



City of Santa Clara

Revised Joint Meeting Agenda of the Council and Authorities Concurrent Santa Clara Stadium Authority

Tuesday, October 19, 2021

4:30 PM

Virtual Meeting
Closed Session 4:30 PM
Open Session 7:30 PM

****Revisions: Added Closed Session Item 21-1504 and 21-1509**

Pursuant to the provisions of AB 361, signed by the Governor on September 16, 2021, to prevent the spread of COVID-19, the City of Santa Clara has implemented methods for the public to participate remotely:

- Via Zoom:

- o <https://santaclaraca.zoom.us/j/99706759306>

Meeting ID: 997-0675-9306 or

- o Phone: 1(669) 900-6833

- Via the City's eComment (now available during the meeting)

- Via email to PublicComment@santaclaraca.gov

As always, the public may view the meetings on SantaClaraCA.gov, Santa Clara City Television (Comcast cable channel 15 or AT&T U-verse channel 99), or the livestream on the City's YouTube channel or Facebook page.

4:30 PM CLOSED SESSION

Call to Order

Roll Call

Public Comment

The public may provide comments regarding the Closed Session item(s) just prior to the Council beginning the Closed Session. Closed Sessions are not open to the public.

1.A 21-1483 [Public Employee Appointment \(Government Code Section 54954, subd. \(e\)\)](#)
[Title: Interim City Attorney](#)

1.B 21-1207 [Threat to Public Services or Facilities \(CC, SA\)](#)
[Pursuant to Gov. Code § 54957\(a\)](#)
[Consultation with: City Manager & Information Technology](#)

- 1.C 21-1346** [Conference with Real Property Negotiators \(CC\)](#)
[Pursuant to Gov. Code § 54956.8](#)
[Property: Please see below listing for APNs and addresses](#)
[City/Authority Negotiator: Deanna J. Santana, City Manager/Executive Director \(or designee\)](#)
[Negotiating Parties: Please see below listing for names for negotiating party\(ies\)](#)
[Under Negotiation: Purchase/Sale/Exchange/Lease of Real Property \(provisions, price and terms of payment\)](#)

	APN	Property Address	Property Owner (Name) / Negotiating Party
1	224-63-020	2380 Lafayette Street, Santa Clara	Dinapoli Family, LP
2	224-63-006	985 Memorex Drive, Santa Clara	Dinapoli Family, LP
3	224-67-023	2199 Ronald Street, Santa Clara	Richard Rossi, Tr.
4	224-66-005	2222 Ronald Street, Santa Clara	Portisi Investments, LLC
5	224-66-003	2122 Ronald Street, Santa Clara	JB Manufacturing, LLC
6	224-05-093	1040 Di Giulio Avenue, Santa Clara	Jon Anderson, Tr.
7	224-05-043	1034 Di Giulio Avenue, Santa Clara	Curtis Chew, Tr.
8	224-05-044	1024 Di Giulio Avenue, Santa Clara	Dante Esposito, Tr.
9	224-05-045	996 Di Giulio Avenue, Santa Clara	Dorothy Luth, Tr.
10	224-05-046	982 Di Giulio Avenue, Santa Clara	Sunding Brothers, LLC
11	224-05-047	962 Di Giulio Avenue, Santa Clara	Sunding Brothers, LLC
12	224-05-048	942 Di Giulio Avenue, Santa Clara	Aaron Smith
13	224-05-049	934 Di Giulio Avenue, Santa Clara	Timmy Chun
14	224-05-050	2200 Lafayette Street, Santa Clara	Better Melon LLC
15	224-67-042	2206 Lafayette Street, Santa Clara	Felix Panis
16	224-67-048	2222 Lafayette Street, Santa Clara	Huy Nguyn
17	224-67-028	2234 Lafayette Street, Santa Clara	Posouvat se, LLC
18	224-03-080	2265 Lafayette Street, Santa Clara	SEW LLC

- 1.D 21-1381** [Conference with Real Property Negotiators \(CC\)](#)
[Pursuant to Gov. Code § 54956.8](#)
[Property: Please see below listing for APNs and addresses](#)
[City/Authority Negotiator: Deanna J. Santana, City Manager/Executive Director \(or designee\)](#)
[Negotiating Parties: Please see below listing for names for negotiating party\(ies\)](#)
[Under Negotiation: Purchase/Sale/Exchange/Lease of Real Property \(provisions, price and terms of payment\)](#)

	APN	Property Address	Property Owner (Name) / Negotiating Party
1	224-60-012	1199 Martin Avenue, Santa Clara	1065 Martin Ave LLC
2	224-60-013	1061 Martin Avenue, Santa Clara	1065 Martin Ave LLC
3	224-60-005	999 Martin Avenue, Santa Clara	Pollack Enterprises Inc.
4	224-60-014	1261 Martin Avenue, Santa Clara	Martin Investment Properties LLC

- 1.E 21-1504** [Conference with Labor Negotiators \(CC\)](#)
[Pursuant to Gov. Code § 54957.6](#)
[City representative: Deanna J. Santana, City Manager \(or designee\)](#)
[Employee Organization\(s\):](#)
[Unit #1-Santa Clara Firefighters Association, IAFF, Local 1171](#)
[Unit #2-Santa Clara Police Officer's Association](#)
[Unit #3-IBEW Local 1245 \(International Brotherhood of Electrical Workers\)](#)
[Unit #4-City of Santa Clara Professional Engineers](#)
[Units #5, 7 & 8-City of Santa Clara Employees Association](#)
[Unit #6-AFSCME Local 101 \(American Federation of State, County and Municipal Employees\)](#)
[Unit #9-Miscellaneous Unclassified Management Employees](#)
[Unit #9A-Unclassified Police Management Employees](#)
[Unit #9B-Unclassified Fire Management Employees](#)
[Unit #10-PSNSEA \(Public Safety Non-Sworn Employees Association\)](#)

- 1.F 21-1509 [Conference with Legal Counsel-Existing Litigation \(SA\)](#)
[Pursuant to Gov't Code § 54956.9\(d\)\(1\)](#)
[Forty Niners SC Stadium Company LLC, et al., v. Santa Clara](#)
[Stadium Authority, Demand for Arbitration through JAMS,](#)
[07/26/2019](#)

Convene to Closed Session

7:30 PM JOINT COUNCIL/STADIUM AUTHORITY MEETING

**Open Session is to begin at 7:30 PM or shortly thereafter*

Pledge of Allegiance and Statement of Values

REPORTS OF ACTION TAKEN IN CLOSED SESSION MATTERS

CONTINUANCES/EXCEPTIONS/RECONSIDERATIONS

2. 21-1444 [Action to Defer the Update on Sustainability Program and](#)
[Provide Feedback on Program Priorities to November 9, 2021](#)

Recommendation: Defer the Update on Sustainability Program and
Provide Feedback on Program Priorities to
November 9, 2021.

3. 21-1416 [Direction to Staff on Alternatives for Revisions to the El Camino Real Specific Plan; Possible Action on the Consultant Contract with Rami & Associates and budget amendment for Revisions to the El Camino Real Specific Plan \(Continued from September 28, 2021 and to be Heard Early on Agenda \)](#)

Recommendation: Direct staff to proceed with either:

Alternative 1: Direct staff to conduct additional planning work to revise the draft Specific Plan per City Council direction. Authorize the City Manager to execute an agreement with Rami & Associates, Inc. to provide El Camino Real Specific Plan Consultant Services for an initial three-year term ending September 30, 2024, for a maximum compensation not to exceed \$750,000, subject to the annual appropriation of funds. Approve the related budget amendment recognizing appropriations of an additional \$900,000 in FY 2021/22 General Fund account to support consultant work and the use of contract planning staff. Upon completion of the revised Specific Plan, staff will return to the City Council for adoption of the project Water Supply Assessment, project EIR, a modified Specific Plan, General Plan amendments, and a resolution to remove on-street parking for the El Camino Real corridor. Direct staff to bring forward budget amendments at a future date or

Alternative 2: Direct staff to create two new zoning districts with objective design standards that align with the existing General Plan land use designations for the El Camino Real corridor and to prepare an El Camino Real Infrastructure Plan/Streetscape Plan for the creation of bicycle lanes along the corridor. . Authorize the City Manager to execute an agreement with Rami & Associates, Inc. to provide El Camino Real Specific Plan Consultant Services for a one-year term ending September 30, 2022, for a maximum compensation not to exceed \$50,000, subject to the annual appropriation of funds. Approve the related budget amendment recognizing appropriations of an additional \$50,000 in FY 2021/22 General Fund Staff will return to City Council for adoption of zoning districts, a resolution to remove on-street parking for the El Camino Real corridor, and adoption of an El Camino Real Infrastructure Plan/Streetscape Plan.

SPECIAL ORDER OF BUSINESS

- 4.A 21-0006 [Proclaim October 2021 as Breast Cancer Awareness Month](#)
- 4.B 21-0007 [Proclaim October 2021 as Domestic Violence Awareness Month](#)
- 4.C 21-1501 [Recognition of Outgoing Cultural Commissioner Teresa Sulcer](#)
- 4.D 21-1476 [Introduce Santa Clara Swim Club's New Head Coach](#)

STUDY SESSION

- 5. 21-1269 [Presentation on Business Tax Ballot Measure and Other Potential Revenue Measures for November 2022 Ballot](#)

Recommendation: 1. Provide feedback on key priorities for the development of recommendations on possible alternative tax structures for future Council consideration; and
2. Review and direct staff to explore other potential revenue measures to be placed on the November 2022 ballot.

CONSENT CALENDAR

[Items listed on the CONSENT CALENDAR are considered routine and will be adopted by one motion. There will be no separate discussion of the items on the CONSENT CALENDAR unless discussion is requested by a member of the Council, staff, or public. If so requested, that item will be removed from the CONSENT CALENDAR and considered under CONSENT ITEMS PULLED FOR DISCUSSION.]

- 6.A 21-20 [Board, Commissions and Committee Minutes](#)

Recommendation: Note and file the Minutes of:

Downtown Community Task Force - May 20, 2021
Cultural Commission - August 2, 2021
Parks & Recreation Commission - August 17, 2021
Senior Advisory Commission - August 23, 2021
Planning Commission - August 25, 2021

6.B 21-959 [Action on Bills and Claims Report \(CC, HA, SA\) for the period June 12th, 2021 - August 27th, 2021](#)

Recommendation: Approve the list of Bills and Claims for June 12, 2021 - August 27, 2021.

6.C 21-1434 [Action on the Adoption of Ordinance No. 2033 Amending Section 3.25.030 of the Santa Clara City Code to Reflect the Increase in the Transient Occupancy Tax Rate to 11.5%](#)

Recommendation: 1. Adopt Ordinance No. 2033 Amending Section 3.25.030 of the Santa Clara City Code to Reflect the Increase in the Transient Occupancy Tax Rate to 11.5%.

6.D 21-1293 [Action on an Agreement with Impark for Event Parking Services at the Santa Clara Convention Center](#)

Recommendation: 1. Authorize the City Manager to negotiate and execute an Agreement with Impark for event parking services at the Santa Clara Convention Center for an initial three-year term not-to-exceed \$1,064,700;
2. Authorize the City Manager to increase maximum compensation during the initial three-year term if demand for event parking services exceeds the current forecast and based on actual services rendered, subject to the appropriation of funds; and
3. Authorize the City Manager to execute up to two one-year options to extend the term of the Agreement after the initial three-year term and subject to the appropriation of funds.

6.E 21-738 [Action on Agreements with the Santa Clara Valley Transportation Authority for 2016 Measure B Funding of the De La Cruz Boulevard Class IV Bikeway Study, Monroe Street Class II Buffered Bicycle Lane Study, Walsh Avenue Class IV Bikeway Study, and Related Budget Amendments](#)

- Recommendation:**
1. Approve and authorize the City Manager to execute funding agreements between the City of Santa Clara and Santa Clara Valley Transportation Authority for the De La Cruz Boulevard Class IV Bikeway Study, Monroe Street Class II Buffered Bicycle Lane Study, and Walsh Avenue Class IV Bikeway Study;
 2. Consistent with City Charter Section 1305, *"At any meeting after the adoption of the budget, the City Council may amend or supplement the budget by motion adopted by the **affirmative votes of at least five members** so as to authorize the transfer of unused balances appropriated for one purpose to another purpose, or to appropriate available revenue not included in the budget,"* approve the FY 2021/22 budget amendment in the Streets and Highways Capital Fund to increase the Other Agencies Revenue estimate by \$455,000 to recognize grant funding for the VTA Measure B Bicycle/Pedestrian program category funds, establish an appropriation for the new Project - De La Cruz Boulevard Class IV Bikeway Study in the amount of \$250,000, establish an appropriation for the new Project - Monroe Street Class II Buffered Bicycle Lane Study in the amount of \$200,000, establish an appropriation for the new Project - Walsh Avenue Class IV Bikeway Study in the amount of \$200,000 and decrease the Pedestrian and Bicycle Enhancement Facilities Project by \$195,000 (**five affirmative Council votes required to appropriate additional revenue**); and
 3. Authorize the City Manager to make modifications to the Agreements, if needed, within the approved budget of the projects.

6.F 21-1038 [Action on a Resolution Authorizing the City Manager to Negotiate and Execute Master Service Agreements with RWG USA, Inc. and Standard Aero to Perform Gas Turbine Engine Parts Supply, Field Services, and Depot Services](#)

- Recommendation:**
1. Adopt a Resolution authorizing the City Manager to negotiate and execute Master Service Agreements with RWG USA, Inc. and Standard Aero Limited to perform Gas Turbine Engine Parts Supply, Field Services, and Depot Services subject to the following conditions:
 - A. Each agreement shall have an initial term of five years and shall have a maximum amount not-to-exceed set by the City Manager subject to an aggregate maximum authority of \$10,000,000 during the initial term with annual spending subject to the annual appropriation of funds;
 - B. The City Manager shall be authorized to add or delete services consistent with the scope of the agreements and allow future rate adjustments subject to justification by contractor and the appropriation of funds; and
 - C. The City Manager shall be authorized to execute up to five one-year options to extend the term of the master service agreements, subject to the annual appropriation of funds.

6.G 21-998 [Action on a Resolution Amending Silicon Valley Power Rate Schedule SB-1 - Standby General Service with Respect to Determination of Reservation Capacity, and Rate Schedule NM - Net Energy Metering Service with Respect to Implementation of an Aggregate Metering Option](#)

- Recommendation:** Adopt a Resolution of the City of Santa Clara amending rate schedules to Silicon Valley Power's Standby Service Schedule (SB-1) with respect to determination of Reservation Capacity and amending rate schedule Net Energy Metering Service (NM) with respect to implementation of aggregate metering, effective October 6, 2021.

6.H 21-1206 [Action on Amendment No. 2 to the Steam Sales Agreement with The Newark Group, Inc. to Extend the Agreement Until March 31, 2022](#)

Recommendation: 1. Authorize the City Manager to execute Amendment No. 2 to the Steam Sales Agreement with The Newark Group, Inc. to extend the Agreement until March 31, 2022; and
2. Authorize the City Manager to make minor changes to the attached Amendment subject to approval by City Attorney as to form.

6.I 21-21237 [Consideration of the Silicon Valley Power 2020 Power Content Label](#)

Recommendation: Note and file SVP's Power Content Label(s).

6.J 21-1265 [Delegation of authority to the City Manager to negotiate and execute the Third Phase Agreement with Northern California Power Agency \(NCPA\) for a Power Purchase Agreement \(PPA\) with South Feather Water and Power Agency \(SFWPA\)](#)

Recommendation: 1. Authorize the City Manager to negotiate and execute the Third Phase Agreement with Northern California Power Agency (NCPA) for a Power Purchase Agreement with South Feather Water and Power Agency (SFWPA); and
2. Authorize the City Manager to execute administrative amendments to the Third Phase Agreement with Northern California Power Agency as may be needed from time to time during the term of the PPA.

6.K 21-1253 [Action on a Resolution Approving the 2022 Historical and Landmarks Commission Calendar of Meetings](#)

Recommendation: Adopt a Resolution approving the 2022 Historical and Landmarks Commission Calendar of Meetings.

6.L 21-1480 [Action on a Resolution Allowing City Legislative Bodies to Hold Public Meetings Solely by Teleconference or Otherwise Electronically Pursuant to AB 361](#)

Recommendation: Adopt a Resolution allowing the City's legislative bodies to hold public meetings solely by teleconference or otherwise electronically pursuant to AB 361.

6.M 21-1217 [Action on Resolution Declaring Two Successor Agency Sites located at 5101 and 5201 Great America Parkway as Surplus Land as Required by State Law \[APNs: 104-55-012 and 104-55-013\]](#)

Recommendation: That the City Council acting as the governing board of the Successor Agency to the Former Redevelopment Agency of the City of Santa Clara adopt a Resolution declaring two Successor Agency properties located at 5101 Great America Parkway [APN 104-55-012 and 5201 Great America Parkway [APN 104-55-013] as "Surplus Land" pursuant to Government Code § 54221(b)(1).

SANTA CLARA STADIUM AUTHORITY CONSENT CALENDAR

7.A 21-1249 [Action on Stadium Authority Bills and Claims for the Month of July 2021](#)

Recommendation: Approve the list of Stadium Authority Bills and Claims for July 2021.

7.B Action on Request from the Stadium Manager to Execute Agreement with R.E. Cuddie Co. for Tunnel Slip and Fall Protection CapEx Project

1. 21-1424 [Request from the Stadium Manager to Execute Agreement with R.E. Cuddie Co. for Tunnel Slip and Fall Protection CapEx Project](#)

2. 21-1425 [Report from the Stadium Authority Regarding Stadium Manager's Request to Execute Agreement with R.E. Cuddie Co. for Tunnel Slip and Fall Protection CapEx Project](#)

Recommendation:

1. Approve the Stadium Manager's request to execute an agreement with R.E. Cuddie Co. for removal and disposal of existing synthetic turf flooring, and furnishing and installation of new synthetic turf flooring from stadium tunnels at Levi's Stadium (Tunnel Slip and Fall Protection CapEx line item) in the amount of \$14,614, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
2. Authorize the Executive Director to approve the execution of any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and
3. Authorize the Executive Director to approve the execution of change orders up to approximately 10% of the contract cost, or \$1,461, for a total not to exceed amount of \$16,075.

7.C Action on Request from the Stadium Manager to Award Purchase Orders to Cintas and Twin Hill for Guest Services Uniforms and Fastenal for Stadium and Special Event Spaces CapEx Project, and Execute Agreement with MGC DBA Mission Glass Company for Command Post Window Treatment CapEx Project

1. 21-1437 [Request from the Stadium Manager to Award Purchase Orders to Cintas and Twin Hill for Guest Services Uniforms and Fastenal for Stadium and Special Event Spaces CapEx Project, and Execute Agreement with MGC DBA Mission Glass Company for Command Post Window Treatment CapEx Project](#)

2. 21-1438 [Report from Stadium Authority Regarding Stadium Manager's Request to Award Purchase Orders to Cintas and Twin Hill for Guest Services Uniforms and Fastenal for Stadium and Special Event Spaces CapEx Project, and Execute Agreement with MGC DBA Mission Glass Company for Command Post Window Treatment CapEx Project](#)

Recommendation:

1. Approve the Stadium Manager's request to award a purchase order to Cintas for the purchase of Guest Services uniforms, in an amount not to exceed \$4,365, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
2. Approve the Stadium Manager's request to award a purchase order to Twin Hill for the purchase of Intaglio jackets and Royal Oxford shirts for Guest Services uniforms, in the amount of \$3,367, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
3. Approve the Stadium Manager's request to award a purchase order to Fastenal for Waterhog premier mats (Stadium and Special Event Spaces CapEx project), in the amount of \$71,274, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager; and
4. Approve the Stadium Manager's request execute an agreement with MGC DBA Mission Glass Company for window tinting services (Command Post Window Treatment CapEx project), in the amount of \$9,425, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager.

7.D Action on Request from the Stadium Manager to Execute Agreement with R.E. Cuddie Co. for Non-Slip Floor Matting CapEx Project and Related Budget Amendment

1. **21-1440** [Request from the Stadium Manager to Execute Agreement with R.E. Cuddie Co. for Non-Slip Floor Matting CapEx Project and Related Budget Amendment](#)
2. **21-1441** [Report from the Stadium Authority Regarding Stadium Manager's Request to Execute Agreement with R.E. Cuddie Co. for Non-Slip Floor Matting CapEx Project and Related Budget Amendment](#)

Recommendation:

1. Approve the Stadium Manager's request to execute an agreement with R.E. Cuddie Co. for the removal and disposal of existing resilient athletic flooring from service tunnels, and the furnishing and installation of rubber resilient athletic flooring at Levi's Stadium (Non-Slip Floor Matting CapEx line item) in an amount not to exceed \$53,955, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
2. Authorize the Executive Director to approve the execution of any and all documents associated with, and necessary for the award, completion, and acceptance of the project;
3. Authorize the Executive Director to approve the execution of change orders up to approximately 10% of the contract cost, or \$5,396, for a total not to exceed amount of \$59,351; and
4. Approve a budget amendment in the amount of \$6,851 to fund the total agreement and 10% contingency amount exceeding the budgeted amount for the line item in the Stadium Authority FY 2021/22 CapEx Budget, offset by a decrease in Capital Reserves.

7.E Action on Request from the Stadium Manager to Incur Charges for Various Conferences, Events, and Meetings

1. **21-1442** [Request from the Stadium Manager to Incur Charges for Various Conferences, Events, and Meetings](#)
2. **21-1443** [Report from the Stadium Authority Regarding the Stadium Manager's Request to Incur Charges for Various Conferences, Events, and Meetings](#)

- Recommendation:**
1. Approve the Stadium Manager's request to incur charges up to \$2,300 to cover registration fees, travel expenses and potential client entertainment, including the purchase of alcohol with public funds, for one Stadium Manager employee for the October 21-22, 2021 VenuesNow Conference in Seattle, WA;
 2. Approve the Stadium Manager's request to incur charges up to \$4,550 to cover registration fees, travel expenses and potential client entertainment, including the purchase of alcohol with public funds, for two Stadium Manager employees for the November 2021 Billboard Live Music Summit + Awards in Los Angeles, CA;
 3. Approve the Stadium Manager's request to incur charges up to \$2,650 in order to cover travel expenses and potential client entertainment, including the purchase of alcohol with public funds, for two Stadium Manager employees for the February/March 2022 Gridiron Stadium Network Annual Meeting in Austin, TX; and
 4. Approve the Stadium Manager's request to incur charges up to \$9,000 to cover travel and entertainment expenses, including the purchase of alcohol with public funds, for up to six client meetings.

PUBLIC PRESENTATIONS

[This item is reserved for persons to address the Council or authorities on any matter not on the agenda that is within the subject matter jurisdiction of the City or Authorities. The law does not permit action on, or extended discussion of, any item not on the agenda except under special circumstances. The governing body, or staff, may briefly respond to statements made or questions posed, and appropriate body may request staff to report back at a subsequent meeting.]

CONSENT ITEMS PULLED FOR DISCUSSION

PUBLIC HEARING/GENERAL BUSINESS

8. 21-198 [Public Hearing: Action on a Resolution of Necessity to Acquire Certain Real Property Interests on 999 Martin Avenue, Santa Clara, California, from Pollack Enterprises, Inc.](#)

Recommendation: Alternative 1: Adopt a Resolution of Necessity to Acquire Certain Real Property Interests on 999 Martin Avenue, Santa Clara, California, from Pollack Enterprises, Inc. **(Five affirmative votes required [California Code of Civil Procedure section 1245.245]).**

9. 21-1385 [Public Hearing: Action on a Resolution of Necessity to Acquire Certain Real Property Interests on 1261 Martin Avenue, Santa Clara, California, from Martin Investment Properties, LLC](#)

Recommendation: Alternative 1: Adopt a Resolution of Necessity to Acquire Certain Real Property Interests on 1261 Martin Avenue, Santa Clara, California, from Martin Investment Properties, LLC. **(Five affirmative votes required [California Code of Civil Procedure section 1245.245]).**

10. 21-1386 [Public Hearing: Action on a Resolution of Necessity to Acquire Certain Real Property Interests on 1199 & 1061 Martin Avenue, Santa Clara, California, from 1065 Martin Ave, LLC](#)

Recommendation: Alternative 1: Adopt a Resolution of Necessity to Acquire Certain Real Property Interests on 1199 & 1061 Martin Avenue, Santa Clara, California, from 1065 Martin Ave, LLC. **(Five affirmative votes required [California Code of Civil Procedure section 1245.245]).**

11. **21-1432** [Action on the Introduction of an All-Electric Reach Code Ordinance, including Electric Vehicle \(EV\) Charging, that Amends Chapter 15.36 \(Energy Code\) and Chapter 15.38 \(Green Building Code\) of Title 15 \(Buildings and Construction\) of the Santa Clara City Code \(Deferred from September 28, 2021\)](#)

Recommendation: Staff recommend that City Council introduce electrification reach codes as written, to be established on January 1, 2022; to help reduce carbon emissions associated with new construction, reduce costs in new construction, improve indoor air quality and safety of our building stock, support affordable housing, and increase adoption of electric vehicles.

12. **WRITTEN PETITIONS (POLICY 030) SUBMITTED BY THE PUBLIC/COUNCIL**

- A. **21-1478** [Action on a Written Petition \(Council Policy 030\) submitted by Morteza Shafiei, as representative of HOAs on October 7, 2021 to add an Agenda Item to a future Council Agenda to Consider the Purchase of lot at 1601 Civic Center Drive](#)

Recommendation: Staff makes no recommendation.

- B. **21-1477** [Action on a Written Petition \(Council Petition 030\) Submitted by Councilmember Jain Requesting to Place an Agenda Item at a Future Meeting to Discuss the Debt Acquisition Company of America Applying for a Conditional Use Permit to Build and Operate a 320 Acre Sand and Gravel Quarry at Sargent Ranch](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- C. **21-1431** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose including a New City Hall Plan Incorporated into the New Santa Clara Downtown Plan](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- D. **21-1486** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose a Stricter and more Regulated Ordinance for AirBNB Properties/Operations](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- E. **21-1488** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose a New Santa Clara City Commission, Film Commission](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- F. **21-1489** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Change the Name of the City of Santa Clara Observed Holiday from Columbus Day to Indigenous People's Day](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- G. **21-1490** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion on Construction of New Lawn Bowl Facility to Follow through on Past Promises](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- H. **21-1491** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Add a Ballot Measure in 2022 Election for an Infrastructure Bond or Tax](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- I. **21-1492** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose an Ordinance to make it a Crime to Promote or Encourage Sideshows on Social Media](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- J. **21-1493** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion of Installation of RRFB Crosswalk at the Kiely/Mauricia Avenue Intersection](#)

Recommendation: Staff has no recommendation and seeks Council direction.

- K. **21-1494** [Action on Written Petition \(Council Petition 030\) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion of Installation of Rainbow Crosswalk\(s\) in the City of Santa Clara](#)

Recommendation: Staff has no recommendation and seeks Council direction.

REPORTS OF MEMBERS AND SPECIAL COMMITTEES

CITY MANAGER/EXECUTIVE DIRECTOR REPORT

- 21-1502** [Tentative Meeting Agenda Calendar \(TMAC\)](#)

ADJOURNMENT

The next regular scheduled meeting is on Tuesday evening, October 26, 2021.

MEETING DISCLOSURES

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitation period is specified by any other provision. Under Section 1094.6, any lawsuit or legal challenge to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge, which is not filed within that 90-day period, will be barred. If a person wishes to challenge the nature of the above section in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of Santa Clara, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

AB23 ANNOUNCEMENT: Members of the Santa Clara Stadium Authority, Sports and Open Space Authority and Housing Authority are entitled to receive \$30 for each attended meeting.

Note: The City Council and its associated Authorities meet as separate agencies but in a concurrent manner. Actions taken should be considered actions of only the identified policy body.

LEGEND: City Council (CC); Stadium Authority (SA); Sports and Open Space Authority (SOSA); Housing Authority (HA); Successor Agency to the City of Santa Clara Redevelopment Agency (SARDA); Bayshore North Project Enhancement Authority (BNPEA); Public Facilities Financing Corporation (PFFC)

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

If a member of the public submits a speaker card for any agenda items, their name will appear in the Minutes. If no speaker card is submitted, the Minutes will reflect "Public Speaker."

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the City of Santa Clara will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities, and will ensure that all existing facilities will be made accessible to the maximum extent feasible. The City of Santa Clara will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities including those with speech, hearing, or vision impairments so they can participate equally in the City's programs, services, and activities. The City of Santa Clara will make all reasonable modifications to policies and programs to ensure that people with disabilities have an equal opportunity to enjoy all of its programs, services, and activities.

Agendas and other written materials distributed during a public meeting that are public record will be made available by the City in an appropriate alternative format. Contact the City Clerk's Office at 1 408-615-2220 with your request for an alternative format copy of the agenda or other written materials.

Individuals who require an auxiliary aid or service for effective communication, or any other disability-related modification of policies or procedures, or other accommodation, in order to participate in a program, service, or activity of the City of Santa Clara, should contact the City's ADA Coordinator at 408-615-3000 as soon as possible but no later than 48 hours before the scheduled event.



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
santaclaraca.gov
@SantaClaraCity

Agenda Report

21-1483

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Public Employee Appointment (Government Code Section 54954, subd. (e))

Title: Interim City Attorney



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
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Agenda Report

21-1207

Agenda Date: 10/19/2021

SUBJECT

Threat to Public Services or Facilities (CC, SA)

Pursuant to Gov. Code § 54957(a)

Consultation with: City Manager & Information Technology



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
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Agenda Report

21-1346

Agenda Date: 10/19/2021

SUBJECT

Conference with Real Property Negotiators (CC)

Pursuant to Gov. Code § 54956.8

Property: Please see below listing for APNs and addresses

City/Authority Negotiator: Deanna J. Santana, City Manager/Executive Director (or designee)

Negotiating Parties: Please see below listing for names for negotiating party(ies)

Under Negotiation: Purchase/Sale/Exchange/Lease of Real Property (provisions, price and terms of payment)

	APN	Property Address	Property Owner (Name) / Negotiating Party
1	224-63-020	2380 Lafayette Street, Santa Clara	Dinapoli Family, LP
2	224-63-006	985 Memorex Drive, Santa Clara	Dinapoli Family, LP
3	224-67-023	2199 Ronald Street, Santa Clara	Richard Rossi, Tr.
4	224-66-005	2222 Ronald Street, Santa Clara	Portisi Investments, LLC
5	224-66-003	2122 Ronald Street, Santa Clara	JB Manufacturing, LLC
6	224-05-093	1040 Di Giulio Avenue, Santa Clara	Jon Anderson, Tr.
7	224-05-043	1034 Di Giulio Avenue, Santa Clara	Curtis Chew, Tr.
8	224-05-044	1024 Di Giulio Avenue, Santa Clara	Dante Esposito, Tr.
9	224-05-045	996 Di Giulio Avenue, Santa Clara	Dorothy Luth, Tr.
10	224-05-046	982 Di Giulio Avenue, Santa Clara	Sunding Brothers, LLC
11	224-05-047	962 Di Giulio Avenue, Santa Clara	Sunding Brothers, LLC
12	224-05-048	942 Di Giulio Avenue, Santa Clara	Aaron Smith
13	224-05-049	934 Di Giulio Avenue, Santa Clara	Timmy Chun
14	224-05-050	2200 Lafayette Street, Santa Clara	Better Melon LLC
15	224-67-042	2206 Lafayette Street, Santa Clara	Felix Panis
16	224-67-048	2222 Lafayette Street, Santa Clara	Huy Nguyen
17	224-67-028	2234 Lafayette Street, Santa Clara	Posouvat se, LLC
18	224-03-080	2265 Lafayette Street, Santa Clara	SEW LLC



City of Santa Clara

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Santa Clara, CA 95050
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Agenda Report

21-1381

Agenda Date: 10/19/2021

SUBJECT

Conference with Real Property Negotiators (CC)

Pursuant to Gov. Code § 54956.8

Property: Please see below listing for APNs and addresses

City/Authority Negotiator: Deanna J. Santana, City Manager/Executive Director (or designee)

Negotiating Parties: Please see below listing for names for negotiating party(ies)

Under Negotiation: Purchase/Sale/Exchange/Lease of Real Property (provisions, price and terms of payment)

	APN	Property Address	Property Owner (Name) / Negotiating Party
1	224-60-012	1199 Martin Avenue, Santa Clara	1065 Martin Ave LLC
2	224-60-013	1061 Martin Avenue, Santa Clara	1065 Martin Ave LLC
3	224-60-005	999 Martin Avenue, Santa Clara	Pollack Enterprises Inc.
4	224-60-014	1261 Martin Avenue, Santa Clara	Martin Investment Properties LLC



City of Santa Clara

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Santa Clara, CA 95050
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Agenda Report

21-1504

Agenda Date: 10/19/2021

SUBJECT

Conference with Labor Negotiators (CC)

Pursuant to Gov. Code § 54957.6

City representative: Deanna J. Santana, City Manager (or designee)

Employee Organization(s):

Unit #1-Santa Clara Firefighters Association, IAFF, Local 1171

Unit #2-Santa Clara Police Officer's Association

Unit #3-IBEW Local 1245 (International Brotherhood of Electrical Workers)

Unit #4-City of Santa Clara Professional Engineers

Units #5, 7 & 8-City of Santa Clara Employees Association

Unit #6-AFSCME Local 101 (American Federation of State, County and Municipal Employees)

Unit #9-Miscellaneous Unclassified Management Employees

Unit #9A-Unclassified Police Management Employees

Unit #9B-Unclassified Fire Management Employees

Unit #10-PSNSEA (Public Safety Non-Sworn Employees Association)



City of Santa Clara

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Agenda Report

21-1509

Agenda Date: 10/19/2021

SUBJECT

Conference with Legal Counsel-Existing Litigation (SA)

Pursuant to Gov't Code § 54956.9(d)(1)

Forty Niners SC Stadium Company LLC, et al., v. Santa Clara Stadium Authority, Demand for Arbitration through JAMS, 07/26/2019



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
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Agenda Report

21-1444

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action to Defer the Update on Sustainability Program and Provide Feedback on Program Priorities to November 9, 2021

COUNCIL PILLAR

Enhance Community Engagement and Transparency

DISCUSSION

This item was originally deferred from the July 13, 2021 Council meeting to a September meeting. Staff was prepared to bring this item forward to the September 28, 2021 meeting but because of the large number of agenda items which were scheduled staff scheduled it for October 19, 2021. Due to the number of items that were not heard at the September 28, 2021 council meeting and were deferred to the October 19, 2021 Council agenda, staff is requesting that the Council defer this item to November 9, 2021.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

FISCAL IMPACT

There is no impact to the City to defer this item.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> .

RECOMMENDATION

Defer the Update on Sustainability Program and Provide Feedback on Program Priorities to November 9, 2021.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager



Agenda Report

21-1416

Agenda Date: 10/19/2021

REPORT TO CITY COUNCIL

SUBJECT

Direction to Staff on Alternatives for Revisions to the El Camino Real Specific Plan; Possible Action on the Consultant Contract with Rami & Associates and budget amendment for Revisions to the El Camino Real Specific Plan (Continued from September 28, 2021 and to be Heard Early on Agenda)

COUNCIL PILLAR

Promote and Enhance Economic, Housing and Transportation Development

BACKGROUND

Following City Council direction, staff has worked since 2017 with community members and a City Council appointed Community Advisory Committee to prepare a Specific Plan for the El Camino Real Focus Area identified in the General Plan. The intent of the Specific Plan is to provide policy direction for new land development along the El Camino Real Corridor, as well as for the future use of the El Camino Real road right-of-way.

A draft Specific Plan, including land uses as recommended by the Community Advisory Committee, was presented for City Council adoption at the June 15, 2021 City Council meeting. Although the proposed land use plan and land use designations had been previously reviewed and supported by the City Council, at the conclusion of the City Council's consideration of the item, the Council directed staff to significantly modify the proposed General Plan Land Use Designations for the Specific Plan so that the maximum heights for the three land use designations (Corridor Residential, Corridor Mixed Use and Regional Mixed Use) are 2, 3 and 4 stories respectively.

On July 6, 2021 staff returned to the City Council to provide additional information, and possible alternatives, and requesting direction on the next steps for the El Camino Real Specific Plan. Staff explained that the revised height limits would likely correspond to significant reductions in land density from what had been studied in the project Environmental Impact Report (EIR) and require additional funding for CEQA analysis.

Based upon discussions with the City's consultant, staff projected that this would require a General Fund appropriation of \$200,000 to support preparation of a Vehicle Miles Traveled (VMT) analysis and recirculation of the EIR, economic feasibility analysis, and the rewriting of development standards for the Plan. Staff also explained that several projects that had been waiting to make use of the completion of the Specific Plan CEQA analysis would be delayed while they prepared their own CEQA analysis or wait for the completion of the City's process. Staff presented four options for the Council to consider:

1. Proceed with a significant modification of the Specific Plan, including revision to and recirculation of the project EIR, extending the schedule into 2022 and requiring additional budget appropriation.

2. Proceed with an alternative that would significantly reduce the Specific Plan density but not below a density that would allow use of the current EIR;
3. Discontinue preparation of the Specific Plan; or
4. Prepare City initiated CEQA analysis to support pending project applications.

The Council voted to direct staff to proceed with option 1, modification of the Specific Plan to include the height limits as previously directed by the City Council.

During the City Council discussion on July 6, some Council members indicated that adoption of objective design standards for the El Camino Real corridor continues to be an important City priority and asked staff if there were alternative ways to adopt such standards. Councilmembers also indicated continued support for the removal of on-street parking in order to create bicycle lanes along the corridor.

DISCUSSION

Since the July 6 meeting, staff has worked with the consultants to clarify the full scope of work required to implement the City Council direction. Staff has also further evaluated possible options for the Specific Plan taking the City Council's questions and comments into consideration. Staff has accordingly identified two possible alternatives to implement the Council direction:

1. Significantly revise the Specific Plan to fully align with the vision of a lower density land use plan for the El Camino Real corridor. The revised plan would include new land use designations and design standards based on approximately one-third of the residential density proposed in the current draft Plan. This effort would include additional community outreach and Community Advisory Committee meetings, as well as an update and recirculation of the project EIR. This approach requires a budget appropriation of \$900,000.
2. Implement the new height limits through a rezoning of the El Camino Real corridor. The rezoning can include adoption of the objective design standards and adoption of a Corridor Roadway Plan to add bicycle lanes. In this alternative the Specific Plan would not be adopted, but key elements could be adopted without additional CEQA work or consultant costs if the design standards are used in their current form, or with some additional funding the design standards could be updated by the consultant to fully align with the new height limits.

Alternative 1: Redo the Specific Plan for a lower density

The City could undertake a significant modification of the Specific Plan based upon the City Council's direction to reduce density to approximately one-third of the number of residential units supported by the current Draft Plan. The height limit changes to the Specific Plan as directed by the City Council indicate significant revisions to the land use development types and densities, which further trigger substantial revisions to the entire Plan including:

- Revising vision/goals/policies
- Rewriting development standards for all designations
- Revising design standards
- Replacing or revising images, graphics, and maps as needed

To ensure that the changes to the development types and densities are feasible, an Economic Feasibility Analysis will be conducted.

The City would also evaluate the potential for retaining some sites for exclusive commercial use. The need for this evaluation is prompted by the loss of commercial square footage in mixed-use

development that is no longer feasible at the lower densities. Reducing the overall density would make it easier to incorporate lower density commercial density development while creating opportunities for redevelopment on other sites.

This alternative includes an update of the project EIR, including:

- A new Vehicle Miles Traveled (VMT) Analysis to update the model for the revised land uses; and
- Air quality remodeling

A significant revision of the Specific Plan should provide additional community engagement, including reconvening the Citizen Advisory Committee as well as general community workshops. Once the revisions to the specific plan are completed, community outreach on the changes will be conducted and then the revised Specific Plan will be brought back to the City Council for action along with approval of the EIR, General Plan amendments, a rezoning ordinance and removal of the on-street parking along the El Camino Real corridor.

Once the Specific Plan is complete, the City would next embark on a rezoning of the properties along the corridor to conform to recent State law requirements expanding the requirement for alignment of zoning and General Plan to apply to Charter Cities. The City would initiate rezoning of the properties within the Plan area to change the zoning to new designations that align with the new Specific Plan land use designations. This work will occur once community outreach has been conducted, including the notification of property owners.

The benefit of this alternative is that it would allow the City to complete a Specific Plan that presents a clear and comprehensive vision and closely correlated implementation policies for El Camino Real. This approach also allows for more technical analysis and community engagement. However, of the two alternatives, it has a much greater impact in terms of both costs and schedule delays. The anticipated costs is \$900,000, including both consultant costs and the use of contract planner to serve as the City's project manager.

Alternative 2: Implement the Council direction through a Roadway Plan and Rezoning

An alternative to making the revisions to the Specific Plan is to maintain the existing General Plan land use designations for the El Camino Real and implement the Council direction on maximum building heights through rezoning of the properties. As mentioned above the City is required to rezone the corridor so that the zoning and General Plan are in alignment. Rather than invest further in the Specific Plan, the City could incorporate the height limits and objective design standards into two new zoning districts that align with the current General Plan designations. Whereas the draft Plan includes three land use designations, the two-story and three-story height limitations could be applied to those districts based upon proximity to single-family residences or other criteria. Based on the current General Plan, the rezoning would implement the following land use standards.

Land Use Designation	Density	Commercial FAR	Building Height	# of Stories
Community Mixed Use	20-36 DU/AC	0.1	NA	2 to 3
Regional Mixed Use	37-50 DU/AC	0.15	NA	3 to 5

Coupled with this work would be to use portions of Chapter 5, Transportation and Public Spaces, of the proposed El Camino Real Specific Plan to create an El Camino Real infrastructure Plan/Streetscape Plan supporting the addition of a bicycle lane on El Camino Real. With this alternative, recirculation of the EIR is not required and instead CEQA clearance would be satisfied by the reuse of the 2010-2035 General Plan EIR.

This alternative would result in Council action to amend the zoning code to create the El Camino Real Zoning districts, adoption of an El Camino Real Infrastructure Plan/Streetscape Plan, and a resolution allowing the removal of on-street parking on El Camino Real. Similar to Alternative 2, the City would then follow up to rezone all the property within the draft Specific Plan boundary to be consistent with their respective land use designations. This work will occur once community outreach has been conducted, including the notification of property owners.

As part of this approach, the City could either engage the City's consultant to update the objective design standards prepared for the draft Specific Plan so that they align well with the lower height limits and current General Plan designations, or the City could make use of the design standards in their current form. The consultant has indicated that it would cost approximately \$50,000 to update the standards. If the standards are not updated, to the degree that the design standards in their current form would require interpretation to apply to lower height residential projects, their applicability could be limited if they are no longer clearly "objective" where the use of design standards is limited to objective standards. The latter approach, using the design standards in their current form, would result in greater need to interpret the design standards, so that they might be considered less objective, but would avoid the need for additional consultant costs. Note, however, that under recent amendments to the Housing Accountability Act, the City can no longer utilize subjective design criteria for residential developments and for mixed-use developments where at least two-thirds of the square footage is residential. Subjective design criteria could only be applied to commercial developments.

The benefits of this alternative are that they allow the City to adopt height limits per the City Council direction along with the adoption of objective design standards and a plan to replace on-street parking with bicycle lanes, without the need for additional CEQA review and lesser impacts upon staff resources and the City budget. This alternative would not result in the adoption of a Specific Plan and would continue to make use of the two current General Plan land use designations rather than the three more refined designations developed through a community-based planning process.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

FISCAL IMPACT

The fiscal impact varies between the alternatives. Alternative 1 has a greater fiscal impact (approximately \$900,000 to redo the Specific Plan and EIR) than Alternative 2 (approximately \$50,000 to update the design standards). For Alternative 1, the City's Consultant has indicated that the scope of work for the revisions to the El Camino Real Specific Plan requested would cost up to \$750,000. In addition, to address the additional work required to prepare this alternative, staff is proposing to use contract planning services at an additional cost of \$150,000. Therefore, staff is

requesting that funds in the amount of \$900,000 be allocated from the General Fund to cover the total cost of the Agreement.

The budget amendment for Alternative 1 below allocates funding from the General Fund account to the El Camino Real Specific Plan in the amount of \$900,000. The budget amendment for Alternative 2 below allocates funding from the General Fund account to the El Camino Real Specific Plan in the amount of \$50,000.

COORDINATION

This report has been coordinated with the Finance Department and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Direct staff to conduct additional planning work to revise the draft Specific Plan per City Council direction. Authorize the City Manager to execute an agreement with Rami & Associates, Inc. to provide El Camino Real Specific Plan Consultant Services for an initial three-year term ending September 30, 2024, for a maximum compensation not to exceed \$750,000, subject to the annual appropriation of funds. Approve the related budget amendment recognizing appropriations of an additional \$900,000 in FY 2021/22 General Fund account to support consultant work and the use of contract planning staff. Upon completion of the revised Specific Plan, staff will return to the City Council for adoption of the project Water Supply Assessment, project EIR, a modified Specific Plan, General Plan amendments, and a resolution to remove on-street parking for the El Camino Real corridor. Direct staff to bring forward budget amendments at a future date.

2. Direct staff to create two new zoning districts with objective design standards that align with the existing General Plan land use designations for the El Camino Real corridor and to prepare an El Camino Real Infrastructure Plan/Streetscape Plan for the creation of bicycle lanes along the corridor. . Authorize the City Manager to execute an agreement with Rami & Associates, Inc. to provide El Camino Real Specific Plan Consultant Services for a one-year term ending September 30, 2022, for a maximum compensation not to exceed \$50,000, subject to the annual appropriation of funds. Approve the related budget amendment recognizing appropriations of an additional \$50,000 in FY 2021/22 General Fund Staff will return to City Council for adoption of zoning districts, a resolution to remove on-street parking for the El Camino Real corridor, and adoption of an El Camino Real Infrastructure Plan/Streetscape Plan.

RECOMMENDATION

Direct staff to proceed with either:

Alternative 1: Direct staff to conduct additional planning work to revise the draft Specific Plan per City Council direction. Authorize the City Manager to execute an agreement with Rami & Associates, Inc. to provide El Camino Real Specific Plan Consultant Services for an initial three-year term ending

September 30, 2024, for a maximum compensation not to exceed \$750,000, subject to the annual appropriation of funds. Approve the related budget amendment recognizing appropriations of an additional \$900,000 in FY 2021/22 General Fund account to support consultant work and the use of contract planning staff. Upon completion of the revised Specific Plan, staff will return to the City Council for adoption of the project Water Supply Assessment, project EIR, a modified Specific Plan, General Plan amendments, and a resolution to remove on-street parking for the El Camino Real corridor. Direct staff to bring forward budget amendments at a future date or

Alternative 2: Direct staff to create two new zoning districts with objective design standards that align with the existing General Plan land use designations for the El Camino Real corridor and to prepare an El Camino Real Infrastructure Plan/Streetscape Plan for the creation of bicycle lanes along the corridor. . Authorize the City Manager to execute an agreement with Rami & Associates, Inc. to provide El Camino Real Specific Plan Consultant Services for a one-year term ending September 30, 2022, for a maximum compensation not to exceed \$50,000, subject to the annual appropriation of funds. Approve the related budget amendment recognizing appropriations of an additional \$50,000 in FY 2021/22 General Fund Staff will return to City Council for adoption of zoning districts, a resolution to remove on-street parking for the El Camino Real corridor, and adoption of an El Camino Real Infrastructure Plan/Streetscape Plan.

Reviewed by: Andrew Crabtree, Director, Community Development Department
Approved by: Deanna J. Santana, City Manager

ATTACHMENT

1. Post Meeting Material from September 28, 2021 Council meeting



**Council and
Authorities
Concurrent
Meeting**

**Item #7 RTC 21-1048
Alternatives for Revisions
to the El Camino Real
Specific Plan**

September 28, 2021

1



**City of
Santa Clara**
The Center of What's Possible

El Camino Real Specific Plan

Project Background

- 2010 – General Plan Update allows mixed-use development
- 2010–2017 – 13 Projects (1,292 Units) entitled
- May 2014 – Grant funding for the project from Bay Area Metro
- 2017 – Council direction to prepare a Specific Plan to provide detailed policies for new development
- June 15, 2021 – City Council direction to modify Specific Plan by reducing density
- June 30, 2021 – MTC grant funding ended

2

2



Alternatives

Alternative 1 - Redo the Specific Plan for a lower density

Direct staff to conduct additional planning work to revise the draft Specific Plan per City Council direction, including:

- Authorize the City Manager to execute an agreement with the consultant Rami & Associates, Inc. for an initial three-year term ending September 30, 2024
- Approve related budget amendment recognizing appropriations of an additional \$900,000 in FY 2021/22 General Fund

3

3



Alternatives

Alternative 2 – Prepare Roadway Plan and Rezoning

Direct staff to implement Council direction through two new zoning districts with objective design standards that align with the existing General Plan land use designations and prepare an Infrastructure Plan/Streetscape Plan for the creation of bicycle lanes, and:

- Authorize the City Manager to execute an agreement with Rami & Associates, Inc. to provide El Camino Real Specific Plan Consultant Services for a one-year term ending September 30, 2022
- Approve the related budget amendment recognizing appropriations of an additional \$50,000 in FY 2021/22 General Fund Staff

4

4

The seal of the City of Santa Clara, California, is circular. It features a central illustration of a mission building with a red roof and a bell tower, set against a blue sky with clouds. Below the building is a green field. The year "1852" is inscribed in white on a green banner at the bottom of the central image. The outer ring of the seal contains the text "CITY OF SANTA CLARA CALIFORNIA" at the top and "THE MISSION CITY" at the bottom, separated by small dots.

**Council and
Authorities
Concurrent
Meeting**

Item # 7 RTC 21-1048
**Alternatives for Revisions
to the El Camino Real
Specific Plan**

September 28, 2021

9/28/21

Item 7.

Julie Minot

From: Mathew Reed <mathew@siliconvalleyathome.org>
Sent: Tuesday, September 28, 2021 2:50 PM
To: tmcmillan@bayareametro.gov
Cc: Andrew Crabtree; Manager; mshorett@bayareametro.gov; abockelman@bayareametro.gov; dmartin@biabayarea.org; 'Vince Rocha'; David Meyer; Mayor and Council
Subject: RE: City of Santa Clara El Camino Real Specific Plan
Attachments: BIA_SVH_SVLG MTC Santa Clara ECRSP 9_28_21.pdf

I apologize.
The attachment was left off of the last email.
Please see the attached letter as described below.

Mathew Reed – Director of Policy
SV@Home – siliconvalleyathome.org



Silicon Valley Is Home. Join our Houser Movement. Become a member!

350 W Julian St. #5, San José, CA 95110

[Website](#) [Facebook](#) [LinkedIn](#) [Twitter](#)

From: Mathew Reed
Sent: Tuesday, September 28, 2021 2:42 PM
To: tmcmillan@bayareametro.gov
Cc: Andrew Crabtree <ACrabtree@SantaClaraCA.gov>; manager@santaclaraca.gov; mshorett@bayareametro.gov; abockelman@bayareametro.gov; dmartin@biabayarea.org; 'Vince Rocha' <vrocha@svlg.org>; David Meyer <david@siliconvalleyathome.org>; MayorAndCouncil@santaclaraca.gov
Subject: City of Santa Clara El Camino Real Specific Plan

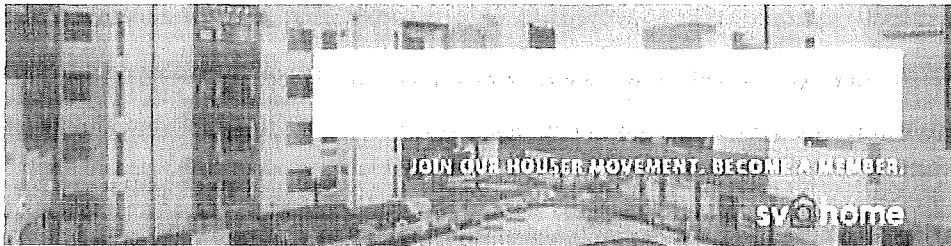
Director McMillan.

On behalf of BIA Bay Area, Silicon Valley at Home, and the Silicon Valley Leadership Group, we write today to share our attached concerns regarding the MTC PDA Planning Grant for the City of Santa Clara's El Camino Real Specific Plan. We would ask that you respond to our request that MTC engage with the City of Santa Clara to address the divergence of the expected City's actions from the agreement made with your agency about the purpose of this grant and the regional importance of the El Camino Real corridor.

Thank you for your attention.

Mathew Reed – Director of Policy
SV@Home – siliconvalleyathome.org

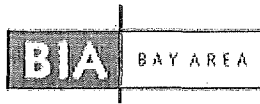
POST MEETING MATERIAL



Silicon Valley Is Home. Join our Houser Movement. Become a member!

350 W Julian St. #5, San José, CA 95110

[Website](#) [Facebook](#) [LinkedIn](#) [Twitter](#)



September 28, 2021

Therese McMillan
Executive Director
Metropolitan Transportation Commission
375 Beale Street, Suite 800
San Francisco, CA 94105

RE: City of Santa Clara El Camino Real Specific Plan

Director McMillan.

On behalf of BIA Bay Area, Silicon Valley at Home and the Silicon Valley Leadership Group, we call on MTC to investigate alarming developments in the progress of the City of Santa Clara's El Camino Real Specific Plan. Each of our organizations served on the Community Advisory Committee for the specific plan and participated in the series of public community meetings, as well as a number of study sessions with both the Santa Clara Planning Commission and City Council, as the plan was developed and refined. We believe that without intervention from MTC, the Plan is now at serious risk of failing to provide opportunity for significant housing growth and support for vital public and alternative transportation infrastructure, two key MTC planning policy objectives. We urge MTC to immediately initiate contact with the City of Santa Clara regarding the status of the planning grants for preparation of the El Camino Real Specific Plan with a goal of providing guidance on ways of leading the plan back to policy objectives considered essential to sustainable regional development by MTC, and originally supported and committed to by the City.

El Camino Real Focus Area PDA and Metropolitan Transportation Commission Planning Grant

As MTC is aware, the El Camino Real Focus Area in Santa Clara has been identified as a Priority Development Area since at least 2011. One of the foremost objectives of the PDA program is to increase the opportunity for housing development in the PDA. The City's General Plan Housing Element identifies the potential for 2,274 net new units within current land use and zoning designations of which 1,292 units have received approvals.

In 2014, MTC awarded an initial PDA Grant to the City in the amount of \$750,000, later expanded to \$910,000 (along with \$105,000 matching City funds), to begin the development of the El Camino Real Specific Plan in accordance with MTC goals and objectives. The PDA Planning Program funds Specific

September 28, 2021

Re: City of Santa Clara ECR Specific Plan

Plans that result in intensified land uses around public transit hubs and bus and rail corridors in the Bay Area.

MTC Planning Application Grant Funding Guidelines:

- Increase housing supply, including affordable housing, and jobs;
- Boost transit ridership and reduce vehicle miles traveled (VMT)
- Increase walking, bicycling, carpooling and carsharing by effectively managing parking and driving while promoting multimodal connections; and
- Retain and expand community assets, and locate key services and retail within the planning area.

In their grant application submitted in April of 2014, the City committed to supporting a planning process and outcomes aligned with MTC Planning Program funding guidelines:

City Grant Application Cover Letter (April 2014)

The City of Santa Clara is pleased to submit the enclosed Priority Development Area (PDA) Planning Program grant application for the El Camino Real Precise Plan. This planning effort will intensify the land use around the City's mixed-use corridor with emphasis on increasing housing supply, implementing multi-modal access and connectivity, and promoting pedestrian friendly design.

City Grant Application Part 6

To guide this transformation of El Camino Real, Santa Clara, with support from the Santa Clara Valley Transportation Authority (VTA), is seeking grant funding to develop a Precise Plan and Environmental Impact Report for El Camino Real within the City. The Precise Plan will build on three supporting plans: the City's 2010-2035 General Plan, which envisions El Camino as a tree-lined, pedestrian and transit-oriented corridor with a mix of residential and retail uses;

- *El Camino Real is still the most important street in Santa Clara today. It provides commercial services for many of the City's residential neighborhoods. The corridor is served by VTA's highest ridership lines, with transit usage expected to increase by up to 50 percent with implementation of BRT. However, the corridor is primarily fronted by strip malls, lacks landscaping, has minimal sidewalks, and many properties are underutilized. The Precise Plan will capitalize on the existing strengths of the corridor and recent redevelopments of the existing building properties. The Plan will serve as an implementation tool to revitalize and positively define this corridor as a leading example of smart growth while promoting the City's economic vitality, creating links between neighborhoods that promote walking and transit and*
- *The El Camino Real Precise Plan will lay the groundwork for increasing housing supply and employment growth in the El Camino Real Focus Area PDA by defining policies and guidelines that integrate transit with intensified land uses and strong multimodal connections within the PDA.*

Dismissal of the Draft El Camino Specific Plan at Santa Clara City Council

September 28, 2021

Re: City of Santa Clara ECR Specific Plan

On June 15, 2021, Staff presented the overdue results of over 4 years of planning, outreach, community involvement, environmental review and vetting for the 250 acre ECR corridor. The Draft Plan included over 6000 thousand housing units, nearly a million square feet of commercial, and numerous amenities such as enhanced pedestrian access and protected bike lanes. The plan also addressed the challenges of boulevard redevelopment with higher-density, mixed-use activity centers at key intersections with walkable, medium-density residential in the areas in between. This was a thoughtful and carefully planned document.

However, at the June 15th meeting and again at the July 6, 2021 meeting, the Santa Clara City Council adopted several actions to significantly modify the Draft Plan, slashing building heights from four to eight stories to two to four stories, reducing housing density and hampering the viability of any effort to effectively develop the El Camino Corridor as fully envisioned in PDA Policy.

City Staff analyzed 3 different scenarios at the July 6th meeting, comparing the Draft Plan, the Council direction and a Staff Alternative Plan that would still provide significant housing opportunity and retail business development while supporting transit and multimodal transportation:

July 6, 2021 Meeting	Housing Units	Density	Commercial
Draft SP	6200	77 du/ac	910k sq.ft.
Staff Alternative	4400	36 du/ac	510k sq.ft.
Council Direction	2290	28 du/ac	210k sq.ft.

Staff also advised Council that Council direction would have significant impact on the key functional elements of the plan, and would require the city to incur significant additional costs:

- “Activity Centers” (i.e., retail centers) would no longer be feasible as envisioned in the Draft Plan.
- In no part of the corridor would the height constraints on residential development support ground floor retail.
- Residential development of any kind would be unlikely where heights were lowered to two stories. (Current, lower-density town-homes, require 3-4 stories to avoid surface parking.)
- Support for the existing high-frequency transit would be significantly reduced.
- Because the density would drop below 32 du/ac a comprehensive VMT analysis would need to be conducted at the city’s expense.
- The existing EIR would need to be updated, and recirculated for comment, due to significant modification to Plan, and could not be completed until at least mid-year 2022

At the most basic level we are concerned that the planning process funded through the MTC PDA Planning Grant will result in a reduction of the actual residential development capacity of the corridor. Feasibility analysis conducted for the ECR Plan Area, and a similar analysis presented to the Santa Clara Downtown Community Task Force, showed that residential development, with the exception of low-

September 28, 2021

Re: City of Santa Clara ECR Specific Plan

density townhomes, required densities of 50-70 units an acre to be economically feasible. In the current market the heights proposed would make rental housing extremely difficult to finance and build.

Despite Staff concerns -- and other warnings that following Council Direction would severely undermine the economic feasibility of housing development, retail development, and support for transit and multimodal transportation -- Council adopted the worst case scenario and directed Staff to redraft the Plan, and update the EIR to measure the negative impact of the proposed changes and recirculate for comment at an estimated cost of \$200,000. The council simultaneously refused to support a new feasibility study to assess the overall impact of the changes on the viability of key elements of the plan.

The El Camino Real Corridor was expected to be central to the 6th Cycle Housing Element Update

The new density restrictions and infeasibility of many types of residential development throughout the corridor will greatly limit the inclusion of sites along the ECR in the Housing Element Update currently under development. This will be particularly true for planning for the affordable housing allocation, as the new state laws require far more robust feasibility assessment than during past cycles. New state guidelines for Affirmatively Furthering Fair Housing (AFFH) explicitly state that jurisdictions must plan for the integration of neighborhoods with higher resources throughout the jurisdiction. Jurisdictions are also now required to address whether the location of planned housing at all income levels will improve overall access to opportunity, including access to transportation and employment. El Camino Real is the most transit-rich corridor in the City, it runs through established middle- and upper-income neighborhoods with high-quality schools, and could facilitate crucial multi-modal access to the Caltrain/BART Station area for significant numbers of working people.

Santa Clara is expected to have a RHNA obligation of 11,632 new homes, with 4,525 to be affordable at levels below 80% of AMI. Because the significantly reduced densities adopted by the council for most of the plan area fall below levels feasible for affordable development, and below the minimum densities required for eligibility for state and federal affordable housing financing, the housing opportunity sites along the El Camino Real corridor will be severely limited. While significant residential capacity will be made available in other planned development areas in the city, by forgoing the opportunity to make El Camino Real a rich mixed-use and transit-oriented corridor, the City may struggle to be in compliance with state guidance on the implementation of affirmatively furthering fair housing requirements for the Housing Element Update.

Regional support for the El Camino Real vision of sustainable redevelopment

Other nearby cities, such as Sunnyvale and Mountain View have adopted, or are in the process of adopting El Camino Real plans in their communities that comport with MTC objectives. Sunnyvale is considering an alternative with 6,900 housing units and 730,000 sq. ft of commercial in its Plan, and Mountain View adopted a plan in 2014 featuring dense nodes of development, dramatically increased building heights to 6 stories, and an emphasis on transportation alternatives. These significant efforts need to be replicated along the full length of the El Camino Real to fully support housing alternatives, commercial activity centers, transit, and multimodal transportation through the heart of Silicon Valley.

5

September 28, 2021

Re: City of Santa Clara ECR Specific Plan

We believe that the stakes for the future functionality of the El Camino Real corridor for the sustainable development of the City, and for the regional transit and economic integration of the ECR across jurisdictions, should prompt an MTC intervention with the City of Santa Clara at this juncture to investigate the status of the Plan. It is our hope that there may still be avenues of engagement that will allow the city to revisit this potentially disastrous decision for the future of the El Camino Real.

Thank you for your time and attention.

Dennis Martin
Building Industry Association Bay Area

Mathew Reed
Silicon Valley at Home

Vince Rocha
Silicon Valley Leadership Group

cc:
Alix Bockelman, Deputy Executive Director, Policy
Mark Shorett, PDA Program Manager
Deanna J. Santana, City Manager
Andrew Crabtree, Director, Community Development Department

9/28/21

Item 7.

Julie Minot

From: Morteza <emuloid@yahoo.com>
Sent: Monday, September 27, 2021 12:29 PM
To: Mayor and Council; Raj Chahal
Cc: ksinaï@prodigy.net; wgnr1780@yahoo.com
Subject: RE: Additional Citizen input on Charities Housing and Agenda item 7- up for vote during Public Hearing of September 28 2021
Attachments: Project_Specs_1601_CC.PNG; Project_Bonuses_Concessions_1601_CC.PNG
Follow Up Flag: Follow up
Flag Status: Flagged

POST MEETING MATERIAL

Dear Santa Clara Mayor and Council,
We have obtained **additional** support for our letter below to the City Council from the following:

Boulevard HOA - Bill Waggoner: Boulevard HOA President (on behalf of 130 homes)
Alex Salzmann: Boulevard HOA Board Member

So far there are a total of 4 HOA Boards/residents representing 170 homes and 4 individuals.

Sincerely
Morteza Shafiei - President - Civic Center Village HOA

----- Forwarded Message -----

From: Morteza <emuloid@yahoo.com>
To: mayorandcouncil@santaclaraca.gov <mayorandcouncil@santaclaraca.gov>; rchahal@santaclaraca.gov <rchahal@santaclaraca.gov>
Cc: ksinaï@prodigy.net <ksinaï@prodigy.net>
Sent: Monday, September 27, 2021, 11:29:48 AM PDT
Subject: Citizen input on Charities Housing and Agenda item 7- up for vote during Public Hearing of September 28 2021

Dear Santa Clara Mayor and Council,
We are Citizens and Representatives of several HOAs listed below (current count 50 homes) who reside along Civic Center Drive and Warburton Avenue. We have listed our contact information below and attached two summary pages of the 12-8-20 Charities Housing Proposal.

We respectfully and strongly urge you to **reject alternative #2**, Agenda item 7. 21-1048 scheduled for your vote on 9-28-21.

We are alarmed and gravely concerned that Alternative #2 is a **special zoning handout to Charities Housing**, a tax-exempt (not a Charity) developer of 1601 Civic Center Drive. A YES vote on Alternative #2 is to the detriment of an overwhelming

majority of owner residents in our neighborhood. There is not a single reference to Charities Housing on pages 1076-1081 of the 1616 page Discussion Packet accompanying this agenda item. Even so, **alternative #2** is designed specifically **to quickly enable and create a path forward**, without delay and public input, for Charities Housing. **Alternative #2** was devised in response to the delay in the adoption of the Specific Plan during the Council's meeting of July 6 2021, in which the Charities Housing representative warned that financing for the project would become more difficult the longer it takes to approve this project. This by-pass special zoning deprives us from any input. We also have reason to believe that Charities Housing has been conducting a PR campaign at the City's highest levels while keeping us in the dark.

Alternative #2 creates a quick, opaque, and ill-devised bypass to our input as stake holder Citizens and is framed as a less costly and faster alternative. In reality it is neither. The real cost is long term and to us as Citizens.

We also urge you to consider and **enable our Citizen Proposal to rezone the 1601 Civic Center Drive into a Park, on equal footing with any other proposals**. We are confident there is overwhelming public and corporate support for our proposal. We intend to file a petition to the City in this regards.

We also urge the City Council to reject any current and future special zoning proposals that by-pass public scrutiny and primarily benefit Charities Housing or other developers at our expense. It is not sound public policy to create opaque special zoning or exceptions that benefit a few at the expense of many. We are in a state of disbelief at how far Charities Housing "proposal" has progressed before we found out about it. We request timely and transparent inclusion of Citizen Stakeholders. The Charities Housing proposal was filed on Dec. 8 2020, right before AB 2345 went into effect on January 1 2021. AB2345 increases the bonus for "affordable" Housing to 50%.

We understand the City is concerned about State Mandates to create extra housing. Since this is a complex matter we urge the Council to investigate the potential application of State Mandates to the Charities Housing proposal. This can be best accomplished by retaining outside Counsel (We currently do not have a City Attorney) in order to obtain impartial advice on whether Charity Housing's 12-8-2020 Proposal or future revisions are indeed eligible for the staggering number of bonuses/waivers it claims. There are serious ramifications to misapplying State Mandates. Regardless, we urge the Council not to invoke the fear of State Mandates in its deliberations. Let Charity Housing be its own advocate. We hope the Council stays our advocates. In summary we oppose Charity Housing's proposal of 12-8-2020 because among other reasons:

Charities Housing is neither a good nor a charitable neighbor. They are not transparent. They refused to protect, contact, or dialogue with their wall-to-wall neighbors in Civic Center Village HOA for **thirteen months, after being notified** by Santa Clara PD that their property is attracting blight and petty crime at the height of the Covid-19 crisis. Charities Housing did not put up a fence until May 2021, **months after** they filed their 12-8-20 proposal. The irony is that they did protect their **building** by boarding it up in June 2020, indicating that they were well aware of the nuisance and security problem as early as June 2020. Nevertheless they refused to protect their neighbors until May 2021

and only after escalating criminal incidents and nuisance from their property made it impossible for them to further ignore their neighbors. We found out in July 2021 that they had been sending emails to the Council to gain mind-space and traction within the City while we Citizens had no idea about their plans. For Charities Housing, we, the direct stake-holders are clearly an **after-thought**.

Charities Housing's proposal invokes a staggering number of bonuses/waivers. We question their eligibility for these waivers and their counting method of lumping several sub-concessions into a single concession to increase the actual number of concessions above what the statutes may allow.

Our neighborhood is saturated with housing and cars. We are not opposed to housing, but in our neighborhood we need green space and parks more. Our neighborhood cannot tolerate a 6 level residential building with 112 units packed into an ultra-dense 84.4 Dwelling Units per Acre.

Charities Housing proposes 0.8 **unassigned** parking spaces per unit. There is already an intolerable parking congestion along Civic Center Drive, Lincoln, Warburton, and Don Avenue. The City's in-progress **proposal to park diagonally** along Civic Center Drive gains a mere 25 spots. This is not counting the future impact of the Charities Housing and the former Fuji Florist projects. We face the specter of one way streets, more vandalized cars, blight accumulated at the curbs and expensive parking garages and fees. Spill over traffic and parking from a narrowed El Camino Real and banned parking along El Camino Real will further aggravate the congestion. We need more infrastructure (public transportation, etc.) before adding more density. We are not NYC.

Charities Housing discloses it cannot "create a basement level well into the water table". In our view this precludes building underground multi-level **assigned** parking and raises questions about structural integrity and sinking structures.

We are also attaching 2 summary pages of Charities Housing Dec. 8 2020 proposal.

Sincerely

Civic Center Village HOA

Morteza Shafiei - emuloid@yahoo.com - By Full HOA Board (On behalf of 17 homes)

Civic Center HOA:

Sneha Shah - snehashah16@gmail.com - By HOA Board Member (On behalf of 8 homes)

Park Vista HOA:

Sunil Ravipati - sravipati@gmail.com - By Full HOA Board (On behalf of 15 homes)

Boulevard (Hillebrant Place) Residents:

Tom Weinstein - tomw@ryleth.com

Landy Tuduanya - tuduanyalandy@gmail.com

Chao Cheng - chen0867@gmail.com

Sinan Liu - liusinan1010@gmail.com

Disha Shetty - dishashetty88@gmail.com

Sumit Rao - rao.sumit@yahoo.com

Catalina Residents:

Yu Shil and Yixin Ma - clara150512@gmail.com

Hao Wu - haowu1112@gmail.com

Yifan Jiang - jyfan2018@gmail.com

Greenpointe Apartment Resident:

Faisal Safdar - syed_faisal@sbcglobal.net

ZONING DATA:

CATEGORY	REQUIRED	ALLOWED	REFERENCE	PROPOSED	STATUS
EIGHT LIMIT:	60'-0" (5 Stories)			67', 6-stories	
	Reduction abutting residential zones		DSP Pg 59	Reduction abutting residential zones	SDB Waiver #1
PEN SPACE:	Common: 100 sf/unit		DSP Pg 70	*See G1.05 for Open Space Calculations	Complies
	Total Common Required (at 112 units) = 14,000 sf			Total Common Provided = 19,458 sf	
	Personal: 80 sf/unit		DSP Pg 70 SDB Ch. 17.35	37 units reduction in required open space - 47-75 sf/unit	Concession #1
LOT COVERAGE	Determined by setbacks & open space			34,470sf / 61,409 sf = 56%	Complies
SETBACKS & FRONTAGES	Street: 20' sidewalk zone + 15' setback		DSP Pg 70.8 Complete Street Section	Lincoln St: 20' sidewalk zone + varied setback (10'-76')	SDB Concession #2
	Street: 20' sidewalk zone + 15' setback		DSP Pg 54.6 137	Civic Center Dr: 10' sidewalk zone + 15' setback	
	Side & Rear: 10' (from adjacent parcel)		DSP Pg 54	North Edge: 10'	
	Parking: 10'		DSP Pg 71	West Edge: varies (46'-68') Setback: 5'	
PARKING	Studios & 1-Bedrooms: 1 space/unit = 46 Spaces 2-Bedrooms or more: 2 spaces/unit = 132 Spaces Total Parking Req'd = 178 spaces EV Charging Stations:			0.85 spaces/unit (at 112 units) Total Parking Provided: 96 Spaces *See parking plan	SDB Concession #3
BIKE PARKING	Class 1: 1 space per 2 units (56 req'd w/ 112 units) Class 2: 1 space per 15 units (8 req'd w/ 112 units)		18.25 (0%) 18.25 (0%)	Class 1: 72 spaces Class 2: 8 spaces	Complies Complies
DENSITY:	45-65 DU/acre 65 x 1.41 ac = 91 Units			84.4 DU/acre 23 % bonus (through SDB)	Complies through SDB w/ 35% SDB = 123 Units w/ 80% SDB = 164 Units
DEDICATED PARKLAND	Per Ordinance			None	SDB Waiver

STATE DENSITY BONUS: WAIVERS & CONCESSION DESCRIPTIONS

WAIVERS:

1. **BUILDING HEIGHT IS CONSIDERED A WAIVER** BECAUSE IT IS NOT PHYSICALLY POSSIBLE TO ACHIEVE THE NUMBER OF UNITS LEGALLY PERMITTED THROUGH THE STATE DENSITY BONUS PROGRAM WITHIN THE ZONING HEIGHT OF 5 STORIES AND 60' GIVEN THE OTHER ZONING CONSTRAINTS SUCH AS THE 45 DEGREE SETBACK PLANE FROM NEIGHBORING RESIDENCES, WITH THE UNIT MIX REQUIRED FOR THE PROJECT (25% 2 BEDROOM AND 25% 3 BEDROOM UNITS).

CONCESSIONS:

1. **OPEN SPACE IS REQUESTED AS A CONCESSION** BECAUSE WHILE IT IS PHYSICALLY POSSIBLE TO PROVIDE THE AMOUNT REQUIRED THROUGH ZONING THROUGH ROOF DECKS, IT WOULD BE PROHIBITIVELY EXPENSIVE TO DO SO. OPEN SPACE IS DESCRIBED IN MORE DETAIL ON G1.05. WE ARE PROVIDING PRIVATE DECKS AT ALL THE UNITS EXCEPT THE STUDIOS AND 5 OF THE 1-BEDROOM UNITS. MANY OF THE DECKS ARE AT LEAST 80 S.F. BUT SEVERAL ARE SMALLER. IN ORDER TO MAKE ALL OF THE DECKS 80 S.F., THE DEPTH OF THE UNITS WOULD NEED TO GROW, REDUCING THE AMOUNT OF COMMON OPEN SPACE IN THE COURTYARD AND CREATING UNITS THAT ARE LARGER THAN THE APPLICANT CAN PROVIDE. WE ARE PROVIDING 19,458 SF OF COMMON OPEN SPACE, 38% MORE THAN THE 14,080 REQUIRED.
2. **WE ARE REQUESTING A CONCESSION FOR SETBACKS & FRONTAGES** BECAUSE COMPLYING FULLY WITH THESE WOULD SQUEEZE OUR PARKING SO SIGNIFICANTLY THAT WE WOULD NEED TO ADD AN ADDITIONAL LEVEL OF PARKING TO PROVIDE ANYWHERE CLOSE TO THE AMOUNT NEEDED FOR THE PROJECT. THIS WOULD HAVE THE EFFECT OF EITHER CREATING A BASEMENT LEVEL WELL INTO THE WATER TABLE, OR ADDING ANOTHER 12' IN HEIGHT TO THE BUILDING.
 - A. **LINCOLN FRONTAGE:** THE 20' SIDEWALK ZONE IS PROVIDED ON LINCOLN PER ZONING. AS THIS IS THE MAIN ACCESS ROAD CONNECTING EL CAMINO TO THE CIVIC CENTER BUILDINGS, THE SETBACK FROM THE SIDEWALK ZONE IS 10' RATHER THAN 15' AT THE TWO CORNER PINCH POINTS, BUT THE MAJORITY OF THE FRONTAGE STEPS BACK MUCH MORE THAN 15' TO PROVIDE A LANDSCAPED FORECOURT.
 - B. **CIVIC CENTER FRONTAGE:** THIS STREET IS A MUCH SMALLER, RESIDENTIAL STREET AND FEELS LIKE AN ATYPICAL CONDITION IN THE CONTEXT OF THE SPECIFIC PLAN. WE PROPOSE TO PROVIDE THE 15' REQUIRED SETBACK, BUT NOT PROVIDE THE 20' SIDEWALK ZONE AND INSTEAD KEEP TO THE EXISTING 10' ZONE.
 - C. **NORTH SIDE SETBACK:** 10' REQUIRED SETBACK IS PROVIDED.
 - D. **WEST SIDE SETBACK:** 10' REQUIRED SETBACK IS PROVIDED, BUT THE PARKING ON THIS EDGE IS 5' RATHER THAN 10' AND THIS REDUCTION IS ALSO PART OF THE CONCESSION REQUEST.
3. **A PARKING REDUCTION IS REQUESTED AS A CONCESSION.** PROVIDING THE QUANTITY OUTLINED IN THE SPECIFIC PLAN WOULD REQUIRE MULTIPLE LEVELS OF PARKING WHICH IS COST PROHIBITIVE FOR AFFORDABLE HOUSING. THE STATE DENSITY BONUS ALLOWS FOR A REDUCTION IN PARKING SUCH THAT .5 SPACES PER UNIT IS THE MOST THAT CAN BE REQUIRED. WHEN THE SITE IS WITHIN 1/2 MILE OF TRANSIT, **WE ARE REQUESTING A REDUCTION FROM 178 SPACES DOWN TO 96 SPACES, OR .85 SPACES PER UNIT.** EVEN ACHIEVING THIS NUMBER OF SPACES WILL BE COSTLY, AS TANDEM STACKERS NEED TO BE USED IN ORDER TO PROVIDE 96 SPACES.



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
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Agenda Report

21-0006

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Proclaim October 2021 as Breast Cancer Awareness Month

BACKGROUND

The month of October has been observed as Breast Cancer Awareness Month since 1985. Breast Cancer Awareness Month is celebrated throughout the month of October to increase awareness of the disease, raise funds for research into the causes of breast cancer, promote prevention, diagnosis, treatment, and cure, as well as to educate people about the importance of early screening and detection of breast cancer.

DISCUSSION

At the September 28, 2021 City Council meeting, the Santa Clara City Council will proclaim October 2021 as Breast Cancer Awareness Month.

ENVIRONMENTAL REVIEW

This is an information report only and no action is being taken by the City Council and no environmental review under the California Environmental Quality Act ("CEQA") is required.

FISCAL IMPACT

There is no fiscal impact to the City other than staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>

Reviewed by: Julie Minot, Executive Director to the Mayor and City Council

Approved by: Deanna J. Santana, City Manager



City of Santa Clara

1500 Warburton Avenue
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Agenda Report

21-0007

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Proclaim October 2021 as Domestic Violence Awareness Month

BACKGROUND

October is Domestic Violence Awareness Month. Domestic Violence Awareness Month evolved from the first Day of Unity observed in October 1981 by the National Coalition Against Domestic Violence, which connected battered women's advocates from across the country who were working to end domestic violence against women and children.

In 1989, Congress passed Public Law 101-112, officially designating October of that year as National Domestic Violence Awareness Month. Since then, cities across the nation have joined with battered women's advocates to proclaim the month of October as Domestic Violence Awareness month.

Each year, Domestic Violence Awareness Month is observed to encourage individuals, advocates, and communities to take actions to help end domestic violence. Community events are held to raise public awareness of domestic violence issues, to educate victims on how to access available resources, and to send a powerful statement to abusers that domestic violence will not be tolerated.

DISCUSSION

At the September 28, 2021 City Council meeting, the Santa Clara City Council will proclaim October 2021 as Domestic Violence Awareness Month.

ENVIRONMENTAL REVIEW

This is an information report only and no action is being taken by the City Council and no environmental review under the California Environmental Quality Act ("CEQA") is required.

FISCAL IMPACT

There is no fiscal impact to the City other than staff time

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>

Reviewed by: Julie Minot, Executive Assistant to the Mayor and City Council

Approved by: Deanna J. Santana, City Manager



City of Santa Clara

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Agenda Report

21-1501

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Recognition of Outgoing Cultural Commissioner Teresa Sulcer

BACKGROUND

Council Policy 003 - Guidelines for Recognition of Volunteers, Community Leaders and Outstanding Citizens, includes the recognition of Commissioners who have served on a City Commission. Past City practice has been to recognize outgoing Commissioners for their years of service at a Council meeting (attachment 1).

DISCUSSION

As a Special Order of Business, the Mayor and Council will recognize former Commissioner Sulcer for her years of service.

Commission

Cultural Commission

Member

Teresa Sulcer

Term Years

2019-2021

FISCAL IMPACT

There is no fiscal impact other than staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENT

1. Council Policy 003 - Guidelines for Recognition of Volunteers, Community Leaders and Outstanding Citizens



GUIDELINES FOR RECOGNITION OF VOLUNTEERS, COMMUNITY LEADERS, AND OUTSTANDING CITIZENS

POLICY

The City Council may award certificates, tiles, plaques of appreciation, City medallions, or other items to recognize a volunteer, community leader, or outstanding citizen who has provided a significant service to the City.

PROCEDURE

Awards are authorized by the City Council according to the following guidelines:

1. **City Medallions** shall be awarded to:
 - ◆ Outstanding citizens at the discretion of the City Council.
2. **Engraved Clocks** shall be awarded to:
 - ◆ Council Members who have served one or more terms, upon leaving office.
3. **Special Engraved Plaques**
 - ◆ Council Members who have served one or more terms as Council Member, and one or more terms as Mayor, upon leaving office.
4. **Appreciation Plaques** “The City of Santa Clara is a great City because of the efforts of people like you” shall be awarded to:
 - ◆ Outgoing Council Members and other elected officials.
 - ◆ Commissioners who have served one or more terms.
 - ◆ Youth Commissioners who have served four one-year terms.
 - ◆ Volunteer Fire and Volunteer Police Reserves upon their retirement.
 - ◆ Outstanding citizens who are deserving of special recognition, who have voluntarily served the City in an extraordinary capacity on a single occasion (.g., Olympic medallists) or in a special capacity over an extended period of time* (e.g., as a member of a standing committee). Awards in this category are at the discretion of the City Council and are considered individually.
5. **Small Presentation Items (e.g. tiles, paperweights, etc.)** shall be awarded to:
 - ◆ Commissioners who have served less than one term, but have attended at least one year of Commission meetings
 - ◆ Youth Commissioners who have served at least one but less than



GUIDELINES FOR RECOGNITION OF VOLUNTEERS, COMMUNITY LEADERS, AND OUTSTANDING CITIZENS (cont.)

four one-year terms.

- ◆ Volunteers and community leaders who have served in a special capacity on a limited basis; for example, one who has worked on a short term committee, or who has organized a single event. Awards in this category are at the discretion of the City Council and are considered individually.

6. **Framed Letters of Appreciation Signed by the entire City Council** shall be awarded to:

- ◆ All Outgoing City Council Members.
- ◆ Outgoing Commissioners who have served one or more terms.
- ◆ Other outgoing elected officials.

7. **Framed Letters of Appreciation Signed by the Mayor** shall be awarded to:

- ◆ Commissioners who have served less than one term.

8. **Framed Certificates of Appreciation signed by the Mayor** shall be awarded to:

- ◆ Those individuals receiving small presentation items.
- ◆ Commissioners who have attended less than one year of Commission meetings.
- ◆ Participants in special municipal events, projects or programs (i.e. Arbor Day, Public Safety Providers Week, City contests)

Reference:

***Per Council approval September 2003
Naming of Facilities Policy, August 2003***

**** e.g., The Neil Henry Volunteer Recognition Award, established by City Council in July 2003.***



City of Santa Clara

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Agenda Report

21-1476

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Introduce Santa Clara Swim Club's New Head Coach

DISCUSSION

At the October 19, 2021 City Council meeting, Santa Clara Swim Club Board Member Vikas Gupta will introduce their new Head Coach, Kevin Zacher, to the City Council and community.

ENVIRONMENTAL REVIEW

This is an information report only and no action is being taken by the City Council and no environmental review under the California Environmental Quality Act ("CEQA") is required.

FISCAL IMPACT

There is no fiscal impact to the City other than staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov.

Reviewed by: Julie Minot, Executive Assistant to the City Manager

Approved by: Deanna J. Santana, City Manager



Agenda Report

21-1269

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Presentation on Business Tax Ballot Measure and Other Potential Revenue Measures for November 2022 Ballot

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

At the 2021 Council Priority Setting Session, information was requested by Council on a potential business tax ballot measure which would update the City's current business tax structure. As part of the May 25, 2021 Budget Study Session and at the June 22, 2021 City Council meeting, Staff presented information and a timeline to pursue a measure that could be placed on the November 2022 General Election ballot. At the June 22nd Council meeting, Council directed staff to 1) begin work on a potential November 2022 ballot measure, including exploring other potential revenue measures, and 2) agendize a study session for Fall 2021. This direction was affirmed at the August Council Priority Setting check-in meeting.

Currently, all businesses operating within Santa Clara (including those businesses operating but located outside of the City), must have a license to transact business or occupy space in the city. The City's business tax program was last updated in 1992. The business tax program does not allow for a cost escalator and therefore has not changed in almost 30 years. The City's current charge for business tax ranges from \$15 to \$500 per company and as a result receives annual revenue of approximately \$0.9 million.

DISCUSSION

In preparation for a potential November 2022 ballot measure, City staff has started a procurement for Business Tax and Ballot Measure Consulting Services by releasing a Request for Statement of Qualifications in September 2021. Staff anticipates completing the procurement process shortly with a contract award expected later this month. The services to be provided include 1) a comprehensive study on the current business tax structure and recommending alternative tax structures/methods in addition to exploring other tax measures, 2) professional polling/public opinion research services and, 3) corporate and community outreach.

As staff proceeds with the analysis for a November 2022 ballot measure, it is important Council input is gathered on some key priorities and/or guidelines for the consultant to take into consideration when making recommendations on possible alternative tax structures. During this study session, staff will provide a brief overview of business tax structures, benchmark comparative cities and briefly discuss other possible tax measures the Council may want to explore for the November 2022 ballot given the projected deficit and on-going infrastructure needs.

At the August 2021 Council Priorities check-in meeting, Council was advised of the projected \$17.6 million deficit in fiscal year 2023/24 along with close to \$1 billion of unfunded infrastructure needs. A critical part of the budget balancing strategies presented to Council was increasing revenues, which included exploring tax measures. While the Business License Tax was prioritized, there are other tax measure options that may need to be explored including the Utility User Tax, Documentary Transfer Tax and a General Obligation Bond or Parcel Tax.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a “project” within the meaning of the California Environmental Quality Act (“CEQA”) pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

FISCAL IMPACT

There is no fiscal impact associated with this report other than administrative staff time.

COORDINATION

This report was coordinated with the City Manager’s Office and the Finance Department.

PUBLIC CONTACT

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RECOMMENDATION

1. Provide feedback on key priorities for the development of recommendations on possible alternative tax structures for future Council consideration; and
2. Review and direct staff to explore other potential revenue measures to be placed on the November 2022 ballot.

Reviewed by: Kenn Lee, Director of Finance

Approved by: Deanna J. Santana, City Manager



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
santaclaraca.gov
[@SantaClaraCity](https://twitter.com/SantaClaraCity)

Agenda Report

21-20

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Board, Commissions and Committee Minutes

COUNCIL PILLAR

Enhance Community Engagement and Transparency

RECOMMENDATION

Note and file the Minutes of:

Downtown Community Task Force - May 20, 2021
Cultural Commission - August 2, 2021
Parks & Recreation Commission - August 17, 2021
Senior Advisory Commission - August 23, 2021
Planning Commission - August 25, 2021



City of Santa Clara

Meeting Minutes

Downtown Community Task Force

05/20/2021

6:00 PM

Zoom Webinar

Pursuant to the provisions of California Governor's Executive Order N-29-20, issued on March 17, 2020, to prevent the spread of COVID-19, the City of Santa Clara has implemented the following method for the public to participate remotely:

Via Zoom:

o <https://santaclaraca.zoom.us/j/91975789377>

Meeting ID: 919 7578 9377 or

o Phone: 1(669) 900-6833

CALL TO ORDER AND ROLL CALL

The DCTF Chair, Adam Thompson called the meeting to order at 6:06 p.m.

Present 8 - Adam Thompson, Dan Ondrasek, Rob Mayer, Debra von Huene, Ana Vargas-Smith , Mathew Reed, Butch Coyne, and Chan Thai

Absent 1 - Atisha Varshney

A motion was made by Member von Huene to excuse Member Varshney from the meeting. The motion was seconded by Member Coyne.

Aye: 8 - Thompson, Ondrasek, Mayer, von Huene, Vargas-Smith, Reed, Coyne, and Thai

Absent: 1 - Varshney

CONSENT CALENDAR

There were no items.

GENERAL BUSINESS

1. Discussion on implementation topics for the Downtown Precise Plan.

2. Theater Anchor Discussion - Market Conditions, Land & Building Requirements, Constraints, and Operations
3. Discussion on the content and timing of the online Community Survey on the Preferred Land Use Framework.

PUBLIC PRESENTATIONS

Member von Huene made an announcement regarding the Franklin Forward initiative. A community survey is posted on their website. A zoom meeting on the topic will be held on June 8, 2021. See their website for details: <https://www.franklinfwd.org/>

ADJOURNMENT

A motion was made by Vice Chair Ondrasek, and seconded by Member Coyne to adjourn the meeting at 8:29 p.m.

The next meeting is scheduled for Thursday, June 17, 2021 at 6 p.m.

Aye: 8 - Thompson, Ondrasek, Mayer, von Huene, Vargas-Smith, Reed, Coyne, and Thai

Absent: 1 - Varshney

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City of Santa Clara

Meeting Minutes Cultural Commission

08/02/2021

7:00 PM

Virtual Meeting

Pursuant to the provisions of California Governor's Executive Order N-29-20, issued on March 17, 2020, to prevent the spread of COVID-19, the City of Santa Clara has implemented methods for the public to participate remotely.

Via Zoom:

<https://santaclaraca.zoom.us/j/98272283531>

Webinar ID: 982 7228 3531

Or join by phone: 1 669 900 6833

The meeting set-up is in line with the recommendations of the COVID-19 White House Task Force, which notes no more than ten (10) people gathering. The Chair will be present for the meeting with the staff liaison and commissioners participating remotely.

CALL TO ORDER AND ROLL CALL

The meeting was called to order by Chair Samara at 7:03 P.M.

Present 6 - Commissioner Louis Samara, Chair Debra von Huene, Vice Chair Candida Diaz, Commissioner Jonathan Marinaro, Commissioner Paul McNamara, and Commissioner Jennifer Vega

CONSENT CALENDAR

1.A [21-894](#) Cultural Commission Regular Meeting Minutes of June 7, 2021

Recommendation: Approve the Cultural Commission Regular Meeting Minutes of June 7, 2021.

A motion was made by Commissioner Diaz, seconded by Vice Chair Marinaro that this item be approved. The motion passed with the following vote:

Aye: 5 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, and Sulcer

Abstained: 2 - Commissioner McNamara, and Commissioner Vega

PUBLIC PRESENTATIONS

Community member, Gloria Cox shared details of the Art Campaign and provided an overview of the National Fitness Campaign.

Community members, Janet Stevenson and Louis shared information about the Old Quad. They wanted to have a walking tour and decorate for the holidays. They discussed mapping the entries.

[21-1263](#)

Public Presentation Post Meeting Material

GENERAL BUSINESS

2. [21-895](#) Final Report for Cultural Commission Work Plan FY 2020/21

Recommendation: Provide final status reports on the Cultural Commission work plan goals and activities for FY 2020/21.

Commissioners reported the following update for the Work Plan FY 2020/21:

Sculpture Exhibit is complete. Surviving Covid finalists will be posted on website. \$2,500 is allotted for this program. Utility Box update-6 artists have been selected. One artist started painting. Coloring Book is complete and on website.

3. [21-985](#) Discussion and Development of Cultural Commission Work Plan Goals and Activities for FY 2021/22

Recommendation: Develop and recommend Cultural Commission work plan goals and activities for FY 2021/22.

The Commissioners discussed the goals and activities associated with the goals and which commissioners would serve on each committee. Commissioners voted on the goals. Total budget-\$17,000. No commission meeting in September.

Goal # 1-the Commission discussed community building small outdoor events in districts. Possible locations include farmers market, library or Triton Museum.

All items were updated on the Work Plan for 2021/22.

A motion was made by Commissioner von Huene, seconded by Vice Chair Marinaro to approve Goal # 1 as amended to include: consider hosting free outdoor events in different districts and summer concerts in 2022.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

A motion was made by Vice Chair Marinaro, seconded by Commissioner von Huene, to approve Goal #2 and the objectives associated with the goal.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

A motion was made by Commissioner von Huene, seconded by Commissioner McNamara, to make the Citywide Art Master Plan a separate new Goal #5.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

A motion was made by Commissioner Diaz, seconded by Vice Chair Marinaro, to approve Goal #2 and all objectives associated with the goal, with the removal of Citywide Art Master Plan from Goal #2 and move to a separate Goal #5.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

A motion was made by Commissioner von Huene, seconded by Commissioner Vega, to approve Goal #3 and all the objectives associated with the goal.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

A motion was made by Commissioner von Huene, seconded by Commissioner Diaz, to approve Goal #4 and all the objectives associated with the goal.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

4. [21-893](#) Cultural Commission Election of Chair and Vice Chair

Recommendation: Elect a Chairperson and Vice Chairperson to serve the Cultural Commission for the FY2021/22 term.

Commissioner Diaz, nominated Commissioner von Huene for the position as Chair for the 2021-22 fiscal year. Commissioner von Huene accepted the nomination.

A motion was made by Commissioner Diaz, seconded by Commissioner Sulcer, to elect Commissioner von Huene as Chair for the 2021-22 fiscal year.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

Commissioner Sulcer, nominated Commissioner Diaz for the position as Vice-Chair for the 2021-2022 fiscal year. Commissioner Diaz accepted the nomination.

A motion was made by Commissioner Sulcer, seconded by Vice-Chair Marinaro, to elect Commissioner Diaz as Vice-Chair for the 2021-22 fiscal year.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

STAFF REPORT

Recreation Manager, **Kim Castro** requested the Commissioners to follow us on social media. **Kim Castro** thanked staff member, **Tyler Freitas** for his work on the Chalk Art contest and with an interview on the news.

COMMISSIONERS REPORT

Commissioner Marinaro reported it was his and his wife's birthday this month and he is looking to buy a new home.

Commissioner von Huene mentioned that she was able to have her employer pay for her "Leadership Santa Clara" tuition. She thought it was a good opportunity. She thanked Commissioner Samara for his hard work.

Commisioner Diaz thanked **Chair Samara** for his work on the commission.

ADJOURNMENT

A motion was made by Commissioner Diaz, seconded by Chair Samara, that the meeting be adjourned at 9:28 P.M.

Aye: 7 - Commissioner Samara, Chair von Huene, Vice Chair Diaz, Commissioner Marinaro, Sulcer, Commissioner McNamara, and Commissioner Vega

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City of Santa Clara

Meeting Minutes

Parks & Recreation Commission

08/17/2021

7:00 PM

Virtual Meeting

Pursuant to the provisions of California Governor's Executive Order N-29-20, issued on March 17, 2020, to prevent the spread of COVID-19, the City of Santa Clara has implemented methods for the public to participate remotely:

Via Zoom:

<https://santaclaraca.zoom.us/j/91316665755>

Meeting ID: 913 1666 5755 or

Phone: (669) 900-6833

The meeting set-up is in line with the recommendations of the COVID-19 White House Task Force, which notes no more than ten (10) people gathering. The Chair will be present for the meeting with the staff liaison and commissioners participating remotely.

CALL TO ORDER AND ROLL CALL

Chair Forte called the Parks & Recreation Commission Meeting to order at 7:00 PM.

Present 6 - Commissioner Andrew Knaack, Commissioner Joe Martinez, Commissioner Dana Caldwell, Vice Chair Burt Field, Commissioner Sajid Hai, and Chair Eversley Forte

Absent 1 - Commissioner Kelly Gonzalez

Commissioner Knaack made a motion, seconded by Commissioner Martinez, to excuse Commissioner Gonzalez.

Aye: 6 - Commissioner Knaack, Commissioner Martinez, Commissioner Caldwell, Vice Chair Field, Commissioner Hai, and Chair Forte

Excused: 1 - Commissioner Gonzalez

CONSENT CALENDAR

- 1.A [21-1021](#) Action on the Parks & Recreation Commission Minutes of the July 20, 2021 Meeting

Recommendation: Approve the Parks & Recreation Commission Minutes of the July 20, 2021 Meeting

Commissioner Hai made a motion, seconded by Commissioner Caldwell, to approve the minutes of the July 20, 2021 Meeting.

Aye: 6 - Commissioner Knaack, Commissioner Martinez, Commissioner Caldwell, Vice Chair Field, Commissioner Hai, and Chair Forte

Excused: 1 - Commissioner Gonzalez

PUBLIC PRESENTATIONS

None.

GENERAL BUSINESS

2. [21-1124](#) Recommend Nominee(s) for Consideration as the "Honorary Holiday Tree Lighter 2021" for the Annual Holiday Tree Lighting Ceremony on Friday, December 3, 2021.

Recommendation: Recommend a nominee, or nominees to the Mayor for consideration as "Honorary Holiday Tree Lighter 2021."

Commissioner Caldwell made a motion, seconded by Commissioner Hai, to continue this item to the September 21, 2021 Parks & Recreation Commission Meeting.

Aye: 6 - Commissioner Knaack, Commissioner Martinez, Commissioner Caldwell, Vice Chair Field, Commissioner Hai, and Chair Forte

Excused: 1 - Commissioner Gonzalez

3. [21-1022](#) Parks & Recreation Commission Work Plan Goals for FY2021/22

Recommendation: Continue progress on Parks & Recreation Commission Work Plan Goals for FY 2021/22 and appoint subcommittee(s) as needed.

The subcommittee for Work Plan Goal D will meet between September and October to meet onsite at the future 30+ acre community park site on an upcoming Thursday afternoon. Commissioners were encouraged to visit Westwood Oaks Park to become familiar with the layout of the park, as the next major rehabilitation project will be at this site and robust community outreach will be forthcoming.

STAFF REPORT

Deputy Director Seale provided an update regarding park projects. Staff conducted the initial Westwood Oaks Park site visit with Gates + Associates team. Montague Park Rehabilitation Project is in the final phases of review before going out to bid. The Gazebo Project at City Plaza Park, and the Fairway Glen Restroom Project are both in the design phase. The Senior Center fitness area has new equipment and is open. Henry Schmidt Park's flooring is complete and programming have already started there. The Parks Division is actively addressing the impact of the drought by reducing irrigation usage by 15 - 20% and not irrigating any zones more than three times per week. The water fountain at Civic Center has already been turned off due to the drought. The Department has resumed Ulistac Natural Area monthly meetings while adhering to the master plan for the park.

Recreation Manager Castro provided an update regarding Celebrate Santa Clara, and requested Commissioners to volunteer for each of the developers' booths from 1 - 3:30 PM or 3:30 - 5 PM. The Gateway Crossing survey is closed, and the Freedom Circle survey will go live either Wednesday, August 18 or Thursday, August 19 and remain open for at least three weeks. Santa Clara Rotary will handle beer and wine sales, donating their proceeds to programs that impact Santa Clara youth. There will be 15 artists, a crafts the kids area, food vendors, and signage throughout the park recommending visitors to wear masks. The House Rockers will be the headliner entertainment at Celebrate Santa Clara. The Senior Center is open from 7 AM - 3 PM, indoor dining has already started, and no appointments necessary. Natatorium repairs are ongoing and will not be opening for a few months. The online Fall Activity Guide is out and registration is continuing at a brisk pace. Classes are starting on Monday, August 23. Youth Activity Center/Teen Center has about 75-80 kids participating in programs on a daily basis.

COMMISSIONERS REPORT

Chair Forte: Visited Lick Mill Park.

Commissioner Caldwell: Visited City Plaza Park and the gazebo area, as well as Raymond G. Gamma Dog Park

Commissioner Hai: Visited Jenny Strand Park, played basketball there with a group of students, and passed by Westwood Oaks Park.

Commissioner Knaack: Visited Mission City Memorial Park (the Cemetery), Everett Alvarez Jr. Park, Thomas Barrett Park. Warburton Park, Eddie Souza Park, San Tomas Aquino Trail, Bowers Park, Bracher Park, Machado Park, Meadow Park, Lawrence Station Area Parks, Larry J. Marsalli Park, Fremont Park, Civic Center Park, and attended Sunset Cinema, and congratulated staff for the great turn out.

Commissioner Martinez: Visited Mission City Memorial Park, and Raymond G. Gamma Dog Park.

Vice Chair Field: Visited Youth Soccer Park for the blood drive. He noted the natural grass fields at Youth Soccer Park are in pristine condition.

ADJOURNMENT

Commissioner Caldwell made a motion, seconded by Commissioner Field, to adjourn the meeting until the next regularly held Parks & Recreation Commission meeting at 7:00 PM on Tuesday, September 21, 2021.

Aye: 6 - Commissioner Knaack, Commissioner Martinez, Commissioner Caldwell, Vice Chair Field, Commissioner Hai, and Chair Forte

Excused: 1 - Commissioner Gonzalez

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City of Santa Clara

Meeting Minutes

Senior Advisory Commission

08/23/2021

10:00 AM

Virtual Meeting

Pursuant to the provisions of California Governor's Executive Order N-29-20, issued on March 17, 2020, to prevent the spread of COVID-19, the City of Santa Clara has implemented methods for the public to participate remotely.

Join from a PC, Mac, iPad, iPhone or Android device:

Please click this URL to join: <https://santaclaraca.zoom.us/j/97590069803>

Or join by phone: Dial 1-669-900-6833

Webinar ID: 975 9006 9803

International numbers available: <https://santaclaraca.zoom.us/u/abuhH0eDsx>

The meeting set-up is in line with the recommendations of the COVID-19 White House Task Force, which notes no more than ten (10) people gathering. The Chair will be present for the meeting with the staff liaison and commissioners participating remotely.

CALL TO ORDER AND ROLL CALL

The meeting was called to order by Chair Grant McCauley at 10:03 a.m.

Present 5 - Commissioner Wanda Buck, Commissioner Judy Hubbard, Chair Grant L. McCauley, Vice Chair Nancy Toledo, and Commissioner Helen Narciso

Absent 1 - Commissioner Alex Mackenzie

CONSENT CALENDAR

1.A [21-1080](#) Senior Advisory Commission Minutes of July 26, 2021

Recommendation: Approve the Senior Advisory Commission Minutes of July 26, 2021.

A motion was made by Commissioner Hubbard, seconded by Commissioner Buck, to approve the Senior Advisory Commission minutes from July 26, 2021.

Aye: 5 - Commissioner Buck, Commissioner Hubbard, Chair McCauley, Vice Chair Toledo, and Commissioner Narciso

Absent: 1 - Commissioner Mackenzie

PUBLIC PRESENTATIONS

None

GENERAL BUSINESS

2. [21-1082](#) Senior Advisory Commission Work Plan & Goals for FY2021/22

Using the results from the 2017 Senior Needs Assessment and building upon the strategies that were suggested by focus group participants and partners, the Senior Advisory Commissioner continued to develop potential priorities and interests of older adults residents of Santa Clara ages 50 and over, utilizing the eight (8) domains of the Age-Friendly City guidelines. The Commission made final edits for each goal which included:

1. Advocate for Affordable and Convenient Housing

- a. Provide two (2) presentations (January/May) and three (3) articles for the Senior Center Newsletter (October, February, May) updating older adults on current affordable housing projects in Santa Clara.
- b. Provide two (2) presentations (January/May) and three (3) articles for the Senior Center Newsletter (October, February, May) updating older adults on current rental assistance programs in Santa Clara.
- c. Send representative to attend Housing Commission meetings when they begin.

2. Develop Opportunities to Promote Health, Wellness, and Nutrition

- a. Educate and provide resources for older adults transitioning out of COVID-19 by offering two (2) presentations (December/April) on the topics of "Coping in a New Phase", and "The Effects to our Mental Health", and one (1) "share your experience" opportunities in March.
- b. Host the "Be Strong, Live Long" Health & Wellness Fair on Friday, May 20, 2022.
- c. Send representative to attend ADA Committee meetings when they begin.

Commissioner Toledo made a motion, seconded by Commissioner Buck, to adopt the Senior Advisory Commission Work Plan & Goals for FY2021/22.

Aye: 5 - Commissioner Buck, Commissioner Hubbard, Chair McCauley, Vice Chair Toledo, and Commissioner Narciso

Absent: 1 - Commissioner Mackenzie

3. [21-1090](#) Pruneridge Avenue Complete Streets Plan

STAFF REPORT

Recreation Supervisor Herb reported to the Commission about the following:

- Beginning August 2, the Senior Center opened the Fitness Center and Snack Bar. Patrons can utilize the Senior Center Monday - Friday, from 7:00 am - 3:00 pm.
- Senior Center "Try Before You Buy" class opportunities are taking place during the month of August. Individuals can try out a class to see if they enjoy it before committing to the whole session.
- Senior Center classes will begin September 1 at the Senior Center.
- The Senior Center is taking steps to bring Senior Center volunteers back online and helping in certain program areas at the Senior Center.

Recreation Manager Castro reported to the Commission about the following:

- Celebrate Santa Clara was held on August 14 and had a great attendance.
- Warburton Pool continues to be open for Lap Swim.
- The Parks & Recreation Department is implementing the Adult Activity Pass, where individuals can buy a pass to access recreation activities. Henry Schmidt Park Building has new flooring.
- The Cultural Commission has begun the Utility Box Project, where individuals can apply to decorate a utility box in Santa Clara.
- Westwood Oaks Park rehab project has begun.

COMMISSIONERS REPORT

None

ADJOURNMENT

A motion was made by Commissioner Buck, seconded by Commissioner Narciso, that the meeting be adjourned at 12:17 p.m.

Aye: 5 - Commissioner Buck, Commissioner Hubbard, Chair McCauley, Vice Chair Toledo, and Commissioner Narciso

Absent: 1 - Commissioner Mackenzie

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In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the City of Santa Clara will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities, and will ensure that all existing facilities will be made accessible to the maximum extent feasible. The City of Santa Clara will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities including those with speech, hearing, or vision impairments so they can participate equally in the City's programs, services, and activities. The City of Santa Clara will make all reasonable modifications to policies and programs to ensure that people with disabilities have an equal opportunity to enjoy all of its programs, services, and activities.

Agendas and other written materials distributed during a public meeting that are public record will be made available by the City in an appropriate alternative format. Contact the City Clerk's Office at 1 408-615-2220 with your request for an alternative format copy of the agenda or other written materials.

Individuals who require an auxiliary aid or service for effective communication, or any other disability-related modification of policies or procedures, or other accommodation, in order to participate in a program, service, or activity of the City of Santa Clara, should contact the City's ADA Coordinator at 408-615-3000 as soon as possible but no later than 48 hours before the scheduled event.



City of Santa Clara

Meeting Minutes

Planning Commission

08/25/2021

6:00 PM

Virtual Meeting

Pursuant to the provisions of California Governor's Executive Order N-29-20, issued on March 17, 2020, to prevent the spread of COVID-19, the City of Santa Clara has implemented methods for the public to participate remotely:

- Via Zoom:
 - o <https://santaclaraca.zoom.us/j/91729202898>
 - Webinar ID: 917 2920 2898 or
 - o Phone: 1(669) 900-6833
- Via the City's eComment (available during the meeting)

The public may view the meetings on SantaClaraCA.gov, Santa Clara City Television (Comcast cable channel 15 or AT&T U-verse channel 99), or the livestream on the City's YouTube channel or Facebook page.

Public Comments prior to meeting may be submitted via email to PlanningPublicComment@SantaClaraCA.gov no later than noon on the day of the meeting; and also before and during the meeting via eComment. Clearly indicate the project address, meeting body, and meeting date in the email.

PUBLIC PARTICIPATION IN ZOOM WEBINAR: Please follow the guidelines below when participating in a Zoom Webinar:

- The meeting will be recorded so you must choose 'continue' to accept and stay in the meeting.
- If there is an option to change the phone number to your name when you enter the meeting, please do so as your name will be visible online and will be used to notify you that it is your turn to speak.
- Mute all other audio before speaking. Using multiple devices can cause an audio feedback.
- Use the raise your hand feature in Zoom when you would like to speak on an item and lower when finished speaking. Press *9 to raise your hand if you are calling in by phone only.
- Identify yourself by name before speaking on an item.
- Unmute when called on to speak and mute when done speaking. If there is background noise coming from a participant, they will be muted by the host. Press *6 if you are participating by phone to unmute.
- If you no longer wish to stay in the meeting once your item has been heard, please exit the meeting.

6:00 PM REGULAR MEETING

Call to Order

Chair Biagini called the meeting to order at 6:05 p.m.

Pledge of Allegiance and Statement of Values**Roll Call**

Present 6 - Chair Nancy A. Biagini, Commissioner Ricci Herro, Commissioner Qian Huang, Commissioner Yuki Ikezi, Commissioner Lance Saleme, and Commissioner Yashraj Bhatnagar

Absent 1 - Vice Chair Priya Cherukuru

A motion was made by Commissioner Saleme, seconded by Commissioner Herro to excuse Commissioner Cherukuru's absence.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

DECLARATION OF COMMISSION PROCEDURES

Chair Biagini thanked the Commission for electing her as Chair and stated that she hoped the Commission would uphold the same guidelines regarding limiting Commissioner questions and continue to have a goal of the meeting end time be no later than 10 p.m.. **Chair Biagini** read the Declaration of Commission Procedures.

CONTINUANCES/EXCEPTIONS

None.

CONSENT CALENDAR

A motion was made by Commissioner Herro, seconded by Commissioner Saleme to approve all items on the consent calendar.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

- 1.A [21-1005](#) Planning Commission Meeting Minutes of July 12, 2021 Special Meeting

Recommendation: Approve the Planning Commission Minutes of the July 12, 2021 Special Meeting

- 1.B [21-166](#) Action on Use Permit for ABC License Type 41 for Taqueria La Veracruzana restaurant at 1205 El Camino Real

Recommendation: Adopt a resolution approving a Use Permit for the sale and consumption of alcohol (ABC License Type 41) in an existing Taqueria La Veracruzana located at 1205 El Camino Real, subject to conditions of approval.

- 1.C [21-873](#) Planning Commission 2022 Calendar of Meetings

Recommendation: Approve the Planning Commission 2022 Calendar of Meetings.

- 1.D [21-911](#) Action on Variances to minimum interior side yard and rear yard building setbacks at 794 Park Court

Recommendation: Alternative : 1: Adopt a Resolution making the necessary findings and approving the Variances to allow substandard interior side and rear yard buildings setbacks at 794 Park Court, subject to conditions.

- 1.E [21-1117](#) Action on a Variance to the minimum side corner yard building setback at 343 Kellogg Way

Recommendation: Alternative 1: Adopt a Resolution making the necessary findings and approving the Variance to allow a substandard side corner yard buildings setback at 343 Kellogg Way, subject to conditions.

PUBLIC PRESENTATIONS

None.

PUBLIC HEARING

2. [21-7984](#) Use Permit to allow construction of a 396-room hotel, on-site Alcohol Beverage sales (Type 47 license) and live indoor music entertainment at 312 Brokaw Road and 1240 and 1290 Coleman Avenue

Recommendation: Adopt a Resolution to approve a Use Permit to allow a new 396-room hotel and on-site Alcohol Beverage sales (Type 47 license) and live indoor music entertainment located at 312 Brokaw Road and 1240 and 1290 Coleman Avenue.

Associate Planner Debby Fernandez provided the staff presentation. **Kurt Jensen** and **UK Kang, Jensen Fey Architects**, provided the applicant presentation. Commissioners asked questions regarding the traffic analysis, how the MND conclusion was drawn, comparisons with recent hotel constructions in the City, EV charging, shuttle service, public art, parking, and building height. Commissioners voiced their support for the live entertainment aspect of the project. **Gary Black, Hexagon Transportation Consultants; Environmental Consultant Doug Herring; Bradley Wagstaff, Mogul Hospitality Partners**, from the applicant team and **Development Review Officer Gloria Sciara** answered questions from the Commission.

Public Speaker(s): Mark Ferrari
Michael Lozeau

Bradley Wagstaff, Mogul Hospitality Partners, responded to the concerns of the first public speaker regarding parking. **Assistant City Attorney Alexander Abbe** responded to the comments from the second public speaker regarding emissions of formaldehyde and bird strikes.

A motion was made by Commissioner Ikezi, seconded by Commissioner Herro to close public hearing.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

A motion was made by Commissioner Ikezi, seconded by Commissioner Saleme to adopt the resolution for the MND and MMRP.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

A motion was made by Commissioner Huang, seconded by Commissioner Herro to adopt a resolution to approve a use permit to allow the construction of a 396-room hotel, on-site Alcohol Beverage sales (Type 47 license) and live indoor music entertainment located at 312 Brokaw Road, 1240 Coleman Avenue and 1290 Coleman Avenue.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

3. [21-986](#) Action on a Use Permit for Agape Playschool / Learning Center to allow outdoor activity associated with a child daycare facility at 3700 Thomas Road

Recommendation: Adopt a Resolution to approve a Use Permit to allow outdoor activity associated with a child day care facility at 3700 Thomas Road.

The meeting went into recess at 8:02 p.m. and reconvened at 8:10 p.m.

Associate Planner Debby Fernandez provided the staff presentation.

Adlin Netto, Agape Playschool, provided the applicant presentation. The Commissioners had safety concerns and asked questions regarding the fence, air quality, noise, location, and poles to stop cars. **Applicant Adlin Netto** and **Architect ,K+ Designs**, answered the Commission's questions. The Commission recommended that the applicant return at a later time with a design that included more safety mitigation measures.

A motion was made by Commissioner Saleme, seconded by Commissioner Huang to close public hearing.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

The applicant provided a rebuttal. Commissioner Herro made a motion with a friendly amendment that was later withdrawn. The Commission spent time trying to formulate a motion and ultimately decided to continue the item due to the number of modifications they requested and concerns that were discussed.

A motion was made by Commissioner Saleme, seconded by Commissioner Huang to continue Item 3 to the October 27, 2021 Planning Commission meeting.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

4. [21-995](#) Action on a Variance Request for a Reduced Side Setback and Substandard Interior Garage Width, and Increased Lot Coverage in Conjunction with the Proposed First and Second Story Addition at 3467 Golden State Drive

Recommendation: 1. Adopt a resolution denying the request for a variance.

A motion was made by Commissioner Huang, seconded by Commissioner Herro to close public hearing.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

Associate Planner Nimisha Agrawal provided the staff presentation. **Applicants Sullivan Santos and Bill Herrera** briefly spoke regarding the project.

The Commission expressed support for the staff recommendation and voiced concerns regarding the large size of the proposed changes to the home in relation to the lot size.

A motion as made by Commissioner Bhatnagar, seconded by Commissioner Huang to approve staff recommendation.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

REPORTS OF COMMISSION/BOARD LIAISON AND COMMITTEE:

1. Announcements/Other Items

None.

2. Commissioner Travel and Training Reports, Requests to attend Trainings

Commissioner Ikezi suggested holding a training for the new Commissioners to introduce them to Planning Commission topics. **Planning Manager Reena Brilliot** informed the Commission that there is an APA conference upcoming in September.

DIRECTOR OF COMMUNITY DEVELOPMENT REPORTS:

1. Planning Commission Budget Update

OSIV Elizabeth Elliott provided an update on the Planning Commission budget.

A motion was made by Commissioner Saleme, seconded by Commissioner Huang to expend funds for Commissioners to attend the upcoming California APA Conference, September 13 - September 15, 2021.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Absent: 1 - Vice Chair Cherukuru

2. Upcoming Agenda Items

Planning Manager Reena Brilliot informed the Commission that the Zoning Code Update Study Session would be pushed back to mid-October and reminded the Commission about the September 9, 2021 Joint Study Session with the City Council and the Downtown Community Task Force regarding Form Based Code.

3. City Council Actions

Development Review Officer Gloria Sciara updated the Commission regarding recent City Council actions.

ADJOURNMENT:

A motion was made by Commissioner Huang, seconded by Commissioner Bhatnagar to adjourn the meeting.

The meeting adjourned at 10:22 p.m.

The next regular scheduled meeting is on Wednesday, September 22, 2021.

Aye: 6 - Chair Biagini, Commissioner Herro, Commissioner Huang, Commissioner Ikezi, Commissioner Saleme, and Commissioner Bhatnagar

Excused: 1 - Vice Chair Cherukuru

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Agenda Report

21-959

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Bills and Claims Report (CC, HA, SA) for the period June 12th, 2021 - August 27th, 2021

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Disbursements made by the City are based on invoices submitted for payment. Prior to payment, staff reviews all disbursement documents to ensure they are reflective of the goods or services provided. Invoices are usually paid within 30 days of receipt of an accurate invoice. As the final step, the City Auditor, or her designee verifies all documents before payment is issued. Payments are issued through accounts payable checks and wire transfers. It's important to note that items that pertain to the Stadium Authority are billed to the Stadium Manager (ManCo) to pay on behalf of the Stadium Authority for Non-NFL events and the 49ers for NFL events.

This report covers a longer period than usual. Ordinarily, the Auditor's office presents a monthly report to Council for consideration. The reason for the delay was for the Auditor's office and IT to work together to improve the presentation of the report and simplify the payment reconciliation process for staff.

The Bills and Claims Report represents the cash disbursements required for operations of the City during the period. The report reflects the payment date, invoice number, description of the payment, funding source, and payment amount for all invoices. The budget control is set by the City Council through the budget adoption process.

DISCUSSION

Significant expenditures in this period include:

- Payment to CalPERS in the amount of \$45,442,912 for Fiscal Year 2021/22 pre-paid unfunded pension liability.
- Payment to Northern California Power Agency in the amount of \$29,440,822 for July and August 2021 all resources bill and Western Restoration Fund.
- Payment to Bank of New York Mellon in the amount of \$14,661,948 for principal and interest payments of the Electric Revenue bonds.
- Payment to MSR Public Power Agency/Energy Authority in the amount of \$11,848,055 for May through August 2021 energy purchases.
- Payment to City of San Jose in the amount of \$10,172,310 for San Jose-Santa Clara Regional Wastewater Facility (RWF) for first quarter of Fiscal Year 2021/22 O&M billing and purchase of

recycled water and various utility payments for April through June 2021.

- Payment to California Environment Protection in the amount of \$6,508,934 for bid guarantee for the August 2021 Joint Auction to allow the City to potentially procure up to 267,000 carbon allowances for quarter ended June 30, 2021.

Payments to ManCo are not included in the City's Bills and Claims report as they are reported through a separate Stadium Authority Bills and Claims report. Stadium Authority related payments in the City's Bills and Claims report include general administrative, materials, and supplies expenses of approximately \$149,355. Included in this amount is \$138,928 to Alliant Insurance Services Inc., for FY2021-22 Accidental Death and Dismemberment Policy for the "Double-Badgers" employed by the Police Department from other public safety agencies to provide public safety for special events at the Stadium. These costs are budgeted in General Fund and reimbursable by 49ers/Manco. A separate Stadium Authority Board action is being prepared for full disclosure and transparency of these expenditures.

Certain information such as names of law firms and recipients of workers' compensation have been redacted from the Bills and Claims report. The Supreme Court of California in Los Angeles County Board of Supervisors v. Superior Court, (2016) 2 Cal.5th 282, held that invoices specifying the amounts billed by a law firm to a client fall within the scope of attorney-client privilege while the matters are active. In accordance with the Supreme Court's ruling, the names of law firms retained by the City have been redacted from the public report to maintain confidentiality of billing records for legal services. In addition, individually identifiable information about recipients of workers' compensation has been redacted from the report based on California Labor Code section 138.7.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potential significant impact on the environment.

FISCAL IMPACT

The expenditures of \$208,341,341 were appropriated to various funds with the adoption of the Fiscal Year 2020/21 and 2021/22 Budget, as amended.

COORDINATION

This report has been coordinated with the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

RECOMMENDATION

Approve the list of Bills and Claims for June 12, 2021 - August 27, 2021.

Reviewed by: David Noce, Audit Manager

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Bills and Claims Approved for Payment Report June 12, 2021 - June 30, 2021
2. Bills and Claims Approved for Payment Report July 1, 2021 - July 31, 2021
3. Bills and Claims Approved for Payment Report August 1, 2021 - August 27, 2021



City of Santa Clara
List of All Bills and Claims Approved for Payment
From 06/12/2021 to 06/30/2021

Run Date 9/17/2021
Run Time 11:28:31 AM

Sorted by Payment Amount

Payment No: W21377

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BANK OF NEW YORK MELLON	00495395	263JUN2021A	P&I ELEC REV REFUNDING 2018A	Electric Utility-Debt Services	5,787,750.00
				Total for Payment No.:		5,787,750.00

Payment No: W21376

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BANK OF NEW YORK MELLON	00495394	263JUN2021	P&I ELEC REV SERIES 2013A	Electric Utility-Debt Services	4,541,614.44
				Total for Payment No.:		4,541,614.44

Payment No: W21380

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BANK OF NEW YORK MELLON	00495398	263JUN2021D	P&I ELEC REV, SERIES 2020-3	Electric Utility-Debt Services	3,945,646.00
				Total for Payment No.:		3,945,646.00

Payment No: 019744

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TRI-DAM PROJECT	00495028	2021-5 SVP	ENERGY PURCH (HYDRO) MAY21	Electric Utility	1,912,723.28
				Total for Payment No.:		1,912,723.28

Payment No: 002388

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ELECTRONIC FEDERAL TAX	00495530	05/30/21-06/12/21	DD: FED TAXES W/H B2112	Payroll	311,918.38

					Liability&ClearingAcct	
06/18/2021	ELECTRONIC FEDERAL TAX	00495530	05/30/21-06/12/21	DD: FED TAXES W/H B2112	Payroll Liability&ClearingAcct	311,549.86
06/18/2021	ELECTRONIC FEDERAL TAX	00495530	05/30/21-06/12/21	DD: FED TAXES W/H B2112	Payroll Liability&ClearingAcct	916,317.57
				Total for Payment No.:		1,539,785.81

Payment No: W21363

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MANZANA WIND LLC	00494743	128519	ENERGY PURCH (WIND) MAY21	Electric Utility	1,424,581.88
				Total for Payment No.:		1,424,581.88

Payment No: W21370

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	MSR PUBLIC POWER AGENCY	00495484	060821	BIG HORN ENERGY MAY21	Electric Utility	1,369,180.39
				Total for Payment No.:		1,369,180.39

Payment No: 002392

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/23/2021	CAL PERS - PO BOX 1982	00495872	05/30/21-06/12/21	EMPLOYER/EMPLOYEE DED	Payroll Liability&ClearingAcct	481,085.84
06/23/2021	CAL PERS - PO BOX 1982	00495872	05/30/21-06/12/21	EMPLOYER/EMPLOYEE DED	Payroll Liability&ClearingAcct	840,236.43
				Total for Payment No.:		1,321,322.27

Payment No: W21375

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/24/2021	MSR ENERGY AUTHORITY	00495230	EA2033	NAT GAS PURCH DVR MAY21	Electric Utility	247,655.71
06/24/2021	MSR ENERGY AUTHORITY	00495230	EA2033	NAT GAS PURCH COGEN MAY21	Electric Utility	707,721.79
06/24/2021	MSR ENERGY AUTHORITY	00495230	EA2033	NAT GAS PURCH GIA MAY21	Electric Utility	344,181.25
				Total for Payment No.:		1,299,558.75

Payment No: 019677

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	APG FIELD SERVICES PHASE 1 DIS	Electric Utility Construction	95,000.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	PHILLY GEAR FIELD SERVICES PHA	Electric Utility Construction	61,000.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	PHILLY GEAR SUPPLY NEW LOAD GE	Electric Utility Construction	105,272.20
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	APG FIELD SERVICES PHASE 2 REA	Electric Utility Construction	291,587.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	PHILLY GEAR FIELD SERVICES LAB	Electric Utility Construction	70,000.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	PHILLY GEAR INSPECT, REPAIR OF	Electric Utility Construction	113,564.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	SUMMIT CRANE SUPPORT FOR EMC (Electric Utility Construction	37,441.59
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	QUOTE TO REFURBISH OLD BEARING	Electric Utility Construction	26,829.50
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	QUOTE TO PERFORM OIL FLUSH AND	Electric Utility Construction	60,407.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	QUOTE TO PERFORM OIL FLUSH AND	Electric Utility Construction	23,881.90
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	INSPECT UNIT #1- INSPECT #2 BE	Electric Utility Construction	99,181.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	PHILLY GEAR- INSTALL NEW STYLE	Electric Utility Construction	55,000.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	ENGINEERING REVIEW OF THE UNIT	Electric Utility Construction	1,500.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	PME TO REFURBISH #2 BEARING	Electric Utility Construction	7,245.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	UNIT 2, REMOVE AND REPLACE ALL	Electric Utility Construction	59,812.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	RELADYNE OIL HEATING EQUIPMENT	Electric Utility Construction	16,600.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	ADDITIONAL START UP SUPPORT FO	Electric Utility Construction	24,500.00
06/18/2021	ALLIED POWER GROUP, LLC	00495373	008704	PME ADDITIONAL WORK TO CORRECT	Electric Utility Construction	2,990.00
				Total for Payment No.:		1,151,811.19

Payment No: W21362

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	RE ROSAMOND ONE LLC	00494742	00090	ENERGY PURCH (SOLAR) MAY21	Electric Utility	727,435.47
				Total for Payment No.:		727,435.47

Payment No: W21372

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	SFPUC WATER DEPT	00495520	2395JUN2021COR	2021 MAY WATER PURCHASE-CORECT	Water Utility	645,900.70
				Total for Payment No.:		645,900.70

Payment No: 019797

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	UNISYS CORP	00495784	M2106002	INFORMATION TECHNOLOGY SERVICE	Information Technology Service	447,857.57
06/25/2021	UNISYS CORP	00495784	M2106002	INFORMATION TECHNOLOGY SERVICE	Information Technology Service	171,107.90
				Total for Payment No.:		618,965.47

Payment No: W21369A

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	SANTA CLARA VALLEY WATER DIST	00495026	TI002487	2021 MAY RINCONADA TREATED WTR	Water Utility	549,404.02
				Total for Payment No.:		549,404.02

Payment No: 019755

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ARINI GEOGRAPHICS LLC	00495806	000288	CIP GIS Professional Services	General Government - Other	23,326.50
06/25/2021	ARINI GEOGRAPHICS LLC	00495807	000294	Operational GIS Professional S	Information Technology Service	2,600.25
06/25/2021	ARINI GEOGRAPHICS LLC	00495807	000294	CIP GIS Professional Services	General Government -	45,094.00

					Other	
06/25/2021	ARINI GEOGRAPHICS LLC	00495808	000295	GIS Services for Police Depart	General Government - Other	9,083.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495808	000295	Enterprise GIS integration and	General Government - Other	86.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495809	000296	CIP GIS Professional Services	General Government - Other	8,041.50
06/25/2021	ARINI GEOGRAPHICS LLC	00495810	000297	Operational GIS Professional S	Information Technology Service	17,149.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495811	000298	Operational GIS Professional S	Information Technology Service	11,807.83
06/25/2021	ARINI GEOGRAPHICS LLC	00495811	000298	CIP GIS Professional Services	General Government - Other	38,399.67
06/25/2021	ARINI GEOGRAPHICS LLC	00495812	000299	GIS Services for Police Depart	General Government - Other	9,501.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495812	000299	Enterprise GIS integration and	General Government - Other	98.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495813	000300	CIP GIS Professional Services	General Government - Other	16,365.25
06/25/2021	ARINI GEOGRAPHICS LLC	00495814	000301	Operational GIS Professional S	Information Technology Service	15,383.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495814	000301	CIP GIS Professional Services	General Government - Other	3,108.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495815	000302	Operational GIS Professional S	Information Technology Service	11,808.32
06/25/2021	ARINI GEOGRAPHICS LLC	00495815	000302	CIP GIS Professional Services	General Government - Other	47,526.68
06/25/2021	ARINI GEOGRAPHICS LLC	00495822	000303	GIS Services for Police Depart	General Government - Other	821.25
06/25/2021	ARINI GEOGRAPHICS LLC	00495823	000304	CIP GIS Professional Services	General Government - Other	9,600.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495824	000305	Operational GIS Professional S	Information Technology Service	9,322.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495824	000305	CIP GIS Professional Services	General Government - Other	1,280.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495825	000306	Operational GIS Professional S	Information Technology Service	12,182.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495825	000306	CIP GIS Professional Services	General Government - Other	34,060.50
06/25/2021	ARINI GEOGRAPHICS LLC	00495826	000307	GIS Services for Police Depart	General Government -	507.50

					Other	
06/25/2021	ARINI GEOGRAPHICS LLC	00495826	000307	Enterprise GIS integration and	General Government - Other	555.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495827	000308	CIP GIS Professional Services	General Government - Other	7,513.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495828	000309	Operational GIS Professional S	Information Technology Service	19,469.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495828	000309	CIP GIS Professional Services	General Government - Other	550.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495829	000310	Operational GIS Professional S	Information Technology Service	13,395.67
06/25/2021	ARINI GEOGRAPHICS LLC	00495829	000310	CIP GIS Professional Services	General Government - Other	25,083.58
06/25/2021	ARINI GEOGRAPHICS LLC	00495830	000311	GIS Services for Police Depart	General Government - Other	287.50
06/25/2021	ARINI GEOGRAPHICS LLC	00495830	000311	Enterprise GIS integration and	General Government - Other	775.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495831	000312	CIP GIS Professional Services	General Government - Other	4,710.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495832	000313	Operational GIS Professional S	Information Technology Service	39,690.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495832	000313	CIP GIS Professional Services	General Government - Other	2,386.50
06/25/2021	ARINI GEOGRAPHICS LLC	00495835	000314	Operational GIS Professional S	Information Technology Service	32,336.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495835	000314	CIP GIS Professional Services	General Government - Other	13,942.25
06/25/2021	ARINI GEOGRAPHICS LLC	00495837	000315	GIS Services for Police Depart	General Government - Other	575.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495837	000315	Enterprise GIS integration and	General Government - Other	220.00
06/25/2021	ARINI GEOGRAPHICS LLC	00495839	000316	Change Order No. 1	General Government - Other	4,378.75
06/25/2021	ARINI GEOGRAPHICS LLC	00495840	000317	Operational GIS Professional S	Information Technology Service	380.25
06/25/2021	ARINI GEOGRAPHICS LLC	00495840	000317	CIP GIS Professional Services	General Government - Other	45,728.50
				Total for Payment No.:		539,132.50

Payment No: 019689

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CENTRAL 40 LLC	00495356	131576-2021-05	ENERGY PURCH (SOLAR) MAY21	Electric Utility	497,947.88
				Total for Payment No.:		497,947.88

Payment No: 019721

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MSR PUBLIC POWER AGENCY	00495486	061121	BIG HORN 2 POWER MAY21	Electric Utility	462,626.93
				Total for Payment No.:		462,626.93

Payment No: 651873

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TRANSCANADA TURBINES LTD	00495737	1005585	HPT OVERHAUL (MATERIALS)	Electric Utility Construction	288,614.50
06/25/2021	TRANSCANADA TURBINES LTD	00495737	1005585	DISASSEMBLY / REASSEMBLY (MATE	Electric Utility Construction	23,500.00
06/25/2021	TRANSCANADA TURBINES LTD	00495737	1005585	SERVICE BULLETINS (MATERIALS)	Electric Utility Construction	123,822.00
				Total for Payment No.:		435,936.50

Payment No: 651813

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DELL MARKETING LP	00495841	10492529155	MICROSOFT ENTERPRISE AGREEMENT	Information Technology Service	321,511.42
06/25/2021	DELL MARKETING LP	00495841	10492529155	MICROSOFT ENTERPRISE AGREEMENT	Electric Utility	79,518.60
06/25/2021	DELL MARKETING LP	00495841	10492529155	MICROSOFT ENTERPRISE AGREEMENT	Sewer Utility	8,788.50
06/25/2021	DELL MARKETING LP	00495841	10492529155	MICROSOFT ENTERPRISE AGREEMENT	Solid Waste Program	1,674.00
06/25/2021	DELL MARKETING LP	00495841	10492529155	MICROSOFT ENTERPRISE AGREEMENT	Water Utility	8,788.50
06/25/2021	DELL MARKETING LP	00495841	10492529155	MICROSOFT ENTERPRISE	General Fund	8,774.40

AGREEMENT

Total for Payment No.: 429,055.42

Payment No: 002387

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495528	05/30/21-06/12/21	DD: SIT & SDI W/H B2112	Payroll Liability&ClearingAcct	377,804.76
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495528	05/30/21-06/12/21	DD: SIT & SDI W/H B2112	Payroll Liability&ClearingAcct	38,768.94
Total for Payment No.:						416,573.70

Payment No: W21366

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NATIONWIDE RETIREMENT SOLUTIONS, INC.	00495533	05/30/21-06/12/21	WT: B2112 DEFERRED COMP	Fringe Benefits	362,219.73
Total for Payment No.:						362,219.73

Payment No: W21371

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	MSR PUBLIC POWER AGENCY	00495485	060521	BIG HORN SHAPING MAY21	Electric Utility	312,078.37
Total for Payment No.:						312,078.37

Payment No: 651574

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ELECTRICAL MAINTENANCE	00494979	21-4743-1	SEC3.7 GEN RETAINING RING REPL	Electric Utility Construction	311,860.00
Total for Payment No.:						311,860.00

Payment No: 019678

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/18/2021	AMERESCO	00494866	41133	ENERGY (FORWARD LF GAS) MAY21	Electric Utility	295,158.91
06/18/2021	AMERESCO	00494866	41133	FORWARD LF O&M CHG MAY21	Electric Utility	9,316.37
Total for Payment No.:						304,475.28

Payment No: 019675

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AIMS/PVIC CA, LLC	00495431	925735	Sani Swr MH Inspect Proj	Sewer Utility Construction	256,580.75
Total for Payment No.:						256,580.75

Payment No: 651568

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DAVEY TREE SURGERY	00494877	915669190	TREE TRIMMING PWR LINES MAY21	Electric Utility	153,242.58
06/18/2021	DAVEY TREE SURGERY	00494877	915669190	DUMP FEES MAY21	Electric Utility	4,101.75
06/18/2021	DAVEY TREE SURGERY	00495020	915669173	PREINSPECTION 60KV LINE ORLAND	Electric Utility	10,877.80
06/18/2021	DAVEY TREE SURGERY	00495020	915669173	TREE CREWS 60KV LINE ORLAND	Electric Utility	79,800.00
06/18/2021	DAVEY TREE SURGERY	00495020	915669173	POST VERIFY 60KV LINE ORLAND	Electric Utility	7,600.00
Total for Payment No.:						255,622.13

Payment No: W21367

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	SHELL ENERGY NO AMERICA US LP	00494746	2628264	SALE OF RA CAPACITY MAY21	Electric Utility	-69,300.00
06/21/2021	SHELL ENERGY NO AMERICA US LP	00494746	2628264	SALE OF RA CAPACITY MAY21	Electric Utility	-14,700.00
06/21/2021	SHELL ENERGY NO AMERICA US LP	00494746	2628264	PURCHASE OF RA CAPACITY MAY21	Electric Utility	326,300.00
Total for Payment No.:						242,300.00

Payment No: 651619

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	RECOLOGY SOUTH BAY	00494952	MAY-21	MONTHYL RECYLNG- MAY-21	Solid Waste Program	238,209.67
				Total for Payment No.:		238,209.67

Payment No: 019743

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TRI-DAM POWER AUTHORITY	00495029	2021-5S SVP	ENERGY PURCH (HYDRO) MAY21	Electric Utility	232,325.87
				Total for Payment No.:		232,325.87

Payment No: W21379

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BANK OF NEW YORK MELLON	00495397	263JUN2021C	Int on Elec Rev, Series 2020-2	Electric Utility-Debt Services	224,763.25
				Total for Payment No.:		224,763.25

Payment No: 651593

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	INTER DISPOSAL CORP OF CA	00495057	5127-000036821	MSW PROCSNG- MAY 2021	Solid Waste Program	152,586.40
06/18/2021	INTER DISPOSAL CORP OF CA	00495062	5127-000036822	COMPSTBL WST- MAY2021	Solid Waste Program	44,599.04
				Total for Payment No.:		197,185.44

Payment No: 651616

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	R&B COMPANY	00495400	O148775	PIPE, DUCTILE IRON, 8IN, CL CL	Water Utility Construction	23,944.24
06/18/2021	R&B COMPANY	00495400	O148775	SADDLE, SERVICE 8IN CI/AC X 11	Water Utility Construction	4,009.41
06/18/2021	R&B COMPANY	00495400	O148775	PIPE, DUCTILE IRON, 6IN, CL CL	Water Utility Construction	343.35
06/18/2021	R&B COMPANY	00495400	O148775	HYMAX GRIP COUPLING 8", RANGE:	Water Utility Construction	1,143.72

06/18/2021	R&B COMPANY	00495401	O136059	PIPE, DUCTILE IRON, 12IN, CL C	Water Utility Construction	26,170.63
06/18/2021	R&B COMPANY	00495402	O311988	RETAINER GLAND KIT, 12IN, TYLE	Water Utility Construction	9,155.79
06/18/2021	R&B COMPANY	00495402	O311988	RETAINER GLAND KIT, 10IN, TYLE	Water Utility Construction	179.20
06/18/2021	R&B COMPANY	00495403	O312007	PIPE, DUCTILE IRON, 12IN, CL C	Water Utility Construction	8,723.55
06/18/2021	R&B COMPANY	00495404	O136285	RETAINER GLAND 6IN, MJ, TYLER	Water Utility Construction	2,273.17
06/18/2021	R&B COMPANY	00495404	O136285	RETAINER GLAND KIT, 4IN, TYLER	Water Utility Construction	678.85
06/18/2021	R&B COMPANY	00495404	O136285	RETAINER GLAND KIT, 12IN, TYLE	Water Utility Construction	15,963.98
06/18/2021	R&B COMPANY	00495404	O136285	RETAINER GLAND KIT, 8IN, TYLER	Water Utility Construction	2,002.11
06/18/2021	R&B COMPANY	00495405	O108544	BEND, 45 DEGREES, 6IN, MJ, CL	Water Utility Construction	1,881.56
06/18/2021	R&B COMPANY	00495405	O108544	BEND, 22-1/2 DEGREES, 12IN, MJ	Water Utility Construction	810.65
06/18/2021	R&B COMPANY	00495405	O108544	TEE, MJ, 12IN X 12IN, CL DI C-	Water Utility Construction	3,094.03
06/18/2021	R&B COMPANY	00495405	O108544	TEE, MJ, 12IN X 8IN, CL, DI C-	Water Utility Construction	4,106.54
06/18/2021	R&B COMPANY	00495405	O108544	TEE, MJ, 12IN X 6IN, CL, DI C-	Water Utility Construction	8,319.87
06/18/2021	R&B COMPANY	00495405	O108544	BEND, 45 DEGREES, 12IN, MJ, CL	Water Utility Construction	1,911.42
06/18/2021	R&B COMPANY	00495407	O156554	STOP, BALLCORP, 2IN MUELLER #B	Water Utility	11,461.02
06/18/2021	R&B COMPANY	00495407	O156554	CLAMP, FULL CIRCLE, 6IN X 22-1	Water Utility	8,166.76
06/18/2021	R&B COMPANY	00495408	O062331	BURY, HYDRANT, 6IN X 42IN, MJ	Water Utility Construction	1,153.13
06/18/2021	R&B COMPANY	00495408	O062331	EXTENSION, HYDRANT BURY, 6 X 6	Water Utility Construction	697.60
06/18/2021	R&B COMPANY	00495408	O062331	SADDLE, SERVICE 12IN, CI/AC X	Water Utility Construction	3,434.29
06/18/2021	R&B COMPANY	00495408	O062331	COUPLER, PAK-JOINT, STRAIGHT C	Water Utility Construction	140.48
06/18/2021	R&B COMPANY	00495408	O062331	COUPLER, PAK JOINT, STRAIGHT,	Water Utility	1,010.18

					Construction	
06/18/2021	R&B COMPANY	00495408	O062331	BOLTS, BREAK-OFF FOR HYDRANTS,	Water Utility Construction	82.40
06/18/2021	R&B COMPANY	00495416	0135972	12' FIELD LOK GASKET	Water Utility Construction	24,352.79
				Total for Payment No.:		165,210.72

Payment No: W21378

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BANK OF NEW YORK MELLON	00495396	263JUN2021B	Int Elec Rev Bonds, 2020-1	Electric Utility-Debt Services	162,174.53
				Total for Payment No.:		162,174.53

Payment No: 019747

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	US DEPT OF ENERGY	00495141	NNPB000270521	CVP O&M FUNDING CREDIT	Electric Utility	-654,742.00
06/18/2021	US DEPT OF ENERGY	00495141	NNPB000270521	POWER BILL MAY21	Electric Utility	806,162.91
06/18/2021	US DEPT OF ENERGY	00495141	NNPB000270521	WREGIS PASS-THRU CHGS MAY21	Electric Utility	47.83
				Total for Payment No.:		151,468.74

Payment No: 651530

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AIR PRODUCTS & CHEMICALS INC	00494892	R17-CPR-0076-5	CONTROLS REBATE#5; 61914-01	Elec OperatingGrant Trust Fund	38,244.75
06/18/2021	AIR PRODUCTS & CHEMICALS INC	00494942	R21-CDR-0023	CDR REBATE; 61914-01	Elec OperatingGrant Trust Fund	111,939.00
				Total for Payment No.:		150,183.75

Payment No: 019724

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NO CALIF POWER AGENCY	00495487	CVP0621002	WAPA REST FUND LEVELIZED JUN21	Electric Utility	185,965.29

06/18/2021	NO CALIF POWER AGENCY	00495487	CVP0621002	WAPA REST FUND LEVELIZED JUN21	Electric Utility	-35,965.29
Total for Payment No.:						150,000.00
Payment No: 019772						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HARRIS COMPUTER SYSTEMS	00495560	CT050788	DATA MIGRATION SCRIPT NON- PROD	General Government - Other	42,096.00
06/25/2021	HARRIS COMPUTER SYSTEMS	00495560	CT050788	REST API LICENSE SEW INTEGRATE	General Government - Other	67,410.00
Total for Payment No.:						109,506.00
Payment No: W21382						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JPMORGAN CHASE BANK NA	00495799	15682JUN2021A	2020 Install Sale Interest	Sewer Utility-Debt Services	104,144.04
Total for Payment No.:						104,144.04
Payment No: 019720						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MISSION TRAIL WASTE SYSTEMS	00494353	m633	FOODSCRAP REVISED FEB 2021	Solid Waste Program	44,510.04
06/18/2021	MISSION TRAIL WASTE SYSTEMS	00494353	m633	FOOSCRAP CREDIT JAN 2021	Solid Waste Program	-5,778.62
06/18/2021	MISSION TRAIL WASTE SYSTEMS	00494354	m634	FOODSCRAP PROCESSNG MAR 2021	Solid Waste Program	21,185.29
06/18/2021	MISSION TRAIL WASTE SYSTEMS	00494355	m637	FOODSCRAP PROCESSNG APR 2021	Solid Waste Program	44,150.34
Total for Payment No.:						104,067.05
Payment No: 651570						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DIGITAL REALTY TRUST	00494891	R20-DCR-0072-2	DATA CTR REBATE2; ACT 72798-3	Elec OperatingGrant Trust Fund	40,430.70

06/18/2021	DIGITAL REALTY TRUST	00494939	R19-DCR-0146-3	DATA CTR REBATE; 65816-4	Elec OperatingGrant Trust Fund	51,241.02
Total for Payment No.:						91,671.72
Payment No: 019728						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ORACLE AMERICA INC	00495421	3865710	PEOPLESFT LICENSE FEE EXPANSI	General Fund	89,600.08
Total for Payment No.:						89,600.08
Payment No: 019699						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ETHOSENERGY	00495459	IN75122	ADDITIONAL MATERIALS, SERVICES	Electric Utility Construction	33,795.00
06/18/2021	ETHOSENERGY	00495460	IN75123	ADDITIONAL MATERIALS, SERVICES	Electric Utility Construction	6,087.00
06/18/2021	ETHOSENERGY	00495461	IN75124	ADDITIONAL MATERIALS, SERVICES	Electric Utility Construction	40,503.00
Total for Payment No.:						80,385.00
Payment No: 651571						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DNV ENERGY SERVICES USA INC	00494935	875010007807	BUSINES ENERG EFF PROG APR2021	Elec OperatingGrant Trust Fund	39,561.34
06/18/2021	DNV ENERGY SERVICES USA INC	00494935	875010007807	BUSINES ENERG EFF PROG APR2021	Elec OperatingGrant Trust Fund	8,703.49
06/18/2021	DNV ENERGY SERVICES USA INC	00494935	875010007807	BUSINES ENERG EFF PROG APR2021	Elec OperatingGrant Trust Fund	15,824.54
06/18/2021	DNV ENERGY SERVICES USA INC	00494935	875010007807	BUSINES ENERG EFF PROG APR2021	Elec OperatingGrant Trust Fund	5,538.59
06/18/2021	DNV ENERGY SERVICES USA INC	00494935	875010007807	BUSINES ENERG EFF PROG APR2021	Elec OperatingGrant Trust Fund	9,494.72
Total for Payment No.:						79,122.68

Payment No: W21383

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	RENT 881 MARTIN AVE JUL2021	Electric Utility	56,302.49
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	COMMON AREA 881 MARTIN JUN2020	Electric Utility	8,798.32
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	PGE 881 MARTIN AVE MAY2021	Electric Utility	1,111.79
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	SC UTIL WATER/SEWER/FIRE MAY21	Electric Utility	1,585.55
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	SC UTILITIES ELECTRIC MAY21	Electric Utility	6,212.49
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	PGE 881 MARTIN AVE MAY2021	Elec OperatingGrant Trust Fund	70.97
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	SC UTIL WATER/SEWER/FIRE MAY21	Elec OperatingGrant Trust Fund	101.21
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	SC UTILITIES ELECTRIC MAY21	Elec OperatingGrant Trust Fund	396.54
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	RENT 881 MARTIN AVE JUL2021	Elec OperatingGrant Trust Fund	3,593.78
06/29/2021	GAHRAHMAT FAMILY LTD II	00495997	GFLP2-21195	COMMON AREA 881 MARTIN JUN2020	Elec OperatingGrant Trust Fund	561.60
				Total for Payment No.:		78,734.74

Payment No: W21374

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/22/2021	SILICON VALLEY/SANTA CLARA	00495781	35637JUN2021	ADVANCE FUNDS DMO PAYROLL	Deposit Funds.	77,723.47
				Total for Payment No.:		77,723.47

Payment No: 651842

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MINEWEASER & ASSOCIATES	00495125	#5	MORSE MANSION ART GLASS	General Government - Other	3,517.50
06/25/2021	MINEWEASER & ASSOCIATES	00495126	#2	MORSE MANSION PROJECTS	General Government - Other	10,995.00
06/25/2021	MINEWEASER & ASSOCIATES	00495127	#3	JAMISON BROWN WATER INTRUSION	Public Buildings	5,521.26

06/25/2021	MINEWEASER & ASSOCIATES	00495128	#4	JAMESON BROWN KITCHEN	Public Buildings	2,288.75
06/25/2021	MINEWEASER & ASSOCIATES	00495129	#1a	HARRIS LASS PROJECTS	Public Buildings	55,300.88
				Total for Payment No.:		77,623.39

Payment No: 019697

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ELECTRICAL CONSULTANTS INC	00495441	94268	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	35,317.50
06/18/2021	ELECTRICAL CONSULTANTS INC	00495442	94366	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	7,040.50
06/18/2021	ELECTRICAL CONSULTANTS INC	00495443	94372	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	27,270.00
06/18/2021	ELECTRICAL CONSULTANTS INC	00495481	94399	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	1,101.00
				Total for Payment No.:		70,729.00

Payment No: W21373

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	US DEPT OF ENERGY	00495552	NNPB000270521S	COTP LOSSES-FIN STLMNTS APR21	Electric Utility	39,203.80
06/21/2021	US DEPT OF ENERGY	00495552	NNPB000270521S	COTP LOSSES-FIN STLMNTS MAY21	Electric Utility	24,044.37
				Total for Payment No.:		63,248.17

Payment No: 651659

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	WEST COAST ARBORISTS INC	00495154	173005	EMERGENCY TREE SERVICES	General Fund	33,300.00
06/18/2021	WEST COAST ARBORISTS INC	00495154	173005	PLANTING SERVICES	General Fund	18,642.00
06/18/2021	WEST COAST ARBORISTS INC	00495154	173005	STUMP AND TREE REMOVALS	General Fund	11,250.00
				Total for Payment No.:		63,192.00

Payment No: 651880

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WEST COAST CODE CONSULTANTS INC	00495779	221-05-004-01	AGREEMENT FOR SERVICES TO PERF	General Fund	52,500.00
06/25/2021	WEST COAST CODE CONSULTANTS INC	00495780	221-05-004-03	AGREEMENT FOR SERVICES TO PERF	General Fund	7,425.00
				Total for Payment No.:		59,925.00

Payment No: W21361

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/14/2021	SANTA CLARA STADIUM AUTHORITY	00495153	20620JUN2021A	SCSA 2020/21 Q4 CFD	Community Facilities Dist-SCSA	59,794.00
				Total for Payment No.:		59,794.00

Payment No: 651823

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GOLDEN BAY CONSTRUCTION	00495804	9725-2	AGREEMENT FOR LICK MILL - EAST	Streets And Highways	62,836.55
06/25/2021	GOLDEN BAY CONSTRUCTION	00495804	9725-2	RETENTION	Streets And Highways	-3,141.83
				Total for Payment No.:		59,694.72

Payment No: 019719

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MILTON SECURITY GROUP LLC	00494871	R2021902	SHAREPOINT SUPPORT/MGMT SVCS	Electric Utility	4,596.00
06/18/2021	MILTON SECURITY GROUP LLC	00494871	R2021902	NOC/SOC SERVICES	Electric Utility	22,060.80
06/18/2021	MILTON SECURITY GROUP LLC	00494871	R2021902	OSISOFT PI SYSTEM SERVICE	Electric Utility	13,788.00
06/18/2021	MILTON SECURITY GROUP LLC	00494871	R2021902	AMI/MDMS PROJECT SUPPORT	Electric Utility Construction	18,384.00
				Total for Payment No.:		58,828.80

Payment No: 651548

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/18/2021	BRIGHTON ENERGY	00494897	R21-NPGR-0153	NON PROFIT RBAT LTG; 34083-01	Elec OperatingGrant Trust Fund	25,000.00
06/18/2021	BRIGHTON ENERGY	00494899	R21-SBGR-0183	SM BUSI RBATE LTG; 18262-02	Elec OperatingGrant Trust Fund	4,568.52
06/18/2021	BRIGHTON ENERGY	00494900	R21-SBGR-0130	SM BUS RBATE LTG; ACT 61778-04	Elec OperatingGrant Trust Fund	10,000.00
06/18/2021	BRIGHTON ENERGY	00494901	R21-SBGR-0119	SM BUS RBATE LTG ACT 35908-02	Elec OperatingGrant Trust Fund	3,982.41
06/18/2021	BRIGHTON ENERGY	00494902	R21-NPGR-0191	NON-PROFT RBATE LTG 60348-04	Elec OperatingGrant Trust Fund	5,481.25
06/18/2021	BRIGHTON ENERGY	00494903	R21-SBGR-0138	SM BUSI RBATE LTG 16510-04	Elec OperatingGrant Trust Fund	478.17
06/18/2021	BRIGHTON ENERGY	00494903	R21-SBGR-0138	SM BUSI RBATE FOOD 16510-04	Elec OperatingGrant Trust Fund	9,119.47
Total for Payment No.:						58,629.82

Payment No: 019763

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ECS IMAGING, INC.	00495884	16056	LASERFICHE STORAGE & MAINT	General Fund	56,685.00
Total for Payment No.:						56,685.00

Payment No: 651533

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ALVISO ROCK INC	00495450	27743	2021 CLEANUP CAMPAIGN HIGH-SID	Solid Waste Program	41,937.92
06/18/2021	ALVISO ROCK INC	00495451	27751	2021 CLEANUP CAMPAIGN HIGH-SID	Solid Waste Program	11,538.25
Total for Payment No.:						53,476.17

Payment No: 019775

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	INFOSEND INC	00495211	190899	STREET - CLEAN UP CAMPAIGN-APR	Solid Waste Program	120.69
06/25/2021	INFOSEND INC	00495211	190899	ELECTRIC - APRIL INSERT	Elec OperatingGrant Trust Fund	1,780.12

06/25/2021	INFOSEND INC	00495211	190899	BILL PRINT & MAIL	General Fund	14,238.86
06/25/2021	INFOSEND INC	00495211	190899	CMO - MISSION CITY NEWS-APR	General Fund	1,478.53
06/25/2021	INFOSEND INC	00495211	190899	TAXABLE	General Fund	6,369.21
06/25/2021	INFOSEND INC	00495212	192276	ELECTRIC - MAY INSERT	Electric Utility	1,776.55
06/25/2021	INFOSEND INC	00495212	192276	ELECTRIC - APRIL INSERT	Elec OperatingGrant Trust Fund	30.00
06/25/2021	INFOSEND INC	00495212	192276	BILL PRINT & MAIL	General Fund	16,317.60
06/25/2021	INFOSEND INC	00495212	192276	TAXABLE	General Fund	6,477.23
06/25/2021	INFOSEND INC	00495212	192276	CMO - MISSION CITY NEWS-APR	General Fund	31.09
06/25/2021	INFOSEND INC	00495212	192276	CMO - MISSION CITY NEWS-MAY	General Fund	1,474.77
Total for Payment No.:						50,094.65

Payment No: 651615

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	R & B CO	00495409	O311275	GASKET, HYDRANT, 6IN, 1/8IN TH	Water Utility Construction	15.90
06/18/2021	R & B CO	00495409	O311275	BOX, TRAFFIC VALVE, G05 BOX	Water Utility Construction	628.77
06/18/2021	R & B CO	00495409	O311275	BEND, 45 DEGREES, 8IN, MJ, CL	Water Utility Construction	338.38
06/18/2021	R & B CO	00495409	O311275	TEE, MJ, 8IN X 8IN, CL, DI, C-	Water Utility Construction	295.98
06/18/2021	R & B CO	00495409	O311275	PIPE, PIP, 8IN, 20FT LENGTH, 8	Water Utility Construction	107.91
06/18/2021	R & B CO	00495409	O311275	VALVE, GATE, MJ 6IN CI, RESILI	Water Utility Construction	1,070.81
06/18/2021	R & B CO	00495409	O311275	SADDLE, SERVICE 8IN CI/AC X 11	Water Utility Construction	715.97
06/18/2021	R & B CO	00495409	O311275	STOP, BALLCORP, 1IN MUELLER #B	Water Utility Construction	347.49
06/18/2021	R & B CO	00495409	O311275	TEE, MJ, 8IN X 6IN, DI C-153,	Water Utility Construction	261.81
06/18/2021	R & B CO	00495410	P013136	HYDRANT, PAINTED WHITE 4IN STR	Water Utility	13,995.60
06/18/2021	R & B CO	00495411	N938805	24"x3" CONCRETE GRADE RING #75	Sewer Utility	2,951.50

06/18/2021	R & B CO	00495411	N938805	24"x6" GRADE RING #76246	Sewer Utility	2,372.93
06/18/2021	R & B CO	00495412	N855854	HYDRANT, PAINTED WHITE 4IN STR	Water Utility	13,995.60
06/18/2021	R & B CO	00495413	O089637	VALVE, GATE, MJ, 8IN FOR C.I.,	Water Utility	9,453.14
06/18/2021	R & B CO	00495418	O089803	VALVE, GATE, FLANGED, 4IN, RES	Water Utility	3,247.48
Total for Payment No.:						49,799.27

Payment No: W21381

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JPMORGAN CHASE BANK NA	00495798	15682JUN2021	2020 Install Sale Int & Fee	Sewer Utility-Debt Services	49,020.83
Total for Payment No.:						49,020.83

Payment No: 019783

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PG&E	00495255	0541963339-0MAY2021	TS @ CALVERT/CALVERT	General Fund	37.55
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	AUTO SVCS/1700 WALSH 50%	Fleet Operation Fund	243.37
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	PUMP/ELEC-LAWRENCE/HSTEAD	Sewer Utility	9.72
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	PUMP/4495 N 1ST ST	Sewer Utility	3,118.70
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	BACKUP GEN/2279 CALLE DE LUNA	Sewer Utility	7.84
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	POOL/2250 ROYAL	General Fund	3,092.61
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	SR CNTR 1303 FREMONT ST	General Fund	598.69
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	NORTHSIDE LIB 695 MORELAND WAY	General Fund	50.06
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	FIRE-STA2 1900 WALSH AVE.	General Fund	419.65
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	STREET/1700 WALSH 50%	General Fund	243.38
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	CITY HALL-1500 WARBURTON	General Fund	1,815.32
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	POLICE/601 EL CAMINO	General Fund	2,517.91
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	COMM SVCS-1515 EL CAMINO REAL	General Fund	24.78
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	BERMAN BLDG-1405 CIVIC CTR	General Fund	81.23

06/25/2021	PG&E	00495559	2490226441-5 JUN2021	GYM/2450 CABRILLO	General Fund	286.57
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	SPORTS CTR/3445 BENTON	General Fund	19.09
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	CRC/969 KIELY	General Fund	1,879.41
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	FIRE/#1 777 BENTON	General Fund	655.04
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	FIRE/#4-2323 PRUNERIDGE	General Fund	88.42
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	POOL/BUCHER-REBIERO	General Fund	7.85
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	POOL/BACHER-REBIERO STS	General Fund	2,212.02
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	FIRE/#9-3011 CORVIN	General Fund	35.09
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	FIRE/#3 2821 HOMESTEAD RD	General Fund	67.33
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	LIBRARY/2635 HOMESTEAD	General Fund	3,519.72
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	POOL/2625 PATRICIA	General Fund	12,898.85
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	POL SUBSTN/3992 RIVERMARK PLZ	General Fund	77.06
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	YOUTH SOCCER 5049 CENTENNIAL	General Fund	44.51
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	FIRE/#10 2401 TALLUTO	General Fund	0.00
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	PARKS/4750 LICK MILL BLVD	General Fund	17.85
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	FIRE/#6-888 AGNEW RD	General Fund	105.60
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	POOL/3750 DELA CRUZ	General Fund	0.00
06/25/2021	PG&E	00495559	2490226441-5 JUN2021	2975 LAFAYETTE ST.	General Fund	8.11
06/25/2021	PG&E	00495846	2490226441-5 JUN2021A	POOL/3750 DELA CRUZ	General Fund	1,365.06
06/25/2021	PG&E	00495846	2490226441-5 JUN2021A	POOL/3750 DELA CRUZ	General Fund	1,712.24
06/25/2021	PG&E	00495846	2490226441-5 JUN2021A	POOL/3750 DELA CRUZ	General Fund	3,364.59
06/25/2021	PG&E	00495846	2490226441-5 JUN2021A	POOL/3750 DELA CRUZ	General Fund	868.92
06/25/2021	PG&E	00495846	2490226441-5 JUN2021A	POOL/3750 DELA CRUZ	General Fund	166.77
Total for Payment No.:						41,660.91

Payment No: 019748

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	VALLEY CONCRETE INC	00494957	052721	CITY SIDEWALK MAINT- MAY 2021	Streets And Highways	40,833.00
Total for Payment No.:						40,833.00

Payment No: 019742

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TRANSCANADA TURBINES INC	00495463	1015238	FIELD SERVICES (LABOR)	Electric Utility	36,803.06
06/18/2021	TRANSCANADA TURBINES INC	00495463	1015238	MATERIALS	Electric Utility	2,185.29
				Total for Payment No.:		38,988.35

Payment No: 651534

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AMERESCO	00494865	41135	ENERGY (LANDFILL GAS) MAY21	Electric Utility	37,770.89
				Total for Payment No.:		37,770.89

Payment No: 651526

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495177	L1789841424	Q1 2021 - GENERAL	Unemployment Insurance Fund	65,505.43
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495177	L1789841424	Q1 2021 - SVP	Unemployment Insurance Fund	1,141.00
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495177	L1789841424	Q1 2021 - GENERAL CARES CREDIT	Unemployment Insurance Fund	-31,547.10
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495177	L1789841424	Q1 2021 - SVP CARES CREDIT	Unemployment Insurance Fund	-570.50
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495177	L1789841424	Q1 2021 - PD STADIUM	General Fund	2,010.80
06/18/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00495177	L1789841424	Q1 2021 - STADIUM CARES CREDIT	General Fund	-1,005.40
				Total for Payment No.:		35,534.23

Payment No: 019732

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PG&E	00495144	6960110313-3 JUN2021	GAS TRANSPORT GIANERA MAY21	Electric Utility	35,396.83
				Total for Payment No.:		35,396.83

Payment No: 019701

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GOLDER ASSOCIATES	00495069	620467	RELATED CITY PLACE- MAY 2021	Related Santa Clara Dvlpr Fund	3,198.83
06/18/2021	GOLDER ASSOCIATES	00495069	620467	LANDFILL SERVICES- FEB 2021	Solid Waste Utility-Constructi	31,078.37
				Total for Payment No.:		34,277.20

Payment No: 651584

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021		00495390	1293238	LEGAL SERVICES	Special Liability Insurance	4,916.25
06/18/2021		00495478	1291347	CHANGE ORDER #2: ADDTIONAL ENC	Special Liability Insurance	12,345.10
06/18/2021		00495478	1291347	LEGAL SERVICES - CHANGE ORDER	Special Liability Insurance	2,587.88
06/18/2021		00495479	1293236	LEGAL SERVICES - CHANGE ORDER	Special Liability Insurance	14,330.05
				Total for Payment No.:		34,179.28

Payment No: 019768

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GE GRID SOLUTIONS, LLC	00495760	1416654	JMUX OC-48 EQUIPMENT	Electric Utility Construction	34,036.95
				Total for Payment No.:		34,036.95

Payment No: 651652

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495470	193163659-001	CA PERSONAL PROP TAX FOR LOADE	Solid Waste Program	34.62
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495470	193163659-001	LOADER WHEEL 2.5-2.9 CUBIC YAR	Solid Waste Program	4,615.09
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495470	193163659-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495470	193163659-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55

06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495471	193163670-001	LOADER WHEEL 2.5-2.9 CUBIC YAR	Solid Waste Program	4,615.09
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495471	193163670-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495471	193163670-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495471	193163670-001	CA PERSONAL PROP TAX FOR LOADE	Solid Waste Program	34.62
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495472	193163714-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495472	193163714-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495472	193163714-001	CA PERSONAL PROP TAX FOR LOADE	Solid Waste Program	34.62
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495472	193163714-001	LOADER WHEEL 2.5-2.9 CUBIC YAR	Solid Waste Program	4,615.09
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495473	193163734-001	CA PERSONAL PROP TAX FOR LOADE	Solid Waste Program	34.62
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495473	193163734-001	LOADER WHEEL 2.5-2.9 CUBIC YAR	Solid Waste Program	4,615.09
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495473	193163734-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495473	193163734-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495474	193168052-001	LOADER WHEEL 2.5-2.9 CUBIC YAR	Solid Waste Program	4,615.09
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495474	193168052-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495474	193168052-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495474	193168052-001	CA PERSONAL PROP TAX FOR LOADE	Solid Waste Program	34.62
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495475	193181959-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495475	193181959-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495475	193181959-001	CA PERSONAL PROP TAX FOR FORKL	Solid Waste Program	12.47
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495475	193181959-001	FORKLIFT WHSE 8,000 LBS DIESEL	Solid Waste Program	1,662.61
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495476	193181973-001	CA PERSONAL PROP TAX FOR TANK	Solid Waste Program	3.92
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495476	193181973-001	TANK FUEL DOUBLE WALL 500 GALL	Solid Waste Program	523.08
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495476	193181973-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495476	193181973-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495477	193186294-001	LOADER WHEEL 2.5-2.9 CUBIC YAR	Solid Waste Program	4,615.09
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495477	193186294-001	DELIVERY CHARGES TAXABLE	Solid Waste Program	169.55

06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495477	193186294-001	PICK-UP CHARGES NONTAXABLE	Solid Waste Program	155.55
06/18/2021	UNITED RENTALS (NORTH AMERICA)	00495477	193186294-001	CA PERSONAL PROP TAX FOR LOADE	Solid Waste Program	34.62
Total for Payment No.:						32,701.14

Payment No: 019672

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	INTL FIREFIGHTERS LOCAL 1171	00495545	05/16/21-06/12/21	UNION DUES B2111 & B2112	Payroll Liability&ClearingAcct	32,594.38
Total for Payment No.:						32,594.38

Payment No: 019700

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GARDENLAND POWER EQUIPMENT	00494564	857746	SUPPLIES-PNB	General Fund	460.60
06/18/2021	GARDENLAND POWER EQUIPMENT	00494857	SO437162	SUPPLIES-PNB	General Fund	7,089.60
06/18/2021	GARDENLAND POWER EQUIPMENT	00494858	SO437214	SUPPLIES-PNB	General Fund	10,029.42
06/18/2021	GARDENLAND POWER EQUIPMENT	00495037	857047	SUPPLIES-STREET	General Fund	9,959.78
06/18/2021	GARDENLAND POWER EQUIPMENT	00495039	859413	SUPPLIES-STORM DRAIN	General Fund	2,958.41
Total for Payment No.:						30,497.81

Payment No: 019729

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	OVERDRIVE INC	00495032	CD0091021253451	1241 AD EBK	General Fund	30,000.00
Total for Payment No.:						30,000.00

Payment No: 651611

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ORLAND UNIT WATER USERS ASSN.	00495016	2031JUN2021	STONY CRK HYDRO EXPENSES MAY21	Electric Utility	30.62
06/18/2021	ORLAND UNIT WATER USERS ASSN.	00495016	2031JUN2021	STONY CRK HYDRO EXPENSES MAY21	Electric Utility	8,802.71

06/18/2021	ORLAND UNIT WATER USERS ASSN.	00495016	2031JUN2021	STONY CRK HYDRO EXPENSES MAY21	Electric Utility	58.60
06/18/2021	ORLAND UNIT WATER USERS ASSN.	00495016	2031JUN2021	STONY CRK HYDRO EXPENSES MAY21	Electric Utility	15,816.78
06/18/2021	ORLAND UNIT WATER USERS ASSN.	00495016	2031JUN2021	STONY CRK HYDRO EXPENSES MAY21	Electric Utility	4,379.55
06/18/2021	ORLAND UNIT WATER USERS ASSN.	00495016	2031JUN2021	STONY CRK HYDRO EXPENSES MAY21	Electric Utility	30.63
Total for Payment No.:						29,118.89

Payment No: 651650

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	UNIQUE SCAFFOLDING	00495429	21553	SCAFFOLDING MATERIAL RENTAL	Electric Utility	2,666.82
06/18/2021	UNIQUE SCAFFOLDING	00495430	21398	SCAFFOLDING MATERIAL RENTAL	Electric Utility	25,126.63
06/18/2021	UNIQUE SCAFFOLDING	00495430	21398	TAXABLE	Electric Utility	719.40
Total for Payment No.:						28,512.85

Payment No: 651864

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SCHAAF & WHEELER CONSULTING	00495674	34164	AGREEMENT FOR DESIGN PROFESSIO	Storm Drain	8,666.69
06/25/2021	SCHAAF & WHEELER CONSULTING	00495675	34267	AGREEMENT FOR DESIGN PROFESSIO	Storm Drain	19,548.06
Total for Payment No.:						28,214.75

Payment No: 651558

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CHRIS WORTMAN	00495452	BJ-531211	2021 CLEANUP CAMPAIGN HIGH-SID	Solid Waste Program	13,827.75
06/18/2021	CHRIS WORTMAN	00495453	CW-63211	2021 CLEANUP CAMPAIGN HIGH-SID	Solid Waste Program	13,905.00
Total for Payment No.:						27,732.75

Payment No: 651817

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ELITE COMMAND TRAINING	00495739	79	FEMA L-954 All Hazard Safety O	Fire Operating Grant Fund	27,500.00
				Total for Payment No.:		27,500.00

Payment No: 651613

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PERFORMANCE MECHANICAL, INC	00495426	148438	CODE WORK/REPAIRS; BOILER AND	Electric Utility	23,175.68
06/18/2021	PERFORMANCE MECHANICAL, INC	00495426	148438	MATERIALS	Electric Utility	28.49
06/18/2021	PERFORMANCE MECHANICAL, INC	00495427	148643	CODE WORK/REPAIRS; BOILER AND	Electric Utility	3,078.64
				Total for Payment No.:		26,282.81

Payment No: 019718

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021		00495391	SCLA/56598	CHANGE ORDER #1: ADDITIONAL FU LEGAL SERVICES	Electric Utility Construction	26,079.79
				Total for Payment No.:		26,079.79

Payment No: 019722

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MUNISERVICES LLC	00494984	INV06-011830	SUTA SERVICES - Q4 2020	General Fund	24,407.86
				Total for Payment No.:		24,407.86

Payment No: 651490

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ALTA PLANNING & DESIGN	00495504	00-2020-014 - 5	PRUNERIDGE AVE COMPLETE STREET	Streets And Highways	23,267.50
				Total for Payment No.:		23,267.50

Payment No: 019796

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021		00495816	31772	SERVICES -FREEDOM CIRCLE	Planning Div-Prefund PlanRview	25,313.75
06/25/2021		00495816	31772	SERVICES -FREEDOM CIRCLE	General Fund	-2,301.25
				Total for Payment No.:		23,012.50

Payment No: 651603

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MOTT MACDONALD, LLC	00495386	100250-05	LAFAYETTE ST UNDERPASS AT SUBW	Storm Drain	22,594.75
				Total for Payment No.:		22,594.75

Payment No: 019762

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	EAGLELIFT INC	00495746	203141	EMERGENCY SEWER REPAIR	Sewer Utility	22,400.00
				Total for Payment No.:		22,400.00

Payment No: 651827

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495693	316003007	Project Management Task 1	Water Utility Construction	3,095.00
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495693	316003007	Prepare Draft UWMP Task 2	Water Utility Construction	3,320.00
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495693	316003007	Stakeholder Coordination Task	Water Utility Construction	1,385.00
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495693	316003007	Final UWMP Doc Prep Task 4	Water Utility Construction	2,480.00
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495694	316003008	Stakeholder Coordination Task	Water Utility Construction	730.00
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495694	316003008	Final UWMP Doc Prep Task 4	Water Utility Construction	6,200.00
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495694	316003008	Project Management Task 1	Water Utility	840.00

					Construction	
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495694	316003008	Prepare Draft UWMP Task 2	Water Utility Construction	1,753.75
06/25/2021	HYDROSCIENCE ENGINEERS INC	00495751	316002023	AS-NEEDED SERVICES	Water Utility Construction	2,105.00
				Total for Payment No.:		21,908.75

Payment No: 651618

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	RD ENERGY SOLUTIONS	00494898	R21-SBGR-0195	SM BUSI REBAT; LTG; 62802-08	Elec OperatingGrant Trust Fund	10,000.00
06/18/2021	RD ENERGY SOLUTIONS	00494904	R21-SBGR-0165	SM BUSI RBATE LTG 18719-08	Elec OperatingGrant Trust Fund	2,061.05
06/18/2021	RD ENERGY SOLUTIONS	00495027	R21-SBGR-0164	SM BUSI LTG REBATE; 31428-04	Elec OperatingGrant Trust Fund	2,434.75
06/18/2021	RD ENERGY SOLUTIONS	00495027	R21-SBGR-0164	SM BUSI LTG REBATE; 31428-04	Elec OperatingGrant Trust Fund	7,320.77
				Total for Payment No.:		21,816.57

Payment No: 651549

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BRIGHTON ENERGY	00494941	R21-NPGR-0101	NONPROFIT REBATE LTG; 17972-01	Elec OperatingGrant Trust Fund	21,536.11
				Total for Payment No.:		21,536.11

Payment No: 651655

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	V&A CONSULTING ENGINEERS	00495516	20200	SANITARY SEWER SYSTEM INFLOW A	Sewer Utility Construction	19,462.15
06/18/2021	V&A CONSULTING ENGINEERS	00495517	20297	SANITARY SEWER SYSTEM INFLOW A	Sewer Utility Construction	1,208.25
				Total for Payment No.:		20,670.40

Payment No: 019788

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SERRANO ELECTRIC INC	00495171	50688	CRC POWER INVERTER	Parks And Recreation	20,599.00
				Total for Payment No.:		20,599.00

Payment No: 651875

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TRUE BLUE AUTOMATION SERVICES	00495756	1277	WATER ALLOCATION FOR ELECTRICA	Water Utility	2,877.60
06/25/2021	TRUE BLUE AUTOMATION SERVICES	00495756	1277	LABOR	Water Utility	16,000.00
06/25/2021	TRUE BLUE AUTOMATION SERVICES	00495757	1280	SEWER ALLOCATION FOR ELECTRICA	Sewer Utility	875.00
06/25/2021	TRUE BLUE AUTOMATION SERVICES	00495758	1281	STORM ALLOCATION FOR ELECTRICA	Storm Drain	250.00
				Total for Payment No.:		20,002.60

Payment No: 019749

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	VALLEY FAIR MALL, LLC	00494913	63832-01 CPV MAY-21	PBI SOLAR PROD PYMT #41 MAY202	Elec OperatingGrant Trust Fund	19,495.89
				Total for Payment No.:		19,495.89

Payment No: 019683

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BAYWA R.E. SOLAR PROJECTS, LLC	00494906	66381-03/66317-03 CPV MAY-2021	PBI MAY2021 PYMT #38 PR II TWR	Elec OperatingGrant Trust Fund	19,043.46
				Total for Payment No.:		19,043.46

Payment No: 019708

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	HRST INC	00495462	15514	LIVE LOADING SYSTEM - (PARTS)	Electric Utility	16,216.55

06/18/2021	HRST INC	00495462	15514	PROCEDURES DOCUMENT	Electric Utility	2,579.80
Total for Payment No.:						18,796.35

Payment No: 019698

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	EMTRAIN INC	00494933	2020-10196	SUBSCRIPTION FEE 2.21-2.22	General Fund	18,700.00
Total for Payment No.:						18,700.00

Payment No: 019784

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PLAN REVIEW CONSULTANTS INC	00495785	PRC2021-6	ADDITIONAL FUNDS PER AMENDMENT	General Fund	18,518.55
Total for Payment No.:						18,518.55

Payment No: 019674

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SANTA CLARA POLICE ASSN	00495548	05/16/21-06/12/21	UNION DUES B2111 & B2112	Payroll Liability&ClearingAcct	18,116.44
Total for Payment No.:						18,116.44

Payment No: 019800

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	VALLEY FAIR MALL, LLC	00494306	63832-01 CPV APR-21	PBI SOLAR PROD PYMT #40 APR202	Elec OperatingGrant Trust Fund	17,865.00
Total for Payment No.:						17,865.00

Payment No: 002391

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/22/2021	NAVIA BENEFIT SOLUTIONS, INC	00495541	05/30/21-06/12/21	DD:BIWEEKLY NAVIA BENEFIT	Payroll Liability&ClearingAcct	8,653.16

06/22/2021	NAVIA BENEFIT SOLUTIONS, INC	00495541	05/30/21-06/12/21	DD:BIWEEKLY NAVIA BENEFIT	Payroll Liability&ClearingAcct	9,012.39
Total for Payment No.:						17,665.55

Payment No: 019680

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ASPEN ENVIRONMENTAL GROUP	00495031	3513.002-07	RATE & FEE ANALYSIS MAY21	Electric Utility	4,771.50
06/18/2021	ASPEN ENVIRONMENTAL GROUP	00495033	3513.001-07	AMI,MV90,MTR DATA ANALYS MAY21	Electric Utility Construction	12,863.00
Total for Payment No.:						17,634.50

Payment No: 651639

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SSA LANDSCAPE ARCHITECTS, INC	00495513	7028	AGREEMENT FOR DESIGN PROFESSIO	Parks And Recreation	2,176.24
06/18/2021	SSA LANDSCAPE ARCHITECTS, INC	00495514	7054	AGREEMENT FOR DESIGN PROFESSIO	Parks And Recreation	10,206.96
06/18/2021	SSA LANDSCAPE ARCHITECTS, INC	00495515	7076	AGREEMENT FOR DESIGN PROFESSIO	Parks And Recreation	4,279.90
Total for Payment No.:						16,663.10

Payment No: 651803

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BLACK & VEATCH CORP	00495745	6707450	WTR UTILITY RATE STUDY	Water Utility Construction	8,215.00
06/25/2021	BLACK & VEATCH CORP	00495745	6707450	SWR UTILITY RATE STUDY	Water Utility Construction	8,215.00
Total for Payment No.:						16,430.00

Payment No: 019687

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CALTROL	00495525	CD99128905	PN# SVR-0805F-CSTO - ANDERSON	Electric Utility	15,917.43

Total for Payment No.: 15,917.43

Payment No: 651633

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SCHAAF & WHEELER CONSULTING	00495510	34013	AGREEMENT FOR DESIGN PROFESSIO	Storm Drain	10,674.25
06/18/2021	SCHAAF & WHEELER CONSULTING	00495511	33877	ADDITIONAL SERVICES.	Storm Drain	1,885.00
06/18/2021	SCHAAF & WHEELER CONSULTING	00495512	34012	ADDITIONAL SERVICES.	Storm Drain	2,073.00
Total for Payment No.:						14,632.25

Payment No: 019671

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	IBEW	00495544	05/16/21-06/12/21	UNION DUES B2111 & B2112	Payroll Liability&ClearingAcct	13,937.70
Total for Payment No.:						13,937.70

Payment No: 651529

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AEROVENT COMPANY	00495432	34962	P/N P2BS2207S, FIXED 2-7/16" B	Electric Utility	2,522.39
06/18/2021	AEROVENT COMPANY	00495432	34962	P/N P2BS2207E - EXPANSION 2-7/	Electric Utility	2,522.39
06/18/2021	AEROVENT COMPANY	00495433	35958	PN# 5R5V103, MOTOR SHEAVE	Electric Utility	2,214.22
06/18/2021	AEROVENT COMPANY	00495433	35958	PN# 5R5V85 - FAN SHEAVE	Electric Utility	2,214.23
06/18/2021	AEROVENT COMPANY	00495434	36190	PN# R1X2-7/8 - R1 2 7/8 BUSHIN	Electric Utility	924.48
06/18/2021	AEROVENT COMPANY	00495434	36190	PN# 5VX1060 - FOUR MATCHED SET	Electric Utility	2,288.89
06/18/2021	AEROVENT COMPANY	00495434	36190	PN# R1X2-7/16 ? R1 2 7/16 BUSH	Electric Utility	887.98
Total for Payment No.:						13,574.58

Payment No: 651882

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	WILLIAMS CONSTRUCTION COMPANY	00495268	21-001	HOME DEMO/REMODEL - GANDHI	H.U.D Capital Projects	13,565.00
06/25/2021	WILLIAMS CONSTRUCTION COMPANY	00495268	21-001	GANDHI - 10577	H.U.D Capital Projects	13,565.00
06/25/2021	WILLIAMS CONSTRUCTION COMPANY	00495268	21-001	GANDHI - 10577	H.U.D Capital Projects	-13,565.00
Total for Payment No.:						13,565.00

Payment No: 651612

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PACIFIC FITNESS PRODUCTS LLC	00495374	83801	New Fitness Equipment for Sr.	Parks And Recreation	13,472.41
Total for Payment No.:						13,472.41

Payment No: 651610

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ORCHARD COMMERCIAL, INC	00495438	9448JUN2021	FY 2020-21 PROPERTY MANAGEMENT	Convention Cnt Maintenance Dis	6,459.00
06/18/2021	ORCHARD COMMERCIAL, INC	00495439	9448JUN2021A	FY 2020-21 PROPERTY MANAGEMENT	Convention Cnt Maintenance Dis	6,459.00
Total for Payment No.:						12,918.00

Payment No: 651551

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021		00495388	1067553	LEGAL SERVICES	Special Liability Insurance	9,421.22
06/18/2021		00495389	1074523	LEGAL SERVICES	Special Liability Insurance	3,485.00
Total for Payment No.:						12,906.22

Payment No: 651792

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	U.S. BANK	00488277	02/07/21-02/20/21	BIWKLY PAYROLL DED PARS	Fringe Benefits	7,539.72
06/25/2021	U.S. BANK	00495871	12/27/20-01/09/21	BIWKLY PAYROLL DED PARS	Fringe Benefits	5,364.66
Total for Payment No.:						12,904.38

Payment No: 019764

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	EJ PIRES TRUCKING INC	00495747	99544	OPTION YEAR 1 - TRUCKING & HAU	Sewer Utility	1,750.87
06/25/2021	EJ PIRES TRUCKING INC	00495747	99544	OPTION YEAR 1 - TRUCKING & HAU	Water Utility	9,921.63
06/25/2021	EJ PIRES TRUCKING INC	00495749	99718	OPTION YEAR 1 - TRUCKING & HAU	Sewer Utility	177.67
06/25/2021	EJ PIRES TRUCKING INC	00495749	99718	OPTION YEAR 1 - TRUCKING & HAU	Water Utility	1,006.83
				Total for Payment No.:		12,857.00

Payment No: 651531

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ALLIED UNIVERSAL SECURITY	00495440	11371074	FY 2020-21 SECURITY SERVICES F	Convention Cnt Maintenance Dis	12,661.76
				Total for Payment No.:		12,661.76

Payment No: 651839

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LEXIPOL LLC	00494661	INVLEX1901	ANNUAL SOFTWARE LICENSE	Fire Department	9,600.10
06/25/2021	LEXIPOL LLC	00494661	INVLEX1901	ANNUAL SOFTWARE LICENSE	General Fund	820.90
06/25/2021	LEXIPOL LLC	00495327	INVPR3879	FD EVALS ANNUAL LICENSE	General Fund	2,125.00
				Total for Payment No.:		12,546.00

Payment No: 019765

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ELECTRICAL CONSULTANTS INC	00495738	94275	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	12,353.50
				Total for Payment No.:		12,353.50

Payment No: 019793

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	THE GOODYEAR TIRE & RUBBER	00495190	189-1106436	PARTS-STOCK	Fleet Operation Fund	3,969.71

	COMPANY					
06/25/2021	THE GOODYEAR TIRE & RUBBER COMPANY	00495190	189-1106436	CA WASTE TIRE FEE- STOCL NONTX	Fleet Operation Fund	42.00
06/25/2021	THE GOODYEAR TIRE & RUBBER COMPANY	00495191	189-1106613	PARTS-STOCK	Fleet Operation Fund	7,091.62
06/25/2021	THE GOODYEAR TIRE & RUBBER COMPANY	00495191	189-1106613	CA WASTE TIRE FEE- STOCK NONTX	Fleet Operation Fund	26.25
06/25/2021	THE GOODYEAR TIRE & RUBBER COMPANY	00495192	189-1106636	PARTS-STOCK	Fleet Operation Fund	566.93
06/25/2021	THE GOODYEAR TIRE & RUBBER COMPANY	00495192	189-1106636	CA WASTE TIRE FEE- STOCK NONTX	Fleet Operation Fund	8.75
Total for Payment No.:						11,705.26

Payment No: 651798

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	AERODERIVATIVE GAS TURBINE	00495755	I72395	PN# 1696M81P13 - PROBE, T48 TH	Electric Utility	11,625.00
Total for Payment No.:						11,625.00

Payment No: 651625

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ROSS RECREATION EQUIPMENT INC	00494733	I18928	32 GALLON RECEPTACLES	General Fund	4,440.96
06/18/2021	ROSS RECREATION EQUIPMENT INC	00495387	I18929	MATERIALS	Parks And Recreation	6,076.75
06/18/2021	ROSS RECREATION EQUIPMENT INC	00495387	I18929	FREIGHT	Parks And Recreation	1,039.00
Total for Payment No.:						11,556.71

Payment No: 019739

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	RWG (REPAIR & OVERHAULS) USA, INC.	00495428	011974	PN# 23065992 - TOWER SHAFT	Electric Utility	1,180.19
06/18/2021	RWG (REPAIR & OVERHAULS) USA, INC.	00495428	011974	PN# K501-10 - KIT OIL PUMP	Electric Utility	193.84
06/18/2021	RWG (REPAIR & OVERHAULS) USA, INC.	00495428	011974	PN# 6892265 - PACKING	Electric Utility	33.99

06/18/2021	RWG (REPAIR & OVERHAULS) USA, INC.	00495428	011974	PN# 6849498 - WASHER	Electric Utility	58.21
06/18/2021	RWG (REPAIR & OVERHAULS) USA, INC.	00495428	011974	PN# 23052090 - GASKET	Electric Utility	4.73
06/18/2021	RWG (REPAIR & OVERHAULS) USA, INC.	00495428	011974	PN# 6846359 (ALT FOR 23052098)	Electric Utility	154.53
06/18/2021	RWG (REPAIR & OVERHAULS) USA, INC.	00495428	011974	PN# 23031717 - BEARING SET	Electric Utility	9,711.92
Total for Payment No.:						11,337.41

Payment No: 651846

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	OEM PARTS NETWORK INC	00495769	188517	PN# 382A1379P0001 - UV FLAME D	Electric Utility	11,181.80
Total for Payment No.:						11,181.80

Payment No: 651555

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CALL PROCESSING SYSTEM INC	00495282	45723	IVR Annual Maintenance	General Fund	5,573.68
06/18/2021	CALL PROCESSING SYSTEM INC	00495283	45728	IVR Annual Maintenance Agreeeme	General Fund	5,573.68
Total for Payment No.:						11,147.36

Payment No: 651592

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	INTELLIGENT TECHNOLOGIES & SVC	00494881	88500	PREV MTCE INSPECTION DVR	Electric Utility	5,843.25
06/18/2021	INTELLIGENT TECHNOLOGIES & SVC	00494882	88501	REPAIR AIR LEAK RISER VALVE RM	Electric Utility	4,659.00
06/18/2021	INTELLIGENT TECHNOLOGIES & SVC	00494883	88502	1705 PARTS BT1270 12V PS 1270	Electric Utility	135.31
06/18/2021	INTELLIGENT TECHNOLOGIES & SVC	00494884	88503	PREV MTCE INSPECTION YARD	Electric Utility	318.00
Total for Payment No.:						10,955.56

Payment No: 019746

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/18/2021	UNIVERSAL SITE SERVICES	00495526	21023511	FY 2020-21 SWEEPING SERVICES F	Convention Cnt Maintenance Dis	2,251.00
06/18/2021	UNIVERSAL SITE SERVICES	00495527	21023510	FY 2020-21 CUSTODIAL SERVICES	Convention Cnt Maintenance Dis	5,980.00
06/18/2021	UNIVERSAL SITE SERVICES	00495527	21023510	FY 2020-21 PRESSURE WASHING SE	Convention Cnt Maintenance Dis	2,720.00
Total for Payment No.:						10,951.00

Payment No: 651537

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ASSOCIATED POWER SOLUTIONS,	00495456	S-21-1629	BATTERY MAINTENANCE & TESTING	Electric Utility	6,574.00
06/18/2021	ASSOCIATED POWER SOLUTIONS,	00495457	S-21-1630	BATTERY MAINTENANCE & TESTING	Electric Utility	4,196.00
Total for Payment No.:						10,770.00

Payment No: 651818

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ENERGY PROJECT SOLUTIONS LLC	00495264	2021.530	DOT PIPELINE MANAGEMENT MAY21	Electric Utility	10,615.00
Total for Payment No.:						10,615.00

Payment No: 651648

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TRB AND ASSOCIATES, INC.	00495423	3749	AMENDMENT NO. 3 ADD FUNDS PER	General Fund	5,760.00
06/18/2021	TRB AND ASSOCIATES, INC.	00495424	3750	AMENDMENT NO. 3 ADD FUNDS PER	General Fund	4,825.00
Total for Payment No.:						10,585.00

Payment No: 651585

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	HIGHLIGHT SOLAR	00495140	2021-LISG-001	LOW INCOME SLR RBAT; 52179-01	Elec OperatingGrant	10,500.00

					Trust Fund	
Total for Payment No.:						10,500.00
Payment No: 019713						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	KIMLEY-HORN AND ASSOC INC	00495506	18222095	AGREEMENT FOR ON-CALL TRAFFIC	Streets And Highways	3,057.50
06/18/2021	KIMLEY-HORN AND ASSOC INC	00495507	18420059	AGREEMENT FOR ON-CALL TRAFFIC	Streets And Highways	3,150.00
06/18/2021	KIMLEY-HORN AND ASSOC INC	00495508	18572811	AGREEMENT FOR ON-CALL TRAFFIC	Streets And Highways	2,507.50
06/18/2021	KIMLEY-HORN AND ASSOC INC	00495509	18567924	AGREEMENT FOR ON-CALL TRAFFIC	Streets And Highways	1,580.00
Total for Payment No.:						10,295.00
Payment No: 651835						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KONE INC	00495122	959832884	SCCC	Convention Cnt Maintenance Dis	156.40
06/25/2021	KONE INC	00495122	959832884	SVP DUANE AVE	Electric Utility	130.79
06/25/2021	KONE INC	00495122	959832884	CITY HALL	General Fund	78.20
06/25/2021	KONE INC	00495122	959832884	CENTRAL LIB	General Fund	478.02
06/25/2021	KONE INC	00495122	959832884	PD	General Fund	318.68
06/25/2021	KONE INC	00495122	959832884	GUN RANGE	General Fund	34.80
06/25/2021	KONE INC	00495122	959832884	SENIOR CENTER	General Fund	243.79
06/25/2021	KONE INC	00495122	959832884	BERMAN	General Fund	78.20
06/25/2021	KONE INC	00495122	959832884	TASMAN	General Fund	927.90
06/25/2021	KONE INC	00495122	959832884	FS 2	General Fund	130.79
06/25/2021	KONE INC	00495122	959832884	CRC	General Fund	34.80
06/25/2021	KONE INC	00495122	959832884	24/7 MONITOR	General Fund	780.00
06/25/2021	KONE INC	00495123	959858210	SCCC	Convention Cnt Maintenance Dis	156.40

06/25/2021	KONE INC	00495123	959858210	SVP	Electric Utility	130.79
06/25/2021	KONE INC	00495123	959858210	CITY HALL	General Fund	78.20
06/25/2021	KONE INC	00495123	959858210	CENTRAL LIB	General Fund	478.02
06/25/2021	KONE INC	00495123	959858210	PD	General Fund	318.68
06/25/2021	KONE INC	00495123	959858210	GUN RANGE	General Fund	34.80
06/25/2021	KONE INC	00495123	959858210	SENIOR CNT	General Fund	243.79
06/25/2021	KONE INC	00495123	959858210	BERMAN	General Fund	78.20
06/25/2021	KONE INC	00495123	959858210	TASMAN	General Fund	927.90
06/25/2021	KONE INC	00495123	959858210	FS 2	General Fund	130.79
06/25/2021	KONE INC	00495123	959858210	CRC	General Fund	34.80
06/25/2021	KONE INC	00495123	959858210	24/7 MONITORING	General Fund	780.00
06/25/2021	KONE INC	00495124	959883713	SCCC	Convention Cnt Maintenance Dis	156.40
06/25/2021	KONE INC	00495124	959883713	SVP DUANE	Electric Utility	130.79
06/25/2021	KONE INC	00495124	959883713	CITY HALL	General Fund	78.20
06/25/2021	KONE INC	00495124	959883713	CENTRAL LIB	General Fund	478.02
06/25/2021	KONE INC	00495124	959883713	PD	General Fund	318.68
06/25/2021	KONE INC	00495124	959883713	GUN RANGE	General Fund	34.80
06/25/2021	KONE INC	00495124	959883713	SENIOR CENTER	General Fund	243.79
06/25/2021	KONE INC	00495124	959883713	BERMAN	General Fund	78.20
06/25/2021	KONE INC	00495124	959883713	TASMAN	General Fund	927.90
06/25/2021	KONE INC	00495124	959883713	FS 2	General Fund	130.79
06/25/2021	KONE INC	00495124	959883713	CRC	General Fund	34.80
06/25/2021	KONE INC	00495124	959883713	24/7 MONITORING	General Fund	780.00
				Total for Payment No.:		10,177.11

Payment No: 651622

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ROCHE MOLECULAR SYSTEMS INC	00494905	R21-SLR-0141	LTG REBATE; ACT 64310-04	Elec OperatingGrant Trust Fund	10,176.00

Total for Payment No.: 10,176.00

Payment No: 019778

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JOINT VENTURE SILICON VALLEY	00495847	729EDAsantaclara	2021-22 SIL VLY ECON DEVL P DUE	Electric Utility	10,000.00
Total for Payment No.:						10,000.00

Payment No: 651646

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TM INDUSTRIES	00494888	R21-SBGR-0166	SM BUSI GRAN LTG; ACCT62940-02	Elec OperatingGrant Trust Fund	10,000.00
Total for Payment No.:						10,000.00

Payment No: 651556

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CALSTRUCTIVE LLC	00494894	R21-SBGR-0206	SM BUSI HVAC RBTE; 32945-05	Elec OperatingGrant Trust Fund	10,000.00
Total for Payment No.:						10,000.00

Payment No: 651635

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SEL ENGINEERING SERVICES, INC.	00495147	41439	ELECT NRS UPGRADE THRU MAY2021	Electric Utility Construction	9,864.00
Total for Payment No.:						9,864.00

Payment No: 651614

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PG&E	00495142	0008015693-8	COO NONRULE 2 LES/230KV JUN21	Electric Utility	3,231.16
06/18/2021	PG&E	00495143	0008015692-0	COO 115KV NRS (TFA) JUN21	Electric Utility	6,600.59
Total for Payment No.:						9,831.75

Payment No: 651855

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	REBUILDING TOGETHER	00495672	20/21-Q1-RTSV	REBUILD TOGETHER S.V. FY20/21	H.U.D Capital Projects	1,795.87
06/25/2021	REBUILDING TOGETHER	00495673	20/21-Q2-RTSV	REBUILD TOGETHER S.V. FY20/21	H.U.D Capital Projects	7,949.26
				Total for Payment No.:		9,745.13

Payment No: 651830

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	J FLORES REMODELING INC	00494822	100	BATHROOM REMODEL - COPELAND	H.U.D Capital Projects	9,700.00
06/25/2021	J FLORES REMODELING INC	00494822	100	COPELAND - 10570	H.U.D Capital Projects	9,700.00
06/25/2021	J FLORES REMODELING INC	00494822	100	COPELAND - 10570	H.U.D Capital Projects	-9,700.00
				Total for Payment No.:		9,700.00

Payment No: 651698

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SHONA ARMSTRONG	00495887	36744JUN2021	APPEAL--ALL OTHERS	General Fund	9,381.00
06/25/2021	SHONA ARMSTRONG	00495887	36744JUN2021	TECH SURCHARGE	General Fund	316.14
				Total for Payment No.:		9,697.14

Payment No: 019740

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	STATEN SOLAR CORPORATION	00495375	22020	CONTRACT FOR THE PHOTOVOLTAIC	Library	9,998.20
06/18/2021	STATEN SOLAR CORPORATION	00495375	22020	RETENTION	Library	-499.91
				Total for Payment No.:		9,498.29

Payment No: 651746

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	IPX WALSH BOWERS INVESTORS LP	00495620	62816-05 Utility Refund	UTILITY REFUND	General Fund	9,152.40
06/25/2021	IPX WALSH BOWERS INVESTORS LP	00495621	62817-05 Utility Refund	UTILITY REFUND	General Fund	80.37
Total for Payment No.:						9,232.77

Payment No: 651621

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ROBERT E. VAN HEUIT	00495503	1105	AMENDMENT NO. 3 INCREASE PO BY	Related Santa Clara Dvlpr Fund	9,224.18
Total for Payment No.:						9,224.18

Payment No: 651629

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SAN JOSE MAILING	00494616	4831	2021 PROP 318 MAILING SEWERTAX	Sewer Utility	2,119.90
06/18/2021	SAN JOSE MAILING	00494616	4831	2021 PROP 318 MAILING - SEWER	Sewer Utility	960.02
06/18/2021	SAN JOSE MAILING	00494616	4831	2021 PROP 318 MAILING WATERTAX	Water Utility	2,119.90
06/18/2021	SAN JOSE MAILING	00494616	4831	2021 PROP 318 MAILING RECYCTAX	Water Recycling Program	561.93
06/18/2021	SAN JOSE MAILING	00494616	4831	2021 PROP 318 MAILING - WATER	Water Utility	960.03
06/18/2021	SAN JOSE MAILING	00494616	4831	2021 PROP 318 MAILING - RECYCL	Water Recycling Program	213.34
06/18/2021	SAN JOSE MAILING	00495502	4895	Mailing for ECR Specific Plan	Engineerg Operating Grant Fund	1,610.24
06/18/2021	SAN JOSE MAILING	00495502	4895	TAXABLE	Engineerg Operating Grant Fund	446.02
Total for Payment No.:						8,991.38

Payment No: 019738

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	RUBIETTA, JOSH R.	00495420	SP2021-2	CHANGE ORDER #1: ADDITIONAL FU	General Fund	8,955.60
Total for Payment No.:						8,955.60

Payment No: 019792

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	YSERCO INC	00495222	24753	CITY HALL ACM UPGRADE	Public Buildings	8,852.00
				Total for Payment No.:		8,852.00

Payment No: 651583

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GTT COMMUNICATIONS INC	00494867	INV5054878	INTERNET SVCS 881/1705 JUN21	Electric Utility	8,793.52
				Total for Payment No.:		8,793.52

Payment No: 651800

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BACON CO, EDWARD R	00495042	31683	BORING TOOL	Water Utility	8,774.50
				Total for Payment No.:		8,774.50

Payment No: 651524

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	U.S. BANK	00495542	05/30/21-06/12/21	BIWKLY PAYROLL DED PARS B2112	Fringe Benefits	8,623.39
				Total for Payment No.:		8,623.39

Payment No: 651631

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SANTA CLARA SCHOLARSHIP	00495385	33733JUN2021	2020 Miss Santa Clara Competit	General Fund	8,200.00
				Total for Payment No.:		8,200.00

Payment No: 651862

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANTA CLARA WEEKLY	00495207	1245456	PUBLIC HEARING NOTICE	Housing Successor	1,488.00

				AGRIHOOD		
06/25/2021	SANTA CLARA WEEKLY	00495795	1245475	MUNI FEE ADOPTION FY 2021-22	General Fund	2,640.00
06/25/2021	SANTA CLARA WEEKLY	00495797	1245477	OPERATING BUDGET FY 2021-23	General Fund	2,332.00
06/25/2021	SANTA CLARA WEEKLY	00495817	1245478	PUBLISH ORDINANCE 2031	General Fund	408.00
06/25/2021	SANTA CLARA WEEKLY	00495890	1245479	1199 COLEMAN CC MEETNG 6/22	General Fund	1,248.00
				Total for Payment No.:		8,116.00

Payment No: 019725

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NVIDIA CORP	00494912	63037-04 CPV MAY-2021	PBI SOLAR PROD PYMT #51 MAY-20	Elec OperatingGrant Trust Fund	8,081.37
				Total for Payment No.:		8,081.37

Payment No: 019791

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	STATEN SOLAR CORPORATION	00495805	22021	CONTRACT FOR THE PHOTOVOLTAIC	Library	8,498.20
06/25/2021	STATEN SOLAR CORPORATION	00495805	22021	RETENTION	Library	-424.91
				Total for Payment No.:		8,073.29

Payment No: 651609

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	OMNETRIC CORP.	00495524	5720013222	MDMS & ENERGY ENGAGE IMPLEMENT	Electric Utility Construction	7,905.00
				Total for Payment No.:		7,905.00

Payment No: 019737

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021		00495392	46144	PERSONNEL ISSUES	Special Liability Insurance	4,079.06
06/18/2021		00495449	46270	Internal Investigation Service	Special Liability	3,465.00

						Insurance
Total for Payment No.:						7,544.06
Payment No: 651572						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DOMINGUEZ & SONS TRUCKING INC	00495454	005675	DELIVERY & PICK-UP CHARGES	Solid Waste Program	1,526.00
06/18/2021	DOMINGUEZ & SONS TRUCKING INC	00495454	005675	2013 544 JOHN DEERE TIER 4 WHE	Solid Waste Program	5,995.00
Total for Payment No.:						7,521.00
Payment No: 019771						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GRAINGER-SAN JOSE	00495043	9881770094	ROUND POINT SHOVEL	Electric Utility	74.22
06/25/2021	GRAINGER-SAN JOSE	00495043	9881770094	ROUND POINT SHOVEL	Water Utility	74.23
06/25/2021	GRAINGER-SAN JOSE	00495044	9882145379	GLOVES	Water Utility	52.93
06/25/2021	GRAINGER-SAN JOSE	00495045	9882145387	LEATHER GLOVES	Electric Utility	233.10
06/25/2021	GRAINGER-SAN JOSE	00495046	9883027014	GLOVES	Electric Utility	105.86
06/25/2021	GRAINGER-SAN JOSE	00495047	9888097681	PUSH BROOM	Water Utility	131.23
06/25/2021	GRAINGER-SAN JOSE	00495048	9888097699	LEATHER GLOVES	Electric Utility	62.28
06/25/2021	GRAINGER-SAN JOSE	00495049	9891386147	UTILITY PUMP & ATTACHEMENTS	Water Utility	264.30
06/25/2021	GRAINGER-SAN JOSE	00495051	9899084058	UTILITY PUMP	Water Utility	997.50
06/25/2021	GRAINGER-SAN JOSE	00495053	9899650148	GASKET PUNCH SET	Water Utility	60.38
06/25/2021	GRAINGER-SAN JOSE	00495054	9899723515	TRIM SEAL	Water Utility	221.12
06/25/2021	GRAINGER-SAN JOSE	00495055	9906734315	TUBE BENDER	Water Utility	177.89
06/25/2021	GRAINGER-SAN JOSE	00495056	9906734323	LEVEL AND WRENCH	Water Utility	70.76
06/25/2021	GRAINGER-SAN JOSE	00495056	9906734323	LEVEL AND WRENCH	Water Utility	149.07
06/25/2021	GRAINGER-SAN JOSE	00495063	9906940771	TYPE K CU COIL	Water Utility	228.17
06/25/2021	GRAINGER-SAN JOSE	00495066	9921769247	CRAYON AND GLOVES	Electric Utility	1,226.38
06/25/2021	GRAINGER-SAN JOSE	00495121	9926130866	INDUSTRIAL AIR CLEANER	General Fund	2,096.32
06/25/2021	GRAINGER-SAN JOSE	00495220	9922699872	3X5 US FLAG	Cemetery	1,231.72

Total for Payment No.: 7,457.46

Payment No: 651881

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	SCCC	Convention Cnt Maintenance Dis	70.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	SVP DUANE	Electric Utility	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	SVP ROBERTS	Electric Utility	63.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	SVP MARTIN	Electric Utility	74.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	CEMETRY	Cemetery	63.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	HARRISLASS	Public Buildings	63.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	HEADEN	Public Buildings	63.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	JAMISON BROWN	Public Buildings	63.75
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	TRITON	Public Buildings	91.66
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	HEART OF VALLEY	Public Buildings	50.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	MORSE MANSION	General Government - Other	85.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	BUILD MTCE	General Fund	336.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	BERRYESSA ADOBE	General Fund	63.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	PD	General Fund	135.41
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	STREET	General Fund	201.41
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	FIRE	General Fund	734.64
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	CENTRAL LIB	General Fund	153.41

06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	NORTHSIDE LIB	General Fund	91.66
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	MISSION LIB	General Fund	74.41
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	PARKS	General Fund	893.12
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	PURCHASING WAREHOUSE	General Fund	63.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	EOC	General Fund	73.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495180	12968C	COMMUNITY DEVE	General Fund	45.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	SCCC	Convention Cnt Maintenance Dis	70.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	SVP DUANE	Electric Utility	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	SVP ROBERTS	Electric Utility	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	SVP MARTIN	Electric Utility	80.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	CEMETRY	Cemetery	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	HEART OF VALLEY	Public Buildings	50.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	HARRIS LASS	Public Buildings	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	HEADEN INMAN	Public Buildings	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	JAMISON BROWN	Public Buildings	68.91
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	TRITON	Public Buildings	99.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	MORSE MANSION	General Government - Other	85.00
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	BLD MTCE	General Fund	295.14
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	BERRYESSA ADOBE	General Fund	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	PD	General Fund	146.41

06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	STREET	General Fund	217.83
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	FIRE	General Fund	794.63
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	CENTRAL LIB	General Fund	165.91
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	NORTHSIDE LIB	General Fund	99.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	MISSION LIB	General Fund	80.50
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	PARKS	General Fund	965.88
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	PURCHASING WAREHOUSE	General Fund	68.16
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	EOC	General Fund	78.91
06/25/2021	WESTERN EXTERMINATOR COMPANY	00495181	14621C	COMMUNITY DEV	General Fund	45.00
				Total for Payment No.:		7,438.19

Payment No: 019716

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MBL & SONS, INC	00494910	63467-01 CPV MAY-2021	ST LAWRNC PBI PYMT #39 MAY 202	Elec OperatingGrant Trust Fund	5,678.67
06/18/2021	MBL & SONS, INC	00494911	75175-01 CPV MAY-2021	ST JUSTIN PBI PYMT #34 MAY-202	Elec OperatingGrant Trust Fund	1,671.89
				Total for Payment No.:		7,350.56

Payment No: 651843

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MINTIER HARNISH LP	00495771	SANTA CLARA ZCU-35	CHANGE ORDER #2: ADDITIONAL FU	General Government - Other	7,252.50
				Total for Payment No.:		7,252.50

Payment No: 651606

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NEW IMAGE LANDSCAPE COMPANY	00494946	133956	SVP LANDCPE MAINT- MAY 2021	Electric Utility	3,000.00
06/18/2021	NEW IMAGE LANDSCAPE COMPANY	00494946	133956	DVR LANDCPE MAINT- MAY 2021	Electric Utility	600.00
06/18/2021	NEW IMAGE LANDSCAPE COMPANY	00494946	133956	CSC LANDCPE MAINT- MAY 2021	General Fund	3,635.00
				Total for Payment No.:		7,235.00

Payment No: 002390

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Fleet Operation Fund	75.76
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Electric Utility	3,567.55
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Cemetery	120.98
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Solid Waste Program	0.88
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Solid Waste Program	-0.88
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Solid Waste Program	404.80
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Police Operating Grant Fund	1,090.73
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Public Buildings	3.18
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	General Fund	1,723.25
06/21/2021	CA DEPT OF TAX & FEE ADMIN	00495558	MAY2021	DD:SALES & USE TAX MAY 2021	Water Utility	160.65
				Total for Payment No.:		7,146.90

Payment No: 651890

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	PIPE AND PLANT SOLUTIONS, INC.	00495692	20404	SANITARY SEWER ASSESSMENT PHAS	Sewer Utility Construction	7,058.23
				Total for Payment No.:		7,058.23

Payment No: 651591

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	INFOUSA MARKETING, INC	00494963	060721MV02	1241 AD DB 07/15/21-07/14/22	General Fund	7,000.00

Total for Payment No.: 7,000.00

Payment No: 019669

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AFSCME COUNCIL 57	00495543	05/16/21-06/12/21	UNION DUES B2111 & B2112	Payroll Liability&ClearingAcct	6,835.72
Total for Payment No.:						6,835.72

Payment No: 651539

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BATEMAN SENIOR MEALS	00495445	INV4650005452	ADDITIONAL ENCUMBRANCE (OVERAG	Park and Rec Opr GrantTst Fund	3,763.92
06/18/2021	BATEMAN SENIOR MEALS	00495446	INV4650005657	ADDITIONAL ENCUMBRANCE (OVERAG	Park and Rec Opr GrantTst Fund	2,839.68
Total for Payment No.:						6,603.60

Payment No: 019779

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KOFFLER	00495245	0097924-IN	FRL447VP16 PUMP OVERHAUL- LABOR	Electric Utility	4,590.00
06/25/2021	KOFFLER	00495245	0097924-IN	FRL447VP16 PUMP OVERHAUL- PARTS	Electric Utility	1,776.71
Total for Payment No.:						6,366.71

Payment No: 651569

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DELTAWRX LLC	00495024	1097	Phase III Month 7	General Government - Other	6,254.82
Total for Payment No.:						6,254.82

Payment No: 651656

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	VERIZON WIRELESS	00494886	9880510674	CELL PHONE SERVICE MAY21	Electric Utility	6,178.56
				Total for Payment No.:		6,178.56

Payment No: 019694

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	COAST COUNTIES TRUCK	00494961	0134629S	LABOR-V#3277 WO#130041	Fleet Operation Fund	2,162.48
06/18/2021	COAST COUNTIES TRUCK	00494961	0134629S	PARTS-V#3277 WO#130041	Fleet Operation Fund	3,650.20
06/18/2021	COAST COUNTIES TRUCK	00494961	0134629S	MISC- V#3277 WO#130041 NONTXB	Fleet Operation Fund	245.72
				Total for Payment No.:		6,058.40

Payment No: 651647

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TOWNSEND PUBLIC AFFAIRS INC	00495422	17216	Silicon Valley Power's Adminis	Electric Utility	3,000.00
06/18/2021	TOWNSEND PUBLIC AFFAIRS INC	00495422	17216	Sewer Utility Fund	Sewer Utility	416.70
06/18/2021	TOWNSEND PUBLIC AFFAIRS INC	00495422	17216	State and Federal Legislative	General Fund	2,166.60
06/18/2021	TOWNSEND PUBLIC AFFAIRS INC	00495422	17216	Water Utility Fund	Water Utility	416.70
				Total for Payment No.:		6,000.00

Payment No: 651888

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	CRESCO EQUIPMENT RENTALS	00495763	5428822-0001	EQUIPMENT RENTAL	Electric Utility	34.44
06/30/2021	CRESCO EQUIPMENT RENTALS	00495764	5313217-0006	EQUIPMENT RENTAL	Electric Utility	5,230.64
06/30/2021	CRESCO EQUIPMENT RENTALS	00495764	5313217-0006	NON TAXABLE	Electric Utility	670.75
				Total for Payment No.:		5,935.83

Payment No: 019766

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	SHIPPING	Electric Utility	81.38

06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	18" TEFLON DRILL BIT	Electric Utility	69.30
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	24" TELFON IMPACT DRILL BIT	Electric Utility	253.55
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	24" TELFON IMPACT DRILL BIT	Electric Utility	91.03
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	BUCKINGHAM WRAP PAD	Electric Utility	373.69
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	CRIEF RELIEF LIQ WASTE BAG	Electric Utility	216.17
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	EZ SQUEEZE TRANSMISSION	Electric Utility	781.03
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	MILW M18 SEARCH LIGHT	Electric Utility	215.09
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	JELCO 8ft. LANYARD	Electric Utility	681.11
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	MILW LINEMAN'S 4IN1 WRENCH	Electric Utility	162.62
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	UNIVERSAL GAFF GUARD 6909U	Electric Utility	43.45
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	KLEIN Broad-Range High Voltage	Electric Utility	399.76
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	18" TEFLON DRILL BIT	Electric Utility	194.89
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	PROBE INSTALLATION TOOL	Electric Utility	278.09
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	PRIMARY INSULATION STRIP	Electric Utility	273.75
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	KLEIN FOLDING KNIFE w/ CLIP 44	Electric Utility	325.24
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	KLEIN LINEMAN'S WRENCH	Electric Utility	88.86
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	MILW LINEMAN'S 5IN1 WRENCH	Electric Utility	260.69
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	SEPTOR HEAD LAMP	Electric Utility	201.40
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	KUNZ RUBBER GLOVE PROTECTOR	Electric Utility	303.41
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	10" EDWARDSLOW VOLT GLOVE	Electric Utility	194.45
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	BANANA PEELER BP1A .75"- 1.1"	Electric Utility	249.85
06/25/2021	FARWEST LINE SPECIALTIES LLC	00495244	333956	LBIT-IT BUSHING INSERTION TOOL	Electric Utility	191.19
				Total for Payment No.:		5,930.00

Payment No: 651872

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	THYSSENKRUPP ELEVATOR	00495173	6000511492	SLIDE GUIDES	General Fund	5,658.52
				Total for Payment No.:		5,658.52

Payment No: 019745

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	UNITED ROTARY BRUSH CORP	00494863	CI266977	SUPPLIES-STREET	Solid Waste Program	5,604.17
				Total for Payment No.:		5,604.17

Payment No: 651815

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DLT SOLUTIONS LLC	00495842	SI499545	AutoCAD - including specialize	Sewer Utility	1,148.42
06/25/2021	DLT SOLUTIONS LLC	00495842	SI499545	AutoCAD - including specialize	Water Utility	1,148.41
06/25/2021	DLT SOLUTIONS LLC	00495843	SI499677	IMAGINiT Priority Support-Tele	Sewer Utility	187.50
06/25/2021	DLT SOLUTIONS LLC	00495843	SI499677	IMAGINiT Priority Support-Tele	Water Utility	187.50
06/25/2021	DLT SOLUTIONS LLC	00495844	SI501870	Architecture Engineering & Con	Sewer Utility	1,432.76
06/25/2021	DLT SOLUTIONS LLC	00495844	SI501870	Architecture Engineering & Con	Water Utility	1,432.76
				Total for Payment No.:		5,537.35

Payment No: 651528

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ADVANCED TURBINE SUPPORT LLC	00495458	17851	BOREScope AND NDE SERVICES FOR	Electric Utility Construction	5,380.07
				Total for Payment No.:		5,380.07

Payment No: 651604

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MSDSOnline INC	00495150	234896	MSDSOnline HQ ACCOUNT-RENEWAL	Electric Utility	5,269.00
06/18/2021	MSDSOnline INC	00495150	234896	HQ SITE ADMINISTRATOR-RENEWAL	Electric Utility	100.00
				Total for Payment No.:		5,369.00

Payment No: 019704

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GRANITE CONSTRUCTION CO	00494356	2006283	SUPPLIES - STREET MAINTENANCE	General Fund	3,405.38
06/18/2021	GRANITE CONSTRUCTION CO	00494974	2026800	SUPPLIES-STREET	General Fund	1,364.83
06/18/2021	GRANITE CONSTRUCTION CO	00494976	2027405	SUPPLIES-STREET	General Fund	366.46
				Total for Payment No.:		5,136.67

Payment No: 019750

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	WESTERN RENEWABLE ENERGY	00495145	WR26525	CERTS RETIRED	Electric Utility	4,766.63
06/18/2021	WESTERN RENEWABLE ENERGY	00495145	WR26525	CERTS TRANSFERRED	Electric Utility	93.19
06/18/2021	WESTERN RENEWABLE ENERGY	00495145	WR26525	CERTS CREATED	Electric Utility	62.48
06/18/2021	WESTERN RENEWABLE ENERGY	00495145	WR26525	DELIVERABILITY-NERC TAG	Electric Utility	212.00
				Total for Payment No.:		5,134.30

Payment No: 651602

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MORNINGSTAR INC	00494591	8946JUNE2021	1241 AD DB 07/31/21-07/31/22	General Fund	5,046.00
				Total for Payment No.:		5,046.00

Payment No: 002389

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	STATE DISBURSEMENT UNIT	00495531	05/30/21-06/12/21	WAGE ATTACHMENTS B2112	Payroll Liability&ClearingAcct	5,032.45
				Total for Payment No.:		5,032.45

Payment No: 019734

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PITNEY BOWES	00494908	8977JUN2021	POSTAGE	General Fund	5,017.00
				Total for Payment No.:		5,017.00

Payment No: 651554

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CALIF MUNICIPAL UTILITIES ASSN	00494613	20-0200	FY21-22 WATER UTILITY MEMBRSHP	Water Utility	4,994.00
				Total for Payment No.:		4,994.00

Payment No: 651841

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MCKENDRY DOOR SALES INC	00495740	32210	APPARATUS BAY DOOR REPAIRS - I	General Fund	750.00
06/25/2021	MCKENDRY DOOR SALES INC	00495740	32210	MATERIALS	General Fund	21.85
06/25/2021	MCKENDRY DOOR SALES INC	00495741	32209	APPARATUS BAY DOOR REPAIRS - I	General Fund	1,050.00
06/25/2021	MCKENDRY DOOR SALES INC	00495741	32209	MATERIALS	General Fund	452.15
06/25/2021	MCKENDRY DOOR SALES INC	00495744	32027	APPARATUS BAY DOOR REPAIRS - I	General Fund	1,925.00
06/25/2021	MCKENDRY DOOR SALES INC	00495744	32027	MATERIALS	General Fund	781.13
				Total for Payment No.:		4,980.13

Payment No: 651601

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MEMORIAL IMPRESSIONS INC.	00494959	26886	Veterans Memorial Engravings	Custodial Deposits Fund	770.00
06/18/2021	MEMORIAL IMPRESSIONS INC.	00495097	26899	INSCRIPTION/INSTALLATION SERV	Cemetery	4,189.00
				Total for Payment No.:		4,959.00

Payment No: 651540

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BAYSHORE SAFETY & INDUSTRIAL	00495414	6087	EXAM GLOVES,XL, POWDERLESS, MI	Water Utility	2,928.61
06/18/2021	BAYSHORE SAFETY & INDUSTRIAL	00495417	5907	RAGS, TERI-CLOTH, STRAIGHT CUT	Electric Utility	2,005.60
				Total for Payment No.:		4,934.21

Payment No: 019730

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PAN ASIAN PUBLICATIONS (USA) INC	00494624	U-16803	1241 AD BK	General Fund	1,288.02
06/18/2021	PAN ASIAN PUBLICATIONS (USA) INC	00494625	U-16804	1241 AD BK	General Fund	362.54
06/18/2021	PAN ASIAN PUBLICATIONS (USA) INC	00495035	U-16809	1241 AD BK	General Fund	457.23
06/18/2021	PAN ASIAN PUBLICATIONS (USA) INC	00495148	U-16818	1231 JUV BK	General Fund	1,063.62
06/18/2021	PAN ASIAN PUBLICATIONS (USA) INC	00495149	U-16819	1241 AD BK	General Fund	1,605.81
				Total for Payment No.:		4,777.22

Payment No: 651527

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GREENFIELD LEARNING INC	00495483	10031	Renewal subscription Lexia	Library Operating Grant Fund	4,750.00
				Total for Payment No.:		4,750.00

Payment No: 651801

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BAUER COMPRESSORS INC	00495336	0000280365	REPAIR FOR 2 UNITS @ ST. 2	General Fund	1,010.00
06/25/2021	BAUER COMPRESSORS INC	00495336	0000280365	SERVICE PARTS	General Fund	182.42
06/25/2021	BAUER COMPRESSORS INC	00495556	0000279885	MSA Pouch Replacement	General Fund	1,497.48
06/25/2021	BAUER COMPRESSORS INC	00495556	0000279885	MSA Lumbar Pad Assy	General Fund	418.54
06/25/2021	BAUER COMPRESSORS INC	00495556	0000279885	MSA Replacement Kit	General Fund	256.76
06/25/2021	BAUER COMPRESSORS INC	00495556	0000279885	Lens, G1 Faceplate	General Fund	987.28
06/25/2021	BAUER COMPRESSORS INC	00495556	0000279885	Inlet Valve Seat, G1 Faceplate	General Fund	143.45
06/25/2021	BAUER COMPRESSORS INC	00495556	0000279885	Inlet Valve, G1 Faceplate	General Fund	240.20
				Total for Payment No.:		4,736.13

Payment No: 019756

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	ASPEN ENVIRONMENTAL GROUP	00495754	3360.001-28	SOUTHLOOP TASK A-1	Electric Utility Construction	4,711.47
Total for Payment No.:						4,711.47

Payment No: 651546

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BMI IMAGING SYSTEMS	00495214	315556	Digitizing and Indexing Docs	General Fund	4,685.26
Total for Payment No.:						4,685.26

Payment No: 651866

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SILICON VALLEY PAINTING	00495202	211917	LEE - 10576	H.U.D Capital Projects	-4,635.00
06/25/2021	SILICON VALLEY PAINTING	00495202	211917	PAINT HOME EXTERIOR - LEE	H.U.D Capital Projects	4,635.00
06/25/2021	SILICON VALLEY PAINTING	00495202	211917	LEE - 10576	H.U.D Capital Projects	4,635.00
Total for Payment No.:						4,635.00

Payment No: 019758

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CINTAS CORP #630	00495277	4084909121	2021 MAY WATER UNIFORM SERVICE	Sewer Utility	301.91
06/25/2021	CINTAS CORP #630	00495277	4084909121	2021 MAY WATER UNIFORM SERVICE	Water Utility	301.92
06/25/2021	CINTAS CORP #630	00495278	4085595762	2021 MAY WATER UNIFORM SERVICE	Sewer Utility	301.91
06/25/2021	CINTAS CORP #630	00495278	4085595762	2021 MAY WATER UNIFORM SERVICE	Water Utility	301.92
06/25/2021	CINTAS CORP #630	00495279	4086160649	2021 JUN WATER UNIFORM SERVICE	Sewer Utility	301.91
06/25/2021	CINTAS CORP #630	00495279	4086160649	2021 JUN WATER UNIFORM SERVICE	Water Utility	301.92
06/25/2021	CINTAS CORP #630	00495281	4084791410	DS1-TC	Other City Dept Op Grant Fund	5.04
06/25/2021	CINTAS CORP #630	00495281	4084791410	CHEMICALS-TC	General Fund	45.41

06/25/2021	CINTAS CORP #630	00495286	4084791459	DS1-CRC	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495286	4084791459	CHEMICALS-CRC	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495288	4084989326	UNIFORMS-LICKMILL	General Fund	74.00
06/25/2021	CINTAS CORP #630	00495291	4084995062	UNIFORMS-CEMETERY	Cemetery	49.84
06/25/2021	CINTAS CORP #630	00495291	4084995062	CHEMICALS-CEMETERY	Cemetery	36.74
06/25/2021	CINTAS CORP #630	00495291	4084995062	DS1-CEMETERY	Other City Dept Op Grant Fund	20.41
06/25/2021	CINTAS CORP #630	00495292	4085472009	MACHADO - DS1	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495292	4085472009	MACHADO - CHEMICALS	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495293	4085240619	DS1-MONTAGUE	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495293	4085240619	CHEMICALS-MONTAGUE	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495294	4085472017	WAR MEMORIAL PARK - DS1	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495294	4085472017	WAR MEMORIAL PARK - CHEMICALS	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495295	4085240629	DS1-MONTAGUE SWIM	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495295	4085240629	CHEMICALS-MONTAGUE SWIM	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495296	4085472031	DS1- WILSON	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495296	4085472031	CHEMICALS - WILSON	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495297	4085241492	DS1-THOMAS BARRETT	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495297	4085241492	CHEMICALS-THOMAS BARRETT	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495298	4085470582	DS1-BRACHER	Other City Dept Op Grant Fund	9.81
06/25/2021	CINTAS CORP #630	00495298	4085470582	CHEMICAL-BRACHER	General Fund	20.42
06/25/2021	CINTAS CORP #630	00495299	4085472046	DS1- COMM GARDEN	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495299	4085472046	CHEMICALS - COMM GARDEN	General Fund	32.00
06/25/2021	CINTAS CORP #630	00495300	4085471345	DS1-YSP	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495300	4085471345	CHEMICALS-YSP	General Fund	34.06

06/25/2021	CINTAS CORP #630	00495301	4085472048	ds1 - isc	Other City Dept Op Grant Fund	13.08
06/25/2021	CINTAS CORP #630	00495301	4085472048	CHEMICALS - ISC	General Fund	23.52
06/25/2021	CINTAS CORP #630	00495302	4085471678	DS1-MAYWOOD	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495302	4085471678	CHEMICALS-MAYWOOD	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495303	4085471679	DS1-WESTWOOD	Other City Dept Op Grant Fund	16.35
06/25/2021	CINTAS CORP #630	00495303	4085471679	CHEMICALS-WESTWOOD	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495304	4085472051	DS1- MARY GOMEZ POOL	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495304	4085472051	CHEMICALS - MARY GOMEZ POOL	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495305	4085471696	DS1-JENNY STRAND	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495305	4085471696	CHEMICALS-JENNY STRAND	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495306	4085471800	CHEMICALS-PARKS	General Fund	129.95
06/25/2021	CINTAS CORP #630	00495307	4085472053	DS1- CRC	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495307	4085472053	CHEMICALS - CRC	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495308	4085471869	DS1-BOWERS	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495308	4085471869	CHEMICALS-BOWERS	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495309	4085472063	DS1- TENNIS CENTER	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495309	4085472063	CHEMICALS - TENNIS CENTER	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495310	4085471918	DS1-YAC	Other City Dept Op Grant Fund	5.04
06/25/2021	CINTAS CORP #630	00495310	4085471918	CHEMICALS-YAC	General Fund	47.31
06/25/2021	CINTAS CORP #630	00495311	4085472065	DS1- STEVE CARLI	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495311	4085472065	CHEMICALS - STEVE CARLI	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495313	4085471977	DS1-EARL CARMICHAEL	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495313	4085471977	CHEMICALS-EARL CARMICHAEL	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495314	4085473518	DS1- LARRY MARSALLI	Other City Dept Op Grant Fund	6.54

06/25/2021	CINTAS CORP #630	00495314	4085473518	CHEMICALS - LARRY MARSALLI	General Fund	15.88
06/25/2021	CINTAS CORP #630	00495316	4085471987	UNIFORMS-PARKS	General Fund	355.06
06/25/2021	CINTAS CORP #630	00495316	4085471987	SANIS BOWL CLIP	General Fund	4.57
06/25/2021	CINTAS CORP #630	00495317	4085473539	DS1- WARBURTON	Other City Dept Op Grant Fund	9.81
06/25/2021	CINTAS CORP #630	00495317	4085473539	CHEMICALS - WARBURTON	General Fund	21.66
06/25/2021	CINTAS CORP #630	00495318	4085471996	DS1-HOMERIDGE	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495318	4085471996	CHEMICALS-HOMERIDGE	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495319	4085474006	DS1- PARKWAY PARK	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495319	4085474006	CHEMICALS - PARWAY PARK	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495320	4085472003	DS1-CENTRAL	Other City Dept Op Grant Fund	39.24
06/25/2021	CINTAS CORP #630	00495320	4085472003	CHEMICALS-CENTRAL	General Fund	68.09
06/25/2021	CINTAS CORP #630	00495321	4085595718	DS1- REED AND GRANT	Other City Dept Op Grant Fund	22.89
06/25/2021	CINTAS CORP #630	00495321	4085595718	CHEMICALS - REED AND GRANT	General Fund	45.38
06/25/2021	CINTAS CORP #630	00495322	4085745300	CHEMICALS - LICK MILL	General Fund	41.16
06/25/2021	CINTAS CORP #630	00495323	4085745423	UNIFORMS	General Fund	70.90
06/25/2021	CINTAS CORP #630	00495324	4085745425	DS1- LIVE OAK	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495324	4085745425	CHEMICALS - LIVE OAK	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495326	4085745444	DS1- FULLER STREET	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495326	4085745444	CHEMICALS - FULLER STREET	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495328	4085745462	DS1- THAMIEN	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495328	4085745462	CHEMICALS - THAMIEN	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495329	4085745465	DS1- AGNEW	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495329	4085745465	CHEMICALS - AGNEW	General Fund	34.06
06/25/2021	CINTAS CORP #630	00495331	4085747201	DS1- SR CENTER	Other City Dept Op Grant Fund	39.24
06/25/2021	CINTAS CORP #630	00495331	4085747201	CHEMICALS - SR CENTER	General Fund	67.49

06/25/2021	CINTAS CORP #630	00495333	4085747302	DS1- CEMETERY	Other City Dept Op Grant Fund	19.86
06/25/2021	CINTAS CORP #630	00495333	4085747302	UNIFORMS - CEMETERY	General Fund	31.20
06/25/2021	CINTAS CORP #630	00495333	4085747302	TAXABLE	General Fund	54.38
06/25/2021	CINTAS CORP #630	00495334	4085747334	DS1- HENRY SCHMIDT	Other City Dept Op Grant Fund	9.81
06/25/2021	CINTAS CORP #630	00495334	4085747334	CHEMICALS - HENRY SCHMIDT	General Fund	20.42
06/25/2021	CINTAS CORP #630	00495335	4085747343	DS1- EVERETT ALVAREZ	Other City Dept Op Grant Fund	19.62
06/25/2021	CINTAS CORP #630	00495335	4085747343	CHEMICALS - EVERETT ALVAREZ	General Fund	34.06
				Total for Payment No.:		4,572.31

Payment No: 651630

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SANTA CLARA LIGHTING, INC.	00494630	20229	LIGHTBULBS	General Fund	43.55
06/18/2021	SANTA CLARA LIGHTING, INC.	00494631	20256	LIGHTBULBS	General Fund	423.12
06/18/2021	SANTA CLARA LIGHTING, INC.	00494632	20401	LIGHTBULBS	General Fund	40.28
06/18/2021	SANTA CLARA LIGHTING, INC.	00494633	20469	LIGHTBULBS	General Fund	326.78
06/18/2021	SANTA CLARA LIGHTING, INC.	00494634	20537	LIGHTBULBS	General Fund	175.64
06/18/2021	SANTA CLARA LIGHTING, INC.	00494734	21370	POLE, BOLT KIT, LIGHTBULBS	General Fund	1,985.76
06/18/2021	SANTA CLARA LIGHTING, INC.	00494735	21324	LIGHTBULBS	General Fund	38.91
06/18/2021	SANTA CLARA LIGHTING, INC.	00494736	21327	LIGHTBULBS-FATJO FIELD	General Fund	914.95
06/18/2021	SANTA CLARA LIGHTING, INC.	00494737	21411	LIGHTBULBS-SENIOR CTR	General Fund	216.91
06/18/2021	SANTA CLARA LIGHTING, INC.	00494738	21437	LIGHTBULBS	General Fund	153.31
06/18/2021	SANTA CLARA LIGHTING, INC.	00494955	19637	LIGHTS- P&B SUPPLIES	General Fund	78.26
				Total for Payment No.:		4,397.47

Payment No: 651596

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021		00495284	1522238	PROF SERVICES - INVESTIGATION	Special Liability Insurance	4,276.27

Total for Payment No.: 4,276.27

Payment No: 651891

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	UNIQUE SCAFFOLDING	00495766	RI-21740	SCAFFOLDING MATERIAL RENTAL	Electric Utility	467.67
06/30/2021	UNIQUE SCAFFOLDING	00495766	RI-21740	SCAFFOLDING MATERIAL RENTAL	Electric Utility	786.87
06/30/2021	UNIQUE SCAFFOLDING	00495767	RI-21741	SCAFFOLDING MATERIAL RENTAL	Electric Utility	2,996.79
Total for Payment No.:						4,251.33

Payment No: 019790

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	STAPLES ADVANTAGE	00495676	8062587070-BLDGINSP	OFFICE SUPPLIES	General Fund	82.49
06/25/2021	STAPLES ADVANTAGE	00495677	8062587070-CMO	OFFICE SUPPLIES	General Fund	62.34
06/25/2021	STAPLES ADVANTAGE	00495677	8062587070-CMO	OFFICE SUPPLIES	S.C.Stadium Authority Ops	8.18
06/25/2021	STAPLES ADVANTAGE	00495678	8062587070-ELECYARD	OFFICE SUPPLIES	Electric Utility	23.22
06/25/2021	STAPLES ADVANTAGE	00495679	8062587070-ENG	OFFICE SUPPLIES	General Fund	189.92
06/25/2021	STAPLES ADVANTAGE	00495679	8062587070-ENG	OFFICE SUPPLIES	General Fund	189.92
06/25/2021	STAPLES ADVANTAGE	00495679	8062587070-ENG	OFFICE SUPPLIES	General Fund	-26.23
06/25/2021	STAPLES ADVANTAGE	00495679	8062587070-ENG	OFFICE SUPPLIES	General Fund	26.23
06/25/2021	STAPLES ADVANTAGE	00495679	8062587070-ENG	OFFICE SUPPLIES	General Fund	-26.23
06/25/2021	STAPLES ADVANTAGE	00495679	8062587070-ENG	OFFICE SUPPLIES	General Fund	26.23
06/25/2021	STAPLES ADVANTAGE	00495679	8062587070-ENG	OFFICE SUPPLIES	General Fund	353.96
06/25/2021	STAPLES ADVANTAGE	00495680	8062587070-FIRE	OFFICE SUPPLIES	General Fund	248.90
06/25/2021	STAPLES ADVANTAGE	00495681	8062587070-HCS	OFFICE SUPPLIES	General Fund	66.48
06/25/2021	STAPLES ADVANTAGE	00495682	8062587070-HR	OFFICE SUPPLIES	General Fund	85.98
06/25/2021	STAPLES ADVANTAGE	00495682	8062587070-HR	NON TAXABLE	General Fund	17.19
06/25/2021	STAPLES ADVANTAGE	00495683	8062587070-MUNISVC	OFFICE SUPPLIES	General Fund	168.30
06/25/2021	STAPLES ADVANTAGE	00495684	8062587070-PARKCH	OFFICE SUPPLIES	General Fund	39.55
06/25/2021	STAPLES ADVANTAGE	00495685	8062587070-PARK CRC	OFFICE SUPPLIES	General Fund	84.27

06/25/2021	STAPLES ADVANTAGE	00495685	8062587070-PARK CRC	OFFICE SUPPLIES	General Fund	60.43
06/25/2021	STAPLES ADVANTAGE	00495686	8062587070-PARK YAC	OFFICE SUPPLIES	General Fund	302.19
06/25/2021	STAPLES ADVANTAGE	00495687	8062587070-PARKYARD	OFFICE SUPPLIES	General Fund	141.69
06/25/2021	STAPLES ADVANTAGE	00495688	8062587070-PLANNING	OFFICE SUPPLIES	General Fund	268.01
06/25/2021	STAPLES ADVANTAGE	00495689	8062587070-POLICEDET	OFFICE SUPPLIES	Police Operating Grant Fund	32.43
06/25/2021	STAPLES ADVANTAGE	00495689	8062587070-POLICEDET	OFFICE SUPPLIES	General Fund	215.06
06/25/2021	STAPLES ADVANTAGE	00495690	8062587070-POLICESPECIAL	OFFICE SUPPLIES	General Fund	20.30
06/25/2021	STAPLES ADVANTAGE	00495690	8062587070-POLICESPECIAL	OFFICE SUPPLIES	General Fund	147.91
06/25/2021	STAPLES ADVANTAGE	00495690	8062587070-POLICESPECIAL	OFFICE SUPPLIES	General Fund	149.30
06/25/2021	STAPLES ADVANTAGE	00495691	8062587070-POLICESVC	OFFICE SUPPLIES	General Fund	1,276.52
Total for Payment No.:						4,234.54

Payment No: 651822

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GLOBAL RENTAL CO	00495273	3639940	RENT FREIGHTL M2-106 6/9-7/6	Electric Utility	3,815.00
Total for Payment No.:						3,815.00

Payment No: 651653

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	UNITED SITE SERVICES INC	00494887	114-11944746	WKLY SVC @DVR 5/5-5/24/21	Electric Utility	157.14
06/18/2021	UNITED SITE SERVICES INC	00494887	114-11944746	WKLY RSTM SVCX2 @DVR 5/5-5/24	Electric Utility	157.14
06/18/2021	UNITED SITE SERVICES INC	00494887	114-11944746	2 SINK RENT@DVR 5/5-5/24/21	Electric Utility	31.14
06/18/2021	UNITED SITE SERVICES INC	00494887	114-11944746	WKLY SINK SRV@DVR 5/5-5/24/21	Electric Utility	121.43
06/18/2021	UNITED SITE SERVICES INC	00494887	114-11944746	WKLY SINK SRVX2@DVR 5/5-5/24	Electric Utility	121.43
06/18/2021	UNITED SITE SERVICES INC	00494887	114-11944746	ENVIRONMENTAL FEE	Electric Utility	69.09
06/18/2021	UNITED SITE SERVICES INC	00494887	114-11944746	RSTRM RENT@DVR 5/5-5/24/21	Electric Utility	62.28
06/18/2021	UNITED SITE SERVICES INC	00494890	114-11960322	ADA ACCESS@SERRA SUB 5/11-6/7	Electric Utility Construction	10.91

06/18/2021	UNITED SITE SERVICES INC	00494890	114-11960322	WKLY ADA SRV@SERRA 5/11-6/7	Electric Utility Construction	138.00
06/18/2021	UNITED SITE SERVICES INC	00494890	114-11960322	ENVIRONMENTAL FEE	Electric Utility Construction	15.92
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	WKLY SINK SRVX2@DVR 5/19-6/15	Electric Utility	85.00
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	DAMAGE WAIVER	Electric Utility	7.95
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	ENVIRONMENTAL FEE	Electric Utility	48.39
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	RSTRM RENT@DVR 5/19-6/15/21	Electric Utility	43.60
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	WKLY SVC @DVR 5/19-6/15/21	Electric Utility	110.00
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	WKLY SVCX2 @DVR 5/19-6/15/21	Electric Utility	110.00
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	DAMAGE WAIVER	Electric Utility	15.90
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	2 SINK RENT@DVR 5/19-6/15/21	Electric Utility	21.80
06/18/2021	UNITED SITE SERVICES INC	00494893	114-11982244	WKLY SINK SRV@DVR 5/19-6/15/21	Electric Utility	85.00
06/18/2021	UNITED SITE SERVICES INC	00494895	114-12006854	2 SINK RENT@DVR 5/25-6/21/21	Electric Utility	109.00
06/18/2021	UNITED SITE SERVICES INC	00494895	114-12006854	WKLY SINK SRV@DVR 5/25-6/21/21	Electric Utility	425.00
06/18/2021	UNITED SITE SERVICES INC	00494895	114-12006854	WKLY SINK SRVX2@DVR 5/25-6/21	Electric Utility	425.00
06/18/2021	UNITED SITE SERVICES INC	00494895	114-12006854	ENVIRONMENTAL FEE	Electric Utility	213.93
06/18/2021	UNITED SITE SERVICES INC	00494895	114-12006854	RSTRM RENT@DVR 5/25-6/21/21	Electric Utility	174.40
06/18/2021	UNITED SITE SERVICES INC	00494895	114-12006854	WKLY SVC @DVR 5/25-6/21/21	Electric Utility	440.00
06/18/2021	UNITED SITE SERVICES INC	00494895	114-12006854	WKLY SVCX2 @DVR 5/25-6/21/21	Electric Utility	440.00
06/18/2021	UNITED SITE SERVICES INC	00495022	114-11948780	RSTRM RENT@AGNEW SUB 5/6-6/2	Electric Utility	10.91
06/18/2021	UNITED SITE SERVICES INC	00495022	114-11948780	WKLY SVC @AGNEW SUB 5/6-6/2	Electric Utility	55.00
06/18/2021	UNITED SITE SERVICES INC	00495022	114-11948780	DAMAGE WAIVER	Electric Utility	7.95
06/18/2021	UNITED SITE SERVICES INC	00495022	114-11948780	ENVIRONMENTAL FEE	Electric Utility	6.99
06/18/2021	UNITED SITE SERVICES INC	00495023	114-11949024	WKLY RESTRM SRV@WALSH 5/6-6/2	Electric Utility	55.00
06/18/2021	UNITED SITE SERVICES INC	00495023	114-11949024	ENVIRONMENTAL FEE	Electric Utility	8.06
06/18/2021	UNITED SITE SERVICES INC	00495023	114-11949024	RESTROOM RENT@WALSH 5/6-6/2	Electric Utility	21.80
Total for Payment No.:						3,805.16

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	R3 CONSULTING GROUP, INC.	00495469	10381	EXCLUSIVE FRANCHISE AGREEMENT	Solid Waste Program	3,770.00
				Total for Payment No.:		3,770.00

Payment No: 651623

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ROGER LUEBKEMAN	00495010	96	Mark43	General Government - Other	300.00
06/18/2021	ROGER LUEBKEMAN	00495010	96	Evidenc / EmPLYee/ Equip Maint	General Fund	3,450.00
				Total for Payment No.:		3,750.00

Payment No: 019777

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JOHANNA JEAN MARCHEL	00495833	232	JANITORIAL 881 MARTIN JUL2021	Electric Utility	2,753.62
06/25/2021	JOHANNA JEAN MARCHEL	00495833	232	JANITORIAL 881 MARTIN JUL2021	Elec OperatingGrant Trust Fund	175.76
06/25/2021	JOHANNA JEAN MARCHEL	00495834	233	JANITOR 881 MARTIN MAY21 FRIG	Electric Utility	75.20
06/25/2021	JOHANNA JEAN MARCHEL	00495834	233	JANITOR 881 MARTIN MAY21 FRIG	Elec OperatingGrant Trust Fund	4.80
06/25/2021	JOHANNA JEAN MARCHEL	00495836	234	JANITOR 881 MARTIN JUN21 FRIG	Electric Utility	75.20
06/25/2021	JOHANNA JEAN MARCHEL	00495836	234	JANITOR 881 MARTIN JUN21 FRIG	Elec OperatingGrant Trust Fund	4.80
06/25/2021	JOHANNA JEAN MARCHEL	00495838	235/284299215	JANITORIAL SUPPLIES 881 MARTIN	Electric Utility	516.24
06/25/2021	JOHANNA JEAN MARCHEL	00495838	235/284299215	JANITORIAL SUPPLIES 881 MARTIN	Elec OperatingGrant Trust Fund	32.95
				Total for Payment No.:		3,638.57

Payment No: 019706

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GRID SUBJECT MATTER EXPERTS, LLC	00494868	9691	ONGOING CIP ACTIVITIES MAY21	Electric Utility	860.00

06/18/2021	GRID SUBJECT MATTER EXPERTS, LLC	00494869	9692	ONGOING CIP ACTIVITIES MAY21	Electric Utility	2,730.00
Total for Payment No.:						3,590.00
Payment No: 651560						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CODE FOR FUN	00495419	1683	Instructor payment FY 20/21	General Fund	3,524.00
Total for Payment No.:						3,524.00
Payment No: 651538						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BANK UP CORP	00494799	4585	OUTSOURCE CASH RECEIPTS	General Fund	3,502.46
Total for Payment No.:						3,502.46
Payment No: 651845						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	NETFILE	00495886	7408	6/21-8/21 CAMPAIGN & 700 SEI	General Fund	3,500.00
Total for Payment No.:						3,500.00
Payment No: 651870						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TARGET SPECIALTY PRODUCTS INC	00495267	INVP500456870	NATURAL KNIT SEED & TURF FUEL	General Fund	1,207.78
06/25/2021	TARGET SPECIALTY PRODUCTS INC	00495269	INVP500459750	EUTROSORB	General Fund	2,249.76
Total for Payment No.:						3,457.54
Payment No: 651840						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LN CURTIS & SONS	00495332	INV494664	FP & FIELD OPS NOMEX SHIRTS	Fire Department	3,439.97
Total for Payment No.:						3,439.97

Payment No: 651553

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA EMERGENCY MEDICAL SERVICES	00495275	EMSA-888-971	PARAMEDIC RENEWALS - 11 MEDICS	General Fund	2,475.00
06/18/2021	CA EMERGENCY MEDICAL SERVICES	00495275	EMSA-888-971	LATE FEE - VISO	General Fund	50.00
06/18/2021	CA EMERGENCY MEDICAL SERVICES	00495275	EMSA-888-971	PARAMEDIC RENEWALS - 4 MEDICS	General Fund	900.00
				Total for Payment No.:		3,425.00

Payment No: 019703

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GRAINGER-SAN JOSE	00494547	9916865588	SUPPLIES-STREET	General Fund	814.34
06/18/2021	GRAINGER-SAN JOSE	00494569	9903450337	PARTS-V#3103	Fleet Operation Fund	101.07
06/18/2021	GRAINGER-SAN JOSE	00494849	9908907869	PARTS-SHOP USE	Fleet Operation Fund	12.21
06/18/2021	GRAINGER-SAN JOSE	00494850	9909668502	PARTS-V#D1131 WO#130638	Fleet Operation Fund	1.58
06/18/2021	GRAINGER-SAN JOSE	00494851	9915432083	PARTS-STOCK	Fleet Operation Fund	59.15
06/18/2021	GRAINGER-SAN JOSE	00494853	9916565588	SPRAYER- STREET DEPT	General Fund	814.34
06/18/2021	GRAINGER-SAN JOSE	00494854	9917480031	BLOWER/SPRAYER- STREET DEPT	General Fund	374.68
06/18/2021	GRAINGER-SAN JOSE	00494859	9916865570	SUPPLIES-STREET	General Fund	25.11
06/18/2021	GRAINGER-SAN JOSE	00494860	9921693306	SUPPLIES- STREET DEPT	General Fund	92.30
06/18/2021	GRAINGER-SAN JOSE	00494861	9918570178	SUPPLIES-STREET	General Fund	8.37
06/18/2021	GRAINGER-SAN JOSE	00494862	9919790817	SUPPLIES-STREET	General Fund	645.23
06/18/2021	GRAINGER-SAN JOSE	00495415	9902398644	WASHER, FLAT, 316 STN STL, 1/2	Electric Utility	457.92
				Total for Payment No.:		3,406.30

Payment No: 651580

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	FRANK YE	00494856	36633JUN2021	Building Permit BLD2020-58209	General Fund	2,803.92
06/18/2021	FRANK YE	00494856	36633JUN2021	Electric Permit	General Fund	282.74
06/18/2021	FRANK YE	00494856	36633JUN2021	Mechanical Permit	General Fund	156.80

06/18/2021	FRANK YE	00494856	36633JUN2021	Plumbing Permit	General Fund	156.80
				Total for Payment No.:		3,400.26
Payment No: W21368						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/21/2021	CALPINE ENERGY SERVICES LP	00494872	73301	RA CAPACITY PURCHASE MAY21	Electric Utility	3,315.00
				Total for Payment No.:		3,315.00
Payment No: 651807						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CED CONTRACTORS	00495379	7488-1009243	WIRE	Electric Utility	3,303.26
				Total for Payment No.:		3,303.26
Payment No: 651657						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	W-TRANS	00495518	26413	AGREEMENT FOR Warburton Ave/Ci	General Fund	3,297.50
				Total for Payment No.:		3,297.50
Payment No: 651858						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANDIS	00495770	21505073	SURVEYING EXISTING PROPERTY LI	Electric Utility Construction	2,400.00
06/25/2021	SANDIS	00495770	21505073	ENGAGE TITLE COMPANY TO PROVIDE	Electric Utility Construction	850.00
				Total for Payment No.:		3,250.00
Payment No: 651821						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GENEVIEVE ALTWER LMFT	00494660	931	COUNSELING #131 SESS 6/20	General Fund	170.00

06/25/2021	GENEVIEVE ALTWER LMFT	00494662	912	COUNSELING #131 SESS 5/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00494663	888	COUNSELING #131 SESS 4/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00494664	909	COUNSELING #125 SESS 13/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495338	928	COUNSELING #133 SESS 5/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495339	957	COUNSELING #133 SESS 6/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495340	954	COUNSELING #119 SESS 24/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495341	939	COUNSELING #125 SESS 14/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495342	894	COUNSELING #133 SESS 4/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495343	936	COUNSELING #115 SESS 16/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495344	917	COUNSELING #115 SESS 15/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495345	940	COUNSELING #101 SESS 7/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495346	889	COUNSELING #105 SESS 4/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495347	929	COUNSELING #111 SESS 9/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495348	896	COUNSELING #115 SESS 14/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495350	934	COUNSELING #119 SESS 23/30	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495351	916	COUNSELING #119 SESS 22/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495352	890	COUNSELING #119 SESS 21/20	General Fund	170.00
06/25/2021	GENEVIEVE ALTWER LMFT	00495353	965	COUNSELING #115 SESS 17/20	General Fund	170.00
Total for Payment No.:						3,230.00

Payment No: 651607

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	OCLC INC	00494622	1000125002	CATALOG & METADATA	General Fund	2,788.04
06/18/2021	OCLC INC	00494623	1000126917	WEBDEWEY 06/01/21-05/31/22	General Fund	336.62
Total for Payment No.:						3,124.66

Payment No: 019727

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ONESOURCE DISTRIBUTORS LLC	00495399	S6708178.003	LUBRICANT, CABLE PULLING, 1/2	Electric Utility	3,082.57

Total for Payment No.: 3,082.57

Payment No: 651660

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	XYLEM WATER SOLUTIONS USA INC	00495287	3556B38659	Labor Rate for Crane Services	Storm Drain	2,658.46
06/18/2021	XYLEM WATER SOLUTIONS USA INC	00495287	3556B38659	Fuel Charge	Storm Drain	186.12
Total for Payment No.:						2,844.58

Payment No: 019736

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	R & R INDUSTRIES INC	00494950	T48305	SWTSHRTS & VESTS- STREET DEPT	General Fund	2,775.34
Total for Payment No.:						2,775.34

Payment No: 019780

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LINCOLN AQUATICS	00495241	36033477	LIQUID CHLORINE	General Fund	369.24
06/25/2021	LINCOLN AQUATICS	00495241	36033477	PESTICIDE ASSESSMENT	General Fund	43.82
06/25/2021	LINCOLN AQUATICS	00495265	36032514	LIQUID CHLORINE	General Fund	1,472.59
06/25/2021	LINCOLN AQUATICS	00495265	36032514	PESTICIDE ASSESSMENT	General Fund	62.05
06/25/2021	LINCOLN AQUATICS	00495272	36033478	MURIATIC ACID	General Fund	776.62
06/25/2021	LINCOLN AQUATICS	00495272	36033478	PESTICIDE ASSESSMENT	General Fund	50.30
Total for Payment No.:						2,774.62

Payment No: 651645

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	THOMSON REUTERS WEST	00495393	844427417	Online Legal Database - May 20	General Fund	1,822.06
06/18/2021	THOMSON REUTERS WEST	00495480	844544673	Legal References - May 2021	General Fund	906.88
Total for Payment No.:						2,728.94

Payment No: 019753

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	AEMTEK, INC	00495742	2105062	Water Quality Testing	Water Utility	2,638.00
				Total for Payment No.:		2,638.00

Payment No: 019673

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PUBLIC SAFETY NON-SWORN	00495546	05/16/21-06/12/21	UNION DUES B2111 & B2112	Payroll Liability&ClearingAcct	2,600.00
				Total for Payment No.:		2,600.00

Payment No: 651852

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PURETEC INDUSTRIAL WATER	00495248	1887776	COG WTR VESSEL EXCHANGE MAY21	Electric Utility	1,150.92
06/25/2021	PURETEC INDUSTRIAL WATER	00495248	1887776	COG WTR VESSL EXCH MAY21 (TAX)	Electric Utility	121.48
06/25/2021	PURETEC INDUSTRIAL WATER	00495253	1888700	GIA WTR VESSEL EXCHANGE MAY21	Electric Utility	523.36
06/25/2021	PURETEC INDUSTRIAL WATER	00495768	1891370	LABOR	Electric Utility	675.30
				Total for Payment No.:		2,471.06

Payment No: 019769

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GE SUPPLY	00495761	21604755	PN# 235A5134P004 - HEATER, TUB	Electric Utility	2,418.89
				Total for Payment No.:		2,418.89

Payment No: 019761

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CPMAXIS INC	00495488	1042	FRT/MID/BCK OFC SYS SUPT MAR21	Electric Utility	852.00

06/25/2021	CPMAXIS INC	00495489	1043	FRT/MID/BCK OFC SYS SUPT APR21	Electric Utility	710.00
06/25/2021	CPMAXIS INC	00495490	1044	FRT/MID/BCK OFC SYS SUPT MAY21	Electric Utility	852.00
Total for Payment No.:						2,414.00

Payment No: 019670

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CITY OF SANTA CLARA EMPLOYEES	00495547	05/16/21-06/12/21	UNION DUES B2111 & B2112	Payroll Liability&ClearingAcct	2,388.00
Total for Payment No.:						2,388.00

Payment No: 019754

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	AIR FILTER SUPPLY INC	00495102	I476397	SUPPLIES	General Fund	237.54
06/25/2021	AIR FILTER SUPPLY INC	00495103	I478923	SUPPLIES	General Fund	74.33
06/25/2021	AIR FILTER SUPPLY INC	00495104	I479405	SUPPLIES	General Fund	78.00
06/25/2021	AIR FILTER SUPPLY INC	00495105	I481252	SUPPLIES	General Fund	225.11
06/25/2021	AIR FILTER SUPPLY INC	00495106	I479871	SUPPLIES	General Fund	466.33
06/25/2021	AIR FILTER SUPPLY INC	00495107	I449734	SUPPLIES	General Fund	282.70
06/25/2021	AIR FILTER SUPPLY INC	00495108	I453545	SUPPLIES	General Fund	190.88
06/25/2021	AIR FILTER SUPPLY INC	00495109	I449462	SUPPLIES	General Fund	120.42
06/25/2021	AIR FILTER SUPPLY INC	00495110	I457004	SUPPLIES	General Fund	600.82
06/25/2021	AIR FILTER SUPPLY INC	00495112	I478764	SUPPLIES	General Fund	95.18
Total for Payment No.:						2,371.31

Payment No: 651859

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANTA CLARA CO SOCIAL SVC AGCY	00495882	2457JUN2021	FY20-21 SR NUT PROG MAY21	Deposit Funds.	2,354.35
Total for Payment No.:						2,354.35

Payment No: 651589

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	HYLAND SOFTWARE INC	00495000	LE01-210279	PERFORM MNTN FEES SEP-DEC21	General Fund	2,338.96
				Total for Payment No.:		2,338.96

Payment No: 651643

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SYNERGETIC CONSULTING INC	00494821	21-0729	Application Support PWP Accela	General Fund	2,271.25
				Total for Payment No.:		2,271.25

Payment No: 651853

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	R&B COMPANY	00495223	O018020	SONATA METER	Water Utility	958.24
06/25/2021	R&B COMPANY	00495225	O256981	QUICKRETE	Water Utility	1,252.90
				Total for Payment No.:		2,211.14

Payment No: 019723

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NEWSBANK INC	00495096	RN989644	1241 AD DB	General Fund	2,149.00
				Total for Payment No.:		2,149.00

Payment No: 651829

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	IRON MOUNTAIN	00494842	202356998	DATA STORAGE	Information Technology Service	2,086.79
				Total for Payment No.:		2,086.79

Payment No: 651564

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/18/2021	CRESCO EQUIPMENT RENTALS	00494596	5376471-0002	FORKLIFT RENTAL	Electric Utility Construction	1,689.50
06/18/2021	CRESCO EQUIPMENT RENTALS	00494596	5376471-0002	NON-TAXABLE	Electric Utility Construction	18.63
06/18/2021	CRESCO EQUIPMENT RENTALS	00495425	5403591-0002	EQUIPMENT RENTAL	Electric Utility	327.00
06/18/2021	CRESCO EQUIPMENT RENTALS	00495425	5403591-0002	NON TAXABLE	Electric Utility	44.25
				Total for Payment No.:		2,079.38

Payment No: 651542

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BESOSIE GANAL	00494907	61559-01 CPV MAY-2021	PBI MAY-2021 PYMT #45 VALLY HO	Elec OperatingGrant Trust Fund	2,067.77
				Total for Payment No.:		2,067.77

Payment No: 651638

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SOUTHERN COUNTIES LUBRICANTS, LLC	00495233	305521	MATERIALS	Electric Utility	1,963.72
06/18/2021	SOUTHERN COUNTIES LUBRICANTS, LLC	00495233	305521	NON-TAXABLE	Electric Utility	40.00
				Total for Payment No.:		2,003.72

Payment No: 651814

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DESTINATION ADVANTAGE LLC	00495883	377	MAY 2021 WEBSITE SUPPORT	Deposit Funds.	2,000.00
				Total for Payment No.:		2,000.00

Payment No: 651781

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SUPERIOR HYDROSEEDING INC	00495587	24507-16 Utility Refund	UTILITY REFUND	General Fund	1,980.00
				Total for Payment No.:		1,980.00

Payment No: 651710

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ACCO ENGINEERED SYSTEMS, INC	00495647	81898-03 Utility Refund	UTILITY REFUND	General Fund	1,980.00
				Total for Payment No.:		1,980.00

Payment No: 651671

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495649	22224-03 Utility Refund	UTILITY REFUND	General Fund	59.45
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495650	29501-14 Utility Refund	UTILITY REFUND	General Fund	129.05
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495651	30150-09 Utility Refund	UTILITY REFUND	General Fund	170.15
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495652	38829-03 Utility Refund	UTILITY REFUND	General Fund	226.42
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495653	44531-06 Utility Refund	UTILITY REFUND	General Fund	273.46
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495654	46378-09 Utility Refund	UTILITY REFUND	General Fund	230.92
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495655	67305-04 Utility Refund	UTILITY REFUND	General Fund	622.02
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495656	72954-03 Utility Refund	UTILITY REFUND	General Fund	197.54
06/25/2021	DEPT OF COMMUNITY SVCS&DEVELOP	00495657	75001-02 Utility Refund	UTILITY REFUND	General Fund	35.63
				Total for Payment No.:		1,944.64

Payment No: 651884

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ZANKER RECYCLING	00495271	6514	MAHOGANY MULCH-OUT	General Fund	1,890.03
				Total for Payment No.:		1,890.03

Payment No: 651861

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANTA CLARA LIGHTING, INC.	00495167	21540	CH LIGHTS	General Fund	250.65
06/25/2021	SANTA CLARA LIGHTING, INC.	00495168	21397	CH LIGHTS	General Fund	1,002.36
06/25/2021	SANTA CLARA LIGHTING, INC.	00495169	21661	NORTHSIDE LIBE LIGHTS	General Fund	537.92
06/25/2021	SANTA CLARA LIGHTING, INC.	00495170	19843	CH LIGHT	General Fund	87.20
				Total for Payment No.:		1,878.13

Payment No: 651848

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PARS	00495467	48330	ARS PARS FEES - APR 2021	General Fund	1,861.50
				Total for Payment No.:		1,861.50

Payment No: 651768

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PRESTON PIPELINES INC	00495622	65035-09 Utility Refund	UTILITY REFUND	General Fund	1,833.72
				Total for Payment No.:		1,833.72

Payment No: 651506

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	JENNIFER GUZMAN	00495466	30031MAY2021	TUITION REIMBURSEMENT	General Fund	1,833.00
				Total for Payment No.:		1,833.00

Payment No: 651860

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANTA CLARA COUNTY	00495773	21EST-000004	ALUC REFERRAL FOR PHD PLAN	Planning Div-Prefund PlanReview	1,829.00
				Total for Payment No.:		1,829.00

Payment No: 651624

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	RONG COVINGTON	00494864	36646JUN2021	Electric Permit BLD2021-60869	General Fund	1,224.57
06/18/2021	RONG COVINGTON	00494864	36646JUN2021	Mechanical Permit	General Fund	163.00
06/18/2021	RONG COVINGTON	00494864	36646JUN2021	Plumbing Permit	General Fund	434.00
				Total for Payment No.:		1,821.57

Payment No: 651576

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	EXPRESS FENCE LLC	00494725	21195	SIX FT HIGH CHAIN LINK PANELS	General Fund	1,765.00
06/18/2021	EXPRESS FENCE LLC	00494725	21195	NON TAXABLE	General Fund	45.00
				Total for Payment No.:		1,810.00

Payment No: 019711

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	INGRAM LIBRARY SERVICES INC	00494964	53267060	1241 AD BK	General Fund	153.42
06/18/2021	INGRAM LIBRARY SERVICES INC	00494964	53267060	1231 JUV BK	General Fund	461.24
06/18/2021	INGRAM LIBRARY SERVICES INC	00494964	53267060	1232 YA BK	General Fund	50.40
06/18/2021	INGRAM LIBRARY SERVICES INC	00494966	53267077	1235 AD/JUV/YA BK	General Fund	329.74
06/18/2021	INGRAM LIBRARY SERVICES INC	00494967	53267093	1236 JUV BK	General Fund	715.02
06/18/2021	INGRAM LIBRARY SERVICES INC	00494968	53267094	1233 JUV BK	General Fund	82.53
				Total for Payment No.:		1,792.35

Payment No: 651649

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TURF & INDUSTRIAL EQUIPMENT CO	00494576	IV39165	PARTS-V#2953	Fleet Operation Fund	1,237.56
06/18/2021	TURF & INDUSTRIAL EQUIPMENT CO	00494956	IV39165A	PARTS-V#2953	Fleet Operation Fund	547.31
				Total for Payment No.:		1,784.87

Payment No: 651588

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	HSI WORKPLACE COMPLIANCE SOLUTIONS INC	00495100	INV48094	MANAGED TRAINING MAY21	Electric Utility	1,750.00
				Total for Payment No.:		1,750.00

Payment No: 651874

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TRANSOFT SOLUTIONS INC	00495774	TSUS-2953	AUTOTURN PRO MAP CONVERSION TO	General Fund	1,748.00
				Total for Payment No.:		1,748.00

Payment No: 019731

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PG&E	00495017	3345487577-5 MAY2021	ELEC SVC BLACK BUTTE HYD MAY21	Electric Utility	1,080.57
06/18/2021	PG&E	00495017	3345487577-5 MAY2021	ELEC SVC HIGH LINE CANAL MAY21	Electric Utility	142.75
06/18/2021	PG&E	00495017	3345487577-5 MAY2021	ELEC SVC STONY GORGE HYD MAY21	Electric Utility	499.26
				Total for Payment No.:		1,722.58

Payment No: 019684

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BOATMAN-JACKLIN INC.	00494909	62112-02 CPV MAY-2021	PBI SOLAR PROD PYMT #51 MAY-20	Elec OperatingGrant Trust Fund	1,719.75
				Total for Payment No.:		1,719.75

Payment No: 019776

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	INTERNAP NETWORK SERVICES CORP	00494848	INV15006866	INTERNET SERVICES	Information Technology Service	1,697.38
				Total for Payment No.:		1,697.38

Payment No: 651737

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GOLDEN GATE DOUGHNUTS	00495577	17295-06 Utility Refund	UTILITY REFUND	General Fund	1,697.34
				Total for Payment No.:		1,697.34

Payment No: 651836

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LANGUAGE LINE SOLUTIONS	00494855	10243632	LANGUAGE LINE USAGE MAY 2021	Information Technology Service	1,666.96
				Total for Payment No.:		1,666.96

Payment No: 651868

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SUPERCO SPECIALTY PRODUCTS	00495266	PSI398940	CLEANING SUPPLIES	General Fund	1,627.70
				Total for Payment No.:		1,627.70

Payment No: 651661

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ZAP MFG INC	00495156	4706	LABOR - TRAFFIC MAINTENANCE	General Fund	1,599.91
				Total for Payment No.:		1,599.91

Payment No: 651854

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	R.S. HUGHES COMPANY, INC.	00495337	79104776-00	ISOBUTYLENE	General Fund	179.15
06/25/2021	R.S. HUGHES COMPANY, INC.	00495355	79087645-01	NORCO DEMAND FLOW REGULATOR	General Fund	1,381.76
06/25/2021	R.S. HUGHES COMPANY, INC.	00495355	79087645-01	DOCK STATION TUBING KIT	General Fund	35.93
				Total for Payment No.:		1,596.84

Payment No: 651545

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BLOOMLITE SOLUTIONS INC	00494896	R21-SBGR-0137	SM BUSI RBATE; ACT 18382-04	Elec OperatingGrant Trust Fund	1,559.79
				Total for Payment No.:		1,559.79

Payment No: 651802

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BAYSCAPE LANDSCAPE MANAGEMENT	00495743	21996	LANDSCAPING SERVICES FOR VARIO	Water Utility Construction	1,545.00
				Total for Payment No.:		1,545.00

Payment No: 651718

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ARB INC	00495648	82117-02 Utility Refund	UTILITY REFUND	General Fund	1,539.17
				Total for Payment No.:		1,539.17

Payment No: 651559

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CITY OF FOSTER CITY	00495213	14163	CAL OPPS - ASSOCIATE PLANNER	General Fund	510.00
06/18/2021	CITY OF FOSTER CITY	00495213	14163	CAL OPPS - DEPUTY CITY CLERK	General Fund	510.00
06/18/2021	CITY OF FOSTER CITY	00495213	14163	CAL OPPS - SR. MGMT ANALYST	General Fund	510.00
				Total for Payment No.:		1,530.00

Payment No: 651642

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	STRYKER SALES CORPORATION	00495276	3381445M	ANNUAL MTC AGREEMENT E690	General Fund	1,530.00
				Total for Payment No.:		1,530.00

Payment No: 651809

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	COGENT COMMUNICATIONS	00494876	CITYOFSA00015JUNE2021	INTERNET SERVICES FOR JUNE	Information Technology Service	1,500.00
				Total for Payment No.:		1,500.00

Payment No: 019693

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CINTAS FIRE PROTECTION #F44	00494834	0F44752815	ANNUAL INPECTNS- 1700 WALSH	Fleet Operation Fund	627.44
06/18/2021	CINTAS FIRE PROTECTION #F44	00494834	0F44752815	RECHRG & FEES- TXBL	Fleet Operation Fund	854.69
				Total for Payment No.:		1,482.13

Payment No: 651797

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ADT COMMERCIAL LLC	00495101	140005292	TASMAN GARAGE	General Fund	1,441.25
				Total for Payment No.:		1,441.25

Payment No: 651869

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SWA SERVICES GROUP	00495166	21569	3025 RAYMOND	Electric Utility	1,421.60
				Total for Payment No.:		1,421.60

Payment No: 019794

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	THERMAL MECHANICAL INC	00495172	81987	CRC CHILLER	General Fund	1,380.00
				Total for Payment No.:		1,380.00

Payment No: 651826

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	HOME DEPOT USA	00495067	620711820	JANITORIAL SUPPLIES	General Fund	179.81
06/25/2021	HOME DEPOT USA	00495071	621000256	JANITORIAL SUPPLIES	General Fund	76.47
06/25/2021	HOME DEPOT USA	00495073	620711838	JANITORIAL SUPPLIES	General Fund	195.55
06/25/2021	HOME DEPOT USA	00495246	620630525	URINAL MAT	General Fund	171.28
06/25/2021	HOME DEPOT USA	00495247	620630533	1G SAFETY FIRST HAND SANITIZER	Other City Dept Op Grant Fund	741.04
				Total for Payment No.:		1,364.15

Payment No: 651597

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	LIVING CLASSROOM	00495447	FY2021 SCPR - 003	Hourly Sessions	General Fund	1,350.00
				Total for Payment No.:		1,350.00

Payment No: 651595

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	KELLY-MOORE PAINT CO	00495038	817-00000422977	SUPPLIES-TRAFFIC	General Fund	1,294.79
				Total for Payment No.:		1,294.79

Payment No: 651658

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	WASHINGTON TRUST BANK	00495152	210601-297245	VEBA CUSTODY FEE - MAY 2021	General Fund	1,274.00
				Total for Payment No.:		1,274.00

Payment No: 651567

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DALCON INC	00495146	IN253966	METER REPAIR 1550 ISABELLA ST	Electric Utility Construction	1,250.00
				Total for Payment No.:		1,250.00

Payment No: 651847

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PACIFIC COAST PETROLEUM INC.	00495204	978657	OIL- STOCK	Fleet Operation Fund	1,242.60
				Total for Payment No.:		1,242.60

Payment No: 651736

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	G AND D EASTBAY HOLDINGS INC	00495578	17910-10 Utility Refund	UTILITY REFUND	General Fund	186.43
06/25/2021	G AND D EASTBAY HOLDINGS INC	00495628	72176-04 Utility Refund	UTILITY REFUND	General Fund	1,033.58
				Total for Payment No.:		1,220.01

Payment No: 019726

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	OMEGA INDUSTRIAL SUPPLY INC	00495040	134985	SUPPLIES-STREET	General Fund	1,218.89
				Total for Payment No.:		1,218.89

Payment No: 019692

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CINTAS CORP #630	00494800	4085473582	UNIFORM SERVICES	General Fund	61.11
06/18/2021	CINTAS CORP #630	00494801	4086062369	UNIFORM SERVICES	General Fund	61.11
06/18/2021	CINTAS CORP #630	00494824	9129869427	CREDIT- STREET RENTALS	General Fund	-43.94
06/18/2021	CINTAS CORP #630	00494825	4085596183	FLEET RENTALS	Fleet Operation Fund	266.58
06/18/2021	CINTAS CORP #630	00494825	4085596183	SAFEWASHR MOBL SRV	Fleet Operation Fund	31.03
06/18/2021	CINTAS CORP #630	00494833	4086319947	SAFEWASHER MOBL SRVC	Fleet Operation Fund	31.03
06/18/2021	CINTAS CORP #630	00494833	4086319947	FLEET RENTALS	Fleet Operation Fund	286.34
06/18/2021	CINTAS CORP #630	00495519	4086160467	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	236.34
06/18/2021	CINTAS CORP #630	00495521	4086160278	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	129.34

06/18/2021	CINTAS CORP #630	00495522	4086160285	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	35.85
06/18/2021	CINTAS CORP #630	00495523	4086160844	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	105.71
Total for Payment No.:						1,200.50

Payment No: 651663

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ALYSSA AGUILAR	00495664	36657JUN2021	CULTURAL COMMISSION	General Fund	1,200.00
Total for Payment No.:						1,200.00

Payment No: 651494

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CAMERON SMITH	00495499	24249MAR2021	MUTUAL AID DEPLOYMENT	General Fund	1,190.10
Total for Payment No.:						1,190.10

Payment No: 651819

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	EUGENE BURGER MANAGEMENT	00495889	107809	Management Fee for May	General Fund	1,179.38
Total for Payment No.:						1,179.38

Payment No: 019781

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	METROPOLITAN PLANNING GROUP	00495786	2002338	2200 CALLE DE LUNA	Planning Div-Prefund PlanRview	116.25
06/25/2021	METROPOLITAN PLANNING GROUP	00495787	2002339	2343 CALLE DEL MUNDO	Planning Div-Prefund PlanRview	155.00
06/25/2021	METROPOLITAN PLANNING GROUP	00495788	2002340	PARCEL 11 5185 LAFAYETTE	Planning Div-Prefund PlanRview	38.75
06/25/2021	METROPOLITAN PLANNING GROUP	00495789	2002395	2200 CALLE DE LUNA	Planning Div-Prefund PlanRview	38.75

06/25/2021	METROPOLITAN PLANNING GROUP	00495790	2002396	2343 CALLE DEL MUNDO	Planning Div-Prefund PlanRview	38.75
06/25/2021	METROPOLITAN PLANNING GROUP	00495791	2002397	PARCEL 11 5185 LAFAYETTE	Planning Div-Prefund PlanRview	77.50
06/25/2021	METROPOLITAN PLANNING GROUP	00495792	2002447	2200 CALLE DE LUNA	Planning Div-Prefund PlanRview	387.50
06/25/2021	METROPOLITAN PLANNING GROUP	00495793	2002448	PARCEL 11 5185 LAFAYETTE	Planning Div-Prefund PlanRview	38.75
06/25/2021	METROPOLITAN PLANNING GROUP	00495794	2002487	2200 CALLE DE LUNA	Planning Div-Prefund PlanRview	38.75
06/25/2021	METROPOLITAN PLANNING GROUP	00495796	2002488	2343 CALLE DEL MUNDO	Planning Div-Prefund PlanRview	232.50
Total for Payment No.:						1,162.50

Payment No: 019688

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CARIE T ROSE	00495534	05/30/21-06/12/21DR	WAGE ATTACHMENT B2112	Payroll Liability&ClearingAcct	1,153.85
Total for Payment No.:						1,153.85

Payment No: 651674

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GENEVIEVE YIP	00495671	31692JUN2021	TUITION REIMB -ENVIRO IMPACT	General Fund	1,131.00
Total for Payment No.:						1,131.00

Payment No: 019785

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PRAXAIR DISTRIBUTION INC	00495383	61941790	ACETYLENE	Water Utility	1,116.87
Total for Payment No.:						1,116.87

Payment No: 651578

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/18/2021	FAST UNDERCAR SANTA CLARA	00494567	264556	PARTS-V#3185	Fleet Operation Fund	221.07
06/18/2021	FAST UNDERCAR SANTA CLARA	00494844	268355	PARTS-V#3370	Fleet Operation Fund	213.15
06/18/2021	FAST UNDERCAR SANTA CLARA	00494845	269345	PARTS-STOCK	Fleet Operation Fund	638.59
				Total for Payment No.:		1,072.81

Payment No: 651867

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SUNNYVALE FORD	00495205	188280	PARTS-STOCK	Fleet Operation Fund	566.37
06/25/2021	SUNNYVALE FORD	00495206	F0CS831141	LABOR-V#3527 WO#130123	Fleet Operation Fund	500.00
				Total for Payment No.:		1,066.37

Payment No: 019710

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	INFOSEND INC	00494802	192277	TAX & LICENSE MAILING SERVICES	General Fund	1,064.58
				Total for Payment No.:		1,064.58

Payment No: 019702

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GRAINGER	00494726	9909292022	HEX NUT 1/2-13, GR 2	General Fund	56.31
06/18/2021	GRAINGER	00494727	9909493901	WASHER, 1/2" BOLT, NUTS, ROD	General Fund	480.44
06/18/2021	GRAINGER	00494728	9909617756	HOSE CLAMPS, GOGGLES, GLOVES	General Fund	517.19
				Total for Payment No.:		1,053.94

Payment No: 651605

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NAPA AUTO PARTS	00494571	5983-664397	PARTS-STOCK	Fleet Operation Fund	96.32
06/18/2021	NAPA AUTO PARTS	00494572	5983-664403	PARTS-STOCK	Fleet Operation Fund	81.78
06/18/2021	NAPA AUTO PARTS	00494573	5983-664572	PARTS-V#3059	Fleet Operation Fund	39.59

06/18/2021	NAPA AUTO PARTS	00494922	5983-663010	PARTS-STOCK	Fleet Operation Fund	200.73
06/18/2021	NAPA AUTO PARTS	00494926	5983-663232	PARTS-STOCK	Fleet Operation Fund	18.40
06/18/2021	NAPA AUTO PARTS	00494932	5983-663329	PARTS-STOCK	Fleet Operation Fund	151.77
06/18/2021	NAPA AUTO PARTS	00494934	5983-664764	PARTS-STOCK	Fleet Operation Fund	215.61
06/18/2021	NAPA AUTO PARTS	00494936	5983-665065	PARTS-STOCK	Fleet Operation Fund	17.07
06/18/2021	NAPA AUTO PARTS	00494937	5983-665097	PARTS-STOCK	Fleet Operation Fund	16.44
06/18/2021	NAPA AUTO PARTS	00494940	5983-665280	PARTS-STOCK	Fleet Operation Fund	14.65
06/18/2021	NAPA AUTO PARTS	00494943	5983-665285	PARTS-V#2969	Fleet Operation Fund	19.59
06/18/2021	NAPA AUTO PARTS	00494944	5983-665329	PARTS-V#2969	Fleet Operation Fund	137.96
Total for Payment No.:						1,009.91

Payment No: 651547

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BOON CHEW	00494923	R220-EVC-104	EV CHRGR REBATE; 40408-03	Elec OperatingGrant Trust Fund	1,000.00
Total for Payment No.:						1,000.00

Payment No: 651594

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	JINUK SHIN	00494927	R220-EVC-107	EV CHARGER REBATE; 60654-06	Elec OperatingGrant Trust Fund	1,000.00
Total for Payment No.:						1,000.00

Payment No: W21365

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ICMA Retirement Corporation	00495532	05/30/21-06/12/21A	WT: B2112 457 PLN CONTRIBUTION	Fringe Benefits	1,000.00
Total for Payment No.:						1,000.00

Payment No: 651693

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	RONALD MIRANDA	00495908	33205MAY2021	ICI OFFICER SHOOTING COURSE	General Fund	323.50
06/25/2021	RONALD MIRANDA	00495909	33205MAY2021A	ICI HOMICIDE COURSE	General Fund	668.20
Total for Payment No.:						991.70

Payment No: 651632

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SANTA CLARA WEEKLY	00495164	1245426	PUBLIC HEARING DIRECTOR OF PW	Downtown Parking Maintenance D	984.00
Total for Payment No.:						984.00

Payment No: 651544

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BLAIR REESE	00495155	18996	LABOR-FRANKLIN SQ CHANGE FLAGS	Downtown Parking Maintenance D	600.00
06/18/2021	BLAIR REESE	00495158	18997	CHANGE BANNER-PARK @ LINCOLN	General Fund	240.00
06/18/2021	BLAIR REESE	00495160	18998	CHANGE BANNER-DELA CRUZ	General Fund	120.00
Total for Payment No.:						960.00

Payment No: 019735

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PRAXAIR DISTRIBUTION INC	00494597	63748130	ACYETYLENE	Water Utility	912.93
06/18/2021	PRAXAIR DISTRIBUTION INC	00494948	63739509	CYLINDER RENTAL- APR 2021	Fleet Operation Fund	37.39
Total for Payment No.:						950.32

Payment No: 651680

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JASON KOEHLER	00495728	24586JAN2021	ICI SEXUAL ASSAULT COURSE	General Fund	409.00
06/25/2021	JASON KOEHLER	00495904	24586MAY2021	ICI ASSAULT COURSE	General Fund	375.00
06/25/2021	JASON KOEHLER	00495905	24586MAY2021A	ICI CHILD ABUSE COURSE	General Fund	151.76

Total for Payment No.: 935.76

Payment No: 651886

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	BESOSIE GANAL	00490307	61559-01 CPV FEB-2021	PBI FEB-2021 PYMT #42 VALLY HO	Elec OperatingGrant Trust Fund	922.87
Total for Payment No.:						922.87

Payment No: 651666

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BILL LUTZ	00495726	18432FEB2021	POST SUPERVISOR CLASS	General Fund	170.00
06/25/2021	BILL LUTZ	00495727	18432FEB2021A	ICI HOMICIDE	General Fund	750.00
Total for Payment No.:						920.00

Payment No: 651706

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TYSON SHEARER	00495912	2568MAY2021A	MANAGEMENT COURSE	General Fund	416.00
06/25/2021	TYSON SHEARER	00495961	2568MAY2021	POST MANAGEMENT COURSE	General Fund	493.22
Total for Payment No.:						909.22

Payment No: 651806

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CALIFORNIA PEOPLE SEARCH INC	00495820	2631	TEMP ADMIN ASST. 4/19-4/23	Deposit Funds.	742.50
06/25/2021	CALIFORNIA PEOPLE SEARCH INC	00495821	2632	TEMP ADMIN ASST 4/26	Deposit Funds.	148.50
Total for Payment No.:						891.00

Payment No: 651794

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CA DEPT OF TOXIC SUBSTANCE	00495259	20SM5222	SC POLICE STATION JAN-MAR 2021	Public Buildings	883.15

Total for Payment No.: 883.15

Payment No: 651500

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ENGINEERS -CITY OF SANTA CLARA	00495536	05/16/21-06/12/21	UNION DUES B2112	Payroll Liability&ClearingAcct	878.42
Total for Payment No.:						878.42

Payment No: 651667

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BRYAN WILLIAMS	00495736	22119MAR2021	BASIC SWAT SCHOOL	General Fund	875.43
Total for Payment No.:						875.43

Payment No: 651640

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	STEVEN DOLEZAL	00495081	0892MAY2021	Psych Services	General Fund	875.00
Total for Payment No.:						875.00

Payment No: 651566

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	D&M TRAFFIC SERVICES	00494843	78684	CONES- STREET DEPT	General Fund	814.78
06/18/2021	D&M TRAFFIC SERVICES	00494843	78684	NON TAXABLE	General Fund	50.00
Total for Payment No.:						864.78

Payment No: W21364

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ICMA Retirement Corporation	00495529	05/30/21-06/12/21	WT: B2112 401 (A) PLAN CONTRIB	Fringe Benefits	862.48
Total for Payment No.:						862.48

Payment No: 651689

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MIKE CRESCINI	00495901	10266JUN2021	MANAGEMENT COURSE	General Fund	398.52
06/25/2021	MIKE CRESCINI	00495907	10266MAY2021	MANAGEMENT COURSE	General Fund	440.52
				Total for Payment No.:		839.04

Payment No: 651586

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	HOME DEPOT USA	00494601	619348543	JANITORIAL SUPPLIES	General Fund	280.00
06/18/2021	HOME DEPOT USA	00494603	619348550	JANITORIAL SUPPLIES	General Fund	79.17
06/18/2021	HOME DEPOT USA	00494604	619348568	JANITORIAL SUPPLIES	General Fund	457.15
				Total for Payment No.:		816.32

Payment No: 651832

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KAMBRIA EVANS PSYCHOTHERAPY,	00495315	8	COUNSELING #111 SESS 8/20	General Fund	810.00
				Total for Payment No.:		810.00

Payment No: 019774

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	IMPERIAL SPRINKLER SUPPLY INC	00495249	4680750-00	SPRINKLER MAINTENANCE	General Fund	65.57
06/25/2021	IMPERIAL SPRINKLER SUPPLY INC	00495250	4680667-00	SPRINKLER MAINTENANCE	General Fund	4.42
06/25/2021	IMPERIAL SPRINKLER SUPPLY INC	00495251	4679860-00	SPRINKLER MAINTENANCE	General Fund	14.28
06/25/2021	IMPERIAL SPRINKLER SUPPLY INC	00495254	4681871-00	SPRINKLER MAINTENANCE	General Fund	179.04
06/25/2021	IMPERIAL SPRINKLER SUPPLY INC	00495256	4682433-00	SPRINKLER MAINTENANCE	General Fund	18.09
06/25/2021	IMPERIAL SPRINKLER SUPPLY INC	00495260	4688728-00	SPRINKLER MAINTENANCE	General Fund	362.24
06/25/2021	IMPERIAL SPRINKLER SUPPLY INC	00495261	4688881-00	SPRINKLER MAINTENANCE	General Fund	142.62
				Total for Payment No.:		786.26

Payment No: 651833

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KAREN MURPHY LANSING	00495354	SCFD-9	COUNSELING# FD-8 SESS 1 & 2	General Fund	780.00
				Total for Payment No.:		780.00

Payment No: 651766

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PAN-PACIFIC MECHANICAL	00495585	24481-08 Utility Refund	UTILITY REFUND	General Fund	771.69
				Total for Payment No.:		771.69

Payment No: 651582

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GOLDEN STATE EMERGENCY VEHICLE SERV, INC	00494847	CI028492	PARTS-V#2951	Fleet Operation Fund	769.25
				Total for Payment No.:		769.25

Payment No: 651773

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ROSE FOX NOLL	00495573	16325-07 Utility Refund	UTILITY REFUND	General Fund	417.52
06/25/2021	ROSE FOX NOLL	00495574	16326-08 Utility Refund	UTILITY REFUND	General Fund	346.18
				Total for Payment No.:		763.70

Payment No: 651685

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MANASA SUNDARAM	00495670	36660JUN2021	CULTURAL COMMISSION	General Fund	750.00
				Total for Payment No.:		750.00

Payment No: 651707

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	VIDYUT S KOLTE	00495668	32857JUN2021	CULTURAL COMMISSION	General Fund	750.00
Total for Payment No.:						750.00
Payment No: 651678						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HYE KYUNG KONG	00495667	36665JUN2021	CULTURAL COMMISSION	General Fund	750.00
Total for Payment No.:						750.00
Payment No: 651664						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ANGELO LOPEZ	00495665	36658JUN2021	CULTURAL COMMISSION	General Fund	750.00
Total for Payment No.:						750.00
Payment No: 651522						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA FRANCHISE TAX BOARD	00495538	05/30/21-06/12/21JC	WAGE ATTACHMENT B2112	Payroll Liability&ClearingAcct	727.39
Total for Payment No.:						727.39
Payment No: 019789						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SOFTWAREONE	00495199	US-PSI-1060157	APRIL AZURE OVERAGES	Information Technology Service	721.13
Total for Payment No.:						721.13
Payment No: 651700						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SILVA, DUSTIN	00495729	29038MAR2021	CATO CHEM AGNT INSTRUCT COURSE	General Fund	549.47
06/25/2021	SILVA, DUSTIN	00495731	29038JAN2021	POST SUPERVISORY COURSE	General Fund	170.00

Total for Payment No.: 719.47

Payment No: 651561

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CONSOLIDATED ENGINEERING	00495505	186391	AGREEMENT FOR MATERIALS TESTIN	General Fund	717.12
Total for Payment No.:						717.12

Payment No: 019752

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ZCOLO, LLC	00495019	2021060034793	MRC 5101 LAFAYETTE JUN21	Electric Utility	711.41
Total for Payment No.:						711.41

Payment No: 651694

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SAMUEL MICELI	00495732	30269MAR2021	ICI MAJOR DRUGS INVEST COURSE	General Fund	710.00
Total for Payment No.:						710.00

Payment No: 019686

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA DEPT OF JUSTICE	00495012	514506	CITY R & AN - MAY 2021	General Fund	245.00
06/18/2021	CA DEPT OF JUSTICE	00495012	514506	PARKS & REC CONTRACTORS - MAY	General Fund	456.00
Total for Payment No.:						701.00

Payment No: 019786

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SCOTT'S PPE RECON INC	00495349	37019	MAY TURNOUT REPAIRS NONTAX	Fire Department	684.00
06/25/2021	SCOTT'S PPE RECON INC	00495349	37019	MAY TURNOUT REPAIRS TAXABLE	Fire Department	16.35

Total for Payment No.: 700.35

Payment No: 651795

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	A TOOL SHED	00495041	1494191-4	PRESSURE WASHER RENTAL	Water Utility	700.00
Total for Payment No.:						700.00

Payment No: 019707

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00494914	170476	PARTS-V#3258	Fleet Operation Fund	645.89
06/18/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00494917	170549	PARTS-V#3258	Fleet Operation Fund	34.16
Total for Payment No.:						680.05

Payment No: 651590

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	INDUSTRIAL SCIENTIFIC CORP	00495099	2427554	2021 MAY INET GAS MONITORING	Electric Utility	677.11
Total for Payment No.:						677.11

Payment No: 019712

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	JAVELCO EQUIPMENT SVC INC	00494570	58171	PARTS-V#3079	Fleet Operation Fund	667.85
Total for Payment No.:						667.85

Payment No: 019802

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	CINTAS CORP #630	00495748	4082457268	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00

06/30/2021	CINTAS CORP #630	00495750	4081138764	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
Total for Payment No.:						660.00

Payment No: 651828

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	INDUSTRIAL SCIENTIFIC CORP	00495752	2428776	Monthly iNet Usage Fee w/AutoR	Sewer Utility	650.86
Total for Payment No.:						650.86

Payment No: 651708

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WICHT, ZACHARY	00495734	32659FEB2021	ICI MAJOR DRUGS INVEST COURSE	General Fund	650.00
Total for Payment No.:						650.00

Payment No: 651563

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CORODATA RECORDS MANAGEMENT, INC	00495500	RS3283070	Offsite Records Management	General Fund	647.08
Total for Payment No.:						647.08

Payment No: 651688

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MCCOLLOCH, KEVIN	00495725	29036MAR2021	BASIC SWAT SCHOOL	General Fund	645.00
Total for Payment No.:						645.00

Payment No: 651701

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SOTELO, MICHAEL	00495906	29039MAY2021	MOTORCYCLE COURSE	General Fund	640.00

Total for Payment No.: 640.00

Payment No: 651654

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	UNIVAR SOLUTIONS USA INC	00495464	49204280	BULK CHEMICALS	Electric Utility	612.35
				Total for Payment No.:		612.35

Payment No: 651789

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	XI MEI TAN	00495598	33403-09 Utility Refund	UTILITY REFUND	General Fund	607.27
				Total for Payment No.:		607.27

Payment No: 651878

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	UNITED SITE SERVICES INC	00495258	114-11747414	RSTRM RENT@COGEN 3/17-4/6	Electric Utility	16.35
06/25/2021	UNITED SITE SERVICES INC	00495258	114-11747414	WKLY RESTRM SRV@COGEN 3/17-4/6	Electric Utility	48.75
06/25/2021	UNITED SITE SERVICES INC	00495258	114-11747414	DAMAGE WAIVER	Electric Utility	5.96
06/25/2021	UNITED SITE SERVICES INC	00495258	114-11747414	ENVIRONMENTAL FEE	Electric Utility	6.85
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	DAMAGE WAIVER	Electric Utility	48.39
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	WKLY SVCX2 @DVR 3/24-4/20/21	Electric Utility	110.00
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	DAMAGE WAIVER	Electric Utility	15.90
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	2 SINK RENT@DVR 3/24-4/20/21	Electric Utility	21.80
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	WKLY SINK SRV@DVR 3/24-4/20/21	Electric Utility	85.00
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	WKLY SINK SRVX2@DVR 3/24-4/20	Electric Utility	85.00
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	DAMAGE WAIVER	Electric Utility	7.95
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	RSTRM RENT@DVR 3/24-4/20/21	Electric Utility	43.60
06/25/2021	UNITED SITE SERVICES INC	00495262	114-11858017	WKLY SVC @DVR 3/24-4/20/21	Electric Utility	110.00
				Total for Payment No.:		605.55

Payment No: 651865

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SHRED-IT USA LLC	00495663	8182179139	INFORMATION TECHNOLOGY	Information Technology Service	134.55
06/25/2021	SHRED-IT USA LLC	00495663	8182179139	CCO - RECORDS CENTER	General Fund	67.27
06/25/2021	SHRED-IT USA LLC	00495663	8182179139	FINANCE - MUNICIPAL SERVICES	General Fund	67.28
06/25/2021	SHRED-IT USA LLC	00495663	8182179139	FINANCE - ACCOUNTING & PAYROLL	General Fund	134.55
06/25/2021	SHRED-IT USA LLC	00495663	8182179139	HOUSING	General Fund	67.27
06/25/2021	SHRED-IT USA LLC	00495663	8182179139	HUMAN RESOURCES	General Fund	67.27
06/25/2021	SHRED-IT USA LLC	00495663	8182179139	CITY ATTORNEY'S OFFICE	General Fund	67.27
				Total for Payment No.:		605.46

Payment No: 651804

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00495113	7397786	SCCC RODENT	Convention Cnt Maintenance Dis	580.00
				Total for Payment No.:		580.00

Payment No: 651599

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MAD SCIENCE OF THE BAY AREA	00495448	24570	CHANGE ORDER # 1: ADDITIONAL F	General Fund	572.80
				Total for Payment No.:		572.80

Payment No: 651579

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	FEDERAL EXPRESS	00494878	7-379-50099	MISC. SHIPPING DVR	Electric Utility	111.18
06/18/2021	FEDERAL EXPRESS	00494879	7-386-96502	MISC. SHIPPING DVR	Electric Utility	444.69
06/18/2021	FEDERAL EXPRESS	00494880	7-386-84051	MISC. RESOURCES SHIPPING	Electric Utility	14.99
				Total for Payment No.:		570.86

Payment No: 019795

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TIFCO INDUSTRIES	00495208	71657267	PARTS-SHOP USE	Fleet Operation Fund	567.23
				Total for Payment No.:		567.23

Payment No: 651562

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CONTRACTOR COMPLIANCE AND MONITORING	00495030	14371	LABOR COMPLIANCE SVC MAY21 SVP	Electric Utility	562.50
				Total for Payment No.:		562.50

Payment No: 651577

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	FARID GHAFGHAICHI	00494924	R220-EVC-106	EV CHARGER REBATE; 75194-01	Elec OperatingGrant Trust Fund	550.00
				Total for Payment No.:		550.00

Payment No: 651857

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ROYAL BRASS INC	00495227	954736-001	ASSORTED PARTS	Water Utility	140.46
06/25/2021	ROYAL BRASS INC	00495228	955771-001	ASSORTED PARTS	Water Utility	297.37
06/25/2021	ROYAL BRASS INC	00495229	956148-001	ASSORTED PARTS	Water Utility	110.54
				Total for Payment No.:		548.37

Payment No: 651695

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SASKIA LAGERGREN	00495911	14984MAY2021	EXECUTIVE DEVELOPMENT COURSE	General Fund	507.56
				Total for Payment No.:		507.56

Payment No: 651557

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CENTRAL COLO, LLC	00495021	CB447 - CI3039	FIBER PATHWAY INNERDUCTS JUL21	Electric Utility	500.00
				Total for Payment No.:		500.00

Payment No: 651620

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	REED & GRAHAM INC	00494565	998673	SUPPLIES-STORM DRAIN	General Fund	286.24
06/18/2021	REED & GRAHAM INC	00494977	001479	SUPPLIES-STREET	General Fund	212.00
				Total for Payment No.:		498.24

Payment No: 651844

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	NAPA AUTO PARTS	00495195	5983-665522	PARTS-V#2734	Fleet Operation Fund	33.53
06/25/2021	NAPA AUTO PARTS	00495196	5983-666048	PARTS-STOCK	Fleet Operation Fund	81.87
06/25/2021	NAPA AUTO PARTS	00495197	5983-666073	PARTS-V#2869	Fleet Operation Fund	10.71
06/25/2021	NAPA AUTO PARTS	00495198	5983-666312	PARTS-V#2670	Fleet Operation Fund	11.76
06/25/2021	NAPA AUTO PARTS	00495200	5983-666393	PARTS-STOCK	Fleet Operation Fund	295.47
06/25/2021	NAPA AUTO PARTS	00495201	5983-666761	PARTS-V#3361	Fleet Operation Fund	29.12
06/25/2021	NAPA AUTO PARTS	00495203	5983-666917	PARTS-V#2978	Fleet Operation Fund	22.92
				Total for Payment No.:		485.38

Payment No: 651702

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	STEPHANIE KNIGHT	00495722	13670MAR2021	FINANCIAL CRIMES COURSE	General Fund	483.48
				Total for Payment No.:		483.48

Payment No: 651690

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	NICK VAN HAEFTEN	00495898	35235MAY2021	PGE QUARTERLY MEETING	Electric Utility	464.18
				Total for Payment No.:		464.18

Payment No: 651770

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	REDOX TECH LLC	00495586	24507-15 Utility Refund	UTILITY REFUND	General Fund	460.26
				Total for Payment No.:		460.26

Payment No: 019705

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GREEN HALO SYSTEMS	00495455	3124	WASTETRACKING.COM MONTHLY FEES	Solid Waste Program	459.72
				Total for Payment No.:		459.72

Payment No: 651541

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BENCHMARK	00495435	E21-774A	SVACA - MOLD SCREEN	Expendable Trust Funds	455.00
				Total for Payment No.:		455.00

Payment No: 651497

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DANIEL BOBIAS	00495132	22520JUN2021A	2021 RAINGEAR REIMB	Water Utility	217.05
06/18/2021	DANIEL BOBIAS	00495133	22520JUN2021	2021 BOOT REIMB	Water Utility	237.00
				Total for Payment No.:		454.05

Payment No: 651504

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	JAMES VIDUNAS	00494852	30980JUN2021	RAIN GEAR FY20-21	General Fund	217.98

06/18/2021	JAMES VIDUNAS	00494852	30980JUN2021	SAFETY BOOTS FY2021	General Fund	233.16
Total for Payment No.:						451.14
Payment No: 651805						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CA DEPT OF INDUSTRIAL RELATIONS	00495163	E1803423SJ	ELEVATOR TASMAN	General Fund	225.00
06/25/2021	CA DEPT OF INDUSTRIAL RELATIONS	00495165	E1803419SJ	TASMAN ELEVATOR	General Fund	225.00
Total for Payment No.:						450.00
Payment No: 651824						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GOLDEN STATE EMERGENCY VEHICLE SERV, INC	00495189	CI028485	PARTS-V#2951	Fleet Operation Fund	68.68
06/25/2021	GOLDEN STATE EMERGENCY VEHICLE SERV, INC	00495189	CI028485	PARTS-STOCK	Fleet Operation Fund	380.42
Total for Payment No.:						449.10
Payment No: 651810						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CONSOLIDATED PARTS INC	00495117	5067512	SUPPLIES	General Fund	65.40
06/25/2021	CONSOLIDATED PARTS INC	00495118	5067435	FS 2 LIGHTS	General Fund	272.50
06/25/2021	CONSOLIDATED PARTS INC	00495119	5062677	FUSES	General Fund	109.00
Total for Payment No.:						446.90
Payment No: 651550						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BRINK'S INCORPORATED	00494972	11278855	ARMORED COURIER SERVICE	General Fund	267.64
06/18/2021	BRINK'S INCORPORATED	00494973	11522749	ARMORED COURIER SERVICE	General Fund	169.76
Total for Payment No.:						437.40

Payment No: 019798

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	UNITED REFRIGERATION INC	00495174	78780581-00	SUPPLIES	General Fund	159.39
06/25/2021	UNITED REFRIGERATION INC	00495175	78844003-00	HVAC COURTHOUSE	General Fund	277.61
				Total for Payment No.:		437.00

Payment No: 651769

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	R & C BROWN	00495561	10301-03 Utility Refund	UTILITY REFUND	General Fund	240.36
06/25/2021	R & C BROWN	00495562	10304-05 Utility Refund	UTILITY REFUND	General Fund	184.96
				Total for Payment No.:		425.32

Payment No: 651535

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AMERICAN TEXTILE & SUPPLY INC	00494724	110936	SERVICE WHITE TERRY RAGBALE	General Fund	425.10
				Total for Payment No.:		425.10

Payment No: 651626

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ROYAL BRASS INC	00494574	955962-001	PARTS-V#3256	Fleet Operation Fund	410.91
06/18/2021	ROYAL BRASS INC	00494598	955261-001	1/4 NUT	Sewer Utility	9.32
				Total for Payment No.:		420.23

Payment No: 651691

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	OLIVEIRA, PAULA	00495662	00025129-03 Utility Refund	UTILITY REFUND	General Fund	417.00
				Total for Payment No.:		417.00

Payment No: 651799

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ARAMARK UNIFORM SERVICES	00495762	511000073230	CLEANING SVC / SHOP TOWELS	Electric Utility	408.56
				Total for Payment No.:		408.56

Payment No: 651692

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PATRICIA BOWERS	00495723	28933JAN2021	PITCHESS MOTION UPDATE	General Fund	289.26
06/25/2021	PATRICIA BOWERS	00495900	28933MAY2021	FORCE ENCOUNTERS ANALYSIS	General Fund	114.50
				Total for Payment No.:		403.76

Payment No: 019759

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CINTAS CORP #630	00495114	4085859832	UNIFORMS	General Fund	96.22
06/25/2021	CINTAS CORP #630	00495115	4086062354	UNIFORMS	General Fund	64.74
06/25/2021	CINTAS CORP #630	00495116	4086443223	UNIFORMS	General Fund	96.22
06/25/2021	CINTAS CORP #630	00495224	4086737201	UNIFORMS	General Fund	145.14
				Total for Payment No.:		402.32

Payment No: 651697

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SCOTT TYLER	00495735	20850MAR2021	FIREARMS SNIPER INSTRUCTOR	General Fund	397.55
				Total for Payment No.:		397.55

Payment No: 651628

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SAN JOSE BMW	00494388	4346712	PARTS-STOCK	Fleet Operation Fund	396.27
				Total for Payment No.:		396.27

Payment No: 651820

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	FAST UNDERCAR SANTA CLARA	00495183	268563	PARTS-V#D1161	Fleet Operation Fund	98.23
06/25/2021	FAST UNDERCAR SANTA CLARA	00495185	271029	PARTS-V#3144	Fleet Operation Fund	116.19
06/25/2021	FAST UNDERCAR SANTA CLARA	00495186	271659	PARTS-V#3231	Fleet Operation Fund	78.20
06/25/2021	FAST UNDERCAR SANTA CLARA	00495187	271673	PARTS-V#3361	Fleet Operation Fund	78.20
06/25/2021	FAST UNDERCAR SANTA CLARA	00495188	271994	PARTS-V#3235	Fleet Operation Fund	22.94
				Total for Payment No.:		393.76

Payment No: 651793

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CA DEPT OF TOXIC SUBSTANCE CNTRL	00495257	20SM5243	SC GATEWAY JAN-MAR 2021	Public Buildings	385.00
				Total for Payment No.:		385.00

Payment No: 019676

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AIRGAS USA, LLC	00494637	9112434754	MEDICAL OXYGEN STATION 3	General Fund	104.05
06/18/2021	AIRGAS USA, LLC	00494638	9112434805	MEDICAL OXYGEN STATION 6	General Fund	168.80
06/18/2021	AIRGAS USA, LLC	00494640	9112434806	MEDICAL OXYGEN STATION 5	General Fund	104.50
				Total for Payment No.:		377.35

Payment No: 651543

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BETTY NGUYEN	00495036	1	CC Utility Box Artist	General Fund	375.00
				Total for Payment No.:		375.00

Payment No: 651665

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	BETTY NGUYEN	00495666	36655JUN2021	CULTURAL COMMISSION	General Fund	375.00
Total for Payment No.:						375.00
Payment No: 651704						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	STEPHEN STEK	00495733	33162MAR2021	CHEMICAL AGENT COURSE	General Fund	368.00
Total for Payment No.:						368.00
Payment No: 651681						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JEFFREY REVAY	00495730	33165MAR2021	CHEMICAL AGNT INSTRUCT COURSE	General Fund	368.00
Total for Payment No.:						368.00
Payment No: 651669						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CALOGERO MONACHINO	00495818	1853JUN2021	S-270 BASIC AIR OPS TRAINING	General Fund	350.00
Total for Payment No.:						350.00
Payment No: 651489						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AJMAL PUYEHGAR	00495482	35982JUN2021	TUITION REIMBURSEMENT	General Fund	350.00
Total for Payment No.:						350.00
Payment No: 651517						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	STEVEN FOLKES	00494609	34799MAY2021	2021 BOOT RMBRSMNT UNIT 7	General Fund	228.88
06/18/2021	STEVEN FOLKES	00494610	34799MAY2021A	2021 RAINGEAR RMBRSMNT UNIT 7	General Fund	120.00

Total for Payment No.: 348.88

Payment No: 651598

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	LUIS BORUNDA	00494874	36649JUN2021	Mechanical Permit BLD2021-6153	General Fund	347.00
Total for Payment No.:						347.00

Payment No: 651503

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ISMAEL RAMIREZ	00494607	29420MAY2021	2021 BOOT RMBRSMNT UNIT 7	General Fund	237.00
06/18/2021	ISMAEL RAMIREZ	00494608	29420MAY2021A	2021 RAINGEAR RMBRSMNT UNIT 7	General Fund	109.00
Total for Payment No.:						346.00

Payment No: 651850

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PEACE OFFICERS RESEARCH ASSOC OF CA	00494517	627740	3rd qtr Reserves LDF membershi	General Fund	342.00
Total for Payment No.:						342.00

Payment No: 019717

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MIDWEST TAPE LLC	00494954	500527255	1236 Juv DVD'S	General Fund	27.75
06/18/2021	MIDWEST TAPE LLC	00494954	500527255	1241 AD MCDS	General Fund	28.97
06/18/2021	MIDWEST TAPE LLC	00494954	500527255	1241 AD DVD'S	General Fund	65.36
06/18/2021	MIDWEST TAPE LLC	00494954	500527255	1235 AD DVD'S	General Fund	102.63
06/18/2021	MIDWEST TAPE LLC	00494954	500527255	1235 Juv DVD'S	General Fund	115.92
Total for Payment No.:						340.63

Payment No: 651491

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BRIAN D SLADWICK	00495130	12714MAR2021	2021 BOOT & RAINGEAR REIMB	Water Utility	335.53
				Total for Payment No.:		335.53

Payment No: 651774

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	RUSHABH PASAD	00495611	48916-13 Utility Refund	UTILITY REFUND	General Fund	334.93
				Total for Payment No.:		334.93

Payment No: 651856

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	REGENTS OF THE UNIV OF CALIF	00495891	11016052	LEGAL REFERENCES	General Fund	333.58
				Total for Payment No.:		333.58

Payment No: 651687

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MARK BARRY	00495724	13801APR2020	FINANCIAL CRIMES COURSE	General Fund	333.00
				Total for Payment No.:		333.00

Payment No: 019801

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WAXIE SANITARY SUPPLY	00495325	80070885	NABC	General Fund	329.31
				Total for Payment No.:		329.31

Payment No: 651679

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JAMES SITLER	00495913	18438JUN2021	FORCE ENCOUNTER COURSE	General Fund	329.16

Total for Payment No.: 329.16

Payment No: 651636

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SHRED-IT USA LLC	00494885	8182077717	1705 ELEC. SHRED MAY2021	Electric Utility	328.76
Total for Payment No.:						328.76

Payment No: 019757

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	BUCKLES-SMITH	00495215	3220728-00	WIRE MARKER TAPE DISPENSER	Water Utility	79.81
06/25/2021	BUCKLES-SMITH	00495236	3233108-00	PERMASLEEV LABELS	Electric Utility	248.49
Total for Payment No.:						328.30

Payment No: 651785

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	VINAY SEKHRI	00495606	40093-04 Utility Refund	UTILITY REFUND	General Fund	305.60
Total for Payment No.:						305.60

Payment No: 651516

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SCOTT LITZNER	00495131	5534JUN2021	2021 BOOT & RAINGEAR REIMB	Water Utility	298.50
Total for Payment No.:						298.50

Payment No: 019690

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CHRISTOPHER F DIVENS	00495376	24048JUN2021	SFTY BOOT/CLOTH REIMB FY 2021	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 651696

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SCOTT ANDERSON	00495819	36741JUN2021	SAFETY BOOTS REIMB	Electric Utility	280.00
				Total for Payment No.:		280.00

Payment No: 651670

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DAVID WEITZ	00495550	32304MAY2021	BOOT/CLOTHING REIMBURSE 20/21	Electric Utility	280.00
				Total for Payment No.:		280.00

Payment No: 651796

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ABB ENTERPRISE SOFTWARE INC.	00495759	8600097414	PART NUMBER: 1KGT024300R0001 /	Electric Utility	123.17
06/25/2021	ABB ENTERPRISE SOFTWARE INC.	00495759	8600097414	PART NUMBER: 1KGT033200R0002 /	Electric Utility	150.42
				Total for Payment No.:		273.59

Payment No: 019741

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TIFCO INDUSTRIES	00494575	71656241	CUC 2021- SUPPLIES	Solid Waste Program	271.68
				Total for Payment No.:		271.68

Payment No: 002393

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/24/2021	NAVIA BENEFIT SOLUTIONS, INC	00496091	06/13/21-06/26/21	DD:COMMUTER BENEFIT B2113	Payroll Liability&ClearingAcct	270.00
				Total for Payment No.:		270.00

Payment No: 651816

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DUNN-EDWARDS CORP	00495239	2011172305	CENTRAL PARK ARBOR	Parks And Recreation	260.92
				Total for Payment No.:		260.92

Payment No: 651501

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	EVERTH RAMIREZ	00495377	35085JUN2021	SFTY BOOT/CLOTH REIMB FY 2021	Electric Utility	250.70
				Total for Payment No.:		250.70

Payment No: 651523

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA FRANCHISE TAX BOARD	00495539	05/30/21-06/12/21NG	WAGE ATTACHMENT B2112	Payroll Liability&ClearingAcct	250.00
				Total for Payment No.:		250.00

Payment No: 651644

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	TAYLOR MILLS	00494870	36647JUN2021	Mechanical Permit BLD2021-6089	General Fund	124.00
06/18/2021	TAYLOR MILLS	00494873	36647JUN2021A	Mechanical Permit BLD2021-6092	General Fund	124.00
				Total for Payment No.:		248.00

Payment No: 651532

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ALTEC INDUSTRIES INC	00494566	11655152	PARTS-V#2816	Fleet Operation Fund	246.42
				Total for Payment No.:		246.42

Payment No: 651573

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/18/2021	EDELMAN CORP	00495436	215643	CHANGE TO LINE 1 ACCOUNT STRIN	Public Buildings	245.00
				Total for Payment No.:		245.00
Payment No: 651734						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	FARAH WAJIHUDDIN	00495639	78232-07 Utility Refund	UTILITY REFUND	General Fund	244.35
				Total for Payment No.:		244.35
Payment No: 651512						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NOEL DOMONDON	00495138	11972JUN2021	2021 RAINGEAR REIMB	Water Utility	240.00
				Total for Payment No.:		240.00
Payment No: 651499						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DENNIS HAYSE	00495015	31550JUN2021	SafetyBootReimbursementFY20-21	General Fund	237.00
				Total for Payment No.:		237.00
Payment No: 651495						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CHANH LE	00494611	17566JUN2021	2021 BOOT RMBRSMNT UNIT 7	General Fund	237.00
				Total for Payment No.:		237.00
Payment No: 651684						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LUPE FUENTES	00495549	12716MAY2021	BOOT REIMBURSEMENT FY 20/21	General Fund	237.00
				Total for Payment No.:		237.00

Payment No: 651682

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KARI ROGERS	00495899	18365JUN2021	TRAINING	Expendable Trust Funds	229.92
				Total for Payment No.:		229.92

Payment No: 651849

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PEACE OFFICERS RESEARCH ASSOC OF CA	00494515	315776	3rd qtr membership dues Reserv	General Fund	228.00
				Total for Payment No.:		228.00

Payment No: 651637

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SHREDLOGIX INC	00495437	0010817	SHREDDING SERVICES: 2/1/2021-1	General Fund	225.00
				Total for Payment No.:		225.00

Payment No: 651676

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GREG DEGER	00495902	17266MAY2021A	FORCE ENCOUNTER COURSE	General Fund	221.00
				Total for Payment No.:		221.00

Payment No: 651502

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	GARY WELLING	00495139	27528JUN2021	2021 EOC WINIX HEPA AIR PURIFR	Other City Dept Op Grant Fund	217.99
				Total for Payment No.:		217.99

Payment No: 651627

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/18/2021	SAFETY-KLEEN SYSTEMS INC	00494953	86068658	HAZ/MAT- MAY 2021	Fleet Operation Fund	217.00
Total for Payment No.:						217.00
Payment No: 651778						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SCT OWNER LLC	00495627	71937-04 Utility Refund	UTILITY REFUND	General Fund	216.36
Total for Payment No.:						216.36
Payment No: 651651						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	UNIQUE TOWING	00495382	176773	GOLF CART	General Fund	215.00
Total for Payment No.:						215.00
Payment No: 651600						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MEDWASTE MANAGEMENT, LLC	00494642	MW48090	MEDICAL WASTE DISPOSAL	General Fund	210.00
Total for Payment No.:						210.00
Payment No: 651496						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CHARLES QUANZ	00495072	3316JUN2021	FY20-21 RAINGEAR REIMBURSEMENT	General Fund	207.59
Total for Payment No.:						207.59
Payment No: 651780						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SOOD, VISHAL	00495618	60267-15 Utility Refund	UTILITY REFUND	General Fund	206.84
Total for Payment No.:						206.84

Payment No: 019715

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	LEHR AUTO ELECTRIC	00494919	SI61769	PARTS-V#3260	Fleet Operation Fund	200.13
				Total for Payment No.:		200.13

Payment No: 019679

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AMERICAN BEVERAGE EQUIPMENT	00494875	53034	JUN21 RENT FOR ICE MACHINE DVR	Electric Utility	200.00
				Total for Payment No.:		200.00

Payment No: 651729

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DC AUTOMATIC GATE INC	00495576	17098-06 Utility Refund	UTILITY REFUND	General Fund	189.63
				Total for Payment No.:		189.63

Payment No: 651721

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CATHRINE PEDONE	00495599	35454-01 Utility Refund	UTILITY REFUND	General Fund	181.52
				Total for Payment No.:		181.52

Payment No: 651492

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA DEPT OF CONSUMER AFFAIRS	00494605	3414JUN2021	TE RNWL SHARIAT 063023	General Fund	180.00
				Total for Payment No.:		180.00

Payment No: 651668

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CA DEPT OF CONSUMER AFFAIRS	00495252	3414JUN2021A	RNWL CE LCNS MOBECK 063021	General Fund	180.00

Total for Payment No.: 180.00

Payment No: 019691

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CINTAS CORP #630	00495157	4082380906	UNIFORMS-LICKMILL	General Fund	70.90
06/18/2021	CINTAS CORP #630	00495161	4082386485	UNIFORMS-CEMETERY	Cemetery	31.25
06/18/2021	CINTAS CORP #630	00495161	4082386485	CHEMICALS-CEMETERY	Cemetery	54.33
06/18/2021	CINTAS CORP #630	00495161	4082386485	DS1-CEMETERY	Other City Dept Op Grant Fund	19.86
Total for Payment No.:						176.34

Payment No: 019714

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	KINOKUNIYA BOOKSTORES OF AMERICA CO. LTD	00495034	SJ1879	1241 AD/JUV BK	General Fund	175.02
Total for Payment No.:						175.02

Payment No: 019709

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	IMPERIAL SPRINKLER SUPPLY INC	00494729	4674920-00	SPRINKLER MAINTENANCE	General Fund	72.31
06/18/2021	IMPERIAL SPRINKLER SUPPLY INC	00494730	4670052-00	SPRINKLER MAINTENANCE	General Fund	49.28
06/18/2021	IMPERIAL SPRINKLER SUPPLY INC	00494731	4673085-00	SPRINKLER MAINTENANCE	General Fund	53.00
Total for Payment No.:						174.59

Payment No: 651705

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	THOMAS GRATNY	00495903	1190JUN2021	MOTORCYCLE COURSE	General Fund	170.00
Total for Payment No.:						170.00

Payment No: 651885

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	STEPHEN SELBERG	00495782	13802JUN2021	ICI CORE	General Fund	170.00
				Total for Payment No.:		170.00

Payment No: 019733

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PG&E	00494614	8978316890-2 MAY2021	2021 MAY 700 LOS ESTEROS SJTP	Sewer Utility	26.98
06/18/2021	PG&E	00494915	3135894939-9 JUN2021	ELE SVC BENICIA PUMPHOUS MAY21	Electric Utility	36.68
06/18/2021	PG&E	00494920	3219228267-4 JUN2021	ELE SVC BENICIA HOUSE MAY21	Electric Utility	102.69
				Total for Payment No.:		166.35

Payment No: 651725

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CREA LLC	00495575	16460-05 Utility Refund	UTILITY REFUND	General Fund	165.52
				Total for Payment No.:		165.52

Payment No: 651791

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	YUJI IIZAKA	00495640	79038-02 Utility Refund	UTILITY REFUND	General Fund	164.52
				Total for Payment No.:		164.52

Payment No: 651498

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	DANIEL CABRAL	00495136	29125JUN2021	2021 WTR OPS & MAINTENCE CLASS	Water Utility	163.53
				Total for Payment No.:		163.53

Payment No: 651879

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WATERSAVERS IRRIGATION INC	00495270	2462614-00	IRRIGATION MAINTENANCE	General Fund	162.09
				Total for Payment No.:		162.09

Payment No: 651699

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SHUAI YUAN	00495661	0007383402 Utility Refund	UTILITY REFUND	General Fund	161.09
				Total for Payment No.:		161.09

Payment No: 651825

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HELENE ROTHSCHILD	00495330	FD 100-1	COUNSELING #100	General Fund	160.00
				Total for Payment No.:		160.00

Payment No: 651883

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WITMER-TYSON IMPORTS INC	00495095	T14018	K9 boarding 4/14-4/17 Kairo	General Fund	155.00
				Total for Payment No.:		155.00

Payment No: 651521

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA FRANCHISE TAX BOARD	00495537	05/30/21-06/12/21CB	WAGE ATTACHMENT B2112	Payroll Liability&ClearingAcct	150.00
				Total for Payment No.:		150.00

Payment No: 651716

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	AMIR AYUPOV	00495569	12792-26 Utility Refund	UTILITY REFUND	General Fund	148.58

Total for Payment No.: 148.58

Payment No: 019799

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	UNIVERSAL SITE SERVICES	00495178	21023439	SCCC GATE ARM	Convention Cnt Maintenance Dis	32.63
06/25/2021	UNIVERSAL SITE SERVICES	00495178	21023439	SCCC GATE ARM	Convention Cnt Maintenance Dis	44.31
06/25/2021	UNIVERSAL SITE SERVICES	00495178	21023439	SCCC GATE ARM	Convention Cnt Maintenance Dis	70.56
Total for Payment No.:						147.50

Payment No: 019751

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	WESTERN STATES OIL CO	00494958	453643	UNLDED- PD MOTRCYLCS	Fleet Operation Fund	143.82
Total for Payment No.:						143.82

Payment No: 651758

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MARIO AZEDED0	00495583	22188-09 Utility Refund	UTILITY REFUND	General Fund	142.11
Total for Payment No.:						142.11

Payment No: 651510

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	MATEO CERALDE	00495018	36659JUN2021	SafetyBootReimbursementFY20-21	General Fund	142.00
Total for Payment No.:						142.00

Payment No: 651634

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	SCP DISTRIBUTORS LLC	00494599	36032051	JANDY VALVE	Water Utility	140.06

Total for Payment No.: 140.06

Payment No: 651565

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CRIME SCENE CLEANERS INC	00495381	81318	CLEAN VEHICLE 3301 & 3262	General Fund	140.00
Total for Payment No.:						140.00

Payment No: 651738

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GONCALVES, GABRIEL	00495593	29975-15 Utility Refund	UTILITY REFUND	General Fund	139.07
Total for Payment No.:						139.07

Payment No: 651754

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MAEDA, HIROYUKI	00495629	72192-06 Utility Refund	UTILITY REFUND	General Fund	138.61
Total for Payment No.:						138.61

Payment No: 651519

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	VISHAY SILICONIX	00495498	4901JUN2021	Reimb. unused closure fees	Deposit Funds.	138.25
Total for Payment No.:						138.25

Payment No: 651493

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CAL PERS LONG TERM CARE PROGRAM	00495535	13944341	BIWEEKLY PR CALPERS LT B2112	Payroll Liability&ClearingAcct	138.01
Total for Payment No.:						138.01

Payment No: 651763

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	NAIMISH PATEL	00495584	22503-02 Utility Refund	UTILITY REFUND	General Fund	137.54
				Total for Payment No.:		137.54

Payment No: 651762

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MOTOHIRO KAWAHATA	00495636	75564-05 Utility Refund	UTILITY REFUND	General Fund	137.37
				Total for Payment No.:		137.37

Payment No: 651838

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LEGAL PURSUIT INC	00495931	5793841	LEGAL COURIER	General Fund	135.00
				Total for Payment No.:		135.00

Payment No: 651744

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HOSHIJAMA, MASA AKI	00495623	68942-19 Utility Refund	UTILITY REFUND	General Fund	132.99
				Total for Payment No.:		132.99

Payment No: 651887

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	CODE FOR FUN	00495772	1688	Instructor payment FY 20/21	General Fund	132.00
				Total for Payment No.:		132.00

Payment No: 651739

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HANYU CHENG	00495642	79610-02 Utility Refund	UTILITY REFUND	General Fund	130.03
				Total for Payment No.:		130.03

Payment No: 019682

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BAKER & TAYLOR BOOKS	00494805	2035888189	1235 AD BK	General Fund	129.72
				Total for Payment No.:		129.72

Payment No: 651741

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HARISHANKAR SRIDHARAN	00495637	77456-02 Utility Refund	UTILITY REFUND	General Fund	129.25
				Total for Payment No.:		129.25

Payment No: 651834

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KELLY-MOORE PAINT CO	00495263	817-00000423027	PAINT	General Fund	128.37
				Total for Payment No.:		128.37

Payment No: 651727

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DAVID BERMUDES VARGAS	00495632	72542-13 Utility Refund	UTILITY REFUND	General Fund	128.14
				Total for Payment No.:		128.14

Payment No: 651733

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DONGNING LIU	00495619	61146-26 Utility Refund	UTILITY REFUND	General Fund	126.97
				Total for Payment No.:		126.97

Payment No: 651765

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	NATASHA DE DIOS	00495638	78014-06 Utility Refund	UTILITY REFUND	General Fund	126.74

Total for Payment No.: 126.74

Payment No: 651745

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HUI NGUYEN	00495592	29529-13 Utility Refund	UTILITY REFUND	General Fund	125.20
Total for Payment No.:						125.20

Payment No: 019685

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BOUNDTREE MEDICAL LLC	00494641	84072255	MEDICAL SUPPLIES	General Fund	40.97
06/18/2021	BOUNDTREE MEDICAL LLC	00495274	84077092	MEDICAL SUPPLIES	General Fund	81.94
Total for Payment No.:						122.91

Payment No: 651514

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PHIL ORR	00495444	9007JUN2021	PURCHASED ROPE FOR MCMP FLAG P	Cemetery	119.90
Total for Payment No.:						119.90

Payment No: 651752

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LEE, ANNA	00495594	30135-11 Utility Refund	UTILITY REFUND	General Fund	117.42
Total for Payment No.:						117.42

Payment No: 651714

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ALEJANDRA PADILLA RENTERIA	00495563	10405-09 Utility Refund	UTILITY REFUND	General Fund	115.90
Total for Payment No.:						115.90

Payment No: 651520

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	WILLIAM G. GIANATASIO, III	00495135	1126MAY2021	2021 BOOT REIMB	Water Utility	108.95
				Total for Payment No.:		108.95

Payment No: 651790

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	YOHEI OBATA	00495631	72458-24 Utility Refund	UTILITY REFUND	General Fund	105.47
				Total for Payment No.:		105.47

Payment No: 651587

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00495011	02661270	SAFETY GLASSES - D. PADILLA	Electric Utility	73.75
06/18/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00495011	02661270	DISPENSING FEE	Electric Utility	28.00
				Total for Payment No.:		101.75

Payment No: 651511

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	NELSON LUI	00495137	33846JUN2021	2021 WTR DIST OP - D3 EXAM	Water Utility	100.00
				Total for Payment No.:		100.00

Payment No: 019770

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GRAINGER	00495242	9916440242	FENDER WASHER BOLT	General Fund	99.93
				Total for Payment No.:		99.93

Payment No: 651747

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JAIDEV KOCHUNNI	00495630	72366-16 Utility Refund	UTILITY REFUND	General Fund	99.56
				Total for Payment No.:		99.56

Payment No: 651518

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	VISHAL TALWAR	00467647	75401-04 Utility Refund	UTILITY REFUND	General Fund	96.83
				Total for Payment No.:		96.83

Payment No: 651722

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CHANGMING SUN	00495608	44660-15 Utility Refund	UTILITY REFUND	General Fund	96.66
				Total for Payment No.:		96.66

Payment No: 651779

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SEONPIL JANG	00495635	75561-04 Utility Refund	UTILITY REFUND	General Fund	96.31
				Total for Payment No.:		96.31

Payment No: 651740

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HARIS, MUKIC	00495624	69225-08 Utility Refund	UTILITY REFUND	General Fund	96.12
				Total for Payment No.:		96.12

Payment No: 019773

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00495193	170586	PARTS-STOCK	Fleet Operation Fund	95.88
				Total for Payment No.:		95.88

Payment No: 651784

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	VENKATA JYOTHSNA DONAPATI	00495572	13777-24 Utility Refund	UTILITY REFUND	General Fund	95.31
				Total for Payment No.:		95.31

Payment No: 651811

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CORE & MAIN LP	00495216	N098130	FREIGHT CHARGE	Water Utility	68.75
06/25/2021	CORE & MAIN LP	00495217	N098145	FREIGHT CHARGES	Water Utility	22.60
				Total for Payment No.:		91.35

Payment No: 651748

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JOHNNY WANG	00495643	79734-02 Utility Refund	UTILITY REFUND	General Fund	89.69
				Total for Payment No.:		89.69

Payment No: 651552

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	CA DEPT OF TOXIC SUBSTANCE CNTRL	00495501	20SM5840	CHANGE ORDER #1 ADD FUNDS FOR	Parks And Recreation	85.55
				Total for Payment No.:		85.55

Payment No: 651505

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	JASON KOEHLER	00495465	24586APR2021	ICI TRAFFICKING COURSE	General Fund	85.00
				Total for Payment No.:		85.00

Payment No: 651786

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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06/25/2021	WAGNER, RYAN	00495570	13224-18 Utility Refund	UTILITY REFUND	General Fund	84.54
Total for Payment No.:						84.54
Payment No: 651513						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	PAUL D. FOSTER	00495179	1057JUN2021	REIMBURSEMENT LIVESCAN PRINT	General Fund	84.00
Total for Payment No.:						84.00
Payment No: 651641						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	STORAGE EXPRESS INC	00495285	69875	20-FT STORAGE CONTAINER RENTAL	Electric Utility	81.75
Total for Payment No.:						81.75
Payment No: 651723						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CHELSEA ANGELA	00495626	70575-07 Utility Refund	UTILITY REFUND	General Fund	80.95
Total for Payment No.:						80.95
Payment No: 651536						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	AMEX PLATING INCORPORATED	00494889	R21-SLR-0136	LTG REBATE; 61905-01	Elec OperatingGrant Trust Fund	80.00
Total for Payment No.:						80.00
Payment No: 651759						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MARLON PENTICOSTES	00495604	38126-15 Utility Refund	UTILITY REFUND	General Fund	79.35
Total for Payment No.:						79.35

Payment No: 651581

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	FRONTIER FORD	00494568	653284	PARTS-V#3154	Fleet Operation Fund	38.02
06/18/2021	FRONTIER FORD	00494846	653420	PARTS-V#3528	Fleet Operation Fund	40.14
				Total for Payment No.:		78.16

Payment No: 651713

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	AISVARYA RAVINDRAN	00495610	46704-24 Utility Refund	UTILITY REFUND	General Fund	70.09
				Total for Payment No.:		70.09

Payment No: 651715

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ALEXA SORTO	00495625	69320-03 Utility Refund	UTILITY REFUND	General Fund	69.82
				Total for Payment No.:		69.82

Payment No: 651732

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DIANA BLUE	00495601	37158-10 Utility Refund	UTILITY REFUND	General Fund	11.73
06/25/2021	DIANA BLUE	00495602	37162-10 Utility Refund	UTILITY REFUND	General Fund	56.39
				Total for Payment No.:		68.12

Payment No: 651776

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANDER BOGDAN	00495590	27945-03 Utility Refund	UTILITY REFUND	General Fund	67.65
				Total for Payment No.:		67.65

Payment No: 651717

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ANUP RATHI	00495616	57764-20 Utility Refund	UTILITY REFUND	General Fund	65.74
				Total for Payment No.:		65.74

Payment No: 651757

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MARIA ROSALES	00495564	10406-07 Utility Refund	UTILITY REFUND	General Fund	64.39
				Total for Payment No.:		64.39

Payment No: 651677

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HUANG, XIAOLIN	00495658	0007859301 Utility Refund	UTILITY REFUND	General Fund	61.62
				Total for Payment No.:		61.62

Payment No: 651787

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WOSSEN SADAMO	00495565	10965-02 Utility Refund	UTILITY REFUND	General Fund	57.18
				Total for Payment No.:		57.18

Payment No: 651772

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	RIGVED KALE	00495617	58717-20 Utility Refund	UTILITY REFUND	General Fund	56.77
				Total for Payment No.:		56.77

Payment No: 019696

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	EFFICIENCY SERVICES GROUP, LLC	00494938	3219	ADMIN/PROGRAM SUPP SRV MAY21	Elec OperatingGrant Trust Fund	55.00
				Total for Payment No.:		55.00

Payment No: 651507

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	JOEL CASTILLO	00495134	5359APR2021	2021 BOOT REIMB	Water Utility	54.31
				Total for Payment No.:		54.31

Payment No: 651837

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LAWSON PRODUCTS, INC	00495194	9308480690	PARTS-SHOP USE	Fleet Operation Fund	53.58
				Total for Payment No.:		53.58

Payment No: 651525

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	US TREASURY	00495540	05/30/21-06/12/21JO	WAGE ATTACHMENT B2112	Payroll Liability&ClearingAcct	50.00
				Total for Payment No.:		50.00

Payment No: 019760

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	COAST COUNTIES TRUCK	00495182	01130550P	PARTS-V#3196	Fleet Operation Fund	49.98
				Total for Payment No.:		49.98

Payment No: 651831

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JACK DOHENY COMPANIES	00495221	116650	REAR AIR VALVE	Sewer Utility	46.34
				Total for Payment No.:		46.34

Payment No: 019681

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	BADGER METER INC	00494594	80074873	ORION CELLULAR SERVICE	Sewer Utility	45.00

Total for Payment No.: 45.00

Payment No: 651742

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HIROYUKI KAWAI	00495634	75352-05 Utility Refund	UTILITY REFUND	General Fund	44.03
Total for Payment No.:						44.03

Payment No: 651728

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DAVID KO	00495596	31389-18 Utility Refund	UTILITY REFUND	General Fund	42.70
Total for Payment No.:						42.70

Payment No: 651751

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KATHERINE MALHAS	00495641	79466-02 Utility Refund	UTILITY REFUND	General Fund	42.10
Total for Payment No.:						42.10

Payment No: 651755

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MANCHUNG LAM	00495600	36474-04 Utility Refund	UTILITY REFUND	General Fund	40.69
Total for Payment No.:						40.69

Payment No: 651673

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ERI WEBER	00495660	0008189401 Utility Refund	UTILITY REFUND	General Fund	40.37
Total for Payment No.:						40.37

Payment No: 651508

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	JOSEPH GARTNER III	00495184	17413JUN2021	CAP REIMBURSE - JUNE 2021	General Fund	40.00
				Total for Payment No.:		40.00

Payment No: 651515

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	RANDY KENT	00494975	35349JUN2021	CAP REIMBURSEMENT - JUNE 2021	General Fund	40.00
				Total for Payment No.:		40.00

Payment No: 651863

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANTA CLARA WINDUSTRIAL CO	00495231	020068 01	PVC CAPS	Water Utility	38.84
				Total for Payment No.:		38.84

Payment No: 651735

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	FEIFAN FENG	00495644	80569-02 Utility Refund	UTILITY REFUND	General Fund	38.71
				Total for Payment No.:		38.71

Payment No: 651575

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	EQUIFAX CREDIT INFORMATION SVC	00495083	6379377	Credit check - New Hires	General Fund	37.59
				Total for Payment No.:		37.59

Payment No: 651889

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/30/2021	DEWELL ENTERPRISE	00485703	35973DEC2020	REIMB. ALARM PERMIT FEE	General Fund	37.00
				Total for Payment No.:		37.00

Payment No: 651709

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	AAREN GRACE	00495615	57752-25 Utility Refund	UTILITY REFUND	General Fund	36.35
				Total for Payment No.:		36.35

Payment No: 651788

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	WU, HENRY	00495645	80895-01 Utility Refund	UTILITY REFUND	General Fund	32.56
				Total for Payment No.:		32.56

Payment No: 651775

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	RYAN GIBBS	00495568	12762-15 Utility Refund	UTILITY REFUND	General Fund	32.17
				Total for Payment No.:		32.17

Payment No: 651764

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	NAOMI EVANS	00495613	53835-18 Utility Refund	UTILITY REFUND	General Fund	31.90
				Total for Payment No.:		31.90

Payment No: 019782

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PELICAN SIGN SERVICE INC	00495162	62755	EMPLOYEE AWARD	General Fund	27.69
				Total for Payment No.:		27.69

Payment No: 019695

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	COMCAST	00494971	5/27/21AC8155100091701 239	COMCAST LIB 2635 HOMESTEAD RD	General Fund	26.74

Total for Payment No.: 26.74

Payment No: 651756

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MARIA HERRERA ZAPATA	00495582	21243-19 Utility Refund	UTILITY REFUND	General Fund	21.35
Total for Payment No.:						21.35

Payment No: 651750

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	KAPIL KHANDELWAL	00495609	45474-22 Utility Refund	UTILITY REFUND	General Fund	20.78
Total for Payment No.:						20.78

Payment No: 651720

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ATLANTIS PROPERTIES	00495579	19645-18 Utility Refund	UTILITY REFUND	General Fund	19.42
Total for Payment No.:						19.42

Payment No: 651724

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CHRISTOPHER ALLAIRE	00495588	27644-19 Utility Refund	UTILITY REFUND	General Fund	18.60
Total for Payment No.:						18.60

Payment No: 651761

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MAYANK KOTHIYA	00495612	51574-07 Utility Refund	UTILITY REFUND	General Fund	18.07
Total for Payment No.:						18.07

Payment No: 651675

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GINA SAPORITO	00495932	29051JUN2021A	MILEAGE REIMB TO LSAP SITE	Parks And Recreation	15.68
				Total for Payment No.:		15.68

Payment No: 651877

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	UNITED PARCEL SERVICE	00495885	00009882E5241A	DELIVERY CHARGES	Fleet Operation Fund	15.59
				Total for Payment No.:		15.59

Payment No: 651719

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ASHLEY ZAHARI	00495614	57732-23 Utility Refund	UTILITY REFUND	General Fund	14.95
				Total for Payment No.:		14.95

Payment No: 651777

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	SANDRA GUIZA MEDINA	00495646	80933-02 Utility Refund	UTILITY REFUND	General Fund	13.91
				Total for Payment No.:		13.91

Payment No: 651771

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	RICK DAVIS PATTERSON	00495580	20261-14 Utility Refund	UTILITY REFUND	General Fund	13.49
				Total for Payment No.:		13.49

Payment No: 651726

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DANIEL LOVATO	00495605	38150-12 Utility Refund	UTILITY REFUND	General Fund	13.38
				Total for Payment No.:		13.38

Payment No: 651731

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DEVAN AGRAWAL	00495589	27709-19 Utility Refund	UTILITY REFUND	General Fund	13.36
				Total for Payment No.:		13.36

Payment No: 651662

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/18/2021	ZORO TOOLS INC.	00494739	INV9616397	DROP-IN ANCHOR NO FLANGE TOOL	General Fund	12.73
				Total for Payment No.:		12.73

Payment No: 651749

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	JOSEPH SCHWARZ	00495566	12395-24 Utility Refund	UTILITY REFUND	General Fund	12.69
				Total for Payment No.:		12.69

Payment No: 651672

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DINESH MEHTA	00495659	0007384301 Utility Refund	UTILITY REFUND	General Fund	11.88
				Total for Payment No.:		11.88

Payment No: 651753

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	LOES LEE	00495607	44415-10 Utility Refund	UTILITY REFUND	General Fund	11.50
				Total for Payment No.:		11.50

Payment No: 651782

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TAE KIM	00495603	37785-12 Utility Refund	UTILITY REFUND	General Fund	10.51

Total for Payment No.: 10.51

Payment No: 651712

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	AHMED AMIN	00495571	13327-22 Utility Refund	UTILITY REFUND	General Fund	10.50
Total for Payment No.:						10.50

Payment No: 651767

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	PEIQI GONG	00495633	75239-02 Utility Refund	UTILITY REFUND	General Fund	10.06
Total for Payment No.:						10.06

Payment No: 651783

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TINA ALFTON	00495597	31446-13 Utility Refund	UTILITY REFUND	General Fund	9.34
Total for Payment No.:						9.34

Payment No: 651730

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	DEJA SIM	00495591	29385-24 Utility Refund	UTILITY REFUND	General Fund	9.27
Total for Payment No.:						9.27

Payment No: 651743

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	HONG K LEE	00495595	30150-09 Utility Refund	UTILITY REFUND	General Fund	8.81
Total for Payment No.:						8.81

Payment No: 651711

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	ADRIAN RADOCEA	00495567	12462-15 Utility Refund	UTILITY REFUND	General Fund	8.46
				Total for Payment No.:		8.46

Payment No: 019767

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	GARDENLAND POWER EQUIPMENT	00495219	828135	SPARK PLUG	Water Utility	5.45
				Total for Payment No.:		5.45

Payment No: 651760

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	MATHEUS ARNELLAS	00495581	21038-07 Utility Refund	UTILITY REFUND	General Fund	5.22
				Total for Payment No.:		5.22

Payment No: 651876

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	TURF & INDUSTRIAL EQUIPMENT CO	00495210	IV39214	PARTS-V#2953	Fleet Operation Fund	4.64
				Total for Payment No.:		4.64

Payment No: 651812

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
06/25/2021	CRESCO EQUIPMENT RENTALS	00495218	5189928-0001	PROPANE	Water Utility	2.16
				Total for Payment No.:		2.16

Overall Total 37,147,892.59



City of Santa Clara
List of All Bills and Claims Approved for Payment
From 07/01/2021 to 07/31/2021

Run Date 9/17/2021
Run Time 11:38:15 AM

Sorted by Payment Amount

Payment No: 002403

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/15/2021	CAL PERS - PO BOX 1982	00496454	100000016474708	FY2122 ANL UNFUNDED LIAB MISC	Payroll Liability&ClearingAcct	24,570,525.00
07/15/2021	CAL PERS - PO BOX 1982	00496455	100000016474722	FY2122 ANL UNFUNDED LIAB SAFET	Payroll Liability&ClearingAcct	20,872,387.00
				Total for Payment No.:		45,442,912.00

Payment No: W22026

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	GEO1 FIXED JUL21	Electric Utility	1,217,909.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	GEO1 VAR FY2021	Electric Utility	-904,554.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	GEO1 VAR JUL21	Electric Utility	52,839.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	GEO1 DEBT JUL21	Electric Utility	183,239.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CT FIXED JUL21	Electric Utility	213,607.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CT VAR FY2021	Electric Utility	-36,025.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CT VAR JUL21	Electric Utility	360,227.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	HYDRO FIXED JUL21	Electric Utility	556,059.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	HYDRO VAR FY2021	Electric Utility	-331,782.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	HYDRO VAR JUL21	Electric Utility	-19,127.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	HYDRO DEBT JUL21	Electric Utility	1,072,514.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEC FUEL FY2021	Electric Utility	828,596.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEC FUEL JUL21	Electric Utility	1,754,686.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEC VARIABLE FY2021	Electric Utility	-1,865,326.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEC VARIABLE JUL21	Electric Utility	107,171.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEC FIXED JUL21	Electric Utility	433,527.00

07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEC DEBT JUL21	Electric Utility	632,943.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEG/REG/PM PASS THRU SVC FY22	Electric Utility	-45,757.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	LEG/REG/PM PASS THRU SVC JUL21	Electric Utility	489,335.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	SUBSCRIPTOINS FY2122	Electric Utility	7,292.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CISO MKT EST FY2021	Electric Utility	8,656,350.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CISO MKT EST JUL21	Electric Utility	2,927,973.00
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CISO GMC MAY21,APR21,OTHER	Electric Utility	177,111.01
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CISO MKT MAY21,APR21,OTHER	Electric Utility	-5,123,242.47
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CISO XMN MAY21,APR21,OTHER	Electric Utility	5,418,909.25
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CISO CRR MAY21,APR21,OTHER	Electric Utility	-185,343.64
07/22/2021	NORTHERN CALIF POWER AGENCY	00497652	006002-0721025	CISO A/S MAY21,APR21,OTHER	Electric Utility	-287,434.15
Total for Payment No.:						16,291,696.00

Payment No: 019922

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	TRI-DAM PROJECT	00496861	2021-6 SVP	ENERGY PURCH (HYDRO) JUN21	Electric Utility	1,847,667.59
Total for Payment No.:						1,847,667.59

Payment No: 002418

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ELECTRONIC FEDERAL TAX	00498241	07/11/21-07/24/21	DD: FED TAXES W/H B2115	Payroll Liability&ClearingAcct	991,072.72
07/30/2021	ELECTRONIC FEDERAL TAX	00498241	07/11/21-07/24/21	DD: FED TAXES W/H B2115	Payroll Liability&ClearingAcct	287,418.82
07/30/2021	ELECTRONIC FEDERAL TAX	00498241	07/11/21-07/24/21	DD: FED TAXES W/H B2115	Payroll Liability&ClearingAcct	284,801.57
Total for Payment No.:						1,563,293.11

Payment No: 002396

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	ELECTRONIC FEDERAL TAX	00496372	06/13/21-06/26/21	DD: FED TAXES W/H B2113	Payroll Liability&ClearingAcct	907,256.18
07/02/2021	ELECTRONIC FEDERAL TAX	00496372	06/13/21-06/26/21	DD: FED TAXES W/H B2113	Payroll Liability&ClearingAcct	308,288.55
07/02/2021	ELECTRONIC FEDERAL TAX	00496372	06/13/21-06/26/21	DD: FED TAXES W/H B2113	Payroll Liability&ClearingAcct	307,707.10
				Total for Payment No.:		1,523,251.83

Payment No: W22033

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/26/2021	EDF TRADING NORTH AMERICA LLC	00497061	1530651	NAT GAS PURCH DVR JUN21	Electric Utility	1,325,213.52
07/26/2021	EDF TRADING NORTH AMERICA LLC	00497061	1530651	NAT GAS PURCH COGEN JUN21	Electric Utility	145,374.61
07/26/2021	EDF TRADING NORTH AMERICA LLC	00497061	1530651	NAT GAS PURCH GIA JUN21	Electric Utility	29,223.47
				Total for Payment No.:		1,499,811.60

Payment No: 002405

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ELECTRONIC FEDERAL TAX	00497219	06/27/21-07/10/21	DD: FED TAXES W/H B2114	Payroll Liability&ClearingAcct	863,489.92
07/16/2021	ELECTRONIC FEDERAL TAX	00497219	06/27/21-07/10/21	DD: FED TAXES W/H B2114	Payroll Liability&ClearingAcct	287,093.88
07/16/2021	ELECTRONIC FEDERAL TAX	00497219	06/27/21-07/10/21	DD: FED TAXES W/H B2114	Payroll Liability&ClearingAcct	285,845.80
				Total for Payment No.:		1,436,429.60

Payment No: W22044

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SANTA CLARA VALLEY WATER DIST	00498294	GM102860	2021 MAY PUMP TAX	Water Utility	1,415,137.56
				Total for Payment No.:		1,415,137.56

Payment No: 019996

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ALLIANT INSURANCE SVCS INC	00498091	1691858	AD&D ACCIDENT MEDICAL - STADIUM	General Fund	15,007.39
07/30/2021	ALLIANT INSURANCE SVCS INC	00498092	10124364	PROP INS PROGRAM -ALL RISK	Special Liability Insurance	1,079,699.12
07/30/2021	ALLIANT INSURANCE SVCS INC	00498093	20124364	PROP INS -EXCESS BOILER & MACH	Special Liability Insurance	11,432.00
07/30/2021	ALLIANT INSURANCE SVCS INC	00498094	1688127	GRIZZLY HYDROELECT PLANT DIC	Special Liability Insurance	103,924.23
07/30/2021	ALLIANT INSURANCE SVCS INC	00498095	1688292	21-22 LAW ENFORCEMENT LIAB	General Fund	123,920.65
				Total for Payment No.:		1,333,983.39

Payment No: 002407

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CAL PERS - PO BOX 1982	00497612	06/13/21-06/26/21	EMPLOYER/EMPLOYEE DED B2113	Payroll Liability&ClearingAcct	471,064.06
07/16/2021	CAL PERS - PO BOX 1982	00497612	06/13/21-06/26/21	EMPLOYER/EMPLOYEE DED B2113	Payroll Liability&ClearingAcct	822,624.76
				Total for Payment No.:		1,293,688.82

Payment No: W22029

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MSR ENERGY AUTHORITY	00496859	EA2036	NAT GAS PURCH DVR JUN21	Electric Utility	1,137,739.31
07/23/2021	MSR ENERGY AUTHORITY	00496859	EA2036	NAT GAS PURCH COGEN JUN21	Electric Utility	124,808.88
07/23/2021	MSR ENERGY AUTHORITY	00496859	EA2036	NAT GAS PURCH GIA JUN21	Electric Utility	25,089.31
				Total for Payment No.:		1,287,637.50

Payment No: W22031

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MSR PUBLIC POWER AGENCY	00497609	070821	BIG HORN ENERGY JUN21	Electric Utility	1,277,589.84
				Total for Payment No.:		1,277,589.84

Payment No: W22018

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/14/2021	SANTA CLARA VALLEY WATER DIST	00497081	GM102811	2021 APRIL PUMP TAX	Water Utility	1,102,676.22
				Total for Payment No.:		1,102,676.22

Payment No: 652450

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PRISM	00498021	22100144	EXCESS W/C INSURANCE	Workers Compensation	1,032,527.00
				Total for Payment No.:		1,032,527.00

Payment No: W22017

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/14/2021	MISSION TRAIL WASTE SYSTEMS	00496977	1839JUNE2021	GARBAGE COLLECTION JUNE 2021	Solid Waste Program	834,112.68
07/14/2021	MISSION TRAIL WASTE SYSTEMS	00496977	1839JUNE2021	CLEAN GREEN COLLECTION JUNE 21	Solid Waste Program	185,827.90
				Total for Payment No.:		1,019,940.58

Payment No: 019958

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MSR PUBLIC POWER AGENCY	00497272	070221	PUR POWER SAN JUAN JUL21 ACT	Electric Utility	96,250.00
07/23/2021	MSR PUBLIC POWER AGENCY	00497272	070221	PUR POWER SAN JUAN JUL21 ACT	Electric Utility	810,580.75
07/23/2021	MSR PUBLIC POWER AGENCY	00497272	070221	PUR POWER SAN JUAN JUL21 ACT	Electric Utility	12,418.00
07/23/2021	MSR PUBLIC POWER AGENCY	00497272	070221	RENEWABLE ADMIN COSTS JUL21	Electric Utility	40,547.00
				Total for Payment No.:		959,795.75

Payment No: 002399

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/07/2021	CAL PERS - HEALTH	00496457	JUL-21	HEALTH INSURANCE PREMIUMS	OPEB Plan Trust Fund	95,460.49
07/07/2021	CAL PERS - HEALTH	00496457	JUL-21	HEALTH INSURANCE PREMIUMS	Payroll Liability&ClearingAcct	738,436.20

Total for Payment No.: 833,896.69

Payment No: W22024A

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/21/2021	MANZANA WIND LLC	00496858	130232	ENERGY PURCH (WIND) JUN21	Electric Utility	788,446.73
Total for Payment No.:						788,446.73

Payment No: W22023

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/20/2021	RE ROSAMOND ONE LLC	00496860	00091	ENERGY PURCH (SOLAR) JUN21	Electric Utility	684,010.21
Total for Payment No.:						684,010.21

Payment No: W22002

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/01/2021	SANTA CLARA CONVENTION CENTER	00496446	2461JUN2021	PRE-FUND EXPEND JULY AUG 2021	Convention Center Enterprise F	683,549.00
Total for Payment No.:						683,549.00

Payment No: W22027

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/22/2021	SFPUC WATER DEPT	00497900	2395JUL2021	2021 JUNE WATER PURCHASES	Water Utility	665,808.00
Total for Payment No.:						665,808.00

Payment No: 020049

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	US BANK NATIONAL ASSOCIATION	00497617	EO&M000270721	CVP O&M FUNDING #9 FY2022	Electric Utility	648,775.00
Total for Payment No.:						648,775.00

Payment No: 020005

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CENTRAL 40 LLC	00497057	131576-2021-06	ENERGY PURCH (SOLAR) JUN21	Electric Utility	570,528.50
				Total for Payment No.:		570,528.50

Payment No: W22037

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/29/2021	CAPITAL ONE PUBLIC FUNDING C/O DEUTSCHE	00497102	0007378917	2010 Lease Payment - Principal	Public Facilities Financing Co	551,436.25
				Total for Payment No.:		551,436.25

Payment No: 019962

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	NATIONAL PLANT SERVICE INC	00497799	16466-A	Phase IV Sanitary Sewer Assess	Sewer Utility Construction	541,130.64
				Total for Payment No.:		541,130.64

Payment No: 652215

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GREENWASTE RECOVERY, INC	00496961	028277	MUNICIPAL SOLID WASTE PROCESSI	Solid Waste Program	519,192.66
				Total for Payment No.:		519,192.66

Payment No: W22028

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/22/2021	SANTA CLARA VALLEY WATER DIST	00497901	TI002495	2021 JUN RINCONADA TREATED WTR	Water Utility	515,831.40
				Total for Payment No.:		515,831.40

Payment No: W22036

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/28/2021	JPMORGAN CHASE BANK NA	00497931	15682JUL2021	2016 INSTALL SALE AGRMT P&I	Sewer Utility-Debt Services	378,854.50
07/28/2021	JPMORGAN CHASE BANK NA	00497931	15682JUL2021	2016 INSTALL SALE AGRMT P&I	Sewer Utility-Debt Services	89,870.12
Total for Payment No.:						468,724.62

Payment No: 019905

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496663	0000457561	SVP 881 MARTIN GARBAGE SERVICE	Electric Utility	1,002.60
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	General Fund	3,457.37
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	General Fund	4,218.07
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	General Fund	848.72
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	General Fund	434.77
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	General Fund	58.46
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	General Fund	1,401.92
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	Water Utility	989.40
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	Electric Utility	2,222.64
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	Solid Waste Program	690.76
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496664	0000457555	CART & FRONT LOAD BIN JUNE2021	Electric Utility	243.85
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496665	0000456587	DEBRIS BIN BILLING MAY2021	Cemetery	540.92
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496665	0000456587	DEBRIS BIN BILLING MAY2021	General Fund	171.52
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496665	0000456587	DEBRIS BIN BILLING MAY2021	General Fund	3,316.60
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496665	0000456587	DEBRIS BIN BILLING MAY2021	Water Utility	90.15
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496665	0000456587	DEBRIS BIN BILLING MAY2021	Electric Utility	991.69
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00496963	0000456586	STREET CORP YARD DEBRIS BIN MA	Solid Waste Program	3,179.93

07/16/2021	MISSION TRAIL WASTE SYSTEMS	00497065	070821A	2021 ANNUAL CITY CLEAN-UP CAMP	Solid Waste Program	135,341.71
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00497067	070821B	2021 ANNUAL CITY CLEAN-UP CAMP	Solid Waste Program	103,854.09
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00497069	070821C	2021 ANNUAL CITY CLEAN-UP CAMP	Solid Waste Program	125,780.88
07/16/2021	MISSION TRAIL WASTE SYSTEMS	00497071	070821D	2021 ANNUAL CITY CLEAN-UP CAMP	Solid Waste Program	69,107.56
Total for Payment No.:						457,943.61

Payment No: 002417

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00498239	07/11/21-07/24/21	DD: SIT & SDI W/H B2115	Payroll Liability&ClearingAcct	411,455.40
07/30/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00498239	07/11/21-07/24/21	DD: SIT & SDI W/H B2115	Payroll Liability&ClearingAcct	34,310.01
Total for Payment No.:						445,765.41

Payment No: 019879

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FRIANT POWER AUTHORITY	00496649	810	ENERGY PURCH (HYDRO1) JUN21	Electric Utility	218,082.23
07/16/2021	FRIANT POWER AUTHORITY	00496649	810	ENERGY PURCH (HYDRO2) JUN21	Electric Utility	206,323.81
Total for Payment No.:						424,406.04

Payment No: 020032

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MSR PUBLIC POWER AGENCY	00497659	071121	BIG HORN 2 POWER JUN21	Electric Utility	417,593.65
Total for Payment No.:						417,593.65

Payment No: 002395

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	CA EMPLOYMENT DEVELOPMENT	00496371	06/13/21-06/26/21	DD: SIT & SDI W/H B2113	Payroll	38,101.68

	DEPT				Liability&ClearingAcct	
07/02/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00496371	06/13/21-06/26/21	DD: SIT & SDI W/H B2113	Payroll Liability&ClearingAcct	375,093.34
				Total for Payment No.:		413,195.02

Payment No: 002404

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00497218	06/27/21-07/10/21	DD: SIT & SDI W/H B2114	Payroll Liability&ClearingAcct	34,911.75
07/16/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00497218	06/27/21-07/10/21	DD: SIT & SDI W/H B2114	Payroll Liability&ClearingAcct	359,075.01
				Total for Payment No.:		393,986.76

Payment No: 652500

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	NEWTRON LLC	00498054	115161	LABOR FOR PUBLIC WORKS CONTRAC	Electric Utility Construction	12,373.22
07/30/2021	NEWTRON LLC	00498054	115161	LABOR FOR PUBLIC WORKS CONTRAC	Electric Utility Construction	401,787.27
07/30/2021	NEWTRON LLC	00498054	115161	RETENTION	Electric Utility Construction	-20,708.02
				Total for Payment No.:		393,452.47

Payment No: W22005

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	NATIONWIDE RETIREMENT SOLUTIONS, INC.	00496452	06/13/21-06/26/21	WT: B2113 DEFERRED COMP	Fringe Benefits	389,845.58
				Total for Payment No.:		389,845.58

Payment No: W22032

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MSR PUBLIC POWER AGENCY	00497610	070521	BIG HORN SHAPING JUN21	Electric Utility	373,037.13

Total for Payment No.: 373,037.13

Payment No: 019981

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TRANSMISSION AGENCY OF NORTHERN CA	00497273	JUNE 2021	DEBT SERVICE (TANC) AUG21	Electric Utility	80,391.00
07/23/2021	TRANSMISSION AGENCY OF NORTHERN CA	00497273	JUNE 2021	DEBT SERVICE (SOT) JUL21	Electric Utility	3,546.00
07/23/2021	TRANSMISSION AGENCY OF NORTHERN CA	00497273	JUNE 2021	TANC A&G AUG21	Electric Utility	142,981.00
07/23/2021	TRANSMISSION AGENCY OF NORTHERN CA	00497273	JUNE 2021	COTP O&M AUG21	Electric Utility	123,429.00
07/23/2021	TRANSMISSION AGENCY OF NORTHERN CA	00497273	JUNE 2021	TANC CRR PROGRAM COSTS JAN21	Electric Utility	8,760.00
07/23/2021	TRANSMISSION AGENCY OF NORTHERN CA	00497273	JUNE 2021	SOT FAC CHARGE JUN21	Electric Utility	4,057.83
07/23/2021	TRANSMISSION AGENCY OF NORTHERN CA	00497273	JUNE 2021	SOT ADMIN COSTS MAY21	Electric Utility	2,953.27
Total for Payment No.:						366,118.10

Payment No: W22021

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	NATIONWIDE RETIREMENT SOLUTIONS, INC.	00497191	06/27/21-07/10/21	WT: B2114 DEFERRED COMP	Fringe Benefits	362,827.00
Total for Payment No.:						362,827.00

Payment No: W22039

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	NATIONWIDE RETIREMENT SOLUTIONS, INC.	00498240	07/11/21-07/24/21	WT: B2115 DEFERRED COMP	Fringe Benefits	356,466.71
Total for Payment No.:						356,466.71

Payment No: 019834

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PARS/GASB 45	00496463	14589JUL2021	Monthly Contribution-JULY 2021	OPEB Plan Trust Fund	312,413.00
				Total for Payment No.:		312,413.00

Payment No: W22042

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SANTA CLARA CONVENTION CENTER	00498205	2461JUL2021	pre-fund budgeted expenditures	Convention Center Enterprise F	312,209.00
				Total for Payment No.:		312,209.00

Payment No: 019909

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	PARS/GASB 45	00497216	14589DEC2020A	Monthly Contribution-2018 Wire	OPEB Plan Trust Fund	305,583.00
				Total for Payment No.:		305,583.00

Payment No: 019997

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	AMERESCO	00497059	41474	ENERGY (VASCO LF GAS) JUN21	Electric Utility	285,755.59
07/30/2021	AMERESCO	00497059	41474	VASCO LF O&M CHARGE JUN21	Electric Utility	13,065.57
				Total for Payment No.:		298,821.16

Payment No: 652325

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ALTEC INDUSTRIES INC	00497603	8292380	AC18-70B HYDRAULIC TELESCOPIC	Vehicle Replacement Fund	273,392.71
07/23/2021	ALTEC INDUSTRIES INC	00497603	8292380	DELIVERY CHARGES	Vehicle Replacement Fund	6,765.00
07/23/2021	ALTEC INDUSTRIES INC	00497603	8292380	FEDERAL EXCISE TAX HEAVY VEHIC	Vehicle Replacement Fund	11,790.99
				Total for Payment No.:		291,948.70

Payment No: 652245

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SANTA CLARA VALLEY URBAN RUNOFF	00496982	2021.22.11	SANTA CLARA 6% FY21-22 ASSESSM	General Fund	289,541.29
				Total for Payment No.:		289,541.29

Payment No: 002421

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CA DEPT OF TAX & FEE ADMIN	00498363	APR-JUN2021COR	DD:ELEC ENERGY SURCHARGE	Electric Utility	287,421.00
				Total for Payment No.:		287,421.00

Payment No: 020041

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PG&E	00497070	6738869084-3 JUL2021	GAS TRANSPORT DVR JUN21	Electric Utility	278,996.70
				Total for Payment No.:		278,996.70

Payment No: 019914

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ROSENDIN ELECTRIC INC	00496802	201350	MAJOR WORK 10/15/19 - 1/26/20	Electric Utility Construction	154,108.00
07/16/2021	ROSENDIN ELECTRIC INC	00496802	201350	MAJOR WORK 10/15/19 - 1/26/20	Electric Utility Construction	123,688.00
				Total for Payment No.:		277,796.00

Payment No: 019929

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ANIXTER INC.	00497702	4867960-01	INSULATOR, 60KV, SUSPENSION, S	Electric Utility	2,544.84
07/23/2021	ANIXTER INC.	00497703	4913920-05	CONNECTOR, SPLIT BOLT, CU/CU,	Electric Utility	260.16
07/23/2021	ANIXTER INC.	00497703	4913920-05	FAULT INDICATOR - 800/1600 AMP	Electric Utility	10,962.68
07/23/2021	ANIXTER INC.	00497704	4913907-01	CUTOUT, OH, 100 AMP, 15KV, TYP	Electric Utility	24,786.60

07/23/2021	ANIXTER INC.	00497705	4936028-01	CLEVIS, DEAD END, SWING, W/O S	Electric Utility	499.44
07/23/2021	ANIXTER INC.	00497706	4936028-00	CLEVIS, DEAD END, SWING, W/O S	Electric Utility	132.76
07/23/2021	ANIXTER INC.	00497707	4952316-00	COMPOUND, ELECTRICAL JOINT, FO	Electric Utility	88.94
07/23/2021	ANIXTER INC.	00497708	4952316-03	MARKER, #4, 2-7/8INX1-3/4IN, 2	Electric Utility	104.64
07/23/2021	ANIXTER INC.	00497709	4952316-04	CLAMP, GROUND, CONDUIT, 2IN, F	Electric Utility	370.33
07/23/2021	ANIXTER INC.	00497710	4952358-00	CONNECTOR, 2 BOLT, BRONZE, CU/	Electric Utility	1,415.91
07/23/2021	ANIXTER INC.	00497716	4864102-00	TRANSFORMER, OH, 100 KVA, 120/	Electric Utility	23,648.64
07/23/2021	ANIXTER INC.	00497717	4864132-00	TRANSFORMER, PAD, 1500 KVA, 48	Electric Utility	99,517.64
07/23/2021	ANIXTER INC.	00497718	4952355-00	SPRING, GROUNDING, CLAMP, 1000	Electric Utility	11,869.12
07/23/2021	ANIXTER INC.	00497720	4959149-00	CONNECTOR, SUBMERSIBLE, 3 POSI	Electric Utility	3,230.76
07/23/2021	ANIXTER INC.	00497721	4931443-00	CONNECTOR, SERVICE DROP, INSUL	Electric Utility	281.98
07/23/2021	ANIXTER INC.	00497772	4732585-02	GUY MARKER, PLASTIC, YELLOW, 8	Electric Utility	1,297.10
07/23/2021	ANIXTER INC.	00497773	4894003-01	DEAD-END, BAIL, CU, #2 STR, AU	Electric Utility	630.67
07/23/2021	ANIXTER INC.	00497774	4894083-01	DEAD-END, BAIL, CU, #2 STR, AU	Electric Utility	630.67
07/23/2021	ANIXTER INC.	00497777	4853115-04	CONNECTOR, SPADE, DUAL TERMINA	Electric Utility	28,372.70
07/23/2021	ANIXTER INC.	00497779	4864108-01	TRANSFORMER, PAD, 112KVA, 120/	Electric Utility	43,044.10
07/23/2021	ANIXTER INC.	00497781	4904703-00	CLAMP DEADEND, HOT LINE, 12 KV	Electric Utility	3,170.27
07/23/2021	ANIXTER INC.	00497784	4904103-01	DUCT SEAL, 5 LB. PLUG 6 PLUGS	Electric Utility	111.83
07/23/2021	ANIXTER INC.	00497785	4913920-02	ATTACHMENT, POLE, EYE PLATE WI	Electric Utility	230.26
07/23/2021	ANIXTER INC.	00497797	4867960-04	FUSE - SUB - 12KV - CAPACITOR	Electric Utility	1,819.22
07/23/2021	ANIXTER INC.	00497798	4936028-03	WIRE, 600V, 1/0 QUAD, URD, XLP	Electric Utility	6,023.70
07/23/2021	ANIXTER INC.	00497812	4864108-02	TRANSFORMER, PAD, 112KVA, 120/	Electric Utility	8,618.69
07/23/2021	ANIXTER INC.	00497814	4952358-01	CONNECTOR, 2 BOLT, BRONZE, CU/	Electric Utility	472.51
07/23/2021	ANIXTER INC.	00497816	4969879-00	CONNECTOR, OH, PARALLEL GROOVE	Electric Utility	1,258.95
Total for Payment No.:						275,395.11

Payment No: 019916

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SILICON VALLEY ANIMAL CONTROL	00497009	2021-17	1ST QTR FY 21-22 JULY-SEPT	General Fund	265,591.50
				Total for Payment No.:		265,591.50

Payment No: W22014

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/07/2021	SEDGWICK CLAIMS MGMT SVCS INC	00496549	SF-8029-2021-00914252	Escrow deposit Worker's Comp	Workers Compensation	263,956.50
				Total for Payment No.:		263,956.50

Payment No: 002413

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	BANK OF AMERICA PROCUREMENT	00496066	PC0621AUTO	SHELL OIL 504220800QPS - Purch	Fleet Operation Fund	100.22
07/06/2021	BANK OF AMERICA PROCUREMENT	00496066	PC0621AUTO	TANS CARWASH - Purchase	Fleet Operation Fund	2,099.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00496066	PC0621AUTO	SP PRODECAL - Purchase	Fleet Operation Fund	28.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496066	PC0621AUTO	AMZN MKTP US 2156X7N51 - Purch	General Fund	241.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00496066	PC0621AUTO	IN NORCAL PORTABLE SE - Purch	Solid Waste Program	886.10
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	Expendable Trust Funds	121.73
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	Expendable Trust Funds	25.54
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	LOWES 01756 - Purchase	Expendable Trust Funds	62.25
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	KELLYMOORE PAINT - Purchase	Expendable Trust Funds	49.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	Expendable Trust Funds	22.87
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	Expendable Trust Funds	36.11
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ANIXTER CLARK TRI-ED - Purchas	General Fund	1,502.23
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ANIXTER CLARK TRI-ED - Purchas	General Fund	71.12
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	SP BLACKHAWK SUPPLY - Purcha	General Fund	136.65
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	32.57
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	27.29
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	19.45

07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	13.59
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	The Webstaurant Store - Purcha	General Fund	1,342.62
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	536.58
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	AMC GLASS CO INC - Purchase	General Fund	107.13
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	20.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	50.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ZORO TOOLS INC - Purchase	General Fund	36.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	90 STANDARD PLUMBING - Purchas	General Fund	82.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	16.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	15.33
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	90 STANDARD PLUMBING - Purchas	General Fund	23.83
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ZORO TOOLS INC - Purchase	General Fund	36.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	40.66
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ZORO TOOLS INC - Purchase	General Fund	61.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	90 STANDARD PLUMBING - Purchas	General Fund	14.83
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	2.57
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ABSUPPLYNET - Purchase	General Fund	1,425.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ABSUPPLYNET - Purchase	General Fund	712.57
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	SUNNYVALE LUMBER, INC. - Purch	General Fund	311.78
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	SHERWIN WILLIAMS 70868 - Purch	General Fund	112.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	43.08
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	61.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	101.22
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	48.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	10.88
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	2.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	UNITED REFRIG BR 409 - Purcha	General Fund	11.47
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	6.65
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	5.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	INTERNATIONAL TRANSACTION -	General Fund	4.60

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07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ULTRA FASTENERS INC. - Purchas	General Fund	574.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	72.84
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ZORO TOOLS INC - Purchase	General Fund	57.98
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Credit	General Fund	-22.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	212.64
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	8.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	58.13
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	HD SUPPLY HIS 719 - Purchase	General Fund	3.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	PELICAN SIGNS - Purchase	General Fund	42.67
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	90 STANDARD PLUMBING - Purchas	General Fund	22.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	1.21
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	17.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	18.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	43.52
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	Amazon Prime 2X7GR4G31 - Purch	General Fund	14.16
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	AMZN Mktp US - Credit	General Fund	-120.46
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	40.88
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	48.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	5.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	TEQUIPMENT - Purchase	General Fund	3,525.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	37.01
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	10.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	STAPLES 00107193 - Purch	General Fund	3.05
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	4.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	SHERWIN WILLIAMS 70868 - Purch	General Fund	47.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	29.09
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	580 ALLIED BLDG PROD - Purchas	General Fund	644.13
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ZORO TOOLS INC - Purchase	General Fund	323.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	H.L. FLAKE COMPANY - Purchase	General Fund	292.97

07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	H.L. FLAKE COMPANY - Purchase	General Fund	308.21
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	CLEANITSUPPLY.COM - Purchase	General Fund	147.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	ANIXTER CLARK TRI-ED - Purchas	General Fund	470.10
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	Electric Utility	1.25
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE MOULDING COMPANY-S - Purch	General Government - Other	72.75
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	General Government - Other	22.87
07/06/2021	BANK OF AMERICA PROCUREMENT	00496067	PC0621BLDG	THE HOME DEPOT 0630 - Purchas	Sewer Utility	20.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	260.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	ZOOM.US 888-799-9666 - Purchas	General Fund	14.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	390.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	UPCODES - Purchase	General Fund	468.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	130.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	PAYPAL ICCPENINSUL - Purchase	General Fund	30.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	AMZN MKTP US 2X5N78CV2 - Purch	General Fund	77.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	FREDPRYOR CAREERTRACK - Purcha	General Fund	199.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	AMAZON.COM 2X6J66L50 A - Purch	General Fund	23.85
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	RS HUGHES CO INC - Purchase	General Fund	629.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	445.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	445.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	445.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	445.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	445.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	READYREFRESH BY NESTLE - Purch	General Fund	78.30
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	390.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	390.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	390.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	CALIFORNIA BUILDING OF - Purch	General Fund	585.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	ZOOM.US 888-799-9666 - Purchas	General Fund	14.99

07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	AMZN MKTP US 2122X0XZ1 - Purch	General Fund	69.57
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	125.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	125.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	100.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	125.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496068	PC0621PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	125.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496069	PC0621ATTY	ONELEGAL CCSALE0331679 - Purch	General Fund	18.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00496069	PC0621ATTY	SJ MERCURY NEWS CIRC - Purchas	General Fund	12.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496069	PC0621ATTY	WESTERN CONTRACT INTER - Purch	General Fund	1,032.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00496070	PC0621CLRK	LOGIFORMS.COM - Purchase	General Fund	203.66
07/06/2021	BANK OF AMERICA PROCUREMENT	00496070	PC0621CLRK	INTERNATIONAL TRANSACTION - Pu	General Fund	1.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00496071	PC0621CNCL	TERIYAKI MADNESS SANTA - Purch	General Fund	166.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00496071	PC0621CNCL	THE BUSINESS JORNALS - Purchas	General Fund	95.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496072	PC0621MNGR	FEDEX 91543894 - Purchase	General Fund	14.17
07/06/2021	BANK OF AMERICA PROCUREMENT	00496073	PC0621COMM	FSP COMMUNICATION RENT - Purch	General Fund	825.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496073	PC0621COMM	SQ CHUCK WISE - Purchase	General Fund	500.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496074	PC0621ELECT	PP FACEBOOK FACEBOOK A - Purch	Elec OperatingGrant Trust Fund	10.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496074	PC0621ELECT	IN GOLDEN STATE REPRO - Purch	Electric Utility Construction	182.75
07/06/2021	BANK OF AMERICA PROCUREMENT	00496074	PC0621ELECT	IN GOLDEN STATE REPRO - Purch	Electric Utility Construction	275.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496074	PC0621ELECT	IN GOLDEN STATE REPRO - Purch	Electric Utility Construction	52.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496074	PC0621ELECT	DOBLE ENGINEERING CO - Purchas	Electric Utility	2,166.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496074	PC0621ELECT	IN GOLDEN STATE REPRO - Purch	Electric Utility	152.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00496074	PC0621ELECT	IN GOLDEN STATE REPRO - Purch	Electric Utility	152.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	KOFFLER ELECTRICAL MEC - Purch	Electric Utility	1,385.39

07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	HARRINGTON IND PLASTIC - Purch	Electric Utility	16.43
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	HARRINGTON IND PLASTIC - Purch	Electric Utility	901.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	TEMPRESKO, INC - Purchase	Electric Utility	1,018.58
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	FLUID GAUGE COMPANY IN - Purch	Electric Utility	1,481.51
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	MICRO MOTION INC - Purchase	Electric Utility	2,942.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	KOFFLER ELECTRICAL MEC - Purch	Electric Utility	141.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	PAYPAL COMPENERGY - Purchase	Electric Utility	218.07
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	SKYGEEK.COM - Purchase	Electric Utility	3,182.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	SKYGEEK.COM - Purchase	Electric Utility	1,477.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	ALL INDUSTRIAL ELECTRI - Purch	Electric Utility	547.55
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	CALIFORNIA COMPRESSION - Purch	Electric Utility	403.89
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	YOKOGAWA CORP OF AMERI - Purch	Electric Utility	2,140.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	EVOQUA WATER TECHNOLOG - Purch	Electric Utility	1,667.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	SP BLACKHAWK SUPPLY - Purcha	Electric Utility	424.21
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	YOKOGAWA CORP OF AMERI - Purch	Electric Utility	157.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	AMZN MKTP US 2X5OA03R1 - Purch	Electric Utility	17.42
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	AMZN MKTP US 2R24Q5642 - Purch	Electric Utility	12.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	BROTHER INTERNATIONAL - Purcha	Electric Utility	50.11
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	MCMASTER-CARR - Purchase	Electric Utility	114.15
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	MCMASTER-CARR - Purchase	Electric Utility	87.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	BROTHER INTERNATIONAL - Purcha	Electric Utility	96.97
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	MCMASTER-CARR - Purchase	Electric Utility	287.46
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	MITCHELL INSTRUMENT CO - Purch	Electric Utility	431.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	ZORO TOOLS INC - Purchase	Electric Utility	94.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	CISCO SYSTEMS INC - Purchase	Electric Utility	14.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	GRAINGER - Purchase	Electric Utility	45.35
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	LOGMEIN GoToMeeting - Purchase	Electric Utility	14.00

07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	ARGCO - Purchase	Electric Utility	121.19
07/06/2021	BANK OF AMERICA PROCUREMENT	00496075	PC0621ELEC	SANTA CLARA WINDUSTRIA - Purch	Electric Utility	39.82
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	347.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	DOBLE ENGINEERING CO - Purchas	Electric Utility	103.19
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	20.68
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	618.03
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	46.85
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	5.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	LOWES 02211 - Purchase	Electric Utility	243.55
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	16.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	125.22
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	WESTERN TOOL SUPPLY - Purcha	Electric Utility	59.65
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	WESTERN TOOL SUPPLY - Purcha	Electric Utility	59.51
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	COOL AMP CONDUCTO LUBE - Purch	Electric Utility	179.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	BUCKLES- SMITH ELECTRI - Purch	Electric Utility	260.35
07/06/2021	BANK OF AMERICA PROCUREMENT	00496076	PC0621EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	441.25
07/06/2021	BANK OF AMERICA PROCUREMENT	00496077	PC0621EREC	GE DIGITAL ENERGY - Purchase	Electric Utility Construction	3,175.02
07/06/2021	BANK OF AMERICA PROCUREMENT	00496077	PC0621EREC	DOBLE ENGINEERING CO - Purchas	Electric Utility	2,167.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496077	PC0621EREC	DOBLE ENGINEERING CO - Purchas	Electric Utility	2,167.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496077	PC0621EREC	ADVANTECH CORPORATION - Purcha	Electric Utility	924.44
07/06/2021	BANK OF AMERICA PROCUREMENT	00496078	PC0621ENGN	SANTA CLARA VALLEY WAT - Purch	Streets And Highways	250.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496078	PC0621ENGN	FLT GEOSYSTEMS - Purchase	General Fund	122.83
07/06/2021	BANK OF AMERICA PROCUREMENT	00496078	PC0621ENGN	HD SUPPLY WHITE CAP 0 - Purch	General Fund	65.64
07/06/2021	BANK OF AMERICA PROCUREMENT	00496078	PC0621ENGN	OFFICE DEPOT 1135 - Purchase	General Fund	49.81
07/06/2021	BANK OF AMERICA PROCUREMENT	00496078	PC0621ENGN	ENGINEERS BD - Purchase	General Fund	180.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496078	PC0621ENGN	AMAZON.COM 2166V33R1 A - Purch	General Fund	142.98
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	THE HOME DEPOT 0630 - Purchas	Water Utility	26.07
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	THE HOME DEPOT 0630 - Purchas	Water Utility	26.06

07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	THE HOME DEPOT 0630 - Purchas	Water Utility	26.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	SMART AND FINAL 448 - Purchase	Water Utility	16.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	SMART AND FINAL 448 - Purchase	Water Utility	16.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	AMAZON.COM 2X78L4F82 A - Purch	General Fund	27.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	SJ MERCURY NEWS CIRC - Purchas	General Fund	14.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	THE BUSINESS JORNALS - Purchas	General Fund	70.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	SERVICE SPRING CORP, D - Purch	Sewer Utility	392.73
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	THE HOME DEPOT 0630 - Purchas	Electric Utility	69.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00496079	PC0621FINC	SMART AND FINAL 448 - Purchase	Electric Utility	32.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	SURESTAY PLUS ROCKLIN - Purcha	Expendable Trust Funds	97.64
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	TARGET 00027722 - Purch	General Fund	43.64
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AMAZON.COM 2X0585781 A - Purch	General Fund	320.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	PACIFIC COAST FLAG - Purchase	General Fund	108.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	ONLINESTORES.COM - Purchase	General Fund	125.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	INT'L CODE COUNCIL INC - Purch	General Fund	60.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AMZN MKTP US 2R0V88KE2 - Purch	General Fund	80.57
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	USPS.COM CLICKNSHIP - Purchase	General Fund	7.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	SETMOREAPPOINTMENTS - Purchase	General Fund	25.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AMAZON.COM 2X9NY9KV1 A - Purch	General Fund	94.67
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	FASTSIGNS OF SUNNYVALE - Purch	General Fund	2,500.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	HON ANALYTICS INC. - Purchase	General Fund	788.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	COSTCO DELIVERY 848 - Credit	General Fund	-14.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	COSTCO DELIVERY 848 - Purchas	General Fund	581.59
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	ENDEAVOR STORAGE CONTA - Purch	General Fund	87.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	NI GOVERNMENT SERVICES - Purch	General Fund	77.37
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	THE HOME DEPOT 0630 - Purchas	General Fund	456.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	FASTRAK VIOLATION CENT - Purch	General Fund	25.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	FASTRAK VIOLATION CENT - Purch	General Fund	74.50

07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	FASTRAK VIOLATION CENT - Purch	General Fund	1.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	WWW COSTCO COM - Purchase	General Fund	386.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	WWW COSTCO COM - Purchase	General Fund	686.48
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	WWW COSTCO COM - Purchase	General Fund	1,547.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	WWW COSTCO COM - Purchase	General Fund	180.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AMZN MKTP US 2X6QK58X2 - Purch	General Fund	661.78
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AMZN Mktp US 2X0KR85F2 - Purch	General Fund	1,082.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AMAZON.COM 2X0BS7D52 A - Purch	General Fund	719.44
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AMZN MKTP US 2X2S20532 - Purch	General Fund	182.81
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	AVENZA MAPS PRO - Purchase	General Fund	830.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	INTERNATIONAL TRANSACTION - Pu	General Fund	6.65
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	TFS THERMOEBERLINELLC - Purcha	General Fund	3,476.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496080	PC0621FIRE	ALIMED - Purchase	Other City Dept Op Grant Fund	659.45
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	OFFICE DEPOT-projector for Pol	Police Operating Grant Fund	764.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	Amazon-accessories for Police	Police Operating Grant Fund	39.07
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	CDW GOVT-Projector mount for P	Police Operating Grant Fund	136.73
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	B H PHOTO-projector bulb for P	Police Operating Grant Fund	64.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	Amazon-magnifying lamp for dat	Information Technology Service	46.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	CLOUDFLARE - security software	Information Technology Service	200.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	Amazon-transceivers for data c	Information Technology Service	261.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	ATT-long distance charges for	Information Technology Service	38.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	GODADDY.COM-domain renewal-scl	Information Technology Service	21.17
07/06/2021	BANK OF AMERICA PROCUREMENT	00496081	PC0621INFO	SOLARWINDS-Kiwi Syslog Server	Information Technology Service	111.36

07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2X6SY9J41 - Purch	General Fund	656.59
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2R4YD1RH0 - Purch	General Fund	124.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2R5IV1RX0 - Purch	General Fund	604.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2R4HZ6WM0 - Purch	General Fund	54.43
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2R5OE3WF0 - Purch	General Fund	108.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	SAINT PETERSBURG TRADE - Purch	General Fund	1,286.42
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	SAINT PETERSBURG TRADE - Purch	General Fund	396.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X7IG73T0 A - Purch	General Fund	276.62
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	SP WORLD-TRUST - Purchase	General Fund	278.13
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	RKI INSTRUMENTS INC. - Purchas	General Fund	540.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2X79V4EI0 - Purch	General Fund	58.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2X3KE71V1 - Purch	General Fund	11.98
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2R8UX4UM2 - Purch	General Fund	21.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X3EO11W1 A - Purch	General Fund	27.89
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2X33A0A62 - Purch	General Fund	32.68
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	COMCAST CALIFORNIA - Purchase	General Fund	17.44
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	MIXBOOK.COM - Purchase	General Fund	1,274.93
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X10D7OL0 A - Purch	General Fund	912.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	The Webstaurant Store - Purcha	General Fund	703.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2X8CB7J40 - Purch	General Fund	17.43
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X51Y5NE2 A - Purch	General Fund	23.37
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2X7YF3SB1 - Purch	General Fund	9.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MKTP US 2X7DO5QL2 - Purch	General Fund	17.43
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X44G9181 A - Purch	General Fund	114.42
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMZN MktP US 2R63S9972 - Purch	General Fund	155.66
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X43M5SB1 A - Purch	General Fund	15.21

07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	DEMCO INC - Purchase	General Fund	355.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	OFFICE DEPOT 1135 - Purchase	General Fund	356.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	TOTAL IMAGING SOLUTION - Purch	General Fund	753.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	LIBRARYWORKS.COM - Purchase	General Fund	49.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	TEACHING STRATEGIES,LL - Purch	Library Operating Grant Fund	700.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	OFFICE DEPOT 1135 - Purchase	Library Operating Grant Fund	358.78
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X6AT3O91 A - Purch	Library Operating Grant Fund	10.85
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X4VO8C41 A - Purch	Library Operating Grant Fund	10.87
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	DBC BLICK ART MATERIAL - Purch	Library Operating Grant Fund	70.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	AMAZON.COM 2X0HX9CR2 A - Purch	Library Operating Grant Fund	424.45
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	WALMART.COM AX - Purchase	Library Operating Grant Fund	54.29
07/06/2021	BANK OF AMERICA PROCUREMENT	00496082	PC0621LIBR	26 LAKESHORE LEARNING - Purch	Library Operating Grant Fund	45.43
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	INTERNATIONAL CEMETERY - Purch	Cemetery	99.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0630 - Purchas	General Fund	79.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0630 - Purchas	Parks And Recreation	399.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0630 - Purchas	General Fund	64.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	PESTICIDE APPLICATORS - Purcha	General Fund	225.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	SMARTSIGN - Purchase	General Fund	255.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	ZANKER LANDSCAPE MATER - Purch	General Fund	279.68
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	ZANKER LANDSCAPE MATER - Purch	General Fund	279.68
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	ZANKER LANDSCAPE MATER - Purch	General Fund	279.68
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 6635 - Purchas	General Fund	65.48
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0630 - Purchas	General Fund	189.51
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	NEWSTRIPE, INC - Purchase	General Fund	120.19

07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0630 - Purchas	Parks And Recreation	476.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	HOMEDEPOT.COM - Purchase	Parks And Recreation	412.02
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0630 - Purchas	Parks And Recreation	159.49
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0640 - Purchas	General Fund	476.90
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE ROP SHOP - Purchase	General Fund	156.85
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	WESTERN TOOL SUPPLY - Purcha	General Fund	108.16
07/06/2021	BANK OF AMERICA PROCUREMENT	00496083	PC0621PARK	THE HOME DEPOT 0630 - Purchas	General Fund	78.25
07/06/2021	BANK OF AMERICA PROCUREMENT	00496084	PC0621PLN1	PAUL W. ZIMMERMAN FOUN - Purch	General Fund	762.30
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	IN ARROWHEAD SCIENTIF - Purch	Police Operating Grant Fund	247.23
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	WWW.MOLEKULE.COM - Purchase	Police Operating Grant Fund	107.91
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	WWW.MOLEKULE.COM - Purchase	Police Operating Grant Fund	107.91
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	WWW.MOLEKULE.COM - Purchase	Police Operating Grant Fund	107.91
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	WWW.MOLEKULE.COM - Purchase	Police Operating Grant Fund	107.91
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	B H PHOTO 800-606-6969 - Purch	Police Operating Grant Fund	186.23
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	STAPLES DIRECT - Purchase	Police Operating Grant Fund	112.04
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	STAPLES DIRECT - Purchase	Police Operating Grant Fund	21.53
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	ULINE SHIP SUPPLIES - Purcha	Police Operating Grant Fund	263.05
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SAFARILAND, LLC - Purchase	Police Operating Grant Fund	303.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	PRECISION ROLLER - Purchase	General Fund	101.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	LASER PROS INTERNATIONAL - Purch	General Fund	115.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	IN BAY AREA PL SERVIC - Purch	General Fund	471.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	IN BAY AREA PL SERVIC - Purch	General Fund	1,334.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	CA2RS - Purchase	General Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	IN BAY AREA PL SERVIC - Purch	General Fund	785.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	ULINE SHIP SUPPLIES - Purcha	General Fund	542.88

07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	BEST BUY	00008516 - Purch	General Fund	174.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	BEST BUY	00008516 - Purch	General Fund	415.66
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	LOWES	02211 - Purchase	General Fund	187.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	THE HOME DEPOT	0642 - Purchas	General Fund	228.33
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	THE HOME DEPOT	0630 - Purchas	General Fund	9.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	LOWES	02211 - Purchase	General Fund	33.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	TAP PLASTICS	13 - Purchase	General Fund	70.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	BEST BUY	00008516 - Purch	General Fund	314.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SHERATON SAN DIEGO	- Purchase	General Fund	704.34
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SHERATON SAN DIEGO	- Purchase	General Fund	1.45
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	LAKE NATOMA INN	- Purchase	General Fund	534.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	RESIDENCE INN DOWNTOWN	- Purch	General Fund	394.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	CARMEL MISSION INN	- Purchase	General Fund	811.15
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	OPTICSPLANET, INC.	- Purchase	General Fund	227.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	RESIDENCE INN DOWNTOWN	- Purch	General Fund	394.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SANTA CLARA AQUAMAIDS	- Purcha	General Fund	102.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SANTA CLARA AQUAMAIDS	- Purcha	General Fund	102.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SMART AND FINAL	448 - Purchase	General Fund	84.02
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	CALIFORNIA POLICE CHIE	- Purch	General Fund	145.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	TST ATHENA GRILL	- Purchase	General Fund	162.08
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	CALIFORNIA POLICE CHIE	- Purch	General Fund	145.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	CALIFORNIA POLICE CHIE	- Purch	General Fund	2,315.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SAFEWAY	0763 - Purchase	General Fund	64.59
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	TST ATHENA GRILL	- Purchase	General Fund	17.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SP RE FACTOR TACTICA	- Credi	General Fund	-3.30
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	GAYLORD OPRY RESORT	- Purchase	General Fund	761.09
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	COURTYARD BY MARRIOTT	- Credit	General Fund	-0.01

07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	AMZN MKTP US 2R8HU0WS1 - Purch	General Fund	49.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	COURTYARD BY MARRIOTT - Credit	General Fund	-0.02
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	IN HALE OUTDOOR PRODU - Credi	General Fund	-431.46
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SOUTHWES 5262393057625 - Purc	General Fund	449.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	CARMEL MISSION INN - Purchase	General Fund	648.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	OPTICSPLANET, INC. - Credit	General Fund	-380.83
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SHERATON SAN DIEGO - Purchase	General Fund	706.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	PAYPAL KTLIC - Purchase	General Fund	149.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	NATIONAL ACADEMY OF EM - Purch	General Fund	198.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	NATIONAL ACADEMY OF EM - Purch	General Fund	395.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	STARBUCKS 800-782-7282 - Purch	General Fund	35.90
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	CHICK-FIL-A 03876 - Purchase	General Fund	70.51
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	W C Wolff Company - Purchase	General Fund	304.11
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	DOCUSIGN - Purchase	General Fund	60.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	ULINE SHIP SUPPLIES - Purcha	General Fund	147.94
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	SIRCHIE FINGER PRINT L - Purch	General Fund	121.07
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	PEAVEY CORP. - Purchase	General Fund	674.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	NEST LABS - Purchase	General Fund	20.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	AMAZON.COM 2X6RK6P60 A - Purch	General Fund	163.01
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	PEAVEY CORP. - Purchase	General Fund	152.87
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	STAPLES DIRECT - Purchase	General Fund	30.60
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	AMZN MKTP US 2R34S7HK0 - Purch	General Fund	10.89
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	AMZN MKTP US 2R3EJ6K00 - Purch	General Fund	84.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	AMZN MKTP US 2R0EC0IG0 - Purch	General Fund	62.78
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	FASTRAK CSC - Purchase	General Fund	25.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	LC Action Police Suppl - Vest	General Fund	848.05
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	AXON TASER - Purchase	General Fund	1,549.10
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	ATLAS BUSINESS SOLUTIO - Purch	General Fund	203.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496085	PC0621POLC	AMZN MKTP US 2X44C5LA0 - Purch	General Fund	35.55

07/06/2021	BANK OF AMERICA PROCUREMENT	00496086	PC0621PINV	ANIMALDENTALCLINIC - Purchase	General Fund	1,772.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	FASTSIGNS - Purchase	Cemetery	486.17
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	SMART AND FINAL 448 - Purchase	Park and Rec Opr GrantTst Fund	44.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMAZON.COM 2X39S1W31 A - Purch	General Fund	201.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	SMART AND FINAL 448 - Purchase	General Fund	89.91
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	SMART AND FINAL 448 - Purchase	General Fund	27.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	SAFEWAY 0700 - Purchase	General Fund	29.73
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMAZON.COM 2X7N11PK2 A - Purch	General Fund	43.62
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMAZON.COM 2X9PY9VJ0 A - Purch	General Fund	13.08
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN MKTP US 2X6XZ41G2 - Purch	General Fund	236.75
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN MKTP US 218373LD1 - Purch	General Fund	155.77
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	OTC BRANDS INC - Purchase	General Fund	265.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMAZON.COM 2X1NT92R0 A - Purch	General Fund	75.08
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	MICHAELS 9490 - Purchase	General Fund	11.77
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMAZON.COM 217DL2F90 A - Purch	General Fund	114.19
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	Twitter Online Ads - Purchase	General Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	Twitter Online Ads - Purchase	General Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	Twitter Online Ads - Purchase	General Fund	10.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	Twitter Online Ads - Purchase	General Fund	3.49
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	MICHAELS STORES 6713 - Purchas	General Fund	48.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	THE HOME DEPOT 0630 - Purchas	General Fund	25.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	Amazon Prime 2X70A8AJ0 - Purch	General Fund	129.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	TARGET.COM - Purchase	General Fund	926.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN Mktp US 2X18D99X1 - Purch	General Fund	22.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	WF WAYFAIR3593733596 - Purchas	General Fund	398.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN Mktp US 2X5YK6I81 - Purch	General Fund	1,217.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN MKTP US 2X8NC4D82 - Purch	General Fund	934.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	0868.0673.0470 IKEA US - Purch	General Fund	1,688.41
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	Amazon Prime 2R8FP8S00 - Purch	General Fund	129.71

07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	IN ARCADIA GRAPHIX - Purchase	General Fund	150.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	COMCAST CALIFORNIA - Purchase	General Fund	15.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN Mktp US 2X36O6MJ1 - Purch	General Fund	895.34
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN Mktp US 2X43Q5U12 - Purch	General Fund	86.64
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	PAYPAL CRITERION P - Purchase	General Fund	375.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMERICAN RED CROSS - Purchase	General Fund	120.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMERICAN RED CROSS - Purchase	General Fund	320.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	TARGET 00028308 - Purch	General Fund	85.82
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	TARGET 00028308 - Purch	General Fund	6.64
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	SAFEWAY 0700 - Purchase	General Fund	26.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	DBC BLICK ART MATERIAL - Purch	General Fund	30.84
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN MKTP US 2X3VU8AV2 - Purch	General Fund	52.30
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	MUSSON THEATRICAL, INC - Purch	General Fund	1,953.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	DBC BLICK ART MATERIAL - Purch	General Fund	103.37
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	USPS PO 0569480201 - Purchase	General Fund	277.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMAZON.COM 2X97Q0H61 A - Purch	General Fund	75.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN MKTP US 2X7OF6B91 - Purch	General Fund	38.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	AMZN MKTP US 2X6D682J1 - Purch	General Fund	76.28
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	STAPLES DIRECT - Purchase	General Fund	127.53
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	STAPLES DIRECT - Purchase	General Fund	9.52
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	SMART AND FINAL 448 - Purchase	Other City Dept Op Grant Fund	29.37
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	SAFEWAY 0763 - Purchase	Other City Dept Op Grant Fund	39.13
07/06/2021	BANK OF AMERICA PROCUREMENT	00496087	PC0621CRCP	ALTRADE SUPPLIES INC - Purchas	Other City Dept Op Grant Fund	2,394.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	AMZN MKTP US 2X90P0PR2 - Purch	Fleet Operation Fund	107.88
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	OFFICE DEPOT 1135 - Purchase	Fleet Operation Fund	140.61
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	OFFICE DEPOT 1135 - Purchase	Fleet Operation Fund	149.01
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	THE HOME DEPOT 0630 - Purchas	General Fund	62.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	THE HOME DEPOT 0630 - Purchas	General Fund	177.02

07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	GRAINGER - Purchase	General Fund	21.65
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	GRAINGER - Purchase	General Fund	660.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	THE HOME DEPOT 0630 - Credit	General Fund	-140.61
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	THE HOME DEPOT 0630 - Purchas	General Fund	758.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	ALMETEK INDUSTRIES - Purchase	General Fund	2,320.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	TREESTUFF - Purchase	General Fund	8,022.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	AMZN MKTP US 2X0WP2X61 - Purch	General Fund	86.05
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	OFFICE DEPOT 5125 - Purchase	General Fund	43.59
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	AMZN MKTP US 2X6Z45OA2 - Purch	General Fund	114.45
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	AMZN MKTP US 2X5E181H0 - Purch	General Fund	179.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	TREESTUFF - Purchase	General Fund	3,601.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	JENDCO SAFETY SUPPLY - Purchas	General Fund	1,579.21
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	THE HOME DEPOT 0630 - Purchas	General Fund	11.41
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	APPLE.COM BILL - Purchase	General Fund	0.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	THE HOME DEPOT 0634 - Credit	General Fund	-95.34
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	HOMEDEPOT.COM - Purchase	General Fund	1,785.42
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	HOMEDEPOT.COM - Purchase	General Fund	94.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	THE HOME DEPOT 0630 - Purchas	General Fund	23.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	AMZN Mktp US - Credit	General Fund	-925.41
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	POWER EQUIP DIRECT - Purchase	General Fund	2,999.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	LOWES 02211 - Purchase	General Fund	400.84
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	SP OLD SOUTH TRADE - Purchas	General Fund	400.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	SP OLD SOUTH TRADE - Purchas	General Fund	400.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496088	PC0621STRT	SP OLD SOUTH TRADE - Purchas	General Fund	279.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	192.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	CWEA Assoc. Membership Renewal	Water Utility	192.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	CSM-1 Renewal Fee	Water Utility	91.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	PM-1 Renewal Fee	Water Utility	91.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	53.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	53.00

07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	OPC STATE WB FEE - Purchase	Water Utility	2.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	STATE WATER BOARD - Purchase	Water Utility	120.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00496089	PC0621WATR	4IMPRINT - Purchase	Water Utility	1,436.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00497738	PC0621-2AUTO	WWW.ASCYCLES.COM - Purchase	Fleet Operation Fund	26.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00497738	PC0621-2AUTO	A TOOL SHED (SANTA CLA - Purch	Fleet Operation Fund	70.37
07/06/2021	BANK OF AMERICA PROCUREMENT	00497738	PC0621-2AUTO	CAMPWAYS TRUCK ACCESSO - Purch	Fleet Operation Fund	66.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00497738	PC0621-2AUTO	KTEC E-STORE - Purchase	Fleet Operation Fund	167.01
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	Expendable Trust Funds	8.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	RSD - SAN JOSE#38 - Purchase	Cemetery	237.89
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	SMARTSIGN - Purchase	General Fund	502.47
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	SMARTSIGN - Purchase	General Fund	63.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	AMAZON.COM 2125D0VW2 A - Purch	General Fund	13.07
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	26.13
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	71.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	RUSSELL SIGLER INC - Purchase	General Fund	34.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	42.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Credit	General Fund	-27.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	49.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	AMAZON.COM 211KD6MR1 A - Purch	General Fund	95.52
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	AMAZON.COM 2185M54O0 A - Purch	General Fund	99.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	SP MODERN LOCKSMITH - Purcha	General Fund	1,400.10
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	209.05
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	BATTERIES PLUS #0475 - Purchas	General Fund	23.66
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	CONLEFF PLUMBING SUPPL - Purch	General Fund	161.87
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	45.78
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	8.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	BEDROSANS BLDG SPLY 1 - Purch	General Fund	299.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	30.33

07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	BEDROSIANS BLDG SPLY 1 - Purch	General Fund	55.21
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	DAL-TILE #121 SAN JOSE - Purch	General Fund	156.02
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	21.21
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	SANTA CLARA WINDUSTRIA - Purch	General Fund	77.19
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	HOMEDEPOT.COM - Purchase	General Fund	70.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	ZORO TOOLS INC - Credit	General Fund	-31.71
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	BULLNOSE TILE - Purchase	General Fund	22.55
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	BEDROSIANS BLDG SPLY 1 - Purch	General Fund	166.67
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	General Fund	8.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0640 - Purchas	General Fund	67.50
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	AMAZON.COM 215NV51D0 A - Purch	General Fund	61.04
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	Electric Utility	2.04
07/06/2021	BANK OF AMERICA PROCUREMENT	00497739	PC0621-2BLDG	THE HOME DEPOT #0630 - Purchas	Electric Utility	5.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00497740	PC0621-2PLN2	ALMADEN - Purchase	General Fund	757.55
07/06/2021	BANK OF AMERICA PROCUREMENT	00497740	PC0621-2PLN2	AMZN MKTP US AMZN.COM - Credi	General Fund	-58.37
07/06/2021	BANK OF AMERICA PROCUREMENT	00497741	PC0621-2ATTY	ONELEGAL CCSALE0335279 - Purch	General Fund	12.35
07/06/2021	BANK OF AMERICA PROCUREMENT	00497741	PC0621-2ATTY	ONELEGAL CCSALE0336420 - Purch	General Fund	12.35
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	MICHAELS STORES 6713 - Purchas	General Fund	4.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	WOWZY CREATION CORP. - Purchas	General Fund	929.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	J.B. TROPHIES - Purchase	General Fund	37.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	T & ART - Purchase	General Fund	76.48
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	ABB BOUDIN CATERING - Purchase	General Fund	212.17
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	SMART AND FINAL 448 - Purchase	General Fund	23.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	PANERA BREAD #204482 O - Purch	General Fund	224.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	ACHILLES ACHILLES - Purchas	General Fund	202.51
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	THE SOURCING GROUP LLC - Purch	General Fund	70.85
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	MENDOCINO FARMS 18ONLI - Purch	General Fund	230.91
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	CLAIM ADJ PAYPAL MICHIGA - Cr	General Fund	500.00

07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	MICHAELS STORES 6713 - Purchas	General Fund	4.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00497742	PC0621-2CNCL	EVOSHOP LLC - Purchase	General Fund	258.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00497743	PC0621-2MNGR	AMZN MKTP US 2X5S86AU0 - Purch	Public Education and Governmnt	148.41
07/06/2021	BANK OF AMERICA PROCUREMENT	00497743	PC0621-2MNGR	MOTION ARRAY MONTHLY - Purchas	General Fund	29.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00497743	PC0621-2MNGR	SJ MERCURY NEWS CIRC - Purchas	General Fund	14.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497743	PC0621-2MNGR	COMMUNICAID INC - Purchase	General Fund	75.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497743	PC0621-2MNGR	CKO WWW.ISTOCKPHOTO.CO - Purch	General Fund	92.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497744	PC0621-2COMM	BATTERY WAREHOUSE DIRE - Purch	General Fund	95.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00497745	PC0621-2ELECT	PP FACEBOOK FACEBOOK A - Purch	Elec OperatingGrant Trust Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497745	PC0621-2ELECT	PP FACEBOOK FACEBOOK A - Purch	Elec OperatingGrant Trust Fund	100.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497745	PC0621-2ELECT	PP FACEBOOK FACEBOOK A - Purch	Elec OperatingGrant Trust Fund	100.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497745	PC0621-2ELECT	NETA - Purchase	Electric Utility	647.41
07/06/2021	BANK OF AMERICA PROCUREMENT	00497745	PC0621-2ELECT	TEAMWORK.COM PROJECTS - Purcha	Electric Utility	149.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497745	PC0621-2ELECT	INTERNATIONAL TRANSACTION - Pu	Electric Utility	1.19
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	HACH COMPANY - Purchase	Electric Utility	607.13
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	IN ALLESCO MANAGEMENT - Purch	Electric Utility	1,045.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	MOUSER ELECTRONICS INC - Purch	Electric Utility	1,251.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	MICRO MOTION INC - Purchase	Electric Utility	1,418.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	CALTROL- INC. - Purchase	Electric Utility	1,367.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	CALTROL- INC. - Purchase	Electric Utility	109.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	SQ ACE SEAL LLC - Purchase	Electric Utility	15.73
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	MCMASTER-CARR - Purchase	Electric Utility	763.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	ULINE SHIP SUPPLIES - Purcha	Electric Utility	1,094.42
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	MCMASTER-CARR - Purchase	Electric Utility	89.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	SP DMARK CORPORATION - Purch	Electric Utility	132.59

07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	SQ BRIGHTLIGHT WELDIN - Purch	Electric Utility	283.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	ZORO TOOLS INC - Purchase	Electric Utility	11.01
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	CTI CONTROLTECH - Purchase	Electric Utility	2,060.94
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	SANTA CLARA WINDUSTRIA - Purch	Electric Utility	80.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	AMZN MKTP US 2105U0GZ0 - Purch	Electric Utility	79.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00497746	PC0621-2ELEC	AMZN Mktp US 2189T17H1 - Purch	Electric Utility	29.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	THE HOME DEPOT #0630 - Purchas	Electric Utility	28.30
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	PELICAN SIGNS - Purchase	Electric Utility	1,742.58
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	NFPA NATL FIRE PROTECT - Purch	Electric Utility	175.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	NFPA NATL FIRE PROTECT - Purch	Electric Utility	211.46
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	CIRCADIAN STORE - Purchase	Electric Utility	863.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	THE HOME DEPOT #0630 - Purchas	Electric Utility	48.24
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	COMCAST CALIFORNIA - Purchase	Electric Utility	66.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	BLUECOSMO - Purchase	Electric Utility	41.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	PHILIPS LIFELINE - Purchase	Electric Utility	48.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	CALIFORNIA SERVICE TOO - Purch	Electric Utility	469.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	BIG 5 SPORTING GOODS 0 - Purch	Electric Utility	28.37
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	AMZN MKTP US 2X8GB95G1 - Purch	Electric Utility	653.82
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	STAPLES DIRECT - Purchase	Electric Utility	333.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	AMAZON.COM 2X4X95U81 A - Purch	Electric Utility	35.41
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	ANIXTER INC - UPS - Purchase	Electric Utility	4,756.22
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	D&M TRAFFIC SERVICES - Purchas	Electric Utility	1,952.84
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	AMZN Mktp US 212VH7M21 - Purch	Electric Utility	161.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	AMZN Mktp US 211GT1HP1 - Purch	Electric Utility	119.10
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	TARGET.COM - Purchase	Electric Utility	5.44
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	TARGET.COM - Purchase	Electric Utility	59.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	AMZN MKTP US 216W22132 - Purch	Electric Utility	993.29
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	METRO TECH CORPORATION - Purch	Electric Utility	251.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	AMZN Mktp US 211032VV2 - Purch	Electric Utility	64.45

07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	HNS HughesNet.com - Purchase	Electric Utility	119.94
07/06/2021	BANK OF AMERICA PROCUREMENT	00497747	PC0621-2EFLD	GRAINGER - Purchase	Electric Utility	42.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	Twitter Online Ads - Purchase	Elec OperatingGrant Trust Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	EB RACE TO NET ZERO E - Purcha	Elec OperatingGrant Trust Fund	28.16
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	VISTAPR VistaPrint.com - Purch	Elec OperatingGrant Trust Fund	63.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	Twitter Online Ads - Purchase	Elec OperatingGrant Trust Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	Twitter Online Ads - Purchase	Elec OperatingGrant Trust Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	Twitter Online Ads - Purchase	Elec OperatingGrant Trust Fund	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	VISTAPR VistaPrint.com - Purch	Elec OperatingGrant Trust Fund	450.98
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	Twitter Online Ads - Purchase	Elec OperatingGrant Trust Fund	150.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	Twitter Online Ads - Purchase	Elec OperatingGrant Trust Fund	4.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	CKO WWW.ISTOCKPHOTO.CO - Purch	Elec OperatingGrant Trust Fund	115.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	PAYPAL SOFTWARE - Credit	Electric Utility Construction	-4.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	INTERNATIONAL TRANSACTION - Cr	Electric Utility Construction	-0.04
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	WEB NETWORKSOLUTIONS - Purchas	Electric Utility Construction	1,559.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	WEB NETWORKSOLUTIONS - Purchas	Electric Utility Construction	75.97
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	AMAZON.COM 2R8XZ6KH2 A - Purch	Electric Utility	132.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	FEDEX 787858245628 - Purchase	Electric Utility	23.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	AMZN MKTP US 2X92D1S30 - Purch	Electric Utility	42.48
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	AMZN MKTP US 2X4D41752 - Purch	Electric Utility	81.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	FEDEX 940614506102 - Purchase	Electric Utility	16.35
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	FEDEX 280381859075 - Purchase	Electric Utility	201.56

07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	AMAZON.COM 212WO8LJ2 A - Purch	Electric Utility	359.68
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	ADOBE ACROPRO SUBS - Purchase	Electric Utility	24.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	EB RACE TO NET ZERO E - Purcha	Electric Utility	28.16
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	EB RACE TO NET ZERO E - Purcha	Electric Utility	56.32
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	EB RACE TO NET ZERO E - Purcha	Electric Utility	28.16
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	SAFARI MICRO - Purchase	Electric Utility	94.44
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	SAFARI MICRO - Purchase	Electric Utility	94.44
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	Hilgraeve Inc - Purchase	Electric Utility	194.97
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	AMAZON.COM 2X1VM2WS0 A - Purch	Electric Utility	59.54
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	HNS HughesNet.com - Purchase	Electric Utility	96.94
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	ATT BILL PAYMENT - Purchase	Electric Utility	74.90
07/06/2021	BANK OF AMERICA PROCUREMENT	00497748	PC0621-2EREC	DTV DIRECTV SERVICE - Purchase	Electric Utility	240.98
07/06/2021	BANK OF AMERICA PROCUREMENT	00497749	PC0621-2FINC	STAPLES 00107193 - Purch	General Fund	43.67
07/06/2021	BANK OF AMERICA PROCUREMENT	00497749	PC0621-2FINC	WESTERN CONTRACT INTER - Purch	General Fund	1,088.82
07/06/2021	BANK OF AMERICA PROCUREMENT	00497749	PC0621-2FINC	USPS PO 0569480201 - Purchase	General Fund	35.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497749	PC0621-2FINC	USPS PO 0569480201 - Purchase	General Fund	23.85
07/06/2021	BANK OF AMERICA PROCUREMENT	00497749	PC0621-2FINC	THE HOME DEPOT #0630 - Purchas	Electric Utility	54.42
07/06/2021	BANK OF AMERICA PROCUREMENT	00497749	PC0621-2FINC	THE HOME DEPOT #0630 - Purchas	Sewer Utility	77.94
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	SPREADZ LOC. #1 - Purchase	General Fund	56.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	SPREADZ LOC. #1 - Purchase	General Fund	243.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	7-ELEVEN 17733 - Purchase	General Fund	12.05
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	TST ATHENA GRILL - Purchase	General Fund	257.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	AMERICAN HEART SHOPCPR - Purch	General Fund	11.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	AMERICAN HEART SHOPCPR - Purch	General Fund	5.90
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	AMERICAN HEART SHOPCPR - Purch	General Fund	11.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	THE HOME DEPOT #1041 - Purchas	General Fund	533.14
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	FASTSIGNS OF SUNNYVALE - Purch	General Fund	2,500.00

07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	AMAZON.COM 218MW2VD1 A - Purch	General Fund	1,209.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	FASTSIGNS OF SUNNYVALE - Purch	General Fund	376.34
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	FASTSIGNS OF SUNNYVALE - Purch	General Fund	2,025.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	CA NEWSPAPERS ADV S - Purchase	General Fund	531.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	MALLORY SAFETY AND SUP - Purch	General Fund	3,000.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	MALLORY SAFETY AND SUP - Purch	General Fund	2,515.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	USPS.COM CLICKNSHIP - Purchase	General Fund	7.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	HILLS SIGNS - Purchase	General Fund	60.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	FEDEX 91850953 - Purchase	General Fund	88.98
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	FEDEX 91850959 - Purchase	General Fund	246.48
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	THIRD EAR SOUND COMPAN - Purch	General Fund	4,084.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	IN THE ED. JONES COMP - Purch	General Fund	112.87
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	GLENDALE PARADE STORE - Purcha	General Fund	626.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	ADOBE 800-833-6687 - Purchas	General Fund	14.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	SPREADZ LOC. #1 - Purchase	General Fund	185.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	PANERA BREAD #204482 O - Purch	General Fund	58.78
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	PANERA BREAD #204482 O - Purch	General Fund	66.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	TST GREENFISH TERIYAK - Purch	General Fund	171.67
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	PANERA BREAD #204482 O - Purch	General Fund	81.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	PANERA BREAD #204482 O - Purch	General Fund	77.28
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	GALLS - Purchase	General Fund	931.23
07/06/2021	BANK OF AMERICA PROCUREMENT	00497750	PC0621-2FIRE	DROPBOX M6QK2R3C8TXM - Purchas	General Fund	19.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	ASSOCIATION FOR CALIFO - Purch	General Fund	60.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	ASSOCIATION FOR CALIFO - Purch	General Fund	60.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	AMERICAN PUBLIC WORKS - Purcha	General Fund	325.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	CALPELRA - Purchase	General Fund	370.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	CALPELRA - Purchase	General Fund	860.00

07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	CALPELRA - Purchase	General Fund	2,180.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	CA PARK REC SOCIETY - Purchase	General Fund	75.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	ZOOM.US 888-799-9666 - Purchas	General Fund	14.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	BROWN AND CALDWELL - Purchase	Water Utility	160.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	PAYPAL CWEA - Purchase	Water Utility	232.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	AMERICAN PUBLIC WORKS - Purcha	General Fund	325.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	ASCE CAREER CENTER - Purchase	Water Utility	396.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	YOURMEMBER-CAREERS - Purchase	Water Utility	319.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	BROWN AND CALDWELL - Purchase	Sewer Utility	40.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	PAYPAL CWEA - Purchase	Sewer Utility	58.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	ASCE CAREER CENTER - Purchase	Sewer Utility	99.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497751	PC0621-2HREC	YOURMEMBER-CAREERS - Purchase	Sewer Utility	79.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-Laptop battery for Park	General Fund	71.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-Laptop battery for Poli	General Fund	71.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-Laptop batteries for Fi	General Fund	142.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-Laptop battery for HR	General Fund	71.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-Laptop battery for EOC	General Fund	71.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-headset for CDD-Yolanda	General Fund	213.08
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	GODADDY.COM - Linux Hosting mo	Information Technology Service	10.99
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-Laptop batteries for st	General Government - Other	174.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	ZOOM-monthly renewal	Information Technology Service	50.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	CBI IDM - Ultra Edit software	Information Technology Service	99.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-headset for stock	General Government - Other	149.86
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	ZOOM-monthly renewal	Information Technology Service	814.90
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	HOOTSUITE-monthly renewal	Information Technology Service	75.00

07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	AMAZON-electronic wipes for IT	Information Technology Service	17.94
07/06/2021	BANK OF AMERICA PROCUREMENT	00497752	PC0621-2INFO	Amazon-dust cans for IT	Information Technology Service	46.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00497753	PC0621-2LIBR	B2B Prime 212YN9GB2 - Purchase	General Fund	195.11
07/06/2021	BANK OF AMERICA PROCUREMENT	00497753	PC0621-2LIBR	AMZN MKTP US 218G98PB2 - Purch	General Fund	104.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00497753	PC0621-2LIBR	Amazon Prime 2154W8F62 - Purch	General Fund	14.16
07/06/2021	BANK OF AMERICA PROCUREMENT	00497753	PC0621-2LIBR	POS SUPPLY SOLUTIONS - Purchas	General Fund	339.82
07/06/2021	BANK OF AMERICA PROCUREMENT	00497753	PC0621-2LIBR	CALIFORNIA LIBRARY ASS - Purch	General Fund	1,000.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	CENTRAL WHOLESALE NURS - Purch	General Fund	601.26
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	ZANKER LANDSCAPE MATER - Purch	Parks And Recreation	209.76
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	THE HOME DEPOT #0630 - Purchas	General Fund	166.34
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	THE HOME DEPOT #0630 - Purchas	General Fund	22.60
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	CA PARK REC SOCIETY - Purchase	General Fund	1,785.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	AMZN MKTP US 210FZ0MR2 - Purch	General Fund	94.30
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	THE HOME DEPOT #0630 - Purchas	General Fund	158.15
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	THE HOME DEPOT #0630 - Purchas	General Fund	55.80
07/06/2021	BANK OF AMERICA PROCUREMENT	00497754	PC0621-2PARK	THE HOME DEPOT #0630 - Purchas	General Fund	32.25
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	CSI FORENSIC SUPPLY - Purchase	Police Operating Grant Fund	127.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTH BAY PUBLIC SAFET - Purch	General Fund	157.08
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	CARMEL MISSION INN - Purchase	General Fund	648.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	89.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	CALIBRE PRESS - Purchase	General Fund	219.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261402452265 - Purc	General Fund	201.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261402453539 - Purc	General Fund	201.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	89.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261402455130 - Purc	General Fund	201.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261402454801 - Purc	General Fund	201.96

07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	89.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	89.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261402452870 - Purc	General Fund	201.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	89.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261402453245 - Purc	General Fund	201.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261402346497 - Purc	General Fund	197.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	89.27
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SAFEWAY #0763 - Stuff	General Fund	15.48
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	EMBELLISH FX - ECOMMER - Purch	General Fund	10.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	VANG COMP SYSTEMS - Purchase	General Fund	176.60
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	ATT COURT ORDER CHGS - Purchas	General Fund	250.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	AMZN Mktp US 293P624P1 - Purch	General Fund	58.35
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	AMZN MKTP US 210C483I0 - Purch	General Fund	5.69
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	AMZN MKTP US 213CV2360 - Purch	General Fund	48.03
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	CARMEL MISSION INN - Purchase	General Fund	811.15
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SPK SPOKEO SEARCH - Purchase	General Fund	14.85
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5262398577457 - Purc	General Fund	196.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5262398583937 - Purc	General Fund	167.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	IN THIRD DEGREE COMMU - Purch	General Fund	225.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5262398565119 - Purc	General Fund	237.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5262398574511 - Purc	General Fund	186.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5262398569744 - Purc	General Fund	237.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5262398581407 - Purc	General Fund	167.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5262398272375 - Purc	General Fund	463.96
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	ALASKA A 0272186202831 - Purc	General Fund	1,138.40
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	EVENT TASER - Purchase	General Fund	499.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	DOUBLETREE HOTELS - Purchase	General Fund	432.92

07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	DOUBLETREE ANAHEIM - Purchase	General Fund	426.90
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	ADVANCED OFFICERS - Purchase	General Fund	206.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SOUTHWES 5261400460376 - Purc	General Fund	150.38
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SHERATON - Purchase	General Fund	692.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	STARBUCKS 800-782-7282 - Purch	General Government - Other	17.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	STARBUCKS 800-782-7282 - Purch	General Government - Other	17.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497755	PC0621-2POLC	SAFEWAY #0763 - Purchase	General Government - Other	43.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00497756	PC0621-2PINV	PRINCETON VET CLINIC - Purchas	General Fund	553.52
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	SUMMERWINDS NURSERY #5 - Purch	General Fund	243.49
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	MICHAELS STORES 5155 - Purchas	General Fund	12.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	THE HOME DEPOT #0630 - Purchas	General Fund	33.09
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	SMART AND FINAL 448 - Purchase	Park and Rec Opr GrantTst Fund	22.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US 212XY0A42 - Purch	General Fund	30.36
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	ROSS STORES #237 - Purchase	General Fund	30.45
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	FUN EXPRESS - Purchase	General Fund	69.92
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	ARBONNE - Purchase	General Fund	-213.43
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	Claim ADJ PAYPAL THAT TH - Cr	General Fund	24.45
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	ARBONNE - Purchase	General Fund	213.43
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	CVS PHARMACY #09901 - Purchase	General Fund	5.45
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	FACEBK 2UCAV6BHY2 - Purchase	General Fund	97.29
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	PETSMART # 0072 - Purchase	General Fund	15.25
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	JOANN STORES #1878 - Purchase	General Fund	44.10
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	THE HOME DEPOT #0630 - Purchas	General Fund	213.93
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN Mktp US 2160Q1251 - Purch	General Fund	15.77
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN Mktp US 2135F22E1 - Purch	General Fund	21.79
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMAZON.COM 217XN4KX1 A - Purch	General Fund	17.39
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN Mktp US 216KN0J32 - Purch	General Fund	33.73

07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN Mktp US 2199R8PU0 - Purch	General Fund	16.34
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN Mktp US 213E150M0 - Purch	General Fund	56.64
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US 217TX31G2 - Purch	General Fund	18.06
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	CHEAPESTEES.COM - Purchase	General Fund	54.19
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US 210R51IB1 - Purch	General Fund	411.82
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN Mktp US 211YN40W2 - Purch	General Fund	22.52
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US AMZN.COM/ - Credi	General Fund	-26.15
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US AMZN.COM/ - Credi	General Fund	-26.15
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US 215XL7LZ0 - Purch	General Fund	52.42
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US 2184I8B21 - Purch	General Fund	23.20
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	SMART AND FINAL 448 - Purchase	General Fund	26.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497757	PC0621-2CRCP	AMZN MKTP US 214YT4MC2 - Purch	General Fund	21.70
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	A TOOL SHED (SANTA CLA - Purch	General Fund	83.31
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	AUTOMOTIVE TOOLS AND E - Purch	General Fund	31.34
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	THE HOME DEPOT #0630 - Purchas	General Fund	58.63
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	THE HOME DEPOT #0630 - Purchas	General Fund	81.88
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	PROPERTYSCOUT PRO PLAN - Purch	General Fund	59.95
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	E-TRAINING INC. - Purchase	General Fund	248.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	E-TRAINING INC. - Purchase	General Fund	89.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	E-TRAINING INC. - Purchase	General Fund	89.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497758	PC0621-2STRT	AMZN MKTP US 2X0E68RM2 - Purch	General Fund	30.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	PINE CONE LUMBER - Purchase	Water Utility Construction	1,222.72
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	91.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	LATE FEE	Water Utility	25.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	192.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	96.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	96.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	192.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	SILLWORKS LTD - Purchase	Water Utility	189.31

07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	INTERNATIONAL TRANSACTION - Pu	Water Utility	1.51
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	HACH COMPANY - Purchase	Water Utility	569.61
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	MAIN STREET BAGEL NO 3 - Purch	Water Utility	30.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	METAL-WERX LLC - Purchase	Water Utility	110.18
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	HOTSTART - Purchase	Water Utility	424.08
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	AWWA.ORG - Purchase	Water Utility	370.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	SP BNI BUILDING NEWS - Purch	Water Utility	184.56
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	BAY AREA AIR QUALITY M - Purch	Sewer Utility	394.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	PAYMENTUS CORP - Purchase	Sewer Utility	11.62
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Sewer Utility	101.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Sewer Utility	192.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	CALIFORNIA WATER ENVIR - Purch	Sewer Utility	101.00
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	AUTOMATIONDIRECT.COM - Purchas	Sewer Utility	202.74
07/06/2021	BANK OF AMERICA PROCUREMENT	00497759	PC0621-2WATR	MAIN STREET BAGEL NO 3 - Purch	Sewer Utility	30.00
				Total for Payment No.:		247,218.00

Payment No: 652236

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	RECOLOGY SOUTH BAY	00497072	JUNE-21	JUNE 2021 RECYCLING SERVICES	Solid Waste Program	238,209.67
				Total for Payment No.:		238,209.67

Payment No: W22030

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	UNION BANK	00497101	2929JUL2021	Interest on 2013 COPs	Public Facilities Financing Co	233,557.50
				Total for Payment No.:		233,557.50

Payment No: 019963

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497126	S6730977.001	SERVICE SLEEVE	Electric Utility	1,270.18
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497132	S6731704.001	ENTRANCE SLEEVES	Electric Utility	2,080.70
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497865	S6685613.006	CONNECTOR, SPLIT BOLT, CU/CU,	Electric Utility	5,009.64
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497866	S6692778.001	SPLICE KIT, 115kv, 600A, COLD	Electric Utility	200,120.73
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497867	S6708178.006	TERMINAL, LUG, 2 HOLE PAD, COM	Electric Utility	245.45
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497868	S6722885.001	WIRE, AL, 600V, #4 STR. DUPLEX	Electric Utility	3,706.00
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497869	S6717801.003	CROSSARM, 9', "PUPI" HEAVY DUT	Electric Utility	12,708.31
07/23/2021	ONESOURCE DISTRIBUTORS LLC	00497870	S6692778.003	CONNECTOR, SERVICE DROP, INSUL	Electric Utility	2,580.03
				Total for Payment No.:		227,721.04

Payment No: 019945

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	GENERAL ELECTRIC INTL INC	00497686	21616675	SMO1173100 STAGE 1 BUCKET KIT	Electric Utility Construction	213,868.46
				Total for Payment No.:		213,868.46

Payment No: 652474

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 2 GEN OVERHAUL LABOR	Electric Utility Construction	74,363.00
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 2 GEN OVERHAUL MATERIALS	Electric Utility Construction	4,360.00
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 4.1 GEN STATOR REWEDGE LAB	Electric Utility Construction	28,645.00
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 4.11.1 10K FORKLIFT RENTAL	Electric Utility Construction	12,800.00
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 4.11.2 CRANE SERVICES	Electric Utility Construction	26,000.00
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 4.11.3 SCAFFOLDING	Electric Utility Construction	13,500.00
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 4.11.4 TRUCKING SERVICE	Electric Utility Construction	16,042.80

07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 4.11.5 PORTABLE RESTROOMS	Electric Utility Construction	1,500.00
07/30/2021	ELECTRICAL MAINTENANCE	00498098	21-4743-2	SEC 8 EXTRA WORK	Electric Utility Construction	14,338.90
Total for Payment No.:						191,549.70

Payment No: 019878

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FISHER SCIENTIFIC	00496927	1180495	FHT 1377-GN2 PACKEYE THERMO SC	General Fund	2,745.42
07/16/2021	FISHER SCIENTIFIC	00496927	1180495	FHT 1377-GN2 PACKEYE THERMO SC	Fire Operating Grant Fund	184,999.99
Total for Payment No.:						187,745.41

Payment No: 019823

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HARRIS COMPUTER SYSTEMS	00496304	MN00135492	ANNUAL MAINTENANCE SUPPORT	General Fund	152,589.88
07/09/2021	HARRIS COMPUTER SYSTEMS	00496304	MN00135492	AMI SUPPORT	Electric Utility	28,939.75
Total for Payment No.:						181,529.63

Payment No: W22006

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	WASHINGTON TRUST BANK	00496453	06/13/21-06/26/21	WT:VEBA CONTRIB B2113	Fringe Benefits	171,708.03
Total for Payment No.:						171,708.03

Payment No: 020012

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	FLYNN RESOURCE CONSULTANTS INC	00497658	1480	CAISO,CRR,PG&E,LITIG MAR-APR21	Electric Utility	167,788.75
Total for Payment No.:						167,788.75

Payment No: 652322

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497676	8600100287	PART NUMBER: 1KGT037400R0001 /	Electric Utility	1,217.33
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497676	8600100287	PART NUMBER: 1KGT031500R0001 /	Electric Utility	150.94
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497676	8600100287	PART NUMBER : 1KGT034400R0001	Electric Utility	150.94
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497676	8600100287	PART NUMBER: 1KGT033200R0001 /	Electric Utility	136.72
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497676	8600100287	PART NUMBER: 1KGT033300R1002 /	Electric Utility	175.00
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497676	8600100287	PART NUMBER: 1KGT201442R0012 /	Electric Utility	2,953.08
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497723	8600104368	TRANSFORMER, PAD, 2000 KVA, 48	Electric Utility	31,746.25
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497724	8600105039	TRANSFORMER, PAD, 2000 KVA, 48	Electric Utility	31,782.66
07/23/2021	ABB ENTERPRISE SOFTWARE INC.	00497725	8600104159	TRANSFORMER, PAD, 2000 KVA, 48	Electric Utility	95,238.75
				Total for Payment No.:		163,551.67

Payment No: 020050

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	US DEPT OF ENERGY	00497062	NNPB000270621	POWER BILL JUN21	Electric Utility	811,397.55
07/30/2021	US DEPT OF ENERGY	00497062	NNPB000270621	CVP O&M FUNDING CREDIT	Electric Utility	-656,657.00
				Total for Payment No.:		154,740.55

Payment No: 652185

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BILL WILSON CENTER	00496933	TBRA-10-2020BW	BWC-TBRA HOME FY20/21	H.U.D Capital Projects	34,978.00
07/16/2021	BILL WILSON CENTER	00496933	TBRA-10-2020BW	BWC-TBRA HSCAG/SB341 FY20/21	Housing Successor	12,735.78
07/16/2021	BILL WILSON CENTER	00496934	TBRA-11-2020BW	BWC-TBRA HOME FY20/21	H.U.D Capital Projects	33,796.00
07/16/2021	BILL WILSON CENTER	00496934	TBRA-11-2020BW	BWC-TBRA HSCAG/SB341 FY20/21	Housing Successor	11,097.91
07/16/2021	BILL WILSON CENTER	00496935	TBRA-12-2020BW	BWC-TBRA HOME FY20/21	H.U.D Capital Projects	44,942.00
07/16/2021	BILL WILSON CENTER	00496935	TBRA-12-2020BW	BWC-TBRA HSCAG/SB341 FY20/21	Housing Successor	16,381.25

Total for Payment No.: 153,930.94

Payment No: 020035

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	NO CALIF POWER AGENCY	00497058	CVP0721002	WAPA REST FUND LEVELIZED JUL21	Electric Utility	185,965.29
07/30/2021	NO CALIF POWER AGENCY	00497058	CVP0721002	WAPA REST FUND LEVELIZED JUL21	Electric Utility	-35,965.29
Total for Payment No.:						150,000.00

Payment No: 019837

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PG&E	00496305	6738869084-3 JUN2021	GAS TRANSPORT DVR MAY21	Electric Utility	149,220.03
Total for Payment No.:						149,220.03

Payment No: 019884

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GE SUPPLY	00496924	21618402	SMO1188600 STAGE 2 BUCKET KIT	Electric Utility Construction	148,876.56
Total for Payment No.:						148,876.56

Payment No: 652095

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	INNOVATIVE INTERFACES INC	00496438	INV-INC28226	ANNUAL SIERRA SOFTWARE SUB	General Fund	119,692.09
07/09/2021	INNOVATIVE INTERFACES INC	00496440	INV-INC28227	ANNUAL RESOURCE SHARING	General Fund	24,507.97
Total for Payment No.:						144,200.06

Payment No: 652459

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BAY AREA TREE SPECIALISTS	00498060	67028	TREE PRUNING AND REMOVALS	General Fund	6,715.00

				SERV		
07/30/2021	BAY AREA TREE SPECIALISTS	00498061	67029	TREE PRUNING AND REMOVALS SERV	General Fund	46,475.00
07/30/2021	BAY AREA TREE SPECIALISTS	00498062	67044	TREE PRUNING AND REMOVALS SERV	General Fund	17,300.00
07/30/2021	BAY AREA TREE SPECIALISTS	00498063	67178	TREE PRUNING AND REMOVALS SERV	General Fund	59,360.00
				Total for Payment No.:		129,850.00

Payment No: 652452

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ABODE SERVICES	00498104	TBRA-03-2021AB	ABODE-TBRA CAHF FY20/21	City Affordable Housing	12,942.22
07/30/2021	ABODE SERVICES	00498104	TBRA-03-2021AB	ABODE-TBRA HOME FY20/21	H.U.D Capital Projects	39,848.37
07/30/2021	ABODE SERVICES	00498108	TBRA-04-2021AB	ABODE-TBRA CAHF FY20/21	City Affordable Housing	10,705.95
07/30/2021	ABODE SERVICES	00498108	TBRA-04-2021AB	ABODE-TBRA HOME FY20/21	H.U.D Capital Projects	28,075.14
07/30/2021	ABODE SERVICES	00498113	TBRA-05-2021AB	ABODE-TBRA CAHF FY20/21	City Affordable Housing	6,736.09
07/30/2021	ABODE SERVICES	00498113	TBRA-05-2021AB	ABODE-TBRA HOME FY20/21	H.U.D Capital Projects	31,022.29
				Total for Payment No.:		129,330.06

Payment No: W22022

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	WASHINGTON TRUST BANK	00497192	06/27/21-07/10/21	WT:VEBA DEDUCTIONS B2114	Fringe Benefits	124,297.19
				Total for Payment No.:		124,297.19

Payment No: 652198

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	DELL MARKETING LP	00496967	10495372000	OPTIPLEX 7090 SMALL FORM FACTO	Electric Utility	43,035.38
07/16/2021	DELL MARKETING LP	00496974	10496387686	OPTIPLEX 7090 SMALL FORM FACTO	Electric Utility	7,466.50
07/16/2021	DELL MARKETING LP	00496975	10496387694	OPTIPLEX 7090 SMALL FORM FACTO	Electric Utility	1,132.51

07/16/2021	DELL MARKETING LP	00497080	10495182588	DELL LATITUDE 5424	Electric Utility	35,525.25
07/16/2021	DELL MARKETING LP	00497080	10495182588	ENVIRONMENTAL FEE	Electric Utility	56.00
07/16/2021	DELL MARKETING LP	00497082	10495238531	DELL LATITUDE 7520 TAXABLE POR	Electric Utility	8,882.71
07/16/2021	DELL MARKETING LP	00497082	10495238531	DELL LATITUDE 7520 NON TAXABLE	Electric Utility	353.40
07/16/2021	DELL MARKETING LP	00497082	10495238531	ENVIRONMENTAL FEE	Electric Utility	30.00
07/16/2021	DELL MARKETING LP	00497086	10496179752	PRECISION 5820 TOWER TAXABLE P	Electric Utility	12,834.37
07/16/2021	DELL MARKETING LP	00497086	10496179752	PRECISION 5820 TOWER NON TAXAB	Electric Utility	508.80
Total for Payment No.:						109,824.92

Payment No: 019921

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	TRI-DAM POWER AUTHORITY	00496862	2021-6S SVP	ENERGY PURCH (HYDRO) JUN21	Electric Utility	101,947.64
Total for Payment No.:						101,947.64

Payment No: 652510

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	R&B COMPANY	00497854	O306673	REDUCERS AND BENDS	Water Utility	2,966.27
07/30/2021	R&B COMPANY	00498025	P079216	FIELD LOK GASKETS 8"	Water Utility Construction	12,853.83
07/30/2021	R&B COMPANY	00498025	P079216	COUPLER, PAK JOINT, REDUCING,	Water Utility Construction	778.42
07/30/2021	R&B COMPANY	00498025	P079216	PIPE, PIP, 8IN, 20FT LENGTH, 8	Water Utility Construction	185.30
07/30/2021	R&B COMPANY	00498029	P079025	GASKET, HYDRANT, 6IN, 1/8IN TH	Water Utility Construction	30.12
07/30/2021	R&B COMPANY	00498029	P079025	BOX, TRAFFIC VALVE, G05 BOX W	Water Utility Construction	1,383.29
07/30/2021	R&B COMPANY	00498029	P079025	BOX, TRAFFIC VALVE, G05 BOX W	Water Utility Construction	518.69
07/30/2021	R&B COMPANY	00498029	P079025	BEND, 45 DEGREES, 8IN, MJ, CL	Water Utility Construction	1,746.09

07/30/2021	R&B COMPANY	00498029	P079025	TEE, MJ, 8IN X 8IN, CL, DI, C-	Water Utility Construction	1,202.71
07/30/2021	R&B COMPANY	00498029	P079025	#12 TRACER WIRE	Water Utility Construction	490.50
07/30/2021	R&B COMPANY	00498029	P079025	VALVE, GATE, MJ, 8IN FOR C.I.,	Water Utility Construction	8,527.16
07/30/2021	R&B COMPANY	00498029	P079025	VALVE, GATE, MJ 6IN CI, RESILI	Water Utility Construction	535.41
07/30/2021	R&B COMPANY	00498029	P079025	STOP, BALLCORP, 1IN MUELLER #B	Water Utility Construction	1,945.96
07/30/2021	R&B COMPANY	00498029	P079025	HYDRANT, PAINTED WHITE 4IN STR	Water Utility Construction	2,468.85
07/30/2021	R&B COMPANY	00498029	P079025	TEE, MJ, 8IN X 6IN, DI C-153,	Water Utility Construction	337.73
07/30/2021	R&B COMPANY	00498029	P079025	BOLTS, BREAK-OFF FOR HYDRANTS,	Water Utility Construction	12.01
07/30/2021	R&B COMPANY	00498030	P023458	STRAINER FOR TURBINE WATER MET	Water Utility	8,720.00
07/30/2021	R&B COMPANY	00498035	P065238	PIPE, DUCTILE IRON, 8IN, CL CL	Water Utility Construction	17,893.45
07/30/2021	R&B COMPANY	00498035	P065238	PIPE, DUCTILE IRON, 6IN, CL CL	Water Utility Construction	308.03
07/30/2021	R&B COMPANY	00498036	P043951	RETAINER GLAND 6IN, MJ, TYLER	Water Utility Construction	457.80
07/30/2021	R&B COMPANY	00498036	P043951	TEE, MJ, 8IN X 6IN, DI C-153,	Water Utility Construction	879.63
07/30/2021	R&B COMPANY	00498036	P043951	BOLTS, BREAK-OFF FOR HYDRANTS,	Water Utility Construction	33.03
07/30/2021	R&B COMPANY	00498036	P043951	GASKET, HYDRANT, 6IN, 1/8IN TH	Water Utility Construction	180.70
07/30/2021	R&B COMPANY	00498036	P043951	BOX, TRAFFIC VALVE, G05 BOX W	Water Utility Construction	824.04
07/30/2021	R&B COMPANY	00498036	P043951	BOX, TRAFFIC VALVE, G05 BOX W	Water Utility Construction	313.92
07/30/2021	R&B COMPANY	00498036	P043951	VALVE, GATE, MJ, 8IN FOR C.I.,	Water Utility Construction	2,835.09
07/30/2021	R&B COMPANY	00498036	P043951	VALVE, GATE, MJ 6IN CI, RESILI	Water Utility Construction	1,782.15
07/30/2021	R&B COMPANY	00498036	P043951	HYDRANT, PAINTED WHITE 4IN STR	Water Utility Construction	7,063.19

07/30/2021	R&B COMPANY	00498036	P043951	RETAINER GLAND KIT, 8IN, TYLER	Water Utility Construction	1,438.80
07/30/2021	R&B COMPANY	00498037	P043713	FIELD LOK GASKETS 8"	Water Utility Construction	2,725.00
07/30/2021	R&B COMPANY	00498037	P043713	SADDLE, SERVICE 8IN CI/AC X 11	Water Utility Construction	4,839.61
07/30/2021	R&B COMPANY	00498037	P043713	STOP, BALLCORP, 1IN MUELLER #B	Water Utility Construction	2,040.48
07/30/2021	R&B COMPANY	00498037	P043713	EXTENSION, HYDRANT BURY, 6 X 6	Water Utility Construction	353.16
07/30/2021	R&B COMPANY	00498037	P043713	COUPLER, PAK JOINT, REDUCING,	Water Utility Construction	680.16
07/30/2021	R&B COMPANY	00498037	P043713	PIPE, PIP, 8IN, 20FT LENGTH, 8	Water Utility Construction	203.83
07/30/2021	R&B COMPANY	00498037	P043713	HYMAX GRIP COUPLING 8", RANGE:	Water Utility Construction	530.83
07/30/2021	R&B COMPANY	00498046	P035799	8" EPDM FIELD LOK GASKET	Water Utility Construction	6,812.50
07/30/2021	R&B COMPANY	00498046	P035799	3"x1000' WATER MARKING TAPE	Water Utility Construction	136.25
07/30/2021	R&B COMPANY	00498218	P109835	PLUG, BRASS, 2IN, CC MUELLER H	Water Utility	1,209.90
07/30/2021	R&B COMPANY	00498218	P109835	BALL VALVE, METER, 2IN VALVE -	Water Utility	1,691.69
07/30/2021	R&B COMPANY	00498218	P109835	RELOCATER, METER, 5/8 X 3/4 X	Water Utility	1,526.00
				Total for Payment No.:		101,461.58

Payment No: 019858

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	3DEGREES GROUP INC	00496666	20138	GREEN E US WIND APPLIED MATERI	Electric Utility	98,465.60
				Total for Payment No.:		98,465.60

Payment No: 019806

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	3DEGREES GROUP INC	00495999	20490	GREEN US WIND CITY OF SC 2020	Electric Utility	6,745.20
07/09/2021	3DEGREES GROUP INC	00496104	20762	WSTRN NATL WIND BULK REC	Electric Utility	1,898.89

				MAY21		
07/09/2021	3DEGREES GROUP INC	00496104	20762	SC GREEN PWR MARKET REC MAY21	Electric Utility	34,715.82
07/09/2021	3DEGREES GROUP INC	00496366	19884	GREEN E US WIND SCU 2020	Electric Utility	25,060.10
07/09/2021	3DEGREES GROUP INC	00496367	20351	GREEN E USWIND SCU 2020	Electric Utility	28,945.00
				Total for Payment No.:		97,365.01

Payment No: 019838

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PG&E	00496306	6751776993-0 JUN2021	GAS TRANSPORT COGEN MAY21	Electric Utility	91,373.45
				Total for Payment No.:		91,373.45

Payment No: 019912

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	PREFERRED BENEFIT	00497187	EIA41121	DENTAL PREMIUMS JULY 2021	Payroll Liability&ClearingAcct	74,387.30
07/16/2021	PREFERRED BENEFIT	00497189	EIA41122	DENTAL PREMIUMS JULY 21	Payroll Liability&ClearingAcct	6,676.21
07/16/2021	PREFERRED BENEFIT	00497217	EIA41123COR	VISION PREMIUMS JULY 21	Payroll Liability&ClearingAcct	9,832.10
				Total for Payment No.:		90,895.61

Payment No: 652266

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	VALLEY OIL CO	00496968	66902	UNLEADED GASOLINE	Fleet Operation Fund	19,809.97
07/16/2021	VALLEY OIL CO	00496969	66962	UNLEADED GASOLINE	Fleet Operation Fund	21,061.46
07/16/2021	VALLEY OIL CO	00496970	70142	UNLEADED GASOLINE	Fleet Operation Fund	27,714.95
07/16/2021	VALLEY OIL CO	00496971	70184	UNLEADED GASOLINE	Fleet Operation Fund	20,545.52
				Total for Payment No.:		89,131.90

Payment No: W22009

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	FIRST AMERICAN TITLE COMPANY	00496378	NCS-1011914-19-CC	EASEMENT FOR 2495 LAFAYETTE AV	Electric Utility Construction	87,560.00
				Total for Payment No.:		87,560.00

Payment No: 019880

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	G2 ENERGY OSTROM ROAD LLC	00496647	SVP 6-21	ENERGY (LANDFILL GAS) JUN21	Electric Utility	87,191.93
				Total for Payment No.:		87,191.93

Payment No: 020042

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PG&E	00497088	6751776993-0 JUL2021	GAS TRANSPORT COGEN JUN21	Electric Utility	86,889.94
				Total for Payment No.:		86,889.94

Payment No: 652334

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CENTRALSQUARE TECHNOLOGIES,	00496102	322262	Annual Tiburon 21-22	General Fund	86,300.95
				Total for Payment No.:		86,300.95

Payment No: 019817

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021		00496368	33256 PJS	LEGAL SVC BUCKS CREEK MAY21	Electric Utility Construction	7,851.46
07/09/2021		00496368	33256 PJS	LEGAL SERVICES MAY21	Electric Utility	76,076.00
				Total for Payment No.:		83,927.46

Payment No: 652256

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/16/2021	SWA SERVICES GROUP	00496608	21610	3025 RAYMONE JUNE 2021	Electric Utility	1,563.76
07/16/2021	SWA SERVICES GROUP	00496609	21582	JANITORIAL JUNE 2021	General Fund	80,131.76
07/16/2021	SWA SERVICES GROUP	00496610	21591	HARRIS LASS	Public Buildings	450.00
07/16/2021	SWA SERVICES GROUP	00496611	21456	3025 RAYMOND FEB 2021	Electric Utility	1,350.52
Total for Payment No.:						83,496.04

Payment No: 020009

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ECS IMAGING, INC.	00498097	16085	Laserfiche Rio Named Full User	General Government - Other	60,000.00
07/30/2021	ECS IMAGING, INC.	00498097	16085	Laserfiche Connector (200-499	General Government - Other	3,000.00
07/30/2021	ECS IMAGING, INC.	00498097	16085	Laserfiche Forms Professional	General Government - Other	6,000.00
07/30/2021	ECS IMAGING, INC.	00498097	16085	Laserfiche Rio Named Full User	General Government - Other	12,000.00
07/30/2021	ECS IMAGING, INC.	00498097	16085	Laserfiche Connector (200-499	General Government - Other	600.00
07/30/2021	ECS IMAGING, INC.	00498097	16085	Laserfiche Forms Professional	General Government - Other	1,200.00
Total for Payment No.:						82,800.00

Payment No: W22016

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/12/2021	SANTA CLARA CONVENTION CENTER	00496923	89232	CIP Funds-Western Speciality 5	SCCC Capital Improvement Fund	79,144.88
Total for Payment No.:						79,144.88

Payment No: 652498

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MOTOROLA SOLUTIONS INC	00498033	8230326368	MAINTENANCE CONTR#USC000185810	General Fund	77,215.08
Total for Payment No.:						77,215.08

Payment No: 652350

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DOWNTOWN FORD SALES	00497597	318701	DELIVERY FEE	Vehicle Replacement Fund	300.00
07/23/2021	DOWNTOWN FORD SALES	00497597	318701	EARLY PYMNT DISCOUNT	Vehicle Replacement Fund	-545.63
07/23/2021	DOWNTOWN FORD SALES	00497597	318701	2021 FORD F150 SUPER CREW CAB	Vehicle Replacement Fund	35,797.36
07/23/2021	DOWNTOWN FORD SALES	00497597	318701	CA TIRE TAX	Vehicle Replacement Fund	8.75
07/23/2021	DOWNTOWN FORD SALES	00497597	318701	DOC FEE	Vehicle Replacement Fund	92.76
07/23/2021	DOWNTOWN FORD SALES	00497598	318708	DISCOUNT FOR EARLY PYMNT	Vehicle Replacement Fund	-545.00
07/23/2021	DOWNTOWN FORD SALES	00497598	318708	2021 FORD F150 CREW CAB PICK-U	Vehicle Replacement Fund	41,391.66
07/23/2021	DOWNTOWN FORD SALES	00497598	318708	CA TIRE TAX	Vehicle Replacement Fund	8.75
07/23/2021	DOWNTOWN FORD SALES	00497598	318708	DOC FEE	Vehicle Replacement Fund	92.65
07/23/2021	DOWNTOWN FORD SALES	00497598	318708	DELIVERY FEE	Vehicle Replacement Fund	300.00
				Total for Payment No.:		76,901.30

Payment No: 019869

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497159	269110	CHANGE ORDER #1: ADDITIONAL FU LEGAL SERVICES	Related Santa Clara Dvlpr Fund	38,535.00
07/16/2021		00497161	269711	CHANGE ORDER #1: ADDITIONAL FU LEGAL SERVICES	Related Santa Clara Dvlpr Fund	23,435.00
07/16/2021		00497162	269927	CHANGE ORDER #1: ADDITIONAL FU LEGAL SERVICES	Electric Utility Construction	14,873.20
				Total for Payment No.:		76,843.20

Payment No: W22041

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	SC UTILITIES ELECTRIC JUN21	Elec OperatingGrant Trust Fund	610.39
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	RENT 881 MARTIN AVE AUG2021	Elec OperatingGrant Trust Fund	3,593.78
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	COMMON AREA 881 MARTIN JUL2020	Elec OperatingGrant Trust Fund	142.48
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	PGE 881 MARTIN AVE JUN2021	Elec OperatingGrant Trust Fund	64.19
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	SC UTIL WATER/SEWER/FIRE JUN21	Elec OperatingGrant Trust Fund	96.92
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	RENT 881 MARTIN AVE AUG2021	Electric Utility	56,302.49
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	COMMON AREA 881 MARTIN JUL2020	Electric Utility	2,232.11
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	PGE 881 MARTIN AVE JUN2021	Electric Utility	1,005.69
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	SC UTIL WATER/SEWER/FIRE JUN21	Electric Utility	1,518.40
07/30/2021	GAHRAHMAT FAMILY LTD II	00498103	GFLP2-21228	SC UTILITIES ELECTRIC JUN21	Electric Utility	9,562.85
				Total for Payment No.:		75,129.30

Payment No: W22010

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	FIRST AMERICAN TITLE COMPANY	00496379	1011914-21-CC	EASEMENT FOR 2365 LAFAYETTE ST	Electric Utility Construction	70,510.00
				Total for Payment No.:		70,510.00

Payment No: W22025A

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/21/2021	SANTA CLARA CONVENTION CENTER	00497680	35508269, 35647627, 35669978	CIP Funds Request - Johnson Co	SCCC Capital Improvement Fund	68,506.33
				Total for Payment No.:		68,506.33

Payment No: 652393

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	POWER PLANT SERVICES	00497687	64529	CROSSFIRE TUBES	Electric Utility	1,832.36

07/23/2021	POWER PLANT SERVICES	00497687	64529	TRANSITION PIECE ASSEMBLY	Construction Electric Utility Construction	66,423.14
Total for Payment No.:						68,255.50

Payment No: 019841

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SEDGWICK CLAIMS MGMT SVCS INC	00495801	400000055288	WORK COMP SVCS APRIL 2021	Workers Compensation	22,655.17
07/09/2021	SEDGWICK CLAIMS MGMT SVCS INC	00495802	400000057929	WORK COMP SVCS MAY 2021	Workers Compensation	22,655.17
07/09/2021	SEDGWICK CLAIMS MGMT SVCS INC	00495803	400000060569	WORK COMP SVCS JUNE 2021	Workers Compensation	22,655.17
Total for Payment No.:						67,965.51

Payment No: W22008

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	FIRST AMERICAN TITLE COMPANY	00496377	NCS-1011914-18-CC	EASTMENT FOR 953 MARTIN AVE	Electric Utility Construction	67,810.00
Total for Payment No.:						67,810.00

Payment No: 652540

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WEST COAST ARBORISTS INC	00497944	174509	PRUNING 05/24/21-06/30/21	General Fund	25,264.00
07/30/2021	WEST COAST ARBORISTS INC	00497944	174509	EMERGENCY TREE SERVICES AND PR	General Fund	4,052.00
07/30/2021	WEST COAST ARBORISTS INC	00498068	174544	EMERGENCY TREE SERVICES AND PR	General Fund	35,948.00
Total for Payment No.:						65,264.00

Payment No: 652200

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	DOMINGUEZ & SONS TRUCKING INC	00496953	2105100	2021 CLEANUP CAMPAIGN HIGH-SID	Solid Waste Program	63,963.00

Total for Payment No.: 63,963.00

Payment No: 652247

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SCC OFFICE OF SUPPORTIVE HOUSING	00496936	HPPCSC-QI-2021	HPP - Homeless Prevention Prog	City Affordable Housing	63,951.95
Total for Payment No.:						63,951.95

Payment No: 019860

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AIR PRODUCTS & CHEMICALS	00496645	417372847	PURCHASE OF RA CAPACITY JUN21	Electric Utility	60,000.00
Total for Payment No.:						60,000.00

Payment No: 020036

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	OC JONES & SONS INC	00498047	70892	AGREEMENT FOR REED ST-GRANT ST	Parks And Recreation	57,019.38
Total for Payment No.:						57,019.38

Payment No: 652347

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DASHER TECHNOLOGIES INC	00497672	360443	HPE HARDWARE MAINTENANCE ONSIT	Electric Utility	29,877.12
07/23/2021	DASHER TECHNOLOGIES INC	00497672	360443	HPE SOFTWARE TECHNICAL UNLIMIT	Electric Utility	16,220.88
07/23/2021	DASHER TECHNOLOGIES INC	00497672	360443	HPE SOFTWARE UPDATES SVC	Electric Utility	8,087.04
Total for Payment No.:						54,185.04

Payment No: 019830

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/09/2021	MARIN CLEAN ENERGY	00496296	SVP-0521	CISO CHG SC SVC G2-1 MAY21	Electric Utility	53,335.10
07/09/2021	MARIN CLEAN ENERGY	00496296	SVP-0521	CISO CHG SC SVC G2-1 MAY21	Electric Utility	-267.65
Total for Payment No.:						53,067.45

Payment No: 019832

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	OC JONES & SONS INC	00496555	70877	AGREEMENT FOR REED ST-GRANT ST	Parks And Recreation	43,873.94
07/09/2021	OC JONES & SONS INC	00496555	70877	AGREEMENT FOR REED ST-GRANT ST	Parks And Recreation	8,526.25
Total for Payment No.:						52,400.19

Payment No: W22045

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WASHINGTON TRUST BANK	00498404	07/11/21-07/24/21COR	WT:VEBA CONTRIB B2115	Fringe Benefits	52,027.02
Total for Payment No.:						52,027.02

Payment No: 652426

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	G. BORTOLOTTO & CO	00498052	4820F	RETENTION	Streets And Highways	-2,708.39
07/30/2021	G. BORTOLOTTO & CO	00498052	4820F	AGREEMENT FOR THE 2020 PAVEMEN	Streets And Highways	4,971.95
07/30/2021	G. BORTOLOTTO & CO	00498052	4820F	10% CONTINGENCY.	Streets And Highways	49,195.72
Total for Payment No.:						51,459.28

Payment No: W22013

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	GEORGE HILLS COMPANY, INC	00496436	1299JUL2021	Replensih Special Liability	Special Liability Insurance	51,000.00
Total for Payment No.:						51,000.00

Payment No: 019925

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	WESTERN STATES OIL CO	00496495	819648	CREDIT- INVOICE #816362	Fleet Operation Fund	-2,540.57
07/16/2021	WESTERN STATES OIL CO	00496496	819649	CREDIT- INVOICE# 816363	Fleet Operation Fund	-2,582.23
07/16/2021	WESTERN STATES OIL CO	00496497	819650	CREDIT- INVOICE #816364	Fleet Operation Fund	-17,779.05
07/16/2021	WESTERN STATES OIL CO	00496498	819651	CREDIT- INVOICE #817429	Fleet Operation Fund	-16,008.69
07/16/2021	WESTERN STATES OIL CO	00496499	819652	CREDIT- INVOICE #818525	Fleet Operation Fund	-17,241.83
07/16/2021	WESTERN STATES OIL CO	00496500	819654	DIESEL- ST CORP YRD #53	Fleet Operation Fund	2,925.57
07/16/2021	WESTERN STATES OIL CO	00496502	819656	DIESEL- ST CORP YRD #53	Fleet Operation Fund	2,967.23
07/16/2021	WESTERN STATES OIL CO	00496504	819657	DIESEL- ST CORP YRD #53	Fleet Operation Fund	20,480.21
07/16/2021	WESTERN STATES OIL CO	00496505	819658	DIESEL- ST CORP YRD #53	Fleet Operation Fund	18,399.92
07/16/2021	WESTERN STATES OIL CO	00496506	819659	DIESEL- ST SORP YRD #53	Fleet Operation Fund	19,548.75
07/16/2021	WESTERN STATES OIL CO	00496507	819584	DIESEL- ST CORP YRD #53	Fleet Operation Fund	20,412.03
07/16/2021	WESTERN STATES OIL CO	00496632	454703	UNLDED- PD MOTRCYCL	Fleet Operation Fund	204.12
07/16/2021	WESTERN STATES OIL CO	00496972	818959	RENEWABLE DIESEL	Fleet Operation Fund	21,762.38
				Total for Payment No.:		50,547.84

Payment No: W22035

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/26/2021	GEORGE HILLS COMPANY, INC	00497984	1299JUL2021A	Replensih Special Liability	Special Liability Insurance	50,000.00
				Total for Payment No.:		50,000.00

Payment No: 020010

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ELB US INC.	00498096	JC115235	ANNUAL AV SUPPORT & MAINTENANC	Information Technology Service	49,000.00
				Total for Payment No.:		49,000.00

Payment No: W22011

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	FIRST AMERICAN TITLE COMPANY	00496380	NCS-1011914-25-CC	EASEMENT FOR 2265 LAFAYETTE ST	Electric Utility Construction	48,060.00
				Total for Payment No.:		48,060.00

Payment No: 652111

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PRIMARY RECRUITING SERVICES	00496568	2345	RECRUITMENT OF ELECTRIC PROGRA	Electric Utility	47,500.00
				Total for Payment No.:		47,500.00

Payment No: 002414

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Fleet Operation Fund	17.46
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Cemetery	456.91
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Police Operating Grant Fund	507.24
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	General Fund	399.28
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Electric Utility Construction	42,292.42
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Electric Utility	3,401.41
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Sewer Utility	3.12
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Electric Utility	-1.27
07/22/2021	CA DEPT OF TAX & FEE ADMIN	00497677	JUNE2021	DD:SALES & USE TAX JUNE 2021	Solid Waste Program	0.88
				Total for Payment No.:		47,077.45

Payment No: 652410

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	S/T TECHNICAL 58.5HR MAY21	Electric Utility Construction	8,775.00
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	O/T TECHNICAL 12HR MAY21	Electric Utility Construction	2,700.00

07/23/2021	TETRAD SERVICES INC	00496772	R-10563	S/T CRAFT 178.5HR MAY21	Electric Utility Construction	17,493.00
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	O/T CRAFT 38HR MAY21	Electric Utility Construction	5,586.00
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	S/T MACHINIST 3.5HR MAY21	Electric Utility Construction	273.00
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	S/T CRAFT 45HR MAY21	Electric Utility Construction	3,150.00
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	PER DIEM	Electric Utility Construction	1,550.00
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	MILEAGE	Electric Utility Construction	1,585.50
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	MATERIALS	Electric Utility Construction	1,227.01
07/23/2021	TETRAD SERVICES INC	00496772	R-10563	CRANE RENTAL SERVICE	Electric Utility Construction	2,973.60
				Total for Payment No.:		45,313.11

Payment No: W22001

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/01/2021	LOCAL AGENCY FORMATION	00496445	1557JUN2021	FY2022 LAFCO BUDGET	General Fund	44,374.28
				Total for Payment No.:		44,374.28

Payment No: 020022

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	HYDRA-STOP LLC	00497783	43205	VALVE BODIES	Water Utility Construction	42,773.78
				Total for Payment No.:		42,773.78

Payment No: 652378

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MOTT MACDONALD GROUP, LLC	00497791	100094-7	ANNUAL SANITARY SEWER CONDITIO	Sewer Utility Construction	42,236.25
				Total for Payment No.:		42,236.25

Payment No: 019955

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	LEVY SANTA CLARA CONVENTION CENTER	00497694	LevyInv 00025	Levy - FY 20/21 JUNE SHORTFALL	SCCC-Levy Food & Beverage	41,465.87
				Total for Payment No.:		41,465.87

Payment No: 652388

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496759	0008018490-6	GRIZZLY PH O&M MAY21	Electric Utility	41,163.10
				Total for Payment No.:		41,163.10

Payment No: 652183

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BAY AREA TREE SPECIALISTS	00496943	67101	TREE PRUNING AND REMOVALS SERV	General Fund	40,460.00
				Total for Payment No.:		40,460.00

Payment No: 652212

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FREEWAY TOYOTA OF HANFORD	00496957	4128155	2021 TOYOTA HIGHLANDER HY (696	Vehicle Replacement Fund	39,991.01
07/16/2021	FREEWAY TOYOTA OF HANFORD	00496957	4128155	CA TIRE TAX	Vehicle Replacement Fund	8.75
07/16/2021	FREEWAY TOYOTA OF HANFORD	00496957	4128155	DELIVERY TO SANTA CLARA	Vehicle Replacement Fund	300.00
				Total for Payment No.:		40,299.76

Payment No: 652436

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	POSTMASTER US POST OFFICE	00498143	2946JUL2021A	PERMIT 92 POSTAGE	General Fund	40,000.00
				Total for Payment No.:		40,000.00

Payment No: 652430

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	JITENDRA G PATEL AND	00497998	34944-JUL2021	JUDGMENT FOR 800 MATHEW EASEME	Electric Utility Construction	39,900.00
				Total for Payment No.:		39,900.00

Payment No: W22015

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/12/2021	SANTA CLARA CONVENTION CENTER	00496922	20.04039.00-6	(CIP) Fund Request - HOK #6	SCCC Capital Improvement Fund	39,576.93
				Total for Payment No.:		39,576.93

Payment No: 019976

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	THERMAL MECHANICAL INC	00497613	82134	SENIOR CENTER HVAC REPAIR FOR	Parks And Recreation	23,512.00
07/23/2021	THERMAL MECHANICAL INC	00497613	82134	CRANE SERVICE AND STREET CONTR	Parks And Recreation	1,600.00
07/23/2021	THERMAL MECHANICAL INC	00497613	82134	LABOR	Parks And Recreation	13,680.00
07/23/2021	THERMAL MECHANICAL INC	00497613	82134	TRUCK AND SPECIAL EQUIPMENT	Parks And Recreation	160.00
07/23/2021	THERMAL MECHANICAL INC	00497613	82134	FREIGHT	Parks And Recreation	350.00
				Total for Payment No.:		39,302.00

Payment No: 019982

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TRAYER ENGINEERING CORP	00497157	0000027359	VACUUM SWITCH	Electric Utility	38,871.07
				Total for Payment No.:		38,871.07

Payment No: 019818

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ELECTRICAL CONSULTANTS INC	00496283	91958	TRANSMISSION ENG. SRVCS	Electric Utility	38,389.94

DEC20

Construction

Total for Payment No.:

38,389.94

Payment No: 652516

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SEL ENGINEERING SERVICES, INC.	00497662	41570	ELECT SUPPORT/UPGRADES MAY21	Electric Utility Construction	14,768.50
07/30/2021	SEL ENGINEERING SERVICES, INC.	00497662	41570	ELECT SUPPORT/UPGRADES MAY21	Electric Utility	820.00
07/30/2021	SEL ENGINEERING SERVICES, INC.	00497663	42018	ELECT SUPPORT/UPGRADES JUN21	Electric Utility Construction	22,267.50
Total for Payment No.:						37,856.00

Payment No: 652365

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JONES LANG LASALLE AMERICAS INC	00497844	US002HOT003621	DMO: Consulting Services for t	Deposit Funds.	5,000.00
07/23/2021	JONES LANG LASALLE AMERICAS INC	00497844	US002HOT003621	CMO: Consulting Services for t	Convention Center Enterprise F	7,500.00
07/23/2021	JONES LANG LASALLE AMERICAS INC	00497847	US002HOT003701	DMO: Consulting Services for t	Deposit Funds.	5,000.00
07/23/2021	JONES LANG LASALLE AMERICAS INC	00497847	US002HOT003701	CMO: Consulting Services for t	Convention Center Enterprise F	7,500.00
07/23/2021	JONES LANG LASALLE AMERICAS INC	00497849	US002HOT003822	DMO: Consulting Services for t	Deposit Funds.	5,000.00
07/23/2021	JONES LANG LASALLE AMERICAS INC	00497849	US002HOT003822	CMO: Consulting Services for t	Convention Center Enterprise F	7,500.00
Total for Payment No.:						37,500.00

Payment No: 019942

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ETHOSENENERGY	00497683	IN75165	ADDITIONAL MATERIALS, SERVICES	Electric Utility Construction	9,903.00
07/23/2021	ETHOSENENERGY	00497684	IN75190	ADDITIONAL MATERIALS, SERVICES	Electric Utility Construction	27,233.00
Total for Payment No.:						37,136.00

Payment No: 019885

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GOLDER ASSOCIATES	00496662	623722	RELATED CITY PLACE SERVICES	Related Santa Clara Dvlpr Fund	1,099.09
07/16/2021	GOLDER ASSOCIATES	00496662	623722	LANDFILL SERVICES	Solid Waste Utility-Constructi	35,713.94
				Total for Payment No.:		36,813.03

Payment No: 020031

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MISSION TRAIL WASTE SYSTEMS	00498064	m639	COMMERCIAL FOOD SCRAP PROCESSI	Solid Waste Program	35,855.76
				Total for Payment No.:		35,855.76

Payment No: 652453

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	AMERESCO	00497060	41477	ENERGY (LANDFILL GAS) JUN21	Electric Utility	35,627.43
				Total for Payment No.:		35,627.43

Payment No: 652249

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SHAKE SHACK ENTERPRISES LLC	00496916	32990OCT2019.	ESCHEAT ORIGINAL CK#637413	General Fund	35,289.00
				Total for Payment No.:		35,289.00

Payment No: 019919

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	THERMAL MECHANICAL INC	00496618	82135	MORSE MANSION HVAC	General Government - Other	31,897.00
07/16/2021	THERMAL MECHANICAL INC	00496619	82133	TRITON PM	Public Buildings	499.00
07/16/2021	THERMAL MECHANICAL INC	00496620	82196	PD PREVENTATIVE MAINT	General Fund	2,831.00
				Total for Payment No.:		35,227.00

Payment No: 019803

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	BENEFIT COORDINATORS CORP	00496346	33496JUN2021A	LIFE & DISABILITY INS	Payroll Liability&ClearingAcct	4,476.04
07/02/2021	BENEFIT COORDINATORS CORP	00496346	33496JUN2021A	LIFE & DISABILITY INS	Payroll Liability&ClearingAcct	10,027.93
07/02/2021	BENEFIT COORDINATORS CORP	00496346	33496JUN2021A	LIFE & DISABILITY INS	Payroll Liability&ClearingAcct	3,569.01
07/02/2021	BENEFIT COORDINATORS CORP	00496346	33496JUN2021A	LIFE & DISABILITY INS	Payroll Liability&ClearingAcct	3,995.69
07/02/2021	BENEFIT COORDINATORS CORP	00496346	33496JUN2021A	LIFE & DISABILITY INS	Payroll Liability&ClearingAcct	12,518.34
				Total for Payment No.:		34,587.01

Payment No: 019984

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	US DEPT OF ENERGY	00496788	1000087	BBD LINE EMER PATROL MAY2021	Electric Utility	1,220.53
07/23/2021	US DEPT OF ENERGY	00497275	NNPB000270621S	COTP LOSSES-FIN STLMNTS JUN21	Electric Utility	32,599.68
				Total for Payment No.:		33,820.21

Payment No: 019904

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MILTON SECURITY GROUP LLC	00496774	2021916	AMI/MDMS PROJECT SUPPORT	Electric Utility Construction	10,560.00
07/16/2021	MILTON SECURITY GROUP LLC	00496774	2021916	NOC/SOC SERVICES	Electric Utility	12,672.00
07/16/2021	MILTON SECURITY GROUP LLC	00496774	2021916	OSISOFT PI SYSTEM SERVICE	Electric Utility	7,920.00
07/16/2021	MILTON SECURITY GROUP LLC	00496774	2021916	SHAREPOINT SUPPORT/MGMT SVCS	Electric Utility	2,640.00
				Total for Payment No.:		33,792.00

Payment No: 019924

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/16/2021	VALLEY CONCRETE INC	00496626	062921	CONCRETE SERVICES BILL # 84	Streets And Highways	33,338.14
Total for Payment No.:						33,338.14

Payment No: 019855

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	INTL FIREFIGHTERS LOCAL 1171	00497200	06/13/21-07/10/21	UNION DUES B2113 & B2114	Payroll Liability&ClearingAcct	32,427.03
Total for Payment No.:						32,427.03

Payment No: 652384

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ORLAND UNIT WATER USERS ASSN.	00496757	2031JUL2021	STONY CRK HYDRO EXPENSES JUN21	Electric Utility	18,103.72
07/23/2021	ORLAND UNIT WATER USERS ASSN.	00496757	2031JUL2021	STONY CRK HYDRO EXPENSES JUN21	Electric Utility	6,411.46
07/23/2021	ORLAND UNIT WATER USERS ASSN.	00496757	2031JUL2021	STONY CRK HYDRO EXPENSES JUN21	Electric Utility	31.40
07/23/2021	ORLAND UNIT WATER USERS ASSN.	00496757	2031JUL2021	STONY CRK HYDRO EXPENSES JUN21	Electric Utility	31.39
07/23/2021	ORLAND UNIT WATER USERS ASSN.	00496757	2031JUL2021	STONY CRK HYDRO EXPENSES JUN21	Electric Utility	7,768.10
07/23/2021	ORLAND UNIT WATER USERS ASSN.	00496757	2031JUL2021	STONY CRK HYDRO EXPENSES JUN21	Electric Utility	62.80
Total for Payment No.:						32,408.87

Payment No: 019933

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	BIBLIOTHECA, LLC	00496959	INV-US43584	SERVICE/MAINTENANCE CONTRACT	General Fund	30,110.35
Total for Payment No.:						30,110.35

Payment No: 019973

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/23/2021	RELIABILITY OPTIMIZATION INC	00496783	21-00060	VIBR ANALYSIS ST 5/20 PW	Electric Utility	984.38
07/23/2021	RELIABILITY OPTIMIZATION INC	00496783	21-00060	VIBR ANALYSIS OFFSITE 5/25 NPW	Electric Utility	375.00
07/23/2021	RELIABILITY OPTIMIZATION INC	00496784	21-00061	PDM SERVICES DVR MAY21 PW	Electric Utility	5,405.63
07/23/2021	RELIABILITY OPTIMIZATION INC	00496785	21-00062	PDM SERVICES DVR MAY21 NPW	Electric Utility	2,612.37
07/23/2021	RELIABILITY OPTIMIZATION INC	00496786	21-00063	PDM SERVICES COGEN MAY21 PW	Electric Utility	281.25
07/23/2021	RELIABILITY OPTIMIZATION INC	00496787	21-00064	PDM SERVICES COG MAY21 NPW	Electric Utility	3,202.75
07/23/2021	RELIABILITY OPTIMIZATION INC	00496944	21-00069	PDM SERVICES BB APR21&JUN21 PW	Electric Utility	343.13
07/23/2021	RELIABILITY OPTIMIZATION INC	00496946	21-00070	PDM SERV BLK BUT APR-JUN21 NPW	Electric Utility	3,784.87
07/23/2021	RELIABILITY OPTIMIZATION INC	00496949	21-00071	PDM SERVICES DVR JUN21 PW	Electric Utility	2,718.75
07/23/2021	RELIABILITY OPTIMIZATION INC	00496950	21-00072	PDM SERVICES DVR JUN21 NPW	Electric Utility	5,299.25
07/23/2021	RELIABILITY OPTIMIZATION INC	00496951	21-00073	PDM SERVICES COGEN JUN21 PW	Electric Utility	328.13
07/23/2021	RELIABILITY OPTIMIZATION INC	00496952	21-00074	PDM SERVICES COG JUN21 NPW	Electric Utility	3,155.87
Total for Payment No.:						28,491.38

Payment No: 652199

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	DENCO SALES CO	00496947	8761398-00	FLATBED APPLICATOR: CWT PLATIN	General Fund	23,053.51
07/16/2021	DENCO SALES CO	00496947	8761398-00	FREIGHT	General Fund	1,400.00
07/16/2021	DENCO SALES CO	00496948	8765083-00	FLEXIPRINT & CUT 3M EDITION V1	General Fund	1,738.55
07/16/2021	DENCO SALES CO	00496948	8765083-00	MUTCD VERSION 10 HIGHWAY SIGNS	General Fund	1,956.56
Total for Payment No.:						28,148.62

Payment No: W22012

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	FIRST AMERICAN TITLE COMPANY	00496381	NCS-1011914-32-CC	EASEMENT FOR 1515 WALSH AVENU	Electric Utility Construction	27,660.00
Total for Payment No.:						27,660.00

Payment No: 652380

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MTH ENGINEERS INC	00496511	12380	ENG/CON DESIGN MAY2021	Electric Utility Construction	27,636.00
				Total for Payment No.:		27,636.00

Payment No: 019836

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PFM ASSET MGMT LLC	00496625	SMA-M0521-24428	INVESTMENT MANAGEMENT SERVICES	General Fund	26,145.82
				Total for Payment No.:		26,145.82

Payment No: 020044

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	AUTO SVCS/1700 WALSH 50%	Fleet Operation Fund	89.40
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	POOL/2250 ROYAL	General Fund	2,497.46
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	SR CNTR 1303 FREMONT ST	General Fund	709.31
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	NORTHSIDE LIB 695 MORELAND WAY	General Fund	49.76
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	FIRE-STA2 1900 WALSH AVE.	General Fund	166.14
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	STREET/1700 WALSH 50%	General Fund	89.40
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	CITY HALL-1500 WARBURTON	General Fund	1,766.97
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	POLICE/601 EL CAMINO	General Fund	1,525.88
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	COMM SVCS-1515 EL CAMINO REAL	General Fund	9.99
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	BERMAN BLDG-1405 CIVIC CTR	General Fund	38.78
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	FIRE/#1 777 BENTON	General Fund	653.57
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	FIRE/#4-2323 PRUNERIDGE	General Fund	61.81
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	POOL/BUCHER-REBIERO	General Fund	8.11
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	POOL/BACHER-REBIERO STS	General Fund	1,645.52
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	FIRE/#9-3011 CORVIN	General Fund	28.73

07/30/2021	PG&E	00498006	2490226441-5 JUL2021	GYM/2450 CABRILLO	General Fund	96.58
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	SPORTS CTR/3445 BENTON	General Fund	7.84
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	CRC/969 KIELY	General Fund	1,510.96
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	FIRE/#3 2821 HOMESTEAD RD	General Fund	53.84
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	LIBRARY/2635 HOMESTEAD	General Fund	3,317.46
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	POOL/2625 PATRICIA	General Fund	8,901.64
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	YOUTH SOCCER 5049 CENTENNIAL	General Fund	43.91
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	FIRE/#10 2401 TALLUTO	General Fund	0.00
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	PARKS/4750 LICK MILL BLVD	General Fund	15.11
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	FIRE/#6-888 AGNEW RD	General Fund	88.19
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	POOL/3750 DELA CRUZ	General Fund	107.82
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	2975 LAFAYETTE ST.	General Fund	8.11
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	POL SUBSTN/3992 RIVERMARK PLZ	General Fund	74.35
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	PUMP/ELEC-LAWRENCE/HSTEAD	Sewer Utility	10.06
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	PUMP/4495 N 1ST ST	Sewer Utility	2,185.40
07/30/2021	PG&E	00498006	2490226441-5 JUL2021	BACKUP GEN/2279 CALLE DE LUNA	Sewer Utility	8.11
Total for Payment No.:						25,770.21

Payment No: W22007

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	FIRST AMERICAN TITLE COMPANY	00496376	NCS-1011914-7-CC	EASEMENT PURCHAS 840 COMSTOCK	Electric Utility Construction	25,660.00
Total for Payment No.:						25,660.00

Payment No: 652504

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PACIFIC LIBRARY PARTNERSHIP	00497035	1032	PLP MEMBERSHIP FEES 21/22	General Fund	25,641.00
Total for Payment No.:						25,641.00

Payment No: 020040

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PFM ASSET MGMT LLC	00498149	SMA-M0621-24984	INVESTMENT MANAGEMENT SERVICES	General Fund	25,439.57
				Total for Payment No.:		25,439.57

Payment No: 019874

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	EFFICIENCY SERVICES GROUP, LLC	00496668	3257	EXTER/PRKING LOT LITE JUN21	Elec OperatingGrant Trust Fund	6,100.00
07/16/2021	EFFICIENCY SERVICES GROUP, LLC	00496668	3257	EXTER/PRKING LOT LITE JUN21	Elec OperatingGrant Trust Fund	19,118.00
				Total for Payment No.:		25,218.00

Payment No: 652485

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	INTELLIGENT TECHNOLOGIES & SVC	00497185	88724	INSTALL COMPRESSOR LABOR 6/23	Electric Utility	8,121.00
07/30/2021	INTELLIGENT TECHNOLOGIES & SVC	00497185	88724	INSTALL COMPRESSOR LABOR 6/23	Electric Utility	1,950.00
07/30/2021	INTELLIGENT TECHNOLOGIES & SVC	00497185	88724	DESIGN TIME 6/23	Electric Utility	1,153.00
07/30/2021	INTELLIGENT TECHNOLOGIES & SVC	00497185	88724	SHOP TIME 6/23	Electric Utility	966.00
07/30/2021	INTELLIGENT TECHNOLOGIES & SVC	00497185	88724	INSTALL COMPRESSOR PM 6/23	Electric Utility	1,405.00
07/30/2021	INTELLIGENT TECHNOLOGIES & SVC	00497185	88724	EQUIPMENT 6/23	Electric Utility	145.00
07/30/2021	INTELLIGENT TECHNOLOGIES & SVC	00497185	88724	MATERIALS 6/23	Electric Utility	10,755.00
				Total for Payment No.:		24,495.00

Payment No: 019931

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	BADGER METER INC	00497727	1438431	METER, WATER, RECLAIMED 2" E-S	Water Utility	19,958.45
07/23/2021	BADGER METER INC	00497728	1442034	STRAINER, FOR TURBINE WATER ME	Water Utility	1,983.80

07/23/2021	BADGER METER INC	00497860	1431533	STRAINER, FOR TURBINE WATER ME	Water Utility	1,983.80
Total for Payment No.:						23,926.05

Payment No: 652460

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BAY AREA WATER SUPPLY &	00497262	7297	FY 21-22 1ST QTR REG ASSMT	Water Utility	22,657.00
Total for Payment No.:						22,657.00

Payment No: 652357

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	FIRST RESPONDERS RESILIENCY,	00497615	2021-1007A	RESILIENCY TRAINING FOR FIRE D	General Fund	4,516.00
07/23/2021	FIRST RESPONDERS RESILIENCY,	00497615	2021-1007A	RESILIENCY TRAINING FOR FIRE D	General Fund	3,000.00
07/23/2021	FIRST RESPONDERS RESILIENCY,	00497615	2021-1007A	RESILIENCY TRAINING FOR FIRE D	General Fund	8,000.00
07/23/2021	FIRST RESPONDERS RESILIENCY,	00497615	2021-1007A	RESILIENCY TRAINING FOR FIRE D	General Fund	6,484.00
Total for Payment No.:						22,000.00

Payment No: 019900

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LEVY SANTA CLARA CONVENTION CENTER	00497027	LEVYINV 060321	CHANGE ORDER NO. 1: ADDITIONAL	Other City Dept Op Grant Fund	21,715.20
Total for Payment No.:						21,715.20

Payment No: 652386

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PAVEMENT ENGINEERING, INC	00497770	2105-031	AGREEMENT FOR PUBLIC PARKING L	Public Buildings	21,705.00
Total for Payment No.:						21,705.00

Payment No: 651913

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SREEJITH, SREEDHARAN	00496465	21898-06 Utility Refund	UTILITY REFUND	General Fund	21,371.13
				Total for Payment No.:		21,371.13

Payment No: 652371

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	LEXIPOL LLC	00496103	INVLEX2204	Annual Lexipol 21-22	General Fund	21,114.00
				Total for Payment No.:		21,114.00

Payment No: 002412

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/20/2021	NAVIA BENEFIT SOLUTIONS, INC	00497221	06/27/21-07/10/21	DD:BIWKLY NAVIA BENEFIT B2114	Payroll Liability&ClearingAcct	10,919.64
07/20/2021	NAVIA BENEFIT SOLUTIONS, INC	00497221	06/27/21-07/10/21	DD:BIWKLY NAVIA BENEFIT B2114	Payroll Liability&ClearingAcct	9,721.58
				Total for Payment No.:		20,641.22

Payment No: 652209

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FIRST ALARM SECURITY & PATROL,	00496576	11437224	TASMAN JULY 2021	General Fund	690.00
07/16/2021	FIRST ALARM SECURITY & PATROL,	00497007	11434592	24/7 SITE PATROL JAN 15 - FEB	General Fund	19,350.00
				Total for Payment No.:		20,040.00

Payment No: 002398

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	NAVIA BENEFIT SOLUTIONS, INC	00496456	06/13/21-06/26/21A	DD:BIWEEKLY BENEFIT B2113	Payroll Liability&ClearingAcct	9,683.24
07/06/2021	NAVIA BENEFIT SOLUTIONS, INC	00496456	06/13/21-06/26/21A	DD:BIWEEKLY BENEFIT B2113	Payroll Liability&ClearingAcct	10,103.73
				Total for Payment No.:		19,786.97

Payment No: 020017

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GEORGE HILLS COMPANY, INC	00498144	INV1019866	20-21 Administration Monthly F	Special Liability Insurance	400.00
07/30/2021	GEORGE HILLS COMPANY, INC	00498145	INV1019743	Claim Adjusting	Special Liability Insurance	18,667.60
				Total for Payment No.:		19,067.60

Payment No: 019894

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	HOUSEKEYS INC	00496937	SC210618BMR	HOUSEKEYS FY20/21 Program Admi	Housing Successor	13,000.00
07/16/2021	HOUSEKEYS INC	00496938	SCBMP210618	BMP FY20/21 HOUSEKEYS	City Affordable Housing	6,025.00
				Total for Payment No.:		19,025.00

Payment No: 652478

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	FEDERAL ENERGY REGULATORY COMM	00497712	H21453-00	FERC ADMIN CHRGS FY21 BB 3190	Electric Utility	19,003.99
				Total for Payment No.:		19,003.99

Payment No: 019857

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SANTA CLARA POLICE ASSN	00497206	06/13/21-07/10/21	UNION DUES B2113 & B2114	Payroll Liability&ClearingAcct	18,048.44
				Total for Payment No.:		18,048.44

Payment No: 652261

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	██████████	00497017	217202	PROF SVCS THRU APRIL 21 LEGAL	Deposit Funds.	2,037.50
07/16/2021	██████████	00497019	218139	PROF SVCS THRU MAY 2021 LEGAL	Deposit Funds.	15,984.97
				Total for Payment No.:		18,022.47

Payment No: 652520

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SILICON VALLEY INDEPENDENT	00498124	SVILC #1 FY20-21	S.V. INDEPENDENT LIVING FY20/2	H.U.D Capital Projects	9,411.26
07/30/2021	SILICON VALLEY INDEPENDENT	00498130	SVILC #2 FY20-21	S.V. INDEPENDENT LIVING FY20/2	H.U.D Capital Projects	8,588.74
				Total for Payment No.:		18,000.00

Payment No: 019822

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GRANITE CONSTRUCTION CO	00495962	2028302	SUPPLIES-STREET	General Fund	810.68
07/09/2021	GRANITE CONSTRUCTION CO	00495963	2029744	SUPPLIES-STREET	General Fund	2,859.27
07/09/2021	GRANITE CONSTRUCTION CO	00495965	2030705	SUPPLIES-STREET	General Fund	1,280.81
07/09/2021	GRANITE CONSTRUCTION CO	00495966	2031355	SUPPLIES-STREET	General Fund	1,536.44
07/09/2021	GRANITE CONSTRUCTION CO	00495967	2032003	SUPPLIES-STREET	General Fund	4,186.57
07/09/2021	GRANITE CONSTRUCTION CO	00495968	2033739	SUPPLIES-STREET	General Fund	1,214.67
07/09/2021	GRANITE CONSTRUCTION CO	00496359	2034671	SUPPLIES-STREET	General Fund	2,673.35
07/09/2021	GRANITE CONSTRUCTION CO	00496360	2034956	SUPPLIES-STREET	General Fund	1,549.85
07/09/2021	GRANITE CONSTRUCTION CO	00496361	2035583	SUPPLIES-STREET	General Fund	1,409.52
				Total for Payment No.:		17,521.16

Payment No: 652477

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	FEDERAL ENERGY REGULATORY COMM	00497713	H21454-00	FERC ADMIN CHRGS FY21 SG 3193	Electric Utility	17,497.43
				Total for Payment No.:		17,497.43

Payment No: 652471

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	DENCO SALES CO	00498069	8765085-00	DAYS (APPROXIMATELY 10 HOURS)	General Fund	643.84
07/30/2021	DENCO SALES CO	00498069	8765085-00	DENCO TOLL FREE PHONE	General Fund	0.00

				SUPPORT		
07/30/2021	DENCO SALES CO	00498070	8765079-00	HP LATEX L365 64 INCH PRINTER	General Fund	18,524.55
07/30/2021	DENCO SALES CO	00498070	8765079-00	HP LATEX 3X0 EDGE HOLDERS	General Fund	185.30
07/30/2021	DENCO SALES CO	00498070	8765079-00	SHIPPING & HANDLING	General Fund	0.00
07/30/2021	DENCO SALES CO	00498070	8765079-00	REBATES APPLIED	General Fund	-2,180.00
				Total for Payment No.:		17,173.69

Payment No: 020016

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GENERAL ELECTRIC INTL INC	00498022	21629249	SMO0620025 SHROUD BLOCKS SET	Electric Utility Construction	16,978.49
				Total for Payment No.:		16,978.49

Payment No: 020008

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CINTAS FIRE PROTECTION #F44	00497226	0F44755451	FIRE EXT. INSPECTION	General Fund	516.12
07/30/2021	CINTAS FIRE PROTECTION #F44	00497226	0F44755451	FIRE SYSTEM MAINTENANCE - CPL	General Fund	542.23
07/30/2021	CINTAS FIRE PROTECTION #F44	00497227	0F44755489	FIRE EXT. INSPECTION	General Fund	50.60
07/30/2021	CINTAS FIRE PROTECTION #F44	00497227	0F44755489	FIRE SYSTEM MAINTENANCE - M	General Fund	57.79
07/30/2021	CINTAS FIRE PROTECTION #F44	00497228	0F44755490	FIRE SYSTEM MAINTENANCE - NS	General Fund	103.56
07/30/2021	CINTAS FIRE PROTECTION #F44	00498155	0F44752285	FIRE EXTINGUISHER SERVICE CUST	General Fund	4,153.73
07/30/2021	CINTAS FIRE PROTECTION #F44	00498155	0F44752285	NON TAXABLE	General Fund	1,908.23
07/30/2021	CINTAS FIRE PROTECTION #F44	00498156	0F44752284	TAXABLE	General Fund	1,242.10
07/30/2021	CINTAS FIRE PROTECTION #F44	00498156	0F44752284	FIRE EXTINGUISHER SERVICE CUST	General Fund	1,200.00
07/30/2021	CINTAS FIRE PROTECTION #F44	00498189	0F44752286	FIRE EXTINGUISHER SERVICE CUST	General Fund	65.60
07/30/2021	CINTAS FIRE PROTECTION #F44	00498192	0F44752640	FIRE EXTINGUISHER SERVICE CUST	Electric Utility	3,667.77
07/30/2021	CINTAS FIRE PROTECTION #F44	00498192	0F44752640	NON TAXABLE	Electric Utility	2,935.64
				Total for Payment No.:		16,443.37

Payment No: 019917

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SUNE W12DG-C, LLC	00496685	CA-12-0396-31	ENERGY PURCH (SOLAR) JUN21	Electric Utility	16,234.50
				Total for Payment No.:		16,234.50

Payment No: 652376

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MARTECH	00496748	7782	OTHER MAY21 PO25314	Electric Utility	325.00
07/23/2021	MARTECH	00496748	7782	PER DIEM MAY21 PO25314	Electric Utility	150.00
07/23/2021	MARTECH	00496748	7782	FREIGHT MAY21 PO25314	Electric Utility	175.82
07/23/2021	MARTECH	00496748	7782	LABOR MAY21 PO25314	Electric Utility	8,567.50
07/23/2021	MARTECH	00496748	7782	MATERIALS MAY21 PO25314	Electric Utility	461.20
07/23/2021	MARTECH	00496748	7782	EQUIPMENT MAY21 PO25314	Electric Utility	450.00
07/23/2021	MARTECH	00496749	7794	LABOR 5/21/21 PO25314	Electric Utility	5,480.00
07/23/2021	MARTECH	00496749	7794	EQUIPMENT 5/21/21 PO25314	Electric Utility	550.00
				Total for Payment No.:		16,159.52

Payment No: 652390

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496760	0008018610-9	COP GRIZZLY MAY21	Electric Utility Construction	15,881.39
				Total for Payment No.:		15,881.39

Payment No: 019910

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	POWER SYSTEMS OPERATIONS	00496652	1396	VERA VALIDATION UPDATES APR21	Electric Utility	4,477.52
07/16/2021	POWER SYSTEMS OPERATIONS	00496654	1403	VERA VALIDATION UPDATES MAY21	Electric Utility	4,970.17
07/16/2021	POWER SYSTEMS OPERATIONS	00496655	1415	VERA VALIDATION UPDATES JUN21	Electric Utility	6,363.12

Total for Payment No.: 15,810.81

Payment No: 652387

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PERFORMANCE MECHANICAL, INC	00496767	149047	MATERIALS PO25302	Electric Utility	1,016.74
07/23/2021	PERFORMANCE MECHANICAL, INC	00496767	149047	MARKUP	Electric Utility	107.93
07/23/2021	PERFORMANCE MECHANICAL, INC	00496932	148795	LABOR 4-26-21 TO 5-23-21	Electric Utility	10,805.83
07/23/2021	PERFORMANCE MECHANICAL, INC	00496932	148795	EQUIPMENT 4-26-21 TO 5-23-21	Electric Utility	900.00
07/23/2021	PERFORMANCE MECHANICAL, INC	00496932	148795	PER DIEM 4-26-21 TO 5-23-21	Electric Utility	390.00
07/23/2021	PERFORMANCE MECHANICAL, INC	00496932	148795	RENTED EQUIP 4-26-21 TO 5-23-2	Electric Utility	348.90
07/23/2021	PERFORMANCE MECHANICAL, INC	00496932	148795	MATERIALS 4-26-21 TO 5-23-21	Electric Utility	2,181.66
Total for Payment No.:						15,751.06

Payment No: 019915

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SERRANO ELECTRIC INC	00496603	30892	SCCC LABOR JUNE 2021	Convention Cnt Maintenance Dis	6,184.50
07/16/2021	SERRANO ELECTRIC INC	00496603	30892	SCCC MATERIALS JUNE 2021	Convention Cnt Maintenance Dis	1,238.52
07/16/2021	SERRANO ELECTRIC INC	00496603	30892	RECYCLING JUNE 2021	Convention Cnt Maintenance Dis	82.00
07/16/2021	SERRANO ELECTRIC INC	00496605	30810	SCCC LABOR MAY 2021	Convention Cnt Maintenance Dis	6,184.50
07/16/2021	SERRANO ELECTRIC INC	00496605	30810	SCCC MATERIAL MAY 2021	Convention Cnt Maintenance Dis	1,915.22
Total for Payment No.:						15,604.74

Payment No: 652225

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497166	1522237	CHANGE ORDER #3: ADDITIONAL FU LEGAL SERVICES	General Fund	407.00
07/16/2021		00497167	1522239	LEGAL SERVICE REQUEST	Special Liability	7,801.85

07/16/2021		00497168	1522240	LEGAL SERVICES	Insurance Special Liability Insurance	7,058.40
				Total for Payment No.:		15,267.25

Payment No: 652203

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	EQUINIX INC	00496719	100210316879	SANTA CLARA IBX - SV2 (FIBER)	Electric Utility	15,228.65
				Total for Payment No.:		15,228.65

Payment No: 652383

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	NVIDIA CORP	00497731	7717FEB2020.	ESCHEAT ORIGINAL CK#640654	General Fund	15,192.00
				Total for Payment No.:		15,192.00

Payment No: W22034

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/26/2021	MSR ENERGY AUTHORITY	00497611	EA1655	BUDGETED A&G COSTS JUL21-DEC21	Electric Utility	14,976.61
				Total for Payment No.:		14,976.61

Payment No: 652067

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AT&T CALNET	00496309	000016641764	1541 Civic Center 9391023685	Information Technology Service	-19.14
07/09/2021	AT&T CALNET	00496310	000016641806	Cabrillo-Warburton 9391023687	Information Technology Service	-37.78
07/09/2021	AT&T CALNET	00496311	000016662298	Engr - traffic light 1 9391023	Information Technology Service	0.00
07/09/2021	AT&T CALNET	00496312	000016656211	IT - Comm - PD 9391023695	Information Technology Service	4,983.64
07/09/2021	AT&T CALNET	00496312	000016656211	Conv Center elevators 408-986-	Convention Cnt	45.65

					Maintenance Dis	
07/09/2021	AT&T CALNET	00496312	000016656211	Conv Center garage office 408-	Convention Cnt Maintenance Dis	22.01
07/09/2021	AT&T CALNET	00496313	000016657063	Finance 9391054149	Information Technology Service	56.00
07/09/2021	AT&T CALNET	00496314	000016656198	BM - IT 9391023697	Information Technology Service	229.69
07/09/2021	AT&T CALNET	00496315	000016656229	CAO 9391023698	Information Technology Service	44.02
07/09/2021	AT&T CALNET	00496316	000016656205	CCO 9391023699	Information Technology Service	67.65
07/09/2021	AT&T CALNET	00496317	000016656215	CMO 9391023700	Information Technology Service	22.01
07/09/2021	AT&T CALNET	00496318	000016656201	Finance Misc. 9391023701	Information Technology Service	186.22
07/09/2021	AT&T CALNET	00496319	000016656204	Berryessa Adobe 260-1826	General Fund	67.65
07/09/2021	AT&T CALNET	00496319	000016656204	CDD 9391023702	Information Technology Service	253.67
07/09/2021	AT&T CALNET	00496320	000016656209	Library 9391023703	Information Technology Service	231.68
07/09/2021	AT&T CALNET	00496321	000016656226	AUTO 9391023704	Information Technology Service	25.15
07/09/2021	AT&T CALNET	00496322	000016656220	DPW 9391023705	Information Technology Service	116.96
07/09/2021	AT&T CALNET	00496323	000016656217	HR 9391023706	Information Technology Service	23.77
07/09/2021	AT&T CALNET	00496324	000016656210	PARKS - Cemetary 9391023707	Cemetery	69.40
07/09/2021	AT&T CALNET	00496325	000016656199	PARKS - YAC 9391023708	Information Technology Service	470.20
07/09/2021	AT&T CALNET	00496326	000016656208	PARKS - Sr Center 9391023709	Information Technology Service	25.13
07/09/2021	AT&T CALNET	00496327	000016656214	PARKS - CRC 9391023710	Information Technology Service	23.67
07/09/2021	AT&T CALNET	00496328	000016656203	PD 9391023711	Information Technology Service	3,763.77
07/09/2021	AT&T CALNET	00496329	000016656224	Purchasing 9391023712	Information Technology Service	23.67
07/09/2021	AT&T CALNET	00496330	000016656207	auto dialer 970-8644	Solid Waste Utility- Constructi	23.78

07/09/2021	AT&T CALNET	00496330	000016656207	Street 9391023713	Information Technology Service	220.05
07/09/2021	AT&T CALNET	00496330	000016656207	Convention Center 986-1335	Convention Cnt Maintenance Dis	23.67
07/09/2021	AT&T CALNET	00496331	000016656202	Fire 9391023714	Information Technology Service	716.16
07/09/2021	AT&T CALNET	00496332	000016656200	Water (flat fee \$50)	Water Utility	50.00
07/09/2021	AT&T CALNET	00496332	000016656200	IT 9391023715	Information Technology Service	320.71
07/09/2021	AT&T CALNET	00496333	000016656212	Water (50% of bal)	Water Utility	191.68
07/09/2021	AT&T CALNET	00496333	000016656212	IT (615 & 261 #s) 9391023716	Information Technology Service	846.53
07/09/2021	AT&T CALNET	00496333	000016656212	Sewer (50% of bal)	Sewer Utility	191.69
07/09/2021	AT&T CALNET	00496334	000016656218	Library 9391023718	General Fund	267.98
07/09/2021	AT&T CALNET	00496335	000016656206	PARKS 9391023719	General Fund	108.42
07/09/2021	AT&T CALNET	00496336	000016656213	PD 9391023720	General Fund	-22.86
07/09/2021	AT&T CALNET	00496337	000016656223	Tasman Garage 9391023724	General Fund	733.77
07/09/2021	AT&T CALNET	00496338	000016656194	CDD - Comm Svcs 9391048040	General Fund	23.67
07/09/2021	AT&T CALNET	00496339	000016657064	PARKS - CRC 9391054153	Information Technology Service	17.41
07/09/2021	AT&T CALNET	00496340	000016657549	Morse Mansion 9391064468	General Fund	47.39
07/09/2021	AT&T CALNET	00496341	000016613544	DOJ 9391066810	Information Technology Service	301.86
07/09/2021	AT&T CALNET	00496342	000016657575	PD - Alarms 9391065446	Information Technology Service	45.65
07/09/2021	AT&T CALNET	00496343	000016612444	Conference (COVID) 9391060106	Other City Dept Op Grant Fund	67.54
Total for Payment No.:						14,869.79

Payment No: 019897

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	INGRAM LIBRARY SERVICES INC	00496467	53368998	1241 AD BK	General Fund	390.85
07/16/2021	INGRAM LIBRARY SERVICES INC	00496467	53368998	1231 JUV BK	General Fund	2,630.47
07/16/2021	INGRAM LIBRARY SERVICES INC	00496467	53368998	1232 YA BK	General Fund	983.51

07/16/2021	INGRAM LIBRARY SERVICES INC	00496471	53369015	1235 AD/JUV/YA BK	General Fund	513.89
07/16/2021	INGRAM LIBRARY SERVICES INC	00496473	53369032	1236 JUV BK	General Fund	151.67
07/16/2021	INGRAM LIBRARY SERVICES INC	00496474	53369033	1233 JUV BK	General Fund	97.63
07/16/2021	INGRAM LIBRARY SERVICES INC	00496478	53465200	1241 AD BK	General Fund	2,346.06
07/16/2021	INGRAM LIBRARY SERVICES INC	00496478	53465200	1231 JUV BK	General Fund	2,408.49
07/16/2021	INGRAM LIBRARY SERVICES INC	00496478	53465200	1232 YA BK	General Fund	218.20
07/16/2021	INGRAM LIBRARY SERVICES INC	00496479	53465214	1235 AD/JUV/YA BK	General Fund	1,032.60
07/16/2021	INGRAM LIBRARY SERVICES INC	00496480	53465227	1236 JUV BK	General Fund	69.41
07/16/2021	INGRAM LIBRARY SERVICES INC	00496481	53465228	1233 JUV BK	General Fund	26.68
07/16/2021	INGRAM LIBRARY SERVICES INC	00496656	53564615	1241 AD BK	General Fund	973.44
07/16/2021	INGRAM LIBRARY SERVICES INC	00496656	53564615	1231 JUV BK	General Fund	1,056.74
07/16/2021	INGRAM LIBRARY SERVICES INC	00496656	53564615	1232 YA BK	General Fund	262.46
07/16/2021	INGRAM LIBRARY SERVICES INC	00496657	53564629	1235 AD/JUV/YA BK	General Fund	1,481.59
07/16/2021	INGRAM LIBRARY SERVICES INC	00496658	53564641	1233 JUV BK	General Fund	26.68
				Total for Payment No.:		14,670.37

Payment No: 020043

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PG&E	00497089	6960110313-3 JUL2021	GAS TRANSPORT GIANERA JUN21	Electric Utility	14,536.99
				Total for Payment No.:		14,536.99

Payment No: 652237

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	REED & GRAHAM INC	00496641	003781	SUPPLIES-STREET	General Fund	1,386.45
07/16/2021	REED & GRAHAM INC	00496754	996143	COLD MIX & BASE ROCK	Water Utility Construction	880.20
07/16/2021	REED & GRAHAM INC	00496754	996143	COLD MIX & BASE ROCK	Water Utility	352.08
07/16/2021	REED & GRAHAM INC	00496754	996143	COLD MIX & BASE ROCK	Electric Utility Construction	440.11
07/16/2021	REED & GRAHAM INC	00496754	996143	COLD MIX & BASE ROCK	Sewer Utility	88.02

07/16/2021	REED & GRAHAM INC	00496755	998791	COLD MIX & BASE ROCK	Water Utility Construction	779.33
07/16/2021	REED & GRAHAM INC	00496755	998791	COLD MIX & BASE ROCK	Water Utility	311.73
07/16/2021	REED & GRAHAM INC	00496755	998791	COLD MIX & BASE ROCK	Electric Utility Construction	389.66
07/16/2021	REED & GRAHAM INC	00496755	998791	COLD MIX & BASE ROCK	Sewer Utility	77.93
07/16/2021	REED & GRAHAM INC	00496894	000433	COLD MIX & BASE ROCK	Water Utility Construction	777.55
07/16/2021	REED & GRAHAM INC	00496894	000433	COLD MIX & BASE ROCK	Water Utility	311.02
07/16/2021	REED & GRAHAM INC	00496894	000433	COLD MIX & BASE ROCK	Electric Utility Construction	388.78
07/16/2021	REED & GRAHAM INC	00496894	000433	COLD MIX & BASE ROCK	Sewer Utility	77.76
07/16/2021	REED & GRAHAM INC	00496895	001590	COLD MIX & BASE ROCK	Water Utility Construction	439.01
07/16/2021	REED & GRAHAM INC	00496895	001590	COLD MIX & BASE ROCK	Water Utility	175.61
07/16/2021	REED & GRAHAM INC	00496895	001590	COLD MIX & BASE ROCK	Electric Utility Construction	219.50
07/16/2021	REED & GRAHAM INC	00496895	001590	COLD MIX & BASE ROCK	Sewer Utility	43.90
07/16/2021	REED & GRAHAM INC	00496896	002525	COLD MIX & BASE ROCK	Water Utility Construction	423.12
07/16/2021	REED & GRAHAM INC	00496896	002525	COLD MIX & BASE ROCK	Water Utility	169.25
07/16/2021	REED & GRAHAM INC	00496896	002525	COLD MIX & BASE ROCK	Electric Utility Construction	211.57
07/16/2021	REED & GRAHAM INC	00496896	002525	COLD MIX & BASE ROCK	Sewer Utility	42.32
07/16/2021	REED & GRAHAM INC	00496901	002644	COLD MIX & BASE ROCK	Water Utility Construction	577.54
07/16/2021	REED & GRAHAM INC	00496901	002644	COLD MIX & BASE ROCK	Water Utility	231.02
07/16/2021	REED & GRAHAM INC	00496901	002644	COLD MIX & BASE ROCK	Electric Utility Construction	288.77
07/16/2021	REED & GRAHAM INC	00496901	002644	COLD MIX & BASE ROCK	Sewer Utility	57.75
07/16/2021	REED & GRAHAM INC	00496902	003036	COLD MIX & BASE ROCK	Water Utility Construction	249.41
07/16/2021	REED & GRAHAM INC	00496902	003036	COLD MIX & BASE ROCK	Water Utility	99.76
07/16/2021	REED & GRAHAM INC	00496902	003036	COLD MIX & BASE ROCK	Electric Utility Construction	124.69
07/16/2021	REED & GRAHAM INC	00496902	003036	COLD MIX & BASE ROCK	Sewer Utility	24.94

07/16/2021	REED & GRAHAM INC	00496903	003037	COLD MIX & BASE ROCK	Water Utility Construction	744.57
07/16/2021	REED & GRAHAM INC	00496903	003037	COLD MIX & BASE ROCK	Water Utility	297.82
07/16/2021	REED & GRAHAM INC	00496903	003037	COLD MIX & BASE ROCK	Electric Utility Construction	372.28
07/16/2021	REED & GRAHAM INC	00496903	003037	COLD MIX & BASE ROCK	Sewer Utility	74.45
07/16/2021	REED & GRAHAM INC	00496904	003524	COLD MIX & BASE ROCK	Water Utility Construction	222.63
07/16/2021	REED & GRAHAM INC	00496904	003524	COLD MIX & BASE ROCK	Water Utility	89.06
07/16/2021	REED & GRAHAM INC	00496904	003524	COLD MIX & BASE ROCK	Electric Utility Construction	111.33
07/16/2021	REED & GRAHAM INC	00496904	003524	COLD MIX & BASE ROCK	Sewer Utility	22.26
07/16/2021	REED & GRAHAM INC	00496905	003637	COLD MIX & BASE ROCK	Water Utility Construction	107.62
07/16/2021	REED & GRAHAM INC	00496905	003637	COLD MIX & BASE ROCK	Water Utility	43.06
07/16/2021	REED & GRAHAM INC	00496905	003637	COLD MIX & BASE ROCK	Electric Utility Construction	53.81
07/16/2021	REED & GRAHAM INC	00496905	003637	COLD MIX & BASE ROCK	Sewer Utility	10.77
07/16/2021	REED & GRAHAM INC	00496906	003782	COLD MIX & BASE ROCK	Water Utility Construction	812.47
07/16/2021	REED & GRAHAM INC	00496906	003782	COLD MIX & BASE ROCK	Water Utility	324.98
07/16/2021	REED & GRAHAM INC	00496906	003782	COLD MIX & BASE ROCK	Electric Utility Construction	406.24
07/16/2021	REED & GRAHAM INC	00496906	003782	COLD MIX & BASE ROCK	Sewer Utility	81.25
07/16/2021	REED & GRAHAM INC	00496907	996451	COLD MIX & BASE ROCK	Water Utility Construction	297.58
07/16/2021	REED & GRAHAM INC	00496907	996451	COLD MIX & BASE ROCK	Water Utility	119.03
07/16/2021	REED & GRAHAM INC	00496907	996451	COLD MIX & BASE ROCK	Electric Utility Construction	148.79
07/16/2021	REED & GRAHAM INC	00496907	996451	COLD MIX & BASE ROCK	Sewer Utility	29.76
07/16/2021	REED & GRAHAM INC	00496908	998579	COLD MIX & BASE ROCK	Water Utility Construction	257.74
07/16/2021	REED & GRAHAM INC	00496908	998579	COLD MIX & BASE ROCK	Water Utility	103.10
07/16/2021	REED & GRAHAM INC	00496908	998579	COLD MIX & BASE ROCK	Electric Utility Construction	128.88
07/16/2021	REED & GRAHAM INC	00496908	998579	COLD MIX & BASE ROCK	Sewer Utility	25.77

Total for Payment No.: 14,524.03

Payment No: 019887

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GRAINGER-SAN JOSE	00496513	9917420599	CU PIPE CUT OFF TOOL	Water Utility	506.31
07/16/2021	GRAINGER-SAN JOSE	00496516	9924220057	CU PIPE SHUT OFF TOLL	Water Utility	480.44
07/16/2021	GRAINGER-SAN JOSE	00496517	9928053009	DRAIN SPADE	Water Utility	75.72
07/16/2021	GRAINGER-SAN JOSE	00496519	9928746768	HEX CAP SCREW	Electric Utility	10.61
07/16/2021	GRAINGER-SAN JOSE	00496548	9934987877	PARTS-SHOP USE	Fleet Operation Fund	403.38
07/16/2021	GRAINGER-SAN JOSE	00496552	9947066164	PARTS-V#3274	Fleet Operation Fund	8.51
07/16/2021	GRAINGER-SAN JOSE	00496553	9947066172	PARTS-V#3119	Fleet Operation Fund	44.21
07/16/2021	GRAINGER-SAN JOSE	00496554	9950065889	PARTS-SHOP USE	Fleet Operation Fund	9.27
07/16/2021	GRAINGER-SAN JOSE	00496601	9880054201	SUPPLIES	General Fund	163.43
07/16/2021	GRAINGER-SAN JOSE	00496602	9946407989	AUTO AC FOR OFFICE	Fleet Operation Fund	1,317.31
07/16/2021	GRAINGER-SAN JOSE	00496958	9930598728	ITEM # 36VE04 JET 52' STEEL HY	General Fund	11,150.34
Total for Payment No.:						14,169.53

Payment No: 019854

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	IBEW	00497198	06/13/21-07/10/21	UNION DUES B2113 & B2114	Payroll Liability&ClearingAcct	13,969.52
Total for Payment No.:						13,969.52

Payment No: 019902

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MIDWEST TAPE LLC	00496659	500653834	1241 AD DB	General Fund	13,903.47
Total for Payment No.:						13,903.47

Payment No: 652486

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	INTTERRA	00497038	000913	ANNUAL LICENSE 6/1/21-6/31/21	General Fund	3,808.50
07/30/2021	INTTERRA	00497039	000906	ANNUAL LIC. R&A 7/1/21-6/30/22	General Fund	9,500.00
				Total for Payment No.:		13,308.50

Payment No: 652336

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CITIES ASSN OF SANTA CLARA CO	00497614	1138	MEMBERSHIP DUES	General Fund	13,046.27
				Total for Payment No.:		13,046.27

Payment No: 652170

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ALLIED UNIVERSAL SECURITY	00496577	11470892	SCCC JUNE 2021 APPL TO 2020-21	Convention Cnt Maintenance Dis	12,859.52
				Total for Payment No.:		12,859.52

Payment No: 652476

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ENERGY PROJECT SOLUTIONS LLC	00497175	2021.539	DOT PIPELINE MANAGEMENT JUN21	Electric Utility	10,615.00
07/30/2021	ENERGY PROJECT SOLUTIONS LLC	00497233	2021.513	PROJECT MGMT MAY21	Electric Utility Construction	1,000.00
07/30/2021	ENERGY PROJECT SOLUTIONS LLC	00497233	2021.513	REIMBURSEABLE EXPENSE-FJ TECH	Electric Utility Construction	1,080.00
07/30/2021	ENERGY PROJECT SOLUTIONS LLC	00497233	2021.513	10% SUB MARKUP	Electric Utility Construction	108.00
				Total for Payment No.:		12,803.00

Payment No: 652328

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	BATEMAN SENIOR MEALS	00497692	INV4650005762	ADDITIONAL ENCUMBRANCE (OVERAG	Park and Rec Opr GrantTst Fund	3,454.40

07/23/2021	BATEMAN SENIOR MEALS	00497693	INV4650005691	ADDITIONAL ENCUMBRANCE (OVERAG	Park and Rec Opr GrantTst Fund	3,579.52
07/23/2021	BATEMAN SENIOR MEALS	00497695	INV4650005727	ADDITIONAL ENCUMBRANCE (OVERAG	Park and Rec Opr GrantTst Fund	3,421.76
07/23/2021	BATEMAN SENIOR MEALS	00497696	INV4650005981	ADDITIONAL ENCUMBRANCE (OVERAG	Park and Rec Opr GrantTst Fund	1,958.40
Total for Payment No.:						12,414.08

Payment No: 019890

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497164	5686367	ADDITIONAL FUNDS FROM PO 24464 LEGAL SERVICES	Related Santa Clara Dvlpr Fund	10,507.75
07/16/2021		00497165	5686683	LEGAL SERVICES	Solid Waste Utility-Constructi	1,878.50
Total for Payment No.:						12,386.25

Payment No: 019850

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	WOODARD & CURRAN, INC	00496558	191276	CHANGE ORDER PER AMENDMENT NO	Sewer Utility Construction	12,365.75
Total for Payment No.:						12,365.75

Payment No: 019863

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ASPEN ENVIRONMENTAL GROUP	00496954	3360.003-14	SELF GENERATION TASK A-2	Electric Utility	6,977.35
07/16/2021	ASPEN ENVIRONMENTAL GROUP	00496956	3360.005-01	HOMESTEAD REBUILD TASK A-4	Electric Utility Construction	5,327.50
Total for Payment No.:						12,304.85

Payment No: 019893

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	HILL BROTHERS CHEMICAL CO	00496741	07096305	AQUA AMMONIA PO25306	Electric Utility	4,306.23

07/16/2021	HILL BROTHERS CHEMICAL CO	00496741	07096305	FUEL SURCHARGE PO25306	Electric Utility	21.80
07/16/2021	HILL BROTHERS CHEMICAL CO	00496742	07097530	AQUA AMMONIA PO25306	Electric Utility	4,157.86
07/16/2021	HILL BROTHERS CHEMICAL CO	00496742	07097530	FUEL SURCHARGE PO25306	Electric Utility	21.80
07/16/2021	HILL BROTHERS CHEMICAL CO	00496743	07098407	AQUA AMMONIA PO25306	Electric Utility	3,712.22
07/16/2021	HILL BROTHERS CHEMICAL CO	00496743	07098407	FUEL SURCHARGE PO25306	Electric Utility	21.80
				Total for Payment No.:		12,241.71

Payment No: 019807

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ACT ENVIRO	00496298	339646	6 HR CHEMIST 6/2/21	Electric Utility	402.00
07/09/2021	ACT ENVIRO	00496298	339646	HAND PUMP LARGE	Electric Utility	50.00
07/09/2021	ACT ENVIRO	00496298	339646	PPE GEAR LEVEL D	Electric Utility	8.00
07/09/2021	ACT ENVIRO	00496298	339646	GEAR TRUCK (BOB TAIL) 6/2/21	Electric Utility	125.00
07/09/2021	ACT ENVIRO	00496298	339646	SUPPLIES	Electric Utility	150.00
07/09/2021	ACT ENVIRO	00496298	339646	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	58.80
07/09/2021	ACT ENVIRO	00496299	340687	6 HR CHEMIST 6/9/21	Electric Utility	402.00
07/09/2021	ACT ENVIRO	00496299	340687	HAND PUMP LARGE	Electric Utility	50.00
07/09/2021	ACT ENVIRO	00496299	340687	PPE GEAR LEVEL D	Electric Utility	8.00
07/09/2021	ACT ENVIRO	00496299	340687	GEAR TRUCK (BOB TAIL) 6/9/21	Electric Utility	125.00
07/09/2021	ACT ENVIRO	00496299	340687	SUPPLIES	Electric Utility	150.00
07/09/2021	ACT ENVIRO	00496299	340687	ANALYTICALS	Electric Utility	1,000.00
07/09/2021	ACT ENVIRO	00496299	340687	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	138.80
07/09/2021	ACT ENVIRO	00496300	341802	OILY DEBRIS	Electric Utility	150.00
07/09/2021	ACT ENVIRO	00496300	341802	AEROSOLS	Electric Utility	165.00
07/09/2021	ACT ENVIRO	00496300	341802	OILY DEBRIS	Electric Utility	150.00
07/09/2021	ACT ENVIRO	00496300	341802	USED OIL	Electric Utility	725.00
07/09/2021	ACT ENVIRO	00496300	341802	DIESEL FUEL WITH PCB <10PPM	Electric Utility	80.00
07/09/2021	ACT ENVIRO	00496300	341802	ASBESTOS PIPING	Electric Utility	420.00

07/09/2021	ACT ENVIRO	00496300	341802	MAPP GAS CYLINDERS	Electric Utility	30.00
07/09/2021	ACT ENVIRO	00496300	341802	HID LAMPS	Electric Utility	244.75
07/09/2021	ACT ENVIRO	00496300	341802	ALKALINE BATTERIES	Electric Utility	76.50
07/09/2021	ACT ENVIRO	00496300	341802	LITHIUM ION BATTERIES	Electric Utility	76.00
07/09/2021	ACT ENVIRO	00496300	341802	LEAD ACID BATTERIES	Electric Utility	15.00
07/09/2021	ACT ENVIRO	00496300	341802	2 HR DRIVER 6/16/21	Electric Utility	134.00
07/09/2021	ACT ENVIRO	00496300	341802	TRANSPORTATION 55 GALLON	Electric Utility	297.00
07/09/2021	ACT ENVIRO	00496300	341802	TRANSPORTATION 55 GALLON	Electric Utility	33.00
07/09/2021	ACT ENVIRO	00496300	341802	TRANSPORTATION 55 GALLON	Electric Utility	100.00
07/09/2021	ACT ENVIRO	00496300	341802	PPE GEAR LEVEL D	Electric Utility	8.00
07/09/2021	ACT ENVIRO	00496300	341802	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	223.54
07/09/2021	ACT ENVIRO	00496300	341802	MANIFEST FEE	Electric Utility	90.00
07/09/2021	ACT ENVIRO	00496301	342052	6 HR CHEMIST 6/16/21	Electric Utility	402.00
07/09/2021	ACT ENVIRO	00496301	342052	HAND PUMP LAGE	Electric Utility	50.00
07/09/2021	ACT ENVIRO	00496301	342052	PPE GEAR LEVEL D	Electric Utility	8.00
07/09/2021	ACT ENVIRO	00496301	342052	GEAR TRUCK (BOB TAIL) 6/16/21	Electric Utility	125.00
07/09/2021	ACT ENVIRO	00496301	342052	SUPPLIES	Electric Utility	150.00
07/09/2021	ACT ENVIRO	00496301	342052	ANALYTICALS	Electric Utility	3,750.00
07/09/2021	ACT ENVIRO	00496301	342052	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	358.80
07/09/2021	ACT ENVIRO	00496302	340142	1 HR DRIVER 6/3/21	Electric Utility	67.00
07/09/2021	ACT ENVIRO	00496302	340142	ANALYTICALS	Electric Utility	280.00
07/09/2021	ACT ENVIRO	00496302	340142	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	27.76
07/09/2021	ACT ENVIRO	00496303	340958	USED OIL	Electric Utility Construction	1,003.32
07/09/2021	ACT ENVIRO	00496303	340958	OILY RAGS	Electric Utility Construction	0.00
07/09/2021	ACT ENVIRO	00496303	340958	2 HR DRIVER 6/10/21	Electric Utility Construction	0.00
07/09/2021	ACT ENVIRO	00496303	340958	TRANSPORTATION 55 GALLON	Electric Utility Construction	0.00

07/09/2021	ACT ENVIRO	00496303	340958	PPE GEAR LEVEL D	Electric Utility Construction	0.00
07/09/2021	ACT ENVIRO	00496303	340958	MANIFEST FEE	Electric Utility Construction	0.00
07/09/2021	ACT ENVIRO	00496303	340958	ENVIRONMENTAL SERVICE CHARGE	Electric Utility Construction	0.00
Total for Payment No.:						11,907.27

Payment No: 020039

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PENINSULA GYMNASTICS	00497989	0008	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,295.00
07/30/2021	PENINSULA GYMNASTICS	00497990	0009	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,160.00
07/30/2021	PENINSULA GYMNASTICS	00497991	0010	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	4,744.80
07/30/2021	PENINSULA GYMNASTICS	00497992	0011	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,565.00
Total for Payment No.:						11,764.80

Payment No: 652397

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	QUESTLINE, INC	00496931	060820A	MO KEY ACCT/RES LT MAY20-APR21	Elec OperatingGrant Trust Fund	2,936.41
07/23/2021	QUESTLINE, INC	00496931	060820A	MO KEY ACCT/RES LT MAY20-APR21	Elec OperatingGrant Trust Fund	2,936.41
07/23/2021	QUESTLINE, INC	00496931	060820A	MO KEY ACCT/RES LT MAY20-APR21	Electric Utility	5,872.83
Total for Payment No.:						11,745.65

Payment No: 652415

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	UNIVAR SOLUTIONS USA INC	00496776	49219965	DVR CHEM DEL SOD HYP JUN2021	Electric Utility	831.04
07/23/2021	UNIVAR SOLUTIONS USA INC	00496776	49219965	CALIFORNIA MILL FEE	Electric Utility	18.07

07/23/2021	UNIVAR SOLUTIONS USA INC	00496777	49232613	DVR CHEM DEL SOD HYP JUN2021	Electric Utility	934.93
07/23/2021	UNIVAR SOLUTIONS USA INC	00496777	49232613	CALIFORNIA MILL FEE	Electric Utility	20.34
07/23/2021	UNIVAR SOLUTIONS USA INC	00496778	49245285	DVR CHEM DEL SULFURIC AC JUN21	Electric Utility	6,840.19
07/23/2021	UNIVAR SOLUTIONS USA INC	00496779	49250141	DVR CHEM DEL SOD HYP JUN2021	Electric Utility	1,254.56
07/23/2021	UNIVAR SOLUTIONS USA INC	00496779	49250141	CALIFORNIA MILL FEE	Electric Utility	27.28
07/23/2021	UNIVAR SOLUTIONS USA INC	00496780	49255185	DVR CHEM DEL SOD HYP JUN2021	Electric Utility	423.51
07/23/2021	UNIVAR SOLUTIONS USA INC	00496780	49255185	CALIFORNIA MILL FEE	Electric Utility	9.21
07/23/2021	UNIVAR SOLUTIONS USA INC	00496781	49265966	DVR CHEM DEL SOD HYP JUN2021	Electric Utility	447.49
07/23/2021	UNIVAR SOLUTIONS USA INC	00496781	49265966	CALIFORNIA MILL FEE	Electric Utility	9.73
07/23/2021	UNIVAR SOLUTIONS USA INC	00496925	49232612	DVR CHEM DEL SOD HYP JUN2021	Electric Utility	664.90
Total for Payment No.:						11,481.25

Payment No: 019941

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	EPM POWER & WATER SOLUTIONS	00497793	8117353	PN# 1C31201G03 - PMOD ASSY, SE	Electric Utility	10,978.12
Total for Payment No.:						10,978.12

Payment No: 652448

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	U.S. BANK	00498229	07/11/21-07/24/21	BIWKLY PAYROLL DED PARS B2115	Fringe Benefits	10,776.50
Total for Payment No.:						10,776.50

Payment No: 019888

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GRANITE CONSTRUCTION CO	00496635	2038861	SUPPLIES-STREET	General Fund	2,537.51
07/16/2021	GRANITE CONSTRUCTION CO	00496636	2039411	SUPPLIES-STREET	General Fund	2,230.03
07/16/2021	GRANITE CONSTRUCTION CO	00496637	2042593	SUPPLIES-STREET	General Fund	1,946.70
07/16/2021	GRANITE CONSTRUCTION CO	00496639	2045831	SUPPLIES-STREET	General Fund	2,325.67

07/16/2021	GRANITE CONSTRUCTION CO	00497087	2048384	SUPPLIES-STREET	General Fund	1,681.24
Total for Payment No.:						10,721.15

Payment No: 652413

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	UNIQUE SCAFFOLDING	00496773	21747	SCAFFOLDING 6/1-6/3 PO25305	Electric Utility	10,625.88
Total for Payment No.:						10,625.88

Payment No: 652324

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ALPINE POWER SYSTEMS	00497788	0808805-IN	PN# BB0443-00 - HINDLE POWER U	Electric Utility	9,194.15
07/23/2021	ALPINE POWER SYSTEMS	00497788	0808805-IN	ESTIMATED SHIPPING & HANDLING	Electric Utility	1,270.45
Total for Payment No.:						10,464.60

Payment No: 652355

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	FASTER ASSET SOLUTIONS	00497090	CINV-008715	ANNUAL SERVICES- 8/21-7/22	Fleet Operation Fund	10,140.13
Total for Payment No.:						10,140.13

Payment No: 652538

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WATERSAVERS IRRIGATION INC	00497569	2420034-00	IRRIGATION MAINTENANCE SUPPLIE	General Fund	7,115.66
07/30/2021	WATERSAVERS IRRIGATION INC	00497573	2482321-00	IRRIGATION MAINTENANCE SUPPLIE	General Fund	3,005.77
Total for Payment No.:						10,121.43

Payment No: 651895

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/02/2021	U.S. BANK	00496353	06/13/21-06/26/21	BIWKLY PAYROLL DED PARS B2113	Fringe Benefits	10,052.92
Total for Payment No.:						10,052.92

Payment No: 652129

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TERI BLACK & CO LLC	00496572	21-0614-179	PHASE II	General Fund	4,750.00
07/09/2021	TERI BLACK & CO LLC	00496572	21-0614-179	PHASE III	General Fund	4,750.00
07/09/2021	TERI BLACK & CO LLC	00496572	21-0614-179	REIMBURSABLE EXPENSES	General Fund	543.81
Total for Payment No.:						10,043.81

Payment No: 652492

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	LN CURTIS & SONS	00496857	INV499622	SHIPPING FOR RECEIPT#66994	General Fund	0.00
07/30/2021	LN CURTIS & SONS	00496857	INV499622	22888180G2 PARA KPI35I 39.5 MA	General Fund	1,728.94
07/30/2021	LN CURTIS & SONS	00496857	INV499622	22888160G2 PARA KPI22 25.6 MAX	General Fund	5,363.66
07/30/2021	LN CURTIS & SONS	00496857	INV499622	22888130G2 PARA KIP5 5.4 MAXIF	General Fund	1,541.69
07/30/2021	LN CURTIS & SONS	00496857	INV499622	22888110G2 PARA KPI1 1.5 MAXIF	General Fund	1,298.26
Total for Payment No.:						9,932.55

Payment No: 651897

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	PRISM	00496352	22400048	QTRLY PMT FOR EAP JUL-SEP21	Payroll Liability&ClearingAcct	9,905.74
Total for Payment No.:						9,905.74

Payment No: 652507

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	PG&E	00497654	0008024101-1	COO NONRULE 2 LES/230KV JUL21	Electric Utility	3,231.16
07/30/2021	PG&E	00497655	0008024100-3	COO 115KV NRS (TFA) JUL21	Electric Utility	6,600.59
Total for Payment No.:						9,831.75

Payment No: 652144

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ENVIRONMENTAL SYSTEMS INC	00496646	8503-CO7	CE18-19-03 BCKFLW PRVNTR UPGRD	Public Buildings	9,450.00
Total for Payment No.:						9,450.00

Payment No: 652166

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	U.S. BANK	00497196	06/27/21-07/10/21	BIWKLY PAYROLL DED PARS	Fringe Benefits	9,378.60
Total for Payment No.:						9,378.60

Payment No: 652465

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CDW-GOVERNMENT INC	00497995	7718168	ZEBRA TC70X HANDHELD COMPUTER	Electric Utility Construction	7,157.07
07/30/2021	CDW-GOVERNMENT INC	00497996	7779619	ZEBRA FIVE-SLOT SHARECRADLE MF	Electric Utility Construction	444.28
07/30/2021	CDW-GOVERNMENT INC	00497997	7529623	ZEBRA HANDHELD HOLSTER MFG. PA	Electric Utility Construction	400.77
07/30/2021	CDW-GOVERNMENT INC	00497997	7529623	ZEBRA GX SERIES GX420T - LABEL	Electric Utility Construction	1,355.79
Total for Payment No.:						9,357.91

Payment No: 019990

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	WESTERN STATES OIL CO	00497599	819740	RENEWABLE DIESEL	Fleet Operation Fund	3,586.55
07/23/2021	WESTERN STATES OIL CO	00497600	819741	RENEWABLE DIESEL	Fleet Operation Fund	2,169.86

07/23/2021	WESTERN STATES OIL CO	00497601	819743	RENEWABLE DIESEL	Fleet Operation Fund	2,151.93
07/23/2021	WESTERN STATES OIL CO	00497602	819744	RENEWABLE DIESEL	Fleet Operation Fund	1,434.62
				Total for Payment No.:		9,342.96

Payment No: 652216

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GTT COMMUNICATIONS INC	00496775	INV5180907	INTERNET SVCS 881/1705 JUL21	Electric Utility	8,793.71
				Total for Payment No.:		8,793.71

Payment No: 652345

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CRESCO EQUIPMENT RENTALS	00497862	5436175-0001	STANLEY TRASH PUMP CE MODEL IT	Water Utility	8,421.21
07/23/2021	CRESCO EQUIPMENT RENTALS	00497862	5436175-0001	DELIVERY FEE	Water Utility	354.25
				Total for Payment No.:		8,775.46

Payment No: 652177

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AT&T CALNET	00496695	000016656147	BAN: 9391015175 5/25-6/24/21	Electric Utility	8,598.92
				Total for Payment No.:		8,598.92

Payment No: 652358

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021		00497801	1295843	LEGAL SERVICES - CHANGE ORDER	Special Liability Insurance	8,536.75
				Total for Payment No.:		8,536.75

Payment No: 652521

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	SOUDI CONSULTANTS INC	00497664	SC2101	SUBSTATION PROT SRV FEB-APR21	Electric Utility	8,500.00
Total for Payment No.:						8,500.00

Payment No: 652364

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JET MULCH INC	00497714	16179-OL	Engineered Wood Fiber Install	General Fund	4,182.35
07/23/2021	JET MULCH INC	00497714	16179-OL	TAXABLE	General Fund	4,317.49
Total for Payment No.:						8,499.84

Payment No: 019829

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LINCOLN AQUATICS	00496393	36035835	LIQUID CHLORINE	General Fund	586.64
07/09/2021	LINCOLN AQUATICS	00496393	36035835	PESTICIDE ASSESSMENT	General Fund	47.18
07/09/2021	LINCOLN AQUATICS	00496394	36035823	LIQUID CHLORINE	General Fund	1,963.96
07/09/2021	LINCOLN AQUATICS	00496394	36035823	PESTICIDE ASSESSMENT	General Fund	69.77
07/09/2021	LINCOLN AQUATICS	00496395	36035842	LIQUID CHLORINE	General Fund	1,294.92
07/09/2021	LINCOLN AQUATICS	00496395	36035842	PESTICIDE ASSESSMENT	General Fund	58.94
07/09/2021	LINCOLN AQUATICS	00496407	36035009	MURIATIC ACID	General Fund	573.88
07/09/2021	LINCOLN AQUATICS	00496407	36035009	PESTICIDE ASSESSMENT	General Fund	47.30
07/09/2021	LINCOLN AQUATICS	00496414	36033635	LIQUID CHLORINE	General Fund	443.08
07/09/2021	LINCOLN AQUATICS	00496414	36033635	PESTICIDE ASSESSMENT	General Fund	44.98
07/09/2021	LINCOLN AQUATICS	00496415	36033580	LIQUID CHLORINE	General Fund	511.02
07/09/2021	LINCOLN AQUATICS	00496415	36033580	PESTICIDE ASSESSMENT	General Fund	46.05
07/09/2021	LINCOLN AQUATICS	00496423	36035008	LIQUID CHLORINE	General Fund	2,713.77
07/09/2021	LINCOLN AQUATICS	00496423	36035008	PESTICIDE ASSESSMENT	General Fund	82.33
Total for Payment No.:						8,483.82

Payment No: 019927

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ALMADEN PRESS INC	00497056	150002	MAIL LTG, FOOD SRV, REB; JUL21	Elec OperatingGrant Trust Fund	1,688.00
07/23/2021	ALMADEN PRESS INC	00497056	150002	MAIL LTG, FOOD SRV, REB; JUL21	Elec OperatingGrant Trust Fund	1,688.00
07/23/2021	ALMADEN PRESS INC	00497056	150002	MAIL LTG, FOOD SRV, REB; JUL21	Elec OperatingGrant Trust Fund	1,688.00
07/23/2021	ALMADEN PRESS INC	00497056	150002	MAIL LTG, FOOD SRV, REB; JUL21	Elec OperatingGrant Trust Fund	3,376.00
				Total for Payment No.:		8,440.00

Payment No: 652232

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	OLDCASTLE INFRASTRUCTURE	00496532	030303525	#19 SVP 2436-P1 ASSY MRKD UTIL	Electric Utility	8,338.51
				Total for Payment No.:		8,338.51

Payment No: 652511

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ROCKO'S CHOCOLATE TACOS LLC	00497607	R22-SBGR-0030	SM BUSI REBATE;ACT 32946-04	Elec OperatingGrant Trust Fund	8,032.50
				Total for Payment No.:		8,032.50

Payment No: 652268

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	WILSON BOHANNAN	00496535	0181362-IN	BRASS PADLOCK	Electric Utility	8,006.05
				Total for Payment No.:		8,006.05

Payment No: 652398

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	QUICK CRETE PRODUCTS	00497808	120844	QLBT72PT - 72"L. X 72"W. ONE P	Parks And Recreation	3,666.60
07/23/2021	QUICK CRETE PRODUCTS	00497808	120844	QLBT102PTADA - 102"L. X 72"W.	Parks And Recreation	4,278.80

Total for Payment No.: 7,945.40

Payment No: 652348

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DELTAWRX LLC	00496978	1103	RMS Project : Phase III Month	General Government - Other	6,254.82
07/23/2021	DELTAWRX LLC	00496981	1100	NIBRS Transition Apr-June 2021	General Government - Other	1,660.00
Total for Payment No.:						7,914.82

Payment No: 652134

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	VP SECURITY SERVICES, INC	00496560	18128	TEMPORARY SECURITY SERVICES	Electric Utility	1,584.00
07/09/2021	VP SECURITY SERVICES, INC	00496561	18129	TEMPORARY SECURITY SERVICES	Electric Utility	600.00
07/09/2021	VP SECURITY SERVICES, INC	00496562	18174	TEMPORARY SECURITY SERVICES	Electric Utility	1,500.00
07/09/2021	VP SECURITY SERVICES, INC	00496563	18254	TEMPORARY SECURITY SERVICES	Electric Utility	4,224.00
Total for Payment No.:						7,908.00

Payment No: 652191

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CHRIS WORTMAN	00496945	BJ-613211	2021 CLEANUP CAMPAIGN HIGH-SID	Solid Waste Program	7,828.00
Total for Payment No.:						7,828.00

Payment No: 019883

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GE GRID SOLUTIONS, LLC	00496976	1423187	DATA-NX64F UNIT FIBER PB (C37.	Electric Utility	2,005.46
07/16/2021	GE GRID SOLUTIONS, LLC	00496976	1423187	DATA-NX64F UNIT (64-768K) B864	Electric Utility	5,664.54
Total for Payment No.:						7,670.00

Payment No: 020021

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	HSQ TECHNOLOGY INC	00497239	203737	2021 LEVI STADIUM RTU REPLACED	Sewer Utility	5,160.50
07/30/2021	HSQ TECHNOLOGY INC	00497239	203737	2021 LEVI STADIUM RTU REPLACE	Sewer Utility	1,035.50
07/30/2021	HSQ TECHNOLOGY INC	00498105	203475	4TH QTR PAYMENT - SCADA PHONE	Storm Drain	374.08
07/30/2021	HSQ TECHNOLOGY INC	00498105	203475	4TH QTR PAYMENT - SCADA PHONE	Water Utility	801.60
07/30/2021	HSQ TECHNOLOGY INC	00498105	203475	4TH QTR PAYMENT - SCADA PHONE	Sewer Utility	160.32
Total for Payment No.:						7,532.00

Payment No: 652213

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GLOBAL RENTAL CO	00496728	3641860	RENT FREIGHTL M2-106 6/14-7/11	Electric Utility	3,815.00
07/16/2021	GLOBAL RENTAL CO	00496730	3647480	2019 INTL4300 6/29/21-7/26/21	Electric Utility	3,706.00
Total for Payment No.:						7,521.00

Payment No: 019891

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	HARRIS COMPUTER SYSTEMS	00496431	CT050528	EIP INTEGRATION-DEPLOY TO PROD	General Government - Other	7,500.00
Total for Payment No.:						7,500.00

Payment No: 019956

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	LINCOLN AQUATICS	00496983	36037609	MURIATIC ACID	General Fund	518.34
07/23/2021	LINCOLN AQUATICS	00496983	36037609	PESTICIDE ASSESSMENT	General Fund	46.20
07/23/2021	LINCOLN AQUATICS	00496984	36037610	LIQUID CHLORINE	General Fund	451.78
07/23/2021	LINCOLN AQUATICS	00496984	36037610	PESTICIDE ASSESSMENT	General Fund	45.06

07/23/2021	LINCOLN AQUATICS	00496985	36037604	MURIATIC ACID	General Fund	498.70
07/23/2021	LINCOLN AQUATICS	00496985	36037604	PESTICIDE ASSESSMENT	General Fund	45.90
07/23/2021	LINCOLN AQUATICS	00496986	36037603	MURIATIC ACID	General Fund	852.05
07/23/2021	LINCOLN AQUATICS	00496986	36037603	PESTICIDE ASSESSMENT	General Fund	51.12
07/23/2021	LINCOLN AQUATICS	00496987	36037548	LIQUID CHLORINE	General Fund	540.17
07/23/2021	LINCOLN AQUATICS	00496987	36037548	PESTICIDE ASSESSMENT	General Fund	46.73
07/23/2021	LINCOLN AQUATICS	00497133	36036081	LMI CONNECTING NUT	General Fund	1,770.35
07/23/2021	LINCOLN AQUATICS	00497135	D8738716	50# DE POWDER	General Fund	2,569.33
				Total for Payment No.:		7,435.73

Payment No: 652437

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	QUALITY TRAFFIC DATA LLC	00497994	2021135	AS-NEEDED TRAFFIC DATA COLLECT	Streets And Highways	7,340.00
				Total for Payment No.:		7,340.00

Payment No: 652502

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	NV5 INC	00497240	195130	2021 JAN SERRA TANK RHB DESIGN	Water Utility Construction	2,845.00
07/30/2021	NV5 INC	00497241	220714	2021 JUL SERRA TANK RHB DESIGN	Water Utility Construction	4,345.51
				Total for Payment No.:		7,190.51

Payment No: 019875

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ELECTRICAL CONSULTANTS INC	00497005	94732	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	5,776.82
07/16/2021	ELECTRICAL CONSULTANTS INC	00497008	94733	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	1,410.00
				Total for Payment No.:		7,186.82

Payment No: 652525

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	THE HEALTH TRUST	00498114	31520-07-07	HEALTH TRUST/MOW FY20/21 MEALS	H.U.D Capital Projects	7,102.57
				Total for Payment No.:		7,102.57

Payment No: 652331

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CED CONTRACTORS	00497729	7488-1010443	WIRE, TRAFFIC SIGNAL, #12, BLU	Electric Utility	6,480.16
07/23/2021	CED CONTRACTORS	00497730	7488-1013275	WIRE, 600V, CU, #12 SOLID, THH	Electric Utility	542.82
				Total for Payment No.:		7,022.98

Payment No: 019953

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KIDZ LOVE SOCCER	00497576	2021MAY-10300-0014	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	3,627.00
07/23/2021	KIDZ LOVE SOCCER	00497578	2021JUN-10391-0014	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	3,369.60
				Total for Payment No.:		6,996.60

Payment No: 652187

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00496586	7418088	SCCC IRRIGATION	Convention Cnt Maintenance Dis	2,792.96
07/16/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00496588	7448914	SCCC IRRIGATION TECH	Convention Cnt Maintenance Dis	1,286.08
07/16/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00496590	7418086	SCCC IRRIGATION GATE	Convention Cnt Maintenance Dis	2,296.09
07/16/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00496591	7443097	SCCC RODENT	Convention Cnt Maintenance Dis	580.00
				Total for Payment No.:		6,955.13

Payment No: 019998

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ANIXTER INC.	00497767	4843703-03	BLADES FOR ESC50LX	Electric Utility	690.76
07/30/2021	ANIXTER INC.	00497768	4843703-00	BLADES, AND GUIDE FOR ESC 50LX	Electric Utility	235.44
07/30/2021	ANIXTER INC.	00497769	4920049-00	STUDS AND INSULATORS	Electric Utility	5,441.28
07/30/2021	ANIXTER INC.	00497771	4892308-04	#6 SOLID CU WIRE	Electric Utility	865.24
07/30/2021	ANIXTER INC.	00497780	5006091-00	BARE COPPER WIRE	Electric Utility	-721.04
07/30/2021	ANIXTER INC.	00497983	4979703-00	BRUSH REPLACEMENT, SINGLE KEAR	Electric Utility	75.51
07/30/2021	ANIXTER INC.	00497983	4979703-00	BRUSH, WIRE CLEANING, HOLDER W	Electric Utility	231.26
				Total for Payment No.:		6,818.45

Payment No: 019851

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AFSCME COUNCIL 57	00497197	06/13/21-07/10/21	UNION DUES B2113 & B2114	Payroll Liability&ClearingAcct	6,805.72
				Total for Payment No.:		6,805.72

Payment No: 652227

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MOTT MACDONALD GROUP, LLC	00497006	100250-06	LAFAYETTE ST UNDERPASS AT SUBW	Storm Drain	6,730.00
				Total for Payment No.:		6,730.00

Payment No: 652173

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ARROW SIGN CO	00496994	4513	Manufacture and deliver signs	General Fund	6,600.00
				Total for Payment No.:		6,600.00

Payment No: 002410

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	3,021.20
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	499.20
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	1,279.20
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	202.80
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	182.00
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	312.00
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	187.20
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	218.40
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	572.00
07/19/2021	CAL PERS - PO BOX 1982	00496999	100000016469629	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
				Total for Payment No.:		6,598.80

Payment No: 652508

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PRECISION CONCRETE CUTTING	00498065	51815	CONCRETE SHAVING	Streets And Highways	6,542.09
				Total for Payment No.:		6,542.09

Payment No: 019930

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	AVIATION, POWER & MARINE, LLC	00497678	I100022	PN# P16-5332 - ELEMENT,FILTER	Electric Utility	690.58
07/23/2021	AVIATION, POWER & MARINE, LLC	00497678	I100022	PN# P16-5659 - FILTER, HYDRAUL	Electric Utility	712.58
07/23/2021	AVIATION, POWER & MARINE, LLC	00497678	I100022	PN# P16-7185 - FILTER	Electric Utility	3,850.99
07/23/2021	AVIATION, POWER & MARINE, LLC	00497678	I100022	PN# J644P08D - BOLT	Electric Utility	991.06
07/23/2021	AVIATION, POWER & MARINE, LLC	00497678	I100022	PN# 9379M93P01 - GASKET	Electric Utility	237.86
				Total for Payment No.:		6,483.07

Payment No: 652195

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	D&M TRAFFIC SERVICES	00496694	79122	TRAFFIC CONTROL	Electric Utility Construction	2,102.50
07/16/2021	D&M TRAFFIC SERVICES	00496697	79258	TRAFFIC CONTROL	Electric Utility Construction	4,320.00
				Total for Payment No.:		6,422.50

Payment No: 002400

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/07/2021	CAL PERS - PO BOX 1982	00496515	100000016423010	EMPLOYER/EMPLOYEE DED	Payroll Liability&ClearingAcct	6,353.00
				Total for Payment No.:		6,353.00

Payment No: 652374

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	LN CURTIS & SONS	00496845	INV497196	WILDLAND TURNOUTS AND GEAR	Fire Department	6,211.95
07/23/2021	LN CURTIS & SONS	00496851	INV498932	RHINO TOOL	General Fund	79.15
				Total for Payment No.:		6,291.10

Payment No: 652523

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SULZER PUMPS (US) INC	00498101	90565109	PN# 44815-101 - SEAL HOUSING E	Electric Utility	6,195.40
				Total for Payment No.:		6,195.40

Payment No: 652412

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TOWNSEND PUBLIC AFFAIRS INC	00497858	17312	State and Federal Legislative	General Fund	2,166.60
07/23/2021	TOWNSEND PUBLIC AFFAIRS INC	00497858	17312	Water Utility Fund	Water Utility	416.70
07/23/2021	TOWNSEND PUBLIC AFFAIRS INC	00497858	17312	Silicon Valley Power's Adminis	Electric Utility	3,000.00

07/23/2021	TOWNSEND PUBLIC AFFAIRS INC	00497858	17312	Sewer Utility Fund	Sewer Utility	416.70
				Total for Payment No.:		6,000.00

Payment No: 019831

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MT TIRE SERVICE	00495974	16470	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495975	16471	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495976	16472	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495977	16473	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495978	16474	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495979	16517	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495980	16518	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495981	15912	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495982	16519	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495983	16531	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495984	16547	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495985	16533	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495986	16534	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495987	16539	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495988	16549	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495989	16550	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495990	16431	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495991	16432	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495992	16224	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495993	16435	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495994	16436	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495995	16721	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00495996	16722	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00495998	16706	CUC 21- V#3224	Solid Waste Program	35.00

07/09/2021	MT TIRE SERVICE	00496000	16719	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00496001	16723	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00496002	16724	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00496003	16725	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00496004	16565	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00496005	16566	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00496006	16730	PARTS- V#3551 WO#130605	Fleet Operation Fund	225.63
07/09/2021	MT TIRE SERVICE	00496006	16730	TIRE TAX- V#3551 WO#130605	Fleet Operation Fund	1.75
07/09/2021	MT TIRE SERVICE	00496006	16730	LABOR- V#3551 WO#130605	Fleet Operation Fund	25.00
07/09/2021	MT TIRE SERVICE	00496007	16277	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00496008	16278	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00496009	16275	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00496010	16276	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00496011	16280	CUC 21- V#3256	Solid Waste Program	35.00
07/09/2021	MT TIRE SERVICE	00496012	16281	CUC 21- FLEET SERVICE	Solid Waste Program	60.00
07/09/2021	MT TIRE SERVICE	00496013	16282	CUC 21- FLEET SERVICE	Solid Waste Program	120.00
07/09/2021	MT TIRE SERVICE	00496014	16578	TIRE TAX- V/33157 WO#130668	Fleet Operation Fund	3.50
07/09/2021	MT TIRE SERVICE	00496014	16578	LABOR-V#3157 WO#130668	Fleet Operation Fund	50.00
07/09/2021	MT TIRE SERVICE	00496014	16578	PARTS- V#3157 WO#130668	Fleet Operation Fund	575.52
07/09/2021	MT TIRE SERVICE	00496015	16583	LABOR- FLEET SERVICE	Fleet Operation Fund	120.00
07/09/2021	MT TIRE SERVICE	00496016	16587	LABOR- V#3508 WO#130699	Fleet Operation Fund	120.00
07/09/2021	MT TIRE SERVICE	00496017	16363	LABOR- V#3220 WO#130730	Fleet Operation Fund	120.00
07/09/2021	MT TIRE SERVICE	00496018	16373	TIRE TAX- V#3257 WO#130720	Fleet Operation Fund	3.50
07/09/2021	MT TIRE SERVICE	00496018	16373	LABOR-V#3257 WO#130720	Fleet Operation Fund	50.00
07/09/2021	MT TIRE SERVICE	00496018	16373	PARTS-V#3257 WO#130720	Fleet Operation Fund	390.22
07/09/2021	MT TIRE SERVICE	00496019	16374	PARTS-V#D1161 WO#129967	Fleet Operation Fund	100.28
07/09/2021	MT TIRE SERVICE	00496019	16374	TIRE TAX-V#D1161 WO#129967	Fleet Operation Fund	3.50
07/09/2021	MT TIRE SERVICE	00496019	16374	LABOR-V#D1161 WO#129967	Fleet Operation Fund	50.00
07/09/2021	MT TIRE SERVICE	00496020	16598	LABOR-V#3323 WO#130731	Fleet Operation Fund	60.00
07/09/2021	MT TIRE SERVICE	00496021	16599	LABOR- FLEET SERVICE	Fleet Operation Fund	120.00

07/09/2021	MT TIRE SERVICE	00496022	16607	LABOR-V#3149 WO#130751	Fleet Operation Fund	80.00
07/09/2021	MT TIRE SERVICE	00496022	16607	PARTS-V#3149 WO#130751	Fleet Operation Fund	32.70
07/09/2021	MT TIRE SERVICE	00496023	16393	PARTS-V#3198	Fleet Operation Fund	381.50
07/09/2021	MT TIRE SERVICE	00496023	16393	TIRE TAX- V#3198	Fleet Operation Fund	3.50
07/09/2021	MT TIRE SERVICE	00496276	16403	LABOR- FLEET SERVICE	Fleet Operation Fund	120.00
07/09/2021	MT TIRE SERVICE	00496277	16631	LABOR-V#3224 WO#130896	Fleet Operation Fund	45.00
				Total for Payment No.:		5,871.60

Payment No: 019935

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CINTAS CORP #630	00496803	1902245217	GLOVES	General Fund	670.35
07/23/2021	CINTAS CORP #630	00496804	4086061169	CHEMICALS-TC	General Fund	45.41
07/23/2021	CINTAS CORP #630	00496804	4086061169	DS1-TC	Other City Dept Op Grant Fund	5.04
07/23/2021	CINTAS CORP #630	00496805	4086061276	UNIFORMS-PARKS	General Fund	355.06
07/23/2021	CINTAS CORP #630	00496805	4086061276	SANIS CLIP	General Fund	4.57
07/23/2021	CINTAS CORP #630	00496806	4086061309	CHEMICALS-CRC	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496806	4086061309	DS1-CRC	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496807	4086323193	UNIFORMS-LICKMILL	General Fund	70.90
07/23/2021	CINTAS CORP #630	00496808	4086325486	CHEMICALS-CEMETERY	Cemetery	54.33
07/23/2021	CINTAS CORP #630	00496808	4086325486	UNIFORMS-CEMETERY	Cemetery	47.08
07/23/2021	CINTAS CORP #630	00496808	4086325486	DS1-CEMETERY	Other City Dept Op Grant Fund	19.86
07/23/2021	CINTAS CORP #630	00496809	4086731348	CHEMICALS-YSP	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496809	4086731348	DS1-YSP	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496810	4086732888	CHEMICALS-YAC	General Fund	47.31
07/23/2021	CINTAS CORP #630	00496810	4086732888	DS1-YAC	Other City Dept Op Grant Fund	5.04
07/23/2021	CINTAS CORP #630	00496811	4086733148	CHEMICALS-CRC	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496811	4086733148	DS1-CRC	Other City Dept Op	19.62

					Grant Fund	
07/23/2021	CINTAS CORP #630	00496812	4086733284	CHEMICALS-ISC	General Fund	23.52
07/23/2021	CINTAS CORP #630	00496812	4086733284	DS1-ISC	Other City Dept Op Grant Fund	13.08
07/23/2021	CINTAS CORP #630	00496813	4086733302	UNIFORMS-PARKS	General Fund	356.61
07/23/2021	CINTAS CORP #630	00496813	4086733302	SANIS CLIP	General Fund	4.57
07/23/2021	CINTAS CORP #630	00496814	4086862634	CHEMICALS-R&G	General Fund	45.38
07/23/2021	CINTAS CORP #630	00496814	4086862634	DS1-R&G	Other City Dept Op Grant Fund	22.89
07/23/2021	CINTAS CORP #630	00496815	4086949874	UNIFORMS-LICKMILL	General Fund	70.90
07/23/2021	CINTAS CORP #630	00496816	4086955871	UNIFORMS-CEMETERY	Cemetery	31.25
07/23/2021	CINTAS CORP #630	00496816	4086955871	CHEMICALS-CEMETERY	Cemetery	54.33
07/23/2021	CINTAS CORP #630	00496816	4086955871	DS1-CEMETERY	Other City Dept Op Grant Fund	19.86
07/23/2021	CINTAS CORP #630	00496817	4086956074	CHEMICALS-SR CTR	General Fund	67.49
07/23/2021	CINTAS CORP #630	00496817	4086956074	DS1-SR CTR	Other City Dept Op Grant Fund	39.24
07/23/2021	CINTAS CORP #630	00496818	4087380615	CHEMICALS-TC	General Fund	45.41
07/23/2021	CINTAS CORP #630	00496818	4087380615	DS1-TC	Other City Dept Op Grant Fund	5.04
07/23/2021	CINTAS CORP #630	00496819	4087380741	CHEMICALS-CRC	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496819	4087380741	DS1-CRC	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496820	4087380749	UNIFORMS-PARKS	General Fund	413.69
07/23/2021	CINTAS CORP #630	00496820	4087380749	SANIS CLIP	General Fund	4.57
07/23/2021	CINTAS CORP #630	00496821	4087616289	UNIFORMS-LICKMILL	General Fund	70.90
07/23/2021	CINTAS CORP #630	00496822	4087622123	UNIFORMS-CEMETERY	Cemetery	31.25
07/23/2021	CINTAS CORP #630	00496822	4087622123	CHEMICALS-CEMETERY	Cemetery	54.33
07/23/2021	CINTAS CORP #630	00496822	4087622123	DS1-CEMETERY	Other City Dept Op Grant Fund	19.86
07/23/2021	CINTAS CORP #630	00496823	4087857921	CHEMICALS-MONTAGUE SWIM	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496823	4087857921	DS1-MONTAGUE SWIM	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496824	4087857984	CHEMICALS-MONTAGUE	General Fund	34.06

07/23/2021	CINTAS CORP #630	00496824	4087857984	DS1-MONTAGUE	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496825	4087858685	CHEMICALS-THOMAS BARRETT	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496825	4087858685	DS1-THOMAS BARRETT	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496826	4088066588	CHEMICALS-BRACHER	General Fund	20.42
07/23/2021	CINTAS CORP #630	00496826	4088066588	DS1-BRACHER	Other City Dept Op Grant Fund	9.81
07/23/2021	CINTAS CORP #630	00496827	4088067009	CHEMICALS-YSP	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496827	4088067009	DS1-YSP	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496828	4088067160	CHEMICALS-PARKS	General Fund	128.35
07/23/2021	CINTAS CORP #630	00496829	4088067161	CHEMICALS-BOWERS	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496829	4088067161	DS1-BOWERS	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496830	4088067163	CHEMICALS-JENNY STRAND	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496830	4088067163	DS1-JENNY STRAND	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496831	4088067174	CHEMICALS-WWO	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496831	4088067174	DS1-WWO	Other City Dept Op Grant Fund	16.35
07/23/2021	CINTAS CORP #630	00496832	4088067199	CHEMICALS-CRC	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496832	4088067199	DS1-CRC	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496833	4088067218	CHEMICALS-ISC	General Fund	23.52
07/23/2021	CINTAS CORP #630	00496833	4088067218	DS1-ISC	Other City Dept Op Grant Fund	13.08
07/23/2021	CINTAS CORP #630	00496834	4088067246	CHEMICALS-WAR MEMORIAL	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496834	4088067246	DS1-WAR MEMORIAL	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496835	4088067255	CHEMICALS-CENTRAL	General Fund	68.09
07/23/2021	CINTAS CORP #630	00496835	4088067255	DS1-CENTRAL	Other City Dept Op Grant Fund	39.24
07/23/2021	CINTAS CORP #630	00496836	4088067257	CHEMICALS-EARL CARMICHAEL	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496836	4088067257	DS1-EARL CARMICHAEL	Other City Dept Op Grant Fund	19.62

07/23/2021	CINTAS CORP #630	00496837	4088067258	CHEMICALS-MACHADO	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496837	4088067258	DS1-MACHADO	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496838	4088067264	CHEMICALS-YAC	General Fund	47.31
07/23/2021	CINTAS CORP #630	00496838	4088067264	DS1-YAC	Other City Dept Op Grant Fund	5.04
07/23/2021	CINTAS CORP #630	00496839	4088067266	CHEMICALS-HOMERIDGE	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496839	4088067266	DS1-HOMERIDGE	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496840	4088067267	CHEMICALS-MARY GOMEZ	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496840	4088067267	DS1-MARY GOMEZ	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496841	4088067292	CHEMICALS-EVERETT N EDDIE	General Fund	32.00
07/23/2021	CINTAS CORP #630	00496841	4088067292	DS1-EVERETT N EDDIE	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496842	4088067294	UNIFORMS-PARKS	General Fund	355.06
07/23/2021	CINTAS CORP #630	00496842	4088067294	SANIS CLIP	General Fund	4.57
07/23/2021	CINTAS CORP #630	00496843	4088067295	CHEMICALS-STEVE CARLI	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496843	4088067295	DS1-STEVE CARLI	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496844	4088067312	CHEMICALS-WILSON	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496844	4088067312	DS1-WILSON	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496863	4088068681	CHEMICALS-MARSALLI	General Fund	10.92
07/23/2021	CINTAS CORP #630	00496863	4088068681	DS1-MARSALLI	Other City Dept Op Grant Fund	6.54
07/23/2021	CINTAS CORP #630	00496864	4088068818	CHEMICALS-WARBURTON	General Fund	22.75
07/23/2021	CINTAS CORP #630	00496864	4088068818	DS1-WARBURTON	Other City Dept Op Grant Fund	8.72
07/23/2021	CINTAS CORP #630	00496865	4088069488	CHEMICALS-PARKWAY	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496865	4088069488	DS1-PARKWAY	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496866	4088175576	CHEMICALS-R&G	General Fund	45.38
07/23/2021	CINTAS CORP #630	00496866	4088175576	DS1-R&G	Other City Dept Op Grant Fund	22.89

07/23/2021	CINTAS CORP #630	00496867	4088259211	CHEMICALS-LICKMILL	General Fund	41.16
07/23/2021	CINTAS CORP #630	00496868	4088259348	UNIFORMS-LICKMILL	General Fund	70.97
07/23/2021	CINTAS CORP #630	00496869	4088259355	CHEMICALS-LIVE OAK	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496869	4088259355	DS1-LIVE OAK	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496870	4088259371	CHEMICALS-THAMIEN	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496870	4088259371	DS1-THAMIEN	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496871	4088259485	CHEMICALS-AGNEW	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496871	4088259485	DS1-AGNEW	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496873	4088259493	CHEMICALS-FULLER	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496873	4088259493	DS1-FULLER	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496875	4088265564	UNIFORMS-CEMETERY	Cemetery	31.25
07/23/2021	CINTAS CORP #630	00496875	4088265564	CHEMICALS-CEMETERY	Cemetery	54.33
07/23/2021	CINTAS CORP #630	00496875	4088265564	DS1-CEMETERY	Other City Dept Op Grant Fund	19.86
07/23/2021	CINTAS CORP #630	00496876	4088265643	CHEMICALS-SR CTR	General Fund	67.49
07/23/2021	CINTAS CORP #630	00496876	4088265643	DS1-SR CTR	Other City Dept Op Grant Fund	39.24
07/23/2021	CINTAS CORP #630	00496878	4088265782	CHEMICALS-SCHMIDT	General Fund	20.42
07/23/2021	CINTAS CORP #630	00496878	4088265782	DS1-SCHMIDT	Other City Dept Op Grant Fund	9.81
07/23/2021	CINTAS CORP #630	00496879	4088265833	CHEMICALS-EVERETT ALVAREZ	General Fund	20.42
07/23/2021	CINTAS CORP #630	00496879	4088265833	DS1 EVERETT ALVAREZ	Other City Dept Op Grant Fund	9.81
07/23/2021	CINTAS CORP #630	00496880	4088728993	CHEMICALS-CRC	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496880	4088728993	DS1-CRC	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496881	4088067286	CHEMICALS- TENNIS CTR	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496881	4088067286	DS1-TENNIS CTR	Other City Dept Op Grant Fund	19.62
07/23/2021	CINTAS CORP #630	00496882	4088067147	CHEMICALS-MAYWOOD	General Fund	34.06
07/23/2021	CINTAS CORP #630	00496882	4088067147	DS1-MAYWOOD	Other City Dept Op	19.62

					Grant Fund	
07/23/2021	CINTAS CORP #630	00496883	4088728859	CHEMICALS-TC	General Fund	45.41
07/23/2021	CINTAS CORP #630	00496883	4088728859	DS1-TC	Other City Dept Op Grant Fund	5.04
07/23/2021	CINTAS CORP #630	00496973	4084791503	UNIFORMS-PARLS	General Fund	355.06
07/23/2021	CINTAS CORP #630	00496973	4084791503	SANIS CLIP	General Fund	4.57
				Total for Payment No.:		5,843.36

Payment No: 002411

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/19/2021	CAL PERS - PO BOX 1982	00497001	100000016471133	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
07/19/2021	CAL PERS - PO BOX 1982	00497001	100000016471133	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	187.20
07/19/2021	CAL PERS - PO BOX 1982	00497001	100000016471133	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	5,018.00
07/19/2021	CAL PERS - PO BOX 1982	00497001	100000016471133	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	156.00
07/19/2021	CAL PERS - PO BOX 1982	00497001	100000016471133	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	249.60
07/19/2021	CAL PERS - PO BOX 1982	00497001	100000016471133	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	124.80
				Total for Payment No.:		5,798.00

Payment No: 652389

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496761	0008018613-3	GRIZZLY PROJ O&M 15% COO MAY21	Electric Utility	5,624.31
				Total for Payment No.:		5,624.31

Payment No: 652218

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ICE US OTC COMMODITY MARKETS LLC	00496650	0621000868088	ENERGY BROKER COMM JUN21	Electric Utility	5,555.00
				Total for Payment No.:		5,555.00

Payment No: 652202

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	EFXLED SCREENS	00496941	5775	X5 screen rental 7/27 event	General Fund	5,400.00
				Total for Payment No.:		5,400.00

Payment No: 652093

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HOME DEPOT USA	00496385	625148473	PAPER TOWELS AND SUPPLIES	General Fund	1,622.21
07/09/2021	HOME DEPOT USA	00496386	625605977	HAND SANITIZER	General Fund	518.13
07/09/2021	HOME DEPOT USA	00496387	625683602	RESTROOM CLEANING SUPPLIES	General Fund	3,026.72
07/09/2021	HOME DEPOT USA	00496388	625683610	HAND SOAP	General Fund	50.40
07/09/2021	HOME DEPOT USA	00496412	622140135	HAND SOAP AND SPONGE	General Fund	129.80
				Total for Payment No.:		5,347.26

Payment No: 019948

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	GRANITE CONSTRUCTION CO	00496918	2041326	SUPPLIES-STREET	General Fund	1,635.65
07/23/2021	GRANITE CONSTRUCTION CO	00496919	2049864	SUPPLIES-STREET	General Fund	1,747.59
07/23/2021	GRANITE CONSTRUCTION CO	00496920	2051047	SUPPLIES-STREET	General Fund	1,959.67
				Total for Payment No.:		5,342.91

Payment No: 019952

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JOHN'S SALT SERVICE INC	00496940	31583	BULK SALT ONE TON-COGEN JUN21	Electric Utility	4,552.27
07/23/2021	JOHN'S SALT SERVICE INC	00496940	31583	FREIGHT	Electric Utility	438.00
07/23/2021	JOHN'S SALT SERVICE INC	00496940	31583	FUEL	Electric Utility	184.23
				Total for Payment No.:		5,174.50

Payment No: 002397

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	STATE DISBURSEMENT UNIT	00496373	06/13/21-06/26/21	WAGE ATTACHMENTS B2113	Payroll Liability&ClearingAcct	5,170.91
				Total for Payment No.:		5,170.91

Payment No: 652254

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	DRUM, METAL, 55 GALLON JUL15	Electric Utility	109.61
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	DRUM, METAL, 55 GALLON JUL15	Electric Utility	109.61
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	TRANSPORTATION, PER DRUM	Electric Utility	826.80
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	340309-06 - LUBE OIL JUL15	Electric Utility	1,006.56
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	TURBINE JET WASH WATER JUL15	Electric Utility	355.30
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	ICE BLASTING WASTE JUL15	Electric Utility	1,198.20
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	OIL SOLIDS JUL15	Electric Utility	820.00
07/16/2021	STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.	00496891	29402136479	ENERGY&INSURANCE	Electric Utility	690.99
				Total for Payment No.:		5,117.07

Payment No: 019960

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	NALCO CO	00496751	6600514173	JR PORTA FEED NEXGUARD #22310	Electric Utility	4,697.49
07/23/2021	NALCO CO	00496751	6600514173	TRANSPORTATION/ENERGY FEE	Electric Utility	64.94
07/23/2021	NALCO CO	00496753	6670083197	MO.SRV FEE COGEN JUN21	Electric Utility	315.46
				Total for Payment No.:		5,077.89

Payment No: 019845

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	UNITED ROTARY BRUSH CORP	00496365	CI267426	SUPPLIES-STREET SWEEPING	Solid Waste Program	5,065.45
				Total for Payment No.:		5,065.45

Payment No: 652275

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	AEROHIVE NETWORKS	00497315	62150-05 Utility Refund	UTILITY REFUND	General Fund	5,061.66
				Total for Payment No.:		5,061.66

Payment No: 019839

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PITNEY BOWES	00496518	8977JUL2021	POSTAGE	General Fund	5,017.00
				Total for Payment No.:		5,017.00

Payment No: 652080

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CUSHMAN & WAKEFIELD WESTERN INC	00496282	20-38002-900425	APPRAISAL FOR 1063-1199 MARTIN	Electric Utility Construction	5,000.00
				Total for Payment No.:		5,000.00

Payment No: 652359

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	HAWK ANALYTICS, INC.	00496095	INV24426	CellHawk Subscription 21-22	General Fund	4,995.00
				Total for Payment No.:		4,995.00

Payment No: 652484

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	HYDROSCIENCE ENGINEERS INC	00498146	316003009	Stakeholder Coordination Task	Water Utility	928.75

					Construction	
07/30/2021	HYDROSCIENCE ENGINEERS INC	00498146	316003009	Final UWMP Doc Prep Task 4	Water Utility Construction	2,983.75
07/30/2021	HYDROSCIENCE ENGINEERS INC	00498146	316003009	Project Management Task 1	Water Utility Construction	1,037.50
				Total for Payment No.:		4,950.00

Payment No: 652108

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PAETEC	00495888	73883127	TELEPHONE SERVICES	Information Technology Service	4,935.63
				Total for Payment No.:		4,935.63

Payment No: 019951

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	INGRAM LIBRARY SERVICES INC	00496886	53663166	1241 AD BK	General Fund	909.44
07/23/2021	INGRAM LIBRARY SERVICES INC	00496886	53663166	1231 JUV BK	General Fund	1,013.71
07/23/2021	INGRAM LIBRARY SERVICES INC	00496886	53663166	1232 YA BK	General Fund	302.12
07/23/2021	INGRAM LIBRARY SERVICES INC	00496887	53663181	1235 AD/JUV/YA BK	General Fund	865.42
07/23/2021	INGRAM LIBRARY SERVICES INC	00496888	53663196	1236 JUV BK	General Fund	212.83
07/23/2021	INGRAM LIBRARY SERVICES INC	00496889	53663197	1233 JUV BK	General Fund	72.96
07/23/2021	INGRAM LIBRARY SERVICES INC	00497024	53752411	1241 AD BK	General Fund	256.36
07/23/2021	INGRAM LIBRARY SERVICES INC	00497024	53752411	1231 JUV BK	General Fund	603.90
07/23/2021	INGRAM LIBRARY SERVICES INC	00497024	53752411	1232 YA BK	General Fund	132.29
07/23/2021	INGRAM LIBRARY SERVICES INC	00497031	53752425	1235 AD/JUV BK	General Fund	472.34
07/23/2021	INGRAM LIBRARY SERVICES INC	00497032	53752438	1236 JUV BK	General Fund	13.79
				Total for Payment No.:		4,855.16

Payment No: 652401

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/23/2021	R.S. HUGHES COMPANY, INC.	00496847	79117024-01	ISOBUTYLENE	General Fund	179.15
07/23/2021	R.S. HUGHES COMPANY, INC.	00496849	79087645-00	AUTORAE EQUIPMENT	General Fund	4,655.37
				Total for Payment No.:		4,834.52

Payment No: 652363

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	INSTRUMART	00497690	IN586265	PN# MAB3-0EC1218-020 - RAE SY	Electric Utility	4,813.01
				Total for Payment No.:		4,813.01

Payment No: 652240

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SAFARI MICRO INC	00496688	SM370108	ENDPOINT PROTECT,SUBSC LICENSE	Electric Utility	4,800.00
				Total for Payment No.:		4,800.00

Payment No: 652409

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TESCO CONTROLS INC	00497151	0073819-IN	MAINTENANCE STORM	Storm Drain	2,400.00
07/23/2021	TESCO CONTROLS INC	00497151	0073819-IN	MAINTENANCE PRIMAVERA	Sewer Utility	600.00
07/23/2021	TESCO CONTROLS INC	00497151	0073819-IN	MAINTENANCE RABELLO	Sewer Utility	600.00
07/23/2021	TESCO CONTROLS INC	00497151	0073819-IN	MAINTENANCE NORTHSIDE	Sewer Utility	600.00
07/23/2021	TESCO CONTROLS INC	00497151	0073819-IN	MAINTENANCE STADIUM	Sewer Utility	600.00
				Total for Payment No.:		4,800.00

Payment No: 651905

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	FIRST AMERICAN TITLE INSURANCE	00496466	1687-1687112431	Standard ALTA 2006/Fees	General Fund	4,759.42
				Total for Payment No.:		4,759.42

Payment No: 652490

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	KELLY-MOORE PAINT CO	00497214	817-00000424239	SUPPLIES-TRAFFIC MNTCE	General Fund	4,750.34
				Total for Payment No.:		4,750.34

Payment No: 019954

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KOFFLER	00496926	0098091-IN	10HP MOTOR SHOP LABOR	Electric Utility	2,142.00
07/23/2021	KOFFLER	00496926	0098091-IN	10HP MOTOR MATERIALS	Electric Utility	163.51
07/23/2021	KOFFLER	00496928	0098092-IN	11KW MOTOR SHOP LABOR	Electric Utility	2,325.00
07/23/2021	KOFFLER	00496928	0098092-IN	11KW MOTOR MATERIALS	Electric Utility	87.20
				Total for Payment No.:		4,717.71

Payment No: 652252

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SOUTHWEST POWER POOL, INC.	00496651	WIUFMP379PY26	PY26 BILLING CALENDAR YR2020	Electric Utility	4,637.11
				Total for Payment No.:		4,637.11

Payment No: 002406

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	STATE DISBURSEMENT UNIT	00497220	06/27/21-07/10/21	WAGE ATTACHMENTS B2114	Payroll Liability&ClearingAcct	4,628.14
				Total for Payment No.:		4,628.14

Payment No: 002419

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	STATE DISBURSEMENT UNIT	00498244	07/11/21-07/24/21	WAGE ATTACHMENTS B2115	Payroll Liability&ClearingAcct	4,628.14
				Total for Payment No.:		4,628.14

Payment No: 652536

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	VP SECURITY SERVICES, INC	00498152	18301	TEMPORARY SECURITY SERVICES	Electric Utility	4,620.00
				Total for Payment No.:		4,620.00

Payment No: 019971

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PLANET FUTSAL INC	00497570	4	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	4,615.80
				Total for Payment No.:		4,615.80

Payment No: 019805

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	INTL FIREFIGHTERS LOCAL 1171	00496350	05/30/21-06/26/21	RETIRED FIRE MEDICAL BENEFITS	Payroll Liability&ClearingAcct	4,536.00
				Total for Payment No.:		4,536.00

Payment No: 652226

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LONG'S CUSTOM DISCING INC	00496638	11002	ANNUAL MOWING 2021 BMX PARK	Solid Waste Utility-Constructi	4,488.75
				Total for Payment No.:		4,488.75

Payment No: 652106

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PACIFIC COAST PETROLEUM INC.	00495933	978685	DIESEL-EXHAUST FLUID- STOCK	Fleet Operation Fund	718.52
07/09/2021	PACIFIC COAST PETROLEUM INC.	00495934	978871	PARTS-STOCK	Fleet Operation Fund	3,653.96
07/09/2021	PACIFIC COAST PETROLEUM INC.	00495934	978871	DRUM- STOCK NONTXB	Fleet Operation Fund	25.00
				Total for Payment No.:		4,397.48

Payment No: 652394

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PURETEC INDUSTRIAL WATER	00496942	1894948	DVR WATER VESSEL RENT JUN21	Electric Utility	3,646.44
07/23/2021	PURETEC INDUSTRIAL WATER	00496942	1894948	DVR WATER VESSEL EXCH JUL21	Electric Utility	675.30
07/23/2021	PURETEC INDUSTRIAL WATER	00496942	1894948	FUEL SURCHARGE	Electric Utility	36.00
				Total for Payment No.:		4,357.74

Payment No: 019920

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497180	31771	CHANGE ORDER #3: ADDITIONAL FU LEGAL SERVICES	Special Liability Insurance	4,350.00
				Total for Payment No.:		4,350.00

Payment No: 652481

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GENEVIEVE ALTWER LMFT	00497041	101-0621	COUNSELING SESS #101 8/20	General Fund	170.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497042	111-0621	COUNSELING #111 SESSIONS 10-12	General Fund	510.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497043	115-0621	COUNSELING #115 SESS 18-21	General Fund	680.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497044	117-0621	COUNSELING #117 SESS 9-10	General Fund	340.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497045	119-0621	COUNSELING #119 SESS 25-29	General Fund	850.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497046	125-0621	COUNSELING #125 SESS 15-16	General Fund	340.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497047	133-0621	COUNSELING #133 SESS 7-8	General Fund	340.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497048	135-0621	COUNSELING #135 SESS 1-3	General Fund	555.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497049	137-0621	COUNSELING #137 SESS 1-2	General Fund	385.00
07/30/2021	GENEVIEVE ALTWER LMFT	00497279	131-0621	COUNSELING #131 - SESS 7	General Fund	170.00
				Total for Payment No.:		4,340.00

Payment No: 652464

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	CAREERS IN GOVERNMENT	00497665	11-11795	ANNUAL MEMBERSHIP 8.21-8.22	General Fund	4,250.00
Total for Payment No.:						4,250.00
Payment No: 020027						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	JOENVILLE LLC	00497852	21-6574	Graphic Design Services	General Fund	4,175.00
Total for Payment No.:						4,175.00
Payment No: 652400						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	R&B COMPANY	00497856	P089352	RETAINER GLAND KIT, 8IN, TYLER	Water Utility Construction	3,796.34
07/23/2021	R&B COMPANY	00497856	P089352	RETAINER GLAND 6IN, MJ, TYLER	Water Utility Construction	339.37
Total for Payment No.:						4,135.71
Payment No: 652260						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	THIRD EAR SOUND COMPANY	00496960	55010	RENTAL EQUIP NON-TAX	General Fund	2,409.85
07/16/2021	THIRD EAR SOUND COMPANY	00496960	55010	LABOR NON-TAX	General Fund	1,320.00
07/16/2021	THIRD EAR SOUND COMPANY	00496960	55010	RENTAL EQUIPMENT TAXABLE	General Fund	28.55
07/16/2021	THIRD EAR SOUND COMPANY	00496960	55010	DELIVERY & PICKUP TAXABLE	General Fund	326.99
Total for Payment No.:						4,085.39
Payment No: 652221						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	JACK DOHENY COMPANIES	00496704	129873	PARTS	Sewer Utility	1,899.31
07/16/2021	JACK DOHENY COMPANIES	00496704	129873	LABOR	Sewer Utility	1,080.00
07/16/2021	JACK DOHENY COMPANIES	00496706	132176	LABOR	Sewer Utility	820.93
07/16/2021	JACK DOHENY COMPANIES	00496706	132176	PARTS	Sewer Utility	273.35

Total for Payment No.: 4,073.59

Payment No: 652320

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	COOPERATIVE PERSONNEL SERVICES	00497016	SOP53016	FIRE - DRIVER ENGINEER	General Fund	1,851.00
07/23/2021	COOPERATIVE PERSONNEL SERVICES	00497018	SOP53111	TROUBLESHOOTER SVP	General Fund	429.00
07/23/2021	COOPERATIVE PERSONNEL SERVICES	00497020	SOP53131	ELECTRIC UTILITY HELPER DRIVER	General Fund	667.00
07/23/2021	COOPERATIVE PERSONNEL SERVICES	00497021	SOP53137	UTILITY ELECTRICIAN	General Fund	471.50
07/23/2021	COOPERATIVE PERSONNEL SERVICES	00497028	SOP53138	ELECTRIC MAINT. WORKER	General Fund	644.00
Total for Payment No.:						4,062.50

Payment No: 652349

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DOBLE ENGINEERING CO	00497673	PSEI11076440	ANNUAL RTS SOFTWARE MAINTENANC	Electric Utility	2,701.87
07/23/2021	DOBLE ENGINEERING CO	00497673	PSEI11076440	ANNUAL RTS LEVEL 2 SOFTWARE SU	Electric Utility	1,350.94
Total for Payment No.:						4,052.81

Payment No: 652535

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	VOYAGER CRAFT COFFEE	00497040	000027	REFRESHMENTS FOR EVENT	General Fund	4,000.00
Total for Payment No.:						4,000.00

Payment No: 652194

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CUBIC ITS, INC	00496648	90088439	PO 25477 CLOSED - SUPPORT	Streets And Highways	4,000.00

Total for Payment No.: 4,000.00

Payment No: 652262

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	THOMSON REUTERS WEST	00497182	844593270	Online Legal Database - June 2	General Fund	1,822.06
07/16/2021	THOMSON REUTERS WEST	00497183	844701186	Legal References - June 2021	General Fund	1,637.18
07/16/2021	THOMSON REUTERS WEST	00497184	844701187	Legal References - June 2021	General Fund	536.28
Total for Payment No.:						3,995.52

Payment No: 652222

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	JWH ASBESTOS REMOVAL	00496459	20211806	ASBESTOS REMOVAL - GANDHI	H.U.D Capital Projects	3,985.00
07/16/2021	JWH ASBESTOS REMOVAL	00496459	20211806	GANDHI - 10577	H.U.D Capital Projects	3,985.00
07/16/2021	JWH ASBESTOS REMOVAL	00496459	20211806	GANDHI - 10577	H.U.D Capital Projects	-3,985.00
Total for Payment No.:						3,985.00

Payment No: 020051

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WAXIE SANITARY SUPPLY	00497592	80144399	HAND TOWELS AND SOAP	General Fund	3,937.96
Total for Payment No.:						3,937.96

Payment No: 019964

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PENINSULA GYMNASTICS	00497582	0006	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	1,620.00
07/23/2021	PENINSULA GYMNASTICS	00497583	0007	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,295.00
Total for Payment No.:						3,915.00

Payment No: 652073

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AT&T MOBILITY	00495721	287286334235X06192021	FIRE DEPT WIRELESS	General Fund	3,678.60
07/09/2021	AT&T MOBILITY	00495721	287286334235X06192021	EMERGENCY SVCS WIRELESS	General Fund	138.46
07/09/2021	AT&T MOBILITY	00495721	287286334235X06192021	STREET DEPT WIRELESS	General Fund	49.55
				Total for Payment No.:		3,866.61

Payment No: 020019

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GRANITE CONSTRUCTION CO	00497902	1988039	CREDIT MEMO VCHR 490644	General Fund	-32.29
07/30/2021	GRANITE CONSTRUCTION CO	00497902	1988039	CREDIT MEMO VCHR 490644	General Fund	-2,466.89
07/30/2021	GRANITE CONSTRUCTION CO	00497903	RU 123042	CREDIT	General Fund	-32.29
07/30/2021	GRANITE CONSTRUCTION CO	00497904	2051694	MATERIALS - STREET MAINTENANCE	General Fund	3,128.31
07/30/2021	GRANITE CONSTRUCTION CO	00498071	2052258	HOT MIX ASPHALT AND EMULSION	General Fund	3,225.85
				Total for Payment No.:		3,822.69

Payment No: 652482

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GLOBAL RENTAL CO	00497176	3652142	RENT FREIGHTL M2-106 7/12-8/8	Electric Utility	3,819.38
				Total for Payment No.:		3,819.38

Payment No: 652407

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	T-MOBILE USA INC	00496093	9450429185	GPS Locate 21-123127	General Fund	300.00
07/23/2021	T-MOBILE USA INC	00496344	9452279483	GPS Locate 21-309087	General Fund	690.00
07/23/2021	T-MOBILE USA INC	00496424	9453349285	GPS Locate 21-650313F	General Fund	360.00
07/23/2021	T-MOBILE USA INC	00496425	9451684403	GPS Locate 21-0550143F	General Fund	360.00
07/23/2021	T-MOBILE USA INC	00496427	9452279484	GPS Locate 21-0650313F	General Fund	540.00

07/23/2021	T-MOBILE USA INC	00496429	9453349286	GPS Locate 21-50118	General Fund	900.00
07/23/2021	T-MOBILE USA INC	00496430	9453349284	GPS Locate 21-406035	General Fund	480.00
07/23/2021	T-MOBILE USA INC	00496989	9452611218	GPS Locate 21-307008	General Fund	180.00
				Total for Payment No.:		3,810.00

Payment No: 652514

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SANTA CLARA WEEKLY	00497242	1245458	2021 MAY URBAN WATER MGMT PLAN	Water Utility Construction	3,782.00
				Total for Payment No.:		3,782.00

Payment No: 652515

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SEAN MENDELSON	00498056	2B 2021	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	3,744.40
				Total for Payment No.:		3,744.40

Payment No: 652141

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CSG CONSULTANTS INC	00496643	37538	SERRA SUBSTATION FENCING RVW	Electric Utility Construction	3,740.00
				Total for Payment No.:		3,740.00

Payment No: 652244

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SANTA CLARA LIGHTING, INC.	00496612	21817	TASMAN LIGHTS	General Fund	249.61
07/16/2021	SANTA CLARA LIGHTING, INC.	00496613	21738	CITY HALL	General Fund	713.08
07/16/2021	SANTA CLARA LIGHTING, INC.	00496614	21881	SENIOR CENTER LAMPHOLDER	General Fund	949.22
07/16/2021	SANTA CLARA LIGHTING, INC.	00496615	20862	CITY HALL	General Fund	343.35
07/16/2021	SANTA CLARA LIGHTING, INC.	00496616	21712	PD LIGHT	General Fund	553.18

07/16/2021	SANTA CLARA LIGHTING, INC.	00496617	21794	CENTRAL LIB LIGHTS	General Fund	926.50
				Total for Payment No.:		3,734.94

Payment No: 652197

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	DAVID ZANOTTI	00496623	C-2021-182	SVACA MOLD	Expendable Trust Funds	1,520.00
07/16/2021	DAVID ZANOTTI	00496624	C-2021-235	BUILD MTCE YARD	General Fund	2,179.00
				Total for Payment No.:		3,699.00

Payment No: 652084

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	FAST UNDERCAR SANTA CLARA	00495869	215938	BATTERY- WATER DEPT	Water Utility	1,057.12
07/09/2021	FAST UNDERCAR SANTA CLARA	00495869	215938	CA BATTERY FEE- NONTXBL	Water Utility	2.18
07/09/2021	FAST UNDERCAR SANTA CLARA	00495870	272026	PARTS-V#3361	Fleet Operation Fund	104.20
07/09/2021	FAST UNDERCAR SANTA CLARA	00495873	272251	PARTS-STOCK	Fleet Operation Fund	219.26
07/09/2021	FAST UNDERCAR SANTA CLARA	00495874	274636	PARTS-V#0067	Fleet Operation Fund	1,057.30
07/09/2021	FAST UNDERCAR SANTA CLARA	00495875	275979	PARTS-STOCK	Fleet Operation Fund	130.58
07/09/2021	FAST UNDERCAR SANTA CLARA	00495876	275990	PARTS-STOCK	Fleet Operation Fund	255.45
07/09/2021	FAST UNDERCAR SANTA CLARA	00495877	275997	PARTS-STOCK	Fleet Operation Fund	25.64
07/09/2021	FAST UNDERCAR SANTA CLARA	00495878	276394	CREDIT- V#3022 & V#3361	Fleet Operation Fund	-258.05
07/09/2021	FAST UNDERCAR SANTA CLARA	00495879	276400	PARTS-STOCK	Fleet Operation Fund	151.64
07/09/2021	FAST UNDERCAR SANTA CLARA	00495880	276415	PARTS-V#3390	Fleet Operation Fund	11.28
07/09/2021	FAST UNDERCAR SANTA CLARA	00495881	276669	PARTS-STOCK	Fleet Operation Fund	13.43
07/09/2021	FAST UNDERCAR SANTA CLARA	00496265	278968	PARTS-V#3376	Fleet Operation Fund	119.80
07/09/2021	FAST UNDERCAR SANTA CLARA	00496266	279149	PARTS-V#3028	Fleet Operation Fund	33.66
07/09/2021	FAST UNDERCAR SANTA CLARA	00496267	279461	PARTS-V#3379	Fleet Operation Fund	15.25
07/09/2021	FAST UNDERCAR SANTA CLARA	00496268	279529	PARTS-V#3524	Fleet Operation Fund	131.20
07/09/2021	FAST UNDERCAR SANTA CLARA	00496269	279841	PARTS-STOCK	Fleet Operation Fund	280.74
07/09/2021	FAST UNDERCAR SANTA CLARA	00496270	280253	PARTS-V#3498	Fleet Operation Fund	132.01

07/09/2021	FAST UNDERCAR SANTA CLARA	00496271	281606	PARTS-V#2326	Fleet Operation Fund	178.38
				Total for Payment No.:		3,661.07
Payment No: 652182						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BANK UP CORP	00496559	4618	OUTSOURCE CASH RECEIPTS	General Fund	3,653.07
				Total for Payment No.:		3,653.07
Payment No: 652517						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SENIOR ADULT LEGAL ASSISTANCE	00498118	Q4-2020-2021	SALA -SENIOR ADULT LEGAL ASSIS	H.U.D Capital Projects	3,619.39
				Total for Payment No.:		3,619.39
Payment No: 019999						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BADGER METER INC	00498039	1442033	METER, WATER, 1" RECLAIMED, E-	Water Utility	3,605.20
				Total for Payment No.:		3,605.20
Payment No: 652319						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00497223	L1656595472	Q1 ASSESSMENT - PENALTY & INT	Unemployment Insurance Fund	3,575.65
				Total for Payment No.:		3,575.65
Payment No: 652293						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JOSEPH J ALBANESE INC	00497562	78674-02 Utility Refund	UTILITY REFUND	General Fund	1,671.78
07/23/2021	JOSEPH J ALBANESE INC	00497563	81975-02 Utility Refund	UTILITY REFUND	General Fund	1,894.78

Total for Payment No.: 3,566.56

Payment No: 652239

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	RING POWER CORPORATION	00496531	44LU06904735	EQUIPMENT RNTL 5/25/21-6/21/21	Electric Utility Construction	3,468.00
Total for Payment No.:						3,468.00

Payment No: 652124

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SNAP-ON INDUSTRIAL	00496293	ARV/48514170	SHOP TOOLS	Fleet Operation Fund	3,425.41
Total for Payment No.:						3,425.41

Payment No: 019969

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496766	9644211793-1 JUN2021	ELEC SVC GRIZZLY PWRHSE JUN21	Electric Utility	3,375.53
Total for Payment No.:						3,375.53

Payment No: 652395

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	QUALITROL COMPANY LLC	00497689	20144657	PN# 042-017-01 - 6 LEVEL GAGE	Electric Utility	2,870.12
07/23/2021	QUALITROL COMPANY LLC	00497689	20144657	SHIPPING & HANDLING	Electric Utility	204.10
Total for Payment No.:						3,074.22

Payment No: 652217

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	HOME DEPOT USA	00496523	621849637	JANITORIAL SUPPLIES	General Fund	83.39
07/16/2021	HOME DEPOT USA	00496524	623256583	JANITORIAL SUPPLIES	General Fund	205.66

07/16/2021	HOME DEPOT USA	00496525	623256591	JANITORIAL SUPPLIES	General Fund	35.16
07/16/2021	HOME DEPOT USA	00496526	623256609	JANITORIAL SUPPLIES	Water Utility	346.06
07/16/2021	HOME DEPOT USA	00496527	623256617	JANITORIAL SUPPLIES	Electric Utility	517.95
07/16/2021	HOME DEPOT USA	00496528	623256625	JANITORIAL SUPPLIES	General Fund	225.82
07/16/2021	HOME DEPOT USA	00496530	623256633	JANITORIAL SUPPLIES	General Fund	365.72
07/16/2021	HOME DEPOT USA	00496729	624599999	JANITORIAL SUPPLIES	General Fund	192.73
07/16/2021	HOME DEPOT USA	00496732	624599981	JANITORIAL SUPPLIES	General Fund	299.32
07/16/2021	HOME DEPOT USA	00496735	625964259	JANITORIAL SUPPLIES	General Fund	499.61
07/16/2021	HOME DEPOT USA	00496737	625964267	JANITORIAL SUPPLIES	General Fund	301.81
				Total for Payment No.:		3,073.23

Payment No: 652405

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SKYHAWKS SPORTS ACADEMY, LLC	00497584	172405	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	3,071.72
				Total for Payment No.:		3,071.72

Payment No: 019809

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	APPLIED POWER TECHNOLOGIES INC	00496281	13711-02	MO. EPMS MAINT SRV JUN2021	Electric Utility	3,061.50
				Total for Payment No.:		3,061.50

Payment No: 019826

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00495969	4695461-00	SUPPLIES-PNB	General Fund	1,349.45
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496363	4694608-00	SUPPLIES-PNB	General Fund	504.06
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496389	4713367-00	RAINBIRD 5004 PLUS PRS PC SAM	General Fund	85.70
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496399	4709390-00	SPRINKLER MAINTENANCE	General Fund	106.35
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496400	4710198-00	SPRINKLER MAINTENANCE	General Fund	143.54

07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496403	4703938-00	SPRINKLER MAINTENANCE	General Fund	225.03
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496404	4702188-00	SPRINKLER MAINTENANCE	General Fund	261.73
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496405	4702870-00	SPRINKLER MAINTENANCE	General Fund	144.33
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496406	4704052-00	SPRINKLER MAINTENANCE	General Fund	60.36
07/09/2021	IMPERIAL SPRINKLER SUPPLY INC	00496413	4692371-00	SPRINKLER MAINTENANCE	General Fund	175.78
				Total for Payment No.:		3,056.33

Payment No: 020026

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	JOHANNA JEAN MARCHEL	00497605	236	JANITOR 881 MARTIN JUL21 FRIG	Elec OperatingGrant Trust Fund	4.80
07/30/2021	JOHANNA JEAN MARCHEL	00497605	236	JANITOR 881 MARTIN JUL21 FRIG	Electric Utility	75.20
07/30/2021	JOHANNA JEAN MARCHEL	00497606	237	JANITORIAL 881 MARTIN AUG2021	Elec OperatingGrant Trust Fund	175.76
07/30/2021	JOHANNA JEAN MARCHEL	00497606	237	JANITORIAL 881 MARTIN AUG2021	Electric Utility	2,753.62
				Total for Payment No.:		3,009.38

Payment No: 019861

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AIRGAS USA, LLC	00496684	9113998898	MEDICAL OXYGEN - ST 1	General Fund	143.68
07/16/2021	AIRGAS USA, LLC	00496686	9113998899	MEDICAL OXYGEN - ST 5	General Fund	104.60
07/16/2021	AIRGAS USA, LLC	00496687	9114052992	MEDICAL OXYGEN - ST 3	General Fund	75.01
07/16/2021	AIRGAS USA, LLC	00496710	9113708715	E03NI99E15A0260 NC/90PPM	Electric Utility	665.82
07/16/2021	AIRGAS USA, LLC	00496710	9113708715	AIRGAS HAZMAT CHARGE	Electric Utility	2.32
07/16/2021	AIRGAS USA, LLC	00496712	9114055978	E03NI99E15A0260 NC/90PPM	Electric Utility	817.50
07/16/2021	AIRGAS USA, LLC	00496712	9114055978	DELIVERY FLAT FEE	Electric Utility	70.85
07/16/2021	AIRGAS USA, LLC	00496712	9114055978	FUEL SURCHARGE FLAT	Electric Utility	11.55
07/16/2021	AIRGAS USA, LLC	00496712	9114055978	AIRGAS HAZMAT CHARGE	Electric Utility	13.90
07/16/2021	AIRGAS USA, LLC	00496715	9980362298	RENTAL CYLINDERS FOR DVR MAY21	Electric Utility	1,084.87
07/16/2021	AIRGAS USA, LLC	00496715	9980362298	AIRGAS HAZMAT CHARGE	Electric Utility	12.75

Total for Payment No.: 3,002.85

Payment No: 652443

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	THE MECHANICS BANK	00498048	1772JUL2021	ESCROW AGREEMENT FOR THE REED	Parks And Recreation	3,001.02
Total for Payment No.:						3,001.02

Payment No: 652377

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MOTION INDUSTRIES INC	00497796	CA24-113752	PN# 5VX1500 - GATES PRECISION	Electric Utility	2,966.82
Total for Payment No.:						2,966.82

Payment No: 019995

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	AEMTEK, INC	00498107	2106051	Water Quality Testing	Water Utility	2,941.00
Total for Payment No.:						2,941.00

Payment No: 652286

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DUTCHINTS DEVELOPMENT LLC	00497298	20239-03 Utility Refund	UTILITY REFUND	General Fund	2,917.74
Total for Payment No.:						2,917.74

Payment No: 652375

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MAD SCIENCE OF THE BAY AREA	00497581	24595	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,891.00
Total for Payment No.:						2,891.00

Payment No: 019847

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	WAXIE SANITARY SUPPLY	00496419	80076973	PAPERTOWELS & HANDSOAP	General Fund	2,886.24
				Total for Payment No.:		2,886.24

Payment No: 652479

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	FLOWER DIVAS	00497608	R22-SBGR-0031	SM BUSI LTG RBT;ACT 16336-37	Elec OperatingGrant Trust Fund	2,865.00
				Total for Payment No.:		2,865.00

Payment No: 652466

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CED CONTRACTORS	00498041	7488-1015601	WIRE, BARE, CU, #18, TINNED, S	Electric Utility	1,415.68
07/30/2021	CED CONTRACTORS	00498042	7488-1013745	WIRE, 600V, CU, #12 SOLID, THH	Electric Utility	542.82
07/30/2021	CED CONTRACTORS	00498217	7488-1002422	WIRE, TRAFFIC SIGNAL, #14, GRE	Electric Utility	886.44
				Total for Payment No.:		2,844.94

Payment No: 652230

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	OCLC INC	00496660	1000130996	CATALOG & METADATA	General Fund	2,843.81
				Total for Payment No.:		2,843.81

Payment No: 019886

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GRAINGER	00496634	9936561894	SUPPLIES-STORM	General Fund	350.17
07/16/2021	GRAINGER	00496701	9921512217	TUBING CUTTER	Water Utility	322.87
07/16/2021	GRAINGER	00496731	9929377662	SAFETY GATE, STEEL	Electric Utility	539.38
07/16/2021	GRAINGER	00496733	9929377670	SAFETY GATE, STEEL	Electric Utility	1,216.63

07/16/2021	GRAINGER	00496734	9936122754	SAFETY GATE, STEEL	Electric Utility	405.54
Total for Payment No.:						2,834.59

Payment No: 652224

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LECKEY CONSULTING INC	00497022	1578	CONSULTING SERVICES: BARCODING	Electric Utility Construction	2,812.50
Total for Payment No.:						2,812.50

Payment No: 019936

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CINTAS CORP #630	00496872	4083553452	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	129.34
07/23/2021	CINTAS CORP #630	00496874	4085859943	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
07/23/2021	CINTAS CORP #630	00496877	4088175591	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	105.71
07/23/2021	CINTAS CORP #630	00496884	4088175426	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	236.34
07/23/2021	CINTAS CORP #630	00496885	4087055632	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
07/23/2021	CINTAS CORP #630	00496909	4087537260	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	129.34
07/23/2021	CINTAS CORP #630	00496910	4087537449	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	236.34
07/23/2021	CINTAS CORP #630	00496911	4087537601	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	105.71
07/23/2021	CINTAS CORP #630	00496912	4086862667	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	105.71
07/23/2021	CINTAS CORP #630	00496913	4086443316	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
07/23/2021	CINTAS CORP #630	00496914	4086862448	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	129.34
07/23/2021	CINTAS CORP #630	00496915	4088432810	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
07/23/2021	CINTAS CORP #630	00497077	4088176107	FLEET RENTALS	Fleet Operation Fund	270.84

07/23/2021	CINTAS CORP #630	00497077	4088176107	SAFEWASHER MOBL SRVC- TXBL	Fleet Operation Fund	31.03
Total for Payment No.:						2,799.70
Payment No: 652496						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MIDWEST INDUSTRIES, INC	00498027	288021	MI QD MOUNT AIMPOINT & COMPM4	General Fund	1,582.00
07/30/2021	MIDWEST INDUSTRIES, INC	00498028	289614	COMBAT BACK UP IRON SIGHT	General Fund	1,200.00
Total for Payment No.:						2,782.00
Payment No: 651915						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	THE MECHANICS BANK	00496557	1772JUN2021	EXCROW AGREEMENT FOR THE REED	Parks And Recreation	2,309.15
07/09/2021	THE MECHANICS BANK	00496557	1772JUN2021	ESCROW AGREEMENT FOR THE REED	Parks And Recreation	448.75
Total for Payment No.:						2,757.90
Payment No: 652408						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TARGET SPECIALTY PRODUCTS INC	00497142	INVP500491707	HYDRO MAX GROWTH PRODUCTS	General Fund	1,173.19
07/23/2021	TARGET SPECIALTY PRODUCTS INC	00497144	INVP500495043	HYDRO MAX GROWTH PRODUCT	General Fund	546.51
07/23/2021	TARGET SPECIALTY PRODUCTS INC	00497145	INVP500499310	GARLON 4 ULTRA	General Fund	563.07
07/23/2021	TARGET SPECIALTY PRODUCTS INC	00497147	INVP500517538	LIFELINE HERBICIDE	General Fund	472.72
Total for Payment No.:						2,755.49
Payment No: 002409						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/19/2021	CAL PERS - PO BOX 1982	00496998	100000016470746	DD: 4TH LEVEL 1959 SURV BENEFIT	General Fund	2,496.00
07/19/2021	CAL PERS - PO BOX 1982	00496998	100000016470746	DD: 4TH LEVEL 1959 SURV BENEFIT	General Fund	171.60

07/19/2021	CAL PERS - PO BOX 1982	00496998	100000016470746	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
Total for Payment No.:						2,730.00
Payment No: 652088						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GLOBAL RENTAL CO	00496369	3644888	2019 FORD F550 JUL21	Electric Utility Construction	2,725.00
Total for Payment No.:						2,725.00
Payment No: 019827						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	INTERSTATE TRAFFIC CONTROL	00496362	244802	SUPPLIES-TRAFFIC MNTCE	General Fund	2,638.39
Total for Payment No.:						2,638.39
Payment No: 019856						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	PUBLIC SAFETY NON-SWORN	00497202	06/13/21-07/10/21	UNION DUES B2113 & B2114	Payroll Liability&ClearingAcct	2,600.00
Total for Payment No.:						2,600.00
Payment No: 652417						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	WELLS FARGO BANK NA	00497859	13403829	CUSTODY SERVICES AND SAFEKEEPI	General Fund	2,594.49
Total for Payment No.:						2,594.49
Payment No: 652142						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CSG CONSULTANTS INC	00496644	37588	DVLPR PLAN RVW - VANCE BROWN	Deposit Funds.	2,590.00

Total for Payment No.: 2,590.00

Payment No: 652519

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SIEMENS ENERGY INC	00498151	5842010328A	PERFORMANCE BOND	Electric Utility Construction	2,550.00
Total for Payment No.:						2,550.00

Payment No: 652488

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	KAREN MURPHY LANSING	00498031	SCPD 40	PSYCH SERVICES	General Fund	2,540.00
Total for Payment No.:						2,540.00

Payment No: 652102

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	NAPA AUTO PARTS	00496024	5983-664727	PARTS-V#1711	Fleet Operation Fund	79.22
07/09/2021	NAPA AUTO PARTS	00496025	5983-665588	PARTS-V#0743	Fleet Operation Fund	18.02
07/09/2021	NAPA AUTO PARTS	00496026	5983-666747	PARTS-STOCK	Fleet Operation Fund	107.78
07/09/2021	NAPA AUTO PARTS	00496027	5983-667100	PARTS-STOCK	Fleet Operation Fund	96.45
07/09/2021	NAPA AUTO PARTS	00496028	5983-667363	PARTS-V#2891	Fleet Operation Fund	60.24
07/09/2021	NAPA AUTO PARTS	00496029	5983-667765	PARTS-STOCK	Fleet Operation Fund	194.35
07/09/2021	NAPA AUTO PARTS	00496030	5983-667766	PARTS-V#3509	Fleet Operation Fund	7.61
07/09/2021	NAPA AUTO PARTS	00496031	5983-667767	PARTS-V#3168	Fleet Operation Fund	6.90
07/09/2021	NAPA AUTO PARTS	00496032	5983-667768	PARTS-V#2738	Fleet Operation Fund	5.11
07/09/2021	NAPA AUTO PARTS	00496033	5983-668163	PARTS-V#2614	Fleet Operation Fund	122.95
07/09/2021	NAPA AUTO PARTS	00496034	5983-668165	PARTS-STOCK	Fleet Operation Fund	115.31
07/09/2021	NAPA AUTO PARTS	00496035	5983-668230	PARTS-STOCK	Fleet Operation Fund	65.33
07/09/2021	NAPA AUTO PARTS	00496036	5983-668282	PARTS-STOCK	Fleet Operation Fund	74.53
07/09/2021	NAPA AUTO PARTS	00496037	5983-668309	PARTS-V#2975	Fleet Operation Fund	66.35

07/09/2021	NAPA AUTO PARTS	00496038	5983-668483	PARTS-STOCK	Fleet Operation Fund	183.31
07/09/2021	NAPA AUTO PARTS	00496039	5983-668828	PARTS-STOCK	Fleet Operation Fund	103.45
07/09/2021	NAPA AUTO PARTS	00496040	5983-668958	PARTS-V#3304	Fleet Operation Fund	7.24
07/09/2021	NAPA AUTO PARTS	00496040	5983-668958	PARTS-STOCK	Fleet Operation Fund	43.09
07/09/2021	NAPA AUTO PARTS	00496041	5983-669032	PARTS-STOCK	Fleet Operation Fund	201.41
07/09/2021	NAPA AUTO PARTS	00496042	5983-669151	PARTS-STOCK	Fleet Operation Fund	109.04
07/09/2021	NAPA AUTO PARTS	00496043	5983-669379	PARTS-STOCK	Fleet Operation Fund	149.22
07/09/2021	NAPA AUTO PARTS	00496044	5983-669468	PARTS-STOCK	Fleet Operation Fund	195.04
07/09/2021	NAPA AUTO PARTS	00496045	5983-669474	PARTS-V#3183	Fleet Operation Fund	23.27
07/09/2021	NAPA AUTO PARTS	00496046	5983-669487	PARTS-STOCK	Fleet Operation Fund	108.31
07/09/2021	NAPA AUTO PARTS	00496047	5983-669576	PARTS-STOCK	Fleet Operation Fund	7.00
07/09/2021	NAPA AUTO PARTS	00496048	5983-669670	CREDIT- PART RETURNED	Fleet Operation Fund	-7.00
07/09/2021	NAPA AUTO PARTS	00496049	5983-669701	PARTS-STOCK	Fleet Operation Fund	114.60
07/09/2021	NAPA AUTO PARTS	00496050	5983-669799	CREDIT- PART RETURNED V#3224	Fleet Operation Fund	-32.19
07/09/2021	NAPA AUTO PARTS	00496051	5983-670013	PARTS-STOCK	Fleet Operation Fund	27.77
07/09/2021	NAPA AUTO PARTS	00496052	5983-670044	PARTS-V#3401	Fleet Operation Fund	9.64
07/09/2021	NAPA AUTO PARTS	00496053	5983-670235	PARTS-V#2845	Fleet Operation Fund	208.16
07/09/2021	NAPA AUTO PARTS	00496054	5983-670301	PARTS-STOCK	Fleet Operation Fund	11.67
07/09/2021	NAPA AUTO PARTS	00496278	5983-661835	CREDIT- PARTS RETURNED	Fleet Operation Fund	-846.09
07/09/2021	NAPA AUTO PARTS	00496279	5983-670386	PARTS-STOCK	Fleet Operation Fund	75.77
07/09/2021	NAPA AUTO PARTS	00496280	5983-670703	PARTS-V#2958	Fleet Operation Fund	42.76
07/09/2021	NAPA AUTO PARTS	00496286	5983-670932	PARTS-STOCK	Fleet Operation Fund	157.07
07/09/2021	NAPA AUTO PARTS	00496287	5983-671169	PARTS-V#3274	Fleet Operation Fund	202.71
07/09/2021	NAPA AUTO PARTS	00496288	5983-671300	PARTS-STOCK	Fleet Operation Fund	319.14
07/09/2021	NAPA AUTO PARTS	00496289	5983-672041	PARTS-STOCK	Fleet Operation Fund	71.37
				Total for Payment No.:		2,505.91

Payment No: 019961

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/23/2021	NALCO CO	00496750	6600513996	PERMATREAT PC-191T 6/28/21	Electric Utility	1,537.17
07/23/2021	NALCO CO	00496750	6600513996	TRANSPORTATION/ENERGY FEE	Electric Utility	20.40
07/23/2021	NALCO CO	00496752	6670081408	MO.SRV FEE DVR JUN21	Electric Utility	946.35
Total for Payment No.:						2,503.92

Payment No: 019844

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TITAN CLOUD SOFTWARE, LLC	00495947	INV7352	ANNUAL SUBSCRIPTION FEE- 21-22	Fleet Operation Fund	2,500.00
Total for Payment No.:						2,500.00

Payment No: 652329

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	BAY AREA WATER SUPPLY &	00496793	7458	2021 JAN WTR LOSS CONTROL PROG	Water Utility	2,500.00
Total for Payment No.:						2,500.00

Payment No: 652360

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	HEALTHINVEST HRA	00497819	32307JUL2021	VEBA ADMINISTRATOR - \$2,500 MO	General Fund	2,500.00
Total for Payment No.:						2,500.00

Payment No: 652307

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497324	79862-01 Utility Refund	UTILITY REFUND	General Fund	13.48
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497325	79863-01 Utility Refund	UTILITY REFUND	General Fund	13.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497326	79864-01 Utility Refund	UTILITY REFUND	General Fund	11.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497327	79866-01 Utility Refund	UTILITY REFUND	General Fund	13.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497328	79867-01 Utility Refund	UTILITY REFUND	General Fund	10.81
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497329	79868-01 Utility Refund	UTILITY REFUND	General Fund	10.59

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497330	79869-01 Utility Refund	UTILITY REFUND	General Fund	12.37
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497331	79873-01 Utility Refund	UTILITY REFUND	General Fund	16.62
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497332	79874-01 Utility Refund	UTILITY REFUND	General Fund	12.93
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497333	79875-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497334	79876-01 Utility Refund	UTILITY REFUND	General Fund	14.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497335	79879-01 Utility Refund	UTILITY REFUND	General Fund	8.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497336	79880-01 Utility Refund	UTILITY REFUND	General Fund	13.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497337	79881-01 Utility Refund	UTILITY REFUND	General Fund	14.39
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497338	79882-01 Utility Refund	UTILITY REFUND	General Fund	13.60
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497339	79883-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497340	79884-01 Utility Refund	UTILITY REFUND	General Fund	8.03
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497341	79885-01 Utility Refund	UTILITY REFUND	General Fund	12.83
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497342	79886-01 Utility Refund	UTILITY REFUND	General Fund	14.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497343	79887-01 Utility Refund	UTILITY REFUND	General Fund	14.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497344	79888-01 Utility Refund	UTILITY REFUND	General Fund	13.60
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497345	79889-01 Utility Refund	UTILITY REFUND	General Fund	13.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497346	79890-01 Utility Refund	UTILITY REFUND	General Fund	12.71
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497347	79892-01 Utility Refund	UTILITY REFUND	General Fund	9.58
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497348	79893-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497349	79894-01 Utility Refund	UTILITY REFUND	General Fund	6.47
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497350	79895-01 Utility Refund	UTILITY REFUND	General Fund	14.83
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497351	79896-01 Utility Refund	UTILITY REFUND	General Fund	14.28
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497352	79897-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497353	79898-01 Utility Refund	UTILITY REFUND	General Fund	7.59
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497354	79899-01 Utility Refund	UTILITY REFUND	General Fund	14.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497355	79900-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497356	79901-01 Utility Refund	UTILITY REFUND	General Fund	12.83
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497357	79902-01 Utility Refund	UTILITY REFUND	General Fund	12.94
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497358	79903-01 Utility Refund	UTILITY REFUND	General Fund	12.37
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497359	79904-01 Utility Refund	UTILITY REFUND	General Fund	11.26

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497360	79905-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497361	79906-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497362	79907-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497363	79908-01 Utility Refund	UTILITY REFUND	General Fund	14.60
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497364	79909-01 Utility Refund	UTILITY REFUND	General Fund	14.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497365	79910-01 Utility Refund	UTILITY REFUND	General Fund	14.83
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497366	79911-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497367	79912-01 Utility Refund	UTILITY REFUND	General Fund	13.27
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497368	79913-01 Utility Refund	UTILITY REFUND	General Fund	12.15
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497369	79914-01 Utility Refund	UTILITY REFUND	General Fund	7.59
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497370	79915-01 Utility Refund	UTILITY REFUND	General Fund	14.94
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497371	79916-01 Utility Refund	UTILITY REFUND	General Fund	11.93
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497372	79917-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497373	79918-01 Utility Refund	UTILITY REFUND	General Fund	11.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497374	79919-01 Utility Refund	UTILITY REFUND	General Fund	14.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497375	79920-01 Utility Refund	UTILITY REFUND	General Fund	13.84
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497376	79921-01 Utility Refund	UTILITY REFUND	General Fund	14.28
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497377	79922-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497378	79923-01 Utility Refund	UTILITY REFUND	General Fund	11.84
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497379	79925-01 Utility Refund	UTILITY REFUND	General Fund	13.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497380	79958-01 Utility Refund	UTILITY REFUND	General Fund	9.82
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497381	79959-01 Utility Refund	UTILITY REFUND	General Fund	14.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497382	79960-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497383	79961-01 Utility Refund	UTILITY REFUND	General Fund	14.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497384	79962-01 Utility Refund	UTILITY REFUND	General Fund	11.94
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497385	79963-01 Utility Refund	UTILITY REFUND	General Fund	6.47
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497386	79964-01 Utility Refund	UTILITY REFUND	General Fund	7.47
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497387	79965-01 Utility Refund	UTILITY REFUND	General Fund	12.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497388	79966-01 Utility Refund	UTILITY REFUND	General Fund	13.49
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497389	79967-01 Utility Refund	UTILITY REFUND	General Fund	13.61

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497390	79968-01 Utility Refund	UTILITY REFUND	General Fund	9.37
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497391	79969-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497392	79970-01 Utility Refund	UTILITY REFUND	General Fund	13.49
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497393	79971-01 Utility Refund	UTILITY REFUND	General Fund	12.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497394	79972-01 Utility Refund	UTILITY REFUND	General Fund	10.81
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497395	79974-01 Utility Refund	UTILITY REFUND	General Fund	12.71
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497396	79975-01 Utility Refund	UTILITY REFUND	General Fund	12.49
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497397	79976-01 Utility Refund	UTILITY REFUND	General Fund	12.49
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497398	79977-01 Utility Refund	UTILITY REFUND	General Fund	13.83
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497399	79980-01 Utility Refund	UTILITY REFUND	General Fund	8.59
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497400	79981-01 Utility Refund	UTILITY REFUND	General Fund	13.93
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497401	79982-01 Utility Refund	UTILITY REFUND	General Fund	14.49
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497402	79983-01 Utility Refund	UTILITY REFUND	General Fund	13.27
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497403	79984-01 Utility Refund	UTILITY REFUND	General Fund	11.71
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497404	79985-01 Utility Refund	UTILITY REFUND	General Fund	14.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497405	79988-01 Utility Refund	UTILITY REFUND	General Fund	13.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497406	79989-01 Utility Refund	UTILITY REFUND	General Fund	14.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497407	79990-01 Utility Refund	UTILITY REFUND	General Fund	12.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497408	79992-01 Utility Refund	UTILITY REFUND	General Fund	13.93
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497409	79993-01 Utility Refund	UTILITY REFUND	General Fund	6.99
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497410	79994-01 Utility Refund	UTILITY REFUND	General Fund	12.04
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497411	79995-01 Utility Refund	UTILITY REFUND	General Fund	10.93
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497412	79996-01 Utility Refund	UTILITY REFUND	General Fund	12.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497413	79997-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497414	79998-01 Utility Refund	UTILITY REFUND	General Fund	13.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497415	79999-01 Utility Refund	UTILITY REFUND	General Fund	14.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497416	80000-01 Utility Refund	UTILITY REFUND	General Fund	16.95
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497417	80001-01 Utility Refund	UTILITY REFUND	General Fund	16.62
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497418	80002-01 Utility Refund	UTILITY REFUND	General Fund	16.73
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497419	80003-01 Utility Refund	UTILITY REFUND	General Fund	14.38

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497420	80005-01 Utility Refund	UTILITY REFUND	General Fund	12.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497421	80006-01 Utility Refund	UTILITY REFUND	General Fund	11.71
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497422	80007-01 Utility Refund	UTILITY REFUND	General Fund	13.49
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497423	80008-01 Utility Refund	UTILITY REFUND	General Fund	12.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497424	80009-01 Utility Refund	UTILITY REFUND	General Fund	18.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497425	80010-01 Utility Refund	UTILITY REFUND	General Fund	11.26
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497426	80011-01 Utility Refund	UTILITY REFUND	General Fund	14.50
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497427	80012-01 Utility Refund	UTILITY REFUND	General Fund	13.39
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497428	80013-01 Utility Refund	UTILITY REFUND	General Fund	17.40
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497429	80015-01 Utility Refund	UTILITY REFUND	General Fund	13.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497430	80017-01 Utility Refund	UTILITY REFUND	General Fund	10.36
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497431	80019-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497432	80020-01 Utility Refund	UTILITY REFUND	General Fund	12.83
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497433	80021-01 Utility Refund	UTILITY REFUND	General Fund	14.06
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497434	80022-01 Utility Refund	UTILITY REFUND	General Fund	9.92
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497435	80023-01 Utility Refund	UTILITY REFUND	General Fund	14.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497436	80024-01 Utility Refund	UTILITY REFUND	General Fund	14.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497437	80025-01 Utility Refund	UTILITY REFUND	General Fund	14.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497438	80026-01 Utility Refund	UTILITY REFUND	General Fund	13.39
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497439	80027-01 Utility Refund	UTILITY REFUND	General Fund	12.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497440	80028-01 Utility Refund	UTILITY REFUND	General Fund	10.93
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497441	80029-01 Utility Refund	UTILITY REFUND	General Fund	12.60
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497442	80030-01 Utility Refund	UTILITY REFUND	General Fund	13.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497443	80056-01 Utility Refund	UTILITY REFUND	General Fund	12.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497444	80057-01 Utility Refund	UTILITY REFUND	General Fund	12.60
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497445	80058-01 Utility Refund	UTILITY REFUND	General Fund	8.59
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497446	80059-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497447	80060-01 Utility Refund	UTILITY REFUND	General Fund	12.54
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497448	80061-01 Utility Refund	UTILITY REFUND	General Fund	14.06
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497449	80062-01 Utility Refund	UTILITY REFUND	General Fund	14.28

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497450	80063-01 Utility Refund	UTILITY REFUND	General Fund	14.26
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497451	80064-01 Utility Refund	UTILITY REFUND	General Fund	14.38
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497452	80065-01 Utility Refund	UTILITY REFUND	General Fund	14.28
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497453	80066-01 Utility Refund	UTILITY REFUND	General Fund	14.61
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497454	80068-01 Utility Refund	UTILITY REFUND	General Fund	13.16
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497455	80069-01 Utility Refund	UTILITY REFUND	General Fund	11.71
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497456	80071-01 Utility Refund	UTILITY REFUND	General Fund	22.26
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497457	80074-01 Utility Refund	UTILITY REFUND	General Fund	5.63
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497458	80075-01 Utility Refund	UTILITY REFUND	General Fund	5.46
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497459	80077-01 Utility Refund	UTILITY REFUND	General Fund	5.08
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497460	80085-01 Utility Refund	UTILITY REFUND	General Fund	5.18
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497461	80087-01 Utility Refund	UTILITY REFUND	General Fund	5.40
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497462	80090-01 Utility Refund	UTILITY REFUND	General Fund	6.08
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497463	80092-01 Utility Refund	UTILITY REFUND	General Fund	5.18
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497464	80095-01 Utility Refund	UTILITY REFUND	General Fund	5.07
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497465	80102-01 Utility Refund	UTILITY REFUND	General Fund	5.84
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497466	80105-01 Utility Refund	UTILITY REFUND	General Fund	5.08
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497467	80106-01 Utility Refund	UTILITY REFUND	General Fund	5.51
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497468	80108-01 Utility Refund	UTILITY REFUND	General Fund	6.20
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497469	80109-01 Utility Refund	UTILITY REFUND	General Fund	6.98
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497470	80111-01 Utility Refund	UTILITY REFUND	General Fund	6.52
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497471	80113-01 Utility Refund	UTILITY REFUND	General Fund	7.97
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497472	80117-01 Utility Refund	UTILITY REFUND	General Fund	7.65
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497473	80119-01 Utility Refund	UTILITY REFUND	General Fund	6.74
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497474	80121-01 Utility Refund	UTILITY REFUND	General Fund	6.85
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497475	80122-01 Utility Refund	UTILITY REFUND	General Fund	5.42
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497476	80124-01 Utility Refund	UTILITY REFUND	General Fund	5.62
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497477	80126-01 Utility Refund	UTILITY REFUND	General Fund	5.74
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497478	80130-01 Utility Refund	UTILITY REFUND	General Fund	5.75
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497479	80135-01 Utility Refund	UTILITY REFUND	General Fund	6.04

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497480	80163-01 Utility Refund	UTILITY REFUND	General Fund	5.63
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497481	80165-01 Utility Refund	UTILITY REFUND	General Fund	5.42
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497482	80166-01 Utility Refund	UTILITY REFUND	General Fund	5.63
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497483	80168-01 Utility Refund	UTILITY REFUND	General Fund	5.64
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497484	80169-01 Utility Refund	UTILITY REFUND	General Fund	13.72
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497485	80171-01 Utility Refund	UTILITY REFUND	General Fund	6.20
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497486	80173-01 Utility Refund	UTILITY REFUND	General Fund	5.74
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497487	80174-01 Utility Refund	UTILITY REFUND	General Fund	6.06
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497488	80176-01 Utility Refund	UTILITY REFUND	General Fund	5.63
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497489	80177-01 Utility Refund	UTILITY REFUND	General Fund	5.30
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497490	80178-01 Utility Refund	UTILITY REFUND	General Fund	5.85
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497491	80179-01 Utility Refund	UTILITY REFUND	General Fund	6.75
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497492	80181-01 Utility Refund	UTILITY REFUND	General Fund	7.48
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497493	80183-01 Utility Refund	UTILITY REFUND	General Fund	8.03
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497494	80185-01 Utility Refund	UTILITY REFUND	General Fund	7.29
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497495	80189-01 Utility Refund	UTILITY REFUND	General Fund	9.37
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497496	80190-01 Utility Refund	UTILITY REFUND	General Fund	5.74
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497497	80192-01 Utility Refund	UTILITY REFUND	General Fund	79.14
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497498	80193-01 Utility Refund	UTILITY REFUND	General Fund	6.09
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497499	80195-01 Utility Refund	UTILITY REFUND	General Fund	5.53
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497500	80196-01 Utility Refund	UTILITY REFUND	General Fund	5.18
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497501	80200-01 Utility Refund	UTILITY REFUND	General Fund	14.05
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497502	80201-01 Utility Refund	UTILITY REFUND	General Fund	5.85
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497503	80203-01 Utility Refund	UTILITY REFUND	General Fund	9.82
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497504	80206-01 Utility Refund	UTILITY REFUND	General Fund	5.08
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497505	80207-01 Utility Refund	UTILITY REFUND	General Fund	5.07
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497506	80208-01 Utility Refund	UTILITY REFUND	General Fund	14.85
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497507	80209-01 Utility Refund	UTILITY REFUND	General Fund	6.35
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497508	80214-01 Utility Refund	UTILITY REFUND	General Fund	5.42
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497509	80216-01 Utility Refund	UTILITY REFUND	General Fund	6.63

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497510	80219-01 Utility Refund	UTILITY REFUND	General Fund	8.31
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497511	80223-01 Utility Refund	UTILITY REFUND	General Fund	5.20
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497512	80227-01 Utility Refund	UTILITY REFUND	General Fund	6.64
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497513	80228-01 Utility Refund	UTILITY REFUND	General Fund	6.64
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497514	80230-01 Utility Refund	UTILITY REFUND	General Fund	5.31
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497515	80232-01 Utility Refund	UTILITY REFUND	General Fund	5.74
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497516	80233-01 Utility Refund	UTILITY REFUND	General Fund	7.81
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497517	80234-01 Utility Refund	UTILITY REFUND	General Fund	5.53
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497518	80235-01 Utility Refund	UTILITY REFUND	General Fund	7.02
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497519	80237-01 Utility Refund	UTILITY REFUND	General Fund	6.91
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497520	80238-01 Utility Refund	UTILITY REFUND	General Fund	5.41
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497521	80239-01 Utility Refund	UTILITY REFUND	General Fund	5.29
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497522	80267-01 Utility Refund	UTILITY REFUND	General Fund	5.64
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497523	80270-01 Utility Refund	UTILITY REFUND	General Fund	5.42
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497524	80271-01 Utility Refund	UTILITY REFUND	General Fund	5.86
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497525	80272-01 Utility Refund	UTILITY REFUND	General Fund	6.07
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497526	80273-01 Utility Refund	UTILITY REFUND	General Fund	5.53
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497527	80275-01 Utility Refund	UTILITY REFUND	General Fund	5.06
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497528	80277-01 Utility Refund	UTILITY REFUND	General Fund	5.08
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497529	80278-01 Utility Refund	UTILITY REFUND	General Fund	7.41
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497530	80279-01 Utility Refund	UTILITY REFUND	General Fund	5.51
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497531	80280-01 Utility Refund	UTILITY REFUND	General Fund	5.96
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497532	80281-01 Utility Refund	UTILITY REFUND	General Fund	5.86
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497533	80282-01 Utility Refund	UTILITY REFUND	General Fund	5.73
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497534	80283-01 Utility Refund	UTILITY REFUND	General Fund	5.85
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497535	80291-01 Utility Refund	UTILITY REFUND	General Fund	5.19
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497536	80294-01 Utility Refund	UTILITY REFUND	General Fund	9.59
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497537	80297-01 Utility Refund	UTILITY REFUND	General Fund	5.52
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497538	80298-01 Utility Refund	UTILITY REFUND	General Fund	6.41
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497539	80299-01 Utility Refund	UTILITY REFUND	General Fund	5.85

07/23/2021	ZAKSKORN CONSTRUCTION CO	00497540	80300-01 Utility Refund	UTILITY REFUND	General Fund	6.08
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497541	80304-01 Utility Refund	UTILITY REFUND	General Fund	5.30
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497542	80307-01 Utility Refund	UTILITY REFUND	General Fund	6.14
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497543	80308-01 Utility Refund	UTILITY REFUND	General Fund	5.06
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497544	80310-01 Utility Refund	UTILITY REFUND	General Fund	5.84
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497545	80311-01 Utility Refund	UTILITY REFUND	General Fund	6.51
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497546	80312-01 Utility Refund	UTILITY REFUND	General Fund	5.86
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497547	80314-01 Utility Refund	UTILITY REFUND	General Fund	5.80
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497548	80317-01 Utility Refund	UTILITY REFUND	General Fund	7.92
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497549	80318-01 Utility Refund	UTILITY REFUND	General Fund	6.19
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497550	80319-01 Utility Refund	UTILITY REFUND	General Fund	6.20
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497551	80320-01 Utility Refund	UTILITY REFUND	General Fund	5.30
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497552	80326-01 Utility Refund	UTILITY REFUND	General Fund	9.48
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497553	80327-01 Utility Refund	UTILITY REFUND	General Fund	5.52
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497554	80328-01 Utility Refund	UTILITY REFUND	General Fund	6.40
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497555	80329-01 Utility Refund	UTILITY REFUND	General Fund	7.48
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497556	80330-01 Utility Refund	UTILITY REFUND	General Fund	8.58
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497557	80333-01 Utility Refund	UTILITY REFUND	General Fund	6.31
07/23/2021	ZAKSKORN CONSTRUCTION CO	00497558	80334-01 Utility Refund	UTILITY REFUND	General Fund	5.08
				Total for Payment No.:		2,462.60

Payment No: 019923

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	UNIVERSAL SITE SERVICES	00496621	21025989	SCCC PAINT PILLARS	Convention Cnt Maintenance Dis	920.00
07/16/2021	UNIVERSAL SITE SERVICES	00496622	21023601	SCCC REPAIR GATE	Convention Cnt Maintenance Dis	32.63
07/16/2021	UNIVERSAL SITE SERVICES	00496622	21023601	SCCC REPAIR GATE	Convention Cnt Maintenance Dis	44.31
07/16/2021	UNIVERSAL SITE SERVICES	00496622	21023601	SCCC REPAIR GATE	Convention Cnt Maintenance Dis	70.56

07/16/2021	UNIVERSAL SITE SERVICES	00496966	21024034	SWEEPING - FRANKLIN SQUARE	Downtown Parking Maintenance D	1,383.00
Total for Payment No.:						2,450.50
Payment No: 002408						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/19/2021	CAL PERS - PO BOX 1982	00496997	100000016469788	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	2,022.80
07/19/2021	CAL PERS - PO BOX 1982	00496997	100000016469788	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
07/19/2021	CAL PERS - PO BOX 1982	00496997	100000016469788	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
07/19/2021	CAL PERS - PO BOX 1982	00496997	100000016469788	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
07/19/2021	CAL PERS - PO BOX 1982	00496997	100000016469788	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	62.40
07/19/2021	CAL PERS - PO BOX 1982	00496997	100000016469788	DD: 4TH LEVEL 1959 SURV BENEFI	General Fund	171.60
Total for Payment No.:						2,444.00
Payment No: 652461						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BAYSHORE SAFETY & INDUSTRIAL	00498040	5910	EXAM GLOVES,XL, POWDERLESS, MI	Water Utility	2,440.51
Total for Payment No.:						2,440.51
Payment No: 652462						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00497249	7398652	SCCC HYATT IRRIGATION	Convention Cnt Maintenance Dis	1,187.40
07/30/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00497250	7398175	SCCC IRRIG OLIVE TREE	Convention Cnt Maintenance Dis	1,211.04
Total for Payment No.:						2,398.44
Payment No: 020045						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021		00498019	46658	Internal Investigation Service	Special Liability	2,390.50

						Insurance
Total for Payment No.:						2,390.50
Payment No: 019853						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CITY OF SANTA CLARA EMPLOYEES	00497204	06/13/21-07/10/21	UNION DUES B2113 & B2114	Payroll Liability&ClearingAcct	2,353.00
Total for Payment No.:						2,353.00
Payment No: 652297						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MEGA LIQUORS	00497310	43338-06 Utility Refund	UTILITY REFUND	General Fund	2,345.95
Total for Payment No.:						2,345.95
Payment No: 019889						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GRANITE ROCK CO #29145	00496995	1308259	SAND & BASE ROCK	Water Utility Construction	140.98
07/16/2021	GRANITE ROCK CO #29145	00496995	1308259	SAND & BASE ROCK	Water Utility	105.73
07/16/2021	GRANITE ROCK CO #29145	00496995	1308259	SAND & BASE ROCK	Electric Utility Construction	352.45
07/16/2021	GRANITE ROCK CO #29145	00496995	1308259	SAND & BASE ROCK	Water Utility	70.49
07/16/2021	GRANITE ROCK CO #29145	00496995	1308259	SAND & BASE ROCK	Sewer Utility	35.24
07/16/2021	GRANITE ROCK CO #29145	00496996	1309483	SAND & BASE ROCK	Water Utility Construction	242.99
07/16/2021	GRANITE ROCK CO #29145	00496996	1309483	SAND & BASE ROCK	Water Utility	182.25
07/16/2021	GRANITE ROCK CO #29145	00496996	1309483	SAND & BASE ROCK	Electric Utility Construction	607.50
07/16/2021	GRANITE ROCK CO #29145	00496996	1309483	SAND & BASE ROCK	Water Utility	121.50
07/16/2021	GRANITE ROCK CO #29145	00496996	1309483	SAND & BASE ROCK	Sewer Utility	60.75
07/16/2021	GRANITE ROCK CO #29145	00497000	1310794	SAND & BASE ROCK	Water Utility Construction	84.03

07/16/2021	GRANITE ROCK CO #29145	00497000	1310794	SAND & BASE ROCK	Water Utility	63.01
07/16/2021	GRANITE ROCK CO #29145	00497000	1310794	SAND & BASE RCOK	Electric Utility Construction	210.06
07/16/2021	GRANITE ROCK CO #29145	00497000	1310794	SAND & BASE ROCK	Water Utility	42.01
07/16/2021	GRANITE ROCK CO #29145	00497000	1310794	SAND & BASE ROCK	Sewer Utility	21.00
				Total for Payment No.:		2,339.99

Payment No: 652467

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CITY OF SAN JOSE	00497263	19253123	2021 ANNUAL STORM SEWER 1ST ST	Sewer Utility	2,068.64
07/30/2021	CITY OF SAN JOSE	00497270	19574150	2021 JUN 4495 1ST ST WATER MTR	Water Utility	262.22
				Total for Payment No.:		2,330.86

Payment No: 019993

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ABBOTT'S PRO-POWER LLC	00497051	152765	SAW, BLADE AND LOOP - TAXABLE	General Fund	2,137.98
07/30/2021	ABBOTT'S PRO-POWER LLC	00497051	152765	LABOR - NONTAX	General Fund	54.50
07/30/2021	ABBOTT'S PRO-POWER LLC	00497052	152956	LABOR TO SHARPEN BARS/CHAIN	General Fund	100.00
07/30/2021	ABBOTT'S PRO-POWER LLC	00497053	153564	RECUT SPARK GUARDS FOR TS410	General Fund	30.00
				Total for Payment No.:		2,322.48

Payment No: 652241

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SAGE SOFTWARE INC	00496606	2002364516	FA SYST SUPPORT RNWL 8/21-8/22	General Fund	2,277.00
				Total for Payment No.:		2,277.00

Payment No: 652265

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/16/2021	UNITED RENTALS (NORTH AMERICA) INC	00495232	191929414-001	TRENCH PLATES	Water Utility Construction	143.06
07/16/2021	UNITED RENTALS (NORTH AMERICA) INC	00495234	191929414-002	TRENCH PLATES	Water Utility Construction	-143.06
07/16/2021	UNITED RENTALS (NORTH AMERICA) INC	00496534	191647884-001	STREET PLATE LIFTING	Water Utility Construction	1,090.00
07/16/2021	UNITED RENTALS (NORTH AMERICA) INC	00496739	194751672-001	SHORING	Water Utility Construction	1,182.09
Total for Payment No.:						2,272.09

Payment No: 019868

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BOUNDTREE MEDICAL LLC	00496698	84092944	MEDICAL SUPPLIES	General Fund	105.41
07/16/2021	BOUNDTREE MEDICAL LLC	00496699	84104572	MEDICAL SUPPLIES - CITY AED	General Fund	994.57
07/16/2021	BOUNDTREE MEDICAL LLC	00496702	84116376	MEDICAL SUPPLIES - COVID19	Other City Dept Op Grant Fund	1,164.13
Total for Payment No.:						2,264.11

Payment No: 652277

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	APPLIED MANUFACTURING GROUP	00497296	16599-06 Utility Refund	UTILITY REFUND	General Fund	2,259.12
Total for Payment No.:						2,259.12

Payment No: 652344

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CRANE CERTIFICATION &	00497078	1141	QRTLY INSPCTN-V#3308 WO#130903	Fleet Operation Fund	275.00
07/23/2021	CRANE CERTIFICATION &	00497078	1141	QRTLY INSPCTN-V#3288 WO#130904	Fleet Operation Fund	500.00
07/23/2021	CRANE CERTIFICATION &	00497078	1141	QRTLY INSPCTN-V#2392 WO#130923	Fleet Operation Fund	275.00
07/23/2021	CRANE CERTIFICATION &	00497078	1141	QRTLY INSPCTN-V#3277 WO#130921	Fleet Operation Fund	450.00
07/23/2021	CRANE CERTIFICATION &	00497078	1141	QRTLY INSPCTN-V#3188	Fleet Operation Fund	450.00

				WO#130922		
07/23/2021	CRANE CERTIFICATION &	00497078	1141	QRTL Y INSPCTN-V#3357 WO#130902	Fleet Operation Fund	275.00
				Total for Payment No.:		2,225.00

Payment No: 652524

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SYNERGETIC CONSULTING INC	00497230	21-0736	Planning App Support	Building New Dvlpmnt Srcv Fee	115.00
07/30/2021	SYNERGETIC CONSULTING INC	00497236	21-0734	Bldg June App Support	Building New Dvlpmnt Srcv Fee	1,926.25
07/30/2021	SYNERGETIC CONSULTING INC	00497245	21-0735	Fire App Support June 2021	General Fund	172.50
				Total for Payment No.:		2,213.75

Payment No: 652483

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	HOME DEPOT USA	00497585	627854896	RESTROOM CLEANING SURPRISES	General Fund	775.55
07/30/2021	HOME DEPOT USA	00497586	627854904	URINAL MAT DSPBL	General Fund	171.48
07/30/2021	HOME DEPOT USA	00497587	628231680	SANITARY NAPKIN DISPOSAL	General Fund	856.00
07/30/2021	HOME DEPOT USA	00497795	628510281	JANITORIAL SUPPLIES	General Fund	288.22
07/30/2021	HOME DEPOT USA	00497823	628510299	JANITORIAL SUPPLIES	General Fund	111.63
				Total for Payment No.:		2,202.88

Payment No: 020006

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CINTAS CORP #630	00497235	4088175628	2021 JUN WATER UNIFORM SERVICE	Water Utility	303.76
07/30/2021	CINTAS CORP #630	00497235	4088175628	2021 JUN WATER UNIFORM SERVICE	Sewer Utility	303.75
07/30/2021	CINTAS CORP #630	00497237	4088834755	2021 JUL WATER UNIFORM SERVICE	Water Utility	497.89

07/30/2021	CINTAS CORP #630	00497237	4088834755	2021 JUL WATER UNIFORM SERVICE	Sewer Utility	497.88
07/30/2021	CINTAS CORP #630	00497238	4089387586	2021 JUL WATER UNIFORM SERVICE	Water Utility	296.37
07/30/2021	CINTAS CORP #630	00497238	4089387586	2021 JUL WATER UNIFORM SERVICE	Sewer Utility	296.36
Total for Payment No.:						2,196.01

Payment No: 652527

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	TUCKER CONSTRUCTION	00498066	29427	FENCE REPAIR & REPLACEMENT	Storm Drain	1,131.15
07/30/2021	TUCKER CONSTRUCTION	00498067	29776	FENCE REPAIR & REPLACEMENT	Storm Drain	1,061.39
Total for Payment No.:						2,192.54

Payment No: 019867

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497156	908142	LEGAL SERVICES	Information Technology Service	2,190.00
Total for Payment No.:						2,190.00

Payment No: 652168

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ADT COMMERCIAL LLC	00496578	140229136	EOC FIRE SYSTEM	General Fund	375.00
07/16/2021	ADT COMMERCIAL LLC	00496579	140467824	PD FIRE SYSTEM	General Fund	533.80
07/16/2021	ADT COMMERCIAL LLC	00496580	140467823	PD SEMI ANNUAL HALON	General Fund	640.56
07/16/2021	ADT COMMERCIAL LLC	00496581	140527495	PD ANNUAL SPRINKLER INSPEC	General Fund	640.56
Total for Payment No.:						2,189.92

Payment No: 652487

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	IRON MOUNTAIN	00497034	202373420	DATA STORAGE	Information Technology	2,184.73

Service

Total for Payment No.:

2,184.73

Payment No: 652370

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KRAFT INDUSTRIAL SUPPLY	00496746	36150	8"-150# FLANGED EXPAN JOINT	Electric Utility	954.04
07/23/2021	KRAFT INDUSTRIAL SUPPLY	00496746	36150	SET CARBON STEEL RETAIN RINGS	Electric Utility	77.85
07/23/2021	KRAFT INDUSTRIAL SUPPLY	00496746	36150	SET CONTROL UNITS, 2 ROD SET	Electric Utility	161.71
07/23/2021	KRAFT INDUSTRIAL SUPPLY	00496746	36150	TESTING FOR FULL VACUUM	Electric Utility	281.48
07/23/2021	KRAFT INDUSTRIAL SUPPLY	00496746	36150	EXPEDITED SHIPPING	Electric Utility	696.64
Total for Payment No.:						2,171.72

Payment No: 652243

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SANTA CLARA CO SOCIAL SVC AGCY	00497023	2457JUL2021	SR NUT PROGRAM JUNE 2021	Deposit Funds.	2,160.00
Total for Payment No.:						2,160.00

Payment No: 019980

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TRANSCANADA TURBINES INC	00497691	1015330	PN# 398032 - HOSE,3/4 X 14IN O	Electric Utility	569.40
07/23/2021	TRANSCANADA TURBINES INC	00497691	1015330	PN# 398004P0001 - HOSE, INTERC	Electric Utility	352.55
07/23/2021	TRANSCANADA TURBINES INC	00497691	1015330	PN# 398007P0001 - HOSE, INTERC	Electric Utility	1,224.47
Total for Payment No.:						2,146.42

Payment No: 019903

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497169	404119	LEGAL SERVICE - ADDITIOANAL EN	Related Santa Clara Dvlpr Fund	684.00
07/16/2021		00497170	404120	LEGAL SERVICE - ADDITIOANAL EN	Related Santa Clara	324.00

					Dvlpr Fund	
07/16/2021		00497171	404121	LEGAL SERVICE - ADDITIOANAL EN	Related Santa Clara Dvlpr Fund	615.95
07/16/2021		00497172	404224	CHANGE ORDER #1: ADDITIONAL FU LEGAL SERVICE	Electric Utility Construction	495.50
				Total for Payment No.:		2,119.45

Payment No: 652117

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SAN JOSE MAILING	00496097	4898	MAILING	General Fund	643.42
07/09/2021	SAN JOSE MAILING	00496097	4898	Old Quad mailer 1199 Coleman	General Fund	467.90
07/09/2021	SAN JOSE MAILING	00496097	4898	POSTAGE	General Fund	990.69
				Total for Payment No.:		2,102.01

Payment No: 020029

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	LINCOLN AQUATICS	00497591	36038323	POWDERED CONDITIONER	General Fund	104.47
07/30/2021	LINCOLN AQUATICS	00497595	35962691	50# DE POWDER	General Fund	1,996.20
				Total for Payment No.:		2,100.67

Payment No: 019908

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	NATIONAL PLANT SERVICE INC	00496964	16905	STORM DRAIN INSPECTION SERVICE	General Fund	2,100.00
				Total for Payment No.:		2,100.00

Payment No: 652253

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	STANFORD HOSPITAL AND CLINICS	00496713	2109-106933CITYNSCL	MEDICAL ADVISOR SERVICES	General Fund	2,083.00
				Total for Payment No.:		2,083.00

Payment No: 652491

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	LANGUAGE LINE SOLUTIONS	00497036	10270784	LANGUAGE LINE SERVICES - JUNE	Information Technology Service	2,078.77
				Total for Payment No.:		2,078.77

Payment No: 652072

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AT&T MOBILITY	00495555	287288153081X06162021	PD MDC BACKUP WIRELESS	General Fund	2,066.29
				Total for Payment No.:		2,066.29

Payment No: 652081

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	DIAMOND DIESEL SERVICE INC	00496264	15335-1	PARTS-V#2832	Fleet Operation Fund	2,065.55
				Total for Payment No.:		2,065.55

Payment No: 652494

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MAD SCIENCE OF THE BAY AREA	00497988	24665	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,065.00
				Total for Payment No.:		2,065.00

Payment No: 019876

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ESSENSE PARTNERS	00496669	20264	MKT ADMN SUPP REBATE JUN21	Elec OperatingGrant Trust Fund	700.00
07/16/2021	ESSENSE PARTNERS	00496669	20264	MKT ADMN SUPP REBATE JUN21	Elec OperatingGrant Trust Fund	700.00
07/16/2021	ESSENSE PARTNERS	00496669	20264	MKT ADMN SUPP REBATE JUN21	Elec OperatingGrant Trust Fund	642.50
				Total for Payment No.:		2,042.50

Payment No: 652472

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	DESTINATION ADVANTAGE LLC	00498115	379	JUNE WEBSITE PROGRAM SUPPORT	Deposit Funds.	2,000.00
				Total for Payment No.:		2,000.00

Payment No: 651931

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CABLECOM OF CALIFORNIA INC	00496132	15877-02 Utility Refund	UTILITY REFUND	General Fund	736.01
07/09/2021	CABLECOM OF CALIFORNIA INC	00496209	66096-02 Utility Refund	UTILITY REFUND	General Fund	1,261.98
				Total for Payment No.:		1,997.99

Payment No: 019966

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496763	3345487577-5 JUN2021	ELEC SVC STONY GORGE HYD JUN21	Electric Utility	1,046.15
07/23/2021	PG&E	00496763	3345487577-5 JUN2021	ELEC SVC BLACK BUTTE HYD JUN21	Electric Utility	816.65
07/23/2021	PG&E	00496763	3345487577-5 JUN2021	ELEC SVC HIGH LINE CANAL JUN21	Electric Utility	108.64
				Total for Payment No.:		1,971.44

Payment No: 020034

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	NALCO CO	00497179	6670097494	MO.SRV FEE DVR JUL21	Electric Utility	947.43
07/30/2021	NALCO CO	00497711	6600547888	PP01-3911.15 DRUM 210 LITER	Electric Utility	980.36
07/30/2021	NALCO CO	00497711	6600547888	TRANSPORTATION/ENERGY FEE	Electric Utility	13.55
				Total for Payment No.:		1,941.34

Payment No: 652059

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/09/2021	ZAYO GROUP LLC	00496206	61600-03 Utility Refund	UTILITY REFUND	General Fund	1,288.04
07/09/2021	ZAYO GROUP LLC	00496207	61601-03 Utility Refund	UTILITY REFUND	General Fund	256.51
07/09/2021	ZAYO GROUP LLC	00496231	74573-02 Utility Refund	UTILITY REFUND	General Fund	344.32
				Total for Payment No.:		1,888.87

Payment No: 019913

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497178	46268	LEGAL SERVICES	General Fund	1,882.00
				Total for Payment No.:		1,882.00

Payment No: 652506

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PARS	00497104	48441	ARS PARS FEES - MAY 2021	General Fund	1,877.72
				Total for Payment No.:		1,877.72

Payment No: 019926

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ACT ENVIRO	00497264	342887	8 HRS CHEMIST 6/23/21	Electric Utility	536.00
07/23/2021	ACT ENVIRO	00497264	342887	HAND PUMP LARGE	Electric Utility	50.00
07/23/2021	ACT ENVIRO	00497264	342887	PPE GEAR LEVEL D	Electric Utility	8.00
07/23/2021	ACT ENVIRO	00497264	342887	GEAR TRUCK (BOB TAIL) 6/23/21	Electric Utility	125.00
07/23/2021	ACT ENVIRO	00497264	342887	SUPPLIES	Electric Utility	150.00
07/23/2021	ACT ENVIRO	00497264	342887	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	69.52
07/23/2021	ACT ENVIRO	00497268	343904	8 HRS CHEMIST 6/30/21	Electric Utility	536.00
07/23/2021	ACT ENVIRO	00497268	343904	HAND PUMP LARGE	Electric Utility	50.00
07/23/2021	ACT ENVIRO	00497268	343904	PPE GEAR LEVEL D	Electric Utility	8.00
07/23/2021	ACT ENVIRO	00497268	343904	GEAR TRUCK (BOB TAIL) 6/30/21	Electric Utility	125.00
07/23/2021	ACT ENVIRO	00497268	343904	SUPPLIES	Electric Utility	150.00

07/23/2021	ACT ENVIRO	00497268	343904	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	69.52
Total for Payment No.:						1,877.04
Payment No: 019947						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	GRAINGER-SAN JOSE	00496917	9949747944	SUPPLIES-STREET	General Fund	148.30
07/23/2021	GRAINGER-SAN JOSE	00497289	9882145395	PLIERS, 9IN SIDE CUTTING KLEIN	Electric Utility	1,069.95
07/23/2021	GRAINGER-SAN JOSE	00497289	9882145395	TAPE RULE, 3/4IN WIDE X 25FT L	Electric Utility	368.86
07/23/2021	GRAINGER-SAN JOSE	00497289	9882145395	PLIERS, CHANNEL LOCK #420G. G	Electric Utility	180.33
07/23/2021	GRAINGER-SAN JOSE	00497290	9900896920	TIE WIRE, 16 GAUGE BLACK, 4 LB	Electric Utility	44.28
07/23/2021	GRAINGER-SAN JOSE	00497291	9900382343	ELBOW, PLASTIC, 90 DEGREES, 2I	Water Utility	47.09
Total for Payment No.:						1,858.81
Payment No: 652281						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CANDY'S LANDSCAPE INC	00497316	65015-11 Utility Refund	UTILITY REFUND	General Fund	1,845.94
Total for Payment No.:						1,845.94
Payment No: 651956						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GEORGE D GARCIA INC	00496263	81977-02 Utility Refund	UTILITY REFUND	General Fund	1,836.52
Total for Payment No.:						1,836.52
Payment No: 652039						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	T MOBILE WEST CORPORATION	00496211	68342-02 Utility Refund	UTILITY REFUND	General Fund	1,801.70
Total for Payment No.:						1,801.70

Payment No: 652126

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SYN-TECH SYSTEMS INC	00495941	233884	PARTS-STOCK	Vehicle Replacement Fund	1,796.01
				Total for Payment No.:		1,796.01

Payment No: 019957

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MIDWEST TAPE LLC	00496501	500554815	1241 AD CD	General Fund	44.11
07/23/2021	MIDWEST TAPE LLC	00496501	500554815	1241 AD DVD	General Fund	167.40
07/23/2021	MIDWEST TAPE LLC	00496501	500554815	1231 Juv DVD	General Fund	11.42
07/23/2021	MIDWEST TAPE LLC	00496501	500554815	1233 AD DVD	General Fund	33.47
07/23/2021	MIDWEST TAPE LLC	00496501	500554815	1235 AD DVD	General Fund	101.28
07/23/2021	MIDWEST TAPE LLC	00496501	500554815	1235 Juv DVD	General Fund	26.93
07/23/2021	MIDWEST TAPE LLC	00496503	500561816	1241 AD CD	General Fund	16.67
07/23/2021	MIDWEST TAPE LLC	00496508	500585453	1241 AD CD	General Fund	417.23
07/23/2021	MIDWEST TAPE LLC	00496508	500585453	1241 AD DVD	General Fund	297.84
07/23/2021	MIDWEST TAPE LLC	00496508	500585453	1233 AD DVD	General Fund	106.18
07/23/2021	MIDWEST TAPE LLC	00496508	500585453	1235 AD DVD	General Fund	35.93
07/23/2021	MIDWEST TAPE LLC	00496508	500585453	1235 Juv DVD	General Fund	93.09
07/23/2021	MIDWEST TAPE LLC	00496509	500594144	1241 AD ABK	General Fund	10.88
07/23/2021	MIDWEST TAPE LLC	00496510	500625557	1235 Juv DVD	General Fund	15.51
07/23/2021	MIDWEST TAPE LLC	00496510	500625557	1241 AD CD	General Fund	122.80
07/23/2021	MIDWEST TAPE LLC	00496510	500625557	1241 AD DVD	General Fund	141.27
07/23/2021	MIDWEST TAPE LLC	00496510	500625557	1233 AD DVD	General Fund	19.60
07/23/2021	MIDWEST TAPE LLC	00496510	500625557	1235 AD DVD	General Fund	127.38
				Total for Payment No.:		1,788.99

Payment No: 652332

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/23/2021	CENTER FOR PUBLIC SAFETY EXCELLENCE, INC	00496854	05-16132	ANNUAL ACCREDITATION FEE	General Fund	1,780.00
Total for Payment No.:						1,780.00

Payment No: 652193

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CRESO EQUIPMENT RENTALS	00496693	5376471-0003	FORKLIFT RENTAL	Electric Utility Construction	1,689.50
07/16/2021	CRESO EQUIPMENT RENTALS	00496693	5376471-0003	MISCELLANEOUS	Electric Utility Construction	18.63
07/16/2021	CRESO EQUIPMENT RENTALS	00496717	5400930-0001	PROPANE PO25308	Electric Utility	32.30
07/16/2021	CRESO EQUIPMENT RENTALS	00496718	5431441-0001	PROPANE PO25308	Electric Utility	30.14
Total for Payment No.:						1,770.57

Payment No: 019816

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CORE BUSINESS TECHNOLOGIES	00496297	INV-08983	CREDIT CARD GATEWAY ANNUAL FEE	General Fund	1,750.00
Total for Payment No.:						1,750.00

Payment No: 020004

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CAROLYN SUSIE BERLIN	00497657	10803	LEGAL SERVICES MAY21	Electric Utility	1,716.00
Total for Payment No.:						1,716.00

Payment No: 019840

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	POWER PROS	00495845	2021049	KRS HV PT TESTING EMERGENCY	Electric Utility	1,680.00
Total for Payment No.:						1,680.00

Payment No: 652381

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00497091	0160974-IN	PARTS-V#3182	Fleet Operation Fund	1,670.07
				Total for Payment No.:		1,670.07

Payment No: 652340

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CONSOLIDATED ENGINEERING	00497786	187483	SERRA SUB REBUILD SOIL SAMPLES	Electric Utility Construction	1,637.10
				Total for Payment No.:		1,637.10

Payment No: 652116

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SAN JOSE BOILER WORKS	00496397	13423	LABOR- BOILER REPAIR	General Fund	900.00
07/09/2021	SAN JOSE BOILER WORKS	00496397	13423	VEHICLE OVERHEAD	General Fund	39.00
07/09/2021	SAN JOSE BOILER WORKS	00496397	13423	RBI BTC STAGING CONTROL 4 STAG	General Fund	695.42
				Total for Payment No.:		1,634.42

Payment No: 652367

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KAMBRIA EVANS PSYCHOTHERAPY,	00496850	9	COUNSELING SERVICES #111 9/20	General Fund	810.00
07/23/2021	KAMBRIA EVANS PSYCHOTHERAPY,	00496853	10	COUNSELING SERVICES #111 10/20	General Fund	810.00
				Total for Payment No.:		1,620.00

Payment No: 652220

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	J FLORES REMODELING INC	00496461	101	BATHROOM REMODEL - COPELAND	H.U.D Capital Projects	1,610.00

07/16/2021	J FLORES REMODELING INC	00496461	101	COPELAND - 10570	H.U.D Capital Projects	1,610.00
07/16/2021	J FLORES REMODELING INC	00496461	101	COPELAND - 10570	H.U.D Capital Projects	-1,610.00
Total for Payment No.:						1,610.00

Payment No: 020002

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BELL ELECTRICAL SUPPLY	00497251	5676612	SENIOR CNT ELECTRICAL	General Fund	363.07
07/30/2021	BELL ELECTRICAL SUPPLY	00497574	5677303	CARPET FOR SR CTR FLOOR	General Fund	1,246.41
Total for Payment No.:						1,609.48

Payment No: 019842

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YSERCO INC	00496444	9265	FACILITIES MAINTENANCE	General Fund	1,591.00
Total for Payment No.:						1,591.00

Payment No: 019974

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021		00497803	46269	PERSONNEL ISSUES	Special Liability Insurance	1,579.50
Total for Payment No.:						1,579.50

Payment No: 652104

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	NEWGEN STRATEGIES	00496370	11418	RATES, COST OF SVC ANALYSIS	Electric Utility	1,576.25
Total for Payment No.:						1,576.25

Payment No: 019949

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	GURUS EDUCATIONAL SERVICES INC	00497571	2021S0614	INSTRUCTOR PAYMENT FY 21-22	General Fund	859.20

07/23/2021	GURUS EDUCATIONAL SERVICES INC	00497572	20210628S	FO		
				INSTRUCTOR PAYMENT FY 21-22	General Fund	716.00
				FO		
				Total for Payment No.:		1,575.20

Payment No: 652208

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FERNANDO CASTRO	00496472	18739	LABOR- V#3495 WO#130519	Fleet Operation Fund	1,346.40
07/16/2021	FERNANDO CASTRO	00496472	18739	PARTS-V#3495 WO#130519	Fleet Operation Fund	221.05
				Total for Payment No.:		1,567.45

Payment No: 652531

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	UNITED SITE SERVICES INC	00498208	114-11975124	AS NEEDED PORTABLE TOILET & SI	General Fund	495.26
07/30/2021	UNITED SITE SERVICES INC	00498208	114-11975124	TAXABLE	General Fund	359.71
07/30/2021	UNITED SITE SERVICES INC	00498209	114-12082444	AS NEEDED PORTABLE TOILET & SI	General Fund	481.28
07/30/2021	UNITED SITE SERVICES INC	00498209	114-12082444	TAXABLE	General Fund	218.00
				Total for Payment No.:		1,554.25

Payment No: 652513

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SAN JOSE MAILING	00498210	4988	MAILING FOR 2600 DE LA CRUZ	General Fund	330.15
07/30/2021	SAN JOSE MAILING	00498210	4988	NOTICE	General Fund	48.50
07/30/2021	SAN JOSE MAILING	00498211	4989	MAILING FOR 143 BROOKSIDE	General Fund	355.45
07/30/2021	SAN JOSE MAILING	00498211	4989	NOTICE	General Fund	69.44
07/30/2021	SAN JOSE MAILING	00498212	4962	MAILING FOR 190 N WINCHESTER	General Fund	597.60
07/30/2021	SAN JOSE MAILING	00498212	4962	NOTICE	General Fund	146.98
				Total for Payment No.:		1,548.12

Payment No: 019824

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00495918	170695	PARTS-V#3258	Fleet Operation Fund	1,221.36
07/09/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00495919	170733	PARTS-V#3258	Fleet Operation Fund	139.41
07/09/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00495920	170738	PARTS-V#3258	Fleet Operation Fund	91.40
07/09/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00495921	170766	PARTS-V#3435	Fleet Operation Fund	84.08
				Total for Payment No.:		1,536.25

Payment No: 652463

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CALIFORNIA PEOPLE SEARCH INC	00498111	2617	TEMP ADMIN ASST 4/5-4/9/21	Deposit Funds.	742.50
07/30/2021	CALIFORNIA PEOPLE SEARCH INC	00498112	2618	TEMP ADMIN ASST 4/12-4/16/21	Deposit Funds.	792.00
				Total for Payment No.:		1,534.50

Payment No: 019989

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	WECO INDUSTRIES LLC	00497160	0047839-IN	ASSORTED PARTS	Sewer Utility	1,532.44
				Total for Payment No.:		1,532.44

Payment No: 019946

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	GRAINGER	00497108	9943267063	CONDUIT OUTLET BODY	General Fund	176.09
07/23/2021	GRAINGER	00497110	9944409136	CONDUIT OUTLET BODY	General Fund	13.98
07/23/2021	GRAINGER	00497112	9943470659	LEATHER GLOVES	General Fund	61.48
07/23/2021	GRAINGER	00497113	9947288974	LOW ARC CHROME FAUCETS	General Fund	474.41
07/23/2021	GRAINGER	00497280	9790495221	HELMET BRACKET	Water Utility	190.58
07/23/2021	GRAINGER	00497281	9896971273	SQUARE POINT SHOVEL	Water Utility	76.30

07/23/2021	GRAINGER	00497281	9896971273	SQUARE POINT SHOVEL	Electric Utility	76.30
07/23/2021	GRAINGER	00497283	9906725529	GRAINGER	Electric Utility	62.28
07/23/2021	GRAINGER	00497284	9905985801	HIP WADERS	Water Utility	281.97
07/23/2021	GRAINGER	00497285	9919789975	PRE MOISTENED TOWELETTE	Electric Utility	25.07
07/23/2021	GRAINGER	00497285	9919789975	PRE MOISTENED TOWELETTE	Sewer Utility	25.08
07/23/2021	GRAINGER	00497286	9815396826	PIPE STRAP	Electric Utility	68.89
				Total for Payment No.:		1,532.43

Payment No: 019899

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LEHR AUTO ELECTRIC	00496482	SI62462	PARTS-V#3546	Vehicle Replacement Fund	699.13
07/16/2021	LEHR AUTO ELECTRIC	00496483	SI62768	PARTS-V#3528	General Fund	115.76
07/16/2021	LEHR AUTO ELECTRIC	00496569	SI62465	PARTS-V#3586	Vehicle Replacement Fund	471.70
07/16/2021	LEHR AUTO ELECTRIC	00496569	SI62465	PARTS-SYOCK	Fleet Operation Fund	58.04
07/16/2021	LEHR AUTO ELECTRIC	00496571	SI62475	PARTS-V#3586	Vehicle Replacement Fund	184.29
				Total for Payment No.:		1,528.92

Payment No: 652075

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BSN SPORTS, LLC	00496382	912984376	TENNIS NETS	General Fund	1,525.90
				Total for Payment No.:		1,525.90

Payment No: 652419

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	YIN QIIONG ZHANG	00497565	06/08/21 CLASS REFUND	PARKS DEPT REFUND	General Fund	1,519.00
				Total for Payment No.:		1,519.00

Payment No: 652119

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SANTA CLARA WEEKLY	00496096	1245476	ECR Specific Plan Publish 6/15	Engineerg Operating Grant Fund	1,512.00
				Total for Payment No.:		1,512.00

Payment No: 652497

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MOTION INDUSTRIES INC	00498207	CA24-114916	PN# 5VX1000 - GATES (PRECISIO	Electric Utility	1,506.14
				Total for Payment No.:		1,506.14

Payment No: 019901

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MCCAMPBELL ANALYTICAL INC	00497143	2105776	Laboratory Services with McCam	Water Utility	17.00
07/16/2021	MCCAMPBELL ANALYTICAL INC	00497146	2106259	Laboratory Services with McCam	Water Utility	267.00
07/16/2021	MCCAMPBELL ANALYTICAL INC	00497148	2106544	Laboratory Services with McCam	Water Utility	893.00
07/16/2021	MCCAMPBELL ANALYTICAL INC	00497150	2106707	Laboratory Services with McCam	Water Utility	306.00
				Total for Payment No.:		1,483.00

Payment No: 020007

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CINTAS CORP #630	00497066	4087537415	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	577.46
07/30/2021	CINTAS CORP #630	00497068	4088175389	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	577.46
07/30/2021	CINTAS CORP #630	00497254	4089739190	UNIFORMS	General Fund	96.22
07/30/2021	CINTAS CORP #630	00497255	4089983800	UNIFORMS	General Fund	64.74
07/30/2021	CINTAS CORP #630	00497256	4089293009	UNIFORMS	General Fund	145.14
				Total for Payment No.:		1,461.02

Payment No: 020038

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PENINSULA BUILDING MATERIALS	00497842	86854	3/4" CRUSHED ROCK	Water Utility	485.61
07/30/2021	PENINSULA BUILDING MATERIALS	00497850	86877	3/4" CRUSHED ROCK	Water Utility	485.61
07/30/2021	PENINSULA BUILDING MATERIALS	00497851	86893	3/4 CRUSHED ROCK	Water Utility	485.61
				Total for Payment No.:		1,456.83

Payment No: 019819

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GARDENLAND POWER EQUIPMENT	00495895	862093	PARTS-V#3144	Fleet Operation Fund	46.92
07/09/2021	GARDENLAND POWER EQUIPMENT	00495959	860159	SUPPLIES-PNB	General Fund	224.95
07/09/2021	GARDENLAND POWER EQUIPMENT	00495960	861294	SUPPLIES-PNB	General Fund	116.07
07/09/2021	GARDENLAND POWER EQUIPMENT	00495960	861294	LABOR	General Fund	80.75
07/09/2021	GARDENLAND POWER EQUIPMENT	00496411	860019	KOMBISYSTEM, BLOWER & ATTACH	General Fund	987.59
				Total for Payment No.:		1,456.28

Payment No: 652201

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	EDELMAN CORP	00497003	215660	CHANGE TO LINE 1 ACCOUNT STRIN	Public Buildings	1,400.00
				Total for Payment No.:		1,400.00

Payment No: 652234

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	PERSONAL EXPOSURE REPORTING	00496711	PER-2122-SANT	ANNUAL SUBSCRIPTION 2021-2022	General Fund	1,360.00
				Total for Payment No.:		1,360.00

Payment No: 019944

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/23/2021	FERGUSON ENTERPRISES INC	00497855	1643067	EXTENSION, HYDRANT BURY 6 X 10	Water Utility	1,353.15
Total for Payment No.:						1,353.15
Payment No: 652399						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	R & B CO	00497861	N961533	LID, 17INX30IN, PURPLE WITH HI	Water Utility	1,353.07
Total for Payment No.:						1,353.07
Payment No: 652133						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	VERIZON WIRELESS	00495849	9881494447	M2M CHARGES MAY21	Electric Utility Construction	1,351.38
Total for Payment No.:						1,351.38
Payment No: 652539						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WATERWORKS INDUSTRIES, INC	00497871	10670	CIVIC CTR CITY HALL FOUNTAIN	General Fund	1,350.00
Total for Payment No.:						1,350.00
Payment No: 019959						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MT TIRE SERVICE	00497092	16887	LABOR-V#2295 WO#130924	Fleet Operation Fund	145.00
07/23/2021	MT TIRE SERVICE	00497093	16792	PARTS-V#3274 WO#130874	Fleet Operation Fund	624.28
07/23/2021	MT TIRE SERVICE	00497093	16792	TIRE TAX- V#3274 WO#130874	Fleet Operation Fund	12.38
07/23/2021	MT TIRE SERVICE	00497093	16792	LABOR- V#3274 WO#130874	Fleet Operation Fund	60.00
07/23/2021	MT TIRE SERVICE	00497094	16927	LABOR-V#3365 WO#130932	Fleet Operation Fund	120.00
07/23/2021	MT TIRE SERVICE	00497095	16798	LABOR-V#2892 WO#130920	Fleet Operation Fund	60.00
07/23/2021	MT TIRE SERVICE	00497096	16799	LABOR- FLEET SERVICES	Fleet Operation Fund	120.00
07/23/2021	MT TIRE SERVICE	00497097	16930	LABOR-V#3366 WO#130933	Fleet Operation Fund	35.00

07/23/2021	MT TIRE SERVICE	00497098	16879	LABOR-V#3028 WO#130981	Fleet Operation Fund	30.00
07/23/2021	MT TIRE SERVICE	00497099	17016	LABOR-V#3364 WO#130953	Fleet Operation Fund	120.00
Total for Payment No.:						1,326.66

Payment No: 652274

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	2454 ALVARADO LLC	00497307	39191-06 Utility Refund	UTILITY REFUND	General Fund	1,317.29
Total for Payment No.:						1,317.29

Payment No: 652083

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	EDELMAN CORP	00495970	215655	Video access - City Hall	General Fund	551.25
07/09/2021	EDELMAN CORP	00496441	215653	CPL GARAGE MTCE	General Fund	253.64
07/09/2021	EDELMAN CORP	00496441	215653	LABOR	General Fund	245.00
07/09/2021	EDELMAN CORP	00496443	215654	NS CARD READER MTCE	General Fund	245.00
Total for Payment No.:						1,294.89

Payment No: 652537

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WASHINGTON TRUST BANK	00497106	210630-298220	VEBA CUSTODY FEE - JUN 2021	General Fund	1,286.59
Total for Payment No.:						1,286.59

Payment No: 652338

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CODE FOR FUN	00497288	1711	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	1,256.00
Total for Payment No.:						1,256.00

Payment No: 652065

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ALLISON FOEHR	00479468	PRCK#87697	REPLACE OUTDATED PRCK#87697	Payroll Liability&ClearingAcct	278.41
07/09/2021	ALLISON FOEHR	00479469	PRCK#87888	REPLACE OUTDATED PRCK#87888	Payroll Liability&ClearingAcct	422.59
07/09/2021	ALLISON FOEHR	00479470	PRCK#88045	REPLACE OUTDATED PRCK#88045	Payroll Liability&ClearingAcct	146.52
07/09/2021	ALLISON FOEHR	00479471	PRCK#88673	REPLACE OUTDATED PRCK#88673	Payroll Liability&ClearingAcct	181.53
07/09/2021	ALLISON FOEHR	00479472	PRCK#88818	REPLACE OUTDATED PRCK#88818	Payroll Liability&ClearingAcct	203.57
				Total for Payment No.:		1,232.62

Payment No: 652172

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ARAMARK UNIFORM SERVICES	00496689	511000077091	CLEANING SVC/SHOP TOWELS DVR	Electric Utility	408.56
07/16/2021	ARAMARK UNIFORM SERVICES	00496690	511000080568	CLEANING SVC/SHOP TOWELS DVR	Electric Utility	408.56
07/16/2021	ARAMARK UNIFORM SERVICES	00496691	511000084509	CLEANING SVC/SHOP TOWELS DVR	Electric Utility	408.56
				Total for Payment No.:		1,225.68

Payment No: 019813

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CINTAS CORP #630	00496064	4086862704	2021 JUN WATER UNIFORM SERVICE	Water Utility	300.01
07/09/2021	CINTAS CORP #630	00496064	4086862704	2021 JUN WATER UNIFORM SERVICE	Sewer Utility	300.01
07/09/2021	CINTAS CORP #630	00496065	4087537510	2021 JUN WATER UNIFORM SERVICE	Water Utility	300.01
07/09/2021	CINTAS CORP #630	00496065	4087537510	2021 JUN WATER UNIFORM SERVICE	Sewer Utility	300.01
				Total for Payment No.:		1,200.04

Payment No: 652090

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GUIDEHOUSE INC	00496374	0100062370	NERC CIP SUPPORT MAY21	Electric Utility	1,194.25
				Total for Payment No.:		1,194.25

Payment No: 020046

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SPORTS, FITNESS & KARATE INC	00497993	SCPRWinter 2021-3	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	1,192.60
				Total for Payment No.:		1,192.60

Payment No: 652396

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	QUALITY TECHNOLOGY SERVICES HOLDING, LLC	00496768	066271	CONDUIT LEASE JUL21	Electric Utility	1,090.00
07/23/2021	QUALITY TECHNOLOGY SERVICES HOLDING, LLC	00496768	066271	RACK: 2POST JUL21	Electric Utility	100.00
				Total for Payment No.:		1,190.00

Payment No: 652361

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	HOME DEPOT USA	00496744	622437465	SCOTT MULTIFOLD TOWEL 1PLY	Electric Utility	59.25
07/23/2021	HOME DEPOT USA	00496744	622437465	RENOWN KITCHEN TWL 3PLY	Electric Utility	30.26
07/23/2021	HOME DEPOT USA	00496744	622437465	SCOTT 2PLY TOILET TISSUE	Electric Utility	55.07
07/23/2021	HOME DEPOT USA	00497152	627658933	JANITORIAL SUPPLIES	General Fund	261.46
07/23/2021	HOME DEPOT USA	00497153	627658941	JANITORIAL SUPPLIES	General Fund	219.37
07/23/2021	HOME DEPOT USA	00497154	627658958	JANITORIAL SUPPLIES	Fleet Operation Fund	219.37
07/23/2021	HOME DEPOT USA	00497155	627658966	JANITORIAL SUPPLIES	Electric Utility	150.24
07/23/2021	HOME DEPOT USA	00497229	621849645	JANITORIAL SUPPLIES	General Fund	187.65
				Total for Payment No.:		1,182.67

Payment No: 652529

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	UNIQUE TOWING	00498008	00177222	SCPD CASE TOW TO SCPD LOT	General Fund	215.00
07/30/2021	UNIQUE TOWING	00498009	00177869	SCPD #21-614105	General Fund	322.50
07/30/2021	UNIQUE TOWING	00498010	00178291	SCPD #21-315029	General Fund	107.50
07/30/2021	UNIQUE TOWING	00498011	00178946	SCPD #21-628041	General Fund	215.00
07/30/2021	UNIQUE TOWING	00498012	00179642	SCPD #21-708004	General Fund	322.50
				Total for Payment No.:		1,182.50

Payment No: 652353

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	EUGENE BURGER MANAGEMENT	00497811	109384	JUNE 2021 MGMT FEE	General Fund	1,179.38
				Total for Payment No.:		1,179.38

Payment No: 652414

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	UNITED SITE SERVICES INC	00496789	114-12010959	RESTROOM RENT@LAF 5/26-6/22	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496789	114-12010959	WKLY RESTRM SRV@LAF 5/26-6/22	Electric Utility	55.00
07/23/2021	UNITED SITE SERVICES INC	00496789	114-12010959	DAMAGE WAIVER	Electric Utility	7.95
07/23/2021	UNITED SITE SERVICES INC	00496789	114-12010959	2 SINK RENT@LAF 5/26-6/22	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496789	114-12010959	WKLY SINK SRV@LAF 5/26-6/22	Electric Utility	85.00
07/23/2021	UNITED SITE SERVICES INC	00496789	114-12010959	DAMAGE WAIVER	Electric Utility	7.95
07/23/2021	UNITED SITE SERVICES INC	00496789	114-12010959	ENVIRONMENTAL FEE	Electric Utility	19.35
07/23/2021	UNITED SITE SERVICES INC	00496790	114-12016356	RESTROOM RENT@MISSION5/27-6/23	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496790	114-12016356	WKLY RESTRM SRV@MISS 5/27-6/23	Electric Utility	55.00
07/23/2021	UNITED SITE SERVICES INC	00496790	114-12016356	DAMAGE WAIVER	Electric Utility	9.95
07/23/2021	UNITED SITE SERVICES INC	00496790	114-12016356	ENVIRONMENTAL FEE	Electric Utility	8.06
07/23/2021	UNITED SITE SERVICES INC	00496791	114-12058813	RSTRM RENT@AGNEWSUB 6/3-6/30	Electric Utility	10.91

07/23/2021	UNITED SITE SERVICES INC	00496791	114-12058813	WKLY SVC @AGNEW SUB 6/3-6/30	Electric Utility	55.00
07/23/2021	UNITED SITE SERVICES INC	00496791	114-12058813	DAMAGE WAIVER	Electric Utility	7.95
07/23/2021	UNITED SITE SERVICES INC	00496791	114-12058813	ENVIRONMENTAL FEE	Electric Utility	6.99
07/23/2021	UNITED SITE SERVICES INC	00496792	114-12069470	ADA ACCESS@SERRA SUB 6/8-7/5	Electric Utility Construction	10.91
07/23/2021	UNITED SITE SERVICES INC	00496792	114-12069470	WKLY ADA SRV@SERRA 6/8-7/5/21	Electric Utility Construction	138.00
07/23/2021	UNITED SITE SERVICES INC	00496792	114-12069470	ENVIRONMENTAL FEE	Electric Utility Construction	15.92
07/23/2021	UNITED SITE SERVICES INC	00496794	114-12058920	RESTROOM RENT@WALSH 6/3-6/30	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496794	114-12058920	WKLY RESTRM SRV@WALSH 6/3-6/30	Electric Utility	55.00
07/23/2021	UNITED SITE SERVICES INC	00496794	114-12058920	ENVIRONMENTAL FEE	Electric Utility	8.06
07/23/2021	UNITED SITE SERVICES INC	00496796	114-12116116	RESTROOM RENT@LAF 6/23-7/20	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496796	114-12116116	WKLY RESTRM SRV@LAF 6/23-7/20	Electric Utility	55.00
07/23/2021	UNITED SITE SERVICES INC	00496796	114-12116116	DAMAGE WAIVER	Electric Utility	7.95
07/23/2021	UNITED SITE SERVICES INC	00496796	114-12116116	2 SINK RENT@LAF 6/23-7/20	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496796	114-12116116	WKLY SINK SRV@LAF 6/23-7/20	Electric Utility	85.00
07/23/2021	UNITED SITE SERVICES INC	00496796	114-12116116	DAMAGE WAIVER	Electric Utility	7.95
07/23/2021	UNITED SITE SERVICES INC	00496796	114-12116116	ENVIRONMENTAL FEE	Electric Utility	19.35
07/23/2021	UNITED SITE SERVICES INC	00496797	114-12116488	RESTROOM RENT@MISSION6/24-7/21	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496797	114-12116488	WKLY RESTRM SRV@MISS 6/24-7/21	Electric Utility	55.00
07/23/2021	UNITED SITE SERVICES INC	00496797	114-12116488	DAMAGE WAIVER	Electric Utility	9.95
07/23/2021	UNITED SITE SERVICES INC	00496797	114-12116488	ENVIRONMENTAL FEE	Electric Utility	8.06
07/23/2021	UNITED SITE SERVICES INC	00496798	114-12121276	RESTROOM RENT@KEN 6/25-7/22	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496798	114-12121276	WKLY RSTRM SRV@KEN 6/25-7/22	Electric Utility	55.00
07/23/2021	UNITED SITE SERVICES INC	00496798	114-12121276	ENVIRONMENTAL FEE	Electric Utility	8.06
07/23/2021	UNITED SITE SERVICES INC	00496799	114-12134393	RESTROOM RENT@BROKAW 6/29-7/26	Electric Utility	21.80
07/23/2021	UNITED SITE SERVICES INC	00496799	114-12134393	WKLY SINK SRV@BROKAW 6/29-7/26	Electric Utility	55.00

07/23/2021	UNITED SITE SERVICES INC	00496799	114-12134393	DELIVERY, SETUP, REMOVAL	Electric Utility	43.60
07/23/2021	UNITED SITE SERVICES INC	00496799	114-12134393	ENVIRONMENTAL FEE	Electric Utility	12.36
				Total for Payment No.:		1,175.48

Payment No: 652179

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AT&T CALNET	00496703	000016691515	STO WAN CKTS 6/01/21-6/30/21	Electric Utility	1,169.78
				Total for Payment No.:		1,169.78

Payment No: 019907

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MUNISERVICES LLC	00496627	INV06-012086	STARS SVC 1ST QTR 2021 DATA	General Fund	1,164.98
				Total for Payment No.:		1,164.98

Payment No: 019852

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CARIE T ROSE	00497186	06/27/21-07/10/21DR	WAGE ATTACHMENT B2114	Payroll Liability&ClearingAcct	1,153.85
				Total for Payment No.:		1,153.85

Payment No: 019992

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CARIE T ROSE	00498230	07/11/21-07/24/21DR	WAGE ATTACHMENT B2115	Payroll Liability&ClearingAcct	1,153.85
				Total for Payment No.:		1,153.85

Payment No: 019804

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	CARIE T ROSE	00496348	06/13/21-06/26/21DR	WAGE ATTACHMENT B2113	Payroll Liability&ClearingAcct	1,153.85

Total for Payment No.: 1,153.85

Payment No: 652000

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MICHAEL ROBERTS CONSTRUCTION	00496143	24476-10 Utility Refund	UTILITY REFUND	General Fund	1,140.35
Total for Payment No.:						1,140.35

Payment No: 652085

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	FLEET BODYWORX INC	00495892	42339	LABOR-V#3127 WO#130422	Fleet Operation Fund	945.00
07/09/2021	FLEET BODYWORX INC	00495892	42339	PARTS-V#3127 WO#130422	Fleet Operation Fund	190.10
07/09/2021	FLEET BODYWORX INC	00495892	42339	HAZWST DIS-V3127 WO13042 NONTX	Fleet Operation Fund	2.10
Total for Payment No.:						1,137.20

Payment No: 652115

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SAN JOSE BMW	00496291	4347712	PARTS-V#3241	Fleet Operation Fund	192.92
07/09/2021	SAN JOSE BMW	00496292	4348553	PARTS-STOCK	Fleet Operation Fund	932.12
Total for Payment No.:						1,125.04

Payment No: 652100

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LIVING CLASSROOM	00496604	FY2021 SCPR - 004	Contingency	General Fund	1,125.00
Total for Payment No.:						1,125.00

Payment No: 019812

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021		00496307	10791	LEGAL SERVICES APR21	Electric Utility	897.00

07/09/2021		00496308	10796 (d)	LEGAL SERVICES (NCGC) APR21	Electric Utility	201.50
Total for Payment No.:						1,098.50

Payment No: 019934

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CA DEPT OF JUSTICE	00497013	520188	CITY EE - R, C, AND AN JUNE 21	General Fund	571.00
07/23/2021	CA DEPT OF JUSTICE	00497013	520188	PARKS & REC	General Fund	490.00
Total for Payment No.:						1,061.00

Payment No: 002401

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/08/2021	NAVIA BENEFIT SOLUTIONS, INC	00496514	10360987	DD:NAVIA ADMIN FEE JUNE 21	Payroll Liability&ClearingAcct	557.05
07/08/2021	NAVIA BENEFIT SOLUTIONS, INC	00496514	10360987	DD:NAVIA ADMIN FEE JUNE 21	General Fund	501.67
Total for Payment No.:						1,058.72

Payment No: 019978

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021		00497800	31773	LEGAL SERVICES	Special Liability Insurance	1,050.00
Total for Payment No.:						1,050.00

Payment No: 019906

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MT TIRE SERVICE	00496484	16690	LABOR- V#3256 WO#130805	Fleet Operation Fund	45.00
07/16/2021	MT TIRE SERVICE	00496485	16777	LABOR-V#3822 WO#130878	Fleet Operation Fund	60.00
07/16/2021	MT TIRE SERVICE	00496485	16777	PARTS-V#3822 WO#130878	Fleet Operation Fund	54.50
07/16/2021	MT TIRE SERVICE	00496486	16778	LABOR- FLEET SERVICE	Fleet Operation Fund	120.00
07/16/2021	MT TIRE SERVICE	00496628	16770	PARTS-STOCK	Fleet Operation Fund	768.45
Total for Payment No.:						1,047.95

Payment No: 019849

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	WILLIAMS SCOTSMAN INC	00496284	9010913095	40X8 CONTAINER RENT JUL21	Electric Utility Construction	575.99
07/09/2021	WILLIAMS SCOTSMAN INC	00496285	9010913096	CONTAINER RENTAL SERRA JUL21	Electric Utility Construction	459.63
				Total for Payment No.:		1,035.62

Payment No: 652458

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BAY AREA PL SERVICES	00498201	7433	LAB FEES FOR JUNE 2021	General Fund	1,020.50
				Total for Payment No.:		1,020.50

Payment No: 652337

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CITY OF FOSTER CITY	00497222	14250	CALOPPS POSTING - SR CIVIL ENG	General Fund	510.00
07/23/2021	CITY OF FOSTER CITY	00497222	14250	CALOPPS POSTING - PRINC ENG	General Fund	510.00
				Total for Payment No.:		1,020.00

Payment No: 652321

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DIVISION OF THE STATE ARCHITECT	00497698	13921JUL2021	PORTION OF \$4 CASP FEE	Building Fee Admin Retainage	1,010.80
				Total for Payment No.:		1,010.80

Payment No: W22020

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ICMA Retirement Corporation	00497190	06/27/21-07/10/21A	WT: B2114 457 PLN CONTRIBUTION	Fringe Benefits	1,000.00
				Total for Payment No.:		1,000.00

Payment No: W22038

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ICMA Retirement Corporation	00498238	07/11/21-07/24/21A	WT: B2115 457 PLN CONTRIBUTION	Fringe Benefits	1,000.00
				Total for Payment No.:		1,000.00

Payment No: W22004

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	ICMA Retirement Corporation	00496450	06/13/21-06/26/21A	WT: B2113 457 PLN CONTRIBUTION	Fringe Benefits	1,000.00
				Total for Payment No.:		1,000.00

Payment No: 652454

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ANIMAL DAMAGE MANAGEMENT	00497905	203680	PEST CONTROL SERVICE	General Fund	995.00
				Total for Payment No.:		995.00

Payment No: 020024

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497209	4717671-00	SUPPLIES-PNB	General Fund	67.96
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497211	4719233-00	SUPPLIES-PNB	General Fund	40.96
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497212	4719417-00	SUPPLIES-PNB	General Fund	114.35
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497213	4720341-00	SUPPLIES-PNB	General Fund	179.96
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497588	4731564-00	SPRINKLER MAINTENANCE	General Fund	89.82
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497589	4652075-00	SPRINKLER MAINTENANCE	General Fund	76.23
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497590	4739959-00	SPRINKLER MAINTENANCE	General Fund	168.04
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497827	4722982-00	STRAW WADDLES	Water Utility	99.44
07/30/2021	IMPERIAL SPRINKLER SUPPLY INC	00497829	4710215-00	HOSE WAHERS AND FITTINGS	Water Utility	155.44
				Total for Payment No.:		992.20

Payment No: 652469

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CONCENTRA MEDICAL CENTERS	00497669	71402038	AUTO SERVICES	Fleet Operation Fund	45.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497669	71402038	PRE EMPLOY PHYSICALS	General Fund	220.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497669	71402038	WATER MAINTENANCE	Water Utility	85.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497669	71402038	SVP FIELD SERVICES	Electric Utility	150.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497670	71843967	PRE EMPLOY PHYSICAL	General Fund	85.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497670	71843967	STREET MAINTENANCE	General Fund	220.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497670	71843967	STREET STORM DRAIN	General Fund	45.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497671	71918497	STREET MAINTENANCE	General Fund	45.00
07/30/2021	CONCENTRA MEDICAL CENTERS	00497671	71918497	SVP FIELD SERVICES	Electric Utility	85.00
				Total for Payment No.:		980.00

Payment No: 020052

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WECO INDUSTRIES LLC	00497857	0047754-IN	ROOT CUTTER 903 MOTOR	Sewer Utility	966.55
				Total for Payment No.:		966.55

Payment No: 019865

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BAKER & TAYLOR BOOKS	00496432	2035952939	1233 AD BK	General Fund	21.13
07/16/2021	BAKER & TAYLOR BOOKS	00496433	2035952940	1235 AD BK	General Fund	73.71
07/16/2021	BAKER & TAYLOR BOOKS	00496434	2035991982	1233 AD BK	General Fund	577.52
07/16/2021	BAKER & TAYLOR BOOKS	00496435	2035991983	1235 AD BK	General Fund	43.49
07/16/2021	BAKER & TAYLOR BOOKS	00496437	2035996488	1233 AD BK	General Fund	20.58
07/16/2021	BAKER & TAYLOR BOOKS	00496439	2035996489	1235 AD BK	General Fund	41.70
07/16/2021	BAKER & TAYLOR BOOKS	00496653	2035954836	1235 AD BK	General Fund	186.73
				Total for Payment No.:		964.86

Payment No: 652475

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ELIZABETH RAWSON, MD	00497050	1	COUNSELING #243 SESS 1-4	General Fund	960.00
				Total for Payment No.:		960.00

Payment No: 019911

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	PRAXAIR DISTRIBUTION INC	00496720	60425730	SERVICE CHARGE	Water Utility	5.53
07/16/2021	PRAXAIR DISTRIBUTION INC	00496722	61009875	SERVICE CHARGE	Water Utility	3.50
07/16/2021	PRAXAIR DISTRIBUTION INC	00496723	61546391	SERVICE CHARGE	Water Utility	3.51
07/16/2021	PRAXAIR DISTRIBUTION INC	00496726	64319479	ACETYLENE	Water Utility	940.00
				Total for Payment No.:		952.54

Payment No: 652505

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PAMELA PEDJOE	00497037	111-0321	COUNSELNG #111 - SESSIONS 1-5	General Fund	950.00
				Total for Payment No.:		950.00

Payment No: 652518

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SHRED-IT USA LLC	00498024	8182294244	SHRED SERVICES	General Fund	947.25
				Total for Payment No.:		947.25

Payment No: 652077

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CONCENTRA MEDICAL CENTERS	00496056	71619495	FLEET SERVICES	Fleet Operation Fund	45.00
07/09/2021	CONCENTRA MEDICAL CENTERS	00496056	71619495	REG PRE EMPLOY PHYSICAL	General Fund	85.00
07/09/2021	CONCENTRA MEDICAL CENTERS	00496056	71619495	STREET MAINTENANCE	General Fund	20.00
07/09/2021	CONCENTRA MEDICAL CENTERS	00496056	71619495	WATER MAINTENANCE	Water Utility	85.00
07/09/2021	CONCENTRA MEDICAL CENTERS	00496056	71619495	SVP FIELD SERVICES	Electric Utility	164.50

07/09/2021	CONCENTRA MEDICAL CENTERS	00496057	70603165	FACILITIES - RESPIRATOR TESTS	General Fund	370.00
07/09/2021	CONCENTRA MEDICAL CENTERS	00496058	71544268	REG PRE EMPLOY PHSYICAL	General Fund	85.00
07/09/2021	CONCENTRA MEDICAL CENTERS	00496058	71544268	WATER MAINTENANCE	Water Utility	85.00
				Total for Payment No.:		939.50

Payment No: 019983

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	UNITY COURIER SERVICES, INC	00496893	470493	LINK+ DELIVERY	General Fund	922.00
				Total for Payment No.:		922.00

Payment No: 652076

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CLEARBLU ENVIROMENTAL	00496106	25399	LABOR-MAINTENANCE JUNE 2021	Fleet Operation Fund	803.00
07/09/2021	CLEARBLU ENVIROMENTAL	00496106	25399	PARTS-MAINTENANCE JUNE 2021	Fleet Operation Fund	118.42
				Total for Payment No.:		921.42

Payment No: 020014

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GARDENLAND POWER EQUIPMENT	00497207	865582	SUPPLIES-PNB	General Fund	686.24
07/30/2021	GARDENLAND POWER EQUIPMENT	00497577	868073	HEDGE TRIMMERS	General Fund	153.11
07/30/2021	GARDENLAND POWER EQUIPMENT	00497579	868076	BLOWER SERVICE KIT	General Fund	75.30
				Total for Payment No.:		914.65

Payment No: 019833

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	OMEGA INDUSTRIAL SUPPLY INC	00496416	134986	FAST & TOMBSTONE	General Fund	909.85
				Total for Payment No.:		909.85

Payment No: 019918

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	TECHNOLOGY, ENGINEERING & CONSTRUCTION	00496965	202944	TESTING, INSPECTION, MAINTENAN	Fleet Operation Fund	154.00
07/16/2021	TECHNOLOGY, ENGINEERING & CONSTRUCTION	00497075	203164	TESTING, INSPECTION, MAINTENAN	Fleet Operation Fund	375.00
07/16/2021	TECHNOLOGY, ENGINEERING & CONSTRUCTION	00497076	202906	TESTING, INSPECTION, MAINTENAN	Fleet Operation Fund	375.00
				Total for Payment No.:		904.00

Payment No: 652113

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ROTO-ROOTER SERVICES COMPANY	00496396	19322906186	CLEAR SEWER PIPE & TOILET	General Fund	817.03
07/09/2021	ROTO-ROOTER SERVICES COMPANY	00496396	19322906186	PRODUCTS	General Fund	78.47
				Total for Payment No.:		895.50

Payment No: 652171

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ANIMAL DAMAGE MANAGEMENT	00496979	4260C	PEST CONTROL SERVICES JUNE2021	General Fund	895.00
				Total for Payment No.:		895.00

Payment No: 020018

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GRAINGER-SAN JOSE	00497257	9956651021	SUPPLIES	General Fund	17.25
07/30/2021	GRAINGER-SAN JOSE	00497258	9956651039	SUPPLIES	General Fund	17.25
07/30/2021	GRAINGER-SAN JOSE	00498043	9929749720	COVERALL, 2XL, HOODED TYVEK, W	Electric Utility	258.10
07/30/2021	GRAINGER-SAN JOSE	00498045	9922699880	CONNECTOR, MISC, BUTT, #19-26	Electric Utility	83.59
07/30/2021	GRAINGER-SAN JOSE	00498214	9961655348	SCREWDRIVER, ROUND SHANK, STAN	Electric Utility	175.15
07/30/2021	GRAINGER-SAN JOSE	00498214	9961655348	LEVEL, 5IN POCKET TYPE, ALUMIN	Electric Utility	7.97

07/30/2021	GRAINGER-SAN JOSE	00498214	9961655348	SHACKLE, 3/4IN ANCHOR TYPE, GA	Electric Utility	229.17
07/30/2021	GRAINGER-SAN JOSE	00498214	9961655348	WATER COOLER, 5GAL WITH CUP DI	Electric Utility	54.26
07/30/2021	GRAINGER-SAN JOSE	00498214	9961655348	COOLER, WATER, 3 GALLON, WITH	Electric Utility	48.12
Total for Payment No.:						890.86

Payment No: 652368

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KAREN MURPHY LANSING	00496855	SCFD-10	COUNSELING SERVICES #FD-1 1/20	General Fund	890.00
Total for Payment No.:						890.00

Payment No: 652235

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	RDO EQUIPMENT CO	00496631	P0674474	PARTS-V#3095 WO#130882	Fleet Operation Fund	778.18
07/16/2021	RDO EQUIPMENT CO	00496631	P0674474	PARTS-V#3095 WO#130907	Fleet Operation Fund	104.33
Total for Payment No.:						882.51

Payment No: 652178

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AT&T CALNET	00496700	000016656267	BN9391023721 5/25/21-6/24/21	Electric Utility	880.13
Total for Payment No.:						880.13

Payment No: 652165

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ENGINEERS -CITY OF SANTA CLARA	00497193	06/13/21-07/10/21	UNION DUES B2114	Payroll Liability&ClearingAcct	878.42
Total for Payment No.:						878.42

Payment No: 652258

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	TEREX USA LLC	00496493	5003309826	PARTS-V#2656	Fleet Operation Fund	875.35
				Total for Payment No.:		875.35

Payment No: 652427

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GEENAMARIE BONILLA	00498026	32410JUN2021	CRIME SCENE INVESTIGATION COUR	General Fund	873.79
				Total for Payment No.:		873.79

Payment No: 652101

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00495926	0159978-IN	PARTS-V#3224	Fleet Operation Fund	303.79
07/09/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00495927	0160205-IN	PARTS-V#3224	Fleet Operation Fund	135.61
07/09/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00495928	0160228-IN	PARTS-V#3224	Fleet Operation Fund	349.40
07/09/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00495929	0160229-IN	PARTS-STOCK	Fleet Operation Fund	77.79
				Total for Payment No.:		866.59

Payment No: W22043

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ICMA Retirement Corporation	00498237	07/11/21-07/24/21	WT: B2115 401 (A) PLAN CONTRIB	Fringe Benefits	862.48
				Total for Payment No.:		862.48

Payment No: W22019

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ICMA Retirement Corporation	00497188	06/27/21-07/10/21	WT: B2114 401 (A) PLAN CONTRIB	Fringe Benefits	862.48
				Total for Payment No.:		862.48

Payment No: W22003

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	ICMA Retirement Corporation	00496449	06/13/21-06/26/21	WT: B2113 401 (A) PLAN CONTRIB	Fringe Benefits	862.48
				Total for Payment No.:		862.48

Payment No: 652404

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SHRED-IT USA LLC	00496769	8182269509	SHREDIT SVP 881MARTIN 6/2/21	Electric Utility	164.24
07/23/2021	SHRED-IT USA LLC	00496769	8182269509	SHREDIT SVP 881MARTIN 6/16/21	Electric Utility	164.24
07/23/2021	SHRED-IT USA LLC	00496770	8182280094	1705 ELEC. SHRED 5/27/21	Electric Utility	189.73
07/23/2021	SHRED-IT USA LLC	00496770	8182280094	1705 ELEC. SHRED 6/10/21	Electric Utility	189.58
07/23/2021	SHRED-IT USA LLC	00496771	8182280095	SHRED SVP DVR 6/3/2021	Electric Utility	152.96
				Total for Payment No.:		860.75

Payment No: 652432

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	JOSHUA CRAIG	00498034	23205JUN2021	CRIME SCENE INVESTIGATOR COURS	General Fund	852.71
				Total for Payment No.:		852.71

Payment No: 652099

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LC ACTION POLICE SUPPLY	00495971	427202	Vest - Luke Erickson	General Fund	848.05
				Total for Payment No.:		848.05

Payment No: 652343

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CORODATA RECORDS MANAGEMENT, INC	00497805	RS3291826	OFFSITE RECORDS MGMT STORAGE	General Fund	821.03
				Total for Payment No.:		821.03

Payment No: 652455

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	AZCO SUPPLY, INC.	00498216	302890	BOX, B52 UTILITY 30" x 60".	Electric Utility	571.81
07/30/2021	AZCO SUPPLY, INC.	00498216	302890	BEND, CONDUIT, PVC, 4INX90 DEG	Electric Utility	222.62
07/30/2021	AZCO SUPPLY, INC.	00498216	302890	BEND, CONDUIT, PVC, 2"X30 DEGR	Electric Utility	24.88
				Total for Payment No.:		819.31

Payment No: 652175

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AT&T	00496707	1174435948	T1.5 MBPS SVC 19JUN21-18JUL21	Electric Utility	811.30
				Total for Payment No.:		811.30

Payment No: 651900

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	CA FRANCHISE TAX BOARD	00496355	06/13/21-06/26/21JC	WAGE ATTACHMENT B2113	Payroll Liability&ClearingAcct	806.79
				Total for Payment No.:		806.79

Payment No: 652446

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CA FRANCHISE TAX BOARD	00498224	07/11/21-07/24/21JC	WAGE ATTACHMENT B2115	Payroll Liability&ClearingAcct	806.79
				Total for Payment No.:		806.79

Payment No: 019985

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	VANTAGE DATA CENTERS 6, LLC	00496800	2394	CARRIER ACCESS JUL21 2897 NORT	Electric Utility	400.00
07/23/2021	VANTAGE DATA CENTERS 6, LLC	00497700	2491	CARRIER ACCESS AUG21 2897 NORT	Electric Utility	400.00
				Total for Payment No.:		800.00

Payment No: 651982

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LARRY NGUYEN	00496165	43354-03 Utility Refund	UTILITY REFUND	General Fund	145.35
07/09/2021	LARRY NGUYEN	00496166	43357-03 Utility Refund	UTILITY REFUND	General Fund	653.64
				Total for Payment No.:		798.99

Payment No: 652512

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SAFETY-KLEEN SYSTEMS INC	00497596	86534059	GASTEC AQUEOUS PW SAMPLE	General Fund	786.20
				Total for Payment No.:		786.20

Payment No: 652301

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SAK CONSTRUCTION LLC	00497561	81976-02 Utility Refund	UTILITY REFUND	General Fund	771.71
				Total for Payment No.:		771.71

Payment No: 019814

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CINTAS CORP #630	00495862	4086863077	FLEET RENTALS	Fleet Operation Fund	318.32
07/09/2021	CINTAS CORP #630	00495862	4086863077	SAFEWASHER MOBL SRVC- TXB	Fleet Operation Fund	31.03
07/09/2021	CINTAS CORP #630	00495863	4087537935	FLEET RENTALS	Fleet Operation Fund	270.84
07/09/2021	CINTAS CORP #630	00495863	4087537935	SAFEWASHER MOBL SRVC- TXB	Fleet Operation Fund	31.03
07/09/2021	CINTAS CORP #630	00495954	4086737266	UNIFORM SERVICES	General Fund	61.11
07/09/2021	CINTAS CORP #630	00495955	4087390049	UNIFORM SERVICES	General Fund	56.75
				Total for Payment No.:		769.08

Payment No: 019828

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LEHR AUTO ELECTRIC	00495923	SI62001	PARTS-V#3176	Water Utility	205.64

07/09/2021	LEHR AUTO ELECTRIC	00495924	SI62165	PARTS-STOCK	Fleet Operation Fund	133.75
07/09/2021	LEHR AUTO ELECTRIC	00496275	SI62474	PARTS-STOCK	Fleet Operation Fund	419.85
				Total for Payment No.:		759.24

Payment No: 019896

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	INFOSEND INC	00496683	194127	TAXABLE	General Fund	97.04
07/16/2021	INFOSEND INC	00496683	194127	TAX & LICENSE MAILING SERVICES	General Fund	652.09
				Total for Payment No.:		749.13

Payment No: 652385

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	OWEN EQUIPMENT SALES	00496758	00053233	HXX ROTATING NO	Electric Utility	719.75
07/23/2021	OWEN EQUIPMENT SALES	00496758	00053233	SHIPPING	Electric Utility	15.37
07/23/2021	OWEN EQUIPMENT SALES	00496758	00053233	HANLDING (TAX)	Electric Utility	5.45
				Total for Payment No.:		740.57

Payment No: 652181

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BAKER SUPPLIES AND REPAIRS	00496469	71381	PARTS-V#3408 WO#130895	Fleet Operation Fund	7.85
07/16/2021	BAKER SUPPLIES AND REPAIRS	00496469	71381	PARTS-STOCK	Fleet Operation Fund	271.26
07/16/2021	BAKER SUPPLIES AND REPAIRS	00496470	71408	PARTS- STOCK	Fleet Operation Fund	452.16
				Total for Payment No.:		731.27

Payment No: 652163

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CA FRANCHISE TAX BOARD	00497201	06/27/21-07/10/21JC	WAGE ATTACHMENT B2114	Payroll Liability&ClearingAcct	727.39
				Total for Payment No.:		727.39

Payment No: 651927

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BAREFOOT NETWORKS	00496134	17221-08 Utility Refund	UTILITY REFUND	General Fund	725.38
				Total for Payment No.:		725.38

Payment No: 019871

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497163	21382	LEGAL SERVICES	Housing Successor	720.00
				Total for Payment No.:		720.00

Payment No: 019991

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ZCOLO, LLC	00496782	2021070034793	MRC 5101 LAFAYETTE JUL21	Electric Utility	711.41
				Total for Payment No.:		711.41

Payment No: 652528

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	TURF & INDUSTRIAL EQUIPMENT CO	00497917	LI14111	TOP DRESSER RENTAL	General Fund	708.50
				Total for Payment No.:		708.50

Payment No: 652382

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	NAPA AUTO PARTS	00497109	5983-672939	PARTS-STOCK	Fleet Operation Fund	205.05
07/23/2021	NAPA AUTO PARTS	00497111	5983-673412	PARTS-STOCK	Fleet Operation Fund	142.83
07/23/2021	NAPA AUTO PARTS	00497116	5983-673445	PARTS-STOCK	Fleet Operation Fund	47.82
07/23/2021	NAPA AUTO PARTS	00497118	5983-673460	CREDIT- CORE DEPOSIT RETURNED	Fleet Operation Fund	-84.34
07/23/2021	NAPA AUTO PARTS	00497119	5983-673753	PARTS-V#2889	Fleet Operation Fund	38.45
07/23/2021	NAPA AUTO PARTS	00497119	5983-673753	PARTS-STOCK	Fleet Operation Fund	100.31

07/23/2021	NAPA AUTO PARTS	00497121	5983-673761	PARTS-STOCK	Fleet Operation Fund	36.10
07/23/2021	NAPA AUTO PARTS	00497123	5983-674505	PARTS-V#STAD005	Fleet Operation Fund	104.31
07/23/2021	NAPA AUTO PARTS	00497124	5983-674615	PARTS-V#STAD012	Fleet Operation Fund	104.31
07/23/2021	NAPA AUTO PARTS	00497125	5983-674630	PARTS-STOCK	Fleet Operation Fund	12.14
07/23/2021	NAPA AUTO PARTS	00497127	5983-674676	CREDIT- PART RETURNED	Fleet Operation Fund	-6.10
				Total for Payment No.:		700.88

Payment No: 652416

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	WARDELL AUTO INTERIORS AND TOPS, LLC	00497130	10561	LABOR-V#3301 WO#130917	Fleet Operation Fund	600.00
07/23/2021	WARDELL AUTO INTERIORS AND TOPS, LLC	00497130	10561	PARTS-V#3301 WO#130917	Fleet Operation Fund	95.38
				Total for Payment No.:		695.38

Payment No: 002402

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/01/2021	REPLACEMENT BENEFIT FUND	00495496	100000016447637	DD: REPLACEMENT BENEFIT B TRAN	General Fund	694.39
				Total for Payment No.:		694.39

Payment No: 019843

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TIFCO INDUSTRIES	00495945	71660966	PARTS-SHOP USE	Fleet Operation Fund	692.80
				Total for Payment No.:		692.80

Payment No: 020047

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	STAPLES ADVANTAGE	00498013	8062735255-CMO	OFFICE SUPPLIES	General Fund	123.92
07/30/2021	STAPLES ADVANTAGE	00498014	8062735255-ELECYARD	OFFICE SUPPLIES	Electric Utility	114.37

07/30/2021	STAPLES ADVANTAGE	00498015	8062735255-HR	OFFICE SUPPLIES	General Fund	126.40
07/30/2021	STAPLES ADVANTAGE	00498016	8062735255-MAYOR	OFFICE SUPPLIES	General Fund	76.39
07/30/2021	STAPLES ADVANTAGE	00498017	8062735255-POLICESVC	OFFICE SUPPLIES	General Fund	46.22
07/30/2021	STAPLES ADVANTAGE	00498018	8062735255-WATER	OFFICE SUPPLIES	Water Utility	102.11
07/30/2021	STAPLES ADVANTAGE	00498018	8062735255-WATER	OFFICE SUPPLIES	Sewer Utility	102.11
				Total for Payment No.:		691.52

Payment No: 652063

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ALL STAR GLASS	00495852	ISJ074393	LABOR- V#3511 WO#130548	Fleet Operation Fund	99.00
07/09/2021	ALL STAR GLASS	00495853	ISJ074732	LABOR-V#3155 WO#130687	Fleet Operation Fund	143.00
07/09/2021	ALL STAR GLASS	00495853	ISJ074732	PARTS-V#3155 WO#130687	Fleet Operation Fund	443.66
				Total for Payment No.:		685.66

Payment No: 652169

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ALLIED AUTO STORES	00496468	01AU6479	PARTS-V#3301	Fleet Operation Fund	288.38
07/16/2021	ALLIED AUTO STORES	00496468	01AU6479	PARTS- STOCK	Fleet Operation Fund	393.73
				Total for Payment No.:		682.11

Payment No: 652362

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	INDUSTRIAL SCIENTIFIC CORP	00496745	2435739	2021 JUN INET GAS MONITORING	Electric Utility	677.11
				Total for Payment No.:		677.11

Payment No: 652204

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ESKINDER KIROS	00496458	36749JUN2021	Mechanical Permit BLD2021-6156	General Fund	216.00
07/16/2021	ESKINDER KIROS	00496458	36749JUN2021	Plumbing Permit	General Fund	434.00

07/16/2021	ESKINDER KIROS	00496458	36749JUN2021	Tech Fee - PC BDIV & Permit	General Fund	21.91
Total for Payment No.:						671.91

Payment No: 019825

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	IMAGE SALES INC	00495964	0070401-IN	CARD PRINTER RIBBON & CARDS	General Fund	244.98
07/09/2021	IMAGE SALES INC	00496541	0070327-IN	ACTIVITY CARDS AND RIBBON	General Fund	415.60
Total for Payment No.:						660.58

Payment No: 019815

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	COAST COUNTIES TRUCK	00495864	01130829P	PARTS-STOCK	Fleet Operation Fund	80.14
07/09/2021	COAST COUNTIES TRUCK	00495865	01130779P	PARTS-V#3277	Fleet Operation Fund	239.69
07/09/2021	COAST COUNTIES TRUCK	00495866	01131252P	PARTS-STOCK	Fleet Operation Fund	15.69
07/09/2021	COAST COUNTIES TRUCK	00495867	01131231P	PARTS-V#3399	Fleet Operation Fund	10.58
07/09/2021	COAST COUNTIES TRUCK	00495868	01131494P	PARTS-STOCK	Fleet Operation Fund	309.43
Total for Payment No.:						655.53

Payment No: 651911

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MARK CARDINALI	00496099	PRCK#90507	REPLACE OUTDATED PRCK#90507	Payroll Liability&ClearingAcct	654.07
Total for Payment No.:						654.07

Payment No: 652219

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	INDUSTRIAL SCIENTIFIC CORP	00497138	2436537	Monthly iNet Usage Fee w/AutoR	Sewer Utility	650.86
Total for Payment No.:						650.86

Payment No: 652326

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	AZCO SUPPLY, INC.	00497103	299764	PV HEAVY MOLDING	Electric Utility	255.42
07/23/2021	AZCO SUPPLY, INC.	00497726	300384	BEND, CONDUIT, PVC, 1/2IN X 18	Electric Utility	217.78
07/23/2021	AZCO SUPPLY, INC.	00497726	300384	ADAPTER, RISER, PVC TRANSITION	Electric Utility	122.08
07/23/2021	AZCO SUPPLY, INC.	00497726	300384	BEND, CONDUIT, PVC, 1-1/2IN X	Electric Utility	39.15
				Total for Payment No.:		634.43

Payment No: 652122

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SHRED-IT USA LLC	00495972	8182102995	Shredding Service	General Fund	632.02
				Total for Payment No.:		632.02

Payment No: 652091

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	H&E EQUIPMENT SERVICES, INC	00496274	95874418	ENVIRONMENT	Fleet Operation Fund	16.41
07/09/2021	H&E EQUIPMENT SERVICES, INC	00496274	95874418	LABOR-V#3251 WO#130872	Fleet Operation Fund	581.08
07/09/2021	H&E EQUIPMENT SERVICES, INC	00496274	95874418	PARTS-V#3251 WO#130872	Fleet Operation Fund	30.05
				Total for Payment No.:		627.54

Payment No: 652186

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BORDER STATES	00496667	1600617894	FINANCE CHARGE FOR LATE INV	Electric Utility Construction	626.64
				Total for Payment No.:		626.64

Payment No: 019898

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LEE'S FORKLIFT SERVICE	00496962	20740	FORKLIFT SERVICES	Fleet Operation Fund	468.75

07/16/2021	LEE'S FORKLIFT SERVICE	00496962	20740	TAXABLE	Fleet Operation Fund	157.45
				Total for Payment No.:		626.20
Payment No: 019979						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TONY JANOVICH	00497580	1006641	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	616.00
				Total for Payment No.:		616.00
Payment No: 652411						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	THOMSON WEST GROUP	00496345	844276716	Monthly CLEAR May 21	General Fund	307.80
07/23/2021	THOMSON WEST GROUP	00496345	844276716	Monthly CLEAR May 21	General Fund	307.80
				Total for Payment No.:		615.60
Payment No: 652457						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BANK UP CORP	00497225	4653	ECL CHANGE - BANK TRANSITION	General Government - Other	612.00
				Total for Payment No.:		612.00
Payment No: 652429						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	JACOB MALAE	00498049	11553JUN2021A	MOTORCYCLE TRAINING	General Fund	610.00
				Total for Payment No.:		610.00
Payment No: 652354						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	FAST UNDERCAR SANTA CLARA	00497079	284385	PARTS-V#3202	Fleet Operation Fund	236.26

07/23/2021	FAST UNDERCAR SANTA CLARA	00497083	286180	PARTS-V#2894	Fleet Operation Fund	96.18
07/23/2021	FAST UNDERCAR SANTA CLARA	00497084	286659	PARTS-V#3239	Fleet Operation Fund	126.45
07/23/2021	FAST UNDERCAR SANTA CLARA	00497085	286848	PARTS-STOCK	Fleet Operation Fund	144.34
				Total for Payment No.:		603.23

Payment No: 652205

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FAST UNDERCAR SANTA CLARA	00496476	282183	CREDIT- RTND-V#3524 WO#128582	Fleet Operation Fund	-106.98
07/16/2021	FAST UNDERCAR SANTA CLARA	00496543	283617	PARTS-STOCK	Fleet Operation Fund	421.11
07/16/2021	FAST UNDERCAR SANTA CLARA	00496544	284239	PARTS-STOCK	Fleet Operation Fund	288.68
				Total for Payment No.:		602.81

Payment No: 019892

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00496477	170861	PARTS-V#3121	Fleet Operation Fund	204.58
07/16/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00496566	170866	PARTS-V#3218	Fleet Operation Fund	110.31
07/16/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00496567	170879	PARTS-V#2809	Fleet Operation Fund	286.13
				Total for Payment No.:		601.02

Payment No: 652406

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SPECIAL SERVICES GROUP LLC	00496092	14312	GPS Tracking Device Renewal	General Fund	600.00
				Total for Payment No.:		600.00

Payment No: 652509

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PRN ERGONOMIC SERVICES	00497267	1731	ERGO EVALUATION	General Fund	600.00

Total for Payment No.: 600.00

Payment No: 651909

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JUSTIN ROGERS	00496100	PRCK#90774	REPLACE OUTDATED PRCK#90774	Payroll Liability&ClearingAcct	227.87
07/09/2021	JUSTIN ROGERS	00496101	PRCK#90836	REPLACE OUTDATED PRCK#90836	Payroll Liability&ClearingAcct	361.71
Total for Payment No.:						589.58

Payment No: 019866

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BELL ELECTRICAL SUPPLY	00496536	5673132	KLEIN 32288 INSUL CHNGBLE DRVR	Electric Utility	128.51
07/16/2021	BELL ELECTRICAL SUPPLY	00496538	5672859	KRS 115KV PT REPAIR MATERIAL	Electric Utility	60.67
07/16/2021	BELL ELECTRICAL SUPPLY	00496539	5672858	P-STRUT STRUT BRACKET	Electric Utility	76.58
07/16/2021	BELL ELECTRICAL SUPPLY	00496540	5672865	VARIOUS PRTS FOR KRS 115KV RPR	Electric Utility	313.41
Total for Payment No.:						579.17

Payment No: 019873

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CINTAS CORP #630	00496592	4087763805	UNIFORMS	General Fund	96.22
07/16/2021	CINTAS CORP #630	00496593	4089165306	UNIFORMS	General Fund	96.22
07/16/2021	CINTAS CORP #630	00496594	4087390011	UNIFORMS	General Fund	64.74
07/16/2021	CINTAS CORP #630	00496596	4087055460	UNIFORMS	General Fund	96.22
07/16/2021	CINTAS CORP #630	00496597	4088068835	UNIFORMS	General Fund	64.74
07/16/2021	CINTAS CORP #630	00496598	4088432812	UNIFORMS	General Fund	96.22
07/16/2021	CINTAS CORP #630	00496599	4088730204	UNIFORMS	General Fund	64.74
Total for Payment No.:						579.10

Payment No: 652372

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	LEXISNEXIS PO BOX 894166	00496747	3093309664	ONLINE SERVICE CHARGES JUN21	Electric Utility	560.00
				Total for Payment No.:		560.00

Payment No: 652064

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ALLIED AUTO STORES	00495854	01AR3772	PARTS-STOCK	Fleet Operation Fund	508.41
07/09/2021	ALLIED AUTO STORES	00495855	01AS3268	PARTS-V#3304	Fleet Operation Fund	39.62
				Total for Payment No.:		548.03

Payment No: 652288

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	HITT CONTRACTING INC	00497301	24513-15 Utility Refund	UTILITY REFUND	General Fund	547.80
				Total for Payment No.:		547.80

Payment No: 019870

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CALTROL	00496724	CD99127697	KEYSTONE ACTUATOR	Electric Utility	530.97
07/16/2021	CALTROL	00496724	CD99127697	CONVENIENCE FEE (NONTAX)	Electric Utility	15.94
				Total for Payment No.:		546.91

Payment No: 652231

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	OIL CHANGER	00494947	APR 21 CAR WASHES	CAR WASHES- APRIL 2021	Fleet Operation Fund	546.00
				Total for Payment No.:		546.00

Payment No: 652493

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	M R DILLINGHAM	00498148	13793	PERMIT DRAWINGS	Parks And Recreation	542.50
				Total for Payment No.:		542.50

Payment No: 652251

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SIMPLEVIEW LLC	00497012	CI_13962	MONTHLY CHARGES JULY21	Deposit Funds.	541.67
				Total for Payment No.:		541.67

Payment No: 019977

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TIFCO INDUSTRIES	00497129	71667749	PARTS-SHOP USE	Fleet Operation Fund	538.10
				Total for Payment No.:		538.10

Payment No: 020020

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GRID SUBJECT MATTER EXPERTS, LLC	00497656	9901	ONGOING CIP ACTIVITIES JUN21	Electric Utility	530.00
				Total for Payment No.:		530.00

Payment No: 651910

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MARCO SOTO	00495783	36640JUN2021COR	RETURN MONES SCPD#18-3668	Deposit Funds.	529.00
				Total for Payment No.:		529.00

Payment No: 020025

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	INTERSTATE TRAFFIC CONTROL	00497208	245128	SUPPLIES-PARKS DEPT	General Fund	528.77
				Total for Payment No.:		528.77

Payment No: 652123

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SMART CITY NETWORKS, L.P.	00496587	070-001-05-2021	IT Month Service Fee MAY 2021	Deposit Funds.	264.00
07/09/2021	SMART CITY NETWORKS, L.P.	00496589	070-001-06-2021	IT Month Service Fee JUN 2021	Deposit Funds.	264.00
				Total for Payment No.:		528.00

Payment No: 652066

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ALTEC INDUSTRIES INC	00495856	11657693	PARTS-V#3308	Fleet Operation Fund	29.58
07/09/2021	ALTEC INDUSTRIES INC	00495857	11659963	PARTS-STOCK	Fleet Operation Fund	85.40
07/09/2021	ALTEC INDUSTRIES INC	00495858	11668149	PARTS-V#3277	Fleet Operation Fund	21.51
07/09/2021	ALTEC INDUSTRIES INC	00495859	11668450	PARTS-STOCK	Fleet Operation Fund	165.75
07/09/2021	ALTEC INDUSTRIES INC	00495860	11672860	PARTS-STOCK	Fleet Operation Fund	205.95
				Total for Payment No.:		508.19

Payment No: 019859

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AIR FILTER SUPPLY INC	00496582	I484509	SUPPLIES	General Fund	159.81
07/16/2021	AIR FILTER SUPPLY INC	00496583	I452400	SUPPLIES	General Fund	42.53
07/16/2021	AIR FILTER SUPPLY INC	00496584	I482040	SUPPLIES	General Fund	304.14
				Total for Payment No.:		506.48

Payment No: 020053

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	WILLDAN FINANCIAL SERVICES	00497115	010-48412	ARBITRGE SRVC-BYSHR N 2011 BND	Redevlpmt Obligtn Retrmnt Fund	500.00
				Total for Payment No.:		500.00

Payment No: 652190

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CENTRAL COLO, LLC	00496716	CB546 - CI3275	FIBER PATHWAY INNERDUCTS AUG21	Electric Utility	500.00
				Total for Payment No.:		500.00

Payment No: 652267

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	VENOUS TECHNOLOGIES INC	00496714	6338	MEDICAL SUPPLIES - COVID19	Other City Dept Op Grant Fund	499.45
				Total for Payment No.:		499.45

Payment No: 652451

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	A TOOL SHED	00497763	1510270-4	PRESSURE WASHER	Water Utility	392.00
07/30/2021	A TOOL SHED	00497763	1510270-4	TAXABLE	Water Utility	107.12
				Total for Payment No.:		499.12

Payment No: 652238

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	REGENTS OF THE UNIV OF CALIF	00497173	11017766	Legal References - 6/16/2021	General Fund	249.43
07/16/2021	REGENTS OF THE UNIV OF CALIF	00497174	11018283	Legal References - 6/18/2021	General Fund	249.43
				Total for Payment No.:		498.86

Payment No: 019881

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GALE/CENGAGE LEARNING	00496442	74455398	1241 AD BK	General Fund	54.75
07/16/2021	GALE/CENGAGE LEARNING	00496447	74455567	1241 AD BK	General Fund	290.10
07/16/2021	GALE/CENGAGE LEARNING	00496448	74507028	1241 AD BK	General Fund	147.09
				Total for Payment No.:		491.94

Payment No: 652351

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	EDELMAN CORP	00497604	215659	CHANGE TO LINE 1 ACCOUNT STRIN	Public Buildings	490.00
				Total for Payment No.:		490.00

Payment No: 652391

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PINE CONE LUMBER CO	00496980	107643	LUMBER	General Fund	91.21
07/23/2021	PINE CONE LUMBER CO	00496980	107643	MISC	General Fund	0.67
07/23/2021	PINE CONE LUMBER CO	00497137	106437	LUMBER	General Fund	262.91
07/23/2021	PINE CONE LUMBER CO	00497137	106437	MISC	General Fund	2.41
07/23/2021	PINE CONE LUMBER CO	00497139	107156	LUMBER	General Fund	126.32
07/23/2021	PINE CONE LUMBER CO	00497139	107156	MISC	General Fund	1.16
				Total for Payment No.:		484.68

Payment No: 652105

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	OIL CHANGER	00495930	MAY 21 CAR WASH	PD CAR WASHES- MAY 21	Fleet Operation Fund	474.00
				Total for Payment No.:		474.00

Payment No: 652034

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	STEVE WONG	00496164	43336-04 Utility Refund	UTILITY REFUND	General Fund	473.56
				Total for Payment No.:		473.56

Payment No: 652434

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PILAR PULLIAM	00497986	PRCK#81594	REPLACE PRCK#81594	Payroll Liability&ClearingAcct	459.42

Total for Payment No.: 459.42

Payment No: 652097

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	KELLY-MOORE PAINT CO	00496391	817-00000424097	SILCAULK CRYSTAL CLR	General Fund	6.54
07/09/2021	KELLY-MOORE PAINT CO	00496410	816-00000138981	PAINT & SUPPLIES	General Fund	450.65
Total for Payment No.:						457.19

Payment No: 652330

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	BSN SPORTS, LLC	00497105	913017985	ULTRA LITE FIELD COVERS	General Fund	455.99
Total for Payment No.:						455.99

Payment No: 651902

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ANTHONY J. DIBERNARDO	00496537	24272JUN2021	SWIFTWATER IN-SERVICE TRAINING	General Fund	455.00
Total for Payment No.:						455.00

Payment No: 652228

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	NAPA AUTO PARTS	00496487	5983-672405	PARTS-V#3272	Fleet Operation Fund	87.19
07/16/2021	NAPA AUTO PARTS	00496488	5983-672499	PARTS- STOCK	Fleet Operation Fund	58.34
07/16/2021	NAPA AUTO PARTS	00496489	5983-672654	PARTS-STOCK	Fleet Operation Fund	35.26
07/16/2021	NAPA AUTO PARTS	00496490	5983-672910	PARTS-V#3154	Fleet Operation Fund	13.43
07/16/2021	NAPA AUTO PARTS	00496490	5983-672910	PARTS-V#3406	Fleet Operation Fund	4.29
07/16/2021	NAPA AUTO PARTS	00496629	5983-672174	PARTS-V#3401	Fleet Operation Fund	43.56
07/16/2021	NAPA AUTO PARTS	00496630	5983-672486	PARTS-V#3344	Fleet Operation Fund	206.82
Total for Payment No.:						448.89

Payment No: 652078

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CONSOLIDATED PARTS INC	00496383	5065685	ED63A025 ITE	General Fund	446.90
				Total for Payment No.:		446.90

Payment No: 651951

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	EMBARK MEDICAL	00496135	18068-09 Utility Refund	UTILITY REFUND	General Fund	445.41
				Total for Payment No.:		445.41

Payment No: 652125

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SUNNYVALE FORD	00495937	184928-1	PARTS-V#3207	Fleet Operation Fund	105.17
07/09/2021	SUNNYVALE FORD	00495938	188312	PARTS- V#3274	Fleet Operation Fund	31.69
07/09/2021	SUNNYVALE FORD	00495939	188662	PARTS-STOCK	Fleet Operation Fund	133.09
07/09/2021	SUNNYVALE FORD	00495940	188753	PARTS-V#2975	Fleet Operation Fund	55.14
07/09/2021	SUNNYVALE FORD	00496295	189144	PARTS-V#3379	Fleet Operation Fund	119.57
				Total for Payment No.:		444.66

Payment No: 652373

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021		00497033	200087	PROF SERVICES - INVESTIGATION	Special Liability Insurance	444.00
				Total for Payment No.:		444.00

Payment No: 652030

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SINGH, HARPREET	00496138	20692-23 Utility Refund	UTILITY REFUND	General Fund	441.81
				Total for Payment No.:		441.81

Payment No: 652422

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ASHLEY KOEPPLIN	00498023	33199JUN2021	POST RECORDS TRAINING	General Fund	440.88
				Total for Payment No.:		440.88

Payment No: 652442

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SYLVIA AVALOS	00498050	33177JUN2021	RECORD CLERK COURSE	General Fund	440.21
				Total for Payment No.:		440.21

Payment No: 652096

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JACK DOHENY COMPANIES	00493756	126120	CAMERA TRACTOR REPAIR	Sewer Utility	160.36
07/09/2021	JACK DOHENY COMPANIES	00493759	126336	PARTS	Sewer Utility	211.52
07/09/2021	JACK DOHENY COMPANIES	00493759	126336	LABOR	Sewer Utility	67.50
				Total for Payment No.:		439.38

Payment No: 652246

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SANTA CLARA WEEKLY	00497177	1245495	Publication Ordinance No. 2031	General Fund	432.00
				Total for Payment No.:		432.00

Payment No: 652041

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TIERNEY AND COMPANY	00496189	54968-11 Utility Refund	UTILITY REFUND	General Fund	430.25
				Total for Payment No.:		430.25

Payment No: 652403

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SCP DISTRIBUTORS LLC	00497140	36038325	VALVE ACTUATOR	Water Utility	429.04
				Total for Payment No.:		429.04

Payment No: 020023

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	IMAGE SALES INC	00497243	0070570-IN	MEMBERSHIP CARD & RIBBON	General Fund	428.19
				Total for Payment No.:		428.19

Payment No: 652440

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SASKIA LAGERGREN	00498038	14984JUN2021	EXECUTIVE DEVELOPMENT COURSE	General Fund	427.56
				Total for Payment No.:		427.56

Payment No: 652109

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PETERSON TRACTOR CO	00495935	PC001742965	PARTS-V#2834	Fleet Operation Fund	313.02
07/09/2021	PETERSON TRACTOR CO	00496290	PC001744112	PARTS-V#2832	Fleet Operation Fund	110.00
				Total for Payment No.:		423.02

Payment No: 651893

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	METLIFE INDIVIDUAL LONG TERM	00496351	19647956 JUL2021	BIWEEKLY PR METLIFE LONG TERM	Payroll Liability&ClearingAcct	421.83
				Total for Payment No.:		421.83

Payment No: 652094

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/09/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00496059	02665808	SAFETY GLASS TINT - D. PADILLA	Electric Utility	80.30
07/09/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00496059	02665808	DISPENSING FEE	Electric Utility	28.00
07/09/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00496060	02675492	SAFETY GLASSES - D. BOBIAS	Water Utility	137.11
07/09/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00496060	02675492	DISPENSING FEE	Water Utility	28.00
07/09/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00496061	02675493	SAFETY TINT GLASSES D. BOBIAS	Water Utility	114.17
07/09/2021	HOYA OPTICAL LABS OF AMERICA, INC.	00496061	02675493	DISPENSING FEE	Water Utility	28.00
Total for Payment No.:						415.58

Payment No: 652211

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FRANK SCHMIDT & ASSOCIATES	00496955	178	ADDITIONAL FUNDS PER AMENDMENT	Parks And Recreation	415.00
Total for Payment No.:						415.00

Payment No: 652112

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	REED & GRAHAM INC	00496364	003264	SUPPLIES-STREET	General Fund	412.09
Total for Payment No.:						412.09

Payment No: 019938

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DYNAMIC SYSTEMS INC	00497674	21060142	ORACLE DATABASE APPLIANCE X7-2	Electric Utility	402.75
Total for Payment No.:						402.75

Payment No: 019987

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/23/2021	VANTAGE DATA CENTERS 7, LLC	00496801	2408	CARRIER ACCESS JUL21 737MATHEW	Electric Utility	400.00
Total for Payment No.:						400.00

Payment No: 019986

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	VANTAGE DATA CENTERS 6, LLC	00497701	2500	CARRIER ACCESS AUG21 737MATHEW	Electric Utility	400.00
Total for Payment No.:						400.00

Payment No: 652435

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PIPE USERS GROUP	00497266	12038 JUL2021	FY 2021-22 MEMBERSHIP RENEWAL	Water Utility	200.00
07/30/2021	PIPE USERS GROUP	00497266	12038 JUL2021	FY 2021-22 MEMBERSHIP RENEWAL	Sewer Utility	200.00
Total for Payment No.:						400.00

Payment No: 652271

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	LUKE ERICKSON	00497802	22269JUL2021	DTAC INSTRUCTIOR	General Fund	399.60
Total for Payment No.:						399.60

Payment No: 652423

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BRIAN GAUKEL	00497987	24250MAY2021	In-service Training	General Fund	399.00
Total for Payment No.:						399.00

Payment No: 652279

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/23/2021	AURORA FARIAS	00497308	42563-15 Utility Refund	UTILITY REFUND	General Fund	389.17
Total for Payment No.:						389.17
Payment No: 652136						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ZORO TOOLS INC.	00496398	INV9733792	OD PLAIN FINISH LOW CARBON STE	General Fund	90.74
07/09/2021	ZORO TOOLS INC.	00496421	INV9683314	TESTER, IRRIGATION 24B	General Fund	123.62
07/09/2021	ZORO TOOLS INC.	00496422	INV9690040	THREADED ROD	General Fund	165.68
Total for Payment No.:						380.04
Payment No: 020001						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BARRY S MILSTONE	00498117	12076	REMAINING BALANCE FROM PO 2462	Related Santa Clara Dvlpr Fund	379.77
Total for Payment No.:						379.77
Payment No: 652192						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	COUNTY OF SOLANO	00496670	10052	BENICIA ILLEGAL DUMP MAR21 LBR	Electric Utility	257.98
07/16/2021	COUNTY OF SOLANO	00496670	10052	BENICIA ILLEGAL DUMP MAR21 OVH	Electric Utility	118.36
Total for Payment No.:						376.34
Payment No: 019872						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CINTAS CORP #630	00496426	4088068797	UNIFORM SERVICES	General Fund	56.46
07/16/2021	CINTAS CORP #630	00496428	4088730273	UNIFORM SERVICES	General Fund	56.46
07/16/2021	CINTAS CORP #630	00496475	4088835124	FLEET RENTALS	Fleet Operation Fund	231.11
07/16/2021	CINTAS CORP #630	00496475	4088835124	SAFEWASHR MOBL SRVC- TXBL	Fleet Operation Fund	31.03

Total for Payment No.: 375.06

Payment No: 020013

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GALE/CENGAGE LEARNING	00497100	74646535	1241 AD BK	General Fund	196.35
07/30/2021	GALE/CENGAGE LEARNING	00497277	74655267	1241 AD BK	General Fund	115.35
07/30/2021	GALE/CENGAGE LEARNING	00497278	74656397	1241 AD BK	General Fund	54.82
Total for Payment No.:						366.52

Payment No: 652042

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TQ NAIL	00496148	28680-06 Utility Refund	UTILITY REFUND	General Fund	363.35
Total for Payment No.:						363.35

Payment No: 652369

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KELLY-MOORE PAINT CO	00497122	816-00000135616	PAINT	Water Utility	350.94
07/23/2021	KELLY-MOORE PAINT CO	00497131	816-00000140227	RUS 200 SKID-RESIST	General Fund	11.98
Total for Payment No.:						362.92

Payment No: 019975

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SCOTT'S PPE RECON INC	00496852	37146	PPE REPAIR JUNE 2021 - TAXABLE	Fire Department	10.90
07/23/2021	SCOTT'S PPE RECON INC	00496852	37146	PPE REPAIR JUNE 2021 - NONTAX	Fire Department	347.50
Total for Payment No.:						358.40

Payment No: 019821

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/09/2021	GRAINGER-SAN JOSE	00495897	9913745684	PARTS-V#3435	Fleet Operation Fund	57.75
07/09/2021	GRAINGER-SAN JOSE	00495915	9926113243	PARTS-V#3277	Fleet Operation Fund	48.24
07/09/2021	GRAINGER-SAN JOSE	00495916	9932274559	PARTS-STOCK	Fleet Operation Fund	181.10
07/09/2021	GRAINGER-SAN JOSE	00495917	9936380162	CARTRIDGE- SHOP USE	Fleet Operation Fund	70.00
				Total for Payment No.:		357.09

Payment No: 652284

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CLICKHOME INC	00497305	35026-04 Utility Refund	UTILITY REFUND	General Fund	356.36
				Total for Payment No.:		356.36

Payment No: 652439

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	SANTA CLARA CO POLICE CHIEFS	00498007	2451JUL2021	MEMBERSHIP DUES 21-22	General Fund	350.00
				Total for Payment No.:		350.00

Payment No: 652079

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CONTRA COSTA CO SHERIFF DEPT	00495800	724JUN2021	FTO COURSE JREVAY	General Fund	349.00
				Total for Payment No.:		349.00

Payment No: 651923

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ANDREA AGUIRRE	00496197	59751-10 Utility Refund	UTILITY REFUND	General Fund	343.85
				Total for Payment No.:		343.85

Payment No: 020048

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	STEPHANIE ATIGH	00498202	27756JUL2021	ADMINISTRATIVE CITATION HEARIN	General Fund	342.00
Total for Payment No.:						342.00
Payment No: 651957						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GIOVANNA SIVIRA-GALLARDO	00496128	14636-08 Utility Refund	UTILITY REFUND	General Fund	340.56
Total for Payment No.:						340.56
Payment No: 652188						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BRINK'S INCORPORATED	00496681	11588951	ARMORED COURIER SERVICE	General Fund	170.23
07/16/2021	BRINK'S INCORPORATED	00496682	11622026	ARMORED COURIER SERVICE	General Fund	170.23
Total for Payment No.:						340.46
Payment No: 652428						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GREG DEGER	00498032	17266JUN2021	SHERMAN BLOCK SUPERVISORY	General Fund	338.00
Total for Payment No.:						338.00
Payment No: 652049						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	XI MEI TAN	00496155	33404-09 Utility Refund	UTILITY REFUND	General Fund	329.92
Total for Payment No.:						329.92
Payment No: 019862						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ALL GUARD ALARM SYSTEMS INC	00496585	S107600	NORTHSIDE LIB DIAL OUT	General Fund	325.00
Total for Payment No.:						325.00

Payment No: 652323

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ACCEL AIR SYSTEMS, INC.	00497269	11908	HVAC SERVICES 881 MARTIN AVE	Electric Utility	325.00
				Total for Payment No.:		325.00

Payment No: 651932

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CALVIN ONG	00496112	11011-13 Utility Refund	UTILITY REFUND	General Fund	317.74
				Total for Payment No.:		317.74

Payment No: 020033

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	NALCO CO	00497181	6670099748	MO.SRV FEE COGEN JUL21	Electric Utility	315.82
				Total for Payment No.:		315.82

Payment No: 652250

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SHREDLOGIX INC	00497004	0011036	SHREDDING SERVICES: 2/1/2021-1	General Fund	315.00
				Total for Payment No.:		315.00

Payment No: 652149

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	JUSTIN ROGERS	00497002	PRCK#91470	REPLACE STALE DATED CK#91470	Payroll Liability&ClearingAcct	314.68
				Total for Payment No.:		314.68

Payment No: 652522

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	STATEWIDE SAFETY SYSTEMS	00498213	05034424	PAINT, MARKING, FLOURESCENT	Electric Utility	305.14

OR

Total for Payment No.: 305.14

Payment No: 019943

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	FARWEST LINE SPECIALTIES LLC	00496898	325768	BUCKINGHAM BAG	Electric Utility	48.38
07/23/2021	FARWEST LINE SPECIALTIES LLC	00496898	325768	SHIPPING	Electric Utility	12.46
07/23/2021	FARWEST LINE SPECIALTIES LLC	00497810	332025	HOOK, FOR HAND LINE BASHLIN #3	Electric Utility	219.14
07/23/2021	FARWEST LINE SPECIALTIES LLC	00497810	332025	SHIPPING	Electric Utility	18.87
Total for Payment No.:						298.85

Payment No: 652005

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MOTOMI MATSUDA	00496235	75585-04 Utility Refund	UTILITY REFUND	General Fund	298.80
Total for Payment No.:						298.80

Payment No: 020037

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ONESOURCE DISTRIBUTORS LLC	00497835	S6717801.001	POLE MARKERS	Electric Utility	294.52
Total for Payment No.:						294.52

Payment No: 652184

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BENCHMARK	00496460	E20-606A	ASBESTOS REMOVAL	H.U.D Capital Projects	288.75
Total for Payment No.:						288.75

Payment No: 652456

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	BAKER DISTRIBUTING COMPANY LLC	00497252	CF48117	SENIOR CNT FREEZER	General Fund	147.67
07/30/2021	BAKER DISTRIBUTING COMPANY LLC	00497253	CF22857	PAYROLL	General Fund	140.73
Total for Payment No.:						288.40

Payment No: 019877

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FARWEST LINE SPECIALTIES LLC	00496721	334955	BURNDY DIE	Electric Utility	270.69
07/16/2021	FARWEST LINE SPECIALTIES LLC	00496721	334955	SHIPPING	Electric Utility	15.56
Total for Payment No.:						286.25

Payment No: 652098

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	KM & D MACHINE INC	00495922	43083	LABOR-V#2996 WO#130767	Fleet Operation Fund	220.00
07/09/2021	KM & D MACHINE INC	00495922	43083	PARTS-V#2996 WO#130767	Fleet Operation Fund	66.00
Total for Payment No.:						286.00

Payment No: 651991

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MANOJ PANIKKAR	00496185	52551-06 Utility Refund	UTILITY REFUND	General Fund	282.25
Total for Payment No.:						282.25

Payment No: 652273

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	WARREN FOSS	00497026	16018JUL2021	FY 21-22 SFTY CLOTH/BOOT REIMB	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 651904

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/09/2021	DEION WILLCOX	00495958	33742JUN2021	SAFETY REIMB UNIT 3 FY20/21	Electric Utility	280.00
Total for Payment No.:						280.00
Payment No: 651908						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JOHN SANDERS	00495957	7244JUN2021	SAFETY REIMB FY20/21 UNIT 3	Electric Utility	280.00
Total for Payment No.:						280.00
Payment No: 651912						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MICHELE VITARELLI	00495956	3002JUN2021	SAFETY REIMB FY20/21 UNIT 3	Electric Utility	280.00
Total for Payment No.:						280.00
Payment No: 652425						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CHARLES BANKSTON	00497232	29688JUL2021	FY 21/22 SFTY CLOTH/BOOT REIMB	Electric Utility	280.00
Total for Payment No.:						280.00
Payment No: 652438						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ROBERTS, BRYANT J.	00497231	30324JUL2021	FY 20/21 SFTY CLOTH/BOOT REIMB	Electric Utility	280.00
Total for Payment No.:						280.00
Payment No: 652433						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MARK GUERRERO	00497697	21470JUL2021	FY 21/22 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 652138

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BRANDON QUIJADA	00496673	14597JUN2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00
				Total for Payment No.:		280.00

Payment No: 652140

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CHRISTOPHER GUERRERO	00496570	1207JUN2021	FY 20/21 SFTY CLTH/BOOT REIMB	Electric Utility	280.00
				Total for Payment No.:		280.00

Payment No: 652154

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LEONARDO SAN PEDRO	00496678	17425JUL2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00
				Total for Payment No.:		280.00

Payment No: 652160

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SLADWICK, JOSHUA	00496677	15579JUN2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00
				Total for Payment No.:		280.00

Payment No: 652155

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MATTHEW SAVAGE	00496676	29690JUL2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00
				Total for Payment No.:		280.00

Payment No: 652157

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MICHAEL KEATE	00496574	20468JUL2021	FY 2021 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00

Total for Payment No.: 280.00

Payment No: 652143

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	DUNCAN, JEFFERY D	00496564	29744JUN2021	FY 20/21 SFTY CLTH/BOOT REIMB	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 652153

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LEON ALCANTAR	00496556	14497JUL2021	FY 20/21 SFTY CLTH/BOOT REIMB	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 652147

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	JESSE DELGADO	00496550	28714JUL2021	FY 2122 SAFETY BOOT/CLOTH REIM	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 652339

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CONCENTRA MEDICAL CENTERS	00497029	71763313	PRE EMPLOY PHYSICAL	General Fund	85.00
07/23/2021	CONCENTRA MEDICAL CENTERS	00497029	71763313	STREET P&B	General Fund	45.00
07/23/2021	CONCENTRA MEDICAL CENTERS	00497029	71763313	SVP FIELD SERVICES	Electric Utility	65.00
07/23/2021	CONCENTRA MEDICAL CENTERS	00497030	71691480	STREET MAINTENANCE	General Fund	85.00
Total for Payment No.:						280.00

Payment No: 652503

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	PACIFIC COAST FLAG	00497054	25410	4X6 US FLAGS FOR STATION SUPP	General Fund	278.49

Total for Payment No.: 278.49

Payment No: 652152

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	LARRY ORLANDO	00496672	12218JUL2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	278.21
Total for Payment No.:						278.21

Payment No: 652379

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	MOUNTAIN VIEW GARDEN CENTER	00497136	107159	1 YARD 6 SACK	General Fund	274.68
Total for Payment No.:						274.68

Payment No: 652161

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	THUCVU QUOC HUYNH	00496573	23776JUN2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	273.14
Total for Payment No.:						273.14

Payment No: 652148

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	JUAN DANIEL VASQUEZ JR	00496679	31753JUN2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	271.35
Total for Payment No.:						271.35

Payment No: 002416

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/27/2021	NAVIA BENEFIT SOLUTIONS, INC	00498194	07/25/21-08/07/21	DD:COMMUTER BENEFIT AUG	Payroll Liability&ClearingAcct	270.00
Total for Payment No.:						270.00

Payment No: 019967

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496764	3847680626-0 JUN2021	ELEC SVC GRZ INTAKE TWR JUN21	Electric Utility	266.22
				Total for Payment No.:		266.22

Payment No: 019970

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496929	3135894939-9JUL2021	ELE SVC BENICIA PUMPHOUS JUN21	Electric Utility	39.22
07/23/2021	PG&E	00496930	3219228267-4JUL2021	ELE SVC BENICIA HOUSE JUN21	Electric Utility	212.97
				Total for Payment No.:		252.19

Payment No: 652137

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AGUILAR, GERALD ALLEN	00496551	30774JUL2021	FY 20/21 SFTY CLTH/BOOT REIMB	Electric Utility	251.28
				Total for Payment No.:		251.28

Payment No: 020015

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GE SUPPLY	00498100	21627130	SMP77656 RING SHIM	Electric Utility Construction	250.99
				Total for Payment No.:		250.99

Payment No: 652214

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GRAYBAR ELECTRIC	00496736	9321760855	PREFORMED LINE PRODS	Electric Utility Construction	29.84
07/16/2021	GRAYBAR ELECTRIC	00496736	9321760855	INBOUND FREIGHT	Electric Utility Construction	5.90
07/16/2021	GRAYBAR ELECTRIC	00496738	9321895169	WIRE & KEVLAR CUTTING SHEARS	Electric Utility Construction	24.83
07/16/2021	GRAYBAR ELECTRIC	00496740	9321982166	HANDTRUCK 0-275LBS CAP	Electric Utility Construction	190.29

Total for Payment No.: 250.86

Payment No: 652004

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MONOWARA HOQUE	00496176	48414-14 Utility Refund A	UTILITY REFUND	General Fund	250.00
Total for Payment No.:						250.00

Payment No: 651901

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	CA FRANCHISE TAX BOARD	00496356	06/13/21-06/26/21NG	WAGE ATTACHMENT B2113	Payroll Liability&ClearingAcct	250.00
Total for Payment No.:						250.00

Payment No: 652164

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CA FRANCHISE TAX BOARD	00497203	06/27/21-07/10/21NG	WAGE ATTACHMENT B2114	Payroll Liability&ClearingAcct	250.00
Total for Payment No.:						250.00

Payment No: 652447

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CA FRANCHISE TAX BOARD	00498226	07/11/21-07/24/21NG	WAGE ATTACHMENT B2115	Payroll Liability&ClearingAcct	250.00
Total for Payment No.:						250.00

Payment No: 652121

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SCP DISTRIBUTORS LLC	00496401	36035246	CALCIUM CHLORIDE FLAKE	General Fund	249.50
Total for Payment No.:						249.50

Payment No: 651948

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	DENISE WALKER	00496229	72581-17 Utility Refund	UTILITY REFUND	General Fund	248.22
				Total for Payment No.:		248.22

Payment No: 652392

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	POSTMASTER US POST OFFICE	00497616	2946JUL2021	RENEWAL PERMIT 92	General Fund	245.00
				Total for Payment No.:		245.00

Payment No: 652402

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	REED & GRAHAM INC	00496921	004312	SUPPLIES-STREET	General Fund	237.19
				Total for Payment No.:		237.19

Payment No: 019932

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	BAY AREA DATA SUPPLY	00496094	206984	HP M601 Toner	General Fund	237.08
				Total for Payment No.:		237.08

Payment No: 020028

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	KINOKUNIYA BOOKSTORES OF AMERICA CO. LTD	00497074	SJ1880	1241 AD/JUV BK	General Fund	233.64
				Total for Payment No.:		233.64

Payment No: 652534

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	VERIZON WIRELESS	00496991	9882629332	FIRE EMS WIRELESS	General Fund	230.46

Total for Payment No.: 230.46

Payment No: 651924

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ANDREI NETCHITALIOUK	00496222	71293-05 Utility Refund	UTILITY REFUND	General Fund	229.92
Total for Payment No.:						229.92

Payment No: 651906

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JACOB MALAE	00496107	11553JUN2021	RADAR/LIDAR COURSE	General Fund	229.50
Total for Payment No.:						229.50

Payment No: 652210

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FIX AIR	00496600	3079647	SENIOR CNT AC	General Fund	227.48
Total for Payment No.:						227.48

Payment No: 652128

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TEREX USA LLC	00495942	5003323512	PARTS-V#2656	Fleet Operation Fund	40.84
07/09/2021	TEREX USA LLC	00495944	5003342071	PARTS-V#2656	Fleet Operation Fund	181.09
Total for Payment No.:						221.93

Payment No: 652151

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	KYLE CARDIN	00497015	27666MAY2021	FORCE ENCOUNTERS	General Fund	221.00
Total for Payment No.:						221.00

Payment No: 652156

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	MICHAEL J. SANCHEZ	00496675	32051JUL2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	217.99
				Total for Payment No.:		217.99

Payment No: 652069

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AT&T MOBILITY	00495551	828928594X06162021	STREET DEPT WIRELESS	Solid Waste Utility-Constructi	11.50
07/09/2021	AT&T MOBILITY	00495551	828928594X06162021	STREET DEPT WIRELESS	General Fund	28.63
07/09/2021	AT&T MOBILITY	00495551	828928594X06162021	STREET DEPT WIRELESS	General Fund	28.63
07/09/2021	AT&T MOBILITY	00495551	828928594X06162021	STREET DEPT WIRELESS	General Fund	47.04
07/09/2021	AT&T MOBILITY	00495551	828928594X06162021	STREET DEPT WIRELESS	General Fund	47.04
07/09/2021	AT&T MOBILITY	00495551	828928594X06162021	STREET DEPT WIRELESS	General Fund	53.16
				Total for Payment No.:		216.00

Payment No: 652120

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SANTA CLARA WINDUSTRIAL CO	00496420	022123 03	PRESS CTS FLANGE	General Fund	209.65
				Total for Payment No.:		209.65

Payment No: 019810

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BAY AREA DATA SUPPLY	00495953	206992	TONERS - 8100, M402	General Fund	207.10
				Total for Payment No.:		207.10

Payment No: 020000

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BAKER & TAYLOR BOOKS	00497063	2036025827	1233 AD BK	General Fund	162.29

07/30/2021	BAKER & TAYLOR BOOKS	00497064	2036025828	1235 JUV BK	General Fund	43.73
Total for Payment No.:						206.02
Payment No: 651947						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	DANIEL NELSON	00496161	38065-12 Utility Refund	UTILITY REFUND	General Fund	203.29
Total for Payment No.:						203.29
Payment No: 652342						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CONTRACTOR COMPLIANCE AND MONITORING	00497274	14582	LABOR COMPLIANCE SVC JUN21 CMO	Related Santa Clara Dvlpr Fund	90.00
07/23/2021	CONTRACTOR COMPLIANCE AND MONITORING	00497274	14582	LABOR COMPLIANCE SVC JUN21 SVP	Electric Utility	112.50
Total for Payment No.:						202.50
Payment No: 651962						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HARSIMRANJIT SINGH	00496141	22901-05 Utility Refund	UTILITY REFUND	General Fund	200.52
Total for Payment No.:						200.52
Payment No: 019928						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	AMERICAN BEVERAGE EQUIPMENT	00496897	53292	JUL21 RENT FOR ICE MACHINE DVR	Electric Utility	200.00
Total for Payment No.:						200.00
Payment No: 652114						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SAFETY-KLEEN SYSTEMS INC	00495936	86359837	HAZ-MAT SRVC- MAY 21	Fleet Operation Fund	200.00

Total for Payment No.: 200.00

Payment No: 652176

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	AT&T CALNET	00496692	000016641811	BN9391023689 5/20/21-6/19/21	Electric Utility	199.52
Total for Payment No.:						199.52

Payment No: 652420

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ZORO TOOLS INC.	00497149	INV9759073	NONFUSIBLE SINGLE THROW SAFET	General Fund	196.48
Total for Payment No.:						196.48

Payment No: 651930

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BLANCA FIORELLA FARFAN	00496152	31955-10 Utility Refund	UTILITY REFUND	General Fund	195.94
Total for Payment No.:						195.94

Payment No: 652071

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AT&T MOBILITY	00495554	828850115X06162021	STREET WIRELESS	Solid Waste Utility-Constructi	14.74
07/09/2021	AT&T MOBILITY	00495554	828850115X06162021	LIBRARY WIRELESS	General Fund	132.69
07/09/2021	AT&T MOBILITY	00495554	828850115X06162021	IT DEPT WIRELESS - PEREZ	Information Technology Service	46.23
Total for Payment No.:						193.66

Payment No: 652418

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	XIN LIU	00497567	06/29/21 CLASS REFUND	PARKS DEPT REFUND	General Fund	192.00

Total for Payment No.: 192.00

Payment No: 019972

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PRAXAIR DISTRIBUTION INC	00497141	64297477	CYLINDER RENTAL	General Fund	189.66
Total for Payment No.:						189.66

Payment No: 019988

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	WAXIE SANITARY SUPPLY	00496846	80082517	NABC	General Fund	188.18
Total for Payment No.:						188.18

Payment No: 019895

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	IMPERIAL SPRINKLER SUPPLY INC	00496640	4711695-00	SUPLLIES-PNB	General Fund	186.15
Total for Payment No.:						186.15

Payment No: 652174

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ASHLEY MCDONALD	00496464	36750JUN2021	Mechanical Permit BLD2021-6157	General Fund	173.60
Total for Payment No.:						173.60

Payment No: 652092

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HALREC INC	00496294	391674	PARTS- V#3492	Fleet Operation Fund	171.37
Total for Payment No.:						171.37

Payment No: 652327

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	BAKER SUPPLIES AND REPAIRS	00497073	20617	PARTS-V#3408	Fleet Operation Fund	171.13
				Total for Payment No.:		171.13

Payment No: 652087

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	FRONTIER FORD	00495894	653470	PARTS-V#3534	Fleet Operation Fund	90.46
07/09/2021	FRONTIER FORD	00496272	653844	PARTS-V#3354	Fleet Operation Fund	80.66
				Total for Payment No.:		171.12

Payment No: 652341

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CONSOLIDATED PARTS INC	00497271	5064812	GL814 NSI-NSI GL814 #8 CU CMPR	Electric Utility	168.95
				Total for Payment No.:		168.95

Payment No: 652118

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SANTA CLARA LIGHTING, INC.	00496418	21630	LIGHTBULBS	General Fund	166.77
				Total for Payment No.:		166.77

Payment No: 019882

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GARDENLAND POWER EQUIPMENT	00496545	865816	PARTS-STOCK	Fleet Operation Fund	32.72
07/16/2021	GARDENLAND POWER EQUIPMENT	00496546	866010	PARTS-STOCK	Fleet Operation Fund	130.88
				Total for Payment No.:		163.60

Payment No: 652421

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	ARISTOTLE DUQUE	00497247	15201JUL2021	FY 21/22 SFTY BOOT/CLOTH REIMB	Electric Utility	163.48
Total for Payment No.:						163.48
Payment No: 652292						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JOSEFINA PUGA	00497306	38645-15 Utility Refund	UTILITY REFUND	General Fund	162.66
Total for Payment No.:						162.66
Payment No: 652150						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	KURT TOMARO	00496680	22698JUN2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	162.32
Total for Payment No.:						162.32
Payment No: 652444						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	VINCENT NGUYEN	00497248	36901JUL2021	FY 21/22 SFTY BOOT/CLOTH REIMB	Electric Utility	161.30
Total for Payment No.:						161.30
Payment No: 652269						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ZEP SALES & SERVICE	00496642	9006400350	SUPPLIES-STREET	General Fund	130.59
07/16/2021	ZEP SALES & SERVICE	00496642	9006400350	SHIPPING	General Fund	30.51
Total for Payment No.:						161.10
Payment No: 652038						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SYLVIA CATHY	00496146	25617-09 Utility Refund	UTILITY REFUND	General Fund	160.01
Total for Payment No.:						160.01

Payment No: 651919

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AKSHAY M SRIVATSA	00496241	76635-02 Utility Refund	UTILITY REFUND	General Fund	159.93
				Total for Payment No.:		159.93

Payment No: 652110

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PINE CONE LUMBER CO	00496408	105056	LUMBER	General Fund	159.17
				Total for Payment No.:		159.17

Payment No: 652441

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	STEPHEN SELBERG	00498044	13802MAY2021A	CDR TECHNICIAN COURSE	General Fund	159.00
				Total for Payment No.:		159.00

Payment No: 019848

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	WESTERN STATES OIL CO	00495949	454154	PD MOTORCYCLES- FUEL	Fleet Operation Fund	158.36
				Total for Payment No.:		158.36

Payment No: 652304

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SIYAN DING	00497321	78719-04 Utility Refund	UTILITY REFUND	General Fund	157.54
				Total for Payment No.:		157.54

Payment No: 651949

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	DIVESH BANSAL	00496177	48558-02 Utility Refund	UTILITY REFUND	General Fund	157.00

Total for Payment No.: 157.00

Payment No: 652532

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	VANESSA YANG	00498057	07/13/21 CLASS REFUND	PARKS DEPT REFUND	General Fund	157.00
				Total for Payment No.:		157.00

Payment No: 652055

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YIJIE LIU	00496214	68843-12 Utility Refund	UTILITY REFUND	General Fund	155.38
				Total for Payment No.:		155.38

Payment No: 652501

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	NI GOVERNMENT SERVICES	00498020	21052908551	MONTHLY FEES SATTELITE RADIOS	General Fund	77.37
07/30/2021	NI GOVERNMENT SERVICES	00498072	21062908551	MONTHLY FEES SATTELITE RADIOS	General Fund	77.37
				Total for Payment No.:		154.74

Payment No: 651928

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BENJAMIN COTTON	00496226	72098-17 Utility Refund	UTILITY REFUND	General Fund	154.33
				Total for Payment No.:		154.33

Payment No: 652242

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SAN JOSE BOILER WORKS	00496607	13392	PD BOILER	General Fund	152.68
				Total for Payment No.:		152.68

Payment No: 652061

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AIR COOLED ENGINES	00495850	84726	PARTS-V#2880	Fleet Operation Fund	151.21
				Total for Payment No.:		151.21

Payment No: 020030

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MIDWEST TAPE LLC	00497134	500677861	1241 AD CD	General Fund	38.84
07/30/2021	MIDWEST TAPE LLC	00497134	500677861	1241 AD DVD	General Fund	23.71
07/30/2021	MIDWEST TAPE LLC	00497134	500677861	1233 AD DVD	General Fund	88.32
				Total for Payment No.:		150.87

Payment No: 652159

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	RANDY KENT	00496671	35349JUN2021A	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	150.70
				Total for Payment No.:		150.70

Payment No: 651914

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	STATE CONTROLLERS OFFICE	00496451	6730JUL2021	CONFIR CHG -CSC REVENUE 21-2	General Fund	150.00
				Total for Payment No.:		150.00

Payment No: 651899

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/06/2021	CA FRANCHISE TAX BOARD	00496354	06/13/21-06/26/21CB	WAGE ATTACHMENT B2113	Payroll Liability&ClearingAcct	150.00
				Total for Payment No.:		150.00

Payment No: 652162

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CA FRANCHISE TAX BOARD	00497199	06/27/21-07/10/21CB	WAGE ATTACHMENT B2114	Payroll Liability&ClearingAcct	150.00
				Total for Payment No.:		150.00

Payment No: 652445

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CA FRANCHISE TAX BOARD	00498223	07/11/21-07/24/21CB	WAGE ATTACHMENT B2115	Payroll Liability&ClearingAcct	150.00
				Total for Payment No.:		150.00

Payment No: 651925

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ARLEN MASULIS	00496137	20559-13 Utility Refund	UTILITY REFUND	General Fund	144.37
				Total for Payment No.:		144.37

Payment No: 652070

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AT&T MOBILITY	00495553	876361410X06162021	PARKS & REC WIRELESS	General Fund	43.23
07/09/2021	AT&T MOBILITY	00495553	876361410X06162021	PARKS & REC WIRELESS	General Fund	86.56
07/09/2021	AT&T MOBILITY	00495553	876361410X06162021	PARKS & REC WIRELESS	General Fund	13.91
				Total for Payment No.:		143.70

Payment No: 652526

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	THE SOURCING GROUP, LLC	00497668	397122	BUS. CARDS - V COLEMAN D. YEE	General Fund	141.71
				Total for Payment No.:		141.71

Payment No: 651944

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CYNTHIA R ROVNAGHI	00496116	12551-24 Utility Refund	UTILITY REFUND	General Fund	141.35
				Total for Payment No.:		141.35

Payment No: 651939

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHIIHIRO HIRAIWA	00496242	76990-06 Utility Refund	UTILITY REFUND	General Fund	140.74
				Total for Payment No.:		140.74

Payment No: 652499

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MUSSON THEATRICAL	00497244	00450137	PAINT FOR RJJT	General Fund	140.07
				Total for Payment No.:		140.07

Payment No: 651965

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HIDEAKI SUZUKI	00496230	73340-14 Utility Refund	UTILITY REFUND	General Fund	140.00
				Total for Payment No.:		140.00

Payment No: 652287

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	FOCALSPEC INC	00497292	12250-13 Utility Refund	UTILITY REFUND	General Fund	139.70
				Total for Payment No.:		139.70

Payment No: 652009

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	NICHELE CRAIG	00496162	39095-05 Utility Refund	UTILITY REFUND	General Fund	139.61
				Total for Payment No.:		139.61

Payment No: 652043

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TURLOK SINGH	00496111	10720-15 Utility Refund	UTILITY REFUND	General Fund	138.64
				Total for Payment No.:		138.64

Payment No: 651892

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	CAL PERS LONG TERM CARE PROGRAM	00496347	13951277	BIWEEKLY PR CALPERS LT	Payroll Liability&ClearingAcct	138.01
				Total for Payment No.:		138.01

Payment No: 652139

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	CAL PERS LONG TERM CARE PROGRAM	00497195	13986679	BIWEEKLY PR CALPERS LT B2114	Payroll Liability&ClearingAcct	138.01
				Total for Payment No.:		138.01

Payment No: 652424

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CAL PERS LONG TERM CARE PROGRAM	00498234	13995528	BIWEEKLY PR CALPERS LT B2115	Payroll Liability&ClearingAcct	138.01
				Total for Payment No.:		138.01

Payment No: 652480

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	GENERAL PACIFIC INC	00498215	1414098	MARKER, LETTER, P, 2-7/8INX1-3	Electric Utility	11.46
07/30/2021	GENERAL PACIFIC INC	00498215	1414098	MARKER, LETTER, Q, 2-7/8INX1-3	Electric Utility	22.92
07/30/2021	GENERAL PACIFIC INC	00498215	1414098	MARKER, LETTER, A, 2-7/8INX1-3	Electric Utility	68.74
07/30/2021	GENERAL PACIFIC INC	00498215	1414098	MARKER, LETTER, E, 2-7/8INX1-3	Electric Utility	11.46
07/30/2021	GENERAL PACIFIC INC	00498215	1414098	MARKER, LETTER, H, 2-7/8INX1-3	Electric Utility	22.92

Total for Payment No.: 137.50

Payment No: 652289

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JENNIFER LEMON	00497318	78456-01 Utility Refund	UTILITY REFUND	General Fund	136.41
				Total for Payment No.:		136.41

Payment No: 652033

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SRINIVAS POKURI	00496174	46144-23 Utility Refund	UTILITY REFUND	General Fund	135.85
				Total for Payment No.:		135.85

Payment No: 652264

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	UNITED PARCEL SERVICE	00492009	00009882E5161A	AUTO SERVICES	Fleet Operation Fund	15.98
07/16/2021	UNITED PARCEL SERVICE	00496939	00009882E521A	POLICE	General Fund	103.91
07/16/2021	UNITED PARCEL SERVICE	00496939	00009882E521A	ELECTRIC	Electric Utility	14.90
				Total for Payment No.:		134.79

Payment No: 652013

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	OROOB ALI AYESH	00496184	51271-10 Utility Refund	UTILITY REFUND	General Fund	131.23
				Total for Payment No.:		131.23

Payment No: 019994

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ACT ENVIRO	00497661	343423	ANALYTICALS	Electric Utility	120.00
07/30/2021	ACT ENVIRO	00497661	343423	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	9.60

Total for Payment No.: 129.60

Payment No: 651979

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	KEICHI MATSUMOTO	00496145	24917-18 Utility Refund	UTILITY REFUND	General Fund	127.83
Total for Payment No.:						127.83

Payment No: 652299

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	RIKITA YAMADA	00497559	81092-02 Utility Refund	UTILITY REFUND	General Fund	127.07
Total for Payment No.:						127.07

Payment No: 651934

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHAOYI HE	00496154	33117-09 Utility Refund	UTILITY REFUND	General Fund	126.06
Total for Payment No.:						126.06

Payment No: 652333

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CENTRAL WHOLESALE NURSERY	00496988	749292	ANIGOZATNHOS	General Fund	125.16
Total for Payment No.:						125.16

Payment No: 651958

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GOPAL VARSHNEY MAHESH	00496127	14452-19 Utility Refund	UTILITY REFUND	General Fund	123.88
Total for Payment No.:						123.88

Payment No: 651926

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ATSUSHI YASUDA	00496225	72072-19 Utility Refund	UTILITY REFUND	General Fund	123.12
				Total for Payment No.:		123.12

Payment No: 652305

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	TIERNEY AND CO	00497309	42968-22 Utility Refund	UTILITY REFUND	General Fund	121.95
				Total for Payment No.:		121.95

Payment No: 651945

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	DAISUKE KATO	00496227	72141-11 Utility Refund	UTILITY REFUND	General Fund	118.74
				Total for Payment No.:		118.74

Payment No: 651937

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHIA CHANG HSU	00496210	67217-16 Utility Refund	UTILITY REFUND	General Fund	115.97
				Total for Payment No.:		115.97

Payment No: 652257

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SYNERGETIC CONSULTING INC	00495695	21-0730	Application Supprt Planning Ma	Building New Dvlpmnt Srcv Fee	115.00
				Total for Payment No.:		115.00

Payment No: 651960

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HARO WIRELESS LLC	00496147	28618-07 Utility Refund	UTILITY REFUND	General Fund	114.92
				Total for Payment No.:		114.92

Payment No: 651973

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JOSE NAUN RIVERA	00496140	22419-11 Utility Refund	UTILITY REFUND	General Fund	114.71
				Total for Payment No.:		114.71

Payment No: 652132

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	UNITED PARCEL SERVICE	00496098	00009882E5251A	Water & Sewer	Water Utility	15.62
07/09/2021	UNITED PARCEL SERVICE	00496384	00009882E5261A	DELIVERY CHARGES	Fleet Operation Fund	65.90
07/09/2021	UNITED PARCEL SERVICE	00496384	00009882E5261A	DELIVERY CHARGES	General Fund	16.66
07/09/2021	UNITED PARCEL SERVICE	00496384	00009882E5261A	DELIVERY CHARGES	Electric Utility	14.90
				Total for Payment No.:		113.08

Payment No: 652082

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	DUNN-EDWARDS CORP	00496409	2011172526	PAINT-SUNSET BEIGE	General Fund	110.04
				Total for Payment No.:		110.04

Payment No: 651953

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ESTRELLITA CAZADOR	00496192	57373-07 Utility Refund	UTILITY REFUND	General Fund	107.12
				Total for Payment No.:		107.12

Payment No: 652468

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CLAIRE LEE	00498058	07/20/21 CLASS REFUND	PARKS DEPT REFUND	General Fund	105.00
				Total for Payment No.:		105.00

Payment No: 652074

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BAKER SUPPLIES AND REPAIRS	00495861	70856	PARTS-V#3407	Fleet Operation Fund	103.42
				Total for Payment No.:		103.42

Payment No: 652052

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YANG XU	00496125	14151-12 Utility Refund	UTILITY REFUND	General Fund	102.86
				Total for Payment No.:		102.86

Payment No: 652029

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SINGH, AMANDEEP	00496126	14289-26 Utility Refund	UTILITY REFUND	General Fund	101.95
				Total for Payment No.:		101.95

Payment No: 652495

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	MCKESSON MEDICAL	00497246	18276459	GLOVES	General Fund	101.37
				Total for Payment No.:		101.37

Payment No: 020011

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	EMPLOYMENT SCREENING RESOURCES	00497667	231915	ONE EXECUTIVE HIRE	General Fund	101.00
				Total for Payment No.:		101.00

Payment No: 652303

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SERGIO FLORES	00497303	32012-05 Utility Refund	UTILITY REFUND	General Fund	100.97

Total for Payment No.: 100.97

Payment No: 020003

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	BERLITZ LANGUAGES, INC	00497666	001-274-21-02433	BILINGUAL TESTING - ONE EMPLOY	General Fund	100.00
Total for Payment No.:						100.00

Payment No: 652127

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TAYLOR CORPORATION, INC	00496090	4237090	MICRO IMAGING	General Fund	100.00
Total for Payment No.:						100.00

Payment No: 652335

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CHRISTINA CONTRERAS	00497566	06/29/21 CLASS REFUND	PARKS DEPT REFUND	General Fund	100.00
Total for Payment No.:						100.00

Payment No: 652019

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	RICHARD HUDNUT	00496131	15667-01 Utility Refund	UTILITY REFUND	General Fund	98.37
Total for Payment No.:						98.37

Payment No: 019808

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ADOBE INC	00496375	1432798513	ACROBAT PRO SUBSCRPT DC ALL	Electric Utility	96.84
Total for Payment No.:						96.84

Payment No: 652223

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	KORTICK MANUFACTURING CO	00496708	068955	5/8 X 16 MACHINE BOLTS	Electric Utility	96.23
				Total for Payment No.:		96.23

Payment No: 651978

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	KARTHIK CHARAN BORKAR	00496156	33568-37 Utility Refund	UTILITY REFUND	General Fund	95.31
				Total for Payment No.:		95.31

Payment No: 652290

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JIAWEN YE	00497322	78955-02 Utility Refund	UTILITY REFUND	General Fund	94.93
				Total for Payment No.:		94.93

Payment No: 652040

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	TATSUYA SATO	00496245	78148-05 Utility Refund	UTILITY REFUND	General Fund	93.10
				Total for Payment No.:		93.10

Payment No: 651995

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MASAYOSHI SHIMIZU	00496254	79493-02 Utility Refund	UTILITY REFUND	General Fund	92.62
				Total for Payment No.:		92.62

Payment No: 019939

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	EMPLOYMENT SCREENING RESOURCES	00497014	230932	ONE EXECUTIVE HIRE	General Fund	91.00
				Total for Payment No.:		91.00

Payment No: 002415

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/19/2021	REPLACEMENT BENEFIT FUND	00497287	100000016472922	DD:REPLCMNT BENEFIT CHG V GILL	General Fund	90.47
				Total for Payment No.:		90.47

Payment No: 652306

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	VANESSA ELIZALDE	00497299	21322-16 Utility Refund	UTILITY REFUND	General Fund	87.60
				Total for Payment No.:		87.60

Payment No: 651903

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHARLOTTE QUINN	00496392	36381JUL2021	LEED Certification Renewal	Building Fee Admin Retainage	85.00
				Total for Payment No.:		85.00

Payment No: 651907

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JAMES BROOKS	00496055	36752JUN2021	REIMBURSE LIVESCAN FEES	General Fund	84.00
				Total for Payment No.:		84.00

Payment No: 652032

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SNEHA JOSEPH	00496178	48581-02 Utility Refund	UTILITY REFUND	General Fund	82.85
				Total for Payment No.:		82.85

Payment No: 652530

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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07/30/2021	UNITED PARCEL SERVICE	00497985	00009882E5291A	DELIVERY CHARGES	Fleet Operation Fund	63.26
07/30/2021	UNITED PARCEL SERVICE	00497985	00009882E5291A	DELIVERY CHARGES	General Fund	19.24
				Total for Payment No.:		82.50

Payment No: 019835

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PELICAN SIGN SERVICE INC	00496062	62865	THREE NAME PLATES HR EMPLOYEES	General Fund	81.54
				Total for Payment No.:		81.54

Payment No: 652031

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SIVARANJANI BALAN	00496117	12915-18 Utility Refund	UTILITY REFUND	General Fund	80.46
				Total for Payment No.:		80.46

Payment No: 652352

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ERIC AKER	00497568	06/08/21 CLASS REFUND	PARKS DEPT REFUND	General Fund	80.00
				Total for Payment No.:		80.00

Payment No: 652302

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	SANJAY TADEPALLY	00497314	58884-12 Utility Refund	UTILITY REFUND	General Fund	78.93
				Total for Payment No.:		78.93

Payment No: 652135

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	WESTERN TRUCK FAB	00495950	23599	PARTS-V#3196	Fleet Operation Fund	78.68
				Total for Payment No.:		78.68

Payment No: 651921

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ALVIN GOMEZ	00496167	44049-07 Utility Refund	UTILITY REFUND	General Fund	78.27
				Total for Payment No.:		78.27

Payment No: 652107

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PACIFIC TELEMAGEMENT SVCS	00495775	2069490	PAY PHONE	Information Technology Service	78.00
				Total for Payment No.:		78.00

Payment No: 652541

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	ZORO TOOLS INC.	00497594	INV9805285	CARRIAGE BOLTS	General Fund	77.52
				Total for Payment No.:		77.52

Payment No: 651952

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ERIC TURBEN	00496251	79031-02 Utility Refund	UTILITY REFUND	General Fund	76.48
				Total for Payment No.:		76.48

Payment No: 652263

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	TURF & INDUSTRIAL EQUIPMENT CO	00496494	IV39519	PARTS-V#3283	Fleet Operation Fund	29.65
07/16/2021	TURF & INDUSTRIAL EQUIPMENT CO	00496533	IV37184	BLADE, RIDER PLATE, THRUST WASH	Electric Utility	45.73
				Total for Payment No.:		75.38

Payment No: 652276

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	AMERICAN MACHINING	00497297	16715-06 Utility Refund A	UTILITY REFUND	General Fund	72.24
				Total for Payment No.:		72.24

Payment No: 652024

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SEKYEONG SEONG	00496188	54255-12 Utility Refund	UTILITY REFUND	General Fund	72.16
				Total for Payment No.:		72.16

Payment No: 652131

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	THE SOURCING GROUP, LLC	00496063	391155	BUSINESS CARDS - I. PANESCU	General Fund	70.85
				Total for Payment No.:		70.85

Payment No: 651954

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	EVAN YOUNG	00496218	69859-03 Utility Refund	UTILITY REFUND	General Fund	68.18
				Total for Payment No.:		68.18

Payment No: 651988

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LYLY DOAN	00496252	79041-02 Utility Refund	UTILITY REFUND	General Fund	66.93
				Total for Payment No.:		66.93

Payment No: 652146

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	JAMES B GOSHIA	00496565	1169JUL2021	FY 20/21 SFTY CLTH/BOOT REIMB	Electric Utility	65.35
				Total for Payment No.:		65.35

Payment No: 652180

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BAKER SUPPLIES AND REPAIRS	00496542	20615	PARTS-V#3409	Fleet Operation Fund	64.31
				Total for Payment No.:		64.31

Payment No: 652300

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	RUPEN PARIKH	00497312	52766-06 Utility Refund	UTILITY REFUND	General Fund	62.51
				Total for Payment No.:		62.51

Payment No: 651968

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JAKING KONG	00496257	79651-02 Utility Refund	UTILITY REFUND	General Fund	62.38
				Total for Payment No.:		62.38

Payment No: 652196

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	DANA SAFETY SUPPLY, INC	00496661	728766	ADDL PARTS FOR PO 25808	Vehicle Replacement Fund	31.06
07/16/2021	DANA SAFETY SUPPLY, INC	00496661	728766	ADDL PARTS FOR PO 25808	Vehicle Replacement Fund	31.07
				Total for Payment No.:		62.13

Payment No: 652047

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	VIVEK KINI	00496119	13016-23 Utility Refund	UTILITY REFUND	General Fund	61.93
				Total for Payment No.:		61.93

Payment No: 019820

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GRAINGER	00496358	9936274092	SUPPLIES-STREET	General Fund	60.70
				Total for Payment No.:		60.70

Payment No: 652006

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MYKHAYLO GAVRYLYUK	00496212	68363-17 Utility Refund	UTILITY REFUND	General Fund	60.54
				Total for Payment No.:		60.54

Payment No: 651972

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JOHN CHOI	00496181	49420-09 Utility Refund	UTILITY REFUND	General Fund	59.98
				Total for Payment No.:		59.98

Payment No: 652016

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	RADU BUTUCELEA	00496130	14732-20 Utility Refund	UTILITY REFUND	General Fund	58.16
				Total for Payment No.:		58.16

Payment No: 652056

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YOUNGJIK JO	00496233	75427-02 Utility Refund	UTILITY REFUND	General Fund	57.48
				Total for Payment No.:		57.48

Payment No: 652296

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	LAUREEN LEAHY	00497302	27816-02 Utility Refund	UTILITY REFUND	General Fund	56.98
				Total for Payment No.:		56.98

Payment No: 652089

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GLR FASTENERS INC	00496390	P085265	NEOPRENE WASHERS AND HEX BOLT	General Fund	56.65
				Total for Payment No.:		56.65

Payment No: 651985

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LINO CROARO	00496168	44427-12 Utility Refund	UTILITY REFUND	General Fund	11.44
07/09/2021	LINO CROARO	00496169	44428-14 Utility Refund	UTILITY REFUND	General Fund	9.94
07/09/2021	LINO CROARO	00496170	44430-11 Utility Refund	UTILITY REFUND	General Fund	12.47
07/09/2021	LINO CROARO	00496171	44434-12 Utility Refund	UTILITY REFUND	General Fund	9.94
07/09/2021	LINO CROARO	00496172	44435-06 Utility Refund	UTILITY REFUND	General Fund	12.41
				Total for Payment No.:		56.20

Payment No: 652058

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YUTING CHEN	00496249	78985-02 Utility Refund	UTILITY REFUND	General Fund	54.61
				Total for Payment No.:		54.61

Payment No: 651967

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	INTEMPUS REALTY	00496151	31843-07 Utility Refund	UTILITY REFUND	General Fund	53.97
				Total for Payment No.:		53.97

Payment No: 652014

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PATRA, MAYURIKA	00496139	21766-10 Utility Refund	UTILITY REFUND	General Fund	53.87
				Total for Payment No.:		53.87

Payment No: 652010

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	NICHOLAS FOLLETT	00496248	78905-02 Utility Refund	UTILITY REFUND	General Fund	51.81
				Total for Payment No.:		51.81

Payment No: 652051

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	XINCHI YAO	00496194	57995-02 Utility Refund	UTILITY REFUND	General Fund	51.67
				Total for Payment No.:		51.67

Payment No: 651955

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	GARRETT THE	00496213	68820-08 Utility Refund	UTILITY REFUND	General Fund	50.62
				Total for Payment No.:		50.62

Payment No: 651966

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HUI GAO	00496180	49412-03 Utility Refund	UTILITY REFUND	General Fund	50.28
				Total for Payment No.:		50.28

Payment No: 651896

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/02/2021	US TREASURY	00496357	06/13/21-06/26/21JO	WAGE ATTACHMENT B2113	Payroll Liability&ClearingAcct	50.00
				Total for Payment No.:		50.00

Payment No: 652167

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	US TREASURY	00497205	06/27/21-07/10/21JO	WAGE ATTACHMENT B2114	Payroll	50.00

Total for Payment No.:

50.00

Payment No: 652449

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	US TREASURY	00498227	07/11/21-07/24/21JO	WAGE ATTACHMENT B2115	Payroll Liability&ClearingAcct	50.00
Total for Payment No.:						50.00

Payment No: 651961

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HARSHA MUKTAMATH	00496202	60972-17 Utility Refund	UTILITY REFUND	General Fund	49.66
Total for Payment No.:						49.66

Payment No: 652470

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	CONSOLIDATED PARTS INC	00497782	5067943	FUSES AND SPLICES	Sewer Utility	49.05
Total for Payment No.:						49.05

Payment No: 652037

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SWARUP MASURKAR	00496183	50618-18 Utility Refund	UTILITY REFUND	General Fund	47.69
Total for Payment No.:						47.69

Payment No: 651990

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MAMTA PANDYA	00496120	13050-17 Utility Refund	UTILITY REFUND	General Fund	46.32
Total for Payment No.:						46.32

Payment No: 019950

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	IMPERIAL SPRINKLER SUPPLY INC	00497114	4724279-00	SPRINKLER MAINTENANCE	General Fund	46.31
				Total for Payment No.:		46.31

Payment No: 652473

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	DIGITAL ENGINEERING SYSTEM	00497234	74689	PRINT PDFS	Electric Utility Construction	29.46
07/30/2021	DIGITAL ENGINEERING SYSTEM	00497234	74689	DELIVERY	Electric Utility Construction	16.37
				Total for Payment No.:		45.83

Payment No: 019864

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	BADGER METER INC	00496512	80076868	ORION CELLULAR SERVICE	Water Utility	45.00
				Total for Payment No.:		45.00

Payment No: 019965

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496762	2937321050-8 JUN2021	COGEN GAS HEATERS MAY21	Electric Utility	43.57
				Total for Payment No.:		43.57

Payment No: 652229

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	NIXON-EGLI EQUIPMENT CO	00496709	P54368	FREIGHT	Sewer Utility	42.77
				Total for Payment No.:		42.77

Payment No: 651917

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ABHISHEK MEHRA	00496259	79677-02 Utility Refund	UTILITY REFUND	General Fund	42.57
				Total for Payment No.:		42.57

Payment No: 652062

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ALHAMBRA & SIERRA SPRINGS	00495851	4973747 061121	WATER SRVC- OFFICE USE	Fleet Operation Fund	42.16
				Total for Payment No.:		42.16

Payment No: 651999

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MICHAEL LOHMEYER	00496133	16809-11 Utility Refund	UTILITY REFUND	General Fund	41.86
				Total for Payment No.:		41.86

Payment No: 651933

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CARLOS TREVINO	00496255	79527-02 Utility Refund	UTILITY REFUND	General Fund	41.65
				Total for Payment No.:		41.65

Payment No: 651997

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MEYER, ANDREW	00496163	39169-12 Utility Refund	UTILITY REFUND	General Fund	41.57
				Total for Payment No.:		41.57

Payment No: 652086

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	FLEETPRIDE, INC.	00495893	75675353	PARTS-V#2996	Fleet Operation Fund	40.51
				Total for Payment No.:		40.51

Payment No: 651981

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	KONSTANTINOS SINANAS	00496260	79686-03 Utility Refund	UTILITY REFUND	General Fund	40.17
				Total for Payment No.:		40.17

Payment No: 652431

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	JOSEPH GARTNER III	00497699	17413JUL2021	CAP REIMURSEMENT - JULY 2021	General Fund	40.00
				Total for Payment No.:		40.00

Payment No: 652272

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	RANDY KENT	00497011	35349JUL2021	CAP REIMBURSE - JULY 2021	General Fund	40.00
				Total for Payment No.:		40.00

Payment No: 652270

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CONRAD REYNOLDS	00497010	2299JUL2021	CAP REIMBURSE - JULY 2021	General Fund	40.00
				Total for Payment No.:		40.00

Payment No: 652291

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	JOHN DANBY	00497304	33292-06 Utility Refund	UTILITY REFUND	General Fund	38.57
				Total for Payment No.:		38.57

Payment No: 652207

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FEDERAL EXPRESS	00496462	7-401-12642	AGRIHOOD CLOSING	Housing Successor	26.60

07/16/2021	FEDERAL EXPRESS	00496725	7-415-37464	MISC. RESOURCES SHIPPING	Electric Utility	11.10
Total for Payment No.:						37.70
Payment No: 652017						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	RAMDAS BANGALORE SATYAN	00496208	65259-27 Utility Refund	UTILITY REFUND	General Fund	37.50
Total for Payment No.:						37.50
Payment No: 651971						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JHENYU FANG	00496236	75721-07 Utility Refund	UTILITY REFUND	General Fund	36.31
Total for Payment No.:						36.31
Payment No: 652318						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ZHANG, YIMING	00497323	79600-02 Utility Refund	UTILITY REFUND	General Fund	36.14
Total for Payment No.:						36.14
Payment No: 652278						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	ASHWIN BANSOD	00497295	14055-16 Utility Refund	UTILITY REFUND	General Fund	35.96
Total for Payment No.:						35.96
Payment No: 652011						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	NICK DOMINGO	00496216	69233-02 Utility Refund	UTILITY REFUND	General Fund	35.60
Total for Payment No.:						35.60

Payment No: 651959

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HAOCHEN ZHANG	00496221	70828-20 Utility Refund	UTILITY REFUND	General Fund	35.57
				Total for Payment No.:		35.57

Payment No: 652346

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	D&M TRAFFIC SERVICES	00497107	79295	SIGNWORKS	General Fund	35.52
				Total for Payment No.:		35.52

Payment No: 652158

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	NATHAN A. RICHMOND	00496674	30323JUN2021	FY 20/21 SFTY BOOT/CLOTH REIMB	Electric Utility	34.84
				Total for Payment No.:		34.84

Payment No: 651987

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LORENA GOMEZ	00496244	77358-02 Utility Refund	UTILITY REFUND	General Fund	34.17
				Total for Payment No.:		34.17

Payment No: 651916

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	5 STAR DRY CLEANERS	00496149	28681-04 Utility Refund	UTILITY REFUND	General Fund	34.11
				Total for Payment No.:		34.11

Payment No: 652044

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	VARINDER GALOTRA	00496182	50274-02 Utility Refund A	UTILITY REFUND	General Fund	32.80

Total for Payment No.: 32.80

Payment No: 651918

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	AGARWAL, ADITYA	00496115	12497-08 Utility Refund	UTILITY REFUND	General Fund	31.83
Total for Payment No.:						31.83

Payment No: 651940

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHINTAN DESAI	00496175	47783-12 Utility Refund	UTILITY REFUND	General Fund	30.11
Total for Payment No.:						30.11

Payment No: 652189

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021		00497158	1078321	LEGAL SERVICES	Special Liability Insurance	30.00
Total for Payment No.:						30.00

Payment No: 652021

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SAI HARSHA JANDHYALA	00496204	61075-26 Utility Refund	UTILITY REFUND	General Fund	29.50
Total for Payment No.:						29.50

Payment No: 652248

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	SCP DISTRIBUTORS LLC	00496520	36023369	FAFCO REPAIR PLUG	Water Utility	28.95
Total for Payment No.:						28.95

Payment No: 652003

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MOMOTA EGAWA	00496246	78710-02 Utility Refund	UTILITY REFUND	General Fund	28.27
				Total for Payment No.:		28.27

Payment No: 652023

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SANJAY K LAXMAN	00496186	53816-12 Utility Refund	UTILITY REFUND	General Fund	27.60
				Total for Payment No.:		27.60

Payment No: 652283

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CHUNHONG LI	00497313	53128-08 Utility Refund	UTILITY REFUND	General Fund	27.04
				Total for Payment No.:		27.04

Payment No: 652022

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SANDEEP VOLLALA	00496199	60714-10 Utility Refund	UTILITY REFUND	General Fund	27.02
				Total for Payment No.:		27.02

Payment No: 651980

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	KOJI TAKAICHI	00496256	79639-02 Utility Refund	UTILITY REFUND	General Fund	26.96
				Total for Payment No.:		26.96

Payment No: 652366

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KALLCENTS	00496890	E42516063021	Monthly Q-Card	General Fund	26.75
				Total for Payment No.:		26.75

Payment No: 019937

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	COMCAST	00496892	6/27/21AC8155100091701239	COMCAST LIB 2635 HOMESTEAD RD	General Fund	26.74
				Total for Payment No.:		26.74

Payment No: 652259

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	THE HOME DEPOT PRO	00496529	623450525	JANITORIAL SUPPLIES	General Fund	26.55
				Total for Payment No.:		26.55

Payment No: 019968

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	PG&E	00496765	8733459618-3 JUN2021	GAS SVC 3025 RAYMOND MAY2021	Electric Utility	26.36
				Total for Payment No.:		26.36

Payment No: 651992

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MARCO SECCHI	00496160	37111-05 Utility Refund	UTILITY REFUND	General Fund	26.34
				Total for Payment No.:		26.34

Payment No: 651922

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ANAND ABHINAV MANOHAR KUMAR	00496201	60786-20 Utility Refund	UTILITY REFUND	General Fund	25.46
				Total for Payment No.:		25.46

Payment No: 652020

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ROBIN LOVELACE	00496228	72231-09 Utility Refund	UTILITY REFUND	General Fund	25.42

Total for Payment No.: 25.42

Payment No: 652294

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KEITH WONG	00497311	51706-03 Utility Refund	UTILITY REFUND	General Fund	25.17
Total for Payment No.:						25.17

Payment No: 651994

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MASATO TAKADA	00496232	75387-06 Utility Refund	UTILITY REFUND	General Fund	25.10
Total for Payment No.:						25.10

Payment No: 651942

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHUN, BENNETT	00496159	36070-14 Utility Refund	UTILITY REFUND	General Fund	24.29
Total for Payment No.:						24.29

Payment No: 652285

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	DANIEL JACOBUS JOSEF VAN ESCH	00497317	72081-16 Utility Refund	UTILITY REFUND	General Fund	23.39
Total for Payment No.:						23.39

Payment No: 651950

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	EDGAR TEJADA RODRIGUEZ	00496121	13197-10 Utility Refund	UTILITY REFUND	General Fund	22.85
Total for Payment No.:						22.85

Payment No: 651970

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JESSICA PUSATERI	00496238	76434-04 Utility Refund	UTILITY REFUND	General Fund	22.12
				Total for Payment No.:		22.12

Payment No: 651996

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MAURA CONROY	00496193	57775-20 Utility Refund	UTILITY REFUND	General Fund	21.95
				Total for Payment No.:		21.95

Payment No: 652045

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	VASILE MARIAN	00496129	14677-26 Utility Refund	UTILITY REFUND	General Fund	21.93
				Total for Payment No.:		21.93

Payment No: 651943

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CONRAD HYNES	00496113	11078-16 Utility Refund	UTILITY REFUND	General Fund	21.68
				Total for Payment No.:		21.68

Payment No: 651984

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LINH DO	00496114	11177-08 Utility Refund	UTILITY REFUND	General Fund	21.43
				Total for Payment No.:		21.43

Payment No: 651975

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JUANITA PINA	00496198	60339-09 Utility Refund	UTILITY REFUND	General Fund	20.07
				Total for Payment No.:		20.07

Payment No: 652057

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YUMA ITO	00496234	75582-05 Utility Refund	UTILITY REFUND	General Fund	19.67
				Total for Payment No.:		19.67

Payment No: 651964

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HELEN J LEONELLI	00496150	31099-01 Utility Refund	UTILITY REFUND	General Fund	19.22
				Total for Payment No.:		19.22

Payment No: 651989

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	M A SARODI	00496158	35155-01 Utility Refund	UTILITY REFUND	General Fund	19.16
				Total for Payment No.:		19.16

Payment No: 652048

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	WILLIAM PARKER	00496223	71634-05 Utility Refund	UTILITY REFUND	General Fund	17.54
				Total for Payment No.:		17.54

Payment No: 651929

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BENJAMIN WANNER	00496258	79659-02 Utility Refund	UTILITY REFUND	General Fund	16.64
				Total for Payment No.:		16.64

Payment No: 652050

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	XIAODONG WANG	00496136	20050-11 Utility Refund	UTILITY REFUND	General Fund	16.31

Total for Payment No.: 16.31

Payment No: 652008

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	NANCY CHUA	00496224	71639-10 Utility Refund	UTILITY REFUND	General Fund	15.62
Total for Payment No.:						15.62

Payment No: 652282

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CARMEL LIMAS	00497300	22125-09 Utility Refund	UTILITY REFUND	General Fund	15.47
Total for Payment No.:						15.47

Payment No: 652026

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SHIMUL CHAUDHARY	00496237	76400-06 Utility Refund	UTILITY REFUND	General Fund	15.15
Total for Payment No.:						15.15

Payment No: 652001

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MIT MEHTA	00496124	13549-13 Utility Refund	UTILITY REFUND	General Fund	14.03
Total for Payment No.:						14.03

Payment No: 651963

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	HE ZHOU	00496262	80605-02 Utility Refund	UTILITY REFUND	General Fund	14.01
Total for Payment No.:						14.01

Payment No: 651977

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	KANNO, STACY	00496142	24276-21 Utility Refund	UTILITY REFUND	General Fund	13.49
				Total for Payment No.:		13.49

Payment No: 652012

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	OMID BAGHERIEH	00496247	78806-05 Utility Refund	UTILITY REFUND	General Fund	13.07
				Total for Payment No.:		13.07

Payment No: 652295

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	KOUNDIMYA LANKA	00497320	78709-02 Utility Refund	UTILITY REFUND	General Fund	12.79
				Total for Payment No.:		12.79

Payment No: 652206

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	FEDERAL EXPRESS	00496727	7-423-50031	MISC. ENG SHIPPING	Electric Utility	12.66
				Total for Payment No.:		12.66

Payment No: 651974

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JOYCE CARSON	00496215	68899-15 Utility Refund	UTILITY REFUND	General Fund	12.38
				Total for Payment No.:		12.38

Payment No: 651935

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHENNING ZHANG	00496123	13466-18 Utility Refund	UTILITY REFUND	General Fund	12.00
				Total for Payment No.:		12.00

Payment No: 652489

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	KAVITA AGGARWAL	00498059	07/20/21 CLASS REFUND	PARKS DEPT REFUND	General Fund	12.00
				Total for Payment No.:		12.00

Payment No: 019811

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	BELL ELECTRICAL SUPPLY	00496402	5674361	SQZ PULLING LUBE	General Fund	11.45
				Total for Payment No.:		11.45

Payment No: 652007

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	NAN WANG	00496157	33677-22 Utility Refund	UTILITY REFUND	General Fund	10.97
				Total for Payment No.:		10.97

Payment No: 651993

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MARYELLEN GARCIA	00496153	32605-03 Utility Refund	UTILITY REFUND	General Fund	10.72
				Total for Payment No.:		10.72

Payment No: 651998

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MICHAEL CUPINO	00496243	77124-04 Utility Refund	UTILITY REFUND	General Fund	10.15
				Total for Payment No.:		10.15

Payment No: 652533

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/30/2021	VERIZON WIRELESS	00496990	9882629331	FIRE STADIUM WIRELESS	General Fund	10.02

Total for Payment No.: 10.02

Payment No: 652053

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YANG YU	00496253	79471-02 Utility Refund	UTILITY REFUND	General Fund	9.63
Total for Payment No.:						9.63

Payment No: 651969

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JAMES HAN	00496173	44905-05 Utility Refund	UTILITY REFUND	General Fund	9.21
Total for Payment No.:						9.21

Payment No: 652015

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	PRAKASH SWAIN	00496187	53875-16 Utility Refund	UTILITY REFUND	General Fund	8.78
Total for Payment No.:						8.78

Payment No: 651946

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	DANIEL ABEBE	00496219	70426-13 Utility Refund	UTILITY REFUND	General Fund	7.94
Total for Payment No.:						7.94

Payment No: 651983

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LEH REN SHIEH	00496191	57276-15 Utility Refund	UTILITY REFUND	General Fund	7.94
Total for Payment No.:						7.94

Payment No: 652145

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	GINA SAPORITO	00497025	29051JUL2021	MILEAGE TO LSAP PARK SITE	Parks And Recreation	7.84
				Total for Payment No.:		7.84

Payment No: 652036

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SUKANTA DAS	00496122	13204-28 Utility Refund	UTILITY REFUND	General Fund	7.54
				Total for Payment No.:		7.54

Payment No: 651936

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHI MILLER	00496239	76577-02 Utility Refund	UTILITY REFUND	General Fund	7.46
				Total for Payment No.:		7.46

Payment No: 652298

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	NELSON KICK	00497294	12688-32 Utility Refund	UTILITY REFUND	General Fund	7.43
				Total for Payment No.:		7.43

Payment No: 651938

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHIEN KUANG CHEN	00496196	58843-07 Utility Refund	UTILITY REFUND	General Fund	7.34
				Total for Payment No.:		7.34

Payment No: 651976

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	JUNGHOON LEE	00496217	69329-07 Utility Refund	UTILITY REFUND	General Fund	7.33
				Total for Payment No.:		7.33

Payment No: 652054

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	YANG, XIAOLU	00496250	79026-02 Utility Refund	UTILITY REFUND	General Fund	7.22
				Total for Payment No.:		7.22

Payment No: 652060

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ZHILONG CONG	00496240	76591-04 Utility Refund	UTILITY REFUND	General Fund	7.22
				Total for Payment No.:		7.22

Payment No: 652028

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SIMRANJEET ARORA	00496144	24781-22 Utility Refund	UTILITY REFUND	General Fund	6.85
				Total for Payment No.:		6.85

Payment No: 652280

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	CALVIN SHIU	00497293	12641-10 Utility Refund	UTILITY REFUND	General Fund	6.65
				Total for Payment No.:		6.65

Payment No: 651920

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	ALFRED DOMINGUEZ	00496179	49292-02 Utility Refund	UTILITY REFUND	General Fund	6.60
				Total for Payment No.:		6.60

Payment No: 652046

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	VIJAY KUMAR KOLA	00496195	58605-10 Utility Refund	UTILITY REFUND	General Fund	6.35

Total for Payment No.: 6.35

Payment No: 651986

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	LOGAN CHUN	00496220	70781-10 Utility Refund	UTILITY REFUND	General Fund	6.21
Total for Payment No.:						6.21

Payment No: 652035

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SUBHA KOMATH	00496118	13013-27 Utility Refund	UTILITY REFUND	General Fund	6.18
Total for Payment No.:						6.18

Payment No: 651941

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	CHUAN YUN	00496205	61081-16 Utility Refund	UTILITY REFUND	General Fund	6.09
Total for Payment No.:						6.09

Payment No: 652027

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SIDDAVEERASHARAN DEVARKAL	00496203	61009-17 Utility Refund	UTILITY REFUND	General Fund	6.00
Total for Payment No.:						6.00

Payment No: 652018

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	RAMENDHER BUSIREDDY	00496200	60732-17 Utility Refund	UTILITY REFUND	General Fund	6.00
Total for Payment No.:						6.00

Payment No: 652025

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	SERENA AGUILOS	00496190	56471-07 Utility Refund	UTILITY REFUND	General Fund	5.28
				Total for Payment No.:		5.28

Payment No: 652002

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/09/2021	MOHAMMAD YEKE YAZDANDOOST	00496261	79726-02 Utility Refund	UTILITY REFUND	General Fund	5.03
				Total for Payment No.:		5.03

Payment No: 652356

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/23/2021	FEDERAL EXPRESS	00496899	7-416-50883	MISC. SHIPPING DVR	Electric Utility	4.99
				Total for Payment No.:		4.99

Payment No: 652233

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
07/16/2021	ORLANDI TRAILER INC	00496491	199719	PARTS-V#2895	Fleet Operation Fund	4.36
				Total for Payment No.:		4.36

Overall Total 105,991,884.32



City of Santa Clara
List of All Bills and Claims Approved for Payment
From 08/01/2021 to 08/27/2021

Run Date 9/17/2021
Run Time 11:39:00 AM

Sorted by Payment Amount

Payment No: W22067

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	WT:GEO1 FIXED AUG21	Electric Utility	1,217,909.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	GEO1 VAR FY2021	Electric Utility	-1,250,212.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	GEO1 VAR AUG21	Electric Utility	53,103.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	GEO1 DEBT AUG21	Electric Utility	183,239.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CT FIXED AUG21	Electric Utility	213,607.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CT VAR FY2021	Electric Utility	-148,183.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CT VAR AUG21	Electric Utility	437,633.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	HYDRO FIXED AUG21	Electric Utility	556,059.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	HYDRO VAR FY2021	Electric Utility	-558,732.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	HYDRO VAR AUG21	Electric Utility	-17,600.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	HYDRO DEBT AUG21	Electric Utility	1,072,514.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	LEC FUEL FY2021	Electric Utility	506,281.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	LEC FUEL AUG21	Electric Utility	2,227,259.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	LEC VARIABLE FY2021	Electric Utility	-2,688,476.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	LEC VARIABLE AUG21	Electric Utility	122,721.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	LEC FIXED AUG21	Electric Utility	433,527.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	LEC DEBT AUG21	Electric Utility	632,943.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	POWER MGMT/JPA ASSESS FY2021	Electric Utility	-45,626.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	POWER MGMT/JPA ASSESS AUG21	Electric Utility	397,914.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	LEGISLATIVE/REGULATORY AUG21	Electric Utility	53,992.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	PASSTHRU-MEMBERSHIP DUES AUG21	Electric Utility	6,556.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	PASSTHRU-SUBSCRIPTIONS AUG21	Electric Utility	736.00

08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	PASSTHRU-CMUA EE REPORT FY2021	Electric Utility	-7,005.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CONTRACT SVC-CADMUS CONF 0185	Electric Utility	8,465.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CISO MKT EST FY2021	Electric Utility	5,781,980.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CISO MKT EST AUG21	Electric Utility	3,658,522.00
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CISO GMC JUN21,MAY21,OTHER	Electric Utility	213,937.79
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CISO MKT JUN21,MAY21,OTHER	Electric Utility	-3,286,648.89
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CISO XMN JUN21,MAY21,OTHER	Electric Utility	3,799,379.84
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CISO CRR JUN21,MAY21,OTHER	Electric Utility	-106,947.39
08/25/2021	NORTHERN CALIF POWER AGENCY	00499558	006002-0821025	CISO A/S JUN21,MAY21,OTHER	Electric Utility	-619,721.35
Total for Payment No.:						12,849,126.00

Payment No: W22048

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/05/2021	CA ENVIRONMENTAL PROTECTION	00497736	507JUL2021	BID GUARANTEE AUCTION#28 AUG21	Electric Utility	6,500,000.00
Total for Payment No.:						6,500,000.00

Payment No: W22059

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CITY OF SAN JOSE	00499399	1199535	WT:FY2021-22 Q1 OPERTS &MAINT	Sewer Utility	4,752,361.00
Total for Payment No.:						4,752,361.00

Payment No: W22060

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CITY OF SAN JOSE	00499401	1199536	WT:FY2021-22 Q1 CAPITAL BILLNG	Sewer Utility Construction	4,298,040.00
Total for Payment No.:						4,298,040.00

Payment No: 020273

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	TRI-DAM PROJECT	00498829	2021-7 SVP	ENERGY PURCH (HYDRO) JUL21	Electric Utility	2,263,775.22
08/27/2021	TRI-DAM PROJECT	00498830	2021-5T SVP	CREDIT ENGY PURCH (HYDRO)MAY21	Electric Utility	-1,430.82
				Total for Payment No.:		2,262,344.40

Payment No: W22063

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/24/2021	EDF TRADING NORTH AMERICA LLC	00498831	1604798	NAT GAS PURCH DVR JUL21	Electric Utility	1,897,120.67
08/24/2021	EDF TRADING NORTH AMERICA LLC	00498831	1604798	NAT GAS PURCH COGEN JUL21	Electric Utility	161,448.79
08/24/2021	EDF TRADING NORTH AMERICA LLC	00498831	1604798	NAT GAS PURCH GIA JUL21	Electric Utility	56,595.48
				Total for Payment No.:		2,115,164.94

Payment No: 652814

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PRISM	00498653	22400392	CYBER LIAB PROGRAM	Special Liability Insurance	88,638.00
08/13/2021	PRISM	00498654	22400565	POLLUTION PROGRAM	Special Liability Insurance	18,734.00
08/13/2021	PRISM	00498655	22400281	MASTER CRIME PROGRAM	Special Liability Insurance	12,391.00
08/13/2021	PRISM	00498656	22350013	GEN LIAB 2 PROGRAM	Special Liability Insurance	1,209,801.00
08/13/2021	PRISM	00498657	22400640	OPTIONAL EXCESS LIAB PROGRAM	Special Liability Insurance	330,329.00
				Total for Payment No.:		1,659,893.00

Payment No: W22062

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/23/2021	MSR ENERGY AUTHORITY	00498705	EA2039	NAT GAS PURCH DVR JUL21	Electric Utility	1,466,226.51
08/23/2021	MSR ENERGY AUTHORITY	00498705	EA2039	NAT GAS PURCH COGEN JUL21	Electric Utility	124,778.83
08/23/2021	MSR ENERGY AUTHORITY	00498705	EA2039	NAT GAS PURCH GIA JUL21	Electric Utility	43,740.91

Total for Payment No.: 1,634,746.25

Payment No: 002427

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ELECTRONIC FEDERAL TAX	00499064	07/25/21-08/07/21	DD: FED TAXES W/H B2116	Payroll Liability&ClearingAcct	1,028,030.80
08/13/2021	ELECTRONIC FEDERAL TAX	00499064	07/25/21-08/07/21	DD: FED TAXES W/H B2116	Payroll Liability&ClearingAcct	291,371.24
08/13/2021	ELECTRONIC FEDERAL TAX	00499064	07/25/21-08/07/21	DD: FED TAXES W/H B2116	Payroll Liability&ClearingAcct	288,133.51
Total for Payment No.:						1,607,535.55

Payment No: 002437

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ELECTRONIC FEDERAL TAX	00499708	08/08/21-08/21/21	DD: FED TAXES W/H B2117	Payroll Liability&ClearingAcct	1,012,534.97
08/27/2021	ELECTRONIC FEDERAL TAX	00499708	08/08/21-08/21/21	DD: FED TAXES W/H B2117	Payroll Liability&ClearingAcct	282,565.24
08/27/2021	ELECTRONIC FEDERAL TAX	00499708	08/08/21-08/21/21	DD: FED TAXES W/H B2117	Payroll Liability&ClearingAcct	277,479.86
Total for Payment No.:						1,572,580.07

Payment No: 002429

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/05/2021	CAL PERS - PO BOX 1982	00498646	07/11/21-07/24/21	EMPLOYER/EMPLOYEE DED B2115	Payroll Liability&ClearingAcct	475,699.75
08/05/2021	CAL PERS - PO BOX 1982	00498646	07/11/21-07/24/21	EMPLOYER/EMPLOYEE DED B2115	Payroll Liability&ClearingAcct	806,654.09
Total for Payment No.:						1,282,353.84

Payment No: 002422

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/02/2021	CAL PERS - PO BOX 1982	00498432	06/27/21-07/10/21	EMPLOYER/EMPLOYEE DED B2114	Payroll	793,591.72

08/02/2021	CAL PERS - PO BOX 1982	00498432	06/27/21-07/10/21	EMPLOYER/EMPLOYEE DED B2114	Liability&ClearingAcct Payroll Liability&ClearingAcct	468,277.24
Total for Payment No.:						1,261,868.96

Payment No: 002432

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/18/2021	CAL PERS - PO BOX 1982	00499501	07/25/21-08/04/21	EMPLOYER/EMPLOYEE DED B2116	Payroll Liability&ClearingAcct	465,895.82
08/18/2021	CAL PERS - PO BOX 1982	00499501	07/25/21-08/04/21	EMPLOYER/EMPLOYEE DED B2116	Payroll Liability&ClearingAcct	789,392.15
Total for Payment No.:						1,255,287.97

Payment No: W22056

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	MSR PUBLIC POWER AGENCY	00499265	080821	WT:BIG HORN ENERGY JUL21	Electric Utility	1,215,335.25
Total for Payment No.:						1,215,335.25

Payment No: W22061

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CITY OF SAN JOSE	00499413	1200141	WT:2021 APR-JUN RECYCLED WATER	Water Recycling Program	1,119,577.72
Total for Payment No.:						1,119,577.72

Payment No: W22054

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00499092	1839AUG2021	GARBAGE COLLECTION JULY 2021	Solid Waste Program	891,114.22
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00499092	1839AUG2021	CLEAN & GREEN COLLECTION JUL21	Solid Waste Program	203,377.05
Total for Payment No.:						1,094,491.27

Payment No: W22068

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	MSR PUBLIC POWER AGENCY	00499299	080221	WT:PUR PWER SAN JUAN AUG21 ACT	Electric Utility	12,415.55
08/27/2021	MSR PUBLIC POWER AGENCY	00499299	080221	PUR POWER SAN JUAN AUG21 ACT	Electric Utility	96,250.00
08/27/2021	MSR PUBLIC POWER AGENCY	00499299	080221	PUR POWER SAN JUAN AUG21 ACT	Electric Utility	810,577.60
08/27/2021	MSR PUBLIC POWER AGENCY	00499299	080221	RENEWABLE ADMIN COSTS AUG21	Electric Utility	40,544.60
				Total for Payment No.:		959,787.75

Payment No: 020276

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	US DEPT OF ENERGY	00498832	NNPB000270721S	COTP LOSSES-FIN STLMNTS JUL21	Electric Utility	37,446.64
08/27/2021	US DEPT OF ENERGY	00498832	NNPB000270721S	COTP LOSSES-FIN STLMNTS JUN21	Electric Utility	-886.01
08/27/2021	US DEPT OF ENERGY	00498833	NNPB000270721	POWER BILL JUL21	Electric Utility	811,296.41
08/27/2021	US DEPT OF ENERGY	00498833	NNPB000270721	WREGIS PASS-THRU CHGS JUL21	Electric Utility	181.58
				Total for Payment No.:		848,038.62

Payment No: 002425

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CAL PERS - HEALTH	00498431	AUG-21	HEALTH INSURANCE PREMIUMS	OPEB Plan Trust Fund	94,634.09
08/06/2021	CAL PERS - HEALTH	00498431	AUG-21	HEALTH INSURANCE PREMIUMS	Payroll Liability&ClearingAcct	738,899.40
				Total for Payment No.:		833,533.49

Payment No: W22058

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	RE ROSAMOND ONE LLC	00498660	00092	ENERGY PURCH (SOLAR) JUL21	Electric Utility	675,975.01
				Total for Payment No.:		675,975.01

Payment No: 020097

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	US BANK NATIONAL ASSOCIATION	00497778	EO&M000270821	CVP O&M FUNDING #10 FY2022	Electric Utility	631,850.87
				Total for Payment No.:		631,850.87

Payment No: 020236

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	AMERESCO	00498746	41760	ENERGY (FORWARD LF GAS) JUL21	Electric Utility	296,598.08
08/27/2021	AMERESCO	00498746	41760	FORWARD LF O&M CHG JUL21	Electric Utility	9,316.37
08/27/2021	AMERESCO	00498748	41759	ENERGY (VASCO LF GAS) JUL21	Electric Utility	305,931.02
08/27/2021	AMERESCO	00498748	41759	VASCO LF O&M CHARGE JUL21	Electric Utility	13,065.57
				Total for Payment No.:		624,911.04

Payment No: 020274

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	UNISYS CORP	00499512	M2107006	STADIUM OPERATIONS COSTS	General Fund	3,177.00
08/27/2021	UNISYS CORP	00499512	M2107006	INFORMATION TECHNOLOGY SERVICE	Information Technology Service	607,736.36
				Total for Payment No.:		610,913.36

Payment No: 652796

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GREENWASTE RECOVERY, INC	00498053	028468	SOLIDWASTE PROCESSING- JUNE 21	Solid Waste Program	10,271.18
08/13/2021	GREENWASTE RECOVERY, INC	00498053	028468	MUNICIPAL SOLID WASTE PROCESSI	Solid Waste Program	540,807.34
				Total for Payment No.:		551,078.52

Payment No: W22064

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/24/2021	SANTA CLARA VALLEY WATER DIST	00499535	TI002503	WT:2021 JULY - RINCONADA	Water Utility	546,080.76
Total for Payment No.:						546,080.76

Payment No: 020242

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CENTRAL 40 LLC	00498704	131576-2021-07	ENERGY PURCH (SOLAR) JUL21	Electric Utility	512,454.93
Total for Payment No.:						512,454.93

Payment No: 002426

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499065	07/25/21-08/07/21	DD: SIT & SDI W/H B2116	Payroll Liability&ClearingAcct	423,032.00
08/13/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499065	07/25/21-08/07/21	DD: SIT & SDI W/H B2116	Payroll Liability&ClearingAcct	33,420.68
Total for Payment No.:						456,452.68

Payment No: 002436

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499707	08/08/21-08/21/21	DD: SIT & SDI W/H B2117	Payroll Liability&ClearingAcct	30,357.59
08/27/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499707	08/08/21-08/21/21	DD: SIT & SDI W/H B2117	Payroll Liability&ClearingAcct	415,882.33
Total for Payment No.:						446,239.92

Payment No: W22052

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NATIONWIDE RETIREMENT SOLUTIONS, INC.	00499068	07/25/21-08/07/21	WT: B2116 DEFERRED COMP	Fringe Benefits	387,350.06
Total for Payment No.:						387,350.06

Payment No: 020232

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	TRANSMISSION AGENCY OF NORTHERN CA	00498564	JULY 2021	DEBT SERVICE (TANC) SEP21	Electric Utility	80,391.00
08/20/2021	TRANSMISSION AGENCY OF NORTHERN CA	00498564	JULY 2021	DEBT SERVICE (SOT) AUG21	Electric Utility	3,467.00
08/20/2021	TRANSMISSION AGENCY OF NORTHERN CA	00498564	JULY 2021	TANC A&G SEP21	Electric Utility	142,981.00
08/20/2021	TRANSMISSION AGENCY OF NORTHERN CA	00498564	JULY 2021	COTP O&M SEP21	Electric Utility	123,429.00
08/20/2021	TRANSMISSION AGENCY OF NORTHERN CA	00498564	JULY 2021	TANC CRR PROGRAM FEB/MAR21	Electric Utility	11,594.86
08/20/2021	TRANSMISSION AGENCY OF NORTHERN CA	00498564	JULY 2021	SOT FAC CHARGE JUL21	Electric Utility	4,057.83
08/20/2021	TRANSMISSION AGENCY OF NORTHERN CA	00498564	JULY 2021	SOT ADMIN COSTS JUN21	Electric Utility	3,307.48
Total for Payment No.:						369,228.17

Payment No: W22073

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	NATIONWIDE RETIREMENT SOLUTIONS, INC.	00499703	08/08/21-08/21/21	WT: B2117 DEFERRED COMP	Fringe Benefits	357,200.09
Total for Payment No.:						357,200.09

Payment No: 652892

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	DAVEY TREE SURGERY	00498600	915793428	TREE TRIMMING PWR LINES JUN21	Electric Utility	191,192.13
08/20/2021	DAVEY TREE SURGERY	00498600	915793428	DUMP FEES JUN21	Electric Utility	5,341.25
08/20/2021	DAVEY TREE SURGERY	00498601	915887815	TREE TRIMMING PWR LINES JUL21	Electric Utility	153,340.56
08/20/2021	DAVEY TREE SURGERY	00498601	915887815	DUMP FEES JUL21	Electric Utility	4,623.00
Total for Payment No.:						354,496.94

Payment No: 652926

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/20/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00498520	0161496-IN	PARTS-V#3028	Fleet Operation Fund	374.29
08/20/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00498628	0161298-IN	PARTS-V#3158	Fleet Operation Fund	337.98
08/20/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00498629	0161392-IN	PARTS-V#3028	Fleet Operation Fund	551.25
08/20/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00498630	0161489-IN	PARTS-V#3119	Fleet Operation Fund	600.99
08/20/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00498631	0161945-IN	PARTS-STOCK	Fleet Operation Fund	101.24
08/20/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00499263	0161974-IN	SCHWARZE MODEL A9 MONSOON SWEE	Vehicle Replacement Fund	318,582.80
08/20/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00499263	0161974-IN	CA TIRE FEE	Vehicle Replacement Fund	10.50
Total for Payment No.:						320,559.05

Payment No: 020157

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PARS/GASB 45	00498752	14589AUG2021	Monthly Contribution-JULY 2021	OPEB Plan Trust Fund	312,417.00
Total for Payment No.:						312,417.00

Payment No: 020061

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AMERESCO	00497932	41475	FORWARD LF O&M CHG JUN21	Electric Utility	9,316.37
08/06/2021	AMERESCO	00497932	41475	ENERGY (FORWARD LF GAS) JUN21	Electric Utility	300,514.01
Total for Payment No.:						309,830.38

Payment No: 020193

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	FRIANT POWER AUTHORITY	00498559	811	ENERGY PURCH (HYDRO1) JUL21	Electric Utility	85,035.94
08/20/2021	FRIANT POWER AUTHORITY	00498559	811	ENERGY PURCH (HYDRO2) JUL21	Electric Utility	214,705.80
Total for Payment No.:						299,741.74

Payment No: 020264

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	PG&E	00498683	6738869084-3 AUG2021	GAS TRANSPORT DVR JUL21	Electric Utility	297,805.69
				Total for Payment No.:		297,805.69

Payment No: W22057

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	MSR PUBLIC POWER AGENCY	00499267	080521	WT:BIG HORN SHAPING JUL21	Electric Utility	264,110.81
				Total for Payment No.:		264,110.81

Payment No: 652771

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BILL WILSON CENTER	00498724	ERAP-6-2021	BWC - CDBG-CV ERAP FUNDS; CHAN	H.U.D Capital Projects	92,351.25
08/13/2021	BILL WILSON CENTER	00498726	ERAP-5-2021	BWC - CDBG-CV ERAP FUNDS; CHAN	H.U.D Capital Projects	152,474.47
08/13/2021	BILL WILSON CENTER	00499049	FAS-6-2021	BWC - FAS FY20/21	H.U.D Capital Projects	7,848.00
				Total for Payment No.:		252,673.72

Payment No: 002433

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/04/2021	BANK OF AMERICA PROCUREMENT	00499671	PC0721AUTO	AMZN Mktp US 293OV5WA1 - Purch	Fleet Operation Fund	88.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499671	PC0721AUTO	STEVENS CREEK CHEVROLE - Purch	Fleet Operation Fund	210.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499671	PC0721AUTO	LED LIGHTING - Purchase	Fleet Operation Fund	424.94
08/04/2021	BANK OF AMERICA PROCUREMENT	00499671	PC0721AUTO	THE HOME DEPOT 0630 - Purchas	Fleet Operation Fund	4.41
08/04/2021	BANK OF AMERICA PROCUREMENT	00499671	PC0721AUTO	NEWSTRIPE, INC - Purchase	Fleet Operation Fund	1,726.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499671	PC0721AUTO	FONTIS SOLUTIONS - Purchase	Fleet Operation Fund	13.11
08/04/2021	BANK OF AMERICA PROCUREMENT	00499671	PC0721AUTO	LODI TRUCK AND EQUIPME - Purch	Fleet Operation Fund	264.29
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	EASYKEYSCOM INC - Purchase	Fleet Operation Fund	47.96

08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	UNI-SOURCE - Purchase	Fleet Operation Fund	328.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	UNI-SOURCE - Purchase	Fleet Operation Fund	67.93
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN MKTP US 2E0MN45R2 - Purch	Public Education and Governmnt	212.37
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SHERWIN WILLIAMS 70868 - Purch	Public Buildings	282.42
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	Public Buildings	106.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SHERWIN WILLIAMS 70868 - Purch	Public Buildings	88.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	28.96
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	29.76
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	KULLY SUPPLY - Purchase	General Fund	208.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	28.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	66.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	KELLYMOORE PAINT - Purchase	General Fund	16.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	32.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN MKTP US 295WK5AW1 - Purch	General Fund	39.23
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMAZON.COM 2983F9LQ1 A - Purch	General Fund	75.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMAZON.COM AMZN.COM BI - Cred	General Fund	-75.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	eBay O 04-07293-09228 - Purcha	General Fund	67.12
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	44.44
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	48.94
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	50.13
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	ANIXTER CLARK TRI-ED - Purch	General Fund	365.63
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN MKTP US 2E3M50R41 - Purch	General Fund	70.92
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN Mktp US 2E9DH4BJ2 - Purch	General Fund	136.10
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN MKTP US 291JQ7RU1 - Purch	General Fund	32.73
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	TAYLOR SECURITY - Purchase	General Fund	99.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	EKEYBLANKS.COM - Purchase	General Fund	31.45
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN MKTP US 2E86N7CS0 - Purch	General Fund	243.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	TAYLOR SECURITY - Purchase	General Fund	58.23
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN MKTP US 2E61N61X1 - Purch	General Fund	98.10

08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	59.38
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	23.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	CAMPBELL METAL SUPPLY - Purcha	General Fund	85.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	26.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	57.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	118.05
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMAZON.COM 299LW8R12 A - Purch	General Fund	38.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	eBay O 18-07341-76251 - Purcha	General Fund	49.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	27.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	83.39
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	166.77
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	38.44
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN Mktp US 297TD2RK2 - Purch	General Fund	271.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	H.L. FLAKE COMPANY - Purchase	General Fund	285.33
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	DOORLOCKS DI - Purchase	General Fund	79.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	E-TRAINING INC. - Purchase	General Fund	66.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	59.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SANTA CLARA LIGHTING - Purchas	General Fund	141.65
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	18.51
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	BELL ELECTRICAL SUPPLY - Purch	General Fund	343.59
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	90 STANDARD PLUMBING - Purchas	General Fund	46.86
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	16.74
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	CONLEFF PLUMBING SUPPL - Purch	General Fund	49.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	85.37
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	88.57
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	57.36
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	70.71
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	HARBOR FREIGHT TOOLS 3 - Purch	General Fund	65.43
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	ANCHOR ELECTRONICS - Purchase	General Fund	91.32

08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	UNITED REFRIG BR 409 - Purcha	General Fund	25.24
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	RUSSELL SIGLER INC - Purchase	General Fund	173.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	UNITED REFRIG BR 409 - Purcha	General Fund	159.02
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	34.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	13.07
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	UNITED REFRIG BR 409 - Purcha	General Fund	45.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	AMZN MKTP US 216Y14DS2 - Purch	General Fund	72.93
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SIGN BRACKET STORE - Purchase	General Fund	144.76
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	168.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	GIH GLOBALINDUSTRIALEQ - Purch	General Fund	1,096.64
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	BRADY WORLDWIDE INC. - Purchas	General Fund	42.49
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	GRAINGER - Purchase	General Fund	19.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	SUPPLYHOUSE.COM - Purchase	General Fund	129.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	28.86
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	9.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	65.65
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	90 STANDARD PLUMBING - Purchas	General Fund	72.52
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Fund	13.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	KELLYMOORE PAINT - Purchase	General Government - Other	132.02
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Government - Other	24.92
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	HD SUPPLY HIS 719 - Purchase	Solid Waste Program	327.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	eBay O 05-07344-79121 - Purcha	General Government - Other	15.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Government - Other	17.82
08/04/2021	BANK OF AMERICA PROCUREMENT	00499672	PC0721BLDG	THE HOME DEPOT 0630 - Purchas	General Government - Other	3.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	IAPMO - Purchase	Building New Dvlpmnt Svc Fee	300.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	ZOOM.US 888-799-9666 - Purchas	Building New Dvlpmnt Svc Fee	14.99

08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	RS HUGHES CO INC - Purchase	Building New Dvlpmnt Srcv Fee	86.63
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	READYREFRESH BY NESTLE - Purch	Building New Dvlpmnt Srcv Fee	101.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	ZOOM.US 888-799-9666 - Purchas	Building New Dvlpmnt Srcv Fee	14.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	WAVE - ACCESS TOOLKIT - Purch	Building Fee Admin Retainage	39.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	125.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	125.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499673	PC0721PLN2	EB 2021 CALIFORNIA AC - Purcha	Building Fee Admin Retainage	100.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499674	PC0721ATTY	SJ MERCURY NEWS CIRC - Purchas	General Fund	12.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499675	PC0721CLRK	IIMC - Purchase	General Fund	115.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	SPOTLIGHT IMPRESSIONS - Purcha	General Fund	171.83
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	POSTAL ANNEX 14024 - Purchase	General Fund	13.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	TARGET 00028308 - Purch	General Fund	20.10
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	AMZN MKTP US 295NO61J0 - Purch	General Fund	63.79
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	MENDOCINO FARMS 18ONLI - Purch	General Fund	231.15
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	TARGET 00028308 - Purch	General Fund	9.38
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	TERIYAKI MADNESS SANTA - Purch	General Fund	227.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	MILPITAS GROCERY OUT - Purchas	General Fund	52.11
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	THE SOURCING GROUP LLC - Purch	General Fund	261.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	CACITIES REGISTRATION - Purcha	General Fund	1,100.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	CACITIES REGISTRATION - Purcha	General Fund	550.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	PRINTIQUE.COM - Purchase	General Fund	55.87
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	NCPA EVENTS - Purchase	Electric Utility	875.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	NCPA EVENTS - Purchase	Electric Utility	875.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	SILVERADO RESORT - Purchase	Electric Utility	414.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	NCPA EVENTS - Purchase	Electric Utility	875.00

08/04/2021	BANK OF AMERICA PROCUREMENT	00499676	PC0721CNCL	SILVERADO RESORT - Purchase	Electric Utility	414.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	ZOOM.US 888-799-9666 - Purchas	Deposit Funds.	149.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	THE HANOVER INSU CE - Purcha	Deposit Funds.	1,780.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	THE HANOVER INSU CE - Purcha	Deposit Funds.	1,730.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	L2G SCC ENVMTL HEALTH - Purch	SCCC Capital Improvement Fund	438.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	FEDEX 92275805 - Purchase	General Fund	14.17
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	PUBLIC AGENCY RISK MAN - Purch	General Fund	150.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	SJ MERCURY NEWS CIRC - Purchas	General Fund	14.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	MOTION ARRAY MONTHLY - Purchas	General Fund	29.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	4IMPRINT - Purchase	General Fund	375.05
08/04/2021	BANK OF AMERICA PROCUREMENT	00499677	PC0721MNGR	ICMA ONLINE - Purchase	General Fund	720.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	PP FACEBOOK FACEBOOK A - Purch	Elec OperatingGrant Trust Fund	50.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	PP FACEBOOK FACEBOOK A - Purch	Elec OperatingGrant Trust Fund	100.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	Amazon Prime 297YM4ZW1 - Purch	Electric Utility	14.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	ZOOM.US 888-799-9666 - Purchas	Electric Utility	149.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	ZOOM.US 888-799-9666 - Purchas	Electric Utility	14.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	SILVERADO RESORT - Purchase	Electric Utility	356.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	NCPA EVENTS - Purchase	Electric Utility	875.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	Amazon Prime 2E4MH57X0 - Purch	Electric Utility	14.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	INTERNATIONAL TRANSACTION - Pu	Electric Utility	1.19
08/04/2021	BANK OF AMERICA PROCUREMENT	00499678	PC0721ELECT	TEAMWORK.COM PROJECTS - Purcha	Electric Utility	149.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	CONAX TECHNOLOGIES LLC - Purch	Electric Utility Construction	448.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	ZORO TOOLS INC - Purchase	Electric Utility Construction	148.83
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	ZORO TOOLS INC - Purchase	Electric Utility Construction	47.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SWAGELOK NORTHERN CALI - Purch	Electric Utility Construction	40.04

08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SWAGELOK NORTHERN CALI - Purch	Electric Utility Construction	311.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	THE HOME DEPOT 0630 - Purchas	Electric Utility Construction	205.59
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BELL ELECTRICAL SUPPLY - Purch	Electric Utility Construction	104.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	INSTRUMENTATION - Purchase	Electric Utility Construction	734.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GORDON ELECTRIC SUPPLY - Purch	Electric Utility Construction	361.43
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	THE HOME DEPOT 0630 - Purchas	Electric Utility Construction	380.26
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	AMAZON.COM 2947O5242 A - Purch	Electric Utility Construction	178.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	HOMEDEPOT.COM - Purchase	Electric Utility Construction	718.04
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	HOMEDEPOT.COM - Purchase	Electric Utility Construction	1,573.56
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	AMZN MKTP US 2E0LN3G11 - Purch	Electric Utility Construction	254.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	CONSOLIDATED PARTS INC - Purch	Electric Utility Construction	182.03
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	THE SPENCER TURBINE CO - Credi	Electric Utility	-21.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	AMZN Mktp US 292Y12JT0 - Purch	Electric Utility	337.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GRAINGER - Purchase	Electric Utility	104.04
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	ALLIED ELECTRONICS INC - Purch	Electric Utility	3,737.62
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MANUFACTURERS EDGE, IN - Purch	Electric Utility	122.44
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MANUFACTURERS EDGE, IN - Purch	Electric Utility	508.19
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GRAINGER - Purchase	Electric Utility	106.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GRAINGER - Purchase	Electric Utility	498.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SP GOLDENSTATECOMPRS - Purch	Electric Utility	211.30
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	FLOW AMERICA, LLC - Purchase	Electric Utility	2,406.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MCMMASTER-CARR - Purchase	Electric Utility	196.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MCMMASTER-CARR - Purchase	Electric Utility	196.31

08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	KOFFLER ELECTRICAL MEC - Purch	Electric Utility	3,002.03
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	HYDRAULIC CONTROLS INC - Purch	Electric Utility	1,810.44
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	INTERNATIONAL TRANSACTION - Pu	Electric Utility	19.38
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	TRANSCANADA TURBINES - Purchas	Electric Utility	2,421.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MOTION INDUSTRIES CA24 - Purch	Electric Utility	1,434.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	EVOQUA WATER TECHNOLOG - Purch	Electric Utility	1,649.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BURT PROCESS EQUIPMENT - Purch	Electric Utility	1,745.94
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	AMZN Mktp US 2E0E14381 - Purch	Electric Utility	107.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MCMASTER-CARR - Purchase	Electric Utility	1,117.29
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MCMASTER-CARR - Purchase	Electric Utility	185.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MCMASTER-CARR - Purchase	Electric Utility	437.54
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	NPC NEW PIG CORP - Purchase	Electric Utility	1,013.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GRAINGER - Purchase	Electric Utility	72.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MITCHELL INSTRUMENT CO - Purch	Electric Utility	386.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	THE HOME DEPOT 0630 - Purchas	Electric Utility	146.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	THE HOME DEPOT 0630 - Purchas	Electric Utility	255.29
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	THE HOME DEPOT 0630 - Purchas	Electric Utility	112.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BELL ELECTRICAL SUPPLY - Purch	Electric Utility	124.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	ZORO TOOLS INC - Purchase	Electric Utility	12.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BELL ELECTRICAL SUPPLY - Purch	Electric Utility	610.83
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GRAINGER - Purchase	Electric Utility	158.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	ZORO TOOLS INC - Purchase	Electric Utility	217.17
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	CISCO SYSTEMS INC - Purchase	Electric Utility	14.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SWAGELOK NORTHERN CALI - Purch	Electric Utility	565.51
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SWAGELOK NORTHERN CALI - Purch	Electric Utility	339.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SOL SNAP-ON INDUSTRIAL - Purch	Electric Utility	126.03
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BELL ELECTRICAL SUPPLY - Purch	Electric Utility	1,016.95

08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BUCKLES- SMITH ELECTRI - Purch	Electric Utility	20.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BELL ELECTRICAL SUPPLY - Purch	Electric Utility	639.96
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	BELL ELECTRICAL SUPPLY - Purch	Electric Utility	60.94
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SWAGELOK NORTHERN CALI - Purch	Electric Utility	829.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SWAGELOK NORTHERN CALI - Purch	Electric Utility	101.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	LOGMEIN GoToMeeting - Purchase	Electric Utility	14.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	MCMASTER-CARR - Purchase	Electric Utility	1,412.62
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SANTA CLARA WINDUSTRIA - Purch	Electric Utility	238.17
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	KELLY MOORE PAINTS0816 - Purch	Electric Utility	138.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SOL SNAP-ON INDUSTRIAL - Purch	Electric Utility	1,048.36
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	U SAVE ROCKERY - Purchase	Electric Utility	211.09
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GUARDIAN SAFETY AND SU - Purch	Electric Utility	2,037.84
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	SANTA CLARA WINDUSTRIA - Purch	Electric Utility	53.10
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	ACCUFORM.COM - Purchase	Electric Utility	926.64
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	AMAZON.COM 2E9UA1IT1 A - Purch	Electric Utility	16.53
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	GRAINGER - Purchase	Electric Utility	729.77
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	THE HOME DEPOT 0630 - Purchas	Electric Utility	22.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	ZORO TOOLS INC - Purchase	Electric Utility	1,144.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	U SAVE ROCKERY - Purchase	Electric Utility	147.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	IN BURLINGAME ENGINEE - Purch	Electric Utility	536.93
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	RM AUTOMATION INC-CLOV - Purch	Electric Utility	3,049.28
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	POWELL ELECTRICAL SYST - Purch	Electric Utility	612.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499679	PC0721ELEC	HACH COMPANY - Purchase	Electric Utility	2,122.13
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	BUCKLES- SMITH ELECTRI - Purch	Electric Utility Construction	1,308.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	BUCKLES- SMITH ELECTRI - Purch	Electric Utility Construction	1,220.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMAZON.COM 298NC43W0 A - Purch	Electric Utility Construction	239.19
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	BUCKLES- SMITH ELECTRI - Purch	Electric Utility Construction	263.73

08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	FASTENAL COMPANY 01CAS - Purch	Electric Utility Construction	3.82
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	METAL-WERX LLC - Purchase	Electric Utility Construction	50.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	FASTENAL COMPANY 01CAS - Purch	Electric Utility Construction	18.81
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	BUCKLES- SMITH ELECTRI - Purch	Electric Utility Construction	41.65
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	9.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	ANCHOR ELECTRONICS - Purchase	Electric Utility	3.27
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	112.12
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	VERIZON WRLS W2461-01 - Purcha	Electric Utility	65.46
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	CENTRAL VACUUM FACTORY - Purch	Electric Utility	187.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	BATTERIES PLUS 0475 - Purchas	Electric Utility	18.65
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	THE HOME DEPOT 0630 - Purchas	Electric Utility	3.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	COMCAST CALIFORNIA - Purchase	Electric Utility	66.18
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	BLUECOSMO - Purchase	Electric Utility	41.39
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	PHILIPS LIFELINE - Purchase	Electric Utility	48.27
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	atyourpaceonline.com - Purchas	Electric Utility	100.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMAZON.COM 2E7FY3ZH2 A - Purch	Electric Utility	25.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN MKTP US 2E1UI6BI2 - Purch	Electric Utility	65.46
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN MKTP US 292555NK1 - Purch	Electric Utility	41.37
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN MKTP US 2999H75Z1 - Purch	Electric Utility	32.68
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	CALIFORNIA SERVICE TOO - Purch	Electric Utility	304.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	CALIFORNIA SERVICE TOO - Purch	Electric Utility	165.30
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN Mktp US 291IC6RK2 - Purch	Electric Utility	30.76
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN Mktp US 297845UC2 - Purch	Electric Utility	29.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	TARGET.COM - Purchase	Electric Utility	27.26
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	STAPLES DIRECT - Purchase	Electric Utility	115.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	TARGET.COM - Purchase	Electric Utility	32.73
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	STAPLES DIRECT - Purchase	Electric Utility	327.88

08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN MKTP US 2E6455LG2 - Purch	Electric Utility	29.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN MKTP US 2E4405LV2 - Purch	Electric Utility	169.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN Mktp US 2E8H182B1 - Purch	Electric Utility	487.62
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN Mktp US 2E2T90X20 - Purch	Electric Utility	43.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN Mktp US - Credit	Electric Utility	-64.45
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	AMZN MKTP US 2E0NF5HP2 - Purch	Electric Utility	859.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	HNS HughesNet.com - Purchase	Electric Utility	119.94
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	CENTRAL COMPUTERS, INC - Purch	Electric Utility	42.29
08/04/2021	BANK OF AMERICA PROCUREMENT	00499680	PC0721EFLD	EMEDCO - Purchase	Electric Utility	110.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	VISTAPR VistaPrint.com - Purch	Elec OperatingGrant Trust Fund	447.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	WEB NETWORKSOLUTIONS - Credit	Electric Utility Construction	-1,559.74
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	SAFARI MICRO - Purchase	Electric Utility Construction	273.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	GE DIGITAL ENERGY - Purchase	Electric Utility Construction	322.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	WEB NETWORKSOLUTIONS - Purchas	Electric Utility Construction	132.96
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMZN Mktp US 296SC2YV1 - Purch	Electric Utility	667.22
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	SP ROKFORM.COM - Purchase	Electric Utility	69.83
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMZN Mktp US 2E91S4F60 - Purch	Electric Utility	906.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	ADOBE ACROPRO SUBS - Purchase	Electric Utility	24.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMAZON.COM 2E1KD6K30 A - Purch	Electric Utility	37.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	CARD QUEST INC - Purchase	Electric Utility	690.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	CARD QUEST INC - Purchase	Electric Utility	740.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMZN MKTP US 298TO4W10 - Purch	Electric Utility	123.06
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMZN MKTP US 2984B29F2 - Purch	Electric Utility	15.24
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	USPS PO 0569480201 - Purchase	Electric Utility	146.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	BZB EXPRESS - Purchase	Electric Utility	1,505.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMZN MKTP US 292P59M90 - Purch	Electric Utility	35.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMAZON.COM 2932811D2 A - Purch	Electric Utility	7.82

08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	BLUEBEAM INC - Purchase	Electric Utility	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	DMI DELL K-12 GOVT - Purchas	Electric Utility	2,311.27
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	EVENT ELEVATE 2021 - Purchase	Electric Utility	69.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	EVENT ELEVATE 2021 - Purchase	Electric Utility	69.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	HNS HughesNet.com - Purchase	Electric Utility	96.94
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	EUCI - Purchase	Electric Utility	1,195.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	ATT BILL PAYMENT - Purchase	Electric Utility	74.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	WPY Bay Hauling Juanba - Purch	Electric Utility	200.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	DTV DIRECTV SERVICE - Purchase	Electric Utility	240.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMZN MKTP US 298HB25J1 - Purch	Electric Utility	12.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	AMAZON.COM 298K53L80 A - Purch	Electric Utility	216.49
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	PROGRESS SOFTWARE CORP - Purch	Electric Utility	295.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499681	PC0721EREC	SP ROKFORM.COM - Purchase	Electric Utility	138.56
08/04/2021	BANK OF AMERICA PROCUREMENT	00499682	PC0721ENGN	THE SOURCING GROUP LLC - Purch	Streets And Highways	745.52
08/04/2021	BANK OF AMERICA PROCUREMENT	00499682	PC0721ENGN	OWPSACSTATE - Purchase	General Fund	95.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	SJ MERCURY NEWS CIRC - Purchas	General Fund	14.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	SERVICE SPRING CORP, D - Purch	Sewer Utility	246.05
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	EMEDCO - Purchase	Electric Utility	49.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	EMEDCO - Purchase	Electric Utility	49.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	THE HOME DEPOT 0630 - Purchas	Electric Utility	35.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	THE HOME DEPOT PRO - Purchase	Other City Dept Op Grant Fund	4,708.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	AMZN MKTP US 2E7XM6KX0 - Purch	Other City Dept Op Grant Fund	108.02
08/04/2021	BANK OF AMERICA PROCUREMENT	00499683	PC0721FINC	STAPLES 00107193 - Purch	Electric Utility	54.67
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	PIONEER GAS - Purchase	General Fund	49.52
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	LOS BANOS - Purchase	General Fund	58.60
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	CATHYS VALLEY FOOD - Purchas	General Fund	67.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	CHEVRON 0379849 - Purchase	General Fund	90.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMERICAN HEART SHOPCPR -	General Fund	261.35

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08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	USPS.COM CLICKNSHIP - Purchase	General Fund	7.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	SAFCO DENTAL SUPPLY - Purchase	General Fund	281.21
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	RESCUEDIRECT - Purchase	General Fund	141.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	ALERT ALL CORP - Purchase	General Fund	734.41
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	SETMOREAPPOINTMENTS - Purchase	General Fund	25.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	SQ NORTHERN CALIFORNI - Purch	General Fund	65.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	INT'L CODE COUNCIL INC - Purch	General Fund	132.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	DTV DIRECTV SERVICE - Purchase	General Fund	81.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	NI GOVERNMENT SERVICES - Purch	General Fund	77.37
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	GRAINGER - Purchase	General Fund	15.12
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	GRAINGER - Purchase	General Fund	2,548.39
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	COSTCO DELIVERY 848 - Purchas	General Fund	668.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	FASTRAK VIOLATION CENT - Purch	General Fund	70.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN MKTP US 291QI0IM2 - Purch	General Fund	141.84
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMAZON.COM 291CG9IV2 A - Purch	General Fund	46.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	READYREFRESH BY NESTLE - Purch	General Fund	33.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	IN THE ED. JONES COMP - Purch	General Fund	1,591.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	ENDEAVOR STORAGE CONTA - Purch	General Fund	87.30
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	READYREFRESH BY NESTLE - Purch	General Fund	60.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	ALSCO INC. - Purchase	General Fund	1,863.48
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	THIRD EAR SOUND COMPAN - Credi	General Fund	-4,084.39
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	COSTCO DELIVERY 848 - Purchas	General Fund	366.13
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	DTV DIRECTV SERVICE - Purchase	General Fund	81.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	DTV DIRECTV SERVICE - Purchase	General Fund	122.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	DTV DIRECTV SERVICE - Purchase	General Fund	122.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	TST ATHENA GRILL - Purchase	General Fund	131.66

08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN MKTP US 2903X71N0 - Purch	General Fund	10.87
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN MKTP US 294VW91E0 - Purch	General Fund	9.81
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	ADOBE 800-833-6687 - Credit	General Fund	-14.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	SMK SURVEYMONKEY.COM - Purchas	General Fund	346.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	IN FIRST RESPONDERS R - Purch	General Fund	268.63
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN MKTP US 2E5KY8H42 - Purch	General Fund	7.63
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	TST ATHENA GRILL - Purchase	General Fund	105.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN MKTP US 292D75RO1 - Purch	General Fund	21.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	4TH ST. PIZZA CO - Purchase	General Fund	477.29
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN Mktp US 2E5XH0TR1 - Purch	General Fund	303.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMAZON.COM 291KX61N2 A - Purch	General Fund	21.76
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN MKTP US 298TT81Z2 - Purch	General Fund	29.01
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN Mktp US 295O42W41 - Purch	General Fund	21.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	AMZN Mktp US 2E49W6C52 - Purch	General Fund	30.60
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	DROPBOX L39S6SD5SFRZ - Purchas	General Fund	19.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	ALIMED - Credit	Other City Dept Op Grant Fund	-130.57
08/04/2021	BANK OF AMERICA PROCUREMENT	00499684	PC0721FIRE	GRAINGER - Purchase	Other City Dept Op Grant Fund	2,982.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	YOURMEMBER-CAREERS - Purchase	Water Utility	239.20
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	BROWN AND CALDWELL - Purchase	Water Utility	160.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	TARGET 00028308 - Purch	General Fund	37.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	YOURMEMBER-CAREERS - Purchase	Water Utility	239.20
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	ZOOM.US 888-799-9666 - Purchas	General Fund	14.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	CONCERN E A P - Purchase	General Fund	550.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	YOURMEMBER-CAREERS - Purchase	Sewer Utility	59.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	BROWN AND CALDWELL - Purchase	Sewer Utility	40.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499685	PC0721HREC	YOURMEMBER-CAREERS - Purchase	Sewer Utility	59.80

08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Amazon-Screen for Council Cham	Public Education and Governmnt	240.06
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Amazon-laptop cooling pads and	Public Education and Governmnt	79.62
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Amazon-screens for Council Cha	Public Education and Governmnt	2,040.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Amazon-iPad case for CMO Commu	Public Education and Governmnt	13.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	AMAZON-cable for CMO Communica	Public Education and Governmnt	18.54
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Amazon-wall plug for CMO Commu	Public Education and Governmnt	10.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Adobe Pro for DPW-Gustavo Gome	General Fund	57.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Adobe Pro for DPW-Rebecca Robi	General Fund	57.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Adobe Pro for DPW-Mark Silva	General Fund	57.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Adobe Pro for HR-Iulia Panescu	General Fund	57.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	GODADDY.COM - Linux Hosting mo	Information Technology Service	10.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	CLOUDFLARE - security software	Information Technology Service	200.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	GODADDY.COM - domain renewal-s	Information Technology Service	21.17
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	HOOTSUITE-monthly renewal	Information Technology Service	75.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	ZOOM-monthly renewal	Information Technology Service	814.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	Amazon-PC Mounting Brackets	General Government - Other	205.36
08/04/2021	BANK OF AMERICA PROCUREMENT	00499686	PC0721INFO	GODADDY.COM - domain renewal-j	Information Technology Service	21.17
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	MICHAELS STORES 5155 - Purchas	General Fund	14.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMZN Mktp US 296UX9GD1 - Purch	General Fund	15.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMAZON.COM 219W56RU2 A - Purch	General Fund	35.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMZN MKTP US 2E0W23FH2 - Purch	General Fund	51.64
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	Amazon Prime 2E5D27QW1 - Purch	General Fund	14.18
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	COMCAST CALIFORNIA - Purchase	General Fund	17.44

08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	ADORAMA INC. - Purchase	General Fund	90.64
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	ADORAMA INC. - Purchase	General Fund	135.01
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMZN MKTP US 2E7FE3GB0 - Purch	General Fund	15.26
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	THE SOURCING GROUP LLC - Purch	General Fund	152.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	OFFICE DEPOT 1135 - Purchase	General Fund	155.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	MOBILE BEACON - Purchase	General Fund	960.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMZN Mktp US 2E5JC7F60 - Purch	General Fund	28.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	TECHSOUP - Purchase	General Fund	150.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMAZON.COM 2E8G99JK2 A - Purch	General Fund	265.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMZN MKTP US 2P4XE34B1 - Purch	General Fund	280.23
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	NATIONAL AUDUBON SOCIE - Purch	General Fund	30.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	PAYPAL DCARA - Purchase	General Fund	200.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	SQ SIGN GYPSIES SANTA - Purch	General Fund	99.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	SQ SIGN GYPSIES SANTA - Purch	General Fund	99.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMZN MKTP US 218UR9DH2 - Purch	Library Operating Grant Fund	38.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	SMK SURVEYMONKEY.COM - Purchas	Library Operating Grant Fund	372.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	MOBILE BEACON - Purchase	Library Operating Grant Fund	360.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	BELL ELECTRICAL SUPPLY - Purch	Library	1,417.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	BELL ELECTRICAL SUPPLY - Purch	Library	708.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMZN MKTP US 2E1WA47V1 - Purch	Other City Dept Op Grant Fund	42.48
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMAZON.COM 298KS2NT1 A - Purch	Library Operating Grant Fund	10.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMAZON.COM 296CD8VK0 A - Purch	Library Operating Grant Fund	9.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499687	PC0721LIBR	AMAZON.COM 291GB7AV2 A - Purch	Library Operating Grant Fund	9.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	IMPERIAL SPRINKLER -15 - Purch	Cemetery	375.21
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	U SAVE ROCKERY - Purchase	Cemetery	526.37
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	U SAVE ROCKERY - Purchase	Cemetery	526.37

08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CENTRAL WHOLESALE NURS - Purch	Cemetery	312.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	LOWES 00907 - Purchase	Cemetery	247.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CAPITOL WHOLESALE NURS - Purch	Cemetery	285.15
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	ZANKER LANDSCAPE MATER - Purch	Cemetery	98.44
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CENTRAL WHOLESALE NURS - Purch	Cemetery	135.41
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	Cemetery	71.76
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CENTRAL WHOLESALE NURS - Purch	Cemetery	2,028.73
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	GRAINGER - Purchase	Cemetery	1,064.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	USPS PO 0569480201 - Purchase	Cemetery	165.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CA PARK REC SOCIETY - Purchase	General Fund	595.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	AMAZON.COM 2155N59V2 A - Purch	General Fund	28.32
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	AMZN Mktp US 217F27U62 - Purch	General Fund	18.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	LOWES 02211 - Purchase	General Fund	37.69
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	LOWES 02211 - Purchase	General Fund	56.76
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	LOWES 02211 - Purchase	General Fund	165.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE SOURCING GROUP LLC - Purch	General Fund	141.86
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	AMZN MKTP US 299256FS2 - Purch	General Fund	26.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	477.04
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	AMSOIL - Purchase	General Fund	395.21
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	STAPLES 00107193 - Purch	General Fund	72.15
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	LOWES 02211 - Purchase	General Fund	150.53
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	254.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	139.45
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE UPS STORE 4636 - Purchase	General Fund	8.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	LOWES 02211 - Purchase	General Fund	34.24
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	HOMEDEPOT.COM - Purchase	General Fund	87.81
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0640 - Purchas	General Fund	71.89

08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	ARCMATE MFG CORP - Purchase	General Fund	424.77
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	GOT PEE BY HEALTH TECH - Purch	General Fund	562.21
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	460.20
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	85.84
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	58.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	51.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	HOMEDEPOT.COM - Purchase	General Fund	480.15
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	56.13
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	AQUABOND LLC - Purchase	General Fund	60.51
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	BOETHING TREELAND LODI - Purch	Parks And Recreation	843.12
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	AMZN MKTP US 2902Q5HM1 - Purch	General Fund	97.52
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CENTRAL WHOLESALE NURS - Purch	Parks And Recreation	229.43
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	98.69
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0630 - Purchas	General Fund	304.46
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	AMZN MKTP US AMZN.COM - Cred	General Fund	-97.52
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	90 STANDARD PLUMBING - Purchas	General Fund	44.64
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	FIRE HOSE DIRECT - Purchase	General Fund	1,260.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	THE HOME DEPOT 0640 - Purchas	General Fund	10.87
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CA PARK REC SOCIETY - Purchase	General Fund	125.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CVS PHARMACY 09793 - Purchas	General Fund	14.82
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CA PARK REC SOCIETY - Purchase	General Fund	125.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	DAL-TILE 121 SAN JOSE - Purch	General Fund	272.30
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CA DEPT PEST REGS LICE - Purch	General Fund	450.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CA PARK REC SOCIETY - Purchase	General Fund	595.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499688	PC0721PARK	CA PARK REC SOCIETY - Purchase	General Fund	595.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499689	PC0721PLN1	AMERICAN PLANNING ASSO - Purch	General Fund	68.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499689	PC0721PLN1	AMZN Mktp US 292712I80 - Purch	General Fund	201.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PEAVEY CORP. - Purchase	Police Operating Grant Fund	134.90

08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	TRITECH FORENSICS - Purchase	Police Operating Grant Fund	107.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON SAN DIEGO - Purchase	General Fund	704.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON SAN DIEGO - Purchase	General Fund	779.74
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	429.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	GPS C L E A R S INC - Purchase	General Fund	8.61
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	EVENT UNITED TACTICAL - Purch	General Fund	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	GPS C L E A R S INC - Purchase	General Fund	325.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 23585 - Purchase	General Fund	28.69
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL TACOSELCOMP - Purchase	General Fund	3,068.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	IN TACFLOW COMBATIVES - Purch	General Fund	2,300.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	422.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SOUTHWES 5261411955090 - Purc	General Fund	211.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	422.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	422.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	422.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	DOUBLETREE HOTELS - Purchase	General Fund	426.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL KTLIC - Purchase	General Fund	425.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SO PT HOTEL AND CASINO - Purch	General Fund	73.45
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	422.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	422.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	422.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SQ CRAMER'S BAGELS - Purchase	General Fund	47.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 23585 - Purchase	General Fund	28.69

08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Credit	General Fund	-389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	MARRIOTT VISALIA CONV - Purcha	General Fund	504.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	MARRIOTT VISALIA CONV - Purcha	General Fund	504.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	EMBASSY SUITES - Purchase	General Fund	474.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	MARRIOTT VISALIA CONV - Purcha	General Fund	504.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SIG SAUER INC - Purchase	General Fund	270.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PIZZA MY HEART - BELLO - Purch	General Fund	107.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CAFE ROSALENA - Purchase	General Fund	128.92
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	IN N OUT BURGER 240 - Purchase	General Fund	25.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	JN TACTICAL - Purchase	General Fund	170.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	BROWNELLS INC - Purchase	General Fund	516.85
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RANGE SYSTEMS - Purchase	General Fund	209.55
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	AMZN MKTP US 2935P0MY0 - Purch	General Fund	347.02
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	GUNSAFES - Purchase	General Fund	326.04
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	THE HOME DEPOT 0630 - Purchas	General Fund	72.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ACTION TARGETS - Purchase	General Fund	355.56
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ROYAL ARMS INTERNATIONAL - Purch	General Fund	290.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	BROWNELLS INC - Purchase	General Fund	208.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	MIDWEST GUN WORKS INC - Purcha	General Fund	77.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ACTION TARGETS - Purchase	General Fund	10.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	BROWNELLS INC - Credit	General Fund	-50.49
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	VANG COMP SYSTEMS - Purchase	General Fund	346.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL ESSTAC ESSTAC - Purcha	General Fund	343.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	WILSON S GUN SHOP, INC - Purch	General Fund	477.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ZOOM.US 888-799-9666 - Purchas	General Fund	54.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ZOOM.US 888-799-9666 - Purchas	General Fund	83.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ZOOM.US 888-799-9666 - Purchas	General Fund	11.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	DOCUSIGN - Purchase	General Fund	60.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CHIPOTLE ONLINE - Purchase	General Fund	116.89

08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PETCO 1204 63512040 - Purch	General Fund	52.33
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PIZZA MY HEART - GREAT - Purch	General Fund	114.60
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 23585 - Purchase	General Fund	6.69
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	TOGO'S 332698 - Purchase	General Fund	41.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	STARBUCKS STORE 05686 - Purcha	General Fund	17.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	saferestrains.com - Purchase	General Fund	2,125.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CHICK-FIL-A 02807 - Purchase	General Fund	260.20
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	HUNGRY HOUND Q77 - Purch	General Fund	200.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	EXXONMOBIL 98706013 - Purch	General Fund	78.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CHEVRON 0352017 - Purchase	General Fund	70.01
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CHEVRON 0090049 - Purchase	General Fund	20.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	AMZN MKTP US 2E9XP1C21 - Purch	General Fund	181.36
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ATT COURT ORDER CHGS - Purchas	General Fund	150.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	AMZN MKTP US 2E4K68FK1 - Purch	General Fund	45.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ATT COURT ORDER CHGS - Purchas	General Fund	220.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ULINE SHIP SUPPLIES - Purcha	General Fund	143.44
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	TRITECH FORENSICS - Purchase	General Fund	200.61
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	AMAZON.COM 291LW6TZ1 A - Purch	General Fund	119.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	USPS PO 0569480201 - Purchase	General Fund	10.55
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	UBER TRIP - Purchase	General Fund	60.58
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ROSEN HOTELS SHNGL CRK - Purch	General Fund	810.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ADAMSON POLICE PRODUCT - Purch	General Fund	530.12
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	LC Action Police Suppl - Purch	General Fund	3,863.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ATLAS BUSINESS SOLUTIO - Purch	General Fund	205.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	FASTRAK VIOLATION CENT - Purch	General Fund	25.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	FASTRAK VIOLATION CENT - Purch	General Fund	26.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	Amazon Prime - Credit	General Fund	-13.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	Amazon Prime 2E1G982E1 - Purch	General Fund	129.86

08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	AMZN MKTP US 2E6C96KL1 - Purch	General Fund	128.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SUMMIT UNIFORMS CORP - Purchas	General Fund	42.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	Amazon Prime 2E89G8XF0 - Purch	General Fund	14.18
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	THE HOME DEPOT 0630 - Purchas	General Fund	69.63
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	THE HOME DEPOT 0630 - Purchas	General Fund	155.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	THE HOME DEPOT 0630 - Purchas	General Fund	166.49
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	NOAH'S BAGELS 2802 - Purchase	General Fund	24.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 14236 - Purchase	General Fund	7.62
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SQ CRAMER'S BAGELS - Purchase	General Fund	30.14
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	OPTICSPLANET, INC. - Purchase	General Fund	99.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	BEST BUY 00008516 - Purch	General Fund	328.19
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	THE HOME DEPOT 0630 - Purchas	General Fund	193.31
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 14236 - Purchase	General Fund	15.24
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SAFEWAY 0763 - Purchase	General Fund	82.22
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	THE HOME DEPOT 0630 - Purchas	General Fund	472.52
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	WALGREENS 2384 - Purchase	General Fund	17.41
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ACTION TARGETS - Purchase	General Fund	375.01
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	JOANN STORES 605 - Purchase	General Fund	34.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	THE HOME DEPOT 0630 - Purchas	General Fund	93.62
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RESIDENCE INN SAN MARC - Purch	General Fund	413.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SAFEWAY 0763 - Purchase	General Fund	14.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RESIDENCE INN SAN MARC - Purch	General Fund	466.62
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	DOLLAR TREE - Purchase	General Fund	111.61
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	Tiffany Cleaners - Purchase	General Fund	86.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ID WHOLESALER - Purchase	General Fund	297.24
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SPRINGHILL SUITES PASO - Purch	General Fund	960.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	STARBUCKS STORE 05619 - Purcha	General Fund	107.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SPRINGHILL SUITES PASO - Purch	General Fund	960.75
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SOUTHWES 5261403141277 - Purc	General Fund	201.96

08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	IN THIRD DEGREE COMMU - Purch	General Fund	750.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	IN THIRD DEGREE COMMU - Purch	General Fund	375.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	537.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	537.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	537.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	537.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	537.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	RED ROCK ADV ROOM DEP - Purcha	General Fund	537.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CA HOMICIDE INVESTIGAT - Purch	General Fund	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CA HOMICIDE INVESTIGAT - Purch	General Fund	30.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CA HOMICIDE INVESTIGAT - Purch	General Fund	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CA HOMICIDE INVESTIGAT - Purch	General Fund	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CA HOMICIDE INVESTIGAT - Purch	General Fund	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CA HOMICIDE INVESTIGAT - Purch	General Fund	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CA HOMICIDE INVESTIGAT - Purch	General Fund	349.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	IN FORZA FORENSICS, L - Purch	General Fund	2,432.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	EB CRISIS NEGOTIATION - Credit	General Fund	-249.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	1,690.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Credit	General Fund	-281.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SHERATON GARDEN GROVE - Purcha	General Fund	1,690.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SOUTH BAY PUBLIC SAFET - Purch	General Fund	433.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ALASKA A 0272187574047 - Purc	General Fund	496.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ALASKA A 0272187661758 - Purc	General Fund	116.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ALASKA A 0272187573697 - Purc	General Fund	146.79
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SOUTHWES 5261405881284 - Purc	General Fund	185.95

08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ALASKA A 0272187573633 - Purc	General Fund	146.79
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	OAKLAND MARRIOTT CITY - Purcha	General Fund	647.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	ALASKA A 0272187662113 - Purc	General Fund	116.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	MARIN CONSULTING ASSOC - Purch	General Fund	375.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	MARRIOTT MISSION VALLE - Purch	General Fund	703.26
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL WILLIAMSKEY - Purchase	General Fund	124.13
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL KTLIC - Purchase	General Fund	149.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL PRIMALRESPO - Purchase	General Fund	900.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	HAMPTON INN - Purchase	General Fund	197.86
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL POLICE RECO - Purchase	General Fund	250.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	HAMPTON INN - Purchase	General Fund	197.86
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	STARBUCKS STORE 05619 - Purcha	General Fund	305.15
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SQ CRAMER'S BAGELS - Purchase	General Fund	29.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL KTLIC - Purchase	General Fund	425.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 23585 - Purchase	General Fund	14.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SQ CRAMER'S BAGELS - Purchase	General Fund	40.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SAFEWAY 1455 - Purchase	General Fund	18.51
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	PAYPAL TACTICALENE - Purchase	General Fund	1,465.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SQ CRAMER'S BAGELS - Purchase	General Fund	35.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 23585 - Purchase	General Fund	14.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 23585 - Purchase	General Fund	14.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00

08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	CRPOA - Purchase	General Fund	389.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	7-ELEVEN 23585 - Purchase	General Fund	28.69
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SQ CRAMER'S BAGELS - Purchase	General Fund	22.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SQ CRAMER'S BAGELS - Purchase	General Fund	48.09
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	STARBUCKS 800-782-7282 - Purch	General Government - Other	35.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	SAFEWAY 0763 - Purchase	General Government - Other	21.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	STARBUCKS 800-782-7282 - Purch	General Government - Other	35.90
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	AMAZON.COM 290KX0GX2 A - Purch	General Government - Other	109.10
08/04/2021	BANK OF AMERICA PROCUREMENT	00499690	PC0721POLC	BARCODESINC - Purchase	General Government - Other	682.66
08/04/2021	BANK OF AMERICA PROCUREMENT	00499691	PC0721PINV	BASS PRO ONLINE U.S. - Purchas	General Fund	435.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499691	PC0721PINV	THE HOME DEPOT 0630 - Purchas	General Fund	19.58
08/04/2021	BANK OF AMERICA PROCUREMENT	00499691	PC0721PINV	BASS PRO ONLINE U.S. - Purchas	General Fund	436.49
08/04/2021	BANK OF AMERICA PROCUREMENT	00499691	PC0721PINV	STAPLES DIRECT - Purchase	General Fund	30.74
08/04/2021	BANK OF AMERICA PROCUREMENT	00499691	PC0721PINV	SP RUBBERSTAMPS.COM - Purcha	General Fund	20.12
08/04/2021	BANK OF AMERICA PROCUREMENT	00499691	PC0721PINV	MEDVET CAMPBELL - Purchase	General Fund	631.65
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SMART AND FINAL 448 - Purchase	Deposit Funds.	23.58
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	THE HOME DEPOT 0630 - Purchas	Cemetery	57.81
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	COSTCO DELIVERY 848 - Purchas	Park and Rec Opr GrantTst Fund	310.25
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SAFEWAY 0763 - Purchase	General Fund	3.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 2905W6MX0 - Purch	General Fund	13.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 293406M80 - Purch	General Fund	91.47
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	WWW COSTCO COM - Purchase	General Fund	360.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 2E30534O1 - Purch	General Fund	108.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	IN THEMIRRORCOMPANY.C - Purch	General Fund	743.12
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMAZON.COM 2E3HG6GO1 A - Purch	General Fund	58.92
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SMART AND FINAL 448 - Purchase	Park and Rec Opr GrantTst Fund	15.98

08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SMART AND FINAL 448 - Purchase	General Fund	17.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SMART AND FINAL 448 - Purchase	General Fund	39.06
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SAFEWAY 0700 - Purchase	General Fund	4.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 2974X5PE1 - Purch	General Fund	18.55
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SAFEWAY 0700 - Purchase	General Fund	4.54
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SAFEWAY 0700 - Purchase	General Fund	52.30
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SAFEWAY 0700 - Purchase	General Fund	3.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	S S WORLDWIDE, INC. - Purchase	General Fund	218.24
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 211698IM2 - Purch	General Fund	193.78
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMAZON.COM 2954P8OT0 A - Purch	General Fund	169.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 290CR9HT1 - Purch	General Fund	69.60
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 2E79Y9G61 - Purch	General Fund	45.88
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	TARGET 00028308 - Purch	General Fund	28.33
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	DOLLAR TREE - Purchase	General Fund	12.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	TARGET 00028308 - Purch	General Fund	26.35
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SMART AND FINAL 448 - Purchase	General Fund	23.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	IKEA EAST PALO ALTO - Purchase	General Fund	283.74
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	IN THEMIRRORCOMPANY.C - Purch	General Fund	743.11
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	WALMART.COM AW - Purchase	General Fund	225.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	COMCAST CALIFORNIA - Purchase	General Fund	15.27
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMAZON.COM 2E1CZ2EE0 A - Purch	General Fund	142.18
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SWANK MOTION PICTURES - Purcha	General Fund	1,625.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	MICHAELS STORES 4814 - Purchas	General Fund	36.53
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 299WI4P21 - Purch	General Fund	13.06
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 292OH8PG0 - Purch	General Fund	94.32
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US AMZN.COM - Cred	General Fund	-13.06
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	ICP NORBERT'S ATHLETIC - Purch	General Fund	1,895.45
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	ICP NORBERT'S ATHLETIC - Purch	General Fund	562.05
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	ICP NORBERT'S ATHLETIC - Purch	General Fund	2,032.78

08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMERICAN RED CROSS - Purchase	General Fund	80.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SP SWIMOUTLET.COM - Purchase	General Fund	261.39
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 2906V5AB1 - Purch	General Fund	123.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 298V13AP1 - Purch	General Fund	104.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	OFFICE RELIEF - Purchase	General Fund	979.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	THE HOME DEPOT 0630 - Purchas	General Fund	86.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	CREATIVE PAINT 12 - Purchase	General Fund	19.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	GROSH BACKDROPS DRAP - Purch	General Fund	300.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	DINN BROS INCINTERNET - Purcha	General Fund	92.70
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	GROSH BACKDROPS DRAP - Credi	General Fund	-300.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMAZON.COM 290UM0970 A - Purch	General Fund	172.82
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	OFFICE RELIEF - Purchase	General Fund	744.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	TARGET 00028308 - Purch	General Fund	33.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 2E4TC9230 - Purch	General Fund	7.63
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	DOLLAR TREE - Purchase	General Fund	10.91
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	USPS PO 0569480201 - Purchase	General Fund	27.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	SPROUTS FARMERS MARK - Purchas	General Fund	10.83
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	GIH GLOBALINDUSTRIALEQ - Purch	General Fund	824.68
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	ULINE SHIP SUPPLIES - Purcha	General Fund	1,003.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN Mktp US 2105Q2YN0 - Purch	General Fund	240.89
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 290E01BD1 - Purch	General Fund	408.41
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN MKTP US 2963B4PM2 - Purch	General Fund	111.28
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	AMZN Mktp US 2E2DI9OS0 - Purch	General Fund	330.20
08/04/2021	BANK OF AMERICA PROCUREMENT	00499692	PC0721CRCP	PAYPAL SANCRASOUTH - Purchase	General Fund	30.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	IN TIRE WAREHOUSE SER - Purch	Fleet Operation Fund	70.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	BAY AREA AIR QUALITY M - Purch	Storm Drain	286.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	BAY AREA AIR QUALITY M - Purch	Storm Drain	286.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	PAYMENTUS CORP - Purchase	Storm Drain	12.36

08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	BAY AREA AIR QUALITY M - Purch	Storm Drain	419.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	PAYMENTUS CORP - Purchase	Solid Waste Utility-Constructi	245.44
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	BAY AREA AIR QUALITY M - Purch	Solid Waste Utility-Constructi	7,462.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US 295TE6PC2 - Purch	General Fund	220.86
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	THE HOME DEPOT 0630 - Purchas	General Fund	225.27
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	IN LADYBUGS DIRECT - Purchase	General Fund	325.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	IN LADYBUGS DIRECT - Purchase	General Fund	325.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	PROPERTYSCOUT PRO PLAN - Purch	General Fund	59.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	CINTAS 961 - Purchase	General Fund	33.80
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	CINTAS 961 - Purchase	General Fund	146.46
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	CINTAS 961 - Purchase	General Fund	1,661.42
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	CINTAS 961 - Purchase	General Fund	2,662.42
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US 2E3LE1KX1 - Purch	General Fund	16.34
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US 2E81X09P1 - Purch	General Fund	13.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN Mktp US 2E8QY1911 - Purch	General Fund	14.39
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US 2E8YG2RL1 - Purch	General Fund	74.18
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US 2E1I597W0 - Purch	General Fund	32.72
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMAZON.COM 2E4FC28F2 A - Purch	General Fund	147.32
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US 2E18I3KN0 - Purch	General Fund	18.54
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US AMZN.COM - Cred	General Fund	-13.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	THE HOME DEPOT 0630 - Purchas	General Fund	234.39
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	L2G SCC PLANNING AND D - Purch	Water Utility	55.26
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	L2G SCC PERMIT CENTER - Purcha	Water Utility	2,455.83
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	APPLE.COM BILL - Purchase	General Fund	0.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	VCN SANTA CLARA CTY - - Purcha	General Fund	152.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	CACEO - Purchase	General Fund	299.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMZN MKTP US 2E5SW6XO0 - Purch	General Fund	13.08
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	BAY AREA AIR QUALITY M - Purch	General Fund	385.00

08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	PAYMENTUS CORP - Purchase	General Fund	11.36
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	ENVIROCERT INTERNATIONAL - Purch	General Fund	172.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	LOWES 02211 - Purchase	General Fund	16.54
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	AMERICAN FLAGS EXPRESS - Purch	General Fund	81.40
08/04/2021	BANK OF AMERICA PROCUREMENT	00499693	PC0721STRT	BAY AREA AIR QUALITY M - Purch	Sewer Utility	286.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	PAYPAL REGIONALGOV - Purchase	Water Utility	475.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	SAFETY CENTER - Purchase	Water Utility	975.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	SAFETY CENTER - Purchase	Water Utility	487.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	96.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	CALIFORNIA WATER ENVIR - Purch	Water Utility	192.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	TARGET 00028308 - Purch	Water Utility	32.73
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	HACH COMPANY - Purchase	Water Utility	563.56
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	MAIN STREET BAGEL NO 3 - Purch	Water Utility	30.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	TST PETERS' BAKERY - Purchase	Water Utility	27.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	OCCUPATIONAL SAFETY A - Purcha	Water Utility	79.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	POLLARDWATER.COM 3325 - Purch	Water Utility	1,001.60
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	POLLARD RPR CTR 3099 - Purchas	Water Utility	1,001.60
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	7-ELEVEN 24271 - Purchase	Water Utility	36.95
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	UNITED RENTALS 013107 - Purcha	Water Utility	1,182.09
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	UNITED RENTALS 013107 - Purcha	Water Utility	882.71
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	AWWA.ORG - Purchase	Water Utility	453.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	MILPITAS MATERIALS - Purchase	Water Utility	1,135.16
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	THE SOURCING GROUP LLC - Purch	Water Utility	185.98
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	THE SOURCING GROUP LLC - Purch	Water Utility	185.97
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	MILPITAS MATERIALS - Purchase	Water Recycling Program	1,264.47
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	PAYPAL REGIONALGOV - Purchase	Sewer Utility	475.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	SAFETY CENTER - Purchase	Sewer Utility	487.50
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	CALIFORNIA WATER ENVIR - Purch	Sewer Utility	195.00

08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	CALIFORNIA WATER ENVIR - Purch	Sewer Utility	96.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	MAIN STREET BAGEL NO 3 - Purch	Sewer Utility	30.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	TST PETERS' BAKERY - Purchase	Sewer Utility	27.00
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	THE SOURCING GROUP LLC - Purch	Sewer Utility	185.99
08/04/2021	BANK OF AMERICA PROCUREMENT	00499694	PC0721WATR	THE SOURCING GROUP LLC - Purch	Sewer Utility	185.97
Total for Payment No.:						242,593.99

Payment No: 020091

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	POWER PROS	00498359	2021040	FAIRVIEW TESTING AND COMMISSIO	Electric Utility Construction	89,232.00
08/06/2021	POWER PROS	00498438	2021039	FAIRVIEW TESTING AND COMMISSIO	Electric Utility Construction	148,016.00
Total for Payment No.:						237,248.00

Payment No: W22055

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/19/2021	MANZANA WIND LLC	00498662	131879	ENERGY PURCH (WIND) JUL21	Electric Utility	222,373.91
Total for Payment No.:						222,373.91

Payment No: 652906

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GOLDEN BAY CONSTRUCTION	00499169	9765-4	AGREEMENT FOR LICK MILL - EAST	Streets And Highways	216,030.00
08/20/2021	GOLDEN BAY CONSTRUCTION	00499169	9765-4	RETENTION	Streets And Highways	-10,801.50
Total for Payment No.:						205,228.50

Payment No: 653011

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/27/2021	PG&E	00499288	0008026344-5	GRIZZLY PH O&M JUN21	Electric Utility	161,994.81
08/27/2021	PG&E	00499288	0008026344-5	GRIZZLY PH O&M JUN21 (TAX)	Electric Utility	21,680.70
Total for Payment No.:						183,675.51

Payment No: 020054

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	3DEGREES GROUP INC	00497873	19999	GREEN E US WIND INTEL 2020	Electric Utility	140,526.00
08/06/2021	3DEGREES GROUP INC	00497999	20947	SC GREEN PWR MARKET REC JUN21	Electric Utility	36,090.36
08/06/2021	3DEGREES GROUP INC	00497999	20947	WSTRN NATL WIND BULK REC JUN21	Electric Utility	1,591.25
Total for Payment No.:						178,207.61

Payment No: 652568

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BILL WILSON CENTER	00498340	TBRA-01-2021BW	BWC-TBRA HOME FY20/21	H.U.D Capital Projects	53,835.55
08/06/2021	BILL WILSON CENTER	00498340	TBRA-01-2021BW	BWC-TBRA HSCAG/SB341 FY20/21	Housing Successor	10,449.39
08/06/2021	BILL WILSON CENTER	00498341	TBRA-02-2021BW	BWC-TBRA HOME FY20/21	H.U.D Capital Projects	44,903.32
08/06/2021	BILL WILSON CENTER	00498341	TBRA-02-2021BW	BWC-TBRA HSCAG/SB341 FY20/21	Housing Successor	14,130.34
08/06/2021	BILL WILSON CENTER	00498342	TBRA-03-2021BW	BWC-TBRA HOME FY20/21	H.U.D Capital Projects	43,656.10
08/06/2021	BILL WILSON CENTER	00498342	TBRA-03-2021BW	BWC-TBRA HSCAG/SB341 FY20/21	Housing Successor	7,344.16
Total for Payment No.:						174,318.86

Payment No: W22046

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/03/2021	SEDGWICK CLAIMS MGMT SVCS INC	00498399	SF-8029-2021-00928677	Escrow deposit WORKER COMP	Workers Compensation	144,167.48
Total for Payment No.:						144,167.48

Payment No: W22053

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	WASHINGTON TRUST BANK	00499069	07/25/21-08/07/21	WT:VEBA CONTRIB B2116	Fringe Benefits	128,921.04
Total for Payment No.:						128,921.04

Payment No: 652591

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ELECTRICAL MAINTENANCE	00498102	21-4743-3	SEC 3.1-3.5 GE ROT INSPECTION	Electric Utility Construction	72,709.50
08/06/2021	ELECTRICAL MAINTENANCE	00498102	21-4743-3	SEC4.1 GE STATOR REWEDGE LABOR	Electric Utility Construction	13,645.00
08/06/2021	ELECTRICAL MAINTENANCE	00498102	21-4743-3	SEC4.7 STATOR FLUX PROBE PARTS	Electric Utility Construction	9,650.35
08/06/2021	ELECTRICAL MAINTENANCE	00498102	21-4743-3	SEC4.1 GE STATOR REWEDGE PARTS	Electric Utility Construction	15,000.00
08/06/2021	ELECTRICAL MAINTENANCE	00498102	21-4743-3	SEC 4.5 GE STATOR PWR FAC TEST	Electric Utility Construction	3,500.00
08/06/2021	ELECTRICAL MAINTENANCE	00498102	21-4743-3	SEC 4.7 STATOR FLUX PROBE LBR	Electric Utility Construction	10,185.00
Total for Payment No.:						124,689.85

Payment No: 020155

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	O'GRADY PAVING INC	00498648	5476	Central-Lafayette Emergency Ro	Water Utility Construction	99,500.00
08/13/2021	O'GRADY PAVING INC	00498648	5476	Contingency 20%	Water Utility Construction	17,500.00
Total for Payment No.:						117,000.00

Payment No: 652597

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GOLDEN BAY CONSTRUCTION	00498394	9754-3	AGREEMENT FOR LICK MILL - EAST	Streets And Highways	115,698.45
08/06/2021	GOLDEN BAY CONSTRUCTION	00498394	9754-3	RETENTION	Streets And Highways	-5,784.92
Total for Payment No.:						109,913.53

Payment No: 652584

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	DASHER TECHNOLOGIES INC	00498362	360720	HPE HARDWARE MAINTENANCE ONSIT	Electric Utility	3,772.08
08/06/2021	DASHER TECHNOLOGIES INC	00498362	360720	HPE SOFTWARE TECHNICAL UNLIMIT	Electric Utility	3,369.60
08/06/2021	DASHER TECHNOLOGIES INC	00498362	360720	HPE SOFTWARE UPDATES SVC	Electric Utility	1,638.00
08/06/2021	DASHER TECHNOLOGIES INC	00498362	360720	HPE HARDWARE MAINTENANCE ONSIT	Electric Utility	30,728.88
08/06/2021	DASHER TECHNOLOGIES INC	00498362	360720	HPE SOFTWARE TECHNICAL UNLIMIT	Electric Utility	16,220.68
08/06/2021	DASHER TECHNOLOGIES INC	00498362	360720	HPE SOFTWARE UPDATES	Electric Utility	8,087.04
08/06/2021	DASHER TECHNOLOGIES INC	00498362	360720	HPE STARTER PACK	Electric Utility	44,928.20
				Total for Payment No.:		108,744.48

Payment No: 653009

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	PACIFIC FITNESS PRODUCTS LLC	00499600	84118	New Fitness Equipment for Sr.	Parks And Recreation	106,437.73
				Total for Payment No.:		106,437.73

Payment No: 652891

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	DASHER TECHNOLOGIES INC	00498492	360529	FINAL SYSTEM ACCEPTANCE	Electric Utility Construction	106,073.88
				Total for Payment No.:		106,073.88

Payment No: 020128

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ELECTRICAL CONSULTANTS INC	00497897	94582	PWR SYS EXPANSION PLAN MAY2021	Electric Utility Construction	19,338.00
08/13/2021	ELECTRICAL CONSULTANTS INC	00498436	94436	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	29,426.00

08/13/2021	ELECTRICAL CONSULTANTS INC	00498439	94730	TRANSMISSION ENGINEERING AND D	Electric Utility Construction	46,425.03
08/13/2021	ELECTRICAL CONSULTANTS INC	00498448	95226	TRANSMISSION ENGINEERING DESIG	Electric Utility Construction	2,328.00
08/13/2021	ELECTRICAL CONSULTANTS INC	00498449	95223	TRANSMISSION ENGINEERING AND D	Electric Utility Construction	2,848.95
Total for Payment No.:						100,365.98

Payment No: W22069

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	STATE TREASURER'S OFFICE	00499670	4469AUG2021	CONDEMNATION FUND APN22404057	Electric Utility Construction	97,300.00
Total for Payment No.:						97,300.00

Payment No: 652645

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SOUDI CONSULTANTS INC	00497874	SC2003	SUBSTATIO PROT SRV FEB20-DEC20	Electric Utility	94,000.00
Total for Payment No.:						94,000.00

Payment No: 020194

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	G2 ENERGY OSTROM RD LLC	00498558	SVP 7-21	ENERGY (LANDFILL GAS) JUL21	Electric Utility	92,492.39
Total for Payment No.:						92,492.39

Payment No: 020221

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PREFERRED BENEFIT	00499244	EIA41486	DENTAL PREMIUMS GROUP 5 & 6	Payroll Liability&ClearingAcct	73,688.90
08/20/2021	PREFERRED BENEFIT	00499245	EIA41487	DENTAL PREMIUMS GROUP 1	Payroll Liability&ClearingAcct	6,736.78
08/20/2021	PREFERRED BENEFIT	00499246	EIA41488	VISION PREMIUMS AUG 2021	Payroll Liability&ClearingAcct	9,930.70

Total for Payment No.: 90,356.38

Payment No: 652852

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BATTON ASSOCIATES LLC	00499243	61191-02 Utility Refund	UTILITY REFUND	General Fund	89,302.16
Total for Payment No.:						89,302.16

Payment No: 652667

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ALTA PLANNING & DESIGN	00498720	00-2020-014 - 7	PRUNERIDGE AVE COMPLETE STREET	Streets And Highways	64,858.25
08/13/2021	ALTA PLANNING & DESIGN	00498720	00-2020-014 - 7	CONTINGENCY. FUNDING: 533-124	Streets And Highways	5,938.01
08/13/2021	ALTA PLANNING & DESIGN	00498723	00-2020-014 - 6R	PRUNERIDGE AVE COMPLETE STREET	Streets And Highways	15,600.00
08/13/2021	ALTA PLANNING & DESIGN	00498723	00-2020-014 - 6R	CONTINGENCY. FUNDING: 533-124	Streets And Highways	436.00
Total for Payment No.:						86,832.26

Payment No: 652648

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SWA SERVICES GROUP	00497937	21625	JANITORIAL JULY 2021	General Fund	85,741.00
08/06/2021	SWA SERVICES GROUP	00498247	21626	3025 RAYMOND LAST BILLING	Electric Utility	568.64
Total for Payment No.:						86,309.64

Payment No: 020068

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021		00497925	33313 PJS	LEGAL SVC BUCKS CREEK MAY21	Electric Utility Construction	2,591.50
08/06/2021		00497925	33313 PJS	LEGAL SERVICES MAY21	Electric Utility	80,172.50
Total for Payment No.:						82,764.00

Payment No: 652566

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BELLECCI & ASSOCIATES INC	00498445	20052-G rev 0	DESIGN PROFESSIONAL SERVICES F	Streets And Highways	34,122.13
08/06/2021	BELLECCI & ASSOCIATES INC	00498447	20052-H rev 1	DESIGN PROFESSIONAL SERVICES F	Streets And Highways	48,122.83
Total for Payment No.:						82,244.96

Payment No: 652990

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	DNV ENERGY SERVICES USA INC	00496992	875010007973	BUSINES ENERG EFF PROG JUN2021	Elec OperatingGrant Trust Fund	38,063.73
08/27/2021	DNV ENERGY SERVICES USA INC	00496992	875010007973	BUSINES ENERG EFF PROG JUN2021	Elec OperatingGrant Trust Fund	7,612.75
08/27/2021	DNV ENERGY SERVICES USA INC	00496992	875010007973	BUSINES ENERG EFF PROG JUN2021	Elec OperatingGrant Trust Fund	10,657.84
08/27/2021	DNV ENERGY SERVICES USA INC	00496992	875010007973	BUSINES ENERG EFF PROG JUN2021	Elec OperatingGrant Trust Fund	12,180.39
08/27/2021	DNV ENERGY SERVICES USA INC	00496992	875010007973	BUSINES ENERG EFF PROG JUN2021	Elec OperatingGrant Trust Fund	7,612.75
Total for Payment No.:						76,127.46

Payment No: 020093

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ROSENDIN ELECTRIC INC	00498261	195180	LABOR FEB/MAR20 ESTIMATOR MOVE	Electric Utility	682.34
08/06/2021	ROSENDIN ELECTRIC INC	00498261	195180	MATERIALS FEB/MAR20	Electric Utility	3,817.36
08/06/2021	ROSENDIN ELECTRIC INC	00498261	195180	ELEC NETWORK SETUP FEB/MAR20	Electric Utility	61,238.98
08/06/2021	ROSENDIN ELECTRIC INC	00498261	195180	SUB MARKUP FEB/MAR20	Electric Utility	9,185.85
08/06/2021	ROSENDIN ELECTRIC INC	00498261	195180	ADJUSTMENT FEB/MAR20	Electric Utility	0.47
Total for Payment No.:						74,925.00

Payment No: 653033

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	WEST COAST CODE CONSULTANTS INC	00499603	221-07-004-03	AGREEMENT FOR SERVICES TO PERF	Building New Dvlpmnt Svc Fee	10,450.00
08/27/2021	WEST COAST CODE CONSULTANTS INC	00499604	221-07-004-01	AGREEMENT FOR SERVICES TO PERF	Building New Dvlpmnt Svc Fee	63,300.00
				Total for Payment No.:		73,750.00

Payment No: 652959

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	VALLEY OIL CO	00499264	12455	UNLEADED GASOLINE	Fleet Operation Fund	21,043.55
08/20/2021	VALLEY OIL CO	00499266	76227	UNLEADED GASOLINE	Fleet Operation Fund	26,373.62
08/20/2021	VALLEY OIL CO	00499268	77288	UNLEADED GASOLINE	Fleet Operation Fund	22,241.26
				Total for Payment No.:		69,658.43

Payment No: 652627

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PG&E	00497951	0008026347-8	COP GRIZZLY JUN21	Electric Utility Construction	68,077.54
				Total for Payment No.:		68,077.54

Payment No: 020244

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	COUNTY OF SANTA CLARA	00498691	1800077801	2021-2022 CAL-ID	General Fund	66,537.00
				Total for Payment No.:		66,537.00

Payment No: 652609

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	LEE & RO INC	00498435	668/02	CITYWIDE EMERGENCY GENERATOR R	Public Buildings	38,200.00
08/06/2021	LEE & RO INC	00498442	668/03	CITYWIDE EMERGENCY GENERATOR R	Public Buildings	12,122.00

08/06/2021	LEE & RO INC	00498443	668/04	CITYWIDE EMERGENCY GENERATOR R	Public Buildings	14,414.50
Total for Payment No.:						64,736.50

Payment No: 020226

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SPX TRANSFORMER SOLUTIONS, INC	00499238	022793	JULIETTE PARTS SN:E-73201186	Electric Utility	58,805.51
08/20/2021	SPX TRANSFORMER SOLUTIONS, INC	00499238	022793	FREIGHT	Electric Utility	4,750.00
Total for Payment No.:						63,555.51

Payment No: 020179

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	AIR PRODUCTS & CHEMICALS	00498563	417685383	PURCHASE OF RA CAPACITY JUL21	Electric Utility	60,000.00
Total for Payment No.:						60,000.00

Payment No: 020239

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	BADGER METER INC	00499513	1446775	METER, WATER, TURBINE, 6IN SIZ	Water Utility	6,669.72
08/27/2021	BADGER METER INC	00499667	1442330	METER 5/8"-3/4" RCDL MODEL 25	Water Utility	51,502.51
Total for Payment No.:						58,172.23

Payment No: 020272

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	TRI-DAM POWER AUTHORITY	00498828	2021-7S SVP	ENERGY PURCH (HYDRO) JUL21	Electric Utility	57,696.47
Total for Payment No.:						57,696.47

Payment No: 652923

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/20/2021	LONG'S CUSTOM DISCING INC	00484071	10824	CLEANING EASTSIDE RETN SWALE	General Fund	48,350.00
08/20/2021	LONG'S CUSTOM DISCING INC	00484074	10825	BMX PRK & GOLF COURSE MOWING	Solid Waste Utility- Constructi	4,488.75
Total for Payment No.:						52,838.75

Payment No: 652834

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	THE SOURCING GROUP, LLC	00498651	395158	2021 SUMMER INSIDE SANTA CLARA	General Fund	51,943.95
Total for Payment No.:						51,943.95

Payment No: 653013

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	QUESTICA, INC.	00499695	INV107265	ANNUAL SOFTWARE MAINTENANCE &	General Fund	47,258.09
08/27/2021	QUESTICA, INC.	00499695	INV107265	OPENBOOK SUBSCRIPTION; AUGUST	General Fund	3,125.00
Total for Payment No.:						50,383.09

Payment No: 652758

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CA DEPT OF CONSERVATION	00498682	508AUG2021	Strong Motion Fee Q2 2021	Building Fee Admin Retainage	49,640.70
Total for Payment No.:						49,640.70

Payment No: 020059

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ALLIANT INSURANCE SVCS INC	00498516	1691929	CONVENTION CTR PARKING INS	Special Liability Insurance	43,174.97
Total for Payment No.:						43,174.97

Payment No: 652981

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	BORDER STATES	00498673	1600621519	FINANCE CHARGE	Electric Utility Construction	613.78
08/27/2021	BORDER STATES	00499581	922012460	MATERIALS CHARGE FOR SVP SOUTH	Electric Utility Construction	41,776.13
08/27/2021	BORDER STATES	00499583	922469142	FREIGHT CHARGED IN ERROR	Electric Utility Construction	-21.86
08/27/2021	BORDER STATES	00499584	992469145	FREIGHT CHARGED IN ERROR	Electric Utility Construction	-835.61
				Total for Payment No.:		41,532.44

Payment No: 653008

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ORLAND UNIT WATER USERS ASSN.	00498974	2031AUG2021	STONY CRK HYDRO EXPENSES JUL21	Electric Utility	22,016.51
08/27/2021	ORLAND UNIT WATER USERS ASSN.	00498974	2031AUG2021	STONY CRK HYDRO EXPENSES JUL21	Electric Utility	7,686.55
08/27/2021	ORLAND UNIT WATER USERS ASSN.	00498974	2031AUG2021	STONY CRK HYDRO EXPENSES JUL21	Electric Utility	42.63
08/27/2021	ORLAND UNIT WATER USERS ASSN.	00498974	2031AUG2021	STONY CRK HYDRO EXPENSES JUL21	Electric Utility	42.64
08/27/2021	ORLAND UNIT WATER USERS ASSN.	00498974	2031AUG2021	STONY CRK HYDRO EXPENSES JUL21	Electric Utility	9,126.37
08/27/2021	ORLAND UNIT WATER USERS ASSN.	00498974	2031AUG2021	STONY CRK HYDRO EXPENSES JUL21	Electric Utility	85.27
				Total for Payment No.:		38,999.97

Payment No: 652865

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ABODE SERVICES	00499325	TBRA-06-2021AB	ABODE-TBRA CAHF FY20/21	City Affordable Housing	22,130.18
08/20/2021	ABODE SERVICES	00499325	TBRA-06-2021AB	ABODE-TBRA HOME FY20/21	H.U.D Capital Projects	16,189.04
				Total for Payment No.:		38,319.22

Payment No: 020168

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RODNEY C PEOPLES	00498081	R210711	REPLCE WELL G-3 TO G-4	Solid Waste Utility-Constructi	38,287.22
				Total for Payment No.:		38,287.22

Payment No: 652574

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CHARGEPOINT INC	00498088	IN106645	EV CHARGER CONTRACT 4/1/2025	Elec OperatingGrant Trust Fund	38,252.00
				Total for Payment No.:		38,252.00

Payment No: 020163

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PLAN REVIEW CONSULTANTS INC	00498770	PRC2021-7	ADDITIONAL FUNDS PER AMENDMENT	Building New Dvlpmnt Svc Fee	37,454.76
				Total for Payment No.:		37,454.76

Payment No: 652925

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	MONTROSE AIR QUALITY SERVICES,	00498555	CINV-046272	LAB ANALYSIS JUL12	Electric Utility	3,366.00
08/20/2021	MONTROSE AIR QUALITY SERVICES,	00498555	CINV-046272	LAB ANALYSIS JUL21	Electric Utility	3,180.00
08/20/2021	MONTROSE AIR QUALITY SERVICES,	00498555	CINV-046272	TESTING JUL21	Electric Utility	21,464.00
08/20/2021	MONTROSE AIR QUALITY SERVICES,	00498555	CINV-046272	TESTING EQUIPMENT JUL21	Electric Utility	5,794.00
08/20/2021	MONTROSE AIR QUALITY SERVICES,	00498555	CINV-046272	TEST PREPARATION JUL21	Electric Utility	1,444.00
08/20/2021	MONTROSE AIR QUALITY SERVICES,	00498555	CINV-046272	PLANNING & PROTOCOL JUL21	Electric Utility	936.00
				Total for Payment No.:		36,184.00

Payment No: 020067

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/06/2021	DALEO INC	00498055	SV8112-01A	2004D MASTER CONTRACT	Electric Utility Construction	35,482.83
				Total for Payment No.:		35,482.83
Payment No: 652632						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	REBUILDING TOGETHER	00498339	20/21-Q4-RTSV	REBUILD TOGETHER S.V. FY20/21	H.U.D Capital Projects	34,958.53
				Total for Payment No.:		34,958.53
Payment No: 020105						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BENEFIT COORDINATORS CORP	00499072	33496AUG2021	LIFE & DISABILITY INS B2116	Payroll Liability&ClearingAcct	4,458.85
08/13/2021	BENEFIT COORDINATORS CORP	00499072	33496AUG2021	LIFE & DISABILITY INS B2116	Payroll Liability&ClearingAcct	9,804.43
08/13/2021	BENEFIT COORDINATORS CORP	00499072	33496AUG2021	LIFE & DISABILITY INS B2116	Payroll Liability&ClearingAcct	3,513.51
08/13/2021	BENEFIT COORDINATORS CORP	00499072	33496AUG2021	LIFE & DISABILITY INS B2116	Payroll Liability&ClearingAcct	3,998.73
08/13/2021	BENEFIT COORDINATORS CORP	00499072	33496AUG2021	LIFE & DISABILITY INS B2116	Payroll Liability&ClearingAcct	12,655.75
				Total for Payment No.:		34,431.27
Payment No: 652578						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CMMS DATA GROUP, INC	00495765	00006688	PN#: PLANT-S-USER-GOLD-C - MVP	Electric Utility	24,300.00
08/06/2021	CMMS DATA GROUP, INC	00495765	00006688	PN# PLANT-S-RS-10 - MVP Plant	Electric Utility	1,500.00
08/06/2021	CMMS DATA GROUP, INC	00495765	00006688	PN# PLANT-S-MOBILE-APP - MVP P	Electric Utility	8,550.00
				Total for Payment No.:		34,350.00
Payment No: 652942						

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SSA LANDSCAPE ARCHITECTS, INC	00499205	7117	AGREEMENT FOR DESIGN PROFESSION	Parks And Recreation	32,339.04
				Total for Payment No.:		32,339.04

Payment No: 020109

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INTL FIREFIGHTERS LOCAL 1171	00499073	07/11/21-08/07/21	UNION DUES B2115 & B2116	Payroll Liability&ClearingAcct	32,259.68
				Total for Payment No.:		32,259.68

Payment No: 652552

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WILLIAMS CONSTRUCTION COMPANY	00497872	21-002	KITCHEN/BATH REPAIR - GANDHI	H.U.D Capital Projects	31,645.00
08/06/2021	WILLIAMS CONSTRUCTION COMPANY	00497872	21-002	GANDHI 10577	H.U.D Capital Projects	31,645.00
08/06/2021	WILLIAMS CONSTRUCTION COMPANY	00497872	21-002	GANDHI 10577	H.U.D Capital Projects	-31,645.00
				Total for Payment No.:		31,645.00

Payment No: 020216

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021		00499341	521502	CHANGE ORDER #2: ADDITIONAL FU LEGAL SERVICES	Sewer Utility	3,823.42
08/20/2021		00499341	521502	LEGAL SERVICES - CHANGE ORDER	Sewer Utility	9,544.38
08/20/2021		00499344	523381	LEGAL SERVICES - CHANGE ORDER	Sewer Utility	17,963.25
				Total for Payment No.:		31,331.05

Payment No: 020087

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MILTON SECURITY GROUP LLC	00497945	2021926	AMI/MDMS PROJECT SUPPORT	Electric Utility Construction	9,600.00

08/06/2021	MILTON SECURITY GROUP LLC	00497945	2021926	NOC/SOC SERVICES	Electric Utility	11,520.00
08/06/2021	MILTON SECURITY GROUP LLC	00497945	2021926	OSISOFT PI SYSTEM SERVICE	Electric Utility	7,200.00
08/06/2021	MILTON SECURITY GROUP LLC	00497945	2021926	SHAREPOINT SUPPORT/MGMT SVCS	Electric Utility	2,400.00
Total for Payment No.:						30,720.00

Payment No: 652899

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ENERGY RESOURCES CONSERVATION	00499006	3199	ANNL ENERGY FAC COMP FEE 21-22	Electric Utility	30,554.00
Total for Payment No.:						30,554.00

Payment No: 020099

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	VALLEY CONCRETE INC	00498286	072721	CONCRETE MAINT. JULY 2021	Streets And Highways	29,783.26
Total for Payment No.:						29,783.26

Payment No: 652921

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	LCPTRACKER, INC.	00498481	IR-16634	PREVAIL WAGE COMPL/MGMT SOFTWR	Water Utility	4,916.67
08/20/2021	LCPTRACKER, INC.	00498481	IR-16634	PREVAIL WAGE COMPL/MGMT SOFTWR	General Fund	9,833.33
08/20/2021	LCPTRACKER, INC.	00498481	IR-16634	PREVAIL WAGE COMPL/MGMT SOFTWR	Sewer Utility	4,916.67
08/20/2021	LCPTRACKER, INC.	00498481	IR-16634	PREVAIL WAGE COMPL/MGMT SOFTWR	Electric Utility	9,833.33
Total for Payment No.:						29,500.00

Payment No: 020191

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	EFFICIENCY SERVICES GROUP, LLC	00498428	3303	EXTER/PRKING LOT LITE JUL21	Elec OperatingGrant	4,325.00

08/20/2021	EFFICIENCY SERVICES GROUP, LLC	00498428	3303	EXTER/PRKING LOT LITE JUL21	Trust Fund Elec OperatingGrant Trust Fund	24,884.00
Total for Payment No.:						29,209.00

Payment No: 020139

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INFOSEND INC	00498150	194126	CMO - MISSION CITY NEWS-JUL	General Fund	70.33
08/13/2021	INFOSEND INC	00498150	194126	TAXABLE	General Fund	6,538.27
08/13/2021	INFOSEND INC	00498150	194126	BILL PRINT & MAIL	General Fund	17,380.44
08/13/2021	INFOSEND INC	00498150	194126	CMO - MISSION CITY NEWS-MAY	General Fund	33.77
08/13/2021	INFOSEND INC	00498150	194126	CMO - MISSION CITY NEWS-JUN	General Fund	1,484.13
08/13/2021	INFOSEND INC	00498150	194126	ELECTRIC - MAY INSERT	Electric Utility	32.65
08/13/2021	INFOSEND INC	00498150	194126	ELECTRIC - JUNE INSERT	Electric Utility	1,785.17
Total for Payment No.:						27,324.76

Payment No: 020130

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GEORGE HILLS COMPANY, INC	00498679	INV1019966	20-21 Administration Monthly F	Special Liability Insurance	400.00
08/13/2021	GEORGE HILLS COMPANY, INC	00498680	INV1019898	Claim Adjusting	Special Liability Insurance	11,615.80
08/13/2021	GEORGE HILLS COMPANY, INC	00498681	INV1020044	Claim Adjusting	Special Liability Insurance	14,926.02
Total for Payment No.:						26,941.82

Payment No: 652628

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PG&E	00497952	0008026942-6	GRIZZLY PROJ O&M 15% COO JUN21	Electric Utility	26,764.28
Total for Payment No.:						26,764.28

Payment No: 020127

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	DALEO INC	00498300	SV8-109-01	2004D MASTER CONTRACT	Electric Utility Construction	23,469.80
08/13/2021	DALEO INC	00498301	SV8-109-02	2004D MASTER CONTRACT	Electric Utility Construction	3,060.72
				Total for Payment No.:		26,530.52

Payment No: 020257

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	KOFFLER	00498971	0098327-IN	200 HP MOTOR-SHOP LABOR JUL21	Electric Utility	22,950.00
08/27/2021	KOFFLER	00498971	0098327-IN	200 HP MOTOR-MATERIALS JUL21	Electric Utility	2,815.43
				Total for Payment No.:		25,765.43

Payment No: 020176

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ACT ENVIRO	00498478	345584	6 HR CHEMIST 7/7/21	Electric Utility	402.00
08/20/2021	ACT ENVIRO	00498478	345584	HAND PUMP LARGE	Electric Utility	50.00
08/20/2021	ACT ENVIRO	00498478	345584	PPE GEAR LEVEL D	Electric Utility	8.00
08/20/2021	ACT ENVIRO	00498478	345584	GEAR TRUCK (BOB TAIL) 7/7/21	Electric Utility	125.00
08/20/2021	ACT ENVIRO	00498478	345584	SUPPLIES	Electric Utility	150.00
08/20/2021	ACT ENVIRO	00498478	345584	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	58.80
08/20/2021	ACT ENVIRO	00498479	346685	6 HR CHEMIST 7/14/21	Electric Utility	402.00
08/20/2021	ACT ENVIRO	00498479	346685	HAND PUMP LARGE	Electric Utility	50.00
08/20/2021	ACT ENVIRO	00498479	346685	PPE GEAR LEVEL D	Electric Utility	8.00
08/20/2021	ACT ENVIRO	00498479	346685	GEAR TRUCK (BOB TAIL) 7/14/21	Electric Utility	125.00
08/20/2021	ACT ENVIRO	00498479	346685	SUPPLIES	Electric Utility	150.00
08/20/2021	ACT ENVIRO	00498479	346685	ANALYTICALS	Electric Utility	1,500.00
08/20/2021	ACT ENVIRO	00498479	346685	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	178.80

08/20/2021	ACT ENVIRO	00498523	347869	4 HR CHEMIST 7/7/21	Electric Utility	268.00
08/20/2021	ACT ENVIRO	00498523	347869	PPE GEAR LEVEL D	Electric Utility	8.00
08/20/2021	ACT ENVIRO	00498523	347869	GEAR TRUCK (BOB TAIL) 7/7/21	Electric Utility	125.00
08/20/2021	ACT ENVIRO	00498523	347869	SUPPLIES	Electric Utility	150.00
08/20/2021	ACT ENVIRO	00498523	347869	55 GAL METAL DRUM UN1A2	Electric Utility	327.37
08/20/2021	ACT ENVIRO	00498523	347869	CUBIC YARD BOX W/PALLET	Electric Utility	85.12
08/20/2021	ACT ENVIRO	00498523	347869	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	74.32
08/20/2021	ACT ENVIRO	00498526	347888	4 HR CHEMIST 7/21/21	Electric Utility	268.00
08/20/2021	ACT ENVIRO	00498526	347888	HAND PUMP LARGE	Electric Utility	50.00
08/20/2021	ACT ENVIRO	00498526	347888	PPE GEAR LEVEL D	Electric Utility	8.00
08/20/2021	ACT ENVIRO	00498526	347888	GEAR TRUCK (BOB TAIL) 7/21/21	Electric Utility	125.00
08/20/2021	ACT ENVIRO	00498526	347888	SUPPLIES	Electric Utility	150.00
08/20/2021	ACT ENVIRO	00498526	347888	ANALYTICALS	Electric Utility	1,750.00
08/20/2021	ACT ENVIRO	00498526	347888	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	188.08
08/20/2021	ACT ENVIRO	00498607	324707	PCB TRANSFORMER SHIPMENT 1/27	Electric Utility	9,183.00
08/20/2021	ACT ENVIRO	00498607	324707	1 HR SUB CONTRACTED 1/27/21	Electric Utility	734.64
08/20/2021	ACT ENVIRO	00498611	346793	HRSG ICE BLAST DEBRIS	Electric Utility	700.00
08/20/2021	ACT ENVIRO	00498611	346793	3 HR DRIVER 7/15/21	Electric Utility	201.00
08/20/2021	ACT ENVIRO	00498611	346793	55 GAL RECON METAL DRUM UN1A2	Electric Utility	600.19
08/20/2021	ACT ENVIRO	00498611	346793	TRANSPORTATION CUBIC YARD BOX	Electric Utility	200.00
08/20/2021	ACT ENVIRO	00498611	346793	PPE GEAR LEVEL D	Electric Utility	8.00
08/20/2021	ACT ENVIRO	00498611	346793	MANIFEST FEE	Electric Utility	30.00
08/20/2021	ACT ENVIRO	00498611	346793	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	135.12
08/20/2021	ACT ENVIRO	00498612	348348	2 HR DRIVER 7/26/21	Electric Utility Construction	134.00
08/20/2021	ACT ENVIRO	00498612	348348	TRANSPORTATION 22 GAL	Electric Utility Construction	33.00
08/20/2021	ACT ENVIRO	00498612	348348	PPE GEAR LEVEL D	Electric Utility	8.00

					Construction	
08/20/2021	ACT ENVIRO	00498612	348348	MANIFEST FEE	Electric Utility Construction	30.00
08/20/2021	ACT ENVIRO	00498612	348348	ENVIRONMENTAL SERVICE CHARGE	Electric Utility Construction	29.60
08/20/2021	ACT ENVIRO	00498612	348348	OILY DEBRIS	Electric Utility	165.00
08/20/2021	ACT ENVIRO	00498613	348548	USED OIL	Electric Utility Construction	425.00
08/20/2021	ACT ENVIRO	00498613	348548	PPE GEAR LEVEL D	Electric Utility Construction	10.00
08/20/2021	ACT ENVIRO	00498613	348548	8 HR PREVAILING WAGE 7/22/21	Electric Utility Construction	1,200.00
08/20/2021	ACT ENVIRO	00498613	348548	1 OT PREVAILING WAGE 7/22/21	Electric Utility Construction	225.00
08/20/2021	ACT ENVIRO	00498613	348548	WASHOUT FEE FOR TANKER	Electric Utility Construction	650.00
08/20/2021	ACT ENVIRO	00498613	348548		Electric Utility Construction	125.00
08/20/2021	ACT ENVIRO	00498613	348548	CONFINED SPACE - FULL GEAR SET	Electric Utility Construction	750.00
08/20/2021	ACT ENVIRO	00498613	348548	SUPPLIES	Electric Utility Construction	1,500.00
08/20/2021	ACT ENVIRO	00498613	348548	PROCESSING FEE	Electric Utility Construction	500.00
08/20/2021	ACT ENVIRO	00498613	348548	ENVIRONMENTAL SERVICE CHARGE	Electric Utility Construction	433.20
08/20/2021	ACT ENVIRO	00498613	348548	MANIFEST FEE	Electric Utility Construction	30.00
				Total for Payment No.:		24,824.24

Payment No: 020078

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	HPI LLC	00497719	0721-772305	GIA TECH DIR 40 REG HRS JUL21	Electric Utility Construction	5,800.00
08/06/2021	HPI LLC	00497719	0721-772305	GIA TECH DIR 20 OT HRS JUL21	Electric Utility Construction	4,350.00
08/06/2021	HPI LLC	00497719	0721-772305	GIA TECH DIR PER DIEM JUL21	Electric Utility Construction	1,400.00

08/06/2021	HPI LLC	00497719	0721-772305	GIA LOCAL TRUCK JUL21	Electric Utility Construction	525.00
08/06/2021	HPI LLC	00497719	0721-772305	GIA LOCAL MILEAGE JUL21	Electric Utility Construction	210.00
08/06/2021	HPI LLC	00497719	0721-772305	GIA PROJ EXPENDABLES JUL21	Electric Utility Construction	90.00
08/06/2021	HPI LLC	00497722	0721-772306	GIA TECH DIR 40 REG HRS JUL21	Electric Utility Construction	5,800.00
08/06/2021	HPI LLC	00497722	0721-772306	GIA TECH DIR 20 OT HRS JUL21	Electric Utility Construction	4,350.00
08/06/2021	HPI LLC	00497722	0721-772306	GIA TECH DIR PER DIEM JUL21	Electric Utility Construction	1,400.00
08/06/2021	HPI LLC	00497722	0721-772306	GIA LOCAL TRUCK JUL21	Electric Utility Construction	450.00
08/06/2021	HPI LLC	00497722	0721-772306	GIA LOCAL MILEAGE JUL21	Electric Utility Construction	180.00
08/06/2021	HPI LLC	00497722	0721-772306	GIA PROJ EXPENDABLES JUL21	Electric Utility Construction	90.00
Total for Payment No.:						24,645.00

Payment No: 652616

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MTH ENGINEERS INC	00498386	12387	ENGINEERING DESGIN AND CONSTRU	Electric Utility Construction	3,200.00
08/06/2021	MTH ENGINEERS INC	00498437	12369	ENGINEERING SERVICES FOR FAIRV	Electric Utility Construction	14,030.00
08/06/2021	MTH ENGINEERS INC	00498437	12369	FAT SERVICES	Electric Utility Construction	7,400.00
Total for Payment No.:						24,630.00

Payment No: 020133

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GRANITE CONSTRUCTION CO	00498942	2043623	HOT MIX ASPHALT AND EMULSION	General Fund	3,893.38
08/13/2021	GRANITE CONSTRUCTION CO	00498943	2053560	HOT MIX ASPHALT AND EMULSION	General Fund	1,435.30
08/13/2021	GRANITE CONSTRUCTION CO	00498944	2054179	HOT MIX ASPHALT AND EMULSION	General Fund	2,192.32

08/13/2021	GRANITE CONSTRUCTION CO	00498946	2054883	HOT MIX ASPHALT AND EMULSION	General Fund	3,132.78
08/13/2021	GRANITE CONSTRUCTION CO	00498948	2055746	HOT MIX ASPHALT AND EMULSION	General Fund	1,607.11
08/13/2021	GRANITE CONSTRUCTION CO	00498951	2056443	HOT MIX ASPHALT AND EMULSION	General Fund	2,795.44
08/13/2021	GRANITE CONSTRUCTION CO	00498952	2058912	HOT MIX ASPHALT AND EMULSION	General Fund	2,337.29
08/13/2021	GRANITE CONSTRUCTION CO	00498954	2059644	HOT MIX ASPHALT AND EMULSION	General Fund	2,588.73
08/13/2021	GRANITE CONSTRUCTION CO	00498955	2060827	HOT MIX ASPHALT AND EMULSION	General Fund	2,537.72
08/13/2021	GRANITE CONSTRUCTION CO	00498958	2060828	HOT MIX ASPHALT AND EMULSION	General Fund	1,990.98
				Total for Payment No.:		24,511.05

Payment No: 652768

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BEAR ELECTRICAL SOLUTIONS, INC.	00499033	13147	TRAFFIC SIGNAL MAINTENANCE, RE	General Fund	22,149.00
08/13/2021	BEAR ELECTRICAL SOLUTIONS, INC.	00499036	13148	TRAFFIC SIGNAL MAINTENANCE, RE	General Fund	920.00
08/13/2021	BEAR ELECTRICAL SOLUTIONS, INC.	00499038	13209	TRAFFIC SIGNAL MAINTENANCE, RE	General Fund	1,330.00
				Total for Payment No.:		24,399.00

Payment No: 652808

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MULTIPLIER	00498677	17465-2021-1	Business support services to u	General Fund	23,750.00
				Total for Payment No.:		23,750.00

Payment No: 020190

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ECS IMAGING, INC.	00499321	15988	ECS AMENDMENT NO. 2: ADDITIONA	Housing Authority	9,000.00
08/20/2021	ECS IMAGING, INC.	00499322	15856	ADDITIONAL ENCUMBRANCE PER AME	Housing Authority	12,000.00
08/20/2021	ECS IMAGING, INC.	00499322	15856	ECS AMENDMENT NO. 2: ADDITIONA	Housing Authority	2,150.00

Total for Payment No.: 23,150.00

Payment No: 652615

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MOTT MACDONALD GROUP, LLC	00498441	504100382-01	STORM DRAIN SLIDE GATE REHABIL	Storm Drain	9,356.25
08/06/2021	MOTT MACDONALD GROUP, LLC	00498446	100250-07	LAFAYETTE ST UNDERPASS AT SUBW	Storm Drain	13,195.00
Total for Payment No.:						22,551.25

Payment No: 020175

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ABB ENTERPRISE SOFTWARE INC.	00498552	8600109641	NMARKET CA MTCE OCT21-DEC21 Q1	Electric Utility	22,260.88
Total for Payment No.:						22,260.88

Payment No: 652897

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	DOBLE ENGINEERING CO	00499261	PSEI11078361	ENOSERV POWERBASE ANNUAL MAINT	Electric Utility	22,240.50
Total for Payment No.:						22,240.50

Payment No: 652840

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VALLEY OIL CO	00498962	76872	UNLEADED GASOLINE	Fleet Operation Fund	22,189.02
Total for Payment No.:						22,189.02

Payment No: 652823

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SCHAAF & WHEELER CONSULTING	00499044	34419	AGREEMENT FOR DESIGN PROFESSIO	Storm Drain	22,037.56

Total for Payment No.: 22,037.56

Payment No: 020113

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ADVOLOGIX.COM LLC	00498966	21-3329	AGREEMENT FOR SERVICES	General Fund	22,000.00
Total for Payment No.:						22,000.00

Payment No: 652570

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00498401	7419701	FY 2021-22 LANDSCAPED SERVICES	Convention Cnt Maintenance Dis	15,451.00
08/06/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00498402	7448606	ADDITIONAL SERVICES - CONTINGE	Convention Cnt Maintenance Dis	4,994.00
08/06/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00498403	7418265	ADDITIONAL SERVICES - CONTINGE	Convention Cnt Maintenance Dis	1,551.00
Total for Payment No.:						21,996.00

Payment No: 652791

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	FORTEL TRAFFIC INC	00498729	10389	8080-0001 PCB Driver Board	Streets And Highways	654.00
08/13/2021	FORTEL TRAFFIC INC	00498729	10389	8080-0276 Display	Streets And Highways	4,087.50
08/13/2021	FORTEL TRAFFIC INC	00498729	10389	8080-0296 Digit, Lower Display	Streets And Highways	1,471.50
08/13/2021	FORTEL TRAFFIC INC	00498729	10389	5300-1621 FTI VCalm Sign Maint	Streets And Highways	12,750.00
08/13/2021	FORTEL TRAFFIC INC	00498729	10389	8080-0169 PCB Controller	Streets And Highways	2,834.00
Total for Payment No.:						21,797.00

Payment No: 652770

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BIBLIOCOMMONS, INC	00498132	1764	ANNUAL SUBSCRIPTION FEE	General Fund	20,733.55
Total for Payment No.:						20,733.55

Payment No: 652786

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ENVIRONMENTAL SYSTEMS CORP	00498710	012041	AMMONIA CONVERSION FACTORS	Electric Utility	1,950.00
08/13/2021	ENVIRONMENTAL SYSTEMS CORP	00498713	012062	2021 STACKVISION DASPROTECT	Electric Utility	18,750.00
				Total for Payment No.:		20,700.00

Payment No: 652953

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	TRB AND ASSOCIATES, INC.	00499253	3829	AMENDMENT NO. 3 ADD FUNDS PER	Building New Dvlpmnt Svc Fee	6,475.00
08/20/2021	TRB AND ASSOCIATES, INC.	00499255	3830	AMENDMENT NO. 3 ADD FUNDS PER	Building New Dvlpmnt Svc Fee	555.00
08/20/2021	TRB AND ASSOCIATES, INC.	00499258	3824	AMENDMENT NO. 3 ADD FUNDS PER	Building New Dvlpmnt Svc Fee	13,440.00
				Total for Payment No.:		20,470.00

Payment No: 002430

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/17/2021	NAVIA BENEFIT SOLUTIONS, INC	00499061	07/25/21-08/07/21A	DD:BIWKLY NAVIA BENEFIT B2116	Payroll Liability&ClearingAcct	10,643.99
08/17/2021	NAVIA BENEFIT SOLUTIONS, INC	00499061	07/25/21-08/07/21A	DD:BIWKLY NAVIA BENEFIT B2116	Payroll Liability&ClearingAcct	9,721.56
				Total for Payment No.:		20,365.55

Payment No: 002423

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/03/2021	NAVIA BENEFIT SOLUTIONS, INC	00498248	07/11/21-07/24/21	DD:BIWKLY NAVIA BENEFIT B2115	Payroll Liability&ClearingAcct	10,301.76
08/03/2021	NAVIA BENEFIT SOLUTIONS, INC	00498248	07/11/21-07/24/21	DD:BIWKLY NAVIA BENEFIT B2115	Payroll Liability&ClearingAcct	9,721.75
				Total for Payment No.:		20,023.51

Payment No: 652993

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GEXPRO	00499527	S130053878.001	TRANSFORMER, OH, 75 KVA, 120/2	Electric Utility	19,498.46
				Total for Payment No.:		19,498.46

Payment No: 020145

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	LEVY SANTA CLARA CONVENTION CENTER	00498769	LevyInv 070121	CHANGE ORDER NO. 1: ADDITIONAL	Other City Dept Op Grant Fund	19,315.20
				Total for Payment No.:		19,315.20

Payment No: 020174

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VALLEY FAIR MALL, LLC	00498353	63832-01 CPV JUN-21	PBI SOLAR PROD PYMT #42 JUN202	Elec OperatingGrant Trust Fund	19,314.99
				Total for Payment No.:		19,314.99

Payment No: 020220

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	AUTO SVCS/1700 WALSH 50%	Fleet Operation Fund	61.49
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	FIRE/#6-888 AGNEW RD	General Fund	87.66
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	POOL/3750 DELA CRUZ	General Fund	54.53
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	2975 LAFAYETTE ST.	General Fund	8.65
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	POL SUBSTN/3992 RIVERMARK PLZ	General Fund	16.68
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	POOL/2250 ROYAL	General Fund	1,248.49
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	SR CNTR 1303 FREMONT ST	General Fund	338.70
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	NORTHSIDE LIB 695 MORELAND WAY	General Fund	43.20
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	FIRE-STA2 1900 WALSH AVE.	General Fund	134.03
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	STREET/1700 WALSH 50%	General Fund	61.48

08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	CITY HALL-1500 WARBURTON	General Fund	1,215.65
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	POLICE/601 EL CAMINO	General Fund	1,681.65
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	COMM SVCS-1515 EL CAMINO REAL	General Fund	9.72
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	BERMAN BLDG-1405 CIVIC CTR	General Fund	24.14
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	FIRE/#1 777 BENTON	General Fund	482.21
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	FIRE/#4-2323 PRUNERIDGE	General Fund	57.63
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	POOL/BUCHER-REBIERO	General Fund	8.66
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	POOL/BACHER-REBIERO STS	General Fund	966.81
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	FIRE/#9-3011 CORVIN	General Fund	0.00
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	GYM/2450 CABRILLO	General Fund	57.21
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	SPORTS CTR/3445 BENTON	General Fund	8.65
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	CRC/969 KIELY	General Fund	522.87
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	FIRE/#3 2821 HOMESTEAD RD	General Fund	59.32
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	LIBRARY/2635 HOMESTEAD	General Fund	3,193.93
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	POOL/2625 PATRICIA	General Fund	5,713.52
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	YOUTH SOCCER 5049 CENTENNIAL	General Fund	30.08
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	FIRE/#10 2401 TALLUTO	General Fund	0.00
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	PARKS/4750 LICK MILL BLVD	General Fund	16.67
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	PUMP/ELEC-LAWRENCE/HSTEAD	Sewer Utility	10.72
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	PUMP/4495 N 1ST ST	Sewer Utility	3,106.01
08/20/2021	PG&E	00499305	2490226441-5 JUL2021A	BACKUP GEN/2279 CALLE DE LUNA	Sewer Utility	8.65
Total for Payment No.:						19,229.01

Payment No: 020181

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ASPEN ENVIRONMENTAL GROUP	00498505	3513.001-08	AMI,MV90,MTR DATA ANALYS JUN21	Electric Utility Construction	12,863.00
08/20/2021	ASPEN ENVIRONMENTAL GROUP	00498508	3513.002-08	RATE & FEE ANALYSIS JUN21	Electric Utility	6,187.50
Total for Payment No.:						19,050.50

Payment No: 020149

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498078	0000457662	DEBRIS BIN SRVC- JUN 2021	Cemetery	270.46
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498078	0000457662	DEBRIS BIN SRVC- JUN 2021	General Fund	411.98
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498078	0000457662	DEBRIS BIN SRVC- JUN 2021	General Fund	3,498.32
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498078	0000457662	DEBRIS BIN SRVC- JUN 2021	Electric Utility	540.92
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	General Fund	3,768.18
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	General Fund	4,005.52
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	General Fund	925.10
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	General Fund	473.90
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	General Fund	63.73
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	General Fund	1,528.09
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	Water Utility	1,078.61
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	Electric Utility	2,423.02
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	Solid Waste Program	752.93
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498079	0000458852	CART & FRNT LOAD SRVC-JUN 2021	Electric Utility	265.80
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498080	0000458858	SVP GARBG & RECYL- JULY 2021	Electric Utility	1,002.60
08/13/2021	MISSION TRAIL WASTE SYSTEMS	00498267	CM456229	CREDIT- OVERPAYMENT #456229	Electric Utility	-2,005.20
				Total for Payment No.:		19,003.96

Payment No: 020249

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	FERGUSON ENTERPRISES INC	00499518	1648367	BOX, TRAFFIC VALVE, G05 BOX W	Water Utility	4,213.32
08/27/2021	FERGUSON ENTERPRISES INC	00499518	1648367	TYLER #670610502551(LID)	Water Utility	282.63
08/27/2021	FERGUSON ENTERPRISES INC	00499585	1647098	VALVE, BACKFLOW PREVENTER,	Water Utility	14,273.55

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Total for Payment No.: 18,769.50

Payment No: 020119

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BAYWA R.E. SOLAR PROJECTS, LLC	00498347	66381-03/66317-03 CPV JUN-2021	PBI JUN2021 PYMT #39 PR II TWR	Elec OperatingGrant Trust Fund	18,729.27
Total for Payment No.:						18,729.27

Payment No: 020258

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	LEVY SANTA CLARA CONVENTION CENTER	00499508	LEVYINV 00024	FY 20/21 SHORTFALL MAY	SCCC-Levy Food & Beverage	18,225.20
Total for Payment No.:						18,225.20

Payment No: 653006

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498632	134330	CSC LANDSCP MAINT- JUNE 21	General Fund	3,635.00
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498632	134330	SVP LANDSCP MAIN- JUNE 21	Electric Utility	3,000.00
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498632	134330	DVR PWRPLNT-LANDSCP MAIN JUN21	Electric Utility	600.00
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498633	134671	CSC LANDSCP MAIN- JULY 21	General Fund	3,635.00
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498633	134671	VTA FRIDAY SRVC- JULY 21	General Fund	1,950.00
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498633	134671	SVP LANDSCP MAIN- JULY 21	Electric Utility	3,000.00
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498633	134671	DVR PWRPLT LANDSCP MAIN- JUL21	Electric Utility	600.00
08/27/2021	NEW IMAGE LANDSCAPE COMPANY	00498633	134671	SVP LANDSCP MAIN #2- JULY 21	Electric Utility	1,700.00
Total for Payment No.:						18,120.00

Payment No: 020112

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	SANTA CLARA POLICE ASSN	00499076	07/11/21-08/07/21	UNION DUES B2115 & B2116	Payroll Liability&ClearingAcct	18,048.44
Total for Payment No.:						18,048.44
Payment No: 652867						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ALLIED UNIVERSAL SECURITY	00499313	11593440	FY 2021-22 SECURITY SERVICES F	Convention Cnt Maintenance Dis	16,123.84
08/20/2021	ALLIED UNIVERSAL SECURITY	00499314	11593441	FY 2021-22 SECURITY SERVICES F	Convention Cnt Maintenance Dis	1,780.32
Total for Payment No.:						17,904.16
Payment No: 652950						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021		00499270	219170	PROFESSIONAL SERVICES FOR 6/21 LEGAL SVS	Deposit Funds.	17,782.00
Total for Payment No.:						17,782.00
Payment No: 002435						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	NAVIA BENEFIT SOLUTIONS, INC	00499705	08/08/21-08/21/21A	DD:BIWEEKLY BENEFIT B2117	Payroll Liability&ClearingAcct	8,037.81
08/27/2021	NAVIA BENEFIT SOLUTIONS, INC	00499705	08/08/21-08/21/21A	DD:BIWEEKLY BENEFIT B2117	Payroll Liability&ClearingAcct	9,721.56
Total for Payment No.:						17,759.37
Payment No: 020167						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RICOH CORP	00499029	9028912299	June 2021 lease Ricoh	S.C.Stadium Authority Ops	70.85
08/13/2021	RICOH CORP	00499029	9028912299	June 2021 lease Ricoh	General Fund	77.78
08/13/2021	RICOH CORP	00499029	9028912299	June 2021 lease Ricoh	Information Technology Service	17,343.05

Total for Payment No.: 17,491.68

Payment No: 652816

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	R&B COMPANY	00498197	O090590	ASSORTED PARTS	Water Utility	11,627.39
08/13/2021	R&B COMPANY	00498198	O310631	ASSORTED PARTS	Water Utility	5,740.82
Total for Payment No.:						17,368.21

Payment No: 020077

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	HPI LLC	00497715	0721-772303	GIA TECH DIR REG 40HRS JUN21	Electric Utility Construction	5,800.00
08/06/2021	HPI LLC	00497715	0721-772303	GIA TECH DIR OT 32HRS JUN21	Electric Utility Construction	6,960.00
08/06/2021	HPI LLC	00497715	0721-772303	GIA TECH DIR TRAVEL JUN21	Electric Utility Construction	580.00
08/06/2021	HPI LLC	00497715	0721-772303	GIA TECH DIR PER DIEM JUN21	Electric Utility Construction	1,600.00
08/06/2021	HPI LLC	00497715	0721-772303	GIA TECH DIR TRAVEL JUN21	Electric Utility Construction	1,140.00
08/06/2021	HPI LLC	00497715	0721-772303	GIA LOCAL TRUCK JUN21	Electric Utility Construction	600.00
08/06/2021	HPI LLC	00497715	0721-772303	GIA LOCAL MILEAGE JUN21	Electric Utility Construction	240.00
08/06/2021	HPI LLC	00497715	0721-772303	GIA PROJ EXPENDABLES JUN21	Electric Utility Construction	108.00
Total for Payment No.:						17,028.00

Payment No: W22066A

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/25/2021	NOR-CAL OVERHEAD INC	00499349	39121	POLICE DEPT EL CAMINO EVIDENCE	General Fund	10,712.89
08/25/2021	NOR-CAL OVERHEAD INC	00499349	39121	POLICE DEPT EL CAMINO EVIDENCE	General Fund	6,255.00

Total for Payment No.: 16,967.89

Payment No: W22047

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/04/2021	SANTA CLARA CONVENTION CENTER	00498367	2461JUL2021A	INFORMA TECH HOLDING DEPOSIT	Convention Center Enterprise F	16,266.75
Total for Payment No.:						16,266.75

Payment No: W22049

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/05/2021	MARIN CLEAN ENERGY	00498368	SVP-0621	CISO CHG SC SVC G2-1 JUN21	Electric Utility	16,343.59
08/05/2021	MARIN CLEAN ENERGY	00498368	SVP-0621	CISO CHG SC SVC G2-1 MAY21	Electric Utility	-128.63
Total for Payment No.:						16,214.96

Payment No: 652905

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GARTON TRACTOR, INC	00499323	WE01487	PDI (PRE-DELIVERY INSPECTION)	Vehicle Replacement Fund	250.00
08/20/2021	GARTON TRACTOR, INC	00499323	WE01487	LOCAL DEALER HANDLING & DELIVE	Vehicle Replacement Fund	250.00
08/20/2021	GARTON TRACTOR, INC	00499323	WE01487	CA TIRE FEE	Vehicle Replacement Fund	7.00
08/20/2021	GARTON TRACTOR, INC	00499323	WE01487	CONFIGURED KUBOTA ZERO-TURN MO	Vehicle Replacement Fund	15,115.17
08/20/2021	GARTON TRACTOR, INC	00499323	WE01487	DEALER ASSEMBLY	Vehicle Replacement Fund	85.00
08/20/2021	GARTON TRACTOR, INC	00499323	WE01487	FREIGHT COST	Vehicle Replacement Fund	255.00
Total for Payment No.:						15,962.17

Payment No: 020267

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/27/2021	RUBIETTA, JOSH R.	00499593	SUM2021	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	15,700.40
Total for Payment No.:						15,700.40
Payment No: 020227						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SUNE W12DG-C, LLC	00498560	CA-12-0396-32	ENERGY PURCH (SOLAR) JUL21	Electric Utility	15,518.51
Total for Payment No.:						15,518.51
Payment No: 652878						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00499315	7462295	FY 2021-22 LANDSCAPED SERVICES	Convention Cnt Maintenance Dis	15,451.00
Total for Payment No.:						15,451.00
Payment No: 652991						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	EQUINIX INC	00498950	100210323623	SANTA CLARA IBX - SV2 (FIBER)	Electric Utility	15,228.65
Total for Payment No.:						15,228.65
Payment No: 020169						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SHUMS CODA ASSOC	00498771	6497	AGREEMENT FOR SERVICES TO PERF	Building New Dvlpmnt Svc Fee	15,200.00
Total for Payment No.:						15,200.00
Payment No: 652912						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	HEART OF THE VALLEY	00498567	HOTV-01-20/21	FY20/21 Services for Seniors	H.U.D Capital Projects	15,000.00
Total for Payment No.:						15,000.00

Payment No: 652589

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	E & M ELECTRIC & MACHINERY	00498514	376150	WWCA-SVC-DOC OPTIONAL DOCUMENT	Electric Utility	1,500.00
08/06/2021	E & M ELECTRIC & MACHINERY	00498514	376150	WWCA-SVC-DOC OPTIONAL DOCUMENT	Electric Utility	1,500.00
08/06/2021	E & M ELECTRIC & MACHINERY	00498514	376150	WWCA-SVC-DOC OPTIONAL DOCUMENT	Electric Utility	750.00
08/06/2021	E & M ELECTRIC & MACHINERY	00498514	376150	WWCA-SVC-0010 IT SERVICES	Electric Utility	4,366.00
08/06/2021	E & M ELECTRIC & MACHINERY	00498514	376150	WWCA-SVC-0010 IT SERVICES	Electric Utility	4,366.00
08/06/2021	E & M ELECTRIC & MACHINERY	00498514	376150	WWCA-SVC-0010 IT SERVICES	Electric Utility	2,183.00
				Total for Payment No.:		14,665.00

Payment No: 652973

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	U.S. BANK	00499711	08/08/21-08/21/21	BIWKLY PAYROLL DED PARS B2117	Fringe Benefits	14,453.77
				Total for Payment No.:		14,453.77

Payment No: 020237

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ANIXTER INC.	00499500	4913920-04	CONNECTOR, SPLIT BOLT, CU/CU,	Electric Utility	420.00
08/27/2021	ANIXTER INC.	00499504	5002877-00	CONNECTOR, OH, PARALLEL GROOVE	Electric Utility	2,274.98
08/27/2021	ANIXTER INC.	00499505	5002877-01	CONNECTOR, COMPRESSION, 500 KC	Electric Utility	153.05
08/27/2021	ANIXTER INC.	00499506	5002912-03	TRANSFORMER SAC ANDAX #TFS-065	Electric Utility	2,084.29
08/27/2021	ANIXTER INC.	00499507	5006917-00	CONNECTOR, MISC, #12 THRU #6 A	Electric Utility	758.42
08/27/2021	ANIXTER INC.	00499509	5010300-00	TERMINATION, 200A, ELBOW, #1/0	Electric Utility	2,337.78
08/27/2021	ANIXTER INC.	00499511	5017243-00	WIRE, BARE, CU, #6, SOLID, SOF	Electric Utility	1,639.66
08/27/2021	ANIXTER INC.	00499567	4952316-02	COMPOUND, ELECTRICAL JOINT, FO	Electric Utility	148.41

08/27/2021	ANIXTER INC.	00499570	5002834-00	INSULATOR, 12KV, PINTYPE-TIE T	Electric Utility	96.03
08/27/2021	ANIXTER INC.	00499572	5002912-01	GAIN, POLE, PLASTIC, 7IN X 4IN	Electric Utility	632.93
08/27/2021	ANIXTER INC.	00499594	5002912-00	TAPE, WOVEN POLYESTER, 2500 LB	Electric Utility	3,601.13
Total for Payment No.:						14,146.68

Payment No: 020124

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498740	271021	CHANGE ORDER #1: ADDITIONAL FU LEGAL SERVICES	Related Santa Clara Dvlpr Fund	11,440.00
08/13/2021		00498968	271185	CHANGE ORDER #1: ADDITIONAL FU LEGAL SERVICES	Electric Utility Construction	769.70
08/13/2021		00498969	271205	LEGAL SERVICES	Electric Utility Construction	1,908.00
Total for Payment No.:						14,117.70

Payment No: 020108

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	IBEW	00499071	07/11/21-08/07/21	UNION DUES B2115 & B2116	Payroll Liability&ClearingAcct	13,989.59
Total for Payment No.:						13,989.59

Payment No: 020259

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	LINNEA SHEEHY	00499601	2033	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	13,953.92
Total for Payment No.:						13,953.92

Payment No: 020213

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	MIDWEST TAPE LLC	00498452	500789897	1241 AD STRM	General Fund	13,653.89
08/20/2021	MIDWEST TAPE LLC	00498468	500748558	1241 AD DVD	General Fund	90.21

08/20/2021	MIDWEST TAPE LLC	00498468	500748558	1233 AD DVD	General Fund	19.62
08/20/2021	MIDWEST TAPE LLC	00498469	500775319	1241 AD DVD	General Fund	18.80
08/20/2021	MIDWEST TAPE LLC	00498469	500775319	1233 AD DVD	General Fund	18.80
Total for Payment No.:						13,801.32

Payment No: 020206

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	KIMBERLY DAVEY	00499286	A-080221	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	13,762.54
Total for Payment No.:						13,762.54

Payment No: 652977

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	AMERESCO	00498751	41762	ENERGY (LANDFILL GAS) JUL21	Electric Utility	13,696.66
Total for Payment No.:						13,696.66

Payment No: 020148

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498737	405235	LEGAL SERVICE - ADDITIOANAL EN	Related Santa Clara Dvlpr Fund	1,440.00
08/13/2021		00498739	405233	LEGAL SERVICE - ADDITIOANAL EN	Related Santa Clara Dvlpr Fund	11,865.00
08/13/2021		00498984	405234	LEGAL SERVICES	General Government - Other	108.00
Total for Payment No.:						13,413.00

Payment No: 020217

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	OLCESE WATER DISTRICT	00498561	100385	PURCHASE OF RECS AUG21	Electric Utility	12,512.00
08/20/2021	OLCESE WATER DISTRICT	00498561	100385	SCHEDULNG COORDINATOR ID APR21	Electric Utility	750.00

Total for Payment No.: 13,262.00

Payment No: 652935

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SAFARI MICRO INC	00499336	SM371047	HPE ARUBA SFP+ TRNSCEIVER MODU	Electric Utility	13,211.28
Total for Payment No.:						13,211.28

Payment No: 020134

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498738	5713776	ADDITIONAL FUNDS FROM PO 24464 LEGAL SERVICES	Related Santa Clara Dvlpr Fund	12,930.75
Total for Payment No.:						12,930.75

Payment No: 652871

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	AT&T CALNET	00499170	000016799445	IT - Comm - PD 9391023695	Information Technology Service	3,593.25
08/20/2021	AT&T CALNET	00499170	000016799445	Conv Center elevators 408-986-	Convention Cnt Maintenance Dis	45.15
08/20/2021	AT&T CALNET	00499170	000016799445	Conv Center garage office 408-	Convention Cnt Maintenance Dis	12.35
08/20/2021	AT&T CALNET	00499171	000016800297	Finance 9391054149	Information Technology Service	55.95
08/20/2021	AT&T CALNET	00499172	000016799432	BM - IT 9391023697	Information Technology Service	227.42
08/20/2021	AT&T CALNET	00499173	000016799463	CAO 9391023698	Information Technology Service	43.63
08/20/2021	AT&T CALNET	00499174	000016799439	CCO 9391023699	Information Technology Service	66.90
08/20/2021	AT&T CALNET	00499175	000016799449	CMO 9391023700	Information Technology Service	21.76
08/20/2021	AT&T CALNET	00499176	000016799435	Finance Misc. 9391023701	Information Technology Service	173.90
08/20/2021	AT&T CALNET	00499177	000016799438	Berryessa Adobe 260-1826	General Fund	66.90

08/20/2021	AT&T CALNET	00499177	000016799438	CDD 9391023702	Information Technology Service	250.91
08/20/2021	AT&T CALNET	00499178	000016799443	Library 9391023703	Information Technology Service	229.19
08/20/2021	AT&T CALNET	00499179	000016799460	AUTO 9391023704	Information Technology Service	45.19
08/20/2021	AT&T CALNET	00499180	000016799454	DPW 9391023705	Information Technology Service	115.85
08/20/2021	AT&T CALNET	00499181	000016799451	HR 9391023706	Information Technology Service	23.48
08/20/2021	AT&T CALNET	00499182	000016799444	PARKS - Cemetary 9391023707	Cemetery	68.58
08/20/2021	AT&T CALNET	00499183	000016799433	PARKS - YAC 9391023708	Information Technology Service	603.75
08/20/2021	AT&T CALNET	00499184	000016799442	PARKS - Sr Center 9391023709	Information Technology Service	5.10
08/20/2021	AT&T CALNET	00499185	000016799448	PARKS - CRC 9391023710	Information Technology Service	23.42
08/20/2021	AT&T CALNET	00499186	000016799437	PD 9391023711	Information Technology Service	3,801.63
08/20/2021	AT&T CALNET	00499187	000016799458	Purchasing 9391023712	Information Technology Service	23.42
08/20/2021	AT&T CALNET	00499188	000016799441	auto dialer 970-8644	Solid Waste Utility-Constructi	23.42
08/20/2021	AT&T CALNET	00499188	000016799441	Street 9391023713	Information Technology Service	215.12
08/20/2021	AT&T CALNET	00499188	000016799441	Convention Center 986-1335	Convention Cnt Maintenance Dis	23.42
08/20/2021	AT&T CALNET	00499189	000016799436	Fire 9391023714	Information Technology Service	460.04
08/20/2021	AT&T CALNET	00499190	000016799434	Water (flat fee \$50)	Water Utility	50.00
08/20/2021	AT&T CALNET	00499190	000016799434	IT 9391023715	Information Technology Service	171.65
08/20/2021	AT&T CALNET	00499191	000016799446	Water (50% of bal)	Water Utility	45.02
08/20/2021	AT&T CALNET	00499191	000016799446	IT (615 & 261 #s) 9391023716	Information Technology Service	749.41
08/20/2021	AT&T CALNET	00499191	000016799446	Sewer (50% of bal)	Sewer Utility	45.02
08/20/2021	AT&T CALNET	00499192	000016799452	Library 9391023718	General Fund	266.31
08/20/2021	AT&T CALNET	00499193	000016799440	PARKS 9391023719	General Fund	171.93

08/20/2021	AT&T CALNET	00499194	000016799457	Tasman Garage 9391023724	General Fund	726.02
08/20/2021	AT&T CALNET	00499195	000016799428	CDD - Comm Svcs 9391048040	General Fund	23.42
08/20/2021	AT&T CALNET	00499196	000016800298	PARKS - CRC 9391054153	Information Technology Service	-34.83
08/20/2021	AT&T CALNET	00499197	000016800783	Morse Mansion 9391064468	General Fund	46.89
08/20/2021	AT&T CALNET	00499198	000016760459	DOJ 9391066810	Information Technology Service	301.86
08/20/2021	AT&T CALNET	00499199	000016800809	PD - Alarms 9391065446	Information Technology Service	45.15
08/20/2021	AT&T CALNET	00499200	000016759359	Conference (COVID) 9391060106	Other City Dept Op Grant Fund	46.84
				Total for Payment No.:		12,874.42

Payment No: 652850

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VP SECURITY SERVICES, INC	00498985	18355	TEMPORARY SECURITY SERVICES	Electric Utility	4,224.00
08/13/2021	VP SECURITY SERVICES, INC	00498986	18394	TEMPORARY SECURITY SERVICES	Electric Utility	4,224.00
08/13/2021	VP SECURITY SERVICES, INC	00498987	18407	TEMPORARY SECURITY SERVICES	Electric Utility	4,224.00
				Total for Payment No.:		12,672.00

Payment No: 652881

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499098	L1681046544	U1 - Q2 - PD STADIUM	General Fund	3,540.52
08/20/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499098	L1681046544	U1- Q2 - STADIUM - CARE CREDIT	General Fund	-1,770.26
08/20/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499098	L1681046544	U1 - Q2 - GENERAL	Unemployment Insurance Fund	26,529.86
08/20/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499098	L1681046544	U1 - Q2 - SVP	Unemployment Insurance Fund	9,724.00
08/20/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499098	L1681046544	U1- Q2 - GENERAL - CARE CREDIT	Unemployment Insurance Fund	-20,701.74
08/20/2021	CA EMPLOYMENT DEVELOPMENT DEPT	00499098	L1681046544	U1 - Q2 - SVP - CARE CREDIT	Unemployment Insurance Fund	-4,862.00

Total for Payment No.: 12,460.38

Payment No: 020115

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ALLIANT INSURANCE SVCS INC	00498649	1681242	DEADLY WEAPONS -CITY	Special Liability Insurance	6,344.71
08/13/2021	ALLIANT INSURANCE SVCS INC	00498650	1681245	DEADLY WEAPONS -POWER PLANTS	Special Liability Insurance	6,064.91
Total for Payment No.:						12,409.62

Payment No: 020200

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	HPI LLC	00498465	0821-772301	GIA TECH DIR REG 40HRS JUL21	Electric Utility Construction	5,800.00
08/20/2021	HPI LLC	00498465	0821-772301	GIA TECH DIR OT 20HRS JUL21	Electric Utility Construction	4,350.00
08/20/2021	HPI LLC	00498465	0821-772301	GIA TECH DIR PER DIEM JUL21	Electric Utility Construction	1,400.00
08/20/2021	HPI LLC	00498465	0821-772301	GIA LOCAL TRUCK JUL21	Electric Utility Construction	450.00
08/20/2021	HPI LLC	00498465	0821-772301	GIA LOCAL MILEAGE JUL21	Electric Utility Construction	180.00
08/20/2021	HPI LLC	00498465	0821-772301	GIA PROJ EXPENDABLES JUL21	Electric Utility Construction	90.00
Total for Payment No.:						12,270.00

Payment No: 020137

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	HPI LLC	00498178	0721-772312	GIA TECH DIR REG 40HRS JUL21	Electric Utility Construction	5,800.00
08/13/2021	HPI LLC	00498178	0721-772312	GIA TECH DIR OT 20HRS JUL21	Electric Utility Construction	4,350.00
08/13/2021	HPI LLC	00498178	0721-772312	GIA TECH DIR PER DIEM JUL21	Electric Utility Construction	1,400.00
08/13/2021	HPI LLC	00498178	0721-772312	GIA LOCAL TRUCK JUL21	Electric Utility	450.00

					Construction	
08/13/2021	HPI LLC	00498178	0721-772312	GIA LOCAL MILEAGE JUL21	Electric Utility Construction	180.00
08/13/2021	HPI LLC	00498178	0721-772312	GIA PROJ EXPENDABLES JUL21	Electric Utility Construction	90.00
				Total for Payment No.:		12,270.00

Payment No: 020256

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	HPI LLC	00498963	0821-772305	GIA TECH DIR REG 40HRS AUG21	Electric Utility Construction	5,800.00
08/27/2021	HPI LLC	00498963	0821-772305	GIA TECH DIR OT 20HRS AUG21	Electric Utility Construction	4,350.00
08/27/2021	HPI LLC	00498963	0821-772305	GIA TECH DIR PER DIEM AUG21	Electric Utility Construction	1,400.00
08/27/2021	HPI LLC	00498963	0821-772305	GIA LOCAL TRUCK AUG21	Electric Utility Construction	450.00
08/27/2021	HPI LLC	00498963	0821-772305	GIA LOCAL MILEAGE AUG21	Electric Utility Construction	180.00
08/27/2021	HPI LLC	00498963	0821-772305	GIA PROJ EXPENDABLES AUG21	Electric Utility Construction	90.00
				Total for Payment No.:		12,270.00

Payment No: 652658

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WEST COAST ARBORISTS INC	00497981	174507	TREE REMOVAL	Cemetery	11,940.00
				Total for Payment No.:		11,940.00

Payment No: 652978

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	AMERICAN MACHINE & CONVEYOR	00499523	1332	SAMPLE STATION, WITHOUT FLUSH	Water Utility	8,262.20
08/27/2021	AMERICAN MACHINE & CONVEYOR	00499523	1332	POWDER COATING WHITE	Water Utility	708.50
08/27/2021	AMERICAN MACHINE & CONVEYOR	00499523	1332	FREIGHT	Water Utility	178.00

08/27/2021	AMERICAN MACHINE & CONVEYOR	00499525	1333	SAMPLE STATION, WITHOUT FLUSH	Water Utility	2,478.66
08/27/2021	AMERICAN MACHINE & CONVEYOR	00499525	1333	POWDER COATING WHITE	Water Utility	212.55
				Total for Payment No.:		11,839.91

Payment No: 020225

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SERRANO ELECTRIC INC	00498588	30977	TASMAN	Public Buildings	11,586.00
				Total for Payment No.:		11,586.00

Payment No: 652756

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	U.S. BANK	00499063	07/25/21-08/07/21	BIWKLY PAYROLL DED PARS B2116	Fringe Benefits	11,157.48
				Total for Payment No.:		11,157.48

Payment No: 020069

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	EJ PIRES TRUCKING INC	00498396	99919	TRUCKING AND HAULING SERVICES-	Water Utility	1,006.83
08/06/2021	EJ PIRES TRUCKING INC	00498396	99919	OPTION YEAR 1 - TRUCKING & HAU	Water Utility	8,416.27
08/06/2021	EJ PIRES TRUCKING INC	00498396	99919	TRUCKING & HAULING SERVICES -	Sewer Utility	177.67
08/06/2021	EJ PIRES TRUCKING INC	00498396	99919	OPTION YEAR 1 - TRUCKING & HAU	Sewer Utility	1,485.23
				Total for Payment No.:		11,086.00

Payment No: 020117

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BADGER METER INC	00498766	1446774	METER, WATER 1" E-SERIES ULTRA	Water Utility	11,076.19
				Total for Payment No.:		11,076.19

Payment No: 652812

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PRECISION CONCRETE CUTTING	00499023	51913	CONCRETE SHAVING	Streets And Highways	10,927.84
				Total for Payment No.:		10,927.84

Payment No: 652836

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	TRUEPOINT SOLUTIONS, LLC	00498003	21-484	Accela IVR Integration	General Government - Other	8,000.00
08/13/2021	TRUEPOINT SOLUTIONS, LLC	00498004	21-386	Accela IVR Integration	General Government - Other	2,575.00
				Total for Payment No.:		10,575.00

Payment No: 652662

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	YOUR ENERGY SOLUTIONS	00497733	2021-LISG-028	LOW INCOME GRANTSOLAR;41899-01	Elec OperatingGrant Trust Fund	10,500.00
				Total for Payment No.:		10,500.00

Payment No: 020229

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY PD CELLULAR SERVICE	General Fund	450.00
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY STADIUM CELLULAR SERVIC	General Fund	14.91
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY CMO CELLULAR SERVICE	General Fund	42.03
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY PARKS CELLULAR SERVICE	General Fund	333.04
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY COUNCIL CELLULAR SERVICE	General Fund	24.85
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY CCD CELLULAR SERVICE	General Fund	124.25
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY HR CELLULAR SERVICE	General Fund	24.85
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY DPW CELLULAR SERVICE	General Fund	82.20
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY BLD MNT CELLULAR SERVICE	General Fund	54.67

08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY STREETS CELLULAR SERVICE	General Fund	129.77
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY RECURRING CELL SERVICE	Information Technology Service	1,314.03
08/20/2021	T-MOBILE	00499161	952058658 MAY2021	MAY WATER CELLULAR SERVICE	Sewer Utility	257.39
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN PD CELLULAR SERVICE	General Fund	450.00
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN STADIUM CELLULAR SERVIC	General Fund	39.21
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN CMO CELLULAR SERVICE	General Fund	258.23
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN PARKS CELLULAR SERVICE	General Fund	908.04
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN COUNCIL CELLULAR SERVICE	General Fund	65.35
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN CCD CELLULAR SERVICE	General Fund	326.75
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN HR CELLULAR SERVICE	General Fund	65.35
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN DPW CELLULAR SERVICE	General Fund	298.88
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN BLD MNT CELLULAR SERVICE	General Fund	289.63
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN STREETS CELLULAR SERVICE	General Fund	519.95
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN PLANNING CELLULAR SERVICE	Other City Dept Op Grant Fund	13.07
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN RECURRING CELL SERVICE	Information Technology Service	3,657.16
08/20/2021	T-MOBILE	00499165	952058658 JUN2021	JUN WATER CELLULAR SERVICE	Sewer Utility	696.49
				Total for Payment No.:		10,440.10

Payment No: 020173

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	UNIVERSAL SITE SERVICES	00498709	21027618	FY 2021-2022 CUSTODIAL SERVICE	Convention Cnt Maintenance Dis	5,980.00
08/13/2021	UNIVERSAL SITE SERVICES	00498709	21027618	FY 2021-2022 PRESSURE WASHING	Convention Cnt Maintenance Dis	2,720.00
08/13/2021	UNIVERSAL SITE SERVICES	00499024	21026807	SWEEPING - FRANKLIN SQUARE	Downtown Parking Maintenance D	1,383.00
				Total for Payment No.:		10,083.00

Payment No: 653007

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	OPENGOV, INC	00499696	INV00004636	YEAR 4 OF 5 TO PROVIDE SURVEY	General Fund	10,000.00
				Total for Payment No.:		10,000.00

Payment No: 652775

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CATHOLIC CHARITIES	00499050	20/21-Q1-COPC	CATHOLIC CHARITIES OMBUDSMAN F	H.U.D Capital Projects	3,172.30
08/13/2021	CATHOLIC CHARITIES	00499051	20/21-Q2-COPC	CATHOLIC CHARITIES OMBUDSMAN F	H.U.D Capital Projects	2,429.02
08/13/2021	CATHOLIC CHARITIES	00499052	20/21-Q3-COPC	CATHOLIC CHARITIES OMBUDSMAN F	H.U.D Capital Projects	2,305.97
08/13/2021	CATHOLIC CHARITIES	00499053	20/21-Q4-COPC	CATHOLIC CHARITIES OMBUDSMAN F	H.U.D Capital Projects	2,092.71
				Total for Payment No.:		10,000.00

Payment No: 652877

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BRIGHTON ENERGY	00498427	R22-SBGR-0046	SM BUS LTG REBATE; 18673-04	Elec OperatingGrant Trust Fund	10,000.00
				Total for Payment No.:		10,000.00

Payment No: 652952

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	TOM JEW	00498426	R22-SBGR-0027	SM BUS HVAC REBATE;35015-01	Elec OperatingGrant Trust Fund	10,000.00
				Total for Payment No.:		10,000.00

Payment No: 652934

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	RD ENERGY SOLUTIONS	00498470	R22-SBGR-0011	SM BUS LTG REBATE; 67737-01	Elec OperatingGrant Trust Fund	9,893.00

Total for Payment No.: 9,893.00

Payment No: 652680

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	TRAFFIC DATA SERVICE CA, LLC	00499087	21043	AS-NEEDED TRAFFIC DATA COLLECT	Streets And Highways	4,980.00
08/13/2021	TRAFFIC DATA SERVICE CA, LLC	00499088	21044	AS-NEEDED TRAFFIC DATA COLLECT	Streets And Highways	4,800.00
Total for Payment No.:						9,780.00

Payment No: 652996

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	HYAS GROUP, LLC	00498727	4433	CONSULTING 457 PLAN Q2 2021	Expendable Trust Funds	9,750.00
Total for Payment No.:						9,750.00

Payment No: 652653

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	VALLEY POWER SYSTEMS INC	00497646	K57424	LABOR-V#3423 WO#130998	Fleet Operation Fund	767.00
08/06/2021	VALLEY POWER SYSTEMS INC	00497646	K57424	MACHINE OPS-V#3423 WO#130998	Fleet Operation Fund	274.28
08/06/2021	VALLEY POWER SYSTEMS INC	00497646	K57424	MILEAGE- V#3423 WO#130998	Fleet Operation Fund	19.92
08/06/2021	VALLEY POWER SYSTEMS INC	00497646	K57424	PARTS-V#34233 WO#130998	Fleet Operation Fund	138.80
08/06/2021	VALLEY POWER SYSTEMS INC	00497647	K57426	MILEAGE-V#3425 WO#130997	Fleet Operation Fund	11.79
08/06/2021	VALLEY POWER SYSTEMS INC	00497647	K57426	PARTS-V#3425 WO#130997	Fleet Operation Fund	237.93
08/06/2021	VALLEY POWER SYSTEMS INC	00497647	K57426	LABOR-V#3425 WO#130997	Fleet Operation Fund	676.00
08/06/2021	VALLEY POWER SYSTEMS INC	00497647	K57426	MACHINE OPS-V#3425 WO#130997	Fleet Operation Fund	274.28
08/06/2021	VALLEY POWER SYSTEMS INC	00497648	K57224	LABOR-V#3120 WO#1330993	Fleet Operation Fund	1,200.00
08/06/2021	VALLEY POWER SYSTEMS INC	00497649	K57225	LABOR-V#SVACG1 WO#130180	Fleet Operation Fund	1,200.00
08/06/2021	VALLEY POWER SYSTEMS INC	00497650	K57430	LABOR-V#3429 WO#130999	Fleet Operation Fund	1,200.00
08/06/2021	VALLEY POWER SYSTEMS INC	00497651	K57431	LABOR-V#3430 WO3130992	Fleet Operation Fund	1,200.00
08/06/2021	VALLEY POWER SYSTEMS INC	00497895	K54517	LABOR-V#0743 WO#131047	Fleet Operation Fund	884.00

08/06/2021	VALLEY POWER SYSTEMS INC	00497895	K54517	MILEAGE-V#0743 WO#131047	Fleet Operation Fund	87.11
08/06/2021	VALLEY POWER SYSTEMS INC	00497895	K54517	PARTS-V#0743 WO#131047	Fleet Operation Fund	228.89
08/06/2021	VALLEY POWER SYSTEMS INC	00497896	K55294	LABOR-V#3422 WO#131045	Fleet Operation Fund	1,200.00
Total for Payment No.:						9,600.00

Payment No: 020102

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KIMLEY-HORN AND ASSOC INC	00498325	097083031-0421	SIGNAL TIMING - APR21	Streets And Highways	9,585.00
Total for Payment No.:						9,585.00

Payment No: 020250

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GARDENLAND POWER EQUIPMENT	00499599	872180	AR3000L KIT (Battery, BP FR, C	Elec OperatingGrant Trust Fund	6,913.53
08/27/2021	GARDENLAND POWER EQUIPMENT	00499599	872180	AL 500 High Speed	Elec OperatingGrant Trust Fund	656.20
08/27/2021	GARDENLAND POWER EQUIPMENT	00499599	872180	BGA 200 HAND HELD BLOWER	Elec OperatingGrant Trust Fund	1,928.23
Total for Payment No.:						9,497.96

Payment No: 020204

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	INGRAM LIBRARY SERVICES INC	00498663	54083244	1241 AD BK	General Fund	1,535.73
08/20/2021	INGRAM LIBRARY SERVICES INC	00498663	54083244	1231 JUV BK	General Fund	4,401.49
08/20/2021	INGRAM LIBRARY SERVICES INC	00498663	54083244	1232 YA BK	General Fund	81.61
08/20/2021	INGRAM LIBRARY SERVICES INC	00498664	54083259	1235 AD/JUV/YA BK	General Fund	3,232.53
08/20/2021	INGRAM LIBRARY SERVICES INC	00498665	54083274	1236 AD/JUV BK	General Fund	162.69
08/20/2021	INGRAM LIBRARY SERVICES INC	00498666	54083275	1233 JUV BK	General Fund	15.26
Total for Payment No.:						9,429.31

Payment No: 652913

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	HOPE SERVICES	00499320	FY2021-02	HOPE Services FY20/21 - Media	H.U.D Capital Projects	9,353.27
				Total for Payment No.:		9,353.27

Payment No: 652851

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	WEST COAST CODE CONSULTANTS INC	00498772	221-06-004-03	AGREEMENT FOR SERVICES TO PERF	Building New Dvlpmnt Svc Fee	9,350.00
				Total for Payment No.:		9,350.00

Payment No: 652629

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PG&E	00497764	0008024099-7	COO C'ROCK-LKVIL AF CHG 21-22	Electric Utility	9,342.16
				Total for Payment No.:		9,342.16

Payment No: 020248

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	FASTENAL CO	00499517	CASAJ92106	FUSE-LV-600V-CARTRIDGE TYPE-N0	Electric Utility	246.09
08/27/2021	FASTENAL CO	00499517	CASAJ92106	SCREW - MACHINE - FLAT HD - BR	Electric Utility	196.88
08/27/2021	FASTENAL CO	00499517	CASAJ92106	CABLE TIE, 20IN LG X .50IN WID	Electric Utility	8,603.44
				Total for Payment No.:		9,046.41

Payment No: 652665

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ZOLL DATA SYSTEMS INC	00497979	INV00087111	INTERFACE ANNUAL 7/1/21-6/30/2	General Fund	8,999.00
08/06/2021	ZOLL DATA SYSTEMS INC	00497979	INV00087111	FIRE RMS ANNUAL 7/1/21-6/30/22	General Fund	0.00
				Total for Payment No.:		8,999.00

Payment No: 652543

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CA ENVIRONMENTAL PROTECTION	00498519	507JUL2021A	QTRLY CUPA FEES APR-JUN21	General Fund	8,934.00
				Total for Payment No.:		8,934.00

Payment No: 652907

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GTT COMMUNICATIONS INC	00498527	INV5282380	INTERNET SVCS 881/1705 AUG21	Electric Utility	8,793.71
				Total for Payment No.:		8,793.71

Payment No: 652975

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CALIF BUILDING STANDARDS COMMISSION	00498450	15309AUG2021	Building Standards Fee for Q2	Building Fee Admin Retainage	8,793.00
				Total for Payment No.:		8,793.00

Payment No: 652828

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	STATEWIDE SAFETY SYSTEMS	00499027	05034526	GRINDER; SO 26B278 - DC89G W/	General Fund	8,740.23
				Total for Payment No.:		8,740.23

Payment No: 020209

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	KOFFLER	00498466	0098293-IN	200HP PUMP MOTOR-SHOP LABOR	Electric Utility	8,348.00
08/20/2021	KOFFLER	00498466	0098293-IN	200HP PUMP MOTOR-MATERIALS	Electric Utility	371.03
				Total for Payment No.:		8,719.03

Payment No: 020095

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	STATEN SOLAR CORPORATION	00498440	22027	15% CONTINGENCY	Library	9,170.00
08/06/2021	STATEN SOLAR CORPORATION	00498440	22027	RETENTION	Library	-458.50
Total for Payment No.:						8,711.50

Payment No: 020223

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	RODNEY C PEOPLES	00498421	R210715	REPAIR WELL 3R- JULY 2021	Solid Waste Utility-Constructi	4,873.50
08/20/2021	RODNEY C PEOPLES	00498422	R210716	#8332-S7 JULY 2021	Solid Waste Utility-Constructi	3,783.75
Total for Payment No.:						8,657.25

Payment No: 020076

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	HILL BROTHERS CHEMICAL CO	00498510	07100504	AQUEOUS AMMONIA DELIVERIES	Electric Utility	4,110.21
08/06/2021	HILL BROTHERS CHEMICAL CO	00498515	07099596	AQUEOUS AMMONIA DELIVERIES	Electric Utility	4,481.58
Total for Payment No.:						8,591.79

Payment No: 020230

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	THERMAL MECHANICAL INC	00498589	82296	CRC ANNUAL CHILLER SRV	General Fund	8,526.00
Total for Payment No.:						8,526.00

Payment No: 652883

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CENTER FOR INTERNET SECURITY	00499339	INV-210628-0028509	CIS Albert SM Monitoring Prima	Information Technology Service	8,520.00
Total for Payment No.:						8,520.00

Payment No: 652764

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AT&T CALNET	00498175	000016799381	BAN: 9391015175 6/25-7/24/21	Electric Utility	8,508.36
				Total for Payment No.:		8,508.36

Payment No: 020263

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ORACLE AMERICA INC	00499522	100025902	PEOPLESFT PROGRAM-RELATED QUA	General Fund	3,060.17
08/27/2021	ORACLE AMERICA INC	00499524	100022200	PEOPLESFT SOFTWARE UDPATE, LI	General Fund	5,330.15
				Total for Payment No.:		8,390.32

Payment No: 653030

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	VERIZON WIRELESS	00499289	9884826119	CELL PHONE SERVICE JUL21	Electric Utility	8,375.59
				Total for Payment No.:		8,375.59

Payment No: 652635

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SAFARI MICRO INC	00497946	SM370798	RENEWAL IRONKEY EMS CLOUD MGMT	Electric Utility	4,476.08
08/06/2021	SAFARI MICRO INC	00497947	SM370361	HP LASERJET ENTERPRISE MFP	Electric Utility	3,881.02
				Total for Payment No.:		8,357.10

Payment No: 020143

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KIDZ LOVE SOCCER	00498750	2021JUN-10390-0014	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	7,943.00
				Total for Payment No.:		7,943.00

Payment No: 652586

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	DELL MARKETING LP	00498099	10495647584	Dell Laptop - XPS 17 9700	Public Education and Governmnt	6,628.36
08/06/2021	DELL MARKETING LP	00498099	10495647584	Dell Thunderbolt Dock-WD19TBS	Public Education and Governmnt	612.99
08/06/2021	DELL MARKETING LP	00498099	10495647584	Environment Fee	Public Education and Governmnt	10.90
08/06/2021	DELL MARKETING LP	00498099	10495647584	NON TAXABLE	Public Education and Governmnt	649.02
				Total for Payment No.:		7,901.27

Payment No: 020211

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	LEHR AUTO ELECTRIC	00498488	SI62994	PARTS-V#3588	Vehicle Replacement Fund	294.13
08/20/2021	LEHR AUTO ELECTRIC	00498488	SI62994	PARTS-V#3589	Vehicle Replacement Fund	294.14
08/20/2021	LEHR AUTO ELECTRIC	00498491	SI63591	PARTS-V#3586	Vehicle Replacement Fund	603.63
08/20/2021	LEHR AUTO ELECTRIC	00498493	SI63816	PARTS-V#3588	Vehicle Replacement Fund	2,946.92
08/20/2021	LEHR AUTO ELECTRIC	00498493	SI63816	PARTS-V#3589	Vehicle Replacement Fund	2,946.92
08/20/2021	LEHR AUTO ELECTRIC	00498495	SI63833	PARTS-V#3594	Vehicle Replacement Fund	172.13
08/20/2021	LEHR AUTO ELECTRIC	00498495	SI63833	PARTS-STOCK	Fleet Operation Fund	516.38
				Total for Payment No.:		7,774.25

Payment No: 652896

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	DINESH DRISHANA & DHRITIL LLC	00498425	R22-SBGR-0012	SM BUS LTG REBATE; 63996-07	Elec OperatingGrant Trust Fund	7,740.00
				Total for Payment No.:		7,740.00

Payment No: 652576

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CHRISTY VAULT CO	00497982	0090239-IN	CRYPTS/SHUTTERS/VAULTS	Cemetery	7,726.20
				Total for Payment No.:		7,726.20

Payment No: 652994

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GLOBAL RENTAL CO	00498953	3661763	RENT FREIGHTL M2-106 8/4-8/31	Electric Utility	3,819.38
08/27/2021	GLOBAL RENTAL CO	00498957	3663524	RENT FREIGHTL M2-106 8/9-9/5	Electric Utility	3,819.38
				Total for Payment No.:		7,638.76

Payment No: 652861

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SCCW LLC	00499242	63865-03 Utility Refund	UTILITY REFUND	General Fund	7,612.10
				Total for Payment No.:		7,612.10

Payment No: 020154

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NVIDIA CORP	00498352	63037-04 CPV JUN-2021	PBI SOLAR PROD PYMT #52 JUN-20	Elec OperatingGrant Trust Fund	7,536.06
				Total for Payment No.:		7,536.06

Payment No: 002431

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Vehicle Replacement Fund	46.95
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Fleet Operation Fund	5.05
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Cemetery	307.97
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Water Utility Construction	49.05

08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	General Fund	275.07
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Electric Utility Construction	6,034.50
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Electric Utility	643.20
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Sewer Utility	24.61
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Other City Dept Op Grant Fund	1.33
08/20/2021	CA DEPT OF TAX & FEE ADMIN	00499151	JULY2021	DD:SALES & USE TAX JUL21	Electric Utility	55.69
Total for Payment No.:						7,443.42

Payment No: 652633

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	REED & GRAHAM INC	00498489	004603	COLD MIX & BASE ROCK	Water Utility Construction	763.79
08/06/2021	REED & GRAHAM INC	00498489	004603	COLD MIX & BASE ROCK	Water Utility	305.52
08/06/2021	REED & GRAHAM INC	00498489	004603	COLD MIX & BASE ROCK	Electric Utility Construction	381.90
08/06/2021	REED & GRAHAM INC	00498489	004603	COLD MIX & BASE ROCK	Sewer Utility	76.37
08/06/2021	REED & GRAHAM INC	00498490	004602	COLD MIX & BASE ROCK	Water Utility Construction	801.79
08/06/2021	REED & GRAHAM INC	00498490	004602	COLD MIX & BASE ROCK	Water Utility	320.72
08/06/2021	REED & GRAHAM INC	00498490	004602	COLD MIX & BASE ROCK	Electric Utility Construction	400.91
08/06/2021	REED & GRAHAM INC	00498490	004602	COLD MIX & BASE ROCK	Sewer Utility	80.18
08/06/2021	REED & GRAHAM INC	00498494	004313	COLD MIX & BASE ROCK	Water Utility Construction	284.88
08/06/2021	REED & GRAHAM INC	00498494	004313	COLD MIX & BASE ROCK	Water Utility	113.96
08/06/2021	REED & GRAHAM INC	00498494	004313	COLD MIX & BASE ROCK	Electric Utility Construction	142.43
08/06/2021	REED & GRAHAM INC	00498494	004313	COLD MIX & BASE ROCK	Sewer Utility	28.50
08/06/2021	REED & GRAHAM INC	00498501	004805	COLD MIX & BASE ROCK	Water Utility Construction	1,833.03
08/06/2021	REED & GRAHAM INC	00498501	004805	COLD MIX & BASE ROCK	Water Utility	733.22
08/06/2021	REED & GRAHAM INC	00498501	004805	COLD MIX & BASE ROCK	Electric Utility Construction	916.53

08/06/2021	REED & GRAHAM INC	00498501	004805	COLD MIX & BASE ROCK	Sewer Utility	183.30
Total for Payment No.:						7,367.03
Payment No: 652553						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	TRUE POWER SERVICES	00498429	1329	Labor to install materials pro	General Fund	7,261.33
Total for Payment No.:						7,261.33
Payment No: 020118						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BAY AREA TREE SPECIALISTS	00498075	67243	SVP- JENNY STAND SOLAR RESRCH	Electric Utility	7,200.00
Total for Payment No.:						7,200.00
Payment No: 652783						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	DELL MARKETING LP	00498976	10498880819	Dell Thunderbolt Dock- WD19TBS	General Fund	218.00
08/13/2021	DELL MARKETING LP	00498976	10498880819	Dell Thunderbolt Dock- WD19TBS	General Fund	218.00
08/13/2021	DELL MARKETING LP	00498976	10498880819	Dell Thunderbolt Dock- WD19TBS	General Fund	218.00
08/13/2021	DELL MARKETING LP	00498976	10498880819	Dell Thunderbolt Dock- WD19TBS	S.C.Stadium Authority Ops	218.00
08/13/2021	DELL MARKETING LP	00498976	10498880819	Dell Thunderbolt Dock- WD19TBS	General Fund	218.00
08/13/2021	DELL MARKETING LP	00499005	10495647605	Dell Latitude 5320 XCTO Base	General Fund	1,226.24
08/13/2021	DELL MARKETING LP	00499005	10495647605	Dell Latitude 5320 XCTO Base	General Fund	1,226.25
08/13/2021	DELL MARKETING LP	00499005	10495647605	Dell Latitude 5320 XCTO Base	General Fund	1,226.25
08/13/2021	DELL MARKETING LP	00499005	10495647605	Dell Latitude 5320 XCTO Base	S.C.Stadium Authority Ops	1,226.25
08/13/2021	DELL MARKETING LP	00499005	10495647605	Dell Latitude 5320 XCTO Base	General Fund	301.82
08/13/2021	DELL MARKETING LP	00499005	10495647605	Environmental Fees	General Fund	4.00
08/13/2021	DELL MARKETING LP	00499005	10495647605	Environmental Fees	General Fund	4.00

08/13/2021	DELL MARKETING LP	00499005	10495647605	Environmental Fees	General Fund	4.00
08/13/2021	DELL MARKETING LP	00499005	10495647605	Environmental Fees	S.C.Stadium Authority Ops	4.00
08/13/2021	DELL MARKETING LP	00499005	10495647605	Environmental Fees	General Fund	4.00
08/13/2021	DELL MARKETING LP	00499005	10495647605	Dell Latitude 5320 XCTO Base	General Fund	848.10
				Total for Payment No.:		7,164.91

Payment No: 652642

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SEL ENGINEERING SERVICES, INC.	00498001	42079	ELECT NRS UPGRADE THRU JUN2021	Electric Utility Construction	7,161.79
				Total for Payment No.:		7,161.79

Payment No: 020207

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	KIMLEY-HORN AND ASSOC INC	00499160	18940610	AGREEMENT FOR ON-CALL TRAFFIC	Streets And Highways	1,117.50
08/20/2021	KIMLEY-HORN AND ASSOC INC	00499220	19039002	HI-INTENSITY ACTIVATED CROSSWA	Streets And Highways	6,005.00
				Total for Payment No.:		7,122.50

Payment No: 020172

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398032 - HOSE,3/4 X 14IN O	Electric Utility	618.64
08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398004P0001 - HOSE, INTERC	Electric Utility	383.03
08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398005P0001 - HOSE, INTERC	Electric Utility	1,525.08
08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398007P0001 - HOSE, INTERC	Electric Utility	1,330.35
08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398046P0001 - HOSE, PUMP C	Electric Utility	599.66
08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398071P0001 - HOSE, PUMP,C	Electric Utility	641.90
08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398131P0001 - HOSE, HYDRA	Electric Utility	491.39

08/13/2021	TRANSCANADA TURBINES INC	00498945	1015425	PN# 398003P0001 - HOSE, INTERC	Electric Utility	1,505.88
Total for Payment No.:						7,095.93

Payment No: 020146

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MBL & SONS, INC	00498350	63467-01 CPV JUN-2021	ST LAWRNC PBI PYMT #40 JUN 202	Elec OperatingGrant Trust Fund	5,479.32
08/13/2021	MBL & SONS, INC	00498351	75175-01 CPV JUN-2021	ST JUSTIN PBI PYMT #35 JUN-202	Elec OperatingGrant Trust Fund	1,613.77
Total for Payment No.:						7,093.09

Payment No: 652909

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021		00499306	1295845	LEGAL SERVICES	Special Liability Insurance	2,936.98
08/20/2021		00499306	1295845	LEGAL SERVICES - CHANGE ORDER	Special Liability Insurance	3,780.17
Total for Payment No.:						6,717.15

Payment No: 020231

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	TIMOTHY D BOWEN	00499285	DB20624	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	6,644.46
Total for Payment No.:						6,644.46

Payment No: 020252

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GRANITE CONSTRUCTION CO	00499574	2061679	HOT MIX ASPHALT AND EMULSION	General Fund	807.13
08/27/2021	GRANITE CONSTRUCTION CO	00499575	2065407	HOT MIX ASPHALT AND EMULSION	General Fund	859.03
08/27/2021	GRANITE CONSTRUCTION CO	00499576	2062714	HOT MIX ASPHALT AND EMULSION	General Fund	2,234.38
08/27/2021	GRANITE CONSTRUCTION CO	00499577	2063864	HOT MIX ASPHALT AND EMULSION	General Fund	2,250.49

08/27/2021	GRANITE CONSTRUCTION CO	00499579	2066468	HOT MIX ASPHALT AND EMULSION	General Fund	412.52
Total for Payment No.:						6,563.55
Payment No: 652595						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GLOBAL RENTAL CO	00496900	3650904	RENT FREIGHTL M2-106 7/7-8/3	Electric Utility	3,819.38
08/06/2021	GLOBAL RENTAL CO	00497928	3655765	2019 FORD F550 AUG21	Electric Utility Construction	2,728.13
Total for Payment No.:						6,547.51
Payment No: 652644						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SNAP-ON INDUSTRIAL	00498283	ARV / 48808721	DIAGNOSTIC TOOLS- SHOP USE	Fleet Operation Fund	6,532.99
Total for Payment No.:						6,532.99
Payment No: 652837						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	TUCKER CONSTRUCTION	00498073	29484A	FENCE RPR-LAFYTT & MT VIEW ALV	Storm Drain	3,741.97
08/13/2021	TUCKER CONSTRUCTION	00498073	29484A	FENCE REPAIR & REPLACEMENT	Storm Drain	1,084.83
08/13/2021	TUCKER CONSTRUCTION	00498085	29484B	FENCE REPR- MT VIEW ALVISO RD	Storm Drain	1,581.59
Total for Payment No.:						6,408.39
Payment No: 652947						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SWA SERVICES GROUP	00499345	21647	JANITORIAL SERVICES AT THE ISC	General Fund	3,625.87
08/20/2021	SWA SERVICES GROUP	00499346	21612	JANITORIAL SERVICES AT THE ISC	General Fund	418.37
08/20/2021	SWA SERVICES GROUP	00499347	21611	JANITORIAL SERVICES AT THE ISC	General Fund	2,340.00
Total for Payment No.:						6,384.24

Payment No: 652875

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BAYSCAPE LANDSCAPE MANAGEMENT	00499152	21711	CHANGE ORDER #1 - ADDITIONAL F	Water Utility Construction	2,187.00
08/20/2021	BAYSCAPE LANDSCAPE MANAGEMENT	00499152	21711	LANDSCAPING SERVICES FOR VARIO	Water Utility Construction	2,573.00
08/20/2021	BAYSCAPE LANDSCAPE MANAGEMENT	00499153	22283	CHANGE ORDER #1 - ADDITIONAL F	Water Utility Construction	1,515.00
				Total for Payment No.:		6,275.00

Payment No: 652894

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	DELTAWRX LLC	00499241	1117	RMS AQUISTITION PHASE III MTH9	General Government - Other	6,254.82
				Total for Payment No.:		6,254.82

Payment No: 653001

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	MALLORY SAFETY & SUPPLY LLC	00499582	5136794	VEST, LARGE, CLASS 3, LIME GRE	Electric Utility	2,638.76
08/27/2021	MALLORY SAFETY & SUPPLY LLC	00499582	5136794	VEST, XL, CLASS 3, LIME GREEN	Electric Utility	1,319.38
08/27/2021	MALLORY SAFETY & SUPPLY LLC	00499582	5136794	VEST, XXL, CLASS 3, LIME GREEN	Electric Utility	1,451.65
08/27/2021	MALLORY SAFETY & SUPPLY LLC	00499582	5136794	LOGO FEE	Electric Utility	385.01
08/27/2021	MALLORY SAFETY & SUPPLY LLC	00499582	5136794	BACK LOGO FEE	Electric Utility	319.54
				Total for Payment No.:		6,114.34

Payment No: 020055

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ACT ENVIRO	00498365	344352	LIQUID GLYCOL	Electric Utility	195.00
08/06/2021	ACT ENVIRO	00498365	344352	MINERAL OIL	Electric Utility	1,160.00
08/06/2021	ACT ENVIRO	00498365	344352	FLUORESCENT LAMPS 4 FT / 8FT	Electric Utility	375.00
08/06/2021	ACT ENVIRO	00498365	344352	OILY RAGS	Electric Utility	150.00

08/06/2021	ACT ENVIRO	00498365	344352	MISC. COMPUTERS, ELECTRONICS,	Electric Utility	350.00
08/06/2021	ACT ENVIRO	00498365	344352	ALKALINE BATTERIES	Electric Utility	30.00
08/06/2021	ACT ENVIRO	00498365	344352	LITHIUM ION BATTERIES	Electric Utility	190.00
08/06/2021	ACT ENVIRO	00498365	344352	OILY RAGS	Electric Utility	750.00
08/06/2021	ACT ENVIRO	00498365	344352	HID LAMPS	Electric Utility	445.00
08/06/2021	ACT ENVIRO	00498365	344352	15GAL RECON POLY DRUM UN1H2/15	Electric Utility	49.05
08/06/2021	ACT ENVIRO	00498365	344352	5 GAL POLY DRUM - OPEN TOP	Electric Utility	98.10
08/06/2021	ACT ENVIRO	00498365	344352	CUBIC YARD BOX W/PALLET	Electric Utility	85.02
08/06/2021	ACT ENVIRO	00498365	344352	4FT FIBER LIGHT BULB CYLINDER	Electric Utility	59.95
08/06/2021	ACT ENVIRO	00498365	344352	NICAD BATTERIES	Electric Utility	15.00
08/06/2021	ACT ENVIRO	00498365	344352	5 HR DRIVER 6/30/21	Electric Utility	335.00
08/06/2021	ACT ENVIRO	00498365	344352	5 HR TECHNICIAN 6/30/21	Electric Utility	335.00
08/06/2021	ACT ENVIRO	00498365	344352	NON-RCRA SOLIDS FOR WASTE TO	Electric Utility	45.00
08/06/2021	ACT ENVIRO	00498365	344352	55 GAL RECON POLY DRUM UN1H2	Electric Utility	63.22
08/06/2021	ACT ENVIRO	00498365	344352	TRANSPORTATION 5 GALLON	Electric Utility	40.00
08/06/2021	ACT ENVIRO	00498365	344352	TRANSPORTATION 55 GALLON	Electric Utility	528.00
08/06/2021	ACT ENVIRO	00498365	344352	MANIFEST FEE	Electric Utility	90.00
08/06/2021	ACT ENVIRO	00498365	344352	ENVIRONMENTAL SERVICE CHARGE	Electric Utility	448.80
08/06/2021	ACT ENVIRO	00498365	344352	8FT FIBER LIGHT BULB CYLINDER	Electric Utility	50.14
08/06/2021	ACT ENVIRO	00498365	344352	PPE GEAR LEVEL D	Electric Utility	16.00
08/06/2021	ACT ENVIRO	00498365	344352	TRANSPORT 4'&8'FLORESCENT TUBE	Electric Utility	64.00
08/06/2021	ACT ENVIRO	00498365	344352	TRANSPORTATION CUBIC YARD BOX	Electric Utility	100.00
08/06/2021	ACT ENVIRO	00498365	344352	TRANSPORTATION 15 GALLON	Electric Utility	25.00
Total for Payment No.:						6,092.28

Payment No: 020171

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498997	31867	CHANGE ORDER #3: ADDITIONAL FU LEGAL SERVICES	Special Liability Insurance	5,775.00
08/13/2021		00498999	31868	LEGAL SERVICES	General Fund	300.00
				Total for Payment No.:		6,075.00

Payment No: 652802

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498972	200086	LEGAL SERVICE REQUEST	Special Liability Insurance	6,054.10
				Total for Payment No.:		6,054.10

Payment No: 653027

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	TOWNSEND PUBLIC AFFAIRS INC	00499697	17413	State and Federal Legislative	General Fund	2,166.60
08/27/2021	TOWNSEND PUBLIC AFFAIRS INC	00499697	17413	Water Utility Fund	Water Utility	416.70
08/27/2021	TOWNSEND PUBLIC AFFAIRS INC	00499697	17413	Silicon Valley Power's Adminis	Electric Utility	3,000.00
08/27/2021	TOWNSEND PUBLIC AFFAIRS INC	00499697	17413	Sewer Utility Fund	Sewer Utility	416.70
				Total for Payment No.:		6,000.00

Payment No: 020268

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	STAPLES ADVANTAGE	00499540	8063080713-BLDGINSP	OFFICE SUPPLIES	General Fund	832.19
08/27/2021	STAPLES ADVANTAGE	00499541	8063080713-BLDGMTCE	OFFICE SUPPLIES	General Fund	665.61
08/27/2021	STAPLES ADVANTAGE	00499541	8063080713-BLDGMTCE	OFFICE SUPPLIES	General Fund	100.80
08/27/2021	STAPLES ADVANTAGE	00499542	8063080713-CEMETERY	OFFICE SUPPLIES	Cemetery	87.64
08/27/2021	STAPLES ADVANTAGE	00499543	8063080713-CITYCLERK	OFFICE SUPPLIES	General Fund	254.37
08/27/2021	STAPLES ADVANTAGE	00499544	8063080713-ELECGEN	OFFICE SUPPLIES	Electric Utility	2,422.65
08/27/2021	STAPLES ADVANTAGE	00499545	8063080713-ELECRES	OFFICE SUPPLIES	Electric Utility	33.27
08/27/2021	STAPLES ADVANTAGE	00499546	8063080713-ELECYARD	OFFICE SUPPLIES	Electric Utility	107.32

08/27/2021	STAPLES ADVANTAGE	00499546	8063080713-ELECYARD	OFFICE SUPPLIES	Electric Utility	111.33
08/27/2021	STAPLES ADVANTAGE	00499547	8063080713-FIRE	OFFICE SUPPLIES	General Fund	52.64
08/27/2021	STAPLES ADVANTAGE	00499548	8063080713-HR	OFFICE SUPPLIES	General Fund	146.62
08/27/2021	STAPLES ADVANTAGE	00499549	8063080713-MAYOR	OFFICE SUPPLIES	General Fund	94.15
08/27/2021	STAPLES ADVANTAGE	00499550	8063080713-PARK CRC	OFFICE SUPPLIES	General Fund	198.53
08/27/2021	STAPLES ADVANTAGE	00499550	8063080713-PARK CRC	OFFICE SUPPLIES	General Fund	19.64
08/27/2021	STAPLES ADVANTAGE	00499551	8063080713-PLANNING	OFFICE SUPPLIES	General Fund	157.26
08/27/2021	STAPLES ADVANTAGE	00499552	8063080713-POLICEDET	OFFICE SUPPLIES	General Fund	59.44
08/27/2021	STAPLES ADVANTAGE	00499552	8063080713-POLICEDET	OFFICE SUPPLIES	General Fund	17.97
08/27/2021	STAPLES ADVANTAGE	00499553	8063080713-POLICEPATROL	OFFICE SUPPLIES	General Fund	15.02
08/27/2021	STAPLES ADVANTAGE	00499554	8063080713-POLICESPECIAL	OFFICE SUPPLIES	General Fund	22.37
08/27/2021	STAPLES ADVANTAGE	00499555	8063080713-SRCTR	OFFICE SUPPLIES	General Fund	372.43
08/27/2021	STAPLES ADVANTAGE	00499556	8063080713-WATER	OFFICE SUPPLIES	Water Utility	111.74
08/27/2021	STAPLES ADVANTAGE	00499556	8063080713-WATER	OFFICE SUPPLIES	Sewer Utility	111.72
				Total for Payment No.:		5,994.71

Payment No: 020215

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	NALCO CO	00498463	6600579084	JR PORTA FEED IBC TRAS 7/27/21	Electric Utility	5,833.68
08/20/2021	NALCO CO	00498463	6600579084	TRANSPORTATION/ENERGY FEE	Electric Utility	61.84
				Total for Payment No.:		5,895.52

Payment No: 020212

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	LINCOLN AQUATICS	00498181	36040100	LIQUID CHLORINE	General Fund	1,836.57
08/20/2021	LINCOLN AQUATICS	00498181	36040100	PESTICIDE ASSESSMENT	General Fund	67.67
08/20/2021	LINCOLN AQUATICS	00498537	36040718	LIQUID CHLORINE	General Fund	496.96
08/20/2021	LINCOLN AQUATICS	00498537	36040718	PESTICIDE ASSESSMENT	General Fund	45.77

08/20/2021	LINCOLN AQUATICS	00498550	36039153	HEAD CLASSIC PUMP	General Fund	1,285.38
08/20/2021	LINCOLN AQUATICS	00498590	36041369	CHLORINE NEUTRALIZER	General Fund	436.50
08/20/2021	LINCOLN AQUATICS	00498591	36039980	LIQUID CHLORINE	General Fund	1,642.11
08/20/2021	LINCOLN AQUATICS	00498591	36039980	PESTICIDE ASSESSMENT	General Fund	64.53
				Total for Payment No.:		5,875.49

Payment No: 020116

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ASPEN ENVIRONMENTAL GROUP	00498685	3360.003-15	SELF GENERATION TASK A-2	Electric Utility	3,568.00
08/13/2021	ASPEN ENVIRONMENTAL GROUP	00498747	3360.002-05	PRELIM CEQA DETERMINATION A-3	Electric Utility	2,228.90
				Total for Payment No.:		5,796.90

Payment No: 652603

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	INTELLIGENCE PRESS INC	00497930	Jul212021-14914	NGI SUBSCRIPT. 8/15/21-8/14/22	Electric Utility	5,775.00
				Total for Payment No.:		5,775.00

Payment No: 653012

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	PURETEC INDUSTRIAL WATER	00498978	1893858	COG WTR VESSEL EXCHANGE JUN21	Electric Utility	880.36
08/27/2021	PURETEC INDUSTRIAL WATER	00498978	1893858	COG WTR VESSL EXCH JUN21 (TAX)	Electric Utility	209.60
08/27/2021	PURETEC INDUSTRIAL WATER	00498979	1902091	GIA WTR VESSEL EXCHANGE JUL21	Electric Utility	261.68
08/27/2021	PURETEC INDUSTRIAL WATER	00498979	1902091	GIA QTRLY RENT 8/1/21-10/31/21	Electric Utility	372.56
08/27/2021	PURETEC INDUSTRIAL WATER	00498981	1902337	COG WTR VESSEL EXCHANGE JUL21	Electric Utility	880.36
08/27/2021	PURETEC INDUSTRIAL WATER	00498981	1902337	COG QTRLY RENT 8/1/21-10/31/21	Electric Utility	558.84
08/27/2021	PURETEC INDUSTRIAL WATER	00498983	1902637	DVR WATER VESSEL EXCH JUL21	Electric Utility	1,841.22

08/27/2021	PURETEC INDUSTRIAL WATER	00498983	1902637	DVR WATER VESSEL RENT AUG21	Electric Utility	675.30
Total for Payment No.:						5,679.92
Payment No: 020136						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	HILL BROTHERS CHEMICAL CO	00498715	07101413	AQUEOUS AMMONIA DELIVERIES	Electric Utility	5,434.98
Total for Payment No.:						5,434.98
Payment No: 020081						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	KIMBERLY DAVEY	00498525	A-070521	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	5,194.60
Total for Payment No.:						5,194.60
Payment No: 020222						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	R F MACDONALD CO	00499330	311290	PN# E20-642 - INDUSTRIAL STEAM	Electric Utility	5,085.61
Total for Payment No.:						5,085.61
Payment No: 652810						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PAETEC	00498005	73969425		Information Technology Service	5,045.90
Total for Payment No.:						5,045.90
Payment No: 652593						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	FIRESTAR PRODUCTIONS	00497974	2107GEN2	VIDEO SERVICES FOR 6/27 EVENT	General Fund	5,029.40
Total for Payment No.:						5,029.40

Payment No: 020177

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ADVANTAGE OFFICE SOLUTIONS INC	00498582	5603	CHAIR DELIVERY FINANCE	General Fund	85.00
08/20/2021	ADVANTAGE OFFICE SOLUTIONS INC	00499337	5579	OFFICE FURNITURE (INCLUDES SHI	General Fund	4,918.44
				Total for Payment No.:		5,003.44

Payment No: 652963

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GFI ENTERTAINMENT LLC	00498784	1054	CELEBRATE SANTA CLARA CONCERT	General Fund	5,000.00
				Total for Payment No.:		5,000.00

Payment No: 652958

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	UNITED WAY BAY AREA	00499327	INV000000056773	UNITED WAY BAY AREA - 211 FY	General Fund	2,500.00
08/20/2021	UNITED WAY BAY AREA	00499327	INV000000056773	UNITED WAY BAY AREA - 211 FY	General Fund	2,500.00
				Total for Payment No.:		5,000.00

Payment No: 652767

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BAYSHORE SAFETY & INDUSTRIAL	00498761	6290	RAGS, TERI-CLOTH, STRAIGHT CUT	Electric Utility	2,007.90
08/13/2021	BAYSHORE SAFETY & INDUSTRIAL	00498765	6291	EXAM GLOVES,XL, POWDERLESS, MI	Water Utility	2,931.97
				Total for Payment No.:		4,939.87

Payment No: 652916

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ITRON INC	00498383	595807	MAINTENANCE SUPPORT (AUG- DEC)	General Fund	4,932.66

Total for Payment No.: 4,932.66

Payment No: 652826

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SSA LANDSCAPE ARCHITECTS, INC	00499045	7103	AGREEMENT FOR DESIGN PROFESSIO	Parks And Recreation	4,896.00
Total for Payment No.:						4,896.00

Payment No: 653003

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	MEMORIAL IMPRESSIONS INC.	00498949	26911	IINSCRIPTIONS/INTALLATION SERV	Cemetery	2,565.00
08/27/2021	MEMORIAL IMPRESSIONS INC.	00498961	26913	INSCRIPTION/INSTALLATION SERV	Cemetery	2,322.00
Total for Payment No.:						4,887.00

Payment No: 020064

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CINTAS CORP #630	00498232	4091033251	UNIFORMS	General Fund	100.42
08/06/2021	CINTAS CORP #630	00498233	4090628330	UNIFORMS	General Fund	64.74
08/06/2021	CINTAS CORP #630	00498407	4082267941	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	598.04
08/06/2021	CINTAS CORP #630	00498408	4082942255	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	598.04
08/06/2021	CINTAS CORP #630	00498409	4084445929	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
08/06/2021	CINTAS CORP #630	00498410	4085141513	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
08/06/2021	CINTAS CORP #630	00498414	4085595662	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	1,402.63
08/06/2021	CINTAS CORP #630	00498415	4086862672	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	1,026.40
08/06/2021	CINTAS CORP #630	00498418	4087763865	LAUNDRY SERVICE FY20/21 SVP FR	Electric Utility	330.00
Total for Payment No.:						4,780.27

Payment No: 002428

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	STATE DISBURSEMENT UNIT	00499062	07/25/21-08/07/21	WAGE ATTACHMENTS B2116	Payroll Liability&ClearingAcct	4,763.83
				Total for Payment No.:		4,763.83

Payment No: 652910

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	HDL COREN & CONE	00499340	SIN010360	PROPERTY TAX AUDIT AND MANAGEM	General Fund	4,756.25
				Total for Payment No.:		4,756.25

Payment No: 020199

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	HILL BROTHERS CHEMICAL CO	00499214	07102577	AQUEOUS AMMONIA DELIVERIES	Electric Utility	4,710.51
				Total for Payment No.:		4,710.51

Payment No: 652799

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INDIGO/HAMMOND & PLAYLE ARCHITECTS, LLP	00499042	20263 -7	PROFESSIONAL SERVICE AGREEMENT	General Fund	4,700.00
				Total for Payment No.:		4,700.00

Payment No: 652960

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	VERIZON WIRELESS	00499239	9882661007	CELL PHONE SERVICE JUN21	Electric Utility	4,652.97
				Total for Payment No.:		4,652.97

Payment No: 020262

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/27/2021	ONESOURCE DISTRIBUTORS LLC	00499532	S6756762.001	TAPE, ELECTRICAL, LV, PVC, 3/4	Electric Utility	1,162.18
08/27/2021	ONESOURCE DISTRIBUTORS LLC	00499664	S6756762.002	TAPE, ELECTRICAL, LV, PVC, 3/4	Electric Utility	3,486.54
Total for Payment No.:						4,648.72

Payment No: 020255

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	HILL BROTHERS CHEMICAL CO	00499659	07103427	AQUEOUS AMMONIA DELIVERIES	Electric Utility	4,529.29
Total for Payment No.:						4,529.29

Payment No: 020110

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INTL FIREFIGHTERS LOCAL 1171	00499059	06/27/21-08/07/21	RETIRED FIRE MEDICAL BENEFITS	Payroll Liability&ClearingAcct	4,500.00
Total for Payment No.:						4,500.00

Payment No: 002438

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	STATE DISBURSEMENT UNIT	00499709	08/08/21-08/21/21	WAGE ATTACHMENTS B2117	Payroll Liability&ClearingAcct	4,475.26
Total for Payment No.:						4,475.26

Payment No: 652575

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CHEF'S TOYS LLC	00498200	3421249	SCOTSMAN NUGGET ICE MAKER WITH	General Fund	4,392.28
Total for Payment No.:						4,392.28

Payment No: 652661

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	YEI ENGINEERS, INC.	00498389	1735-26	AGREEMENT FOR DESIGN SVCS	Public Buildings	2,214.90

				FOR		
08/06/2021	YEI ENGINEERS, INC.	00498389	1735-26	ADDITIONAL SERVICES.	Public Buildings	2,169.40
				Total for Payment No.:		4,384.30

Payment No: 652805

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MAD SCIENCE OF THE BAY AREA	00498755	24670	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	1,484.00
08/13/2021	MAD SCIENCE OF THE BAY AREA	00498756	24684	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,891.00
				Total for Payment No.:		4,375.00

Payment No: 020270

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	TIMOTHY D BOWEN	00499597	DB20786	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	4,321.60
				Total for Payment No.:		4,321.60

Payment No: 653000

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	KRAFT INDUSTRIAL SUPPLY	00498973	36254	8"-150#FLANGED EXPANSION JOINT	Electric Utility	2,815.04
08/27/2021	KRAFT INDUSTRIAL SUPPLY	00498973	36254	RETAINING RINGS, CARBON STEEL	Electric Utility	229.73
08/27/2021	KRAFT INDUSTRIAL SUPPLY	00498973	36254	8" x 6" 150# CONTROL UNITS	Electric Utility	477.14
08/27/2021	KRAFT INDUSTRIAL SUPPLY	00498973	36254	VACUUM TEST AT FULL VACUUM	Electric Utility	758.68
				Total for Payment No.:		4,280.59

Payment No: 020071

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ENDUSTRA FILTER MFGS	00497682	G212525-3	PN# 51007 - ENDUSTRA ELEMENT F	Electric Utility	4,214.07

Total for Payment No.: 4,214.07

Payment No: 652914

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ICE US OTC COMMODITY MARKETS LLC	00498614	0721000868088	ENERGY BROKER COMM JUL21	Electric Utility	4,185.00
Total for Payment No.:						4,185.00

Payment No: 652659

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	CEMETRY	Cemetery	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	HARRIS LASS	Public Buildings	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	HEADEN INMAN	Public Buildings	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	JAMISON BROWN	Public Buildings	68.91
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	TRITON	Public Buildings	99.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	HEART OF VALLEY	Public Buildings	50.00
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	JUNE 2021 BUILDING MTC	General Fund	295.14
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	BERRYESSA ADOBE	General Fund	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	PD	General Fund	146.41
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	STREET	General Fund	217.83
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	FIRE	General Fund	794.63
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	CENTRAL LIB	General Fund	165.91
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	NORTHSIDE LIB	General Fund	99.16

08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	MISSION LIB	General Fund	80.50
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	PARKS	General Fund	965.88
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	COMMUNICATIONSHOP	General Fund	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	PURCHSING	General Fund	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	EOC	General Fund	78.91
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	TASMAN	General Fund	217.00
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	COMMUNITY ANNEX	General Fund	45.00
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	SVP DUANE	Electric Utility	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	SVP ROBERTS	Electric Utility	68.16
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	SVP MARTIN	Electric Utility	80.00
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	MORSE	General Government - Other	85.00
08/06/2021	WESTERN EXTERMINATOR COMPANY	00497949	16245C	SCCC	Convention Cnt Maintenance Dis	70.00
				Total for Payment No.:		4,104.72

Payment No: 020241

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	BURLINGTON SAFETY LAB INC	00498947	42199	INSULATING BLANKET CL2 TYPE II	Electric Utility	134.09
08/27/2021	BURLINGTON SAFETY LAB INC	00498947	42199	GLOVE INSULATING CL0 TYPE I	Electric Utility	286.79
08/27/2021	BURLINGTON SAFETY LAB INC	00498947	42199	GLOVE INSULATING CL0 TYPE I	Electric Utility	147.04
08/27/2021	BURLINGTON SAFETY LAB INC	00498947	42199	GLOVE INSULATING CL0 TYPE I	Electric Utility	75.48
08/27/2021	BURLINGTON SAFETY LAB INC	00498947	42199	GLOVE ELECTRIFLEX CL2 TYPE I	Electric Utility	1,433.63
08/27/2021	BURLINGTON SAFETY LAB INC	00498947	42199	GLOVE ELECTRIFLEX CL2 TYPE I	Electric Utility	1,911.51
				Total for Payment No.:		3,988.54

Payment No: 652664

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ZOHO CORPORATION	00497593	2304642	ANNUAL SUBSCRIPTION FEE	General Fund	3,980.00
				Total for Payment No.:		3,980.00

Payment No: 652579

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CODE FOR FUN	00498390	1728	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,888.80
08/06/2021	CODE FOR FUN	00498391	1737	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	1,056.00
				Total for Payment No.:		3,944.80

Payment No: 652564

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AT&T MOBILITY	00497877	287286334235X07192021	FIRE DEPT WIRELESS	General Fund	3,677.97
08/06/2021	AT&T MOBILITY	00497877	287286334235X07192021	EMERGENCY SVCS WIRELESS	General Fund	138.44
08/06/2021	AT&T MOBILITY	00497877	287286334235X07192021	STREET DEPT WIRELESS - QUANZ	General Fund	49.52
				Total for Payment No.:		3,865.93

Payment No: 652601

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	HYDROSCIENCE ENGINEERS INC	00498397	316002024	AS-NEEDED SERVICES	Water Utility Construction	3,855.00
				Total for Payment No.:		3,855.00

Payment No: 652980

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	BMI IMAGING SYSTEMS	00499311	315775	Digitizing and Indexing Docs	General Government - Other	3,799.52
				Total for Payment No.:		3,799.52

Payment No: 020114

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AIRGAS USA, LLC	00498157	9114654356	E03NI99E15A0260 NC/90PPM	Electric Utility	665.82
08/13/2021	AIRGAS USA, LLC	00498157	9114654356	DELIVERY FLAT FEE	Electric Utility	70.85
08/13/2021	AIRGAS USA, LLC	00498157	9114654356	FUEL SURCHARGE FLAT	Electric Utility	11.55
08/13/2021	AIRGAS USA, LLC	00498157	9114654356	AIRGAS HAZMAT CHARGE	Electric Utility	13.90
08/13/2021	AIRGAS USA, LLC	00498158	9115225343	E03NI99E15A03N0 EP 9PPM NC/9	Electric Utility	666.57
08/13/2021	AIRGAS USA, LLC	00498158	9115225343	DELIVERY FLAT FEE	Electric Utility	70.93
08/13/2021	AIRGAS USA, LLC	00498158	9115225343	FUEL SURCHARGE FLAT	Electric Utility	11.89
08/13/2021	AIRGAS USA, LLC	00498158	9115225343	AIRGAS HAZMAT CHARGE	Electric Utility	4.64
08/13/2021	AIRGAS USA, LLC	00498159	9115378846	E03NI99E15A0260 NC/90PPM	Electric Utility	1,333.15
08/13/2021	AIRGAS USA, LLC	00498159	9115378846	AIRGAS HAZMAT CHARGE	Electric Utility	9.28
08/13/2021	AIRGAS USA, LLC	00498160	9981079759	RENTAL CYLINDERS FOR DVR JUN21	Electric Utility	923.98
08/13/2021	AIRGAS USA, LLC	00498160	9981079759	HAZMAT CHARGE	Electric Utility	12.75
				Total for Payment No.:		3,795.31

Payment No: 020196

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GE SUPPLY	00499158	21649283	PN# 248A4123P091 - THERMOCPL	Electric Utility	441.06
08/20/2021	GE SUPPLY	00499216	21649264	PN# 320B6928G006 - THERMOCOUP	Electric Utility	2,984.01
08/20/2021	GE SUPPLY	00499216	21649264	PN# 248A4123P065 - THERMOCOUP	Electric Utility	337.11
				Total for Payment No.:		3,762.18

Payment No: 652790

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	FLEET BODYWORX INC	00498323	42696	LABOR-V#3344 WO#130883	Fleet Operation Fund	2,910.80
08/13/2021	FLEET BODYWORX INC	00498323	42696	HAZWASTE DSPL-NONTXBL V#3344	Fleet Operation Fund	10.85

08/13/2021	FLEET BODYWORX INC	00498323	42696	PARTS-V#3344 WO#130883	Fleet Operation Fund	826.46
Total for Payment No.:						3,748.11

Payment No: 020080

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	INGRAM LIBRARY SERVICES INC	00497679	53866539	1241 AD BK	General Fund	1,171.43
08/06/2021	INGRAM LIBRARY SERVICES INC	00497679	53866539	1231 JUV BK	General Fund	1,235.99
08/06/2021	INGRAM LIBRARY SERVICES INC	00497679	53866539	1232 YA BK	General Fund	256.81
08/06/2021	INGRAM LIBRARY SERVICES INC	00497681	53866556	1235 AD/JUV/YA BK	General Fund	900.44
08/06/2021	INGRAM LIBRARY SERVICES INC	00497688	53866569	1236 JUV BK	General Fund	148.10
Total for Payment No.:						3,712.77

Payment No: 652792

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GLOBAL RENTAL CO	00498259	3658316	2019 INTL4300 7/27/21-8/23/21	Electric Utility	3,710.25
Total for Payment No.:						3,710.25

Payment No: 020165

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PRESIDIO HOLDINGS INC.	00498982	6013221008147	AIR-ANT5114P2M-N= 5 GHz 14 dBi	Parks And Recreation	491.41
08/13/2021	PRESIDIO HOLDINGS INC.	00498989	6013221008238	AIR-ACCAMK-2= 1560 External Di	Parks And Recreation	179.30
08/13/2021	PRESIDIO HOLDINGS INC.	00498995	6013221008704	GLC-LH-SMD= 1000BASE-LX/LH SFP	Parks And Recreation	2,573.83
08/13/2021	PRESIDIO HOLDINGS INC.	00498998	6013221008854	AIR-ANT2413P2M-N= 2.4 GHz 13 d	Parks And Recreation	464.89
Total for Payment No.:						3,709.43

Payment No: 652801

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	LAYNE THOMAS	00498051	062021	Payment for videography	General Fund	3,660.00

Total for Payment No.: 3,660.00

Payment No: 020247

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ESSENSE PARTNERS	00498827	20280	MKT ADMN SUPP REBATE JUL21	Elec OperatingGrant Trust Fund	795.00
08/27/2021	ESSENSE PARTNERS	00498827	20280	MKT ADMN SUPP REBATE JUL21	Electric Utility	2,800.00
Total for Payment No.:						3,595.00

Payment No: 652876

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BLACK & VEATCH CORP	00499154	6707760	WTR UTILITY RATE STUDY	Water Utility Construction	195.00
08/20/2021	BLACK & VEATCH CORP	00499154	6707760	SWR UTILITY RATE STUDY	Water Utility Construction	195.00
08/20/2021	BLACK & VEATCH CORP	00499308	6707591	WTR UTILITY RATE STUDY	Water Utility Construction	1,590.00
08/20/2021	BLACK & VEATCH CORP	00499308	6707591	SWR UTILITY RATE STUDY	Water Utility Construction	1,590.00
Total for Payment No.:						3,570.00

Payment No: 652844

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VERIZON WIRELESS	00498295	9883988992	FIRE MDC WIRELESS	General Fund	1,026.27
08/13/2021	VERIZON WIRELESS	00498295	9883988992	PD MDC WIRELESS	General Fund	114.03
08/13/2021	VERIZON WIRELESS	00498295	9883988992	PD MDC WIRELESS	General Fund	38.01
08/13/2021	VERIZON WIRELESS	00498295	9883988992	PD MDC WIRELESS	General Fund	38.01
08/13/2021	VERIZON WIRELESS	00498295	9883988992	PD MDC WIRELESS	General Fund	2,128.56
08/13/2021	VERIZON WIRELESS	00498295	9883988992	STREET MDC WIRELESS	General Fund	114.03
08/13/2021	VERIZON WIRELESS	00498295	9883988992	LIBRARY MDC WIRELSS	General Fund	38.01
08/13/2021	VERIZON WIRELESS	00498295	9883988992	PARKS MDC WIRELESS	General Fund	38.01

Total for Payment No.: 3,534.93

Payment No: 020104

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AFSCME COUNCIL 57	00499070	07/11/21-08/07/21	UNION DUES B2115 & B2116	Payroll Liability&ClearingAcct	3,526.15
Total for Payment No.:						3,526.15

Payment No: 652933

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	RANGE MAINTENANCE SERVICES LLC	00499207	0709202101	QTRLY MAINTENACE FOR SCPD GUN	General Fund	3,500.00
Total for Payment No.:						3,500.00

Payment No: 652819

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RING POWER CORPORATION	00498161	44LU06964351	EQUIPMNT RNTL 6/22/21-7/19/21	Electric Utility Construction	3,468.00
Total for Payment No.:						3,468.00

Payment No: 652776

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CDW-GOVERNMENT INC	00498964	G085723	APC Smart-UPS SRT 2200VA Sinew	General Fund	1,564.85
08/13/2021	CDW-GOVERNMENT INC	00498970	H056406	APC Smart-UPS SRT 72V 2.2kVA B	Information Technology Service	1,889.28
Total for Payment No.:						3,454.13

Payment No: 652874

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BANK UP CORP	00498433	4662	OUTSOURCE CASH RECEIPTS	General Fund	3,395.63

Total for Payment No.: 3,395.63

Payment No: 020251

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GRAINGER	00498781	9962410867	HARD HAT, W/FACE SHIELD	Electric Utility	1,608.08
08/27/2021	GRAINGER	00498781	9962410867	GEAR BAG, COTTON, WHITE	Electric Utility	766.67
08/27/2021	GRAINGER	00498960	9012025384	COATED GLOVES,NYLON,L,PR	Electric Utility	80.14
08/27/2021	GRAINGER	00498960	9012025384	FUSE,CLASS J,60A,AJT SERIES	Electric Utility	486.28
08/27/2021	GRAINGER	00499528	9005318119	BATTERY, AA, ALKALINE, RAY-O-V	Water Utility	115.45
08/27/2021	GRAINGER	00499529	9007097984	SUNSCREEN TOWELETTE, SPF 30.	Electric Utility	246.31
08/27/2021	GRAINGER	00499530	9965467823	COUPLINGS, 2IN X 2IN, PLASTIC,	Electric Utility	22.26
08/27/2021	GRAINGER	00499531	9972072848	COUPLING, PVC, 3/4IN, S X S FI	Water Utility	5.68
Total for Payment No.:						3,330.87

Payment No: 652778

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CHEF'S TOYS LLC	00498767	3439205	HOSHIZAKI NUGGET ICE MAKER WIT	General Fund	3,290.12
Total for Payment No.:						3,290.12

Payment No: 652637

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SAN JOSE MAILING	00498360	4928	ECR SPECIFIC PLAN	Engineerg Operating Grant Fund	782.96
08/06/2021	SAN JOSE MAILING	00498360	4928	MAILING/POSTAGE -TAX EXEMPT	Engineerg Operating Grant Fund	2,443.26
Total for Payment No.:						3,226.22

Payment No: 652893

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/20/2021	DELL MARKETING LP	00499259	10505554202	DELL ULTRASHARP 32 4K USB-C MO	Electric Utility	1,540.83
08/20/2021	DELL MARKETING LP	00499259	10505554202	PRECISION 3450 SMALL FORM FACT	Electric Utility	1,530.16
08/20/2021	DELL MARKETING LP	00499259	10505554202	PRECISION 3450 SMALL FORM FACT	Electric Utility	136.78
08/20/2021	DELL MARKETING LP	00499259	10505554202	ENVIRONMENTAL FEE	Electric Utility	10.00
Total for Payment No.:						3,217.77

Payment No: 020238

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	APPLIED POWER TECHNOLOGIES INC	00498700	13711-03	MO. EPMS MAINT SRV JUL2021	Electric Utility	3,061.50
Total for Payment No.:						3,061.50

Payment No: 020103

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KIMLEY-HORN AND ASSOC INC	00498327	097083031-0521	SIGNAL TIMING - MAY21	Streets And Highways	3,053.22
Total for Payment No.:						3,053.22

Payment No: 020151

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NALCO CO	00498167	6600562943	JR PORTA FEED IBC1720 7/19/21	Electric Utility	2,959.14
08/13/2021	NALCO CO	00498167	6600562943	TRANSPORTATION/ENERGY FEE	Electric Utility	67.77
Total for Payment No.:						3,026.91

Payment No: 020082

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	KIMLEY-HORN AND ASSOC INC	00498444	18865921R	HI-INTENSITY ACTIVATED CROSSWA	Streets And Highways	3,012.50
Total for Payment No.:						3,012.50

Payment No: 652949

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	TAYLOR CORPORATION, INC	00498578	4237347	JPMORGAN SETUP	General Fund	1,558.70
08/20/2021	TAYLOR CORPORATION, INC	00499338	4237275	CHECK STOCK	General Fund	1,349.04
Total for Payment No.:						2,907.74

Payment No: 652565

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AZCO SUPPLY, INC.	00498366	298111	BOX COVER, FIBERGLASS, 17IN X	Electric Utility	704.11
08/06/2021	AZCO SUPPLY, INC.	00498366	298111	BOX COVER, POLYMER, 17INX30IN,	Electric Utility	1,056.16
08/06/2021	AZCO SUPPLY, INC.	00498366	298111	LOG FEE "SVP INTERCONNECT"	Electric Utility	230.37
08/06/2021	AZCO SUPPLY, INC.	00498366	298111	BOX COVER, FIBERGLASS, 24INX36	Electric Utility	678.12
08/06/2021	AZCO SUPPLY, INC.	00498366	298111	LOGO FEE "CSC LOW VOLTAGE"	Electric Utility	230.37
Total for Payment No.:						2,899.13

Payment No: 652809

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	OCLC INC	00498364	1000148034	CATALOG & METADATA	General Fund	2,843.81
Total for Payment No.:						2,843.81

Payment No: 020158

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PENINSULA GYMNASTICS	00498758	0012	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	2,835.00
Total for Payment No.:						2,835.00

Payment No: 652936

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SAN JOSE BOILER WORKS	00498546	13645	ISC BOILER REPAIR	General Fund	1,575.28

08/20/2021	SAN JOSE BOILER WORKS	00498546	13645	LABOR & VEHICLE OVERHEAD CHRG	General Fund	1,259.25
Total for Payment No.:						2,834.53

Payment No: 652944

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	STATCOMM INC	00498471	W14709	GATE REPAIR DVR 5/4/21	Electric Utility	652.50
08/20/2021	STATCOMM INC	00498472	W14722	GATE REPAIR 1705 5/7/21	Electric Utility	180.00
08/20/2021	STATCOMM INC	00498473	W14732	GATE REPAIR 1705 5/10/21	Electric Utility	678.00
08/20/2021	STATCOMM INC	00498474	W14791	GATE REPAIR DVR 5/18/21	Electric Utility	135.00
08/20/2021	STATCOMM INC	00498475	W14892	GATE REPAIR DVR 5/25/21	Electric Utility	540.00
08/20/2021	STATCOMM INC	00498476	W15183	GATE REPAIR DVR 6/10/21	Electric Utility	315.00
08/20/2021	STATCOMM INC	00498477	W15573	GATE REPAIR 1705 6/18/21	Electric Utility	315.00
Total for Payment No.:						2,815.50

Payment No: 020214

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	MT TIRE SERVICE	00498507	17127	LABOR-V#3144 WO#131014	Fleet Operation Fund	35.00
08/20/2021	MT TIRE SERVICE	00498509	17137	LABOR-FLEET SERVICES	Fleet Operation Fund	120.00
08/20/2021	MT TIRE SERVICE	00498511	17156	LABOR-FLEET SERVICES	Fleet Operation Fund	120.00
08/20/2021	MT TIRE SERVICE	00498625	17034	PARTS-V#3585 WO#131054	Fleet Operation Fund	125.33
08/20/2021	MT TIRE SERVICE	00498625	17034	TIRE TAX-V#3585 WO#131054	Fleet Operation Fund	1.91
08/20/2021	MT TIRE SERVICE	00498626	17178	LABOR-V#3286 WO#131183	Fleet Operation Fund	235.00
08/20/2021	MT TIRE SERVICE	00498626	17178	PARTS-V#3286 WO#131183	Fleet Operation Fund	1,964.25
08/20/2021	MT TIRE SERVICE	00498627	17157	PARTS-V#3233 WO#131157	Fleet Operation Fund	190.81
08/20/2021	MT TIRE SERVICE	00498627	17157	TIRE TAX- V#3233 WO#131157	Fleet Operation Fund	1.91
Total for Payment No.:						2,794.21

Payment No: 020123

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BOUNDTREE MEDICAL LLC	00498302	84140162	MEDICAL SUPPLIES - TAXED	General Fund	852.13
08/13/2021	BOUNDTREE MEDICAL LLC	00498302	84140162	MEDICAL SUPPLIES - NON TAXED	General Fund	178.58
08/13/2021	BOUNDTREE MEDICAL LLC	00498304	84140163	MEDICAL SUPPLIES	General Fund	10.22
08/13/2021	BOUNDTREE MEDICAL LLC	00498305	84141670	MEDICAL SUPPLIES	General Fund	98.84
08/13/2021	BOUNDTREE MEDICAL LLC	00498306	84143252	MEDICAL SUPPLIES - OFIRMEV	General Fund	1,527.59
08/13/2021	BOUNDTREE MEDICAL LLC	00498307	84145113	MEDICATION - NON TAXABLE	General Fund	105.00
				Total for Payment No.:		2,772.36

Payment No: 020246

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ELSTER SOLUTIONS LLC	00499578	5255732454	METER, SOCKET, 4 TERMINAL,1S R	Electric Utility	2,757.26
				Total for Payment No.:		2,757.26

Payment No: 652929

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PARS	00499091	48666	ARS PARS FEES - JUNE 2021	General Fund	2,754.59
				Total for Payment No.:		2,754.59

Payment No: 652608

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	KONE INC	00498250	959818521	CITY HALL	General Fund	78.20
08/06/2021	KONE INC	00498250	959818521	PD	General Fund	318.68
08/06/2021	KONE INC	00498250	959818521	GUN RANGE	General Fund	34.80
08/06/2021	KONE INC	00498250	959818521	SENIOT CENTE	General Fund	243.79
08/06/2021	KONE INC	00498250	959818521	BERMAN	General Fund	78.20
08/06/2021	KONE INC	00498250	959818521	TASMAN	General Fund	927.90
08/06/2021	KONE INC	00498250	959818521	FS 2	General Fund	130.79
08/06/2021	KONE INC	00498250	959818521	CRC	General Fund	34.80

08/06/2021	KONE INC	00498250	959818521	24/7 MONITORING	General Fund	585.00
08/06/2021	KONE INC	00498250	959818521	SVP DUANE	Electric Utility	130.79
08/06/2021	KONE INC	00498250	959818521	SCCC	Convention Cnt Maintenance Dis	156.40
Total for Payment No.:						2,719.35

Payment No: 652740

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SLEEPMODE AT 1408 LLC	00498855	20087-02 Utility Refund	UTILITY REFUND	General Fund	2,665.91
Total for Payment No.:						2,665.91

Payment No: 652555

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ADT COMMERCIAL LLC	00498219	140621977	NORTHSIDE POWER SUPPLY IT ROOM	General Fund	578.97
08/06/2021	ADT COMMERCIAL LLC	00498219	140621977	TAXABLE	General Fund	43.21
08/06/2021	ADT COMMERCIAL LLC	00498220	140778954	FIRE ELEVATOR TEST 1900 WALSH	General Fund	675.00
08/06/2021	ADT COMMERCIAL LLC	00498221	140858058	EOC BELL ISSUE	General Fund	675.00
08/06/2021	ADT COMMERCIAL LLC	00498222	140790927	FIRE 888 AGNEW PANEL PROBLEM	General Fund	675.00
Total for Payment No.:						2,647.18

Payment No: 652930

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PENINSULA CRANE & RIGGING	00499217	2886	GENERATION AGREEMENT BALANCE U	Electric Utility	2,635.00
Total for Payment No.:						2,635.00

Payment No: 652772

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BONNIE SUN	00498565	36936AUG2021	Bldg Plan Review BLD2021-61915	Building New Dvlpmnt Srcv Fee	2,597.14

Total for Payment No.: 2,597.14

Payment No: 020098

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	VALBRIDGE PROPERTY ADVISORS	00497875	31299	PROP APPRAISAL NORM HULBERT	Electric Utility Construction	504.00
08/06/2021	VALBRIDGE PROPERTY ADVISORS	00497875	31299	PROP APPRAISAL/ VP MAI APPRAIS	Electric Utility Construction	1,584.00
08/06/2021	VALBRIDGE PROPERTY ADVISORS	00497876	31433	PROP APPRAISAL/ VP MAI APPRAIS	Electric Utility Construction	468.00
Total for Payment No.:						2,556.00

Payment No: 652873

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ATLAS BUSINESS SOLUTIONS INC	00499208	INV323150	SCHEDULE ANYWHERE SUBSCRIPTION	General Fund	2,531.76
Total for Payment No.:						2,531.76

Payment No: 020084

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	LINCOLN AQUATICS	00497958	36039565	MURIATIC ACID	General Fund	574.54
08/06/2021	LINCOLN AQUATICS	00497958	36039565	PESTICIDE ASSESSMENT	General Fund	47.30
08/06/2021	LINCOLN AQUATICS	00497963	36038724	LIQUID CHLORINE	General Fund	512.01
08/06/2021	LINCOLN AQUATICS	00497963	36038724	PESTICIDE ASSESSMENT	General Fund	46.00
08/06/2021	LINCOLN AQUATICS	00497964	36038728	LIQUID CHLORINE	General Fund	1,285.60
08/06/2021	LINCOLN AQUATICS	00497964	36038728	PESTICIDE ASSESSMENT	General Fund	58.77
Total for Payment No.:						2,524.22

Payment No: 020111

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PUBLIC SAFETY NON-SWORN	00499074	07/11/21-08/07/21	UNION DUES B2115 & B2116	Payroll	2,500.00

Total for Payment No.:

2,500.00

Payment No: 652911

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	HEALTHINVEST HRA	00499157	32307AUG2021	VEBA ADMINISTRATOR - \$2,500 MO	General Fund	2,500.00
Total for Payment No.:						2,500.00

Payment No: 020140

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INGRAM LIBRARY SERVICES INC	00498147	53972367	1241 AD BK	General Fund	634.76
08/13/2021	INGRAM LIBRARY SERVICES INC	00498147	53972367	1231 JUV BK	General Fund	1,214.02
08/13/2021	INGRAM LIBRARY SERVICES INC	00498147	53972367	1232 YA BK	General Fund	92.55
08/13/2021	INGRAM LIBRARY SERVICES INC	00498153	53972384	1235 AD/JUV/YA BK	General Fund	497.29
08/13/2021	INGRAM LIBRARY SERVICES INC	00498154	53972399	1236 JUV BK	General Fund	25.03
Total for Payment No.:						2,463.65

Payment No: 652691

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CALIFORNIA SUITES	00498900	73314-16 Utility Refund	UTILITY REFUND	General Fund	173.42
08/13/2021	CALIFORNIA SUITES	00498902	75314-04 Utility Refund	UTILITY REFUND	General Fund	78.73
08/13/2021	CALIFORNIA SUITES	00498903	75367-08 Utility Refund	UTILITY REFUND	General Fund	81.73
08/13/2021	CALIFORNIA SUITES	00498908	76814-06 Utility Refund	UTILITY REFUND	General Fund	89.26
08/13/2021	CALIFORNIA SUITES	00498909	76829-08 Utility Refund	UTILITY REFUND	General Fund	85.65
08/13/2021	CALIFORNIA SUITES	00498910	76864-04 Utility Refund	UTILITY REFUND	General Fund	58.84
08/13/2021	CALIFORNIA SUITES	00498911	76867-03 Utility Refund	UTILITY REFUND	General Fund	72.41
08/13/2021	CALIFORNIA SUITES	00498912	76943-03 Utility Refund	UTILITY REFUND	General Fund	175.28
08/13/2021	CALIFORNIA SUITES	00498913	77006-04 Utility Refund	UTILITY REFUND	General Fund	209.00
08/13/2021	CALIFORNIA SUITES	00498915	77395-02 Utility Refund	UTILITY REFUND	General Fund	106.19

08/13/2021	CALIFORNIA SUITES	00498916	77396-06 Utility Refund	UTILITY REFUND	General Fund	56.29
08/13/2021	CALIFORNIA SUITES	00498917	77457-02 Utility Refund	UTILITY REFUND	General Fund	21.64
08/13/2021	CALIFORNIA SUITES	00498918	77519-07 Utility Refund	UTILITY REFUND	General Fund	111.56
08/13/2021	CALIFORNIA SUITES	00498919	77591-06 Utility Refund	UTILITY REFUND	General Fund	102.38
08/13/2021	CALIFORNIA SUITES	00498920	77596-07 Utility Refund	UTILITY REFUND	General Fund	68.60
08/13/2021	CALIFORNIA SUITES	00498921	77620-02 Utility Refund	UTILITY REFUND	General Fund	58.54
08/13/2021	CALIFORNIA SUITES	00498922	77666-04 Utility Refund	UTILITY REFUND	General Fund	125.09
08/13/2021	CALIFORNIA SUITES	00498923	77670-02 Utility Refund	UTILITY REFUND	General Fund	79.29
08/13/2021	CALIFORNIA SUITES	00498924	77676-02 Utility Refund	UTILITY REFUND	General Fund	82.53
08/13/2021	CALIFORNIA SUITES	00498925	77684-02 Utility Refund	UTILITY REFUND	General Fund	92.81
08/13/2021	CALIFORNIA SUITES	00498926	77719-05 Utility Refund	UTILITY REFUND	General Fund	97.34
08/13/2021	CALIFORNIA SUITES	00498927	77752-06 Utility Refund	UTILITY REFUND	General Fund	22.49
08/13/2021	CALIFORNIA SUITES	00498928	77777-04 Utility Refund	UTILITY REFUND	General Fund	71.70
08/13/2021	CALIFORNIA SUITES	00498929	77847-06 Utility Refund	UTILITY REFUND	General Fund	109.33
08/13/2021	CALIFORNIA SUITES	00498933	79942-02 Utility Refund	UTILITY REFUND	General Fund	61.11
08/13/2021	CALIFORNIA SUITES	00498934	80052-02 Utility Refund	UTILITY REFUND	General Fund	22.76
08/13/2021	CALIFORNIA SUITES	00498935	80514-02 Utility Refund	UTILITY REFUND	General Fund	56.21
08/13/2021	CALIFORNIA SUITES	00498937	81104-02 Utility Refund	UTILITY REFUND	General Fund	42.61
				Total for Payment No.:		2,412.79

Payment No: 653021

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SPECTRUM CANINE LLC	00499054	250	July monthly K9 training	General Fund	2,400.00
				Total for Payment No.:		2,400.00

Payment No: 652594

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	FLEET BODYWORX INC	00497626	42649	PARTS-V#3515 WO#130928	Fleet Operation Fund	402.39
08/06/2021	FLEET BODYWORX INC	00497626	42649	HAZ WASTE DISP- NONTXBL V#3515	Fleet Operation Fund	4.20

08/06/2021	FLEET BODYWORX INC	00497626	42649	LABOR-V#3515 WO#130928	Fleet Operation Fund	1,942.50
Total for Payment No.:						2,349.09
Payment No: 020107						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CITY OF SANTA CLARA EMPLOYEES	00499075	07/11/21-08/07/21	UNION DUES B2115 & B2116	Payroll Liability&ClearingAcct	2,348.00
Total for Payment No.:						2,348.00
Payment No: 020189						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	DYNAMIC SYSTEMS INC	00498576	21050161	ORACLE DATABASE APPLIANCE X7-2	Electric Utility	2,341.11
Total for Payment No.:						2,341.11
Payment No: 652636						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SAFETY-KLEEN SYSTEMS INC	00497642	86362296	HAZ-MAT SERVICES 07.14.21	Fleet Operation Fund	290.00
08/06/2021	SAFETY-KLEEN SYSTEMS INC	00497643	86412181	DRUMS- HAZ-MAT 06.18.21	Fleet Operation Fund	463.25
08/06/2021	SAFETY-KLEEN SYSTEMS INC	00497643	86412181	HAZ-MAT SERVICE- 06.18.21	Fleet Operation Fund	1,548.00
Total for Payment No.:						2,301.25
Payment No: 652651						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	TMT ENTERPRISES INC	00497968	09396	TOPSOIL	General Fund	888.80
08/06/2021	TMT ENTERPRISES INC	00497969	09395	NITRO REDWOOD SAWDUST	General Fund	1,410.44
Total for Payment No.:						2,299.24

Payment No: 020218

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PG&E	00498462	3345487577-5 JUL2021	ELEC SVC STONY GORGE HYD JUI21	Electric Utility	989.42
08/20/2021	PG&E	00498462	3345487577-5 JUL2021	ELEC SVC BLACK BUTTE HYD JUI21	Electric Utility	1,196.45
08/20/2021	PG&E	00498462	3345487577-5 JUL2021	ELEC SVC HIGH LINE CANAL JUI21	Electric Utility	107.79
				Total for Payment No.:		2,293.66

Payment No: 653017

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SANTA CLARA VALLEY HEALTH & HOSPITAL SYS	00498690	H7909388703	SART 21-331088	General Fund	2,262.00
				Total for Payment No.:		2,262.00

Payment No: 020233

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	UNIVERSAL SITE SERVICES	00499316	21028930	FY 2021-2022 SWEEPING SERVICES	Convention Cnt Maintenance Dis	2,251.00
				Total for Payment No.:		2,251.00

Payment No: 652677

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NV5 INC	00498310	221108	SURVEY-PARCEL MAP REVIEW	General Fund	2,217.50
				Total for Payment No.:		2,217.50

Payment No: 652919

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	KAY PARK-REC CORP	00498549	192935	BAG TOSS, BIKE DETERRENT, BAGS	General Fund	2,182.00
				Total for Payment No.:		2,182.00

Payment No: 652567

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BENCHMARK	00498252	E21-963	CORP YARD - ELECTRIC	Electric Utility Construction	551.00
08/06/2021	BENCHMARK	00498253	E21-774	SVACA	Expendable Trust Funds	470.00
08/06/2021	BENCHMARK	00498254	E21-946	BERRYESSA ADOBE	Public Buildings	225.00
08/06/2021	BENCHMARK	00498256	E21-945	CITY HALL	General Fund	225.00
08/06/2021	BENCHMARK	00498257	E21-956	815 COMSTOCK	General Fund	397.00
08/06/2021	BENCHMARK	00498258	E21-943	PD RANGE	General Fund	309.00
				Total for Payment No.:		2,177.00

Payment No: 652961

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	WATER QUALITY PLUMBING INC	00498534	92871	PHILLIPS - 10578	H.U.D Capital Projects	2,145.00
08/20/2021	WATER QUALITY PLUMBING INC	00498534	92871	PHILLIPS - 10578	H.U.D Capital Projects	-2,145.00
08/20/2021	WATER QUALITY PLUMBING INC	00498534	92871	SHOWER VALVE/DISPOSAL-PHILLIPS	H.U.D Capital Projects	2,145.00
				Total for Payment No.:		2,145.00

Payment No: 020261

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	NALCO CO	00499012	6600608079	IRON REMOVER PAIL 18-24 LITER	Electric Utility	1,112.77
08/27/2021	NALCO CO	00499012	6600608079	TRANSPORTATION/ENERGY FEE	Electric Utility	6.94
08/27/2021	NALCO CO	00499015	6670113270	MO.SRV FEE DVR AUG21	Electric Utility	994.81
				Total for Payment No.:		2,114.52

Payment No: 652827

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	STANFORD HOSPITAL AND CLINICS	00498308	2110-106933CITYNSCL	MEDICAL ADVISOR SERVICES	General Fund	2,083.00
				Total for Payment No.:		2,083.00

Payment No: 652964

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	JAMESON AMATO	00499589	PRCK#90923	REPLACED OUTDATED PR CHECK	Payroll Liability&ClearingAcct	2,079.87
				Total for Payment No.:		2,079.87

Payment No: 652739

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SLEEPMODE APARTMENT HOMES LLC	00498854	20075-02 Utility Refund	UTILITY REFUND	General Fund	2,074.19
				Total for Payment No.:		2,074.19

Payment No: 652780

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CRESCO EQUIPMENT RENTALS	00498193	5376471-0004	FORKLIFT RENTAL	Electric Utility Construction	1,691.44
08/13/2021	CRESCO EQUIPMENT RENTALS	00498193	5376471-0004	NON TAXABLE	Electric Utility Construction	18.63
08/13/2021	CRESCO EQUIPMENT RENTALS	00498687	5455919-0001	EQUIPMENT RENTAL	Electric Utility	341.56
08/13/2021	CRESCO EQUIPMENT RENTALS	00498687	5455919-0001	EQUIP. PROTECTION PLAN & MISC.	Electric Utility	18.70
				Total for Payment No.:		2,070.33

Payment No: 652561

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AT&T MOBILITY	00497760	287288153081X07162021	PD BACK UP MDC WIRELESS	General Fund	2,066.29
				Total for Payment No.:		2,066.29

Payment No: 652652

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	TUCKER CONSTRUCTION	00497915	29722	LABOR-REPAIRED FENCE	Solid Waste Program	1,615.04
08/06/2021	TUCKER CONSTRUCTION	00497915	29722	MATERIAL (NT)	Solid Waste Program	389.23

08/06/2021	TUCKER CONSTRUCTION	00497915	29722	CONTRACTOR FEE (NT)	Solid Waste Program	58.38
				Total for Payment No.:		2,062.65
Payment No: 652900						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ESSEL TECHNOLOGY SERVICES, INC	00498584	153.21001.01-04	CEMETRY	Cemetery	560.00
08/20/2021	ESSEL TECHNOLOGY SERVICES, INC	00498584	153.21001.01-04	POOL 2250 ROYAL DR	General Fund	1,020.00
08/20/2021	ESSEL TECHNOLOGY SERVICES, INC	00498584	153.21001.01-04	HENRY SCHMIDT	Parks And Recreation	480.00
				Total for Payment No.:		2,060.00
Payment No: W22066						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/25/2021	NOR-CAL OVERHEAD INC	00499309	39083	ELECTRIC/WATER WAREHOUSE	General Fund	2,058.47
				Total for Payment No.:		2,058.47
Payment No: 020192						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498553	337189	KLEIN LINEMAN INSULATIN WRENCH	Electric Utility	43.96
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498553	337189	4-n-1 BUG WRENCH	Electric Utility	47.19
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498553	337189	SHIPPING	Electric Utility	15.45
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498554	337359	DBI SALA XP ARC FLASH HARNESS	Electric Utility	443.84
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498554	337359	DBI SALA ARC FLASH LANYARD	Electric Utility	188.82
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498554	337359	SHIPPING	Electric Utility	17.26
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	BLACK KLEIN XL EQUIP.BAG	Electric Utility	124.76
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	M18 COMPACT BLOWER	Electric Utility	96.64
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	M18 DUAL BAY CHARGER	Electric Utility	150.93
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	M18 FUEL 1/2" HAMMER DRILL/DR	Electric Utility	161.80
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	M18 FUEL 1/4" HEX IMPACT DRIVE	Electric Utility	145.51

08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	M18 FUEL 7/16" UTILITY WRENCH	Electric Utility	378.97
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	M18 FUEL SAWZALL	Electric Utility	216.09
08/20/2021	FARWEST LINE SPECIALTIES LLC	00498606	336544	SHIPPING	Electric Utility	24.31
Total for Payment No.:						2,055.53

Payment No: 020203

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	INFOSEND INC	00498659	195810	TAX & LICENSE MAILING SERVICES	General Fund	1,629.73
08/20/2021	INFOSEND INC	00498659	195810	TAX & LICENSE MAILING SERVICES	General Fund	420.29
Total for Payment No.:						2,050.02

Payment No: 020186

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BURLINGTON SAFETY LAB INC	00498551	42182	RUBBER GLOVE RETEST NON-TAX	Electric Utility	1,350.00
08/20/2021	BURLINGTON SAFETY LAB INC	00498551	42182	INSULATING BLANKET CL2 TYPE II	Electric Utility	268.17
08/20/2021	BURLINGTON SAFETY LAB INC	00498551	42182	GLOVE ELECTRIFLEX CL2 TYPE I	Electric Utility	428.96
Total for Payment No.:						2,047.13

Payment No: 652939

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SCT OWNER LLC	00498424	R22-CDR-0038	HVAC REBATE; 61404-03 3945 FRE	Elec OperatingGrant Trust Fund	2,043.97
Total for Payment No.:						2,043.97

Payment No: 020187

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CAROLYN SUSIE BERLIN	00498517	10816	LEGAL SERVICES JUN21	Electric Utility	1,950.00
08/20/2021	CAROLYN SUSIE BERLIN	00498518	10820 (d)	LEGAL SERVICES (NCGC) JUN21	Electric Utility	91.00
Total for Payment No.:						2,041.00

Payment No: 020056

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	TRITON	Public Buildings	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	CITY HALL	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	CRC	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	FS 1	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	CENTRAL LIB	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	NORTHSIDE	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	PD	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498225	0361258-IN	OLD COURTHOUSE	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	TRITON	Public Buildings	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	CITY HALL	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	OLD COURTHOUSE	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	CRC	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	FS 1	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	CENTRAL	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	NORTHSIDE	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498228	0363651-IN	PD	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	TRITON	Public Buildings	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	CITY HALL	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	OLD COURTHOUSE	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	CRC	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	CENTRAL	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	FS1	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	NORTHSIDE	General Fund	85.00
08/06/2021	ACT, A DIVISION OF CCI	00498231	0365189-IN	PD	General Fund	85.00
				Total for Payment No.:		2,040.00

Payment No: 652857

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	JENNIFER GUZMAN	00499162	30031JUL2021	TUITION REIMB	General Fund	2,000.00
				Total for Payment No.:		2,000.00

Payment No: 652769

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BESOSIE GANAL	00498348	61559-01 CPV JUN-2021	PBI JUN-2021 PYMT #46 VALLY HO	Elec OperatingGrant Trust Fund	1,982.36
				Total for Payment No.:		1,982.36

Payment No: 652610

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	LIVE OAK ADULT DAY SERVICES	00498343	2020-21C	LIVE OAK ADULT SERVICES FY20/2	H.U.D Capital Projects	1,968.80
				Total for Payment No.:		1,968.80

Payment No: 020088

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MT TIRE SERVICE	00497886	16967	LABOR-V#3127 WO#131043	Fleet Operation Fund	30.00
08/06/2021	MT TIRE SERVICE	00497887	16968	LABOR-FLEET SERVICE	Fleet Operation Fund	120.00
08/06/2021	MT TIRE SERVICE	00497888	16948	PARTS-V#3351 WO#130960	Fleet Operation Fund	1,485.08
08/06/2021	MT TIRE SERVICE	00497888	16948	TIRE TAX- V#3351 WO#130960	Fleet Operation Fund	130.14
08/06/2021	MT TIRE SERVICE	00497888	16948	LABOR-V#3351 WO#130960	Fleet Operation Fund	60.00
08/06/2021	MT TIRE SERVICE	00497889	16590	LABOR-FLEET SERVICES	Fleet Operation Fund	120.00
				Total for Payment No.:		1,945.22

Payment No: 020240

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	BUCKLES-SMITH	00499658	3248296-00	PN# ALB1783SFP1GSX - 1783-SFP	Electric Utility	1,371.87
08/27/2021	BUCKLES-SMITH	00499658	3248296-00	PN# ALB1606XLP100E - 1606-XLP	Electric Utility	572.03

Total for Payment No.: 1,943.90

Payment No: 652986

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CREATE & LEARN INC.	00499590	SANTA CLARA 1	Instructor payment FY 21-22 fo	General Fund	1,936.00
				Total for Payment No.:		1,936.00

Payment No: 652592

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	EN ENGINEERING, LLC	00498385	0235143	ENGINEERING DESIGN SERVICES FO	Electric Utility Construction	1,923.15
				Total for Payment No.:		1,923.15

Payment No: 020094

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	STAPLES ADVANTAGE	00498369	8062891174-BLDGINSP	OFFICE SUPPLIES	General Fund	106.03
08/06/2021	STAPLES ADVANTAGE	00498370	8062891174-CMO	OFFICE SUPPLIES	General Fund	3.71
08/06/2021	STAPLES ADVANTAGE	00498371	8062891174-ELECRES	OFFICE SUPPLIES	Electric Utility	178.47
08/06/2021	STAPLES ADVANTAGE	00498372	8062891174-ENG	OFFICE SUPPLIES	General Fund	42.92
08/06/2021	STAPLES ADVANTAGE	00498373	8062891174-FIRE	OFFICE SUPPLIES	General Fund	229.89
08/06/2021	STAPLES ADVANTAGE	00498374	8062891174-IT	OFFICE SUPPLIES	Information Technology Service	205.74
08/06/2021	STAPLES ADVANTAGE	00498375	8062891174-MAYOR	OFFICE SUPPLIES	General Fund	80.26
08/06/2021	STAPLES ADVANTAGE	00498376	8062891174-MUNISVC	OFFICE SUPPLIES	General Fund	205.81
08/06/2021	STAPLES ADVANTAGE	00498377	8062891174-PARK CRC	OFFICE SUPPLIES	General Fund	104.21
08/06/2021	STAPLES ADVANTAGE	00498378	8062891174-PARK YAC	OFFICE SUPPLIES	General Fund	83.69
08/06/2021	STAPLES ADVANTAGE	00498379	8062891174-PLANNING	OFFICE SUPPLIES	General Fund	32.58
08/06/2021	STAPLES ADVANTAGE	00498380	8062891174-POLICEDET	OFFICE SUPPLIES	General Fund	229.77
08/06/2021	STAPLES ADVANTAGE	00498380	8062891174-POLICEDET	OFFICE SUPPLIES	General Government - Other	279.35

08/06/2021	STAPLES ADVANTAGE	00498381	8062891174-POLICEPATROL	OFFICE SUPPLIES	General Fund	117.38
08/06/2021	STAPLES ADVANTAGE	00498382	8062891174-WATER	OFFICE SUPPLIES	Water Utility	6.86
08/06/2021	STAPLES ADVANTAGE	00498382	8062891174-WATER	OFFICE SUPPLIES	Sewer Utility	6.86
				Total for Payment No.:		1,913.53

Payment No: 020101

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WILLDAN FINANCIAL SERVICES	00497776	010-48439	ARBITRGE RBATE SRVC-ELEC 2011A	Electric Utility-Debt Services	1,900.00
				Total for Payment No.:		1,900.00

Payment No: 652683

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AEI CONSULTANTS	00498931	78674-03 Utility Refund	UTILITY REFUND	General Fund	1,894.52
				Total for Payment No.:		1,894.52

Payment No: 020198

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GRID SUBJECT MATTER EXPERTS, LLC	00498661	10136	ONGOING CIP ACTIVITIES JUL21	Electric Utility	1,887.50
				Total for Payment No.:		1,887.50

Payment No: 020120

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BELL ELECTRICAL SUPPLY	00498186	5678792	POLYCARBONATE DUPLEX	General Fund	1,871.89
				Total for Payment No.:		1,871.89

Payment No: 652813

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	PRINTS CHARLES REPROGRAPHICS	00498311	102944	PLANS&SPECS CE 20-21-02	Streets And Highways	1,847.55
Total for Payment No.:						1,847.55
Payment No: 020100						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WESTERN RENEWABLE ENERGY	00497775	WR26997	CERTS RETIRED	Electric Utility	1,446.66
08/06/2021	WESTERN RENEWABLE ENERGY	00497775	WR26997	CERTS CREATED	Electric Utility	94.69
08/06/2021	WESTERN RENEWABLE ENERGY	00497775	WR26997	CERTS TRANSFERRED	Electric Utility	92.50
08/06/2021	WESTERN RENEWABLE ENERGY	00497775	WR26997	DELIVERABILITY-NERC TAG	Electric Utility	212.00
Total for Payment No.:						1,845.85
Payment No: 652951						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	THOMSON REUTERS WEST	00499307	844754327	ONLINE LEGAL DATABASE JULY21	General Fund	1,822.06
Total for Payment No.:						1,822.06
Payment No: 652581						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CONSOLIDATED ENGINEERING	00498387	187493	AGREEMENT FOR MATERIALS TESTIN	General Fund	1,792.80
Total for Payment No.:						1,792.80
Payment No: 020277						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	WILLIAMS SCOTSMAN INC	00498684	9011165909	40X8 CONTAINER RENT AUG21	Electric Utility Construction	576.65
08/27/2021	WILLIAMS SCOTSMAN INC	00498686	9011165910	CONTAINER RENTAL SERRA AUG21	Electric Utility Construction	460.16
08/27/2021	WILLIAMS SCOTSMAN INC	00498702	9010919075	PERSONAL PROPERTY EXP JUL21	Street Lighting	12.08
08/27/2021	WILLIAMS SCOTSMAN INC	00498702	9010919075	LOCK RENTAL JUL21	Street Lighting	24.56

08/27/2021	WILLIAMS SCOTSMAN INC	00498702	9010919075	40X8 CONTAINER RENT JUL21	Street Lighting	302.00
08/27/2021	WILLIAMS SCOTSMAN INC	00498703	9011189380	40X8 CONTAINER RENT AUG21	Street Lighting	302.01
08/27/2021	WILLIAMS SCOTSMAN INC	00498703	9011189380	PERSONAL PROPERTY EXP AUG21	Street Lighting	12.08
08/27/2021	WILLIAMS SCOTSMAN INC	00498703	9011189380	LOCK RENTAL AUG21	Street Lighting	24.55
08/27/2021	WILLIAMS SCOTSMAN INC	00498703	9011189380	INTEREST CHARGE AUG21	Street Lighting	5.08
08/27/2021	WILLIAMS SCOTSMAN INC	00498703	9011189380	LATE FEE AUG21	Street Lighting	35.00
Total for Payment No.:						1,754.17

Payment No: 652620

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	NEXT DOOR	00498338	COFSC Q4	NEXT DOOR SOLUTIONS TO DOMESTI	H.U.D Capital Projects	1,731.66
Total for Payment No.:						1,731.66

Payment No: 652777

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CED CONTRACTORS	00498759	7488-1002127	WIRE, 600V, CU, #10, 105 STR.,	Electric Utility	1,689.50
Total for Payment No.:						1,689.50

Payment No: 020141

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INTERSTATE TRAFFIC CONTROL	00498290	245420	SUPPLIES-PARK SIGNS	General Fund	660.96
08/13/2021	INTERSTATE TRAFFIC CONTROL	00498290	245420	SUPPLIES-STREET	General Fund	1,016.03
Total for Payment No.:						1,676.99

Payment No: 652833

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SYNERGETIC CONSULTING INC	00498532	21-0746	Application Support July 2021	Building New Dvlpmnt Svc Fee	1,667.50
Total for Payment No.:						1,667.50

Payment No: 020122

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BOATMAN-JACKLIN INC.	00498349	62112-02 CPV JUN-2021	PBI SOLAR PROD PYMT #52 JUN-20	Elec OperatingGrant Trust Fund	1,663.25
				Total for Payment No.:		1,663.25

Payment No: 652731

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	R2 CONTRACTORS	00498859	24482-16 Utility Refund	UTILITY REFUND	General Fund	1,663.24
				Total for Payment No.:		1,663.24

Payment No: 653002

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	MARYBETH YANG	00498672	R220-EVC-112	EV CHARGER REBATE; 11604-03	Elec OperatingGrant Trust Fund	1,658.29
				Total for Payment No.:		1,658.29

Payment No: 652623

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PACIFIC COAST PETROLEUM INC.	00497838	980188	OIL- STOCK	Fleet Operation Fund	1,628.24
				Total for Payment No.:		1,628.24

Payment No: 652606

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	KAMBRIA EVANS PSYCHOTHERAPY,	00497973	11	COUNSELING #111 - SESS 11/20	General Fund	810.00
08/06/2021	KAMBRIA EVANS PSYCHOTHERAPY,	00497977	12	COUNSELING #111, SESS 12/20	General Fund	810.00
				Total for Payment No.:		1,620.00

Payment No: 020152

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NALCO CO	00498166	6600562728	PERMATREAT PC-191T 7/19/21	Electric Utility	1,538.92
08/13/2021	NALCO CO	00498166	6600562728	TRANSPORTATION/ENERGY FEE	Electric Utility	20.43
				Total for Payment No.:		1,559.35

Payment No: 652979

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	BAYSHORE SAFETY & INDUSTRIAL	00499514	6328	RAGS, BLUE CREPED SONTARA, APP	Electric Utility	1,553.67
				Total for Payment No.:		1,553.67

Payment No: 020166

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498988	46656	LEGAL SERVICES	General Fund	314.00
08/13/2021		00498994	46657	PERSONNEL ISSUES LEGAL SVS	Special Liability Insurance	1,227.80
				Total for Payment No.:		1,541.80

Payment No: 020224

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SAFETY CENTER, INCORPORATED	00499156	80407	Traffic Control and Flagger Sa	Water Utility	690.00
08/20/2021	SAFETY CENTER, INCORPORATED	00499156	80407	Traffic Control and Flagger Sa	General Fund	120.00
08/20/2021	SAFETY CENTER, INCORPORATED	00499156	80407	Traffic Control and Flagger Sa	Sewer Utility	690.00
				Total for Payment No.:		1,500.00

Payment No: 652779

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	COGENT COMMUNICATIONS	00498269	CITYOFSA00015JULY2021	INTERNET SERVICES - JULY 2021	Information Technology Service	1,500.00
				Total for Payment No.:		1,500.00

Payment No: 652955

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	UNIQUE TOWING	00499209	00179692	TOWED ABANDONED MOTROHOME	General Fund	1,500.00
				Total for Payment No.:		1,500.00

Payment No: 020183

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BOUNDTREE MEDICAL LLC	00498608	84073966	MEDICAL SUPPLIES	General Fund	1,024.17
08/20/2021	BOUNDTREE MEDICAL LLC	00498609	84151988	MEDICATION - NON TAXED	General Fund	105.00
08/20/2021	BOUNDTREE MEDICAL LLC	00498610	84155075	MEDICATION - NO TAX	General Fund	329.40
				Total for Payment No.:		1,458.57

Payment No: 652794

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GOLDEN STATE EMERGENCY VEHICLE SERV, INC	00498125	CI029356	PARTS-V#2950	Fleet Operation Fund	1,445.77
				Total for Payment No.:		1,445.77

Payment No: 652577

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CLEARBLU ENVIROMENTAL	00497809	25542	PARTS-SHOP	Fleet Operation Fund	647.55
08/06/2021	CLEARBLU ENVIROMENTAL	00497809	25542	LABOR-SHOP	Fleet Operation Fund	795.00
				Total for Payment No.:		1,442.55

Payment No: 652773

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00498939	7457616	ADDITIONAL SERVICES - CONTINGE	Convention Cnt Maintenance Dis	838.83
08/13/2021	BRIGHTVIEW LANDSCAPE SERVICES, INC.	00498941	7457614	ADDITIONAL SERVICES - CONTINGE	Convention Cnt Maintenance Dis	600.00

Total for Payment No.: 1,438.83

Payment No: 020125

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CINTAS CORP #630	00498109	4089561849	FLEET RENTALS	Fleet Operation Fund	234.76
08/13/2021	CINTAS CORP #630	00498109	4089561849	SAFEWASHER MOBILE SRVC	Fleet Operation Fund	31.07
08/13/2021	CINTAS CORP #630	00498110	4090179538	FLEET RENTALS	Fleet Operation Fund	238.20
08/13/2021	CINTAS CORP #630	00498110	4090179538	SAFEWASHER MOBLE SRVC	Fleet Operation Fund	31.07
08/13/2021	CINTAS CORP #630	00498116	4090834397	FLEET RENTALS	Fleet Operation Fund	231.11
08/13/2021	CINTAS CORP #630	00498116	4090834397	SAFEWASHER MOBILE SRVC	Fleet Operation Fund	31.07
08/13/2021	CINTAS CORP #630	00498303	4090834209	2021 JUL WATER UNIFORM SERVICE	Water Utility	295.59
08/13/2021	CINTAS CORP #630	00498303	4090834209	2021 JUL WATER UNIFORM SERVICE	Sewer Utility	295.59
Total for Payment No.:						1,388.46

Payment No: 020210

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	LEE'S FORKLIFT SERVICE	00498412	20777	LABOR-V#0004 WO#131144	Fleet Operation Fund	250.00
08/20/2021	LEE'S FORKLIFT SERVICE	00498413	20778	LABOR-V#2470 WO#131145	Fleet Operation Fund	250.00
08/20/2021	LEE'S FORKLIFT SERVICE	00498416	20779	LABOR-V#3270 WO#131147	Fleet Operation Fund	250.00
08/20/2021	LEE'S FORKLIFT SERVICE	00498417	20780	LABOR-V#2695 WO#131148	Fleet Operation Fund	250.00
08/20/2021	LEE'S FORKLIFT SERVICE	00498419	20781	LABOR-V#3244 WO#131150	Fleet Operation Fund	250.00
08/20/2021	LEE'S FORKLIFT SERVICE	00498420	20782	LABOR-V#3245 WO#131149	Fleet Operation Fund	125.00
Total for Payment No.:						1,375.00

Payment No: 652654

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	VERIZON WIRELESS	00497766	9883650341	M2M CHARGES JUN21	Electric Utility Construction	1,351.24

Total for Payment No.: 1,351.24

Payment No: 020132

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GRAINGER-SAN JOSE	00498324	9967553364	PARTS-STOCK	Fleet Operation Fund	42.61
08/13/2021	GRAINGER-SAN JOSE	00498762	9968834011	PAINT,SPRAY, GRAY PRIMER	Electric Utility	51.72
08/13/2021	GRAINGER-SAN JOSE	00498763	9950487901	LAMP, INDICATOR, 130V, 6 WATTS	Electric Utility	29.33
08/13/2021	GRAINGER-SAN JOSE	00498763	9950487901	CONNECTOR, MISC, #12 THRU #6 A	Electric Utility	61.93
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	PLIERS, CHANNEL LOCK #420G. G	Electric Utility	67.70
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	ADHESIVE BANDAGE, 1IN NORTH #0	Electric Utility	57.29
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	STRAP, CHIN, TO FIT BULLARD HA	Electric Utility	48.58
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	BOOTS, PVC KNEE STYLE, WITH ST	Electric Utility	72.04
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	BOOTS, PVC KNEE STYLE, WITH ST	Electric Utility	72.04
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	GLOVE, WORKMAN TYPE LARGE MECH	Electric Utility	591.66
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	HAMMER, 20 OZ. CUSHION GRIP WI	Electric Utility	186.18
08/13/2021	GRAINGER-SAN JOSE	00498764	9969632265	SCREWDRIVER, 8IN BLADE, ROUND	Electric Utility	48.84
Total for Payment No.:						1,329.92

Payment No: 652655

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	W-TRANS	00498388	26571	DESIGN AGREEMENT FOR THE LICK	Streets And Highways	1,312.50
Total for Payment No.:						1,312.50

Payment No: 653032

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	WASHINGTON TRUST BANK	00498753	210801-420836	VEBA CUSTODY FEE - JUL 2021	General Fund	1,298.14

Total for Payment No.: 1,298.14

Payment No: 652822

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SANTA CLARA VALLEY HEALTH & HOSPITAL SYS	00497863	H7830160200	SART 21-303147	General Fund	1,296.00
Total for Payment No.:						1,296.00

Payment No: 653025

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	T-MOBILE USA INC	00498693	9456971729	GPS Locate 21-612064	General Fund	210.00
08/27/2021	T-MOBILE USA INC	00498694	9455553106	GPS Locate 21-421065	General Fund	660.00
08/27/2021	T-MOBILE USA INC	00498695	9454618401	GPS Locate 21-518137	General Fund	210.00
08/27/2021	T-MOBILE USA INC	00498696	9456235740	GPS Locate 21-428136	General Fund	210.00
Total for Payment No.:						1,290.00

Payment No: 652835

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498678	27523AUG2021	PERS ADVANCED DISABILITY JULY	Workers Compensation	1,282.46
Total for Payment No.:						1,282.46

Payment No: 652864

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PACIFIC WATER ART INC	00499317	66455	MONTHLY FOUNTAIN MAINTENANCE:	Convention Cnt Maintenance Dis	1,280.00
Total for Payment No.:						1,280.00

Payment No: 020162

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	PITNEY BOWES	00498090	3104868694	LEASING CHARGES	General Fund	1,263.89
Total for Payment No.:						1,263.89
Payment No: 020144						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	LEHR AUTO ELECTRIC	00498126	SI63561	PARTS-V#3259	Fleet Operation Fund	1,255.95
Total for Payment No.:						1,255.95
Payment No: 653024						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	STEVEN DOLEZAL	00499566	892JUL2021	PSYCH SERVICES JULY 2021	General Fund	1,225.00
Total for Payment No.:						1,225.00
Payment No: 652855						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ERIDAN COMMUNICATIONS INC	00499159	17857-05 Utility Refund.	ESCHEAT ORIGINAL CHK640682	General Fund	1,218.79
Total for Payment No.:						1,218.79
Payment No: 652889						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	D & M POLYGRAPH	00499219	24084JUN2021	POLYGRAPH JUNE NEW HIRES	General Fund	1,200.00
Total for Payment No.:						1,200.00
Payment No: 652841						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VALLEY POWER SYSTEMS INC	00498331	K57422	LABOR-V#3421 WO#131143	Fleet Operation Fund	1,200.00
Total for Payment No.:						1,200.00

Payment No: 652815

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	QUALITY TECHNOLOGY SERVICES HOLDING, LLC	00498317	070762	CONDUIT LEASE AUG21	Electric Utility	1,091.25
08/13/2021	QUALITY TECHNOLOGY SERVICES HOLDING, LLC	00498317	070762	RACK: 2POST AUG21	Electric Utility	100.00
				Total for Payment No.:		1,191.25

Payment No: 020065

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	COAST COUNTIES TRUCK	00497618	01132655P	PARTS-V#3218	Fleet Operation Fund	442.50
08/06/2021	COAST COUNTIES TRUCK	00497619	01132768P	PARTS-V#3464	Fleet Operation Fund	108.82
08/06/2021	COAST COUNTIES TRUCK	00497620	01132940P	PARTS-V#3351	Fleet Operation Fund	108.82
08/06/2021	COAST COUNTIES TRUCK	00497881	01133812P	PARTS-V#3364	Fleet Operation Fund	119.09
08/06/2021	COAST COUNTIES TRUCK	00498262	01134205P	PARTS-STOCK	Fleet Operation Fund	367.06
08/06/2021	COAST COUNTIES TRUCK	00498263	01134212P	PARTS-STOCK	Fleet Operation Fund	41.69
				Total for Payment No.:		1,187.98

Payment No: 020253

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GRANITE ROCK CO #29145	00499519	1304505	SAND	Water Utility Construction	87.41
08/27/2021	GRANITE ROCK CO #29145	00499519	1304505	SAND	Water Utility	65.55
08/27/2021	GRANITE ROCK CO #29145	00499519	1304505	SAND	Electric Utility Construction	218.52
08/27/2021	GRANITE ROCK CO #29145	00499519	1304505	SAND	Water Utility	43.70
08/27/2021	GRANITE ROCK CO #29145	00499519	1304505	SAND	Sewer Utility	21.85
08/27/2021	GRANITE ROCK CO #29145	00499520	1303135	SAND	Water Utility Construction	61.25
08/27/2021	GRANITE ROCK CO #29145	00499520	1303135	SAND	Water Utility	45.93
08/27/2021	GRANITE ROCK CO #29145	00499520	1303135	SAND	Electric Utility Construction	153.12

08/27/2021	GRANITE ROCK CO #29145	00499520	1303135	SAND	Water Utility	30.62
08/27/2021	GRANITE ROCK CO #29145	00499520	1303135	SAND	Sewer Utility	15.31
08/27/2021	GRANITE ROCK CO #29145	00499521	1305782	SAND	Water Utility Construction	86.25
08/27/2021	GRANITE ROCK CO #29145	00499521	1305782	SAND	Water Utility	64.69
08/27/2021	GRANITE ROCK CO #29145	00499521	1305782	SAND	Electric Utility Construction	215.64
08/27/2021	GRANITE ROCK CO #29145	00499521	1305782	SAND	Water Utility	43.13
08/27/2021	GRANITE ROCK CO #29145	00499521	1305782	SAND	Sewer Utility	21.56
				Total for Payment No.:		1,174.53

Payment No: 652870

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	AT&T CALNET	00498455	000016830935	STO WAN CKTS 7/1/21-7/31/21	Electric Utility	1,169.78
				Total for Payment No.:		1,169.78

Payment No: 652784

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	E & M ELECTRIC & MACHINERY	00499043	379411	WWCA-VM-BASE-DOC HYPERVISOR SY	Electric Utility	464.80
08/13/2021	E & M ELECTRIC & MACHINERY	00499043	379411	WWCA-VM-BASE-DOC HYPERVISOR SY	Electric Utility	464.80
08/13/2021	E & M ELECTRIC & MACHINERY	00499043	379411	WWCA-VM-BASE-DOC HYPERVISOR SY	Electric Utility	232.40
				Total for Payment No.:		1,162.00

Payment No: 652617

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00497631	0161184-IN	PARTS-V#3028	Fleet Operation Fund	1,124.16
08/06/2021	MUNICIPAL MAINTENANCE EQUIPMNT	00497631	0161184-IN	PARTS-STOCK	Fleet Operation Fund	35.68

Total for Payment No.: 1,159.84

Payment No: 020106

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CARIE T ROSE	00499057	07/25/21-08/07/21DR	WAGE ATTACHMENT B2116	Payroll Liability&ClearingAcct	1,153.85
Total for Payment No.:						1,153.85

Payment No: 020235

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CARIE T ROSE	00499710	08/08/21-08/21/21DR	WAGE ATTACHMENTB2117	Payroll Liability&ClearingAcct	1,153.85
Total for Payment No.:						1,153.85

Payment No: 652624

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PACIFIC COAST SEED INC	00497965	O-69137-21	TURF AQUA WISE PACIFIC PARK	General Fund	1,003.95
08/06/2021	PACIFIC COAST SEED INC	00497965	O-69137-21	TURF FREIGHT	General Fund	108.00
Total for Payment No.:						1,111.95

Payment No: 652831

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SUPERCO SPECIALTY PRODUCTS	00498204	PSI405239	SUPER CONTROL VERY BERRY	General Fund	1,093.10
Total for Payment No.:						1,093.10

Payment No: 020083

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	LEHR AUTO ELECTRIC	00497629	SI62853	PARTS-V#3382	Fleet Operation Fund	602.61
08/06/2021	LEHR AUTO ELECTRIC	00497885	SI63429	PARTS-STOCK	Fleet Operation Fund	488.29

Total for Payment No.: 1,090.90

Payment No: 002424

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	NAVIA BENEFIT SOLUTIONS, INC	00498430	10366881	DD:MONTHLY ADMIN FEE JUL21	Payroll Liability&ClearingAcct	584.95
08/06/2021	NAVIA BENEFIT SOLUTIONS, INC	00498430	10366881	DD:MONTHLY ADMIN FEE JUL21	General Fund	501.67
Total for Payment No.:						1,086.62

Payment No: 652886

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CRANE CERTIFICATION &	00498411	1146	INSPCTN- V#3016 WO#131103	Fleet Operation Fund	350.00
08/20/2021	CRANE CERTIFICATION &	00498411	1146	INSPCTN- V#2816 WO#131106	Fleet Operation Fund	250.00
08/20/2021	CRANE CERTIFICATION &	00498411	1146	INSPCTN- V#3282 WO#131107	Fleet Operation Fund	250.00
08/20/2021	CRANE CERTIFICATION &	00498411	1146	INSPCTN- V#2899 WO#131108	Fleet Operation Fund	200.00
Total for Payment No.:						1,050.00

Payment No: 653023

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	STERICYCLE INC	00499561	3005601037	SERVICES FOR JULY	General Fund	432.64
08/27/2021	STERICYCLE INC	00499561	3005601037	SERVICES FOR JULY	Solid Waste Program	86.65
08/27/2021	STERICYCLE INC	00499562	3005639708	SERVICES FOR AUGUST	General Fund	432.64
08/27/2021	STERICYCLE INC	00499562	3005639708	SERVICES FOR AUGUST	Solid Waste Program	86.65
Total for Payment No.:						1,038.58

Payment No: 020131

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GRAINGER	00498106	9952474162	HARD HAT, INCL FACE SHILD, 2LB	Electric Utility	134.01
08/13/2021	GRAINGER	00498279	9969495598	SUPPLES-STREET	General Fund	57.75

08/13/2021	GRAINGER	00498280	9970724135	SUPPLIES-STORM	General Fund	449.32
08/13/2021	GRAINGER	00498282	9970724143	SUPPLIES-TRAFFIC	General Fund	381.85
				Total for Payment No.:		1,022.93

Payment No: 652619

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	NEWGEN STRATEGIES	00497927	11626	RATES, COST OF SVC ANALYSIS	Electric Utility	1,012.50
				Total for Payment No.:		1,012.50

Payment No: 652985

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CPS HR CONSULTING	00498712	SOP53257	4 BOOKS SERVICES COORDINATOR	General Fund	44.00
08/27/2021	CPS HR CONSULTING	00498712	SOP53257	AGENCY FEE	General Fund	385.00
08/27/2021	CPS HR CONSULTING	00498714	SOP53258	13 BOOKS - UTILITY ELECTRICIAN	General Fund	143.00
08/27/2021	CPS HR CONSULTING	00498714	SOP53258	AGENCY FEE	General Fund	385.00
08/27/2021	CPS HR CONSULTING	00498716	SOP53299	2 BOOKS - ELECTRIC MAINT WORKE	General Fund	23.00
08/27/2021	CPS HR CONSULTING	00498716	SOP53299	MAKE UP FEE	General Fund	28.75
				Total for Payment No.:		1,008.75

Payment No: 652832

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SUSHMA NAYAK	00498174	R220-EVC-109	EV CHARGER REBATE; ACT36625-04	Elec OperatingGrant Trust Fund	1,000.00
				Total for Payment No.:		1,000.00

Payment No: 652605

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	JACOB BASHYAM	00497735	R220-EVC-108	EV CHARGER REBATE; ACT50417-07	Elec OperatingGrant Trust Fund	1,000.00

Total for Payment No.: 1,000.00

Payment No: 652999

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	JENNIE DEGUZMAN	00498669	R220-EVC-103	EV CHARGER REBATE; 74473-04	Elec OperatingGrant Trust Fund	1,000.00
Total for Payment No.:						1,000.00

Payment No: 652995

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	HOU HSU	00498671	R220-EVC-111	EV CHARGER REBATE; 24016-02	Elec OperatingGrant Trust Fund	1,000.00
Total for Payment No.:						1,000.00

Payment No: 653004

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	MICHAEL LAU	00498670	R220-EVC-110	EV CHARGER REBATE; 53250-01	Elec OperatingGrant Trust Fund	1,000.00
Total for Payment No.:						1,000.00

Payment No: W22072

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ICMA Retirement Corporation	00499702	08/08/21-08/21/21A	WT: B2117 457 PLN CONTRIBUTION	Fringe Benefits	1,000.00
Total for Payment No.:						1,000.00

Payment No: W22051

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ICMA Retirement Corporation	00499067	07/25/21-08/07/21A	WT: B2116 457 PLN CONTRIBUTION	Fringe Benefits	1,000.00
Total for Payment No.:						1,000.00

Payment No: 020184

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BRUCE BARTON PUMP SERVICE INC	00498583	0107504-IN	SUBMERSIBLE WASTE WATER PUMP	General Fund	993.84
				Total for Payment No.:		993.84

Payment No: 652898

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	EDWARD JOHNSON	00499213	20606AUG2021	ADMINISTRATIVE HEARING SERVICE	General Fund	975.00
				Total for Payment No.:		975.00

Payment No: 652571

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BSN SPORTS, LLC	00497954	913149958	TUFFY WINDSCREEN	General Fund	673.13
08/06/2021	BSN SPORTS, LLC	00498400	913140128	TUFFY WINDSCREEN	General Fund	299.96
				Total for Payment No.:		973.09

Payment No: 020228

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	YSERCO INC	00499318	25102R	PREVENTATIVE MAINTENANCE OF TH	Public Buildings	370.40
08/20/2021	YSERCO INC	00499319	25101R	PREVENTATIVE MAINTENANCE OF TH	Public Buildings	598.50
				Total for Payment No.:		968.90

Payment No: 652890

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	D&M TRAFFIC SERVICES	00498533	79911	SUPPLIES-STREET	General Fund	815.71
08/20/2021	D&M TRAFFIC SERVICES	00498533	79911	STENCIL CHARGE	General Fund	50.00
08/20/2021	D&M TRAFFIC SERVICES	00498572	79775	BRACKET BOLTS STRAPS	General Fund	101.75

Total for Payment No.: 967.46

Payment No: 020205

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	JP GRAPHICS INC	00498384	91112	LEAVE REQUEST FORMS	General Fund	955.91
Total for Payment No.:						955.91

Payment No: 020156

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ORACLE AMERICA INC	00498251	3855337	LICENSE&SUPP-PS MOBILE INV MGT	Electric Utility Construction	948.75
Total for Payment No.:						948.75

Payment No: 020275

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	UNITY COURIER SERVICES, INC	00498674	471416	LINK+ DELIVERY	General Fund	922.00
Total for Payment No.:						922.00

Payment No: 652678

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ROGELIO GUTIERREZ	00498647	9014	SUPERVISORY COURSE	General Fund	921.26
Total for Payment No.:						921.26

Payment No: 020072

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GARDENLAND POWER EQUIPMENT	00497818	869652	PARTS-V#3144	Fleet Operation Fund	77.46
08/06/2021	GARDENLAND POWER EQUIPMENT	00497818	869652	PARTS-STOCK	Fleet Operation Fund	81.90
08/06/2021	GARDENLAND POWER EQUIPMENT	00497907	864210	CREDIT MEMO-SUPPLIES PNB	General Fund	-13.11
08/06/2021	GARDENLAND POWER EQUIPMENT	00497908	869613	SUPPLIES-STREET	General Fund	355.02

08/06/2021	GARDENLAND POWER EQUIPMENT	00497908	869613	LABOR	General Fund	134.24
08/06/2021	GARDENLAND POWER EQUIPMENT	00497909	869618	SUPPLIES-STREET	General Fund	74.32
08/06/2021	GARDENLAND POWER EQUIPMENT	00498265	871704	PARTS-STOCK	Fleet Operation Fund	187.80
				Total for Payment No.:		897.63

Payment No: 652869

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ARAMARK UNIFORM SERVICES	00499331	511000105295	CLEANING SVC / SHOP TOWELS / F	Electric Utility	176.50
08/20/2021	ARAMARK UNIFORM SERVICES	00499332	511000100997	CLEANING SVC / SHOP TOWELS / F	Electric Utility	176.50
08/20/2021	ARAMARK UNIFORM SERVICES	00499333	511000088700	CLEANING SVC / SHOP TOWELS / F	Electric Utility	176.50
08/20/2021	ARAMARK UNIFORM SERVICES	00499334	511000092512	CLEANING SVC / SHOP TOWELS / F	Electric Utility	176.50
08/20/2021	ARAMARK UNIFORM SERVICES	00499335	511000097060	CLEANING SVC / SHOP TOWELS / F	Electric Utility	176.50
				Total for Payment No.:		882.50

Payment No: 652983

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CONCENTRA MEDICAL CENTERS	00498741	72068629	AUTO SERVICES	Fleet Operation Fund	85.00
08/27/2021	CONCENTRA MEDICAL CENTERS	00498741	72068629	REG PRE EMPLOY PHYSICALS	General Fund	456.00
08/27/2021	CONCENTRA MEDICAL CENTERS	00498741	72068629	STREET TREE TRIMMERS	General Fund	85.00
08/27/2021	CONCENTRA MEDICAL CENTERS	00498741	72068629	SVP FIELD SERVICES	Electric Utility	170.00
08/27/2021	CONCENTRA MEDICAL CENTERS	00498743	72149416	SVP FIELD SERVICES	Electric Utility	85.00
				Total for Payment No.:		881.00

Payment No: 652765

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AT&T CALNET	00498176	000016799501	BN9391023721 6/25/21-7/24/21	Electric Utility	880.13
				Total for Payment No.:		880.13

Payment No: 020085

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MCCAMPBELL ANALYTICAL INC	00498398	2107517	Laboratory Services with McCam	Water Utility	876.00
				Total for Payment No.:		876.00

Payment No: 020074

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GRAINGER-SAN JOSE	00497628	9950299355	PARTS-SHOP USE	Fleet Operation Fund	140.67
08/06/2021	GRAINGER-SAN JOSE	00498236	9969217976	ELECTICAL	General Fund	268.89
08/06/2021	GRAINGER-SAN JOSE	00498243	9970824356	CENTRAL LIB HVAC	General Fund	152.34
08/06/2021	GRAINGER-SAN JOSE	00498245	9970962990	CENTRAL LIB HVAC	General Fund	113.92
08/06/2021	GRAINGER-SAN JOSE	00498246	9970824349	CENTRAL LIB HVAC	General Fund	199.91
				Total for Payment No.:		875.73

Payment No: 652582

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CRESCO EQUIPMENT RENTALS	00498512	5456199-0001	EQUIPMENT RENTAL	Electric Utility	30.17
08/06/2021	CRESCO EQUIPMENT RENTALS	00498513	5447275-0001	EQUIPMENT RENTAL	Electric Utility	763.88
08/06/2021	CRESCO EQUIPMENT RENTALS	00498513	5447275-0001	NON TAXABLE	Electric Utility	80.75
				Total for Payment No.:		874.80

Payment No: W22071

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ICMA Retirement Corporation	00499701	08/08/21-08/21/21	WT: B2117 401 (A) PLAN CONTRIB	Fringe Benefits	862.48
				Total for Payment No.:		862.48

Payment No: W22050A

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ICMA Retirement Corporation	00499066	07/25/21-08/07/21	WT: B2116 401 (A) PLAN CONTRIB	Fringe Benefits	862.48
				Total for Payment No.:		862.48

Payment No: 652998

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	INTELLIGENT TECHNOLOGIES & SVC	00498965	88994	PARTS - THERMAL DETECTOR	Electric Utility	274.83
08/27/2021	INTELLIGENT TECHNOLOGIES & SVC	00498965	88994	HEAT DETECTOR LABOR 7/23	Electric Utility	585.00
				Total for Payment No.:		859.83

Payment No: 020243

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	PD 1990 WALSH AVE	General Fund	141.51
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	FIRE 1177 ALVISO ST	General Fund	32.37
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	FIRE 1177 ALVISO ST	General Fund	40.96
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	PD 601 EL CAMINO REAL	General Fund	229.71
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	PD 3992 RIVERMARK PLZ	General Fund	29.83
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	SR CNTR 1303 FREMONT ST	General Fund	147.75
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	CH 1500 WARBURTON AVE	Information Technology Service	163.38
08/27/2021	COMCAST	00499539	7/23/21AC8155400650182 213	IT 1405 CIVIC CNTR DR	Information Technology Service	55.83
				Total for Payment No.:		841.34

Payment No: 652755

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ENGINEERS -CITY OF SANTA CLARA	00499060	07/11/21-08/07/21	UNION DUES B2116	Payroll Liability&ClearingAcct	837.89
				Total for Payment No.:		837.89

Payment No: 020066

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	FIRE 1177 ALVISO ST	General Fund	40.93
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	PD 601 EL CAMINO REAL	General Fund	225.23
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	PD 3992 RIVERMARK PLZ	General Fund	29.82
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	SR CNTR 1303 FREMONT ST	General Fund	147.75
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	PD 1990 WALSH AVE	General Fund	141.45
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	FIRE 1177 ALVISO ST	General Fund	32.37
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	CH 1500 WARBURTON AVE	Information Technology Service	158.05
08/06/2021	COMCAST	00498393	6/23/21AC8155400650182 213	IT 1405 CIVIC CNTR DR	Information Technology Service	55.81
				Total for Payment No.:		831.41

Payment No: 020188

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CINTAS CORP #630	00498337	4089293001	UNIFORM SERVICES	General Fund	80.92
08/20/2021	CINTAS CORP #630	00498354	4089983902	UNIFORM SERVICES	General Fund	55.77
08/20/2021	CINTAS CORP #630	00498355	4090628453	UNIFORM SERVICES	General Fund	55.77
08/20/2021	CINTAS CORP #630	00498357	4091255143	UNIFORM SERVICES	General Fund	55.77
08/20/2021	CINTAS CORP #630	00498594	4091983454	UNIFORMS	General Fund	146.69
08/20/2021	CINTAS CORP #630	00498595	4091254959	UNIFORMS	General Fund	64.74
08/20/2021	CINTAS CORP #630	00498596	4091690534	UNIFORMS	General Fund	96.20
08/20/2021	CINTAS CORP #630	00498618	4092075936	FLEET RENTALS	Fleet Operation Fund	51.26
08/20/2021	CINTAS CORP #630	00498618	4092075936	SAFEWASHER MOBILE SRVC	Fleet Operation Fund	31.07
08/20/2021	CINTAS CORP #630	00498619	4092076106	FLEET RENTALS	Fleet Operation Fund	179.81
				Total for Payment No.:		818.00

Payment No: 020138

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	IMPERIAL SPRINKLER SUPPLY INC	00498185	4753089-00	SPRINKLER MAINTENANCE	General Fund	588.22
08/13/2021	IMPERIAL SPRINKLER SUPPLY INC	00498291	4738345-00	SUPPLIES-PNB	General Fund	223.14
Total for Payment No.:						811.36

Payment No: 652763

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AT&T	00498162	1174587922	T1.5 MBPS SVC 19JUL21-18AUG21	Electric Utility	811.30
Total for Payment No.:						811.30

Payment No: 653020

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SHRED-IT USA LLC	00498975	8182462716	SHREDIT SVP 881MARTIN 6/30/21	Electric Utility	164.24
08/27/2021	SHRED-IT USA LLC	00498975	8182462716	SHREDIT SVP 881MARTIN 7/21/21	Electric Utility	163.43
08/27/2021	SHRED-IT USA LLC	00498977	8182565219	SHREDIT SVP 881MARTIN 7/28/21	Electric Utility	163.43
08/27/2021	SHRED-IT USA LLC	00499571	8182495325	MONTHLY SHREDDING CHARGES	General Fund	314.19
Total for Payment No.:						805.29

Payment No: 652895

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	DENCO SALES CO	00499017	8761402-00	ONSITE ASSEMBLY	General Fund	800.00
Total for Payment No.:						800.00

Payment No: 652611

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	LN CURTIS & SONS	00498392	INV505694	WLF0217 CREWBOSS	Fire Department	785.70
Total for Payment No.:						785.70

Payment No: 652630

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	R&B COMPANY	00498293	P065334	WIRE	Water Utility	768.45
				Total for Payment No.:		768.45

Payment No: 653028

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	UNIQUE TOWING	00498635	00181004	TOW-V#2832 WO#130965	Fleet Operation Fund	437.50
08/27/2021	UNIQUE TOWING	00499565	00180572	TOW FROM CAMPBELL TO PD LOT	General Fund	322.50
				Total for Payment No.:		760.00

Payment No: 652924

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	METRO MOBILE COMMUNICATIONS	00499283	45579	HEADSET CHARGERS FOR MOTORS	General Fund	755.09
				Total for Payment No.:		755.09

Payment No: 653005

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	NATIONAL TESTING NETWORK, INC	00499568	8851	ANNUAL NTN MEMBERSHIP	General Fund	750.00
				Total for Payment No.:		750.00

Payment No: 020129

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GARDENLAND POWER EQUIPMENT	00498195	869140	EQUIPMENT MAINTENANCE, PARTS	Sewer Utility	61.83
08/13/2021	GARDENLAND POWER EQUIPMENT	00498195	869140	LABOR	Sewer Utility	77.69
08/13/2021	GARDENLAND POWER EQUIPMENT	00498196	869144	SILVER CVR	Sewer Utility	24.01
08/13/2021	GARDENLAND POWER EQUIPMENT	00498276	870563	SUPPLIES-PNB	General Fund	579.61
				Total for Payment No.:		743.14

Payment No: 653016

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SAN JOSE BMW	00498634	4351563	PARTS-STOCK	Fleet Operation Fund	736.03
				Total for Payment No.:		736.03

Payment No: 652573

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CENTRAL WHOLESALE NURSERY	00497955	756556	RHAPHIOLEPIS SPRINGTIME	General Fund	54.00
08/06/2021	CENTRAL WHOLESALE NURSERY	00497956	756041	RHAPHIOLEPIS SRINGTIME	General Fund	678.44
				Total for Payment No.:		732.44

Payment No: 652549

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SCOTT MEAD	00498531	27680MAY2021	POST SUPERVISORY COURSE	General Fund	732.35
				Total for Payment No.:		732.35

Payment No: 652753

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CA FRANCHISE TAX BOARD	00499079	07/25/21-08/07/21JC	WAGE ATTACHMENT B2116	Payroll Liability&ClearingAcct	727.39
				Total for Payment No.:		727.39

Payment No: 652932

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PINE CONE LUMBER CO	00498461	109145	LUMBER	General Fund	712.72
08/20/2021	PINE CONE LUMBER CO	00498461	109145	CA LPA 1%	General Fund	6.53
				Total for Payment No.:		719.25

Payment No: 020234

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ZCOLO, LLC	00498603	2021080034793	MRC 5101 LAFAYETTE AUG21	Electric Utility	711.41
				Total for Payment No.:		711.41

Payment No: 652945

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	STEVEN DOLEZAL	00499206	892JUN2021	PSYCH SERVICES FOR JUNE	General Fund	700.00
				Total for Payment No.:		700.00

Payment No: 652903

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	FIRST ALARM SECURITY & PATROL,	00498577	11554156	TASMAN	General Fund	690.00
				Total for Payment No.:		690.00

Payment No: 020063

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CINTAS CORP #630	00497923	4090179313	2021 JUL WATER UNIFORM SERVICE	Water Utility	296.37
08/06/2021	CINTAS CORP #630	00497923	4090179313	2021 JUL WATER UNIFORM SERVICE	Sewer Utility	296.36
08/06/2021	CINTAS CORP #630	00497934	4090400660	UNIFORMS	General Fund	96.22
				Total for Payment No.:		688.95

Payment No: 652908

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GUIDEHOUSE INC	00498535	0100063291	NERC CIP SUPPORT JUN21	Electric Utility	688.45
				Total for Payment No.:		688.45

Payment No: 652807

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MISSION VALLEY FORD TRUCK	00498127	758236	PARTS-V#STAD001	Fleet Operation Fund	684.93
				Total for Payment No.:		684.93

Payment No: 652800

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INDUSTRIAL SCIENTIFIC CORP	00498165	2444034	2021 JUL INET GAS MONITORING	Electric Utility	677.88
				Total for Payment No.:		677.88

Payment No: 652774

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CA DEPT OF INDUSTRIAL RELATIONS	00498344	E1806454 SJ	MAINTENANCE	General Fund	225.00
08/13/2021	CA DEPT OF INDUSTRIAL RELATIONS	00498345	E 1806456 SJ	MAINTENANCE	General Fund	225.00
08/13/2021	CA DEPT OF INDUSTRIAL RELATIONS	00498346	E 1806458 SJ	MAINTENANCE	General Fund	225.00
				Total for Payment No.:		675.00

Payment No: 652782

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	DAVID'S RALLY WHEELS, INC.	00498076	72205	SHOP- WASTE TIRES	Fleet Operation Fund	669.00
				Total for Payment No.:		669.00

Payment No: 020269

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SUMMIT UNIFORMS	00499055	74802	SEO Chappel uniform	General Fund	156.23
08/27/2021	SUMMIT UNIFORMS	00499698	75346	UNIFORMS FOR NEW DISPATCHERS	General Fund	253.75
08/27/2021	SUMMIT UNIFORMS	00499699	75347	UNIFORMS FOR NEW DISPATCHERSS	General Fund	253.75
				Total for Payment No.:		663.73

Payment No: 653019

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SHAW HR CONSULTING INC	00498735	000400	CONSULTING FEES	General Fund	660.00
				Total for Payment No.:		660.00

Payment No: 652885

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CENTRAL WHOLESALE NURSERY	00498542	756039	RHAPHIOLEPSIS SPRINGTIME	General Fund	648.95
				Total for Payment No.:		648.95

Payment No: 020147

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MIDWEST TAPE LLC	00498086	500716105	1241 AD DVD	General Fund	83.15
08/13/2021	MIDWEST TAPE LLC	00498086	500716105	1235 Juv DVD	General Fund	19.62
08/13/2021	MIDWEST TAPE LLC	00498087	500735354	1241 AD DVD	General Fund	314.56
08/13/2021	MIDWEST TAPE LLC	00498087	500735354	1231 Juv DVD	General Fund	85.03
08/13/2021	MIDWEST TAPE LLC	00498087	500735354	1233 AD DVD	General Fund	114.48
08/13/2021	MIDWEST TAPE LLC	00498087	500735354	1235 AD DVD	General Fund	27.81
				Total for Payment No.:		644.65

Payment No: 020202

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	IMPERIAL SPRINKLER SUPPLY INC	00498539	4759295-00	CH 80 TBE NIPPLE	General Fund	19.28
08/20/2021	IMPERIAL SPRINKLER SUPPLY INC	00498543	4720111-00	SPRINKLER MAINTENANCE	General Fund	316.59
08/20/2021	IMPERIAL SPRINKLER SUPPLY INC	00498544	4722346-00	SPRINKLER MAINTENANCE	General Fund	85.18
08/20/2021	IMPERIAL SPRINKLER SUPPLY INC	00498545	4719499-00	SPRINKLER MAINTENANCE	General Fund	90.09
08/20/2021	IMPERIAL SPRINKLER SUPPLY INC	00498547	4758955-00	SPRINKLER MAINTENANCE	General Fund	128.76
				Total for Payment No.:		639.90

Payment No: 652846

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VERIZON WIRELESS	00498297	9884778600	FIRE PREVENTION WIRELESS	General Fund	638.68
				Total for Payment No.:		638.68

Payment No: 652838

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	UNITED MECHANICAL INC	00498260	59234	LABOR MAR21 PO25303	Electric Utility	531.00
08/13/2021	UNITED MECHANICAL INC	00498260	59234	TRIP CHARGE MAR21 PO25303	Electric Utility	80.00
08/13/2021	UNITED MECHANICAL INC	00498260	59234	MATERIALS MAR21 PO25303	Electric Utility	27.25
				Total for Payment No.:		638.25

Payment No: 020245

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	EFFICIENCY SERVICES GROUP, LLC	00496993	3268	ADMIN/PROGRAM SUPP SRV JUN21	Elec OperatingGrant Trust Fund	82.50
08/27/2021	EFFICIENCY SERVICES GROUP, LLC	00496993	3268	ADMIN/PROGRAM SUPP SRV JUN21	Electric Utility	275.00
08/27/2021	EFFICIENCY SERVICES GROUP, LLC	00498826	3315	ADMIN/PROGRAM SUPP SRV JUL21	Elec OperatingGrant Trust Fund	137.50
08/27/2021	EFFICIENCY SERVICES GROUP, LLC	00498826	3315	ADMIN/PROGRAM SUPP SRV JUL21	Electric Utility	137.50
				Total for Payment No.:		632.50

Payment No: 652621

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	OIL CHANGER	00498281	JUN 21 CAR WASH	JUNE 21 PD CAR WASHES	Fleet Operation Fund	630.00
				Total for Payment No.:		630.00

Payment No: 652882

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/20/2021	CAR KEYS EXPRESS	00498480	CKE-1664366	KEYS- V#3466 WO#131174	Fleet Operation Fund	509.70
08/20/2021	CAR KEYS EXPRESS	00498480	CKE-1664366	KEYS-V#2904 WO#131172	Fleet Operation Fund	119.70
Total for Payment No.:						629.40

Payment No: 652663

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ZEP SALES & SERVICE	00498289	9006490751	PARTS-SHOP USE	Fleet Operation Fund	627.43
Total for Payment No.:						627.43

Payment No: 652957

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	UNITED SITE SERVICES INC	00499287	114-12208146	AS NEEDED PORTABLE TOILET & SI	General Fund	622.81
Total for Payment No.:						622.81

Payment No: 652647

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SUNNYVALE FORD	00497644	CM116916	CREDIT- CORE RETURN	Fleet Operation Fund	-65.40
08/06/2021	SUNNYVALE FORD	00497645	CM136178	CREDIT- CORE RETURN	Fleet Operation Fund	-65.40
08/06/2021	SUNNYVALE FORD	00497843	190465	PARTS-V#3183	Fleet Operation Fund	17.77
08/06/2021	SUNNYVALE FORD	00497893	190761	PARTS-STOCK	Fleet Operation Fund	580.33
08/06/2021	SUNNYVALE FORD	00497894	190675	PARTS-V#3144	Fleet Operation Fund	150.59
Total for Payment No.:						617.89

Payment No: 653026

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	THOMSON WEST GROUP	00498692	844766220	Monthly CLEAR	General Fund	307.80
08/27/2021	THOMSON WEST GROUP	00498692	844766220	Monthly CLEAR	General Fund	307.80
Total for Payment No.:						615.60

Payment No: 020271

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	TIMOTHY KELSO	00498701	I2021093	LICENSE MAINT FEE JUL2021	Electric Utility	600.00
				Total for Payment No.:		600.00

Payment No: 652915

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	INDUSTRIAL SCIENTIFIC CORP	00499155	2445103	Monthly iNet Usage Fee w/AutoR	Sewer Utility	595.75
				Total for Payment No.:		595.75

Payment No: 020079

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	IMPERIAL SPRINKLER SUPPLY INC	00497912	4725071-00	SUPPLIES-PNB	General Fund	195.65
08/06/2021	IMPERIAL SPRINKLER SUPPLY INC	00497913	4730644-00	SUPPLIES-PNB	General Fund	347.74
08/06/2021	IMPERIAL SPRINKLER SUPPLY INC	00497957	4749409-00	TOOLCORO	General Fund	50.84
				Total for Payment No.:		594.23

Payment No: 652656

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WARDELL AUTO INTERIORS AND TOPS, LLC	00498287	10772	PARTS-V#3303 WO#13111	Fleet Operation Fund	92.65
08/06/2021	WARDELL AUTO INTERIORS AND TOPS, LLC	00498287	10772	LABOR-V#3303 WO#131119	Fleet Operation Fund	500.00
				Total for Payment No.:		592.65

Payment No: 652710

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	HONG XIN HUANG	00498885	55412-03 Utility Refund	UTILITY REFUND	General Fund	583.65
				Total for Payment No.:		583.65

Payment No: 652607

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	KELLY-MOORE PAINT CO	00497911	817-00000424781	SUPPLIES-TRAFFIC MNTCE	General Fund	578.14
				Total for Payment No.:		578.14

Payment No: 652643

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SHRED-IT USA LLC	00497564	8182372526	CCO - RECORDS CENTER	General Fund	63.97
08/06/2021	SHRED-IT USA LLC	00497564	8182372526	FINANCE - MUNICIPAL SERVICES	General Fund	63.97
08/06/2021	SHRED-IT USA LLC	00497564	8182372526	FINANCE - ACCOUNTING & PAYROLL	General Fund	127.94
08/06/2021	SHRED-IT USA LLC	00497564	8182372526	HOUSING	General Fund	63.97
08/06/2021	SHRED-IT USA LLC	00497564	8182372526	HUMAN RESOURCES	General Fund	63.97
08/06/2021	SHRED-IT USA LLC	00497564	8182372526	CITY ATTORNEY'S OFFICE	General Fund	63.97
08/06/2021	SHRED-IT USA LLC	00497564	8182372526	INFORMATION TECHNOLOGY	Information Technology Service	127.94
				Total for Payment No.:		575.73

Payment No: 652937

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SANTA CLARA LIGHTING, INC.	00498548	21982	LIGHTBULBS	General Fund	130.84
08/20/2021	SANTA CLARA LIGHTING, INC.	00498598	22017	SUPPLIES	General Fund	283.62
08/20/2021	SANTA CLARA LIGHTING, INC.	00498599	22189	SUPPLIES	General Fund	159.32
				Total for Payment No.:		573.78

Payment No: 020135

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GURUS EDUCATIONAL SERVICES INC	00498745	2021SO712	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	572.80
				Total for Payment No.:		572.80

Payment No: 652922

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	LEXISNEXIS PO BOX 894166	00498464	3093357777	ONLINE SERVICE CHARGES JUL21	Electric Utility	560.00
				Total for Payment No.:		560.00

Payment No: 020195

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GARDENLAND POWER EQUIPMENT	00498454	869215	GUARD SPROCKET, GEAR TOOTH	General Fund	187.26
08/20/2021	GARDENLAND POWER EQUIPMENT	00498536	872911	SUPPLIES-STREET	General Fund	189.54
08/20/2021	GARDENLAND POWER EQUIPMENT	00498536	872911	LABOR	General Fund	174.24
				Total for Payment No.:		551.04

Payment No: 652604

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	IRVIN CHEN	00497734	R220-EVC-105	EV CHRG REBATE;ACCT 42947-06	Elec OperatingGrant Trust Fund	550.00
				Total for Payment No.:		550.00

Payment No: 020057

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ADOBE INC	00497926	1450495524	ACROBAT PRO SUBSCRPT DC DVR	Electric Utility	548.76
				Total for Payment No.:		548.76

Payment No: 652948

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	TARGET SPECIALTY PRODUCTS INC	00498587	INVP500533560	TURF FUEL	General Fund	547.14
				Total for Payment No.:		547.14

Payment No: 652641

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SANTA CLARA WINDUSTRIAL CO	00497959	023852 01	FLANGE BOLT KIT PAVILION POND	General Fund	391.46
08/06/2021	SANTA CLARA WINDUSTRIAL CO	00497970	022123 01	PLATED BOLT KIT	General Fund	147.51
				Total for Payment No.:		538.97

Payment No: 652918

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	KALMIKOV ENTERPRISES INC	00498622	20369	PARTS-V#3259	Fleet Operation Fund	534.85
				Total for Payment No.:		534.85

Payment No: 020096

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	UNITED REFRIGERATION INC	00497939	79277106-00	SUPPLIES	General Fund	195.13
08/06/2021	UNITED REFRIGERATION INC	00497940	79267671-00	SUPPLIES	General Fund	83.28
08/06/2021	UNITED REFRIGERATION INC	00497941	79225109-00	HVAC OLD COURTHOUSE	General Fund	250.18
				Total for Payment No.:		528.59

Payment No: 652726

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MS 2 INC	00498849	17982-09 Utility Refund	UTILITY REFUND	General Fund	523.59
				Total for Payment No.:		523.59

Payment No: 652982

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CITY OF FOSTER CITY	00498733	14325	JOB POSTING - BUSINESS ANALYST	Electric Utility	520.00
				Total for Payment No.:		520.00

Payment No: 020121

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498967	906050	LEGAL SERVICES	Information Technology Service	511.00
				Total for Payment No.:		511.00

Payment No: 652634

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ROYAL BRASS INC	00497641	959788-001	PARTS-V#2832	Fleet Operation Fund	89.91
08/06/2021	ROYAL BRASS INC	00497839	953780-001	PARTS-V#3338	Fleet Operation Fund	93.17
08/06/2021	ROYAL BRASS INC	00497840	954705-001	PARTS-V#3182	Fleet Operation Fund	327.29
				Total for Payment No.:		510.37

Payment No: 652821

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SAN FRANCISCO WATER DEPARTMENT	00498000	48103	PROPERTY TAX REIMBRSMNT TO PUC	Electric Utility	45.45
08/13/2021	SAN FRANCISCO WATER DEPARTMENT	00498249	48105	SFPUC	General Fund	461.70
				Total for Payment No.:		507.15

Payment No: 652938

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SANTA CLARA WINDUSTRIAL CO	00498573	023852 03	BLIND FLANGE	General Fund	504.94
				Total for Payment No.:		504.94

Payment No: 020266

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	R & R INDUSTRIES INC	00499533	602460	VEST, SURVEYOR SAFETY, X-LARGE	Water Utility	251.25
08/27/2021	R & R INDUSTRIES INC	00499533	602460	VEST, SURVEYOR SAFETY, XXX-LAR	Water Utility	251.25

Total for Payment No.: 502.50

Payment No: 652803

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	LOS GATOS ROOFING	00498562	18968AUG2021	Building Permit BLD2021-61756	Building New Dvlpmnt Srcv Fee	502.40
Total for Payment No.:						502.40

Payment No: 652811

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PAUL FOWLER	00498502	33381AUG2021	Building Permit BLD2021-61907	Building New Dvlpmnt Srcv Fee	502.40
Total for Payment No.:						502.40

Payment No: 652884

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CENTRAL COLO, LLC	00498605	CB601 - CI3454	FIBER PATHWAY INNERDUCTS SEP21	Electric Utility	500.00
Total for Payment No.:						500.00

Payment No: 652670

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CONRAD REYNOLDS	00498082	2299JUL2021A	FY21-22 TOOL REIMBURSMNT	Fleet Operation Fund	500.00
Total for Payment No.:						500.00

Payment No: 020142

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	JOHN'S SALT SERVICE INC	00498956	JULY TO SEPTEMBER	BIN RENTAL / OTHER	Electric Utility	494.44
Total for Payment No.:						494.44

Payment No: 652587

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	DELL MARKETING LP	00497259	10499908133	32" MONITOR FOR DPW - AUTO	General Fund	489.41
08/06/2021	DELL MARKETING LP	00497259	10499908133	NON-TAXABLE ENVIRONMENTAL FEE	General Fund	5.00
				Total for Payment No.:		494.41

Payment No: 652785

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	EDELMAN CORP	00498131	215664	ACCESS CARDS	General Fund	488.14
				Total for Payment No.:		488.14

Payment No: 652657

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WATER QUALITY PLUMBING INC	00497864	92839	TOILET AND INSTALL - PHILLIP	H.U.D Capital Projects	487.97
				Total for Payment No.:		487.97

Payment No: 652612

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MATTHEWS INTERNATIONAL CORP	00497980	95511881	MONOBAR - ROSA SILVA	Cemetery	477.58
				Total for Payment No.:		477.58

Payment No: 652701

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	DKABES LLC	00498851	18788-06 Utility Refund	UTILITY REFUND	General Fund	475.59
				Total for Payment No.:		475.59

Payment No: 652723

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	MATSUMOTO, HIROYUKI	00498862	27444-19 Utility Refund	UTILITY REFUND	General Fund	453.47
Total for Payment No.:						453.47
Payment No: 652550						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SEAN CAWLEY	00498530	32241JUL2021	FORENSIC FIRE DEATH INVESTIGAT	General Fund	452.28
Total for Payment No.:						452.28
Payment No: 020089						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PENINSULA BUILDING MATERIALS	00497966	88267	CONCRETE MIX	General Fund	451.01
Total for Payment No.:						451.01
Payment No: 652572						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CA EMERGENCY MEDICAL SERVICES	00497918	EMSA-888-980	MEDIC RENEWAL - MCGEE, WILLIS	General Fund	450.00
Total for Payment No.:						450.00
Payment No: 652804						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	M R DILLINGHAM	00498768	13794	Contingency & Reimbursables 1.	Parks And Recreation	450.00
Total for Payment No.:						450.00
Payment No: 652967						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	RAYMOND GONZALES	00499526	07/25/21-08/07/21	DIRECT DEPOSIT RETURNED #6411	Payroll Liability&ClearingAcct	430.27
Total for Payment No.:						430.27

Payment No: 020254

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	GURUS EDUCATIONAL SERVICES INC	00499591	2021S0726	INSTRUCTOR PAYMENT FY 21-22 FO	General Fund	429.60
				Total for Payment No.:		429.60

Payment No: 652711

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	INOUE, KOCHI	00498861	27243-19 Utility Refund	UTILITY REFUND	General Fund	423.25
				Total for Payment No.:		423.25

Payment No: 652676

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	METLIFE INDIVIDUAL LONG TERM	00499058	19647956 AUG2021	BIWEEKLY PR METLIFE LONG TERM	Payroll Liability&ClearingAcct	421.83
				Total for Payment No.:		421.83

Payment No: 652988

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	D&M TRAFFIC SERVICES	00499515	78669	PAINT, MARKING, WHITE CHALK AE	Electric Utility	116.52
08/27/2021	D&M TRAFFIC SERVICES	00499516	79562	PAINT, MARKING, GREEN. AERVOE	Water Utility	125.54
08/27/2021	D&M TRAFFIC SERVICES	00499516	79562	PAINT, MARKING, WHITE. AERVOE	Water Utility	174.68
				Total for Payment No.:		416.74

Payment No: 652548

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ROGELIO GUTIERREZ	00498529	9014JUL2021	CRISIS NEGOTIATIONS TEAM LEADE	General Fund	415.16
				Total for Payment No.:		415.16

Payment No: 652762

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ASSOCIATION FOR ENERGY AFFORDABILITY INC	00499048	5874	AEA - Association for Energy A	City Affordable Housing	411.75
				Total for Payment No.:		411.75

Payment No: 652558

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ALLIED AUTO STORES	00497807	01AX3942	PARTS-STOCK	Fleet Operation Fund	339.48
08/06/2021	ALLIED AUTO STORES	00497878	01AX7013	PARTS-V#2633	Fleet Operation Fund	70.38
				Total for Payment No.:		409.86

Payment No: 652722

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MAGICAL GARDENS	00498852	18999-10 Utility Refund	UTILITY REFUND	General Fund	402.18
				Total for Payment No.:		402.18

Payment No: 653010

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	PERFORMANCE MECHANICAL, INC	00498992	149107	MATERIALS PO25302	Electric Utility	361.78
08/27/2021	PERFORMANCE MECHANICAL, INC	00498992	149107	MARKUP	Electric Utility	36.18
				Total for Payment No.:		397.96

Payment No: 652788

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	FAST UNDERCAR SANTA CLARA	00497621	264687	CREDIT- PART RETURNED	Fleet Operation Fund	-54.14
08/13/2021	FAST UNDERCAR SANTA CLARA	00497622	284090	CREDIT- RETURN WO#128963	Fleet Operation Fund	-126.33
08/13/2021	FAST UNDERCAR SANTA CLARA	00498264	297262	CREDIT- BATTERY RETURNED	Fleet Operation Fund	-106.83
08/13/2021	FAST UNDERCAR SANTA CLARA	00498318	297536	PARTS-V#SVAC6	Fleet Operation Fund	86.18

08/13/2021	FAST UNDERCAR SANTA CLARA	00498319	297663	PARTS-V#3163	Fleet Operation Fund	48.93
08/13/2021	FAST UNDERCAR SANTA CLARA	00498320	298050	PARTS-STOCK	Fleet Operation Fund	217.73
08/13/2021	FAST UNDERCAR SANTA CLARA	00498321	298053	PARTS-V#SVAC6	Fleet Operation Fund	181.70
08/13/2021	FAST UNDERCAR SANTA CLARA	00498322	298062	PARTS-V#3267	Fleet Operation Fund	135.82
				Total for Payment No.:		383.06

Payment No: 652626

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PETERSON TRACTOR CO	00497638	PC001745194	PARTS-V#2834	Fleet Operation Fund	48.19
08/06/2021	PETERSON TRACTOR CO	00497638	PC001745194	PARTS-STOCK	Fleet Operation Fund	229.47
08/06/2021	PETERSON TRACTOR CO	00497639	PC001746318	PARTS-V#2834	Fleet Operation Fund	102.77
				Total for Payment No.:		380.43

Payment No: 020170

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	TECHNOLOGY, ENGINEERING & CONSTRUCTION	00499037	203298	TESTING, INSPECTION, MAINTENAN	Fleet Operation Fund	375.00
				Total for Payment No.:		375.00

Payment No: 652817

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RDO EQUIPMENT	00498328	P0760074	PARTS-V#2317	Fleet Operation Fund	373.20
				Total for Payment No.:		373.20

Payment No: 652854

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CARLOS GAONA	00498524	1089JUL2021	FY21-22 TOOL REIMBURSMNT	Fleet Operation Fund	367.74
				Total for Payment No.:		367.74

Payment No: 652618

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MYERS TIRE SUPPLY	00497632	11448400	PARTS-SHOP USE	Fleet Operation Fund	104.05
08/06/2021	MYERS TIRE SUPPLY	00497633	11448927	PARTS-SHOP USE	Fleet Operation Fund	158.85
08/06/2021	MYERS TIRE SUPPLY	00497824	11450007	PARTS-SHOP USE	Fleet Operation Fund	102.47
				Total for Payment No.:		365.37

Payment No: 652631

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	R.S. HUGHES COMPANY, INC.	00497976	79041556-00	MULTI-RAE CRADLE CHARGE KIT	General Fund	363.18
				Total for Payment No.:		363.18

Payment No: 652698

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CORNERSTONE PROPERTY MGMT	00498839	10440-12 Utility Refund	UTILITY REFUND	General Fund	294.46
08/13/2021	CORNERSTONE PROPERTY MGMT	00498888	60641-10 Utility Refund	UTILITY REFUND	General Fund	66.64
				Total for Payment No.:		361.10

Payment No: 653031

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	W-TRANS	00499598	26717	DESIGN AGREEMENT FOR THE LICK	Streets And Highways	356.25
				Total for Payment No.:		356.25

Payment No: 652760

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ALL PRO INC	00498676	4066AUG2021	Plumbing Permit BLD2021-61597	General Fund	347.20
				Total for Payment No.:		347.20

Payment No: 020185

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BUCKLES-SMITH	00498592	3244861-00	FIRE TRAINING	General Fund	343.90
				Total for Payment No.:		343.90

Payment No: 652759

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	A TOOL SHED	00498190	1512949-4	TRAILER RENTAL	Water Utility	339.16
				Total for Payment No.:		339.16

Payment No: 652599

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GOLDEN STATE EMERGENCY VEHICLE SERV, INC	00497820	CI028350	PARTS-V#3288	Fleet Operation Fund	221.37
08/06/2021	GOLDEN STATE EMERGENCY VEHICLE SERV, INC	00498266	CI029463	PARTS-STOCK	Fleet Operation Fund	112.30
				Total for Payment No.:		333.67

Payment No: 652551

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SILVA, DUSTIN	00498528	29038JUN2021	FIELD TRAINING PROGRAM	General Fund	332.88
				Total for Payment No.:		332.88

Payment No: 652858

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	JUSTIN MEAD	00499348	18434JUL2021	FTP Training Program	General Fund	332.88
				Total for Payment No.:		332.88

Payment No: 020260

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	NALCO CO	00499019	6670115035	MO.SRV FEE COGEN AUG21	Electric Utility	331.61
				Total for Payment No.:		331.61

Payment No: 652839

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	UNITED SITE SERVICES INC	00498171	114-12149353	RSTRM RENT@AGNEW SUB 7/1-7/28	Electric Utility	10.91
08/13/2021	UNITED SITE SERVICES INC	00498171	114-12149353	WKLY SVC @AGNEW SUB 7/1-7/28	Electric Utility	55.00
08/13/2021	UNITED SITE SERVICES INC	00498171	114-12149353	DAMAGE WAIVER	Electric Utility	7.95
08/13/2021	UNITED SITE SERVICES INC	00498171	114-12149353	ENVIRONMENTAL FEE	Electric Utility	6.99
08/13/2021	UNITED SITE SERVICES INC	00498172	114-12149444	RESTROOM RENT@WALSH 7/1-7/28	Electric Utility	21.80
08/13/2021	UNITED SITE SERVICES INC	00498172	114-12149444	WKLY RESTRM SRV@WALSH 7/1-7/28	Electric Utility	55.00
08/13/2021	UNITED SITE SERVICES INC	00498172	114-12149444	ENVIRONMENTAL FEE	Electric Utility	8.06
08/13/2021	UNITED SITE SERVICES INC	00498173	114-12176731	ADA ACCESS@SERRA SUB 7/6-8/2	Electric Utility Construction	10.91
08/13/2021	UNITED SITE SERVICES INC	00498173	114-12176731	WKLY ADA SRV@SERRA 7/6-8/2/21	Electric Utility Construction	138.00
08/13/2021	UNITED SITE SERVICES INC	00498173	114-12176731	ENVIRONMENTAL FEE	Electric Utility Construction	15.92
				Total for Payment No.:		330.54

Payment No: 652554

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	3M CO	00497906	9412043072	SUPPLIES - TRAFFIC MNTCE	General Fund	321.46
				Total for Payment No.:		321.46

Payment No: 652887

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CRESCO EQUIPMENT RENTALS	00498482	5406205-0001	PRTBLE WATER TRLR- WATER	Water Utility	253.52

				DEPT		
08/20/2021	CRESO EQUIPMENT RENTALS	00499215	5456461-0001	EQUIPMENT RENTAL	Electric Utility	30.17
08/20/2021	CRESO EQUIPMENT RENTALS	00499328	5467932-0001	EQUIPMENT RENTAL	Electric Utility	32.33
				Total for Payment No.:		316.02

Payment No: 652845

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VERIZON WIRELESS	00498296	9883395252	WATER SEWER WIRELESS	Water Utility	122.16
08/13/2021	VERIZON WIRELESS	00498296	9883395252	WATER SEWER WIRELESS	Water Recycling Program	61.07
08/13/2021	VERIZON WIRELESS	00498296	9883395252	WATER SEWER WIRELESS	Sewer Utility	122.16
				Total for Payment No.:		305.39

Payment No: 652848

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VERIZON WIRELESS	00498299	9884787549	METER READERS WIRELESS	General Fund	304.85
				Total for Payment No.:		304.85

Payment No: 653029

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	UNITED SITE SERVICES INC	00498990	114-12216639	RESTROOM RENT@LAF 7/21-8/17	Electric Utility	21.80
08/27/2021	UNITED SITE SERVICES INC	00498990	114-12216639	WKLY RESTRM SRV@LAF 7/21-8/17	Electric Utility	55.00
08/27/2021	UNITED SITE SERVICES INC	00498990	114-12216639	DAMAGE WAIVER	Electric Utility	7.95
08/27/2021	UNITED SITE SERVICES INC	00498990	114-12216639	2 SINK RENT@LAF 7/21-8/17	Electric Utility	21.80
08/27/2021	UNITED SITE SERVICES INC	00498990	114-12216639	WKLY SINK SRV@LAF 7/21-8/17	Electric Utility	85.00
08/27/2021	UNITED SITE SERVICES INC	00498990	114-12216639	DAMAGE WAIVER	Electric Utility	7.95
08/27/2021	UNITED SITE SERVICES INC	00498990	114-12216639	ENVIRONMENTAL FEE	Electric Utility	19.35
08/27/2021	UNITED SITE SERVICES INC	00498991	114-12222122	RESTROOM RENT@KEN 7/23-8/19	Electric Utility	21.80
08/27/2021	UNITED SITE SERVICES INC	00498991	114-12222122	WKLY RSTRM SRV@KEN 7/23-8/19	Electric Utility	55.00

08/27/2021	UNITED SITE SERVICES INC	00498991	114-12222122	ENVIRONMENTAL FEE	Electric Utility	8.06
Total for Payment No.:						303.71

Payment No: 020073

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GRAINGER	00497922	9969215152	SUPPLIES-STREET	General Fund	85.78
08/06/2021	GRAINGER	00497935	9967754475	SUPPLIES	General Fund	108.70
08/06/2021	GRAINGER	00497936	9967754467	OLD COUTHUSE	General Fund	108.53
Total for Payment No.:						303.01

Payment No: 652992

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	FREDERICK CHUN	00498707	984137	EBIKE REBATE; 30274-04	Electric Utility	300.00
Total for Payment No.:						300.00

Payment No: 652640

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SANTA CLARA UNIVERSITY	00497972	CI-0000000055	CATERING FEE FOR 6/27 EVENT	General Fund	300.00
Total for Payment No.:						300.00

Payment No: 652741

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SOGOYA LLC	00498847	17962-06 Utility Refund	UTILITY REFUND	General Fund	186.75
08/13/2021	SOGOYA LLC	00498848	17966-07 Utility Refund	UTILITY REFUND	General Fund	112.66
Total for Payment No.:						299.41

Payment No: 652868

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/20/2021	ALTEC INDUSTRIES INC	00498616	11705002	PARTS-V#3204	Fleet Operation Fund	144.89
08/20/2021	ALTEC INDUSTRIES INC	00498617	11704545	PARTS-V#3277	Fleet Operation Fund	144.89
Total for Payment No.:						289.78

Payment No: 652569

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BOBCAT OF FREMONT	00497879	P42126	PARTS-STOCK	Fleet Operation Fund	223.30
08/06/2021	BOBCAT OF FREMONT	00497880	P42133	PARTS-V#3286	Fleet Operation Fund	59.17
Total for Payment No.:						282.47

Payment No: 652931

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PETERSON TRACTOR CO	00498521	PC001749110	PARTS-STOCK	Fleet Operation Fund	281.52
Total for Payment No.:						281.52

Payment No: 652880

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BSN SPORTS, LLC	00498574	913201424	HEAVY DUTY ANTI-WHIP NET	General Fund	280.17
Total for Payment No.:						280.17

Payment No: 652969

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	THEJON BAZA	00498783	21283AUG2021	FY 21/22 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 652965

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	JORGE RODRIGUEZ	00498782	35392AUG2021	FY 21/22 SFTY BOOT/CLOTH REIMB	Electric Utility	280.00

Total for Payment No.: 280.00

Payment No: 652546

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	JAMES B GOSHIA	00497950	1169JUL2021A	FY 21/22 SFTY CLOTH/BOOT REIMB	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 652669

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CHRISTOPHER TAYLOR	00499046	24592JUL2021	BOOT/CLOTHING REIMBURSEMENT	Electric Utility	280.00
Total for Payment No.:						280.00

Payment No: 652650

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	THREE RIVERS COUNSELING	00495312	1003	COUNSELING #526 SESSIONS 6&7	General Fund	280.00
Total for Payment No.:						280.00

Payment No: 652806

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021		00498980	711476	LEGAL SERVICES	General Fund	275.00
Total for Payment No.:						275.00

Payment No: 652707

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	FRANK NUNEZ	00498853	19228-09 Utility Refund	UTILITY REFUND	General Fund	272.37
Total for Payment No.:						272.37

Payment No: 002434

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/26/2021	NAVIA BENEFIT SOLUTIONS, INC	00499704	08/08/21-08/21/21	DD:COMMUTER BENEFIT SEPT	Payroll Liability&ClearingAcct	270.00
				Total for Payment No.:		270.00

Payment No: 652956

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	UNITED PARCEL SERVICE	00499167	00009882E5311A	DELIVERY CHARGES	General Fund	57.78
08/20/2021	UNITED PARCEL SERVICE	00499168	00009882E5301A	DELIVERY CHARGES	Fleet Operation Fund	16.89
08/20/2021	UNITED PARCEL SERVICE	00499168	00009882E5301A	DELIVERY CHARGES	General Fund	179.12
08/20/2021	UNITED PARCEL SERVICE	00499168	00009882E5301A	DELIVERY CHARGES	Electric Utility	11.55
				Total for Payment No.:		265.34

Payment No: 652580

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	CONCENTRA MEDICAL CENTERS	00498002	71986594	PRE EMPLOY PHYSICAL	General Fund	135.00
08/06/2021	CONCENTRA MEDICAL CENTERS	00498002	71986594	WATER MAINTENANCE	Water Utility	45.00
08/06/2021	CONCENTRA MEDICAL CENTERS	00498002	71986594	ELECTRIC FIELD SERVICES	Electric Utility	85.00
				Total for Payment No.:		265.00

Payment No: 020126

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CINTAS CORP #630	00498316	4091426534	FLEET RENTALS	Fleet Operation Fund	231.11
08/13/2021	CINTAS CORP #630	00498316	4091426534	SAFEWASHER MOBILE SRVC-TXBL	Fleet Operation Fund	31.07
				Total for Payment No.:		262.18

Payment No: 652622

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	OMNETRIC CORP.	00498361	5720011577	MDMS & ENERGY ENGAGE	Electric Utility	255.00

				IMPLEMENT	Construction	
				Total for Payment No.:		255.00
Payment No: 020058						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ADVANTAGE OFFICE SOLUTIONS INC	00497933	5580	ITEMS REMOVED	General Fund	250.00
				Total for Payment No.:		250.00
Payment No: 652754						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CA FRANCHISE TAX BOARD	00499080	07/25/21-08/07/21NG	WAGE ATTACHMENT B2116	Payroll Liability&ClearingAcct	250.00
				Total for Payment No.:		250.00
Payment No: 652972						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CA FRANCHISE TAX BOARD	00499714	08/08/21-08/21/21NG	WAGE ATTACHMENT B2117	Payroll Liability&ClearingAcct	250.00
				Total for Payment No.:		250.00
Payment No: W22070						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	WASHINGTON TRUST BANK	00499700	08/08/21-08/21/21	WT:VEBA CONTRIB B2117	Fringe Benefits	250.00
				Total for Payment No.:		250.00
Payment No: 020197						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GRAINGER-SAN JOSE	00498538	9969215145	SUPPLIES-STREET	General Fund	36.24
08/20/2021	GRAINGER-SAN JOSE	00498585	9006106471	CENTAL LIB HVAC	General Fund	167.41

08/20/2021	GRAINGER-SAN JOSE	00498624	9004506631	PARTS-SHOP USE	Fleet Operation Fund	33.72
				Total for Payment No.:		237.37
Payment No: 652843						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VERIZON WIRELESS	00498188	9884794471	FIRE EMS WIRELESS	General Fund	230.46
				Total for Payment No.:		230.46
Payment No: 652646						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	STEVENS CREEK CHEVROLET	00497841	535513	LABOR-V#3414 WO#130984	Fleet Operation Fund	230.00
				Total for Payment No.:		230.00
Payment No: 652989						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	DAVID STONE	00498708	1009468	EBIKE REBATE; 52768	Electric Utility	229.90
				Total for Payment No.:		229.90
Payment No: 652976						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	ALADDIN NASSAR	00498668	958132	EBIKE REBATE; 49040-01	Electric Utility	229.00
				Total for Payment No.:		229.00
Payment No: 652602						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ICONIX WATERWORKS (US) INC	00497962	U2116034522	CLA-VA REPAIR KIT FOR A CRD	General Fund	224.49
				Total for Payment No.:		224.49

Payment No: 652797

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	HOME DEPOT USA	00497978	4026411	IRRIGATION PARTS ST. 1	General Fund	223.52
				Total for Payment No.:		223.52

Payment No: 652917

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	JOHNSTONE SUPPLY	00498586	25-S100731368.001	SUPPLIES	General Fund	220.41
				Total for Payment No.:		220.41

Payment No: 653018

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SERVIO LEE	00498706	992075	EBIKE REBATE; 78780-05	Electric Utility	219.80
				Total for Payment No.:		219.80

Payment No: 652793

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GLR FASTENERS INC	00498177	P082860	HEX BOLTS AND WASHERS	General Fund	57.16
08/13/2021	GLR FASTENERS INC	00498278	P083705	SUPPLIES-TRAFFIC MNTCE	General Fund	161.53
				Total for Payment No.:		218.69

Payment No: 652672

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ESTEBAN BANUELOS SR	00498074	266JUL2021	FY21-22 SAFETY GEAR REIMBRSMNT	General Fund	217.99
				Total for Payment No.:		217.99

Payment No: 652673

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	FRANK L DESOUSA	00498077	854JUL2021	FY21-22 SAFETY GEAR REIMBRSMNT	Fleet Operation Fund	217.99
Total for Payment No.:						217.99

Payment No: 652820

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SAFETY-KLEEN SYSTEMS INC	00498329	86609959	HAZ-MAT OIL SERVICE- 7.14.21	Fleet Operation Fund	217.00
Total for Payment No.:						217.00

Payment No: 652798

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	HOME DEPOT USA	00498199	629925108	JANITORIAL SUPPLIES	General Fund	215.70
Total for Payment No.:						215.70

Payment No: 652927

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	NAPA AUTO PARTS	00498500	663591	PARTS-V#3509 WO#130333	Fleet Operation Fund	7.61
08/20/2021	NAPA AUTO PARTS	00498503	663593	PARTS-V#2738	Fleet Operation Fund	5.11
08/20/2021	NAPA AUTO PARTS	00498504	663595	PARTS-STOCK	Fleet Operation Fund	194.35
08/20/2021	NAPA AUTO PARTS	00498506	663598	PARTS-V#3168	Fleet Operation Fund	6.90
Total for Payment No.:						213.97

Payment No: 652866

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	ALLIED AUTO STORES	00498615	01AZ7341	PARTS-V#2606	Fleet Operation Fund	213.32
Total for Payment No.:						213.32

Payment No: 653014

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/27/2021	REED & GRAHAM INC	00499573	006824	MATERIALS FOR STREET MAINTENAN	General Fund	211.15
Total for Payment No.:						211.15
Payment No: 652613						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MEDWASTE MANAGEMENT, LLC	00497916	MW47654	MEDICAL WASTE - ST 5	General Fund	210.00
Total for Payment No.:						210.00
Payment No: 652888						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	CRIME SCENE CLEANERS INC	00499210	81383	CLEAN VEHICLE 3301	General Fund	70.00
08/20/2021	CRIME SCENE CLEANERS INC	00499211	81664	CLEAN VEHICLE 3301	General Fund	70.00
08/20/2021	CRIME SCENE CLEANERS INC	00499212	81667	CLEAN VEHICLE 3301	General Fund	70.00
Total for Payment No.:						210.00
Payment No: 652649						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	TELEFLEX LLC	00497919	9504179523	TRAINING BONES	General Fund	207.02
Total for Payment No.:						207.02
Payment No: 652560						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AT&T MOBILITY	00497737	828850115X07162021	STREET DEPT WIRELESS	Solid Waste Utility- Constructi	26.24
08/06/2021	AT&T MOBILITY	00497737	828850115X07162021	LIBRARY WIRELESS	General Fund	132.69
08/06/2021	AT&T MOBILITY	00497737	828850115X07162021	IT DEPT WIRELESS - PEREZ	Information Technology Service	46.23
Total for Payment No.:						205.16

Payment No: 652751

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	YONGUI LEE	00498905	75551-03 Utility Refund	UTILITY REFUND	General Fund	203.36
				Total for Payment No.:		203.36

Payment No: 020208

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	KINOKUNIYA BOOKSTORES OF AMERICA CO. LTD	00498451	INV-0000015236	1241 AD PR	General Fund	202.69
				Total for Payment No.:		202.69

Payment No: 020180

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	AMERICAN BEVERAGE EQUIPMENT	00498453	53514	AUG21 RENT FOR ICE MACHINE DVR	Electric Utility	200.00
				Total for Payment No.:		200.00

Payment No: 652559

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AT&T CALNET	00497929	000016785205	BN9391023689 6/20/21-7/19/21	Electric Utility	199.52
				Total for Payment No.:		199.52

Payment No: 652590

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ED JONES CO INC	00498356	48697	GOLD KLAD BADGE & RIBBON	General Fund	179.85
08/06/2021	ED JONES CO INC	00498356	48697	SHIPPING	General Fund	18.00
				Total for Payment No.:		197.85

Payment No: 652787

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ERICK MUJICA	00498557	36888AUG2021	Bldg Plan Review BLD2021-61715	Building New Dvlpmnt Srcv Fee	196.21
				Total for Payment No.:		196.21

Payment No: 020201

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	IMAGE SALES INC	00498566	0070682-IN	CARD PRINTER RIBBON	General Fund	188.78
				Total for Payment No.:		188.78

Payment No: 020182

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BAKER & TAYLOR BOOKS	00498434	2036106614	1235 AD BK	General Fund	187.37
				Total for Payment No.:		187.37

Payment No: 020164

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PRAXAIR DISTRIBUTION INC	00498182	64894692	CYLINDER RENTAL	General Fund	184.38
				Total for Payment No.:		184.38

Payment No: 652941

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SHREDLOGIX INC	00499312	0011313	SHREDDING SERVICES: 2/1/2021-1	General Fund	1.66
08/20/2021	SHREDLOGIX INC	00499312	0011313	SHREDDING SERVICES: 2/1/2021-1	General Fund	178.34
				Total for Payment No.:		180.00

Payment No: 652563

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AT&T MOBILITY	00497762	876361410X07162021	PARKS & REC WIRELESS	General Fund	43.25

08/06/2021	AT&T MOBILITY	00497762	876361410X07162021	PARKS & REC WIRELESS	General Fund	43.23
08/06/2021	AT&T MOBILITY	00497762	876361410X07162021	PARKS & REC WIRELESS	General Fund	86.74
Total for Payment No.:						173.22

Payment No: 652879

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BRINK'S INCORPORATED	00498658	11650948	ARMORED COURIER SERVICE	General Fund	170.69
Total for Payment No.:						170.69

Payment No: 653015

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	RICHARD CRAIG	00498667	885241	EBIKE REBATE; 54936-01	Electric Utility	169.90
Total for Payment No.:						169.90

Payment No: 020265

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	PRAXAIR DISTRIBUTION INC	00498938	64511347	NITROGEN K	Electric Utility	152.28
08/27/2021	PRAXAIR DISTRIBUTION INC	00498938	64511347	HAZARDOUS MTRL CHRGE	Electric Utility	16.34
Total for Payment No.:						168.62

Payment No: 020150

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MT TIRE SERVICE	00498128	16996	LABOR-V#3417 WO#13111	Fleet Operation Fund	35.00
08/13/2021	MT TIRE SERVICE	00498129	17122	LABOR-V#3365 WO#131064	Fleet Operation Fund	120.00
Total for Payment No.:						155.00

Payment No: 652720

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	LAW OFFICES OF ARUNA VENKIDU	00498850	17998-08 Utility Refund	UTILITY REFUND	General Fund	153.73
Total for Payment No.:						153.73
Payment No: 652681						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AARON FABRIS	00498930	78347-03 Utility Refund	UTILITY REFUND	General Fund	153.24
Total for Payment No.:						153.24
Payment No: 652547						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MINGXI HE	00479934	13173-13 Utility Refunds	UTILITY REFUND	General Fund	152.20
Total for Payment No.:						152.20
Payment No: 652940						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SHRED-IT USA LLC	00498458	8182592749	SHRED SVP DVR 7/29/2021	Electric Utility	152.19
Total for Payment No.:						152.19
Payment No: 652824						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SHRED-IT USA LLC	00498170	8182473144	SHRED SVP DVR 7/1/2021	Electric Utility	152.19
Total for Payment No.:						152.19
Payment No: 652598						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GOLDEN GATE TRUCK CENTER	00497884	FA005070648:01	PARTS-V#3204	Fleet Operation Fund	150.67
Total for Payment No.:						150.67

Payment No: 652544

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	DAWID COETZEE	00497848	18163JUL2021	FY 21/22 SFTY CLOTH/BOOT REIMB	Electric Utility	150.40
				Total for Payment No.:		150.40

Payment No: 652600

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GUIDEHOUSE INC	00497898	0100061201	PHY SECURITY ELEC UTIL MAR2021	Electric Utility Construction	75.00
08/06/2021	GUIDEHOUSE INC	00497899	0100061800	PHY SECURITY ELEC UTIL APR2021	Electric Utility Construction	75.00
				Total for Payment No.:		150.00

Payment No: 652752

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CA FRANCHISE TAX BOARD	00499078	07/25/21-08/07/21CB	WAGE ATTACHMENT B2116	Payroll Liability&ClearingAcct	150.00
				Total for Payment No.:		150.00

Payment No: 652970

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CA FRANCHISE TAX BOARD	00499712	08/08/21-08/21/21CB	WAGE ATTACHMENT B2117	Payroll Liability&ClearingAcct	150.00
				Total for Payment No.:		150.00

Payment No: 652849

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VON HUENE, DEBRA	00498467	29709AUG2021	REIMBURSEMENT-AFTA CONVENTION	General Fund	149.00
				Total for Payment No.:		149.00

Payment No: 652660

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	WITMER-TYSON IMPORTS INC	00497921	T14075	K9 boarding May - Tank	General Fund	148.00
				Total for Payment No.:		148.00

Payment No: 652716

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KAPLAN, DANIEL	00498857	22238-06 Utility Refund	UTILITY REFUND	General Fund	146.27
				Total for Payment No.:		146.27

Payment No: 652818

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	REED & GRAHAM INC	00498959	006027	MATERIALS FOR STREET MAINTENAN	General Fund	146.18
				Total for Payment No.:		146.18

Payment No: 652685

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AMIT GHORPADA	00498874	45046-13 Utility Refund	UTILITY REFUND	General Fund	144.18
				Total for Payment No.:		144.18

Payment No: 652556

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AIR COOLED ENGINES	00497804	84825	PARTS-V#3037	Fleet Operation Fund	143.65
				Total for Payment No.:		143.65

Payment No: 652734

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RUTURAJ WAGHMODE	00498879	49563-14 Utility Refund	UTILITY REFUND	General Fund	143.26

Total for Payment No.: 143.26

Payment No: 652545

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	IURII KOLDOBANOV	00483568	60871-19 Utility Refund	UTILITY REFUND	General Fund	142.24
Total for Payment No.:						142.24

Payment No: 652721

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	LEO MARTINEZ	00498844	15695-13 Utility Refund	UTILITY REFUND	General Fund	139.24
Total for Payment No.:						139.24

Payment No: 652705

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	FNU MOHAMMED FURKHAN AHMED	00498876	45450-27 Utility Refund	UTILITY REFUND	General Fund	138.90
Total for Payment No.:						138.90

Payment No: 652668

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CAL PERS LONG TERM CARE PROGRAM	00499056	14030596	BIWEEKLY PR CALPERS LT B2116	Payroll Liability&ClearingAcct	138.01
Total for Payment No.:						138.01

Payment No: 652962

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CAL PERS LONG TERM CARE PROGRAM	00499706	14038367	BIWEEKLY PR CALPERS LT B2117	Payroll Liability&ClearingAcct	138.01
Total for Payment No.:						138.01

Payment No: 652766

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	AZCO SUPPLY, INC.	00498191	300222	FREIGHT	Electric Utility	138.00
				Total for Payment No.:		138.00

Payment No: 652749

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	YI XIAO	00498882	51618-21 Utility Refund	UTILITY REFUND	General Fund	136.18
				Total for Payment No.:		136.18

Payment No: 652968

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	SUDHANSHU JAIN	00499662	26499AUG2021	NCPA COMMISSION MEETING	Electric Utility	135.07
				Total for Payment No.:		135.07

Payment No: 652684

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ALTOS REALTY ADVISORS	00498871	39264-06 Utility Refund	UTILITY REFUND	General Fund	131.98
				Total for Payment No.:		131.98

Payment No: 652693

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CALWESTERN PROP MNGMNT	00498866	32434-07 Utility Refund	UTILITY REFUND	General Fund	131.03
				Total for Payment No.:		131.03

Payment No: 652736

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SANCHEZ, MARIA JOSEFINA	00498858	22436-11 Utility Refund	UTILITY REFUND	General Fund	130.88

Total for Payment No.: 130.88

Payment No: 652671

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	EDDY TO	00498084	26572JUL2021	FY21-22 BOOT REIMBRSMNT	Fleet Operation Fund	127.78
Total for Payment No.:						127.78

Payment No: 652583

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	D&M TRAFFIC SERVICES	00498395	79032	PAINT, MARKING, BLUE. AERVOE #	Water Utility	125.39
Total for Payment No.:						125.39

Payment No: 652719

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KUAN HUANG	00498889	60861-17 Utility Refund	UTILITY REFUND	General Fund	122.99
Total for Payment No.:						122.99

Payment No: 652847

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VERIZON WIRELESS	00498298	9884778601	CMO WIRELESS	General Fund	76.02
08/13/2021	VERIZON WIRELESS	00498298	9884778601	DPW / PD STADIUM WIRELESS	Information Technology Service	5.32
08/13/2021	VERIZON WIRELESS	00498298	9884778601	CDD WIRELESS	General Government - Other	38.01
Total for Payment No.:						119.35

Payment No: 652687

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ANUPAM SINGHAL	00498875	45062-17 Utility Refund	UTILITY REFUND	General Fund	118.37

Total for Payment No.: 118.37

Payment No: 652829

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	STEVENS CREEK CHEVROLET	00498140	128245	PARTS-V#3495	Fleet Operation Fund	118.31
Total for Payment No.:						118.31

Payment No: 652860

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PRASANTH SN VENNELAKANTI	00483558	58995-14 Utility Refund	UTILITY REFUND	General Fund	118.04
Total for Payment No.:						118.04

Payment No: 020219

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	PG&E	00498604	3847680626-0 JUL2021	ELEC SVC GRZ INTAKE TWR JUL21	Electric Utility	113.04
Total for Payment No.:						113.04

Payment No: 652737

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SARAN SOPPA	00498884	53862-11 Utility Refund	UTILITY REFUND	General Fund	111.39
Total for Payment No.:						111.39

Payment No: 652725

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	MING-HAN HSIEH	00498890	60891-26 Utility Refund	UTILITY REFUND	General Fund	109.32
Total for Payment No.:						109.32

Payment No: 652596

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	GLR FASTENERS INC	00497910	P085265-1	SUPPLIES-TRAFFIC MNTCE	General Fund	107.19
				Total for Payment No.:		107.19

Payment No: 652901

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	FAST UNDERCAR SANTA CLARA	00498483	298348	CREDIT- PART RETURNED	Fleet Operation Fund	-279.32
08/20/2021	FAST UNDERCAR SANTA CLARA	00498484	298404	PARTS-STOCK	Fleet Operation Fund	38.05
08/20/2021	FAST UNDERCAR SANTA CLARA	00498485	299980	PARTS-STOCK	Fleet Operation Fund	29.95
08/20/2021	FAST UNDERCAR SANTA CLARA	00498486	300213	PARTS-V#3026	Fleet Operation Fund	46.80
08/20/2021	FAST UNDERCAR SANTA CLARA	00498487	300386	PARTS-STOCK	Fleet Operation Fund	15.28
08/20/2021	FAST UNDERCAR SANTA CLARA	00498620	301300	PARTS-STOCK	Fleet Operation Fund	30.42
08/20/2021	FAST UNDERCAR SANTA CLARA	00498621	301672	PARTS-V#2656	Fleet Operation Fund	207.39
08/20/2021	FAST UNDERCAR SANTA CLARA	00498621	301672	PARTS-STOCK	Fleet Operation Fund	14.56
				Total for Payment No.:		103.13

Payment No: 652735

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RYAN MAH	00498867	33192-03 Utility Refund	UTILITY REFUND	General Fund	100.76
				Total for Payment No.:		100.76

Payment No: 652638

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SANTA CLARA CO DEPT OF CORRECTIONS	00497920	2022-0008	plaque-reserves	General Fund	92.97
08/06/2021	SANTA CLARA CO DEPT OF CORRECTIONS	00497924	2022-0009	reserve plaque nameplate only	General Fund	5.47
				Total for Payment No.:		98.44

Payment No: 652675

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KENNETH CRAYCRAFT	00498163	36946JUL2021	REIMBURSEMENT LIVESCAN	General Fund	94.00
				Total for Payment No.:		94.00

Payment No: 652946

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SUNNYVALE FORD	00498522	191315	PARTS-V#3267	Fleet Operation Fund	90.61
				Total for Payment No.:		90.61

Payment No: 652588

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	DUNN-EDWARDS CORP	00497961	2011173428	PAINT	General Fund	71.99
08/06/2021	DUNN-EDWARDS CORP	00498235	2011172851	CEMETRY ROOF	Cemetery	18.36
				Total for Payment No.:		90.35

Payment No: 652709

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	HIROKAZU HASHIMOTO	00498895	68891-15 Utility Refund	UTILITY REFUND	General Fund	88.14
				Total for Payment No.:		88.14

Payment No: 652984

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CONCENTRA MEDICAL CENTERS	00498742	72149886	PRE EMPLOY PHSICAL	General Fund	85.00
				Total for Payment No.:		85.00

Payment No: 652689

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BOTROS, NASEF	00498873	44738-19 Utility Refund	UTILITY REFUND	General Fund	79.00

Total for Payment No.: 79.00

Payment No: 652761

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ALLIED AUTO STORES	00498313	01AY8840	PARTS-V#3263	Fleet Operation Fund	78.94
Total for Payment No.:						78.94

Payment No: 652542

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BILL HER	00497732	36935JUL2021	REIMBURSEMENT LIVESCAN FEES	General Fund	78.00
Total for Payment No.:						78.00

Payment No: 652712

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	JAINEEL DALAL	00498878	49445-03 Utility Refund	UTILITY REFUND	General Fund	76.99
Total for Payment No.:						76.99

Payment No: 652708

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GEM PROPERTY MANAGEMENT	00498864	30488-12 Utility Refund	UTILITY REFUND	General Fund	76.45
Total for Payment No.:						76.45

Payment No: 652781

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	D&M TRAFFIC SERVICES	00498203	79754	SIGN BRACKET CHAIN LINK FENCE	General Fund	76.39
Total for Payment No.:						76.39

Payment No: 652625

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PACIFIC TELEMAGEMENT SVCS	00497675	2071234	PAY PHONE	Information Technology Service	75.00
				Total for Payment No.:		75.00

Payment No: 652954

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	UC REGENTS-UC COOPERATIVE EXTENSION	00498423	20210730CEP	COMPOST BINS- JULY 2021	Solid Waste Program	75.00
				Total for Payment No.:		75.00

Payment No: 652730

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PULKIT JAIN	00498898	70236-12 Utility Refund	UTILITY REFUND	General Fund	70.26
				Total for Payment No.:		70.26

Payment No: 652987

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	CRIME SCENE CLEANERS INC	00499564	81580	CLEAN VEHICLE #3301	General Fund	70.00
				Total for Payment No.:		70.00

Payment No: 652694

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CASSANDRA CAMPBELL	00498868	34144-13 Utility Refund	UTILITY REFUND	General Fund	64.59
				Total for Payment No.:		64.59

Payment No: 652674

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GARY WELLING	00498675	27528JUN2021A	REIMB STAFF FOOD MAIN BREAK	Water Utility	62.35

Total for Payment No.: 62.35

Payment No: 020060

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AMAZON.COM	00497948	90JUL2021	1241 AD DVD	General Fund	11.98
08/06/2021	AMAZON.COM	00497948	90JUL2021	1241 AD BK	General Fund	30.52
08/06/2021	AMAZON.COM	00497948	90JUL2021	1235 JUV BK	General Fund	19.77
Total for Payment No.:						62.27

Payment No: 652713

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	JAMES SWENDDAL	00498891	60896-19 Utility Refund	UTILITY REFUND	General Fund	61.86
Total for Payment No.:						61.86

Payment No: 653022

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	STATEWIDE SAFETY SYSTEMS	00499534	05034427	PAINT, MARKING, BLUE. AERVOE #	Water Utility	59.09
Total for Payment No.:						59.09

Payment No: 020075

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	HI-TECH EMERGENCY VEHICLE SERVICE INC	00497821	170960	PARTS-STOCK	Fleet Operation Fund	58.05
Total for Payment No.:						58.05

Payment No: 652997

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	INDUSTRIAL SCIENTIFIC CORP	00499510	2445103COR	SHORT PD -SALES TAX CK#652915	Sewer Utility	55.85
Total for Payment No.:						55.85

Payment No: 652666

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ZORO TOOLS INC.	00497971	INV9808643	CARBON STEEL HEAVY HEX NUTS	General Fund	54.08
				Total for Payment No.:		54.08

Payment No: 652859

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	MICHAEL MARENTES	00492301	10598-13 Utility Refund	UTILITY REFUND	General Fund	53.06
				Total for Payment No.:		53.06

Payment No: 652830

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SUNNYVALE FORD	00498141	190807	PARTS-STOCK	Fleet Operation Fund	52.55
				Total for Payment No.:		52.55

Payment No: 652825

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SNAP-ON INDUSTRIAL	00498083	ARV / 48566060	TOOLS - BUILDING MAINT.	General Fund	52.39
				Total for Payment No.:		52.39

Payment No: 652743

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SRINIVASA PERUMAL RAMAMOORTHY	00498887	60309-09 Utility Refund	UTILITY REFUND	General Fund	51.33
				Total for Payment No.:		51.33

Payment No: 020178

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	AIR FILTER SUPPLY INC	00498579	I485405	FS 2 FILTER	General Fund	50.70

Total for Payment No.: 50.70

Payment No: 652757

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	US TREASURY	00499081	07/25/21-08/07 /21JO	WAGE ATTACHMENT B2116	Payroll Liability&ClearingAcct	50.00
Total for Payment No.:						50.00

Payment No: 652974

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	US TREASURY	00499715	08/08/21-08/21/21JO	WAGE ATTACHMENT B2117	Payroll Liability&ClearingAcct	50.00
Total for Payment No.:						50.00

Payment No: 652863

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	STEVEN DUTRA	00499100	37029AUG2021	REIMBURSE LIVESCAN FEES	General Fund	49.00
Total for Payment No.:						49.00

Payment No: 652742

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SRINIVAS DABIR	00498893	68277-07 Utility Refund	UTILITY REFUND	General Fund	46.53
Total for Payment No.:						46.53

Payment No: 652557

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	ALHAMBRA & SIERRA SPRINGS	00497806	4973747 070921	WATER SRVC- OFFICE USE JUNE 21	Fleet Operation Fund	46.22
Total for Payment No.:						46.22

Payment No: 652614

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MISSION VALLEY FORD TRUCK	00497822	758142	PARTS-V#STAD001	Fleet Operation Fund	44.57
				Total for Payment No.:		44.57

Payment No: 652688

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ARUN VERMA	00498896	68906-10 Utility Refund	UTILITY REFUND	General Fund	42.68
				Total for Payment No.:		42.68

Payment No: 020161

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PG&E	00498309	0541963339-0JUN2021	TS @ CALVERT/CALVERT	General Fund	42.24
				Total for Payment No.:		42.24

Payment No: 020159

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PG&E	00498168	2937321050-8 JUL2021	COGEN GAS HEATERS JUN21	Electric Utility	41.70
				Total for Payment No.:		41.70

Payment No: 020153

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NORTHERN SAFETY CO INC	00498292	904482584	SUPPLIES-STREET	General Fund	41.18
				Total for Payment No.:		41.18

Payment No: 652704

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	EVAN CATE	00498863	30362-02 Utility Refund	UTILITY REFUND	General Fund	41.02

Total for Payment No.: 41.02

Payment No: 652966

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/27/2021	JOSEPH GARTNER III	00498711	17413AUG2021	CAP REIMBURSE - AUGUST 2021	General Fund	40.00
Total for Payment No.:						40.00

Payment No: 652862

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	SIVAKUMAR, SRIRAM	00477541	56765-16 Utility Refund	UTILITY REFUND	General Fund	39.30
Total for Payment No.:						39.30

Payment No: 652744

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SUMIN YUN	00498877	47158-31 Utility Refund	UTILITY REFUND	General Fund	38.53
Total for Payment No.:						38.53

Payment No: 020092

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PRAXAIR DISTRIBUTION INC	00497640	64310770	CYLNDR RENTL FEE- SHOP USE	Fleet Operation Fund	38.07
Total for Payment No.:						38.07

Payment No: 652682

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ADRIANA SALVATIERRA	00498901	73807-02 Utility Refund	UTILITY REFUND	General Fund	37.94
Total for Payment No.:						37.94

Payment No: 652696

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CHE HUNG WANG	00498914	77256-08 Utility Refund	UTILITY REFUND	General Fund	34.85
				Total for Payment No.:		34.85

Payment No: 652690

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	BRANDON TENTHAM	00498870	37826-18 Utility Refund	UTILITY REFUND	General Fund	31.95
				Total for Payment No.:		31.95

Payment No: 652732

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RAQUELA PETRE	00498842	13345-20 Utility Refund	UTILITY REFUND	General Fund	31.83
				Total for Payment No.:		31.83

Payment No: 652702

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	EDIMAX COMPUTER CO	00498846	17564-01 Utility Refund	UTILITY REFUND	General Fund	31.70
				Total for Payment No.:		31.70

Payment No: 652795

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	GRAYBAR ELECTRIC	00498314	9322189451	HIGH LEV CABLE CUTTER	Electric Utility Construction	31.04
				Total for Payment No.:		31.04

Payment No: 652706

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	FNU RESHMA	00498841	12678-25 Utility Refund	UTILITY REFUND	General Fund	30.68
				Total for Payment No.:		30.68

Payment No: 652639

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	SANTA CLARA LIGHTING, INC.	00497967	21890	LIGHTBULBS	General Fund	29.38
				Total for Payment No.:		29.38

Payment No: 020086

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	MIDWEST TAPE LLC	00497685	500688183	1241 AD DVD	General Fund	27.81
				Total for Payment No.:		27.81

Payment No: 652750

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	YONG TENG	00498880	49795-09 Utility Refund	UTILITY REFUND	General Fund	26.91
				Total for Payment No.:		26.91

Payment No: 652700

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	DENIZ DEMIR	00498899	72163-10 Utility Refund	UTILITY REFUND	General Fund	26.78
				Total for Payment No.:		26.78

Payment No: 652679

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SANTA CLARA CO CLERK-RECORDER	00498652	2432JUL2021	RECORDING FEES LE NGUYEN	Housing Successor	25.00
				Total for Payment No.:		25.00

Payment No: 652729

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PRAMOD PALOORAN	00498897	70043-06 Utility Refund	UTILITY REFUND	General Fund	24.87

Total for Payment No.: 24.87

Payment No: 652703

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ELSA MILLER	00498860	27190-23 Utility Refund	UTILITY REFUND	General Fund	24.62
Total for Payment No.:						24.62

Payment No: 652715

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	JOANNE FORNACIARI	00498845	16371-11 Utility Refund	UTILITY REFUND	General Fund	24.49
Total for Payment No.:						24.49

Payment No: 652920

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	KELLY-MOORE PAINT CO	00498459	817-00000425144	PAINTING SUPPLIES	General Fund	22.77
Total for Payment No.:						22.77

Payment No: 652714

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	JENNY YANG	00498907	76479-04 Utility Refund	UTILITY REFUND	General Fund	21.85
Total for Payment No.:						21.85

Payment No: 652904

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	FLEETPRIDE, INC.	00498623	79281062	PARTS-V#2155	Fleet Operation Fund	19.28
08/20/2021	FLEETPRIDE, INC.	00498623	79281062	PARTS-STOCK	Fleet Operation Fund	2.07
Total for Payment No.:						21.35

Payment No: 652789

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	FEDERAL EXPRESS	00498164	7-437-28757	MISC. SHIPPING DVR	Electric Utility	7.68
08/13/2021	FEDERAL EXPRESS	00498312	7-445-60109	MISC. RESOURCES SHIPPING	Electric Utility	11.10
				Total for Payment No.:		18.78

Payment No: 652695

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CHANDARSEKARAN, RAJAN	00498869	36075-04 Utility Refund	UTILITY REFUND	General Fund	18.25
				Total for Payment No.:		18.25

Payment No: 020160

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	PG&E	00498169	8733459618-3 JUL2021	GAS SVC 3025 RAYMOND JUN2021	Electric Utility	17.74
				Total for Payment No.:		17.74

Payment No: 652717

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KARUNA RUDRESH	00498865	31546-30 Utility Refund	UTILITY REFUND	General Fund	17.09
				Total for Payment No.:		17.09

Payment No: 652738

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	SHAPE SECURITY	00498936	80693-02 Utility Refund	UTILITY REFUND	General Fund	15.92
				Total for Payment No.:		15.92

Payment No: 652724

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
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08/13/2021	MIKAEL MANNBERG	00498904	75465-03 Utility Refund	UTILITY REFUND	General Fund	15.40
Total for Payment No.:						15.40
Payment No: 652943						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	STANDARD PLUMBING SUPPLY CO	00498183	MX571	2 ABS SAN TEE	General Fund	13.82
Total for Payment No.:						13.82
Payment No: 652728						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NORMA LABRIE	00498892	61087-24 Utility Refund	UTILITY REFUND	General Fund	13.65
Total for Payment No.:						13.65
Payment No: 652746						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VENKATESWARAO SOMAROUTHU	00498894	68850-15 Utility Refund	UTILITY REFUND	General Fund	12.42
Total for Payment No.:						12.42
Payment No: 652856						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	GINA SAPORITO	00499221	29051AUG2021	LSAP PARK SITE 7/13, 27 & 8/3	Parks And Recreation	11.76
Total for Payment No.:						11.76
Payment No: 652718						
Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	KEVIN MCCAFFERY	00498886	57861-24 Utility Refund	UTILITY REFUND	General Fund	11.12
Total for Payment No.:						11.12

Payment No: 652733

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	RICO D DAVID	00498883	53751-25 Utility Refund	UTILITY REFUND	General Fund	11.10
				Total for Payment No.:		11.10

Payment No: 020090

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	PG&E	00497653	8311198632-5 JUN2021	2021 JUN- 2502 SEABOARD	Sewer Utility	11.08
				Total for Payment No.:		11.08

Payment No: 020062

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	BELL ELECTRICAL SUPPLY	00497960	5678105	FUSE	General Fund	10.83
				Total for Payment No.:		10.83

Payment No: 652853

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	BENNY WONG	00499166	76224-01 C	UTILITY REFUND	General Fund	10.22
				Total for Payment No.:		10.22

Payment No: 652745

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	TRISTA TOOKEY	00498932	78718-02 Utility Refund	UTILITY REFUND	General Fund	10.17
				Total for Payment No.:		10.17

Payment No: 652747

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VOLMUT	00498872	41738-05 Utility Refund	UTILITY REFUND	General Fund	10.03

Total for Payment No.: 10.03

Payment No: 652842

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	VERIZON WIRELESS	00498187	9884794470	FIRE STADIUM WIRELESS	General Fund	10.02
Total for Payment No.:						10.02

Payment No: 652748

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	WA KRAUSS & CO	00498881	50490-08 Utility Refund	UTILITY REFUND	General Fund	9.41
Total for Payment No.:						9.41

Payment No: 652697

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	CHHEANG YANG	00498840	11670-03 Utility Refund	UTILITY REFUND	General Fund	8.69
Total for Payment No.:						8.69

Payment No: 652699

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	DAZHAO LIU	00498906	76265-02 Utility Refund	UTILITY REFUND	General Fund	7.51
Total for Payment No.:						7.51

Payment No: 652686

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	ANNA KOSTER	00498856	20304-17 Utility Refund	UTILITY REFUND	General Fund	6.74
Total for Payment No.:						6.74

Payment No: 652562

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/06/2021	AT&T MOBILITY	00497761	828928594X07162021	STREET DEPT WIRELESS	General Fund	6.28
				Total for Payment No.:		6.28

Payment No: 652902

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/20/2021	FEDERAL EXPRESS	00498602	7-452-10475	MISC. SHIPPING DVR	Electric Utility	6.22
				Total for Payment No.:		6.22

Payment No: 652727

Payment Date	Vendor Name	Voucher No.	Invoice No.	Description	Fund Code	Amount Paid
08/13/2021	NAKUL AGARWAL	00498843	14485-24 Utility Refund	UTILITY REFUND	General Fund	5.37
				Total for Payment No.:		5.37

Overall Total 65,201,564.22



City of Santa Clara

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Agenda Report

21-1434

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on the Adoption of Ordinance No. 2033 Amending Section 3.25.030 of the Santa Clara City Code to Reflect the Increase in the Transient Occupancy Tax Rate to 11.5%

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

At the September 28, 2021 Council meeting, proposed Ordinance No. 2033 was introduced and passed for the purpose of publication. Pursuant to City Charter Sections 808 and 812, proposed Ordinance No. 2033 was published on October 6, 2021, and copies were posted in three public places. The Ordinance now comes to Council for final adoption.

DISCUSSION

The City's current Transient Occupancy Tax (TOT) rate is 9.5%, which is one of the lowest in the County. On November 3, 2020, Santa Clara voters approved the following ballot measure that allows for an increase of up to four percentage points in the City's TOT. This ballot measure, approved by 73.57% of Santa Clara voters, supports essential City services, paid by guests staying in hotels. With this measure, the TOT can be increased from the current rate of 9.5% to up to 13.5%.

As part of the adoption of the operating budget on June 22, 2021, staff was directed to bring forward a separate resolution to increase the TOT rate by two percentage points (of the maximum of four percentage points) effective January 1, 2022. The FY 2021/22 and FY 2022/23 Adopted Operating Budget assumes this increase. On September 28, 2021, the City Council approved a Resolution increasing the TOT rate from 9.5% to 11.5%. This Ordinance brings the City Code into conformance with that Resolution.

Santa Clara City Code 3.25.030 Revisions	
Current Language	Proposed Language
(a) For the privilege of occupancy in any hotel, each transient is subject to and shall pay a tax as imposed from time to time by City Council resolution. Said tax shall be a percentage of the rent charged by the operator to the occupant. An increase that exceeds ten percent of the rent charged by the operator shall be authorized only with an amendment to this section.	(a) For the privilege of occupancy in any hotel, each transient is subject to and shall pay a tax as imposed from time to time by City Council resolution. Said tax shall be a percentage of the rent charged by the operator to the occupant.
(b) On and as of July 22, 1992, and continuing thereafter until further change by City Council resolution, the amount of the tax imposed is nine and one-half percent of the rent charged by the operator.	(b) On and as of January 1, 2022, and continuing thereafter until further change by City Council resolution, the amount of the tax imposed is eleven and one-half percent of the rent charged by the operator.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a “project” within the meaning of the California Environment Quality Act (“CEQA”) pursuant to CEQA Guidelines section 15378(a)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potential significant impact on the environment.

FISCAL IMPACT

The FY 2021/22 and FY 2022/23 Adopted Operating Budget factors in additional revenue from a two-percentage point increase effective January 1, 2022. This additional revenue is estimated at \$1.7 million annually and will increase as the Transient Occupancy Tax recovers from the COVID-19-related impacts.

When the ballot measure was approved by voters in 2020, the expected revenue to be generated was estimated at up to \$7 million for an increase of up to 4 percentage points (or \$3.5 million for a two-percentage point increase). This estimate was based on pre-pandemic data, and that was communicated to the voters in the impartial analysis.

COORDINATION

This report has been coordinated with the City Attorney’s Office.

PUBLIC CONTACT

A summary of proposed Ordinance No. 2033 was published to the Santa Clara Weekly on October 6, 2021, and copies were posted in three public places and made available for public inspection at the City Clerk’s Office.

Public contact was made by posting the Council agenda on the City’s official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City’s website and in the City Clerk’s Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk’s Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

RECOMMENDATION

1. Adopt Ordinance No. 2033 Amending Section 3.25.030 of the Santa Clara City Code to Reflect the Increase in the Transient Occupancy Tax Rate to 11.5%.

Reviewed by: Sujata Reuter, Chief Assistant City Attorney

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Ordinance No. 2033 (Intro)

ORDINANCE NO. 2033

AN ORDINANCE OF THE CITY OF SANTA CLARA, CALIFORNIA, AMENDING SECTION 3.25.030 ("TAX IMPOSED") OF CHAPTER 3.25 ("TRANSIENT OCCUPANCY TAX") OF "THE CODE OF THE CITY OF SANTA CLARA, CALIFORNIA" TO REFLECT THE INCREASED TAX RATE

BE IT ORDAINED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, the City's current Transient Occupancy Tax (TOT) rate is 9.5%, which is one of the lowest in the County;

WHEREAS, on November 3, 2020, 73.57% of Santa Clara voters approved the following ballot measure (Measure E) that allowed for an increase of up to four percentage points in the City's TOT:

<p>Transient Occupancy Tax Rates. To maintain and protect the level of essential city services including 9-1-1 emergency medical/disaster preparedness, police and fire protection, bicycle and pedestrian safety, roadways and storm drains, and other vital services including parks, recreation, libraries and senior services, shall a measure increasing the hotel tax rate up to 4%, generating up to approximately 7 million dollars annually, paid only by hotel/motel guests, until ended by voters, be adopted?</p>
--

WHEREAS, concurrently with this ordinance amendment, pursuant to the authorization granted by the voters in Measure E, the City Council is adopting a resolution increasing the TOT rate from 9.5% to 11.5%, which will be effective January 1, 2022; and,

WHEREAS, the City Code currently reflects a TOT rate of 9.5%, which must be amended to be consistent with the TOT rate increase.

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NOW THEREFORE, BE IT FURTHER ORDAINED BY THE CITY OF SANTA CLARA AS FOLLOWS:

SECTION 1: That Section 3.25.030 (entitled “Tax Imposed”) of Chapter 3.25 (entitled “Transient Occupancy Tax”) of Title 3 (entitled “Revenue and Finance”) of “The Code of the City of Santa Clara, California” (“SCCC”) is amended to read as follows:

“3.25.030 Tax imposed.

(a) For the privilege of occupancy in any hotel, each transient is subject to and shall pay a tax as imposed from time to time by City Council resolution. Said tax shall be a percentage of the rent charged by the operator to the occupant.

(b) On and as of January 1, 2022 and continuing thereafter until further change by City Council resolution, the amount of the tax imposed is eleven and one-half percent (11.5%) of the rent charged by the operator.

(c) Said tax constitutes a debt owed by the transient to the City, which is extinguished only by payment to the operator or to the City. The transient, or any person paying rent on the transient’s behalf, shall pay the tax to the operator of the hotel at the time the rent is paid. If the rent is paid in installments, a proportionate share of the tax shall be paid with each installment. The unpaid tax shall be due upon the transient’s ceasing to occupy space in the hotel. If for any reason the tax due is not paid to the operator of the hotel, the Director of Finance may require that such tax shall be paid directly to the Director of Finance.”

SECTION 2: Ordinances Repealed. With exception of the provisions protected by the savings clause, all ordinances (or parts of ordinances) in conflict with or inconsistent with this ordinance are hereby repealed.

SECTION 3: Savings clause. The changes provided for in this ordinance shall not affect any offense or act committed or done or any penalty or forfeiture incurred or any right established or accruing before the effective date of this ordinance; nor shall it affect any prosecution, suit or proceeding pending or any judgment rendered prior to the effective date of this ordinance. All fee schedules shall remain in force until superseded by the fee schedules adopted by the City Council.

SECTION 4: Effective date. This ordinance shall, by its terms, take effect on and as of January 1, 2022; however, prior to its final adoption it shall be published in accordance with the requirements of Section 808 and 812 of "The Charter of the City of Santa Clara, California."

PASSED FOR THE PURPOSE OF PUBLICATION this 28th day of September, 2021, by the following vote:

AYES:	COUNCILORS:	Becker, Chahal, Hardy, Jain, Park, and Watanabe, and Mayor Gillmor
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NOES:	COUNCILORS:	None
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ABSENT:	COUNCILORS:	None
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ABSTAINED:	COUNCILORS:	None
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ATTEST:


NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference: None



Agenda Report

21-1293

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on an Agreement with Impark for Event Parking Services at the Santa Clara Convention Center

COUNCIL PILLAR

Deliver and Enhance High-Quality Efficient Services and Infrastructure

BACKGROUND

The Department of Public Works Facility Division oversees maintenance and repair services at City Facilities in addition to managing the Santa Clara Convention Center Maintenance District #183 (Convention Center).

The Convention Center serves as a venue for a variety of events such as conventions, tradeshow, meetings, weddings, etc. Staff anticipates events will resume soon so parking services will be required for incoming event participants. The Convention Center Complex includes several surface parking lots in addition to a 3-story parking garage. This agreement provides parking services at the Convention Center which includes tasks such as setting up delineators, directing parking, and managing the ingress/egress from the parking areas.

DISCUSSION

Pursuant to City Code Section 2.105.330, a formal Request for Proposal (RFP) was conducted as the solicitation method for this procurement, with the award recommendation based on "best value". The factors considered in the award were experience, technical capability, and cost.

In June 2021, the City released an RFP for Event Parking Services at the Convention Center. The RFP was published on Periscope Source (formerly BidSync), the City's e-procurement system. A total of 50 companies viewed the RFP, and four proposals were received from the following firms:

1. Ace Parking, Inc
2. Impark
3. Pro Park America
4. SP Plus Parking

Evaluation Process: The proposals were independently evaluated by a four-member evaluation team with City representation from the Department of Public Works, and outside representation from the Convention Center Manager, Techmart Office Center, and Convention Center Property Management. The proposals were evaluated and ranked against the criteria published in the RFP, experience, technical capability, and cost. Ace Parking, Inc. and Impark ranked the highest and were invited to participate in oral presentations to introduce their key personnel and demonstrate how they

would meet the City's requirements.

Impark is recommended for the award of contract as having submitted the best value proposal. They demonstrated experience providing event parking services and demonstrated their ability to efficiently manage parking operations. References for Impark were checked with the 49ers Stadium Management Company and the City of Riverside Convention Center. Both references were positive.

Summary of Agreement: Under the agreement, Impark will provide event parking services for the Convention Center. Compensation under the agreement will be paid on a time and materials basis and are fixed for the initial three-year term. Invoices shall be submitted monthly for all services performed and will be paid in arrears. After the initial term, price adjustments may be considered if the contractor demonstrates that a price increase is warranted. There are two option years to extend the term of the agreement by one year.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

FISCAL IMPACT

The amount paid to Impark to perform event parking management services for the Santa Clara Convention Center Complex (Maintenance District #183) shall not exceed \$344,500 in FY 2021/22; \$354,800 in FY 2022/23; \$365,400 in FY 2023/24. Two optional, one-year extensions are also included for \$376,300 in FY 2024/25, and \$387,500 in FY 2025/26. The total not-to-exceed amount for the initial 3 years is \$1,064,700 and the not-to-exceed amount for the optional two years, if approved, is \$763,800 for a total amount of \$1,828,500, subject to annual budget appropriations. Funds are available in the Convention Center Maintenance District account (026-2961-87870).

COORDINATION

This report was coordinated with the Finance Department and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

1. Authorize the City Manager to negotiate and execute an Agreement with Impark for event parking services at the Santa Clara Convention Center for an initial three-year term not-to-exceed \$1,064,700;
2. Authorize the City Manager to increase maximum compensation during the initial three-year term if demand for event parking services exceeds the current forecast and based on actual services rendered, subject to the appropriation of funds; and

3. Authorize the City Manager to execute up to two one-year options to extend the term of the Agreement after the initial three-year term and subject to the appropriation of funds.

Reviewed by: Craig Mobeck, Director of Public Works

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Draft Agreement with Impark

**AGREEMENT FOR SERVICES
BETWEEN THE
CITY OF SANTA CLARA, CALIFORNIA,
AND
IMPERIAL PARKING (US), LLC DBA IMPARK**

PREAMBLE

This Agreement is entered into between the City of Santa Clara, California, a chartered California municipal corporation (City) and Imperial Parking (US), LLC dba Impark, a Delaware limited liability company, (Contractor). City and Contractor may be referred to individually as a "Party" or collectively as the "Parties" or the "Parties to this Agreement."

RECITALS

- A. City desires to secure the services more fully described in this Agreement, at Exhibit A1, entitled "Scope of Services";
- B. Contractor represents that it, and its subcontractors, if any, have the professional qualifications, expertise, necessary licenses, and desire to provide certain goods and/or required services of the quality and type which meet objectives and requirements of City; and,
- C. The Parties have specified herein the terms and conditions under which such services will be provided and paid for.

The Parties agree as follows:

AGREEMENT TERMS AND CONDITIONS

1. AGREEMENT DOCUMENTS

The documents forming the entire Agreement between City and Contractor will consist of these Terms and Conditions and the following Exhibits, which are hereby incorporated into this Agreement by this reference:

Exhibit A1 – Scope of Services

Exhibit A2 – Site Map

Exhibit B – Schedule of Fees

Exhibit C – Insurance Requirements

Exhibit D – Notice of Exercise of Option to Extend Agreement

This Agreement, including the Exhibits set forth above, contains all the agreements, representations, and understandings of the Parties, and supersedes and replaces any previous agreements, representations, and understandings, whether oral or written. In the event of any inconsistency between the provisions of any of the Exhibits and the Terms and Conditions, the Terms and Conditions will govern and control.

2. TERM OF AGREEMENT

- A. Unless otherwise set forth in this Agreement or unless this paragraph is subsequently modified by a written amendment to this Agreement, the term of this Agreement will begin on October 19, 2021 and terminate on October 30, 2024.
- B. After the Initial Term, the City reserves the right, at its sole discretion, to extend the term of this Agreement for up to two (2) additional one-year terms through October 30, 2026 ("Option Periods"), subject to the appropriation of funds. See Exhibit E for Notice of Exercise to Option to Extend Agreement Form.

3. SCOPE OF SERVICES & PERFORMANCE SCHEDULE

Contractor will perform those Services specified in Exhibit A1 within the time stated in Exhibit A1. Time is of the essence.

4. WARRANTY

Contractor expressly warrants that all materials and services covered by this Agreement will be fit for the purpose intended, will be free from defect and will conform to the specifications, requirements, and instructions upon which this Agreement is based. Contractor agrees to promptly replace or correct any incomplete, inaccurate, or defective Services at no further cost to City when defects are due to the negligence, errors, or omissions of Contractor. If Contractor fails to promptly correct or replace materials or services, City may make corrections or replace materials or services and charge Contractor for the cost incurred by City.

5. QUALIFICATIONS OF CONTRACTOR - STANDARD OF CARE

Contractor represents and maintains that it has the expertise in the professional calling necessary to perform the Services, and its duties and obligations, expressed and implied, contained herein, and City expressly relies upon Contractor's representations regarding its skills and knowledge. Contractor will perform such Services and duties in conformance to and consistent with the professional standards of a specialist in the same discipline in the State of California.

6. COMPENSATION AND PAYMENT

In consideration for Contractor's complete performance of Services, City will pay Contractor for all materials provided and Services rendered by Contractor in accordance with Exhibit B, entitled "SCHEDULE OF FEES." The maximum compensation of this Agreement is **One Million Sixty-Four Thousand Seven-Hundred Dollars (\$1,064,700)**, subject to budget appropriations, which includes all payments that may be authorized for Services and for expenses, supplies, materials, and equipment required to perform the Services. All work performed or materials provided in excess of the maximum compensation will be at Contractor's expense. Contractor will not be entitled to any payment above the maximum compensation under any circumstance.

7. TERMINATION

- A. Termination for Convenience. City will have the right to terminate this Agreement, without cause or penalty, by giving not less than Thirty (30) days' prior written notice to Contractor.
- B. Termination for Default. If either Party fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided by law, either Party may terminate this Agreement immediately upon written notice to Defaulting Party.
- C. Upon termination, each Party will assist the other in arranging an orderly transfer and close-out of services. As soon as possible following the notice of termination, but no later than ten (10) days after the notice of termination, Contractor will deliver to City all City information or material that Contractor has in its possession.

8. ASSIGNMENT AND SUBCONTRACTING

City and Contractor bind themselves, their successors and assigns to all covenants of this Agreement. This Agreement will not be assigned or transferred without the prior written approval of City. Notwithstanding the foregoing, Contractor shall not be required to seek consent where Contractor's parent entity owns (directly or indirectly) at least a 50 % interest in the assignee, provided such assignee agrees to assume all duties and obligations set forth in this Agreement.

Contractor will not hire subcontractors without express written permission from City.

Contractor will be as fully responsible to City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as Contractor is for the acts and omissions of persons directly employed by it.

9. NO THIRD PARTY BENEFICIARY

This Agreement will not be construed to be an agreement for the benefit of any third party or parties and no third party or parties will have any claim or right of action under this Agreement for any cause whatsoever.

10. INDEPENDENT CONTRACTOR

Contractor and all person(s) employed by or contracted with Contractor to furnish labor and/or materials under this Agreement are independent contractors and do not act as agent(s) or employee(s) of City. Contractor has full rights to manage its employees in their performance of Services under this Agreement.

11. CONFIDENTIALITY OF MATERIAL

All ideas, memoranda, specifications, plans, manufacturing procedures, data, drawings, descriptions, documents, discussions or other information developed or received by or for Contractor and all other written information submitted to Contractor in connection with the performance of this Agreement will be held confidential by Contractor and will not, without the prior written consent of City, be used for any purposes other than the performance of the Services nor be disclosed to an entity not connected with performance of the Services. Nothing furnished to Contractor which is otherwise known to Contractor or becomes generally known to the related industry will be deemed confidential.

12. OWNERSHIP OF MATERIAL

All material, which will include, but not be limited to, data, sketches, tracings, drawings, plans, diagrams, quantities, estimates, specifications, proposals, tests, maps, calculations, photographs, reports, designs, technology, programming, works of authorship and other material developed, collected, prepared or caused to be prepared under this Agreement will be the property of City but Contractor may retain and use copies thereof. City will not be limited in any way or at any time in its use of said material. However, Contractor will not be responsible for damages resulting from the use of said material for work other than Project, including, but not limited to, the release of this material to third parties.

13. RIGHT OF CITY TO INSPECT RECORDS OF CONTRACTOR

City, through its authorized employees, representatives or agents will have the right during the term of this Agreement and for four (4) years from the date of final payment for goods or services provided under this Agreement, to audit the books and records of Contractor for the purpose of verifying any and all charges made by Contractor in connection with Contractor compensation under this Agreement, including termination of Contractor. Contractor agrees to maintain sufficient books and records in accordance with generally accepted accounting principles to establish the correctness of all charges submitted to City. Any expenses not so recorded will be disallowed by City. Contractor will bear the cost

of the audit if the audit determines that there has been a substantial billing deviation in excess of five (5) percent adverse to the City.

Contractor will submit to City any and all reports concerning its performance under this Agreement that may be requested by City in writing. Contractor agrees to assist City in meeting City's reporting requirements to the State and other agencies with respect to Contractor's Services hereunder.

14. HOLD HARMLESS/INDEMNIFICATION

- A. To the extent permitted by law, Contractor agrees to protect, defend, hold harmless and indemnify City, its City Council, commissions, officers, employees, volunteers and agents from and against any third-party claim, injury, liability, loss, cost, and/or expense or damage, including all costs and attorney's fees (individually and collectively, "Claims") in providing a defense to any such claim or other action, and whether sounding in law, contract, tort, or equity, in any manner for personal property damage, bodily injury or death arising from, or alleged to arise in whole or in part from, or in any way connected with the Services performed by Contractor pursuant to this Agreement – including claims of any kind by Contractor's employees or persons contracting with Contractor to perform any portion of the Scope of Services -- if such Claim is attributable to the negligence or willful misconduct of Contractor, its employees or agents. However, the obligation to indemnify will not apply to the extent such liability is ultimately adjudicated to have arisen through the negligence or willful misconduct of City; the obligation to defend is not similarly limited.
- B. Contractor's obligation to protect, defend, indemnify, and hold harmless in full City and City's employees, will specifically extend to any and all employment-related claims of any type brought by employees, contractors, subcontractors or other agents of Contractor, against City (either alone, or jointly with Contractor), regardless of venue/jurisdiction in which the claim is brought and the manner of relief sought.
- C. To the extent Contractor is obligated to provide health insurance coverage to its employees pursuant to the Affordable Care Act ("Act") and/or any other similar federal or state law, Contractor warrants that it is meeting its obligations under the Act and will fully indemnify and hold harmless City for any penalties, fines, adverse rulings, or tax payments associated with Contractor's responsibilities under the Act.
- D. Each party's total liability arising under or in connection with this Agreement including for any claims, is hereby limited to the aggregate fees paid hereunder for the twelve (12) month period preceding the date on which the claims arose, provided that this limitation on liability shall not limit (i) any claims for tangible personal property damage, bodily injury, or death to the extent such property damage, injury or death is attributable to

the negligence or willful misconduct of Contractor, City or their respective employees or agents and (ii) claims which may not be limited in accordance with applicable law. Notwithstanding anything to the contrary in this Agreement, in no event will either party or any of its shareholders, members, officers, directors, employees or personnel be liable for any liability or claim for punitive, indirect, or consequential damages or for loss of profits or business.

15. INSURANCE REQUIREMENTS

During the term of this Agreement, and for any time period set forth in Exhibit C, Contractor will provide and maintain in full force and effect, at no cost to City, insurance policies as set forth in Exhibit C.

16. WAIVER

Each Party agrees that waiver by the other Party of any one or more of the conditions of performance under this Agreement will not be construed as waiver(s) of any other condition of performance under this Agreement. Neither Contractor's receipt of payment, or City's review, acceptance nor payments for any of the Services required under this Agreement will be constructed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

17. NOTICES

All notices to the Parties will, unless otherwise requested in writing, be sent to City addressed as follows:

City of Santa Clara Department of Public Works
Attention: Ken Winland
1500 Warburton Avenue
Santa Clara, CA 95050
and by e-mail at kwinland@santaclaraca.gov

And to Contractor addressed as follows:

Imperial Parking (U.S.), LLC
Attention: Legal Department
78 SW 7th Street, 5th Floor
Miami, FL 33130
and by e-mail at legalnotices@reeftechnology.com
realestate.notices@reeftechnology.com

The workday the e-mail was sent will control the date notice was deemed given. An e-mail transmitted after 1:00 p.m. on a Friday will be deemed to have been transmitted on the following business day.

18. COMPLIANCE WITH LAWS

Contractor will comply with all applicable laws and regulations of the federal, state, and local government, including but not limited to "The Code of the City of Santa Clara, California" ("SCCC"). In particular, Contractor's attention is called to the regulations regarding Campaign Contributions (SCCC Chapter 2.130), Lobbying (SCCC Chapter 2.155), Minimum Wage (SCCC Chapter 3.20), Business Tax Certificate (SCCC section 3.40.060), and Food and Beverage Service Worker Retention (SCCC Chapter 9.60), as such Chapters or Sections may be amended from time to time or renumbered. Additionally Contractor has read and agrees to comply with City's Ethical Standards (<http://santaclaraca.gov/home/showdocument?id=58299>).

19. CONFLICTS OF INTEREST

Contractor certifies that to the best of its knowledge, no City officer, employee or authorized representative has any financial interest in the business of Contractor and that no person associated with Contractor has any interest, direct or indirect, which could conflict with the faithful performance of this Agreement. Contractor is familiar with the provisions of California Government Code section 87100 and following and certifies that it does not know of any facts which would violate these code provisions. Contractor will advise City if a conflict arises.

20. FAIR EMPLOYMENT

Contractor will not discriminate against any employee or applicant for employment because of race, sex, color, religion, religious creed, national origin, ancestry, age, gender, marital status, physical disability, mental disability, medical condition, genetic information, sexual orientation, gender expression, gender identity, military and veteran status, or ethnic background, in violation of federal, state or local law.

21. NO USE OF CITY NAME OR EMBLEM

Contractor will not use City's name, insignia, or emblem, or distribute any information related to services under this Agreement in any magazine, trade paper, newspaper or other medium without express written consent of City.

22. GOVERNING LAW AND VENUE

This Agreement will be governed and construed in accordance with the statutes and laws of the State of California. The venue of any suit filed by either Party will be vested in the state courts of the County of Santa Clara, or if appropriate, in the United States District Court, Northern District of California, San Jose, California.

23. SEVERABILITY CLAUSE

In case any one or more of the provisions in this Agreement will, for any reason, be held invalid, illegal or unenforceable in any respect, it will not affect the validity of the other provisions, which will remain in full force and effect.

24. AMENDMENTS

This Agreement may only be modified by a written amendment duly authorized and executed by the Parties to this Agreement.

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25. COUNTERPARTS

This Agreement may be executed in counterparts, each of which will be deemed to be an original, but both of which will constitute one and the same instrument.

The Parties acknowledge and accept the terms and conditions of this Agreement as evidenced by the following signatures of their duly authorized representatives.

CITY OF SANTA CLARA, CALIFORNIA
a chartered California municipal corporation

Approved as to Form:

Dated: _____

Office of the City Attorney
City of Santa Clara

DEANNA J. SANTANA
City Manager
1500 Warburton Avenue
Santa Clara, CA 95050
Telephone: (408) 615-2210
Fax: (408) 241-6771

"CITY"

IMPERIAL PARKING (US), LLC DBA IMPARK
a Delaware limited liability company

Dated: _____

By (Signature): _____

Name: Leonard Carder

Title: President Real Estate

Principal Place of 78 SW 7th Street, 5th Floor

Business Address: Miami, FL 33130

Email Address: leonard.carder@reefparking.com

Telephone: N/A

Fax: N/A

"CONTRACTOR"

EXHIBIT A1 SCOPE OF SERVICES

The following Scope of Services defines the services and responsibilities of Contractor and City to provide as-needed parking control services for the Santa Clara Convention Center.

The Scope of Services, including Exhibit A1, Exhibit A2, and Contractor's proposal response dated June 17, 2021 provide context, supplemental information, and are incorporated by reference to the extent not inconsistent with the Agreement.

1. General Information

- 1.1. The Convention Center consists of the Santa Clara Convention Center, Hyatt Hotel, and TechMart Office Building is located on Great America Parkway in Santa Clara. Note the addresses for each below:
 - 1.1.1. Santa Clara Convention Center: 5001 Great America Parkway
 - 1.1.2. Hyatt Hotel: 5201 Great America Parkway
 - 1.1.3. TechMart Office Building: 5101 Great America Parkway
- 1.2. Parking consists of adjacent surface lots in front of the Convention Center, Hyatt Hotel and TechMart in addition to a 3 story garage for a total parking capacity of approximately 2000 spaces with an additional 1800 spaces available at the Tasman Parking Garage. Refer to Exhibit A2 (Site Map).
- 1.3. Events are tentatively scheduled to begin October 2021 but is subject to change.
- 1.4. In 2019, the Convention Center there were a total of 350 events with a yearly attendance of 350,000.

2. General Service Requirements

- 2.1. Contractor will provide parking control services for events at the Convention Center including all personnel, labor, equipment, materials, tools, services, and management skills required to perform these services. Main objectives are to ensure a high level of experience for guests of the Convention Center, Hyatt Hotel, and TechMart and aid in containing operating costs.
- 2.2. Contractor will provide an assigned operations manager and site supervisors to assure adequate supervision of all personnel. Duties include, but not limited to, the following:
 - 2.2.1. Interview and approve all newly hired staff for City's property.
 - 2.2.2. Ensure personnel maintain contract compliance (i.e. training, licenses, etc.).
 - 2.2.3. Ensure supervisors will be onsite for the complete duration of the event.

- 2.2.4. Facilitate effective communications with the Hyatt Hotel, TechMart, and Convention Center staff.
 - 2.2.5. Maintain discipline with employees.
 - 2.2.6. Provide budget information as requested by City.
 - 2.2.7. Responsible to oversee or conduct training program.
 - 2.2.8. Conduct, on a weekly basis, a minimum of one (1) unannounced randomly scheduled inspection of operations to ensure services are being delivered as required. Documentation of inspections will be discussed at least monthly with City.
- 2.3. Hyatt Hotel, TechMart, and Convention Center staff will provide a schedule of proposed events to the Contractor in advance.
- 2.3.1. Contractor will develop comprehensive parking plans based on scheduled events that include placement of attendants, cones, and signs to direct guests and delivery vehicles to parking areas consisting of surface lots, parking structure, and overflow parking facilities.
 - 2.3.2. Contractor will submit to designated Convention Center staff person and City's Representative at least two workdays prior to the scheduled event a Parking Control Event Plan for approval prior to start of each event.
 - 2.3.3. Hyatt Hotel, TechMart, and Convention Center staff will strive to provide Contractor a minimum of 24 hours' notice for any event that is not included in the proposed schedule of events.
- 2.4. All overtime work requests must receive written approval prior to the event from the Convention Center staff. Any unauthorized overtime work will not be paid.
- 2.4.1. Contractor will provide coverage of additional shifts or special requests at the rate incurred (either standard hourly billing rates or overtime billing rates) if notified of need less than twenty-four (24) hours in advance. Contractor will use due diligence to provide any requested additional coverage with relief workers when necessary to avoid overtime billings.
 - 2.4.2. Subject to Contractor's labor agreement with employees, work on holidays may be billed at an overtime rate. Contractor will provide the Convention Center with a copy of the labor agreement identifying the holidays for which overtime may be charged.
- 2.5. Contractor's employees will not work in excess of twelve (12) hours continuously or with a turnaround less than eight (8) hours, or work in excess of sixty (60) hours per week under Contractor's employment without the Convention Center's consent.

- 2.6. Contractor will provide normal payroll verification procedures, daily sign in sheets, and weekly log sheets, and a complete breakdown of all hours and costs billed. See Section 6 for Invoice Requirements.

3. Service Requirements During Event

- 3.1. Contractor will provide attendants, traffic directors, and supervisors for all events at the Convention Center. Contractor's staff will provide prompt and courteous service to patrons entering and exiting the Convention Center.
 - 3.1.1. Supervisor responsibilities include, but not limited to, the activities specified in Section 2.2.
 - 3.1.2. Attendants responsibilities include, but not limited to, the following:
 - 3.1.2.1. Greet patron's in a friendly professional manner.
 - 3.1.2.2. Direct vehicles to appropriate areas of the property.
 - 3.1.2.3. Respond to patron's issues such as dead batteries, lockouts, and flat tires.
 - 3.1.2.4. Report any criminal activity to onsite security, Property Management representative, and Santa Clara Police Department as needed.
 - 3.1.3. Traffic Directors responsibilities include, but not limited to, the following:
 - 3.1.3.1. Oversee and manage Attendants
- 3.2. Contractor will provide cashier and valet attendants if needed or when requested with a 24-hour notice. Parking tickets will be provided for sale by Contractor if needed.
- 3.3. Contractor will provide employees with clean uniform shirts with Contractor's name and logo and employee's name, a uniform hat, and agreed-upon pants, jackets, and footwear for employees. Contractor will also provide weatherproof jackets to all employees for work during inclement weather as well as a lightweight windbreaker during cool to mild weather days. Contractor's employees will be properly dressed and well-groomed at all times. Contractor will provide the Convention Center with Contractor's employee dress code requirements.
- 3.4. Contractor will provide employees with a flashlight, and a radio or cell phone.
- 3.5. Contractor will provide one electric/gas cart with equipment bed, properly labeled, with rotator lights. If the vehicle breaks down, it will be repaired, or a substitute will be provided by the second business day. The vehicle will be maintained and in good presentable condition at all times.

- 3.6. City will initially provide Contractor with 100 each 28-inch high traffic cones for use onsite. Contractor will be responsible to remove cones from and return cones to the onsite storage location and maintain cones in good condition. Contractor will notify the Convention Center staff the quantity of cones that are worn beyond their useful life and require replacement. The Convention Center will provide all replacements due to normal wear. Contractor will be responsible for the cost to replace lost or damaged traffic cones.
- 3.7. If City determines that Contractor's daily services were not provided per Agreement, City may reduce payment for each day services were not performed. City will notify Contractor by phone as soon as possible concerning non-compliance. If Contractor corrects deficiencies within two (2) hours of notification, no reduction in payment will be made. If not corrected within two (2) hours on the same day of non-compliance, City will deduct all of the daily payment due to Contractor. Contractor will subsequently meet with City representatives to discuss corrective actions taken to prevent future contract performance deficiencies.

4. Meeting Requirements

- 4.1. Contractor's account manager or site supervisor to meet with the Hyatt Hotel, TechMart, Convention Center staff at least weekly, more often as necessary, and review the Parking Control Event Plan developed by Contractor for the events occurring for the next seven days.
- 4.2. Contractor's account manager or site supervisor will attend the monthly Maintenance District meeting and onsite weekly operations meeting as requested.

5. Hiring Requirements for Contractor's Staff

- 5.1. Contractor must have the minimum hiring and employment standards for Contractor and Contractor's employees:
 - 5.1.1. U.S. Citizenship or valid U.S. Work Permit
 - 5.1.2. Minimum Eighteen (18) Years of Age
 - 5.1.3. Free of felony or major misdemeanor criminal record, and multiple DUIs.
 - 5.1.4. Pass all Contractor's pre-employment background checks, previous employment checks, and reference checks (conducted at Contractor's expense).
 - 5.1.5. Speak, read, and understand English.
 - 5.1.6. Comprehend oral and written orders, procedures, and materials, and accept and follow directions.
 - 5.1.7. Physically capable of accomplishing required tasks.

- 5.1.8. The use, possession, or transfer of illegal drugs, controlled substances (including medications without valid prescription), simulated (look-alike) drugs, drug paraphernalia, alcohol, firearms, knives, explosives, and other weapons on premises is strictly forbidden at all times. Contractor will be required to comply with and enforce this policy, with respect to contractor's employees, as part of employment.
- 5.1.9. The Convention Center staff may request Contractor to replace a Contractor's employee at any time. Contractor will immediately comply with the request.
- 5.1.10. Contractor will provide all training necessary for personnel including traffic control safety, emergency response, and customer service skills. A copy of Contractor's training program will be provided to the City or the City's Property Management company.

EXHIBIT A2 SITE MAP

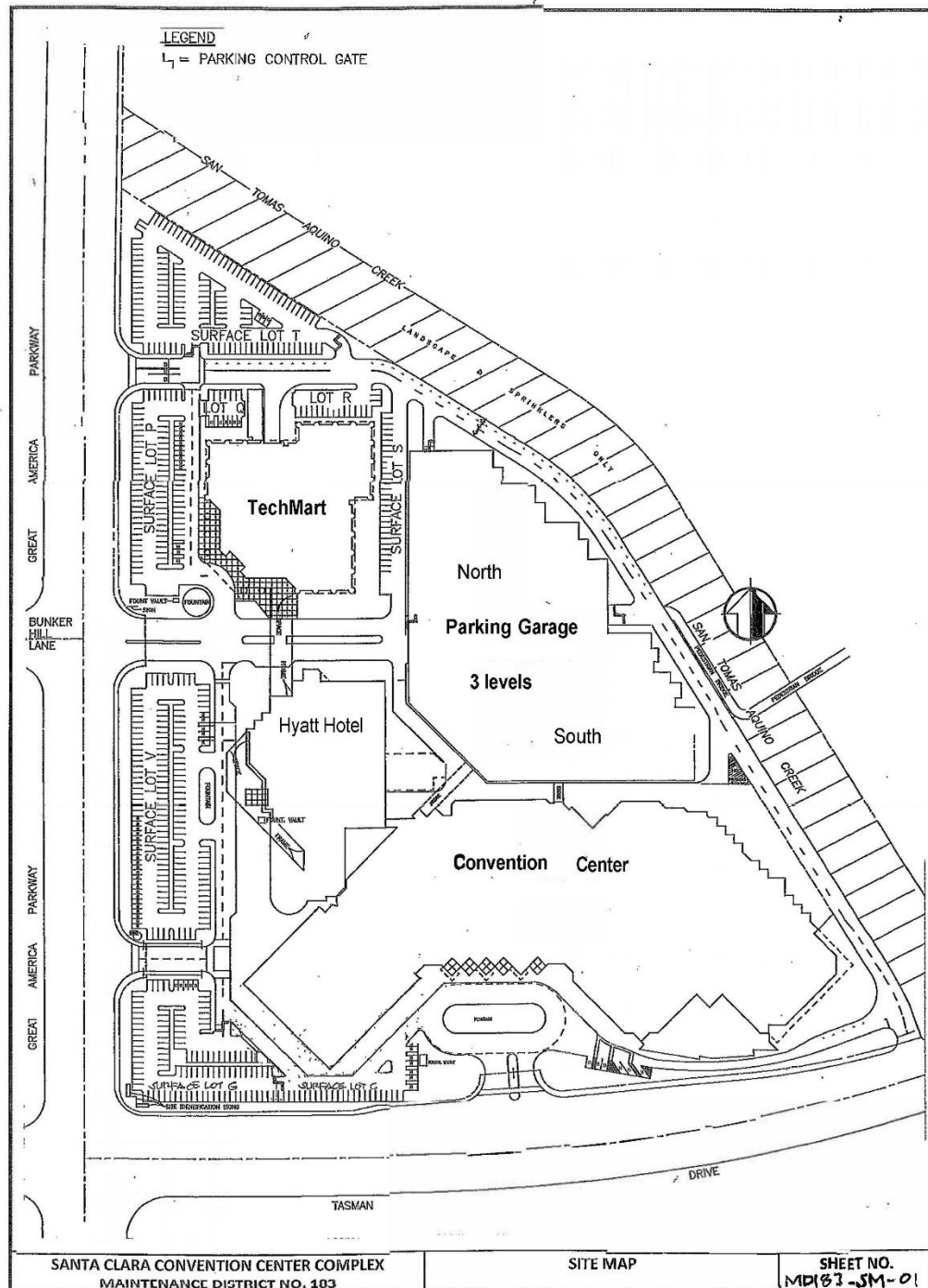


EXHIBIT B
SCHEDULE OF FEES

1. MAXIMUM COMPENSATION

- 1.1. The maximum amount payable for all services provided under this Agreement shall not exceed **One Million Sixty-Four Thousand Seven-Hundred Dollars (\$1,064,700)** during the Initial Three-Year Term. No additional services will be performed unless both Parties execute an amendment outlining the services requested and the compensation agreed for such services.

2. FEES

- 2.1. The City will pay the Contractor based on the fees specified in Table B1 below for services provided:

Table B1: Hourly Rates

Description	Initial Term Year 1 of 3 Hourly Rate	Initial Term Year 2 of 3 Hourly Rate	Initial Term Year 3 of 3 Hourly Rate
Traffic Controllers	\$ 34.81	\$ 35.86	\$ 36.93
Traffic Controllers Overtime	\$ 52.22	\$ 53.79	\$ 55.40
Supervisory Staff	\$ 35.81	\$ 36.86	\$ 37.93
Supervisory Staff Overtime	\$ 53.72	\$ 55.29	\$ 56.90

3. PRICE AND OPTIONS

- 3.1. Pricing shall be firm fixed for the Initial Term of the Agreement.
- 3.2. Price Adjustments: Contractor may request adjustments to the hourly rates prior to any one-year option to renew the Agreement after the Initial Term. Contractor must demonstrate to the satisfaction of the City that a price increase is justified by provide documentation, such as a price index (e.g. CPI or PPI). Price adjustments are subject to City's approval.

4. INVOICING

- 4.1. Contractor will invoice the City on a monthly basis for services provided by Contractor during the preceding month on an invoice and in a format approved by the City. All invoices will be provided to the City's Convention Center Property Management company for initial review on a monthly basis. The City's Convention Center Property Management company will review and work with Contractor on any discrepancies prior to sending to the City for final approval.
- 4.2. City will pay Contractor within thirty (30) days of City's receipt of an approved invoice.
- 4.3. Invoice will at a minimum include the following:

- 4.3.1. Date of Service
- 4.3.2. Description of Services
- 4.3.3. Hours of Service
- 4.3.4. Attendants Hours
- 4.3.5. Traffic Director Hours

EXHIBIT C

INSURANCE REQUIREMENTS

Without limiting the Contractor's indemnification of the City, and prior to commencing any of the Services required under this Agreement, the Contractor will provide and maintain in full force and effect, at its sole cost and expense, the following insurance policies with at least the indicated coverages, provisions and endorsements:

A. COMMERCIAL GENERAL LIABILITY INSURANCE

1. Commercial General Liability Insurance policy which provides coverage at least as broad as Insurance Services Office form CG 00 01. Policy limits are subject to review, but will in no event be less than, the following:

\$5,000,000 Each occurrence
\$5,000,000 General aggregate
\$5,000,000 Products/Completed Operations aggregate
\$5,000,000 Personal Injury
2. Exact structure and layering of the coverage will be left to the discretion of Contractor; however, any excess or umbrella policies used to meet the required limits will be at least as broad as the underlying coverage and will otherwise follow form.
3. The following provisions will apply to the Commercial Liability policy as well as any umbrella policy maintained by the Contractor to comply with the insurance requirements of this Agreement:
 - a. Coverage will be on a "pay on behalf" basis with defense costs payable in addition to policy limits;
 - b. There will be no cross liability exclusion which precludes coverage for claims or suits by one insured against another; and
 - c. Coverage will apply separately to each insured against whom a claim is made or a suit is brought, except with respect to the limits of liability.

B. BUSINESS AUTOMOBILE LIABILITY INSURANCE

Business automobile liability insurance policy which provides coverage at least as broad as ISO form CA 00 01 with policy limits a minimum limit of one million dollars (\$1,000,000) each accident using, or providing coverage at least as broad as, Insurance Services Office form CA 00 01. Liability coverage will apply to all owned, non-owned and hired autos.

C. WORKERS' COMPENSATION

1. Workers' Compensation Insurance Policy as required by statute and employer's liability with limits of one million dollars (\$1,000,000) policy limit Bodily Injury by disease, one million dollars (\$1,000,000) each accident/Bodily Injury and one million dollars (\$1,000,000) each employee Bodily Injury by disease.
2. The indemnification and hold harmless obligations of Contractor included in this Agreement will not be limited in any way by any limitation on the amount or type of damage, compensation or benefit payable by or for Contractor or any subcontractor under any Workers' Compensation Act(s), Disability Benefits Act(s) or other employee benefits act(s).
3. This policy must include a Waiver of Subrogation in favor of the City of Santa Clara, its City Council, commissions, officers, employees, volunteers and agents.

D. COMPLIANCE WITH REQUIREMENTS

All of the following clauses and/or endorsements, or similar provisions, must be part of each commercial general liability policy, and each umbrella or excess policy.

1. Additional Insureds. City of Santa Clara, its City Council, commissions, officers, employees, volunteers and agents are hereby added as additional insureds in respect to liability arising out of Contractor's work for City, using Insurance Services Office (ISO) Endorsement CG 20 10 11 85 or the combination of CG 20 10 03 97 and CG 20 37 10 01, or its equivalent.
2. Primary and non-contributing. Each insurance policy provided by Contractor will contain language or be endorsed to contain wording making it primary insurance as respects to, and not requiring contribution from, any other insurance which the Indemnities may possess, including any self-insurance or self-insured retention they may have. Any other insurance Indemnities may possess will be considered excess insurance only and will not be called upon to contribute with Contractor's insurance.
3. Cancellation.
 - a. Each insurance policy will contain language or be endorsed to reflect that no cancellation of the coverage provided due to non-payment of premiums will be effective until written notice has been given to City at least thirty (30) days prior to the effective date of such modification or cancellation. In the event of non-renewal, written notice will be given at least thirty (30) days prior to the effective date of non-renewal.

- b. Each insurance policy will contain language or be endorsed to reflect that no cancellation of the coverage provided for any cause save and except non-payment of premiums will be effective until written notice has been given to City at least thirty (30) days prior to the effective date of such modification or cancellation. In the event of non-renewal, written notice will be given at least thirty (30) days prior to the effective date of non-renewal.
4. Other Endorsements. Other endorsements may be required for policies other than the commercial general liability policy if specified in the description of required insurance set forth in Sections A through D of this Exhibit C, above.

E. ADDITIONAL INSURANCE RELATED PROVISIONS

Contractor and City agree as follows:

1. Contractor agrees to ensure that subcontractors, and any other party involved with the Services who is brought onto or involved in the performance of the Services by Contractor, provide the same minimum insurance coverage required of Contractor, except as with respect to limits. Contractor agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this Agreement. Contractor agrees that upon request by City, all agreements with, and insurance compliance documents provided by, such subcontractors and others engaged in the project will be submitted to City for review.
2. Contractor agrees to be responsible for ensuring that no contract used by any party involved in any way with the project reserves the right to charge City or Contractor for the cost of additional insurance coverage required by this Agreement. Any such provisions are to be deleted with reference to City. It is not the intent of City to reimburse any third party for the cost of complying with these requirements. There will be no recourse against City for payment of premiums or other amounts with respect thereto.
3. The City reserves the right to withhold payments from the Contractor in the event of material noncompliance with the insurance requirements set forth in this Agreement.

F. EVIDENCE OF COVERAGE

Prior to commencement of any Services under this Agreement, Contractor, and each and every subcontractor (of every tier) will, at its sole cost and expense, provide and maintain not less than the minimum insurance coverage with the endorsements and deductibles indicated in this Agreement. Such insurance coverage will be maintained with insurers, and under forms of policies, satisfactory to City and as described in this Agreement. Contractor will file with

the City all certificates and endorsements for the required insurance policies for City's approval as to adequacy of the insurance protection.

G. EVIDENCE OF COMPLIANCE

Contractor or its insurance broker will provide the required proof of insurance compliance, consisting of Insurance Services Office (ISO) endorsement forms or their equivalent and the ACORD form 25-S certificate of insurance (or its equivalent), evidencing all required coverage will be delivered to City, or its representative as set forth below, at or prior to execution of this Agreement. Upon City's request, Contractor will submit to City copies of the actual insurance policies or renewals or replacements. Unless otherwise required by the terms of this Agreement, all certificates, endorsements, coverage verifications and other items required to be delivered to City pursuant to this Agreement will be emailed to:

ctsantaclara@ebix.com

or mailed to:

EBIX Inc.
City of Santa Clara Electric Department
P.O. Box 100085 – S2
Duluth, GA 30096
Telephone number: 951-766-2280
Fax number: 770-325-0409

H. QUALIFYING INSURERS

All of the insurance companies providing insurance for Contractor will have, and provide written proof of, an A. M. Best rating of at least A minus 6 (A- VI) or will be an insurance company of equal financial stability that is approved by the City or its insurance compliance representatives.

EXHIBIT D
NOTICE OF EXERCISE OF OPTION TO EXTEND AGREEMENT

AGREEMENT TITLE:	
CONTRACTOR:	
DATE:	

Pursuant to Section ___ of the Agreement referenced above, the City of Santa Clara hereby exercises its option to extend the term under the following provisions:

OPTION NO.	# of #
-------------------	---------------

NEW OPTION TERM

Begin date:	
End date:	

☐ **CHANGES IN RATE OF COMPENSATION**

Percentage change in CPI upon which adjustment is based:	
--	--

Pursuant to Section ___ of the Agreement the rates of compensation are hereby adjusted as follows:
(use attachment if necessary)

MAXIMUM COMPENSATION for New Option Term:	
--	--

For the option term exercised by this Notice, City will pay Contractor an amount not to exceed the amount set forth above for Contractor's services and reimbursable expenses, if any. The undersigned signing on behalf of the City of Santa Clara hereby certifies that an unexpended appropriation is available for the term exercised by this Notice, and that funds are available as of the date of this signature.

Approved as to Form: _____ Dated: _____

Office of the City Attorney
City of Santa Clara

DEANNA J. SANTANA
City Manager
1500 Warburton Avenue
Santa Clara, CA 95050
Telephone: (408) 615-2210
Fax: (408) 241-6771



Agenda Report

21-738

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Agreements with the Santa Clara Valley Transportation Authority for 2016 Measure B Funding of the De La Cruz Boulevard Class IV Bikeway Study, Monroe Street Class II Buffered Bicycle Lane Study, Walsh Avenue Class IV Bikeway Study, and Related Budget Amendments

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

In 2016, Santa Clara County voters approved "Measure B," a 30-year half-cent county-wide sales tax to fund improvements for nine transportation related program categories. The Santa Clara Valley Transportation Authority (VTA) administers these funds and the program categories are defined as: BART Silicon Valley Phase II, Caltrain Corridor Capacity Improvements, County of Santa Clara Expressways, Local Streets and Roads, Transit Operations, Bicycle/Pedestrian, Caltrain Grade Separations, Highway Interchanges and State Route 85 Corridor.

VTA requires a local agency to adopt a Complete Streets Resolution in order to receive Measure B funds. The City has met this requirement by adopting a Resolution establishing a Complete Streets Policy at the August 21, 2018 City Council meeting (Attachment 1). This resolution ensures that the City is committed to building streets that are designed for the safe travel of all roadway users including motorists, pedestrians, and bicyclists. Projects using Measure B Local Streets and Roads funding must also individually comply with VTA's Complete Streets Policy prior to receiving funds.

In 2019, the Council adopted the Bicycle Plan Update 2018. This plan included new Class II buffered bicycle lanes and Class IV bikeways to create a comprehensive bicycling network and encourage bicycling as a safe and healthy alternative to driving. A Class II buffered bicycle lane is a striped bicycle lane with a buffer area between bicyclists and vehicles and a Class IV bicycle facility is a protected bicycle lane with a buffer area and vertical features (i.e. reflectorized channelizers, barriers, or curbs) between bicyclists and vehicles. The plan also identified specific corridors that require further study to determine alternate roadway configuration options to accommodate the installation of the recommended bicycle facilities for each corridor (Attachment 2). Inclusion of the recommended bicycle facilities along these corridors may include options to reduce travel lanes or remove on-street parking.

DISCUSSION

The Bicycle/Pedestrian program category of Measure B includes funding for education programs, planning studies, and capital projects. In February 2021, the VTA released a call for projects to award funding for the FY 2020/21 cycle of planning studies.

The VTA received 11 project applications, three of which were submitted by the City. These applications consist of three corridors identified in the Bicycle Plan Update 2018 as requiring further study: (1) De La Cruz Boulevard between Central Expressway and Reed Street; and Coleman Avenue between Reed Street and the City Limit, (2) Monroe Street between Lawrence Expressway and San Tomas Expressway, and (3) Walsh Avenue between the City Limits and Lafayette Street (Attachments 3, 4, and 5, respectively).

The City's applications were ranked 3, 4, and 5 and the VTA Board of Directors awarded of a total of \$455,000 in grant funds to support these three corridors. The planning studies will complete public outreach, analyze traffic and parking conditions, and create conceptual designs to determine final options for the bicycle facility recommendations within the Bicycle Plan Update 2018.

The VTA requires a separate funding agreement for each bicycle corridor receiving grant funding (Attachments 6, 7, and 8). These three agreements total \$650,000 (\$455,000 in grant funds and \$195,000 in local match) and are broken down as follows: 1) \$250,000 for the De La Cruz Boulevard (includes Coleman Avenue) Class IV Bikeway Study, 2) \$200,000 for the Monroe Street Class II Buffered Bicycle Lane Study, and 3) \$200,000 for the Walsh Avenue Class IV Bikeway Study. After approval of the funding agreements, staff will release a Request for Proposal to procure consultants to study these corridors. Upon completion of the studies staff will present recommendations to Council for future consideration.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act pursuant to CEQA Guidelines section 15378(b)(4), government fiscal activities that do not involve any commitment to any specific project that may result in a potentially significant impact on the environment.

FISCAL IMPACT

The De La Cruz Boulevard Class IV Bikeway Study has a total project cost estimate of \$250,000. The VTA has awarded \$175,000 of funds and the City must contribute \$75,000 (30 percent) as a local match requirement.

The Monroe Street Class II Buffered Bicycle Lane Study has a total project cost estimate of \$200,000. The VTA has awarded \$140,000 of funds and the City must contribute \$60,000 (30 percent) as a local match requirement.

The Walsh Avenue Class IV Bikeway Study has a total project cost estimate of \$200,000. The VTA has awarded \$140,000 of funds and the City must contribute \$60,000 (30 percent) as a local match requirement.

The recommended budget actions recognize Measure B grant funding in the amount of \$455,000 and allocates \$175,000 of funds to a new De La Cruz Boulevard Class IV Bikeway Study project, \$140,000 of funds to a new Monroe Street Class II Buffered Bicycle Lane Study project, and \$140,000 of funds to a new Walsh Avenue Class IV Bikeway Study project in the Streets and Highways Capital Fund. In addition, the recommended actions reallocate \$195,000 from the existing Pedestrian and Bicycle Enhancement Facilities project in the same fund. The Pedestrian and Bicycle Enhancement Facilities project supplements funding for the local match related to grant funds for pedestrian and bicycle projects.

Budget Amendment
FY 2021/22

	Current	Increase/ (Decrease)	Revised
Streets and Highways Capital Fund (533)			
<u>Revenue</u>			
Other Agencies Revenue (VTA Measure B Grant)	\$25,023,989	\$455,000	\$25,478,989
<u>Expenditures</u>			
De La Cruz Boulevard Class IV Bikeway Study (New Project)	\$0	\$250,000	\$250,000
Monroe Street Class II Buffered Bicycle Lane Study (New Project)	\$0	\$200,000	\$200,000
Walsh Avenue Class IV Bikeway Study (New Project)	\$0	\$200,000	\$200,000
Pedestrian and Bicycle Enhancement Facilities Project (533-1220)	\$2,556,174	(\$195,000)	\$2,361,174

COORDINATION

This report has been coordinated with the Finance Department and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

At the Bicycle and Pedestrian Advisory Committee's (BPAC) March 22, 2021 meeting, the members discussed the De La Cruz Boulevard, Monroe Street, and Walsh Avenue projects for potential application for Measure B Funding.

RECOMMENDATION

1. Approve and authorize the City Manager to execute funding agreements between the City of Santa Clara and Santa Clara Valley Transportation Authority for the De La Cruz Boulevard Class IV Bikeway Study, Monroe Street Class II Buffered Bicycle Lane Study, and Walsh Avenue Class IV Bikeway Study;
2. Consistent with City Charter Section 1305, "*At any meeting after the adoption of the budget, the City Council may amend or supplement the budget by motion adopted by the affirmative votes of*

at least five members so as to authorize the transfer of unused balances appropriated for one purpose to another purpose, or to appropriate available revenue not included in the budget,” approve the FY 2021/22 budget amendment in the Streets and Highways Capital Fund to increase the Other Agencies Revenue estimate by \$455,000 to recognize grant funding for the VTA Measure B Bicycle/Pedestrian program category funds, establish an appropriation for the new Project - De La Cruz Boulevard Class IV Bikeway Study in the amount of \$250,000, establish an appropriation for the new Project - Monroe Street Class II Buffered Bicycle Lane Study in the amount of \$200,000, establish an appropriation for the new Project - Walsh Avenue Class IV Bikeway Study in the amount of \$200,000 and decrease the Pedestrian and Bicycle Enhancement Facilities Project by \$195,000 **(five affirmative Council votes required to appropriate additional revenue)**; and

3. Authorize the City Manager to make modifications to the Agreements, if needed, within the approved budget of the projects.

Reviewed by: Craig Mobeck, Director of Public Works

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Resolution No. 18-8593, Complete Streets Policy
2. Bicycle Plan Update 2018, Figure D-1 Future Design Considerations
3. De La Cruz Boulevard Class IV Bikeway Study Project Map
4. Monroe Street Class II Buffered Bicycle Lane Study Project Map
5. Walsh Avenue Class IV Bikeway Study Project Map
6. De La Cruz Boulevard Class IV Bikeway Study Funding Agreement
7. Monroe Street Class II Buffered Bicycle Lane Study Funding Agreement
8. Walsh Avenue Class IV Bikeway Study Funding Agreement



Legislation Details (With Text)

File #: 18-260 **Version:** 1 **Name:**
Type: Consent Calendar **Status:** Agenda Ready
File created: 3/8/2018 **In control:** Council and Authorities Concurrent Meeting
On agenda: 8/21/2018 **Final action:**
Title: Action on a Resolution Adopting a Complete Streets Policy to Receive Measure B Funds
Sponsors:
Indexes: CC
Code sections:
Attachments: 1. Resolution and Exhibit A

Date	Ver.	Action By	Action	Result
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REPORT TO COUNCIL

SUBJECT

Action on a Resolution Adopting a Complete Streets Policy to Receive Measure B Funds

BACKGROUND

In 2016, Santa Clara County voters approved "Measure B", a thirty-year half-cent countywide sales tax to enhance transit, highways, expressways, and active transportation projects. The Santa Clara Valley Transportation Authority (VTA), which administers these funds, requires that local jurisdictions adopt a Complete Streets Resolution that contains nine Complete Streets elements as outlined by the Metropolitan Transportation Commission (MTC). Complete Streets are generally defined as streets that are built for the safe travel of all roadway users including motorists, pedestrians and bicyclists. Each local agency within Santa Clara County must adopt a resolution to receive funding from the Measure B program.

In addition, the MTC, as the metropolitan planning organization for the nine-county San Francisco Bay Area (which includes Santa Clara County), administers the One Bay Area Grant (OBAG) Program. The OBAG program is federally funded and funds can be used to invest in local streets and roads maintenance, streetscape enhancements, bicycle and pedestrian improvements, safe routes to school projects, priority conservation areas, and transportation planning. To be eligible for an OBAG grant, the MTC requires that local jurisdictions comply with the California Complete Streets Act of 2008 (AB 1358) which requires local jurisdictions to include the complete streets policies as part of their general plans so that roadways are designed to safely accommodate all users including bicyclists, pedestrians, transit riders, children, senior citizens, disabled people, and motorists. Jurisdictions can meet this requirement by adopting either a Complete Streets Resolution or a General Plan Circulation Element which complies with the California Complete Streets Act of 2008. The City currently meets this requirement by having General Plan Circulation policies that include complete streets elements. Although the City is already meeting this OBAG requirement and has adopted Complete Street policies within its General Plan, adopting this specific Complete Streets Resolution would further strengthen the City's ability to obtain future grant funds.

DISCUSSION

Measure B will provide each local jurisdiction within Santa Clara County with an annual source of both guaranteed and competitive grant funds for both capital projects and local streets and road (pavement management programs) projects. The following are the eight capital program categories within Measure B that are eligible for the funds: BART Phase II, Bicycle and Pedestrian, Caltrain Grade Separations, Caltrain Corridor Capacity Improvements, Highway Interchanges, County Expressways, SR 85 Corridor, and Transit Operations. On October 11, 2016, the City Council endorsed a list of proposed multi-modal projects within Santa Clara that could be funded through Measure B.

In total, Measure B is projected to provide approximately \$69 million in funding for the City's local streets and roads projects over the next 30 years. Currently, funds are being held by the VTA due to ongoing litigation regarding Measure B. The VTA is projecting that this litigation will be resolved by the end of the year. Adopting the attached resolution and policy, (Attachment 1), which incorporates the nine elements outlined by the MTC, enables the City to meet the conditions required to receive both guaranteed and competitive funding from Measure B when funds become available.

The City also applies for MTC OBAG federal funds every grant cycle. Adopting this resolution will also strengthen the City's ability to receive grant funding and solidify the City's current efforts to meet these requirements through its updated General Plan Circulation policies.

The City coordinated the proposed policy with the Santa Clara Valley Transportation Authority who is responsible for overseeing the Measure B program and received their concurrence that the City's policy was consistent with the MTC guidelines. The City's Bicycle and Pedestrian Advisory Committee (BPAC) also reviewed the proposed Complete Streets Policy during its June 25, 2018 meeting. After a discussion as to what specific language should be included in the proposed Complete Streets Policy, the BPAC voted 6 to 2 to recommend that the City Council consider approving a resolution to adopt a Complete Streets Policy containing nine complete streets elements as outlined by MTC. A friendly amendment was added to the motion requesting that language be added to the proposed Complete Streets Policy to address BPAC's concern that proposed projects would not remove existing non-motorized facilities or negatively impact non-motorized users.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines section 15378(b)(5) in that it is a governmental organization or administrative activity that will not result in direct or indirect changes in the environment.

FISCAL IMPACT

There is no fiscal impact related to this report.

COORDINATION

This report has been coordinated with the Finance, Community Development, Electric Utility, Water & Sewer Departments and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website

and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

In addition, this item was discussed at the City's Bicycle and Pedestrian Advisory Committee meeting on June 25, 2018.

RECOMMENDATION

Adopt a Resolution adopting a Complete Streets Policy containing the nine Complete Streets elements as outlined by the Metropolitan Transportation Commission to receive Measure B funds.

Reviewed by: Craig Mobeck, Director of Public Works

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Resolution and Exhibit A

RESOLUTION NO. 18-8593

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA
TO ADOPT A COMPLETE STREETS POLICY CONTAINING THE
NINE COMPLETE STREETS ELEMENTS AS OUTLINED BY THE
METROPOLITAN TRANSPORTATION COMMISSION IN ORDER
TO RECEIVE MEASURE B FUNDS**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, on November 8, 2016, the voters of Santa Clara County approved Measure B, a 30-year, ½ cent sales tax measure supporting transportation projects and services. In order to be eligible to receive 2016 Measure B funds, all recipients must adopt a Complete Streets resolution that contains elements of Complete Streets laid out by Metropolitan Transportation Commission (MTC) for the One Bay Area Grant (OBAG) Program Cycle 2. These elements describe Complete Streets principles, implementation, evaluation, and exception processes;

WHEREAS, the term "Complete Streets" describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, children, youth, and families;

WHEREAS, the City of Santa Clara City Council has long acknowledged the benefits and value for the public health and welfare of reducing vehicle miles traveled and increasing transportation by walking, bicycling, and public transportation;

WHEREAS, the City Council also recognizes that the planning and coordinated development of Complete Streets infrastructure provides benefits for local governments in the areas of infrastructure cost savings; public health; and environmental sustainability;

WHEREAS, these concepts are inherent in the adopted Circulation policies of the City of Santa Clara General Plan;

WHEREAS, the State of California has emphasized the importance of Complete Streets by enacting

the California Complete Streets Act of 2008 (also known as AB 1358), which requires that when cities or counties revise general plans, they identify how they will provide for the mobility needs of all users of the roadways, as well as through Deputy Directive 64, in which the California Department of Transportation explained that it "views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system";

WHEREAS, the California Global Warming Solutions Act of 2006 (known as AB 32) sets a mandate for the reduction of greenhouse gas emissions in California, and the Sustainable Communities and Climate Protection Act of 2008 (known as SB 375) requires emissions reductions through coordinated regional planning that integrates transportation, housing, and land-use policy, and achieving the goals of these laws will require significant increases in travel by public transit, bicycling, and walking;

WHEREAS, numerous California counties, cities, and agencies have adopted Complete Streets policies and legislation in order to further the health, safety, welfare, economic vitality, and environmental well-being of their communities; and,

WHEREAS, the City of Santa Clara, therefore, in light of the foregoing benefits and considerations, wishes to improve its commitment to Complete Streets and desires that its streets form a comprehensive and integrated transportation network promoting safe, equitable, and convenient travel for all users while preserving flexibility, recognizing community context, and using the latest and best design guidelines and standards.

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

1. That the City of Santa Clara adopts the Complete Streets Policy, attached hereto as **Exhibit A**, and made part of this Resolution, and that said exhibit is hereby approved and adopted; and

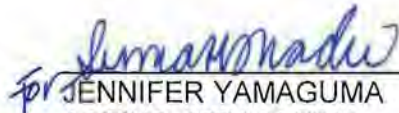
2. That the next substantial revision of the City of Santa Clara General Plan circulation policies shall incorporate Complete Streets policies and principles consistent with the California Complete Streets Act of 2008 (AB 1358) and with the Complete Streets Policy adopted by this resolution.

3. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING THEREOF HELD ON THE 21st DAY OF AUGUST, 2018, BY THE FOLLOWING VOTE:

AYES:	COUNCILORS:	Davis, Kolstad, Mahan, O'Neill, and Watanabe and Mayor Gillmor
NOES:	COUNCILORS:	None
ABSENT:	COUNCILORS:	None
ABSTAINED:	COUNCILORS:	None

ATTEST:


JENNIFER YAMAGUMA
ACTING CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:
1. Exhibit A

EXHIBIT A

COMPLETE STREETS POLICY OF THE CITY OF SANTA CLARA

A. Complete Streets Principles

1. **Complete Streets Serving All Users.** The City of Santa Clara ("City"), through its Circulation policies within the 2010-2035 General Plan and reaffirmed by this resolution is committed to creating, preserving, and maintaining Complete Streets that provide safe, comfortable, and convenient travel along and across streets (including streets, roads, highways, bridges, and other portions of the transportation system) through a comprehensive, integrated transportation network that serves all categories of users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, children, youth, and families.
2. **Context Sensitivity.** In planning and implementing street projects, departments of the City of Santa Clara shall maintain sensitivity to local conditions in both residential and business districts as well as urban, suburban, and rural areas, and shall work with residents, businesses, and other stakeholders to ensure that a strong sense of place ensues. Improvements that may be considered include sidewalks, shared use paths, bicycle lanes, bicycle routes, paved shoulders, street trees and landscaping, planting strips, accessible curb ramps, crosswalks, refuge islands, pedestrian signals, signs, street furniture, bicycle parking facilities, public transportation stops and facilities, transit priority signalization, and other features assisting in the provision of safe travel for all users as identified in an adopted local plan such as a bicycle, pedestrian, transit, multimodal, or other relevant plan.
3. **Complete Streets Routinely Addressed by All Departments.** All relevant departments of the City of Santa Clara shall work towards making Complete Streets practices a routine part of everyday operations, approach every relevant project, program, and practice as an opportunity to improve streets and the transportation network for all categories of users, and work in coordination with other agencies, and jurisdictions to maximize opportunities for Complete Streets, connectivity, and cooperation.
4. **All Projects and Phases.** Complete Streets infrastructure sufficient to enable reasonably safe travel along and across the right of way for each category of users shall be assessed and may be incorporated into all planning, funding, design, approval, and implementation processes for applicable construction, reconstruction, retrofit, maintenance, operations, alteration, or repair of streets, roads, highways, bridges, and other portions of the transportation system, except that specific infrastructure for a given category of users may be excluded if an exemption is approved via the process set forth in section C.1 of this policy.

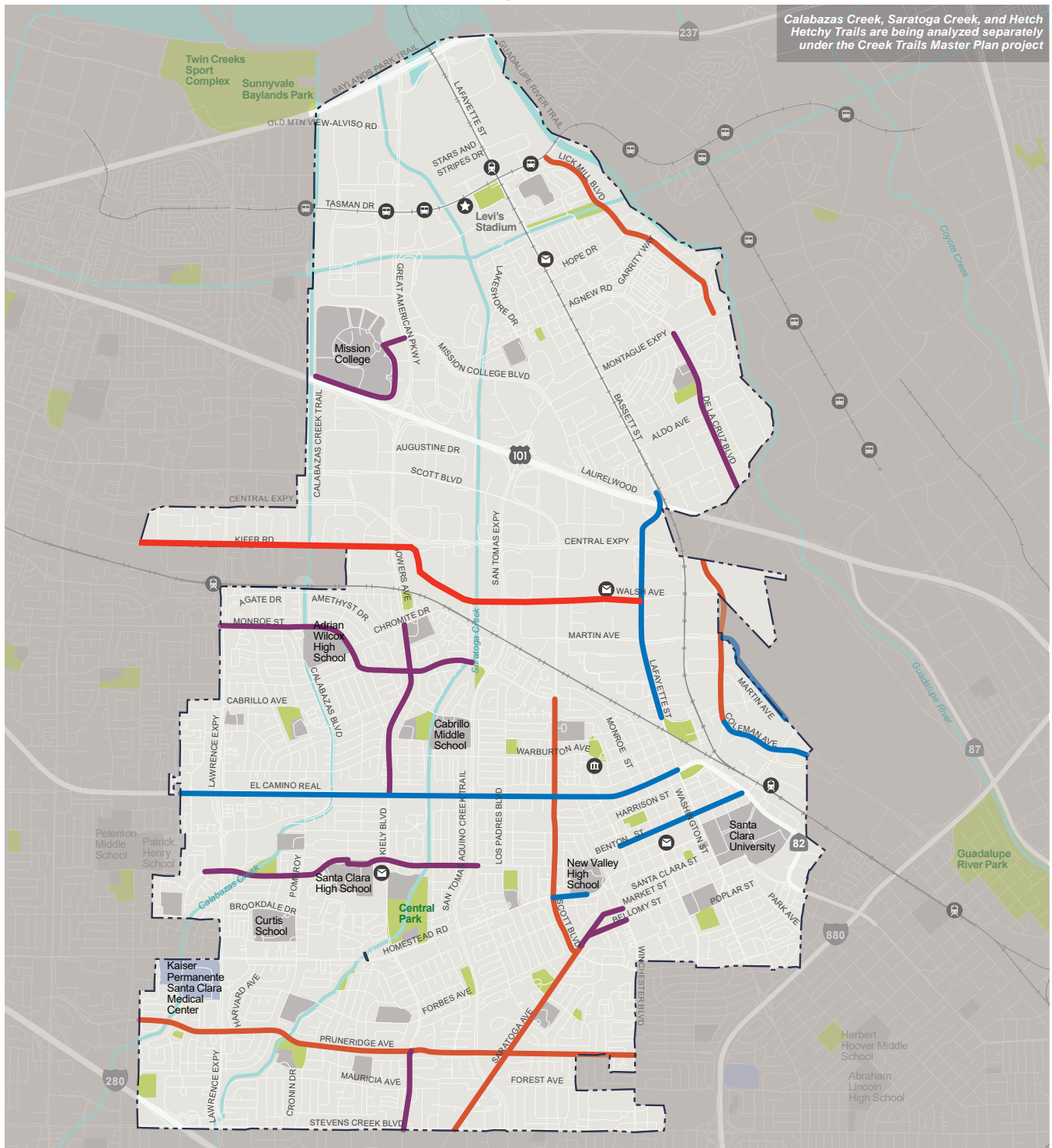
B. Implementation

1. **Plan Consultation and Consistency.** Maintenance, planning, and design of projects affecting the transportation system shall be consistent with local bicycle, pedestrian, transit, multimodal, and other relevant plans, except that where such consistency cannot be achieved without negative consequences, consistency shall not be required if the head of the relevant department provides written approval explaining the basis of such deviation.
2. **Street Network/Connectivity.** Consistent with the City's General Plan and other adopted plans, the City of Santa Clara shall incorporate Complete Streets infrastructure into existing streets to improve the safety and convenience of users, with the particular goal of creating a connected network of facilities accommodating each category of users, and increasing connectivity across jurisdictional boundaries and for existing and anticipated future areas of travel origination or destination.
3. **Bicycle Pedestrian Advisory Commission Consultation.** Relevant transportation projects shall be coordinated with the Santa Clara Bicycle and Pedestrian Advisory Committee to provide comments and recommendations regarding Complete Streets features to be incorporated into the project.
4. **Evaluation.** All relevant departments shall perform evaluations of how well the streets and transportation network of Santa Clara are serving each category of users by collecting baseline data and collecting follow-up data on a regular basis.

C. Exemptions

1. **Leadership Approval for Exemptions.** Projects that seek Complete Streets exemptions must provide a written finding of why accommodations for all modes were not to be included in the project. The memorandum should be signed off by the Public Works Director, City Engineer or equivalent high level staff person. Projects that are granted exceptions must be made publically available for review.

Figure D-1



Source: City of Santa Clara, Caltrans, US Census, ESRI, VTA. Map produced March 2018

Future Design Considerations

Santa Clara Bicycle Plan Update 2018



0 0.5 1 MILES

Roadway Needs for Bicycle Recommendations

- Remove Parking
- Road Reconfiguration
- Study (Remove Parking or Road Reconfiguration)

***Further study is required to determine final options for bicycle facility accommodation

Destinations + Boundaries

- | | |
|--------------------|----------|
| City Hall | School |
| Train Station | Hospital |
| Light Rail Station | Park |
| USPS Office | |
| Sport Stadium | |

--Project Map--

De La Cruz Blvd Class IV Bikeway Study

LAFAYETTE ST

PROJECT LOCATION

MARTIN AVE
(De La Cruz Blvd
to Lafayette St)

PROJECT LOCATION

DE LA CRUZ
BOULEVARD
(Central Expwy to
Reed Street)

REED ST

PROJECT LOCATION

COLEMAN AVENUE
(Reed Street to City
Limit)

LAFAYETTE ST

BROKAW RD

Google Earth

4000 ft



--Project Map--

Monroe St Class II Buffered Bicycle Lane Study



LAWRENCE
EXPWY

CALABAZAS BLVD

CHROMITE DR

BOWERS AVE

SAN TOMAS
EXPWY

PROJECT LOCATION
MONROE STREET
(Lawrence Expwy to
San Tomas Expwy)

Google Earth

3000 ft



--Project Map--

Walsh Ave Class IV Bikeway Study

BOWERS AVE

SAN TOMAS
EXPWY

SCOTT BLVD

LAFAYETTE ST

PROJECT LOCATION

WALSH AVENUE
(Bowers Ave to
Lafayette Street)

Google Earth



2000 ft

**FUNDING AGREEMENT
BETWEEN
CITY OF SANTA CLARA
AND
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
FOR
DE LA CRUZ BOULEVARD CLASS IV BIKEWAY STUDY**

THIS AGREEMENT ("AGREEMENT") is between the CITY OF Santa Clara, referred to herein as "CITY", and the SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, referred to herein as "VTA". Hereinafter, CITY and VTA may be individually referred to as "PARTY" or collectively referred to as "PARTIES".

I. RECITALS

1. Whereas, on June 24, 2016, the VTA Board of Directors adopted a resolution to place a ballot measure before the voters of Santa Clara County in November 2016 to authorize a one-half of one percent retail transaction and use tax ("2016 MEASURE B") for 30 years for nine transportation-related program categories; and
2. Whereas, on November 8, 2016, the voters of Santa Clara County enacted 2016 MEASURE B for 30 years to pay for the nine transportation-related program categories; and
3. Whereas, the duration of 2016 MEASURE B will be 30 years from the initial year of collection, beginning April 1, 2017, and continuing through March 31, 2047; and
4. Whereas, on October 5, 2017, the VTA Board of Directors established the 2016 Measure B Program ("PROGRAM") and adopted the 2016 Measure B Program Category Guidelines; and
5. Whereas, the PROGRAM includes a Bicycle and Pedestrian program category ("BIKE/PED CATEGORY") to fund bicycle and pedestrian projects and educational programs; and
6. Whereas, the BIKE/PED CATEGORY consists of three sub-categories, including a Planning Studies Competitive Grant Program ("BIKE/PED PLANNING PROGRAM"); and
7. Whereas, on September 3, 2020 the VTA Board of Directors adopted the BIKE/PED PLANNING PROGRAM criteria; and
8. Whereas, on February 1, 2021 the Fiscal Year ("FY") 2020 (July 1, 2019 to June 30, 2020) to Fiscal Year 2021 (July 1, 2020 to June 30, 2021) BIKE/PED PLANNING PROGRAM call for projects was released; and

9. Whereas on June 3, 2021 the VTA Board of Directors approved the FY2020 to FY2021 recommended project list for the BIKE/PED PLANNING PROGRAM; and
10. Whereas, CITY'S De La Cruz Boulevard Class IV Bikeway Study ("PROJECT") is an eligible project on the VTA Board of Directors approved list for the BIKE/PED PLANNING PROGRAM; and
11. Whereas, VTA and CITY desire to specify herein the terms and conditions under which the BIKE/PED PLANNING PROGRAM funds will be administered to CITY by VTA as directed by the VTA Board of Directors.

NOW, THEREFORE, for good and valuable consideration, the PARTIES agree as follows:

II. AGREEMENT

1. PROJECT DESCRIPTION

The PROJECT is a planning and feasibility study of a potential Class IV bikeway on De La Cruz Boulevard from Central Expressway to Alviso Street, Martin Avenue from Lafayette Street to De La Cruz Boulevard, and Coleman Avenue from De La Cruz Boulevard to Brokaw Road, all located within Santa Clara, California. The purpose of the PROJECT is to complete community outreach to obtain objectives and goals, complete traffic, parking, and safety analyses of various alternatives, and develop 10% conceptual designs and cost estimates.

2. SCOPE OF WORK

The scope of work for this AGREEMENT consists of existing conditions analysis, public outreach, community engagement and technical analysis of a potential bicycle facility. The final deliverables are a study report, a preferred alternative approved by CITY Council and the community, and 10% conceptual engineering design and cost estimate for the PROJECT.

3. TERM OF AGREEMENT

The term of this AGREEMENT will commence on the Effective Date (as defined in the signature block below) and continue through the later of: (i) October 31, 2023, (ii) completion of the PROJECT, (iii) cancellation of the PROJECT, or (iv) termination of this AGREEMENT pursuant to the terms herein.

4. COST OF PROJECT

Total cost of the PROJECT is estimated not to exceed \$250,000 ("TOTAL PROJECT COST"). TOTAL PROJECT COST means the total cumulative dollar amount actually incurred and expended toward the PROJECT by all PARTIES involved, as measured at the completion or termination of the PROJECT.

5. FINANCIAL CONTRIBUTION TO COST OF PROJECT

- a. VTA's Financial Contribution for PROJECT. VTA will contribute an amount not to exceed \$175,000 of BIKE/PED PLANNING PROGRAM funds to be used by CITY for completion of the Project. All funds will be available on a reimbursement basis for ELIGIBLE COSTS (as described in Section 6 herein) only, pursuant to the terms and conditions set forth herein.
- b. CITY's Financial Contribution for PROJECT. CITY is solely responsible for all funds CITY has expended toward the PROJECT prior to Effective Date of this AGREEMENT, and CITY must not seek reimbursement from VTA for such costs.
- c. Additional Funds. Any additional funds required to complete the PROJECT will be CITY's sole responsibility.
- d. PROJECT Savings. If the PROJECT is anticipated to be delivered under budget, BIKE/PED PLANNING PROGRAM funds will be reduced in proportion to CITY's Financial Contribution to PROJECT.
- e. In all circumstances, regardless of the TOTAL PROJECT COST, CITY is responsible for contributing a minimum of 30% of the TOTAL PROJECT COST.

6. ELIGIBLE USE OF FUNDS

Only PROJECT costs incurred by CITY after the Effective Date of this AGREEMENT, will be eligible for reimbursement.

VTA will only reimburse CITY for actual costs directly related to the PROJECT ("ELIGIBLE COSTS"). ELIGIBLE COSTS are costs that: (i) are directly related to the planning, 10% design, and administration of the PROJECT; and (ii) were incurred in compliance with all applicable 2016 Measure B program requirements.

The following costs are ineligible for reimbursement:

- expenses for organizational functions, businesses services, and information technology;
- overhead cost such as rent and utilities; and
- food or beverages (e.g. as part of meetings, workshops, training, or events).

7. CITY's ROLE

- a. Tasks. CITY will be the sponsor and implementing agency for the PROJECT. In its role as sponsor and implementing agency under this AGREEMENT, CITY must perform and/or be responsible for the following tasks:

- i. serve as project manager for PROJECT;
- ii. all actions necessary to procure professional services for the PROJECT, including but not limited to advertising the work via a public solicitation, opening bids in response to the public solicitation, awarding a contract, approving contract documents, and administering the awarded contract in accordance with all applicable laws, regulations, and codes, including but not limited to the California Public Contract Code and the California Labor Code;
- iii. obtain all necessary permits for performance of the PROJECT;
- iv. conduct community engagement activities for the PROJECT as described in Attachment A; and
- v. conduct standard close-out activities for the PROJECT, including but not limited to performing final accounting review and reviewing all contractual requirements.

b. Other PROJECT Management Duties. CITY must:

- i. submit to VTA the most current version of VTA's 2016 Measure B Complete Streets Checklist ("Complete Streets Checklist") for PROJECT (as supplied by VTA to CITY) within five (5) business days of the Effective Date of this AGREEMENT;
- ii. submit to VTA a project management plan ("PMP") (as supplied by VTA to CITY) within thirty (30) business days of the Effective Date of this AGREEMENT; the PMP must be in writing and must include information regarding staffing plan, cost, schedule, contracting plan, and risk assessment;
- iii. actively monitor actual PROJECT expenditures to ensure that the 2016 MEASURE B funds are used to pay only for ELIGIBLE COSTS (as defined in Section 6. ELIGIBLE USE OF FUNDS);
- iv. provide VTA with written quarterly progress updates on the PROJECT, including but not limited to updates on PROJECT expenditures, any changes in scope and schedule, community engagement outcome, and PROJECT status;
- v. provide VTA copies of PROJECT deliverables including, but not limited to, reports, designs, drawings, plans, specifications, schedules, and other materials;
- vi. submit the PROJECT's final report ("FINAL REPORT") to VTA; this FINAL REPORT must be in writing and must include information regarding final PROJECT costs and study

results, along with any other information VTA may require for inclusion in the FINAL REPORT; and

- vii. CITY will make staff available to present on the PROJECT at VTA committees as needed.

8. VTA's Role.

VTA will perform and/or be responsible for the following tasks to perform oversight for PROJECT:

- a. review PROJECT's Complete Streets Checklist to ensure Complete Streets compliance; and
- b. review PROJECT's PMP to provide oversight of the delivery of the PROJECT and to ensure PROJECT compliance with the 2016 Measure B Program Category Guidelines.

9. CITY's OBLIGATIONS

CITY must:

- a. ensure that all 2016 Measure B funds are expended on only allowable BIKE/PED PLANNING PROGRAM expenditures as described above in Section 6. ELIGIBLE USE OF FUNDS;
- b. begin request for reimbursement of ELIGIBLE COSTS (see Section 6. ELIGIBLE USE OF FUNDS) from VTA within one (1) year of the Effective Date of this AGREEMENT;
- c. submit to VTA all records including contractors' invoices, miscellaneous invoices, and force account charges as substantiation for invoices submitted to VTA for reimbursement hereunder;
- d. maintain financial records, books, documents, papers, accounting records, and other evidence pertaining to costs related to this AGREEMENT for five (5) years; CITY shall make such records available to VTA upon VTA's written request for review and audit purposes, any financial audits will be performed at VTA's sole discretion; and
- e. submit invoices to vta.accountspayable@vta.org, no more frequently than monthly, for reimbursement of ELIGIBLE COSTS (see Section 6. ELIGIBLE USE OF FUNDS); CITY must submit invoices within one year of the date CITY incurs the cost submitted on the invoice for reimbursement (unless otherwise approved by VTA in writing).

10. VTA's OBLIGATIONS

VTA will remit the amount due to the CITY under an invoice within thirty (30) calendar days of receipt of a complete and proper, fully documented invoice complying with the requirements set forth herein.

11. INDEMNIFICATION

Neither VTA nor any officer or employee thereof will be responsible for any damage or liability arising out of or relating to CITY's acts or omissions under or in connection with any work, authority, or jurisdiction associated with this AGREEMENT. Pursuant to California Government Code §895.4, CITY must fully defend, indemnify, and save harmless VTA from all suits or actions of every name, kind, and description arising from an injury (as defined by California Government Code §810.8) relating to CITY's acts or omissions under or in connection with any work, authority, or jurisdiction delegated to CITY under this AGREEMENT. This provision will survive the termination or expiration of this AGREEMENT.

12. INSURANCE

At all times during this AGREEMENT, CITY must comply with the insurance requirements and specifications of Attachment B attached hereto, and herein incorporated by reference.

13. ADDITIONAL INSURED AND INDEMNITY PROVISION

In any agreement executed between the CITY and a third party for purposes related in any way to the subject matter of this AGREEMENT ("Third Party Contract"), the CITY must require that VTA be named as (i) Additional insureds on a primary and non-contributory basis with Separation of Insureds and Waiver of Subrogation on all policies of insurance, except when not applicable required in the Third Party Contract and (ii) indemnified parties in any indemnity provision contained in the Third Party Contract. Third Party Contracts must contain insurance requirements with coverages at least as broad as, and limits at least as great as, the requirements of Attachment B in this AGREEMENT.

14. PUBLIC WORKS

If the CITY awards a contract to a third party for the performance of a public work (as defined in California Labor Code Section 1720 through 1720.6) (a "Public Works Contract") in connection with this AGREEMENT, the CITY must comply, and must require such third party to comply, with the requirements of California Labor Code Section 1720 et seq. If the Public Works Contract is funded in whole or in part with federal funds, the CITY must also comply, and must require such third party to also comply, with the requirements of the Davis Bacon Act (40 U.S.C. Sections 3141-3144 and 3146-3148).

15. COMPLIANCE WITH APPLICABLE LAW

In the execution of the PROJECT and performance of its responsibilities set forth herein, CITY must comply with all applicable requirements of local, state, and federal laws.

16. COMPLIANCE WITH 2016 MEASURE B REQUIREMENTS

In its performance under this AGREEMENT, CITY must comply with, and must ensure PROJECT compliance with all 2016 MEASURE B requirements set forth in the 2016 Measure B Program Category Guidelines for the BIKE/PED CATEGORY as identified in Attachment C, attached hereto.

17. TERMINATION

Each of the PARTIES may at any time terminate this AGREEMENT by giving ten (10) business days written notice of such termination to the other PARTY. Notice must identify the effective date of such cancellation and must be provided in accordance with the terms and conditions of this AGREEMENT. In the event of termination as set forth herein, CITY must submit its final invoice to VTA within thirty (30) calendar days of the effective date of termination, such invoice will be solely for ELIGIBLE COSTS incurred by CITY prior to termination (see Section 6. ELIGIBLE USE OF FUNDS).

18. AUDIT AND RECORDS

- a. All PARTIES must maintain, and shall require their contractors to maintain, in accordance with generally accepted accounting principles and practices, complete books, accounts, records and data pertaining to services performed under this AGREEMENT, including the costs of contract administration. Such documentation must be supported by properly executed payrolls, invoices, contracts, and vouchers evidencing in detail the nature and propriety of any charges and must be sufficient to allow a proper audit of services. All checks, payrolls, invoices, contracts, and other accounting documents pertaining in whole or in part to the services must be clearly identified and readily accessible.
- b. For the duration of the AGREEMENT, and for a period of five (5) years after final payment, the PARTIES and their representatives shall have access during normal business hours to any books, accounts, records, data, and other relevant documents that are pertinent to this AGREEMENT for audits, examinations, excerpts, and transactions and copies thereof must be furnished upon request.

19. NOTICES

All notices required or permitted under this AGREEMENT must be in writing, will be effective five (5) days after being sent by personal service or certified mail, or forty-eight (48) hours after being sent by electronic mail to the individuals at the addresses set forth below, or to such other address which may be specified in writing by the PARTIES hereto.

VTA:
Marcella Rensi
Deputy Director, Grants & Allocations
Santa Clara Valley Transportation Authority
3331 N First Street

San Jose, CA 95134
Email: marcella.rensi@vta.org

CITY:

<Name>

<Title>

<CITY, department>

<Address>

Email: <Email>

Written notification to the other PARTY must be provided, in advance, for changes in the name or address of the individuals identified above.

20. GENERAL TERMS AND CONDITIONS

- a. **Headings.** The subject headings of the articles and paragraphs in this AGREEMENT are included for convenience only and will not affect the construction or interpretation of any of its provisions.
- b. **Construction and Interpretation of Agreement.** This AGREEMENT, and each of its provisions, terms, and conditions, has been reached as a result of negotiations between the PARTIES. Accordingly, each PARTY expressly acknowledges and agrees that (i) this AGREEMENT will not be deemed to have been authored, prepared, or drafted by any particular PARTY and (ii) the rule of construction to the effect that ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this AGREEMENT or in the resolution of disputes.
- c. **Amendment.** No alteration or variation of the terms of this AGREEMENT will be valid unless made in writing and signed by both of the PARTIES hereto, and no oral understanding or agreement not incorporated herein will be binding on any of the PARTIES hereto.
- d. **Entire Agreement.** This AGREEMENT contains the entire understanding between VTA and CITY relating to the subject matter hereof. This AGREEMENT supersedes any and all other agreements which may have existed between the PARTIES, whether oral or written, relating to the subject matter hereof. This AGREEMENT is binding upon each PARTY, their legal representatives, and successors for the duration of the AGREEMENT.
- e. **Representation of Authority.** Each PARTY to this AGREEMENT represents and warrants that each person whose signature appears hereon has been duly authorized and has the full authority to execute this AGREEMENT on behalf of the entity that is a party to this AGREEMENT.
- f. **No Waiver.** The failure of either PARTY to insist upon the strict performance of any of the terms, covenants and conditions of this AGREEMENT will not be deemed a waiver of any right or remedy

that either PARTY may have, and will not be deemed a waiver of either PARTY's right to require strict performance of all of the terms, covenants, and conditions hereunder.

- g. **Dispute Resolution.** If a question or allegation arises regarding (i) interpretation of this AGREEMENT or its performance, or (ii) the alleged failure of a PARTY to perform, the PARTY raising the question or making the allegation shall give written notice thereof to the other PARTY. The PARTIES shall promptly meet in an effort to resolve the issues raised. If the PARTIES fail to resolve the issues raised, alternative forms of dispute resolution, including mediation, may be pursued by mutual agreement. It is the intent of the PARTIES to the greatest extent possible to avoid litigation as a method of dispute resolution.
- h. **Severability.** If any of the provisions of this AGREEMENT (or portions or applications thereof) are held to be unenforceable or invalid by any court of competent jurisdiction, VTA and CITY shall negotiate an equitable adjustment in the provisions this AGREEMENT with a view toward effecting the purpose of this AGREEMENT, and the validity and enforceability of the remaining provisions or portions or applications thereof will not be affected thereby.
- i. **Governing Law.** The laws of the State of California will govern this AGREEMENT, as well as any claim that might arise between CITY and VTA, without regard to conflict of law provisions.
- j. **Venue.** Any lawsuit or legal action arising from this AGREEMENT must be commenced and prosecuted in the courts of Santa Clara County, California. CITY agrees to submit to the personal jurisdiction of the courts located in Santa Clara County, California for the purpose of litigating all such claims.
- k. **Ownership of Work.** All reports, designs, drawings, plans, specifications, schedules, studies, memoranda, and other documents assembled for or prepared by or for; in the process of being assembled or prepared by or for; or furnished to VTA or CITY under this AGREEMENT are the joint property of all PARTIES. Each PARTY is entitled to copies and access to these materials during the progress of the PROJECT and upon completion of the PROJECT or termination of this AGREEMENT. All PARTIES may retain a copy of all material produced under this AGREEMENT for use in their general activities.
- l. **Attribution to the VTA.** CITY must include attribution to VTA that indicates part of the work was funded by 2016 Measure B Funds. This provision applies to any project or publication that was funded in part or in whole by 2016 Measure B Funds. Acceptable forms of attribution include 2016 Measure B's branding on PROJECT-related documents, construction signs, public information materials, and any other applicable documents. VTA will provide 2016 Measure B branding to CITY.
- m. **Non-discrimination.** The PARTIES and any contractors performing services on behalf of the PARTIES ("Contractors") will not unlawfully discriminate or permit discrimination, harass, or allow harassment against any person or group of persons because of race, color, religious creed, national

origin, ancestry, age (over 40), sex, gender, gender identity, gender expression, sexual orientation, marital status, pregnancy, childbirth or related conditions, medical condition (including cancer), mental disability, physical disability (including HIV and AIDS), genetic information, or military and veteran's status, or in any manner prohibited by federal, state, or local laws. In addition, the PARTIES and Contractors shall not unlawfully deny any of their employees family care leave or discriminate against such employees on the basis of having to use family care leave. The PARTIES and Contractors must ensure that the evaluation and treatment of their employees and applicants for employment is free of such discrimination and harassment.

- n. **Relationship of the PARTIES.** It is understood that this is an AGREEMENT by and between independent parties and does not create the relationship of agent, servant, employee, partnership, joint venture or association, or any other relationship other than that of independent contractor.
- o. **Execution in Counterparts / Electronic Signature.** This AGREEMENT may be executed in any number of counterparts and by each PARTY in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute one and the same instrument.

Unless otherwise prohibited by law, VTA policy, or CITY policy, the PARTIES agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect as a contract executed with an original ink signature. The term "electronic copy of a signed contract" refers to a writing as set forth in Evidence Code Section 1550. The term "electronically signed contract" means a contract that is executed by applying an electronic signature using technology approved by each of the PARTIES.

- p. **Warranty of Authority to Execute Agreement.** Each PARTY to this AGREEMENT represents and warrants that each person whose signature appears hereon is authorized and has the full authority to execute this AGREEMENT on behalf of the entity that is a PARTY to this AGREEMENT.

Signatures of PARTIES on following page.

IN WITNESS WHEREOF, the PARTIES have executed this AGREEMENT as of the last date set forth below (“Effective Date”).

**Santa Clara Valley Transportation
Authority**

City of Santa Clara

Carolyn Gonot
General Manager/CEO

<Name>
<Title>

Date

Date

Approved as to Form:

Approved as to Form:

Uzma Saeed
Senior Assistant Counsel

<Name>
<Title>

ATTACHMENT A

Community Engagement Plan

Timeline	Purpose	Communication method	Target groups and stakeholders	Activities	Resources
September 2022	Introduce the project	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
October 2022	Introduce the project	Workshop #1; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; Bicycle & Pedestrian Advisory Committee (BPAC)	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants
December 2022	Present alternatives	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
January 2023	Present alternatives	Workshop #2; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; BPAC	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants
April 2023	Present findings and draft plan	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
May 2023	Present findings and draft plan	Workshop #3; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; BPAC	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants

ATTACHMENT B

Insurance Requirements

Without limiting CITY's obligation to indemnify and hold harmless VTA, CITY must procure and maintain for the duration of the AGREEMENT insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by CITY, its agents, representatives, or employees, or subcontractors. The cost of such insurance must be included in AGREEMENT price. In the event of any material change in the AGREEMENT Scope of Services, VTA reserves the right to change the insurance requirements set forth herein. CITY must furnish complete copies of all insurance policies, within three (3) business days of any request for such by VTA.

A. Liability and Workers' Compensation Insurance

1. Minimum Scope of Coverage

Coverage must be at least as broad as:

- a. Insurance Services Office General Liability coverage ("occurrence" form CG 0001). General Liability insurance written on a "claims made" basis is not acceptable.
- b. Insurance Services Office Business Auto Coverage, Insurance Services Office form number CA 0001, covering Automobile Liability, code 1 "any auto." Auto Liability written on a "claims-made" basis is not acceptable.
- c. Workers' Compensation insurance as required by the Labor Code of the State of California, and Employer's Liability insurance.
- d. Professional Liability, including limited contractual liability coverage, covering liability arising out of any negligent act, error, mistake, or omission in the performance of CITY's services under this AGREEMENT. This coverage must be continuously maintained for a minimum of two (2) years following completion of this AGREEMENT. This coverage may be written on a "claims made" basis, if so, please see special provisions in Section B.

2. Minimum Limits of Insurance

CITY must maintain limits no less than:

- a. General Liability (including Umbrella/Excess insurance): \$2,000,000 limit per occurrence for bodily injury, personal injury, and property damage. If a General Liability or other form with a general aggregate limit is used, either the general aggregate limit must apply

separately to this project/location or the general aggregate limit must be twice the required occurrence limit. This requirement may be satisfied by a combination of General Liability insurance with Excess or Umbrella policies, but in no event may the General Liability primary policy limit per occurrence be less than \$2,000,000, unless Umbrella/Excess policies feature inception and expiration dates concurrent with the underlying policy, "Follow Form" coverage, and a "Drop Down" provision.

- b. Automobile Liability \$1,000,000 limit per accident for bodily injury and property damage.
- c. Workers' Compensation and Employer's Liability: Statutory Workers' Compensation limits and Employer's Liability limits of \$1,000,000 per accident.
- d. Professional Liability: \$2,000,000 each occurrence/aggregate minimum limit per claim. This requirement may be satisfied by a combination of Professional Liability insurance with Excess or Umbrella policies, but in no event may the Professional Liability primary policy limit per occurrence be less than \$2,000,000, unless Umbrella/Excess policies feature inception and expiration dates concurrent with the underlying policy, "Follow Form" coverage, and a "Drop Down" provision.

3. Self-Insured Retention

The certificate of insurance must disclose the actual amount of any deductible or self-insured retention, or lack thereof, for all coverages required herein. Any self-insured retention or deductible in excess of \$250,000 must be declared to and approved by VTA. If CITY is a governmental authority such as a state, municipality or special district, self-insurance is permitted. To apply for approval for a level of retention or deductible in excess of \$250,000, CITY must provide a current financial report including balance sheets and income statements for the past three years, so that VTA can assess CITY's ability to pay claims falling within the self-insured retention or deductible. Upon review of the financial report, if deemed necessary by VTA in its sole discretion, VTA may elect one of the following options: to accept the existing self-insured retention or deductible; require the insurer to reduce or eliminate the self-insured retention or deductible as respects VTA, its directors, officers, officials, employees and volunteers; or to require CITY to procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses. Applicable costs resulting therefrom will be borne solely by CITY. CITY may request execution of a nondisclosure agreement prior to submission of financial reports.

B. Claims Made Provisions (not applicable to General Liability or Automobile Liability)

Claims-made coverage is never acceptable for General Liability or Auto Liability. Claims-made may be considered for Professional, Environmental/Pollution, or Cyber Liability. If coverage is written on a claims-made basis, the Certificate of Insurance must clearly state so. In addition to all other coverage requirements, such policy must provide that:

1. The policy must be in effect as of the date of this AGREEMENT and the retroactive date must be no later than the date of this AGREEMENT.
2. If any policy is not renewed or the retroactive date of such policy is to be changed, CITY must obtain or cause to be obtained the broadest extended reporting period coverage available in the commercial insurance market. This extended reporting provision must cover at least two (2) years.
3. No prior acts exclusion may be added to the policy during the contract period.
4. The policy allows for reporting of circumstances or incidents that might give rise to future claims.

C. Other Provisions

The policies must contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability

- a. VTA, its directors, officers, officials, employees and volunteers are to be named as additional insureds as respects: liability arising out of activities performed by or on behalf of CITY, including VTA's general supervision of CITY; products and completed operations of CITY and its subcontractors; premises owned, occupied or used by CITY; or automobiles owned, leased, hired or borrowed by CITY. The coverage must contain no special limitations on the scope of protection afforded to VTA, its directors, officers, officials, employees, or volunteers. Additional Insured endorsements must provide coverage at least as broad as afforded by the combination of ISO CG 20 10 10 01 and CG 20 37 10 01.
- b. Any failure to comply with reporting provisions of the policies may not affect coverage provided to VTA, its directors, officers, officials, employees, or volunteers.
- c. CITY's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- d. The General Liability General Aggregate limit must apply per project, not per policy.

2. All Coverages

- a. The insurer must agree to waive all rights of subrogation against VTA, its directors, officers, officials, employees, and volunteers for losses arising from work performed by CITY and its subcontractors for VTA.
- b. CITY's insurance coverage must be primary insurance as respects VTA, its directors, officers, officials, employees, and volunteers. Self-insurance or insurance that may be maintained by VTA, its directors, officers, officials, employees, or volunteers may apply only as excess to CITY's insurance. CITY's insurance must not seek contribution from VTA's insurance program.

3. Other Insurance Provisions

- a. The Certificate must disclose the actual amount of the Deductible or Self-Insured Retention
- b. If any coverage forms or endorsements required by this AGREEMENT are updated by their publishers, whether they be the insurance carrier(s), the Insurance Services office, or the American Association of Insurance Services, during the duration of this AGREEMENT, VTA reserves the rights to require CITY to procure said coverage forms or endorsements using the updated versions upon the next renewal cycle.

D. Acceptability of Insurers

Insurance and bonds must be placed with insurers with an A.M. Best's rating of no less than A VII (financial strength rating of no less than A and financial size category of no less than VII), unless specific prior written approval has been granted by VTA.

E. Certificates of Insurance

CITY must furnish VTA with a Certificate of Insurance. The certificates for each insurance policy are to be signed by an authorized representative of that insurer. The certificates must be issued on a standard ACORD Form. The contractor must instruct their insurance broker/agent to submit all insurance certificates and required notices electronically in PDF format to Insurance.certificates@vta.org. All endorsements must be attached to the ACORD certificate in a single PDF document.

The certificates must (1) identify the insurers, the types of insurance, the insurance limits, the SIRs/deductibles or lack thereof and the policy term, (2) include copies of all the actual policy endorsements required herewith, and (3) in the "Certificate Holder" box include:

Santa Clara Valley Transportation Authority ("VTA")
3331 North First Street
San Jose, CA 95134-1906

In the Description of Operations/Locations/Vehicles/Special Items Box, the VTA AGREEMENT number must appear, the list of policies scheduled as underlying on the Umbrella/Excess policy must be listed, Certificate Holder must be named as additional insured, and Waiver of Subrogation must be indicated as endorsed to all policies as stated in the AGREEMENT Documents.

It is a condition precedent to award of this AGREEMENT that all insurance certificates and endorsements be received and approved by VTA before AGREEMENT execution. No work may be performed until insurance is in full compliance. VTA reserves the rights to require complete, certified copies of all required insurance policies, at any time.

If CITY receives notice that any of the insurance policies required by this Exhibit may be cancelled or coverage reduced for any reason whatsoever, CITY must immediately provide written notice to VTA that such insurance policy required by this Exhibit is canceled or coverage is reduced.

F. Maintenance of Insurance

If CITY fails to maintain insurance as required herein, VTA, at its option, may suspend payment for work performed and/or may order CITY to suspend work at CITY's expense until a new policy of insurance is in effect.

Ed. Rev. 10-1-19

ATTACHMENT C

Bicycle & Pedestrian Program Guidelines

(Adopted by VTA Board of Directors on October 5, 2017)

Definition from Resolution No. 2016.06.17

To fund bicycle and pedestrian projects of countywide significance identified by the cities, County and VTA. The program will give priority to those projects that connect to schools, transit and employment centers; fill gaps in the existing bike and pedestrian network; safely cross barriers to mobility; and make walking or biking a safer and more convenient means of transportation for all county residents and visitors. Bicycle and pedestrian educational programs such as Safe Routes to Schools, will be eligible for funding.

Total Funding

- \$250 million in 2017 dollars.

Distribution

- Board of Directors will allocate funding schedule and amount for program through the budget cycle.
- VTA anticipates that allocations will be programmed based upon the total allocation for the Bicycle & Pedestrian Program contained in 2016 Measure B divided by the number of years in the measure.
- Future allocations will vary depending on the amount of sales tax revenue collected.
- Funds will be distributed on a 2-year cycle. The program will consist of three categories: education & encouragement programs, planning studies, and capital projects.
- A total of 15% of available program area funds will be set aside for the education & encouragement category. The funds will be allocated as follows:
 - \$250,000 for countywide (including targeting unincorporated areas) education & encouragement programs
 - Remaining funds allocated by city population formula with a \$10,000 annual minimum allocation per city
- A maximum of 5% of available program area funds will be allocated to planning studies grants category.
- If the planning studies grants category is not fully awarded, the remaining funds will roll into the capital category.
- If a cycle's funds are not fully awarded, the balance will roll into the next cycle's budget.
- Example of breakdown of grant program funding: If Bicycle/Pedestrian Program Area is programmed at \$8.3 million/year:
 - Capital - \$6.6 million (minimum)
 - Planning - \$415,000 (maximum)
 - Education & Encouragement - \$1.25 million (maximum)

Implementation

Education & Encouragement (Formula Distribution)

- VTA and individual agencies will enter into a Master Agreement for Education & Encouragement funds.
- VTA will notify agency of estimated allocation for two-year cycle.
- Agency will submit annual education & encouragement work program.
- Funds will be available on a reimbursable basis. Agencies may submit invoices to VTA on a monthly, quarterly, or annual basis. Invoices must be submitted within one year of the date posted on the contractor's invoice.
- Education & Encouragement funds may be banked for a maximum of three years with explanation of banking purposes.
- VTA will conduct an assessment regarding the effectiveness of the program.

Grant Program (Competitive)

- Only a public agency can serve as a project sponsor. Other entities must partner with a public agency to apply for a grant.
- The grant program will contain two categories:
 - Capital projects
 - § Activities leading to/including:
 - Environmental Clearance
 - Design
 - Right of Way
 - Construction
 - § Construction grant requests must include cost estimates supported by 30% to 35% design.
 - Planning studies
 - § Includes planning studies to support capital project development for those projects currently listed on Attachment A of 2016 Measure B. It does not include general/master planning efforts.
- The minimum grant award is \$50,000.
- The maximum grant award per sponsoring agency can be no more than 50% of the total available funds per call for projects per cycle, unless the cycle is undersubscribed.
- Project criteria will be developed in conjunction with the VTA Technical Advisory Committee (TAC) Capital Improvement Program Working Group, and brought to the TAC and Bicycle & Pedestrian Advisory Committee (BPAC) for input.
- Scoring committee for the grant program will be comprised of three BPAC members, three Member Agency staff, and one VTA staff person.

Criteria

- Only projects currently listed on Attachment A of 2016 Measure B are eligible.

- Capital Projects will be scored on criteria that supports the language in 2016 Measure B.
 - Countywide significance
 - Connection to/serves schools, transit, or employment centers
 - Fills gaps in bicycle/pedestrian network
 - Provides safer crossings of barriers
 - Makes walking or biking safer
 - Makes walking or biking more convenient
 - Other criteria to consider:
 - § Safety benefits
 - § Increase in bicycle and pedestrian usage
 - § Community support
 - § Project readiness
 - § Projects serve Communities of Concern

Requirements

- Competitive grant projects require a 10% non-2016 Measure B contribution.
- Reporting requirements will be detailed in agreements executed with VTA for project funding.
- All applications must include a delivery schedule.
- Funds will be available on a reimbursement basis.
- VTA Complete Streets reporting requirements will be required for Planning and Capital projects.
- All collateral material will be required to display a 2016 Measure B logo.

**FUNDING AGREEMENT
BETWEEN
CITY OF SANTA CLARA
AND
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
FOR
MONROE STREET CLASS II BUFFERED BICYCLE LANE STUDY**

THIS AGREEMENT ("AGREEMENT") is between the CITY OF Santa Clara, referred to herein as "CITY", and the SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, referred to herein as "VTA". Hereinafter, CITY and VTA may be individually referred to as "PARTY" or collectively referred to as "PARTIES".

I. RECITALS

1. Whereas, on June 24, 2016, the VTA Board of Directors adopted a resolution to place a ballot measure before the voters of Santa Clara County in November 2016 to authorize a one-half of one percent retail transaction and use tax ("2016 MEASURE B") for 30 years for nine transportation-related program categories; and
2. Whereas, on November 8, 2016, the voters of Santa Clara County enacted 2016 MEASURE B for 30 years to pay for the nine transportation-related program categories; and
3. Whereas, the duration of 2016 MEASURE B will be 30 years from the initial year of collection, beginning April 1, 2017, and continuing through March 31, 2047; and
4. Whereas, on October 5, 2017, the VTA Board of Directors established the 2016 Measure B Program ("PROGRAM") and adopted the 2016 Measure B Program Category Guidelines; and
5. Whereas, the PROGRAM includes a Bicycle and Pedestrian program category ("BIKE/PED CATEGORY") to fund bicycle and pedestrian projects and educational programs; and
6. Whereas, the BIKE/PED CATEGORY consists of three sub-categories, including a Planning Studies Competitive Grant Program ("BIKE/PED PLANNING PROGRAM"); and
7. Whereas, on September 3, 2020 the VTA Board of Directors adopted the BIKE/PED PLANNING PROGRAM criteria; and
8. Whereas, on February 1, 2021 the Fiscal Year ("FY") 2020 (July 1, 2019 to June 30, 2020) to Fiscal Year 2021 (July 1, 2020 to June 30, 2021) BIKE/PED PLANNING PROGRAM call for projects was released; and

9. Whereas on June 3, 2021 the VTA Board of Directors approved the FY2020 to FY2021 recommended project list for the BIKE/PED PLANNING PROGRAM; and
10. Whereas, CITY'S Monroe Street Class II Buffered Bicycle Lane Study ("PROJECT") is an eligible project on the VTA Board of Directors approved list for the BIKE/PED PLANNING PROGRAM; and
11. Whereas, VTA and CITY desire to specify herein the terms and conditions under which the BIKE/PED PLANNING PROGRAM funds will be administered to CITY by VTA as directed by the VTA Board of Directors.

NOW, THEREFORE, for good and valuable consideration, the PARTIES agree as follows:

II. AGREEMENT

1. PROJECT DESCRIPTION

The PROJECT is a planning and feasibility study of a potential Class II buffered bicycle lane on Monroe Street from Lawrence Expressway to San Tomas Expressway, all located within Santa Clara, California. The purpose of the PROJECT is to complete community outreach to obtain objectives and goals, complete traffic, parking, and safety analyses of various alternatives, and develop 10% conceptual designs and cost estimates.

2. SCOPE OF WORK

The scope of work for this AGREEMENT consists of existing conditions analysis, public outreach, community engagement and technical analysis of a potential bicycle facility. The final deliverables are a study report, a preferred alternative approved by CITY Council and the community, and 10% conceptual engineering design and cost estimate for the PROJECT.

3. TERM OF AGREEMENT

The term of this AGREEMENT will commence on the Effective Date (as defined in the signature block below) and continue through the later of: (i) October 31, 2023, (ii) completion of the PROJECT, (iii) cancellation of the PROJECT, or (iv) termination of this AGREEMENT pursuant to the terms herein.

4. COST OF PROJECT

Total cost of the PROJECT is estimated not to exceed \$200,000 ("TOTAL PROJECT COST"). TOTAL PROJECT COST means the total cumulative dollar amount actually incurred and expended toward the PROJECT by all PARTIES involved, as measured at the completion or termination of the PROJECT.

5. FINANCIAL CONTRIBUTION TO COST OF PROJECT

- a. VTA's Financial Contribution for PROJECT. VTA will contribute an amount not to exceed \$140,000 of BIKE/PED PLANNING PROGRAM funds to be used by CITY for completion of the Project. All funds will be available on a reimbursement basis for ELIGIBLE COSTS (as described in Section 6 herein) only, pursuant to the terms and conditions set forth herein.
- b. CITY's Financial Contribution for PROJECT. CITY is solely responsible for all funds CITY has expended toward the PROJECT prior to Effective Date of this AGREEMENT, and CITY must not seek reimbursement from VTA for such costs.
- c. Additional Funds. Any additional funds required to complete the PROJECT will be CITY's sole responsibility.
- d. PROJECT Savings. If the PROJECT is anticipated to be delivered under budget, BIKE/PED PLANNING PROGRAM funds will be reduced in proportion to CITY's Financial Contribution to PROJECT.
- e. In all circumstances, regardless of the TOTAL PROJECT COST, CITY is responsible for contributing a minimum of 30% of the TOTAL PROJECT COST.

6. ELIGIBLE USE OF FUNDS

Only PROJECT costs incurred by CITY after the Effective Date of this AGREEMENT, will be eligible for reimbursement.

VTA will only reimburse CITY for actual costs directly related to the PROJECT ("ELIGIBLE COSTS"). ELIGIBLE COSTS are costs that: (i) are directly related to the planning, 10% design, and administration of the PROJECT; and (ii) were incurred in compliance with all applicable 2016 Measure B program requirements.

The following costs are ineligible for reimbursement:

- expenses for organizational functions, businesses services, and information technology;
- overhead cost such as rent and utilities; and
- food or beverages (e.g. as part of meetings, workshops, training, or events).

7. CITY's ROLE

- a. Tasks. CITY will be the sponsor and implementing agency for the PROJECT. In its role as sponsor and implementing agency under this AGREEMENT, CITY must perform and/or be responsible for the following tasks:

- i. serve as project manager for PROJECT;
- ii. all actions necessary to procure professional services for the PROJECT, including but not limited to advertising the work via a public solicitation, opening bids in response to the public solicitation, awarding a contract, approving contract documents, and administering the awarded contract in accordance with all applicable laws, regulations, and codes, including but not limited to the California Public Contract Code and the California Labor Code;
- iii. obtain all necessary permits for performance of the PROJECT;
- iv. conduct community engagement activities for the PROJECT as described in Attachment A; and
- v. conduct standard close-out activities for the PROJECT, including but not limited to performing final accounting review and reviewing all contractual requirements.

b. Other PROJECT Management Duties. CITY must:

- i. submit to VTA the most current version of VTA's 2016 Measure B Complete Streets Checklist ("Complete Streets Checklist") for PROJECT (as supplied by VTA to CITY) within five (5) business days of the Effective Date of this AGREEMENT;
- ii. submit to VTA a project management plan ("PMP") (as supplied by VTA to CITY) within thirty (30) business days of the Effective Date of this AGREEMENT; the PMP must be in writing and must include information regarding staffing plan, cost, schedule, contracting plan, and risk assessment;
- iii. actively monitor actual PROJECT expenditures to ensure that the 2016 MEASURE B funds are used to pay only for ELIGIBLE COSTS (as defined in Section 6. ELIGIBLE USE OF FUNDS);
- iv. provide VTA with written quarterly progress updates on the PROJECT, including but not limited to updates on PROJECT expenditures, any changes in scope and schedule, community engagement outcome, and PROJECT status;
- v. provide VTA copies of PROJECT deliverables including, but not limited to, reports, designs, drawings, plans, specifications, schedules, and other materials;
- vi. submit the PROJECT's final report ("FINAL REPORT") to VTA; this FINAL REPORT must be in writing and must include information regarding final PROJECT costs and study

results, along with any other information VTA may require for inclusion in the FINAL REPORT; and

- vii. CITY will make staff available to present on the PROJECT at VTA committees as needed.

8. VTA's Role.

VTA will perform and/or be responsible for the following tasks to perform oversight for PROJECT:

- a. review PROJECT's Complete Streets Checklist to ensure Complete Streets compliance; and
- b. review PROJECT's PMP to provide oversight of the delivery of the PROJECT and to ensure PROJECT compliance with the 2016 Measure B Program Category Guidelines.

9. CITY's OBLIGATIONS

CITY must:

- a. ensure that all 2016 Measure B funds are expended on only allowable BIKE/PED PLANNING PROGRAM expenditures as described above in Section 6. ELIGIBLE USE OF FUNDS;
- b. begin request for reimbursement of ELIGIBLE COSTS (see Section 6. ELIGIBLE USE OF FUNDS) from VTA within one (1) year of the Effective Date of this AGREEMENT;
- c. submit to VTA all records including contractors' invoices, miscellaneous invoices, and force account charges as substantiation for invoices submitted to VTA for reimbursement hereunder;
- d. maintain financial records, books, documents, papers, accounting records, and other evidence pertaining to costs related to this AGREEMENT for five (5) years; CITY shall make such records available to VTA upon VTA's written request for review and audit purposes, any financial audits will be performed at VTA's sole discretion; and
- e. submit invoices to vta.accountspayable@vta.org, no more frequently than monthly, for reimbursement of ELIGIBLE COSTS (see Section 6. ELIGIBLE USE OF FUNDS); CITY must submit invoices within one year of the date CITY incurs the cost submitted on the invoice for reimbursement (unless otherwise approved by VTA in writing).

10. VTA's OBLIGATIONS

VTA will remit the amount due to the CITY under an invoice within thirty (30) calendar days of receipt of a complete and proper, fully documented invoice complying with the requirements set forth herein.

11. INDEMNIFICATION

Neither VTA nor any officer or employee thereof will be responsible for any damage or liability arising out of or relating to CITY's acts or omissions under or in connection with any work, authority, or jurisdiction associated with this AGREEMENT. Pursuant to California Government Code §895.4, CITY must fully defend, indemnify, and save harmless VTA from all suits or actions of every name, kind, and description arising from an injury (as defined by California Government Code §810.8) relating to CITY's acts or omissions under or in connection with any work, authority, or jurisdiction delegated to CITY under this AGREEMENT. This provision will survive the termination or expiration of this AGREEMENT.

12. INSURANCE

At all times during this AGREEMENT, CITY must comply with the insurance requirements and specifications of Attachment B attached hereto, and herein incorporated by reference.

13. ADDITIONAL INSURED AND INDEMNITY PROVISION

In any agreement executed between the CITY and a third party for purposes related in any way to the subject matter of this AGREEMENT ("Third Party Contract"), the CITY must require that VTA be named as (i) Additional insureds on a primary and non-contributory basis with Separation of Insureds and Waiver of Subrogation on all policies of insurance, except when not applicable required in the Third Party Contract and (ii) indemnified parties in any indemnity provision contained in the Third Party Contract. Third Party Contracts must contain insurance requirements with coverages at least as broad as, and limits at least as great as, the requirements of Attachment B in this AGREEMENT.

14. PUBLIC WORKS

If the CITY awards a contract to a third party for the performance of a public work (as defined in California Labor Code Section 1720 through 1720.6) (a "Public Works Contract") in connection with this AGREEMENT, the CITY must comply, and must require such third party to comply, with the requirements of California Labor Code Section 1720 et seq. If the Public Works Contract is funded in whole or in part with federal funds, the CITY must also comply, and must require such third party to also comply, with the requirements of the Davis Bacon Act (40 U.S.C. Sections 3141-3144 and 3146-3148).

15. COMPLIANCE WITH APPLICABLE LAW

In the execution of the PROJECT and performance of its responsibilities set forth herein, CITY must comply with all applicable requirements of local, state, and federal laws.

16. COMPLIANCE WITH 2016 MEASURE B REQUIREMENTS

In its performance under this AGREEMENT, CITY must comply with, and must ensure PROJECT compliance with all 2016 MEASURE B requirements set forth in the 2016 Measure B Program Category Guidelines for the BIKE/PED CATEGORY as identified in Attachment C, attached hereto.

17. TERMINATION

Each of the PARTIES may at any time terminate this AGREEMENT by giving ten (10) business days written notice of such termination to the other PARTY. Notice must identify the effective date of such cancellation and must be provided in accordance with the terms and conditions of this AGREEMENT. In the event of termination as set forth herein, CITY must submit its final invoice to VTA within thirty (30) calendar days of the effective date of termination, such invoice will be solely for ELIGIBLE COSTS incurred by CITY prior to termination (see Section 6. ELIGIBLE USE OF FUNDS).

18. AUDIT AND RECORDS

- a. All PARTIES must maintain, and shall require their contractors to maintain, in accordance with generally accepted accounting principles and practices, complete books, accounts, records and data pertaining to services performed under this AGREEMENT, including the costs of contract administration. Such documentation must be supported by properly executed payrolls, invoices, contracts, and vouchers evidencing in detail the nature and propriety of any charges and must be sufficient to allow a proper audit of services. All checks, payrolls, invoices, contracts and other accounting documents pertaining in whole or in part to the services must be clearly identified and readily accessible.
- b. For the duration of the AGREEMENT, and for a period of five (5) years after final payment, the PARTIES and their representatives shall have access during normal business hours to any books, accounts, records, data, and other relevant documents that are pertinent to this AGREEMENT for audits, examinations, excerpts, and transactions and copies thereof must be furnished upon request.

19. NOTICES

All notices required or permitted under this AGREEMENT must be in writing, will be effective five (5) days after being sent by personal service or certified mail, or forty-eight (48) hours after being sent by electronic mail to the individuals at the addresses set forth below, or to such other address which may be specified in writing by the PARTIES hereto.

VTA:
Marcella Rensi
Deputy Director, Grants & Allocations
Santa Clara Valley Transportation Authority
3331 N First Street

San Jose, CA 95134
Email: marcella.rensi@vta.org

CITY:

<Name>

<Title>

<CITY, department>

<Address>

Email: <Email>

Written notification to the other PARTY must be provided, in advance, for changes in the name or address of the individuals identified above.

20. GENERAL TERMS AND CONDITIONS

- a. **Headings.** The subject headings of the articles and paragraphs in this AGREEMENT are included for convenience only and will not affect the construction or interpretation of any of its provisions.
- b. **Construction and Interpretation of Agreement.** This AGREEMENT, and each of its provisions, terms and conditions, has been reached as a result of negotiations between the PARTIES. Accordingly, each PARTY expressly acknowledges and agrees that (i) this AGREEMENT will not be deemed to have been authored, prepared, or drafted by any particular PARTY and (ii) the rule of construction to the effect that ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this AGREEMENT or in the resolution of disputes.
- c. **Amendment.** No alteration or variation of the terms of this AGREEMENT will be valid unless made in writing and signed by both of the PARTIES hereto, and no oral understanding or agreement not incorporated herein will be binding on any of the PARTIES hereto.
- d. **Entire Agreement.** This AGREEMENT contains the entire understanding between VTA and CITY relating to the subject matter hereof. This AGREEMENT supersedes any and all other agreements which may have existed between the PARTIES, whether oral or written, relating to the subject matter hereof. This AGREEMENT is binding upon each PARTY, their legal representatives, and successors for the duration of the AGREEMENT.
- e. **Representation of Authority.** Each PARTY to this AGREEMENT represents and warrants that each person whose signature appears hereon has been duly authorized and has the full authority to execute this AGREEMENT on behalf of the entity that is a party to this AGREEMENT.
- f. **No Waiver.** The failure of either PARTY to insist upon the strict performance of any of the terms, covenants and conditions of this AGREEMENT will not be deemed a waiver of any right or remedy

that either PARTY may have, and will not be deemed a waiver of either PARTY's right to require strict performance of all of the terms, covenants, and conditions hereunder.

- g. **Dispute Resolution.** If a question or allegation arises regarding (i) interpretation of this AGREEMENT or its performance, or (ii) the alleged failure of a PARTY to perform, the PARTY raising the question or making the allegation shall give written notice thereof to the other PARTY. The PARTIES shall promptly meet in an effort to resolve the issues raised. If the PARTIES fail to resolve the issues raised, alternative forms of dispute resolution, including mediation, may be pursued by mutual agreement. It is the intent of the PARTIES to the greatest extent possible to avoid litigation as a method of dispute resolution.
- h. **Severability.** If any of the provisions of this AGREEMENT (or portions or applications thereof) are held to be unenforceable or invalid by any court of competent jurisdiction, VTA and CITY shall negotiate an equitable adjustment in the provisions this AGREEMENT with a view toward effecting the purpose of this AGREEMENT, and the validity and enforceability of the remaining provisions or portions or applications thereof will not be affected thereby.
- i. **Governing Law.** The laws of the State of California will govern this AGREEMENT, as well as any claim that might arise between CITY and VTA, without regard to conflict of law provisions.
- j. **Venue.** Any lawsuit or legal action arising from this AGREEMENT must be commenced and prosecuted in the courts of Santa Clara County, California. CITY agrees to submit to the personal jurisdiction of the courts located in Santa Clara County, California for the purpose of litigating all such claims.
- k. **Ownership of Work.** All reports, designs, drawings, plans, specifications, schedules, studies, memoranda, and other documents assembled for or prepared by or for; in the process of being assembled or prepared by or for; or furnished to VTA or CITY under this AGREEMENT are the joint property of all PARTIES. Each PARTY is entitled to copies and access to these materials during the progress of the PROJECT and upon completion of the PROJECT or termination of this AGREEMENT. All PARTIES may retain a copy of all material produced under this AGREEMENT for use in their general activities.
- l. **Attribution to the VTA.** CITY must include attribution to VTA that indicates part of the work was funded by 2016 Measure B Funds. This provision applies to any project or publication that was funded in part or in whole by 2016 Measure B Funds. Acceptable forms of attribution include 2016 Measure B's branding on PROJECT-related documents, construction signs, public information materials, and any other applicable documents. VTA will provide 2016 Measure B branding to CITY.
- m. **Non-discrimination.** The PARTIES and any contractors performing services on behalf of the PARTIES ("Contractors") will not unlawfully discriminate or permit discrimination, harass, or allow harassment against any person or group of persons because of race, color, religious creed, national

origin, ancestry, age (over 40), sex, gender, gender identity, gender expression, sexual orientation, marital status, pregnancy, childbirth or related conditions, medical condition (including cancer), mental disability, physical disability (including HIV and AIDS), genetic information, or military and veteran's status, or in any manner prohibited by federal, state, or local laws. In addition, the PARTIES and Contractors shall not unlawfully deny any of their employees family care leave or discriminate against such employees on the basis of having to use family care leave. The PARTIES and Contractors must ensure that the evaluation and treatment of their employees and applicants for employment is free of such discrimination and harassment.

- n. **Relationship of the PARTIES.** It is understood that this is an AGREEMENT by and between independent parties and does not create the relationship of agent, servant, employee, partnership, joint venture or association, or any other relationship other than that of independent contractor.
- o. **Execution in Counterparts / Electronic Signature.** This AGREEMENT may be executed in any number of counterparts and by each PARTY in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute one and the same instrument.

Unless otherwise prohibited by law, VTA policy, or CITY policy, the PARTIES agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect as a contract executed with an original ink signature. The term "electronic copy of a signed contract" refers to a writing as set forth in Evidence Code Section 1550. The term "electronically signed contract" means a contract that is executed by applying an electronic signature using technology approved by each of the PARTIES.

- p. **Warranty of Authority to Execute Agreement.** Each PARTY to this AGREEMENT represents and warrants that each person whose signature appears hereon is authorized and has the full authority to execute this AGREEMENT on behalf of the entity that is a PARTY to this AGREEMENT.

Signatures of PARTIES on following page.

IN WITNESS WHEREOF, the PARTIES have executed this AGREEMENT as of the last date set forth below (“Effective Date”).

**Santa Clara Valley Transportation
Authority**

City of Santa Clara

Carolyn Gonot
General Manager/CEO

<Name>
<Title>

Date

Date

Approved as to Form:

Approved as to Form:

Uzma Saeed
Senior Assistant Counsel

<Name>
<Title>

ATTACHMENT A

Community Engagement Plan

Timeline	Purpose	Communication method	Target groups and stakeholders	Activities	Resources
September 2022	Introduce the project	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
October 2022	Introduce the project	Workshop #1; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; Bicycle & Pedestrian Advisory Committee (BPAC)	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants
December 2022	Present alternatives	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
January 2023	Present alternatives	Workshop #2; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; BPAC	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants
April 2023	Present findings and draft plan	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
May 2023	Present findings and draft plan	Workshop #3; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; BPAC	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants

ATTACHMENT B

Insurance Requirements

Without limiting CITY's obligation to indemnify and hold harmless VTA, CITY must procure and maintain for the duration of the AGREEMENT insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by CITY, its agents, representatives, or employees, or subcontractors. The cost of such insurance must be included in AGREEMENT price. In the event of any material change in the AGREEMENT Scope of Services, VTA reserves the right to change the insurance requirements set forth herein. CITY must furnish complete copies of all insurance policies, within three (3) business days of any request for such by VTA.

A. Liability and Workers' Compensation Insurance

1. Minimum Scope of Coverage

Coverage must be at least as broad as:

- a. Insurance Services Office General Liability coverage ("occurrence" form CG 0001). General Liability insurance written on a "claims made" basis is not acceptable.
- b. Insurance Services Office Business Auto Coverage, Insurance Services Office form number CA 0001, covering Automobile Liability, code 1 "any auto." Auto Liability written on a "claims-made" basis is not acceptable.
- c. Workers' Compensation insurance as required by the Labor Code of the State of California, and Employer's Liability insurance.
- d. Professional Liability, including limited contractual liability coverage, covering liability arising out of any negligent act, error, mistake or omission in the performance of CITY's services under this AGREEMENT. This coverage must be continuously maintained for a minimum of two (2) years following completion of this AGREEMENT. This coverage may be written on a "claims made" basis, if so, please see special provisions in Section B.

2. Minimum Limits of Insurance

CITY must maintain limits no less than:

- a. General Liability (including Umbrella/Excess insurance): \$2,000,000 limit per occurrence for bodily injury, personal injury, and property damage. If a General Liability or other form with a general aggregate limit is used, either the general aggregate limit must apply

separately to this project/location or the general aggregate limit must be twice the required occurrence limit. This requirement may be satisfied by a combination of General Liability insurance with Excess or Umbrella policies, but in no event may the General Liability primary policy limit per occurrence be less than \$2,000,000, unless Umbrella/Excess policies feature inception and expiration dates concurrent with the underlying policy, "Follow Form" coverage, and a "Drop Down" provision.

- b. Automobile Liability \$1,000,000 limit per accident for bodily injury and property damage.
- c. Workers' Compensation and Employer's Liability: Statutory Workers' Compensation limits and Employer's Liability limits of \$1,000,000 per accident.
- d. Professional Liability: \$2,000,000 each occurrence/aggregate minimum limit per claim. This requirement may be satisfied by a combination of Professional Liability insurance with Excess or Umbrella policies, but in no event may the Professional Liability primary policy limit per occurrence be less than \$2,000,000, unless Umbrella/Excess policies feature inception and expiration dates concurrent with the underlying policy, "Follow Form" coverage, and a "Drop Down" provision.

3. Self-Insured Retention

The certificate of insurance must disclose the actual amount of any deductible or self-insured retention, or lack thereof, for all coverages required herein. Any self-insured retention or deductible in excess of \$250,000 must be declared to and approved by VTA. If CITY is a governmental authority such as a state, municipality or special district, self-insurance is permitted. To apply for approval for a level of retention or deductible in excess of \$250,000, CITY must provide a current financial report including balance sheets and income statements for the past three years, so that VTA can assess CITY's ability to pay claims falling within the self-insured retention or deductible. Upon review of the financial report, if deemed necessary by VTA in its sole discretion, VTA may elect one of the following options: to accept the existing self-insured retention or deductible; require the insurer to reduce or eliminate the self-insured retention or deductible as respects VTA, its directors, officers, officials, employees and volunteers; or to require CITY to procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses. Applicable costs resulting therefrom will be borne solely by CITY. CITY may request execution of a nondisclosure agreement prior to submission of financial reports.

B. Claims Made Provisions (not applicable to General Liability or Automobile Liability)

Claims-made coverage is never acceptable for General Liability or Auto Liability. Claims-made may be considered for Professional, Environmental/Pollution, or Cyber Liability. If coverage is written on a claims-made basis, the Certificate of Insurance must clearly state so. In addition to all other coverage requirements, such policy must provide that:

1. The policy must be in effect as of the date of this AGREEMENT and the retroactive date must be no later than the date of this AGREEMENT.
2. If any policy is not renewed or the retroactive date of such policy is to be changed, CITY must obtain or cause to be obtained the broadest extended reporting period coverage available in the commercial insurance market. This extended reporting provision must cover at least two (2) years.
3. No prior acts exclusion may be added to the policy during the contract period.
4. The policy allows for reporting of circumstances or incidents that might give rise to future claims.

C. Other Provisions

The policies must contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability

- a. VTA, its directors, officers, officials, employees and volunteers are to be named as additional insureds as respects: liability arising out of activities performed by or on behalf of CITY, including VTA's general supervision of CITY; products and completed operations of CITY and its subcontractors; premises owned, occupied or used by CITY; or automobiles owned, leased, hired or borrowed by CITY. The coverage must contain no special limitations on the scope of protection afforded to VTA, its directors, officers, officials, employees, or volunteers. Additional Insured endorsements must provide coverage at least as broad as afforded by the combination of ISO CG 20 10 10 01 and CG 20 37 10 01.
- b. Any failure to comply with reporting provisions of the policies may not affect coverage provided to VTA, its directors, officers, officials, employees, or volunteers.
- c. CITY's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- d. The General Liability General Aggregate limit must apply per project, not per policy.

2. All Coverages

- a. The insurer must agree to waive all rights of subrogation against VTA, its directors, officers, officials, employees, and volunteers for losses arising from work performed by CITY and its subcontractors for VTA.
- b. CITY's insurance coverage must be primary insurance as respects VTA, its directors, officers, officials, employees, and volunteers. Self-insurance or insurance that may be maintained by VTA, its directors, officers, officials, employees, or volunteers may apply only as excess to CITY's insurance. CITY's insurance must not seek contribution from VTA's insurance program.

3. Other Insurance Provisions

- a. The Certificate must disclose the actual amount of the Deductible or Self-Insured Retention
- b. If any coverage forms or endorsements required by this AGREEMENT are updated by their publishers, whether they be the insurance carrier(s), the Insurance Services office, or the American Association of Insurance Services, during the duration of this AGREEMENT, VTA reserves the rights to require CITY to procure said coverage forms or endorsements using the updated versions upon the next renewal cycle.

D. Acceptability of Insurers

Insurance and bonds must be placed with insurers with an A.M. Best's rating of no less than A VII (financial strength rating of no less than A and financial size category of no less than VII), unless specific prior written approval has been granted by VTA.

E. Certificates of Insurance

CITY must furnish VTA with a Certificate of Insurance. The certificates for each insurance policy are to be signed by an authorized representative of that insurer. The certificates must be issued on a standard ACORD Form. The contractor must instruct their insurance broker/agent to submit all insurance certificates and required notices electronically in PDF format to Insurance.certificates@vta.org. All endorsements must be attached to the ACORD certificate in a single PDF document.

The certificates must (1) identify the insurers, the types of insurance, the insurance limits, the SIRs/deductibles or lack thereof and the policy term, (2) include copies of all the actual policy endorsements required herewith, and (3) in the "Certificate Holder" box include:

Santa Clara Valley Transportation Authority ("VTA")
 3331 North First Street
 San Jose, CA 95134-1906

In the Description of Operations/Locations/Vehicles/Special Items Box, the VTA AGREEMENT number must appear, the list of policies scheduled as underlying on the Umbrella/Excess policy must be listed, Certificate Holder must be named as additional insured, and Waiver of Subrogation must be indicated as endorsed to all policies as stated in the AGREEMENT Documents.

It is a condition precedent to award of this AGREEMENT that all insurance certificates and endorsements be received and approved by VTA before AGREEMENT execution. No work may be performed until insurance is in full compliance. VTA reserves the rights to require complete, certified copies of all required insurance policies, at any time.

If CITY receives notice that any of the insurance policies required by this Exhibit may be cancelled or coverage reduced for any reason whatsoever, CITY must immediately provide written notice to VTA that such insurance policy required by this Exhibit is canceled or coverage is reduced.

F. Maintenance of Insurance

If CITY fails to maintain insurance as required herein, VTA, at its option, may suspend payment for work performed and/or may order CITY to suspend work at CITY's expense until a new policy of insurance is in effect.

Ed. Rev. 10-1-19

ATTACHMENT C

Bicycle & Pedestrian Program Guidelines

(Adopted by VTA Board of Directors on October 5, 2017)

Definition from Resolution No. 2016.06.17

To fund bicycle and pedestrian projects of countywide significance identified by the cities, County and VTA. The program will give priority to those projects that connect to schools, transit and employment centers; fill gaps in the existing bike and pedestrian network; safely cross barriers to mobility; and make walking or biking a safer and more convenient means of transportation for all county residents and visitors. Bicycle and pedestrian educational programs such as Safe Routes to Schools, will be eligible for funding.

Total Funding

- \$250 million in 2017 dollars.

Distribution

- Board of Directors will allocate funding schedule and amount for program through the budget cycle.
- VTA anticipates that allocations will be programmed based upon the total allocation for the Bicycle & Pedestrian Program contained in 2016 Measure B divided by the number of years in the measure.
- Future allocations will vary depending on the amount of sales tax revenue collected.
- Funds will be distributed on a 2-year cycle. The program will consist of three categories: education & encouragement programs, planning studies, and capital projects.
- A total of 15% of available program area funds will be set aside for the education & encouragement category. The funds will be allocated as follows:
 - \$250,000 for countywide (including targeting unincorporated areas) education & encouragement programs
 - Remaining funds allocated by city population formula with a \$10,000 annual minimum allocation per city
- A maximum of 5% of available program area funds will be allocated to planning studies grants category.
- If the planning studies grants category is not fully awarded, the remaining funds will roll into the capital category.
- If a cycle's funds are not fully awarded, the balance will roll into the next cycle's budget.
- Example of breakdown of grant program funding: If Bicycle/Pedestrian Program Area is programmed at \$8.3 million/year:
 - Capital - \$6.6 million (minimum)
 - Planning - \$415,000 (maximum)
 - Education & Encouragement - \$1.25 million (maximum)

Implementation

Education & Encouragement (Formula Distribution)

- VTA and individual agencies will enter into a Master Agreement for Education & Encouragement funds.
- VTA will notify agency of estimated allocation for two-year cycle.
- Agency will submit annual education & encouragement work program.
- Funds will be available on a reimbursable basis. Agencies may submit invoices to VTA on a monthly, quarterly or annual basis. Invoices must be submitted within one year of the date posted on the contractor's invoice.
- Education & Encouragement funds may be banked for a maximum of three years with explanation of banking purposes.
- VTA will conduct an assessment regarding the effectiveness of the program.

Grant Program (Competitive)

- Only a public agency can serve as a project sponsor. Other entities must partner with a public agency to apply for a grant.
- The grant program will contain two categories:
 - Capital projects
 - § Activities leading to/including:
 - Environmental Clearance
 - Design
 - Right of Way
 - Construction
 - § Construction grant requests must include cost estimates supported by 30% to 35% design.
 - Planning studies
 - § Includes planning studies to support capital project development for those projects currently listed on Attachment A of 2016 Measure B. It does not include general/master planning efforts.
- The minimum grant award is \$50,000.
- The maximum grant award per sponsoring agency can be no more than 50% of the total available funds per call for projects per cycle, unless the cycle is undersubscribed.
- Project criteria will be developed in conjunction with the VTA Technical Advisory Committee (TAC) Capital Improvement Program Working Group, and brought to the TAC and Bicycle & Pedestrian Advisory Committee (BPAC) for input.
- Scoring committee for the grant program will be comprised of three BPAC members, three Member Agency staff, and one VTA staff person.

Criteria

- Only projects currently listed on Attachment A of 2016 Measure B are eligible.

- Capital Projects will be scored on criteria that supports the language in 2016 Measure B.
 - Countywide significance
 - Connection to/serves schools, transit, or employment centers
 - Fills gaps in bicycle/pedestrian network
 - Provides safer crossings of barriers
 - Makes walking or biking safer
 - Makes walking or biking more convenient
 - Other criteria to consider:
 - § Safety benefits
 - § Increase in bicycle and pedestrian usage
 - § Community support
 - § Project readiness
 - § Projects serve Communities of Concern

Requirements

- Competitive grant projects require a 10% non-2016 Measure B contribution.
- Reporting requirements will be detailed in agreements executed with VTA for project funding.
- All applications must include a delivery schedule.
- Funds will be available on a reimbursement basis.
- VTA Complete Streets reporting requirements will be required for Planning and Capital projects.
- All collateral material will be required to display a 2016 Measure B logo.

**FUNDING AGREEMENT
BETWEEN
CITY OF SANTA CLARA
AND
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
FOR
WALSH AVENUE CLASS IV BIKEWAY STUDY**

THIS AGREEMENT ("AGREEMENT") is between the CITY OF Santa Clara, referred to herein as "CITY", and the SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, referred to herein as "VTA". Hereinafter, CITY and VTA may be individually referred to as "PARTY" or collectively referred to as "PARTIES".

I. RECITALS

1. Whereas, on June 24, 2016, the VTA Board of Directors adopted a resolution to place a ballot measure before the voters of Santa Clara County in November 2016 to authorize a one-half of one percent retail transaction and use tax ("2016 MEASURE B") for 30 years for nine transportation-related program categories; and
2. Whereas, on November 8, 2016, the voters of Santa Clara County enacted 2016 MEASURE B for 30 years to pay for the nine transportation-related program categories; and
3. Whereas, the duration of 2016 MEASURE B will be 30 years from the initial year of collection, beginning April 1, 2017, and continuing through March 31, 2047; and
4. Whereas, on October 5, 2017, the VTA Board of Directors established the 2016 Measure B Program ("PROGRAM") and adopted the 2016 Measure B Program Category Guidelines; and
5. Whereas, the PROGRAM includes a Bicycle and Pedestrian program category ("BIKE/PED CATEGORY") to fund bicycle and pedestrian projects and educational programs; and
6. Whereas, the BIKE/PED CATEGORY consists of three sub-categories, including a Planning Studies Competitive Grant Program ("BIKE/PED PLANNING PROGRAM"); and
7. Whereas, on September 3, 2020 the VTA Board of Directors adopted the BIKE/PED PLANNING PROGRAM criteria; and
8. Whereas, on February 1, 2021 the Fiscal Year ("FY") 2020 (July 1, 2019 to June 30, 2020) to Fiscal Year 2021 (July 1, 2020 to June 30, 2021) BIKE/PED PLANNING PROGRAM call for projects was released; and

9. Whereas on June 3, 2021 the VTA Board of Directors approved the FY2020 to FY2021 recommended project list for the BIKE/PED PLANNING PROGRAM; and
10. Whereas, CITY'S Walsh Avenue Class IV Bikeway Study ("PROJECT") is an eligible project on the VTA Board of Directors approved list for the BIKE/PED PLANNING PROGRAM; and
11. Whereas, VTA and CITY desire to specify herein the terms and conditions under which the BIKE/PED PLANNING PROGRAM funds will be administered to CITY by VTA as directed by the VTA Board of Directors.

NOW, THEREFORE, for good and valuable consideration, the PARTIES agree as follows:

II. AGREEMENT

1. PROJECT DESCRIPTION

The PROJECT is a planning and feasibility study of a potential Class IV bikeway on Walsh Avenue from Bowers Avenue to Lafayette Street, all located within Santa Clara, California. The purpose of the PROJECT is to complete community outreach to obtain objectives and goals, complete traffic, parking, and safety analyses of various alternatives, and develop 10% conceptual designs and cost estimates.

2. SCOPE OF WORK

The scope of work for this AGREEMENT consists of existing conditions analysis, public outreach, community engagement and technical analysis of a potential bicycle facility. The final deliverables are a study report, a preferred alternative approved by CITY Council and the community, and 10% conceptual engineering design and cost estimate for the PROJECT.

3. TERM OF AGREEMENT

The term of this AGREEMENT will commence on the Effective Date (as defined in the signature block below) and continue through the later of: (i) October 31, 2023, (ii) completion of the PROJECT, (iii) cancellation of the PROJECT, or (iv) termination of this AGREEMENT pursuant to the terms herein.

4. COST OF PROJECT

Total cost of the PROJECT is estimated not to exceed \$200,000 ("TOTAL PROJECT COST"). TOTAL PROJECT COST means the total cumulative dollar amount actually incurred and expended toward the PROJECT by all PARTIES involved, as measured at the completion or termination of the PROJECT.

5. FINANCIAL CONTRIBUTION TO COST OF PROJECT

- a. VTAs Financial Contribution for PROJECT. VTA will contribute an amount not to exceed \$140,000 of BIKE/PED PLANNING PROGRAM funds to be used by CITY for completion of the Project. All funds will be available on a reimbursement basis for ELIGIBLE COSTS (as described in Section 6 herein) only, pursuant to the terms and conditions set forth herein.
- b. CITYs Financial Contribution for PROJECT. CITY is solely responsible for all funds CITY has expended toward the PROJECT prior to Effective Date of this AGREEMENT, and CITY must not seek reimbursement from VTA for such costs.
- c. Additional Funds. Any additional funds required to complete the PROJECT will be CITYs sole responsibility.
- d. PROJECT Savings. If the PROJECT is anticipated to be delivered under budget, BIKE/PED PLANNING PROGRAM funds will be reduced in proportion to CITYs Financial Contribution to PROJECT.
- e. In all circumstances, regardless of the TOTAL PROJECT COST, CITY is responsible for contributing a minimum of 30% of the TOTAL PROJECT COST.

6. ELIGIBLE USE OF FUNDS

Only PROJECT costs incurred by CITY after the Effective Date of this AGREEMENT, will be eligible for reimbursement.

VTA will only reimburse CITY for actual costs directly related to the PROJECT (“ELIGIBLE COSTS”). ELIGIBLE COSTS are costs that: (i) are directly related to the planning, 10% design, and administration of the PROJECT; and (ii) were incurred in compliance with all applicable 2016 Measure B program requirements.

The following costs are ineligible for reimbursement:

- expenses for organizational functions, businesses services, and information technology;
- overhead cost such as rent and utilities; and
- food or beverages (e.g. as part of meetings, workshops, training, or events).

7. CITYs ROLE

- a. Tasks. CITY will be the sponsor and implementing agency for the PROJECT. In its role as sponsor and implementing agency under this AGREEMENT, CITY must perform and/or be responsible for the following tasks:
 - i. serve as project manager for PROJECT;

- ii. all actions necessary to procure professional services for the PROJECT, including but not limited to advertising the work via a public solicitation, opening bids in response to the public solicitation, awarding a contract, approving contract documents, and administering the awarded contract in accordance with all applicable laws, regulations, and codes, including but not limited to the California Public Contract Code and the California Labor Code;
- iii. obtain all necessary permits for performance of the PROJECT;
- iv. conduct community engagement activities for the PROJECT as described in Attachment A; and
- v. conduct standard close-out activities for the PROJECT, including but not limited to performing final accounting review and reviewing all contractual requirements.

b. Other PROJECT Management Duties. CITY must:

- i. submit to VTA the most current version of VTA's 2016 Measure B Complete Streets Checklist ("Complete Streets Checklist") for PROJECT (as supplied by VTA to CITY) within five (5) business days of the Effective Date of this AGREEMENT;
- ii. submit to VTA a project management plan ("PMP") (as supplied by VTA to CITY) within thirty (30) business days of the Effective Date of this AGREEMENT; the PMP must be in writing and must include information regarding staffing plan, cost, schedule, contracting plan, and risk assessment;
- iii. actively monitor actual PROJECT expenditures to ensure that the 2016 MEASURE B funds are used to pay only for ELIGIBLE COSTS (as defined in Section 6. ELIGIBLE USE OF FUNDS);
- iv. provide VTA with written quarterly progress updates on the PROJECT, including but not limited to updates on PROJECT expenditures, any changes in scope and schedule, community engagement outcome, and PROJECT status;
- v. provide VTA copies of PROJECT deliverables including, but not limited to, reports, designs, drawings, plans, specifications, schedules, and other materials;
- vi. submit the PROJECT's final report ("FINAL REPORT") to VTA; this FINAL REPORT must be in writing and must include information regarding final PROJECT costs and study results, along with any other information VTA may require for inclusion in the FINAL REPORT; and

- vii. CITY will make staff available to present on the PROJECT at VTA committees as needed.

8. VTA's Role.

VTA will perform and/or be responsible for the following tasks to perform oversight for PROJECT:

- a. review PROJECT's Complete Streets Checklist to ensure Complete Streets compliance; and
- b. review PROJECT's PMP to provide oversight of the delivery of the PROJECT and to ensure PROJECT compliance with the 2016 Measure B Program Category Guidelines.

9. CITY's OBLIGATIONS

CITY must:

- a. ensure that all 2016 Measure B funds are expended on only allowable BIKE/PED PLANNING PROGRAM expenditures as described above in Section 6. ELIGIBLE USE OF FUNDS;
- b. begin request for reimbursement of ELIGIBLE COSTS (see Section 6. ELIGIBLE USE OF FUNDS) from VTA within one (1) year of the Effective Date of this AGREEMENT;
- c. submit to VTA all records including contractors' invoices, miscellaneous invoices, and force account charges as substantiation for invoices submitted to VTA for reimbursement hereunder;
- d. maintain financial records, books, documents, papers, accounting records, and other evidence pertaining to costs related to this AGREEMENT for five (5) years; CITY shall make such records available to VTA upon VTA's written request for review and audit purposes, any financial audits will be performed at VTA's sole discretion; and
- e. submit invoices to vta.accounts payable@vta.org, no more frequently than monthly, for reimbursement of ELIGIBLE COSTS (see Section 6. ELIGIBLE USE OF FUNDS); CITY must submit invoices within one year of the date CITY incurs the cost submitted on the invoice for reimbursement (unless otherwise approved by VTA in writing).

10. VTA's OBLIGATIONS

VTA will remit the amount due to the CITY under an invoice within thirty (30) calendar days of receipt of a complete and proper, fully documented invoice complying with the requirements set forth herein.

11. INDEMNIFICATION

Neither VTA nor any officer or employee thereof will be responsible for any damage or liability arising out of or relating to CITY's acts or omissions under or in connection with any work, authority, or jurisdiction associated with this AGREEMENT. Pursuant to California Government Code §895.4, CITY must fully defend, indemnify, and save harmless VTA from all suits or actions of every name, kind, and description arising from an injury (as defined by California Government Code §810.8) relating to CITY's acts or omissions under or in connection with any work, authority, or jurisdiction delegated to CITY under this AGREEMENT. This provision will survive the termination or expiration of this AGREEMENT.

12. INSURANCE

At all times during this AGREEMENT, CITY must comply with the insurance requirements and specifications of Attachment B attached hereto, and herein incorporated by reference.

13. ADDITIONAL INSURED AND INDEMNITY PROVISION

In any agreement executed between the CITY and a third party for purposes related in any way to the subject matter of this AGREEMENT ("Third Party Contract"), the CITY must require that VTA be named as (i) Additional insureds on a primary and non-contributory basis with Separation of Insureds and Waiver of Subrogation on all policies of insurance, except when not applicable required in the Third Party Contract and (ii) indemnified parties in any indemnity provision contained in the Third Party Contract. Third Party Contracts must contain insurance requirements with coverages at least as broad as, and limits at least as great as, the requirements of Attachment B in this AGREEMENT.

14. PUBLIC WORKS

If the CITY awards a contract to a third party for the performance of a public work (as defined in California Labor Code Section 1720 through 1720.6) (a "Public Works Contract") in connection with this AGREEMENT, the CITY must comply, and must require such third party to comply, with the requirements of California Labor Code Section 1720 et seq. If the Public Works Contract is funded in whole or in part with federal funds, the CITY must also comply, and must require such third party to also comply, with the requirements of the Davis Bacon Act (40 U.S.C. Sections 3141-3144 and 3146-3148).

15. COMPLIANCE WITH APPLICABLE LAW

In the execution of the PROJECT and performance of its responsibilities set forth herein, CITY must comply with all applicable requirements of local, state, and federal laws.

16. COMPLIANCE WITH 2016 MEASURE B REQUIREMENTS

In its performance under this AGREEMENT, CITY must comply with, and must ensure PROJECT compliance with all 2016 MEASURE B requirements set forth in the 2016 Measure B Program Category Guidelines for the BIKE/PED CATEGORY as identified in Attachment C, attached hereto.

17. TERMINATION

Each of the PARTIES may at any time terminate this AGREEMENT by giving ten (10) business days written notice of such termination to the other PARTY. Notice must identify the effective date of such cancellation and must be provided in accordance with the terms and conditions of this AGREEMENT. In the event of termination as set forth herein, CITY must submit its final invoice to VTA within thirty (30) calendar days of the effective date of termination, such invoice will be solely for ELIGIBLE COSTS incurred by CITY prior to termination (see Section 6. ELIGIBLE USE OF FUNDS).

18. AUDIT AND RECORDS

- a. All PARTIES must maintain, and shall require their contractors to maintain, in accordance with generally accepted accounting principles and practices, complete books, accounts, records and data pertaining to services performed under this AGREEMENT, including the costs of contract administration. Such documentation must be supported by properly executed payrolls, invoices, contracts, and vouchers evidencing in detail the nature and propriety of any charges and must be sufficient to allow a proper audit of services. All checks, payrolls, invoices, contracts, and other accounting documents pertaining in whole or in part to the services must be clearly identified and readily accessible.
- b. For the duration of the AGREEMENT, and for a period of five (5) years after final payment, the PARTIES and their representatives shall have access during normal business hours to any books, accounts, records, data, and other relevant documents that are pertinent to this AGREEMENT for audits, examinations, excerpts, and transactions and copies thereof must be furnished upon request.

19. NOTICES

All notices required or permitted under this AGREEMENT must be in writing, will be effective five (5) days after being sent by personal service or certified mail, or forty-eight (48) hours after being sent by electronic mail to the individuals at the addresses set forth below, or to such other address which may be specified in writing by the PARTIES hereto.

VTA:
Marcella Rensi
Deputy Director, Grants & Allocations
Santa Clara Valley Transportation Authority
3331 N First Street
San Jose, CA 95134
Email: marcella.rensi@vta.org

CITY:
<Name>
<Title>
<CITY, department>
<Address>
Email: <Email>

Written notification to the other PARTY must be provided, in advance, for changes in the name or address of the individuals identified above.

20. GENERAL TERMS AND CONDITIONS

- a. **Headings.** The subject headings of the articles and paragraphs in this AGREEMENT are included for convenience only and will not affect the construction or interpretation of any of its provisions.
- b. **Construction and Interpretation of Agreement.** This AGREEMENT, and each of its provisions, terms, and conditions, has been reached as a result of negotiations between the PARTIES. Accordingly, each PARTY expressly acknowledges and agrees that (i) this AGREEMENT will not be deemed to have been authored, prepared, or drafted by any particular PARTY and (ii) the rule of construction to the effect that ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this AGREEMENT or in the resolution of disputes.
- c. **Amendment.** No alteration or variation of the terms of this AGREEMENT will be valid unless made in writing and signed by both of the PARTIES hereto, and no oral understanding or agreement not incorporated herein will be binding on any of the PARTIES hereto.
- d. **Entire Agreement.** This AGREEMENT contains the entire understanding between VTA and CITY relating to the subject matter hereof. This AGREEMENT supersedes any and all other agreements which may have existed between the PARTIES, whether oral or written, relating to the subject matter hereof. This AGREEMENT is binding upon each PARTY, their legal representatives, and successors for the duration of the AGREEMENT.
- e. **Representation of Authority.** Each PARTY to this AGREEMENT represents and warrants that each person whose signature appears hereon has been duly authorized and has the full authority to execute this AGREEMENT on behalf of the entity that is a party to this AGREEMENT.
- f. **No Waiver.** The failure of either PARTY to insist upon the strict performance of any of the terms, covenants and conditions of this AGREEMENT will not be deemed a waiver of any right or remedy that either PARTY may have, and will not be deemed a waiver of either PARTY's right to require strict performance of all of the terms, covenants, and conditions hereunder.

- g. **Dispute Resolution.** If a question or allegation arises regarding (i) interpretation of this AGREEMENT or its performance, or (ii) the alleged failure of a PARTY to perform, the PARTY raising the question or making the allegation shall give written notice thereof to the other PARTY. The PARTIES shall promptly meet in an effort to resolve the issues raised. If the PARTIES fail to resolve the issues raised, alternative forms of dispute resolution, including mediation, may be pursued by mutual agreement. It is the intent of the PARTIES to the greatest extent possible to avoid litigation as a method of dispute resolution.
- h. **Severability.** If any of the provisions of this AGREEMENT (or portions or applications thereof) are held to be unenforceable or invalid by any court of competent jurisdiction, VTA and CITY shall negotiate an equitable adjustment in the provisions this AGREEMENT with a view toward effecting the purpose of this AGREEMENT, and the validity and enforceability of the remaining provisions or portions or applications thereof will not be affected thereby.
- i. **Governing Law.** The laws of the State of California will govern this AGREEMENT, as well as any claim that might arise between CITY and VTA, without regard to conflict of law provisions.
- j. **Venue.** Any lawsuit or legal action arising from this AGREEMENT must be commenced and prosecuted in the courts of Santa Clara County, California. CITY agrees to submit to the personal jurisdiction of the courts located in Santa Clara County, California for the purpose of litigating all such claims.
- k. **Ownership of Work.** All reports, designs, drawings, plans, specifications, schedules, studies, memoranda, and other documents assembled for or prepared by or for; in the process of being assembled or prepared by or for; or furnished to VTA or CITY under this AGREEMENT are the joint property of all PARTIES. Each PARTY is entitled to copies and access to these materials during the progress of the PROJECT and upon completion of the PROJECT or termination of this AGREEMENT. All PARTIES may retain a copy of all material produced under this AGREEMENT for use in their general activities.
- l. **Attribution to the VTA.** CITY must include attribution to VTA that indicates part of the work was funded by 2016 Measure B Funds. This provision applies to any project or publication that was funded in part or in whole by 2016 Measure B Funds. Acceptable forms of attribution include 2016 Measure B's branding on PROJECT-related documents, construction signs, public information materials, and any other applicable documents. VTA will provide 2016 Measure B branding to CITY.
- m. **Non-discrimination.** The PARTIES and any contractors performing services on behalf of the PARTIES ("Contractors") will not unlawfully discriminate or permit discrimination, harass, or allow harassment against any person or group of persons because of race, color, religious creed, national origin, ancestry, age (over 40), sex, gender, gender identity, gender expression, sexual orientation, marital status, pregnancy, childbirth or related conditions, medical condition (including cancer), mental disability, physical disability (including HIV and AIDS), genetic information, or military and

veteran's status, or in any manner prohibited by federal, state, or local laws. In addition, the PARTIES and Contractors shall not unlawfully deny any of their employees family care leave or discriminate against such employees on the basis of having to use family care leave. The PARTIES and Contractors must ensure that the evaluation and treatment of their employees and applicants for employment is free of such discrimination and harassment.

- n. **Relationship of the PARTIES.** It is understood that this is an AGREEMENT by and between independent parties and does not create the relationship of agent, servant, employee, partnership, joint venture or association, or any other relationship other than that of independent contractor.
- o. **Execution in Counterparts / Electronic Signature.** This AGREEMENT may be executed in any number of counterparts and by each PARTY in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute one and the same instrument.

Unless otherwise prohibited by law, VTA policy, or CITY policy, the PARTIES agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect as a contract executed with an original ink signature. The term "electronic copy of a signed contract" refers to a writing as set forth in Evidence Code Section 1550. The term "electronically signed contract" means a contract that is executed by applying an electronic signature using technology approved by each of the PARTIES.

- p. **Warranty of Authority to Execute Agreement.** Each PARTY to this AGREEMENT represents and warrants that each person whose signature appears hereon is authorized and has the full authority to execute this AGREEMENT on behalf of the entity that is a PARTY to this AGREEMENT.

Signatures of PARTIES on following page.

IN WITNESS WHEREOF, the PARTIES have executed this AGREEMENT as of the last date set forth below (“Effective Date”).

**Santa Clara Valley Transportation
Authority**

City of Santa Clara

Carolyn Gonot
General Manager/CEO

<Name>
<Title>

Date

Date

Approved as to Form:

Approved as to Form:

Uzma Saeed
Senior Assistant Counsel

<Name>
<Title>

ATTACHMENT A

Community Engagement Plan

Timeline	Purpose	Communication method	Target groups and stakeholders	Activities	Resources
September 2022	Introduce the project	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
October 2022	Introduce the project	Workshop #1; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; Bicycle & Pedestrian Advisory Committee (BPAC)	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants
December 2022	Present alternatives	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
January 2023	Present alternatives	Workshop #2; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; BPAC	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants
April 2023	Present findings and draft plan	Mail out postcards to address within ½ mile of corridor	General public	Notifications of website, phone number, and survey	2 staff, 3 consultants
May 2023	Present findings and draft plan	Workshop #3; Stakeholder interview; Event booth, BPAC meeting	Residents/employers; school district; general public; BPAC	Virtual workshop, presentation boards, polls, photos, and Q&A	2 staff, 3 consultants

ATTACHMENT B

Insurance Requirements

Without limiting CITY's obligation to indemnify and hold harmless VTA, CITY must procure and maintain for the duration of the AGREEMENT insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by CITY, its agents, representatives, or employees, or subcontractors. The cost of such insurance must be included in AGREEMENT price. In the event of any material change in the AGREEMENT Scope of Services, VTA reserves the right to change the insurance requirements set forth herein. CITY must furnish complete copies of all insurance policies, within three (3) business days of any request for such by VTA.

A. Liability and Workers' Compensation Insurance

1. Minimum Scope of Coverage

Coverage must be at least as broad as:

- a. Insurance Services Office General Liability coverage ("occurrence" form CG 0001). General Liability insurance written on a "claims made" basis is not acceptable.
- b. Insurance Services Office Business Auto Coverage, Insurance Services Office form number CA 0001, covering Automobile Liability, code 1 "any auto." Auto Liability written on a "claims-made" basis is not acceptable.
- c. Workers' Compensation insurance as required by the Labor Code of the State of California, and Employer's Liability insurance.
- d. Professional Liability, including limited contractual liability coverage, covering liability arising out of any negligent act, error, mistake, or omission in the performance of CITY's services under this AGREEMENT. This coverage must be continuously maintained for a minimum of two (2) years following completion of this AGREEMENT. This coverage may be written on a "claims made" basis, if so, please see special provisions in Section B.

2. Minimum Limits of Insurance

CITY must maintain limits no less than:

- a. General Liability (including Umbrella/Excess insurance): \$2,000,000 limit per occurrence for bodily injury, personal injury, and property damage. If a General Liability or other form with a general aggregate limit is used, either the general aggregate limit must apply

separately to this project/location or the general aggregate limit must be twice the required occurrence limit. This requirement may be satisfied by a combination of General Liability insurance with Excess or Umbrella policies, but in no event may the General Liability primary policy limit per occurrence be less than \$2,000,000, unless Umbrella/Excess policies feature inception and expiration dates concurrent with the underlying policy, "Follow Form" coverage, and a "Drop Down" provision.

- b. Automobile Liability \$1,000,000 limit per accident for bodily injury and property damage.
- c. Workers' Compensation and Employer's Liability: Statutory Workers' Compensation limits and Employer's Liability limits of \$1,000,000 per accident.
- d. Professional Liability: \$2,000,000 each occurrence/aggregate minimum limit per claim. This requirement may be satisfied by a combination of Professional Liability insurance with Excess or Umbrella policies, but in no event may the Professional Liability primary policy limit per occurrence be less than \$2,000,000, unless Umbrella/Excess policies feature inception and expiration dates concurrent with the underlying policy, "Follow Form" coverage, and a "Drop Down" provision.

3. Self-Insured Retention

The certificate of insurance must disclose the actual amount of any deductible or self-insured retention, or lack thereof, for all coverages required herein. Any self-insured retention or deductible in excess of \$250,000 must be declared to and approved by VTA. If CITY is a governmental authority such as a state, municipality or special district, self-insurance is permitted. To apply for approval for a level of retention or deductible in excess of \$250,000, CITY must provide a current financial report including balance sheets and income statements for the past three years, so that VTA can assess CITY's ability to pay claims falling within the self-insured retention or deductible. Upon review of the financial report, if deemed necessary by VTA in its sole discretion, VTA may elect one of the following options: to accept the existing self-insured retention or deductible; require the insurer to reduce or eliminate the self-insured retention or deductible as respects VTA, its directors, officers, officials, employees and volunteers; or to require CITY to procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses. Applicable costs resulting therefrom will be borne solely by CITY. CITY may request execution of a nondisclosure agreement prior to submission of financial reports.

B. Claims Made Provisions (not applicable to General Liability or Automobile Liability)

Claims-made coverage is never acceptable for General Liability or Auto Liability. Claims-made may be considered for Professional, Environmental/Pollution, or Cyber Liability. If coverage is written on a claims-made basis, the Certificate of Insurance must clearly state so. In addition to all other coverage requirements, such policy must provide that:

1. The policy must be in effect as of the date of this AGREEMENT and the retroactive date must be no later than the date of this AGREEMENT.
2. If any policy is not renewed or the retroactive date of such policy is to be changed, CITY must obtain or cause to be obtained the broadest extended reporting period coverage available in the commercial insurance market. This extended reporting provision must cover at least two (2) years.
3. No prior acts exclusion may be added to the policy during the contract period.
4. The policy allows for reporting of circumstances or incidents that might give rise to future claims.

C. Other Provisions

The policies must contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability

- a. VTA, its directors, officers, officials, employees and volunteers are to be named as additional insureds as respects: liability arising out of activities performed by or on behalf of CITY, including VTA's general supervision of CITY; products and completed operations of CITY and its subcontractors; premises owned, occupied or used by CITY; or automobiles owned, leased, hired or borrowed by CITY. The coverage must contain no special limitations on the scope of protection afforded to VTA, its directors, officers, officials, employees, or volunteers. Additional Insured endorsements must provide coverage at least as broad as afforded by the combination of ISO CG 20 10 10 01 and CG 20 37 10 01.
- b. Any failure to comply with reporting provisions of the policies may not affect coverage provided to VTA, its directors, officers, officials, employees, or volunteers.
- c. CITY's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- d. The General Liability General Aggregate limit must apply per project, not per policy.

2. All Coverages

- a. The insurer must agree to waive all rights of subrogation against VTA, its directors, officers, officials, employees, and volunteers for losses arising from work performed by CITY and its subcontractors for VTA.
- b. CITY's insurance coverage must be primary insurance as respects VTA, its directors, officers, officials, employees, and volunteers. Self-insurance or insurance that may be maintained by VTA, its directors, officers, officials, employees, or volunteers may apply only as excess to CITY's insurance. CITY's insurance must not seek contribution from VTA's insurance program.

3. Other Insurance Provisions

- a. The Certificate must disclose the actual amount of the Deductible or Self-Insured Retention
- b. If any coverage forms or endorsements required by this AGREEMENT are updated by their publishers, whether they be the insurance carrier(s), the Insurance Services office, or the American Association of Insurance Services, during the duration of this AGREEMENT, VTA reserves the rights to require CITY to procure said coverage forms or endorsements using the updated versions upon the next renewal cycle.

D. Acceptability of Insurers

Insurance and bonds must be placed with insurers with an A.M. Best's rating of no less than A VII (financial strength rating of no less than A and financial size category of no less than VII), unless specific prior written approval has been granted by VTA.

E. Certificates of Insurance

CITY must furnish VTA with a Certificate of Insurance. The certificates for each insurance policy are to be signed by an authorized representative of that insurer. The certificates must be issued on a standard ACORD Form. The contractor must instruct their insurance broker/agent to submit all insurance certificates and required notices electronically in PDF format to Insurance.certificates@vta.org. All endorsements must be attached to the ACORD certificate in a single PDF document.

The certificates must (1) identify the insurers, the types of insurance, the insurance limits, the SIRs/deductibles or lack thereof and the policy term, (2) include copies of all the actual policy endorsements required herewith, and (3) in the "Certificate Holder" box include:

Santa Clara Valley Transportation Authority ("VTA")
3331 North First Street
San Jose, CA 95134-1906

In the Description of Operations/Locations/Vehicles/Special Items Box, the VTA AGREEMENT number must appear, the list of policies scheduled as underlying on the Umbrella/Excess policy must be listed, Certificate Holder must be named as additional insured, and Waiver of Subrogation must be indicated as endorsed to all policies as stated in the AGREEMENT Documents.

It is a condition precedent to award of this AGREEMENT that all insurance certificates and endorsements be received and approved by VTA before AGREEMENT execution. No work may be performed until insurance is in full compliance. VTA reserves the rights to require complete, certified copies of all required insurance policies, at any time.

If CITY receives notice that any of the insurance policies required by this Exhibit may be cancelled or coverage reduced for any reason whatsoever, CITY must immediately provide written notice to VTA that such insurance policy required by this Exhibit is canceled or coverage is reduced.

F. Maintenance of Insurance

If CITY fails to maintain insurance as required herein, VTA, at its option, may suspend payment for work performed and/or may order CITY to suspend work at CITY's expense until a new policy of insurance is in effect.

Ed. Rev. 10-1-19

ATTACHMENT C

Bicycle & Pedestrian Program Guidelines

(Adopted by VTA Board of Directors on October 5, 2017)

Definition from Resolution No. 2016.06.17

To fund bicycle and pedestrian projects of countywide significance identified by the cities, County and VTA. The program will give priority to those projects that connect to schools, transit and employment centers; fill gaps in the existing bike and pedestrian network; safely cross barriers to mobility; and make walking or biking a safer and more convenient means of transportation for all county residents and visitors. Bicycle and pedestrian educational programs such as Safe Routes to Schools, will be eligible for funding.

Total Funding

- \$250 million in 2017 dollars.

Distribution

- Board of Directors will allocate funding schedule and amount for program through the budget cycle.
- VTA anticipates that allocations will be programmed based upon the total allocation for the Bicycle & Pedestrian Program contained in 2016 Measure B divided by the number of years in the measure.
- Future allocations will vary depending on the amount of sales tax revenue collected.
- Funds will be distributed on a 2-year cycle. The program will consist of three categories: education & encouragement programs, planning studies, and capital projects.
- A total of 15% of available program area funds will be set aside for the education & encouragement category. The funds will be allocated as follows:
 - \$250,000 for countywide (including targeting unincorporated areas) education & encouragement programs
 - Remaining funds allocated by city population formula with a \$10,000 annual minimum allocation per city
- A maximum of 5% of available program area funds will be allocated to planning studies grants category.
- If the planning studies grants category is not fully awarded, the remaining funds will roll into the capital category.
- If a cycle's funds are not fully awarded, the balance will roll into the next cycle's budget.
- Example of breakdown of grant program funding: If Bicycle/Pedestrian Program Area is programmed at \$8.3 million/year:
 - Capital - \$6.6 million (minimum)
 - Planning - \$415,000 (maximum)
 - Education & Encouragement - \$1.25 million (maximum)

Implementation

Education & Encouragement (Formula Distribution)

- VTA and individual agencies will enter into a Master Agreement for Education & Encouragement funds.
- VTA will notify agency of estimated allocation for two-year cycle.
- Agency will submit annual education & encouragement work program.
- Funds will be available on a reimbursable basis. Agencies may submit invoices to VTA on a monthly, quarterly, or annual basis. Invoices must be submitted within one year of the date posted on the contractor's invoice.
- Education & Encouragement funds may be banked for a maximum of three years with explanation of banking purposes.
- VTA will conduct an assessment regarding the effectiveness of the program.

Grant Program (Competitive)

- Only a public agency can serve as a project sponsor. Other entities must partner with a public agency to apply for a grant.
- The grant program will contain two categories:
 - Capital projects
 - § Activities leading to/including:
 - Environmental Clearance
 - Design
 - Right of Way
 - Construction
 - § Construction grant requests must include cost estimates supported by 30% to 35% design.
 - Planning studies
 - § Includes planning studies to support capital project development for those projects currently listed on Attachment A of 2016 Measure B. It does not include general/master planning efforts.
- The minimum grant award is \$50,000.
- The maximum grant award per sponsoring agency can be no more than 50% of the total available funds per call for projects per cycle, unless the cycle is undersubscribed.
- Project criteria will be developed in conjunction with the VTA Technical Advisory Committee (TAC) Capital Improvement Program Working Group, and brought to the TAC and Bicycle & Pedestrian Advisory Committee (BPAC) for input.
- Scoring committee for the grant program will be comprised of three BPAC members, three Member Agency staff, and one VTA staff person.

Criteria

- Only projects currently listed on Attachment A of 2016 Measure B are eligible.

- Capital Projects will be scored on criteria that supports the language in 2016 Measure B.
 - Countywide significance
 - Connection to/serves schools, transit, or employment centers
 - Fills gaps in bicycle/pedestrian network
 - Provides safer crossings of barriers
 - Makes walking or biking safer
 - Makes walking or biking more convenient
 - Other criteria to consider:
 - § Safety benefits
 - § Increase in bicycle and pedestrian usage
 - § Community support
 - § Project readiness
 - § Projects serve Communities of Concern

Requirements

- Competitive grant projects require a 10% non-2016 Measure B contribution.
- Reporting requirements will be detailed in agreements executed with VTA for project funding.
- All applications must include a delivery schedule.
- Funds will be available on a reimbursement basis.
- VTA Complete Streets reporting requirements will be required for Planning and Capital projects.
- All collateral material will be required to display a 2016 Measure B logo.



Agenda Report

21-1038

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on a Resolution Authorizing the City Manager to Negotiate and Execute Master Service Agreements with RWG USA, Inc. and Standard Aero to Perform Gas Turbine Engine Parts Supply, Field Services, and Depot Services

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

The City of Santa Clara's Electric Utility, Silicon Valley Power (SVP) operates three gas fired power generation facilities within the City limits. The Donald Von Raesfeld Power Plant (DVR), the main facility, is a 2x1 combined cycle power plant rated at 147 Megawatts of electrical power generation. The Gianera Generating Station, the City's peaking generation facility, is rated at 49.5 Megawatts of electrical power generation. The Cogeneration Plant (Cogen), rated at 7 Megawatts, operates two Allison 501-KB5 Gas turbine engines for power generation.

Gas turbine engines are critical to SVP's continued energy generation operations. As peak power needs in the City continue to grow, these engines become more important to maintain grid stability and reliability and are important to be available to support load growth in the City.

Siemens is the Original Equipment Manufacturer who owns the Allison brand of turbine engines. Only Siemens-authorized service providers may perform field or depot services. RWG and Standard Aero are the only service providers on the North American continent that are authorized by Siemens to perform both field services and depot services on the Allison turbines. There are two additional contractors in the world that are authorized by Siemens to perform the field and depot services; Hindustan Aeronautics LTD (located in India), and Centrax Limited Gas Turbine Division (located in England). However, it is not practical to contract with either Hindustan Aeronautics or Centrax Limited as SVP would have to either pay exorbitant travel and lodging fees in order to get the contractors' service teams to the City, or pay very high shipping and customs fees in order to ship one of the engines overseas to their location. Shipping an engine overseas would also greatly increase the amount of time the engine is out of service.

Major engine overhauls for the Allison engines are recommended approximately every 40,000 - 60,000 operating hours, which is between six and eight years of operation. The turbine hot section overhaul interval for the Allison engines is recommended approximately every 20,000 - 30,000 operating hours or between three and four years of operation based on Cogen's current operating profile. Engine condition will affect the actual time between overhauls.

These engines require periodic inspections, repairs, and replacement of parts to maintain optimum

availability and reliability. In May 2019, Council approved purchase orders with RWG USA, Inc. (RWG) to perform major overhaul services on two of the Allison 501-KB5 turbine engines at the Cogeneration Plant, as the result of a competitive RFP process. Engines ASP-758 and ASP-759 had their turbine hot sections overhauled in 2020 and 2021, respectively. Each overhaul has a cost of approximately \$1,000,000. Cogen's spare engine, ASP-1076, currently requires compressor and turbine work which constitutes a Major Overhaul. The compressor portions for these engines are due for service within the next five years.

On September 23, 2021, SVP staff identified a vibration on one of the Cogen engines which necessitated a shutdown of that engine unit. Upon further inspection, contractors and staff identified damage to the turbine section of the engine which requires immediate corrective maintenance that can only be performed in a shop or depot. The spare engine is due for a major overhaul and is not available to be installed. On September 28, 2021; the City Manager authorized emergency procurement of services pursuant to Municipal Code sections 2.105.300 and Public Contract Section 1102 to bring this engine back into service. The emergency work will mitigate the loss of essential public services. Repairs will be performed by RWG (one of the two authorized North American Service Providers for Siemens engines). In 2019, RWG was the lowest bidder in a Request for Proposal (RFP) to perform these services. The expected cost is \$750,000. On staff's recommendation, the City Manager authorized expenditures of up to \$1.2 million because the engine will be disassembled, and commonly additional repairs are identified through this process. A recent major overhaul had a total cost of \$1.2 million. Staff will authorize work based on specific quotes.

DISCUSSION

To assure that contracts are already in place for emergencies as well as ongoing maintenance and repairs, staff recommends that the City Manager is authorized to negotiate and execute master service agreements with RWG and Standard Aero Limited (Standard Aero) to perform as-needed parts supply, field services, and depot services on the Allison turbine engines.

Field services are defined as inspection, maintenance, and repair services that are performed at Cogen (in the field), including but not limited to:

- Borescope inspections: Borescope inspections are performed every six months or as needed such as when the engine operations indicate a fault.
- Package Inspections: Package inspections include air filter inspections; foreign object debris (FOD) inspections; accessory inspections. Package inspections are typically performed every six months.
- Engine swaps, such as swapping the spare engine for an engine needing major service or repair.
- Other field repairs and modifications to the engines to be performed in accordance with Allison 501-KB5 maintenance manual, inspection findings, and recommended service bulletins.

Depot Services are defined as inspection, maintenance, repair, and overhaul services that are performed at the contractor's location (depot), including but not limited to:

- Major Engine Overhaul: Major engine overhauls are typically performed after every 40,000 - 60,000 hours of service. The engine is shipped to the contractor's location where it is

completely disassembled to inspect individual parts. The contractor performs any necessary repairs and refurbishment on all components according to the original equipment manufacturer's (OEM) specifications. This work includes additional compressor inspections and repairs as needed.

- Inspection of the engine Hot Section (combustor and turbine): This inspection is typically performed after 20,000 - 30,000 hours of service after a major overhaul. During a Hot Section inspection, the contractor will fully inspect the engine, perform necessary repairs and refurbishment on combustor and turbine components according to OEM specifications.
- Any other in-depth troubleshooting that may require the engine to be disassembled at the contractor's location.

Executing the master service agreements with RWG and Standard Aero will allow SVP to select a service provider based on pricing and scheduling availability. Service categories are described in the Allison operating and maintenance manuals. When services are required, staff can request pricing based on the respective service package(s) and compare the pricing between RWG and Standard Aero.

Scheduling is also a critical factor in determining which service provider to use. There may be situations, such as outages, when SVP will need to select the service provider that can start work sooner even if that results in paying a higher cost for the work, because the costs of an outage can be more significant than provider cost differences. Scheduling services to start sooner can reduce the duration of an outage, which in turn reduces the risks of an extended outage. This can also ensure equipment availability for periods of high demand.

The initial term of each agreement is proposed to be five years, with five additional one-year options to extend at the discretion of the City. Compensation shall be paid on a per-project basis and shall not exceed an aggregate maximum amount of \$10,000,000 during the initial term. Staff from SVP and the City Attorney's Office will coordinate in negotiating additional specific terms and conditions with each contractor.

The required major overhaul for Cogen's spare engine, ASP-1076 will be awarded to RWG using of the results of the 2019 RFP in order to maximize the value and time investment in the RFP process. This will also assure that engine ASP-1076 is available as soon as possible to avoid potential future extended outages. The estimated pricing for the major overhaul of engine ASP-1076 overhaul is in line with the costs of the two previous overhauls and is anticipated to cost approximately \$1.2 million dollars. The difference includes a contingency based on past experience. When an engine is sent to a depot for overhaul, the engine is dismantled, and it is common for unanticipated repairs to be uncovered.

The contracts will be subject to applicable prevailing wage law.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378 (b)(4) in that it is a fiscal activity that does not involve commitment to a specific project which may result in potential significant impact on the environment. The services to be performed would be exempt from review

under CEQA Guidelines section 15301, operation, maintenance, and repair of existing facilities and mechanical equipment.

FISCAL IMPACT

The total proposed authorization in the Master Agreements is \$10,000,000. The costs associated with these proposed agreements are primarily budgeted as part of SVP's capital budget. Unanticipated services are typically budgeted in the department's operating budget. Funds for the cost of the turbine engine major overhaul services, including contingency are available in Electric Department Capital Improvement Project 2127 (Major Engine Overhaul and Repair).

Funds required for these agreements in future years will be included in proposed budgets for corresponding years.

COORDINATION

This report has been coordinated with the Finance Department and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

1. Adopt a Resolution authorizing the City Manager to negotiate and execute Master Service Agreements with RWG USA, Inc. and Standard Aero Limited to perform Gas Turbine Engine Parts Supply, Field Services, and Depot Services subject to the following conditions:
 - A. Each agreement shall have an initial term of five years and shall have a maximum amount not-to-exceed set by the City Manager subject to an aggregate maximum authority of \$10,000,000 during the initial term with annual spending subject to the annual appropriation of funds;
 - B. The City Manager shall be authorized to add or delete services consistent with the scope of the agreements and allow future rate adjustments subject to justification by contractor and the appropriation of funds; and
 - C. The City Manager shall be authorized to execute up to five one-year options to extend the term of the master service agreements, subject to the annual appropriation of funds.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Resolution

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA
AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND
EXECUTE MASTER SERVICE AGREEMENTS WITH RWG AND
STANDARD AERO LIMITED TO PERFORM GAS TURBINE
ENGINE FIELD AND DEPOT SERVICES**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, Silicon Valley Power (SVP), the City's Electric Utility, operates three gas fired power generation facilities within the City limits;

WHEREAS, the Cogeneration Plant, rated at 7 Megawatts, operates two Allison 501-KB5 gas turbine engines for power generation;

WHEREAS, the turbine engines require routine inspection, maintenance, and repair services in order to keep them operating at an optimal level including a major overhaul for each engine after approximately 30,000 hours of service or every four or five year;

WHEREAS, Siemens is the original equipment manufacturer;

WHEREAS, inspection, maintenance, and repair services may only be performed by an authorized Siemens service provider and RWG and Standard Aero are the only service providers in North America authorized by Siemens to perform both field and depot services on Allison 501-KB5 gas turbine engines;

WHEREAS, executing master service agreements with RWG and Standard Aero will allow SVP to select a service provider based on pricing and scheduling availability of each contractor since each service category is described in operating manuals from the manufacturer and, therefore, staff can request pricing based on the service package needed and compare the pricing between the two contractors;

WHEREAS, in addition to price, scheduling is a critical component of selection because the costs of an outage are significant and, therefore, it may be prudent to pay a higher cost if a specific contractor can schedule services sooner. This can reduce outage durations, ensure equipment availability for periods of high demand, and reduce the risks of an unplanned or

extended outage due to scheduling issues with either service provide; and

WHEREAS, the Allison engines are critical to SVP's continued energy generation operations and as peak power needs in the City continue to grow, these engines become more important to maintain grid stability and reliability and are important to be available to support load growth in the City.

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

1. That the City Manager is authorized to negotiate and execute master service agreements with RWG and Standard Aero, for an initial term of five years, for an aggregate maximum amount not-to-exceed \$10,000,000 during the initial term, subject to the annual appropriation of funds.
2. That the City Manager is authorized to execute up to five one-year options to extend the term of the master service agreements, subject to the annual appropriation of funds.
3. That the City Manager is authorized to add or delete services consistent with the scope of the agreements, and allow future rate adjustments subject to request and justification by contractor, approval by the City, and the appropriation of funds.
4. That this action does not constitute a "project" as defined in the California Environmental Quality Act (CEQA) and section 15378(b)(4) of the CEQA Guidelines in that it is a fiscal activity that does not involve commitment to a specific project which may result in potential significant impact on the environment.

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5. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING
THEREOF HELD ON THE ____ DAY OF _____, 2021, BY THE FOLLOWING VOTE:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference: None



Agenda Report

21-998

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on a Resolution Amending Silicon Valley Power Rate Schedule SB-1 - Standby General Service with Respect to Determination of Reservation Capacity, and Rate Schedule NM - Net Energy Metering Service with Respect to Implementation of an Aggregate Metering Option

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

Through its Electric Utility, Silicon Valley Power (SVP), the City of Santa Clara provides electric service in the City of Santa Clara using a variety of rate schedules including SVP's Standby Service Schedule (SB-1) and Net Energy Metering Service Schedule (NM) associated with customers who self-generate all or a portion of their electric needs.

Schedule SB-1

Rate Schedule SB-1 provides for standby service for customers with self-generation. When a customer uses self-generation in parallel with service from SVP, SVP's Standby Service (Schedule SB-1) is available for any planned or unplanned reduction in customer's generation output and resulting impact on SVP's grid power scheduling and management. This back-up responsibility (or standby service) means that SVP must have the infrastructure and ability to increase power deliveries in order to back-up customers with self-generation, if their own generation is not available for any reason. SB-1 is designed to recover SVP's ongoing cost of being ready to provide this standby service.

Schedule SB-1 was revised by City Council action on December 19, 2017 (Resolution #17-8485) to improve the applicability of Schedule SB-1 to a wider variety of self-generation configurations. Including cases where self-generation was less than 100% of typical customer load. Schedule SB-1 was further amended by City Council action on November 19, 2019 (Resolution #19-8782) to streamline the calculation of capacity reservation charges or amount of capacity required to standby, while achieving substantially the same amount of demand related revenue that SVP would have received under the then current Schedule SB-1. In both the previous and current versions of Schedule SB-1, the amount of reservation capacity was based on the total installed nameplate capacity of customer's self-generation equipment.

Schedule NM

NM customers are typically customers with solar generation of less than 1000 kW that supplies only part of the day's load for the customer. Customers served under Rate Schedule NM are not subject to Schedule SB-1.

Pursuant to Public Utility Code 2827, an eligible customer-generator served under SVP Rate Schedule NM with multiple meters may elect to aggregate different accounts in certain circumstances. The customer can aggregate the electrical load of the meters located on the property where the renewable electrical generation facility is located and on all property adjacent or contiguous to the property on which the renewable electrical generation facility is located, if those properties are solely owned, leased, or rented by the same eligible customer-generator. While aggregate metering is allowed in the Public Utility Code, existing SVP Rate Schedule NM does not provide for aggregate metering in these multiple meter situations. Recently, SVP has received several inquiries from commercial and industrial customers seeking the ability to credit their solar generation to their other on-site or adjacent separately-metered electric loads.

DISCUSSION

Schedule SB-1

The determination of capacity reservation for Schedule B-1 based on customer's total installed nameplate capacity was

meant to be simple and verifiable. However, Schedule SB-1 is applicable to many types of self-generation, including fuel cells - module units that may only lose a portion of their total installed capacity at any particular time, or large solar facilities (in excess of 1,000 KW) - an intermittent resource that is not eligible for Schedule NM thus subject to Schedule SB-1 capacity reservation provisions. This means that only a portion of the total sum of nameplate capacity may require standby services under real world conditions.

Schedule SB-1's current definition of Capacity Reservation does not adequately recognize that a customer's intermittent solar self-generation often will not cause a significant reduction in SVP's demand related revenues under the customer's otherwise applicable rate schedule because the demand revenues may for the most part be captured during non-solar hours. As SVP and SVP's customers have gained more experience with standby customers' installed facilities, staff recognizes that a periodic review is necessary to ensure that the reservation capacity under Schedule SB-1 more accurately reflects the standby service that the customer actually requires from SVP. The proposed change to the determination of Reservation Capacity set forth in new Note D of Schedule SB-1 will allow SVP to make an annual detailed re-assessment of each customer's applicable Reservation Capacity. In addition, staff proposes to clarify Note C with respect to customer's parallel operation and self-generation metering requirements.

Schedule NM

SVP has recently received several inquiries and requests from commercial and industrial customers who are seeking to aggregate electric load so that the excess solar generation can be allocated to their other on-site or adjacent separately-metered electric loads. Such allocation is explicitly permitted under Public Utilities Code Section 2827. Therefore, SVP is proposing that a Load Aggregation Option be added to Rate Schedule NM.

Proposition 218 and Proposition 26 Exemptions

The charges imposed with the addition of Note D to Rate Schedule SB-1 and the Load Aggregation Option to Rate Schedule NM are exempt from the voter-approval requirements of Proposition 218 and Proposition 26. Proposition 218 expressly exempts electricity service charges (See Cal. Const. Article XIII D, § 3(b)) and Proposition 26 exempts charges imposed for a specific government service directly to the payor that is not provided to those not charged, and which do not exceed the reasonable costs to the local government of providing the service (See Cal. Const. Article XIII C, § 1(e) (2)).

The proposed electricity charges are imposed directly to the payor for the benefit conferred for the electricity service provided and such charges represent the reasonable costs to the City for providing the service. Therefore, in accordance with Proposition 218 and Proposition 26, voter approval is not required to enact the proposed rate schedule amendments.

ENVIRONMENTAL REVIEW

The action being considered is statutorily exempt from California Environmental Quality Act ("CEQA") review pursuant to CEQA Guidelines section 15273.

FISCAL IMPACT

The dollar impact of adding Note D to Rate Schedule SB-1 and adding a Load Aggregation Option to Rate Schedule NM is not known at this time, but this impact is not expected to be material and staff does not anticipate that a budget adjustment will be needed.

COORDINATION

This report was coordinated with the Finance Department and City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

RECOMMENDATION

Adopt a Resolution of the City of Santa Clara amending rate schedules to Silicon Valley Power's Standby Service Schedule (SB-1) with respect to determination of Reservation Capacity and amending rate schedule Net Energy Metering Service (NM) with respect to implementation of aggregate metering, effective October 6, 2021.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer
Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Resolution Amending Rate Schedules SB-1 and Rate Schedule NM
2. Amended Rate Schedule SB-1 to be effective October 6, 2021
3. Amended Rate Schedule NM to be effective October 6, 2021

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA,
AMENDING CITY ELECTRIC UTILITY RATE SCHEDULE SB-1 –
STANDBY GENERAL SERVICE WITH RESPECT TO
DETERMINATION OF RESERVATION CAPACITY, AND RATE
SCHEDULE NM – NET ENERGY METERING SERVICE WITH
RESPECT TO IMPLEMENTATION OF AN AGGREGATE
METERING OPTION**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, all electric energy and power furnished to customers of the Electric Department of the City of Santa Clara, California, doing business as Silicon Valley Power, shall be supplied and charged to such customers, and paid for by such customers in accordance with certain electric rate schedules, tariffs and rules and regulations adopted and amended from time to time by the City Council;

WHEREAS, Chapter 13.05 of the Santa Clara City Code (“Code”) pertains to Operation of an Electric Utility, and Section 13.05.040 of the Code provides that the City Council may, by resolution, from time to time as it deems necessary for the administration or implementation of the intent of this chapter, review, revise, adopt and/or promulgate new or amended rate schedules and regulations concerning the operation or administration of the Electric Utility;

WHEREAS, the Electric Department presented a Report To Council to City Council at its regularly scheduled meeting on October 19, 2021 to amend Silicon Valley Power Rate Schedule SB-1 – Standby General Service with respect to determination of reservation capacity, and Rate Schedule NM – Net Energy Metering Service with respect to implementation of an aggregate metering option; and

WHEREAS, the City Council reviewed and approved the recommendations contained in the Report to Council, which included the recommendation to the City Council to amend Silicon Valley Power Rate Schedule SB-1 – Standby General Service with respect to determination of reservation capacity, and Rate Schedule NM – Net Energy Metering Service with respect to implementation of an aggregate metering option.

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

1. That the Rate Schedules, which are attached to this Resolution and incorporated by reference, are amended to include and memorialize the changes as presented by City Staff to the City Council during its regularly scheduled meeting on October 19, 2021, to amend Silicon Valley Power Rate Schedule SB-1 – Standby General Service with respect to determination of reservation capacity, and Rate Schedule NM – Net Energy Metering Service with respect to implementation of an aggregate metering option.
2. That the amended Rate Schedules attached to this Resolution are hereby approved and adopted by the City Council and said Rate Schedules shall become effective November 1, 2021.
3. That the amendments to Rate Schedules SB-1 and NM adopted by the City Council in this Resolution are necessary to enable the Electric Department to more accurately apply the provisions of Rate Schedule SB-1 and Rate Schedule NM.
4. That a true and correct copy of the Resolution, including amended Rate Schedule SB-1 and Rate Schedule NM, shall be kept on file in the Office of the City Clerk and in the Billing Division of the City Finance Department at all times while the rates are effective and, until further amended or replaced, shall be open to public investigation and inspection during the regular business hours of such offices.

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5. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING
THEREOF HELD ON THE ____ DAY OF _____, 2021, BY THE FOLLOWING VOTE:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:

1. Rate Schedule SB-1 to be Effective November 1, 2021
2. Rate Schedule NM to be Effective November 1, 2021

**CITY OF SANTA CLARA
SILICON VALLEY POWER**

**RATE SCHEDULE SB-1
STANDBY GENERAL SERVICE
DEMAND METERED**

Sheet 1 of 2

DESCRIPTION OF SERVICE

This schedule is applicable to standby service for customer's on-site self-generation operated in parallel with service from SVP under any of SVP's applicable demand-metered rate schedules, where such self-generation is not eligible for service under Schedule NEM. This Schedule does not apply to customer's on-site renewable electrical generation facility where Schedule NEM is applicable. The Capacity Reservation Charges under this Schedule SB-1 are supplemental to the demand charges under the applicable demand-metered rate schedule, and are intended to result in SVP recovering its costs to provide standby services for the on-site generation capacity.

RATES:

CUSTOMER CHARGE:

The Customer Charge is equal to the applicable Customer Charge set forth in Customer's otherwise applicable rate schedule.

CAPACITY RESERVATION CHARGE (CRC):

The Capacity Reservation Charge is equal to the applicable Demand Charge per kW set forth in customer's otherwise applicable Rate Schedule multiplied by the lower of 45% of the nameplate rating of customer's on-site generation or the Reservation Capacity determined pursuant to Note D.

SURCHARGES:

Public Benefits Charge, as set forth in Note B, will be added to the above charges.

NOTES:

(A) **FLUCTUATIONS IN CUSTOMER'S SELF-GENERATION OUTPUT:**

Customer shall coordinate with SVP's System Dispatcher for changes of 2000 kW or more in the output of customer's self-generation. If operationally necessary and practical, the System Dispatcher may require customer to schedule the return to service of customer's self-generation. Such coordination shall not relieve Customers from Capacity Reservation Charges determined above.

(B) **PUBLIC BENEFITS CHARGE:**

The Public Benefits Charge is a state required non-bypassable surcharge imposed on all sales of electricity and electrical services. It is used to fund public goods research, development, and demonstration, as well as, energy efficiency activities, renewable energy, and low income assistance programs. The surcharge is equal to the sum of the Meter Charge and Capacity Reservation Charge, times 0.0285.

(C) **PARALLEL OPERATION:**

Any customer may operate its generating plant in parallel with SVP's system if the customer's plant is constructed and operated in accordance with SVP Rule. However, a customer who operates its plant in parallel must assume responsibility for protecting SVP and other parties from damage resulting from negligent operation of the customer's facilities. Customers may be required to meet requirements

Date Effective:	Resolution No.
Supersedes Rate Effective: February 2021 Bill Cycle 705, Series 100	Resolution No. 21-8931

**CITY OF SANTA CLARA
SILICON VALLEY POWER**

**RATE SCHEDULE SB-1
STANDBY GENERAL SERVICE
DEMAND METERED**

Sheet 2 of 2

imposed by other governing entities having jurisdiction over SVP's transmission lines including the California Independent System Operator (CAISO) and the Western Electricity Coordinating Council (WECC). Customer generation under this rate schedule shall be metered by SVP. Customer shall provide a meter location that accommodates SVP's meter and such meter shall be fully accessible by SVP.

(D) RESERVATION CAPACITY:

The Reservation Capacity to be used for billing under the above rates shall be determined as set forth below:

The Reservation Capacity shall be as initially determined by SVP, except that during the first 12-month period following the date of initial determination, SVP may review the specified Reservation Capacity on a monthly basis and make adjustments as warranted (consistent with the criteria specified below). Thereafter, SVP may perform an annual review of the most recent 12 months of actual customer operation and make prospective adjustments to the Reservation Capacity as warranted and consistent with customer's historic operations. Any such adjusted Reservation Capacity shall be effective for a minimum of 12 months unless a documented material change of operation is provided to SVP by the customer. The customer may provide SVP with documentation of such material changes in operations as might call for an adjusted Reservation Capacity at any time. Upon receipt and review of such documentation, SVP shall revise the Reservation Capacity at its sole discretion and such a revision will be effective for the billing period immediately following receipt, acceptance and approval of the documentation and any additional information required by SVP to make such a determination. For purposes of subsequent annual reviews and any resulting adjustment to the Reservation Capacity, the following criteria shall apply:

a. For those customers who operate sufficient non-utility generating capacity so as to ordinarily satisfy all of the electric energy requirements at their site and so do not ordinarily require any service through facilities owned by SVP, the Reservation Capacity shall not exceed the customer's highest peak demand established during the most recent 12 months of actual customer operation;

b. For customers with electric loads that exceed the output capability of their non-utility generation, and thus require the regular provision of supplemental power service through facilities owned by SVP, the Reservation Capacity determination shall consider the number and size of the customer's non-utility generating unit(s), the outage diversity of the non-utility generating units serving the customer's load, and any reduction of customer load commensurate with non-utility generator capacity outages.

Date Effective:

Resolution No.

**Supersedes Rate Effective: February 2021
Bill Cycle 705, Series 100**

Resolution No. 21-8931

**CITY OF SANTA CLARA
SILICON VALLEY POWER**

**RATE SCHEDULE NM
NET ENERGY METERING SERVICE**

Sheet 1 of 3

With 2021 Excess Energy Rate

APPLICABILITY:

This Net Energy Metering rate schedule is applicable to all customers served by Silicon Valley Power (SVP), who own and operate a solar or a wind turbine electrical generating facility, or a hybrid system of both. Such facility shall be located on the customer's premises, shall operate in parallel with SVP's transmission and distribution facilities, shall not exceed 1000 kilowatts, and shall only be used primarily to offset part or all of the customer's own electrical requirements. Availability of this schedule to such "customer-generators" will be on a first-come first-served basis, until the total rated generating capacity operated by eligible customer-generators equals 5.0 percent of SVP's annual peak distribution demand.

RATES:

All rates charged under this schedule shall be the same as the rates charged under the eligible customer generator's otherwise applicable rate schedule (OAS). An eligible customer-generator served under this schedule shall be responsible for all charges under the otherwise applicable rate schedule, except that energy usage will be metered and billed on a net basis. An annual bill will be rendered, as required by Section 2827 of the California Public Utilities Code. A monthly statement of accumulated charges and credits shall be provided. Monthly statements shall be subject to SVP's payment provisions pursuant to Municipal Service Rule and Regulation No. 6, except that customers whose OAS is a demand metered SVP Rate Schedule shall be subject to monthly payment of bills, and be subject to annual true-up as necessary. If the energy generated exceeds the energy consumed during the annual billing cycle, at the customer-generator's option, payment shall be made for such excess energy delivered to SVP's distribution facilities as set forth below, or applied as a credit to the next annual billing cycle.

LOAD AGGREGATION OPTION:

An eligible customer-generator with multiple meters may elect to aggregate the electrical load of the meters located on the property where the renewable electrical generation facility is located and on all properties adjacent or contiguous to the property on which the renewable electrical generation facility is located, if those properties are solely owned, leased, or rented by the eligible customer-generator.

If an eligible customer-generator chooses to aggregate the electrical load of such meters, (i) the eligible customer-generator shall be permanently ineligible to receive net surplus electricity compensation, and SVP shall retain any kilowatt-hours in excess of the eligible customer-generator's aggregated electrical load generated during the 12-month period; (ii) the electricity generated by the renewable electrical generation facility shall be allocated to each of the meters in proportion to the electrical load served by those meters for each billing period. This proportionate allocation shall be calculated based on customer-generator's load data averaged over an indicative 12-month period (estimated if necessary) and should be effective for a minimum of 12 months.

METERING:

Net energy metering is the use of a single meter to measure the flow of electricity in two directions. If the existing electrical meter of an eligible customer-generator is not capable of measuring the flow of electricity in two directions the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions. Any additional meter or meters to monitor the flow of electricity in each direction may be installed with the consent of the customer-generator, at SVP expense.

**Date Effective: _____
Bill Cycle ____, Series 100**

Resolution No.

**Supersedes Rate Effective: February 2021
Bill Cycle 705, Series 100**

Resolution No. 21-8931

**CITY OF SANTA CLARA
SILICON VALLEY POWER**

RATE SCHEDULE NM NET ENERGY METERING SERVICE	Sheet 2 of 3
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With 2021 Excess Energy Rate

SVP meter(s) to monitor the output of customer-generator's generating facilities are required if customer-generator elects the Load Aggregation Option. Such meters shall be provided by SVP and paid for by the customer-generator.

INTERCONNECTION:

Prior to interconnection, the customer-generator shall execute an interconnection agreement with SVP and shall comply with SVP's Rules and Regulations regarding parallel generation, except that service under a standby rate schedule shall not be required. The customer-generator must also meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the California Public Utilities Commission regarding safety and reliability.

PAYMENT RATE FOR EXCESS ENERGY:

The Payment Rate for Excess Energy shall be revised during each calendar year, and shall consist of the sum of an avoided energy cost charge and an avoided renewable energy value charge. The avoided energy cost is equal to 8000 Btu/kWh times SVP's avoided cost of gas in \$/MMBtu. The avoided cost of gas shall be the average of the 12 monthly values for PG&E Citygate taken from Natural Gas Intelligence, adjusted to include transportation to Santa Clara, ending in October of the year prior to the effective date of the Payment Rate for Excess Energy. The avoided renewable energy value charge shall be equal to the average value of renewable energy credits used for SVP's Green Power Program in the 12 months ending In October of the year prior to the effective date of the Payment Rate for Excess Energy.

Payment Rate for Excess Energy effective February 1, 2021: \$ 0.03960 per kWh

Date Effective: _____ Bill Cycle ____, Series 100	Resolution No.
Supersedes Rate Effective: February 2021 Bill Cycle 705, Series 100	Resolution No. 21-8931

**CITY OF SANTA CLARA
SILICON VALLEY POWER**

RATE SCHEDULE NM NET ENERGY METERING SERVICE	Sheet 3 of 3
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With 2021 Excess Energy Rate

Exhibit A

**Rate Schedule NM
Derivation of Payment Rate for Excess Energy**

1. Avoided energy cost charge:

Average of the monthly values for PG&E Citygate from Natural Gas Intelligence for the 12 months ending October 2020: \$3.000 per MMBtu

Average cost of transportation from PG&E Citygate to Santa Clara Donald Von Raesfeld Power Plant for the 12 months ending October 2020: \$ 0.075 per MMBtu

Total average delivered cost of gas: \$3.075 per MMBtu

Avoided energy cost = \$3.075 per MMBtu x 8000 Btu/kWh = \$0.0246/kWh

2. Avoided renewable energy value charge:

Average value of renewable energy credits used for SVP's Green Power Programs for the 12 months ending October 2020: \$0.015 per kWh

3. Payment Rate for Excess Energy beginning February 2021:

	<u>\$/kWh</u>
Avoided energy cost charge	\$0.02460
Avoided renewable energy value charge	\$0.01500
Total	\$0.03960

Date Effective: _____ Bill Cycle ____, Series 100	Resolution No.
Supersedes Rate Effective: February 2021 Bill Cycle 705, Series 100	Resolution No. 21-8931



Agenda Report

21-1206

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Amendment No. 2 to the Steam Sales Agreement with The Newark Group, Inc. to Extend the Agreement Until March 31, 2022

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

Since 1994, the City's Electric Utility, Silicon Valley Power (SVP), has provided the steam from the City's cogeneration facility (Cogen) to The Newark Group, a Greif Company (Newark) for purchase for use in the manufacturing of recycled paper products at the California Paperboard Mill (California Paperboard). This type of manufacturing uses significant quantities of electricity, steam, water and sewer services, and therefore Newark is one of the City's largest electric, water and sewer customers. Cogen was designed to provide steam to the California Paperboard Mill, and Newark is SVP's only customer for the purchase of steam. On November 17, 2015, Council approved a five (5) year Steam Sale Agreement with The Newark Group, Inc. with an expiration date of October 31, 2020.

DISCUSSION

On March 9, 2021, Council approved Amendment No. 1 to extend the term of the Steam Sale Agreement to October 31, 2021 due to longer than expected time needed for negotiation since the COVID-19 pandemic had changed priorities for both parties. Staff has been actively negotiating a new Agreement with The Newark Group, which is under new ownership and is currently evaluating its production at the California Paperboard Mill in Santa Clara. Although there have been delays due to Covid-19 and new ownership, staff has progressed over the last 6 month extension. Staff developed a more detailed capital improvement and refurbishment plan with current equipment pricing for Cogen that meets the power plant's original service level requirements and has updated the fuel, water and labor cost forecasts. The two parties still need approximately six (6) more months until March 31, 2022 for The Newark Group to finish its economic analysis of SVP's offer and for both parties to complete the negotiations and legal reviews. Ultimately, the new agreement will need to provide full cost recovery, or the City will need to explore options regarding Cogen.

By extending this Agreement, SVP will be assured of stable, predictable power sales to this existing customer for an extended time by keeping Newark in SVP's service area. Without an extension, SVP may lose the opportunity to make future sales of steam to Newark and, thereby retain California Paperboard as a large electric customer in SVP's service area.

The long-term Steam Sales Agreement provides an incentive for The Newark Group to maximize their steam purchases from Santa Clara's Cogen power plant instead of using a separate boiler and

provides adequate assurance for recovery of SVP's capital investment. The extension will enable both Parties to continue further negotiations and develop the steam rate methodology which would enable City to recover future capital expenditure on the Cogen plant and streamline the billing process.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment.

FISCAL IMPACT

The steam sales to The Newark Group was approximately \$2 million in Fiscal Year (FY) 2020/21, which is a 28% increase from FY 2019/20. The budget for steam sales for FY 2021/22 and for FY 2022/23 is \$1.5 million annually. Execution of this amendment will allow SVP to continue to make sales of steam to The Newark Group while staff is continuing to negotiate a long-term agreement with The Newark Group.

COORDINATION

This report has been coordinated with the Finance Department and City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

1. Authorize the City Manager to execute Amendment No. 2 to the Steam Sales Agreement with The Newark Group, Inc. to extend the Agreement until March 31, 2022; and
2. Authorize the City Manager to make minor changes to the attached Amendment subject to approval by City Attorney as to form.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Steam Sales Agreement
2. Amendment No. 1 to the Steam Sales Agreement
3. Proposed Amendment No. 2 to the Steam Sales Agreement

**STEAM SALES AGREEMENT
BY AND BETWEEN THE
CITY OF SANTA CLARA
AND
THE NEWARK GROUP, INC.**

This Steam Sales Agreement (herein "Agreement"), by and between the CITY OF SANTA CLARA, CALIFORNIA, a chartered municipal corporation, doing business as Silicon Valley Power (herein called ("CITY" or "SELLER"), and THE NEWARK GROUP, INC., successor in interest to NEWARK GROUP INDUSTRIES, INC., a New Jersey corporation, doing business as California Paperboard, (herein called "BUYER"). SELLER and BUYER may be herein referred to individually as "Party" or collectively as "Parties" or the "Parties to this Agreement."

RECITALS

- A. SELLER solely owns and operates a cogeneration facility, located at 524 Robert Avenue in the city of Santa Clara (as hereinafter more specifically defined, "Facility"), which has its own permits to operate obtained independently by the SELLER. The Facility generates approximately 7,000 kW of electrical power and produces approximately 40 MMBtu per hour of saturated steam, from two gas turbine generating units (hereinafter, "Turbines"); and,
- B. The Facility is located adjacent to a paperboard manufacturing site that is solely owned and operated by the BUYER located at 525 Mathew Street ("Paper Mill"), which has its own permits to operate obtained independently by the BUYER; and;
- C. BUYER uses electricity purchased from SELLER for its Paper Mill manufacturing operations that is supplied from the electrical grid, and BUYER also either purchases, or alternatively at its option, has its own capacity to generate saturated steam for Paper Mill manufacturing operations; and,
- D. SELLER and BUYER are completely separate and independent entities from each other, have no common ownership or control of the other's facilities, operations or permitting; and SELLER's generation of electricity from the Facility is supplied to the electrical grid and is therefore independent of the operation of the Paper Mill; and,
- E. SELLER and BUYER desire to enter into this Agreement to evidence the terms and conditions under which SELLER will sell steam from the Facility and/or from another source of steam to BUYER, who will purchase such steam for its use in the manufacture of recycled paper products at the Paper Mill.

Now, therefore, in consideration of the Recitals and the promises, covenants and commitments made in this Agreement, the Parties mutually agree as follows:

AGREEMENT PROVISIONS

1. INTENT OF PARTIES.

- a. It is specifically understood that SELLER intends to operate the Facility primarily for the production of electrical power to serve the needs of the City's electric utility, Silicon Valley Power. As a secondary purpose, SELLER also intends to produce steam from the waste heat generated by the operation of the Facility for sale. BUYER intends to purchase steam to be used in its manufacturing operations at the Paper Mill.

2. DEFINITIONS.

Whenever used herein, the following words or group of words shall have the following respective meanings:

- a. Billing Period. The incremental period of time for which SELLER will bill BUYER for steam delivery under the term of this Agreement. The Billing Period shall begin on the first calendar day of each month or as close to the first calendar day as practical and shall end thirty (30) days thereafter.
- b. Condensate Delivery Point. A point designated by SELLER at which the condensate meter equipment currently is located.
- c. Facility. The Facility is an electric power and steam generating station, located on property adjacent to BUYER'S Paper Mill site, consisting of two Turbines each fitted with waste heat boilers which are independently capable of generating electricity and process steam, including all of the facilities required to contain, control, measure, transport, process, and convert the fuel into steam and electrical energy, but excluding the Supplemental Firing Equipment, as defined below. The Facility includes all steam and other piping, valves, the Turbines, waste heat boilers, all plumbing and pumps, electrical control and regulation equipment, electrical power transmission equipment, all other equipment and all buildings, structures, enclosures, site improvements and all appurtenances thereto that are required for the convenient and proper operation and maintenance thereof.
- d. Guaranteed Unit Hours. The total number of hours in a year that SELLER promises that the Turbines shall be available for service to (1) produce electricity and (2) to begin the steam production process. Guaranteed Unit Hours are calculated by totaling the hours in a year, multiplied by the percentage of time SELLER guarantees that the Turbines will be available for service as described above, as shown on Exhibit A attached hereto and incorporated herein.
- e. Pricing Year. The period of time beginning on the first date of the term of this Agreement and ending on each subsequent twelve (12) month period.
- f. Steam Delivery Point. A point designated by SELLER at which the steam metering equipment currently is located.

3. TRANSMISSION LINES AND RELATED RIGHTS OF WAY.

BUYER shall provide, at its sole cost and expense and at no cost or expense to SELLER, all lands, easements, rights in land, and any other interests, including rights-of-way, which are reasonably necessary for the installation, maintenance and operation of steam transmission lines from SELLER'S Facility to BUYER'S Paper Mill in order for SELLER to perform its obligations hereunder.

4. PARTIES' OPERATIONS.

- a. BUYER shall be responsible for the design, performance, operation and maintenance costs of the steam distribution system sufficient to handle steam transmitted from the Steam Delivery Point to the BUYER'S process equipment. BUYER shall also be responsible for design, performance, operation and maintenance cost of its condensate return system. The condensate returned to SELLER shall be supplied at the Condensate Delivery Point at a pressure of at least ten (10) psig. The parties acknowledge and agree that, as of the date hereof, the current infrastructure is in good working order and sufficient for SELLER to transmit steam to BUYER hereunder.
- b. SELLER intends to supply steam to BUYER that is produced from operation of SELLER'S Facility. In the event of a period of scheduled outage or reduced or suspended operations of SELLER'S Turbines, BUYER may immediately commence generation of steam from BUYER'S boiler using gas from BUYER'S gas service or oil from BUYER'S oil storage facilities or otherwise obtain steam from another source until such period of outage or reduced or suspended operations ceases.
- c. In the event that SELLER intends to repair or recondition the Facility and is not able to supply all of BUYER'S steam requirements under this Agreement, SELLER shall provide BUYER with reasonable advance notice of such repairs or reconditioning. SELLER shall also, to the extent feasible, schedule such repairs or reconditioning to eliminate or minimize the necessity of BUYER'S generation of steam, and provide for an orderly and efficient transition from SELLER'S to BUYER'S steam generating facilities. In the event of any outage or reduced/suspended operations of SELLER's Turbines, SELLER shall provide BUYER on-going updates with respect to the anticipated length thereof and shall use good faith efforts to end same as soon as commercially practicable under the circumstances.
- d. BUYER shall maintain its own gas service necessary for its operations, and shall pay all costs associated with maintaining and using this gas service.
- e. Both Parties shall use due diligence in their respective operations and activities so as not to endanger the property of the other.

- f. To the extent reasonably possible, both Parties shall coordinate their operations and maintenance activities, with the intent of achieving the most economic and efficient use of BUYER's and SELLER'S equipment. This coordination may include the exchange of operating schedules, schedules for planned facilities shutdowns, etc., and any information supplied by one party shall be deemed proprietary and confidential by the other to the extent allowed by law.
- g. SELLER, at its sole discretion, may satisfy all or part of its steam delivery obligation to BUYER from an alternate source.

5. SALE OF STEAM.

- a. SELLER shall use reasonable efforts to operate a pressure of 125 psig to 150 psig in its main steam header at all times during periods that SELLER has notified BUYER that steam is available for delivery, so long as BUYER'S operations do not affect SELLER'S ability to meet said pressure level. BUYER acknowledges that steam pressure downstream of the Delivery Point is subject to BUYER'S operation of the Paper Mill and that SELLER has no ability, obligation, or desire to control that pressure. BUYER further acknowledges average steam flows for operation of the Facility are approximately 18,000 pounds per hour capacity for one combustion Turbine and 36,000 pounds per hour for two Combustion Turbines. BUYER hereby assumes full responsibility for steam pressure downstream of the delivery point and acknowledges that flow demands on SELLER'S system beyond the capacities stated in this paragraph will cause the quality, including pressure, of delivered steam to degrade. If SELLER is unable to maintain the pressure set forth in this paragraph due in whole or in part to BUYER'S operations, SELLER is relieved of any obligation to meet this requirement and shall operate at as high and stable a pressure as is commercially reasonable under the circumstances.
- b. SELLER is not responsible for any actions taken by BUYER to operate, manage, or otherwise utilize BUYER'S equipment. BUYER is not responsible for any actions taken by SELLER to operate, manage, or otherwise utilize SELLER's equipment.
- c. Steam produced by operation of the Facility:
 - 1. The rate which BUYER shall be charged by SELLER for steam from the Facility is set forth in Exhibit B hereto and incorporated herein by reference. Exhibit B is confidential to the extent allowable by law.
 - 2. SELLER shall seek to maximize the hours of Facility availability in excess of the Combustion Turbine Availability Guarantee. The terms of the Combustion Turbine Availability Guarantee are set forth in Exhibit A, which is attached hereto and incorporated herein. Exhibit A is confidential to the extent allowable by law.

- d. Adjustments in Steam Price.
Adjustments in steam price are set forth in Exhibit B which is confidential to the extent allowable by law.

6. CONDENSATE:

- a. BUYER shall use reasonable good faith efforts to maintain a flow of condensate return to the Facility. The condensate returned to SELLER shall be supplied at the Condensate Delivery Point at a pressure of at least ten (10) psig.
- b. SELLER shall not be required to accept condensate that does not meet the quality specifications contained in Paragraph 6(c) below, and unacceptable condensate shall not be considered as received by SELLER to meet BUYER'S obligations herein.
- c. During periods of steam delivery to BUYER from SELLER, BUYER shall maintain condensate flows to SELLER that follow all the guidelines as measured at the Condensate Delivery Point outlined below:
 - 1. No less than eight percent (8.0%) of the total heat energy, measured in MMBtu, delivered in the form of steam, both measured in the same time period.
 - 2. Conductivity less than 50 microMhos;
 - 3. Total Hardness less than 1 part per million;
 - 4. Iron Content less than 0.2 parts per million;
 - 5. Total Amine (Filmer) less than 30 parts per million;
 - 6. PH level to be between 8.5 and 10.5; and
 - 7. Quality and content of condensate shall meet federal, state and local laws and regulations relating to industrial waste disposal.
- d. SELLER may determine by using standard industry test procedures whether the condensate delivered from BUYER fails to meet the specifications set forth above. If such a failure occurs and after reasonable notice to BUYER and a reasonable time for BUYER to remedy the failure to meet the specifications, SELLER shall, at its sole option, discontinue receipt of said condensate until such time BUYER remedies the circumstances causing such failure to SELLER'S satisfaction. Should SELLER discontinue receipt of condensate, BUYER, at its sole option, may refuse to accept steam from SELLER until such time as BUYER and SELLER jointly determine that condensate is once again acceptable to SELLER. Upon request from BUYER, SELLER shall provide the results of any condensate quality tests to BUYER.

- e. If the deliveries of condensate fall below these specifications for a significant period of time, SELLER may impose upon BUYER, and BUYER agrees to pay, reasonable charges to recover any additional expense incurred by SELLER related to the failure to deliver acceptable condensate.

7. WASTE WATER AND CONDENSATE RETURNS DISPOSAL.

BUYER shall be responsible for disposal of all condensate returns not suitable for delivery to SELLER as specified in Paragraph 6. SELLER shall be responsible for disposal of all wastewater produced by SELLER.

8. SHARED NATURAL GAS SUPPLY OPTIONS.

The Parties agree to discuss opportunities, which arise from time to time, that may bring economic advantages through the acquisition, purchase or transportation of common supplies of natural gas for use at both the Paper Mill and the Facility.

9. BUYER'S PAPER MAKING OPERATIONS.

BUYER shall promptly notify SELLER of any anticipated reduction in the requirement for SELLER'S steam for any reason beyond normal operating variations in demand.

10. MEASUREMENT AND TESTING.

- a. At or near the Steam Delivery Point, SELLER shall at its expense operate and maintain in accurate working order its measuring station, properly equipped with recording orifice meters of a standard type which is acceptable to BUYER for the measurement of SELLER'S steam. At SELLER'S option, recording meters may be installed at the Condensate Delivery Point for BUYER'S condensate delivered hereunder. The foregoing steam and condensate measuring equipment is hereinafter referred to as the "Measuring Equipment." BUYER may view such Measuring Equipment and the readings thereof at all reasonable times and upon reasonable notice, but readings, calibrations, and adjustments thereof, shall be done solely by the employees or agents of SELLER.
- b. SELLER shall make periodic tests to the Measuring Equipment upon request of BUYER, but not more often than twice each year. SELLER shall give to BUYER reasonable notice of such tests of SELLER'S Measuring Equipment in order that BUYER may have its representative present. BUYER may challenge the accuracy of said equipment upon reasonable grounds to do so, and when reasonably challenged, the equipment shall be tested and repaired if SELLER deems repairs are necessary. If the Measuring Equipment challenged is found to be accurate and no repairs are needed, the test shall be paid for by BUYER. If upon any test any Measuring Equipment is found to affect the measurement accuracy by an amount exceeding four percent (4.0%), registrations thereof shall be corrected for a period extending back to the time such inaccuracy occurred if such time is ascertainable. If not

ascertainable, then such correction shall extend back one-half of the time elapsed since the last calibration.

- c. If any portion of said Measuring Equipment is out of service so that the quantity and/or temperature of SELLER'S steam and BUYER'S condensate delivered cannot be ascertained or corrected under this Paragraph, SELLER'S steam delivered and/or the temperature thereof during the period such measuring equipment is out of service shall be estimated and agreed upon by the Parties hereto, using the first of the following methods which is feasible:
 - 1. By using the registration of any check Measuring Equipment if installed and accurately registering; or
 - 2. By estimating the quantity of delivery and/or temperature thereof by averaging deliveries during the preceding periods under similar conditions, considering the power output of the Facility, when the Measuring Equipment was registering accurately.
- d. BUYER may, at its option and expense, install and operate check measuring equipment to check SELLER'S Measuring Equipment. However, measurement of SELLER'S steam and BUYER'S condensate for the purposes of this Agreement shall be by SELLER'S Measuring Equipment only. Any check measuring equipment installed shall be of a type acceptable to SELLER, shall not interfere with SELLER'S operations, and shall be subject at all reasonable times to inspection or examination by SELLER. The reading, calibration and adjustment of the check measuring equipment and changing of charts shall be done only by the employees or agents of BUYER.
- e. The records from SELLER'S Measuring Equipment shall remain the property of SELLER and shall be kept for a period of not less than three (3) years. At any time within such period SELLER shall, upon request of BUYER and upon reasonable advance notice, permit BUYER to inspect and verify records from SELLER'S Measuring Equipment, together with calculations there from.

11. ACCOUNTING.

- a. SELLER shall furnish BUYER, on or before the twenty-fifth (25th) day of each Billing Period, a billing statement showing the total quantity of heat energy delivered to BUYER at the Delivery Point during the preceding Billing Period. BUYER shall make full payment at such address as SELLER may designate from time to time, on or before twenty-one (21) days after the date of the statement. If payment has not been received by SELLER thirty (30) days after the due date SELLER may either suspend its deliveries of steam to BUYER or terminate this Agreement upon written notice to BUYER. The exercise of any such right by SELLER shall be in addition to any and all other remedies available to SELLER. In the event of a payment dispute between the Parties, so long as BUYER pays to SELLER any undisputed amounts in accordance with this Paragraph 11(a) and notifies SELLER of the nature of the payment dispute, SELLER

shall not suspend delivery of steam or terminate this Agreement and, if the Parties cannot resolve such dispute within thirty (30) days, they shall submit the matter for mediation in accordance with Paragraph 27 hereof.

- b. Each Party shall have the right, at reasonable hours and upon reasonable notice, to examine the books, records and charts of the other Party to the extent necessary to verify the accuracy of any statement, payment, calculation or determination made pursuant to this Agreement. If any error or inaccuracy is discovered, adjustment of such statement, payment, calculation or determination shall be made as soon as practicable.
- c. In the event that BUYER shall be required to pay any additional amounts to SELLER or BUYER shall be entitled to any credits from SELLER pursuant to this Agreement, the amounts due or credits shall be calculated as of the close of the Pricing Year. Amounts due to SELLER shall be shown on the next billing statement rendered by SELLER and payable with the amounts due thereunder as set forth in Paragraph 11(a). Credits due to BUYER shall be shown on the next billing statement rendered by SELLER and shall reduce the amount of such billing statement accordingly (and, in the event such credit due to BUYER is greater than the amount due SELLER on such billing statement, at BUYER's option, SELLER shall either continue crediting future billing statements until such credit is exhausted or remit a payment for the difference to BUYER within thirty (30) days of BUYER's request therefor).

12. TAX LIABILITY.

Neither Party shall be responsible or liable for any taxes, assessment, fees or charges levied or assessed against any of the facilities of the other Party used for the purpose of carrying out the provisions of this Agreement.

13. TERM.

The term of this Agreement shall be as set forth in Exhibit B hereto, which is confidential to the extent allowed by law. Notwithstanding anything to the contrary contained herein, if BUYER elects to permanently cease all operations at the Paper Mill, BUYER may terminate this Agreement upon three hundred sixty five (365) days written notice to SELLER. Any such notice shall be confidential to the extent allowable by law.

14. FORCE MAJEURE.

Neither Party shall be considered to be in default in performance of any of its obligations under this Agreement when a failure of performance is due to an Uncontrollable Force. The term "Uncontrollable Force" as used in this Agreement, shall mean any cause beyond the reasonable control of the Party affected, and which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it has been unable to overcome or obtain or cause to be obtained a commercially reasonable substitute therefor. Such Uncontrollable Force includes the failure or threat of

failure of facilities, Act of God, flood, drought, earthquake, storm, tornado, fire, explosion, lightning, epidemic, public emergency, war, riot, civil disobedience, labor strike, labor dispute, labor or materials shortage (however labor or materials shortage does not include the mere inability to obtain that labor or material at a particular price), sabotage, restraint by court order, restraint by public authority, or action or non-action by governmental authority or accident. No Party shall, however, be relieved of liability for failure of performance if such failure is due to causes arising out of its own negligence or due to removable or remediable causes which it fails to take reasonable efforts to remove or remedy within a reasonable time, or due to mere fluctuations in market prices. Nothing contained herein shall be construed to require a Party to settle any strike or labor dispute in which it may be involved. Either Party rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force shall give prompt written notice of such fact to the other Party and shall exercise due diligence to remove such inability with all reasonable dispatch.

15. HOLD HARMLESS/INDEMNIFICATION.

To the extent permitted by law, BUYER agrees to protect, defend, hold harmless and indemnify City, its City Council, commissions, officers, employees, volunteers and agents from and against any claim, injury, liability, loss, cost, and/or expense or damage, including all costs and reasonable attorney's fees in providing a defense to any claim arising therefrom, for which City shall become liable arising from BUYER's negligent, reckless or wrongful acts, errors, or omissions with respect to or in any way connected with the services performed by BUYER pursuant to this Agreement. To the extent permitted by law, SELLER agrees to protect, defend, hold harmless and indemnify BUYER, its officers, employees, contractors and agents from and against any claim, injury, liability, loss, cost, and/or expense or damage, including all costs and reasonable attorney's fees in providing a defense to any claim arising therefrom, for which BUYER shall become liable arising from SELLER's negligent, reckless or wrongful acts, errors, or omissions with respect to or in any way connected with the services performed by SELLER pursuant to this Agreement.

16. NO CONSEQUENTIAL OR INDIRECT DAMAGES.

NEITHER PARTY TO THIS AGREEMENT SHALL BE LIABLE TO THE OTHER PARTY FOR INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING DAMAGES FOR LOST OPPORTUNITIES, LOST PROFITS FROM THIS AGREEMENT OR ANY OTHER TRANSACTION, OR LOST SAVINGS, EVEN IF SUCH DAMAGES WERE FORESEEABLE OR RESULT FROM A BREACH OF THIS AGREEMENT.

17. COMPLIANCE WITH UTILITY RULES AND REGULATIONS.

All the provisions of the Rules and Regulations governing electric utility procedures and BUYER practices, as approved and amended by the City Council of the City of Santa Clara from time to time (hereinafter "Electric Utility Regulations"), shall remain in full force and effect and shall apply to the terms and conditions of this Agreement. In the event that the terms of this Agreement

conflict with the Rules and Regulations, the provisions of this Agreement shall govern.

18. ASSIGNMENTS AND SUCCESSORS IN INTEREST.

SELLER and BUYER bind themselves, their partners, successors, assigns, executors, and administrators to all covenants of this Agreement. Except as otherwise set forth in this Agreement, no interest in this Agreement shall be assigned or transferred, either voluntarily or by operation of law, without the prior written approval of the other Party, except that BUYER may assign this Agreement to an Affiliate, any entity that is directly or indirectly owned or controlled by BUYER or its ultimate corporate parent company, without the consent of SELLER; however, said Affiliate will be bound by all obligations hereunder and shall notify SELLER of the assignment (and of any change required with regard to the Notice provisions of this Agreement set forth in Article 21) prior to the end of the first Billing Cycle after assignee has received the assignment.

19. AMENDMENTS.

It is mutually understood and agreed that no alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the Parties hereto and incorporated into this Agreement.

20. INTEGRATED DOCUMENT/TOTALITY OF AGREEMENT.

This Agreement, its Exhibits and the City's Rules and Regulations embody the entire agreement between SELLER and BUYER and its terms and conditions. No other understanding, agreements, or conversations, or otherwise, with any officer, agent, or employee of SELLER prior to the execution of this Agreement shall affect or modify any of the terms or obligations contained in any document comprising this Agreement.

21. NO THIRD PARTY BENEFICIARY.

This Agreement shall not be construed or deemed to be an agreement for the benefit of any third party or parties, and no third Party or parties shall have any claim or right of action hereunder for any cause whatsoever.

22. NOTICES.

All notices to the Parties hereto shall, unless otherwise requested in writing, be sent to to one another via certified mail or nationally recognized overnight courier, with delivery deemed upon such Party's receipt thereof, addressed as follows:

To SELLER:

Silicon Valley Power City of Santa Clara--Electric Department
Attn: Director of Electric Utility
1500 Warburton Avenue
Santa Clara, California 95050

To BUYER (duplicate notices required):

California Paperboard
525 Mathew Street
Santa Clara, CA 95050
Attention: Mr. Charles Wall

With copy to:
The Newark Group, Inc.
5000 Austell Powder Springs Road, Suite 300
Austell, GA 30106
Attention: Legal Department

23. CAPTIONS.

The captions of the various sections, paragraphs and subparagraphs are for convenience only and shall not be considered or referred to in resolving questions of interpretation.

24. STATUTES AND LAW GOVERNING AGREEMENT.

This Agreement shall be governed and construed in accordance with the statutes and laws of the State of California.

25. NON-WAIVER.

No waiver by a Party of all or any of its rights with respect to a condition, default or other matter arising in connection with this Agreement shall constitute or be deemed a waiver by such Party as to any subsequent condition, default or other matter.

26. RIGHTS AND REMEDIES.

Duties and obligations imposed by the Agreement and rights and remedies available thereunder shall be in addition to and not in limitation of duties, obligations, rights and remedies imposed by or available at law.

27. ALTERNATIVE DISPUTE RESOLUTION.

BUYER is bound to exhaust all administrative remedies required by the Electric Utility Regulations, as well as any other administrative remedies required by law. In the event that BUYER exhausts all such administrative remedies, but continues to dispute items, then, prior to commencing any litigation against the

City of Santa Clara or SELLER, BUYER shall engage in Alternative Dispute Resolution as follows:

- 27.1 Any controversies between BUYER and SELLER regarding the construction or application of this Agreement, and claims arising out of this Agreement or its breach, shall be submitted to mediation within thirty (30) days of the written request of one Party after the service of that request on the other Party.
- 27.2 The Parties may agree on one mediator. If they cannot agree on one mediator, the Party demanding mediation shall request that the Superior Court of Santa Clara County appoint a mediator. The mediation meeting shall not exceed one day (eight (8) hours). The Parties may agree to extend the time allowed for mediation under this Agreement.
- 27.3 The costs of mediation shall be borne by the Parties equally.
- 27.4 Mediation under this section is a condition precedent to filing an action in any court. In the event of litigation, which arises out of any dispute related to this Agreement, the Parties shall each pay their respective attorneys fees, expert witness costs and cost of suit, regardless of the outcome of the litigation.

28. CONFIDENTIALITY.

- 28.1 The Parties to this Agreement agree to maintain as confidential, to the extent permitted by law, that information contained in Exhibit B to this Agreement, as well as any other information exchanged by the Parties and clearly labeled by the Disclosing Party as "Confidential Information."
- 28.2 BUYER acknowledges that Santa Clara is a public agency subject to the requirements of the California Public Records Act Cal. Gov. Code section 6250 et seq. Santa Clara acknowledges that BUYER may submit information to Santa Clara that BUYER considers Confidential Information, proprietary, or trade secret information pursuant to the Uniform Trade Secrets Act (Cal. Civil Code section 3426 et seq.), or otherwise not subject to disclosure pursuant to an exemption to the California Public Records Act (Government Code section 6254 et seq.) BUYER acknowledges that Santa Clara may submit to BUYER information that Santa Clara considers Confidential Information or proprietary or not subject to disclosure pursuant to an exemption to the California Public Records Act (Government Code section 6254 et seq.). Upon request or demand of any third person or entity not a Party to this Agreement ("Requestor") for production, inspection and/or copying of information contained in Exhibit A and B hereto or designated by a Disclosing Party as "Confidential Information", the Receiving Party as soon as practical, but within three (3) days of receipt of the request, shall notify the Disclosing Party that such request has been made by telephone call, letter sent via facsimile and/or by US Mail to the address and facsimile number listed at the end of the Agreement. The Disclosing Party shall be solely responsible for taking whatever legal steps are necessary

to protect information deemed by it to be "Confidential Information" and to prevent release of information to the Requestor by the Receiving Party. If the Disclosing Party takes no such action, after receiving the foregoing notice from the Receiving Party, the Receiving Party shall be permitted to comply with the Requestor's demand and is not required to defend against it.

29. OTHER AGREEMENTS.

This Agreement shall not prevent SELLER or BUYER from entering into similar agreements with others that do not conflict with the terms hereof.

30. CONSTRUCTION OF THIS AGREEMENT.

This Agreement, and each of its provisions, terms and conditions, has been reached as a result of negotiations between the Parties. Each Party has been represented by Counsel. Accordingly, each of the Parties expressly acknowledges and agrees that this Agreement shall not be deemed to have been authored by, prepared by, or drafted by any particular Party, and that the rule of construction to the effect ambiguities are to be resolved against the drafting Party shall not be employed in the interpretation of this Agreement or in the resolution of disputes. This Agreement is to be construed to effectuate the normal and reasonable expectations of a sophisticated BUYER of utility services and a sophisticated provider of such services and shall not be construed either for or against either Party.

31. NO PARTNERSHIP.

Neither SELLER nor BUYER is a partner in a joint venture with the other and nothing in this Agreement may be construed to make them partners or joint venturers or impose any liability as such on either of them.

(Continued on Page 14 of 14)

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32. ENFORCEABILITY.

If any provision of this Agreement is determined to be illegal or unenforceable, such determination will not affect any other provisions of this Agreement and all other provisions will remain in full force and effect.

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but both of which shall constitute one and the same instrument, and, the Parties agree that signatures on this Agreement, including those transmitted by facsimile, shall be sufficient to bind the Parties.

The Parties acknowledge and accept the terms and conditions of this Agreement as evidenced by the following signatures of their duly authorized representatives. The Effective Date is the date that the final signatory executes the Agreement. It is the intent of the Parties that this Agreement shall become operative on the Effective Date.

**CITY OF SANTA CLARA
doing business as Silicon Valley Power**

APPROVED AS TO FORM:

Dated: _____

RICHARD E. NOSKY, JR.
City Attorney

ATTEST:

ROD DIRIDON, JR.
City Clerk

JULIO J. FUENTES
City Manager
1500 Warburton Avenue
Santa Clara, CA 95050
Telephone: (408) 615-2210
Fax: (408) 241-6771

"SELLER"

**THE NEWARK GROUP, INC.
doing business as CALIFORNIA PAPERBOARD**

Dated: _____

By: _____

HARIKUMAR V. IYER
Vice President Sourcing, Logistics and FP&A

525 Mathew Street
Santa Clara, CA 95050
Telephone: (408) 727-7377
Facsimile: (408) 727-7282

"BUYER"

**STEAM SALES AGREEMENT
BY AND BETWEEN
THE CITY OF SANTA CLARA
AND
THE NEWARK GROUP, INC.**

EXHIBIT A

(CONFIDENTIAL – DO NOT DUPLICATE OR DISCLOSE)

Illustration of calculation and implementation of the Combustion Turbine Availability
Guarantee

Combustion Turbine Availability Guarantee:

Hours in each Pricing Year ending October 31st:	8,760
Number of Turbines:	X 2
Annual Unit Hours:	17,520
Guaranteed Availability:	x 70.0%

Guaranteed Unit Hours: 12,264

Actual Available Unit Hours shall be equal to the number of hours in each Pricing Year ending October 31st that the Turbines were available for service to (1) produce electricity and (2) to begin the steam production process.

If **Actual Available Unit Hours exceed Guaranteed Unit Hours**, no payment or bill credit is due BUYER.

If **Actual Available Unit Hours do not exceed Guaranteed Unit Hours**, BUYER receives a payment or bill credit for that year in the amount of \$75,000.

NOTE: SELLER will determine, at its sole discretion, the allowances for scheduled outages.

**STEAM SALES AGREEMENT
BY AND BETWEEN
THE CITY OF SANTA CLARA
AND
THE NEWARK GROUP, INC.**

EXHIBIT B

(CONFIDENTIAL – DO NOT DUPLICATE OR DISCLOSE)

The following terms are incorporated into the Agreement:

1. Term of Agreement: November 1, 2015 through October 31, 2020.
2. SELLER will provide steam to BUYER, which BUYER will use to meet its process requirements. BUYER agrees to meet such requirements first with steam from SELLER, and will use its steam production facilities or other sources only to the extent that steam is not available from SELLER.
3. [OPEN ITEM] Steam price shall be equal to SELLER's weighted average delivered cost of gas (WACOG) in each month multiplied by the adjustment factor set forth in Section 7 below for the then-applicable year (the "Adjustment Factor"). The WACOG will be the average cost, in \$/MMBtu, at the PG&E Citygate of all of SELLER's gas purchases, including vendor service charges (if applicable), plus the average cost of transportation, in \$/MMBtu, from the PG&E Citygate to the Cogen Power Plant, plus a carbon adder reflecting the incremental cost of carbon allowances, in \$/MMBTU, as a result of running the Cogen plant compared to SELLER's DVR power plant. An example of the steam price calculation is shown in Section 7 below.
4. If BUYER reduces its steam usage below an average of 700 MMBtu per day for more than three consecutive months, when steam is otherwise available from SELLER, SELLER may request reopening of this agreement to consider changes to this Exhibit B to address the cost effects on SELLER related to BUYER's reduced level of steam consumption. If SELLER and BUYER are unable to agree on changes to address such cost effects within 90 days of SELLER's request, then SELLER may terminate this agreement on 90 days' notice as its sole remedy.
5. If SELLER will incur an extraordinary expense which is greater than 50% of the revenue from steam sales in the previous Pricing Year, to continue the operation of the Turbines, SELLER may request reopening of this agreement to consider changes to this Exhibit B to address the cost effects on SELLER. If SELLER and BUYER are unable to agree on changes to address such cost effects within 90 days of SELLER's request, then SELLER may terminate this agreement on 90 days' notice as its sole remedy.
6. SELLER's WACOG is intended to reflect SELLER's cost of purchasing gas for electric generation. Gas purchase activities and related costs not intended for electric generation will be excluded from the WACOG determination.

7. Adjustment Factor and Sample Calculation

Adjustment Factor (calendar year)					
<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
1.00	1.05	1.05	1.05	1.05	1.05

Sample Calculation for Months in 2016

Average Cost of SVP Gas Purchases (\$MMBTU)	\$3.16
SVP Average Cost of Transportation (\$MMBTU)	\$0.75
SVP Total WACOG	\$3.91
Adjustment Factor	x1.05
2016 Steam Rate (\$MMBTU)	\$4.11
Carbon Price Adder:	
CARB Floor Rate (\$/Metric Ton CO2)	\$13.28
Multiply by 117 lbs CO2/MMBTU	
Divided by 2204 lbs/metric ton	
Converts it to \$/MMBTU	\$ 0.71
Cogen Plan heat rate (Btu/kWh)	15,500
DVR heat rate (Btu/kWh)	7,650
Cogen heat rate divided by DVR heat rate	2.026
Carbon multiplier for running Cogen	1.026
Carbon adder in \$/MMBTU	\$ 0.72
2016 Steam Rate (\$/MMBTU)	\$4.83

These terms, and the terms and conditions of any agreement entered into by the Parties shall not be disclosed to third parties and shall be kept confidential to the fullest extent allowed by law.



Agenda Report

21-244

Agenda Date: 3/9/2021

REPORT TO COUNCIL

SUBJECT

Action on Amendment No. 1 to the Steam Sales Agreement with The Newark Group, Inc. to Purchase Steam from the City's Cogeneration Facility to Renew and Extend the Agreement Until October 31, 2021 to Allow Staff to Continue Negotiations for a New Steam Sales Agreement

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

The Newark Group is Silicon Valley Power's only customer for the purchase of steam. Since 1994, the City has provided the steam from the City's cogeneration facility (Cogen) to the Newark Group, Inc. (The Newark Group) for purchase for its use in the manufacturing of recycled paper products at the California Paperboard Mill under the Steam Sales Agreement. On November 17, 2015 Council approved a five (5) year Steam Sale Agreement with The Newark Group, Inc. with an expiration date of October 31, 2020.

Although the agreement expired on October 31, 2021, both SVP and Newark have continued to perform as required by the agreement in good faith without issue, and the proposed amendment reflects the extension even though the agreement term expired.

Staff has been negotiating a new Agreement with The Newark Group but has taken longer than expected due to the Pandemic changing priorities from both parties. As discussed, SVP has continued to provide the steam and there are no other potential customers who will be interested in this service.

DISCUSSION

The long term Steam Sales Agreement provides a better incentive for The Newark Group to maximize their steam purchases from Santa Clara's Cogen power plant instead of using a separate boiler. The Newark Group is SVP's only steam customer, and there are no other steam agreements available for comparison. In addition, Cogen was designed to provide steam to the California Paperboard Mill, and revenue from the steam sales essentially offsets operating costs at Cogen power plant. The Parties haven't been able to complete negotiation on the Steam Sale Agreement renewal, and therefore wish to renew and extend the Original Agreement to extend the Term of the Steam Sales Agreement one (1) additional year until October 31, 2021, to continue further negotiations and developing the steam rate methodology which would enable City to recover future capital expenditure on the Cogen plant and streamline the billing process.

By extending this Agreement, SVP will be assured of stable, predictable power sales to this existing customer, for an extended time, by keeping them in the SVP territory. If the extension is not entered into, SVP may lose the opportunity to make future sales of steam to the Newark Group and retain

them as a large electric customer in the SVP territory.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a “project” within the meaning of the California Environmental Quality Act (“CEQA”) pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment.

FISCAL IMPACT

The steam sales to The Newark Group was approximately \$1.5M in FY 2019/20 and the average monthly steam sales is expected to be around \$125,000 in FY 2020/21.

COORDINATION

This report has been coordinated with the Finance Department and City Attorney’s Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City’s official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City’s website and in the City Clerk’s Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk’s Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> .

RECOMMENDATION

Authorize the City Manager to execute Amendment No. 1 to the Steam Sales Agreement with The Newark Group, Inc. to renew and extend the Agreement until October 31, 2021 to allow staff to continue negotiations for a new Steam Sales Agreement.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: DeAnna J. Santana, City Manager

ATTACHMENTS

1. Original Steam Sales Agreement
2. Proposed Amendment No. 1 to the Steam Sales Agreement

**AMENDMENT NO. 1 TO RENEW AND EXTEND
THE STEAM SALE AGREEMENT
BETWEEN THE
CITY OF SANTA CLARA, CALIFORNIA,
AND
THE NEWARK GROUP, INC.**

PREAMBLE

This agreement ("Amendment No. 1") is entered into between the City of Santa Clara, California, a chartered California municipal corporation (City or Seller) and the Newark Group, Inc. a New Jersey corporation, (Buyer). Seller and Buyer may be referred to individually as a "Party" or collectively as the "Parties" or the "Parties to this Agreement."

RECITALS

- A. The Parties previously entered into an agreement entitled "Steam Sales Agreement by and Between the City of Santa Clara and The Newark Group, Inc.," dated November 17, 2015 (Agreement); and
- B. The Parties entered into the Agreement for the purpose of having the City provide the steam from the City's Cogen facility to the Customer for purchase for its use in the manufacture of recycled paper products at the Paper Mill.
- C. The Parties now wish to renew and extend the Original Agreement to extend the Term of the Steam Sales Agreement one (1) additional year while further negotiating for future periods.

NOW, THEREFORE, the Parties agree as follows:

AMENDMENT TERMS AND CONDITIONS

- 1. Reinstatement of Agreement. The Termination of the Agreement is hereby revoked and, except as expressly modified by this Amendment, the Agreement is reinstated in its entirety and shall be in full force and effect as if the same had never been terminated.
- 2. Exhibit B, Section 1 of the Agreement, is amended to read as follows:

Term of Agreement: November 1, 2015 through October 31, 2021.

3. Except as set forth herein, all other terms and conditions of the Agreement shall remain in full force and effect. In case of a conflict in the terms of the Agreement and this Amendment No. 1, the provisions of this Amendment No. 1 shall control.

The Parties acknowledge and accept the terms and conditions of this Amendment No. 1 as evidenced by the following signatures of their duly authorized representatives.

CITY OF SANTA CLARA, CALIFORNIA
a chartered California municipal corporation

Approved as to Form:


BRIAN DOYLE
City Attorney

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Arellano
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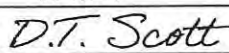
Dated:

3/12/2021


DEANNA J. SANTANA
City Manager
1500 Warburton Avenue
Santa Clara, CA 95050
Telephone: (408) 615-2210
Fax: (408) 241-6771

"CITY"

THE NEWARK GROUP, INC.
a New Jersey Corporation

Dated: 2/3/21
By (Signature): 
Name: David Scott, P.E.
Title: Vice President
Principal Place of Business Address: 525 Mathew Street
Santa Clara, CA 95050
Email Address: David.Scott@greif.com
Telephone: (770) 375-5176

"CUSTOMER"

**AMENDMENT NO. 2
TO THE STEAM SALES AGREEMENT
BETWEEN THE
CITY OF SANTA CLARA, CALIFORNIA,
AND
THE NEWARK GROUP, INC.**

PREAMBLE

This agreement ("Amendment No. 2") is entered into between the City of Santa Clara, California, a chartered California municipal corporation ("City" or "Seller") and the Newark Group, Inc., a New Jersey corporation ("Buyer"), with its principal place of business located at 525 Mathew Street, Santa Clara, California. Seller and Buyer may be referred to individually as a "Party" or collectively as the "Parties" or the "Parties to this Agreement."

RECITALS

- A. The Parties previously entered into an agreement entitled Steam Sales Agreement By and Between the City of Santa Clara and The Newark Group, Inc., dated November 17, 2015 (the "Original Agreement")
- B. The Parties entered into the Original Agreement for the purpose of having the City provide the steam from the City's Cogen facility to the Buyer for purchase for its use in the manufacture of recycled paper products at the Paper Mill.
- C. The Parties executed the Amendment No.1 to the Original Agreement on March 9, 2021 to extend the Term of the Sales Agreement to October 31, 2021 to provide additional time for Parties to negotiate the Sales Agreement renewal.
- D. The Parties now wish to enter into Amendment No. 2 to the Original Agreement to extend the Term of the Steam Sales Agreement to March 31, 2022 to continue negotiations of a new Agreement.

NOW, THEREFORE, the Parties agree as follows:

AMENDMENT TERMS AND CONDITIONS

- 1. Exhibit B, Section 1 of the Agreement, is amended to read as follows: Term of Agreement: November 1, 2015 through March 31, 2022.
- 2. Except as set forth herein, all other terms and conditions of the Agreement as Amended shall remain in full force and effect. In case of a conflict in the terms of the Agreement as Amended and this Amendment No. 2, the provisions of this Amendment No. 2 shall control.

The Parties acknowledge and accept the terms and conditions of this Amendment No. 2 as evidenced by the following signatures of their duly authorized representatives.

CITY OF SANTA CLARA, CALIFORNIA
a chartered California municipal corporation

Approved as to Form:

Dated: _____

Office of the City Attorney
City of Santa Clara

DEANNA J. SANTANA
City Manager
1500 Warburton Avenue
Santa Clara, CA 95050
Telephone: (408) 615-2210
Fax: (408) 241-6771

"CITY"

THE NEWARK GROUP, INC.
a New Jersey corporation

Dated: _____

By (Signature): _____

Name: _____

Title: _____

Principal Place of
Business Address: 525 Mathew Street Santa Clara, CA 95050

Email Address: _____

Telephone: () _____

Fax: () _____

"BUYER"



Agenda Report

21-21237

Agenda Date: 10/19/2021

SUBJECT

Consideration of the Silicon Valley Power 2020 Power Content Label

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

The Power Source Disclosure (PSD) program was established by Senate Bill (SB) 1305 (Stats. 1997, ch. 796) in an effort to provide retail electricity consumers “accurate, reliable, and simple to understand information on the sources of energy that are used to provide electric services.”

In 2016, the California Energy Commission (CEC) adopted modifications to the regulations to incorporate statutory changes to program rules and reporting requirements as required by Assembly Bill (AB) 162 (Stats. 2009, ch. 313) and AB 2227 (Stats. 2012, ch. 616). AB 1110 (Stats. 2016, ch. 656) modified the PSD Program and Power Content Label by requiring retail suppliers to disclose the greenhouse gas (GHG) emissions intensity (the rate of emissions per unit of electricity) associated with each electricity portfolio beginning in 2021 for the 2020 reporting year. AB 1110 also required the CEC among other things, to determine a format for disclosing unbundled California eligible renewable energy credits (RECs) as a percentage of annual retail sales to be shown as an offset.

The law requires that electricity retail suppliers, like the City of Santa Clara's Electric Department, dba Silicon Valley Power (SVP), disclose to customers which types of resources are used to generate the electricity being sold to them. SVP is required to use the reporting format developed by the CEC called the Power Content Label (PCL). The data that is used to create the PCL comes from SVP's Power Source Disclosure (PSD) report that is audited through a third party and submitted to the CEC. Additionally, that CEC combines information from all in-state generation plant owners plus information on electricity imports and exports provided by the California Independent System Operator (CAISO) and other grid balancing authorities serving the state to create California's overall energy mix, which is called the “CA Power Mix”. The CEC states that the CA Power Mix appears on the PCL as a reference point and it is not an exact apples-to-apples comparison of a retail supplier's fuel mix..

New Format for 2020

The CEC established a new 2020 PCL that changes how emissions are reported in an effort to create a more streamlined energy procurement accounting system. What this new format means to SVP customers is that SVP's Power Content Label will now look different than in years past because the new PCL reporting does not count unbundled REC's unless they are California Eligible Renewables. This does not mean that SVP is purchasing less REC's, it just means that the PCL that SVP reports to its customers does not include many of the unbundled REC's that are being purchased through the Green Power Program. Energy procured through Green-e certified power is not recognized by the CEC. Additionally, the new 2020 PCL does not factor in what the carbon intensity of energy is at the

various times when energy is being drawn from the grid. However, SVP will continue to address carbon emissions reductions through all avenues available in order to meet ambitious climate targets set by both the City and the State.

The new 2020 PCL format is broken down into two major sections. The left side of the PCL highlights the carbon intensity of each of the types of electricity products that SVP offers its customers. The right side displays the percentages of energy sources that make up each product. SVP has four types of electricity products offered to our customers. Below we describe how the new PCL format affects the reporting on each product:

- SVP Residential Mix - No change
- SVP Non-Residential - No Change
- SVP Green Power Standard Mix - With the change in the label reporting requirements this year, SVP can no longer show energy offsets that do not fall under the CEC eligible renewable definition. The Green-e certified RECs are not recognized by the CEC unless they are also registered as California Eligible Renewable.
- SVP National Green Power mix - this is a separate label for customers who procure global energy offsets for sustainability and carbon neutrality. The CEC does not recognize any offsets that are not considered California Eligible Renewable and will not allow these Green-e certified renewable RECs be displayed on the California Power Content label.

A notice of PCL availability and link to the SVP website was published on customers' electric utility bill in October and will be published on the Silicon Valley Power website. The PCL will be used in other publications and marketing materials as needed.

DISCUSSION

State Compliance

SVP is in full compliance with the State Renewable Energy Portfolio requirement established in 2004, which has a different set of rules and requirements and time periods separate from the Power Content Label.

Power Content Labels

There are two different Power Content Labels attached. The first label displays only the four energy products and the CA Power Mix per CEC reporting guidelines. This PCL will be submitted to the CEC. The second label includes a combination of the four energy products into SVP's Overall Power mix while also utilizing the California Independent System Operator's (CAISO) emission's factor on an hourly basis for any unspecified energy purchased via the CAISO settled open markets. This combination of SVP's Overall Power mix is comparable to the CA Power Mix. SVP will publish the PCL including the overall SVP power mix. In summary:

- The City's residential load is a 100% carbon-free and renewable energy mix
- The non-residential power mix consists of 31.7% renewable resources. With the inclusion of large hydroelectric generation over 30 MW capacity, SVP's 2020 Power Mix is 48% greenhouse gas (GHG) free.

Information reported in the Power Content Label is the SVP operating data for City-owned power

plants, generation plants operated by the Northern California Power Agency, and Power Purchase agreements. For other specific energy resources, SVP uses information from invoices and RECs that are accounted for in SVP's Western Renewable Energy Generation Information System (WREGIS) account. For those agencies or utilities where a specific generation source (i.e. wind, solar, geothermal, hydro, coal, natural gas, etc.) could not be identified, per the guidelines, staff must assign these resources as "unspecified source of power".

Change over Previous Years

The amount of renewable and carbon free energy in the overall SVP Power Mix decreased compared to the past few years. The decrease in 2020 is largely due the impacts of droughts and wildfires. For example, during an average hydroelectric year, SVP receives over 45% of our clean energy from hydroelectric resources. In 2020, due to drought conditions, SVP only received about half of those expected resources with approximately 23% of its energy from hydroelectric. In 2018, the Camp Fire started in Butte County damaged transmission infrastructure that prevented SVP from receiving electricity from the SVP-owned Grizzly Powerhouse, a small hydro project generating an average 43,000 MWh/year.

Other factors that impact SVP's PCL are the delay in the commercial operation date (COD) of projects SVP has contracted. These delays can occur for a variety of reasons including but not limited to timing and development of transmission expansion, environmental policies, legislative mandates, supply chain issues, and unforeseen events such as the COVID19 pandemic. For example, in 2016, SVP contracted for 49.5 MW of power from the Altamont wind project that was intended to be in commercial operation in 2020. However, due to permitting delays, operations are now not expected until 2023 resulting in approximately 169,000 MWh that did not arrive to our customers.

Upcoming Years

SVP is heavily engaged in clean energy procurement for the future, including negotiations for over 700 MWs of energy totaling over 2,200,000 MWh annually. These resources are in various stages of development and are estimated to achieve commercial operation over the next several years. Additional opportunities are continuously identified by SVP as it is possible that not all negotiations will lead to final agreements or a project will fail to achieve commercial operations. In addition, SVP is working on a Green Tariff program. This voluntary program will enable SVP to procure up to 100% renewable energy for industrial and large commercial customers that want to exceed SVP's current Non-Residential product offering and will be set to ensure any purchases will qualify under the new reporting requirements. This new program will be considered by Council in November/December of this year and will be implemented in 2022.

ENVIRONMENTAL REVIEW

This action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b (5)) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

FISCAL IMPACT

There is no economic or fiscal impact with the exception of staff time in preparing this report.

COORDINATION

This report has been coordinated with the City Attorney's Office and the Finance Department.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

RECOMMENDATION

Note and file SVP's Power Content Label(s).

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

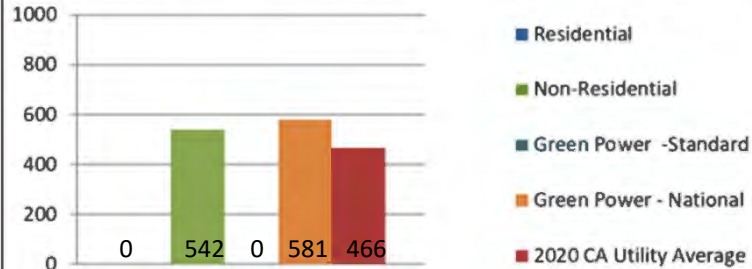
Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. 2020 SVP Power Content Label for CEC
2. 2020 SVP Power Content Label including SVP's overall power mix

2020 POWER CONTENT LABEL
City of Santa Clara/Silicon Valley Power
www.siliconvalleypower.com

Greenhouse Gas Emissions Intensity (lbs CO ₂ e/MWh)					Energy Resources	Residential	Non-Residential	Green Power - Standard	Green Power - National	2020 CA Power Mix
Residential	Non-Residential	Green Power - Standard	Green Power - National	2020 CA Utility Average	Eligible Renewable ¹	40.2%	31.7%	100.0%	26.0%	33.1%
0	542	0	581	466	Biomass & Biowaste	0.0%	2.6%	0.0%	0.5%	2.5%
					Geothermal	0.0%	8.1%	0.0%	5.2%	4.9%
					Eligible Hydroelectric	0.0%	8.8%	0.0%	6.4%	1.4%
					Solar	11.1%	0.2%	100.0%	0.0%	13.2%
					Wind	29.1%	12.2%	0.0%	13.9%	11.1%
					Coal	0.0%	0.0%	0.0%	0.0%	2.7%
					Large Hydroelectric	59.8%	12.2%	0.0%	13.5%	12.2%
					Natural Gas	0.0%	18.4%	0.0%	36.9%	37.1%
					Nuclear	0.0%	0.0%	0.0%	0.0%	9.3%
					Other	0.0%	0.0%	0.0%	0.0%	0.2%
					Unspecified Power ²	0.0%	37.6%	0.0%	23.7%	5.4%
					TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%
Percentage of Retail Sales Covered by Retired Unbundled RECs ³ :						0%	0%	53%	1%	
¹ The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology. ² Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source. ³ Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled renewable energy credits (RECs) represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.										
For specific information about this electricity portfolio, contact:						Silicon Valley Power (408) 244-SAVE(7283)				
For general information about the Power Content Label, visit:						http://www.energy.ca.gov/pcl/				
For additional questions, please contact the California Energy Commission at:						Toll-free in California: 844-454-2906 Outside California: 916-653-0237				

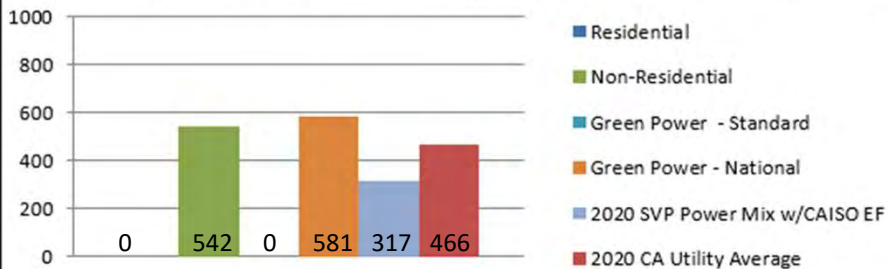


2020 POWER CONTENT LABEL

Silicon Valley Power

www.siliconvalleypower.com

Greenhouse Gas Emissions Intensity (lbs CO ₂ e/MWh)						Energy Resources	Residential	Non-Residential	Green Power - Standard	Green Power - National	2020 SVP Power Mix w/CAISO EF	2020 CA Power Mix
Residential	Non-Residential	Green Power - Standard	Green Power - National	2020 SVP Power Mix w/CAISO EF	2020 CA Utility Average	Eligible Renewable ¹	40.2%	31.7%	100.0%	26.0%	32.4%	33.1%
0	542	0	581	317	466	Biomass & Biowaste	0.0%	2.6%	0.0%	0.5%	2.2%	2.5%
						Geothermal	0.0%	8.1%	0.0%	5.2%	7.4%	4.9%
						Eligible Hydroelectric	0.0%	8.8%	0.0%	6.4%	8.0%	1.4%
						Solar	11.1%	0.2%	100.0%	0.0%	1.6%	13.2%
						Wind	29.1%	12.2%	0.0%	13.9%	13.3%	11.1%
						Coal	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%
						Large Hydroelectric	59.8%	12.2%	0.0%	13.5%	15.2%	12.2%
						Natural Gas	0.0%	18.4%	0.0%	36.9%	19.0%	37.1%
						Nuclear	0.0%	0.0%	0.0%	0.0%	0.0%	9.3%
						Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
						Unspecified Power ²	0.0%	37.6%	0.0%	23.7%	33.3%	5.4%
						TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Percentage of Retail Sales Covered by Retired Unbundled RECs ³ :							0%	0%	53%	1%	1%	
¹ The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology. ² Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source. ³ Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled renewable energy credits (RECs) represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.												
For specific information about this electricity portfolio, contact:							Silicon Valley Power (408) 244-SAVE (7283)					
For general information about the Power Content Label, visit:							http://www.energy.ca.gov/pcl/					
For additional questions, please contact the California Energy Commission at:							Toll-free in California: 844-454-2906 Outside California: 916-653-0237					





Agenda Report

21-1265

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Delegation of authority to the City Manager to negotiate and execute the Third Phase Agreement with Northern California Power Agency (NCPA) for a Power Purchase Agreement (PPA) with South Feather Water and Power Agency (SFWPA)

COUNCIL PILLAR

Deliver and Enhance High-Quality Efficient Services and Infrastructure
Promote Sustainability and Environmental Protection

BACKGROUND

Pursuant to 2.105.090(b) of the City Code, “any contract for the purchase or sale of water, electrical power, fuels for the generation of electrical power, wastewater and recycled water” are exempt from following the purchasing procedures under the City’s Centralized Purchasing Program.

The City of Santa Clara’s Electric Department, Silicon Valley Power (SVP) purchases energy to supply the residents and businesses within the City of Santa Clara. Senate Bill 100 (SB 100) approved on September 10, 2018, requires that SVP meet the State’s Renewable Portfolio Standards (RPS). Under the RPS, SVP must procure a specified percentage of its retail sales from renewable energy resources by a particular year.

SB 100 requires retail sellers and local publicly owned electric utilities to procure a minimum 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 of electricity products from eligible renewable energy resources.

SVP meets its Renewable Portfolio Standards goals by purchasing electrical power either a) through Power Purchase Agreements (PPA)s with project developers through their direct offerings or through Joint Powers Agency (JPA) offerings and/or b) through a request for proposal process. Each potential PPA project may have unique characteristics that impact the value of the resource to SVP customers. Staff evaluates potential projects on locational value, shape of the generation output, environmental attributes, capacity attributes, and operational flexibility and viability.

NCPA is a not-for-profit JPA whose membership includes municipalities, a rural electric cooperative, and other publicly owned entities including the City of Santa Clara. The mission of NCPA is to provide members cost effective wholesale power, energy-related services, and advocacy on behalf of public power consumers through joint action.

In late 2017, SFWPA issued a Request for Statement of Qualifications to NCPA for scheduling coordination and dispatch services along with the option to purchase renewable and carbon free energy from four existing hydroelectric generating power plants that make up the South Feather

Power Project (SFPP). The four hydroelectric power plants are as follows: the Forbestown Powerhouse with a capacity of 37.5 megawatts (MW), the Kelly Ridge Powerhouse with a capacity of 11.0 MW, the Sly Creek Powerhouse with a capacity of 13.0 MW, and the Woodleaf Powerhouse with a capacity of 60.0 MW. The four plants that make up the South Feather Power Project are located across Butte, Plumas, and Yuba counties on the South Fork of the Feather River and Slate Creek.

After receiving the project details, Staff evaluated and analyzed the project and determined the SFPP would further diversify SVP's renewable energy portfolio. SVP notified NCPA and expressed interest in purchasing up to 100% of the projects renewable and carbon free energy as well as the associated project attributes. NCPA indicated that other NCPA members also expressed interest in the project and as a result, NCPA and the interested participating members (Participants) reached consensus on each members' proposed share of the project output.

NCPA, working closely with SVP staff, has been leading the negotiations of a power purchase agreement (PPA) with SFWPA on behalf of its Participants. To enable NCPA to enter into the PPA on behalf of the Participants, the Participants will need to execute a Third Phase Agreement which specifies the rights and obligations of NCPA and the Participants regarding governance and administration of the PPA and obligates each Participant to pay a percentage share of all project costs for project participation, administrative services costs, scheduling coordination costs, and all other costs related to the PPA.

DISCUSSION

The term of the PPA will be for ten years. At the end of the term, if SFWPA does not elect to terminate the PPA, the PPA will automatically extend for an additional ten-year period. During the term of the PPA, NCPA staff will schedule and dispatch the SFPP and SFWPA will continue to own, operate, and maintain the SFPP.

SVP's proposed project participation share would be 64.2% (78 MW of 121.5 MW total). Based on the average historical generation from the project, SVP's proposed project participation share of the generation output would be approximately 245,000 MWh (or 6.5% of SVP's calendar year (CY) 2020 retail sales) annually. The generation output can vary annually based on water availability; however, the project is supported by reservoirs that can conserve the amount of water that is used for generation during years of less than normal rainfall. The project participation share will be finalized when all Participants have received approval by their respective governing body. Although unexpected, in the event a Participant is not able to receive approval to participate in this project, their respective project participation share is proposed to be allocated to the City of Roseville and the City of Santa Clara equally. In the event, SVP is the sole participant in this project, SVP would receive approximately 382,000 MWhs (or approximately 10% of SVP's CY 2020 retail sales) annually. Therefore, SVP staff is recommending the City Council to delegate authority to the City Manager to execute the Third Phase Agreement with Northern California Power Agency (NCPA) for a Power Purchase Agreement with South Feather Water and Power Agency (SFWPA) for up to 100% of the project output.

The proposed contract for the SFPP would increase and further diversify SVP's renewable energy portfolio in accordance with the Council's adopted Policy on Environmental Stewardship and Renewable Portfolio Standards. The flexibility of the project is also advantageous because it can be operated to meet the peak energy demand of each day supplementing SVP's wind and solar

projects, which are only available when the wind blows or during solar hours.

In addition, there is limited development risks because the project is an existing hydroelectric power plant that is currently operating and participating in California's energy market. SFWPA's original Federal Energy Regulatory Commission (FERC) license to operate expired on March 2009. SFWPA initiated the FERC relicensing process in 2007 and SFPP has been operating the project through a series of extensions granted by FERC since the original license expired, the latest extension is set to expire on March 31, 2022. SFWPA plans to file an application for extension with FERC requesting authority to sell output beyond the current term of their FERC license. If FERC does not approve SFWPA's extension application by December 31, 2022, SFWPA would be in default of the terms of the PPA, the proposed PPA would terminate (without damages to either party), and the Parties would seek opportunities to replace the terminated PPA.

If approved, the parties intend to execute the agreement late 2021. SFWPA will begin delivering the SFPP to NCPA and its members on December 19, 2021. SVP will provide Council updates as needed through the SVP quarterly update or memorandums to Council.

ENVIRONMENTAL REVIEW

Our Council's action is not a project as defined by CEQA under 15378(b)(2) as it is an Administrative Activity. The South Feather Water Power Agency adopted a mitigated negative declaration (SCH No. 2010022007) for the underlying project to develop the South Feather Power Project on March 27, 2012.

FISCAL IMPACT

The contract price will include fixed and variable components. The fixed component of the contract price is for the project's capacity and base generation output. The variable component of the contract price will be for any additional generation output that exceeds the base generation output. SVP will purchase approximately 245,000 MWhs annually based on forecasts of average hydrological conditions and the price for this energy production will not exceed \$60/MWh including both fixed and variable payments during the contract term. Sufficient funds are available in the FY 2021/22 and FY 2022/23 Biennial Operating Budget in the Electric Utility Operating Fund Resources: Non-JPA. Budget for future years will be included in recommended budgets.

COORDINATION

This report has been coordinated with the Finance Department and City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

1. Authorize the City Manager to negotiate and execute the Third Phase Agreement with Northern California Power Agency (NCPA) for a Power Purchase Agreement with South Feather Water and Power Agency (SFWPA); and

2. Authorize the City Manager to execute administrative amendments to the Third Phase Agreement with Northern California Power Agency as may be needed from time to time during the term of the PPA.

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Third Phase Agreement with NCPA
2. Power Purchase Agreement between SFWPA and NCPA

**THIRD PHASE AGREEMENT
FOR
POWER PURCHASE AGREEMENT
WITH
SOUTH FEATHER WATER AND POWER AGENCY**

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This THIRD PHASE AGREEMENT ("this Agreement") is dated as of _____, 20__ by and among the Northern California Power Agency, a joint powers agency of the State of California ("NCPA"), and the signatories to this Agreement other than NCPA ("Participants"). NCPA and the Participants are referred to herein individually as a "Party" and collectively as the "Parties".

RECITALS

A. NCPA has heretofore been duly established as a public agency pursuant to the Joint Exercise of Powers Act of the Government Code of the State of California and, among other things, is authorized to acquire, construct, finance, and operate buildings, works, facilities, and improvements for the generation and transmission of electric capacity and energy for resale.

B. Each of the Participants is a signatory to the Joint Powers Agreement which created NCPA and therefore is a Member.

C. Each of the Participants to this Agreement have executed the Amended and Restated Facilities Agreement, dated October 1, 2014, which establishes the framework under which Project Agreements are created for the development, design, financing, construction, and operation of specific NCPA Projects.

D. The Participants desire NCPA to enter into a Power Purchase Agreement ("PPA") with South Feather Water and Power Agency ("SFWPA" or "Seller"), to purchase

electric capacity and energy produced by the Project for the benefit of the Participants' customers.

E. Each Participant is authorized by its Constitutive Documents to obtain electric capacity and energy for its present or future requirements, through contracts with NCPA or otherwise.

F. To enable NCPA to enter into the PPA on behalf of the Participants, pursuant to the terms and conditions of the Amended and Restated Facilities Agreement, NCPA and the Participants wish to enter into this Agreement to provide all means necessary for NCPA to fulfill obligations incurred on behalf of NCPA and the Participants pursuant to the PPA, and to enable and obligate the Participants to take delivery of and pay for such electric capacity and energy and to pay NCPA for all costs it incurs for undertaking the foregoing activities.

G. Upon full execution of this Agreement, NCPA will enter into the PPA on behalf of the Participants, and such PPA shall be deemed a NCPA Project by the Commission.

H. Each of the Parties intends to observe the provisions of this Agreement in good faith and shall cooperate with all other Parties in order to achieve the full benefits of joint action.

I. The Parties desire to equitably allocate costs of NCPA's provision of services under this Agreement among the Participants.

J. The Participants further desire, insofar as possible, to insulate other Members who are not Participants, from risks inherent in the services and transactions undertaken on behalf of the Participants pursuant to this Agreement.

NOW, THEREFORE, the Parties agree as follows:

Section 1. Definitions.

1.1 Definitions. Whenever used in this Agreement (including the Recitals hereto), the following terms shall have the following respective meanings, provided, capitalized terms used in this Agreement (including the Recitals hereto) that are not defined in Section 1 of this Agreement shall have the meaning indicated in Section 1 of the Power Management and Administrative Services Agreement, dated October 1, 2014:

1.1.1 “Administrative Services Costs” means that portion of the NCPA administrative, general and occupancy costs and expenses, including those costs and expenses associated with the operations, direction and supervision of the general affairs and activities of NCPA, general management, treasury operations, accounting, budgeting, payroll, human resources, information technology, facilities management, salaries and wages (including retirement benefits) of employees, facility operation and maintenance costs, taxes and payments in lieu of taxes (if any), insurance premiums, fees for legal, engineering, financial and other services, power management services, general settlement and billing services and general risk management costs, that are charged directly or apportioned to the provision of services under this Agreement.

Administrative Services Costs as separately defined herein and used in the context of this Agreement is different and distinct from the term Administrative Services Costs as defined in Section 1 of the Power Management and Administrative Services Agreement.

1.1.2 “Agreement” means this Third Phase Agreement, including all Exhibits attached hereto.

1.1.3 “CAISO” means the California Independent System Operator Corporation, or its functional successor.

1.1.4 “CAISO Tariff” means the duly authorized tariff, rules, protocols and other requirements of the ISO, as amended from time to time.

1.1.5 “Capacity Attributes” means any and all current or future defined characteristics consistent with the operational limitations of the Project, certificates, tags, credits, ancillary service attributes, or accounting constructs, howsoever entitled, including Resource Adequacy Benefits, Flexible Capacity Benefits, and any tracking or accounting associated with the foregoing, intended to value any aspect of the capacity of the Project to produce Energy or ancillary services, attributed to or associated with the Project.

1.1.6 “Constitutive Documents” means, with respect to NCPA, the Joint Powers Agreement and any resolutions or bylaws adopted thereunder with respect to the governance of NCPA, and with respect to each Participant, the California

Government Code and other statutory provisions applicable to such Participant, any applicable agreements, charters, contracts, or other documents concerning the formation, operation or decision making of such Participant, including, if applicable, its city charter, and any codes, ordinances, bylaws, and resolutions adopted by such Participant's governing body.

1.1.7 "Defaulting Participant" has the meaning set forth in Section 7.2.

1.1.8 "Energy" means electric energy expressed in units of kWh or MWh.

1.1.9 "Environmental Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, as the case may be, and its displacement of conventional energy generation. Environmental Attributes include: (i) any avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (ii) any avoided emissions of carbon dioxide (CO₂), methane (CH₄) and other greenhouse gases that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and (iii) the reporting rights to these avoided emissions such as, but not limited to, a REC.

Environmental Attributes do not include: (i) any Energy, capacity, reliability, or other power attributes from the Project; (ii) production tax credits associated with the construction or operation of the Project, and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by Seller or the owners of the site for the destruction of particular pre-existing pollutants or the promotion of local environmental benefits; or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

1.1.10 “Event of Default” has the meaning set forth in Section 7.2.

1.1.11 “Flexible Capacity” has the meaning set forth in the CAISO Tariff.

1.1.12 “Flexible Capacity Benefits” means the rights and privileges attached to any generating resource that satisfy any entity’s Flexible Capacity requirement.

1.1.13 “General Operating Reserve” means the NCPA General Operating Reserve created through resolution of the Commission, as the same may be amended from time to time.

1.1.14 “KWh” means kilowatt hour.

1.1.15 “MW” means megawatt.

1.1.16 "MWh" means megawatt hour.

1.1.17 "NCPA" has the meaning set forth in the recitals hereto.

1.1.18 "Participant" has the meaning set forth in the recitals of this Agreement.

1.1.19 "Power Management and Administrative Services Agreement" means the NCPA Power Management and Administrative Services Agreement, dated as of October 1, 2014 between NCPA and the Members who are signatories to that agreement by which NCPA provides Power Management and Administrative Services.

1.1.20 "Product" means Energy, Capacity Attributes, Environmental Attributes and ancillary products, services or attributes similar to the foregoing that are delivered to the Participants pursuant to the PPA.

1.1.21 "Project" or "PPA" means the Power Purchase Agreement, dated as of _____, 20__ between NCPA and Seller, under which NCPA, on behalf of the Participants, purchases Product from the South Feather Power Project located in Butte County, California, consisting of four existing hydroelectric generating plants under FERC licenses: the Forbestown Powerhouse, the Kelly Ridge Powerhouse, the Sly Creek Powerhouse, and the Woodleaf Powerhouse. Upon final execution of the PPA, the Project shall be deemed a NCPA Project in accordance with the Amended and Restated Facilities Agreement. The PPA has been attached to this Agreement as Exhibit B.

1.1.22 “Project Costs” means all costs charged to and paid by NCPA pursuant to the PPA.

1.1.23 “Party” or “Parties” has the meaning set forth in the preamble hereto; provided that “Third Parties” are entities that are not Party to this Agreement.

1.1.24 “REC” or “Renewable Energy Certificate” means a certificate of renewable energy generation from units that register in the WREGIS system, or other commonly accepted renewable energy generation tracking system or program, which can be used to verify compliance with state and provincial requirements such as RPS.

1.1.25 “Resource Adequacy” means the procurement obligation of load serving entities, including the Participants, as such obligations are described in CPUC Decisions D.04-10-035 and D.05-10-042, and subsequent CPUC decisions addressing Resource Adequacy issues, as those obligations may be altered from time to time in the CPUC Resource Adequacy Rulemakings (R.) 04-04-003 and (R.) 05-12-013 or by any successor proceeding, and all other Resource Adequacy obligations established by any other entity, including the CAISO.

1.1.26 “Resource Adequacy Benefits” means the rights and privileges attached to any generating resource that satisfy any entity’s Resource Adequacy obligations.

1.1.27 “Revenue” means , with respect to each Participant, all income, rents, rates, fees, charges, and other moneys derived by the Participant from the

ownership or operation of its Electric System, including, without limiting the generality of the foregoing: (a) all income, rents, rates, fees, charges or other moneys derived from the sale, furnishing and supplying of electric capacity and energy and other services, facilities, and commodities sold, furnished, or supplied through the facilities of its Electric System; (b) the earnings on and income derived from the investment of such income, rents, rates, fees, charges or other moneys to the extent that the use of such earnings and income is limited by or pursuant to law to its Electric System; (c) the proceeds derived by the Participant directly or indirectly from the sale, lease or other disposition of all or a part of the Electric System; and (d) the proceeds derived by Participant directly or indirectly from the consignment and sale of freely allocated greenhouse gas compliance instruments into periodic auctions administered by the State of California under the California Cap-and-Trade Program, provided that such proceeds are a permitted use of auction proceeds, but the term Revenues shall not include (i) customers' deposits or any other deposits subject to refund until such deposits have become the property of the Participant or (ii) contributions from customers for the payment of costs of construction of facilities to serve them.

1.1.28 "RPS" or "Renewable Portfolio Standard Program" means the State of California Renewable Portfolio Standard Program, as codified at California Public Utilities Code Section 399.11, *et seq.*

1.1.29 "Scheduling Protocols" means the applicable provisions of the Amended and Restated Scheduling Coordination Program Agreement, and any other contractual or other arrangements between NCPA and the Participants concerning the scheduling, delivery and metering of the PPA.

1.1.30 "Security Deposit" means the account established by NCPA and funded by the Participants in accordance with Section 5, the funds of which are available for use by NCPA in accordance with the terms and conditions hereof.

1.1.31 "Seller" means South Feather Water and Power Agency, as set forth in recital D of this Agreement, or as otherwise set forth in the PPA.

1.1.32 "Term" has the meaning set forth in Section 10.

1.1.33 "Third Party" means an entity (including a Member) that is not Party to this Agreement

1.1.34 "WREGIS" means Western Renewable Energy Generation Information System, or its functional successor.

1.2 Rules of Interpretation. As used in this Agreement (including the Recitals hereto), unless in any such case the context requires otherwise: The terms "herein," "hereto," "herewith" and "hereof" are references to this Agreement taken as a whole and not to any particular provision; the term "include," "includes" or "including" shall mean "including, for example and without limitation;" and references to a "Section," "subsection," "clause," "Appendix", "Schedule", or "Exhibit" shall mean a Section,

subsection, clause, Appendix, Schedule or Exhibit of this Agreement, as the case may be. All references to a given agreement, instrument, tariff or other document, or law, regulation or ordinance shall be a reference to that agreement, instrument, tariff or other document, or law, regulation or ordinance as such now exists and as may be amended from time to time, or its successor. A reference to a “person” includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having a separate legal personality and includes its successors and permitted assigns. A reference to a “day” shall mean a Calendar Day unless otherwise specified. The singular shall include the plural and the masculine shall include the feminine, and *vice versa*.

Section 2. Purpose. The purpose of this Agreement is to: (i) set forth the terms and conditions under which NCPA shall enter into the PPA on behalf of the Participants, (ii) authorize NCPA, acting on behalf of the Participants, to engage in all activities related to that basic purpose, and (iii) specify the rights and obligations of NCPA and the Participants with respect to the PPA.

Section 3. Sale and Purchase of Product. By executing this Agreement, each Participant acknowledges and agrees to be bound by the terms and conditions of the Agreement, and that the Agreement is written as a “take-or-pay” agreement. Any Product delivered to NCPA under the PPA shall be delivered to each Participant in proportion to such Participant’s Project Participation Percentage as set forth in Exhibit A, and each

Participant shall accept and pay for its respective percentage of such Product. To the extent a Participant is unable to accept such deliveries in full, NCPA shall dispose of such surplus in its sole discretion, in such a manner to attempt to maximize Participant value and that Participant shall reimburse to NCPA any costs incurred by NCPA in doing so. Notwithstanding the above, NCPA may allocate Product procured through the PPA among the Participants in such percentages as NCPA may, in its reasonable discretion, determine are necessary, desirable, or appropriate, in order to accommodate Participant transfer rights pursuant to Section 9.

3.1 Scheduling. Product delivered from Seller shall be scheduled for and to the Participants in accordance with Scheduling Protocols, and the terms and conditions of the PPA.

Section 4. Billing and Payments

4.1 Participant Payment Obligations. Each Participant agrees to pay to NCPA each month its respective portion of the Project Costs, Administrative Services Costs, scheduling coordination costs, and all other costs for services provided in accordance with this Agreement and the Amended and Restated Facilities Agreement. In addition to the aforementioned monthly payment obligations, each Participant is obligated to fund: (i) any and all required Security Deposits calculated in accordance with Section 5, and (ii) any working capital requirements for the Project maintained by NCPA as determined, collected and set forth in the Annual Budget.

4.2 Invoices. NCPA will issue an invoice to each Participant for its share of Project Costs, Administrative Services Costs, scheduling coordination costs, and all other costs for services provided in accordance with this Agreement and the Amended and Restated Facilities Agreement. Such invoice may be either the All Resources Bill or separate special invoice, as determined by NCPA. At NCPA's discretion, invoices may be issued to Participants using electronic media or physical distribution.

4.3 Payment of Invoices. All invoices delivered by NCPA (including the All Resources Bill) are due and payable thirty (30) Calendar Days after the date thereof; provided, however, that any amount due on a day other than a Business Day may be paid on the following Business Day.

4.4 Late Payments. Any amount due and not paid by a Participant in accordance with Section 4.3 shall be considered late and bear interest computed on a daily basis until paid at the lesser of (i) the per annum prime rate (or reference rate) of the Bank of America NT&SA then in effect, plus two percent (2%) or (ii) the maximum rate permitted by law.

4.5 Billing Disputes. A Participant may dispute the accuracy of any invoice issued by NCPA under this Agreement by submitting a written dispute to NCPA, within thirty (30) Calendar Days after the date of such invoice; nonetheless the Participant shall pay the full amount billed when due. If a Participant does not timely question or dispute the accuracy of any invoice in writing, then the invoice shall be deemed to be correct. Upon review of a submitted dispute, if an invoice is determined by NCPA to be incorrect,

then NCPA shall issue a corrected invoice and refund any amounts that may be due to the Participant. If NCPA and the Participant fail to agree on the accuracy of an invoice within thirty (30) Calendar Days after the Participant has disputed it, then the General Manager shall promptly submit the dispute to the Commission for resolution. If the Commission and the Participant fail to agree on the accuracy of a disputed invoice within sixty (60) Calendar Days after its submission to the Commission, then the dispute may then be resolved under the mediation and arbitration procedures set forth in Section 12 of this Agreement; provided, however, that prior to resorting to either mediation or arbitration proceedings, the full amount of the disputed invoice must be paid by the Participant.

4.6 Billing/Settlement Data and Examination of Books and Records.

4.6.1 Settlement Data. NCPA shall make billing and settlement data available to the Participants in the All Resources Bill, or other invoice, or upon request. NCPA may also, at its sole discretion, make billing and settlement support information available to Participants using electronic media (e.g. electronic data portal).

Procedures and formats for the provision of such electronic data submission may be established by the Commission from time to time. Without limiting the generality of the foregoing, NCPA may, in its reasonable discretion, require the Participants to execute a non-disclosure agreement prior to providing access to the NCPA electronic data portal.

4.6.2 Examination of Books and Records. Any Participant to this Agreement shall have the right to examine the books and records created and maintained by NCPA pursuant to this Agreement at any reasonable, mutually agreed upon time.

Section 5. Security Deposit Administration

5.1 Security Deposit Requirements. Each Participant agrees that any funds deposited at NCPA to satisfy Participant's Security Deposit requirements pursuant to this Agreement shall be irrevocably committed and held by NCPA in the General Operating Reserve, and that such funds may be used by NCPA in accordance with Section 5.1.3. Each Participant's Security Deposit will be accounted separately from and in addition to any other security accounts or deposits maintained pursuant to any other agreement between NCPA and the Participant, or any other such security account or deposits required of Members. In connection with fulfilling the Security Deposit requirements of this Agreement, Participant may elect to use its uncommitted funds held in the General Operating Reserve to satisfy in whole or in part its Security Deposit required under Section 5. If Participant chooses to satisfy in whole or in part its security requirements using its uncommitted funds held in the General Operating Reserve, then Participant is required to execute and deliver to NCPA an Irrevocable Letter of Direction, directing NCPA to utilize Participant's uncommitted General Operating Reserve funds for such

purposes, and the designated funds will thereafter be irrevocably committed and held by NCPA to satisfy the requirements of this Agreement.

5.1.1 Initial Amounts. Each Participant shall insure that sufficient Security Deposit funds have been deposited with and are held by NCPA equal to the highest three (3) months of estimated Project Costs, as estimated by NCPA. Such Security Deposit requirement may be satisfied by Participant in whole or part either in cash, through irrevocable commitment of its uncommitted funds held in the General Operating Reserve in accordance with Section 5.1, or through a clean, irrevocable letter of credit satisfactory to NCPA's General Manager.

5.1.2 Subsequent Deposits. Periodically, and at least quarterly, NCPA shall review and revise its estimate of Project Costs for which Participant shall be obligated to pay under this Agreement. Following such review, NCPA shall determine whether each Participant has a sufficient Security Deposit balance at NCPA. To the extent that any Participant's Security Deposit balance is greater than one hundred and ten percent (110%) of the amount required herein, NCPA shall credit such amount as soon as practicable to the Participant's next following All Resources Bill, or by separate special invoice. To the extent that any Participant's Security Deposit balance is less than ninety percent (90%) of the amount required herein, NCPA shall add such amount as soon as practicable to such Participant's next All Resources Bill, or as necessary, to a special invoice to be paid by Participant upon receipt. Credits or additions shall not be

made to Participants who satisfy these Security Deposit requirements in whole through the use of a letter of credit; provided, that the amount of the letter of credit shall be adjusted, as required from time to time, in a like manner to assure an amount equal to the highest three (3) months of estimated Project Costs is available to NCPA.

5.1.3 Use of Security Deposit Funds. NCPA may use any and all Security Deposit funds held by NCPA (or utilize a letter of credit provided in lieu thereof) to pay any costs it incurs hereunder, including making payments to Seller, without regard to any individual Participant's Security Deposit balance or proportionate share of Project Costs, and irrespective of whether NCPA has issued an All Resources Bill or special invoice for such costs to the Participants or whether a Participant has made timely payments of All Resources Bills or special invoices. Should Participant have satisfied its Security Deposit requirements in whole or part through a letter of credit, NCPA may draw on such letter of credit to satisfy Participant's obligations hereunder at NCPA's sole discretion. Notwithstanding the foregoing, if any Participant fails to pay any costs incurred by NCPA pursuant to this Agreement, NCPA shall first use that non-paying Participant's Security Deposit and shall not use any other Participants' Security Deposit until such non-paying Participant's Security Deposit has been exhausted.

5.1.4 Accounting. If Security Deposit funds or a letter of credit are used by NCPA to pay any costs it incurs hereunder as described in Section 5.1.3, then NCPA

will maintain a detailed accounting of each Participant's shares of funds withdrawn, and upon the collection of all or a part of such withdrawn funds, NCPA will credit back to each non-defaulting Participant the funds collected in proportion to such non-defaulting Participant's share of funds initially withdrawn.

5.1.5 Emergency Additions. In the event that funds are withdrawn pursuant to Section 5.1.3, or if the Security Deposit held by NCPA is otherwise insufficient to allow for NCPA to pay any invoice, demand, request for further assurances by Seller, or claims, NCPA shall notify all Participants of the deficiency. In conjunction with such notice, NCPA shall send a special or emergency assessment invoice to the Participant or Participants that caused or are otherwise responsible for the deficiency. Each Participant of such an invoice shall pay to NCPA such assessment when and if assessed by NCPA within two (2) Business Days of the invoice date of the assessment, or shall consent to and direct NCPA to draw on any existing letter of credit Participant has established for such purposes. In the event that the Participant or Participants that caused or are otherwise responsible for the deficiency cannot, does not or will not pay to NCPA the special or emergency assessment within two (2) Business Days after the invoice date, NCPA shall immediately submit a special or emergency invoice to all remaining Participants, and such remaining Participants shall pay to NCPA such assessment within two (2) Business Days after the invoice date of

the assessment, or shall consent to and direct NCPA to draw on any existing letter of credit that Participant has established for such purposes.

5.1.6 Security Deposit Interest. NCPA shall maintain a detailed accounting of each Participant's Security Deposits, and withdrawals of such funds, held by NCPA. Security Deposits held by NCPA shall be invested by NCPA in accordance with the General Operating Reserve policies and investment policies adopted by the NCPA Commission. Interest earned on the Security Deposit funds shall be proportionately credited to the Participants in accordance with their weighted average balances held therein. Any Security Deposit losses caused by early termination of investments shall be allocated among the Participants in accordance with the General Operating Reserve provisions and guidelines approved by the Commission, as the same may be amended from time to time; provided, however, to the extent that either the General Operating Reserve provisions and guidelines do not apply or the Security Deposit is not adequate to cover the losses, then such losses shall be allocated among the Participants in accordance with their proportionate Security Deposit balances.

5.1.7 Return of Funds. Upon termination or a permitted withdrawal of a Participant in accordance with this Agreement, the affected Participant may apply to NCPA for the return of their share of Security Deposit funds ninety (90) days after the effective date of such termination or withdrawal. However, NCPA shall, in its sole but

reasonable discretion, as determined by the NCPA General Manager, estimate the then outstanding liabilities of the Participant, including any estimated contingent liabilities and shall retain all such funds, if any, until all such liabilities have been fully paid or otherwise satisfied in full. After all such liabilities have been satisfied in full, as determined by NCPA's General Manager, any remaining balance of the Participant's share of the Security Deposit will be refunded to the Participant within sixty (60) days thereafter.

Section 6. Cooperation and Further Assurances. Each of the Parties agree to provide such information, execute and deliver any instruments and documents and to take such other actions as may be necessary or reasonably requested by any other Party which are consistent with the provisions of this Agreement and which do not involve the assumption of obligations other than those provided for in this Agreement, in order to give full effect to this Agreement and to carry out the intent of this Agreement. The Parties agree to cooperate and act in good faith in connection with obtaining any credit support required in order to satisfy the requirements of this Agreement.

Section 7. Participant Covenants and Defaults

7.1 Each Participant covenants and agrees: (i) to make payments to NCPA, from its Electric System Revenues, of its obligations under this Agreement as an operating expense of its Electric System; (ii) to fix the rates and charges for services provided by its Electric System, so that it will at all times have sufficient Revenues to meet the obligations

of this Agreement, including the payment obligations; (iii) to make all such payments due NCPA under this Agreement whether or not there is an interruption in, interference with, or reduction or suspension of services provided under this Agreement, such payments not being subject to any reduction, whether by offset or otherwise, and regardless of whether any reasonable dispute exists; and (iv) to operate its Electric System, and the business in connection therewith, in accordance with Good Utility Practices.

7.2 Events of Default. An Event of Default under this Agreement shall exist upon the occurrence of any one or more of the following by a Participant (the “Defaulting Participant”):

(i) the failure of any Participant to make any payment in full to NCPA when due;

(ii) the failure of a Participant to perform any covenant or obligation of this Agreement where such failure is not cured within thirty (30) Calendar Days following receipt of a notice from NCPA demanding cure; provided, that this subsection shall not apply to any failure to make payments specified by subsection 7.2 (i));

(iii) if any representation or warranty of a Participant material to the services provided hereunder shall prove to have been incorrect in any material respect when made and the Participant does not cure the facts underlying such incorrect representation or warranty so that the representation or warranty becomes true and correct within thirty (30) Calendar Days after the date of receipt of notice from NCPA demanding cure; or

(iv) if a Participant is in default or in breach of any of its covenants or obligations under any other agreement with NCPA and such default or breach is not cured within the time periods specified in such agreement.

7.3 Uncontrollable Forces. A Party shall not be considered to be in default in respect of any obligation hereunder if prevented from fulfilling such obligation by reason of Uncontrollable Forces; provided, that in order to be relieved of an Event of Default due to Uncontrollable Forces, a Party affected by an Uncontrollable Force shall:

(i) first provide oral notice to the General Manager using telephone communication within two (2) Business Days after the onset of the Uncontrollable Force, and provide subsequent written notice to the General Manager and all other Parties within ten (10) Business Days after the onset of the Uncontrollable Force, describing its nature and extent, the obligations which the Party is unable to fulfill, the anticipated duration of the Uncontrollable Force, and the actions which the Party will undertake so as to remove such disability and be able to fulfill its obligations hereunder; and

(ii) use due diligence to place itself in a position to fulfill its obligations hereunder and if unable to fulfill any obligation by reason of an Uncontrollable Force such Party shall exercise due diligence to remove such disability with reasonable dispatch; provided, that nothing in this subsection shall require a Party to settle or compromise a labor dispute.

7.4 Cure of an Event of Default. An Event of Default shall be deemed cured only if such default shall be remedied or cured within the time periods specified in Section 7.2 above, as may be applicable, provided, however, upon request of the Defaulting Participant the Commission may waive the default at its sole discretion, where such waiver shall not be unreasonably withheld.

7.5 Remedies in the Event of Uncured Default. Upon the occurrence of an Event of Default which is not cured within the time limits specified in Section 7.2, without limiting other rights or remedies available under this Agreement, at law or in equity, and without constituting or resulting in a waiver, release or estoppel of any right, action or cause of action NCPA may have against the Defaulting Participant, NCPA may take any or all of the following actions:

(i) suspend the provision of services under this Agreement to such Defaulting Participant; or

(ii) demand that the Defaulting Participant provide further assurances to guarantee the correction of the default, including the collection of a surcharge or increase in electric rates, or such other actions as may be necessary to produce necessary Revenues to correct the default.

7.6 Effect of Suspension.

7.6.1 Generally. The suspension of this Agreement will not terminate, waive, or otherwise discharge any ongoing or undischarged liabilities, credits or

obligations arising from this Agreement until such liabilities, credits or obligations are satisfied in full.

7.6.2 Suspension. If performance of all or any portion of this Agreement is suspended by NCPA with respect to a Participant in accordance with subsection 7.5(i), then such Participant shall pay any and all costs incurred by NCPA as a result of such suspension including reasonable attorney's fees, the fees and expenses of other experts, including auditors and accountants, or other reasonable and necessary costs associated with such suspension and any portion of the Project Costs, scheduling and dispatch costs, and Administrative Services Costs that were not recovered from such Participant as a result of such suspension.

Section 8. Administration of Agreement

8.1 Commission. The Commission is responsible for the administration of this Agreement. Each Participant shall be represented by its Commissioner or their designated alternate Commissioner ("Alternate") pursuant to the Joint Powers Agreement. Each Commissioner shall have authority to act for the Participant represented with respect to matters pertaining to this Agreement.

8.2 Forum. Whenever any action anticipated by this Agreement is required to be jointly taken by the Participants, such action shall be taken at regular or special meetings of the NCPA Commission.

8.3 Quorum. For purposes of acting upon matters that relate to administration of this Agreement, a quorum of the Participants shall consist of those Commissioners, or their designated Alternate, representing a numerical majority of the Participants.

8.4 Voting. Each Participant shall have the right to cast one vote with respect to matters pertaining to this Agreement. A unanimous vote of all Participants shall be required for action regarding: (i) any transfer of rights to a Third Party as described in Section 9 of this Agreement; and (ii) for matters related to any of the following actions as provided for in the PPA: (a) exercising any early termination provisions as set forth in Section 2.4 of the PPA, and (b) exercising any assignment rights as set forth in Section 12.7 of the PPA. For all other matters pertaining to this Agreement, a majority vote of the Participants shall be required for action.

Section 9. Transfer of Rights by Participants

9.1 A Participant has the right to make transfers, sales, assignments and exchanges (collectively “transfers(s)”) of any portion of its Project Participation Percentage and rights thereto, subject to the approval provisions in Section 8.4 of this Agreement, provided that the transferee satisfies all applicable criterion in the PPA. If a Participant desires to transfer a portion or its entire share of the Project for a specific time interval, or permanently, then NCPA will, if requested by such Participant, use its best efforts to transfer that portion of the Participant’s share of the Project.

9.2 Before a Participant may transfer an excess Project share pursuant to Section 9.1 to any person or entity other than a Participant, it shall give all other Participants the right to purchase the share on the same terms and conditions. Before a Participant may transfer an excess Project share pursuant to section 9.1 to any person or entity other than a Member, it shall give all Members the right to purchase the share on the same terms and conditions. Such right shall be exercised within thirty (30) days of receipt of notice of said right.

No transfer shall relieve a Participant of any of its obligations under this Agreement except to the extent that NCPA receives payment of these obligations from a transferee.

Section 10. Term and Termination. This Agreement shall become effective when it has been duly executed by all Participants, and delivered to and executed by NCPA (the “Effective Date”). NCPA shall notify all Participants in writing of the Effective Date. The Term of this Agreement shall be coterminous with the PPA, and shall commence on the Effective Date, and shall continue through the term of the PPA.

Section 11. Withdrawal of Participants. No Participant may withdraw from this Agreement except as otherwise provided for herein.

Section 12. Settlement of Disputes and Arbitration. The Parties agree to make best efforts to settle all disputes among themselves connected with this Agreement as a matter of normal business under this Agreement. The procedures set forth in Section 10 of the

Power Management and Administrative Services Agreement shall apply to all disputes that cannot be settled by the Participants themselves; provided, that the provisions of Section 4.5 shall first apply to all disputes involving invoices prepared by NCPA.

Section 13. Miscellaneous

13.1 Confidentiality. The Parties will keep confidential all confidential or trade secret information made available to them in connection with this Agreement, to the extent possible, consistent with applicable laws, including the California Public Records Act. Confidential or trade secret information shall be marked or expressly identified as such.

If a Party ("Receiving Party") receives a request from a Third Party for access to, or inspection, disclosure or copying of, any other Party's (the "Supplying Party") confidential data or information, which the Receiving Party has possession of ("Disclosure Request"), then the Receiving Party shall provide notice and a copy of the Disclosure Request to the Supplying Party within three (3) Business Days after receipt of the Disclosure Request. Within three (3) Business Days after receipt of such notice, the Supplying Party shall provide notice to the Receiving Party either:

(i) that the Supplying Party believes there are reasonable legal grounds for denying or objecting to the Disclosure Request, and the Supplying Party requests the Receiving Party to deny or object to the Disclosure Request with respect to identified confidential information. In such case, the Receiving Party shall deny the Disclosure Request and the Supplying Party shall defend the denial of the Disclosure Request at its

sole cost, and it shall indemnify the Receiving Party for all costs associated with denying or objecting to the Disclosure Request. Such indemnification by the Supplying Party of the Receiving Party shall include all of the Receiving Party's costs reasonably incurred with respect to denial of or objection to the Disclosure Request, including but not limited to costs, penalties, and the Receiving Party's attorney's fees; or

(ii) that the Receiving Party may grant the Disclosure Request without any liability by the Receiving Party to the Supplying Party.

13.2 Indemnification and Hold Harmless. Subject to the provisions of Section 13.4, each Participant agrees to indemnify, defend and hold harmless NCPA and its Members, including their respective governing boards, officials, officers, agents, and employees, from and against any and all claims, suits, losses, costs, damages, expenses and liability of any kind or nature, including reasonable attorneys' fees and the costs of litigation, including experts, to the extent caused by any acts, omissions, breach of contract, negligence (active or passive), gross negligence, recklessness, or willful misconduct of that Participant, its governing officials, officers, employees, subcontractors or agents, to the maximum extent permitted by law.

13.3 Several Liabilities. No Participant shall, in the first instance, be liable under this Agreement for the obligations of any other Participant or for the obligations of NCPA incurred on behalf of other Participants. Each Participant shall be solely responsible and liable for performance of its obligations under this Agreement, except as otherwise

provided for herein. The obligation of each Participant under this Agreement is, in the first instance, a several obligation and not a joint obligation with those of the other Participants.

Notwithstanding the foregoing, the Participants acknowledge that any debts or obligations incurred by NCPA under this Agreement on behalf of any of them shall be borne solely by such Participants in proportion to their respective Project Participation Percentages, and not by non-Participant Members of NCPA, pursuant to Article IV, Section 3(b) of the Joint Powers Agreement.

In the event that a Participant should fail to pay its share of the debts or obligations incurred by NCPA as required by this Agreement, the remaining Participants shall, in proportion to their Project Participation Percentages, pay such unpaid amounts and shall be reimbursed by the Participant failing to make such payments.

13.4 No Consequential Damages. FOR ANY BREACH OF ANY PROVISION OF THIS AGREEMENT FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED IN THIS AGREEMENT, THE LIABILITY OF THE DEFAULTING PARTY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION, AND ALL OTHER DAMAGES OR REMEDIES ARE HEREBY WAIVED. IF NO REMEDY OR MEASURE OF DAMAGE IS EXPRESSLY PROVIDED, THE LIABILITY OF THE DEFAULTING PARTY SHALL BE LIMITED TO ACTUAL DAMAGES ONLY AND ALL OTHER DAMAGES AND REMEDIES ARE HEREBY WAIVED. IN NO EVENT SHALL NCPA OR ANY

PARTICIPANT OR THEIR RESPECTIVE SUCCESSORS, ASSIGNS, REPRESENTATIVES, DIRECTORS, OFFICERS, AGENTS, OR EMPLOYEES BE LIABLE FOR ANY LOST PROFITS, CONSEQUENTIAL, SPECIAL, EXEMPLARY, INDIRECT, PUNITIVE, OR INCIDENTAL LOSSES OR DAMAGES, INCLUDING LOSS OF USE, LOSS OF GOODWILL, LOST REVENUES, LOSS OF PROFIT OR LOSS OF CONTRACTS EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND NCPA AND EACH PARTICIPANT EACH HEREBY WAIVES SUCH CLAIMS AND RELEASES EACH OTHER AND EACH OF SUCH PERSONS FROM ANY SUCH LIABILITY.

The Parties acknowledge that California Civil Code section 1542 provides that: "A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor." The Parties waive the provisions of section 1542, or other similar provisions of law, and intend that the waiver and release provided by this Section of this Agreement shall be fully enforceable despite its reference to future or unknown claims.

13.5 Waiver. No waiver of the performance by a Party of any obligation under this Agreement with respect to any default or any other matter arising in connection with this Agreement shall be effective unless given by the Commission or the governing body of a Participant, as applicable. Any such waiver by the Commission in any particular

instance shall not be deemed a waiver with respect to any subsequent performance, default or matter.

13.6 Amendments. Except where this Agreement specifically provides otherwise, this Agreement may be amended only by written instrument executed by the Parties with the same formality as this Agreement.

13.7 Assignment of Agreement.

13.7.1 Binding Upon Successors. This Agreement shall inure to the benefit of and shall be binding upon the respective successors and assignees of the Parties to this Agreement.

13.7.2 No Assignment. Neither this Agreement, nor any interest herein, shall be transferred or assigned by a Party hereto except with the consent in writing of the other Parties hereto, which consent shall not be unreasonably withheld.

13.8 Severability. In the event that any of the terms, covenants or conditions of this Agreement or the application of any such term, covenant or condition, shall be held invalid as to any person or circumstance by any court having jurisdiction, all other terms, covenants or conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect unless the court holds that such provisions are not severable from all other provisions of this Agreement.

13.9 Governing Law. This Agreement shall be interpreted, governed by, and construed under the laws of the State of California.

13.10 Headings. All indices, titles, subject headings, section titles and similar items are provided for the purpose of convenience and are not intended to be inclusive, definitive, or affect the meaning of the contents of this Agreement or the scope thereof.

13.11 Notices. Any notice, demand or request required or authorized by this Agreement to be given to any Party shall be in writing, and shall either be personally delivered to a Participant's Commissioner or Alternate, and to the General Manager, or shall be transmitted to the Participant and the General Manager at the addresses shown on the signature pages hereof. The designation of such addresses may be changed at any time by written notice given to the General Manager who shall thereupon give written notice of such change to each Participant. All such notices shall be deemed delivered when personally delivered, two (2) Business Days after deposit in the United States mail first class postage prepaid, or on the first Business Day following delivery through electronic communication.

13.12 Warranty of Authority. Each Party represents and warrants that it has been duly authorized by all requisite approval and action to execute and deliver this Agreement and that this Agreement is a binding, legal, and valid agreement enforceable in accordance with its terms. Upon execution of this Agreement, each Participant shall deliver to NCPA a resolution of the governing body of such Participant evidencing approval of and authority to enter into this Agreement.

13.13 Counterparts. This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument and as if all the signatories to all of the counterparts had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto but having attached to it one or more signature pages.

13.14 Venue. In the event that a Party brings any action under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Placer or in the United States District Court for the Eastern District of California.

13.15 Attorneys' Fees. If a Party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provisions of this Agreement, then each Party shall bear its own fees and costs, including attorneys' fees, associated with the action.

13.16 Counsel Representation. Pursuant to the provisions of California Civil Code Section 1717 (a), each of the Parties were represented by counsel in the negotiation and execution of this Agreement and no one Party is the author of this Agreement or any of its subparts. Those terms of this Agreement which dictate the responsibility for bearing any attorney's fees incurred in arbitration, litigation or settlement in a manner inconsistent

with the provisions of Section 13.2 were intentionally so drafted by the Parties, and any ambiguities in this Agreement shall not be interpreted for or against a Party by reason of that Party being the author of the provision.

13.17 No Third Party Beneficiaries. Nothing contained in this Agreement is intended by the Parties, nor shall any provision of this Agreement be deemed or construed by the Parties, by any third person or any Third Parties, to be for the benefit of any Third Party, nor shall any Third Party have any right to enforce any provision of this Agreement or be entitled to damages for any breach by the Parties of any of the provisions of this Agreement.

IN WITNESS WHEREOF, NCPA and each Participant have, by the signature of its duly authorized representative shown below, executed and delivered a counterpart of this Agreement.

NORTHERN CALIFORNIA
POWER AGENCY
651 Commerce Drive
Roseville, CA 95678

CITY OF HEALDSBURG
401 Grove Street
Healdsburg, CA 95448

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

Approved as to form:

Approved as to form:

By: _____
Its: General Counsel
Date: _____

By: _____
Its: City Attorney
Date: _____

Attestation (if applicable):

Attestation (if applicable):

By: _____
Its: _____
Date: _____

By: _____
Its: _____
Date: _____

CITY OF LODI
221 W. Pine Street
Lodi, CA 95240

CITY OF LOMPOC
100 Civic Center Plaza
Lompoc, CA 93436

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

Approved as to form:

Approved as to form:

By: _____
Its: City Attorney
Date: _____

By: _____
Its: City Attorney
Date: _____

Attestation (if applicable)

Attestation (if applicable)

By: _____
Its: _____
Date: _____

By: _____
Its: _____
Date: _____

CITY OF OAKLAND, acting
by and through its
Board of Port Commissioners
530 Water Street
Oakland, CA 94607

CITY OF ROSEVILLE
311 Vernon Street
Roseville, CA 95678

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

Approved as to form:

Approved as to form:

By: _____
Its: Port General Counsel
Date: _____

By: _____
Its: City Attorney
Date: _____

Attestation (if applicable)

Attestation (if applicable)

By: _____
Its: _____
Date: _____

By: _____
Its: _____
Date: _____

CITY OF SANTA CLARA
1500 Warburton Avenue
Santa Clara, CA 95050

SAN FRANCISCO BAY AREA RAPID
TRANSIT DISTRICT
300 Lakeside Drive, 16th Floor
Oakland, CA 94612

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

Approved as to form:

Approved as to form:

By: _____
Its: City Attorney
Date: _____

By: _____
Its: City Attorney
Date: _____

Attestation (if applicable)

Attestation (if applicable)

By: _____
Its: _____
Date: _____

By: _____
Its: _____
Date: _____

CITY OF UKIAH
300 Seminary Avenue
Ukiah, CA 95482

By: _____
Title: _____
Date: _____

Approved as to form:

By: _____
Its: City Attorney
Date: _____

Attestation (if applicable)

By: _____
Its: _____
Date: _____

EXHIBIT A
PROJECT PARTICIPATION PERCENTAGES

Concurrent to the Effective Date of this Agreement, the Project Participation Percentages contained in this Exhibit A may be updated in the event that one or more of the Members shown in the preliminary list of Participants do not become a Participant. In the event that one or more of the Members shown in the preliminary list of Participants do not become a Participant, the Project Participation Percentage for that Member will be reallocated to the City of Roseville and the City of Santa Clara in equal shares. NCPA shall notify all Participants of the final Project Participation Percentages in writing concurrent with the Effective Date of this Agreement, and if necessary NCPA shall provide an updated Exhibit A to the Participants showing the final Project Participation Percentages.

Preliminary List of Participants

City of Healdsburg	2.0 MW, or 1.65%
City of Lodi	10.0 MW, or 8.23%
City of Lompoc	2.5 MW, or 2.06%
City of Roseville	20.0 MW, 16.46%
City of Santa Clara	78.0 MW, 64.2%
City of Ukiah	2.0 MW, 1.65%
Port of Oakland	3.0 MW, or 2.47%
San Francisco Bay Area Rapid Transit District	4.0 MW, or 3.29%

Final List of Participants

EXHIBIT B

PPA

The Power Purchase Agreement between South Feather Water and Power Agency and Northern California Power Agency has been attached to this Agreement as Exhibit B.

POWER PURCHASE AGREEMENT

BETWEEN

SOUTH FEATHER WATER AND POWER AGENCY

AND

NORTHERN CALIFORNIA POWER AGENCY

Dated as of [_____], 20[__]

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**POWER PURCHASE AGREEMENT
BETWEEN
NORTHERN CALIFORNIA POWER AGENCY
AND
SOUTH FEATHER WATER AND POWER AGENCY**

THIS POWER PURCHASE AGREEMENT (this “*Agreement*”), dated as of this [____] day of [____], 20[____], is being entered into by and between the NORTHERN CALIFORNIA POWER AGENCY (“*Buyer*”), a joint powers agency and a public entity organized under the laws of the State of California and created under the provisions of the California Joint Exercise of Powers Act found in Chapter 5 of Division 7 of Title 1 of the Government Code of the State of California, beginning at California Government Code Section 6500, et. seq., (“*Act*”) and the “Amended and Restated Northern California Power Agency Joint Powers Agreement” entered into pursuant to the provisions of the Act among Buyer and Buyer’s members, dated as of January 1, 2008, and SOUTH FEATHER WATER AND POWER AGENCY, an irrigation district formed under the Irrigation District Act (Division 11 of the California Water Code) of the State of California (“*Seller*”). Each of Buyer and Seller is referred to individually in this Agreement as a “*Party*” and together as the “*Parties*.”

RECITALS

WHEREAS, Buyer’s members have adopted or are adopting policies that are designed to increase the amount of energy that they provide to their retail customers from eligible renewable energy resources and carbon free resources to comply with the California Renewable Energy Resources Act and other applicable requirements; and

WHEREAS, Seller owns and operates four existing hydroelectric generating plants operating under a FERC license (FERC Project No. 2088): the Forbestown Powerhouse (37.5 MW), the Kelly Ridge Powerhouse (11.0 MW), the Sly Creek Powerhouse (13.0) MW and the Woodleaf Powerhouse (60.0 MW) (the “Facility or as otherwise referred to as the South Feather Power Project”); and

WHEREAS, the Seller’s license for the South Feather Power Project was issued for a period ending March 31, 2009; on March 26, 2007, Seller filed an Application for a New License pursuant to the Federal Power Act and FERC’s regulations thereunder; and Seller currently operates the South Feather Power Project under an annual license issued from year-to-year under the terms and conditions of the prior license until a new license is issued, or the project is otherwise disposed of as provided in the Federal Power Act; and

WHEREAS, the Kelly Ridge Powerhouse and Sly Creek Powerhouse (“the Renewable Facilities”) are eligible renewable energy resource certified by the CEC; and

WHEREAS, Buyer is interested in purchasing Products from the Facilities; and

WHEREAS, Seller has agreed to sell to Buyer, and Buyer has agreed to purchase from Seller, certain energy, capacity rights and associated environmental attributes for the purchase price set forth in Appendix A; and

WHEREAS, the Parties desire to set forth the terms and conditions pursuant to which such sales and purchases shall be made.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein, the mutual covenants and agreements herein set forth, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE I DEFINITIONS AND INTERPRETATION

Section 1.1 Definitions.

The following terms in this Agreement and the appendices hereto shall have the following meanings when used with initial capitalized letters:

“**Act**” has the meaning set forth in the preamble of this Agreement.

“**Affiliate**” means, as to any Person, any other Person that, directly or indirectly, is in control of, is controlled by or is under common control with such Person or, as is appropriate given the context, is a director or officer of such Person or of an Affiliate of such Person. As used in this Agreement, “control” shall mean the possession, directly or indirectly, of the power to direct or cause the direction of management, policies or activities of a Person, whether through ownership of voting securities, by contract or otherwise.

“**Agreement**” has the meaning set forth in the preamble of this Agreement, and includes the Appendices attached hereto.

“**Agreement Term**” has the meaning set forth in Section 2.2(a).

“**Annual True-Up Credit**” has the meaning set forth in Appendix A.

“**ASME**” means American Society of Mechanical Engineers.

“**Assumed Daily Deliveries**” has the meaning set forth in Section 11.3(c).

“**ASTM**” means American Society for Testing and Materials.

“**Authorized Auditors**” means representatives of Buyer or Buyer’s Authorized Representative who are authorized to conduct audits on behalf of Buyer.

“**Authorized Representative**” means, with respect to each Party, the Person designated as such Party’s authorized representative pursuant to Section 12.1.

“**Available Generating Capacity**” means the Contract Capacity less the amount of capacity that is not available due to an outage.

“**Availability Incentive Payment**” has the meaning set forth in the CAISO Tariff.

“Availability Standard” has the meaning set forth in the CAISO Tariff.

“AWS” means American Welding Society.

“Bankruptcy” means any case, action or proceeding under any bankruptcy, reorganization, debt arrangement, insolvency or receivership law or any dissolution or liquidation proceeding commenced by or against a Person and, if such case, action or proceeding is not commenced by such Person, such case, action or proceeding shall be consented to or acquiesced in by such Person or shall result in an order for relief or shall remain undismissed for ninety (90) days.

“Base Output” has the meaning set forth in Appendix A.

“Base Output Compensation” has the meaning set forth in Appendix A.

“Base Output Monthly Payment” has the meaning set forth in Appendix A.

“Brown Act” has the meaning set forth in Section 12.21(b).

“Business Day” means any day that is not a Saturday, a Sunday, or a day on which commercial banks are authorized or required to be closed in Los Angeles, California or New York, New York.

“Buyer” has the meaning set forth in the preamble of this Agreement.

“Buyer Curtailment” has the meaning set forth in Section 6.5(b).

“Buyer Indemnatee” has the meaning set forth in Section 12.19(a).

“Cal-OSHA” means the California Occupational Safety & Health Administration.

“CAISO” means the California Independent System Operator.

“CAISO Costs” means (i) all current and future costs, expenses, fees, charges, credits and other amounts assessed by the CAISO to Seller or to Buyer in connection with the Facilities and (ii) any and all costs, expenses, fees, charges and other amounts incurred in connection with performing Scheduling services, settlement services and serving as the Scheduling Coordinator.

“CAISO Master File” has the meaning set forth in the CAISO Tariff.

“CAISO Tariff” means the CAISO FERC Electric Tariff, Fifth Replacement Volume, including the rules, protocols, procedures and standards attached thereto and any replacement thereof or successor thereto in effect.

“CAMD” means the Clean Air Markets Division of the EPA and any other state, regional or federal or intergovernmental entity or Person that is given authorization or jurisdiction or both over a program involving the registration, validation, certification or transferability of Environmental Attributes.

“Capacity Rights” means the rights, whether in existence as of the Effective Date or arising thereafter during the Agreement Term, to capacity, Resource Adequacy Attributes, Local Capacity Requirement Attributes, flexible capacity attributes, operating reserves, regulation services, and other associated attributes or reserves, or any of the foregoing as may in the future be defined by the CAISO, or any other balancing authority, reliability entity or Governmental Authority, associated with the electric generating capability of the Facilities, including the right to resell such rights.

“CEC” means California’s State Energy Resources Conservation and Development Commission, also known as the California Energy Commission.

“CEC Certified” means that the CEC has certified that the Facility is an eligible renewable energy resource in accordance with RPS Law.

“CEC Performance Standard” means, at any time, the applicable greenhouse gas emissions performance standard in effect at such time for electric generation facilities that are owned or operated (or both) by local publicly owned electric utilities, or for which a local publicly owned electric utility has entered into a contractual agreement for the purchase of power from such facilities, as established by the CEC or other Governmental Authority having jurisdiction over Buyer.

“CEQA” means the California Environmental Quality Act, California Public Resources Code §§ 21000, et seq.

“Change in Law” means a material change to any WREGIS standards, rules, or requirements, or a change to any federal, state, local or other law (including any environmental law, EPS Law or RPS Law), resolution, standard, code, rule, ordinance, directive, regulation, order, judgment, decree, ruling, determination, permit, certificate, authorization, or approval of a Governmental Authority, including the adoption of any new law, resolution, standard, code, rule, ordinance, directive, regulation, order, judgment, decree, ruling, determination, permit, certificate, authorization, or approval.

“Compliance Showings” means the applicable load serving entities compliance with the resource adequacy requirements of its applicable regulatory authority for an applicable Showing Month.

“Conditional Use Permit” means the conditional use permits for the Facility.

“Confidential Information” has the meaning set forth in Section 12.21(a).

“Contract Capacity” means the amount of installed Facility capacity set forth in Appendix B.

“Contract Price” means, for any period of time, the Contract Price set forth in Appendix A.

“Contract Year” means (a) with respect to the first (1st) Contract Year, the period beginning on the Initial Delivery Date and extending through December 31 of the calendar year in which the Initial Delivery Date occurs, (b) with respect to the second (2nd) through the twentieth (20th) Contract Years, the applicable calendar year, and (c) with respect to the twenty first (21st) Contract Year, the period beginning on January 1 of the applicable calendar year and extending through the day before the anniversary of the Initial Delivery Date.

“Costs” has the meaning set forth in Section 11.3(f)(iii).

“CPRA” has the meaning set forth in Section 12.21(b).

“Curtailment Period” means a period of time during the Delivery Term during which the generation of Facility Energy is required to be curtailed or reduced (in whole or part) as a result of an order, direction, alert, request, notice, instruction or directive from a Transmission Provider, the CAISO, WECC, NERC, or any other reliability entity due to (a) a System Emergency, (b) system improvements, curtailments, or scheduled and unscheduled repairs or maintenance at or downstream from the Point of Delivery, (c) an event of Force Majeure at or downstream from the Point of Delivery, (d) over-generation or any other reason adversely affecting the normal function and operation of the CAISO grid or a Transmission Provider’s system, as may from time to time be identified by the CAISO, the Transmission Provider, WECC, NERC, or any other reliability entity. For the avoidance of doubt, the term “Curtailment Period” shall not include curtailments directed by CAISO for economic reasons as described in Section 6.5(b) or any curtailment by Buyer pursuant to Section 6.5(b).

“Day-Ahead Market” has the meaning set forth in the CAISO Tariff.

“Deemed Generated Energy” has the meaning set forth in Section 6.5(c).

“Default” has the meaning set forth in Section 11.1.

“Defaulting Party” has the meaning set forth in Section 11.1.

“Delivery Term” has the meaning set forth in Section 2.2(b).

“Dispute” has the meaning set forth in Section 12.3(a).

“Dispute Notice” has the meaning set forth in Section 12.3(a).

“Early Termination Date” has the meaning set forth in Section 11.3(a).

“**EEI**” means Edison Electric Institute.

“**Effective Date**” means the date on which Buyer and Seller have both executed this Agreement.

“**Electric Metering Devices**” means all meters, metering equipment, and data processing equipment used to measure, record, or transmit data relating to the Facility Energy. Electric Metering Devices include the metering current transformers and the metering voltage transformers.

“**Energy**” means electrical energy.

“**Environmental Attribute Reporting Rights**” means all rights to report ownership of the Environmental Attributes to any Person, including under Section 1605(b) of the Energy Policy Act of 1992, as amended from time to time or any successor statute, or any other current or future international, federal, state or local law, regulation or bill, or otherwise.

“**Environmental Attributes**” means RECs, and any and all other current or future credits, benefits, emissions reductions, offsets or allowances, howsoever entitled, named, registered, created, measured, allocated or validated (A) that are at any time recognized or deemed of value (or both) by Buyer, applicable law, or any voluntary or mandatory program of any other Governmental Authority or other Person and (B) that are attributable to (i) generation by the Facility during the Delivery Term or Replacement Energy required to be delivered by Seller to Buyer during the Delivery Term and (ii) the emissions or other environmental characteristics of such generation or such Replacement Energy or its displacement of conventional or other types of Energy generation. Environmental Attributes include any of the aforementioned arising out of legislation or regulation concerned with oxides of nitrogen, sulfur, carbon, or any other greenhouse gas or chemical compound, particulate matter, soot, or mercury, or implementing the United Nations Framework Convention on Climate Change (the “*UNFCCC*”), the Kyoto Protocol to the UNFCCC, California’s greenhouse gas legislation (including RPS Law and California Assembly Bill 32 (Global Warming Solutions Act of 2006) and any regulations implemented pursuant to that act, including any compliance instruments accepted under the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms regulations of the California Air Resources Board or any successor regulations thereto) or any similar international, federal, state or local program or crediting “early action” with a view thereto, laws or regulations involving or administered by the CAMD and all Environmental Attribute Reporting Rights, including all evidences (if any) thereof such as renewable energy certificates of any kind. Environmental Attributes for purposes of this definition are separate from the Energy produced from the Facility and do not include (a) investment tax credits, any local, state or federal production tax credits, depreciation deductions or other tax credits providing a tax benefit to Seller or any other Person based on an ownership or security interest in the Facility, (b) any other depreciation deductions and benefits, and other tax benefits arising from ownership of the Facility and (c) cash grants or other financial incentives from any local, state or federal government available to Seller with respect to the Facility.

“**EPA**” means the United States Environmental Protection Agency.

“EPS Compliance” or **“EPS Compliant”** when used with respect to the Facility, means that the Facility satisfies both the PUC Performance Standard and the CEC Performance Standard in effect at the time; *provided*, if it is impossible for the Facility to satisfy both the PUC Performance Standard and the CEC Performance Standard in effect at any time, the Facility shall be deemed EPS Compliant if it satisfies the CEC Performance Standard in effect at the time and those portions of the PUC Performance Standard in effect at the time that it is possible for the Facility to satisfy while at the same time satisfying the CEC Performance Standard in effect at the time.

“EPS Law” means Sections 8340 and 8341 of the California Public Utilities Code or its successor or comparable state or federal programs.

“Extended Delivery Term” has the meaning set forth in Section 2.2(b).

“Facility” means the four (4) hydroelectric generating facilities described in the Recitals hereto, and Appendix B, including all property interests and related Interconnection Facilities owned by Seller.

“Facility Energy” means Energy generated by the Facility, less station load, transformation losses and transmission losses to the Point of Delivery, as measured by CAISO-approved Electric Metering Devices.

“Facility Monthly Variable Output” has the meaning set forth in Appendix A.

“FERC” means the Federal Energy Regulatory Commission.

“Fixed Monthly Payment” has the meaning set forth in Appendix A.

“Force Majeure” has the meaning set forth in Section 12.6(b).

“Force Majeure Notice” has the meaning set forth in Section 12.6(a).

“Forced Outage” means the removal of service availability of the Facility, or any portion of the Facility, for emergency reasons or conditions in which the Facility, or any portion thereof, is unavailable due to unanticipated failure, including as a result of Force Majeure.

“Full Capacity Deliverability Status” or **“FCDS”** has the meaning set forth in the CAISO Tariff.

“GAAP” means generally accepted accounting principles set forth in opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as may be approved by a significant segment of the accounting profession, in each case as the same are applicable to the circumstances as of the date of determination.

“**Gains**” has the meaning set forth in Section 11.3(f)(i).

“**Governmental Authority**” means any federal, state, regional, city or local government, any intergovernmental association or political subdivision thereof, or other governmental, regulatory or administrative agency, court, commission, administration, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority with jurisdiction over the Parties, the Facility, or this Agreement, or any Person acting as a delegate or agent of any Governmental Authority; provided that “Governmental Authority” specifically excludes Buyer, any successor or assignee of Buyer and the Participating Members.

“**Gross Facility Energy**” means the amount of Facility Energy delivered to the Point of Delivery during a Buyer Curtailment plus the amount of MWh calculated to approximate the amount of Energy that could have been produced and delivered to the Point of Delivery during the Buyer Curtailment, based on the volume of water bypassed at the Facility during a Buyer Curtailment. For the avoidance of doubt, volumes of water bypassed at the Facility for any reason other than a Buyer Curtailment, including natural spill conditions that may occur, shall not be included in the calculation of Gross Facility Energy.

“**IEEE**” means the Institute of Electrical and Electronics Engineers.

“**Insurance**” means the policies of insurance as set forth in Appendix E.

“**Interest Rate**” has the meaning set forth in Section 9.3.

“**Initial Delivery Date**” means December 19, 2021 and is the first day of the Delivery Term.

“**Initial Delivery Term**” has the meaning set forth in Section 2.2(b).

“**ISA**” means the Instrument Society of America.

“**Interconnection Agreement**” means the interconnection agreement entered into by Seller pursuant to which the Facility will be interconnected with the Transmission System, and pursuant to which Seller’s Interconnection Facilities and any other Interconnection Facilities will be constructed, operated and maintained during the Delivery Term.

“**Interconnection Facilities**” means the interconnection facilities, control and protective devices and metering facilities required to connect the Facility with the Transmission System in accordance with the Interconnection Agreement.

“**Licensed Professional Engineer**” means an independent, professional engineer reasonably acceptable to Buyer, licensed in the State of California, and otherwise qualified to perform the work required hereunder.

“Lien” means any mortgage, deed of trust, lien, security interest, retention of title or lease for security purposes, pledge, charge, encumbrance, equity, attachment, claim, easement, right of way, covenant, condition or restriction, leasehold interest, purchase right or other right of any kind, including any option, of any other Person in or with respect to any real or personal property.

“Local Capacity Requirement Attributes” means the benefits or attributes now or existing in the future based on the procurement obligations of Buyer with respect to local resource capacity requirements as prescribed by the PUC, the CAISO or other regional entity, and that are associated with the electric generating capability of the Facility.

“Locational Marginal Price” or **“LMP”** has the meaning set forth in the CAISO Tariff.

“Losses” has the meaning set forth in Section 11.3(f)(ii).

“Major Maintenance Blockout” has the meaning set forth in Section 3.5(a).

“Month” means a calendar month commencing at 00:00 Pacific Prevailing Time on the first day of such month and ending at 24:00 Pacific Prevailing Time on the last day of such month.

“Monthly Base Output” has the meaning set forth in Appendix A.

“MW” means megawatt in alternating current, or ac.

“MWh” means megawatt-hours.

“NERC” means the North American Electric Reliability Corporation.

“Net Qualifying Capacity” has the meaning set forth in the CAISO Tariff; provided, however, the amount of Net Qualifying Capacity provided by the Facility shall be equal to the amount of Resource Adequacy Capacity that is eligible to be used by Buyer to satisfy Compliance Showing requirements, including adjustments to account for Facility availability, operational limitations and Scheduled Outages.

“Non-Defaulting Party” has the meaning set forth in Section 11.3(a).

“Non-Availability Charge” has the meaning set forth in the CAISO Tariff.

“Notice of Termination” has the meaning set forth in Section 2.2(c).

“Notifying Party” has the meaning set forth in Section 12.3(a).

“OSHA” means the Occupational Safety and Health Administration of the United States Department of Labor.

“Pacific Prevailing Time” means the local time in the State of California.

“Participating Members” means the Cities of Healdsburg, Lodi, Lompoc, Roseville, Santa Clara and Ukiah, and the San Francisco Bay Area Rapid Transit District, and the City of Oakland, acting by and through its Board of Port Commissioners.

“Party” or “Parties” has the meaning set forth in the preamble of this Agreement.

“Permits” means all applications, permits, licenses, franchises, certificates, concessions, consents, authorizations, certifications, self-certifications, approvals, registrations, orders, filings, entitlements and similar requirements of whatever kind and however described that are required to be filed, submitted, obtained or maintained by any Person with respect to the development, siting, design, acquisition, construction, equipping, financing, ownership, possession, shakedown, start-up, testing, operation or maintenance of the Facility, the production, sale and delivery of Products from the Facility, including Facility Energy, Capacity Rights and Environmental Attributes, or any other transactions or matter contemplated by this Agreement (including those pertaining to electrical, building, zoning, environmental and occupational safety and health requirements), including the, Conditional Use Permit, CEQA determinations and the Permits as may be applicable.

“Person” means any individual, corporation, partnership, joint venture, limited liability company, association, joint stock company, trust, unincorporated organization, entity, government or other political subdivision.

“PNode” means the CAISO Pricing Node for the Facility as defined in the CAISO Tariff to be established by CAISO, as set forth in Appendix B.

“Point of Delivery” mean the Point of Interconnection for each Facility.

“Point of Interconnection” has the meaning set forth in Appendix B.

“Present Value Rate” means, at any date, the sum of 0.50% plus the yield reported on page “USD” of the Bloomberg Financial Markets Services Screen (or, if not available, any other nationally-recognized trading screen reporting on-line intraday trading in United States government securities) at 11:00 a.m. (New York City, New York time) for the United States government securities having a maturity that most nearly matches the Remaining Term at that date.

“Products” means any and all Facility Energy, Capacity Rights, Environmental Attributes, and ancillary products, services or attributes similar to the foregoing that are or can be produced by, or are associated with, the Facility, whether now attainable or established in the future, including delivered energy, renewable attributes, operating reserves and renewable energy credits.

“Prudent Utility Practices” means those practices, methods, and acts, that are commonly used by a significant portion of the hydroelectric electric generation industry in prudent engineering and operations to design, construct, and operate and maintain electric equipment lawfully and with safety, dependability, reliability, efficiency, and economy, including any applicable practices, methods, acts, guidelines, standards and criteria of the CAISO, FERC, NERC, WECC, as each may be amended from time to time, and all applicable Requirements of Law.

Prudent Utility Practices are not intended to be limited to the optimum practice, method, or act, to the exclusion of all others, but rather is intended to include acceptable practices, methods, and acts generally accepted in the hydroelectric generation industry.

“Public Utilities Code” means the Public Utilities Code of the State of California, as may be amended from time to time.

“PUC” means the California Public Utilities Commission and any successor thereto.

“PUC Performance Standard” means, at any time, the greenhouse gas emission performance standard in effect at such time for electric generation facilities owned or operated (or both) by load-serving entities and not local publicly-owned electric utilities, or for which a load-serving entity and not a local publicly owned electric utility has entered into a contractual agreement for the purchase of power from such facilities, as established by the PUC or other Governmental Authority under the EPS Law.

“QRE” has the meaning set forth in Section 7.4.

“RA Capacity Monthly Payment” has the meaning set forth in Appendix A.

“RA Capacity Rate” has the meaning set forth in Appendix A.

“RA Deficiency Amount” means the liquidated damages payment that Seller shall pay to Buyer for an applicable RA Shortfall Month as calculated in accordance with Section 8.4.

“RA Shortfall Month” means, for purpose of calculating an RA Deficiency Amount under Section 8.4, any month which the amount of Resource Adequacy Capacity supplied from the Facility for such month was less than the Net Qualifying Capacity for such month.

“Real-Time Market” has the meaning set forth in the CAISO Tariff.

“REC” or **“Renewable Energy Credit”** means a certificate of proof associated with the generation of electricity from an eligible renewable energy resource, which certificate is issued through the accounting system established, used or approved by the CEC pursuant to the RPS Law, evidencing that one (1) MWh of Energy was generated and delivered from such eligible renewable energy resource. Such certificate is a tradable environmental commodity (also known as a “green tag” or “renewable energy certificate”) for which the owner of the REC can evidence that it has purchased Energy that is CEC Certified.

“Recipient Party” has the meaning set forth in Section 12.3(a).

“Remaining Term” means, at any date, the remaining portion of the Delivery Term at that date without regard to any early termination of this Agreement.

“Replacement RA” has the meaning set forth in Section 8.4(c).

“Requirements” means, collectively, (a) any standards or requirements of ASTM, ASME, AWS, EPA, EEI, IEEE, ISA, National Electrical Code, NERC, National Electric Safety Code, OSHA, Cal-OSHA, Uniform Building Code, or Uniform Plumbing Code applicable to the design or construction of the Facility, (b) any applicable local county fire department standards or codes, (c) Prudent Utility Practices, (d) FERC licenses, and federal and state dam safety regulations, (e) all applicable Requirements of Law, including the UCC, and (f) all other requirements of this Agreement.

“Requirement of Law” means any federal, state, local or other law (including any environmental law, EPS Law or RPS Law), resolution, standard, code, rule, ordinance, directive, regulation, order, judgment, decree, ruling, determination, permit, certificate, authorization, license or approval of a Governmental Authority, including those pertaining to electrical, building, zoning, environmental, dam safety, cyber and physical security, and occupational safety and health requirements.

“Resource Adequacy Attributes” of **“Resource Adequacy Capacity”** means the benefits or attributes, including flexible attributes, if any, now or existing in the future based on the procurement obligations of Buyer with respect to Resource Adequacy as prescribed by the PUC, the CAISO or any other regional entity, and that are associated with the electric generating capability of the Facility.

“RPS Compliance” or **“RPS Compliant”** means, when used with respect to the Facility, that all Energy generated by such facility at all times shall, together with all of the associated Environmental Attributes, qualify as a “portfolio content category 1” eligible renewable resource, as such term is defined in Public Utilities Code Section 399.12 or Section 399.16, or equivalent if the RPS Law is changed, under the RPS Law.

“RPS Law” means the California Renewable Energy Resources Act, including the California Renewables Portfolio Standard Program, Article 16 of Chapter 2.3, Division 1 of the Public Utilities Code, California Public Resources Code § 25740 through 25751, any related regulations or guidebooks promulgated by the CEC or, as applicable, the PUC or its successor or equivalent state or federal programs.

“SCADA” means the supervisory control and data acquisition system for the Facility.

“Schedule” or **“Scheduling”** means the actions of Seller and Buyer, their Authorized Representatives, the Scheduling Coordinator and the Transmission Providers, if applicable, of notifying, requesting and confirming to the CAISO the amounts of Facility Energy expected to be delivered consistent with the Scheduling Interval at the Point of Delivery on any given date during the Delivery Term, all in the manner contemplated by the CAISO Tariff.

“Scheduled Outage” means any outage with respect to the Facility other than a Forced Outage.

“Scheduled Outage Projection” has the meaning set forth in Section 3.5(a).

“Scheduling Coordinator” has the meaning set forth in the CAISO Tariff.

“Seller” has the meaning set forth in the preamble of this Agreement.

“Seller Indemnitees” has the meaning set forth in Section 12.19(b).

“Settlement Interval” has the meaning set forth in the CAISO Tariff.

“Settlement Statement” has the meaning set forth in the CAISO Tariff.

“Showing Month” means the calendar month of the Delivery Period that is subject of the related Compliance Showing.

“Subcontract” means any agreement or contract entered into on or after the Effective Date by Seller and a Person other than Buyer, which Person is providing goods or services to Seller that are related to the performance of Seller’s obligations under this Agreement. Subcontracts specifically include any agreement or contract that is referred to or defined as a “subcontract” in the policies, ordinances, codes or laws with which Seller must comply pursuant to this Agreement, or that is made with a “subcontractor” as such term is used or defined in such policies, ordinances, codes, or laws.

“Subcontractor” means any party to a Subcontract with Seller.

“System Emergency” means each of the following: (i) “System Emergency” as set forth in the CAISO Tariff and (ii) a condition or situation that in the judgment of Buyer (a) is imminently likely to endanger life or property; or (b) is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, reliability of, or damage to the Transmission System, Transmission Provider’s interconnection facilities (as defined in the Interconnection Agreement) or the transmission systems of others to which the Transmission System is directly connected.

“Tax” or “Taxes” means each federal, state, county, local and other (a) net income, gross income, gross receipts, sales, use, ad valorem, business or occupation, transfer, franchise, profits, withholding, payroll, employment, excise, property or leasehold tax and (b) customs, duty or other fee, assessment or charge of any kind whatsoever, together with any interest and any penalties, additions to tax or additional amount with respect thereto.

“Termination Notice” has the meaning set forth in Section 11.3(a).

“Termination Payment” means a payment in an amount equal to the Non-Defaulting Party’s (a) Losses, plus (b) Costs, minus (c) Gains; *provided, however*, that if such amount is a negative number, the Termination Payment shall be equal to zero.

“Transmission Provider” means the Person operating the Transmission System to and from the Point of Delivery.

“Transmission Services” means the transmission and other services required to transmit Facility Energy to or from the Point of Delivery.

“Transmission System” means the facilities utilized to provide Transmission Services.

“Unexcused Cause” has the meaning set forth in Section 12.6(b).

“UNFCCC” has the meaning set forth in the definition of “Environmental Attributes.”

“Variable Output” has the meaning set forth in Appendix A.

“Variable Output Monthly Payment” has the meaning set forth in Appendix A.

“Variable Output Rate” has the meaning set forth in Appendix A.

“Variable Output True-Up” has the meaning set forth in Appendix A.

“WECC” means the Western Electricity Coordinating Council.

“WREGIS” means Western Renewable Energy Generation Information System.

“WREGIS Certificates” has the meaning set forth in Section 7.4.

“WREGIS Operating Rules” means the rules describing the operations of the WREGIS, as published by WREGIS.

Other terms defined herein have the meanings so given when used in this Agreement with initial-capitalized letters.

Section 1.2 Interpretation. In this Agreement, unless a clear contrary intention appears:

- (a) time is of the essence;
- (b) the singular number includes the plural number and vice versa;
- (c) reference to any Person includes such Person’s successors and assigns (regardless of whether such Person’s successors and assigns are expressly referenced in the provision) but, in case of a Party hereto, only if such successors and assigns are permitted by this Agreement, and reference to a Person in a particular capacity excludes such Person in any other capacity or individually;
- (d) reference to any gender includes the other;
- (e) reference to any agreement (including this Agreement), document, act, statute, law, instrument, tariff or Requirement means such agreement, document, act, statute, law,

instrument, or tariff, or Requirement, as amended, modified, replaced or superseded and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof, regardless of whether the reference to the agreement, document, act, statute, law, instrument, tariff, or Requirement expressly refers to amendments, modifications, replacements, or successors;

(f) reference to any Article, Section, or Appendix means such Article of this Agreement, Section of this Agreement, or such Appendix to this Agreement, as the case may be, and references in any Article or Section or definition to any clause means such clause of such Article or Section or definition;

(g) “hereunder,” “hereof,” “hereto” and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section or other provision hereof or thereof;

(h) “including” (and with correlative meaning “include”) means including without limiting the generality of any description preceding such term, regardless of whether words such as “without limitation” are expressly included in the applicable provision;

(i) relative to the determination of any period of time, “from” means “from and including,” “to” means “to but excluding” and “through” means “through and including”;

(j) unless otherwise indicated, reference to time shall always refer to Pacific Prevailing Time; and reference to any “day” shall mean a calendar day, unless otherwise indicated; and

(k) the term “or” is not exclusive, regardless of whether “and/or” is used in the applicable provision.

ARTICLE II

EFFECTIVE DATE, TERM, AND EARLY TERMINATION

Section 2.1 Effective Date. This Agreement is effective as of the Effective Date. On or prior to the Effective Date, each of the following has occurred: (a) both Parties have executed and delivered this Agreement; (b) Buyer has received copies of all requisite resolutions and incumbency certificates of Seller and any other documents evidencing all actions taken by Seller to authorize the execution and delivery of this Agreement, such resolutions to be certified as of the Effective Date by an authorized representative of Seller; and (b) Seller has received copies of all requisite resolutions and incumbency certificates of Buyer authorizing the execution and delivery of this Agreement, such resolutions to be certified as of the Effective Date by an authorized official of Buyer.

Section 2.2 Term.

(a) **Agreement Term.** The term of this Agreement (the “*Agreement Term*”) shall commence on the Effective Date and end on the last day of the Delivery Term, or upon the earlier termination of this Agreement in accordance with the terms hereof.

(b) **Delivery Term.** The initial delivery term of this Agreement (the “**Initial Delivery Term**”) shall begin on the Initial Delivery Date and shall continue uninterrupted through 11:59 pm on December 31, 2031, unless sooner terminated in accordance with the terms of this Agreement. At the end of the Initial Delivery Term of this Agreement, the term of this Agreement shall automatically extend for an additional ten (10) year period (the “**Extended Delivery Term**”) unless Seller provides written Notice of Termination pursuant to Section 2.2(c), of its election to not automatically extend the term of this Agreement.

(c) **Notice of Termination.** This Agreement may be terminated by Seller at the end of the Initial Delivery Term by providing written notice to the Buyer at least three hundred sixty five (365) Calendar Days prior to the end of the Initial Delivery Term of this Agreement (“**Notice of Termination**”).

Section 2.3 Survivability. The provisions of this ARTICLE II, ARTICLE X, ARTICLE XI, Section 12.9 and Section 12.21 shall survive for a period of one year following the termination of this Agreement. The provisions of ARTICLE IX shall survive for a period of four (4) years following final payment made by Buyer hereunder or the expiration or termination date of this Agreement, whichever is later. The provisions of ARTICLE V, ARTICLE VII, and ARTICLE VIII shall continue in effect after termination to the extent necessary to provide for final billing, adjustments, and deliveries related to any period prior to termination of this Agreement.

Section 2.4 Early Termination.

(a) **Early Termination by Mutual Agreement.** This Agreement may be terminated by mutual written agreement of the Parties.

(b) **Early Termination for Default.** Upon the occurrence of a Default, the Non-Defaulting Party may terminate this Agreement as set forth in Section 11.3.

(c) **Early Termination for Force Majeure.** This Agreement may be terminated pursuant to Section 12.6(c) or Section 12.6(d).

(d) **Effect of Termination.** Except as otherwise provided herein, any early termination of this Agreement under this Section 2.4 shall be without prejudice to the rights and remedies of a Party for Defaults occurring prior to such termination.

ARTICLE III OPERATION AND MAINTENANCE OF THE FACILITY

Section 3.1 General Operational Requirements. Seller shall, at all times:

(a) At its sole expense, operate and maintain the Facility (i) in accordance with the Requirements and (ii) in a manner that is reasonably likely to result in a useful life for the Facility of not less than the Delivery Term;

(b) Use qualified and trained personnel for managing, operating and maintaining the Facility and for coordinating with Buyer, and ensure that necessary personnel are available on-site or on-call twenty-four (24) hours per day during the Delivery Term;

(c) Operate and maintain the Facility with due regard for the safety, security and reliability of the Interconnection Facilities; and

(d) Operate and maintain the Facility in accordance with the CAISO Tariff and other applicable requirements, including, but not limited to, submitting Facility technical and modeling information to the CAISO, as may be required; and

(e) Comply with operating and maintenance standards recommended or required by the Facility's equipment suppliers, and in accordance with Prudent Utility Practices.

Section 3.2 Operation and Maintenance Plan.

(a) Seller shall devise and implement a plan of inspection, maintenance, and repair for the Facility and the components thereof in order to maintain such equipment in accordance with Prudent Utility Practices, and shall keep records with respect to inspections, maintenance, and repairs thereto. The aforementioned plan and all records of such activities shall be available for inspection by Buyer during Seller's regular business hours upon reasonable notice.

(b) In addition to the other required and preventative maintenance actions required by this Agreement, Seller shall: (i) conduct regular visual equipment inspections and log significant parameters; (ii) identify and perform all preventative maintenance requirements for the following calendar year; (iii) schedule and assign routine maintenance during operations, planned outages, as well as maintenance that can be conducted in parallel; (iv) conduct periodic maintenance to various equipment; (v) conduct periodic quality assurance and quality control activities and inspections; and (vi) hire Subcontractors, as applicable to meet the Facility's maintenance, betterment, and improvement needs. Notwithstanding the requirements of this Section 3.2(b), Seller shall retain full discretion in budgeting and determining the priority in which it performs preventive maintenance in relation to Seller's other projects and actions.

Section 3.3 Decommissioning and Other Costs. Buyer shall not be responsible for any cost of decommissioning or demolition of the Facility or any environmental or other liability associated with the decommissioning or demolition of the Facility without regard to the timing or cause of the decommissioning or demolition.

Section 3.4 Environmental Credits. Seller shall, if applicable, obtain in its own name and at its own expense all pollution or environmental credits or offsets necessary to operate the Facility in compliance with any Requirement of Law; *provided* for the avoidance of doubt, Seller shall not use any Environmental Attributes to satisfy the foregoing obligation.

Section 3.5 Outages.

(a) Buyer and Seller shall cooperate to minimize Scheduled Outages during specified periods of time during each calendar year in accordance with Prudent Utility Practices and this Section 3.5 (such periods, the “**Major Maintenance Blockout**”). No later than May 1 prior the commencement of each Contract Year, Buyer shall provide Seller with its specified Major Maintenance Blockout. In the absence of such updated notification, the period of May 1 through September 30 shall apply. Seller shall attempt to minimize its Scheduled Outages during the Major Maintenance Blockout consistent with Prudent Utility Practices. No later than ninety (90) days prior to the first day of the Delivery Period, and for each calendar year thereafter, no later than four (4) months prior to the deadline for providing the CAISO Resource Adequacy filings and proposed maintenance outages for the following year as described in the CAISO Tariff, Seller shall provide Buyer and the Scheduling Coordinator with its non-binding written projection of all Scheduled Outages for the succeeding calendar year (the “**Scheduled Outage Projection**”) reflecting Seller’s attempt to minimize scheduled maintenance during the Major Maintenance Blockout. In addition, Seller shall cooperate in good faith with maintenance scheduling requests by Buyer consistent with Prudent Utility Practices, and Buyer and Seller shall strive to develop a final Scheduled Outage plan no later than three (3) months prior to the deadline for providing the CAISO Resource Adequacy filings and proposed maintenance outages for the following year as described in the CAISO Tariff. Notwithstanding the process described herein for coordination of Scheduled Outages between Buyer and Seller, both Buyer and Seller acknowledge that all Scheduled Outages submitted to the CAISO may be accepted or rejected by the CAISO as described in the CAISO Tariff. In the event the CAISO rejects a Scheduled Outage request submitted by Seller, Buyer and Seller agree to cooperate in good faith to timely coordinate and develop a revised final Scheduled Outage plan to account for any Scheduled Outages that are not approved by the CAISO. The Scheduled Outage Projection shall include information concerning all projected Scheduled Outages during such period, including (a) the anticipated start and end dates of each Scheduled Outage; (b) a description of the maintenance or repair work to be performed during the Scheduled Outage; and (c) the anticipated MW of operational capacity, if any, during the Scheduled Outage. Seller shall use commercially reasonable efforts to notify Buyer and its Scheduling Coordinator of any change in the Scheduled Outage Projection sixty-five (65) days prior to first day of the month of the originally-scheduled date of the Scheduled Outage but in no event shall Seller notify Buyer later than fifty-five (55) days prior to the first day of the month of the originally-scheduled date of the Scheduled Outage. Seller shall use commercially reasonable efforts to accommodate reasonable requests of Buyer with respect to the timing of Scheduled Outages and shall, to the extent feasible and consistent with Prudent Utility Practices, arrange for Scheduled Outages to occur between October 1 and May 1 of each year (or such other period as reasonably determined by Buyer from time to time) and coincident, to the extent known by Seller, with the Transmission Provider’s planned transmission outages, but not to overlap with the Major Maintenance Blockout. In the event of a System Emergency, Seller shall consider and decide in its discretion if it is commercially reasonable to reschedule any Scheduled Outages previously scheduled so that it does not occurs during the System Emergency. In addition, Seller shall use commercially reasonable efforts to coordinate Scheduled Outages with a total duration of 30 calendar days or less to occur within a single calendar month period.

(b) In addition to reporting outages to Buyer and the Scheduling Coordinator within any applicable time period for reporting outages under the CAISO Tariff and applicable rules and regulations of the CAISO, immediately upon identification of a situation likely to result

in a Forced Outage occurring within a twenty-four (24) hour period that is likely to cause or require removal of the Facility from service, or a reduction in the maximum output capability of the Facility by one (1) MW or more from the value most recently recorded in the generation outage reporting system for the CAISO, Seller shall notify Buyer and the Scheduling Coordinator. For all other Forced Outages, Seller shall provide Buyer and the Scheduling Coordinator with as much advance notice as practicably possible, but in all cases, shall notify Buyer and the Scheduling Coordinator within 30 minutes after the commencement of the Forced Outage. Seller shall provide detailed information concerning each Forced Outage, including (i) the start and anticipated end dates of the Forced Outage; (ii) a description of the cause of the Forced Outage; (iii) a description of the maintenance or repair work to be performed during the Forced Outage; and (iv) the anticipated MW of operational capacity, if any, during the Forced Outage. Seller shall take all reasonable measures and exercise commercially reasonable efforts to avoid Forced Outages and to limit the duration and extent of any such outages.

(c) In addition to the requirements set forth in Section 3.5(a) and Section 3.5(b), the Parties shall cooperate to develop mutually acceptable procedures for addressing Scheduled Outages and any other outages arising in connection with the Facility.

(d) In the event of any inconsistency between the provisions in this Section 3.5 and any applicable requirements of CAISO, the provisions of CAISO shall govern.

ARTICLE IV COMPLIANCE DURING OPERATIONS

Section 4.1 Buyers' Rights to Monitor in General. Buyer shall have the right, and Seller shall permit Buyer and its Authorized Representative, and any other advisors, engineers and consultants agreed by the Parties (where such agreement shall not be unreasonably withheld), to observe, inspect, and monitor the operations and activities of the Facility; provided that such activities on the part of Buyer and its Authorized Representative shall be coordinated with Seller so as to not interfere with the Facility, and as to other advisors, engineers and consultants, such third parties executing an agreement setting forth the terms and conditions required by the Parties, including insurance, indemnity and non-disclosure terms. Seller shall cause its personnel, consultants, and contractors to be available to, and cooperate in all reasonable respects with, Buyer and its Authorized Representative, advisors, engineers, and consultants at reasonable times and with prior notice for purposes of discussing any aspect of the Facility testing, performance, operation, or maintenance thereof and Buyer's exercise of its rights under this Section 4.1. Buyer's rights to access the Facility shall be subject to Seller's reasonable safety protocols.

Section 4.2 Effect of Review by Buyer. Any review by Buyer or a Buyer's Authorized Representative of the operation or maintenance of the Facility, or observation of any testing, is solely for the information of Buyer. Buyer shall have no obligation to share the results of any such review or observations with Seller, nor shall any such review or the results thereof (whether or not the results are shared with Seller), nor any failure to conduct any such review, nor any observation of testing or failure to observe testing, relieve Seller from any of its obligations under this Agreement. By making any such review or observing any such testing, Buyer makes no representation as to the economic and technical feasibility, operational capability or reliability of

the Facility. Seller shall in no way represent to any third party that any such review by Buyer or Buyer's Authorized Representative of the Facility thereof, including any review of the operation or maintenance, is a representation by Buyer as to the economic and technical feasibility, operational capability or reliability of the Facility. Seller is solely responsible for the economic and technical feasibility, operational capability and reliability thereof.

Section 4.3 No Liens. Except as otherwise permitted by this Agreement: (a) the Facility shall be owned by Seller during the Agreement Term; and (b) Seller shall not sell or otherwise dispose of or create, incur, assume or permit to exist any Lien on any portion of the Facility or any other property or assets that are related to the operation, maintenance and use of the Facility without the prior written approval of Buyer, which such written approval shall not be unreasonably withheld.

ARTICLE V PURCHASE AND SALE OF PRODUCT

Section 5.1 Purchases by Buyer. Subject to the terms and conditions of this Agreement, during the Delivery Term, Buyer will purchase and receive all the Products produced by or associated with the Facility at the Contract Price and in accordance with Appendix A, and Seller shall supply and deliver to Buyer all the Products produced by or associated with the Facility. At its sole discretion, Buyer may during the Delivery Term re-sell or use for another purpose all or a portion of the Products, provided that no such re-sale or use shall relieve Buyer of any obligations hereunder. During the Delivery Term, Buyer will have exclusive rights to offer, bid, or otherwise submit the Product from the Facility after the Point of Delivery for resale in the market or to any third party, and retain and receive any and all related revenues. Buyer has no obligation to purchase from Seller any Products for which the associated Facility Energy is not or cannot be delivered to the Point of Delivery as a result of an outage of the Facility, a Force Majeure Event, or a Curtailment Period.

Section 5.2 Sale of Environmental Attributes. During the Delivery Term, Seller shall sell and deliver to Buyer, and Buyer shall purchase and receive from Seller, all Environmental Attributes attributable to the Facility Energy generated by the Facility.

ARTICLE VI TRANSMISSION AND SCHEDULING; TITLE AND RISK OF LOSS

Section 6.1 Delivery.

(a) Energy and Capacity. Subject to the provisions of this Agreement, during the Delivery Term, Seller shall supply and deliver the Products to Buyer at the Point of Delivery, and Buyer shall take delivery of the Products at the Point of Delivery in accordance with the terms of this Agreement. Seller will be responsible for paying or satisfying when due any costs or charges imposed in connection with the delivery of Facility Energy to the Point of Delivery, including without limitation, Station Use, Electrical Losses, and any operation and maintenance charges imposed on Seller by the Transmission Provider directly relating to the Facility's operations. Buyer shall be responsible for all costs, charges and penalties, if any, imposed in connection with

the delivery of Facility Energy at and after the Point of Delivery, including without limitation transmission costs and transmission line losses. Throughout the Delivery Term, Buyer shall Schedule and dispatch the Facilities in accordance with Prudent Utility Practices and shall have the exclusive right to bid or schedule all Products from each Facility, and provide (or cause to be provided), at its own expense, and will be solely responsible for the performance of all Scheduling Coordinator services required under the term of this Agreement, the CAISO Tariff, applicable protocols and scheduling practices, and any other applicable law, rule or regulatory requirement applicable to Scheduling Coordinators, for the Facilities. The Facility Energy will be scheduled and dispatched with the CAISO by Buyer (or Buyer's designated Scheduling Coordinator for the Facility) in accordance with Appendix C.

(b) Environmental Attributes. All Environmental Attributes associated with the Facility during the Delivery Term are exclusively dedicated to and will be conveyed to Buyer. Seller represents and warrants that Seller holds the rights to all Environmental Attributes from the Facility, and Seller agrees to convey and hereby conveys all such Environmental Attributes to Buyer as included in the delivery of the Product from the Facility.

Section 6.2 Scheduling Coordinator; CAISO Cost Allocation. Buyer or Buyer's designee shall act as Scheduling Coordinator for the Facility and shall have the full right and obligation to Schedule and dispatch all Facility Energy and capacity in accordance with the CAISO Tariff and other applicable requirements. Seller shall provide the capability to implement dispatch order, including adjustments to operating constraints, such as ramp rates, megawatt output, and megavar output, in real-time by means of set points received by the SCADA system or Facility controller of Seller, provided that the dispatch order is consistent with the Facility's operational characteristics as then-currently modeled in the CAISO Master File. The Facility shall have one or more designed resource IDs with CAISO for scheduling purposes, as set forth in the CAISO Master File. Buyer shall be financially responsible for and shall pay for all CAISO Costs; provided however, that notwithstanding the foregoing, Seller shall assume all liability and reimburse Buyer for any and all costs or charges under a Settlement Statement incurred by Buyer because of Seller's failure to perform any covenant or obligation set forth in this Agreement.

Section 6.3 Interconnection Facilities. Seller shall maintain an Interconnection Agreement and applicable Interconnection Facilities with the Transmission Provider to enable the Facility to interconnect with the Transmission System at the Point of Delivery. Seller shall be solely responsible for and pay all costs and charges arising under the Interconnection Agreement in compliance with the Interconnection Agreement and applicable rules and requirements in place throughout the Delivery Term.

Section 6.4 Forecasting. Seller shall provide the forecasts described below at its sole expense and in a format reasonably acceptable to Buyer (or Buyer's designee). Seller shall use reasonable efforts to provide forecasts that are accurate and, to the extent not inconsistent with the requirements of this Agreement, shall prepare such forecasts, or cause such forecasts to be prepared, in accordance with Prudent Operating Practices.

(a) Annual Forecast of Energy. No less than forty-five (45) days before (i) the first day of the first Contract Year of the Delivery Term and (ii) at the beginning of each calendar

year for every subsequent Contract Year during the Delivery Term, Seller shall provide to Buyer a non-binding forecast of each month's average-day expected Facility Energy, and associated hydrological storage, for the following calendar year in a form reasonably requested by Buyer.

(b) Monthly Forecast of Energy and Available Generating Capacity. No less than thirty (30) days before the Initial Delivery Date, and thereafter ten (10) Business Days before the beginning of each month during the Delivery Term, Seller shall provide to Buyer a non-binding forecast of the hourly expected Facility Energy, hydrological storage, and Available Generating Capacity for each day of the following month in a form reasonably requested by Buyer ("**Monthly Delivery Forecast**").

(c) Day-Ahead Forecast. By 5:30 AM Pacific Prevailing Time on the Business Day immediately preceding the date of delivery, or as otherwise specified by Buyer consistent with Prudent Operating Practice, Seller shall provide Buyer with a non-binding forecast of (i) Available Generating Capacity and (ii) environmental requirements, including minimum water release requirements, in each case, for each hour of the immediately succeeding day ("**Day-Ahead Forecast**"). A Day-Ahead Forecast provided in a day prior to any non-Business Day(s) shall include non-binding forecasts for the immediate day, each succeeding non-Business Day and the next Business Day. Each Day-Ahead Forecast shall clearly identify, for each hour, Seller's non-binding best estimate of (i) the Available Generating Capacity and (ii) applicable requirements and minimum water release requirements.

(d) Water Transfers. Seller, in Seller's discretion, may implement temporary or long-term reservoir reoperation or other water transfers during the Delivery Term. Seller will include any such transfers in the Monthly Delivery Forecast and Day-Ahead Forecast. If a transfer is forecasted at the time the Annual Forecast is due, then Seller shall provide notice to Buyer in the Annual Forecast; otherwise, Seller will provide notice to Buyer of any potential water transfer when it is first forecasted. Buyer and the Scheduling Coordinator agree to implement any water transfers and any accompanying regulatory or legal requirements of the transfer, including refill criteria and ramping rates. Buyer and Scheduling Coordinator will neither object to Seller water transfers, nor charge an accommodation or other fee or request any other offset or payment for such transfers during the Delivery Term.

(e) Throughout the Delivery Term, Seller shall provide to Buyer and the Scheduling Coordinator the following data on a real-time basis, and in a format that reasonably allows Buyer and the Scheduling Coordinator to copy, paste or otherwise use such data:

(i) Read-only and/or write access via secure login credentials to Energy output information and operational information collected by the SCADA system for the Facility; *provided* that if Buyer or the Scheduling Coordinator is unable to access the Facility's SCADA system, then upon written request from Buyer or the Scheduling Coordinator, Seller shall provide Energy output information and operational information through such other format as may be mutually acceptable to Seller and Buyer, all as may be updated from time to time based on advancements in technology in accordance with Prudent Utility Practices; and

(ii) Read-only access to all Electric Metering Devices.

(f) Seller, Buyer and the Scheduling Coordinator shall mutually develop forecasting and Scheduling procedures in addition to those set forth in this Section 6.4 and Appendix C, in order to administer the provisions of this Agreement in compliance with all applicable Requirements and requirements of the Transmission Provider, CAISO, NERC, WECC, and any balancing authority involved in the Scheduling of Energy and capacity under this Agreement. Seller, Buyer and the Scheduling Coordinator shall promptly cooperate to make any reasonably necessary and appropriate modifications to such forecasting or Scheduling procedures as may be required from time to time.

Section 6.5 Curtailment.

(a) Seller shall reduce deliveries of Facility Energy to the Point of Delivery as soon as reasonably possible upon notice from the Scheduling Coordinator, the CAISO, a Transmission Provider, or any balancing authority or reliability entity during Curtailment Periods. Buyer shall be excused from receiving any Facility Energy from Seller and shall not be obligated to pay Seller for the amount of reduced Facility Energy arising during a Curtailment Period. If required by the Scheduling Coordinator, the CAISO, a Transmission Provider, any balancing authority or reliability entity, or if requested by Buyer, Seller shall provide the dispatch and operating capability to implement curtailments and adjust ramp rates, megawatt output, and (if applicable) megavar output in real-time by means of setpoints received by the SCADA system or Facility controller of Seller.

(b) Separate from the curtailments described in Section 6.5(a), Buyer may, upon delivering curtailment instruction to Seller, curtail deliveries of Facility Energy at any time and for the duration specified by Buyer ("**Buyer Curtailment**"). For the avoidance of doubt, if the curtailment is resulting from Buyer's bidding and scheduling strategies and activities, including Buyer's strategies to minimize Buyer's exposure to negative pricing, the Facility will be deemed to have been curtailed pursuant to this Section 6.5(b), for which Buyer will be required to reimburse Seller as set forth herein. Buyer, Buyer's real-time operators or the Scheduling Coordinator shall provide to Seller a dispatch notice or instruction in accordance with CAISO scheduling timelines set forth in the CAISO Tariff, or in accordance with the Scheduling and dispatch procedures set forth in Appendix C, of its request for curtailment under this Section 6.5(b), and Seller shall comply with such request in accordance with Prudent Utility Practices, provided that the dispatch order is consistent with the Facility's operational characteristics as then-currently modeled in the CAISO Master File. The curtailment notice to Seller shall indicate the amount of any Facility Energy to be produced in each applicable Settlement Interval. Seller shall respond to curtailment notices (including the end of such curtailment periods) in accordance with Prudent Utility Practices. Seller shall provide the capability to implement curtailment notices, including adjustments to operating constraints, such as ramp rates, megawatt output, and megavar output, in real-time by means of set points received by the SCADA system or Facility controller of Seller. Buyer shall compensate Seller for any Deemed Generated Energy by accounted for Deemed Generated Energy as Monthly Base Output, as further set forth in Appendix A.

(c) “**Deemed Generated Energy**” means the amount of Facility Energy, expressed in MWh, that the Facility would have produced and delivered to the Point of Delivery, but for a curtailment event arising under Section 6.5(b), which amount shall be equal to (i) Gross Facility Energy, less (ii) the amount of Facility Energy delivered to the Point of Delivery during the curtailment or other event, if any; *provided* that, if the applicable difference calculated pursuant to the formula provided above is negative, the Deemed Generated Energy shall be zero (0).

(d) Within thirty (30) days after any curtailment pursuant to Section 6.5(a) and Section 6.5(b), Buyer shall provide Seller with all necessary information needed and reasonably requested by Seller, whether from Buyer or CAISO, including CAISO “flags” with respect to the curtailments, for Seller to determine if compensation is owed to Seller by Buyer pursuant to Section 6.5(b).

Section 6.6 No Payment. Buyer shall not be obligated to pay Seller for any Facility Energy that is not or cannot be delivered to the Point of Delivery for any reason (including Force Majeure), except as otherwise stated in Section 6.5(b).

Section 6.7 Title; Risk of Loss. As between the Parties, Seller shall be deemed to be in exclusive control (and responsible for any damages or injury caused thereby) of all Energy prior to the Point of Delivery, and Buyer shall be deemed to be in exclusive control (and responsible for any damages or injury caused thereby), of the Energy at and from the Point of Delivery. Seller warrants that it will deliver all Products, including all of the associated Environmental Attributes, to Buyer free and clear of all Liens created by any Person other than Buyer.

Section 6.8 RPS and EPS Compliance.

(a) Seller warrants and guarantees that during the Delivery Period the Facility Energy produced by each Facility that is CEC Certified as of the Effective Date, and at all times thereafter until the expiration or earlier termination of the Agreement, the Facility (including the Facility Energy and the associated Environmental Attributes) shall be both RPS Compliant and EPS Compliant (if EPS Law is applicable to the Facility), except if the Facility fails to be RPS Compliant or EPS Compliant (if EPS Law is applicable to the Facility) as a result of (i) a Change in Law making it impossible, after the use of commercially reasonable efforts as required under Section 6.8(b), for the Facility to be RPS Compliant or EPS Complaint, or (ii) any repeal of the RPS Law or EPS Law.

(b) If a Change in Law occurs after the Initial Delivery Date that (i) does not repeal the RPS Law or the EPS Law, (ii) causes the Facility to cease to be RPS Compliant and/or EPS Compliant and (iii) reduces the value to Buyer of the Environmental Attributes, then Seller shall use commercially reasonable efforts to comply with such Change in Law and cause the Facility to be RPS Compliant and EPS Compliant. To the extent a Change in Law occurs after the execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such Change in Law. The term “commercially reasonable efforts” as used in this Section 6.8 means efforts consistent with the subject to Section 6.9.

(c) Subject to Section 7.1, Seller shall also take all other reasonable actions necessary to ensure that the Facility Energy is tracked for purposes of satisfying the RPS Law, as may be amended or supplemented by the PUC or CEC from time to time.

Section 6.9 Compliance Expenditure Cap. If a Change in Law occurring after the Effective Date has increased Seller's known or reasonably expected costs to comply with Seller's obligations under this Agreement with respect to obtaining, maintaining, conveying or effectuating Buyer's use of (as applicable) any Products, then the Parties agree that the maximum aggregate amount of out-of-pocket costs and expenses ("**Compliance Costs**") Seller shall be required to bear during the Delivery Term to comply with all of such obligations shall be capped at twenty-five thousand dollars (\$25,000.00) per MW of Contract Capacity ("**Compliance Expenditure Cap**"). Seller's internal administrative costs associated with obtaining, maintaining, conveying or effectuating Buyer's use of (as applicable) any Product are excluded from the Compliance Expenditure Cap.

Any actions required for Seller to comply with its obligations set forth in the first paragraph above, the Compliance Costs of which will be included in the Compliance Expenditure Cap, shall be referred to collectively as the "**Compliance Actions**." Seller will determine, in Seller's reasonable discretion, the implementation schedule for Compliance Actions.

If Seller reasonably anticipates the need to incur Compliance Costs in excess of the Compliance Expenditure Cap in order to take any Compliance Action Seller shall provide Notice to Buyer of such anticipated Compliance Costs.

Buyer will have sixty (60) days to evaluate such Notice (during which time period Seller is not obligated to take any Compliance Actions described in the Notice) and shall, within such time, either (1) agree to reimburse Seller for all of the Compliance Costs that exceed the Compliance Expenditure Cap (such Buyer-agreed upon costs, the "**Accepted Compliance Costs**"), or (2) waive Seller's obligation to take such Compliance Actions, or any part thereof for which Buyer has not agreed to reimburse Seller. If Buyer does not respond to a Notice given by Seller under this Section 6.9 within sixty (60) days after Buyer's receipt of same, Buyer shall be deemed to have waived its rights to require Seller to take the Compliance Actions that are the subject of the Notice, and Seller shall have no further obligation to take, and no liability for any failure to take, these Compliance Actions for the remainder of the Term.

If Buyer agrees to reimburse Seller for the Accepted Compliance Costs, then Seller shall endeavor in good faith to expeditiously implement the Compliance Actions covered by the Accepted Compliance Costs as agreed upon by the Parties and Buyer shall reimburse Seller for Seller's actual costs to effect the Compliance Actions, not to exceed the Accepted Compliance Costs, within sixty (60) days of Buyer's receipt of any invoice from Seller.

ARTICLE VII ENVIRONMENTAL ATTRIBUTES

Section 7.1 Transfer of Environmental Attributes. For and in consideration of Buyer entering into this Agreement, and in addition to the agreement by and between Buyer and Seller

to purchase and sell Facility Energy on the terms and conditions set forth herein, Seller shall transfer to Buyer, and Buyer shall receive from Seller, all right, title, and interest in and to all Environmental Attributes, whether now existing or acquired by Seller or that hereafter come into existence or are acquired by Seller during the Delivery Term associated with the Facility Energy. Seller agrees to transfer and make such Environmental Attributes available to Buyer immediately to the fullest extent allowed by applicable law upon Seller's production or acquisition of the Environmental Attributes. Seller represents and covenants that it has not assigned, transferred, conveyed, encumbered, sold or otherwise disposed of and shall not assign, transfer, convey, encumber, sell or otherwise dispose of all or any portion of such Environmental Attributes to any Person other than Buyer or attempt to do any of the foregoing with respect to any of the Environmental Attributes except with respect to any sales by Seller pursuant to Section 5.1. Buyer and Seller acknowledge and agree that the consideration for the transfer of Environmental Attributes is contained within the Contract Price.

Section 7.2 Reporting of Ownership of Environmental Attributes. During the Agreement Term, Seller shall not report to any Person that the Environmental Attributes granted hereunder to Buyer belong to any Person other than Buyer, and Buyer may report under any program that such Environmental Attributes purchased hereunder belong to it except with respect to any sales by Seller pursuant to Section 5.1, and during a Force Majeure.

Section 7.3 Environmental Attributes. Upon the request of Buyer or Buyer's Authorized Representative, Seller shall take all reasonable actions and execute all documents or instruments necessary under applicable law regulations, guidebooks promulgated by the CEC or PUC, bilateral arrangements or other voluntary Environmental Attribute programs of any kind, as applicable, to maximize the attribution, accrual, realization, generation, production, recognition and validation of Environmental Attributes throughout the Agreement Term and Seller shall file with the CEC and any other applicable Persons all materials and documents required to demonstrate that the Facility is entitled to be CEC Certified.

Section 7.4 WREGIS. In furtherance and not in limitation of Section 7.3, prior to Seller's first delivery of Facility Energy hereunder, Seller shall register with WREGIS to evidence the transfer of any Environmental Attributes under applicable law or any voluntary program ("**WREGIS Certificates**") associated with Facility Energy in accordance with WREGIS reporting protocols and WREGIS Operating Rules and shall register the Facility with WREGIS. After the Facility is registered with WREGIS, at the option of Buyer's Authorized Representative, Seller shall transfer WREGIS Certificates using the Forward Certificate Transfer method as described in WREGIS Operating Rules from Seller's WREGIS account to Buyer's WREGIS accounts, as designated by Buyer's Authorized Representative. Seller shall be responsible for WREGIS Certificate issuance fees and WREGIS expenses associated with registering the Facility, maintaining its account, acquiring and arranging for a Qualified Reporting Entity ("**QRE**") and any applicable QRE agreements, and transferring WREGIS Certificates to Buyer, Buyer's Authorized Representative, or any other designees. Buyer shall be responsible for its WREGIS expenses associated with maintaining its own account, or the accounts of its designees, if any, and subsequent transferring or retiring by it of WREGIS Certificates, or Seller's fees for the retirement of WREGIS Certificates on behalf of Buyer. Forward Certificate Transfers shall occur monthly based on the certificate creation timeline established by the WREGIS Operating Rules. Seller shall

be responsible for, at its expense, validating and disputing data with WREGIS prior to WREGIS Certificate creation each Month. In addition to the foregoing, Seller shall document the production and transfer of Environmental Attributes under this Agreement to Buyer by delivering to Buyer an attestation in substantially the form attached as Appendix D for the Environmental Attributes associated with Facility Energy, if any, measured in whole MWh, or by such other method as Buyer shall designate.

Section 7.5 Further Assurances. In addition to and not in limitation of Section 7.4, Seller shall document the production of Environmental Attributes by delivering with each invoice to Buyer an attestation for the Environmental Attributes associated with Facility Energy, if any, for the preceding Month in the form of the attestation set forth as Appendix D. At Buyer's Authorized Representative's request, the Parties shall execute all reasonable documents and instruments and take commercially reasonable actions in order to effect the transfer of the Environmental Attributes specified in this Agreement to Buyer and to maximize the attribution, accrual, realization, generation, production, recognition and validation of Environmental Attributes throughout the Agreement Term. In the event of the promulgation of a scheme involving Environmental Attributes administered by CAMD, upon notification by CAMD that any transfers contemplated by this Agreement shall not be recorded, each Party shall promptly cooperate in taking all reasonable actions necessary so that such transfer can be recorded. Each Party shall promptly give the other Party copies of all documents it submits to CAMD to effectuate any transfers.

ARTICLE VIII CAPACITY RIGHTS

Section 8.1 Capacity Rights. For and in consideration of Buyer entering into this Agreement, and in addition to the agreement by Buyer and Seller to purchase and sell Facility Energy and Environmental Attributes on the terms and conditions set forth herein, Seller hereby transfers to Buyer, and Buyer hereby accepts from Seller, all of Seller's rights, title and interest in and to the Capacity Rights. The consideration for the transfer of Capacity Rights, if any, is contained within the Contract Price. In no event shall Buyer have any obligation or liability whatsoever for any debt pertaining to the Facility by virtue of Buyer's ownership of the Capacity Rights or otherwise. Throughout the Delivery Term, Seller shall use commercially reasonable efforts to maintain eligibility for Full Capacity Deliverability Status for the Facility from the CAISO and shall perform all actions necessary to ensure that the Facility qualifies to provide Resource Adequacy Benefits to Seller.

Section 8.2 Covenant Regarding Capacity Rights. Seller represents and covenants that it has not assigned, transferred, conveyed, encumbered, sold or otherwise disposed of and shall not in the future assign, transfer, convey, encumber, sell or otherwise dispose of any of the Capacity Rights to any Person other than Buyer or attempt to do any of the foregoing with respect to any of the Capacity Rights. During the Agreement Term, Seller shall not report to any Person that any of the Capacity Rights belong to any Person other than Buyer. Buyer may, at its own risk and expense, report to any Person that the Capacity Rights belongs to it.

Section 8.3 Further Assurances. Seller shall execute and deliver such documents and instruments and take such other action as reasonably required by the CAISO and as Buyer's Authorized Representative may reasonably request to effect recognition and transfer of the Capacity Rights to Buyer. Seller shall bear the costs associated therewith.

Section 8.4 Resource Adequacy Failure.

(a) RA Deficiency Determination. For each RA Shortfall Month, Seller shall pay to Buyer the RA Deficiency Amount as liquidated damages or provide Replacement RA, in each case, as the sole and exclusive remedy for the Capacity Rights Seller failed to convey to Buyer.

(b) RA Deficiency Amount Calculation. Commencing on the Initial Delivery Date, for each RA Shortfall Month, Seller shall pay to Buyer an amount (the "**RA Deficiency Amount**") equal to the product of the difference, expressed in kW, of (i) the Net Qualifying Capacity for such month, minus (ii) the amount of Resource Adequacy Capacity supplied from the Facility for such month, multiplied by the RA Capacity Rate; *provided* that Seller may, as an alternative to paying RA Deficiency Amounts, provide Replacement RA in the amount of (X) the Net Qualifying Capacity with respect to such month, minus (Y) the amount of Resource Adequacy Capacity supplied from the Facility with respect to such month, provided that any Replacement RA capacity is communicated by Seller to Buyer with Replacement RA product information in a written notice at least sixty-five (65) days before the relevant deadlines for the corresponding Compliance Showings applicable to the relevant Showing Month.

(c) Option to Provide Replacement RA. If Seller desires to provide replacement Resource Adequacy Capacity for any Showing Month from a different generating unit other than the Facility (the "**Replacement RA**"), then Seller may provide Buyer with Replacement RA from one or more replacement units, provided that in each case the Replacement RA is supplied from like-for-like replacement units that provide Buyer with equivalent Capacity Attributes as the Facility.

(d) Availability Standards. Seller agrees that the Facility may be subject to the terms of the Availability Standards, Non-Availability Charges, and Availability Incentive Payments as contemplated in the CAISO Tariff. Furthermore, the Parties agree that any Availability Incentive Payments are for the benefit of the Buyer and for Buyer's account and that any Non-Availability Charges are the responsibility of the Buyer and for Buyer's account; provided however, that notwithstanding the foregoing, Seller shall assume all liability and reimburse Buyer for any and all Non-Availability Charges incurred by Buyer because of Seller's failure to perform any covenant or obligation set forth in this Agreement.

ARTICLE IX

BILLING; PAYMENT; AUDITS; METERING; ATTESTATIONS; POLICIES

Section 9.1 Billing and Payment. Billing and payment for all Products shall be as set forth in this ARTICLE IX.

Section 9.2 Calculation of Energy Delivered; Invoices and Payment.

(a) Not later than the tenth (10th) day of each Month, commencing with the next Month following the Month in which Facility Energy is first delivered by Seller and received by Buyer pursuant to the terms and conditions of this Agreement, Seller shall deliver to Buyer an invoice showing the amount due for the preceding Month from Buyer to Seller for Facility Energy, Capacity Rights and Environmental Attributes. Seller shall calculate the amount of Facility Energy from meter readings at the Electric Metering Devices maintained pursuant to Section 9.6, adjusting for any applicable station load, transformation losses and transmission losses to the Point of Delivery in accordance with a methodology agreed to by Buyer. Each invoice shall show the title of the Agreement and, if applicable, the Agreement number, the name, address and identifying information of Seller and the identification of material, equipment or services covered by the invoices, and shall be sent to the address set forth in Appendix F or such other address as Buyer may provide to Seller. Seller shall separately provide in such invoice for any other amounts due to Seller, including amounts due under Section 6.5. Any electronic information delivered by Seller under this ARTICLE IX shall be in a format such as Microsoft Excel (or its equivalent) that allows Buyer to cut, paste or otherwise readily use and work with such information or documentation or as otherwise mutually agreed by the Parties.

(b) Concurrently with the delivery of each Monthly invoice, Seller shall deliver attestations of all Environmental Attribute transfers (including those transferred with WREGIS) substantially in the form set forth in Appendix D.

(c) Subject to Section 9.2(d) and Section 9.3, not later than the twenty-fifth (25th) day after receipt by Buyer of Seller's Monthly invoice (or the next succeeding Business Day, if the twenty-fifth (25th) day is not a Business Day), Buyer shall pay to Seller, by wire transfer of immediately available funds to an account specified by Seller or by any other means agreed to by the Parties from time to time, the amount set forth as due in such Monthly invoice.

(d) Notwithstanding Section 9.2(c), if Buyer believes that it has insufficient information to verify the amount of Deemed Generated Energy calculated by Seller in the invoice, or if Buyer requires additional time to verify such information, Buyer shall notify Seller thereof within twenty-five (25) days after receipt of an invoice from Seller, and timely pay the amounts set forth in such Monthly invoice not related to Deemed Generated Energy. Within thirty (30) days after receipt by Buyer of additional information regarding such Deemed Generated Energy calculation, or on the date mutually agreed to by the Parties, Buyer shall pay to Seller the amount specified in the invoice or notify Seller of any discrepancies with respect to its calculation of the Deemed Generated Energy, in which event such invoice shall be subject to the provisions of Section 9.3.

(e) Seller shall, in subsequent invoices, adjust previously invoiced amounts to reflect (i) adjustments pursuant to Section 9.3, or (ii) adjustments, reconciliations or final settlements with WREGIS occurring after the date of the initial invoice, or any other adjustments agreed to by the Parties (which shall be without interest of any kind), *provided* that Buyer shall not be required to make invoice payments if the invoice is received more than one (1) year after the billing period.

(f) Except with respect to disputed invoices where the dispute is first raised within six months after the applicable Monthly billing period and for any adjustments made pursuant to Section 9.2(e) and Section 9.6(a), Buyer shall not be required to make invoice payments if the invoice is received more than six (6) Months after the applicable Monthly billing period.

Section 9.3 Disputed Invoices. If any portion of any invoice is in dispute, the undisputed amount shall be paid when due. The Party disputing a payment shall promptly notify the other Party of the basis for the dispute, setting forth the details of such dispute in reasonable specificity. Disputes shall be discussed directly by the Parties' Authorized Representatives, who shall use reasonable efforts to amicably and promptly resolve such Disputes, and any failure to agree shall be subject to resolution in accordance with Section 12.3. Upon resolution of any Dispute, if all or part of the disputed amount is later determined to have been due, then the Party owing such payment or refund shall pay within ten (10) days after receipt of notice of such determination the amount determined to be due plus interest thereon at the Interest Rate from the due date until the date of payment. For purposes of this Section 9.3, "**Interest Rate**" shall mean the lesser of (i) two percent (2%) above the per annum Prime Rate reported daily in *The Wall Street Journal*, or (ii) the maximum rate permitted by applicable Requirements of Law.

Section 9.4 Right of Setoff. In addition to any right now or hereafter granted under applicable law and not by way of limitation of any such rights, each Party shall have the right at any time or from time to time without notice to other Party or to any other Person, any such notice being hereby expressly waived, to set off against any amount due a Party from the other Party under this Agreement or otherwise any amount due such Party from the other Party under this Agreement or otherwise, including any amounts due because of breach of this Agreement or any other obligation.

Section 9.5 Records and Audits. Seller shall maintain, and the Authorized Auditors shall have access to, all records and data pertaining to the performance and management of this Agreement (including compliance with the Requirements) and related Subcontracts, and as necessary to properly reflect all costs claimed to have been incurred hereunder and thereunder, including (a) in their original form, all (i) documents provided to Seller in the ordinary course of business for the Facility, (ii) documents for billing, costs, metering, and Environmental Attributes, (iii) books, records, documents, reports, deliverables, employee time sheets, accounting procedures and practices, and (iv) records of financial transactions, and (b) other evidence, regardless of form (for example, machine readable media such as disk or tape, etc.) or type (for example, databases, applications software, database management software, or utilities). If Seller is required to submit cost or pricing data in connection with this Agreement, Seller shall maintain all records and documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used. In the event of a Dispute, records that relate to the Agreement, Dispute, litigation or costs, or items to which an audit exception has been taken, shall be maintained by both Buyer and Seller. All records shall be retained, and shall be subject to examination and audit by the Authorized Auditors, for a period of not less than four (4) years following final payment made by Buyer hereunder, the expiration or termination date of this Agreement, or final settlement of all disputes, claims, or litigation, whichever is later. Seller

shall make said records or, to the extent accepted by the Authorized Auditors, photographs, micro-photographs, or other authentic reproductions thereof, available to the Authorized Auditors at Seller's principal business office or any other of Seller's offices as mutually agreed upon by Buyer and Seller, at all reasonable times and without charge. The Authorized Auditors may reproduce, photocopy, download, transcribe, and the like any such records. Any information provided by Seller on machine-readable media shall be provided in a format accessible and readable by the Authorized Auditors. Seller shall not, however, be required to furnish the Authorized Auditors with commonly available software. Seller shall be subject at any time with fourteen (14) days prior written notice to audits or examinations by Authorized Auditors, relating to all billings and required to verify compliance with all Agreement requirements relative to practices, methods, procedures, performance, compensation, and documentation. Examinations and audits shall be performed using generally accepted auditing practices and principles and applicable governmental audit standards. If Seller utilizes or is subject to Federal Acquisition Regulation, Part 30 and 31, et seq. accounting procedures, or a portion thereof, examinations and audits shall utilize such information. To the extent that an Authorized Auditor's examination or audit reveals inaccurate, incomplete or non-current records, or records are unavailable, the records shall be considered defective. Consistent with standard auditing procedures, Seller shall be provided fifteen (15) days to review an Authorized Auditor's examination results or audit and respond to Buyer prior to the examination's or audit's finalization and public release. Seller shall contractually require all Subcontractors performing services under this Agreement to comply with the provisions of this Section 9.5 by inserting this Section 9.5 into each Subcontract.

Section 9.6 Electric Metering Devices.

(a) Facility Energy shall be measured using a CAISO-approved revenue-quality Electric Metering Device that complies with the CAISO Tariff and relevant protocols and is dedicated exclusively to the Facility. The Electric Metering Device may be installed on the low-side of Seller's transformer and will include adjustments to reflect losses to the Point of Delivery. Seller shall arrange and bear all costs associated with the installation of the Electric Metering Devices needed for the registration, recording and transmission of information regarding the Facility Energy. Seller hereby agrees to provide a mutually agreed set of meter data to Buyer, which data shall be accessible to, and usable by, Buyer. In addition to providing Buyer with its meter data, Seller shall use commercially reasonable efforts to support any efforts by Buyer to obtain CAISO meter data applicable to the Facility and all inspection, testing and calibration data and reports from the CAISO. If the CAISO makes any adjustment to any CAISO meter data for a given time period not exceeding three (3) months, Seller agrees that it shall submit revised Monthly invoices, pursuant to this ARTICLE IX covering the entire applicable time period in order to fully conform such adjustments to the meter data. Seller shall submit any revised invoices no later than thirty (30) days after the date on which the CAISO provides Seller with binding adjustments to the meter data.

(b) Seller or its Authorized Representative, at no expense to Buyer, shall inspect and test all Electric Metering Devices upon installation and at least annually thereafter. Seller shall provide Buyer with reasonable advance notice of, and permit representatives of Buyer to witness and verify, such inspections and tests. Upon reasonable request by Buyer, Seller or its Authorized Representative shall perform additional inspections or tests of any Electric Metering

Device and shall permit a qualified representative of Buyer to inspect or witness the testing of any Electric Metering Device. The actual expense of any additional inspection or testing reasonably requested shall be borne by Seller. Seller shall provide copies of any inspection or testing reports to Buyer.

(c) If an Electric Metering Device fails to register, or if the measurement made by an Electric Metering Device is found upon testing to be inaccurate by more than plus or minus one percent (+/- 1.0%), an adjustment shall be made to correct all measurements made by the inaccurate or defective Electric Metering Device for both the amount of the inaccuracy and the period of the inaccuracy, such adjustment to be made by the Scheduling Coordinator. To the extent that the adjustment period covers a period of deliveries for which payment has already been made by Buyer, Buyer shall use the corrected measurements as determined in accordance with this Section 9.6 to recompute the amount due for the period of the inaccuracy and shall subtract the previous payments by Buyer for this period from such recomputed amount. If the difference is a positive number, the difference shall be paid by Buyer to Seller; if the difference is a negative number, that difference shall be paid by Seller to Buyer, or at the direction of Buyer, may take the form of an offset to payments due to Seller from Buyer. Payment of such difference by the owing Party shall be made not later than thirty (30) days after the owing Party receives notice of the amount due, unless Buyer elects payment via an offset.

Section 9.7 Taxes. Seller shall be responsible for and shall pay, before the due dates therefor, any and all federal, state, and local Taxes incurred by it as a result of entering into this Agreement and all Taxes imposed or assessed with respect to the Facility, or any other assets of Seller, the Products or the transaction arising before or at the Point of Delivery. Buyer shall pay or cause to be paid all Taxes on or with respect to the Products or the transaction from (but excluding) the Point of Delivery to Buyer. If Seller is required by a Requirement of Law to remit or pay Taxes that are the responsibility of Buyer hereunder, Buyer shall promptly reimburse Seller for such Taxes. If Buyer is required by Requirement of Law to remit or pay Taxes that are Seller's responsibility hereunder, Buyer may deduct such amounts from payments to Seller hereunder; if Buyer elects not to deduct such amounts from Seller's payments, Seller shall promptly reimburse Buyer for such amounts upon request. Nothing shall obligate or cause a Party to pay or be liable to pay any Taxes for which it is exempt under law. A Party that is exempt at any time and for any reason from one or more Taxes shall bear the risk that such exemption shall be lost or the benefit of such execution be reduced.

ARTICLE X REPRESENTATIONS, WARRANTIES AND COVENANTS

Section 10.1 Representations and Warranties of Buyer. Buyer makes the following representations and warranties to Seller as of the Effective Date and continuing throughout the Delivery Term:

(a) Buyer is a validly existing California joint powers authority, and has the legal power and authority to own its properties, to carry on its business as now being conducted and to enter into this Agreement, and to carry out the transactions contemplated hereby, and to

perform and carry out all covenants and obligations on its part to be performed under and pursuant to this Agreement.

(b) The execution, delivery and performance by Buyer of this Agreement (i) have been duly authorized by all necessary action, and does not and will not require any consent or approval of Buyer's regulatory or governing bodies, other than that which has been obtained; and (ii) does not violate any federal, state, and local law, including the California Government Code and similar laws.

(c) This Agreement constitutes the legal, valid and binding obligation of Buyer enforceable in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws relating to or affecting the enforcement of creditors' rights generally or by general equitable principles, regardless of whether such enforceability is considered in a proceeding in equity or at law.

Section 10.2 Representations and Warranties of Seller. Except as otherwise set forth in this Agreement, Seller makes each of the following representations and warranties to Buyer as of the Effective Date and continuing throughout the Delivery Term.

(a) Seller is an independent special district formed under the Irrigation District Act (Division 11 of the California Water Code) of the State of California, and has legal power and authority under the Irrigation District Act (Division 11 of the California Water Code) of the State of California to carry on its business as now being conducted and to enter into this Agreement, and to carry out the transactions contemplated hereby, and to perform and carry out all covenants and obligations on its part to be performed under and pursuant to this Agreement.

(b) Seller owns and operates the Facility and has not assigned, transferred, conveyed, sold or otherwise disposed of the Facility.

(c) Seller owns or has contractual right to all of the water rights necessary to operate the Facility in accordance with the Agreement.

(d) Seller has filed an Application for a New License for the South Feather Power Project pursuant to the Federal Power Act and FERC's regulations thereunder; and Seller had filed an application with FERC for approval of this Agreement pursuant to Section 22 of the Federal Power Act, 16 U.S.C. § 815.

(e) Except for Seller's need to obtain the regulatory approval addressed in Section 11.1(h), the execution, delivery and performance by Seller of this Agreement (i) have been duly authorized by all necessary action, and does not and will not require any consent or approval of Seller's regulatory or governing bodies, other than that which has been obtained; and (ii) does not violate any federal, state, and local law, including the California Government Code and similar laws.

(f) This Agreement constitutes the legal, valid and binding obligation of Seller enforceable in accordance with its terms, except as such enforceability may be limited by

bankruptcy, insolvency, reorganization or similar laws relating to or affecting the enforcement of creditors' rights generally or by general equitable principles, regardless of whether such enforceability is considered in a proceeding in equity or at law.

(g) The Parties note Seller's pending application for regulatory approval addressed in Section 11.1(h). Assuming receipt of that approval, the execution and delivery of this Agreement, the consummation of the transactions contemplated hereby and thereby and the fulfillment of and compliance with the provisions of this Agreement, does not conflict with or constitute a breach of or a default under, any of the terms, conditions or provisions of any Requirement of Law, or any organizational documents, agreement, deed of trust, mortgage, loan agreement, other evidence of indebtedness or any other agreement or instrument to which Seller is a party or by which it or any of its property is bound, or result in a breach of or a default under any of the foregoing or result in or require the creation or imposition of any Lien upon any of the properties or assets of Seller (except as contemplated hereby), and Seller has obtained all Permits and licenses required for the operation, and maintenance of the Facility in accordance with the Requirements and the performance of Seller's obligations hereunder to which Seller is a party, or such Permits and licenses are reasonably expected to be timely obtained in the ordinary course of business.

(h) Other than Seller's pending application for regulatory approval addressed in Section 11.1(h), there is no pending, or to the knowledge of Seller, threatened action or proceeding affecting Seller before any Governmental Authority, which purports to affect the legality, validity or enforceability of this Agreement.

(i) In 2005 Seller and a neighboring water provider, North Yuba Water District, settled a longstanding dispute through agreement that, among other terms, requires Seller to share fifty percent (50%) of the annual net revenue, if any, from the generation of hydroelectric power from certain facilities. Neither the 2005 Agreement, nor litigation concerning the 2005 Agreement titled North Yuba Water District vs. South Feather Water and Power Agency, Superior Court of the State of California, County of Butte, Case No. 21CV01563 and any related cases affects the legality, validity or enforceability of this Agreement.

(j) Assuming receipt of the regulatory approval described in Section 11.1(h), Seller is not in violation of any Requirement of Law, which violations, individually or in the aggregate, would reasonably be expected to result in a material adverse effect on the business, assets, operations, condition (financial or otherwise) or prospects of Seller, or the ability of Seller to perform any of its obligations under this Agreement.

(k) Assuming receipt of the regulatory approval addressed in Section 11.1(h), Seller owns or possesses or will acquire all patents, rights to patents, trademarks, copyrights and licenses necessary for the performance by Seller of its obligations under this Agreement, and, to Seller's knowledge, Seller's use thereof does not infringe on the intellectual property rights of third parties.

(l) Seller has not assigned, transferred, conveyed, encumbered, sold or otherwise disposed of the Products except as provided herein.

(m) The Facility is located in the State of California.

(n) Seller will be responsible for obtaining all permits necessary to enter into this Agreement and operate the Facility and Seller will be the applicant on any CEQA documents.

ARTICLE XI

DEFAULT; TERMINATION AND REMEDIES; PERFORMANCE DAMAGE

Section 11.1 Default. Each of the following events or circumstances shall constitute a “*Default*” by the responsible Party (the “*Defaulting Party*”):

(a) **Payment Default.** Failure by a Party to make any payment under this Agreement when and as due (other than payments disputed in good faith) that is not cured within thirty (30) days after receipt of notice thereof from the other Party (which amount shall include payment of interest from the due date at the Interest Rate).

(b) **Performance Default.** Failure by a Party to perform any of its duties or obligations under this Agreement (other than any failure that is separately listed as a Default of Seller under this Section 11.1) that is not cured within thirty (30) days after receipt of notice thereof from the other Party; *provided* that if such failure is curable, but cannot be cured within such thirty (30) day period despite reasonable commercial efforts and such failure is not a failure to make a payment when due, such Party shall have up to sixty (60) additional days to cure.

(c) **Breach of Representation and Warranty.** Any representation, warranty, certification or other statement made by a Party in this Agreement that is false or inaccurate at the time made and materially and adversely affects the Party’s ability to perform its obligations hereunder; *provided* that no Default shall exist if such falsity or inaccuracy is remedied within thirty (30) days after receipt of notice thereof from another Party; and further provided that if such falsity or inaccuracy is curable, but cannot be cured within such thirty (30) day period despite reasonable commercial efforts, such Party shall have up to sixty (60) additional days to cure.

(d) **Bankruptcy.** Bankruptcy of Buyer or Seller.

(e) **Insurance Default.** The failure of Seller to maintain and provide acceptable evidence of the required Insurance for the required period of coverage as set forth in Appendix E that is not cured within five (5) Business Days after receipt of notice of such failure from Buyer.

(f) **Fundamental Change.** Except as permitted by Section 12.7, a Party makes an assignment of its rights or delegation of its obligations under this Agreement.

(g) **Casualty.** Seller fails to meet its obligations under Section 12.19(d).

(h) **Adverse Regulatory Determination Default.** The Parties recognize that Seller requires regulatory approval from FERC to sell and deliver power from the South Feather

Power Project for periods extending beyond the date of termination of Seller's annual license for the Project. The Parties also recognize that the ten-year term for this Agreement is necessary for Buyer to receive the full benefit of this Agreement. Accordingly, Seller must receive by March 31, 2022, either (1) a new FERC license for the South Feather Power Project for a term at least exceeding the Initial Delivery Term of this Agreement, or (2) FERC approval of this Agreement under Section 22 of the Federal Power Act. Seller has applied for both. Failure to receive one of these approvals by March 31, 2022 shall constitute a Default. The Parties recognize that they cannot predict the timing in which FERC will act, and that FERC action could cure the Default. If Seller continues to operate under a new annual license after March 31, 2022, Seller shall have until December 31, 2022 to cure the Default. Further extensions to the time period for curing the Default may be agreed by the Parties. In the event that such an Adverse Regulatory Determination Default is not cured, no Termination Payment shall be due to either Party.

Section 11.2 Default Remedy.

(a) If Buyer is in Default for nonpayment, subject to any duty or obligation under this Agreement, Seller may, at its option, suspend performance hereunder or continue to provide services pursuant to its obligations under this Agreement; *provided* that nothing in this Section 11.2(a) shall affect Seller's rights and remedies set forth in this Section 11.2. Seller's continued service to Buyer shall not act to relieve Buyer of any of its duties or obligations under this Agreement.

(b) Notwithstanding any other provision herein, if any Default has occurred and is continuing, the affected Party may, whether or not the dispute resolution procedure set forth in Section 12.3 has been invoked or completed, bring an action in any court of competent jurisdiction as set forth in Section 12.3 seeking injunctive relief in accordance with applicable rules of civil procedure.

(c) Except as expressly limited by this Agreement, if a Default has occurred and is continuing and Buyer is the Defaulting Party, Seller may without further notice exercise any rights and remedies provided herein or otherwise available at law or in equity including a termination of this Agreement pursuant to Section 11.3. No failure of Seller to exercise, and no delay in exercising, any right, remedy or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise by Seller of any other right, remedy or power hereunder preclude any other or future exercise of any right, remedy or power.

(d) Except as expressly limited by this Agreement, if a Default has occurred and is continuing and Seller is the Defaulting Party, Buyer may without further notice exercise any rights and remedies provided for herein, or otherwise available at law or equity, including termination of this Agreement pursuant to Section 11.3. No failure of Buyer to exercise, and no delay in exercising, any right, remedy or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise by Buyer of any right, remedy or power hereunder preclude any other or future exercise of any right, remedy or power by Buyer.

Section 11.3 Termination for Default.

(a) If a Default occurs, the Party that is not the Defaulting Party (the “**Non-Defaulting Party**”) may, for so long as the Default is continuing and, to the extent permitted by applicable law, without limiting any other rights or remedies available to the Non-Defaulting Party under this Agreement, by notice by it (“**Termination Notice**”) to the Defaulting Party (i) establish a date (which shall be no earlier than the date of such notice and no later than twenty (20) days after the date of such notice) (“**Early Termination Date**”) on which this Agreement shall terminate, and (ii) withhold any payments due in respect of this Agreement; *provided*, upon the occurrence of any Default of the type described in Section 11.1(d), this Agreement shall automatically terminate, without notice or other action by either Party as if an Early Termination Date had been declared immediately prior to such event.

(b) If an Early Termination Date has been designated, the Non-Defaulting Party shall appoint a qualified independent third party to calculate in a commercially reasonable manner its Gains, Losses and Costs resulting from the termination of this Agreement and the resulting Termination Payment. The Gains, Losses and Costs relating to the Products that would have been required to be delivered under this Agreement had it not been terminated shall be determined by comparing the amounts Buyer would have paid for the Products under this Agreement to the equivalent quantities and relevant market prices, either quoted by one or more bona fide third party offers, or which are reasonably expected by the Non-Defaulting Party to be available in the market under a replacement contract for this Agreement covering the same products and having a term equal to the Remaining Term at the date of the Termination Notice, adjusted to account for differences in transmission, if any. To ascertain the market prices of a replacement contract, the Non-Defaulting Party may consider, among other valuations, quotations from dealers in Energy contracts and bona fide third party offers. The Non-Defaulting Party shall not be required to enter into any such replacement agreement in order to determine its Gains, Losses and Costs or the Termination Payment.

(c) For purposes of the Non-Defaulting Party’s determination of its Gains, Losses and Costs and the Termination Payment, it shall be assumed, regardless of the facts, that Seller would have sold, and Buyer would have purchased, each day during the Remaining Term (i) Facility Energy in an amount equal to the Assumed Daily Deliveries, (ii) the Environmental Attributes associated therewith, and (iii) all other components of the Products. The “**Assumed Daily Deliveries**” shall be an amount equal to the average daily amount of Facility Energy forecasted to be delivered during an average hydrological period by Seller, during the Delivery Term, if any.

(d) The Non-Defaulting Party shall notify the Defaulting Party of the Termination Payment, which notice shall include a written statement explaining in reasonable detail the calculation of such amount. If the Termination Payment is a positive number, the Defaulting Party shall, within ten (10) Business Days after receipt of such notice, pay the Termination Payment to the Non-Defaulting Party, together with interest accrued at the Interest Rate from the Early Termination Date until paid.

(e) If the Defaulting Party disagrees with the calculation of the Termination Payment and the Parties cannot otherwise resolve their differences, the calculation of the Termination Payment shall be submitted to the dispute resolution process provided in Section 12.3.

Following resolution of the dispute, the Defaulting Party shall pay the full amount of the Termination Payment (if any) as determined by such resolution as and when required, but no later than thirty (30) days following the date of such resolution, together with all interest, at the Interest Rate, that accrued from the Early Termination Date until the date the Termination Payment is paid.

(f) For purposes of this Agreement:

(i) “**Gains**” means, with respect to a Party, an amount equal to the present value of the economic benefit (exclusive of Costs), if any, resulting from the termination of its obligations under this Agreement, determined in a commercially reasonable manner;

(ii) “**Losses**” means, with respect to a Party, an amount equal to the present value of the economic loss (exclusive of Costs), if any, resulting from the termination of its obligations under this Agreement, determined in a commercially reasonable manner;

(iii) “**Costs**” means, with respect to a Party, brokerage fees, commissions and other similar transaction costs and expenses reasonably incurred in terminating any arrangement pursuant to which it has hedged its obligations or in entering into new arrangements which replace this Agreement, excluding attorneys’ fees, if any, incurred in connection with enforcing its rights under this Agreement. Each Party shall use reasonable efforts to mitigate or eliminate its Costs.

(iv) In no event shall a Party’s Gains, Losses or Costs include any penalties or similar charges imposed by the Non-Defaulting Party.

(v) The Present Value Rate shall be used as the discount rate in all present value calculations required to determine Gains, Losses and Costs.

(g) At the time for payment of any amount due under this Section 11.3 each Party shall pay to the other Party, all additional amounts, if any, payable by it under this Agreement (including any amounts withheld pursuant to Section 11.3(a)).

(h) Notwithstanding the forgoing provisions of Section 11.3, in no event shall a termination payment be due to a Defaulting Party.

ARTICLE XII MISCELLANEOUS

Section 12.1 Authorized Representative. Each Party shall designate an authorized representative who shall be authorized to act on its behalf with respect to those matters contained herein (each an “**Authorized Representative**”), which shall be the functions and responsibilities of such Authorized Representatives. Each Party may also designate an alternate who may act for the Authorized Representative. Within thirty (30) days after execution of this Agreement, each Party shall notify the other Party of the identity of its Authorized Representative, and alternates if

designated, and shall promptly notify the other Party of any subsequent changes in such designation. The Authorized Representatives shall have no authority to alter, modify, or delete any of the provisions of this Agreement. To the extent that an Authorized Representative's contact information is not provided in Appendix F, at the time a Party designates such Authorized Representative, such Party shall concurrently provide written notice to the other Party of such Authorized Representative's contact information.

Section 12.2 Notices. With the exception of billing invoices pursuant to Article 9 and day-to-day ordinary course and operational communications, all notices, requests, demands, consents, approvals, waivers and other communications which are required under this Agreement shall be (a) in writing (regardless of whether the applicable provision expressly requires a writing), (b) deemed properly sent if delivered in person or sent by facsimile transmission, reliable overnight courier, or sent by registered or certified mail, postage prepaid to the persons specified in Appendix F, and (c) deemed delivered, given and received on the date of delivery, in the case of facsimile transmission, or on the date of receipt or rejection in the case of delivery in person, by reliable overnight courier, or by registered or certified mail. In addition to the foregoing, the Parties may agree in writing at any time to deliver notices, requests, demands, consents, approvals, waivers and other communications through alternate methods, such as electronic mail.

Section 12.3 Dispute Resolution.

(a) In the event of any claim, controversy or dispute between the Parties arising out of or relating to or in connection with this Agreement (including any dispute concerning the validity of this Agreement or the scope and interpretation of this Section 12.3) (a "**Dispute**"), either Party (the "**Notifying Party**") may deliver to the other Party (the "**Recipient Party**") notice of the Dispute with a detailed description of the underlying circumstances of such Dispute (a "**Dispute Notice**"). The Dispute Notice shall include a schedule of the availability of the Notifying Party's senior officers (having a title of senior vice president (or its equivalent) or higher) duly authorized to settle the Dispute, or, in the case of Seller, authorized to recommend settlement to Seller's Board of Directors, during the thirty (30) day period following the delivery of the Dispute Notice.

(b) The Recipient Party shall, within five (5) Business Days following receipt of the Dispute Notice, provide to the Notifying Party a parallel schedule of availability of the Recipient Party's senior officers (having a title of senior vice president (or its equivalent) or higher) duly authorized to settle the Dispute, or, in the case of Seller, authorized to recommend settlement to the Seller's Board of Directors. Following delivery of the respective senior officers' schedules of availability, the senior officers of the Parties shall meet and confer as often as they deem reasonably necessary during the remainder of the thirty (30) day period in good faith negotiations to resolve the Dispute to the satisfaction of each Party.

(c) In the event a Dispute is not resolved pursuant to the procedures set forth in Section 12.3(a) and Section 12.3(b) by the expiration of the thirty (30) day period set forth in Section 12.3(a), then a Party may pursue any legal remedy available to it in accordance with the provisions of Section 12.12 and Section 12.13 of this Agreement.

(d) In addition to the Dispute resolution process set forth in this Section 12.3, the Parties shall comply with California law governing claims against public entities and presentment of such claims, if applicable.

Section 12.4 Further Assurances; Change in Electric Market Design.

(a) Each Party agrees to execute and deliver all further instruments and documents, and take all further actions not inconsistent with the provisions of this Agreement that may be reasonably necessary to effectuate the purposes and intent of this Agreement.

(b) If a change in the CAISO Tariff renders this Agreement or any provisions hereof incapable of being performed or administered, then either Party may request that Buyer and Seller enter into negotiations to make the minimum changes to this Agreement necessary to make this Agreement capable of being performed and administered, while attempting to preserve to the maximum extent possible the benefits, burdens, and obligations set forth in this Agreement as of the Effective Date. Upon delivery of such a request, Buyer and Seller shall engage in such negotiations in good faith. If Buyer and Seller are unable, within sixty (60) days after delivery of such request, to agree upon changes to this Agreement or to resolve issues relating to changes to this Agreement, then either Party may submit issues pertaining to changes to this Agreement to the Dispute resolution process set forth in Section 12.3. Notwithstanding the foregoing, a change in cost shall not in and of itself be deemed to render this Agreement or any of the provisions hereof incapable of being performed or administered, or constitute, or form the basis of, a Force Majeure.

Section 12.5 No Dedication of Facilities. Any undertaking by one Party to the other Party under any provisions of this Agreement shall not constitute the dedication of the Facility or any portion thereof of either Party to the public or to the other Party or any other Person, and it is understood and agreed that any such undertaking by either Party shall cease upon the termination of such Party's obligations under this Agreement.

Section 12.6 Force Majeure.

(a) A Party shall not be considered to be in Default in the performance of any of its obligations under this Agreement when and to the extent such Party's performance is prevented by a Force Majeure that, despite the exercise of due diligence, such Party is unable to prevent or mitigate, *provided* the Party has given a written detailed description of the full particulars of the Force Majeure to the other Party reasonably promptly after becoming aware thereof (and in any event within fourteen (14) days after the initial occurrence of the claimed Force Majeure event) (the "***Force Majeure Notice***"), which notice shall include information with respect to the nature, cause and date and time of commencement of such event, and the anticipated scope and duration of the delay. The Party providing such Force Majeure Notice shall be excused from fulfilling its obligations under this Agreement until such time as the Force Majeure has ceased to prevent performance or other remedial action is taken, at which time such Party shall promptly notify the other Party of the resumption of its obligations under this Agreement. If Seller is unable to deliver, or Buyer is unable to receive, Facility Energy due to a Force Majeure, then Buyer shall have no obligation to pay Seller for Facility Energy not delivered or received by reason thereof. In no event shall Buyer be obligated to compensate Seller or any other Person for any losses,

expenses or liabilities that Seller or such other Person may sustain as a consequence of any Force Majeure.

(b) The term “**Force Majeure**” means any act of God (including fire, flood, earthquake, extremely severe storm, lightning strike, tornado, volcanic eruption, hurricane or other natural disaster), labor disturbance, pandemic, strike or lockout of a national scope, act of the public enemy, war, insurrection, riot, explosion, terrorist activities or any order, regulation or restriction imposed by Governmental Authority, military or lawfully established civilian authorities, or other occurrence that (i) prevents one Party from performing any of its obligations under this Agreement, (ii) could not reasonably be anticipated as of the date of this Agreement, (iii) is not within the reasonable control of, or the result of negligence, willful misconduct, breach of contract, intentional act or omission or wrongdoing on the part of the affected Party (or any subcontractor or Affiliate of that Party, or any Person under the control of that Party or any of its subcontractors or Affiliates, or any Person for whose acts such subcontractor or Affiliate is responsible), and (iv) by the exercise of due diligence the affected Party is unable to overcome or avoid or cause to be avoided; *provided*, nothing in clause (iv) above shall be construed so as to require a Party to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or labor dispute in which it may be involved. Any Party rendered unable to fulfill any of its obligations by reason of a Force Majeure shall exercise due diligence to remove such inability with reasonable dispatch within a reasonable time period and mitigate the effects of the Force Majeure. The relief from performance shall be of no greater scope and of no longer duration than is required by the Force Majeure. Without limiting the generality of the foregoing, a Force Majeure does not include any of the following (each an “**Unexcused Cause**”): (1) any requirement to comply with a RPS Law or any change (whether voluntary or mandatory) in any RPS Law, or other Change in Law, that may affect the value of the Products; (2) events arising from the failure by Seller to operate or maintain the Facility in accordance with this Agreement; (3) any increase of any kind in any cost; (4) delays in or inability of a Party to obtain financing or other economic hardship of any kind; (5) Seller’s ability to sell any Facility Energy at a price in excess of those provided in this Agreement or Buyer’s ability to purchase Product or any part thereof at a price lower than those provided in this Agreement; (6) curtailment or other interruption of any Transmission Service, including public safety power shutoff’s by the Transmission Provider; (7) failure of third parties to provide goods or services essential to a Party’s performance; (8) Facility or equipment failure of a kind that is not caused by Force Majeure; or (9) any changes in the financial condition of Buyer or Seller affecting the affected Party’s ability to perform its obligations under this Agreement.

(c) Buyer may terminate this Agreement if (i) a Force Majeure event occurs that diminishes the production of the Facility by more than fifty percent (50%) of the Contract Capacity for a period of eighteen (18) consecutive months, or (ii) the Facility is rendered inoperable and an independent engineer that is mutually acceptable to both Parties determines that the Facility cannot be repaired or replaced within a period not to exceed twenty four (24) months following the date of the occurrence of the Force Majeure event.

(d) Seller may terminate this Agreement if a Force Majeure event occurs that renders Buyer’s facilities that are used to Schedule and dispatch the Facility inoperable for a period of eighteen (18) consecutive months.

(e) Any termination of this Agreement under Section 12.6(c) or Section 12.6(d) shall be “no-fault” and neither Party shall have any liability or obligation to the other Party arising out of such termination. Notwithstanding the foregoing, upon any such termination, each Party shall pay the other Party for any and all amounts hereunder that may be owing, or other outstanding payments due in the ordinary course that occurred prior to the termination. The exercise by Buyer of its right to terminate the Agreement shall not render Buyer or Seller liable for any losses or damages incurred by the other Party whatsoever.

Section 12.7 Assignment of Agreement. Except as otherwise set forth in this Agreement, a Party shall not assign any of its rights, or delegate any of its obligations, in or under this Agreement, without the prior written consent of the other Party, and such consent not to be unreasonably withheld. Any purported assignment or delegation in violation of this provision shall be null and void and of no force or effect.

Section 12.8 Ambiguity. The Parties acknowledge that this Agreement was jointly prepared by them, by and through their respective legal counsel, and any uncertainty or ambiguity existing herein shall not be interpreted against either Party on the basis that the Party drafted the language, but otherwise shall be interpreted according to the application of the rules on interpretation of contracts.

Section 12.9 Attorneys’ Fees & Costs. Both Parties agree that in any action to enforce the terms of this Agreement that each Party shall be responsible for its own attorneys’ fees and costs. Each of the Parties to this Agreement was represented by its respective legal counsel during the negotiation and execution of this Agreement.

Section 12.10 Voluntary Execution. Both Parties acknowledge that they have read and fully understand the content and effect of this Agreement and that the provisions of this Agreement have been reviewed and approved by their respective counsel. The Parties further acknowledge that they have executed this Agreement voluntarily, subject only to the advice of their own counsel, and do not rely on any promise, inducement, representation or warranty that is not expressly stated herein.

Section 12.11 Entire Agreement; Amendments. This Agreement (including all Appendices and Exhibits) contains the entire understanding concerning the subject matter herein and supersedes and replaces any prior negotiations, discussions or agreements between the Parties, or any of them, concerning that subject matter, whether written or oral, except as expressly provided for herein. This is a fully integrated document. Each Party acknowledges that no other party, representative or agent, has made any promise, representation or warranty, express or implied, that is not expressly contained in this Agreement that induced the other Party to sign this document. This Agreement may be amended or modified only by an instrument in writing signed by each Party; provided, however, Appendix C contains detailed principles, descriptions and procedures for Scheduling and operation of the Facility, and Appendix C may be amended from time to time upon mutual written consent of the Authorized Representative of each Party.

Section 12.12 Governing Law. This Agreement was made and entered into in the County of Placer, California and shall be governed by, interpreted and enforced in accordance with the laws of the State of California, without regard to conflict of law principles.

Section 12.13 Venue. All litigation arising out of, or relating to this Agreement, shall be brought in a state or federal court in the County of Placer or the County of Butte in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts and waive any defense of forum non conveniens.

Section 12.14 Execution in Counterparts. This Agreement may be executed in counterparts and upon execution by each signatory, each executed counterpart shall have the same force and effect as an original instrument and as if all signatories had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signature thereon, and may be attached to another counterpart of this Agreement identical in form hereto by having attached to it one or more signature pages.

Section 12.15 Effect of Section Headings. Section headings appearing in this Agreement are inserted for convenience only and shall not be construed as interpretations of text.

Section 12.16 Waiver; Available Remedies. The failure of either Party to this Agreement to enforce or insist upon compliance with or strict performance of any of the terms or conditions hereof, or to take advantage of any of its rights hereunder, shall not constitute a waiver or relinquishment of any such terms, conditions or rights, but the same shall be and remain at all times in full force and effect. Except to the extent this Agreement expressly provides an exclusive remedy for a breach, nothing contained herein shall preclude either Party from seeking and obtaining any available remedies hereunder, including recovery of damages caused by the breach of this Agreement and specific performance or injunctive relief, or any other remedy given under this Agreement or now or hereafter existing in law or equity or otherwise. Seller acknowledges that money damages may not be an adequate remedy for violations of this Agreement and that Buyer may, in its sole discretion seek and obtain from a court of competent jurisdiction specific performance or injunctive or such other relief as such court may deem just and proper to enforce this Agreement or to prevent any violation hereof. Seller hereby waives any objection to specific performance or injunctive relief; provided that where this Agreement provides an exclusive remedy, then specific performance and injunctive relief are not available. The rights granted herein are cumulative except where otherwise provided herein.

Section 12.17 Relationship of the Parties. This Agreement shall not be interpreted to create an association, joint venture or partnership between the Parties hereto or to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as an agent or representative of, the other Party.

Section 12.18 Third Party Beneficiaries. The provisions of this Agreement are solely for the benefit of the Parties. Nothing in this Agreement, whether express or implied, shall be construed to give to, or be deemed to create in, any other Person, whether as a third party

beneficiary of this Agreement or otherwise, any legal or equitable right, remedy or claim in respect of this Agreement or any covenant, condition, provision, duty, obligation or undertaking contained or established herein. This Agreement shall not be construed in any respect to be a contract in whole or in part for the benefit of any Person that is not a party hereto.

Section 12.19 Indemnification; Damage or Destruction; Insurance; Condemnation; Limit of Liability.

(a) **Indemnification by Seller.** Seller undertakes and agrees to indemnify and hold harmless Buyer, Participating Members, and all of their respective commissioners, officers, agents, employees, advisors, and Authorized Representatives and assigns and successors in interest (collectively, “**Buyer Indemnitees**”) and, at the option of Buyer, to defend such Buyer Indemnitees from and against any and all suits and causes of action (including proceedings before administrative agencies), claims, charges, damages, demands, judgments, civil fines and penalties, other monetary remedies or losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including Seller’s employees and agents, or third persons, or damage or destruction to any property of either Party or third persons, in any manner arising by reason of any breach of this Agreement by Seller, any failure of a representation, warranty or guarantee of Seller hereunder to be true in all material respects, the negligent acts, errors, omissions or willful misconduct incident to the performance of this Agreement on the part of Seller, or any of the Seller’s officers, agents, employees, or subcontractors of any tier, except to the extent caused by the gross negligence or willful misconduct of any such Seller Indemnitee. Any liability of Seller shall be limited to the extent of actual coverage and coverage limits of the insurance policies described in Appendix E.

(b) **Indemnification by Buyer.** Buyer undertakes and agrees to indemnify and hold harmless Seller, and all of its respective officers, agents, employees, directors, advisors, and Authorized Representatives and assigns and successors in interest (collectively, “**Seller Indemnitees**”) and, at the option of Seller, to defend such Seller Indemnitees from and against any and all suits and causes of action (including proceedings before administrative agencies), claims, charges, damages, demands, judgments, civil fines and penalties, other monetary remedies or losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including Buyer’s employees and agents, or third persons, or damage or destruction to any property of either Party or third persons, in any manner arising by reason of any breach of this Agreement by Buyer, any failure of a representation, warranty or guarantee of Buyer hereunder to be true in all material respects, the negligent acts, errors, omissions or willful misconduct incident to the performance of this Agreement on the part of Buyer, or any of the Buyer’s officers, agents, employees, or subcontractors of any tier, except to the extent caused by the gross negligence or willful misconduct of any such Buyer Indemnitee. Any liability of Buyer shall be limited to the lesser of the extent of actual coverage and coverage limits of Buyer’s insurance policies or the minimum insurance requirements for Seller described in Appendix E.

(c) **Notice.** The Parties shall give each other prompt notice of the making of any claim or the commencement of any action, suit or proceeding covered by the provisions of this Section 12.19.

(d) **Damage or Destruction.** If there is a casualty event or other event causing the destruction of the Facility that renders the Facility incapable of generating 50% or more of the Contract Capacity, Seller shall, within four (4) months of such event, enter into a contract for the design of a replacement facility designed to be capable of satisfying the obligations of Seller under this Agreement.

(e) **Insurance.** Seller shall obtain and maintain the Insurance coverages listed in Appendix E.

(f) **Condemnation or Other Taking.** Throughout the Agreement Term, Seller shall immediately notify buyer of the institution of any proceeding for the condemnation or other taking of the Facility, the Facility assets, or any portion thereof, including the occurrence of any hearing associated therewith. Buyer may participate in any such proceeding and Seller shall deliver to Buyer all instruments necessary or required by Buyer to permit such participation. Without Buyer's prior written consent, Seller (i) shall not agree to any compensation or award, and (ii) shall not take any action or fail to take any action which would cause the compensation to be determined.

(g) **Limitation of Liability.** EXCEPT TO THE EXTENT INCLUDED IN THE LIQUIDATED DAMAGES, INDEMNIFICATION OBLIGATIONS RELATED TO THIRD PARTY CLAIMS, OR OTHER SPECIFIC CHARGES EXPRESSLY PROVIDED FOR HEREIN, IN NO EVENT SHALL EITHER PARTY OR ITS INDEMNITEES, BE LIABLE FOR SPECIAL, INCIDENTAL, EXEMPLARY, INDIRECT, PUNITIVE OR CONSEQUENTIAL DAMAGES, LOST PROFITS OR OTHER COSTS, BUSINESS INTERRUPTION DAMAGES RELATED TO OR ARISING OUT OF A PARTY'S PERFORMANCE OR NON-PERFORMANCE OF THIS AGREEMENT, WHETHER BASED ON OR CLAIMED UNDER STATUTE, CONTRACT, TORT (INCLUDING SUCH PARTY'S OWN NEGLIGENCE) OR ANY OTHER THEORY OF LIABILITY AT LAW OR IN EQUITY. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES OF SUCH DAMAGES, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONTRIBUTORY, CONCURRENT, OR ACTIVE OR PASSIVE. THE PARTIES HEREBY WAIVE ANY RIGHT TO CONTEST SUCH PAYMENTS AS AN UNREASONABLE PENALTY.

(h) To the extent any damages required to be paid hereunder are liquidated, the Parties acknowledge that the damages are difficult or impossible to determine, and that the liquidated damages constitute a reasonable approximation of the anticipated harm or loss.

(i) Regardless of the indemnitees provided in Section 12.19(a) of this Agreement, Seller shall defend and indemnify Buyer regarding the Scheduling and dispatch actions performed by Buyer in accordance with Article VI and Appendix C of this Agreement.

Section 12.20 Severability. In the event any of the terms, covenants or conditions of this Agreement, or the application of any such terms, covenants or conditions, shall be held invalid, illegal or unenforceable by any court having jurisdiction, all other terms, covenants and conditions

of this Agreement and their application not adversely affected thereby shall remain in force and effect, *provided* that the remaining valid and enforceable provisions materially retain the essence of the Parties' original bargain.

Section 12.21 Confidentiality.

(a) The Parties will keep confidential all confidential or trade secret information made available to them in connection with this Agreement, to the extent possible, consistent with applicable laws, including the California Public Records Act. Confidential or trade secret information shall be marked or expressly identified as such ("**Confidential Information**").

(b) Notwithstanding the foregoing or any other provision of this Agreement, the Parties acknowledges that Buyer and Seller are subject to disclosure as required by the California Public Records Act, Cal. Govt. Code §§ 6250 et seq. ("**CPRA**") and the Ralph M. Brown Act, Cal. Govt. Code §§ 54950 et seq. ("**Brown Act**").

(c) If a Party ("Receiving Party") receives a request from a Third Party for access to, or inspection, disclosure or copying of, any of the other Party's (the "Supplying Party") confidential data or information ("Disclosure Request"), then the Receiving Party shall provide notice and a copy of the Disclosure Request to the Supplying Party within three (3) Business Days of receipt of the Disclosure Request. Within three (3) Business Days of receipt of such notice, the Supplying Party shall provide notice to the Receiving Party either:

(i) that the Supplying Party believes there are reasonable legal grounds for denying or objecting to the Disclosure Request, and the Supplying Party requests the Receiving Party to deny or object to the Disclosure Request with respect to identified confidential information. In such case, the Receiving Party shall deny the Disclosure Request and the Supplying Party shall defend the denial of the Disclosure Request at its sole cost, and it shall indemnify the Receiving Party for all costs associated with denying or objecting to the Disclosure Request. Such indemnification by the Supplying Party of the Receiving Party shall include all of the Receiving Party's costs reasonably incurred with respect to denial of or objection to the Disclosure Request, including but not limited to costs, penalties, attorney's fees awarded against the Receiving Party and the Receiving Party's attorney's fees; or

(ii) the Receiving Party may grant the Disclosure Request without any liability by the Receiving Party to the Supplying Party.

Section 12.22 Mobile-Sierra. The Parties hereby stipulate and agree that this Agreement was entered into as a result of arm's-length negotiations between the Parties. Further, the Parties believe that, to the extent the sale of Energy under this Agreement is subject to Sections 205 and 206 of the Federal Power Act, 16 U.S.C. Sections 824d and 824e, the rates, terms and conditions of this Agreement are just and reasonable within the meanings of Sections 205 and 206 of the Federal Power Act, and that the rates, terms and conditions of this Agreement will remain so during the Agreement Term. Notwithstanding any provision of this Agreement, the Parties waive all rights to challenge the validity of this Agreement or whether it is just and reasonable for and with

respect to the Agreement Term, under Sections 205 and 206 of the Federal Power Act, and to request the FERC to revise the terms and conditions and the rates or services specified in this Agreement, and hereby agree not to seek, nor support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of this Agreement through application or complaint to FERC or any other state or federal agency, board, court or tribunal, related in any manner as to whether such rates, terms or conditions are just and reasonable or in the public interest under the Federal Power Act, absent prior written agreement of the Parties. The Parties also agree that, absent prior agreement in writing by the Parties to a proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party (to the extent that any provision of this Section is unenforceable or ineffective as to such Party), a non-party or the FERC acting *sua sponte* shall be the “public interest” application of the “just and reasonable” standard of review that requires FERC to find an “unequivocal public necessity” or “extraordinary circumstances where the public will be severely harmed” to modify a contract, as set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956), and clarified by *Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish*, 554 U.S. 527 at 550-51 (2008) and *NRG Power Marketing, LLC v. Maine Public Utilities Comm’n*, 558 U.S. 165 (2010).

Buyer and Seller were represented by legal counsel during the negotiation and execution of this Agreement and the Parties have executed this Agreement as of the dates set forth below, effective as of the Effective Date.

BUYER:

NORTHERN CALIFORNIA POWER
AGENCY

By: Randy S. Howard
Its: General Manager
Date: _____

Approved as to Form:

By: _____
Its: General Counsel
Date: _____

SELLER:

SOUTH FEATHER WATER AND POWER
AGENCY

By: _____

Its: _____

Date: _____

Approved as to Form:

By: _____

Its: General Counsel

Date: _____

**APPENDIX A
TO POWER PURCHASE AGREEMENT,
DATED AS OF [____], 20[____]
BETWEEN
NORTHERN CALIFORNIA POWER AGENCY
AND
SOUTH FEATHER WATER AND POWER AGENCY**

CONTRACT PRICE

Buyer shall compensate Seller for the Product in accordance with this Appendix A.

For the period beginning on the Initial Delivery Date through 11:59 pm on December 31, 2021, the Contract Price of the Product shall be equal to \$35.00/MWh.

For the Delivery Term after 11:59 pm on December 31, 2021, the Contract Price of the Product shall be as described below:

- 1) Contract Price. The Contract Price of the Product shall be equal to the Fixed Monthly Payment plus the Variable Output Monthly Payment, as further described herein:

- i. The Fixed Monthly Payment (“**Fixed Monthly Payment**”) Buyer shall pay to Seller each calendar month during the Delivery Term, subject to the terms of this Agreement, shall be equal to RA Capacity Monthly Payment (“**RA Capacity Monthly Payment**”) plus Base Output Monthly Payment, calculated as follows:

1. RA Capacity Monthly Payment = Facility Monthly Net Qualifying Capacity * RA Capacity Rate

Where RA Capacity Rate is \$6.25 per kW-month

2. Base Output Monthly Payment

For each full Contract Year, Buyer shall pay to Seller Six Million Seven Hundred Twenty Six Thousand Seven Hundred Twenty Dollars (\$6,726,720.00) (“**Base Output Compensation**”) in twelve equal monthly installments (“**Base Output Monthly Payment**”). The Base Output Monthly Payment represents Buyer’s prepayment for the initial 192,192.00 MWh of Facility Energy plus Deemed Generated Energy (“**Base Output**”) produced by the Facility during each Contract Year. Base Output is assumed to be produced each calendar month as shown in Table A below (“**Monthly Base Output**”):

Table A – Base Output

Calendar Month	Monthly Base Output (MWh)	Base Output Monthly Payment
January	16,016.00	\$ 560,560.00
February	16,016.00	\$ 560,560.00
March	16,016.00	\$ 560,560.00
April	16,016.00	\$ 560,560.00
May	16,016.00	\$ 560,560.00
June	16,016.00	\$ 560,560.00
July	16,016.00	\$ 560,560.00
August	16,016.00	\$ 560,560.00
September	16,016.00	\$ 560,560.00
October	16,016.00	\$ 560,560.00
November	16,016.00	\$ 560,560.00
December	16,016.00	\$ 560,560.00
Total	192,192.00	\$ 6,726,720.00

- ii. The Variable Output Monthly Payment (“**Variable Output Monthly Payment**”) Buyer shall pay to Seller each calendar month during the Delivery Term, subject to the terms of this Agreement, shall be calculated as follows:

1. Variable Output Monthly Payment

During each full Contract Year, Buyer shall compensate Seller for each MWh of Facility Energy produced in excess of Base Output (“**Variable Output**”) multiplied by the Variable Output Rate. For example, if during a full Contract Year the Facility produced 477,369.00 MWh of Facility Energy, Buyer would pay to Seller \$9,690,314.46 ((477,369.00 MWh – 192,192.00 MWh) * \$33.98/MWh) for Variable Output produced for that full Contract Year. Buyer and Seller acknowledge that actual month Facility production is variable, whereby the amount of Facility Energy produced each calendar month may be greater than, or less than, Monthly Base Output; therefore, Buyer and Seller shall calculate the Variable Output Monthly Payment amount adjusted for a monthly true-up calculation to account for actual monthly Facility Energy production, as follows:

Variable Output Monthly Payment = Facility Monthly Variable Output * Variable Output Rate; where:

- a. Variable Output Rate is \$33.98 per MWh; and
- b. Facility Monthly Variable Output (“**Facility Monthly Variable Output**”) is equal to the amount of Facility Energy produced each calendar month that is in excess to the amount of Monthly Base Output anticipated to be produced for the same calendar month, as reflected in Table A of this Appendix A; provided, however, if the amount of Facility Energy produced during a calendar month is less than the amount of Monthly Base Output anticipated to be produced for the same calendar month, as reflected in Table A of this Appendix A, Monthly Variable Output shall be zero MWh, and the amount of Monthly Base Output that is greater than the amount of Facility Energy produced during a calendar month shall be “rolled forward” and added to the amount of Monthly Base Output anticipated to be produced in the next succeeding calendar month (“**Variable Output True-up**”), for the purpose of calculating Facility Monthly Variable Output for the next succeeding calendar month. For the purpose of clarity, the following examples of the Variable Output True Up calculation are provided below:

Variable Output True-Up Example A

Calendar Month	Facility Energy (MWh)	Monthly Base Output (MWh)	Deemed Generated Energy (MWh)	Variable Output True-Up (MWh)	Facility Monthly Variable Output (MWh)	Variable Output Rate (\$/MWh)	Facility Output Monthly Payment
January	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32
February	15,000.00	16,016.00	-	1,016.00	-	\$ 33.98	\$ -
March	30,000.00	17,032.00	-	-	12,968.00	\$ 33.98	\$ 440,652.64
April	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32

Variable Output True-Up Example B

Calendar Month	Facility Energy (MWh)	Monthly Base Output (MWh)	Deemed Generated Energy (MWh)	Variable Output True-Up (MWh)	Facility Monthly Variable Output (MWh)	Variable Output Rate (\$/MWh)	Facility Output Monthly Payment
January	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32
February	15,000.00	16,016.00	-	1,016.00	-	\$ 33.98	\$ -
March	15,000.00	17,032.00	-	2,032.00	-	\$ 33.98	\$ -
April	30,000.00	18,048.00	-	-	11,952.00	\$ 33.98	\$ 406,128.96

Variable Output True-Up Example C

Calendar Month	Facility Energy (MWh)	Monthly Base Output (MWh)	Deemed Generated Energy (MWh)	Variable Output True-Up (MWh)	Facility Monthly Variable Output (MWh)	Variable Output Rate (\$/MWh)	Facility Output Monthly Payment
January	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32
February	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32
March	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32
April	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32

A final annual true-up credit (“**Annual True-Up Credit**”) will be calculated at the end of each Calendar Year and paid by Seller to Buyer to account for any outstanding Variable Output True-Up amount, if any, as follows:

Annual True-Up Credit = Outstanding Variable Output True-Up amount *
Variable Output Rate

For the purpose of clarity, an example of the Annual True-Up Credit calculation is provided below:

Annual True-Up Credit Example

Calendar Month	Facility Energy (MWh)	Monthly Base Output (MWh)	Deemed Generated Energy (MWh)	Variable Output True-Up (MWh)	Facility Monthly Variable Output (MWh)	Variable Output Rate (\$/MWh)	Facility Output Monthly Payment
November	30,000.00	16,016.00	-	-	13,984.00	\$ 33.98	\$ 475,176.32
December	15,000.00	16,016.00	-	1,016.00	-	\$ 33.98	\$ -

Annual True-Up Credit = 1,016.00 MWh * \$33.98 = \$34,523.68

Notwithstanding the Monthly Variable Output True-Up and Annual True-Up described in this Appendix A, if the Facility produces a total amount of Facility Energy during a Calendar Year that is less than Base Output, Buyer's obligation to pay Seller total Base Output Compensation in a Calendar Year shall not be reduced.

APPENDIX B
TO POWER PURCHASE AGREEMENT,
DATED AS OF [____], 20[__]
BETWEEN
NORTHERN CALIFORNIA POWER AGENCY
AND
SOUTH FEATHER WATER AND POWER AGENCY

FACILITY DESCRIPTION

The Facilities of the South Feather Power Project are located in Butte County on the South Feather river and include:

1. Name of Facility: South Feather Power Project
2. Location:
Kelly Ridge Powerhouse: 39° 31'54.4"N 121° 29'28.6"W
Forbestown Powerhouse: 39° 33'03.4"N 121° 16'43.3"W
Woodleaf Powerhouse: 39° 33'14.0"N 121° 12'15.0"W
Sly Creek Powerhouse: 39° 34'49.5"N 121° 07'10.1"W
3. Description of Facilities:

Facility Name	Contract Capacity (MW)	CAISO Resource ID	PNode	CEC RPS ID
Forbestown	37.5	FORBST_7_UNIT 1	FORBSTWN_7_B1	N/A
Kelly Ridge	11.0	KELYRG_6_UNIT	KELLYRDG_7_B1	60266
Sly Creek	13.0	SLYCRK_1_UNIT 1	SLYCREEK_7_B1	60267
Woodleaf	60.0	WDLEAF_7_UNIT 1	WOODLEAF_7_B1	N/A

2. Owner: South Feather Water and Power Agency
3. Operator: Seller
4. Scheduling Coordinator: Buyer
4. Point of Interconnection: The Point of Interconnection for each Facility shall mean the point, as set forth in this Appendix B and the Interconnection Agreement, where the Interconnection Facilities connect to the Transmission Providers Transmission System. The Point of Interconnection for each Facility is further described herein:

WOODLEAF POWERHOUSE, SLY CREEK POWERHOUSE, AND FORBESTOWN POWERHOUSE POINTS OF INTERCONNECTION

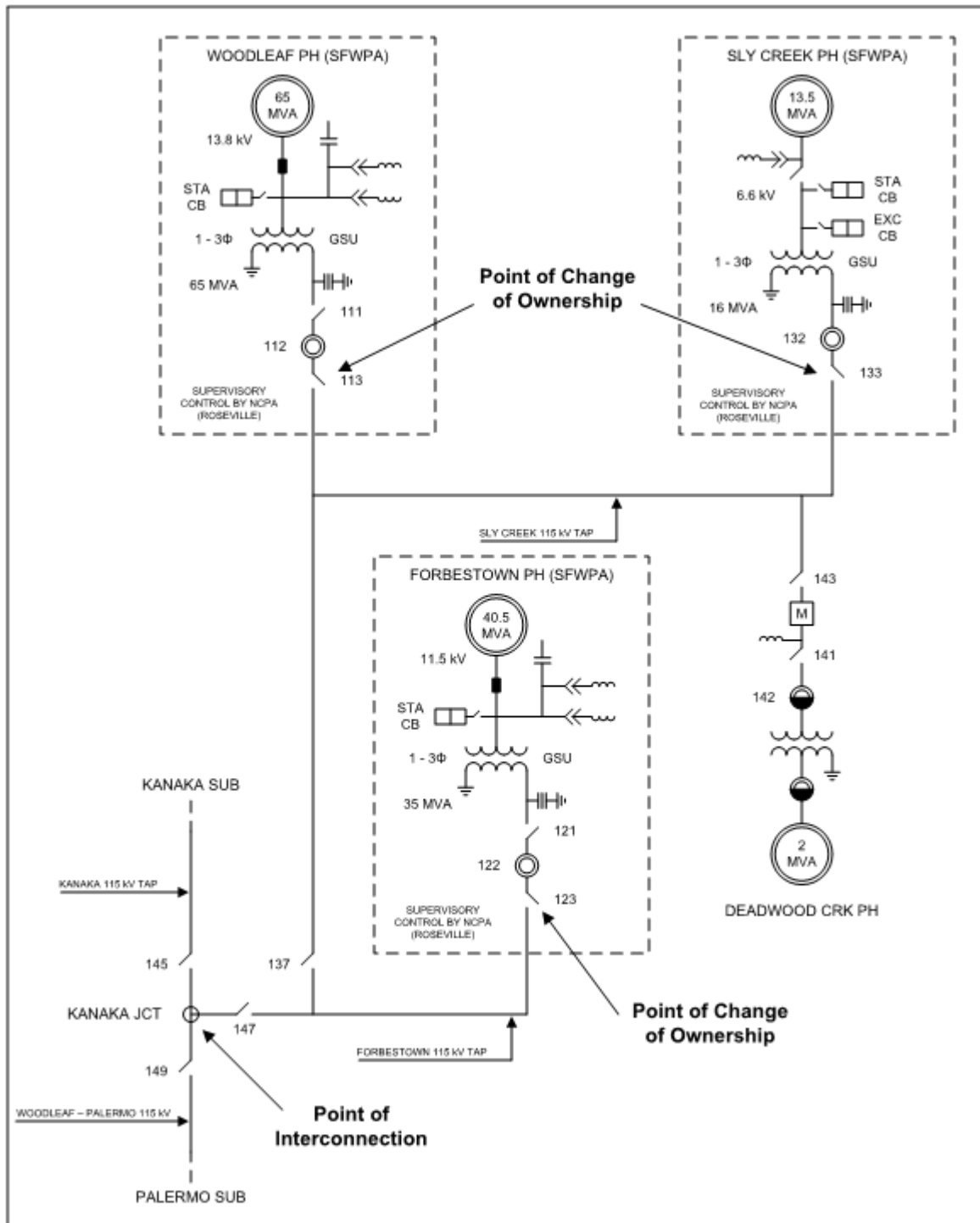


Figure 1. 115 kV Single Line Diagram

KELLY RIDGE POWERHOUSE POINTS OF INTERCONNECTION

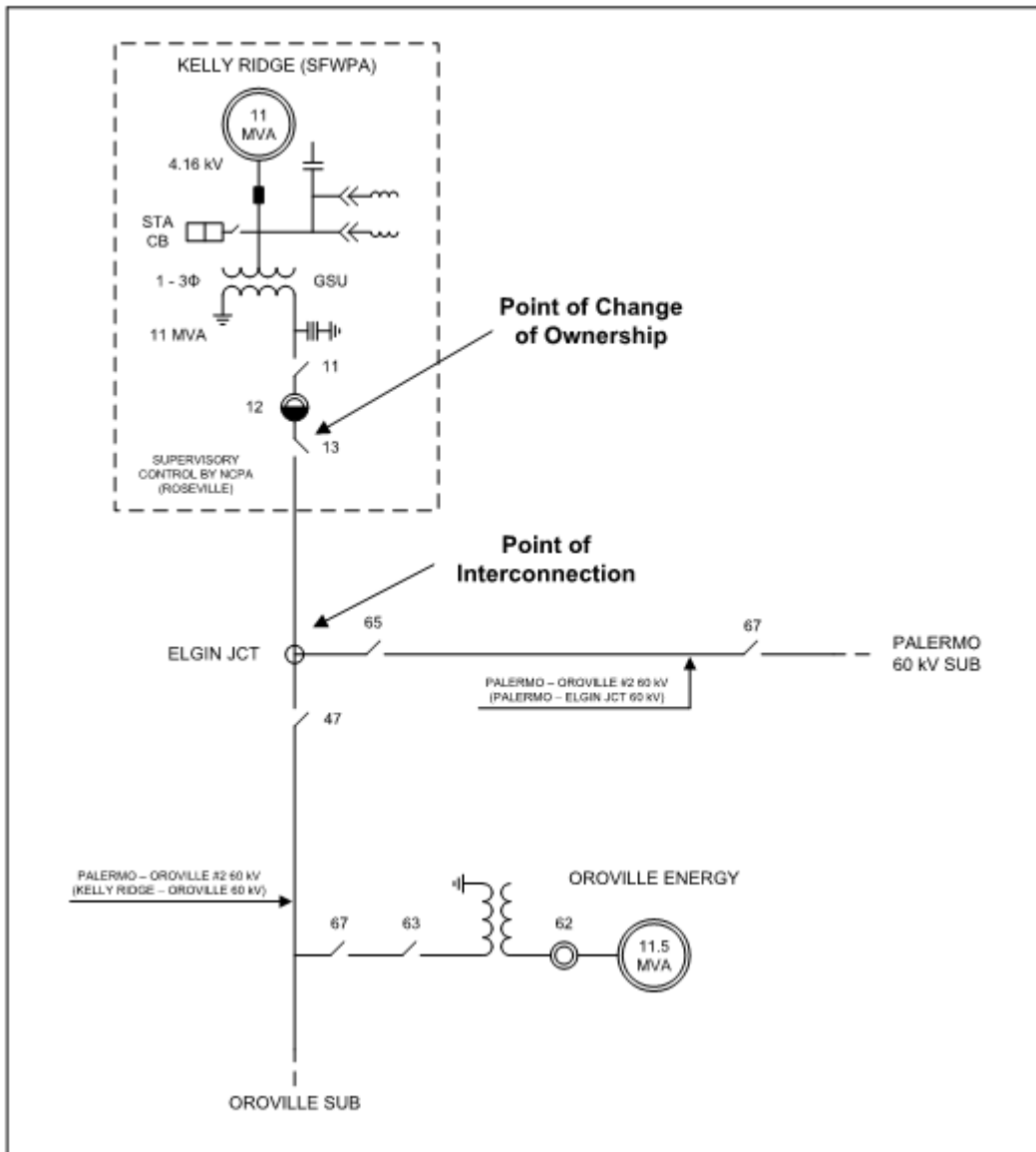


Figure 2. 60 kV Single Line Diagram

APPENDIX C
TO POWER PURCHASE AGREEMENT,
DATED AS OF [____], 20[__]
BETWEEN
NORTHERN CALIFORNIA POWER AGENCY
AND
SOUTH FEATHER WATER AND POWER AGENCY
SCHEDULING AND OPERATING PROCEDURES

1. Scheduling and Operating Procedures

The Scheduling and operating procedures are separately attached to this Appendix C, and are listed below:

SFPP-PM-101 – Voice and Data Communications

SFPP-PM-102 – Outage Management and Operational Reliability Data

SFPP-PM-104 – Dispatch Center Switching and Clearance Procedure

SFPP-PM-107 – Event Reporting Operating Plan

SFPP-PM-108 – Operating Instructions and Emergency Assistance

SFPP-PM-302 – Voltage Control, Automatic Voltage Regulator and Power System Stabilizer Operations

SFPP-PM-304 – Project Operations and Control

SFPP-PM-401 – Scheduling and Bidding

APPENDIX D
TO POWER PURCHASE AGREEMENT,
DATED AS OF [____], 20[__]
BETWEEN
NORTHERN CALIFORNIA POWER AGENCY
AND
SOUTH FEATHER WATER AND POWER AGENCY

FORM OF ATTESTATION

_____(Seller)_____ **Environmental Attribute Attestation and Bill of Sale**

_____(“Seller”) hereby sells, transfers and delivers to Northern California Power Agency (“Buyer”) the Environmental Attributes and Environmental Attribute Reporting Rights associated with the generation from the Facility described below:

Facility name and location:

Fuel Type: Capacity (MW):_____ Operational Date:

As applicable: CEC Reg. no. _____ Energy Admin. ID no. _____ Q.F. ID no. _____

Dates

____ 20____
____ 20____
____ 20____

MWhs generated

in the amount of one Environmental Attribute or its equivalent for each MWh generated.

Seller further attests, warrants and represents as follows:

- i) the information provided herein is true and correct;
- ii) its sale to Buyer is its one and only sale of the Environmental Attributes and associated Environmental Attribute Reporting Rights referenced herein;
- iii) the Facility generated and delivered to the grid the Energy in the amount indicated as undifferentiated Energy; and
- iv) Seller owns the Facility and each of the Environmental Attributes and Environmental Attribute Reporting Rights associated with the generation of the indicated Energy for delivery to the grid have been generated and sold by the Facility.

This serves as a bill of sale, transferring from Seller to Buyer all of Seller’s right, title and interest in and to the Environmental Attributes and Environmental Attribute Reporting Rights associated with the generation of the Energy for delivery to the grid.

Contact Person/telephone: _____

APPENDIX E
TO POWER PURCHASE AGREEMENT,
DATED AS OF [____], 20[__]
BETWEEN
NORTHERN CALIFORNIA POWER AGENCY
AND
SOUTH FEATHER WATER AND POWER AGENCY

INSURANCE

I. GENERAL REQUIREMENTS

Within ten (10) days after the Effective Date, Seller shall furnish Buyer evidence of commercial automobile liability, commercial general liability, excess liability, and workers' compensation coverage meeting the requirements set forth in this Appendix E from insurers acceptable to Buyer and in a form acceptable to the risk management of Buyer or acceptable to Buyer's agent for this purpose. Such insurance shall be maintained by Seller at Seller's sole cost and expense.

Such insurance shall not limit or qualify the liabilities and obligations of Seller assumed under this Agreement. Buyer shall not by reason of its inclusion under these policies incur liability to the insurance carrier for payment of premium for these policies.

Any insurance carried by Buyer which may be applicable shall be deemed to be excess insurance and Seller's insurance is primary for purposes under this Agreement despite any conflicting provision in Seller's policies to the contrary.

Such insurance shall not be canceled or reduced in coverage or amount without first giving thirty (30) days' prior notice thereof (ten (10) days for non-payment of premium) by registered mail to General Manager, Northern California Power Agency.

Should any portion of the required insurance be on a "Claims Made" policy, Seller shall, at the policy expiration date following completion of work, provide evidence that the "Claims Made" policy has been renewed or replaced with the same limits, terms and conditions of the expiring policy, or that an extended discovery period has been purchased on the expiring policy at least for the contract under which the work was performed.

II. SPECIFIC COVERAGES REQUIRED

A. Commercial Automobile Liability

Seller shall provide Commercial Automobile Liability insurance which shall include coverages for liability arising out of the use of owned (if applicable), non-owned, and hired vehicles for performance of the work by Seller or its officers, agents, or employees, as required, to be licensed under the California or any other applicable state vehicle code. The Commercial Automobile Liability insurance shall have not less than \$1,000,000.00 combined single limit per occurrence, with a self-insured retention or deductible of no more than \$100,000, and shall apply to all operations of Seller.

The Commercial Automobile Liability policy shall include Buyer, its members, and their officers, agents, and employees while acting within the scope of their employment, as additional insureds with Seller, and shall insure against liability for death, bodily injury, or property damage resulting from the performance of this Agreement by Seller or its officers, agents, or employees. The evidence of insurance shall be a form acceptable to Buyer's risk manager.

B. Commercial General Liability

Seller shall provide Commercial General Liability insurance with Blanket Contractual Liability, Independent Contractors, Broad Form Property Damage, Premises and Operations, Products and Completed Operations, fire, Legal Liability and Personal Injury coverages included. Such insurance shall provide coverage for total limits actually arranged by Seller, but not less than \$10,000,000.00 combined single limit per occurrence. Should the policy have an aggregate limit, such aggregate limits should not be less than double the Combined Single Limit. Umbrella or Excess Liability coverages may be used to supplement primary coverages to meet the required limits. Evidence of such coverage shall be a form acceptable to Buyer's risk manager, and shall provide for the following:

1. Include Buyer and its members, and their respective officers, agents, and employees as additional insureds with the Named Insured for the activities and operations of Seller and its officers, agents, or employees under this Agreement.
2. Severability-of-Interest or Cross-Liability Clause such as: "The policy to which this endorsement is attached shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the company's liability."
3. A description of the coverages included under the policy.

C. Excess Liability

Seller may use an Umbrella or Excess Liability Coverage to meet coverage limits specified in this Agreement. Seller shall require the carrier for Excess Liability to properly schedule

and to identify the underlying policies on an endorsement to the policy acceptable to Buyer's risk management agent. Such policy shall include, as appropriate, coverage for Commercial General Liability, Commercial Automobile Liability, Employer's Liability, or other applicable insurance coverages.

D. Workers' Compensation/Employer's Liability Insurance

Seller shall provide Workers' Compensation insurance covering all of Seller's employees in accordance with the laws of any state in which the work is to be performed and including Employer's Liability insurance and a Waiver of Subrogation in favor of Buyer. The limit for Employer's Liability coverage shall be not less than \$1,000,000.00 each accident and shall be a separate policy if not included with Workers' Compensation coverage. Evidence of such insurance shall be a form of Buyer Special Endorsement of insurance or on an endorsement to the policy acceptable to Buyer's risk management agent. Workers' Compensation/Employer's Liability exposure may be self-insured *provided* that Buyer is furnished with a copy of the certificate issued by the state authorizing Seller to self-insure. Seller shall notify Buyer's risk manager by receipted delivery as soon as possible of the state withdrawing authority to self-insure.

APPENDIX F
TO POWER PURCHASE AGREEMENT,
DATED AS OF [____], 20[__]
BETWEEN
NORTHERN CALIFORNIA POWER AGENCY
AND
SOUTH FEATHER WATER AND POWER AGENCY

AUTHORIZED REPRESENTATIVES;
BUYER AND SELLER BILLING, NOTIFICATION AND
SCHEDULING CONTACT INFORMATION

1. **Authorized Representative.** The initial Authorized Representatives of Buyer and Seller pursuant to Section 14.1 are as follows:

1.1 Buyer:

Northern California Power Agency
c/o: General Manager
651 Commerce Drive
Roseville, CA 95678

Telephone: 916-781-3636
Facsimile: 916-783-7693
Email: _____

1.2 Seller:

RESERVED

2. **Billings.** Billings and payments pursuant to Article IX and Appendix A shall be transmitted to the following addresses:

2.1 If Billing to Buyer:

Northern California Power Agency
Attention: Settlements
Telephone: 916-781-3636
Facsimile: 916-781-4255
Email: settlements@ncpa.com; acctspayable@ncpa.com

2.2 If Payment to Buyer:

Northern California Power Agency
Attention: Accounts Payable

Telephone: 916-781-4211
Facsimile: 916-781-4255
Email: Acctspayable@ncpa.com

2.3 If Payment or Billing to Seller:

RESERVED

3. **Notices.** Unless otherwise specified by Buyer all notices (other than Scheduling notices, curtailment notices, and Deemed Generated Energy notices):

If to Buyer:

Northern California Power Agency
Attention: General Counsel
Telephone: 916-781-3636
Facsimile: 916-783-7693
Email: _____

If to Seller:

RESERVED

4. **Schedulers.** Unless otherwise specified by Buyer, all notices related to Scheduling of the Facility shall be sent to the following address:

If to Buyer:

Northern California Power Agency

Pre-scheduling: Generation schedules are to be provided to NCPA Pre-Scheduling contacts.

<u>Name</u>	<u>Phone</u>	<u>Email</u>
NCPA Preschedulers	916-786-0123	Preschedulers@ncpa.com
	916-786-0124	
Facsimile:	916-781-4239	

Schedule Coordination: NCPA Schedule Coordinator contacts.

<u>Name</u>	<u>Phone</u>	<u>Email</u>
NCPA SC	916-781-4237	SC2@ncpa.com
Facsimile:	916-781-4226	

Outage Coordination: All Planned and/or Forced Outages of generation facilities are to be provided to NCPA Dispatch and NCPA SC.

<u>Name</u>	<u>Phone</u>	<u>Email</u>
NCPA Dispatch	916-786-3518	Dispatch@ncpa.com
NCPA SC	916-781-4237	SC2@ncpa.com
Facsimile:	916-781-4226	

If to Seller:

RESERVED

5. **Curtailments.** All notices related to curtailments of the Facility pursuant to Section 6.5 shall be sent to the following address:

If to Buyer:

Northern California Power Agency
(see above)

If to Seller:

RESERVED

6. **Deemed Generated Energy.** Unless otherwise specified by Buyer, all notices related to calculations of Deemed Generated Energy shall be sent to the following address:

If to Buyer:

Northern California Power Agency
Attention: Settlements
Telephone: 916-781-3636
Facsimile: 916-781-4255
Email: settlements@ncpa.com

If to Seller:

RESERVED

Either Party may update its contact information in this Appendix F by delivering a notice to the other Party pursuant to Section 12.2 of the Agreement, and such change shall not be considered to be an amendment purchase to Section 12.11 of the Agreement.



Agenda Report

21-1253

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on a Resolution Approving the 2022 Historical and Landmarks Commission Calendar of Meetings

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

The City Code states that each board or commission shall hold regular meetings at the times and on the days indicated by resolution of the City Council.

DISCUSSION

At the September 2, 2021 Historical and Landmarks Commission meeting, the Commission recommended the proposed 2022 schedule of meetings (Attachment 2), which includes 12 meetings to be held on Thursdays at 6 p.m.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b)(5) in that it is a government organizational or administrative activity that will not result in direct or indirect changes in the environment.

FISCAL IMPACT

There is no fiscal impact other than administrative time and expense to set the meetings.

COORDINATION

This report was coordinated with the City Attorney's Office

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

RECOMMENDATION

Adopt a Resolution approving the 2022 Historical and Landmarks Commission Calendar of Meetings.

Reviewed by: Andrew Crabtree, Director, Community Development

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Resolution Approving 2022 Calendar of Meetings
2. 2022 Historical and Landmarks Commission Calendar of Meetings

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA
APPROVING THE 2022 HISTORICAL AND LANDMARKS
COMMISSION CALENDAR OF MEETINGS**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, Section 2.120.030 of the Santa Clara City Code (“SCCC”) requires City boards and commissions to hold regular meetings at the times and on the days indicated by resolution of the Council;

WHEREAS, on September 2, 2021, the Historical and Landmarks Commission recommended to the City Council its meeting schedule for 2022.

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

1. That the City Council hereby finds that the above Recitals are true and correct and by this reference makes them a part hereof.
2. That the City Council hereby approves the 2022 Historical and Landmarks Commission Schedule of Meetings, attached hereto.

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3. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING
THEREOF HELD ON THE ____ DAY OF _____, 2021, BY THE FOLLOWING VOTE:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:

1. 2022 Historical and Landmarks Commission Meeting Schedule



Schedule of Meetings 2022

Regular meetings are typically held on the first Thursday of each month at **6:00 p.m.** in the City Council Chambers at City Hall. If you have any questions, please contact the Planning Division at (408) 615-2450.

Meeting Dates

January 6, 2022	July 7, 2022 *
February 3, 2022	August 4, 2022
March 3, 2022	September 1, 2022
April 7, 2022	October 6, 2022
May 5, 2022	November 3, 2022
June 2, 2022	December 1, 2022*

* Meeting reserved for time sensitive projects only

NOTE: Typically a minimum of four weeks is required for the City to process the final, complete plans and application in order to schedule an application for review on the next available meeting date. Complex projects and those requiring additional environmental analysis, may require additional information and time to process. Staff reports are prepared for each of the regular items on an agenda and are available at least 72 hours before the meeting date. Please contact the Planning Division at 408-615-2450 for additional information.

Adopted by the Historical and Landmarks Commission on **September 2, 2021**



Agenda Report

21-1480

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on a Resolution Allowing City Legislative Bodies to Hold Public Meetings Solely by Teleconference or Otherwise Electronically Pursuant to AB 361

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

On March 17, 2020, Governor Gavin Newsom issued Executive Order N-29-20 which suspended the Brown Act teleconferencing requirements so that legislative bodies could hold public meetings solely by teleconference, or otherwise electronically, without listing the teleconference locations and without any physical location, as long legislative bodies followed a set of requirements for noticing the meeting agenda and public participation, among other things. Subsequently on June 11, 2021, Governor Newsom issued Executive Order N-08-21, which sunset the Brown Act provisions of Executive Order N-29-20 on September 30, 2021.

On September 16, Governor Newsom signed AB 361 into law which allows local agencies to use teleconferencing without complying with specific Brown Act restrictions in certain state emergencies until January 1, 2024, at which point they are to be repealed, and the standard Brown Act teleconference requirements become effective again. The bill was an urgency measure, and it went into effect immediately.

DISCUSSION

AB 361 is an urgency measure that amends Government Code Section 54943 to allow a local agency to use teleconferencing for public meetings without requiring the teleconference location to be accessible to the public or a quorum of the members of the legislative body of the agency to participate from locations within the boundaries of the agency's jurisdiction during a Governor-proclaimed state of emergency in certain circumstances.

In order for a local agency to utilize AB 361's exemption to the Brown Act, there must be certain emergency conditions present. These include:

- There being a state-proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing.
- The Council is meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, that meeting in person would present imminent risks to the health and safety of attendees; or
- The Council is meeting during a proclaimed state of emergency and has determined, by majority vote, that in-person meetings would pose health and safety risks to attendees.

In order for the City's legislative bodies to continue meeting remotely with the exemptions to the Brown Act provided for under AB 361, the Council is required to take certain actions, most of which the City is already implementing:

- The City must continue providing notice of meetings and continue to post agendas as the Brown Act requires to the agency's website,
- The City must continue allowing for public access to the meeting, while allowing for a public comment period to directly address the legislative body pursuant to Brown Act's other teleconferencing provisions,
- The City must continue giving notice for how the public can access the meeting and provide public comment, including a call-in or internet-based service option (no physical location required),
- The City must continue providing the public with the opportunity to comment in real time (with the option of additionally allowing comments to be submitted in advance, if the agency desires),
- The City must stop the meeting until public access is restored in the event of a service disruption, and
- No later than 30 days after the first teleconferencing meeting and every 30 days thereafter, the Council will have to reconsider the circumstances of the state of emergency to determine if remote meeting procedures need to remain in place.

This meeting falls within 30 days of the first teleconferencing meeting held by the City on September 28, 2021 after AB 361 was signed into law.

Beginning on March 11, 2020 and continuing every 60 days thereafter, the City Council has continued its proclamation of local emergency based on substantial evidence that the public interest and necessity require the continuance of the proclamation of local emergency related to COVID-19. On September 21, 2021, the Santa Clara County Public Health Officer recommended that public bodies continue to meet remotely to the extent possible due to the continued threat of COVID-19 to the community, the unique characteristics of public governmental meetings, and the continued increased safety protection that social distancing provides as one means by which to reduce the risk of COVID-19 transmission.

On October 5, 2021, the Santa Clara County Board of Supervisors' Resolution BOS-2021-140 directed all County legislative bodies to only meet remotely in accordance with AB 361. These associated emergency conditions are on-going and there is a need to continue teleconferencing for public meetings without posting the teleconferencing locations on the agenda and without requiring the teleconference locations to be accessible to the public during the current Governor-proclaimed COVID-19 state of emergency. The state of emergency continues to directly impact the ability of the City's legislative bodies to meet safely in person, and City officials continue to impose or recommend public health safety measures.

It is recommended that the Council adopt a resolution to make requisite findings to allow the City's legislative bodies to hold public meetings solely by teleconference or otherwise electronically so long as the state of emergency and social distancing measures continue. The Council will have to take action on a monthly basis to reassess and reaffirm such findings to continue meeting remotely.

The proposed Resolution is attached.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a “project” within the meaning of the California Environmental Quality Act (“CEQA”) pursuant to CEQA Guidelines section 15378(b)(5) in that it is a governmental organizational or administrative activity that will not result in direct or indirect changes in the environment.

FISCAL IMPACT

There is no fiscal impact other than administrative time and expense.

COORDINATION

This report has been coordinated with the City Attorney’s Office and City Clerk’s Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City’s official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City’s website and in the City Clerk’s Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk’s Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

Adopt a Resolution allowing the City’s legislative bodies to hold public meetings solely by teleconference or otherwise electronically pursuant to AB 361.

Reviewed by: Nadine Nader, Assistant City Manager

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Resolution
2. County of Santa Clara Recommendation Regarding Continued Remote Public Meetings

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA
TO ALLOW CITY LEGISLATIVE BODIES TO HOLD PUBLIC
MEETINGS SOLELY BY TELECONFERENCE OR OTHERWISE
ELECTRONICALLY PURSUANT TO AB 361**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, the City of Santa Clara is committed to preserving and nurturing public access and participation in meetings of the City's City Council, Council Committees, City Decision-Making Bodies (including Santa Clara Stadium Authority Board, Sports and Open Space Authority, Housing Authority, Successor Agency to the City of Santa Clara Redevelopment Agency, Bayshore North Project Enhancement Authority, and Public Facilities Financing Corporation), City Boards, Committees and Commissions, Taskforces, and Other City Advisory Entities;

WHEREAS, all meetings of City of Santa Clara's legislative bodies are open and public, as required by the Ralph M. Brown Act (California Government Code Sections 54950, et seq., hereinafter referred to as the "Brown Act"), so that any member of the public may attend, participate, and watch the City's legislative bodies conduct their business;

WHEREAS, the Brown Act allows a local legislative body to hold public meetings by teleconference and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to attend and to address the local legislative body, as long as the following requirements are met: (1) each teleconference location from which a member is participating is noticed on the agenda; (2) each teleconference location is accessible to the public; (3) members of the public must be able to address the body at each teleconference location; (4) at least one member of the legislative body must be physically present at the location specified in the meeting agenda; and (5) during teleconference meetings, at least a quorum of the members of the local body must participate from locations within the local body's territorial jurisdiction;

WHEREAS, on March 17, 2020, Governor Gavin Newsom issued Executive Order N-29-20

which suspended the Brown Act teleconferencing requirements so that legislative bodies can hold public meetings solely by teleconference, or otherwise electronically, without listing the teleconference locations and without any physical location, as long as the agenda that is posted 72 hours in advance indicates that the members of the legislative body will be participating by teleconference, provides the teleconference or webinar access information by which the public may participate electronically, and lists the procedure for individuals with disabilities to request reasonable accommodations;

WHEREAS, on June 11, 2021, Governor Newsom issued Executive Order N-08-21, which sunsets the Brown Act provisions of Executive Order N-29-20 on September 30, 2021;

WHEREAS, on September 16, 2021, Governor Newsom signed urgency ordinance AB 361 which allows a local agency to use teleconferencing for public meetings without posting the teleconferencing locations on the agenda and without requiring the teleconference locations to be accessible to the public during a Governor-proclaimed state of emergency pursuant to California Government Code Section 8625 et seq, if the state of emergency continues to directly impact the ability of the members of its legislative bodies to meet safely in person or state or local officials continue to impose or recommend measures to promote social distancing;

WHEREAS, in light of the continued state of emergency related to COVID-19, the Santa Clara County Public Health Officer continues to recommend that public bodies meet remotely to the extent possible, specifically including use of newly enacted AB 361 to maintain remote meetings under the Ralph M. Brown Act and similar laws, as outlined in their "Recommendation Regarding Continued Remote Public Meetings of Governmental Entities" issued on September 21, 2021;

WHEREAS, Government Code Section 54953(e)(3) requires that the City Council review the need and make findings for continuing the teleconferencing without complying with the agenda posting and public comment requirements at least once every thirty (30) days until Governor terminates the state of emergency; and,

WHEREAS, the associated emergency conditions are on-going and there is a need to continue teleconferencing for public meetings without posting the teleconferencing locations on the agenda and without requiring the teleconference locations to be accessible to the public during the current Governor-proclaimed COVID-19 state of emergency and if approved, will be in effect for 30 days and will expire on November 18, 2021 unless staff returns to City Council on or before November 16, 2021 to request to continue the need for teleconferencing.

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

1. That the City Council hereby finds that the state of emergency conditions related to COVID-19 are on-going.
2. That the City Council finds that there is a need to continue teleconferencing for public meetings without posting the teleconferencing locations on the agenda and without requiring the teleconference locations to be accessible to the public during the current Governor-proclaimed COVID-19 state of emergency.
3. That the City Council finds that the state of emergency continues to directly impact the ability of members of the City's City Council, Council Committees, City Decision-Making Bodies (including Santa Clara Stadium Authority, Sports and Open Space Authority, Housing Authority, Successor Agency to the City of Santa Clara Redevelopment Agency, Bayshore North Project Enhancement Authority, and Public Facilities Financing Corporation), City Boards, Committees and Commissions, Taskforces, and Other City Advisory Entities to meet safely in person.
4. That City officials continue to impose or recommend measures to promote social distancing in City facilities.
5. That members of the City Council, Council Committees, City Decision-Making Bodies, City Boards (including Santa Clara Stadium Authority Board, Sports and Open Space Authority, Housing Authority, Successor Agency to the City of Santa Clara Redevelopment Agency, Bayshore North Project Enhancement Authority, and Public Facilities Financing Corporation),

Committees and Commissions, Taskforces, and Other City Advisory Entities are authorized to use teleconferencing, or other electronic means, to hold its public meetings without noticing the teleconferenced locations on the agenda, without making teleconferenced or physical locations accessible to the public, without posting agendas at teleconferenced locations, without requiring members of the legislative bodies to be physically present at the meeting, and without requiring a quorum of the members of the legislative body to participate from locations within the City's jurisdiction, as long as the agenda that is posted at least 72 hours in advance indicates that members of the legislative body may be participating electronically, provides the teleconference or webinar access information by which the public may participate electronically, and lists the procedure for individuals with disabilities to request reasonable accommodations, in compliance with AB 361, Government Code Section 54953(e).

6. That the Assistant City Clerk is hereby directed to report to the City Council within thirty (30) days on the need to further continue teleconferencing for public meetings without posting the teleconferencing locations on the agenda and without requiring the teleconference locations to be accessible to the public during the current Governor-proclaimed COVID-19 state of emergency.

7. Effective Date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING
THEREOF HELD ON THE ____ DAY OF _____, 2021, BY THE FOLLOWING VOTE:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference: None

County of Santa Clara

Public Health Department

Health Officer
976 Lenzen Avenue, 2nd Floor
San José, CA 95126
408.792.3798



Recommendation Regarding Continued Remote Public Meetings of Governmental Entities

Issued: September 21, 2021

In light of the continued state of emergency related to COVID-19, the County Public Health Officer continues to recommend that public bodies meet remotely to the extent possible, specifically including use of newly enacted AB 361 to maintain remote meetings under the Ralph M. Brown Act and similar laws.

Among other reasons, this recommendation is made due to the continued threat of COVID-19 to the community, the unique characteristics of public governmental meetings (such as the increased mixing associated with bringing together people from across the community, the need to enable those who are immunocompromised or unvaccinated to be able to safely continue to fully participate in public governmental meetings, and the challenges with fully ascertaining and ensuring compliance with vaccination and other safety recommendations at such meetings), and the continued increased safety protection that social distancing provides as one means by which to reduce the risk of COVID-19 transmission. This recommendation does not apply to those meetings of a quasi-judicial nature that have been already meeting in person prior to September 21, 2021, for example to allow for credibility determinations of witnesses.

The Health Officer will continue to evaluate this recommendation on an ongoing basis and will communicate when there is no longer such a recommendation with respect to meetings for public bodies.



Agenda Report

21-1217

Agenda Date: 10/19/2021

REPORT TO COUNCIL AND SUCCESSOR AGENCY TO THE FORMER REDEVELOPMENT AGENCY OF THE CITY OF SANTA CLARA

SUBJECT

Action on Resolution Declaring Two Successor Agency Sites located at 5101 and 5201 Great America Parkway as Surplus Land as Required by State Law [APNs: 104-55-012 and 104-55-013]

COUNCIL PILLAR

Enhance Community Engagement and Transparency

EXECUTIVE SUMMARY

The Successor Agency owns two former Redevelopment Agency sites that are required to be sold under State Redevelopment Dissolution Laws (Techmart Office Parcel located at 5201 Great America Parkway and Hyatt Hotel Parcel located at 5101 Great America Parkway). Under separate State Laws, these same properties are also considered to be no longer necessary for the Successor Agency's use and are therefore "eligible for development" (Attached - List of the Surplus Properties).

Effective January 1, 2020, Assembly Bill (AB) No. 1486 amended the State Surplus Land Act (SLA) to require a local agency to formally declare publicly-owned property no longer used for the agency's expressed purpose as surplus land before beginning the disposition process. Unless the land is exempt from the SLA, the declaration must be made by the legislative body of the local agency and should be supported by written findings. Surplus land must follow a statutory noticing and negotiation period with certain designated entities, including eligible housing sponsors defined by the California Department of Housing and Community Development (HCD).

BACKGROUND

Successor Agency Properties and Long-Range Property Management Plan

Under 2011 Redevelopment Dissolution Laws, all former Redevelopment Agencies in California were required to sell their assets, retire all debt and dissolve. Any net unrestricted proceeds earned by the Successor Agencies prior to dissolution are to be distributed to the taxing entities (e.g., County, school districts, and special districts) on a pro rata basis.

Ownership of the properties owned by the former Redevelopment Agency of the City of Santa Clara (Santa Clara RDA) was assumed by the Santa Clara Successor Agency.

Per State Dissolution Laws, Santa Clara Successor Agency prepared a Long-Range Property Management Plan (LRPMP) which was subsequently approved by the Santa Clara Oversight Board and the California Department of Finance. The LRPMP directs the Successor Agency to sell the

properties subject to the LRPMP expeditiously and for maximum value pursuant to Health and Safety Code Section 34181(a).

Since that time, the Successor Agency (with Oversight Board review and approval) has been selling its properties in accordance with State Law. To date, former Santa Clara RDA land under the Santa Clara Gateway Parcel 2, Santa Clara Hilton, North-South Parking Lot, Great America Theme Park and Convention Center/Convention Center common area have all been sold. The City of Santa Clara purchased the North-South parking lot and the Convention Center/Convention Center common area. The Martinson Day Care parcel was transferred to the Santa Clara Unified School District at no cost. The other properties were sold to private interests.

The two Successor Agency parcels remaining to be sold are the Techmart parcel and the Santa Clara Hyatt Regency parcel. All debt of the Santa Clara RDA has been extinguished and therefore net sale proceeds are distributed to taxing agencies on a pro rata basis upon the sale of property.

The SLA and the Surplus Land Declaration

Effective January 1, 2020, Assembly Bill (AB) No. 1486 amended the SLA by prohibiting local agencies from commencing negotiations over the sale or lease of surplus property prior to sending notices about available, surplus local public land to designated entities (Eligible Entities), including:

- California Department of Housing and Community Development (HCD).
- Any local public entity within the jurisdiction where the surplus local land is located.
- Developers who have notified HCD of their interest in developing affordable housing on surplus local land.

Importantly, AB 1486 now requires a local agency to declare property as “surplus land” before taking any actions to dispose of such property, including issuance of a NOA or request for proposals (RFP). The declaration must be made by the legislative body of the local agency.

Following the declaration of surplus, the Successor Agency must provide a NOA to the Eligible Entities for specified uses, including affordable housing, parks and recreation, and schools. An Eligible Entity desiring to purchase or lease the surplus land for any of the purposes described above must notify the Successor Agency in writing of its intent to purchase or lease the land within 60 days after the receipt of the Successor Agency’s notification of intent to dispose of the land.

If the Successor Agency receives notice of interest from any Eligible Entities, the SLA mandates a 90-day negotiation period with any designated entities that submit timely offers. If no notice of interest is received or negotiations do not result in a disposition, the City may proceed with disposing of the land. The SLA does not require the Successor Agency to dispose of surplus land at less than fair market value. (In fact State Dissolution Laws require that the Successor Agency dispose of the property at the highest value.) However, the SLA requires that, at a minimum, any subsequent development of 10 or more residential units on the site must designate at least 15 percent of units as affordable.

DISCUSSION

The Successor Agency land for sale are two parcels which are burdened by long term ground leases. As the Successor Agency properties are not available for development by a potential buyer until the ground leases expire (Techmart in 2053 plus possible two 1-year extensions and Hyatt in 2035 plus possible four 10-year extensions), the City Attorney's Office reached out to HCD to request an exemption from the SLA process. The SLA process requires notification to affordable housing developers of the availability of property. Although the properties are built out with an office building and hotel, and the land may not be available for development for more than 50 years, the Successor Agency's request for an exemption was denied.

In compliance with State law, staff recommends that City Council acting as the governing board of the Successor Agency declare the Surplus Properties as "surplus land" to begin the process for disposition. The anticipated process is outlined below.

Notices of Availability and Noticing Period

Per the SLA, after City Council issues the surplus declaration, staff will issue NOAs to the Eligible Entities, beginning a minimum 60-day noticing period. Staff will release NOAs. During the 60-day noticing period, the SLA restricts Successor Agency discretion in negotiating with potential buyers, prioritizing NOA responses, and limiting project design features. State law requires the Successor Agency to first respond exclusively to Eligible Entities and to give priority to proposals that provide at least 25 percent of a project's housing units affordable to lower-income households (at or below 80 percent of area median income). If multiple proposals provide at least 25 percent affordable units, State law requires prioritizing the project with the greater number of affordable units. If multiple proposals contain the same number of affordable units, staff are required to prioritize projects that provide the deepest average level of affordability for its affordable units. The Successor Agency is also prevented from negotiating terms that would prevent residential use (even if not permitted by the existing zoning), reduce density below what is allowed by zoning, or impose design requirements that would have a substantial adverse effect on viability for affordable housing.

90-Day Negotiation with Eligible Entities

If staff receives a notice of interest from one or more Eligible Entity, staff will begin negotiations for a period of no less than 90 days.

Project Selection and Return to Council

If negotiations lead to development of a potential project, staff will return to Council acting as the governing board of the Successor Agency to present the recommended project proposal for public comment and Council authorization for an Exclusive Negotiation Agreement (ENA). If no notices of interest are received or if negotiations conclude with no recommended project proposals, the Successor Agency can proceed with its regular process for disposition of the Successor Agency properties.

ENVIRONMENTAL REVIEW

Nothing in this action declaring the Properties "surplus land" should be interpreted as an approval or pre-commitment to approve, now or in the future, of the disposition of the City's interest in the Properties to any particular party, on any particular terms, or for any particular purposes. Any proposed disposition of the Property, whether made pursuant to the NOA or otherwise, will require

further discretionary actions of the City Council, and the City retains full discretion, following conclusion of the response and negotiation periods set forth in the Notice of Availability and the SLA to proceed with disposition of its interest in the Property in compliance with CEQA. As such, this action will not result in a direct or indirect physical change in the environment and does not in-and-of-itself constitute a "project" pursuant to CEQA Guidelines § 15378.

FISCAL IMPACT

There is no fiscal impact related to the declaration of the Surplus Properties as surplus land or to the release of NOAs. Fiscal impacts of received and staff-recommended proposals will be assessed in future reports brought before the City Council.

COORDINATION

This report has been coordinated with the Office of the City Attorney to understand the legal requirements of the SLA.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

That the City Council acting as the governing board of the Successor Agency to the Former Redevelopment Agency of the City of Santa Clara adopt a Resolution declaring two Successor Agency properties located at 5101 Great America Parkway [APN 104-55-012 and 5201 Great America Parkway [APN 104-55-013] as "Surplus Land" pursuant to Government Code § 54221(b)(1).

Reviewed by: Ruth Mizobe Shikada, Assistant City Manager

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Successor Agency Surplus Land Site List
2. Resolution

EXHIBIT A - SURPLUS LAND SITE LIST

#	Property/Site Name	APN(s)	Site Address	Lot Sq Ft	Zoning	Written Findings for Surplus Land Determinations
1	Techmart	104-55-013	5201 Great America Parkway	68,825 / 1.58 acres	PD-Planned Development	The intended use for this property is cited in SCSA's LRPMP as disposition for non-governmental mixed-use development. Per CA Gov Code Section 54221, surplus land includes land that has been designated in the LRPMP either for sale or for future development, but does not include any specific disposal of land to an identified entity described in the plan. The site is currently under a ground lease until May 31, 2053, which may be further extended by the ground lessee.
2	Hyatt Hotel	104-55-012	5101 Great America Parkway	76,666 / 1.76 acres	PD-Planned Development	The intended use for this property is cited in SCSA's LRPMP as disposition for non-governmental mixed-use development. Per CA Gov Code Section 54221, surplus land includes land that has been designated in the LRPMP either for sale or for future development, but does not include any specific disposal of land to an identified entity described in the plan. The site is currently under a ground lease until April 30, 2035, which may be further extended by the ground lessee.

RESOLUTION NO. _____

A RESOLUTION OF THE SUCCESSOR AGENCY TO THE FORMER REDEVELOPMENT AGENCY OF THE CITY OF SANTA CLARA (“SUCCESSOR AGENCY”) DELCARING TWO SUCCESSOR AGENCY PROPERTIES DESIGNATED IN THE LONG-RANGE MANAGEMENT PLAN FOR DISPOSITION OR FUTURE DEVELOPMENT LOCATED AT 5101 GREAT AMERICA PARKWAY, SANTA CLARA [APN 104-55-012] and 5201 GREAT AMERICA PARKWAY, SANTA CLARA [APN 104-55-013] , AS “SURPLUS LAND” PURSUANT TO GOVERNMENT CODE § 54221(b)(1).

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, under the Surplus Land Act (the “SLA”), Government Code § 54220-54233, surplus property is defined as land owned by any local agency no longer necessary for the agency’s use; and

WHEREAS, effective January 1, 2020, the SLA was amended to require local agencies to formally declare agency-owned properties as surplus land prior to taking actions to dispose of such properties and to issue Notices of Availability to eligible entities; and,

WHEREAS, the Successor Agency owns two properties located throughout the City, totaling approximately 3.34 acres, that are suitable for future disposition and development (the “Surplus Properties”); and

WHEREAS, the City Manager has made findings that the Surplus Properties are no longer necessary for the Successor Agency’s use, which findings are set forth in Exhibit A to this Resolution; and

WHEREAS, the Successor Agency intends to follow the provisions of the SLA in disposition of public lands; and

WHEREAS, it is the Successor Agency’s policy, as well as State law, to prioritize affordable housing in the disposition of public lands; and

WHEREAS, a declaration of surplus land, and the issuing of notices pursuant to the SLA, is a process adopted in State law, with the intent of ensuring proper process and the prioritization of

affordable housing, including noticing and opportunity to respond, for affordable housing developers;
and

WHEREAS, the process described in the SLA should take place prior to taking any further actions regarding the disposition of the Surplus Properties; and,

WHEREAS, this declaration of surplus land does not obligate the Successor Agency to subsequently dispose of the land and, depending on the response to the notices and other factors, the Successor Agency could still decide not to move forward with disposition of specific properties;

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE SUCCESSOR AGENCY TO THE FORMER REDEVELOPMENT AGENCY OF THE CITY OF SANTA CLARA AS FOLLOWS:

1. That the above recitals and the findings in Exhibit A are integral to this Resolution and are incorporated herein.
2. That the Successor Agency has independently reviewed the findings for the Surplus Properties and hereby formally declares the Surplus Properties as “surplus land” pursuant to Government Code § 54221(b)(1).
3. That the Successor Agency finds and determines, after independent review and consideration, that this action results in no binding commitment by the City or Successor Agency to authorize or advance the disposition of any Surplus Properties; will not result in a direct or indirect physical change in the environment; and does not constitute an “approval” of a “project” pursuant to CEQA Guidelines § 15004 and 15352.
4. That the Successor Agency authorizes the City Manager to issue Notices of Availability for the Surplus Properties that are compliant with the State SLA.
5. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF SANTA CLARA, CALIFORNIA
ACTING AS THE GOVERNING BODY OF THE SUCCESSOR AGENCY TO THE
REDEVELOPMENT AGENCY OF THE CITY OF SANTA CLARA, CALIFORNIA, AT A
REGULAR MEETING THEREOF HELD ON THE 28th DAY OF SEPTEMBER, 2021, BY THE
FOLLOWING VOTE:

AYES:	COUNCILORS:
NOES:	COUNCILORS:
ABSENT:	COUNCILORS:
ABSTAINED:	COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:
1. Exhibit A – Surplus Land Site List



Agenda Report

21-1249

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Action on Stadium Authority Bills and Claims for the Month of July 2021

BOARD PILLARS

Enhance Community Engagement and Transparency
Ensure Compliance with Measure J and Manage Levi's Stadium

BACKGROUND

Disbursements made by the Stadium Authority are based on invoices submitted for payment. Prior to payment, staff reviews all disbursement documents to ensure that they are in compliance with the goods or services provided.

The Bills and Claims listing represents the cash disbursements required of normal and usual operations during the period. Budget control is set by the Stadium Authority Board through the budget adoption process.

DISCUSSION

On April 30, 2019 the Stadium Authority Board directed staff to stop payment of any Stadium Authority invoices for services unless there is substantial documentation of services rendered, which must also be in compliance with State law and City Code. Since April 30, 2019, staff received direction to pay Stadium Authority invoices related to SBL sales and services, insurance, and utilities.

At the March 23, 2021 Stadium Authority Board meeting, the Executive Director was delegated authority to approve budget amendments of \$4.2 million to move funds from the Legal Contingency line item to Shared Expenses after the review of adequate documentations for costs based on Board direction. Subsequent to that direction, Stadium Authority staff met at Levi's Stadium on March 30, 2021 to review documentation for shared expenses. After follow-up meetings with the Stadium Manager, payments related to compensation that were reviewed and approved for monthly payment, totaling \$4.2 million for the fiscal year.

In addition, based on conversation at Stadium Manager-Stadium Authority Quarterly meeting, it was stated that the Utilities invoiced amounts were based on the budget, which did not factor utility costs to operate the vaccination site into consideration. As the vaccination site was expected to operate for four to six months, the Stadium Authority requested that the portion estimated to be associated with the vaccination operations be credited back based on historical usage and per the lease requirements regarding expenses for NFL sponsored events. No additional information was provided by the Stadium Manager and the Stadium Authority continues to pay half of the invoiced amount until documentation showing a credit for the vaccination site utility usage is produced.

Significant expenses in July 2021 include:

- Payments totaling \$471,802.89 to the City of Santa Clara for the following:
 - \$45,465.39 for reimbursement of General and Administrative (G&A) City payroll costs (e.g.: Executive Director's Office (City Manager's Office), Counsel's Office (City Attorney's Office), and Treasurer's Office (Finance Department))
 - \$1,337.50 for Special Liability Claims for Q1 ending 6/30/2021
 - \$425,000.00 for FY2021-22 Ground Lease Rent
- Payments totaling \$657,645.00 to Forty Niners Stadium Management Co, LLC for the following:
 - \$110,000.00 for August 2021 Stadium Manager Expenses - Insurance
 - \$180,000.00 for August 2021 Stadium Manager Expenses - SBL Sales & Services
 - \$8,300.00 for August 2021 Stadium Manager Expenses - Compensation for Grounds
 - \$21,455.00 for August 2021 Stadium Manager Expenses - Compensation for Guest Services
 - \$33,495.00 for August 2021 Stadium Manager Expenses - Compensation for Security
 - \$136,515.00 for August 2021 Stadium Manager Expenses - Compensation for Engineering
 - \$167,880.00 for August 2021 Stadium Manager Expenses - Compensation for Stadium Ops
- Payment totaling \$175.00 to Contractor Compliance and Monitoring for June 2021 Labor Compliance Services

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potential significant impact on the environment.

FISCAL IMPACT

There is a \$1,131,025.63 fiscal impact to the Stadium Authority.

COORDINATION

This report has been coordinated with the Stadium Authority Counsel's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

RECOMMENDATION

Approve the list of Stadium Authority Bills and Claims for July 2021.

Reviewed by: Kenn Lee, Treasurer

Approved by: Deanna J. Santana, Executive Director

ATTACHMENTS

1. July 2021 SCSA Bills and Claims

Santa Clara Stadium Authority

Bills and Claims Expenses Paid by Wire Transfer For the Month of July 2021

Payment Date	Vendor	Invoice No.	Description	Fund	Amount	
7/15/2021	Bank of America	N/A	June 2021 bank fees acct 0444	Operating	1,171.36	
7/15/2021	Bank of America	N/A	June 2021 bank fees acct 0425	Operating	178.26	
7/15/2021	Bank of America	N/A	June 2021 bank fees acct 6280	Operating	53.12	
			Bank of America Subtotal			1,402.74
7/9/2021	City of Santa Clara	N/A	B2113 SCSA Admin Payroll Costs	Operating	45,465.39	
7/16/2021	City of Santa Clara	N/A	FY2021-22 Ground Lease Rent	Operating	425,000.00	
7/21/2021	City of Santa Clara	92059	Special Liability Claims FY2021-22 Q1	Operating	1,337.50	
			City of Santa Clara Subtotal			471,802.89
7/26/2021	Forty Niners Stadium Management Co, LLC	SLS-23195	August 2021 Std Mgr - Insurance	Operating	110,000.00	
7/26/2021	Forty Niners Stadium Management Co, LLC	SLS-23195	August 2021 Std Mgr - SBL Sales & Svcs	Operating	180,000.00	
7/26/2021	Forty Niners Stadium Management Co, LLC	SLS-23195	August 2021 Std Mgr - Compensation for Grounds	Operating	8,300.00	
7/26/2021	Forty Niners Stadium Management Co, LLC	SLS-23195	August 2021 Std Mgr - Compensation for Guest Svcs	Operating	21,455.00	
7/26/2021	Forty Niners Stadium Management Co, LLC	SLS-23195	August 2021 Std Mgr - Compensation for Security	Operating	33,495.00	
7/26/2021	Forty Niners Stadium Management Co, LLC	SLS-23195	August 2021 Std Mgr - Compensation for Engineering	Operating	136,515.00	
7/26/2021	Forty Niners Stadium Management Co, LLC	SLS-23195	August 2021 Std Mgr - Compensation for Stad Ops	Operating	167,880.00	
			Forty Niners Stadium Management Co, LLC Subtotal			657,645.00
7/9/2021	Contractor Compliance and Monitoring	14527	June 2021 Labor Compliance Svcs	Operating		175.00
			July 2021 Total			<u>\$ 1,131,025.63</u>



Agenda Report

21-1424

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Request from the Stadium Manager to Execute Agreement with R.E. Cuddie Co. for Tunnel Slip and Fall Protection CapEx Project

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

DISCUSSION

On September 29, 2021, the Stadium Manager submitted the attached Recommendation for Award memo (Attachment 1), along with supporting procurement documentation, to request approval from the Stadium Authority Board for the following:

1. Execute a one-time agreement to R.E. Cuddie Co. in the amount of \$14,614 for removal and disposal of existing synthetic turf flooring, and furnishing and installation of new synthetic turf flooring from stadium tunnels at Levi's Stadium. This work is included in the Stadium Authority FY 2021/22 CapEx budget under the Tunnel Slip and Fall Protection line item. This was a carryover project from the FY 2019/20 CapEx Budget;
2. Authorization for the Stadium Manager to execute any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and
3. Authorization for the Stadium Manager to execute change orders up to approximately 10% of the contract cost, or \$1,461, for a total not to exceed amount of \$16,075.

The Stadium Manager's Recommendation for Award describes the Request for Bids process that was implemented.

ATTACHMENTS

1. Stadium Manager's Recommendation for Award
2. CapEx Portion of Stadium Authority FY 2021/22 Budget
3. Agreement with R.E. Cuddie Co.



FORTY NINERS STADIUM MANAGEMENT COMPANY

Date: September 29, 2021

To: Jim Mercurio
Executive Vice President & General Manager

From: Jenti Vandertuig
Procurement Director

Subject: Recommendation for Award RFB FY21-0012 Levi's Stadium Tunnel Slip and Fall Protection Project

Recommendation

- Recommend approval and award of a one-time agreement to R.E. Cuddie Co. in the amount of \$14,613.76 for removal and disposal of existing synthetic turf flooring, and furnishing and installation of new synthetic turf flooring from stadium tunnels at Levi's Stadium;
- Authorize Stadium Manager to execute any and all documents associated with, and necessary for the award, completion, and acceptance of this Project; and
- Authorize Stadium Manager to execute change orders up to approximately 10% of the contract cost, or \$1461, for a total not to exceed amount of \$16,074.76.

Solicitation Process

Forty Niners Stadium Management Company LLC ("Stadium Manager") has a need to replace the non-slip material at the South, Northeast and Northwest field tunnels at Levi's Stadium (the "Stadium"). The replacement of the synthetic material was approved as part of the FY21/22 Santa Clara Stadium Authority (SCSA) Capital Expenditures budget.

On August 30, 2021, Stadium Manager issued a Request for Bids (RFB) FY21-0012 for removing and disposing of the existing synthetic turf flooring from the Stadium tunnels, furnishing and installation of new synthetic turf flooring with beveled edge reducer, and supplying all accessories required for installation, maintenance and repair. Stadium Manager published the RFB on Bonfire Interactive, Stadium Manager's eProcurement portal <https://49ers.bonfirehub.com/portal/>. In addition to inviting a list of suppliers on our established supplier list, Stadium Manager also selected suppliers registered on the portal with specific commodity codes offering flooring and related services.

On September 2, 2021, Stadium Manager published the Notice Inviting Bids related to this project in the San Jose Mercury News publication. Notices were also emailed on August 30, 2021 to the Builders' Exchange of Santa Clara County and Minority Business Consortium requesting them to communicate with their respective member community.

Stadium Manager held a non-mandatory pre-bid conference on September 9, 2021 at 11:00 a.m. (PT) to provide an overview of the project and answer any questions from prospective bidders. The RFB provided prospective bidders the option to schedule on-site visits to the Stadium and to request product substitutions with specific deadlines for each of these options.

Stadium Manager issued Addendum #1 on September 17, 2021 approving a product substitution request submitted by an interested bidder and notified all bidders via the Stadium Manager's eProcurement portal. The RFB closed on September 20, 2021 at 3:00 p.m. (PT).

Three bids were received on or before the closing due date and time from the following firms:

1. R.E. Cuddie Co. (\$14,614)
2. American Sports Construction (\$27,499)
3. Green Constructors California Inc. (\$45,000)

Public Bid Opening

A public bid opening was held on September 20, 2021 at 4:00 p.m. (PT). The RFB provided the public bid opening webcast information including a meeting ID and password for bidders to log on via Zoom to attend. Several bidders were in attendance. Stadium Manager announced the receipt of three bids on or before the due date and time, announced the name of each bidder and the bid amount. R.E. Cuddie Co. was declared the apparent low bidder with a bid amount of \$14,614.

Evaluation of Apparent Low Bidder

Stadium Manager reviewed the bid from R.E. Cuddie Co. and determined the bid to be responsive and responsible. The review verified that all the required forms were submitted and completed properly, the bid schedule contained no arithmetic errors, and the bid bond is authorized. Stadium Manager also confirmed that R.E. Cuddie Co. is authorized to do business in California, is appropriately licensed with the California Contractors State License Board, and is registered with the Department of Industrial Relations (DIR). Stadium Manager checked references to validate that R.E. Cuddie Co. was responsible.

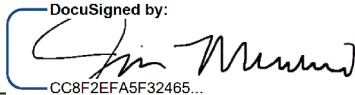
R.E. Cuddie Co. did round their bid pricing to the nearest whole dollar. That technically is not allowed, but the bid documents allow us to independently use their unit prices and the estimated quantities to come up with the total bid amount. The correct bid amount is \$14,613.76.

Next Steps

Once Stadium Manager receives approval from the SCSA Board, an agreement (detailed in the RFB) will be executed with R.E. Cuddie Co., and a fully executed copy will be forwarded to the Board. In addition, Stadium Manager requests authorization to issue change orders up to 10% of the agreement which will allow Stadium Manager to take timely administrative action if required and not delay completion of the Project.

Supporting documentation has been provided for review and approval. The cost of this purchase is covered in the FY 21/22 SCSA Capital Expenditure budget referenced under Furniture, Fixtures and Equipment (FF&E), Tunnel Slip and Fall Protection. The approved budget amount was \$31,500. The cost for advertising the RFB in the San Jose Mercury News publication for one day is \$778.59. Stadium Manager's request to publish legal notices in the San Jose Mercury News for various solicitations, including public works, was approved by the SCSA Board on July 13, 2021. This is a public works project.

Submitted By:  A4B5666F5BF147D... Date: 9/29/2021
Jenti Vandertuig, Procurement Director

Approved By:  CC8F2EFA5F32465... Date: 9/29/2021
Jim Mercurio, Executive Vice President & General Manager

STADIUM AUTHORITY CAPITAL EXPENSE BUDGET

The Capital Expense (CapEx) Budget is used to fund the purchase or upgrade of fixed assets for the Stadium. While the funding for appropriations occur on an annual basis, the Capital Expense Plan extends for a five-year period (shown on Page 57 of this report). Changes to existing projects, as well as the addition of new projects, may occur during the five-year planning period as new needs are identified. The appropriations for capital projects do not lapse at year-end but carryover into future years until the project is complete.

The FY 2021/22 CapEx Budget totals \$14.6 million. Of this total, \$11.2 million of prior year appropriations are projected to be carried over from FY 2020/21 (\$1.5 million of the projected carryover amount is for warranty-related construction, and the other \$9.7 million is for prior year CapEx projects). New capital improvement appropriations equal \$3.4 million.

Capital project delivery continues to be delayed, without demonstrated progress on corrective action, by the Stadium Manager due to procurement issues and violations of State prevailing wage laws. While the budget reflected in this document reflects projects recommended by the Stadium Manager, the Stadium Authority continues to request a procurement plan and implementation timelines regarding how these projects will be completed to ensure the upkeep of the facility and balance any potential City resources that may be required to support the projects. In addition, with the Board's revocation of delegated procurement authority, the contract awards to complete these projects will need to be brought forward to the Board for approval. As such, the timeline to complete these projects may differ or continue to be delayed from the information presented in this section. Below is data relative to the CapEx budget for the Stadium Manager and the actual dollars expended, which demonstrate that there is valid concern for the Stadium's upkeep and surfaces questions whether the Stadium Manager can implement the CapEx budget as requested:

Fiscal Year	CapEx Budget for Stadium Manager Projects and Projects Managed by Stadium Manager	CapEx Dollars Expended by Stadium Manager
FY 2018/19	\$6.3M	\$1.4M (22% spend rate)
FY 2019/20	\$12.5M	\$254,753 (2% spend rate)
FY 2020/21 (to date)	\$8.9M	\$289,034 (3% projected)

A detailed listing of adopted FY 2021/22 projects is provided starting on Page 48 of this report. Stadium Authority is submitting it as transmitted by the Stadium Manager without any additional details on the nature of the project, timing, etc. Stadium Authority has asked almost monthly for a procurement plan for these projects, but the Stadium Manager has not produced such workplan. A capital procurement workplan is a reasonable request given the multiple years of no progress, requirements to maintain the Stadium, and transparency.

STADIUM AUTHORITY CAPITAL EXPENSE BUDGET (CONT'D)



Public Safety Kawasaki Mule
used for public safety patrol
and emergency response

Santa Clara Stadium Authority

Capital Expense Budget Summary

	2019/20	2019/20	2020/21	2020/21	2021/22	2021/22	2021/22
	Final Budget	Year-End Actuals	Final Budget	Projected Actuals	Projected Carryover	Proposed Budget	Total Proposed Budget
Beginning Balances	\$ 14,532,870	\$ 14,516,225	\$ 17,837,300	\$ 17,010,611	\$ 19,438,420		\$ 19,438,420
Resources							
Transfers In from Operating	3,478,000	2,318,549	3,582,000	3,547,379	-	3,690,000	3,690,000
Transfers In from Stadium Manager ⁽¹⁾	-	308,568	-	-	-	-	-
Total Resources	18,010,870	17,143,342	21,419,300	20,557,990	19,438,420	3,690,000	23,128,420
	2019/20	2019/20	2020/21	2020/21	2021/22	2021/22	2021/22
	Final Budget	Year-End Actuals ⁽²⁾	Final Budget	Projected Actuals	Projected Carryover ⁽³⁾	Proposed Budget	Total Proposed Budget
Expenses							
Construction	4,956,922	(4,845)	4,725,327	238,156	3,953,911	2,790,000	6,743,911
Equipment	7,070,988	136,765	6,460,557	881,414	5,286,250	448,520	5,734,770
Contingency	657,397	812	559,296	-	462,009	161,926	623,935
Stadium Warranty Related Construction	1,528,202	-	1,528,202	-	1,528,202	-	1,528,202
Total Expenses	14,213,509	132,731	13,273,382	1,119,570	11,230,372	3,400,446	14,630,818
Capital Expense Reserve	\$ 3,797,361	\$ 17,010,611	\$ 8,145,918	\$ 19,438,420	\$ 8,208,048		\$ 8,497,602

⁽¹⁾ Reimbursement from Stadium Manager

⁽²⁾ Actuals exclude some project payments withheld due to the ManagementCo not following State procurement and prevailing wage laws.

⁽³⁾ The carryover does not include the Levi's Naming Rights Signage Replacement Project that increased in cost estimate from \$650,000 to \$900,000.



Storage Conex Garage for Apparatus
allows for storage of three stadium
vehicles in a lockable, weatherproof
container.

Santa Clara Stadium Authority

2021/22 CapEx Budget

Item Type	SCSA Requested	Description	Cost	Contingency (5%)	Total Cost
General Building		General Areas / Coatings Main Deck Replace and recoat lytmal traffic deck coating at the lower seating bowl and on the 300 and 700 Level Concourses, which are currently showing signs of wear. The deck coating serves as a secondary waterproofing system for the occupied spaces below these areas and also protects and extends the life of the concrete. Periodic replacement and recoating of this system is necessary to maintain current waterproofing system and maintain the expected life of the structure.	\$ 2,450,000	\$ 122,500	\$ 2,572,500
General Building		Field Turf Track Replacement The current turf track carpet is worn, buckled and compacted from use over the past five years and has reached its end of life. This project addresses the uneven grade of the current turf track carpet. This project will remove the existing track and rebuild it using a compacted stone base and shock layer with new carpet on top. Additionally, the project scope permanently addresses the sun grade issues we experience with our current track by stabilizing the base to support the extreme loads it comes under during concerts and dirt events. Finally, the new turf track will eliminate slipping hazards and improve overall safety and appearance.	340,000	17,000	357,000
Subtotal CapEx Construction Costs			\$ 2,790,000	\$ 139,500	\$ 2,929,500
Security		Drone Detection (Antenna System) Drone intrusions are happening more frequently. We need a detection and deterrent system in place for the Security of our venue and events. This technology will assist Stadium Security and Law Enforcement in identifying any threats and to take measures to mitigate the threat.	\$ 55,000	\$ 2,750	\$ 57,750
Security		Key Management System This Key-Box system provides a full audit trail and real time reporting, detailing who has used each set of keys and when. Staff and vendors will become more accountable and will assist in return of keys at the end of each shift. This will reduce loss, damage and liability. The new system will be stationed in the 24/7 Security office.	20,000	1,000	21,000
Public Safety Equipment	x	RadHalo Remote Radiation Monitors New equipment request for the Joint Hazardous Assessment Team (JHAT): Remote radiation detection monitor can be established as a perimeter around the stadium and monitored remotely by JHAT. These units were tested last season with the help of the 95th Civil Support Team. These units proved very useful to monitor large crowds for nuclear and radiation devices that have a potential explosive threat. The team currently uses handheld detectors which are good for pinpointing an exact location around the unit; however, with 4 main gates for ingress and egress, there is no way to fully monitor the crowds for a potential threat without remove monitoring capabilities.	190,000	9,500	199,500
Public Safety Equipment	x	PPE Replacement (Nomex Tops) Projected replacement/additions of Stadium battle dress uniform tops for the team of 60.	5,750	288	6,038
Public Safety Equipment	x	PPE Replacement (Nomex Bottoms) Projected replacement/additions of Stadium battle dress uniform bottoms for the team of 60.	3,260	163	3,423

Santa Clara Stadium Authority

2021/22 CapEx Budget (cont.)

Item Type	SCSA Requested	Description	Cost	Contingency (5%)	Total Cost
Public Safety Equipment		Rigaku CQL 1064nm Handheld Raman Chemical Detector New equipment request for the Joint Hazardous Assessment Team (JHAT). This detector works as a pair with the Tru Defender. The pair combined are able to detect unknown chemicals and substances much quicker than current methods. The unit has a library of over 12,000 substances. This will be very beneficial to determine threats of substances quickly in order to determine evacuation of patrons. JHAT does not carry a detector of this capability. If JHAT came across an unknown substance, a request for mutual aid would be made with likely extended response time. This new equipment would allow the onsite JHAT to analyze substances and chemicals without immediately calling for assistance reducing the impact to the ongoing stadium event.	50,290	2,515	52,805
	x				
Public Safety Equipment		Tru Defender FTX S1 WMD Chemical Detector New equipment request for the Joint Hazardous Assessment Team (JHAT). This detector works as a pair with the Rigaku CQL Raman. The pair combined are able to detect unknown chemicals and substances much quicker than current methods. The unit has a library of over 12,000 substances. This will be very beneficial to determine threats of substances quickly in order to determine evacuation of patrons. JHAT does not carry a detector of this capability. If JHAT came across an unknown substance, a request for mutual aid would be made with likely extended response time. This new equipment would allow the onsite JHAT to analyze substances and chemicals without immediately calling for assistance reducing the impact to the ongoing stadium event.	63,220	3,161	66,381
	x				
Public Safety Equipment		Vehicle upfits for John Deere Gator Vehicle upfits for John Deere Gator including a utility box, mirrors, back up camera and a towing hitch for the E690 MCI Trailer. The mirrors and back up camera would allow for greater visibility when the vehicle is being driven in and around large crowds.	12,000	600	12,600
	x				
Public Safety Equipment		Kawasaki Mule Purchase new Kawasaki Mule for Explosive Ordinance Disposal (EOD) team. Cost includes unfitting the Kawasaki Mule with Police labels and markings, lighting and locking storage boxes. The EOD team does not currently have a dedicated vehicle and are currently walking with canines and EOD gear during response calls for suspicious packages and drone payloads. The EOD team is first on scene sweeping the stadium for safety issues and the last to leave. Shifts can extend past 10 hours. Purchase of a vehicle would reduce fatigue for officers and canines and reduce response time.	25,000	1,250	26,250
	x				
Public Safety Equipment		Kawasaki Mule Purchase new Kawasaki Mule for Special Response Team (SRT). Cost includes unfitting the Kawasaki Mule with Police labels and markings, lighting, equipment storage boxes and Type 3 IME box that is approved by the U.S. Bureau of Alcohol Tobacco and Firearms (ATF) to transport/store breacher explosives. The SRT equipment is currently in a standard size vehicle that upon deployment would not easily maneuver the stadium or crowds of attendees; the team would be required to go to the vehicle to retrieve the required equipment extending response time. The vehicle may also be deployed to City issues and the equipment would not be readily available for use. The SRT does not currently have a dedicated vehicle. Purchase of a vehicle would allow the SRT to mobilize needed equipment and will reduce response time.	\$ 20,000	\$ 1,000	\$ 21,000
	x				
Public Safety Equipment		Onsite Conex Storage Locking onsite Conex Storage container to store 3 Police Kawasaki Mules, including the requested EOD and SRT mule purchase. The Conex Storage container will be housed in a parking lot dedicated for police parking with the secured footprint of the Stadium.	4,000	200	4,200
	x				
Subtotal CapEx Equipment Costs			\$ 448,520	\$ 22,427	\$ 470,947
Total New CapEx Project Costs			\$ 3,238,520	\$ 161,927	\$ 3,400,447

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Electrical		Mechanical and Electrical Closet Lighting (2019/20 Carryover) Install LED lighting in all mechanical and electrical closets located in the service tunnel, 300 Level, and 700 level. These lights not only improve visibility, but also provide longer and more efficient power usage.	\$ 150,000	\$ 7,500	\$ 157,500
Electrical		Broadcast Booth Power (2019/20 Carryover) Install power components used for stadium events. These components will adhere to LEED certification, provide a clean source of power for our clients, and improve operating efficiencies.	35,000	1,750	36,750
Electrical		Concessions Cart Cabling (2019/20 Carryover) Install code rated low voltage cabling (CAT6) to portable concession carts. This will provide Internet Protocol (IP) based access to the IPTV menu boards and Point of Sale (POS) systems for credit card transactions, as well as deliver an emergency signage to be displayed at the concession stands if needed.	50,000	2,500	52,500
General Building		Updated Stadium Wayfinding Signage (2020/21 Carryover) Install Premium/Club wayfinding, Suite wayfinding, Smoking section signs, No smoking signs for around the main and upper concourses, section numbers/floor decals, ADA blue lines, tunnel signs that indicate "no photos/no autographs", etc.	250,000	12,500	262,500
General Building		Stadium Event Signage (2019/20 Carryover) Install stadium signage (including but not limited to tunnel awnings, accessible seating reference areas, lower bowl sections placards, and additional fire and building code signage per Fire Marshal).	138,000	6,900	144,900
General Building		Command Post Window Treatment (2019/20 Carryover) Install window shades and/or tint the exterior windows on the 800 level command post to reduce heat and glare. This will assist dispatchers and command post operators working in this space.	16,000	800	16,800
General Building		Stadium and Special Event Spaces (2019/20 Carryover) Add entry mats to be placed at stadium entrances to help alleviate wet floor scenarios and provide safety to stadium patrons. Will extend the finish of the existing flooring and help prevent slip and falls during inclement weather.	75,000	3,750	78,750
General Building		Non-Slip Floor Matting (2019/20 Carryover) Install non-slip matting from the north side locker rooms to tunnels primarily for event usage (that include access to the field for athletes, performers and customers).	50,000	2,500	52,500
General Building		Women's Locker Room (2019/20 Carryover) Convert a portion of the auxiliary locker room area to accommodate a larger private space for female athletes, performers, officials, and other female event day sporting and entertainment professionals visiting or working events at Levi's Stadium.	372,000	18,600	390,600
General Building		Automatic Logic Control Building Engineering System (2019/20 Carryover) Install an automatic logic controller system upgrade to monitor the building's HVAC in all quadrants simultaneously. This updated system will enable graphic interface and help the system to operate more efficiently with time clock management and assist in potential lighting control energy savings.	35,000	1,750	36,750
General Building		Club Space Flooring (2019/20 Carryover) Strip, resurface, and/or replace hardwood flooring surfaces in the BNY East & West and Levi's 501 spaces. These spaces are among the most utilized spaces in the building and get a large amount of foot traffic. This work will help extend the useful life of these spaces as well as reducing slips and falls from worn floors.	85,000	4,250	89,250

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
General Building		Command Post Communication Equipment (2019/20 Carryover) Purchase and install public safety screens, monitors, and projection devices used in monitoring stadium and security operations to help improve situational awareness and response.	58,000	2,900	60,900
General Building		Stadium Field Conduits (2018/19 Carryover) Add a permanent solution for power and data on field/floor of stadium, making electrical connections safer and efficient for concert and events.	118,197	5,910	124,107
Plumbing		Lift Station (2020/21 Carryover) Replace pumps, motors and controls at sewage ejector sumps in Quadrants A, B, C & D on 100 level.	200,000	10,000	210,000
Plumbing		Plumbing (2020/21 Carryover) Replace pressure reducing valves and other parts on domestic and recycled water systems.	100,000	5,000	105,000
Public Safety	X	Pedestrian Safety Fencing (2020/21 Carryover) Install raised fencing on Tasman Drive from Centennial Boulevard to Calle Del Sol. This is approximately 0.4 miles and would be adjacent to the VTA/Light Rail tracks. This fencing is required to guarantee the safety of patrons as pedestrians on Tasman Drive. Currently, pedestrians regularly jump temporary construction barriers and cross eastbound Tasman Drive and cross live/active VTA light rail tracks. In addition, during events the traffic flow is reversed and pedestrians will not expect cars coming from that direction. This poses a clear danger for pedestrians and mobile personnel are not always available to prevent this regular attempt by pedestrians. Raised fencing will guarantee this dangerous situation stops. The cost is an estimate based on the Fencing on Tasman project.	100,000	5,000	105,000
Security		Surveillance - Command Center Equipment (2020/21 Carryover) Build out workstations with equipment that can handle the load of video viewing during large scale events, as well as the 24/7 security operations in both 100 and 800 command rooms. Equipment includes, but is not limited to, monitors, keyboards, video cards, CPU processors, power supplies, motherboards, and cabling.	50,000	2,500	52,500
Security		Enhance Stadium Security Coverage (2020/21 Carryover) Evaluate and replace existing cameras with technologically advanced multi-lens panoramic/360/multi-directional cameras. Design locations and camera styles have created visual obstructions and gaps in coverage. Height locations with fixed lens cameras create the inability to adjust field of views. Installation of television monitors/signage near camera mounts have created field of view obstructions. Due to high volume of club space usage for large scale, and smaller events, request for video investigations become frequent. Low lighting situations are constant with event type needs, and enhanced technology from newer cameras will enable greater video quality. The areas which need to be evaluated include, but are not limited to: BNY Mellon East and West Club, Yahoo Club, United Club, FII Club, 501 Club, Citrix Owners Club, Entry Gates, and Perimeter fences.	\$ 330,000	\$ 16,500	\$ 346,500
Security		Enhance Stadium Security Access Control (2020/21 Carryover) Install card readers on manual doors to increase access control features and security. Based on operational demands, doors have been identified via staff request and event activity in order to improve operational awareness and enhance the access control abilities by automating the doors. This also increases security to areas deemed by staff to hold sensitive or high value assets. The access control enhancements include Vertx/Mercury upgrade, EvoE400/Mercury upgrade, and various doors with access control needs.	235,000	11,750	246,750

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Security		CCTV Pop Up Trailers (2020/21 Carryover) Purchase five (5) additional units to continue to meet NFL Best Practices guidelines by covering parking lots outside stadium footprint that currently have no camera coverage.	235,000	11,750	246,750
Security		Parking Lot Camera Upgrades (2020/21 Carryover) Replace Great America parking lot cameras with technologically advanced multi- lens panoramic/360/multi-directional cameras. New camera technology would provide better overall coverage of the main parking lot. Sun baked cameras with fixed angles have created gaps in coverage. With more video incident request coming from ingress/egress incidents, new technology would assist in these investigations. Install cameras in Gold lot 4/5 where there is very limited coverage.	40,000	2,000	42,000
Security		Bowl Camera Upgrade/Refurbish (2020/21 Carryover) Replace bowl cameras. Several bowl cameras have become sun baked and provide poor/obscured coverage of bowl seating. Maintenance has become an issue as it takes a lot of time and money to set up scaffolding to reach camera boxes. Need to re-engineer housing (suggest relocating housing closer to stadium infrastructure).	135,000	6,750	141,750
Security		Software Upgrade to Genetec 5.8 (2020/21 Carryover) Upgrade to Genetecs newest firmware version 5.8. This would improve overall system performance and stability, and add new features that will help in operator training and utilization of software. Customizable live dashboards assist in monitoring alarms and events in real time.	35,000	1,750	36,750
Security		Video Analytics (2020/21 Carryover) Add video analytics to assist with video investigations. Video investigations take several hours/days to complete using traditional playback methods. Adding video analytics will greatly decrease man-hours spent in video review process, as well as aid in investigations using newer technology.	35,000	1,750	36,750
Security		License Plate Reader at Vehicle Entry Gates (2020/21 Carryover) Add six (6) License Plate Reader cameras on entry/exit lanes of all vehicle gates (Post 1,2, and 3) to document and track vehicles entering and exiting the stadium.	45,000	2,250	47,250
Security		Security X-Ray Scanners (2020/21 Carryover) Purchase four (4) portable X-ray units to observe postage that comes into the loading dock 24/7 and screen bags/deliveries during event days.	150,000	7,500	157,500
Security		Stadium Camera Booth Card Readers (2019/20 Carryover) Install card reader for north and south camera booths to secure the spaces that enter into/from general public access areas.	84,000	4,200	88,200
Site		Security Fencing - Main Lot (2020/21 Carryover) Remove and replace approximately 1,000 linear feet of 4-foot high security fencing in Main Lot per request of City.	150,000	7,500	157,500
Site		Stationary Electric Pressure Washers (2020/21 Carryover) Install one (1) to two (2) demo stations on the 300 concourse. If these are effective, we would look to replace all gas-powered pressure washers with electrically powered ones.	75,000	3,750	78,750
Site		Stadium Insulation (above 300 level and below 400/500 level) (2019/20 Carryover) Install new insulation in the 400/500 underside above the 300 level. Original insulation is failing due to weather conditions. This also helps reduce sound reverberation throughout the concourse and protects the concrete from the elements.	150,000	7,500	157,500

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Site		Gold Lot 4 and 5 Lighting (2019/20 Carryover) Install LED lighting in Gold 4 and Gold 5 parking lots. The current light plan is underpowered and is not sufficient given the work environment during stadium event load in/out. This lighting improves safety conditions for stadium personnel and provides energy cost savings with more efficient fixtures.	50,000	2,500	52,500
Site		Rust Prevention Mitigation (2019/20 Carryover) Implement rust prevention measures. The stadium railings, beams, and other steel areas need rust prevention and coating in specific areas throughout the stadium.	90,000	4,500	94,500
Site		Stadium Event Power Upgrades & Switchgear Electrical (2019/20 Carryover) Install and enhance Stadium Event wiring service on the 12 Kilovolt (KV) Primary Switch Gear (PMSG) to main electrical panel.	\$ 42,714	\$ 2,136	\$ 44,850
Site		Asphalt (2018/19 Carryover) Slurry coat the visitor parking on Tasman, Gold 4 & 5 parking lots and South Access Road.	190,000	9,500	199,500
Subtotal CapEx Construction Carryover Costs			\$ 3,953,911	\$ 197,696	\$ 4,151,607
Audio/Visual		Radio Booth Cabling (2019/20 Carryover) Install fiber optic cabling to increase the low voltage cabling backbone. This installation will accommodate the expanding requests for booth usage during stadium events and keep up with emerging trends.	\$ 600,000	\$ 30,000	\$ 630,000
Audio/Visual		Creston Control & Building Operating System Upgrades (2019/20 Carryover) Install a Creston Control System to monitor HVAC, lighting, electrical, and fire alarms. This comprehensive system enables all of these items to interface with one another for engineers to see a real time view of the building's systems.	10,000	500	10,500
Food and Beverage		Beverage Distribution System (2020/21 Carryover) Add a beverage distribution system to stadium concession areas and bars. This includes the lines and CO2 dispensing equipment.	50,000	2,500	52,500
Food and Beverage		CO2 Monitoring & Sensors for Code Compliance (2020/21 Carryover) Install remote CO2 monitoring for enhanced safety for stadium staff per SCFD & State of CA.	200,000	10,000	210,000
Furniture, Fixtures & Equipment		Replace Furniture in Club and Special Event Spaces (2019/20 Carryover) Purchase replacement furniture for clubs (BNY, United, Levi's 501 and Yahoo) and special event spaces to enhance areas and meet client expectations. These spaces are amongst the most utilized in the entire stadium.	1,600,000	80,000	1,680,000
Furniture, Fixtures & Equipment		Security and Life Safety Partitions/Dividers (2019/20 Carryover) Install service tunnel drapery and/or partitions for security and public safety personnel during stadium events that require public access to the service level. This helps coordinate public movements in "back of house areas" without affecting stadium operations.	68,000	3,400	71,400
Furniture, Fixtures & Equipment		Tunnel Slip and Fall Protection (2019/20 Carryover) Install non-slip material at the South, Northeast, and Northwest Field Tunnels.	30,000	1,500	31,500
Furniture, Fixtures & Equipment		Guest Service Booths (2018/19 Carryover) Add two additional guest services booths on the main concourse for better enhanced customer service touchpoints.	70,000	3,500	73,500
HVAC/Mechanical		Variable Frequency Drive(s) (2020/21 Carryover) Replace exterior Variable Frequency Drive units for Cooling Tower pumps due to life expectancy issues. This system supports the mechanical cooling functions for the HVAC system.	150,000	7,500	157,500

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
HVAC/ Mechanical		Cooling Towers (2020/21 Carryover) Replace Cooling Towers internal parts and systems. This includes the motors, fans, fill, controls, and piping which support the mechanical cooling functions for the HVAC system.	50,000	2,500	52,500
HVAC/Mechanical		Kitchen Exhaust Fans (2019/20 Carryover) Install variable frequency drive (VFD) Units on kitchen exhaust fans for soft start (slow ramp up) capabilities. Kitchen exhaust fans currently operate 100 percent of the time. Installing VFD units will modulate the power and save energy whenever the fan is in use. Soft start extends the life of the equipment and saves energy.	300,000	15,000	315,000
Information Technology	x	Financial Management Information System Project (2020/21 Carryover) Procure a new cloud-based financial management system for the Stadium Authority that would allow greater visibility in to Non-NFL Events. The management company that handles Non-NFL events would use the financial management system for all transactions related to Non-NFL events as well as store supporting documentation for the transactions (Including invoices). The costs include software license/subscription, hosting fee and a consultant for implementation and process improvement. There will be ongoing software license costs and possibility for additional staff time for implementation. *Subject to subsequent court rulings on cost allocation.	270,000	13,500	283,500
Life Safety/Fire		Fire Alarm System (2020/21 Carryover) Replace/update fire alarm system field devices, including interior/exterior signaling devices, detectors, and control panel parts.	250,000	12,500	262,500
Life Safety/Fire		Fire Sprinkler Extension (2019/20 Carryover) Add fire sprinklers to the Gate F entrance. The Santa Clara Fire Marshal has requested that fire sprinklers be installed at the Gate F entrance to mitigate potential fire risk beneath the existing ribbon boards.	55,000	2,750	57,750
Public Safety Equipment	x	Mass Casualty Incident Trailer (2020/21 Carryover) Purchase a Mass Casualty Incident (MCI) Trailer. The fire department currently has equipment to treat 25 patients during a large-scale emergency. The MCI Trailer would allow the first responders to treat between 500-1000 people during a large-scale emergency by allowing quick access to on-board equipment and supplies.	120,000	6,000	126,000
Public Safety Equipment	x	2-Way CAD/24-7 Link (2020/21 Carryover) Add a 2-way link between the 24/7 dispatch system and the CAD system. All stadium personnel operate on the 24/7 dispatch system. SCPD and SCFD operate on the CAD system. When public safety personnel are sent on calls, the call must be generated by hand in both systems. This causes extra work for dispatchers, however, more importantly this creates delays in reporting and responses to public safety incidents. A 2-way link would allow both systems to "talk" to each other and automatically create incidents in each other's system. Additionally, without this link, we cannot log officers on which creates an officer safety issue as well as an issue when it comes to management of personnel.	\$ 82,000	\$ 4,100	\$ 86,100
Public Safety Equipment	x	Dispatch Monitors (2020/21 Carryover) Replace dispatch monitors with larger screens. Our public safety dispatchers utilize several screens at their work stations in order to facilitate their duties. The necessary upgrading of our latest public safety communications center's CAD and associated software will require larger screen area to effectively manage the new information. These 16 replacement 22" larger monitors are needed to optimize the use and intended application of the latest public safety dispatching software. The larger screens are required to view the additional windows from the CAD system and are expected to last five years. The prior monitors were purchased six years ago and are 19" monitors. The cost includes estimated installation for three workstations.	8,000	400	8,400

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Public Safety Equipment	x	Radio Chargers (2020/21 Carryover) Add three radio charging stations. Our radio equipment is critical and, therefore, their serviceability must be maintained. Each new radio will require a charging port. These three charging stations each have a 6-radio capacity and three are needed to maintain radios at their peak power and usability. Having these three charging stations will ensure all radios are ready for use by public safety without the risk of personnel being without this crucial equipment in a functional state.	3,000	150	3,150
Public Safety Equipment	x	Radios (2020/21 Carryover) Add new radios to equip additional staff in our public safety deployment. Personnel will continue to use these specific radios for varied public safety responsibilities. These radios allow for communication to the command post and between public safety partners working our events. Without these critical radios, personnel would not be able to function in their capacity and as expected to provide public safety services including emergency response. There is a yearly operating cost; requesting quote.	79,000	3,950	82,950
Public Safety Equipment	x	GPS Software for Tracking Personnel (2019/20 Carryover) Add GPS software to track public safety personnel. Live tracking of law enforcement personnel is critical in providing an accurate picture of public safety coverage. This technology and software will allow the Command Post to know where our personnel are at all times and make necessary assignment adjustments on the go. It is desired that the software also be capable of retaining data for historical analysis. The requested funding of \$25,000 is the initial purchase price for approximately 100 devices and the software. There is a monthly operating cost of \$30/month each; \$36,000 total annually.	25,000	1,250	26,250
Public Safety Equipment	x	Fencing on Tasman (2019/20 Carryover) Add fencing to prevent stadium event pedestrian traffic from crossing unsafely between Lafayette St. and the Tasman St. overcrossing.	70,000	3,500	73,500
Public Safety Equipment	x	Street Signage (2017/18 Carryover) Add street signage. This item was brought before the SCSA Board and approved in the 2017/18 budget. Staff has been working with the Department of Public Works, the Executive Director's office and the Chief of Police's office to identify appropriate locations on surrounding city streets (Great America Parkway, Tasman Drive, etc.) to place signage to better protect, inform and serve patrons visiting Levi's® Stadium, non-event day traffic, community event advisories and emergency public safety and traffic advisories.	1,000,000	50,000	1,050,000
Public Safety Equipment	x	Staff Scheduling Software (2019/20 Carryover) The Stadium requires SEOs to operate safely. Notifying and communicating with our SEOs is critical in properly planning our staffing needs. We currently use an out of date version of "Game Day Staffing."	16,250	813	17,063
Public Safety Equipment	x	Portable License Plate Reader/PTZ Cameras (2018/19 Carryover) Purchase portable license plate readers. Placing temporary/moveable license plate readers in remote stadium parking lots will provide better information and intelligence to the Command Post in order to deter crime and assist in apprehending crime suspects in the aftermath of an incident.	160,000	8,000	168,000
Vertical Transport		Elevator Door Replacement (2019/20 Carryover) Replace and install new elevator doors on one of the freight elevators in the stadium.	20,000	1,000	21,000
Subtotal CapEx Equipment Carryover Costs			\$ 5,286,250	\$ 264,313	\$ 5,550,563
Stadium Warranty-Related Construction		Carryover costs from the original Stadium Construction Budget for warranty-related work.	\$ 1,528,202		\$ 1,528,202
Total CapEx Carryover Costs			\$ 10,768,363	\$ 462,009	\$ 11,230,372

Santa Clara Stadium Authority
2021/22 CapEx Project Submittal Not Recommended

Item Type	SCSA	Description	Cost	Contingency	Total Cost
	Requested			(5%)	
General Building		Levi's Naming Rights Signage Replacement (2020/21 Carryover)			
		Replace Levi's Naming Rights signage. The cost of this project increase from \$650,000 to \$900,000. Based on the Naming Rights Agreement, it is the Santa Clara Stadium Authority's position that this project is the responsibility of Levi's.	\$ 900,000	\$ 45,000	\$ 945,000
Subtotal Projects Not Recommended			\$ 900,000	\$ 45,000	\$ 945,000

The Capital Expense budget does not include the requested Levi's Naming Rights Signage Replacement Project totaling \$945,000 which includes a 5% contingency. The Naming Rights Agreement Section 5(f) states, "Naming Rights Sponsor shall be entitled, **at its sole cost and expense**, to replace, update, change, refresh or refurbish any such initial signage at any time and from time to time...". Based on this language, it is the Stadium Authority's position that the full signage replacement is the responsibility of the Naming Rights Sponsor and may constitute a gift of public funds.

There are over 40 CapEx projects that the Stadium Manager has requested over the past three fiscal years and the Stadium Manager has not been able to legally and properly implement these identified needs. The CapEx projects keep growing and, as we all know, repair and maintenance work gets more costly the longer it is delayed. Additionally, given the short turnaround time from receipt of these requests to publishing the proposed budget, the Stadium Authority did not have time to conduct any due diligence on whether the CapEx projects are properly assigned to Stadium Authority, estimated accurately, are in fact needed, or any other confirmation required to support the budgeting of these items. These items are being transmitted as submitted by the Stadium Manager and the Board would be wise to get more information about these projects and purpose for excessive delay in implementing them—including a procurement workplan that provides a schedule for project implementation.

Santa Clara Stadium Authority

Capital Expense Plan Summary - 5 Year Forecast

	2021/22	2022/23	2023/24	2024/25	2025/26
	Budget	Budget	Budget	Budget	Budget
Electrical	\$ -	\$ -	\$ 750,000	\$ 1,250,000	\$ 1,475,000
General Building	2,790,000	1,875,000	1,138,000	2,050,000	3,100,000
Plumbing	-	150,000	-	-	375,000
Public Safety	-	-	-	-	-
Security	-	150,000	-	-	1,110,000
Site	-	400,000	-	150,000	450,000
Subtotal CapEx Construction Costs	\$ 2,790,000	\$ 2,575,000	\$ 1,888,000	\$ 3,450,000	\$ 6,510,000
Audio/Visual	\$ -	\$ 870,000	\$ -	\$ -	\$ 650,000
FF&E	-	-	30,000	-	61,669
Food & Beverage	-	-	-	-	1,200,000
HVAC/Mechanical	-	150,000	-	225,000	225,000
Information Technology	-	-	-	-	-
Life Safety/Fire	-	-	-	50,000	-
Security	75,000	-	-	-	-
Public Safety Equipment	373,520	526,510	164,010	193,010	28,010
Vertical Support	-	-	-	-	-
Subtotal CapEx Equipment Costs	\$ 448,520	\$ 1,546,510	\$ 194,010	\$ 468,010	\$ 2,164,679
Contingency (5%)	161,926	206,076	104,101	195,901	433,734
Total CapEx Project Costs	\$ 3,400,446	\$ 4,327,586	\$ 2,186,111	\$ 4,113,911	\$ 9,108,413

FORTY NINERS STADIUM MANAGEMENT COMPANY LLC

CONSTRUCTION CONTRACT

TUNNEL SLIP AND FALL PROTECTION PROJECT

1. PARTIES AND DATE.

This Contract is made and entered into this [***INSERT DAY***] day of [***INSERT MONTH***], [***INSERT YEAR***] by and between the Forty Niners Stadium Management Company LLC, a Delaware limited liability company ("Stadium Manager") and [***INSERT NAME***], a [***INSERT TYPE OF ENTITY - CORPORATION, PARTNERSHIP, SOLE PROPRIETORSHIP OR OTHER LEGAL ENTITY***] with its principal place of business at [***INSERT ADDRESS***] ("Contractor"). Stadium Manager and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Contract.

2. RECITALS.

2.1 Stadium Manager. Stadium Manager seeks to contract for services necessary to achieve its purpose.

2.2 Contractor. Contractor desires to perform and assume responsibility for the provision of certain construction services required by the Stadium Manager on the terms and conditions set forth in this Contract. Contractor represents that it is duly licensed and experienced in providing synthetic turf flooring related construction services, that it and its employees or subcontractors have all necessary licenses and permits to perform the services in the State of California, and that it is familiar with the plans of Stadium Manager. The following license classifications are required for this Project: Class A – General Engineering Contractor, Class B – General Building Contractor, Class C-15 – Flooring and Flooring Covering Contractors or Class C-61/D-12 – Synthetic Products Contractor.

2.3 Project. Stadium Manager desires to engage Contractor to render such services for the Tunnel Slip and Fall Protection Project ("Project") as set forth in this Contract.

2.4 Project Documents & Certifications. Contractor has obtained, and delivers concurrently herewith, a performance bond, a payment bond, and all insurance documentation, as required by the Contract.

3. TERMS

3.1 Incorporation of Documents. This Contract includes and hereby incorporates in full by reference the following documents, including all exhibits, drawings, specifications and documents therein, and attachments and addenda thereto:

- Services/Schedule (Exhibit "A")
- Plans and Specifications (Exhibit "B")
- Special Conditions (Exhibit "C")
- Contractor's Certificate Regarding Workers' Compensation (Exhibit "D")
- Public Works Contractor Registration Certification (Exhibit "E")
- Payment and Performance Bonds (Exhibit "F")
- Procurement and Contract Process Integrity and Conflict of Interest Guidelines (Exhibit "G")

- Levi's Stadium Jobsite Rules (Exhibit "H")
- Addenda
- Change Orders executed by the Stadium Manager
- 2021 Edition of the Standard Specifications for Public Works Construction (The Greenbook), Excluding Sections 1-9
- Notice Inviting Bids, if any
- Instructions to Bidders, if any
- Contractor's Bid

3.2 Contractor's Basic Obligation; Scope of Work. Contractor promises and agrees, at its own cost and expense, to furnish to the Stadium Manager all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately complete the Project, including all structures and facilities necessary for the Project or described in the Contract (hereinafter sometimes referred to as the "Work"), for a Total Contract Price as specified pursuant to this Contract. All Work shall be subject to, and performed in accordance with the above referenced documents, as well as the exhibits attached hereto and incorporated herein by reference. The plans and specifications for the Work are further described in Exhibit "B" attached hereto and incorporated herein by this reference. Special Conditions, if any, relating to the Work are described in Exhibit "C" attached hereto and incorporated herein by this reference.

3.2.1 Change in Scope of Work. Any change in the scope of the Work, method of performance, nature of materials or price thereof, or any other matter materially affecting the performance or nature of the Work shall not be paid for or accepted unless such change, addition or deletion is approved in writing by a valid change order executed by the Stadium Manager. Should Contractor request a change order due to unforeseen circumstances affecting the performance of the Work, such request shall be made within five (5) business days of the date such circumstances are discovered or shall waive its right to request a change order due to such circumstances. If the Parties cannot agree on any change in price required by such change in the Work, the Stadium Manager may direct the Contractor to proceed with the performance of the change on a time and materials basis.

3.2.2 Substitutions/"Or Equal". Pursuant to Public Contract Code Section 3400(b), the Stadium Manager may make a finding that designates certain products, things, or services by specific brand or trade name. Unless specifically designated in this Contract, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words "or equal."

Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in this Contract. However, the Stadium Manager may have adopted certain uniform standards for certain materials, processes and articles. Contractor shall submit requests, together with substantiating data, for substitution of any "or equal" material, process or article no later than seven (7) calendar days prior to the bid submission deadline set forth in the Notice Inviting Bids as it may be amended. Provisions regarding submission of "or equal" requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed "or equal" substitution request is rejected or submitted untimely, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with Contractor.

The Stadium Manager has the complete and sole discretion to determine if a material, process or article is an "or equal" material, process or article that may be substituted. Data required to substantiate requests for substitutions of an "or equal" material, process or article shall include a signed affidavit from Contractor stating that, and describing how, the substituted "or equal" material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted "or equal" material, process or article, and substantiates that it is an "or equal" to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted "or equal" material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to the Stadium Manager in a timely fashion will result in the rejection of the proposed substitution.

Contractor shall bear all of the Stadium Manager's costs associated with the review of substitution requests. Contractor shall be responsible for all costs related to a substituted "or equal" material, process or article. Contractor is directed to the Special Conditions and/or Services/Schedule exhibits attached hereto (if any) to review any findings made pursuant to Public Contract Code Section 3400.

3.3 Period of Performance.

3.3.1 Contract Time. Contractor shall perform and complete all Work under this Contract within 60 calendar days, beginning the effective date of the Notice to Proceed ("Contract Time"). Contractor shall perform its Work in strict accordance with any completion schedule, construction schedule or project milestones developed by the Stadium Manager. Such schedules or milestones may be included as part of Exhibits "A" or "B" attached hereto, or may be provided separately in writing to Contractor. Contractor agrees that if such Work is not completed within the aforementioned Contract Time and/or pursuant to any such completion schedule, construction schedule or project milestones developed pursuant to provisions of the Contract, it is understood, acknowledged and agreed that the Stadium Manager will suffer damage.

3.3.2 Force Majeure. Neither Stadium Manager nor Contractor shall be considered in default of this Contract for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Contract, such circumstances include but are not limited to, abnormal weather conditions; floods; earthquakes; fire; pandemics or epidemics; war; riots and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage or judicial restraint. Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Contract. Contractor's exclusive remedy in the event of delay covered under this Section shall be a non-compensable extension of the Contract Time.

3.3.3 Liquidated Damages. Pursuant to Government Code Section 53069.85, Contractor shall pay to the Stadium Manager as fixed and liquidated damages the sum of \$100 per day for each and every calendar day of delay beyond the Contract Time or beyond any completion schedule, construction schedule or Project milestones established pursuant to the Contract.

3.4 Standard of Performance; Performance of Employees. Contractor shall perform all Work under this Contract in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling

necessary to perform the Work. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Work, including any required business license, and that such licenses and approvals shall be maintained throughout the term of this Contract. Contractor shall perform, at its own cost and expense and without reimbursement from the Stadium Manager, any work necessary to correct errors or omissions which are caused by Contractor's failure to comply with the standard of care provided for herein. Any employee who is determined by the Stadium Manager to be uncooperative, incompetent, a threat to the safety of persons or the Work, or any employee who fails or refuses to perform the Work in a manner acceptable to the Stadium Manager, shall be promptly removed from the Project by Contractor and shall not be re-employed on the Work.

3.5 Control and Payment of Subordinates; Contractual Relationship. Stadium Manager retains Contractor on an independent contractor basis and Contractor is not an employee of Stadium Manager. Any additional personnel performing the work governed by this Contract on behalf of Contractor shall at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance under this Contract and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, and workers' compensation insurance.

3.6 Stadium Manager's Basic Obligation. Stadium Manager agrees to engage and does hereby engage Contractor as an independent contractor to furnish all materials and to perform all Work according to the terms and conditions herein contained for the sum set forth above. Except as otherwise provided in the Contract, the Stadium Manager shall pay to Contractor, as full consideration for the satisfactory performance by Contractor of the services and obligations required by this Contract, the below-referenced compensation in accordance with compensation provisions set forth in the Contract.

3.7 Compensation and Payment.

3.7.1 Amount of Compensation. As consideration for performance of the Work required herein, Stadium Manager agrees to pay Contractor the Total Contract Price of [REDACTED] Dollars (\$[REDACTED].00) ("Total Contract Price") provided that such amount shall be subject to adjustment pursuant to the applicable terms of this Contract or written change orders approved and signed in advance by the Stadium Manager.

3.7.2 Payment of Compensation. If the Work is scheduled for completion in thirty (30) or less calendar days, Stadium Manager will arrange for payment of the Total Contract Price upon completion and approval by Stadium Manager of the Work. If the Work is scheduled for completion in more than thirty (30) calendar days, Stadium Manager will pay Contractor on a monthly basis as provided for herein. On or before the fifth (5th) day of each month, Contractor shall submit to the Stadium Manager an itemized application for payment in the format supplied by the Stadium Manager indicating the amount of Work completed since commencement of the Work or since the last progress payment. These applications shall be supported by evidence which is required by this Contract and such other documentation as the Stadium Manager may require. The Contractor shall certify that the Work for which payment is requested has been done and that the materials listed are stored where indicated. Contractor may be required to furnish a detailed schedule of values upon request of the Stadium Manager and in such detail and form as the Stadium Manager shall request, showing the quantities, unit prices, overhead, profit, and all

other expenses involved in order to provide a basis for determining the amount of progress payments.

3.7.3 Prompt Payment. Stadium Manager shall review and pay all progress payment requests in accordance with the provisions set forth in Section 20104.50 of the California Public Contract Code. However, no progress payments will be made for Work not completed in accordance with this Contract. Contractor shall comply with all applicable laws, rules and regulations relating to the proper payment of its employees, subcontractors, suppliers or others.

3.7.4 Contract Retentions. From each approved progress estimate, five percent (5%) will be deducted and retained by the Stadium Manager, and the remainder will be paid to Contractor. All Contract retention shall be released and paid to Contractor and subcontractors pursuant to California Public Contract Code Section 7107.

3.7.5 Other Deductions and Withholdings. In addition to Contract retentions, the Stadium Manager may deduct from each progress payment an amount necessary to protect Stadium Manager from loss because of: (1) liquidated damages which have accrued as of the date of the application for payment; (2) any sums expended by the Stadium Manager in performing any of Contractor's obligations under the Contract which Contractor has failed to perform or has performed inadequately; (3) defective Work not remedied; (4) stop notices as allowed by state law; (5) reasonable doubt that the Work can be completed for the unpaid balance of the Total Contract Price or within the scheduled completion date; (6) unsatisfactory prosecution of the Work by Contractor; (7) unauthorized deviations from the Contract; (8) failure of Contractor to maintain or submit on a timely basis proper and sufficient documentation as required by the Contract or by Stadium Manager during the prosecution of the Work; (9) erroneous or false estimates by Contractor of the value of the Work performed; (10) any sums representing expenses, losses, or damages as determined by the Stadium Manager, incurred by the Stadium Manager for which Contractor is liable under the Contract; and (11) any other sums which the Stadium Manager is entitled to recover from Contractor under the terms of the Contract or pursuant to state law, including Section 1727 of the California Labor Code. The failure by the Stadium Manager to deduct any of these sums from a progress payment shall not constitute a waiver of the Stadium Manager's right to such sums.

3.7.6 Substitutions for Contract Retentions. In accordance with California Public Contract Code Section 22300, the Stadium Manager will permit the substitution of securities for any monies withheld by the Stadium Manager to ensure performance under the Contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the Stadium Manager, or with a state or federally chartered bank in California as the escrow agent, and thereafter the Stadium Manager shall then pay such monies to Contractor as they come due. Upon satisfactory completion of the Contract, the securities shall be returned to Contractor. For purposes of this Section and Section 22300 of the Public Contract Code, the term "satisfactory completion of the contract" shall mean the time the Stadium Manager has issued written final acceptance of the Work and filed a Notice of Completion as required by law and provisions of this Contract. Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon. The escrow agreement used for the purposes of this Section shall be in the form provided by the Stadium Manager.

3.7.7 Title to Work. As security for partial, progress, or other payments, title to Work for which such payments are made shall pass to the Stadium Manager at the time of payment. To the extent that title has not previously been vested in the Stadium Manager by reason of payments, full title shall pass to the Stadium Manager at delivery of the Work at the destination and time specified in this Contract. Such transferred title shall in each case be good,

free and clear from any and all security interests, liens, or other encumbrances. Contractor promises and agrees that it will not pledge, hypothecate, or otherwise encumber the items in any manner that would result in any lien, security interest, charge, or claim upon or against said items. Such transfer of title shall not imply acceptance by the Stadium Manager, nor relieve Contractor from the responsibility to strictly comply with the Contract, and shall not relieve Contractor of responsibility for any loss of or damage to items.

3.7.8 Labor and Material Releases. Contractor shall furnish Stadium Manager with labor and material releases from all subcontractors performing work on, or furnishing materials for, the Work governed by this Contract prior to final payment by Stadium Manager.

3.7.9 Prevailing Wages. Contractor is aware of the requirements of California Labor Code Section 1720 et seq., and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. Stadium Manager shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Contract upon request. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at Contractor's principal place of business and at the project site. Contractor shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. Contractor and any subcontractor shall forfeit a penalty of up to \$200 per calendar day or portion thereof for each worker paid less than the prevailing wage rates.

3.7.10 Apprenticeable Crafts. When Contractor employs workmen in an apprenticeable craft or trade, Contractor shall comply with the provisions of Section 1777.5 of the California Labor Code with respect to the employment of properly registered apprentices upon public works. The primary responsibility for compliance with said Section for all apprenticeable occupations shall be with Contractor. The Contractor or any subcontractor that is determined by the Labor Commissioner to have knowingly violated Section 1777.5 shall forfeit as a civil penalty an amount not exceeding \$100 for each full calendar day of noncompliance, or such greater amount as provided by law.

3.7.11 Hours of Work. Contractor is advised that eight (8) hours labor constitutes a legal day's work. Pursuant to Section 1813 of the California Labor Code, Contractor shall forfeit a penalty of \$25.00 per worker for each day that each worker is permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, except when payment for overtime is made at not less than one and one-half (1-1/2) times the basic rate for that worker.

3.7.12 Payroll Records. Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of Contractor in the manner provided in Labor Code Section 1776. In the event of noncompliance with the requirements of this Section, Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what

respects such Contractor must comply with this Section. Should noncompliance still be evident after such 10-day period, Contractor shall, as a penalty to Stadium Manager, forfeit not more than \$100.00 for each calendar day or portion thereof, for each worker, until strict compliance is effectuated. The amount of the forfeiture is to be determined by the Labor Commissioner. A contractor who is found to have violated the provisions of law regarding wages on public works with the intent to defraud shall be ineligible to bid on public works contracts for a period of one to three years as determined by the Labor Commissioner. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The responsibility for compliance with this Section is on Contractor. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code Section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

3.7.13 Contractor and Subcontractor Registration. Pursuant to Labor Code Sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. Contractor is directed to review, fill out and execute the Public Works Contractor Registration Certification attached hereto as Exhibit "E" prior to contract execution. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

3.7.14 Proof of Compliance. It shall be Contractor's sole responsibility to comply with, and maintain adequate records of its adherence to, all applicable state prevailing wage requirement. Proof of such compliance may include proof of Contractor and subcontractor registration with the Department of Industrial Relations, California certified payroll form A-131, statements of non-performance for work not undertaken at any point during the Project, DAS 140/142 forms for all apprenticeable crafts or trades, proper fringe benefits statements, and any other such documents that may be required under this Section 3.7. At any time during or subsequent to the full performance of the services under this Agreement, Stadium Manager and/or the Santa Clara Stadium Authority may require Contractor to produce complete and adequate compliance records, subject to Stadium Manager and/or the Santa Clara Stadium Authority's satisfaction, prior to release of payment.

3.7.15 Labor Compliance; Stop Orders. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be the Contractor's sole responsibility to evaluate and pay the cost of complying with all labor compliance requirements under this Contract and applicable law. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the Stadium Manager. Contractor shall defend, indemnify and hold the Indemnified Parties free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

3.8 Performance of Work; Jobsite Obligations.

3.8.1 Water Quality Management and Compliance.

3.8.1.1 Water Quality Management and Compliance. Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §§ 1300); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); local ordinances regulating discharges of storm water; and any and all regulations, policies, or permits issued pursuant to any such authority regulating the discharge of pollutants, as that term is used in the Porter-Cologne Water Quality Control Act, to any ground or surface water in the State.

3.8.1.2 Compliance with the Statewide Construction General Permit. Contractor shall comply with all conditions of the most recent iteration of the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity, issued by the California State Water Resources Control Board ("Permit"). It shall be Contractor's sole responsibility to file a Notice of Intent and procure coverage under the Permit for all construction activity which results in the disturbance of more than one acre of total land area or which is part of a larger common area of development or sale. Prior to initiating work, Contractor shall be solely responsible for preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) as required by the Permit. Contractor shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, and monitoring and reporting requirements as required by the Permit. The Permit requires the SWPPP to be a "living document" that changes as necessary to meet the conditions and requirements of the job site as it progresses through different phases of construction and is subject to different weather conditions. It shall be Contractor's sole responsibility to update the SWPPP as necessary to address conditions at the project site.

3.8.1.3 Other Water Quality Rules Regulations and Policies. Contractor shall comply with the lawful requirements of any applicable municipality, drainage Stadium Manager, or local agency regarding discharges of storm water to separate storm drain systems or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

3.8.1.4 Cost of Compliance. Storm, surface, nuisance, or other waters may be encountered at various times during construction of the Work. Therefore, the Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

3.8.1.5 Liability for Non-Compliance. Failure to comply with the Permit is a violation of federal and state law. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to defend, indemnify and hold harmless the Indemnified Parties for any alleged violations. In addition, Stadium Manager may seek damages from Contractor for any delay in completing the Work in accordance with the Contract, if such delay is caused by or related to Contractor's failure to comply with the Permit.

3.8.1.6 Reservation of Right to Defend. Stadium Manager reserves the right to defend any enforcement action brought against the Stadium Manager for Contractor's failure to comply with the Permit or any other relevant water quality law, regulation, or policy. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to be bound

by, and to reimburse the Stadium Manager for the costs (including the Stadium Manager's attorney's fees) associated with, any settlement reached between the Stadium Manager and the relevant enforcement entity.

3.8.1.7 Training. In addition to the standard of performance requirements set forth in paragraph 3.4, Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them without impacting water quality in violation of the laws, regulations and policies described in paragraph 3.8.1. Contractor further warrants that it, its employees and subcontractors will receive adequate training, as determined by Stadium Manager, regarding the requirements of the laws, regulations and policies described in paragraph 3.8.1 as they may relate to the Work provided under this Agreement. Upon request, Stadium Manager will provide the Contractor with a list of training programs that meet the requirements of this paragraph.

3.8.2 Safety. Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. Contractor shall comply with the requirements of the specifications relating to safety measures applicable in particular operations or kinds of work. In carrying out its Work, Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the Work and the conditions under which the Work is to be performed. Safety precautions as applicable shall include, but shall not be limited to, adequate life protection and lifesaving equipment; adequate illumination for underground and night operations; instructions in accident prevention for all employees, such as machinery guards, safe walkways, scaffolds, ladders, bridges, gang planks, confined space procedures, trenching and shoring, fall protection and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and adequate facilities for the proper inspection and maintenance of all safety measures. Furthermore, Contractor shall prominently display the names and telephone numbers of at least two medical doctors practicing in the vicinity of the Project, as well as the telephone number of the local ambulance service, adjacent to all telephones at the Project site.

3.8.3 Laws and Regulations. Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Contract or the Work, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Work. If Contractor observes that the drawings or specifications are at variance with any law, rule or regulation, it shall promptly notify the Stadium Manager in writing. Any necessary changes shall be made by written change order. Stadium Manager shall further comply with all requirements specified in the Stadium Manager's Procurement and Contract Process Integrity and Conflict of Interest Guidelines, which are attached hereto as Exhibit "G" and incorporated herein by this reference. If Contractor performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the Stadium Manager, Contractor shall be solely responsible for all costs arising therefrom. Stadium Manager is subject to certain provisions of the Health & Safety Code, Government Code, Public Contract Code, and Labor Code of the State. It is stipulated and agreed that all provisions of the law applicable to the public contracts of a municipality are a part of this Contract to the same extent as though set forth herein and will be complied with. Contractor shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless, pursuant to the indemnification provisions of this Contract, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.8.4 Permits and Licenses. Contractor shall be responsible for securing Stadium Manager permits and licenses necessary to perform the Work described herein, including, but not limited to, any required business license. While Contractor will not be charged a fee for any Stadium Manager permits, Contractor shall pay the Stadium Manager's business license fee, if any. Any ineligible contractor or subcontractor pursuant to Labor Code Sections 1777.1 and 1777.7 may not perform work on this Project.

3.8.5 Trenching Work. If the Total Contract Price exceeds \$25,000 and if the Work governed by this Contract entails excavation of any trench or trenches five (5) feet or more in depth, Contractor shall comply with all applicable provisions of the California Labor Code, including Section 6705. To this end, Contractor shall submit for Stadium Manager's review and approval a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

3.8.6 Hazardous Materials and Differing Conditions. As required by California Public Contract Code Section 7104, if this Contract involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor shall promptly, and prior to disturbance of any conditions, notify Stadium Manager of: (1) any material discovered in excavation that Contractor believes to be a hazardous waste that is required to be removed to a Class I, Class II or Class III disposal site; (2) subsurface or latent physical conditions at the site differing from those indicated by Stadium Manager; and (3) unknown physical conditions of an unusual nature at the site, significantly different from those ordinarily encountered in such contract work. Upon notification, Stadium Manager shall promptly investigate the conditions to determine whether a change order is appropriate. In the event of a dispute, Contractor shall not be excused from any scheduled completion date and shall proceed with all Work to be performed under the Contract, but shall retain all rights provided by the Contract or by law for making protests and resolving the dispute.

3.8.7 Underground Utility Facilities. To the extent required by Section 4215 of the California Government Code, Stadium Manager shall compensate Contractor for the costs of: (1) locating and repairing damage to underground utility facilities not caused by the failure of Contractor to exercise reasonable care; (2) removing or relocating underground utility facilities not indicated in the construction drawings; and (3) equipment necessarily idled during such work. Contractor shall not be assessed liquidated damages for delay caused by failure of Stadium Manager to provide for removal or relocation of such utility facilities.

3.8.8 Air Quality. Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the California Air Resources Board (CARB). Although CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify the Indemnified Parties (defined below) against any fines or penalties imposed by CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in this Agreement.

3.8.9 State Recycling Mandates. Contractor shall comply with State Recycling Mandates. Any recyclable materials/debris collected by the contractor that can be feasibly diverted via reuse or recycling must be hauled by the appropriate handler for reuse or recycling.

3.9 Completion of Work. When Contractor determines that it has completed the Work required herein, Contractor shall so notify Stadium Manager in writing and shall furnish all labor and material releases required by this Contract. Stadium Manager shall thereupon inspect the Work. If the Work is not acceptable to the Stadium Manager, the Stadium Manager shall indicate to Contractor in writing the specific portions or items of Work which are unsatisfactory or incomplete. Once Contractor determines that it has completed the incomplete or unsatisfactory Work, Contractor may request a reinspection by the Stadium Manager. Once the Work is acceptable to Stadium Manager, Stadium Manager shall pay to Contractor the Total Contract Price remaining to be paid, less any amount which Stadium Manager may be authorized or directed by law to retain. Payment of retention proceeds due to Contractor shall be made in accordance with Section 7107 of the California Public Contract Code.

3.10 Claims; Government Code Claim Compliance.

3.10.1 Intent. Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Section is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Section shall be construed to be consistent with said statutes.

3.10.2 Claims. For purposes of this Section, "Claim" means a separate demand by the Contractor, after a change order duly requested in accordance with the terms of this Contract has been denied by the Stadium Manager, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the Stadium Manager. A "Claim" does not include any demand for payment for which the Contractor has failed to provide notice, request a change order, or otherwise failed to follow any procedures contained in the Contract Documents. Claims governed by this Section may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the change order procedures contained herein, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Section must be filed no later than fourteen (14) days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to the Stadium Manager and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing in this Section is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

3.10.3 Supporting Documentation. The Contractor shall submit all claims in the following format:

3.10.3.1 Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made

3.10.3.2 List of documents relating to claim:

(A) Specifications

- (B) Drawings
- (C) Clarifications (Requests for Information)
- (D) Schedules
- (E) Other

3.10.3.3 Chronology of events and correspondence

3.10.3.4 Analysis of claim merit

3.10.3.5 Analysis of claim cost

3.10.3.6 Time impact analysis in CPM format

3.10.3.7 If Contractor's claim is based in whole or in part on an allegation of errors or omissions in the Drawings or Specifications for the Project, Contractor shall provide a summary of the percentage of the claim subject to design errors or omissions and shall obtain a certificate of merit in support of the claim of design errors and omissions.

3.10.3.8 Cover letter and certification of validity of the claim, including any claims from subcontractors of any tier, in accordance with Government Code Section 12650 *et seq.*

3.10.4 Stadium Manager's Response. Upon receipt of a claim pursuant to this Section, Stadium Manager shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 days after the Stadium Manager issues its written statement.

3.10.4.1 If Stadium Manager needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, Stadium Manager shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

3.10.4.2 Within 30 days of receipt of a claim, Stadium Manager may request in writing additional documentation supporting the claim or relating to defenses or claims Stadium Manager may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of Stadium Manager and the Contractor.

3.10.4.3 Stadium Manager's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days (if the claim is less than \$50,000, within 15 days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

3.10.5 Meet and Confer. If the Contractor disputes Stadium Manager's written response, or Stadium Manager fails to respond within the time prescribed, the Contractor may so notify Stadium Manager, in writing, either within 15 days of receipt of Stadium Manager's response or within 15 days of Stadium Manager's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, Stadium Manager shall schedule a meet and confer conference within 30 days for settlement of the dispute.

3.10.6 Mediation. Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, Stadium Manager shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after Stadium Manager issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with Stadium Manager and the Contractor sharing the associated costs equally. Stadium Manager and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

3.10.6.1 If the Parties cannot agree upon a mediator, each Party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each Party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

3.10.6.2 For purposes of this Section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the Parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this Section.

3.10.6.3 Unless otherwise agreed to by Stadium Manager and the Contractor in writing, the mediation conducted pursuant to this Section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

3.10.6.4 The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.

3.10.7 Procedures After Mediation. If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference or mediation.

3.10.8 Civil Actions. The following procedures are established for all civil actions filed to resolve claims subject to this Section:

3.10.8.1 Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement

of the action in accordance with Public Contract Code Section 9204 and the terms of these procedures. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

3.10.8.2 If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

3.10.8.3 In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

3.10.9 Government Code Claims. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Contractor must comply with the claim procedures set forth in Government Code Sections 900 et seq. prior to filing any lawsuit against the Stadium Manager. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Contractor shall be barred from bringing and maintaining a valid lawsuit against the Stadium Manager. A Government Code claim must be filed no earlier than the date the work is completed or the date the Contractor last performs work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.

3.10.10 Non-Waiver. Stadium Manager's failure to respond to a claim from the Contractor within the time periods described in this Section or to otherwise meet the time requirements of this Section shall result in the claim being deemed rejected in its entirety. Stadium Manager's failure to respond shall not waive Stadium Manager's rights to any subsequent procedures for the resolution of disputed claims.

3.11 Loss and Damage. Except as may otherwise be limited by law, Contractor shall be responsible for all loss and damage which may arise out of the nature of the Work agreed to herein, or from the action of the elements, or from any unforeseen difficulties which may arise or be encountered in the prosecution of the Work until the same is fully completed and accepted by Stadium Manager. In the event of damage proximately caused by an Act of God, as defined by Section 7105 of the Public Contract Code, the Stadium Manager may terminate this Contract pursuant to Section 3.17.3; provided, however, that the Stadium Manager needs to provide Contractor with only one (1) day advanced written notice.

3.12 Indemnification.

3.12.1 Scope of Indemnity. To the fullest extent permitted by law, Contractor shall defend, indemnify and hold the Stadium Manager, Forty Niners SC Stadium

Company LLC, Forty Niners Football Company LLC, the Santa Clara Stadium Authority, the City of Santa Clara, their affiliates, and each of their respective officers, directors, managers, members, partners, owners, employees, agents and authorized volunteers, each tenant and event promoter of Levi's Stadium, and any mortgagee, bond trustee or other financial institution from time to time holding a line or indenture upon an interest in Levi's Stadium, and each of them (collectively, the "Indemnified Parties"), free and harmless from any and all claims, demands, causes of action, suits, actions, proceedings, costs, expenses, liability, judgments, awards, decrees, settlements, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, (collectively, "Claims") in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions, or willful misconduct of Contractor, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Contractor's services, the Project or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent required by Civil Code Section 2782, Contractor's indemnity obligation shall not apply to liability for damages for death or bodily injury to persons, injury to property, or any other loss, damage or expense arising from the sole or active negligence or willful misconduct of the Indemnified Parties or the Indemnified Parties' agents, servants, or independent contractors who are directly responsible to the Indemnified Parties, or for defects in design furnished by those persons.

3.12.2 Additional Indemnity Obligations. Contractor shall defend, with counsel of Stadium Manager's choosing and at Contractor's own cost, expense and risk, any and all Claims covered by this Section that may be brought or instituted against the Indemnified Parties. In addition, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the Indemnified Parties as part of any such claim, suit, action or other proceeding. Contractor shall also reimburse the Indemnified Parties for the cost of any settlement paid by the Indemnified Parties as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for the Indemnified Parties' attorney's fees and costs, including expert witness fees. Contractor shall reimburse the Indemnified Parties for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Indemnified Parties.

3.13 Insurance.

3.13.1 Time for Compliance. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the Stadium Manager that it has secured all insurance required under this Section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the Stadium Manager that the subcontractor has secured all insurance required under this Section. Failure to provide and maintain all required insurance shall be grounds for the Stadium Manager to terminate this Contract for cause.

3.13.2 Minimum Requirements. Contractor shall, at its expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Contract. Such insurance shall meet at least the following minimum levels of coverage:

3.13.2.1 Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 00 01) OR Insurance Services Office Owners and Contractors Protective Liability Coverage Form (CG 00 09 11 88) (coverage for operations of designated contractor); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 00 01, code 1 (any auto); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance. Policies shall not contain exclusions contrary to this Contract.

3.13.2.2 Minimum Limits of Insurance. Contractor shall maintain limits no less than: (1) *General Liability*: \$2,000,000 per occurrence and \$4,000,000 aggregate for bodily injury, personal injury and property damage; (2) *Automobile Liability*: \$2,000,000 per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability*: Workers' compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of \$1,000,000 each accident, policy limit bodily injury or disease, and each employee bodily injury or disease. Defense costs shall be available in addition to the limits. Notwithstanding the minimum limits specified herein, any available coverage shall be provided to the parties required to be named as additional insureds pursuant to this Contract.

3.13.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Contractor shall provide endorsements (amendments) on forms supplied or approved by the Stadium Manager to add the following provisions to the insurance policies:

3.13.3.1 General Liability. (1) Such policy shall give the Stadium Manager, its officials, employees, agents and authorized volunteers additional insured status using ISO endorsements CG20 10 10 01 plus CG20 37 10 01, or endorsements providing the exact same coverage, with respect to the Work or operations performed by or on behalf of Contractor, including materials, parts or equipment furnished in connection with such work; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the Stadium Manager, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the Stadium Manager, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it.

3.13.3.2 Automobile Liability. (1) Such policy shall give the Stadium Manager, its officials, employees, agents and authorized volunteers additional insured status with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the Stadium Manager, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the Stadium Manager, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it in any way.

3.13.3.3 Workers' Compensation and Employer's Liability Coverage.

The insurer shall agree to waive all rights of subrogation against the Stadium Manager, its officials, employees, agents and authorized volunteers for losses paid under the terms of the insurance policy which arise from work performed by Contractor.

3.13.3.4 All Coverages. Each insurance policy required by this

Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Stadium Manager; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the Stadium Manager, its officials, employees, agents and authorized volunteers.

3.13.4 Separation of Insureds; No Special Limitations. All insurance

required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the Stadium Manager, its officials, employees, agents and authorized volunteers.

3.13.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-

insured retentions must be declared to and approved by the Stadium Manager. Contractor shall guarantee that, at the option of the Stadium Manager, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Stadium Manager, its officials, employees, agents and authorized volunteers; or (2) the Contractor shall procure a bond or other financial guarantee acceptable to the Stadium Manager guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.13.6 Acceptability of Insurers. Insurance is to be placed with insurers

with a current A.M. Best's rating no less than A:VII, licensed to do business in California, and satisfactory to the Stadium Manager. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

3.13.7 Verification of Coverage. Contractor shall furnish Stadium Manager

with original certificates of insurance and endorsements effecting coverage required by this Contract on forms satisfactory to the Stadium Manager. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the Stadium Manager. All certificates and endorsements must be received and approved by the Stadium Manager before work commences. The Stadium Manager reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.13.8 Subcontractors. All subcontractors shall meet the requirements of

this Section before commencing Work. Contractor shall furnish separate certificates and endorsements for each subcontractor. Subcontractor policies of General Liability insurance shall name the Stadium Manager, its officials, employees, agents and authorized volunteers as additional insureds using form ISO 20 38 04 13 or endorsements providing the exact same coverage. All coverages for subcontractors shall be subject to all of the requirements stated herein except as otherwise agreed to by the Stadium Manager in writing.

3.13.9 Reporting of Claims. Contractor shall report to the Stadium

Manager, in addition to Contractor's insurer, any and all insurance claims submitted by Contractor in connection with the Work under this Contract.

3.14 Bond Requirements.

3.14.1 Payment Bond. If required by law or otherwise specifically requested by Stadium Manager in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to Stadium Manager concurrently with this Contract a Payment Bond in an amount required by the Stadium Manager and in a form provided or approved by the Stadium Manager. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the Stadium Manager.

3.14.2 Performance Bond. If specifically requested by Stadium Manager in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to Stadium Manager concurrently with this Contract a Performance Bond in an amount required by the Stadium Manager and in a form provided or approved by the Stadium Manager. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the Stadium Manager.

3.14.3 Bond Provisions. Should, in Stadium Manager's sole opinion, any bond become insufficient or any surety be found to be unsatisfactory, Contractor shall renew or replace the effected bond within (ten) 10 days of receiving notice from Stadium Manager. In the event the surety or Contractor intends to reduce or cancel any required bond, at least thirty (30) days prior written notice shall be given to the Stadium Manager, and Contractor shall post acceptable replacement bonds at least ten (10) days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Contract until any replacement bonds required by this Section are accepted by the Stadium Manager. To the extent, if any, that the Total Contract Price is increased in accordance with the Contract, Contractor shall, upon request of the Stadium Manager, cause the amount of the bond to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the Stadium Manager. If Contractor fails to furnish any required bond, the Stadium Manager may terminate the Contract for cause.

3.14.4 Surety Qualifications. Only bonds executed by an admitted surety insurer, as defined in California Code of Civil Procedure Section 995.120, shall be accepted. If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with Section 995.660 of the California Code of Civil Procedure, and proof of such is provided to the Stadium Manager.

3.15 Warranty. Contractor warrants all Work under the Contract (which for purposes of this Section shall be deemed to include unauthorized work which has not been removed and any non-conforming materials incorporated into the Work) to be of good quality and free from any defective or faulty material and workmanship. Contractor agrees that for a period of one year (or the period of time specified elsewhere in the Contract or in any guarantee or warranty provided by any manufacturer or supplier of equipment or materials incorporated into the Work, whichever is later) after the date of final acceptance, Contractor shall within ten (10) days after being notified in writing by the Stadium Manager of any defect in the Work or non-conformance of the Work to the Contract, commence and prosecute with due diligence all Work necessary to fulfill the terms of the warranty at its sole cost and expense. Contractor shall act sooner as requested by the Stadium Manager in response to an emergency. In addition, Contractor shall, at its sole cost and expense, repair and replace any portions of the Work (or work of other contractors) damaged by its defective Work or which becomes damaged in the course of repairing or replacing defective Work. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one year period, commencing with the date of acceptance of such corrected Work. Contractor shall perform such tests as the Stadium Manager may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment

and materials necessary to gain access, shall be the sole responsibility of Contractor. All warranties and guarantees of subcontractors, suppliers and manufacturers with respect to any portion of the Work, whether express or implied, are deemed to be obtained by Contractor for the benefit of the Stadium Manager, regardless of whether or not such warranties and guarantees have been transferred or assigned to the Stadium Manager by separate agreement and Contractor agrees to enforce such warranties and guarantees, if necessary, on behalf of the Stadium Manager. In the event that Contractor fails to perform its obligations under this Section, or under any other warranty or guaranty under this Contract, to the reasonable satisfaction of the Stadium Manager, the Stadium Manager shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the Stadium Manager for any expenses incurred hereunder upon demand.

3.16 Employee/Labor Certifications.

3.16.1 Contractor's Labor Certification. By its signature hereunder, Contractor certifies that he is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Work. A certification form for this purpose, which is attached to this Contract as Exhibit "D" and incorporated herein by reference, shall be executed simultaneously with this Contract.

3.16.2 Equal Opportunity Employment. Contractor represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, age or other interests protected by the State or Federal Constitutions. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

3.16.3 Verification of Employment Eligibility. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subcontractors and sub-subcontractors to comply with the same.

3.17 General Provisions.

3.17.1 Stadium Manager's Representative. The Stadium Manager hereby designates the General Manager, or his or her designee, to act as its representative for the performance of this Contract ("Stadium Manager's Representative"). Stadium Manager's Representative shall have the power to act on behalf of the Stadium Manager for all purposes under this Contract. Contractor shall not accept direction or orders from any person other than the Stadium Manager's Representative or his or her designee.

3.17.2 Contractor's Representative. Before starting the Work, Contractor shall submit in writing the name, qualifications and experience of its proposed representative who shall be subject to the review and approval of the Stadium Manager ("Contractor's Representative"). Following approval by the Stadium Manager, Contractor's Representative shall have full authority to represent and act on behalf of Contractor for all purposes under this Contract. Contractor's Representative shall supervise and direct the Work, using his best skill and attention, and shall be responsible for all construction means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Work under this Contract. Contractor's

Representative shall devote full time to the Project and either he or his designee, who shall be acceptable to the Stadium Manager, shall be present at the Work site at all times that any Work is in progress and at any time that any employee or subcontractor of Contractor is present at the Work site. Arrangements for responsible supervision, acceptable to the Stadium Manager, shall be made for emergency Work which may be required. Should Contractor desire to change its Contractor's Representative, Contractor shall provide the information specified above and obtain the Stadium Manager's written approval.

3.17.3 Termination. This Contract may be terminated by Stadium Manager at any time, either with or without cause, by giving Contractor three (3) days advance written notice. In the event of termination by Stadium Manager for any reason other than the fault of Contractor, Stadium Manager shall pay Contractor for all Work performed up to that time as provided herein. In the event of breach of the Contract by Contractor, Stadium Manager may terminate the Contract immediately without notice, may reduce payment to Contractor in the amount necessary to offset Stadium Manager's resulting damages, and may pursue any other available recourse against Contractor. Contractor may not terminate this Contract except for cause. In the event this Contract is terminated in whole or in part as provided, Stadium Manager may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated. Further, if this Contract is terminated as provided, Stadium Manager may require Contractor to provide all finished or unfinished documents, data, diagrams, drawings, materials or other matter prepared or built by Contractor in connection with its performance of this Contract.

3.17.4 Contract Interpretation. Should any question arise regarding the meaning or import of any of the provisions of this Contract or written or oral instructions from Stadium Manager, the matter shall be referred to Stadium Manager's Representative, whose decision shall be binding upon Contractor.

3.17.5 Anti-Trust Claims. This provision shall be operative if this Contract is applicable to California Public Contract Code Section 7103.5. In entering into this Contract to supply goods, services or materials, Contractor hereby offers and agrees to assign to the Stadium Manager all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the Stadium Manager tender final payment to Contractor, without further acknowledgment by the Parties.

3.17.6 Notices. All notices hereunder and communications regarding interpretation of the terms of the Contract or changes thereto shall be provided by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

CONTRACTOR:

INSERT CONTRACTOR NAME AND ADDRESS
Attn: ***INSERT CONTRACTOR REP. NAME AND TITLE***

STADIUM MANAGER:

Forty Niners Stadium Management Company LLC
4900 Marie DeBartolo Way
Santa Clara, CA 95054
Attn: Ryan van Maarth, Vice President, Stadium Operations and
Strategic Planning

With copy to:

Legal Affairs
Forty Niners Stadium Management Company LLC
4949 Marie P. DeBartolo Way
Santa Clara, CA 95054

Any notice so given shall be considered received by the other Party three (3) days after deposit in the U.S. Mail as stated above and addressed to the Party at the above address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.17.7 Time of Essence. Time is of the essence in the performance of this Contract.

3.17.8 Assignment Forbidden. Contractor shall not, either voluntarily or by action of law, assign or transfer this Contract or any obligation, right, title or interest assumed by Contractor herein without the prior written consent of Stadium Manager. If Contractor attempts an assignment or transfer of this Contract or any obligation, right, title or interest herein, Stadium Manager may, at its option, terminate and revoke the Contract and shall thereupon be relieved from any and all obligations to Contractor or its assignee or transferee.

3.17.9 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.17.10 Laws, Venue, and Attorneys' Fees. This Agreement shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a state or federal court situated in the County of Santa Clara, State of California.

3.17.11 Counterparts. This Contract may be executed in counterparts, each of which shall constitute an original.

3.17.12 Successors. The Parties do for themselves, their heirs, executors, administrators, successors, and assigns agree to the full performance of all of the provisions contained in this Contract.

3.17.13 Levi's Stadium Jobsite Rules. Contractor and its subcontractors of every tier and their officers, employees, workers, consultants, volunteers, agents shall comply with the Levi's Stadium Jobsite Rules attached hereto as Exhibit "H" and incorporated herein by this reference. Failure to comply with the Levi's Stadium Jobsite Rules may lead to dismissal of any violating parties from the Project site. Contractor shall be solely responsible for any time and cost impacts arising out of any failure to comply with the Levi's Stadium Jobsite Rules.

3.17.14 Solicitation. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Contract. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, Stadium Manager shall have the right to terminate this Contract without liability.

3.17.15 Conflict of Interest. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, Stadium Manager shall have the right to rescind this Agreement without liability. For the term of this Contract, no official, officer or employee of Stadium Manager, during the term of his or her service with Stadium Manager, shall have any direct interest in this Contract, or obtain any present or anticipated material benefit arising therefrom. In addition, Contractor agrees to file, or to cause its employees or subcontractors to file, a Statement of Economic Interest with the Stadium Manager's Filing Officer as required under state law in the performance of the Work.

3.17.16 Certification of License.

3.17.16.1 Contractor certifies that as of the date of execution of this Contract, Contractor has a current contractor's license of the classification indicated below under Contractor's signature.

3.17.16.2 Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

3.17.17 Authority to Enter Contract. Each Party warrants that the individuals who have signed this Contract have the legal power, right and authority to make this Contract and bind each respective Party.

3.17.18 Entire Contract; Modification. This Contract contains the entire agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Contract may only be modified by a writing signed by both Parties.

3.17.19 Non-Waiver. None of the provisions of this Agreement shall be considered waived by either party, unless such waiver is specifically specified in writing.

3.17.20 Stadium Manager's Right to Employ Other Contractors. Stadium Manager reserves right to employ other contractors in connection with this Project or other projects.

[SIGNATURES ON NEXT PAGE]

**SIGNATURE PAGE FOR CONSTRUCTION CONTRACT
BETWEEN THE FORTY NINERS STADIUM MANAGEMENT COMPANY LLC
AND *****INSERT CONTRACTOR NAME*******

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the *****INSERT DAY***** day of *****INSERT MONTH*****, *****INSERT YEAR*****.

FORTY NINERS STADIUM
MANAGEMENT COMPANY LLC

INSERT NAME OF CONTRACTOR

By: _____
INSERT NAME
INSERT TITLE

By: _____

Its: _____

Printed Name: _____

License No.: _____

ATTEST:

By: _____
INSERT NAME
INSERT TITLE

**(CONTRACTOR'S SIGNATURE MUST BE
NOTARIZED AND CORPORATE
SEAL AFFIXED, IF APPLICABLE)**

EXHIBIT “A”
SERVICES / SCHEDULE
Tunnel Slip and Fall Protection

1 PART 1 – GENERAL

1.1 SUMMARY

Contractor is to remove and dispose of the existing synthetic turf flooring from stadium tunnels and furnish and install new synthetic turf flooring, beveled edge reducer and all accessories required for installation maintenance and repair.

1.1.1 Products Supplied

- A. Synthetic turf flooring.
- B. Synthetic turf beveled edge reducer.
- C. Accessories required for installation, maintenance and repair.

1.2 REFERENCES

1.3 SUBMITTALS

1.3.1 Action Submittals

- A. Provide current printed data sheets for all Products Supplied.
- B. Provide samples, 6 inches x 6 inches, for verification of such characteristics as color and surface texture for each Manufactured Product specified.
- C. As necessary, provide shop drawings prepared for Project illustrating layouts, details, dimensions and other pertinent data.

1.3.2 Informational Submittals

- A. Provide Manufacturer’s current printed substrate surface preparation guidelines.
- B. Provide Manufacturer’s current printed installation guidelines for Products Supplied.

1.3.3 Closeout Submittals

- A. Provide Manufacturer’s current printed maintenance guidelines for Manufactured Product.

B. Provide Manufacturer's current printed standard warranty for Manufactured Product.

1.3.4 Maintenance Material Submittals

A. Provide extra stock materials from original dye lots, for use in facility operations and maintenance (approximately 3% of the total floor surface for each color, surface texture and format of Manufactured Product specified).

1.4 QUALITY ASSURANCE

A. Manufacturer must have a minimum of ten (10) years of experience in the manufacturing of prefabricated synthetic turf.

B. Installer must be approved by the Surfacing Contractor and must have performed installations of the same scale in the last three (3) years.

G. A mock-up installation is highly recommended; always follow the same procedures and use the same materials that have been specified for the actual project. The Stadium Manager will be responsible for deeming the mock-up acceptable. Mock-up size: [minimum 48 in x 48 in] over concrete.

1.5 DELIVERY, STORAGE AND HANDLING

A. Products Supplied must be delivered in Manufacturer's original, unopened and undamaged packaging with identification labels intact.

B. Products Supplied must be protected from exposure to harmful weather conditions and must be safely stored on a clean, dry, flat surface. Store rolls of synthetic turf flooring upright; store tiles of synthetic turf flooring on a flat surface, carefully protecting corners and edges.

C. Climate controlled storage is recommended. Storage temperature must not be below 40-degrees F and must not exceed 100-degrees F. Materials must be delivered to site a minimum of 24 hours before work is scheduled to begin so that they may acclimate.

D. Avoid storing manufactured product for extended periods of time.

1.6 SITE CONDITIONS

A. The Contractor shall be responsible for ensuring all site conditions meet the requirements of the Manufacturer.

1.7 WARRANTY

A. The synthetic flooring is warranted to be free from manufacturing defects for a minimum period of one (1) year.

B. The synthetic turf shall be warranted against excessive wear under normal usage for a period of five (5) years from the date that is 30 days from shipment from the Manufacturer.

2 PART 2 – PRODUCTS

2.1 MANUFACTURED PRODUCT

2.1.1 Manufacturer

A. Preferred Product: Global SynTurf Putt-46 BiColor, or equal.

B. Other products that are considered an approved equal product include:

1. Shawgrass 157SG
2. Shawgrass 156SG
3. SYNLawn Classic Pitch
4. SYNLawn Precision Putt
5. SYNPlay 48 (no pad)

2.1.2 Description

A. Turf to be adhered to existing concrete base.

B. Product specifications shall meet or exceed the following requirements:

- Pile Height: 1/2”
- Turf Gauge: 3/16”
- Face Weight: 46 oz./yd²
- Backing Weight: 25 oz./yd²
- Total Weight: 71 oz./yd²
- Stitch Rate: 44/10cm
- Stitches/m²: 92400
- Material/Dtex: PP 5500
- Color: Light Bi-Color Green
- Type of Fiber: PP Curled as thatch

2.1.3 Substitution

A. Contractor may offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in the Contract Documents including this Exhibit “A.” Substitution requests, if any, shall be made within the time specified and otherwise in accordance with the requirements of the Contract.

B. The burden of proof as to the equality of any material, process or article shall rest with Contractor.

2.2 ACCESSORIES

A. Provide adhesive certified by Manufacturer for installations over concrete. For suitability, recommendations and use, please refer to Manufacturer's current printed adhesive data sheets.

3 PART 3 – EXECUTION

3.1 INSTALLERS

A. Refer to Section 1.4 of this document for information on installers.

3.2 EXAMINATION

A. Prior to installation, ensure substrate is ready to receive flooring and has been prepared according to Manufacturer's current substrate surface preparation guidelines. Removal of existing synthetic turf is required.

B. Ensure room and substrate temperatures are maintained prior to moisture testing and flooring installation, during the flooring installation, as well as a minimum of 48 hours after the flooring has been completely installed, or as recommended by the manufacturer.

3.3 PREPARATION

A. Prepare substrate surface in accordance with Manufacturer's current printed guidelines.

3.4 INSTALLATION

A. Install sheets of flooring following Manufacturer's current printed guidelines.

B. Install all accessories following Manufacturer's current printed guidelines.

3.5 CLEANING

A. Always maintain the flooring following Manufacturer's current printed guidelines.

3.7 PROTECTION

A. As needed, protect synthetic turf flooring with 1/8" Masonite, or equal, during and after the installation, prior to its acceptance by the Stadium Manager.

PART 4 GENERAL REQUIREMENTS

4.1 Contractor is required to provide all required personal protective equipment (PPE) necessary to perform the work.

4.2 The use of safety equipment includes but is not limited to hard hats, eye protection, safety vests, hearing protection, fall protection, and safety boots as required by the California Occupational Safety and Health Administration.

4.3 Contractor shall maintain all necessary licenses to perform the work specified herein.

4.4 Contractor shall provide protection for all existing building components beneath and around the work. Any damage to existing building components caused by Contractor shall be immediately repaired or replaced at Contractor's sole expense in a manner acceptable to and approved by Stadium Manager.

4.5 In all active work areas, Contractor shall provide, install and maintain all necessary barricades and warnings to prohibit pedestrian access into any affected work area. This not only includes areas surrounding the work, but also includes areas below the work. The Project site is an active building containing employees, guests, and other contractors on a daily basis. Contractor shall be responsible for keeping others out of its active work areas and preventing the exposure of others to grinding, sanding, scraping, paint drips, overspray or any other material generated within the work area, both around and below

4.6 Cleaning and Protection

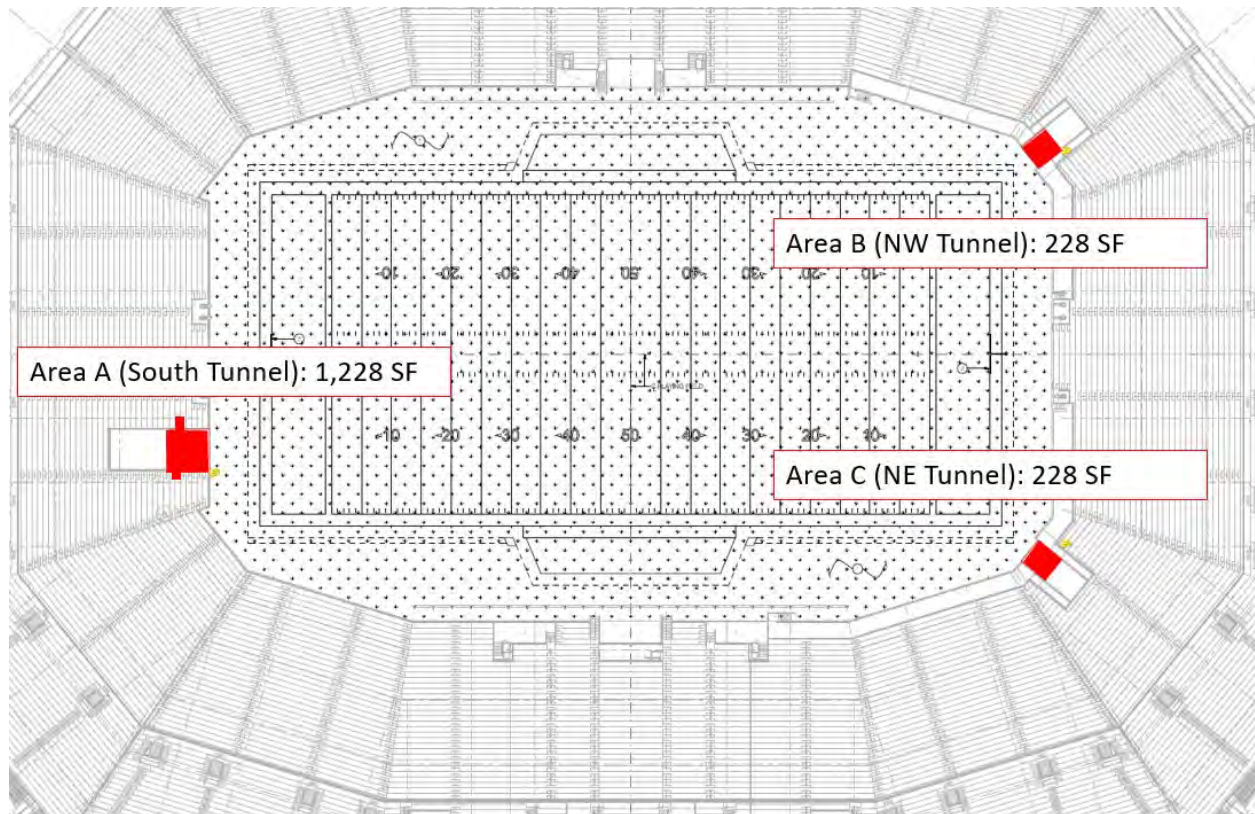
4.6.1 At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from the Project site. Secure, locate and position all unused materials and equipment, including man lifts, to the satisfaction of Stadium Manager.

4.6.2 After completing adhesive application, clean spattered surfaces, if applicable. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished or unfinished surfaces. Do not allow adhesive to drip, spatter onto or otherwise stain adjacent surfaces.

4.6.3 Protect work of other trades against damage from coating operation. Correct damage by cleaning, repairing, replacing, and recoating, as approved by Stadium Manager, and leave in an undamaged condition.

4.6.4 Protect all adjacent surfaces as required by field conditions.

Removal and installation areas for the synthetic sports turf is shown in the diagram below.



Area A (South Tunnel): 1,228 SF

Area B (Northwest Tunnel): 228 SF

Area C (Northeast Tunnel): 228 SF

TOTAL: 1,684 SF

**Contractor to field verify dimensions.*

Photos of existing synthetic turf (to be removed and replaced by Contractor) are set forth below. Please note that synthetic turf extends into the door alcoves on both sides of the tunnel, which is accounted for in the material quantity take off provided above.

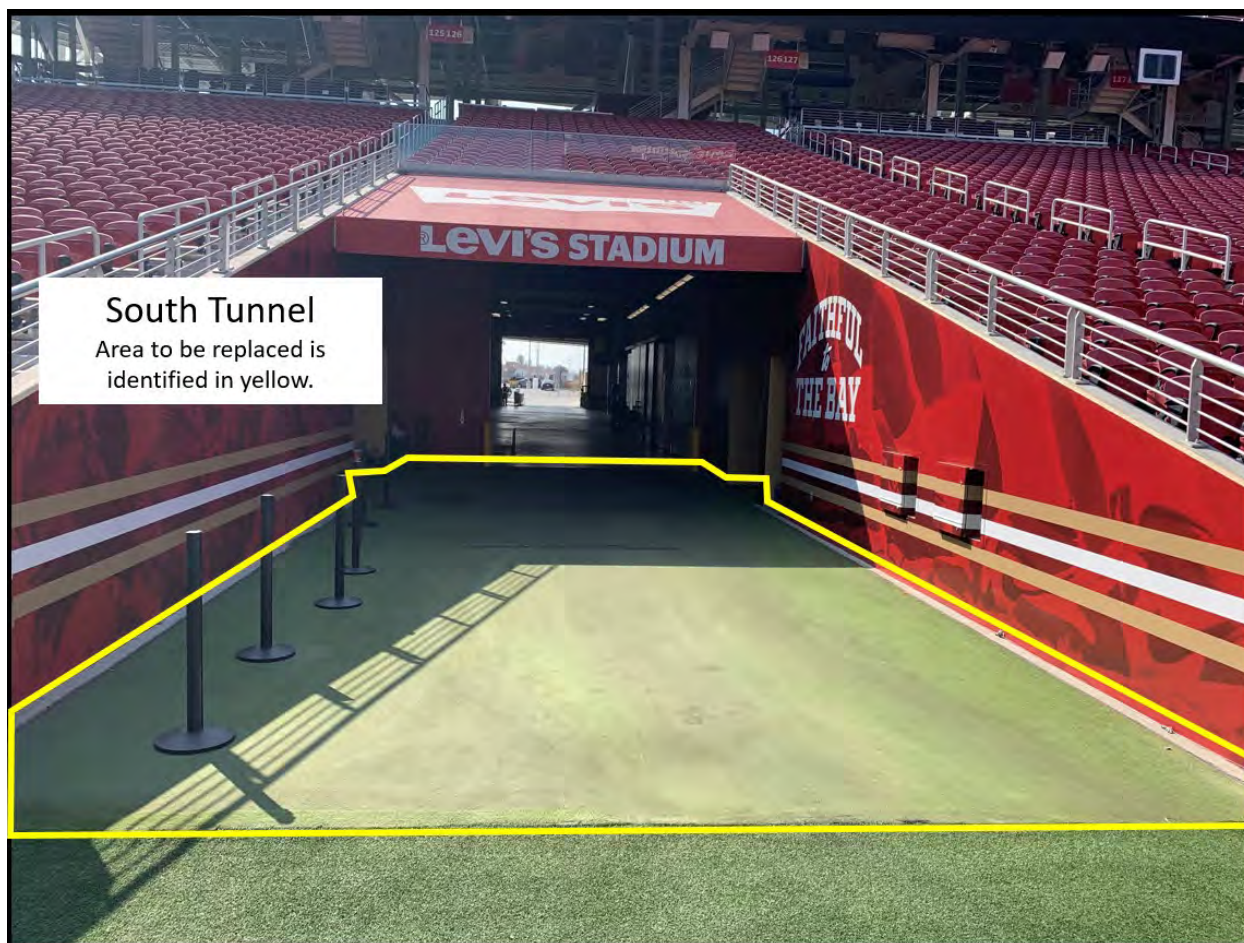


EXHIBIT “B”

PLANS AND SPECIFICATIONS

Contractor shall refer to Exhibit “A” – Services/Schedule for the Project Plans and Specifications.

EXHIBIT “C”

SPECIAL CONDITIONS

ARTICLE 1. BONDS

Within ten (10) calendar days from the date the Contractor is notified of award of the Contract, the Contractor shall deliver to the Stadium Manager four identical counterparts of the Performance Bond and Payment Bond on the forms supplied by the Stadium Manager and included as Exhibit “F” to the Contract. Failure to do so may, in the sole discretion of Stadium Manager, result in the forfeiture of Contractor’s bid security. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the Stadium Manager. The Performance Bond and the Payment Bond shall be for one hundred percent (100%) of the Total Contract Price.

EXHIBIT "D"

**CERTIFICATION
LABOR CODE - SECTION 1861**

I, the undersigned Contractor, am aware of the provisions of Section 3700, et seq., of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the Code, and I, the undersigned Contractor, agree to and will comply with such provisions before commencing the performance of the Work on this Contract.

*****INSERT CONTRACTOR NAME*****

By: _____
Signature

Name (Print)

Title (Print)

EXHIBIT "E"

PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code Sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Contractor hereby certifies that it is aware of the registration requirements set forth in Labor Code Sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.¹

Name of Contractor: _____

DIR Registration Number: _____

DIR Registration Expiration: _____

Small Project Exemption: _____ Yes or _____ No

Unless Contractor is exempt pursuant to the small project exemption, Contractor further acknowledges:

- Contractor shall maintain a current DIR registration for the duration of the project.
- Contractor shall include the requirements of Labor Code Sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
- Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Contractor _____

Signature _____

Name and Title _____

Dated _____

¹ If the Project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark "Yes" in response to "Small Project Exemption."

EXHIBIT “F”

PAYMENT AND PERFORMANCE BONDS

ATTACHED BEHIND THIS PAGE

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the Forty Niners Stadium Management Company LLC (hereinafter referred to as "Stadium Manager") has awarded to _____, (hereinafter referred to as the "Contractor") _____ an agreement for _____ (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the Stadium Manager in the sum of _____ DOLLARS, (\$_____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the Indemnified Parties, as stipulated and defined in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by Stadium Manager, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the Stadium Manager from loss or damage resulting from or caused by defective materials or faulty workmanship, Surety shall undertake and faithfully fulfill all such obligations. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the Stadium Manager's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the Stadium Manager to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the Stadium Manager's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the Stadium Manager, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the Stadium Manager under the Contract and any modification thereto, less any amount previously paid by the Stadium Manager to the Contractor and any other set offs pursuant to the Contract Documents.
- (3) Permit the Stadium Manager to complete the Project in any manner consistent with local, California and federal law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the Stadium Manager under the Contract and any modification thereto, less any amount previously paid by the Stadium Manager to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the Stadium Manager may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the Stadium Manager, when declaring the Contractor in default, notifies Surety of the Stadium Manager's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project, including but not limited to the provisions of Sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__).

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

(Attach Attorney-in-Fact Certificate)

Title _____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$_____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or Representative for service of process in California, if different from above)

(Telephone number of Surety and Agent or Representative for service of process in California)

NOTE: A copy of the Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

Title or Type of Document

- ☐ Partner(s) ☐ Limited
 ☐ General

Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the Forty Niners Stadium Management Company LLC (hereinafter designated as the "Stadium Manager"), by action taken or a resolution passed _____, 20____ has awarded to _____ hereinafter designated as the "Principal," a contract for the work described as follows:

_____ (the "Project"); and

WHEREAS, the work to be performed by the Principal is more particularly set forth in the Contract Documents for the Project dated _____ ("Contract Documents"), the terms and conditions of which are expressly incorporated by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the Stadium Manager in the penal sum of _____ Dollars (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or

subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or Stadium Manager and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned and the provisions of Sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____
Attorney-in-Fact

Title _____

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached. A Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

NOTE: A copy of the Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

EXHIBIT "G"

PROCUREMENT AND CONTRACT PROCESS INTEGRITY AND CONFLICT OF INTEREST GUIDELINES

1 PURPOSE

1.1 The purpose of these Guidelines is to ensure integrity in the Stadium Manager's procurement and contract processes, to educate Stadium Manager employees, consultants, uncompensated outside parties and any person involved in the decision to award a contract about potential Conflicts of Interest, and to establish guidelines for procedural screening of Conflicts of Interest.

1.2 The Stadium Manager desires to provide a fair opportunity to participants in competitive processes for the award of Stadium Manager contracts by promulgating integrity and removal of Conflicts of Interest in all competitive solicitations.

2 DEFINITIONS

2.1 PURCHASING MANAGER

"Purchasing Manager" is the Stadium Manager representative designated by the Stadium Manager to be responsible for the Stadium Manager's procurement process.

2.2 ELECTED OFFICIAL

"Elected Official" means the City of Santa Clara Mayor, Council Members, City Clerk, and Chief of Police.

2.3 COUNCIL APPOINTEES

"Council Appointees" means the City of Santa Clara City Manager, City Attorney, and City Auditor.

2.4 SOLICITATION

"Solicitation" means, but is not limited to, specification development, preparation and issuance of requests for proposals, quotes, qualifications or bids, evaluation of responses and submissions, and other evaluations which lead to an award of a Stadium Manager contract.

3 GENERAL PROVISIONS

3.1 COMMUNICATION PROTOCOL

3.1.1 Prior to Issuance of Solicitations: Prior to the issuance of Solicitations, contact between prospective respondents and Stadium Manager staff, consultants or City of Santa Clara elected officials is permissible.

3.1.2 After Issuance of Solicitations and prior to Submission deadline for Solicitations: After issuance of Solicitations, all contact between prospective respondents and the Stadium Manager with regard to the Solicitation must be directed to the procurement contact designated in the Solicitation. Stadium Manager staff and consultants will refer all inquiries with regard to the Solicitation to the procurement contact. All requests for clarification, objections to the structure, content, or distribution of a Solicitation, or other inquiries must be made in writing and the Stadium Manager shall answer to these clarifications, objections, and inquiries in writing via addenda to the Solicitation.

3.1.3 After Submission Deadline of Solicitations and prior to Issuance of a Notice of Intended Award: After the submission deadline of Solicitations, all contact regarding the procurement between respondents and the Stadium Manager and participants in the evaluation process, who are not Stadium Manager employees or representatives, must be directed to the procurement

contact designated in the Solicitation. Stadium Manager staff and consultants will refer all inquiries to the procurement contact identified in the Solicitation document.

3.1.4 After Issuance of a Notice of Intended Award: The Stadium Manager will issue a notice of intended award to all respondents including the basis for selection and instructions for filing a protest. All respondents shall follow the procedures for protest as indicated in the Solicitation document. During the protest period, Stadium Manager staff and consultants will refer all inquiries to the procurement contact identified in the Solicitation document.

3.1.5 After Completion of Protest Period: After completion of the protest period contact between prospective respondents and Stadium Manager staff, consultants and City of Santa Clara elected officials is permissible.

4 RESPONDENT'S CODE OF CONDUCT

By submitting a response to a Stadium Manager Solicitation, respondents are individually and solely responsible for ensuring compliance with these Guidelines on behalf of the respondent's employees, agents, consultants, lobbyists, or other parties or individuals engaged for purposes of developing or supporting a response. In addition to adhering to these Guidelines, respondents may not collude, directly or indirectly among themselves in regard to the amount, terms or conditions of a Solicitation, influence any Stadium Manager staff member or evaluation team member throughout the solicitation process, including the development of specifications, submit incorrect information in the response to a Solicitation or misrepresent, or fail to disclose material facts during the evaluation process. Any evidence indicating a respondent has failed to adhere with any section of these Guidelines may result in the respondent's disqualification from the procurement as well as possible debarment.

5 CONFIDENTIALITY DURING EVALUATION PROCESS

5.1 Stadium Manager staff, consultants, and outside evaluators who are participants in the evaluation process are required to sign a confidentiality agreement which binds the participants not to share any information about responses received and the evaluation process until the Stadium Manager issues a notice of intended award.

6 CONFLICT OF INTEREST

6.1 Elected officials, appointed officials, their staffs, and Stadium Manager employees and consultants are expected to avoid any conflicts of interest. Further, such individuals should avoid the appearance of conflicts of interest in order to ensure that Stadium Manager decisions are made in an independent and impartial manner. In general, the designated Stadium Manager procurement contact, in consultation with the Stadium Manager's Chief Financial Officer ("CFO") shall take measures to ensure that the Stadium Manager avoid any conflict of interests in procurement processes of Stadium Manager contracts. Specifically, these measures include that:

6.1.1 Persons who may not be regularly involved in Stadium Manager procurements review this Exhibit and other ethical standards and elicit such information from them to enable the Stadium Manager to determine if the person's participation would create a conflict of interest. Such persons shall include, but are not limited to:

- authors of specifications
- paid and unpaid evaluators
- paid and unpaid consultants who assist in the procurement process

6.1.2 The CFO shall discuss any potential conflict of interest identified with Stadium Manager's legal department and document the resulting determination, and take appropriate action including, but not limited to, removal of an employee, consultant, or outside uncompensated party from the procurement activity or cancellation of a Solicitation.

7 ALLEGATIONS OF CONFLICT OF INTEREST

7.1.1 Prior to the Solicitation release, up to award of contract, any allegations of conflict of interest by a Stadium Manager employee, consultant, or other participant in the pre- Solicitation and Solicitation process shall be reported to the CFO. The CFO shall investigate the alleged conflict of interest in consultation with the Stadium Manager's legal department and document the resulting determination.

8 ALLEGATIONS OF MISCONDUCT

8.1.1 At any time during a Solicitation process, any misconduct by a Stadium Manager employee, consultant, or other participant in the pre-Solicitation and Solicitation process, shall be reported to the CFO. The CFO shall investigate the alleged misconduct, in consultation with the procurement contact, and others, as appropriate. Nothing in these guidelines is intended to prohibit anyone from communicating with the CFO or legal department about any alleged misconduct.

EXHIBIT “H”

LEVI’S STADIUM JOBSITE RULES

The Contractor (to include all contractors, vendors, subcontractor and employees of each) shall adhere to the following rules while on site:

1. Contractor shall park in only approved Contractor designated parking areas as identified by Stadium Manager.
2. No smoking, drugs, or alcohol permitted on site.
3. Contractor work area must be left in a clean, neat and orderly condition at the end of each day. If the Contractor fails to perform daily cleaning the Stadium Manager reserves the right to clean up debris at Contractor expense.
4. Contractor shall coordinate with Stadium Manager for use of restroom facilities prior to Project.
5. Contractor to schedule work hours with Stadium Manager prior to Project. Work outside of regularly schedule hours shall require prior written approval by Stadium Manager.
6. Contractor shall coordinate employee break areas with the Stadium Manager prior to Project. All lunch and break debris generated by the Contractor must be disposed of immediately in appropriate containers (i.e. glass, aluminum, cardboard, etc.).
7. No radios, iPods, music devices with earbuds, etc. allowed. NO EXCEPTIONS.
8. Contractor shall report Project status to the Stadium Manager weekly and provide an update on the progress of the work. Contractor shall contact Stadium Manager immediately should any incidents occur or if any conflicts with these jobsite rules should arise.
9. Personal Protective Equipment (“PPE”), including but not limited to, proper safety clothing MUST be worn at all times while on jobsite. Any personnel without proper safety clothing will not be allowed on site. This include office personnel and visitors. Appropriate PPE shall be coordinated with the Stadium Manager prior to Project.
10. The Contract supervisor assigned to this job must have the ability to make employees follow ALL jobsite rules.
11. NO children (under 18 years old) are allowed on site.
12. Contractor, to include all employees and visitors, must register each day for stadium access through the Stadium Manager provided visitor management and access control system. Contractor employees are subject to health screening prior to approval of site access. Contractor employees shall adhere to all Stadium Manager site access requirements.
13. Contractors and all employees must stay in their area as required and defined in the Project scope of work. Any Contractor employee found outside of the authorized Project area will be removed from the property and may not return to the site.
14. Contractor Equipment / Vehicles – Contractor shall coordinate delivery and use of all equipment brought and used on site (owned or rented) with the Stadium

Manager prior to Project. Equipment shall display markings identifying the following information for each piece of equipment while on site:

- Contractor's Company Name
- Contractor's Equipment Contact
- Contact Phone Number
- Duration On-Site (i.e. 06/02/21- 06/15/21)

Equipment requiring this information includes, but is not limited to, the following types of equipment:

- Material Handling Equipment (such as Forklifts and Pallet Jacks)
- Golf Carts
- Flatbeds
- Manlifts
- Vehicles
- Job Boxes
- Trailers
- Other Equipment

Anyone operating this equipment must have the proper certifications, operate them in compliance with Cal/OSHA standards, and shall follow any Stadium Manager safety protocols.

Social Media Policy

This policy governs contractors use of social media, including any online tools used to share content and profiles, such as personal web pages, message boards, networks, communities, and social networking websites including, but not limited to, Facebook, Twitter, Instagram, LinkedIn, Snapchat, Tumblr, Reddit, and web blogs. The lack of explicit reference to a specific site or type of social media does not limit the application of this policy.

The Contractor (and all employees) are prohibited from the following:

1. Using social media to post or to display comments about Stadium Manager, the San Francisco 49ers, Levi's Stadium, co-workers, supervisors, clients, vendors, suppliers or members of management that are vulgar, obscene, physically threatening or intimidating, harassing, or otherwise constitute a violation of the Stadium Manager's workplace policies against discrimination, retaliation, harassment, or hostility on account of any protected category, class, status, act or characteristic.
2. Infringing on Stadium's logos, brand names, taglines, slogans or other trademarks. Contractors and their agents, owners, and employees shall comply with the laws regarding copyrights, trademarks, rights or publicity and other third party rights.
3. Posting or displaying content that is an intentional public attack on the quality of the Stadium's products and/or services in a manner that a reasonable person would perceive as calculated to harm the Stadium's business and is unrelated to any employee concern involving wages, hours, or other terms and conditions of employment.
4. Posting a photograph of a supervisor, manager, co-worker (including players and coaches in non-public settings), vendor, supplier, or client without that individual's express permission.

Violations of this policy may result in disciplinary action up to and including removal from the jobsite. Please contact the Stadium Manager if you have any questions about this policy.



Agenda Report

21-1425

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Report from the Stadium Authority Regarding Stadium Manager's Request to Execute Agreement with R.E. Cuddie Co. for Tunnel Slip and Fall Protection CapEx Project

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

BACKGROUND

On October 8, 2019, the Stadium Authority Board (Board) approved Ordinance No. 2005 amending Chapter 17.30 of the City Code (Stadium Authority Procurement Policy), which rescinded the delegation to the Executive Director to enter into agreements without prior Board approval. As result of Ordinance No. 2005, the Stadium Manager is also required to request Board approval before entering into agreements on behalf of the Stadium Authority. As of the effective date of the Ordinance (November 8, 2019), all Stadium Authority agreements for services, supplies, materials, and equipment require the approval of the Stadium Authority Board.

As the Stadium Manager, Forty Niners Stadium Management Company, LLC is responsible for maintaining "the Stadium in the Required Condition and operate the Stadium as a quality NFL and multi-purpose public sports, public assembly, exhibit and entertainment facility" as required by the Management Agreement between the Stadium Authority and ManCo.

The Stadium Manager is requesting approval for the following:

1. Execute a one-time agreement to R.E. Cuddie Co. in the amount of \$14,614 for removal and disposal of existing synthetic turf flooring, and furnishing and installation of new synthetic turf flooring from stadium tunnels at Levi's Stadium. This work is included in the Stadium Authority FY 2021/22 CapEx budget under the Tunnel Slip and Fall Protection line item. This was a carryover project from the FY 2019/20 CapEx Budget;
2. Authorization for the Stadium Manager to execute any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and
3. Authorization for the Stadium Manager to execute change orders up to approximately 10% of the contract cost, or \$1,461, for a total not to exceed amount of \$16,075.

DISCUSSION

Stadium Authority staff reviewed the Recommendation for Award memo, supporting procurement documents, and agreement with R.E. Cuddie Co. (these documents are attached to corresponding report #21-1424). In reviewing the request, staff recommends that the Stadium Manager's request for

delegated authority to execute any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and change orders up to approximately 10% of the contract cost, or \$1,461, be delegated instead to the Executive Director.

Section 2.1 in the First Amendment to the Management Agreement states that the Stadium Manager only has the ability to enter into contracts with providers to the extent has authority to enter into such Stadium Procurement contracts pursuant to the Santa Authority Procurement Policy. Currently, the Executive Director has no procurement delegated authority under the Stadium Authority Procurement Policy. As such, if the Board approves staff's recommendation to provide the Executive Director with such authority to execute any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and change orders up to approximately 10% of the contract cost, the Stadium Manager would not have the same authority to do so. This approach accomplishes the expediency that the Stadium Manager seeks and is compliant with the First Amendment to the Management Agreement.

Staff has no additional comments regarding the Stadium Manager's request and recommends approval of the agreement with R.E. Cuddie Co. The Stadium Authority will require full supporting documentation including compliance with prevailing wage laws, if applicable, before respectively releasing public funds upon completion of work. This requirement is consistent with the Stadium Authority Board's March 27, 2019 direction to staff to stop payment of any additional invoices for services unless there is substantial documentation of services rendered which must also be in compliance with State law and City Code.

ENVIRONMENTAL REVIEW

The actions being considered do not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment or pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potential significant impact on the environment.

FISCAL IMPACT

The Stadium Authority FY 2021/22 CapEx budget includes \$31,500 for the Tunnel Slip and Fall Protection item which the described services fall under. There are sufficient funds to cover the total cost of agreement (\$14,614) and the 10% contingency (\$1,461) that the Stadium Manager is recommending (\$16,075).

The Stadium Manager advertised the Request for Bids in the San Jose Mercury News publication for the amount of \$779. On July 13, 2021, the Stadium Authority Board previously approved up to \$20,000 for the Stadium Manager to publish legal notices in the San Jose Mercury News and Santa Clara Weekly for various solicitations.

COORDINATION

This report has been coordinated with the City's Purchasing Manager, Stadium Treasurer's Office, and Chief Assistant City Attorney.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board

outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov.

RECOMMENDATION

1. Approve the Stadium Manager's request to execute an agreement with R.E. Cuddie Co. for removal and disposal of existing synthetic turf flooring, and furnishing and installation of new synthetic turf flooring from stadium tunnels at Levi's Stadium (Tunnel Slip and Fall Protection CapEx line item) in the amount of \$14,614, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
2. Authorize the Executive Director to approve the execution of any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and
3. Authorize the Executive Director to approve the execution of change orders up to approximately 10% of the contract cost, or \$1,461, for a total not to exceed amount of \$16,075.

Prepared by: Christine Jung, Assistant to the Executive Director

Reviewed by: Deanna J. Santana, Executive Director



Agenda Report

21-1437

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Request from the Stadium Manager to Award Purchase Orders to Cintas and Twin Hill for Guest Services Uniforms and Fastenal for Stadium and Special Event Spaces CapEx Project, and Execute Agreement with MGC DBA Mission Glass Company for Command Post Window Treatment CapEx Project

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

DISCUSSION

On October 2, 2021, the Stadium Manager submitted a Recommendation for Award memo, along with supporting documentation, to request approval from the Stadium Authority Board for the following:

- Award a purchase order to Cintas for the purchase of Sullivan and New Port blazers for Guest Services uniforms, in an amount not to exceed \$4,365. Per the Stadium Manager, the cost for this service will be charged to the FY 2021/22 Stadium Operations Budget, Guest Services line item;
- Award a purchase order to Twin Hill for the purchase of Intaglio jackets and Royal Oxford shirts for Guest Services uniforms, in the amount of \$3,367. Per the Stadium Manager, the cost for this service will be charged to the FY 2021/22 Stadium Operations Budget, Guest Services line item;
- Award a purchase order to Fastenal for Waterhog premier mats to be placed at Stadium entrances to help alleviate wet floor scenarios and provide safety to Stadium patrons, in the amount of \$71,274. The mats are listed in the Stadium Authority FY 2021/22 CapEx budget under the Stadium and Special Event Spaces line item. The line item is budgeted for \$78,750 and is a carryover from FY 2019/20; and
- Execute an agreement with MGC DBA Mission Glass Company for window tinting services, in the amount of \$9,425. The services are listed in the Stadium Authority FY 2021/22 CapEx budget under the Command Post Window Treatment line item. The line item is budgeted for \$16,800 and is a carryover from FY 2019/20.

The Stadium Manager's Recommendation for Award memo describes the goods and services and the procurement processes that were implemented in more detail. The Stadium Manager's entire request totals a not to exceed amount of \$88,431.

ATTACHMENTS

1. Stadium Manager's Recommendation for Award
2. CapEx Portion of Stadium Authority FY 2021/22 Budget
3. Agreement with MGC DBA Mission Glass Company



FORTY NINERS STADIUM MANAGEMENT COMPANY

Date: October 1, 2021

To: Jim Mercurio
Executive Vice President & General Manager

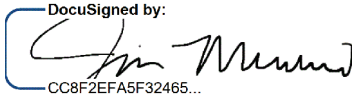
From: Jenti Vandertuig
Procurement Director

Subject: Recommendation for Award for Miscellaneous Acquisitions of Goods and Services

Recommend approval of the following acquisitions. An explanation and supporting documentation for each request has been provided with the recommendation.

1. Uniforms for Guest Services – (\$7,732.29)
2. Mats (\$71,273.75)
3. Window Tinting Services (\$9,425)

Submitted By:  Date: 10/2/2021
A4B5666F5BF147D...
Jenti Vandertuig, Procurement Director

Approved By:  Date: 10/2/2021
CC8F2EFA5F32465...
Jim Mercurio, Executive Vice President & General Manager

1. Uniforms for Guest Services

The Guest Services team are the first staff members at Levi's Stadium (Stadium) that any patron will interact with on event day, and the team that has the most interactions with these guests during the event. Guest Service Representatives (GSR) assist with ticket taking, way finding throughout the Stadium, ensuring guests are in their proper seat, and help provide excellent customer service by answering questions and proactively solving problems. This team is often seen as the face of the Stadium as they help guests who either are having difficulty navigating the Stadium or who need other assistance in the building. Acquisitions of uniforms for GSRs are required and included in the SCSA FY21/22 approved budget for Guest Services to operate throughout the year.

Stadium Manager stock up on shirts, pants and blazers worn by Guest Services Supervisors and staff, and periodically order additional items as needed. This following list of items is a purchase intended to replace old and worn-out uniforms that the staff currently have in order for us to ensure all staff are properly equipped.

Item	Description	Quantity
1	Sullivan Blazer, Grey Plaid, Size 40L	2
2	Sullivan Blazer, Grey Plaid, Size 44S	4
3	Sullivan Blazer, Grey Plaid, Size 44L	4
4	Sullivan Blazer, Grey Plaid, Size 46S	4
5	Sullivan Blazer, Grey Plaid, Size 48R	2
6	Sullivan Blazer, Grey Plaid, Size 48L	2
7	Sullivan Blazer, Grey Plaid, Size 50R	4
8	New Port Blazer, Grey Plaid, Size 16	2
9	Intaglio Suit Jacket, Vintage Khaki, Size 44 Regular	4
10	Intaglio Suit Jacket, Vintage Khaki, Size 46 Regular	3
11	Intaglio Suit Jacket, Vintage Khaki, Size 40 Long	2
12	Intaglio Suit Jacket, Vintage Khaki, Size 42 Long	2
13	Intaglio Suit Jacket, Vintage Khaki, Size 44 Long	4
14	Intaglio Suit Jacket, Vintage Khaki, Size 46 Long	1
15	Royal Oxford ML LS Shirt, white, 3233R, Size Large	4

16	Royal Oxford ML LS Shirt, white, 3233R, Size XL	4
17	Royal Oxford ML LS Shirt, white, 3235R, Size Large	6
18	Royal Oxford ML LS Shirt, white, 3235R, Size XL	6
19	Royal Oxford ML LS Shirt, white, 3237X, Size Large	4
20	Royal Oxford ML LS Shirt, white, 3237X, Size XL	4

Stadium Manager requested quotations from two suppliers, Cintas and Twin Hill, for the twenty items referenced above. Cintas provided a quotation for the Sullivan and New Port Blazers referenced in line items 1 through 8 above for \$3,797.98 excluding shipping and applicable sales tax. Twin Hill provided a quotation for items 9 through 20 above for \$3,367.29 inclusive of freight and applicable sales tax. The quotations from Cintas and Twin Hill are provided as supporting documentation.

Approval is sought to issue Purchase Orders as follows:

1. Purchase Order to Cintas for the purchase of Sullivan and New Port Blazers in the amount of \$3,797.98 plus freight and applicable sales tax for a total not to exceed amount of \$4,365.00.
2. Purchase Order to Twin Hill for the purchase of Intaglio jackets and Royal Oxford shirts in the amount of \$3,367.29.

The cost for this purchase is covered in the FY21/22 Stadium Operations Budget, Guest Services.

2. Mats

Stadium Manager has a need to procure mats for the Stadium. Entry mats need to be placed at Stadium entrances to help alleviate wet floor scenarios and provide safety to Stadium patrons. The SCSA Board approved the project as part of the FY21/22 SCSA Capital Expenditures, under General Building, Stadium and Event Spaces.

On September 17, 2021 Stadium Manager issued a Request for Quotation (RFQ) #10082 for Waterhog premier mats or an "equal" brand for the Stadium. The RFQ was emailed to four suppliers: Fastenal, Home Depot, Grainger and Palace Business Solutions. The RFQ closed on September 24, 2021 and three responses were received. The response from Grainger was incomplete. Fastenal was the lowest responsive and responsible offeror providing the products at a cost of \$65,313.86 inclusive of freight. The total amount inclusive of sales tax is \$71,273.75. The RFQ and responses received are provided as supporting documentation.

Approval is sought to issue a Purchase Order to Fastenal to procure Waterhog premier mats in the amount of \$71,273.75 inclusive of sales tax.

The cost for this purchase is covered in the FY21/22 SCSA Capital Expenditure Budget. The SCSA Capital Expenditure approved by the SCSA Board is \$78,750.

3. Window Tinting Services

Stadium Manager identified the need to install window shades and/or tint the windows to reduce the heat and glare to assist the dispatchers and command post operators working in the Command Center located at the 800 level in the Stadium. The SCSA Board approved the project as part of the FY21/22 SCSA Capital Expenditures, under General Building, Command Post Window Treatment.

On September 15, 2021 Stadium Manager issued Request for Quotation (RFQ) #10081 seeking quotations from offerors for a one-time furnish and installation of solar control film window treatment. The RFQ was emailed to three firms: Royal Glass Company, Pacific Glazing Contractors and Mission Glass Company. In addition to emailing the RFQ, Stadium Manager contacted the three firms to ensure that they received the RFQ. The RFQ closed on September 27, 2021. One response was received from Mission Glass Company to furnish and install the window treatment in accordance with the project specifications and terms for a total cost of \$9,425.00. The RFQ and response are provided as supporting documentation.

Approval is sought to issue an agreement with MGC DBA Mission Glass Company in the amount of \$9,425.

The cost for this purchase is covered in the FY21/22 SCSA Capital Expenditure Budget. The SCSA Capital Expenditure amount approved by the SCSA Board is \$16,800.

STADIUM AUTHORITY CAPITAL EXPENSE BUDGET

The Capital Expense (CapEx) Budget is used to fund the purchase or upgrade of fixed assets for the Stadium. While the funding for appropriations occur on an annual basis, the Capital Expense Plan extends for a five-year period (shown on Page 57 of this report). Changes to existing projects, as well as the addition of new projects, may occur during the five-year planning period as new needs are identified. The appropriations for capital projects do not lapse at year-end but carryover into future years until the project is complete.

The FY 2021/22 CapEx Budget totals \$14.6 million. Of this total, \$11.2 million of prior year appropriations are projected to be carried over from FY 2020/21 (\$1.5 million of the projected carryover amount is for warranty-related construction, and the other \$9.7 million is for prior year CapEx projects). New capital improvement appropriations equal \$3.4 million.

Capital project delivery continues to be delayed, without demonstrated progress on corrective action, by the Stadium Manager due to procurement issues and violations of State prevailing wage laws. While the budget reflected in this document reflects projects recommended by the Stadium Manager, the Stadium Authority continues to request a procurement plan and implementation timelines regarding how these projects will be completed to ensure the upkeep of the facility and balance any potential City resources that may be required to support the projects. In addition, with the Board's revocation of delegated procurement authority, the contract awards to complete these projects will need to be brought forward to the Board for approval. As such, the timeline to complete these projects may differ or continue to be delayed from the information presented in this section. Below is data relative to the CapEx budget for the Stadium Manager and the actual dollars expended, which demonstrate that there is valid concern for the Stadium's upkeep and surfaces questions whether the Stadium Manager can implement the CapEx budget as requested:

Fiscal Year	CapEx Budget for Stadium Manager Projects and Projects Managed by Stadium Manager	CapEx Dollars Expended by Stadium Manager
FY 2018/19	\$6.3M	\$1.4M (22% spend rate)
FY 2019/20	\$12.5M	\$254,753 (2% spend rate)
FY 2020/21 (to date)	\$8.9M	\$289,034 (3% projected)

A detailed listing of adopted FY 2021/22 projects is provided starting on Page 48 of this report. Stadium Authority is submitting it as transmitted by the Stadium Manager without any additional details on the nature of the project, timing, etc. Stadium Authority has asked almost monthly for a procurement plan for these projects, but the Stadium Manager has not produced such workplan. A capital procurement workplan is a reasonable request given the multiple years of no progress, requirements to maintain the Stadium, and transparency.

STADIUM AUTHORITY CAPITAL EXPENSE BUDGET (CONT'D)



Public Safety Kawasaki Mule
used for public safety patrol
and emergency response

Santa Clara Stadium Authority

Capital Expense Budget Summary

	2019/20	2019/20	2020/21	2020/21	2021/22	2021/22	2021/22
	Final Budget	Year-End Actuals	Final Budget	Projected Actuals	Projected Carryover	Proposed Budget	Total Proposed Budget
Beginning Balances	\$ 14,532,870	\$ 14,516,225	\$ 17,837,300	\$ 17,010,611	\$ 19,438,420		\$ 19,438,420
Resources							
Transfers In from Operating	3,478,000	2,318,549	3,582,000	3,547,379	-	3,690,000	3,690,000
Transfers In from Stadium Manager ⁽¹⁾	-	308,568	-	-	-	-	-
Total Resources	18,010,870	17,143,342	21,419,300	20,557,990	19,438,420	3,690,000	23,128,420
	2019/20	2019/20	2020/21	2020/21	2021/22	2021/22	2021/22
	Final Budget	Year-End Actuals ⁽²⁾	Final Budget	Projected Actuals	Projected Carryover ⁽³⁾	Proposed Budget	Total Proposed Budget
Expenses							
Construction	4,956,922	(4,845)	4,725,327	238,156	3,953,911	2,790,000	6,743,911
Equipment	7,070,988	136,765	6,460,557	881,414	5,286,250	448,520	5,734,770
Contingency	657,397	812	559,296	-	462,009	161,926	623,935
Stadium Warranty Related Construction	1,528,202	-	1,528,202	-	1,528,202	-	1,528,202
Total Expenses	14,213,509	132,731	13,273,382	1,119,570	11,230,372	3,400,446	14,630,818
Capital Expense Reserve	\$ 3,797,361	\$ 17,010,611	\$ 8,145,918	\$ 19,438,420	\$ 8,208,048		\$ 8,497,602

⁽¹⁾ Reimbursement from Stadium Manager

⁽²⁾ Actuals exclude some project payments withheld due to the ManagementCo not following State procurement and prevailing wage laws.

⁽³⁾ The carryover does not include the Levi's Naming Rights Signage Replacement Project that increased in cost estimate from \$650,000 to \$900,000.



Storage Conex Garage for Apparatus
allows for storage of three stadium
vehicles in a lockable, weatherproof
container.

Santa Clara Stadium Authority

2021/22 CapEx Budget

Item Type	SCSA Requested	Description	Cost	Contingency (5%)	Total Cost
General Building		General Areas / Coatings Main Deck Replace and recoat lytmal traffic deck coating at the lower seating bowl and on the 300 and 700 Level Concourses, which are currently showing signs of wear. The deck coating serves as a secondary waterproofing system for the occupied spaces below these areas and also protects and extends the life of the concrete. Periodic replacement and recoating of this system is necessary to maintain current waterproofing system and maintain the expected life of the structure.	\$ 2,450,000	\$ 122,500	\$ 2,572,500
General Building		Field Turf Track Replacement The current turf track carpet is worn, buckled and compacted from use over the past five years and has reached its end of life. This project addresses the uneven grade of the current turf track carpet. This project will remove the existing track and rebuild it using a compacted stone base and shock layer with new carpet on top. Additionally, the project scope permanently addresses the sun grade issues we experience with our current track by stabilizing the base to support the extreme loads it comes under during concerts and dirt events. Finally, the new turf track will eliminate slipping hazards and improve overall safety and appearance.	340,000	17,000	357,000
Subtotal CapEx Construction Costs			\$ 2,790,000	\$ 139,500	\$ 2,929,500
Security		Drone Detection (Antenna System) Drone intrusions are happening more frequently. We need a detection and deterrent system in place for the Security of our venue and events. This technology will assist Stadium Security and Law Enforcement in identifying any threats and to take measures to mitigate the threat.	\$ 55,000	\$ 2,750	\$ 57,750
Security		Key Management System This Key-Box system provides a full audit trail and real time reporting, detailing who has used each set of keys and when. Staff and vendors will become more accountable and will assist in return of keys at the end of each shift. This will reduce loss, damage and liability. The new system will be stationed in the 24/7 Security office.	20,000	1,000	21,000
Public Safety Equipment	x	RadHalo Remote Radiation Monitors New equipment request for the Joint Hazardous Assessment Team (JHAT): Remote radiation detection monitor can be established as a perimeter around the stadium and monitored remotely by JHAT. These units were tested last season with the help of the 95th Civil Support Team. These units proved very useful to monitor large crowds for nuclear and radiation devices that have a potential explosive threat. The team currently uses handheld detectors which are good for pinpointing an exact location around the unit; however, with 4 main gates for ingress and egress, there is no way to fully monitor the crowds for a potential threat without remove monitoring capabilities.	190,000	9,500	199,500
Public Safety Equipment	x	PPE Replacement (Nomex Tops) Projected replacement/additions of Stadium battle dress uniform tops for the team of 60.	5,750	288	6,038
Public Safety Equipment	x	PPE Replacement (Nomex Bottoms) Projected replacement/additions of Stadium battle dress uniform bottoms for the team of 60.	3,260	163	3,423

Santa Clara Stadium Authority

2021/22 CapEx Budget (cont.)

Item Type	SCSA Requested	Description	Cost	Contingency (5%)	Total Cost
Public Safety Equipment		Rigaku CQL 1064nm Handheld Raman Chemical Detector New equipment request for the Joint Hazardous Assessment Team (JHAT). This detector works as a pair with the Tru Defender. The pair combined are able to detect unknown chemicals and substances much quicker than current methods. The unit has a library of over 12,000 substances. This will be very beneficial to determine threats of substances quickly in order to determine evacuation of patrons. JHAT does not carry a detector of this capability. If JHAT came across an unknown substance, a request for mutual aid would be made with likely extended response time. This new equipment would allow the onsite JHAT to analyze substances and chemicals without immediately calling for assistance reducing the impact to the ongoing stadium event.	50,290	2,515	52,805
	x				
Public Safety Equipment		Tru Defender FTX S1 WMD Chemical Detector New equipment request for the Joint Hazardous Assessment Team (JHAT). This detector works as a pair with the Rigaku CQL Raman. The pair combined are able to detect unknown chemicals and substances much quicker than current methods. The unit has a library of over 12,000 substances. This will be very beneficial to determine threats of substances quickly in order to determine evacuation of patrons. JHAT does not carry a detector of this capability. If JHAT came across an unknown substance, a request for mutual aid would be made with likely extended response time. This new equipment would allow the onsite JHAT to analyze substances and chemicals without immediately calling for assistance reducing the impact to the ongoing stadium event.	63,220	3,161	66,381
	x				
Public Safety Equipment		Vehicle upfits for John Deere Gator Vehicle upfits for John Deere Gator including a utility box, mirrors, back up camera and a towing hitch for the E690 MCI Trailer. The mirrors and back up camera would allow for greater visibility when the vehicle is being driven in and around large crowds.	12,000	600	12,600
	x				
Public Safety Equipment		Kawasaki Mule Purchase new Kawasaki Mule for Explosive Ordinance Disposal (EOD) team. Cost includes unfitting the Kawasaki Mule with Police labels and markings, lighting and locking storage boxes. The EOD team does not currently have a dedicated vehicle and are currently walking with canines and EOD gear during response calls for suspicious packages and drone payloads. The EOD team is first on scene sweeping the stadium for safety issues and the last to leave. Shifts can extend past 10 hours. Purchase of a vehicle would reduce fatigue for officers and canines and reduce response time.	25,000	1,250	26,250
	x				
Public Safety Equipment		Kawasaki Mule Purchase new Kawasaki Mule for Special Response Team (SRT). Cost includes unfitting the Kawasaki Mule with Police labels and markings, lighting, equipment storage boxes and Type 3 IME box that is approved by the U.S. Bureau of Alcohol Tobacco and Firearms (ATF) to transport/store breacher explosives. The SRT equipment is currently in a standard size vehicle that upon deployment would not easily maneuver the stadium or crowds of attendees; the team would be required to go to the vehicle to retrieve the required equipment extending response time. The vehicle may also be deployed to City issues and the equipment would not be readily available for use. The SRT does not currently have a dedicated vehicle. Purchase of a vehicle would allow the SRT to mobilize needed equipment and will reduce response time.	\$ 20,000	\$ 1,000	\$ 21,000
	x				
Public Safety Equipment		Onsite Conex Storage Locking onsite Conex Storage container to store 3 Police Kawasaki Mules, including the requested EOD and SRT mule purchase. The Conex Storage container will be housed in a parking lot dedicated for police parking with the secured footprint of the Stadium.	4,000	200	4,200
	x				
Subtotal CapEx Equipment Costs			\$ 448,520	\$ 22,427	\$ 470,947
Total New CapEx Project Costs			\$ 3,238,520	\$ 161,927	\$ 3,400,447

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Electrical		Mechanical and Electrical Closet Lighting (2019/20 Carryover) Install LED lighting in all mechanical and electrical closets located in the service tunnel, 300 Level, and 700 level. These lights not only improve visibility, but also provide longer and more efficient power usage.	\$ 150,000	\$ 7,500	\$ 157,500
Electrical		Broadcast Booth Power (2019/20 Carryover) Install power components used for stadium events. These components will adhere to LEED certification, provide a clean source of power for our clients, and improve operating efficiencies.	35,000	1,750	36,750
Electrical		Concessions Cart Cabling (2019/20 Carryover) Install code rated low voltage cabling (CAT6) to portable concession carts. This will provide Internet Protocol (IP) based access to the IPTV menu boards and Point of Sale (POS) systems for credit card transactions, as well as deliver an emergency signage to be displayed at the concession stands if needed.	50,000	2,500	52,500
General Building		Updated Stadium Wayfinding Signage (2020/21 Carryover) Install Premium/Club wayfinding, Suite wayfinding, Smoking section signs, No smoking signs for around the main and upper concourses, section numbers/floor decals, ADA blue lines, tunnel signs that indicate "no photos/no autographs", etc.	250,000	12,500	262,500
General Building		Stadium Event Signage (2019/20 Carryover) Install stadium signage (including but not limited to tunnel awnings, accessible seating reference areas, lower bowl sections placards, and additional fire and building code signage per Fire Marshal).	138,000	6,900	144,900
General Building		Command Post Window Treatment (2019/20 Carryover) Install window shades and/or tint the exterior windows on the 800 level command post to reduce heat and glare. This will assist dispatchers and command post operators working in this space.	16,000	800	16,800
General Building		Stadium and Special Event Spaces (2019/20 Carryover) Add entry mats to be placed at stadium entrances to help alleviate wet floor scenarios and provide safety to stadium patrons. Will extend the finish of the existing flooring and help prevent slip and falls during inclement weather.	75,000	3,750	78,750
General Building		Non-Slip Floor Matting (2019/20 Carryover) Install non-slip matting from the north side locker rooms to tunnels primarily for event usage (that include access to the field for athletes, performers and customers).	50,000	2,500	52,500
General Building		Women's Locker Room (2019/20 Carryover) Convert a portion of the auxiliary locker room area to accommodate a larger private space for female athletes, performers, officials, and other female event day sporting and entertainment professionals visiting or working events at Levi's Stadium.	372,000	18,600	390,600
General Building		Automatic Logic Control Building Engineering System (2019/20 Carryover) Install an automatic logic controller system upgrade to monitor the building's HVAC in all quadrants simultaneously. This updated system will enable graphic interface and help the system to operate more efficiently with time clock management and assist in potential lighting control energy savings.	35,000	1,750	36,750
General Building		Club Space Flooring (2019/20 Carryover) Strip, resurface, and/or replace hardwood flooring surfaces in the BNY East & West and Levi's 501 spaces. These spaces are among the most utilized spaces in the building and get a large amount of foot traffic. This work will help extend the useful life of these spaces as well as reducing slips and falls from worn floors.	85,000	4,250	89,250

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
General Building		Command Post Communication Equipment (2019/20 Carryover) Purchase and install public safety screens, monitors, and projection devices used in monitoring stadium and security operations to help improve situational awareness and response.	58,000	2,900	60,900
General Building		Stadium Field Conduits (2018/19 Carryover) Add a permanent solution for power and data on field/floor of stadium, making electrical connections safer and efficient for concert and events.	118,197	5,910	124,107
Plumbing		Lift Station (2020/21 Carryover) Replace pumps, motors and controls at sewage ejector sumps in Quadrants A, B, C & D on 100 level.	200,000	10,000	210,000
Plumbing		Plumbing (2020/21 Carryover) Replace pressure reducing valves and other parts on domestic and recycled water systems.	100,000	5,000	105,000
Public Safety	X	Pedestrian Safety Fencing (2020/21 Carryover) Install raised fencing on Tasman Drive from Centennial Boulevard to Calle Del Sol. This is approximately 0.4 miles and would be adjacent to the VTA/Light Rail tracks. This fencing is required to guarantee the safety of patrons as pedestrians on Tasman Drive. Currently, pedestrians regularly jump temporary construction barriers and cross eastbound Tasman Drive and cross live/active VTA light rail tracks. In addition, during events the traffic flow is reversed and pedestrians will not expect cars coming from that direction. This poses a clear danger for pedestrians and mobile personnel are not always available to prevent this regular attempt by pedestrians. Raised fencing will guarantee this dangerous situation stops. The cost is an estimate based on the Fencing on Tasman project.	100,000	5,000	105,000
Security		Surveillance - Command Center Equipment (2020/21 Carryover) Build out workstations with equipment that can handle the load of video viewing during large scale events, as well as the 24/7 security operations in both 100 and 800 command rooms. Equipment includes, but is not limited to, monitors, keyboards, video cards, CPU processors, power supplies, motherboards, and cabling.	50,000	2,500	52,500
Security		Enhance Stadium Security Coverage (2020/21 Carryover) Evaluate and replace existing cameras with technologically advanced multi-lens panoramic/360/multi-directional cameras. Design locations and camera styles have created visual obstructions and gaps in coverage. Height locations with fixed lens cameras create the inability to adjust field of views. Installation of television monitors/signage near camera mounts have created field of view obstructions. Due to high volume of club space usage for large scale, and smaller events, request for video investigations become frequent. Low lighting situations are constant with event type needs, and enhanced technology from newer cameras will enable greater video quality. The areas which need to be evaluated include, but are not limited to: BNY Mellon East and West Club, Yahoo Club, United Club, FII Club, 501 Club, Citrix Owners Club, Entry Gates, and Perimeter fences.	\$ 330,000	\$ 16,500	\$ 346,500
Security		Enhance Stadium Security Access Control (2020/21 Carryover) Install card readers on manual doors to increase access control features and security. Based on operational demands, doors have been identified via staff request and event activity in order to improve operational awareness and enhance the access control abilities by automating the doors. This also increases security to areas deemed by staff to hold sensitive or high value assets. The access control enhancements include Vertx/Mercury upgrade, EvoE400/Mercury upgrade, and various doors with access control needs.	235,000	11,750	246,750

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Security		CCTV Pop Up Trailers (2020/21 Carryover) Purchase five (5) additional units to continue to meet NFL Best Practices guidelines by covering parking lots outside stadium footprint that currently have no camera coverage.	235,000	11,750	246,750
Security		Parking Lot Camera Upgrades (2020/21 Carryover) Replace Great America parking lot cameras with technologically advanced multi-lens panoramic/360/multi-directional cameras. New camera technology would provide better overall coverage of the main parking lot. Sun baked cameras with fixed angles have created gaps in coverage. With more video incident request coming from ingress/egress incidents, new technology would assist in these investigations. Install cameras in Gold lot 4/5 where there is very limited coverage.	40,000	2,000	42,000
Security		Bowl Camera Upgrade/Refurbish (2020/21 Carryover) Replace bowl cameras. Several bowl cameras have become sun baked and provide poor/obscured coverage of bowl seating. Maintenance has become an issue as it takes a lot of time and money to set up scaffolding to reach camera boxes. Need to re-engineer housing (suggest relocating housing closer to stadium infrastructure).	135,000	6,750	141,750
Security		Software Upgrade to Genetec 5.8 (2020/21 Carryover) Upgrade to Genetec's newest firmware version 5.8. This would improve overall system performance and stability, and add new features that will help in operator training and utilization of software. Customizable live dashboards assist in monitoring alarms and events in real time.	35,000	1,750	36,750
Security		Video Analytics (2020/21 Carryover) Add video analytics to assist with video investigations. Video investigations take several hours/days to complete using traditional playback methods. Adding video analytics will greatly decrease man-hours spent in video review process, as well as aid in investigations using newer technology.	35,000	1,750	36,750
Security		License Plate Reader at Vehicle Entry Gates (2020/21 Carryover) Add six (6) License Plate Reader cameras on entry/exit lanes of all vehicle gates (Post 1, 2, and 3) to document and track vehicles entering and exiting the stadium.	45,000	2,250	47,250
Security		Security X-Ray Scanners (2020/21 Carryover) Purchase four (4) portable X-ray units to observe postage that comes into the loading dock 24/7 and screen bags/deliveries during event days.	150,000	7,500	157,500
Security		Stadium Camera Booth Card Readers (2019/20 Carryover) Install card reader for north and south camera booths to secure the spaces that enter into/from general public access areas.	84,000	4,200	88,200
Site		Security Fencing - Main Lot (2020/21 Carryover) Remove and replace approximately 1,000 linear feet of 4-foot high security fencing in Main Lot per request of City.	150,000	7,500	157,500
Site		Stationary Electric Pressure Washers (2020/21 Carryover) Install one (1) to two (2) demo stations on the 300 concourse. If these are effective, we would look to replace all gas-powered pressure washers with electrically powered ones.	75,000	3,750	78,750
Site		Stadium Insulation (above 300 level and below 400/500 level) (2019/20 Carryover) Install new insulation in the 400/500 underside above the 300 level. Original insulation is failing due to weather conditions. This also helps reduce sound reverberation throughout the concourse and protects the concrete from the elements.	150,000	7,500	157,500

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Site		Gold Lot 4 and 5 Lighting (2019/20 Carryover) Install LED lighting in Gold 4 and Gold 5 parking lots. The current light plan is underpowered and is not sufficient given the work environment during stadium event load in/out. This lighting improves safety conditions for stadium personnel and provides energy cost savings with more efficient fixtures.	50,000	2,500	52,500
Site		Rust Prevention Mitigation (2019/20 Carryover) Implement rust prevention measures. The stadium railings, beams, and other steel areas need rust prevention and coating in specific areas throughout the stadium.	90,000	4,500	94,500
Site		Stadium Event Power Upgrades & Switchgear Electrical (2019/20 Carryover) Install and enhance Stadium Event wiring service on the 12 Kilovolt (KV) Primary Switch Gear (PMSG) to main electrical panel.	\$ 42,714	\$ 2,136	\$ 44,850
Site		Asphalt (2018/19 Carryover) Slurry coat the visitor parking on Tasman, Gold 4 & 5 parking lots and South Access Road.	190,000	9,500	199,500
Subtotal CapEx Construction Carryover Costs			\$ 3,953,911	\$ 197,696	\$ 4,151,607
Audio/Visual		Radio Booth Cabling (2019/20 Carryover) Install fiber optic cabling to increase the low voltage cabling backbone. This installation will accommodate the expanding requests for booth usage during stadium events and keep up with emerging trends.	\$ 600,000	\$ 30,000	\$ 630,000
Audio/Visual		Creston Control & Building Operating System Upgrades (2019/20 Carryover) Install a Creston Control System to monitor HVAC, lighting, electrical, and fire alarms. This comprehensive system enables all of these items to interface with one another for engineers to see a real time view of the building's systems.	10,000	500	10,500
Food and Beverage		Beverage Distribution System (2020/21 Carryover) Add a beverage distribution system to stadium concession areas and bars. This includes the lines and CO2 dispensing equipment.	50,000	2,500	52,500
Food and Beverage		CO2 Monitoring & Sensors for Code Compliance (2020/21 Carryover) Install remote CO2 monitoring for enhanced safety for stadium staff per SCFD & State of CA.	200,000	10,000	210,000
Furniture, Fixtures & Equipment		Replace Furniture in Club and Special Event Spaces (2019/20 Carryover) Purchase replacement furniture for clubs (BNY, United, Levi's 501 and Yahoo) and special event spaces to enhance areas and meet client expectations. These spaces are amongst the most utilized in the entire stadium.	1,600,000	80,000	1,680,000
Furniture, Fixtures & Equipment		Security and Life Safety Partitions/Dividers (2019/20 Carryover) Install service tunnel drapery and/or partitions for security and public safety personnel during stadium events that require public access to the service level. This helps coordinate public movements in "back of house areas" without affecting stadium operations.	68,000	3,400	71,400
Furniture, Fixtures & Equipment		Tunnel Slip and Fall Protection (2019/20 Carryover) Install non-slip material at the South, Northeast, and Northwest Field Tunnels.	30,000	1,500	31,500
Furniture, Fixtures & Equipment		Guest Service Booths (2018/19 Carryover) Add two additional guest services booths on the main concourse for better enhanced customer service touchpoints.	70,000	3,500	73,500
HVAC/Mechanical		Variable Frequency Drive(s) (2020/21 Carryover) Replace exterior Variable Frequency Drive units for Cooling Tower pumps due to life expectancy issues. This system supports the mechanical cooling functions for the HVAC system.	150,000	7,500	157,500

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
HVAC/ Mechanical		Cooling Towers (2020/21 Carryover) Replace Cooling Towers internal parts and systems. This includes the motors, fans, fill, controls, and piping which support the mechanical cooling functions for the HVAC system.	50,000	2,500	52,500
HVAC/Mechanical		Kitchen Exhaust Fans (2019/20 Carryover) Install variable frequency drive (VFD) Units on kitchen exhaust fans for soft start (slow ramp up) capabilities. Kitchen exhaust fans currently operate 100 percent of the time. Installing VFD units will modulate the power and save energy whenever the fan is in use. Soft start extends the life of the equipment and saves energy.	300,000	15,000	315,000
Information Technology		Financial Management Information System Project (2020/21 Carryover) Procure a new cloud-based financial management system for the Stadium Authority that would allow greater visibility in to Non-NFL Events. The management company that handles Non-NFL events would use the financial management system for all transactions related to Non-NFL events as well as store supporting documentation for the transactions (Including invoices). The costs include software license/subscription, hosting fee and a consultant for implementation and process improvement. There will be ongoing software license costs and possibility for additional staff time for implementation. *Subject to subsequent court rulings on cost allocation.	270,000	13,500	283,500
	x				
Life Safety/Fire		Fire Alarm System (2020/21 Carryover) Replace/update fire alarm system field devices, including interior/exterior signaling devices, detectors, and control panel parts.	250,000	12,500	262,500
Life Safety/Fire		Fire Sprinkler Extension (2019/20 Carryover) Add fire sprinklers to the Gate F entrance. The Santa Clara Fire Marshal has requested that fire sprinklers be installed at the Gate F entrance to mitigate potential fire risk beneath the existing ribbon boards.	55,000	2,750	57,750
Public Safety Equipment		Mass Casualty Incident Trailer (2020/21 Carryover) Purchase a Mass Casualty Incident (MCI) Trailer. The fire department currently has equipment to treat 25 patients during a large-scale emergency. The MCI Trailer would allow the first responders to treat between 500-1000 people during a large-scale emergency by allowing quick access to on-board equipment and supplies.	120,000	6,000	126,000
	x				
Public Safety Equipment		2-Way CAD/24-7 Link (2020/21 Carryover) Add a 2-way link between the 24/7 dispatch system and the CAD system. All stadium personnel operate on the 24/7 dispatch system. SCPD and SCFD operate on the CAD system. When public safety personnel are sent on calls, the call must be generated by hand in both systems. This causes extra work for dispatchers, however, more importantly this creates delays in reporting and responses to public safety incidents. A 2-way link would allow both systems to "talk" to each other and automatically create incidents in each other's system. Additionally, without this link, we cannot log officers on which creates an officer safety issue as well as an issue when it comes to management of personnel.	\$ 82,000	\$ 4,100	\$ 86,100
	x				
Public Safety Equipment		Dispatch Monitors (2020/21 Carryover) Replace dispatch monitors with larger screens. Our public safety dispatchers utilize several screens at their work stations in order to facilitate their duties. The necessary upgrading of our latest public safety communications center's CAD and associated software will require larger screen area to effectively manage the new information. These 16 replacement 22" larger monitors are needed to optimize the use and intended application of the latest public safety dispatching software. The larger screens are required to view the additional windows from the CAD system and are expected to last five years. The prior monitors were purchased six years ago and are 19" monitors. The cost includes estimated installation for three workstations.	8,000	400	8,400
	x				

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Public Safety Equipment	x	Radio Chargers (2020/21 Carryover) Add three radio charging stations. Our radio equipment is critical and, therefore, their serviceability must be maintained. Each new radio will require a charging port. These three charging stations each have a 6-radio capacity and three are needed to maintain radios at their peak power and usability. Having these three charging stations will ensure all radios are ready for use by public safety without the risk of personnel being without this crucial equipment in a functional state.	3,000	150	3,150
Public Safety Equipment	x	Radios (2020/21 Carryover) Add new radios to equip additional staff in our public safety deployment. Personnel will continue to use these specific radios for varied public safety responsibilities. These radios allow for communication to the command post and between public safety partners working our events. Without these critical radios, personnel would not be able to function in their capacity and as expected to provide public safety services including emergency response. There is a yearly operating cost; requesting quote.	79,000	3,950	82,950
Public Safety Equipment	x	GPS Software for Tracking Personnel (2019/20 Carryover) Add GPS software to track public safety personnel. Live tracking of law enforcement personnel is critical in providing an accurate picture of public safety coverage. This technology and software will allow the Command Post to know where our personnel are at all times and make necessary assignment adjustments on the go. It is desired that the software also be capable of retaining data for historical analysis. The requested funding of \$25,000 is the initial purchase price for approximately 100 devices and the software. There is a monthly operating cost of \$30/month each; \$36,000 total annually.	25,000	1,250	26,250
Public Safety Equipment	x	Fencing on Tasman (2019/20 Carryover) Add fencing to prevent stadium event pedestrian traffic from crossing unsafely between Lafayette St. and the Tasman St. overcrossing.	70,000	3,500	73,500
Public Safety Equipment	x	Street Signage (2017/18 Carryover) Add street signage. This item was brought before the SCSA Board and approved in the 2017/18 budget. Staff has been working with the Department of Public Works, the Executive Director's office and the Chief of Police's office to identify appropriate locations on surrounding city streets (Great America Parkway, Tasman Drive, etc.) to place signage to better protect, inform and serve patrons visiting Levi's® Stadium, non-event day traffic, community event advisories and emergency public safety and traffic advisories.	1,000,000	50,000	1,050,000
Public Safety Equipment	x	Staff Scheduling Software (2019/20 Carryover) The Stadium requires SEOs to operate safely. Notifying and communicating with our SEOs is critical in properly planning our staffing needs. We currently use an out of date version of "Game Day Staffing."	16,250	813	17,063
Public Safety Equipment	x	Portable License Plate Reader/PTZ Cameras (2018/19 Carryover) Purchase portable license plate readers. Placing temporary/moveable license plate readers in remote stadium parking lots will provide better information and intelligence to the Command Post in order to deter crime and assist in apprehending crime suspects in the aftermath of an incident.	160,000	8,000	168,000
Vertical Transport		Elevator Door Replacement (2019/20 Carryover) Replace and install new elevator doors on one of the freight elevators in the stadium.	20,000	1,000	21,000
Subtotal CapEx Equipment Carryover Costs			\$ 5,286,250	\$ 264,313	\$ 5,550,563
Stadium Warranty-Related Construction		Carryover costs from the original Stadium Construction Budget for warranty-related work.	\$ 1,528,202		\$ 1,528,202
Total CapEx Carryover Costs			\$ 10,768,363	\$ 462,009	\$ 11,230,372

Santa Clara Stadium Authority
2021/22 CapEx Project Submittal Not Recommended

Item Type	SCSA	Description	Cost	Contingency	Total Cost
	Requested			(5%)	
General Building		Levi's Naming Rights Signage Replacement (2020/21 Carryover)			
		Replace Levi's Naming Rights signage. The cost of this project increase from \$650,000 to \$900,000. Based on the Naming Rights Agreement, it is the Santa Clara Stadium Authority's position that this project is the responsibility of Levi's.	\$ 900,000	\$ 45,000	\$ 945,000
Subtotal Projects Not Recommended			\$ 900,000	\$ 45,000	\$ 945,000

The Capital Expense budget does not include the requested Levi's Naming Rights Signage Replacement Project totaling \$945,000 which includes a 5% contingency. The Naming Rights Agreement Section 5(f) states, "Naming Rights Sponsor shall be entitled, **at its sole cost and expense**, to replace, update, change, refresh or refurbish any such initial signage at any time and from time to time...". Based on this language, it is the Stadium Authority's position that the full signage replacement is the responsibility of the Naming Rights Sponsor and may constitute a gift of public funds.

There are over 40 CapEx projects that the Stadium Manager has requested over the past three fiscal years and the Stadium Manager has not been able to legally and properly implement these identified needs. The CapEx projects keep growing and, as we all know, repair and maintenance work gets more costly the longer it is delayed. Additionally, given the short turnaround time from receipt of these requests to publishing the proposed budget, the Stadium Authority did not have time to conduct any due diligence on whether the CapEx projects are properly assigned to Stadium Authority, estimated accurately, are in fact needed, or any other confirmation required to support the budgeting of these items. These items are being transmitted as submitted by the Stadium Manager and the Board would be wise to get more information about these projects and purpose for excessive delay in implementing them—including a procurement workplan that provides a schedule for project implementation.

Santa Clara Stadium Authority

Capital Expense Plan Summary - 5 Year Forecast

	2021/22	2022/23	2023/24	2024/25	2025/26
	Budget	Budget	Budget	Budget	Budget
Electrical	\$ -	\$ -	\$ 750,000	\$ 1,250,000	\$ 1,475,000
General Building	2,790,000	1,875,000	1,138,000	2,050,000	3,100,000
Plumbing	-	150,000	-	-	375,000
Public Safety	-	-	-	-	-
Security	-	150,000	-	-	1,110,000
Site	-	400,000	-	150,000	450,000
Subtotal CapEx Construction Costs	\$ 2,790,000	\$ 2,575,000	\$ 1,888,000	\$ 3,450,000	\$ 6,510,000
Audio/Visual	\$ -	\$ 870,000	\$ -	\$ -	\$ 650,000
FF&E	-	-	30,000	-	61,669
Food & Beverage	-	-	-	-	1,200,000
HVAC/Mechanical	-	150,000	-	225,000	225,000
Information Technology	-	-	-	-	-
Life Safety/Fire	-	-	-	50,000	-
Security	75,000	-	-	-	-
Public Safety Equipment	373,520	526,510	164,010	193,010	28,010
Vertical Support	-	-	-	-	-
Subtotal CapEx Equipment Costs	\$ 448,520	\$ 1,546,510	\$ 194,010	\$ 468,010	\$ 2,164,679
Contingency (5%)	161,926	206,076	104,101	195,901	433,734
Total CapEx Project Costs	\$ 3,400,446	\$ 4,327,586	\$ 2,186,111	\$ 4,113,911	\$ 9,108,413

**FORTY NINERS STADIUM MANAGEMENT COMPANY LLC
GENERAL SERVICES AGREEMENT
COMMAND POST WINDOW TREATMENT PROJECT**

1. PARTIES AND DATE.

This Agreement is made and entered into this *****INSERT DAY***** day of *****INSERT MONTH*****, 2021 by and between the Forty Niners Stadium Management Company LLC, a Delaware limited liability company ("Stadium Manager") and MGC Inc., DBA Mission Glass Company, a Corporation with its principal place of business at 200 Valley Drive, Unit 17, Brisbane, CA 94005 ("Contractor"). Stadium Manager and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

2. RECITALS.

2.1 Contractor.

Contractor desires to perform and assume responsibility for the provision of certain general services required by the Stadium Manager on the terms and conditions set forth in this Agreement. Contractor represents that it is experienced in providing window treatment services, that it and its employees or subcontractors have all necessary licenses and permits to perform the Services in the State of California, and that it is familiar with the plans of Stadium Manager. Contractor shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of Stadium Manager. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

2.2 Project.

Stadium Manager desires to engage Contractor to render such services for the Command Post Window Treatment project ("Project") as set forth in this Agreement.

3. TERMS.

3.1 Scope of Services and Term.

3.1.1 General Scope of Services. Contractor promises and agrees to furnish to the Stadium Manager all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the window treatment services necessary for the Project ("Services"). The Services are more particularly described in Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

3.1.2 Term. The term of this Agreement shall be from *****INSERT START DATE***** to *****INSERT ENDING DATE*****, unless earlier terminated as provided herein. Contractor shall complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Services.

3.2 Responsibilities of Contractor.

3.2.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Contractor or under its supervision. Contractor will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. Stadium Manager retains Contractor on an independent contractor basis and not as an employee. Contractor retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Contractor shall also not be employees of Stadium Manager and shall at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.2.2 Schedule of Services. Contractor shall perform the Services expeditiously, within the term of this Agreement, and in accordance with the Schedule of Services set forth in Exhibit "B" attached hereto and incorporated herein by reference. Contractor represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Contractor's conformance with the Schedule, Stadium Manager shall respond to Contractor's submittals in a timely manner. Upon request of Stadium Manager, Contractor shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3.2.3 Conformance to Applicable Requirements. All work prepared by Contractor shall be subject to the approval of Stadium Manager.

3.2.4 Stadium Manager's Representative. The Stadium Manager hereby designates Vice President, Stadium Operations and Strategic Planning, or his or her designee, to act as its representative for the performance of this Agreement ("Stadium Manager's Representative"). Stadium Manager's Representative shall have the power to act on behalf of the Stadium Manager for all purposes under this Agreement. Contractor shall not accept direction or orders from any person other than the Stadium Manager's Representative or his or her designee.

3.2.5 Contractor's Representative. Contractor hereby designates *****INSERT NAME OR TITLE*****, or his or her designee, to act as its representative for the performance of this Agreement ("Contractor's Representative"). Contractor's Representative shall have full authority to represent and act on behalf of the Contractor for all purposes under this Agreement. The Contractor's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.2.6 Coordination of Services. Contractor agrees to work closely with Stadium Manager staff in the performance of Services and shall be available to Stadium Manager's staff, consultants and other staff at all reasonable times.

3.2.7 Standard of Care; Performance of Employees. Contractor shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards

generally recognized as being employed by professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling necessary to perform the Services. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, including any required business license, and that such licenses and approvals shall be maintained throughout the term of this Agreement. Contractor shall perform, at its own cost and expense and without reimbursement from the Stadium Manager, any services necessary to correct errors or omissions which are caused by the Contractor's failure to comply with the standard of care provided for herein. Any employee of the Contractor or its sub-contractors who is determined by the Stadium Manager to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the Stadium Manager, shall be promptly removed from the Project by the Contractor and shall not be re-employed to perform any of the Services or to work on the Project.

3.2.8 Period of Performance

3.2.8.1 Performance Time. Contractor shall perform and complete all Services under this Agreement within the term set forth in Section 3.1.2 above ("Performance Time"). Contractor shall perform the Services in strict accordance with any completion schedule or Project milestones described in Exhibits "A" or "B" attached hereto, or which may be provided separately in writing to the Contractor. Contractor agrees that if the Services are not completed within the aforementioned Performance Time and/or pursuant to any such completion schedule or Project milestones developed pursuant to provisions of this Agreement, it is understood, acknowledged and agreed that the Stadium Manager will suffer damage.

3.2.8.2 Force Majeure. Neither Stadium Manager nor Contractor shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Agreement, such circumstances include but are not limited to, abnormal weather conditions; floods; earthquakes; fire; pandemics or epidemics; war; riots and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage or judicial restraint. Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement. Contractor's exclusive remedy in the event of delay covered under this Section shall be a non-compensable extension of the Performance Time.

3.2.8.3 Liquidated Damages. Pursuant to Government Code Section 53069.85, Contractor shall pay to the Stadium Manager as fixed and liquidated damages, and not as a penalty, the sum of \$100 per day for each and every calendar day of delay beyond the Performance Time or beyond any completion schedule or Project milestones established pursuant to this Agreement.

3.2.9 Disputes. Should any dispute arise respecting the true value of any work done, of any work omitted, or of any extra work which Contractor may be required to do, or respecting the size of any payment to Contractor during the performance of this Agreement, Contractor shall continue to perform the Work while said dispute is decided by the Stadium Manager. If Contractor disputes the Stadium Manager's decision, Contractor shall have such

remedies as may be provided by law.

3.2.10 Laws and Regulations; Employee/Labor Certifications. Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Services. If the Contractor performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the Stadium Manager, Contractor shall be solely responsible for all costs arising therefrom. Stadium Manager is subject to certain provisions of the Health & Safety Code, Government Code, Public Contract Code, and Labor Code of the State. It is stipulated and agreed that all provisions of the law applicable to the public contracts of a municipality are a part of this Agreement to the same extent as though set forth herein and will be complied with. These include but are not limited to the payment of prevailing wages, the stipulation that eight (8) hours' labor shall constitute a legal day's work and that no worker shall be permitted to work in excess of eight (8) hours during any one calendar day except as permitted by law. Contractor shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.2.10.1 Employment Eligibility; Contractor. By executing this Agreement, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Contractor. Contractor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Agreement, and shall not violate any such law at any time during the term of the Agreement. Contractor shall avoid any violation of any such law during the term of this Agreement by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Contractor shall maintain records of each such verification, and shall make them available to the Stadium Manager or its representatives for inspection and copy at any time during normal business hours. The Stadium Manager shall not be responsible for any costs or expenses related to Contractor's compliance with the requirements provided for in Section 3.2.10 or any of its sub-sections.

3.2.10.2 Employment Eligibility; Subcontractors, Sub-subcontractors and Consultants. To the same extent and under the same conditions as Contractor, Contractor shall require all of its subcontractors, sub-subcontractors and consultants performing any work relating to the Project or this Agreement to make the same verifications and comply with all requirements and restrictions provided for in Section 3.2.10.1.

3.2.10.3 Employment Eligibility; Failure to Comply. Each person executing this Agreement on behalf of Contractor verifies that they are a duly authorized officer of Contractor, and understands that any of the following shall be grounds for the Stadium Manager to terminate the Agreement for cause: (1) failure of Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in Sections 3.2.10.1 or 3.2.10.2; (2) any misrepresentation or material omission concerning compliance with such

requirements (including in those verifications provided to the Contractor under Section 3.2.10.2); or (3) failure to immediately remove from the Project any person found not to be in compliance with such requirements.

3.2.10.4 Labor Certification. By its signature hereunder, Contractor certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.2.10.5 Equal Opportunity Employment. Contractor represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

3.2.10.6 Air Quality. Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing Services, including, but not limited to, emissions limits and permitting requirements imposed by the California Air Resources Board (CARB). Contractor shall specifically be aware of the CARB limits and requirements' application to "portable equipment", which definition is considered by CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify the Indemnified Parties (defined below) against any fines or penalties imposed by CARB or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in this Agreement.

3.2.10.7 Water Quality.

(A) Management and Compliance. To the extent applicable, Contractor's Services must account for, and fully comply with, all local, state and federal laws, rules and regulations that may impact water quality compliance, including, without limitation, all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §§ 1300); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); laws, rules and regulations of the Environmental Protection Agency and the State Water Resources Control Board; the Stadium Manager's ordinances regulating discharges of storm water; and any and all regulations, policies, or permits issued pursuant to any such authority regulating the discharge of pollutants, as that term is used in the Porter-Cologne Water Quality Control Act, to any ground or surface water in the state.

(B) Liability for Non-Compliance. Failure to comply with the laws, regulations and policies described in this Section is a violation of law that may subject Contractor or Stadium Manager to penalties, fines, or additional regulatory requirements. Contractor shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless, pursuant to the indemnification provisions of this Agreement, from and against any and all fines, penalties, claims or other regulatory requirements imposed as a result of Contractor's non-compliance with the laws, regulations and policies described in this Section, unless such non-compliance is the result of the sole established negligence, willful misconduct or active negligence of the Indemnified Parties (defined below).

(C) Training. In addition to any other standard of care requirements set forth in this Agreement, Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them without impacting water quality in violation of the laws, regulations and policies described in this Section. Contractor further warrants that it, its employees and subcontractors will receive adequate training, as determined by Stadium Manager, regarding the requirements of the laws, regulations and policies described in this Section as they may relate to the Services provided under this Agreement. Upon request, Stadium Manager will provide Contractor with a list of training programs that meet the requirements of this paragraph.

3.2.11 Insurance.

3.2.11.1 Time for Compliance. Contractor shall not commence Work under this Agreement until it has provided evidence satisfactory to the Stadium Manager that it has secured all insurance required under this Section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the Stadium Manager that the subcontractor has secured all insurance required under this Section.

3.2.11.2 Minimum Requirements. Contractor shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance. The policy shall not contain any exclusion contrary to the Agreement, including but not limited to endorsements or provisions limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 29); or (2) cross liability for claims or suits by one insured against another.

(B) Minimum Limits of Insurance. Contractor shall maintain limits no less than: (1) *General Liability*: \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used including, but not limited to, form CG 2503, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability*: \$1,000,000 combined single limit for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of \$1,000,000 per accident for bodily injury or disease. Defense costs shall be paid in addition to the limits.

(C) Notices; Cancellation or Reduction of Coverage. At least fifteen (15) days prior to the expiration of any such policy, evidence showing that such insurance coverage has been renewed or extended shall be filed with the Stadium Manager. If such

Contract Number; XXXXX

coverage is cancelled or materially reduced, Contractor shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with the Stadium Manager evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, the Stadium Manager has the right but not the duty to obtain the insurance it deems necessary and any premium paid by the Stadium Manager will be promptly reimbursed by Contractor or the Stadium Manager may withhold amounts sufficient to pay premium from Contractor payments. In the alternative, the Stadium Manager may suspend or terminate this Agreement.

(D) Additional Insured. Stadium Manager, Santa Clara Stadium Authority, Forty Niners Stadium Company LLC and Forty Niners Football Company LLC and their respective officials, employees, agents and authorized volunteers shall be named as additional insureds on Contractor's and its subcontractors' policies of commercial general liability and automobile liability insurance using the endorsements and forms specified herein or exact equivalents.

3.2.11.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Contractor shall provide endorsements on forms supplied or approved by the Stadium Manager to add the following provisions to the insurance policies:

(A) General Liability. The general liability policy shall include or be endorsed (amended) to state that: (1) using ISO CG forms 20 10 and 20 37, or endorsements providing the exact same coverage, Stadium Manager, Santa Clara Stadium Authority, Forty Niners Stadium Company LLC and Forty Niners Football Company LLC and their respective officials, employees, agents and authorized volunteers shall be covered as additional insured with respect to the Services or ongoing and complete operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work; and (2) using ISO form 20 01, or endorsements providing the exact same coverage, the insurance coverage shall be primary insurance as respects any party named as an additional insured pursuant to this Agreement, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any excess insurance shall contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of the any party named as an additional insured pursuant to this Agreement, before the additional insured's own primary insurance or self-insurance shall be called upon to protect it as a named insured. Any insurance or self-insurance maintained by the additional insureds shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way. Notwithstanding the minimum limits set forth in Section 3.2.11.2(B), any available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as additional insureds pursuant to this Section 3.2.11.3(A).

(B) Automobile Liability. The automobile liability policy shall include or be endorsed (amended) to state that: (1) Stadium Manager, Santa Clara Stadium Authority, Forty Niners Stadium Company LLC and Forty Niners Football Company LLC and their respective officials, employees, agents and authorized volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible; and (2) the insurance coverage shall be primary insurance as respects any party named as an additional insured pursuant to this Agreement, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any

Contract Number; XXXXX

insurance or self-insurance maintained by any party named as an additional insured pursuant to this Agreement shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way. Notwithstanding the minimum limits set forth in Section 3.2.11.2(B), any available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as additional insureds pursuant to this Section 3.2.11.3(B).

(C) Workers' Compensation and Employer's Liability Coverage.

The insurer shall agree to waive all rights of subrogation against the Stadium Manager, Santa Clara Stadium Authority, Forty Niners Stadium Company LLC and Forty Niners Football Company LLC and their respective officials, employees, agents and authorized volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Contractor.

(D) All Coverages. Each insurance policy required by this Agreement shall be endorsed to state that: (A) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days (10 days for nonpayment of premium) prior written notice by certified mail, return receipt requested, has been given to the Stadium Manager; and (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the Stadium Manager, its officials, officers, employees, agents, and volunteers. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the Stadium Manager, its officials, officers, employees, agents and volunteers, or any other additional insureds.

3.2.11.4 Separation of Insureds; No Special Limitations; Waiver of Subrogation. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the Stadium Manager, Santa Clara Stadium Authority, Forty Niners Stadium Company LLC and Forty Niners Football Company LLC and their respective officials, employees, agents and authorized volunteers. All policies shall waive any right of subrogation of the insurer against any party named as an additional insured pursuant to this Agreement, or shall specifically allow Contractor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against any party named as an additional insured pursuant to this Agreement, and shall require similar written express waivers and insurance clauses from each of its subcontractors.

3.2.11.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Stadium Manager. Contractor shall guarantee that, at the option of the Stadium Manager, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Stadium Manager, its officials, officers, employees, agents, and volunteers; or (2) the Contractor shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.2.11.6 Subcontractor Insurance Requirements. Contractor shall not allow any subcontractors to commence work on any subcontract relating to the work under the Agreement until they have provided evidence satisfactory to the Stadium Manager that they have secured all insurance required under this Section. If requested by Contractor, the Stadium Manager may approve different scopes or minimum limits of insurance for particular subcontractors. The Contractor and the Stadium Manager shall be named as additional insureds on all subcontractors' policies of Commercial General Liability using ISO form 20 38, or coverage

at least as broad.

3.2.11.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Stadium Manager.

3.2.11.8 Verification of Coverage. Contractor shall furnish Stadium Manager with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the Stadium Manager. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the Stadium Manager if requested. All certificates and endorsements must be received and approved by the Stadium Manager before work commences. The Stadium Manager reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.2.11.9 Reporting of Claims. Contractor shall report to the Stadium Manager, in addition to Contractor's insurer, any and all insurance claims submitted by Contractor in connection with the Services under this Agreement.

3.2.12 Safety. Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life saving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

3.2.13 Accounting Records. Contractor shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Contractor shall allow a representative of Stadium Manager during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Contractor shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

3.3 Fees and Payments.

3.3.1 Compensation. Contractor shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "C" attached hereto and incorporated herein by reference. The total compensation shall not exceed Nine Thousand Four Hundred and Twenty-Five Dollars (\$9,425.00) without written approval of Stadium Manager or designee. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

3.3.2 Payment of Compensation. Contractor shall submit to Stadium Manager a monthly itemized statement which indicates work completed and hours of Services rendered by

Contractor. The statement shall describe the amount of Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. Stadium Manager shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

3.3.3 Reimbursement for Expenses. Contractor shall not be reimbursed for any expenses unless authorized in writing by Stadium Manager.

3.3.4 Extra Work. At any time during the term of this Agreement, Stadium Manager may request that Contractor perform Extra Work. As used herein, "Extra Work" means any work which is determined by Stadium Manager to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Contractor shall not perform, nor be compensated for, Extra Work without written authorization from Stadium Manager's Representative.

3.3.5 California Labor Code Requirements

a. Contractor is aware of the requirements of California Labor Code Sections 1720 et seq. and 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects ("Prevailing Wage Laws"). If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. Contractor shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It shall be mandatory upon the Contractor and all subcontractors to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code Sections 1771, 1774 and 1775), employment of apprentices (Labor Code Section 1777.5), certified payroll records (Labor Code Sections 1771.4 and 1776), hours of labor (Labor Code Sections 1813 and 1815) and debarment of contractors and subcontractors (Labor Code Section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code Section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

b. If the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Contractor and all subcontractors performing such Services must be registered with the Department of Industrial Relations. Contractor shall maintain registration for the duration of the Project and require the same of any subcontractors, as applicable. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

c. This Agreement may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Contractor's sole responsibility to comply with all applicable registration and labor compliance requirements. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Services, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay and shall not be compensable by the Stadium Manager. Contractor

shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

3.4 Termination of Agreement.

3.4.1 Grounds for Termination. Stadium Manager may, by written notice to Contractor, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Contractor of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Contractor shall be compensated only for those Services which have been adequately rendered to Stadium Manager, and Contractor shall be entitled to no further compensation. Contractor may not terminate this Agreement except for cause.

3.4.2 Effect of Termination. If this Agreement is terminated as provided herein, Stadium Manager may require Contractor to provide all finished or unfinished Documents and Data and other information of any kind prepared by Contractor in connection with the performance of Services under this Agreement. Contractor shall be required to provide such document and other information within fifteen (15) days of the request.

3.4.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, Stadium Manager may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.5 General Provisions.

3.5.1 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Contractor:

MGC Inc., DBA Mission Glass Company
200 Valley Drive, Unit 17
Brisbane, CA 94005
Attn: Rachel Dallara, Operations Manager

Stadium Manager:

Forty Niners Stadium Management Company LLC
4900 Marie DeBartolo Way
Santa Clara, CA 95054
Attn: Ryan van Maarth, Vice President, Stadium Operations and Strategic Planning

With copy to:

Legal Affairs
Forty Niners Stadium Management Company LLC
4949 Marie P. DeBartolo Way
Santa Clara, CA 95054

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.5.2 Indemnification.

3.5.2.1 Scope of Indemnity. To the fullest extent permitted by law, Contractor shall defend, indemnify and hold the Stadium Manager, the Santa Clara Stadium Authority, the City of Santa Clara, their affiliates, and each of their respective officers, directors, managers, members, partners, owners, employees, agents and authorized volunteers, each tenant and event promoter of Levi's Stadium, and any mortgagee, bond trustee or other financial institution from time to time holding a line or indenture upon an interest in Levi's Stadium, and each of them (collectively, the "Indemnified Parties"), free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions of Contractor, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Contractor's Services, the Project or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses, except for any claims, demands, causes of action, costs, expenses, liabilities, losses, damage or injuries arising through the sole negligence or willful misconduct of the Indemnified Parties.

3.5.2.2 Additional Indemnity Obligations. Contractor shall defend, with Counsel of Stadium Manager's choosing and at Contractor's own cost, expense and risk, any and all claims, suits, actions or other proceedings of every kind covered by Section 3.5.2.1 that may be brought or instituted against the Indemnified Parties. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the Stadium Manager or its officials, officers, employees, volunteers and agents as part of any such claim, suit, action or other proceeding, except for any judgments, awards or decrees arising through the sole negligence or willful misconduct of the Indemnified Parties, or its officials, officers, employees, agents or independent contractors. Contractor shall also reimburse the Indemnified Parties for the cost of any settlement paid by the Indemnified Parties as part of any such claim, suit, action or other proceeding, except for any costs of settlements arising through the sole negligence or willful misconduct of the Indemnified Parties. Such reimbursement shall include payment for the Indemnified Parties' attorney's fees and costs, including expert witness fees. Contractor shall reimburse the Indemnified Parties, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided, except for any legal expenses and costs arising through the sole negligence or willful misconduct of the Indemnified Parties. Contractor's obligation to indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by the Indemnified Parties.

3.5.3 Governing Law; Government Code Claim Compliance. This Agreement shall be governed by the laws of the State of California. Venue shall be in Santa Clara County, California. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Contractor must comply with the claim procedures set forth in Government Code Sections 900 et seq. prior to filing any lawsuit against the Stadium Manager. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters

Contract Number; XXXXX

that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Contractor shall be barred from bringing and maintaining a valid lawsuit against the Stadium Manager.

3.5.4 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.5.5 Stadium Manager's Right to Employ Other Contractors. Stadium Manager reserves right to employ other contractors in connection with this Project.

3.5.6 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

3.5.7 Assignment or Transfer. Contractor shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of the Stadium Manager. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.5.8 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Contractor include all personnel, employees, agents, and subcontractors of Contractor, except as otherwise specified in this Agreement. All references to Stadium Manager include its officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

3.5.9 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.5.10 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

3.5.11 No Third Party Beneficiaries. Except to the extent expressly provided for in Section 3.5.7, there are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.5.12 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5.13 Prohibited Interests. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement. Further, Contractor warrants that it has not

Contract Number; XXXXX

paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, Stadium Manager shall have the right to rescind this Agreement without liability. For the term of this Agreement, no official, officer or employee of Stadium Manager, during the term of his or her service with Stadium Manager, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.5.14 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.5.15 Attorneys' Fees and Costs. If any action in law or equity, including an action for declaratory relief, is brought to enforce or interpret the provisions of this Agreement, the prevailing Party shall be entitled to recover from the losing party attorney's fees and costs in an amount determined to be reasonable by a court of competent jurisdiction.

3.5.16 Stadium Manager to Enter Agreement. Contractor has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.5.17 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.5.18 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both parties.

[SIGNATURES ON NEXT PAGE]

Contract Number; XXXXX

**SIGNATURE PAGE FOR GENERAL SERVICES AGREEMENT
BETWEEN THE FORTY NINERS STADIUM MANAGEMENT COMPANY LLC
AND
MGC INC., DBA MISSION GLASS COMPANY**

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the *****INSERT DAY***** day of *****INSERT MONTH*****, *****INSERT YEAR*****.

FORTY NINERS STADIUM
MANAGEMENT COMPANY LLC

MGC INC., DBA MISSION GLASS COMPANY

By: _____
Jim Mercurio
Executive Vice President and
General Manager

By: _____
Its: _____
Printed Name: _____

EXHIBIT "A"
SCOPE/SPECIFICATIONS

Contractor shall furnish and install Llumar ATR-15 or "equal", to include any necessary accessories per the Llumar ATR-15 manufacturer specifications, which are included in Attachment A-1 for reference.

INSTALLATION

Contractor is responsible for the installation and material requirements per the manufacturer requirements. Contractor shall provide all tools, labor, materials, and accessories necessary to complete the installation per the manufacturer requirements.

Contractor shall install the solar control film over the entire window. A total of nine (9) windows will receive the solar control film installation. The window sizes are as follows:

DESCRIPTION	QUANTITY	WINDOW WIDTH	WINDOW HEIGHT
Window #1	One (1) Each	20-inches	128-inches
Window #2	Eight (8) Each	47-inches	128-inches

Contractor should note that the windows are installed above a counter, so the bottom height of the windows start at an elevation of 29-inches Above Finished Floor (AFF). Images of the windows with dimensions are shown in Attachment A-2 for reference. It is anticipated that the solar control film will be installed from the inside of room 08.41.01.

Contractor is required to deliver and install the materials at the Levi's Stadium, which is located at the following address:

Levi's Stadium
4900 Marie P. DeBartolo Way
Santa Clara, CA 95054

SCHEDULE

Delivery and installation of materials is required within 60 calendar days from receipt of Agreement issued by Stadium Manager. Contractor shall coordinate with Stadium Manager to schedule delivery, site access, and installation of materials.

Guide Specifications

Section 08-87-13

EASTMAN

SOLAR-CONTROL FILMS

LLumar® Spectrally-Selective Series

Note: Click on "Show/Hide ¶" button to reveal "Specifier Notes" throughout section. Delete this text when editing is complete.

PART 1 - GENERAL**1.1 CONDITIONS AND REQUIREMENTS**

- A. The General Conditions, Supplementary Conditions, and Division 01 – General Requirements apply.

1.2 SECTION INCLUDES

- A. Solar-control films.
- B. [Insert item description.]

1.3 RELATED SECTIONS

- A. Section 08 80 00 - Glazing: Substrate for application of solar-control film.
- B. Section [xxxx] – [Section Title]: [Include brief description of work specified in another section that is related to the work of this section.]

1.4 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM E903 - Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.

1.5 DEFINITIONS

- A. Spectrally-Selective Films: Film products that reduce solar heat gain by selectively reducing the transmission of near-infrared solar radiation more than reducing visible light. Films with a Light to Solar Heat Gain Ratio of above 1.00 are spectrally selective.

1.6 PERFORMANCE REQUIREMENTS

- A. Spectrally-selective solar-control film products shall help improve solar heat and UV reduction, glare reduction, privacy, fade protection, and aesthetic characteristics when applied to glass surfaces.
- B. Ultraviolet Transmission: Provide solar-control films with UV absorbing materials that limit the weighted UV Transmission to one (1) percent or less when measured according to ASTM E903.
- C. Provide solar-control films that do not have a masking sheet.

1.7 SUBMITTALS

Project Name
Project Location

Project Number
08-87-13

Date
Solar-control Films

- A. Submit under provisions of Section [01 33 00] [_____].
- B. Product Data: Submit for each product specified indicating:
 - 1. Performance properties.
 - 2. Preparation and installation instructions and recommendations.
 - 3. Storage and handling recommendations.
- C. Samples: For each type of solar-control film specified, two (2) samples, 12 inches square.
- D. Qualification Data: Submit documentation indicating qualifications of solar-control film manufacturer.
- E. Operation and Maintenance Data: Submit for solar-control film to include in maintenance manuals.
- F. Warranty: Submit sample special warranty specified in this section.

1.8 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer that has a minimum of 10 years of documented experience manufacturing solar-control films similar to be used for this project.
- B. Installer Qualifications: A firm that is authorized by solar-control film manufacturer to install film in accordance with guidelines set forth by the manufacturer.
- C. Source Limitations: Obtain each type of solar-control film from same manufacturer.
- D. Mock-ups: Build mock-ups to verify selections made under sample submittals and to evaluate surface preparation techniques and application workmanship.
 - 1. Construct mock-ups in the location and of the size indicated or, if not indicated, as directed by Architect.
 - 2. Approved mock-ups may become part of the completed work if undisturbed at time of Substantial Completion.
- E. Pre-installation Conference: Conduct conference at project site to discuss methods and procedures relating to installation of the solar-control films.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, and handle materials in manufacturer's protective packaging.
- B. Store and protect materials according to manufacturer's written recommendations to prevent damage from condensation, temperature changes, direct exposure to sun, or other causes.

1.10 SITE CONDITIONS

- A. Ambient Conditions: Maintain temperature, humidity, and ventilation within limits recommended by manufacturer.

1.11 LIMITED WARRANTY

- A. Manufacturer's Limited Warranty: Certain restrictions apply. The Manufacturer's Limited Warranty can be viewed in full by [clicking here](#).

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: The design for spectrally-selective solar-control films is based on LLumar® Spectrally-Selective Series Solar-Control Films manufactured by an Eastman Performance Films, LLC, 575 Maryville Centre Drive, St. Louis, Missouri 63141; Telephone: 800-851-7781 (Option 2); <https://northamerica.llumar.com/contact-llumar>; Web Site: www.llumar.com.
- B. Representative: [Insert contact information.]
- C. Substitutions will be considered, subject to compliance with requirements of this section, under provisions of Section 01 60 00.

2.2 SOLAR-CONTROL FILMS

- A. Solar-control Film: Vista™ by LLumar® Spectrally-Selective Performance VS20SRCDF Film with the following performance characteristics when applied to the interior surface of single-pane, 1/4-inch clear glass:

% Total Solar Transmittance	13
% Total Solar Reflectance	45
% Total Solar Absorptance	42
% Visible Light Transmission	23
% Visible Light Reflection – Exterior	45
% Visible Light Reflection – Interior	35
Winter U-Value	0.85
Shading Coefficient	0.27
% Ultraviolet Ray Protection (300nm-380nm)	>99
Emissivity	0.52
Solar Heat Gain Coefficient	0.24
% Total Solar Energy Rejected	76
Light-to-Solar Heat Gain Ratio	0.96
% Summer Solar Heat Reduction	71
% Winter Heat Loss Reduction	17
% Glare Reduction	74
Thickness without Liner	50 μ - 2mil
Film Color	Neutral

- B. Solar-control Film: Vista™ by LLumar® Spectrally-Selective Performance VS30SRCDF Film with the following performance characteristics when applied to the interior surface of single-pane, 1/4-inch clear glass:

% Total Solar Transmittance	16
% Total Solar Reflectance	44
% Total Solar Absorptance	40
% Visible Light Transmission	28
% Visible Light Reflection – Exterior	42
% Visible Light Reflection – Interior	38
Winter U-Value	0.86
Shading Coefficient	0.30
% Ultraviolet Ray Protection (300nm-380nm)	>99
Emissivity	0.53
Solar Heat Gain Coefficient	0.26
% Total Solar Energy Rejected	74
Light-to-Solar Heat Gain Ratio	1.08
% Summer Solar Heat Reduction	68
% Winter Heat Loss Reduction	17
% Glare Reduction	68
Thickness without Liner	50 μ - 2mil
Film Color	Neutral

- C. Solar-control Film: Vista™ by LLumar® Spectrally-Selective Performance VS50SRCDF Control Film with the following performance characteristics when applied to the interior surface of single-pane, 1/4-inch clear glass:

% Total Solar Transmittance	30
% Total Solar Reflectance	35
% Total Solar Absorptance	35
% Visible Light Transmission	50
% Visible Light Reflection – Exterior	29
% Visible Light Reflection – Interior	24
Winter U-Value	0.86
Shading Coefficient	0.44
% Ultraviolet Ray Protection (300nm-380nm)	>99
Emissivity	0.54
Solar Heat Gain Coefficient	0.39
% Total Solar Energy Rejected	61
Light-to-Solar Heat Gain Ratio	1.28
% Summer Solar Heat Reduction	52
% Winter Heat Loss Reduction	17
% Glare Reduction	43
Thickness without Liner	50 μ - 2mil
Film Color	Neutral

- D. Solar-control Film: Vista™ by LLumar® Spectrally-Selective Series VS60SRCDF Film with the following performance characteristics when applied to the interior surface of single-pane, 1/4-inch clear glass:

% Total Solar Transmittance	34
% Total Solar Reflectance	24
% Total Solar Absorptance	42
% Visible Light Transmission	66
% Visible Light Reflection – Exterior	10
% Visible Light Reflection – Interior	10
Winter U-Value	0.87
Shading Coefficient	0.52
% Ultraviolet Ray Protection (300nm-380nm)	>99
Emissivity	0.55
Solar Heat Gain Coefficient	0.45
% Total Solar Energy Rejected	55
Light-to-Solar Heat Gain Ratio	1.47
% Summer Solar Heat Reduction	45
% Winter Heat Loss Reduction	16
% Glare Reduction	25
Thickness without Liner	56 μ - 2mil
Film Color	Light Green

- E. Solar-control Film: Vista™ by LLumar® Spectrally-Selective Series VS61SRCDF Film with the following performance characteristics when applied to the interior surface of single-pane, 1/4-inch clear glass:

% Total Solar Transmittance	41
% Total Solar Reflectance	26
% Total Solar Absorptance	33
% Visible Light Transmission	59
% Visible Light Reflection – Exterior	22
% Visible Light Reflection – Interior	22
Winter U-Value	0.92
Shading Coefficient	0.57
% Ultraviolet Ray Protection (300nm-380nm)	>99
Emissivity	0.64
Solar Heat Gain Coefficient	0.50
% Total Solar Energy Rejected	50
Light-to-Solar Heat Gain Ratio	1.18
% Summer Solar Heat Reduction	39
% Winter Heat Loss Reduction	11
% Glare Reduction	33
Thickness without Liner	41 μ - 1.65il
Film Color	Neutral

- F. Solar-control Film: Vista™ by LLumar® Spectrally-Selective Series VS70SRCDF Film with the following performance characteristics when applied to the interior surface of single-pane, 1/4-inch clear glass:

% Total Solar Transmittance	36
% Total Solar Reflectance	22
% Total Solar Absorptance	42
% Visible Light Transmission	69
% Visible Light Reflection – Exterior	8
% Visible Light Reflection – Interior	8
Winter U-Value	0.87
Shading Coefficient	0.54
% Ultraviolet Ray Protection (300nm-380nm)	>99
Emissivity	0.55
Solar Heat Gain Coefficient	0.47
% Total Solar Energy Rejected	53
Light-to-Solar Heat Gain Ratio	1.47
% Summer Solar Heat Reduction	43
% Winter Heat Loss Reduction	16
% Glare Reduction	22
Thickness without Liner	56 μ - 2mil
Film Color	Light green

2.3 SOLAR-CONTROL FILM ACCESSORIES

- A. General: Provide accessories either manufactured by or acceptable to solar-control film manufacturer for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Adhesive: Films with CDF designation utilize a water- activated, dry-adhesive system that forms a molecular bond between the film and glass. Films with a PS designation utilize a pressure-sensitive adhesive which is activated by pressure and water. It is characterized by its permanently tacky nature and its installation ease. Protect adhesive from contamination by applying a release liner that will be removed and discarded at installation.
- C. Cleaners, Primers, and Sealers: Types recommended by solar-control film manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements and for conditions affecting performance of solar-control film including glass that is broken, chipped, cracked, abraded, or damaged in any way.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates thoroughly prior to installation. Provide additional scrubbing of perimeter area with X-100® solution.
- B. Prepare substrates using methods recommended by film manufacturer to achieve the best results for the substrate under project conditions.
- C. Protect window frames and surrounding surfaces to prevent damage during installation.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's written instructions.
- B. Install with no gaps or overlaps.
- C. If seamed, make seams non-overlapping.
- D. Do not remove release liner from film until just before each piece of film is cut and ready for installation.
- E. Custom cut to the glass with neat, square corners and edges to within 1/8-inch of the window frame. Use Film-On solution for the application of all spectrally-selective films. Do not use X-100 solution.
- F. Remove air bubbles, blisters, and other defects. Be careful to remove "fingers" to eliminate any contamination or excess water pockets. It is crucial to remove as much water as possible during installation.

3.4 FIELD QUALITY CONTROL

- A. After installation, view film from a distance of 10 feet against a bright uniform sky or background. Film shall appear uniform in appearance with no visible streaks, wrinkles, banding, thin spots or pinholes.
- B. If installed film does not meet these criteria, remove and replace with new film.

3.5 CLEANING AND PROTECTION

- A. Remove excess mounting solution at finished seams, perimeter edges, and adjacent surfaces.
- B. Use cleaning methods recommended by solar-control film manufacturer.
- C. Replace films that cannot be cleaned.
- D. Protect installed products until completion of project.
- E. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

EASTMAN

For inquiries inside the U.S. and Canada
Eastman Chemical Company
Advanced Materials - Performance Films
P.O. Box 5069
Martinsville, Virginia 24115
1-800-2LLUMAR
www.llumar.com

For inquiries outside the U.S. and Canada
Contact your regional technical services
representative or visit www.llumar.com.



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Project Name
Project Location

Project Number
09-87-13

Date
Solar-control Films

WINDOW FILM PERFORMANCE DATA | Automotive: North America



	% Visible Light Transmission	% Total Solar Energy Rejection	% IR Energy Rejection (IRER)*	% Selective IR Rejection (SIR)***	% Ultraviolet Protection (wavelengths 300-380nm)	% Glare Reduction***	% Visible Light Reflection
ATC Series (Color-Stable Dyed Window Tint) For good heat rejection, privacy and style							
ATC 05 CH SR HPR (Charcoal)	5	44	22	29	>99	94	5
ATC 15 CH SR HPR (Charcoal)	18	40	22	29	>99	79	5
ATC 20 CH SR HPR (Charcoal)	25	38	22	29	>99	72	6
ATC 30 CH SR HPR (Charcoal)	33	36	22	29	>99	63	6
ATC 35 CH SR HPR (Charcoal)	38	35	22	29	>99	57	6
ATC 40 CH SR HPR (Charcoal)	43	33	22	28	>99	51	6
ATC 50 CH SR HPR (Charcoal)	60	28	22	28	>99	32	7
ATR Series (Metallized Window Tint) For great heat rejection with a slightly reflective look							
ATR 05 CH SR HPR (Charcoal)	5	61	54	68	>99	94	6
ATR 15 CH SR HPR (Charcoal)	18	48	38	51	>99	80	5
ATR 20 CH SR HPR (Charcoal)	25	47	39	52	>99	71	6
ATR 30 CH SR HPR (Charcoal)	34	44	38	51	>99	61	7
ATR 35 CH SR HPR (Charcoal)	37	44	40	53	>99	59	8
ATR 40 CH SR HPR (Charcoal)	46	41	38	51	>99	48	8
ATR 50 CH SR HPR (Charcoal)	63	35	29	37	>99	40	9
CTX* Series (Ceramic Window Tint) For excellent heat rejection without blocking electronic signal transmission							
CTX 05 CH SR HPR (Charcoal)	5	60	55	79	>99	94	5
CTX 15 CH SR HPR (Charcoal)	20	53	49	69	>99	78	5
CTX 25 CH SR HPR (Charcoal)*	28	50	47	67	>99	69	5
CTX 30 CH SR HPR (Charcoal)	34	49	48	68	>99	62	6
CTX 35 CH SR HPR (Charcoal)	37	48	48	69	>99	58	6
CTX 40 CH SR HPR (Charcoal)	44	47	49	69	>99	50	6
CTX 50 CH SR HPR (Charcoal)	55	43	48	68	>99	37	7
IRX™ Series (Infrared-Rejecting Ceramic Window Tint) For our best heat rejection, advanced nanoceramic IR-blocking technology, and no sacrifices							
IRX 05 CH SR HPR (Charcoal)*	5	62	59	85	>99	94	5
IRX 15 CH SR HPR (Charcoal)*	20	59	61	88	>99	77	5
IRX 25 CH SR HPR (Charcoal)*	26	58	61	88	>99	70	5
IRX 30 CH SR HPR (Charcoal)*	32	56	60	87	>99	64	6
IRX 35 CH SR HPR (Charcoal)*	38	54	60	87	>99	56	6
IRX 40 CH SR HPR (Charcoal)*	41	52	60	87	>99	54	6
IRX 50 CH SR HPR (Charcoal)*	53	49	60	87	>99	40	7
AIR Series (Clear Window Film) For virtually invisible, ceramic protection against heat and harmful UV rays							
AIR 80 BL SR HPR (Clear)	77	43	60	86	>99	13	9
AIR 90 CL SR HPR (Clear)	84	30	40	57	>99	5	9
UV Protection (Clear Window Film) For excellent UV protection without reduced visibility							
AU 85 UV SR HPR (Clear)	87	20	22	29	>99	1	10

EASTMAN

LLumar.com



*IRER is a more complete measurement of heat experienced from solar infrared radiation (790-2500nm) including absorbed and re-radiated energy. **SIRP is a measurement of solar infrared radiation (790-2500nm) not directly transmitted through glass. †Based on data obtained during product development and is subject to change. Data captured using NFRC guidelines for single pane, nominal 1/4" (6mm) clear glass. Reported values are taken from representative product samples and are subject to normal manufacturing variances. Actual performance will vary based on a number of factors, including glass type and properties. ***These are calculated numbers which may differ between similar products due to averaging and rounding. See LLumar.com for technical details. ©2020 Eastman Performance Films, LLC. Product brands referenced herein with a ™ or ® symbol are trademarks of Eastman Chemical Company or its subsidiaries. All other trademarks are the property of their respective owners. All rights reserved. No liability is accepted for errors. L1748 (04/21)

ATTACHMENT A-2
SOLAR CONTROL WINDOW IMAGES

Image below represents the height of the window. This height is the same for all nine (9) windows that will receive the Solar Control Film

Height from top of window to bottom is 128 inches for all 9 windows.



Width of window from metal beam to ½" binding materials is 20 inches. Only applies for one window.



Image above represents the width of just one (1) of the windows that will receive the solar control film. .

Width of window from ½" binding material to ½" binding material is 47 inches. Applies to 8 windows.



Image above represents the width of eight (8) of the windows that will receive the solar control film.

Height from floor
to ceiling is 157
inches.



Image above represents the highest point Above Finished Floor (AFF) for all nine (9) windows. This information is provided for informational purposes only to assist the Contractor plan their installation.

Height from floor
to start of window
is 29 inches.



Image above represents the lowest point Above Finished Floor (AFF) for all nine (9) windows. This information is provided for informational purposes only to assist the Contractor plan their installation.

EXHIBIT “B”
SCHEDULE OF SERVICES

Contractor shall refer to Exhibit “A”

EXHIBIT “C”

COMPENSATION

Item No.	Description		Quantity	Unit Price (\$)	Total Price (\$)
1	Furnish and Installation of Windows Treatment Per Project Specifications in Exhibit “A”		1 LOT	\$9,425.00	\$9,425.00
			Subtotal:		\$9,425.00
			Grand Total:		\$9,425.00



Agenda Report

21-1438

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Report from Stadium Authority Regarding Stadium Manager's Request to Award Purchase Orders to Cintas and Twin Hill for Guest Services Uniforms and Fastenal for Stadium and Special Event Spaces CapEx Project, and Execute Agreement with MGC DBA Mission Glass Company for Command Post Window Treatment CapEx Project

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

BACKGROUND

On October 8, 2019, the Stadium Authority Board (Board) approved Ordinance No. 2005 amending Chapter 17.30 of the City Code (Stadium Authority Procurement Policy), which rescinded the delegation to the Executive Director to enter into agreements without prior Board approval. As result of Ordinance No. 2005, the Stadium Manager is also required to request Board approval before entering into agreements on behalf of the Stadium Authority. As of the effective date of the Ordinance (November 8, 2019), all Stadium Authority agreements for services, supplies, materials, and equipment require the approval of the Stadium Authority Board.

As the Stadium Manager, Forty Niners Stadium Management Company, LLC is responsible for maintaining "the Stadium in the Required Condition and operate the Stadium as a quality NFL and multi-purpose public sports, public assembly, exhibit and entertainment facility" as required by the Management Agreement between the Stadium Authority and Stadium Manager.

The Stadium Manager is requesting approval for the following:

- Award a purchase order to Cintas for the purchase of Sullivan and New Port blazers for Guest Services uniforms, in an amount not to exceed \$4,365. Per the Stadium Manager, the cost for this service will be charged to the FY 2021/22 Stadium Operations Budget, Guest Services line item;
- Award a purchase order to Twin Hill for the purchase of Intaglio jackets and Royal Oxford shirts for Guest Services uniforms, in the amount of \$3,367. Per the Stadium Manager, the cost for this service will be charged to the FY 2021/22 Stadium Operations Budget, Guest Services line item;
- Award a purchase order to Fastenal for Waterhog premier mats to be placed at Stadium entrances to help alleviate wet floor scenarios and provide safety to Stadium patrons, in the amount of \$71,274. The mats are listed in the Stadium Authority FY 2021/22 CapEx budget under the Stadium and Special Event Spaces line item. The line item is budgeted for \$78,750

and is a carryover from FY 2019/20; and

- Execute an agreement with MGC DBA Mission Glass Company for window tinting services, in the amount of \$9,425. The services are listed in the Stadium Authority FY 2021/22 CapEx budget under the Command Post Window Treatment line item. The line item is budgeted for \$16,800 and is a carryover from FY 2019/20.

DISCUSSION

Stadium Authority staff reviewed the Recommendation for Award memo (attached to corresponding report #21-1437) and supporting procurement documentation submitted for the requests. The documents were in order and staff recommends approval of the requested purchase orders and agreement. The Stadium Authority will require full supporting documentation including compliance with prevailing wage laws, if applicable, before respectively releasing public funds upon procurement of supplies and services. This requirement is consistent with the Stadium Authority Board's March 27, 2019 direction to staff to stop payment of any additional invoices for services unless there is substantial documentation of services rendered which must also be in compliance with State law and City Code.

ENVIRONMENTAL REVIEW

The actions being considered do not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment or pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potential significant impact on the environment.

FISCAL IMPACT

The FY 2021/22 Stadium Authority CapEx Budget includes \$78,500 and \$16,800 respectively for the Stadium and Special Event Spaces and Command Post Window Treatment line items which the mats and window tinting services fall under. There are sufficient funds to cover the cost of the mats (\$71,274) and window tinting services (\$9,425).

The Stadium Authority FY 2021/22 Budget contains a Legal Contingency for Shared Expenses such as Security, Stadium Operations, Engineering, Guest Services, and Grounds. As part of its March 23, 2021 approval of the FY 2021/22 Budget, the Stadium Authority Board delegated budget amendment authority to the Executive Director for Shared Expenses from the Legal Contingency. The Stadium Manager requested to have the uniforms charged to the Stadium Operations Budget, Guest Services line item which doesn't exist. In reviewing the request, these are Guest Services uniforms and it would appropriate to charge their costs to the FY 2021/22 Stadium Authority Legal Contingency, Guest Services line item. There are sufficient funds to cover the amount of \$7,732 for the requested Guest Services uniforms described in this report. The Executive Director will approve a budget amendment to reallocate \$7,732 from the Legal Contingency to the Shared Expenses, Guest Services line item upon the Board's approval of staff's recommendations.

The Stadium Manager's entire request totals a not to exceed amount of \$88,431 for FY 2021/22.

COORDINATION

This report has been coordinated with the Stadium Treasurer's Office and Chief Assistant City Attorney.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov.

RECOMMENDATION

1. Approve the Stadium Manager's request to award a purchase order to Cintas for the purchase of Guest Services uniforms, in an amount not to exceed \$4,365, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
2. Approve the Stadium Manager's request to award a purchase order to Twin Hill for the purchase of Intaglio jackets and Royal Oxford shirts for Guest Services uniforms, in the amount of \$3,367, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
3. Approve the Stadium Manager's request to award a purchase order to Fastenal for Waterhog premier mats (Stadium and Special Event Spaces CapEx project), in the amount of \$71,274, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager; and
4. Approve the Stadium Manager's request execute an agreement with MGC DBA Mission Glass Company for window tinting services (Command Post Window Treatment CapEx project), in the amount of \$9,425, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager.

Prepared by: Christine Jung, Assistant to the Executive Director

Reviewed by: Deanna J. Santana, Executive Director



Agenda Report

21-1440

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Request from the Stadium Manager to Execute Agreement with R.E. Cuddie Co. for Non-Slip Floor Matting CapEx Project and Related Budget Amendment

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

DISCUSSION

On October 1, 2021, the Stadium Manager submitted the attached Recommendation for Award memo (Attachment 1), along with supporting procurement documentation, to request approval from the Stadium Authority Board for the following:

1. Award a one-time agreement to R.E. Cuddie Co. in the amount of \$53,955 for the removal and disposal of existing resilient athletic flooring from service tunnels, and the furnishing and installation of rubber resilient athletic flooring at Levi's Stadium. This work is included in the Stadium Authority FY 2021/22 CapEx budget (Attachment 2) under the Non-Slip Floor Matting line item. This was a carryover project from the FY 2019/20 CapEx Budget;
2. Authorization to execute any and all documents associated with and necessary for the award, completion, and acceptance of the project; and
3. Authorization to execute change orders up to approximately 10% of the contract cost, or \$5,396, for a total not to exceed amount of \$59,351.

The Stadium Manager's Recommendation for Award describes the Request for Bids process that was implemented. It was noted in the memo that the agreement amount will exceed the amount budgeted in the Stadium Authority FY 2021/22 CapEx Budget for the line item (\$52,500). The Stadium Manager is requesting to use unspent and unobligated funds from the Stadium Authority FY 2021/22 CapEx Budget to cover the remaining agreement amount of \$6,851. This will require the Board's approval of a budget amendment to fund the total agreement and 10% contingency amount exceeding the budgeted amount for the line item in the Stadium Authority FY 2021/22 CapEx Budget.

ATTACHMENTS

1. Stadium Manager's Recommendation for Award
2. CapEx Portion of Stadium Authority FY 2021/22 Budget
3. Agreement with R.E. Cuddie Co.



FORTY NINERS STADIUM MANAGEMENT COMPANY

Date: October 1, 2021

To: Jim Mercurio
Executive Vice President & General Manager

From: Jenti Vandertuig
Procurement Director

Subject: Recommendation for Award RFB FY21-0013 Levi's Stadium Resilient
Flooring In Service Tunnel Project

Recommendation

1. Recommend approval and award of a one-time agreement to R.E. Cuddie Co. in the amount of \$53,955.20 for removal and disposal of existing resilient athletic flooring from service tunnels, and furnishing and installation of rubber resilient athletic flooring at Levi's Stadium;
2. Authorize Stadium Manager to execute any and all documents associated with, and necessary for the award, completion, and acceptance of this Project; and
3. Authorize Stadium Manager to execute change orders up to approximately 10% of the contract cost, or \$5,396, for a total not to exceed amount of \$59,351.20.

Solicitation Process

Forty Niners Stadium Management Company LLC ("Stadium Manager") has a need to replace the non-slip floor matting for visiting teams and auxiliary locker room spaces to the North Field tunnels at Levi's Stadium ("Stadium"). This includes access to the field for athletes, performers and customers. The replacement of the synthetic athletic flooring was approved at part of the FY21/22 Santa Clara Stadium Authority (SCSA) Capital Expenditures budget.

On June 9, 2021, Stadium Manager issued a Request for Bids (RFB) FY21-0009 for this Project and received one bid response before the due date of July 8, 2021. The bid was deemed non-responsive and the base bid amount was over 100% of the budgeted amount of the Project. In view of that outcome, Stadium Manager evaluated different solicitation strategies for this Project. After performing additional market research, Stadium Manager decided to rebid the project. Instead of soliciting a single lump sum

bid for the entire Project, the new solicitation would divide the flooring replacement into two categories for a base bid and an alternate bid, giving priority to the area that needed to be replaced more urgently in the event the cost exceeded the budgeted amount when we rebid.

On August 30, 2021, Stadium Manager issued a Request for Bids (RFB) FY21-0013 for removing and disposing the existing resilient athletic flooring from Levi's Stadium tunnels, furnishing and installation of rubber resilient athletic flooring with beveled edge reducer, and supplying all accessories required for installation, maintenance and repair. As planned, the requirements were split into two areas for replacement with the Base Bid Scope covering the visitors' locker room to the field tunnel in the North West Tunnel area of the Stadium, and an Alternate No. 1 Bid Scope covering the service tunnel corridor from the auxiliary rooms to the North West Tunnel. Attached as Exhibit A-1 are diagrams illustrating the two separate areas, along with photographs of the area.

Stadium Manager published the RFB on Bonfire Interactive, Stadium Manager's eProcurement portal <https://49ers.bonfirehub.com/portal/>. In addition to inviting a list of suppliers on our established supplier list, Stadium Manager also selected suppliers registered on the portal with specific commodity codes offering flooring and related services.

On September 2, 2021, Stadium Manager published the Notice Inviting Bids related to this project in the San Jose Mercury News publication. Notices were also emailed on August 30, 2021 to the Builders' Exchange of Santa Clara County and Minority Business Consortium requesting them to communicate with their respective member community.

Stadium Manager held a non-mandatory pre-bid conference on September 9, 2021 at 1:00 p.m. (PT) to provide an overview of the project and answer any questions from prospective bidders. The RFB provided prospective bidders the option to schedule on-site visits to the Stadium and to request product substitutions with specific deadlines for each of these options.

Three bids were received on or before the closing due date and time from the following firms:

1. R.E. Cuddie Co. - \$53,955 (\$28,995 Base Bid and \$24,960 for Alternate No. 1)
2. Green Constructors California Inc. - \$93,500 (\$65,000 Base Bid and \$28,500 for Alternate No. 1)
3. Cal Pro Service Corp. - \$100,000 (\$49,000 for Base Bid and \$51,000 for Alternate No. 1)

Public Bid Opening

A public bid opening was held on September 20, 2021 at 4:00 p.m. (PT). The RFB provided the public bid opening webcast information including a meeting ID and password for bidders to log on via Zoom to attend. Several bidders were in attendance. Stadium Manager announced the receipt of three bids on or before the due date and time, announced the name of each bidder and the bid amount. R.E. Cuddie Co. was declared the apparent low bidder with a base bid amount of \$28,995.

Evaluation of Apparent Low Bidder

Stadium Manager reviewed the bid from R.E. Cuddie Co. and determined the bid to be responsive and responsible. The review verified that all the required forms were submitted and completed properly, the bid schedule contained no arithmetic errors, and the bid bond is authorized. Stadium Manager also confirmed that R.E. Cuddie Co. is authorized to do business in California, is appropriately licensed with the California Contractors State License Board, and is registered with the Department of Industrial Relations (DIR). Stadium Manager checked references to validate that R.E. Cuddie Co. was responsible.

R.E. Cuddie Co. did round their bid pricing to the nearest whole dollar. That technically is not allowed, but the bid documents allow us to independently use their unit prices and the estimated quantities to come up with the total bid amount. The correct bid amount is \$28,995.20.


Next Steps

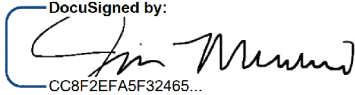
In accordance with the RFB documents, Stadium Manager has the sole discretion to include any, all, or none of the Alternate Bid items. The Total Bid Price, inclusive of the Base Bid and Alternate No. 1, is \$53,955.20. The cost of this purchase is covered in the FY 21/22 SCSA Capital Expenditure budget referenced under General Building, Non-slip Floor Matting from Visiting Team and Auxiliary Locker Room Spaces to North Field Tunnels. The approved budgeted amount is \$52,500.

Stadium Manager recommends approval to utilize SCSA approved, unspent and unobligated funds, from the total FY 21/22 SCSA Capital Expenditures budget to cover the additional \$1455.20, plus the 10% to cover potential change orders which is \$5,396 for a total amount of \$6,851.20 needed to establish an agreement with R.E. Cuddie for this Project. There is ample room in the SCSA FY21/22 Capital Expenditures budget to cover this additional cost.

Once Stadium Manager receives approval from the SCSA Board, an agreement (detailed in the RFB) will be executed with R.E. Cuddie Co., and a fully executed copy of the agreement will be forwarded to the Board. In addition, Stadium Manager requests authorization to issue change orders up to 10% of the agreement which will allow Stadium Manager to take timely administrative action if required and not delay completion of the Project.

Supporting documentation has been provided for review and approval. The cost for advertising the RFB in the San Jose Mercury News publication for one day is \$791.25. Stadium Manager's request to publish legal notices in the San Jose Mercury News for various solicitations, including public works, was approved by the SCSA Board on July 13, 2021. This is a public works project.

Submitted By:  Date: 10/1/2021
Jenti Vandertuig, Procurement Director

Approved By:  Date: 10/1/2021
Jim Mercurio, Executive Vice President & General Manager

Attachment: Exhibit A-1 from RFB FY21-0013

Exhibit “A-1”

BASE BID SCOPE:

Contractor to install flooring product per manufacturer’s recommendation from the locker room to the field tunnel (dimensions shown in Figure 1). The walking path dimensions are shown below in Figure 1. All dimensions to be verified by the Contractor.

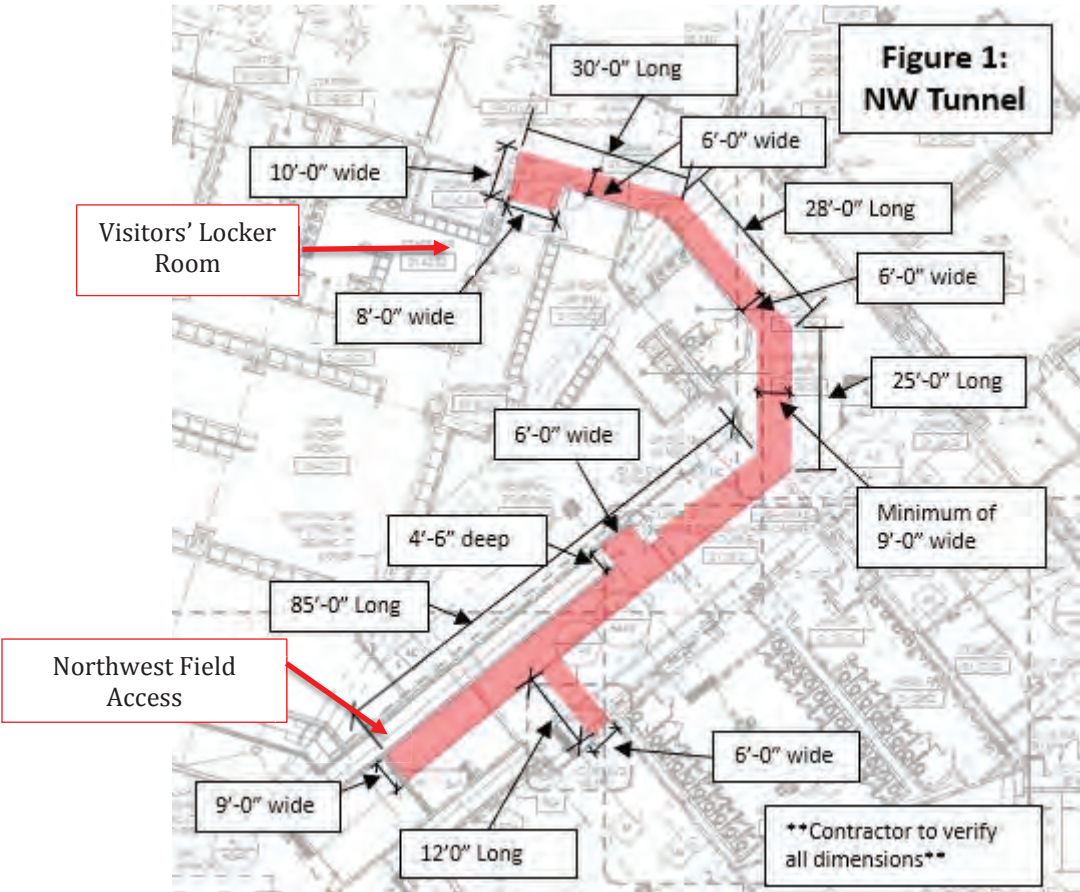


Figure 1: BASE BID - Image of new resilient flooring limits for the NW Tunnel area shown in red.

ALTERNATE #1 BID SCOPE:

Contractor to install flooring product per manufacturer's recommendation along the service tunnel corridor from auxiliary rooms to the North West tunnel (dimensions shown in Figure 2). The walking path dimensions are shown below in Figure 2. All dimensions to be verified by the Contractor.

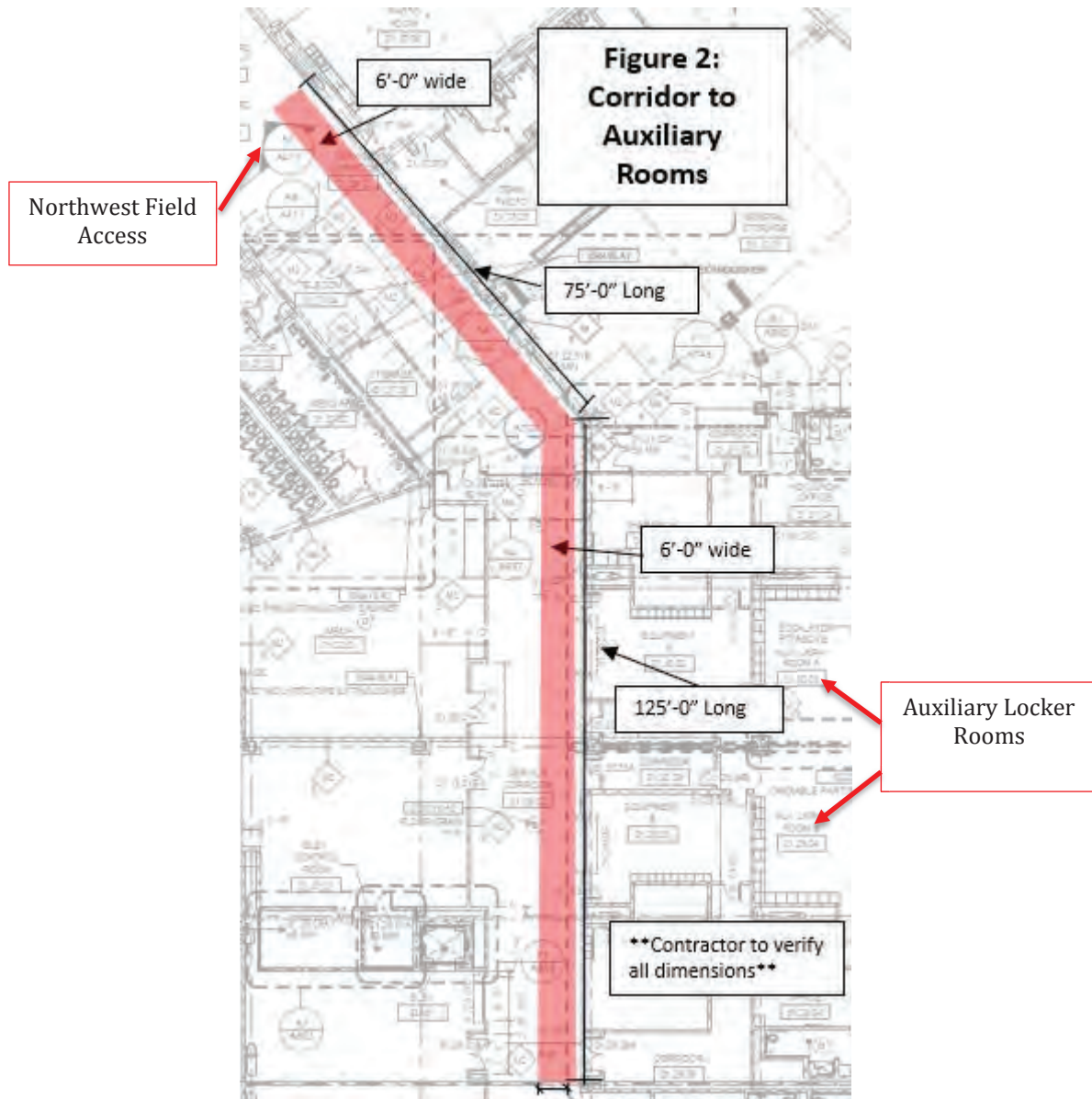


Figure 2: ALTERNATE #1 BID SCOPE: Image of new resilient flooring limits for the service tunnel area shown in red.



Figure 3: Photo of Northwest Tunnel (BASE BID SCOPE) look out to the field area.

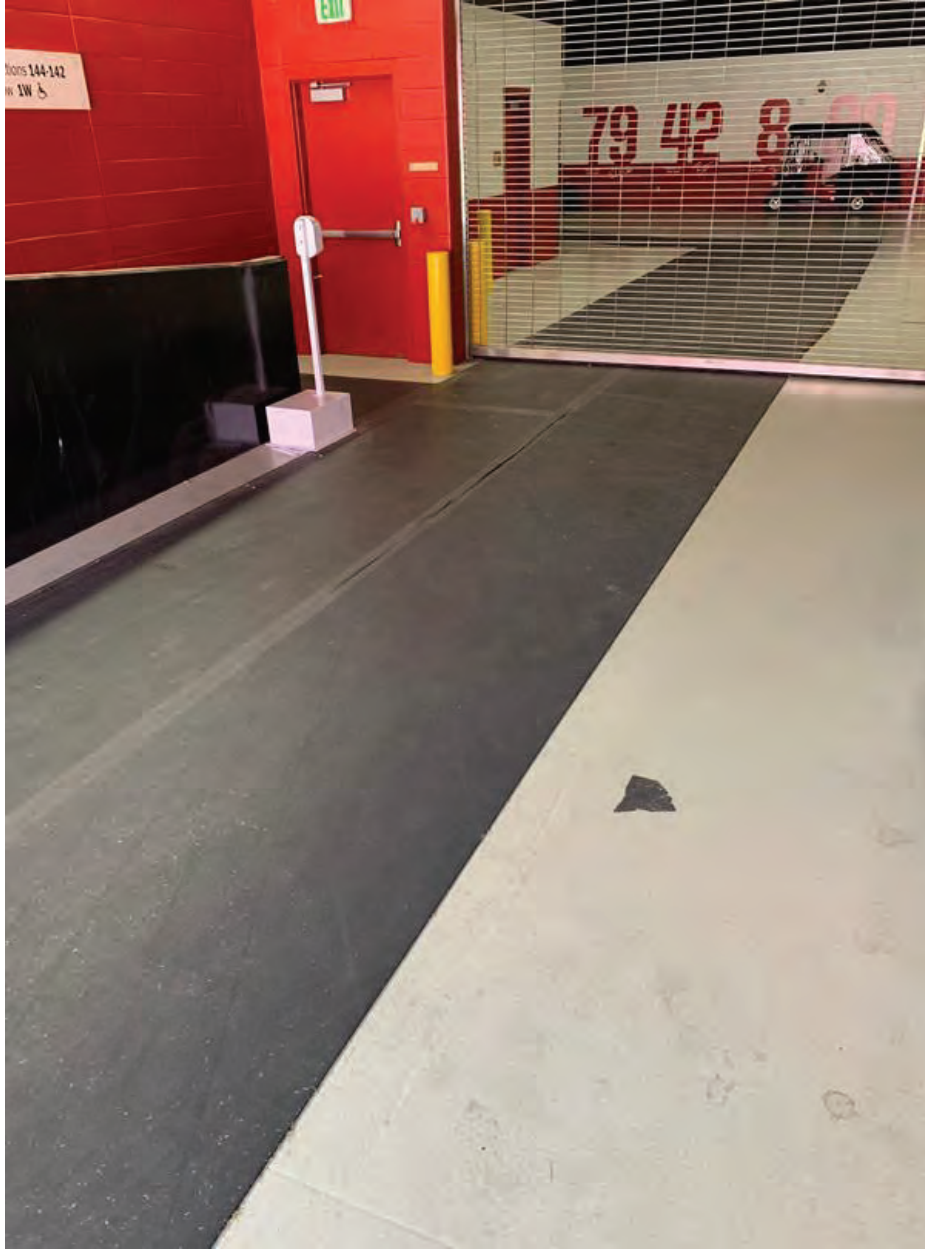


Figure 4: Photo of Northwest Tunnel (BASE BID SCOPE) look into corridor tunnel area from field area.



Figure 5: Photo of Corridor to Auxiliary Rooms (ALTERNATE #1 BID SCOPE) look into corridor tunnel area from field area.

STADIUM AUTHORITY CAPITAL EXPENSE BUDGET

The Capital Expense (CapEx) Budget is used to fund the purchase or upgrade of fixed assets for the Stadium. While the funding for appropriations occur on an annual basis, the Capital Expense Plan extends for a five-year period (shown on Page 57 of this report). Changes to existing projects, as well as the addition of new projects, may occur during the five-year planning period as new needs are identified. The appropriations for capital projects do not lapse at year-end but carryover into future years until the project is complete.

The FY 2021/22 CapEx Budget totals \$14.6 million. Of this total, \$11.2 million of prior year appropriations are projected to be carried over from FY 2020/21 (\$1.5 million of the projected carryover amount is for warranty-related construction, and the other \$9.7 million is for prior year CapEx projects). New capital improvement appropriations equal \$3.4 million.

Capital project delivery continues to be delayed, without demonstrated progress on corrective action, by the Stadium Manager due to procurement issues and violations of State prevailing wage laws. While the budget reflected in this document reflects projects recommended by the Stadium Manager, the Stadium Authority continues to request a procurement plan and implementation timelines regarding how these projects will be completed to ensure the upkeep of the facility and balance any potential City resources that may be required to support the projects. In addition, with the Board's revocation of delegated procurement authority, the contract awards to complete these projects will need to be brought forward to the Board for approval. As such, the timeline to complete these projects may differ or continue to be delayed from the information presented in this section. Below is data relative to the CapEx budget for the Stadium Manager and the actual dollars expended, which demonstrate that there is valid concern for the Stadium's upkeep and surfaces questions whether the Stadium Manager can implement the CapEx budget as requested:

Fiscal Year	CapEx Budget for Stadium Manager Projects and Projects Managed by Stadium Manager	CapEx Dollars Expended by Stadium Manager
FY 2018/19	\$6.3M	\$1.4M (22% spend rate)
FY 2019/20	\$12.5M	\$254,753 (2% spend rate)
FY 2020/21 (to date)	\$8.9M	\$289,034 (3% projected)

A detailed listing of adopted FY 2021/22 projects is provided starting on Page 48 of this report. Stadium Authority is submitting it as transmitted by the Stadium Manager without any additional details on the nature of the project, timing, etc. Stadium Authority has asked almost monthly for a procurement plan for these projects, but the Stadium Manager has not produced such workplan. A capital procurement workplan is a reasonable request given the multiple years of no progress, requirements to maintain the Stadium, and transparency.

STADIUM AUTHORITY CAPITAL EXPENSE BUDGET (CONT'D)



Public Safety Kawasaki Mule
used for public safety patrol
and emergency response

Santa Clara Stadium Authority

Capital Expense Budget Summary

	2019/20	2019/20	2020/21	2020/21	2021/22	2021/22	2021/22
	Final Budget	Year-End Actuals	Final Budget	Projected Actuals	Projected Carryover	Proposed Budget	Total Proposed Budget
Beginning Balances	\$ 14,532,870	\$ 14,516,225	\$ 17,837,300	\$ 17,010,611	\$ 19,438,420		\$ 19,438,420
Resources							
Transfers In from Operating	3,478,000	2,318,549	3,582,000	3,547,379	-	3,690,000	3,690,000
Transfers In from Stadium Manager ⁽¹⁾	-	308,568	-	-	-	-	-
Total Resources	18,010,870	17,143,342	21,419,300	20,557,990	19,438,420	3,690,000	23,128,420
	2019/20	2019/20	2020/21	2020/21	2021/22	2021/22	2021/22
	Final Budget	Year-End Actuals ⁽²⁾	Final Budget	Projected Actuals	Projected Carryover ⁽³⁾	Proposed Budget	Total Proposed Budget
Expenses							
Construction	4,956,922	(4,845)	4,725,327	238,156	3,953,911	2,790,000	6,743,911
Equipment	7,070,988	136,765	6,460,557	881,414	5,286,250	448,520	5,734,770
Contingency	657,397	812	559,296	-	462,009	161,926	623,935
Stadium Warranty Related Construction	1,528,202	-	1,528,202	-	1,528,202	-	1,528,202
Total Expenses	14,213,509	132,731	13,273,382	1,119,570	11,230,372	3,400,446	14,630,818
Capital Expense Reserve	\$ 3,797,361	\$ 17,010,611	\$ 8,145,918	\$ 19,438,420	\$ 8,208,048		\$ 8,497,602

⁽¹⁾ Reimbursement from Stadium Manager

⁽²⁾ Actuals exclude some project payments withheld due to the ManagementCo not following State procurement and prevailing wage laws.

⁽³⁾ The carryover does not include the Levi's Naming Rights Signage Replacement Project that increased in cost estimate from \$650,000 to \$900,000.



Storage Conex Garage for Apparatus
allows for storage of three stadium
vehicles in a lockable, weatherproof
container.

Santa Clara Stadium Authority

2021/22 CapEx Budget

Item Type	SCSA Requested	Description	Cost	Contingency (5%)	Total Cost
General Building		General Areas / Coatings Main Deck Replace and recoat lytmal traffic deck coating at the lower seating bowl and on the 300 and 700 Level Concourses, which are currently showing signs of wear. The deck coating serves as a secondary waterproofing system for the occupied spaces below these areas and also protects and extends the life of the concrete. Periodic replacement and recoating of this system is necessary to maintain current waterproofing system and maintain the expected life of the structure.	\$ 2,450,000	\$ 122,500	\$ 2,572,500
General Building		Field Turf Track Replacement The current turf track carpet is worn, buckled and compacted from use over the past five years and has reached its end of life. This project addresses the uneven grade of the current turf track carpet. This project will remove the existing track and rebuild it using a compacted stone base and shock layer with new carpet on top. Additionally, the project scope permanently addresses the sun grade issues we experience with our current track by stabilizing the base to support the extreme loads it comes under during concerts and dirt events. Finally, the new turf track will eliminate slipping hazards and improve overall safety and appearance.	340,000	17,000	357,000
Subtotal CapEx Construction Costs			\$ 2,790,000	\$ 139,500	\$ 2,929,500
Security		Drone Detection (Antenna System) Drone intrusions are happening more frequently. We need a detection and deterrent system in place for the Security of our venue and events. This technology will assist Stadium Security and Law Enforcement in identifying any threats and to take measures to mitigate the threat.	\$ 55,000	\$ 2,750	\$ 57,750
Security		Key Management System This Key-Box system provides a full audit trail and real time reporting, detailing who has used each set of keys and when. Staff and vendors will become more accountable and will assist in return of keys at the end of each shift. This will reduce loss, damage and liability. The new system will be stationed in the 24/7 Security office.	20,000	1,000	21,000
Public Safety Equipment	x	RadHalo Remote Radiation Monitors New equipment request for the Joint Hazardous Assessment Team (JHAT): Remote radiation detection monitor can be established as a perimeter around the stadium and monitored remotely by JHAT. These units were tested last season with the help of the 95th Civil Support Team. These units proved very useful to monitor large crowds for nuclear and radiation devices that have a potential explosive threat. The team currently uses handheld detectors which are good for pinpointing an exact location around the unit; however, with 4 main gates for ingress and egress, there is no way to fully monitor the crowds for a potential threat without remove monitoring capabilities.	190,000	9,500	199,500
Public Safety Equipment	x	PPE Replacement (Nomex Tops) Projected replacement/additions of Stadium battle dress uniform tops for the team of 60.	5,750	288	6,038
Public Safety Equipment	x	PPE Replacement (Nomex Bottoms) Projected replacement/additions of Stadium battle dress uniform bottoms for the team of 60.	3,260	163	3,423

Santa Clara Stadium Authority

2021/22 CapEx Budget (cont.)

Item Type	SCSA Requested	Description	Cost	Contingency (5%)	Total Cost
Public Safety Equipment		Rigaku CQL 1064nm Handheld Raman Chemical Detector New equipment request for the Joint Hazardous Assessment Team (JHAT). This detector works as a pair with the Tru Defender. The pair combined are able to detect unknown chemicals and substances much quicker than current methods. The unit has a library of over 12,000 substances. This will be very beneficial to determine threats of substances quickly in order to determine evacuation of patrons. JHAT does not carry a detector of this capability. If JHAT came across an unknown substance, a request for mutual aid would be made with likely extended response time. This new equipment would allow the onsite JHAT to analyze substances and chemicals without immediately calling for assistance reducing the impact to the ongoing stadium event.	50,290	2,515	52,805
	x				
Public Safety Equipment		Tru Defender FTX S1 WMD Chemical Detector New equipment request for the Joint Hazardous Assessment Team (JHAT). This detector works as a pair with the Rigaku CQL Raman. The pair combined are able to detect unknown chemicals and substances much quicker than current methods. The unit has a library of over 12,000 substances. This will be very beneficial to determine threats of substances quickly in order to determine evacuation of patrons. JHAT does not carry a detector of this capability. If JHAT came across an unknown substance, a request for mutual aid would be made with likely extended response time. This new equipment would allow the onsite JHAT to analyze substances and chemicals without immediately calling for assistance reducing the impact to the ongoing stadium event.	63,220	3,161	66,381
	x				
Public Safety Equipment		Vehicle upfits for John Deere Gator Vehicle upfits for John Deere Gator including a utility box, mirrors, back up camera and a towing hitch for the E690 MCI Trailer. The mirrors and back up camera would allow for greater visibility when the vehicle is being driven in and around large crowds.	12,000	600	12,600
	x				
Public Safety Equipment		Kawasaki Mule Purchase new Kawasaki Mule for Explosive Ordinance Disposal (EOD) team. Cost includes unfitting the Kawasaki Mule with Police labels and markings, lighting and locking storage boxes. The EOD team does not currently have a dedicated vehicle and are currently walking with canines and EOD gear during response calls for suspicious packages and drone payloads. The EOD team is first on scene sweeping the stadium for safety issues and the last to leave. Shifts can extend past 10 hours. Purchase of a vehicle would reduce fatigue for officers and canines and reduce response time.	25,000	1,250	26,250
	x				
Public Safety Equipment		Kawasaki Mule Purchase new Kawasaki Mule for Special Response Team (SRT). Cost includes unfitting the Kawasaki Mule with Police labels and markings, lighting, equipment storage boxes and Type 3 IME box that is approved by the U.S. Bureau of Alcohol Tobacco and Firearms (ATF) to transport/store breacher explosives. The SRT equipment is currently in a standard size vehicle that upon deployment would not easily maneuver the stadium or crowds of attendees; the team would be required to go to the vehicle to retrieve the required equipment extending response time. The vehicle may also be deployed to City issues and the equipment would not be readily available for use. The SRT does not currently have a dedicated vehicle. Purchase of a vehicle would allow the SRT to mobilize needed equipment and will reduce response time.	\$ 20,000	\$ 1,000	\$ 21,000
	x				
Public Safety Equipment		Onsite Conex Storage Locking onsite Conex Storage container to store 3 Police Kawasaki Mules, including the requested EOD and SRT mule purchase. The Conex Storage container will be housed in a parking lot dedicated for police parking with the secured footprint of the Stadium.	4,000	200	4,200
	x				
Subtotal CapEx Equipment Costs			\$ 448,520	\$ 22,427	\$ 470,947
Total New CapEx Project Costs			\$ 3,238,520	\$ 161,927	\$ 3,400,447

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Electrical		Mechanical and Electrical Closet Lighting (2019/20 Carryover) Install LED lighting in all mechanical and electrical closets located in the service tunnel, 300 Level, and 700 level. These lights not only improve visibility, but also provide longer and more efficient power usage.	\$ 150,000	\$ 7,500	\$ 157,500
Electrical		Broadcast Booth Power (2019/20 Carryover) Install power components used for stadium events. These components will adhere to LEED certification, provide a clean source of power for our clients, and improve operating efficiencies.	35,000	1,750	36,750
Electrical		Concessions Cart Cabling (2019/20 Carryover) Install code rated low voltage cabling (CAT6) to portable concession carts. This will provide Internet Protocol (IP) based access to the IPTV menu boards and Point of Sale (POS) systems for credit card transactions, as well as deliver an emergency signage to be displayed at the concession stands if needed.	50,000	2,500	52,500
General Building		Updated Stadium Wayfinding Signage (2020/21 Carryover) Install Premium/Club wayfinding, Suite wayfinding, Smoking section signs, No smoking signs for around the main and upper concourses, section numbers/floor decals, ADA blue lines, tunnel signs that indicate "no photos/no autographs", etc.	250,000	12,500	262,500
General Building		Stadium Event Signage (2019/20 Carryover) Install stadium signage (including but not limited to tunnel awnings, accessible seating reference areas, lower bowl sections placards, and additional fire and building code signage per Fire Marshal).	138,000	6,900	144,900
General Building		Command Post Window Treatment (2019/20 Carryover) Install window shades and/or tint the exterior windows on the 800 level command post to reduce heat and glare. This will assist dispatchers and command post operators working in this space.	16,000	800	16,800
General Building		Stadium and Special Event Spaces (2019/20 Carryover) Add entry mats to be placed at stadium entrances to help alleviate wet floor scenarios and provide safety to stadium patrons. Will extend the finish of the existing flooring and help prevent slip and falls during inclement weather.	75,000	3,750	78,750
General Building		Non-Slip Floor Matting (2019/20 Carryover) Install non-slip matting from the north side locker rooms to tunnels primarily for event usage (that include access to the field for athletes, performers and customers).	50,000	2,500	52,500
General Building		Women's Locker Room (2019/20 Carryover) Convert a portion of the auxiliary locker room area to accommodate a larger private space for female athletes, performers, officials, and other female event day sporting and entertainment professionals visiting or working events at Levi's Stadium.	372,000	18,600	390,600
General Building		Automatic Logic Control Building Engineering System (2019/20 Carryover) Install an automatic logic controller system upgrade to monitor the building's HVAC in all quadrants simultaneously. This updated system will enable graphic interface and help the system to operate more efficiently with time clock management and assist in potential lighting control energy savings.	35,000	1,750	36,750
General Building		Club Space Flooring (2019/20 Carryover) Strip, resurface, and/or replace hardwood flooring surfaces in the BNY East & West and Levi's 501 spaces. These spaces are among the most utilized spaces in the building and get a large amount of foot traffic. This work will help extend the useful life of these spaces as well as reducing slips and falls from worn floors.	85,000	4,250	89,250

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
General Building		Command Post Communication Equipment (2019/20 Carryover) Purchase and install public safety screens, monitors, and projection devices used in monitoring stadium and security operations to help improve situational awareness and response.	58,000	2,900	60,900
General Building		Stadium Field Conduits (2018/19 Carryover) Add a permanent solution for power and data on field/floor of stadium, making electrical connections safer and efficient for concert and events.	118,197	5,910	124,107
Plumbing		Lift Station (2020/21 Carryover) Replace pumps, motors and controls at sewage ejector sumps in Quadrants A, B, C & D on 100 level.	200,000	10,000	210,000
Plumbing		Plumbing (2020/21 Carryover) Replace pressure reducing valves and other parts on domestic and recycled water systems.	100,000	5,000	105,000
Public Safety	X	Pedestrian Safety Fencing (2020/21 Carryover) Install raised fencing on Tasman Drive from Centennial Boulevard to Calle Del Sol. This is approximately 0.4 miles and would be adjacent to the VTA/Light Rail tracks. This fencing is required to guarantee the safety of patrons as pedestrians on Tasman Drive. Currently, pedestrians regularly jump temporary construction barriers and cross eastbound Tasman Drive and cross live/active VTA light rail tracks. In addition, during events the traffic flow is reversed and pedestrians will not expect cars coming from that direction. This poses a clear danger for pedestrians and mobile personnel are not always available to prevent this regular attempt by pedestrians. Raised fencing will guarantee this dangerous situation stops. The cost is an estimate based on the Fencing on Tasman project.	100,000	5,000	105,000
Security		Surveillance - Command Center Equipment (2020/21 Carryover) Build out workstations with equipment that can handle the load of video viewing during large scale events, as well as the 24/7 security operations in both 100 and 800 command rooms. Equipment includes, but is not limited to, monitors, keyboards, video cards, CPU processors, power supplies, motherboards, and cabling.	50,000	2,500	52,500
Security		Enhance Stadium Security Coverage (2020/21 Carryover) Evaluate and replace existing cameras with technologically advanced multi-lens panoramic/360/multi-directional cameras. Design locations and camera styles have created visual obstructions and gaps in coverage. Height locations with fixed lens cameras create the inability to adjust field of views. Installation of television monitors/signage near camera mounts have created field of view obstructions. Due to high volume of club space usage for large scale, and smaller events, request for video investigations become frequent. Low lighting situations are constant with event type needs, and enhanced technology from newer cameras will enable greater video quality. The areas which need to be evaluated include, but are not limited to: BNY Mellon East and West Club, Yahoo Club, United Club, FII Club, 501 Club, Citrix Owners Club, Entry Gates, and Perimeter fences.	\$ 330,000	\$ 16,500	\$ 346,500
Security		Enhance Stadium Security Access Control (2020/21 Carryover) Install card readers on manual doors to increase access control features and security. Based on operational demands, doors have been identified via staff request and event activity in order to improve operational awareness and enhance the access control abilities by automating the doors. This also increases security to areas deemed by staff to hold sensitive or high value assets. The access control enhancements include Vertx/Mercury upgrade, EvoE400/Mercury upgrade, and various doors with access control needs.	235,000	11,750	246,750

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Security		CCTV Pop Up Trailers (2020/21 Carryover) Purchase five (5) additional units to continue to meet NFL Best Practices guidelines by covering parking lots outside stadium footprint that currently have no camera coverage.	235,000	11,750	246,750
Security		Parking Lot Camera Upgrades (2020/21 Carryover) Replace Great America parking lot cameras with technologically advanced multi-lens panoramic/360/multi-directional cameras. New camera technology would provide better overall coverage of the main parking lot. Sun baked cameras with fixed angles have created gaps in coverage. With more video incident request coming from ingress/egress incidents, new technology would assist in these investigations. Install cameras in Gold lot 4/5 where there is very limited coverage.	40,000	2,000	42,000
Security		Bowl Camera Upgrade/Refurbish (2020/21 Carryover) Replace bowl cameras. Several bowl cameras have become sun baked and provide poor/obscured coverage of bowl seating. Maintenance has become an issue as it takes a lot of time and money to set up scaffolding to reach camera boxes. Need to re-engineer housing (suggest relocating housing closer to stadium infrastructure).	135,000	6,750	141,750
Security		Software Upgrade to Genetec 5.8 (2020/21 Carryover) Upgrade to Genetec's newest firmware version 5.8. This would improve overall system performance and stability, and add new features that will help in operator training and utilization of software. Customizable live dashboards assist in monitoring alarms and events in real time.	35,000	1,750	36,750
Security		Video Analytics (2020/21 Carryover) Add video analytics to assist with video investigations. Video investigations take several hours/days to complete using traditional playback methods. Adding video analytics will greatly decrease man-hours spent in video review process, as well as aid in investigations using newer technology.	35,000	1,750	36,750
Security		License Plate Reader at Vehicle Entry Gates (2020/21 Carryover) Add six (6) License Plate Reader cameras on entry/exit lanes of all vehicle gates (Post 1, 2, and 3) to document and track vehicles entering and exiting the stadium.	45,000	2,250	47,250
Security		Security X-Ray Scanners (2020/21 Carryover) Purchase four (4) portable X-ray units to observe postage that comes into the loading dock 24/7 and screen bags/deliveries during event days.	150,000	7,500	157,500
Security		Stadium Camera Booth Card Readers (2019/20 Carryover) Install card reader for north and south camera booths to secure the spaces that enter into/from general public access areas.	84,000	4,200	88,200
Site		Security Fencing - Main Lot (2020/21 Carryover) Remove and replace approximately 1,000 linear feet of 4-foot high security fencing in Main Lot per request of City.	150,000	7,500	157,500
Site		Stationary Electric Pressure Washers (2020/21 Carryover) Install one (1) to two (2) demo stations on the 300 concourse. If these are effective, we would look to replace all gas-powered pressure washers with electrically powered ones.	75,000	3,750	78,750
Site		Stadium Insulation (above 300 level and below 400/500 level) (2019/20 Carryover) Install new insulation in the 400/500 underside above the 300 level. Original insulation is failing due to weather conditions. This also helps reduce sound reverberation throughout the concourse and protects the concrete from the elements.	150,000	7,500	157,500

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Site		Gold Lot 4 and 5 Lighting (2019/20 Carryover) Install LED lighting in Gold 4 and Gold 5 parking lots. The current light plan is underpowered and is not sufficient given the work environment during stadium event load in/out. This lighting improves safety conditions for stadium personnel and provides energy cost savings with more efficient fixtures.	50,000	2,500	52,500
Site		Rust Prevention Mitigation (2019/20 Carryover) Implement rust prevention measures. The stadium railings, beams, and other steel areas need rust prevention and coating in specific areas throughout the stadium.	90,000	4,500	94,500
Site		Stadium Event Power Upgrades & Switchgear Electrical (2019/20 Carryover) Install and enhance Stadium Event wiring service on the 12 Kilovolt (KV) Primary Switch Gear (PMSG) to main electrical panel.	\$ 42,714	\$ 2,136	\$ 44,850
Site		Asphalt (2018/19 Carryover) Slurry coat the visitor parking on Tasman, Gold 4 & 5 parking lots and South Access Road.	190,000	9,500	199,500
Subtotal CapEx Construction Carryover Costs			\$ 3,953,911	\$ 197,696	\$ 4,151,607
Audio/Visual		Radio Booth Cabling (2019/20 Carryover) Install fiber optic cabling to increase the low voltage cabling backbone. This installation will accommodate the expanding requests for booth usage during stadium events and keep up with emerging trends.	\$ 600,000	\$ 30,000	\$ 630,000
Audio/Visual		Creston Control & Building Operating System Upgrades (2019/20 Carryover) Install a Creston Control System to monitor HVAC, lighting, electrical, and fire alarms. This comprehensive system enables all of these items to interface with one another for engineers to see a real time view of the building's systems.	10,000	500	10,500
Food and Beverage		Beverage Distribution System (2020/21 Carryover) Add a beverage distribution system to stadium concession areas and bars. This includes the lines and CO2 dispensing equipment.	50,000	2,500	52,500
Food and Beverage		CO2 Monitoring & Sensors for Code Compliance (2020/21 Carryover) Install remote CO2 monitoring for enhanced safety for stadium staff per SCFD & State of CA.	200,000	10,000	210,000
Furniture, Fixtures & Equipment		Replace Furniture in Club and Special Event Spaces (2019/20 Carryover) Purchase replacement furniture for clubs (BNY, United, Levi's 501 and Yahoo) and special event spaces to enhance areas and meet client expectations. These spaces are amongst the most utilized in the entire stadium.	1,600,000	80,000	1,680,000
Furniture, Fixtures & Equipment		Security and Life Safety Partitions/Dividers (2019/20 Carryover) Install service tunnel drapery and/or partitions for security and public safety personnel during stadium events that require public access to the service level. This helps coordinate public movements in "back of house areas" without affecting stadium operations.	68,000	3,400	71,400
Furniture, Fixtures & Equipment		Tunnel Slip and Fall Protection (2019/20 Carryover) Install non-slip material at the South, Northeast, and Northwest Field Tunnels.	30,000	1,500	31,500
Furniture, Fixtures & Equipment		Guest Service Booths (2018/19 Carryover) Add two additional guest services booths on the main concourse for better enhanced customer service touchpoints.	70,000	3,500	73,500
HVAC/Mechanical		Variable Frequency Drive(s) (2020/21 Carryover) Replace exterior Variable Frequency Drive units for Cooling Tower pumps due to life expectancy issues. This system supports the mechanical cooling functions for the HVAC system.	150,000	7,500	157,500

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
HVAC/ Mechanical		Cooling Towers (2020/21 Carryover) Replace Cooling Towers internal parts and systems. This includes the motors, fans, fill, controls, and piping which support the mechanical cooling functions for the HVAC system.	50,000	2,500	52,500
HVAC/Mechanical		Kitchen Exhaust Fans (2019/20 Carryover) Install variable frequency drive (VFD) Units on kitchen exhaust fans for soft start (slow ramp up) capabilities. Kitchen exhaust fans currently operate 100 percent of the time. Installing VFD units will modulate the power and save energy whenever the fan is in use. Soft start extends the life of the equipment and saves energy.	300,000	15,000	315,000
Information Technology	x	Financial Management Information System Project (2020/21 Carryover) Procure a new cloud-based financial management system for the Stadium Authority that would allow greater visibility in to Non-NFL Events. The management company that handles Non-NFL events would use the financial management system for all transactions related to Non-NFL events as well as store supporting documentation for the transactions (Including invoices). The costs include software license/subscription, hosting fee and a consultant for implementation and process improvement. There will be ongoing software license costs and possibility for additional staff time for implementation. *Subject to subsequent court rulings on cost allocation.	270,000	13,500	283,500
Life Safety/Fire		Fire Alarm System (2020/21 Carryover) Replace/update fire alarm system field devices, including interior/exterior signaling devices, detectors, and control panel parts.	250,000	12,500	262,500
Life Safety/Fire		Fire Sprinkler Extension (2019/20 Carryover) Add fire sprinklers to the Gate F entrance. The Santa Clara Fire Marshal has requested that fire sprinklers be installed at the Gate F entrance to mitigate potential fire risk beneath the existing ribbon boards.	55,000	2,750	57,750
Public Safety Equipment	x	Mass Casualty Incident Trailer (2020/21 Carryover) Purchase a Mass Casualty Incident (MCI) Trailer. The fire department currently has equipment to treat 25 patients during a large-scale emergency. The MCI Trailer would allow the first responders to treat between 500-1000 people during a large-scale emergency by allowing quick access to on-board equipment and supplies.	120,000	6,000	126,000
Public Safety Equipment	x	2-Way CAD/24-7 Link (2020/21 Carryover) Add a 2-way link between the 24/7 dispatch system and the CAD system. All stadium personnel operate on the 24/7 dispatch system. SCPD and SCFD operate on the CAD system. When public safety personnel are sent on calls, the call must be generated by hand in both systems. This causes extra work for dispatchers, however, more importantly this creates delays in reporting and responses to public safety incidents. A 2-way link would allow both systems to "talk" to each other and automatically create incidents in each other's system. Additionally, without this link, we cannot log officers on which creates an officer safety issue as well as an issue when it comes to management of personnel.	\$ 82,000	\$ 4,100	\$ 86,100
Public Safety Equipment	x	Dispatch Monitors (2020/21 Carryover) Replace dispatch monitors with larger screens. Our public safety dispatchers utilize several screens at their work stations in order to facilitate their duties. The necessary upgrading of our latest public safety communications center's CAD and associated software will require larger screen area to effectively manage the new information. These 16 replacement 22" larger monitors are needed to optimize the use and intended application of the latest public safety dispatching software. The larger screens are required to view the additional windows from the CAD system and are expected to last five years. The prior monitors were purchased six years ago and are 19" monitors. The cost includes estimated installation for three workstations.	8,000	400	8,400

Santa Clara Stadium Authority

2021/22 CapEx Budget Carryover (cont.)

Item Type	SCSA Requested	Description	Cost	Remaining Contingency	Total Cost
Public Safety Equipment	x	Radio Chargers (2020/21 Carryover) Add three radio charging stations. Our radio equipment is critical and, therefore, their serviceability must be maintained. Each new radio will require a charging port. These three charging stations each have a 6-radio capacity and three are needed to maintain radios at their peak power and usability. Having these three charging stations will ensure all radios are ready for use by public safety without the risk of personnel being without this crucial equipment in a functional state.	3,000	150	3,150
Public Safety Equipment	x	Radios (2020/21 Carryover) Add new radios to equip additional staff in our public safety deployment. Personnel will continue to use these specific radios for varied public safety responsibilities. These radios allow for communication to the command post and between public safety partners working our events. Without these critical radios, personnel would not be able to function in their capacity and as expected to provide public safety services including emergency response. There is a yearly operating cost; requesting quote.	79,000	3,950	82,950
Public Safety Equipment	x	GPS Software for Tracking Personnel (2019/20 Carryover) Add GPS software to track public safety personnel. Live tracking of law enforcement personnel is critical in providing an accurate picture of public safety coverage. This technology and software will allow the Command Post to know where our personnel are at all times and make necessary assignment adjustments on the go. It is desired that the software also be capable of retaining data for historical analysis. The requested funding of \$25,000 is the initial purchase price for approximately 100 devices and the software. There is a monthly operating cost of \$30/month each; \$36,000 total annually.	25,000	1,250	26,250
Public Safety Equipment	x	Fencing on Tasman (2019/20 Carryover) Add fencing to prevent stadium event pedestrian traffic from crossing unsafely between Lafayette St. and the Tasman St. overcrossing.	70,000	3,500	73,500
Public Safety Equipment	x	Street Signage (2017/18 Carryover) Add street signage. This item was brought before the SCSA Board and approved in the 2017/18 budget. Staff has been working with the Department of Public Works, the Executive Director's office and the Chief of Police's office to identify appropriate locations on surrounding city streets (Great America Parkway, Tasman Drive, etc.) to place signage to better protect, inform and serve patrons visiting Levi's® Stadium, non-event day traffic, community event advisories and emergency public safety and traffic advisories.	1,000,000	50,000	1,050,000
Public Safety Equipment	x	Staff Scheduling Software (2019/20 Carryover) The Stadium requires SEOs to operate safely. Notifying and communicating with our SEOs is critical in properly planning our staffing needs. We currently use an out of date version of "Game Day Staffing."	16,250	813	17,063
Public Safety Equipment	x	Portable License Plate Reader/PTZ Cameras (2018/19 Carryover) Purchase portable license plate readers. Placing temporary/moveable license plate readers in remote stadium parking lots will provide better information and intelligence to the Command Post in order to deter crime and assist in apprehending crime suspects in the aftermath of an incident.	160,000	8,000	168,000
Vertical Transport		Elevator Door Replacement (2019/20 Carryover) Replace and install new elevator doors on one of the freight elevators in the stadium.	20,000	1,000	21,000
Subtotal CapEx Equipment Carryover Costs			\$ 5,286,250	\$ 264,313	\$ 5,550,563
Stadium Warranty-Related Construction		Carryover costs from the original Stadium Construction Budget for warranty-related work.	\$ 1,528,202		\$ 1,528,202
Total CapEx Carryover Costs			\$ 10,768,363	\$ 462,009	\$ 11,230,372

Santa Clara Stadium Authority
2021/22 CapEx Project Submittal Not Recommended

Item Type	SCSA	Description	Cost	Contingency	Total Cost
	Requested			(5%)	
General Building		Levi's Naming Rights Signage Replacement (2020/21 Carryover)			
		Replace Levi's Naming Rights signage. The cost of this project increase from \$650,000 to \$900,000. Based on the Naming Rights Agreement, it is the Santa Clara Stadium Authority's position that this project is the responsibility of Levi's.	\$ 900,000	\$ 45,000	\$ 945,000
Subtotal Projects Not Recommended			\$ 900,000	\$ 45,000	\$ 945,000

The Capital Expense budget does not include the requested Levi's Naming Rights Signage Replacement Project totaling \$945,000 which includes a 5% contingency. The Naming Rights Agreement Section 5(f) states, "Naming Rights Sponsor shall be entitled, **at its sole cost and expense**, to replace, update, change, refresh or refurbish any such initial signage at any time and from time to time...". Based on this language, it is the Stadium Authority's position that the full signage replacement is the responsibility of the Naming Rights Sponsor and may constitute a gift of public funds.

There are over 40 CapEx projects that the Stadium Manager has requested over the past three fiscal years and the Stadium Manager has not been able to legally and properly implement these identified needs. The CapEx projects keep growing and, as we all know, repair and maintenance work gets more costly the longer it is delayed. Additionally, given the short turnaround time from receipt of these requests to publishing the proposed budget, the Stadium Authority did not have time to conduct any due diligence on whether the CapEx projects are properly assigned to Stadium Authority, estimated accurately, are in fact needed, or any other confirmation required to support the budgeting of these items. These items are being transmitted as submitted by the Stadium Manager and the Board would be wise to get more information about these projects and purpose for excessive delay in implementing them—including a procurement workplan that provides a schedule for project implementation.

Santa Clara Stadium Authority

Capital Expense Plan Summary - 5 Year Forecast

	2021/22	2022/23	2023/24	2024/25	2025/26
	Budget	Budget	Budget	Budget	Budget
Electrical	\$ -	\$ -	\$ 750,000	\$ 1,250,000	\$ 1,475,000
General Building	2,790,000	1,875,000	1,138,000	2,050,000	3,100,000
Plumbing	-	150,000	-	-	375,000
Public Safety	-	-	-	-	-
Security	-	150,000	-	-	1,110,000
Site	-	400,000	-	150,000	450,000
Subtotal CapEx Construction Costs	\$ 2,790,000	\$ 2,575,000	\$ 1,888,000	\$ 3,450,000	\$ 6,510,000
Audio/Visual	\$ -	\$ 870,000	\$ -	\$ -	\$ 650,000
FF&E	-	-	30,000	-	61,669
Food & Beverage	-	-	-	-	1,200,000
HVAC/Mechanical	-	150,000	-	225,000	225,000
Information Technology	-	-	-	-	-
Life Safety/Fire	-	-	-	50,000	-
Security	75,000	-	-	-	-
Public Safety Equipment	373,520	526,510	164,010	193,010	28,010
Vertical Support	-	-	-	-	-
Subtotal CapEx Equipment Costs	\$ 448,520	\$ 1,546,510	\$ 194,010	\$ 468,010	\$ 2,164,679
Contingency (5%)	161,926	206,076	104,101	195,901	433,734
Total CapEx Project Costs	\$ 3,400,446	\$ 4,327,586	\$ 2,186,111	\$ 4,113,911	\$ 9,108,413

**FORTY NINERS STADIUM MANAGEMENT COMPANY LLC
CONSTRUCTION CONTRACT
RESILIENT FLOORING IN SERVICE TUNNEL PROJECT**

1. PARTIES AND DATE.

This Contract is made and entered into this [***INSERT DAY***] day of [***INSERT MONTH***], [***INSERT YEAR***] by and between the Forty Niners Stadium Management Company LLC, a Delaware limited liability company ("Stadium Manager") and R.E. Cuddie Co., a Corporation with its principal place of business at 1751 Junction Avenue, San Jose, CA 95112 ("Contractor"). Stadium Manager and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Contract.

2. RECITALS.

2.1 Stadium Manager. Stadium Manager seeks to contract for services necessary to achieve its purpose.

2.2 Contractor. Contractor desires to perform and assume responsibility for the provision of certain construction services required by the Stadium Manager on the terms and conditions set forth in this Contract. Contractor represents that it is duly licensed and experienced in providing resilient athletic flooring related construction services, that it and its employees or subcontractors have all necessary licenses and permits to perform the services in the State of California, and that it is familiar with the plans of Stadium Manager. The following license classifications are required for this Project: C-15 – Flooring and Floor Covering Contractors or A – General Engineering Contractor or B – General Building Contractor.

2.3 Project. Stadium Manager desires to engage Contractor to render such services for the Resilient Flooring In Service Tunnel Project ("Project") as set forth in this Contract.

2.4 Project Documents & Certifications. Contractor has obtained, and delivers concurrently herewith, a performance bond, a payment bond, and all insurance documentation, as required by the Contract.

3. TERMS

3.1 Incorporation of Documents. This Contract includes and hereby incorporates in full by reference the following documents, including all exhibits, drawings, specifications and documents therein, and attachments and addenda thereto:

- Services/Schedule (Exhibit "A")
- Plans and Specifications (Exhibit "B")
- Special Conditions (Exhibit "C")
- Contractor's Certificate Regarding Workers' Compensation (Exhibit "D")
- Public Works Contractor Registration Certification (Exhibit "E")
- Payment and Performance Bonds (Exhibit "F")
- Procurement and Contract Process Integrity and Conflict of Interest Guidelines (Exhibit "G")
- Levi's Stadium Jobsite Rules (Exhibit "H")
- Addenda
- Change Orders executed by the Stadium Manager

- 2021 Edition of the Standard Specifications for Public Works Construction (The Greenbook), Excluding Sections 1-9
- Notice Inviting Bids, if any
- Instructions to Bidders, if any
- Contractor's Bid

3.2 Contractor's Basic Obligation; Scope of Work. Contractor promises and agrees, at its own cost and expense, to furnish to the Stadium Manager all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately complete the Project, including all structures and facilities necessary for the Project or described in the Contract (hereinafter sometimes referred to as the "Work"), for a Total Contract Price as specified pursuant to this Contract. All Work shall be subject to, and performed in accordance with the above referenced documents, as well as the exhibits attached hereto and incorporated herein by reference. The plans and specifications for the Work are further described in Exhibit "B" attached hereto and incorporated herein by this reference. Special Conditions, if any, relating to the Work are described in Exhibit "C" attached hereto and incorporated herein by this reference.

3.2.1 Change in Scope of Work. Any change in the scope of the Work, method of performance, nature of materials or price thereof, or any other matter materially affecting the performance or nature of the Work shall not be paid for or accepted unless such change, addition or deletion is approved in writing by a valid change order executed by the Stadium Manager. Should Contractor request a change order due to unforeseen circumstances affecting the performance of the Work, such request shall be made within five (5) business days of the date such circumstances are discovered or shall waive its right to request a change order due to such circumstances. If the Parties cannot agree on any change in price required by such change in the Work, the Stadium Manager may direct the Contractor to proceed with the performance of the change on a time and materials basis.

3.2.2 Substitutions/"Or Equal". Pursuant to Public Contract Code Section 3400(b), the Stadium Manager may make a finding that designates certain products, things, or services by specific brand or trade name. Unless specifically designated in this Contract, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words "or equal."

Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in this Contract. However, the Stadium Manager may have adopted certain uniform standards for certain materials, processes and articles. Contractor shall submit requests, together with substantiating data, for substitution of any "or equal" material, process or article no later than 7 calendar days prior to the bid submission deadline set forth in the Notice Inviting Bids as it may be amended. Provisions regarding submission of "or equal" requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed "or equal" substitution request is rejected or submitted untimely, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with Contractor.

The Stadium Manager has the complete and sole discretion to determine if a material, process or article is an "or equal" material, process or article that may be substituted. Data required to substantiate requests for substitutions of an "or equal" material, process or article

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data shall include a signed affidavit from Contractor stating that, and describing how, the substituted "or equal" material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted "or equal" material, process or article, and substantiates that it is an "or equal" to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted "or equal" material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to the Stadium Manager in a timely fashion will result in the rejection of the proposed substitution.

Contractor shall bear all of the Stadium Manager's costs associated with the review of substitution requests. Contractor shall be responsible for all costs related to a substituted "or equal" material, process or article. Contractor is directed to the Special Conditions and/or Services/Schedule exhibits attached hereto (if any) to review any findings made pursuant to Public Contract Code Section 3400.

3.3 Period of Performance.

3.3.1 Contract Time. Contractor shall perform and complete all Work under this Contract within 90 days, beginning the effective date of the Notice to Proceed ("Contract Time"). Contractor shall perform its Work in strict accordance with any completion schedule, construction schedule or project milestones developed by the Stadium Manager. Such schedules or milestones may be included as part of Exhibits "A" or "B" attached hereto, or may be provided separately in writing to Contractor. Contractor agrees that if such Work is not completed within the aforementioned Contract Time and/or pursuant to any such completion schedule, construction schedule or project milestones developed pursuant to provisions of the Contract, it is understood, acknowledged and agreed that the Stadium Manager will suffer damage.

3.3.2 Force Majeure. Neither Stadium Manager nor Contractor shall be considered in default of this Contract for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Contract, such circumstances include but are not limited to, abnormal weather conditions; floods; earthquakes; fire; pandemics or epidemics; war; riots and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage or judicial restraint. Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Contract. Contractor's exclusive remedy in the event of delay covered under this Section shall be a non-compensable extension of the Contract Time.

3.3.3 Liquidated Damages. Pursuant to Government Code Section 53069.85, Contractor shall pay to the Stadium Manager as fixed and liquidated damages the sum of \$100 per day for each and every calendar day of delay beyond the Contract Time or beyond any completion schedule, construction schedule or Project milestones established pursuant to the Contract.

3.4 Standard of Performance; Performance of Employees. Contractor shall perform all Work under this Contract in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling necessary to perform the Work. Contractor warrants that all employees and subcontractors shall

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have sufficient skill and experience to perform the Work assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Work, including any required business license, and that such licenses and approvals shall be maintained throughout the term of this Contract. Contractor shall perform, at its own cost and expense and without reimbursement from the Stadium Manager, any work necessary to correct errors or omissions which are caused by Contractor's failure to comply with the standard of care provided for herein. Any employee who is determined by the Stadium Manager to be uncooperative, incompetent, a threat to the safety of persons or the Work, or any employee who fails or refuses to perform the Work in a manner acceptable to the Stadium Manager, shall be promptly removed from the Project by Contractor and shall not be re-employed on the Work.

3.5 Control and Payment of Subordinates; Contractual Relationship. Stadium Manager retains Contractor on an independent contractor basis and Contractor is not an employee of Stadium Manager. Any additional personnel performing the work governed by this Contract on behalf of Contractor shall at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance under this Contract and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, and workers' compensation insurance.

3.6 Stadium Manager's Basic Obligation. Stadium Manager agrees to engage and does hereby engage Contractor as an independent contractor to furnish all materials and to perform all Work according to the terms and conditions herein contained for the sum set forth above. Except as otherwise provided in the Contract, the Stadium Manager shall pay to Contractor, as full consideration for the satisfactory performance by Contractor of the services and obligations required by this Contract, the below-referenced compensation in accordance with compensation provisions set forth in the Contract.

3.7 Compensation and Payment.

3.7.1 Amount of Compensation. As consideration for performance of the Work required herein, Stadium Manager agrees to pay Contractor the Total Contract Price of Fifty Three Thousand Nine Hundred Fifty Five Dollars and Twenty Cents (\$53,955.20) ("Total Contract Price") provided that such amount shall be subject to adjustment pursuant to the applicable terms of this Contract or written change orders approved and signed in advance by the Stadium Manager.

3.7.2 Payment of Compensation. If the Work is scheduled for completion in thirty (30) or less calendar days, Stadium Manager will arrange for payment of the Total Contract Price upon completion and approval by Stadium Manager of the Work. If the Work is scheduled for completion in more than thirty (30) calendar days, Stadium Manager will pay Contractor on a monthly basis as provided for herein. On or before the fifth (5th) day of each month, Contractor shall submit to the Stadium Manager an itemized application for payment in the format supplied by the Stadium Manager indicating the amount of Work completed since commencement of the Work or since the last progress payment. These applications shall be supported by evidence which is required by this Contract and such other documentation as the Stadium Manager may require. The Contractor shall certify that the Work for which payment is requested has been done and that the materials listed are stored where indicated. Contractor may be required to furnish a detailed schedule of values upon request of the Stadium Manager and in such detail and form as the Stadium Manager shall request, showing the quantities, unit prices, overhead, profit, and all

other expenses involved in order to provide a basis for determining the amount of progress payments.

3.7.3 Prompt Payment. Stadium Manager shall review and pay all progress payment requests in accordance with the provisions set forth in Section 20104.50 of the California Public Contract Code. However, no progress payments will be made for Work not completed in accordance with this Contract. Contractor shall comply with all applicable laws, rules and regulations relating to the proper payment of its employees, subcontractors, suppliers or others.

3.7.4 Contract Retentions. From each approved progress estimate, five percent (5%) will be deducted and retained by the Stadium Manager, and the remainder will be paid to Contractor. All Contract retention shall be released and paid to Contractor and subcontractors pursuant to California Public Contract Code Section 7107.

3.7.5 Other Deductions and Withholdings. In addition to Contract retentions, the Stadium Manager may deduct from each progress payment an amount necessary to protect Stadium Manager from loss because of: (1) liquidated damages which have accrued as of the date of the application for payment; (2) any sums expended by the Stadium Manager in performing any of Contractor's obligations under the Contract which Contractor has failed to perform or has performed inadequately; (3) defective Work not remedied; (4) stop notices as allowed by state law; (5) reasonable doubt that the Work can be completed for the unpaid balance of the Total Contract Price or within the scheduled completion date; (6) unsatisfactory prosecution of the Work by Contractor; (7) unauthorized deviations from the Contract; (8) failure of Contractor to maintain or submit on a timely basis proper and sufficient documentation as required by the Contract or by Stadium Manager during the prosecution of the Work; (9) erroneous or false estimates by Contractor of the value of the Work performed; (10) any sums representing expenses, losses, or damages as determined by the Stadium Manager, incurred by the Stadium Manager for which Contractor is liable under the Contract; and (11) any other sums which the Stadium Manager is entitled to recover from Contractor under the terms of the Contract or pursuant to state law, including Section 1727 of the California Labor Code. The failure by the Stadium Manager to deduct any of these sums from a progress payment shall not constitute a waiver of the Stadium Manager's right to such sums.

3.7.6 Substitutions for Contract Retentions. In accordance with California Public Contract Code Section 22300, the Stadium Manager will permit the substitution of securities for any monies withheld by the Stadium Manager to ensure performance under the Contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the Stadium Manager, or with a state or federally chartered bank in California as the escrow agent, and thereafter the Stadium Manager shall then pay such monies to Contractor as they come due. Upon satisfactory completion of the Contract, the securities shall be returned to Contractor. For purposes of this Section and Section 22300 of the Public Contract Code, the term "satisfactory completion of the contract" shall mean the time the Stadium Manager has issued written final acceptance of the Work and filed a Notice of Completion as required by law and provisions of this Contract. Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon. The escrow agreement used for the purposes of this Section shall be in the form provided by the Stadium Manager.

3.7.7 Title to Work. As security for partial, progress, or other payments, title to Work for which such payments are made shall pass to the Stadium Manager at the time of payment. To the extent that title has not previously been vested in the Stadium Manager by reason of payments, full title shall pass to the Stadium Manager at delivery of the Work at the

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destination and time specified in this Contract. Such transferred title shall in each case be good, free and clear from any and all security interests, liens, or other encumbrances. Contractor promises and agrees that it will not pledge, hypothecate, or otherwise encumber the items in any manner that would result in any lien, security interest, charge, or claim upon or against said items. Such transfer of title shall not imply acceptance by the Stadium Manager, nor relieve Contractor from the responsibility to strictly comply with the Contract, and shall not relieve Contractor of responsibility for any loss of or damage to items.

3.7.8 Labor and Material Releases. Contractor shall furnish Stadium Manager with labor and material releases from all subcontractors performing work on, or furnishing materials for, the Work governed by this Contract prior to final payment by Stadium Manager.

3.7.9 Prevailing Wages. Contractor is aware of the requirements of California Labor Code Section 1720 et seq., and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. Stadium Manager shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Contract upon request. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at Contractor's principal place of business and at the project site. Contractor shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. Contractor and any subcontractor shall forfeit a penalty of up to \$200 per calendar day or portion thereof for each worker paid less than the prevailing wage rates.

3.7.10 Apprenticeable Crafts. When Contractor employs workmen in an apprenticeable craft or trade, Contractor shall comply with the provisions of Section 1777.5 of the California Labor Code with respect to the employment of properly registered apprentices upon public works. The primary responsibility for compliance with said Section for all apprenticeable occupations shall be with Contractor. The Contractor or any subcontractor that is determined by the Labor Commissioner to have knowingly violated Section 1777.5 shall forfeit as a civil penalty an amount not exceeding \$100 for each full calendar day of noncompliance, or such greater amount as provided by law.

3.7.11 Hours of Work. Contractor is advised that eight (8) hours labor constitutes a legal day's work. Pursuant to Section 1813 of the California Labor Code, Contractor shall forfeit a penalty of \$25.00 per worker for each day that each worker is permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, except when payment for overtime is made at not less than one and one-half (1-1/2) times the basic rate for that worker.

3.7.12 Payroll Records. Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of Contractor in the manner provided in Labor Code

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Section 1776. In the event of noncompliance with the requirements of this Section, Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects such Contractor must comply with this Section. Should noncompliance still be evident after such 10-day period, Contractor shall, as a penalty to Stadium Manager, forfeit not more than \$100.00 for each calendar day or portion thereof, for each worker, until strict compliance is effectuated. The amount of the forfeiture is to be determined by the Labor Commissioner. A contractor who is found to have violated the provisions of law regarding wages on public works with the intent to defraud shall be ineligible to bid on public works contracts for a period of one to three years as determined by the Labor Commissioner. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The responsibility for compliance with this Section is on Contractor. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code Section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

3.7.13 Contractor and Subcontractor Registration. Pursuant to Labor Code Sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. Contractor is directed to review, fill out and execute the Public Works Contractor Registration Certification attached hereto as Exhibit "E" prior to contract execution. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

3.7.14 Proof of Compliance. It shall be Contractor's sole responsibility to comply with, and maintain adequate records of its adherence to, all applicable state prevailing wage requirement. Proof of such compliance may include proof of Contractor and subcontractor registration with the Department of Industrial Relations, California certified payroll form A-131, statements of non-performance for work not undertaken at any point during the Project, DAS 140/142 forms for all apprenticeable crafts or trades, proper fringe benefits statements, and any other such documents that may be required under this Section 3.7. At any time during or subsequent to the full performance of the services under this Agreement, Stadium Manager and/or the Santa Clara Stadium Authority may require Contractor to produce complete and adequate compliance records, subject to Stadium Manager and/or the Santa Clara Stadium Authority's satisfaction, prior to release of payment.

3.7.15 Labor Compliance; Stop Orders. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be the Contractor's sole responsibility to evaluate and pay the cost of complying with all labor compliance requirements under this Contract and applicable law. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the Stadium Manager. Contractor shall defend, indemnify and hold the Indemnified Parties free and harmless

from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

3.8 Performance of Work; Jobsite Obligations.

3.8.1 Water Quality Management and Compliance.

3.8.1.1 Water Quality Management and Compliance. Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §§ 1300); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); local ordinances regulating discharges of storm water; and any and all regulations, policies, or permits issued pursuant to any such authority regulating the discharge of pollutants, as that term is used in the Porter-Cologne Water Quality Control Act, to any ground or surface water in the State.

3.8.1.2 Compliance with the Statewide Construction General Permit. Contractor shall comply with all conditions of the most recent iteration of the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity, issued by the California State Water Resources Control Board ("Permit"). It shall be Contractor's sole responsibility to file a Notice of Intent and procure coverage under the Permit for all construction activity which results in the disturbance of more than one acre of total land area or which is part of a larger common area of development or sale. Prior to initiating work, Contractor shall be solely responsible for preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) as required by the Permit. Contractor shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, and monitoring and reporting requirements as required by the Permit. The Permit requires the SWPPP to be a "living document" that changes as necessary to meet the conditions and requirements of the job site as it progresses through difference phases of construction and is subject to different weather conditions. It shall be Contractor's sole responsibility to update the SWPPP as necessary to address conditions at the project site.

3.8.1.3 Other Water Quality Rules Regulations and Policies. Contractor shall comply with the lawful requirements of any applicable municipality, drainage Stadium Manager, or local agency regarding discharges of storm water to separate storm drain systems or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

3.8.1.4 Cost of Compliance. Storm, surface, nuisance, or other waters may be encountered at various times during construction of the Work. Therefore, the Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

3.8.1.5 Liability for Non-Compliance. Failure to comply with the Permit is a violation of federal and state law. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to defend, indemnify and hold harmless the Indemnified Parties for any alleged violations. In addition, Stadium Manager may seek damages from

Contractor for any delay in completing the Work in accordance with the Contract, if such delay is caused by or related to Contractor's failure to comply with the Permit.

3.8.1.6 **Reservation of Right to Defend.** Stadium Manager reserves the right to defend any enforcement action brought against the Stadium Manager for Contractor's failure to comply with the Permit or any other relevant water quality law, regulation, or policy. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to be bound by, and to reimburse the Stadium Manager for the costs (including the Stadium Manager's attorney's fees) associated with, any settlement reached between the Stadium Manager and the relevant enforcement entity.

3.8.1.7 **Training.** In addition to the standard of performance requirements set forth in paragraph 3.4, Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them without impacting water quality in violation of the laws, regulations and policies described in paragraph 3.8.1. Contractor further warrants that it, its employees and subcontractors will receive adequate training, as determined by Stadium Manager, regarding the requirements of the laws, regulations and policies described in paragraph 3.8.1 as they may relate to the Work provided under this Agreement. Upon request, Stadium Manager will provide the Contractor with a list of training programs that meet the requirements of this paragraph.

3.8.2 **Safety.** Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. Contractor shall comply with the requirements of the specifications relating to safety measures applicable in particular operations or kinds of work. In carrying out its Work, Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the Work and the conditions under which the Work is to be performed. Safety precautions as applicable shall include, but shall not be limited to, adequate life protection and lifesaving equipment; adequate illumination for underground and night operations; instructions in accident prevention for all employees, such as machinery guards, safe walkways, scaffolds, ladders, bridges, gang planks, confined space procedures, trenching and shoring, fall protection and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and adequate facilities for the proper inspection and maintenance of all safety measures. Furthermore, Contractor shall prominently display the names and telephone numbers of at least two medical doctors practicing in the vicinity of the Project, as well as the telephone number of the local ambulance service, adjacent to all telephones at the Project site.

3.8.3 **Laws and Regulations.** Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Contract or the Work, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Work. If Contractor observes that the drawings or specifications are at variance with any law, rule or regulation, it shall promptly notify the Stadium Manager in writing. Any necessary changes shall be made by written change order. Stadium Manager shall further comply with all requirements specified in the Stadium Manager's Procurement and Contract Process Integrity and Conflict of Interest Guidelines, which are attached hereto as Exhibit "G" and incorporated herein by this reference. If Contractor performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the Stadium Manager, Contractor shall be solely responsible for all costs arising therefrom. Stadium Manager is subject to certain provisions of the Health & Safety Code, Government Code, Public Contract Code, and

Labor Code of the State. It is stipulated and agreed that all provisions of the law applicable to the public contracts of a municipality are a part of this Contract to the same extent as though set forth herein and will be complied with. Contractor shall defend, indemnify and hold the Indemnified Parties (defined below) free and harmless, pursuant to the indemnification provisions of this Contract, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.8.4 Permits and Licenses. Contractor shall be responsible for securing Stadium Manager permits and licenses necessary to perform the Work described herein, including, but not limited to, any required business license. While Contractor will not be charged a fee for any Stadium Manager permits, Contractor shall pay the Stadium Manager's business license fee, if any. Any ineligible contractor or subcontractor pursuant to Labor Code Sections 1777.1 and 1777.7 may not perform work on this Project.

3.8.5 Trenching Work. If the Total Contract Price exceeds \$25,000 and if the Work governed by this Contract entails excavation of any trench or trenches five (5) feet or more in depth, Contractor shall comply with all applicable provisions of the California Labor Code, including Section 6705. To this end, Contractor shall submit for Stadium Manager's review and approval a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

3.8.6 Hazardous Materials and Differing Conditions. As required by California Public Contract Code Section 7104, if this Contract involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor shall promptly, and prior to disturbance of any conditions, notify Stadium Manager of: (1) any material discovered in excavation that Contractor believes to be a hazardous waste that is required to be removed to a Class I, Class II or Class III disposal site; (2) subsurface or latent physical conditions at the site differing from those indicated by Stadium Manager; and (3) unknown physical conditions of an unusual nature at the site, significantly different from those ordinarily encountered in such contract work. Upon notification, Stadium Manager shall promptly investigate the conditions to determine whether a change order is appropriate. In the event of a dispute, Contractor shall not be excused from any scheduled completion date and shall proceed with all Work to be performed under the Contract, but shall retain all rights provided by the Contract or by law for making protests and resolving the dispute.

3.8.7 Underground Utility Facilities. To the extent required by Section 4215 of the California Government Code, Stadium Manager shall compensate Contractor for the costs of: (1) locating and repairing damage to underground utility facilities not caused by the failure of Contractor to exercise reasonable care; (2) removing or relocating underground utility facilities not indicated in the construction drawings; and (3) equipment necessarily idled during such work. Contractor shall not be assessed liquidated damages for delay caused by failure of Stadium Manager to provide for removal or relocation of such utility facilities.

3.8.8 Air Quality. Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the California Air Resources Board (CARB). Although CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify the

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Indemnified Parties (defined below) against any fines or penalties imposed by CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in this Agreement.

3.8.9 State Recycling Mandates. Contractor shall comply with State Recycling Mandates. Any recyclable materials/debris collected by the contractor that can be feasibly diverted via reuse or recycling must be hauled by the appropriate handler for reuse or recycling.

3.9 Completion of Work. When Contractor determines that it has completed the Work required herein, Contractor shall so notify Stadium Manager in writing and shall furnish all labor and material releases required by this Contract. Stadium Manager shall thereupon inspect the Work. If the Work is not acceptable to the Stadium Manager, the Stadium Manager shall indicate to Contractor in writing the specific portions or items of Work which are unsatisfactory or incomplete. Once Contractor determines that it has completed the incomplete or unsatisfactory Work, Contractor may request a reinspection by the Stadium Manager. Once the Work is acceptable to Stadium Manager, Stadium Manager shall pay to Contractor the Total Contract Price remaining to be paid, less any amount which Stadium Manager may be authorized or directed by law to retain. Payment of retention proceeds due to Contractor shall be made in accordance with Section 7107 of the California Public Contract Code.

3.10 Claims; Government Code Claim Compliance.

3.10.1 Intent. Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Section is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Section shall be construed to be consistent with said statutes.

3.10.2 Claims. For purposes of this Section, "Claim" means a separate demand by the Contractor, after a change order duly requested in accordance with the terms of this Contract has been denied by the Stadium Manager, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the Stadium Manager. A "Claim" does not include any demand for payment for which the Contractor has failed to provide notice, request a change order, or otherwise failed to follow any procedures contained in the Contract. Claims governed by this Section may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the change order procedures contained herein, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Section must be filed no later than fourteen (14) days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to the Stadium Manager and shall include on its first page the following in 16-point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing in this Section is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

3.10.3 Supporting Documentation. The Contractor shall submit all claims in the following format:

3.10.3.1 Summary of claim merit and price, reference Contract provisions pursuant to which the claim is made

3.10.3.2 List of documents relating to claim:

- (A) Specifications
- (B) Drawings
- (C) Clarifications (Requests for Information)
- (D) Schedules
- (E) Other

3.10.3.3 Chronology of events and correspondence

3.10.3.4 Analysis of claim merit

3.10.3.5 Analysis of claim cost

3.10.3.6 Time impact analysis in CPM format

3.10.3.7 If Contractor's claim is based in whole or in part on an allegation of errors or omissions in the Drawings or Specifications for the Project, Contractor shall provide a summary of the percentage of the claim subject to design errors or omissions and shall obtain a certificate of merit in support of the claim of design errors and omissions.

3.10.3.8 Cover letter and certification of validity of the claim, including any claims from subcontractors of any tier, in accordance with Government Code Section 12650 *et seq.*

3.10.4 Stadium Manager's Response. Upon receipt of a claim pursuant to this Section, Stadium Manager shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 days after the Stadium Manager issues its written statement.

3.10.4.1 If Stadium Manager needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, Stadium Manager shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

3.10.4.2 Within 30 days of receipt of a claim, Stadium Manager may request in writing additional documentation supporting the claim or relating to defenses or claims Stadium Manager may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of Stadium Manager and the Contractor.

3.10.4.3 Stadium Manager's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days (if the claim is less than \$50,000, within 15 days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

3.10.5 Meet and Confer. If the Contractor disputes Stadium Manager's written response, or Stadium Manager fails to respond within the time prescribed, the Contractor may so notify Stadium Manager, in writing, either within 15 days of receipt of Stadium Manager's response or within 15 days of Stadium Manager's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, Stadium Manager shall schedule a meet and confer conference within 30 days for settlement of the dispute.

3.10.6 Mediation. Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, Stadium Manager shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after Stadium Manager issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with Stadium Manager and the Contractor sharing the associated costs equally. Stadium Manager and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

3.10.6.1 If the Parties cannot agree upon a mediator, each Party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each Party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

3.10.6.2 For purposes of this Section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the Parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this Section.

3.10.6.3 Unless otherwise agreed to by Stadium Manager and the Contractor in writing, the mediation conducted pursuant to this Section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

3.10.6.4 The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.

3.10.7 Procedures After Mediation. If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference or mediation.

3.10.8 Civil Actions. The following procedures are established for all civil actions filed to resolve claims subject to this Section:

3.10.8.1 Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code Section 9204 and the terms of these procedures. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

3.10.8.2 If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

3.10.8.3 In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

3.10.9 Government Code Claims. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Contractor must comply with the claim procedures set forth in Government Code Sections 900 et seq. prior to filing any lawsuit against the Stadium Manager. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Contractor shall be barred from bringing and maintaining a valid lawsuit against the Stadium Manager. A Government Code claim must be filed no earlier than the date the work is completed or the date the Contractor last performs work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.

3.10.10 Non-Waiver. Stadium Manager's failure to respond to a claim from the Contractor within the time periods described in this Section or to otherwise meet the time requirements of this Section shall result in the claim being deemed rejected in its entirety. Stadium

Manager's failure to respond shall not waive Stadium Manager's rights to any subsequent procedures for the resolution of disputed claims.

3.11 Loss and Damage. Except as may otherwise be limited by law, Contractor shall be responsible for all loss and damage which may arise out of the nature of the Work agreed to herein, or from the action of the elements, or from any unforeseen difficulties which may arise or be encountered in the prosecution of the Work until the same is fully completed and accepted by Stadium Manager. In the event of damage proximately caused by an Act of God, as defined by Section 7105 of the Public Contract Code, the Stadium Manager may terminate this Contract pursuant to Section 3.17.3; provided, however, that the Stadium Manager needs to provide Contractor with only one (1) day advanced written notice.

3.12 Indemnification.

3.12.1 Scope of Indemnity. To the fullest extent permitted by law, Contractor shall defend, indemnify and hold the Stadium Manager, Forty Niners SC Stadium Company LLC, Forty Niners Football Company LLC, the Santa Clara Stadium Authority, the City of Santa Clara, their affiliates, and each of their respective officers, directors, managers, members, partners, owners, employees, agents and authorized volunteers, each tenant and event promoter of Levi's Stadium, and any mortgagee, bond trustee or other financial institution from time to time holding a line or indenture upon an interest in Levi's Stadium, and each of them (collectively, the "Indemnified Parties"), free and harmless from any and all claims, demands, causes of action, suits, actions, proceedings, costs, expenses, liability, judgments, awards, decrees, settlements, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, (collectively, "Claims") in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions, or willful misconduct of Contractor, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Contractor's services, the Project or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent required by Civil Code Section 2782, Contractor's indemnity obligation shall not apply to liability for damages for death or bodily injury to persons, injury to property, or any other loss, damage or expense arising from the sole or active negligence or willful misconduct of the Indemnified Parties or the Indemnified Parties' agents, servants, or independent contractors who are directly responsible to the Indemnified Parties, or for defects in design furnished by those persons.

3.12.2 Additional Indemnity Obligations. Contractor shall defend, with counsel of Stadium Manager's choosing and at Contractor's own cost, expense and risk, any and all Claims covered by this Section that may be brought or instituted against the Indemnified Parties. In addition, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the Indemnified Parties as part of any such claim, suit, action or other proceeding. Contractor shall also reimburse the Indemnified Parties for the cost of any settlement paid by the Indemnified Parties as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for the Indemnified Parties' attorney's fees and costs, including expert witness fees. Contractor shall reimburse the Indemnified Parties for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Indemnified Parties.

3.13 Insurance.

3.13.1 Time for Compliance. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the Stadium Manager that it has secured all insurance required under this Section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the Stadium Manager that the subcontractor has secured all insurance required under this Section. Failure to provide and maintain all required insurance shall be grounds for the Stadium Manager to terminate this Contract for cause.

3.13.2 Minimum Requirements. Contractor shall, at its expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Contract. Such insurance shall meet at least the following minimum levels of coverage:

3.13.2.1 Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 00 01) OR Insurance Services Office Owners and Contractors Protective Liability Coverage Form (CG 00 09 11 88) (coverage for operations of designated contractor); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 00 01, code 1 (any auto); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance. Policies shall not contain exclusions contrary to this Contract.

3.13.2.2 Minimum Limits of Insurance. Contractor shall maintain limits no less than: (1) *General Liability*: \$2,000,000 per occurrence and \$4,000,000 aggregate for bodily injury, personal injury and property damage; (2) *Automobile Liability*: \$2,000,000 per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability*: Workers' compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of \$1,000,000 each accident, policy limit bodily injury or disease, and each employee bodily injury or disease. Defense costs shall be available in addition to the limits. Notwithstanding the minimum limits specified herein, any available coverage shall be provided to the parties required to be named as additional insureds pursuant to this Contract.

3.13.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Contractor shall provide endorsements (amendments) on forms supplied or approved by the Stadium Manager to add the following provisions to the insurance policies:

3.13.3.1 General Liability. (1) Such policy shall give the Stadium Manager, its officials, employees, agents and authorized volunteers additional insured status using ISO endorsements CG20 10 10 01 plus CG20 37 10 01, or endorsements providing the exact same coverage, with respect to the Work or operations performed by or on behalf of Contractor, including materials, parts or equipment furnished in connection with such work; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the Stadium Manager, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the Stadium

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Manager, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it.

3.13.3.2 Automobile Liability. (1) Such policy shall give the Stadium Manager, its officials, employees, agents and authorized volunteers additional insured status with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the Stadium Manager, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the Stadium Manager, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it in any way.

3.13.3.3 Workers' Compensation and Employer's Liability Coverage. The insurer shall agree to waive all rights of subrogation against the Stadium Manager, its officials, employees, agents and authorized volunteers for losses paid under the terms of the insurance policy which arise from work performed by Contractor.

3.13.3.4 All Coverages. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Stadium Manager; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the Stadium Manager, its officials, employees, agents and authorized volunteers.

3.13.4 Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the Stadium Manager, its officials, employees, agents and authorized volunteers.

3.13.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Stadium Manager. Contractor shall guarantee that, at the option of the Stadium Manager, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Stadium Manager, its officials, employees, agents and authorized volunteers; or (2) the Contractor shall procure a bond or other financial guarantee acceptable to the Stadium Manager guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.13.6 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VII, licensed to do business in California, and satisfactory to the Stadium Manager. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

3.13.7 Verification of Coverage. Contractor shall furnish Stadium Manager with original certificates of insurance and endorsements effecting coverage required by this Contract on forms satisfactory to the Stadium Manager. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on

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its behalf, and shall be on forms supplied or approved by the Stadium Manager. All certificates and endorsements must be received and approved by the Stadium Manager before work commences. The Stadium Manager reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.13.8 Subcontractors. All subcontractors shall meet the requirements of this Section before commencing Work. Contractor shall furnish separate certificates and endorsements for each subcontractor. Subcontractor policies of General Liability insurance shall name the Stadium Manager, its officials, employees, agents and authorized volunteers as additional insureds using form ISO 20 38 04 13 or endorsements providing the exact same coverage. All coverages for subcontractors shall be subject to all of the requirements stated herein except as otherwise agreed to by the Stadium Manager in writing.

3.13.9 Reporting of Claims. Contractor shall report to the Stadium Manager, in addition to Contractor's insurer, any and all insurance claims submitted by Contractor in connection with the Work under this Contract.

3.14 Bond Requirements.

3.14.1 Payment Bond. If required by law or otherwise specifically requested by Stadium Manager in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to Stadium Manager concurrently with this Contract a Payment Bond in an amount required by the Stadium Manager and in a form provided or approved by the Stadium Manager. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the Stadium Manager.

3.14.2 Performance Bond. If specifically requested by Stadium Manager in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to Stadium Manager concurrently with this Contract a Performance Bond in an amount required by the Stadium Manager and in a form provided or approved by the Stadium Manager. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the Stadium Manager.

3.14.3 Bond Provisions. Should, in Stadium Manager's sole opinion, any bond become insufficient or any surety be found to be unsatisfactory, Contractor shall renew or replace the effected bond within (ten) 10 days of receiving notice from Stadium Manager. In the event the surety or Contractor intends to reduce or cancel any required bond, at least thirty (30) days prior written notice shall be given to the Stadium Manager, and Contractor shall post acceptable replacement bonds at least ten (10) days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Contract until any replacement bonds required by this Section are accepted by the Stadium Manager. To the extent, if any, that the Total Contract Price is increased in accordance with the Contract, Contractor shall, upon request of the Stadium Manager, cause the amount of the bond to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the Stadium Manager. If Contractor fails to furnish any required bond, the Stadium Manager may terminate the Contract for cause.

3.14.4 Surety Qualifications. Only bonds executed by an admitted surety insurer, as defined in California Code of Civil Procedure Section 995.120, shall be accepted. If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with Section 995.660 of the California Code of Civil Procedure, and proof of such is provided to the Stadium Manager.

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3.15 Warranty. Contractor warrants all Work under the Contract (which for purposes of this Section shall be deemed to include unauthorized work which has not been removed and any non-conforming materials incorporated into the Work) to be of good quality and free from any defective or faulty material and workmanship. Contractor agrees that for a period of one year (or the period of time specified elsewhere in the Contract or in any guarantee or warranty provided by any manufacturer or supplier of equipment or materials incorporated into the Work, whichever is later) after the date of final acceptance, Contractor shall within ten (10) days after being notified in writing by the Stadium Manager of any defect in the Work or non-conformance of the Work to the Contract, commence and prosecute with due diligence all Work necessary to fulfill the terms of the warranty at its sole cost and expense. Contractor shall act sooner as requested by the Stadium Manager in response to an emergency. In addition, Contractor shall, at its sole cost and expense, repair and replace any portions of the Work (or work of other contractors) damaged by its defective Work or which becomes damaged in the course of repairing or replacing defective Work. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one year period, commencing with the date of acceptance of such corrected Work. Contractor shall perform such tests as the Stadium Manager may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of Contractor. All warranties and guarantees of subcontractors, suppliers and manufacturers with respect to any portion of the Work, whether express or implied, are deemed to be obtained by Contractor for the benefit of the Stadium Manager, regardless of whether or not such warranties and guarantees have been transferred or assigned to the Stadium Manager by separate agreement and Contractor agrees to enforce such warranties and guarantees, if necessary, on behalf of the Stadium Manager. In the event that Contractor fails to perform its obligations under this Section, or under any other warranty or guaranty under this Contract, to the reasonable satisfaction of the Stadium Manager, the Stadium Manager shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the Stadium Manager for any expenses incurred hereunder upon demand.

3.16 Employee/Labor Certifications.

3.16.1 Contractor's Labor Certification. By its signature hereunder, Contractor certifies that he is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Work. A certification form for this purpose, which is attached to this Contract as Exhibit "D" and incorporated herein by reference, shall be executed simultaneously with this Contract.

3.16.2 Equal Opportunity Employment. Contractor represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, age or other interests protected by the State or Federal Constitutions. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

3.16.3 Verification of Employment Eligibility. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal

law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subcontractors and sub-subcontractors to comply with the same.

3.17 General Provisions.

3.17.1 Stadium Manager's Representative. The Stadium Manager hereby designates the General Manager, or his or her designee, to act as its representative for the performance of this Contract ("Stadium Manager's Representative"). Stadium Manager's Representative shall have the power to act on behalf of the Stadium Manager for all purposes under this Contract. Contractor shall not accept direction or orders from any person other than the Stadium Manager's Representative or his or her designee.

3.17.2 Contractor's Representative. Before starting the Work, Contractor shall submit in writing the name, qualifications and experience of its proposed representative who shall be subject to the review and approval of the Stadium Manager ("Contractor's Representative"). Following approval by the Stadium Manager, Contractor's Representative shall have full authority to represent and act on behalf of Contractor for all purposes under this Contract. Contractor's Representative shall supervise and direct the Work, using his best skill and attention, and shall be responsible for all construction means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Work under this Contract. Contractor's Representative shall devote full time to the Project and either he or his designee, who shall be acceptable to the Stadium Manager, shall be present at the Work site at all times that any Work is in progress and at any time that any employee or subcontractor of Contractor is present at the Work site. Arrangements for responsible supervision, acceptable to the Stadium Manager, shall be made for emergency Work which may be required. Should Contractor desire to change its Contractor's Representative, Contractor shall provide the information specified above and obtain the Stadium Manager's written approval.

3.17.3 Termination. This Contract may be terminated by Stadium Manager at any time, either with or without cause, by giving Contractor three (3) days advance written notice. In the event of termination by Stadium Manager for any reason other than the fault of Contractor, Stadium Manager shall pay Contractor for all Work performed up to that time as provided herein. In the event of breach of the Contract by Contractor, Stadium Manager may terminate the Contract immediately without notice, may reduce payment to Contractor in the amount necessary to offset Stadium Manager's resulting damages, and may pursue any other available recourse against Contractor. Contractor may not terminate this Contract except for cause. In the event this Contract is terminated in whole or in part as provided, Stadium Manager may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated. Further, if this Contract is terminated as provided, Stadium Manager may require Contractor to provide all finished or unfinished documents, data, diagrams, drawings, materials or other matter prepared or built by Contractor in connection with its performance of this Contract.

3.17.4 Contract Interpretation. Should any question arise regarding the meaning or import of any of the provisions of this Contract or written or oral instructions from Stadium Manager, the matter shall be referred to Stadium Manager's Representative, whose decision shall be binding upon Contractor.

3.17.5 Anti-Trust Claims. This provision shall be operative if this Contract is applicable to California Public Contract Code Section 7103.5. In entering into this Contract to supply goods, services or materials, Contractor hereby offers and agrees to assign to the Stadium

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Manager all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the Stadium Manager tender final payment to Contractor, without further acknowledgment by the Parties.

3.17.6 Notices. All notices hereunder and communications regarding interpretation of the terms of the Contract or changes thereto shall be provided by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

CONTRACTOR:

R. E. Cuddie Co.
1751 Junction Avenue
San Jose, CA 95112
Attn: Thomas R. Cuddie Jr., Vice President

STADIUM MANAGER:

Forty Niners Stadium Management Company LLC
4900 Marie DeBartolo Way
Santa Clara, CA 95054
Attn: Ryan Van Maarth, VP of Stadium Operations and Strategic Planning

With copy to:

Legal Affairs
Forty Niners Stadium Management Company LLC
4949 Marie P. DeBartolo Way
Santa Clara, CA 95054

Any notice so given shall be considered received by the other Party three (3) days after deposit in the U.S. Mail as stated above and addressed to the Party at the above address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.17.7 Time of Essence. Time is of the essence in the performance of this Contract.

3.17.8 Assignment Forbidden. Contractor shall not, either voluntarily or by action of law, assign or transfer this Contract or any obligation, right, title or interest assumed by Contractor herein without the prior written consent of Stadium Manager. If Contractor attempts an assignment or transfer of this Contract or any obligation, right, title or interest herein, Stadium Manager may, at its option, terminate and revoke the Contract and shall thereupon be relieved from any and all obligations to Contractor or its assignee or transferee.

3.17.9 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.17.10 Laws, Venue, and Attorneys' Fees. This Agreement shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a state or federal court situated in the County of Santa Clara, State of California.

3.17.11 Counterparts. This Contract may be executed in counterparts, each of which shall constitute an original.

3.17.12 Successors. The Parties do for themselves, their heirs, executors, administrators, successors, and assigns agree to the full performance of all of the provisions contained in this Contract.

3.17.13 Levi's Stadium Jobsite Rules. Contractor and its subcontractors of every tier and their officers, employees, workers, consultants, volunteers, agents shall comply with the Levi's Stadium Jobsite Rules attached hereto as Exhibit "H" and incorporated herein by this reference. Failure to comply with the Levi's Stadium Jobsite Rules may lead to dismissal of any violating parties from the Project site. Contractor shall be solely responsible for any time and cost impacts arising out of any failure to comply with the Levi's Stadium Jobsite Rules.

3.17.14 Solicitation. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Contract. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, Stadium Manager shall have the right to terminate this Contract without liability.

3.17.15 Conflict of Interest. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, Stadium Manager shall have the right to rescind this Agreement without liability. For the term of this Contract, no official, officer or employee of Stadium Manager, during the term of his or her service with Stadium Manager, shall have any direct interest in this Contract, or obtain any present or anticipated material benefit arising therefrom. In addition, Contractor agrees to file, or to cause its employees or subcontractors to file, a Statement of Economic Interest with the Stadium Manager's Filing Officer as required under state law in the performance of the Work.

3.17.16 Certification of License.

3.17.16.1 Contractor certifies that as of the date of execution of this Contract, Contractor has a current contractor's license of the classification indicated below under Contractor's signature.

3.17.16.2 Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions

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concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

3.17.17 Authority to Enter Contract. Each Party warrants that the individuals who have signed this Contract have the legal power, right and authority to make this Contract and bind each respective Party.

3.17.18 Entire Contract; Modification. This Contract contains the entire agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Contract may only be modified by a writing signed by both Parties.

3.17.19 Non-Waiver. None of the provisions of this Agreement shall be considered waived by either party, unless such waiver is specifically specified in writing.

3.17.20 Stadium Manager's Right to Employ Other Contractors. Stadium Manager reserves right to employ other contractors in connection with this Project or other projects.

[SIGNATURES ON NEXT PAGE]

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**SIGNATURE PAGE FOR CONSTRUCTION CONTRACT
BETWEEN THE FORTY NINERS STADIUM MANAGEMENT COMPANY LLC
AND
R.E. CUDDIE CO.**

IN WITNESS WHEREOF, the Parties have entered into this Agreement as of the
[***INSERT DAY***] day of [***INSERT MONTH***], [***INSERT YEAR***].

FORTY NINERS STADIUM

R.E. CUDDIE CO.

MANAGEMENT COMPANY LLC

By: _____
Jim Mercurio
Executive Vice President and
General Manager

By: _____

Its: _____

Printed Name: _____

License No. _____

EXHIBIT “A”

SERVICES / SCHEDULE Resilient Flooring Project in Service Tunnel

PART 1 – GENERAL

1.1 SUMMARY

Contractor shall remove and dispose of existing resilient athletic flooring from stadium service tunnel. Contractor to provide and install new rubber resilient athletic flooring, beveled edge reducer and all accessories required for installation, maintenance and repair. The Contractor shall install the resilient flooring between the locker room and field tunnel, per Exhibit “A-1”. Rubber resilient flooring shall be manufactured and installed per manufacturer’s requirements in order to maintain performance criteria stated by manufacturer.

1.1.1 Contractor shall provide the following products:

- A. Resilient athletic flooring: prefabricated rubber track surfacing.
- B. Resilient flooring beveled edge reducer.
- C. Accessories required for installation, maintenance and repair including adhesives.

1.2 REFERENCES

Contractor shall comply with the following standards. In the event of any conflicts between the standards or between the standards and the balance of the Contract, the most protective and highest standard shall apply.

1.2.1 ASTM International (ASTM)

- A. ASTM D412: Standard Test Methods for Rubber and Thermoplastic Elastomers—Tension.
- B. ASTM D2240: Standard Test Method for Rubber Property (Durometer Hardness).
- C. ASTM D3389: Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform Abrader).
- D. ASTM E648: Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

E. ASTM E1643: Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs.

F. ASTM E1745: Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.

G. ASTM F387: Standard Test Method for Measuring Thickness of Resilient Flooring Covering with Foam Layer.

H. ASTM F710: Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.

I. ASTM F925: Standard Test Method for Resistance to Chemicals of Resilient Flooring.

J. ASTM F1514: Standard Test method for Measuring Heat Stability of Resilient Flooring by Color Change.

K. ASTM F1515: Standard Test Method for Measuring Light Stability of Resilient Flooring by Color Change.

L. ASTM F1869: Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.

M. ASTM F2170: Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.

1.2.2 State of California (CA)

A. CA Section 01350. Standard Method for the Testing and Evaluation of Volatile Organic Compound Emissions from Indoor Sources Using Environmental Chambers.

1.2.3 GREENGUARD Environmental Institute (GEI)

A. GREENGUARD Certification. Compliant with stringent emission levels for over 360 VOCs, plus a limit on the total of all chemical emissions combined (TVOC).

B. GREENGUARD Gold. Compliant with safety factors to account for sensitive individuals (such as children and the elderly) and ensures that a product is acceptable for use in environments such as schools and healthcare facilities.

1.2.4 International Organization for Standardization (ISO)

A. ISO 9001: Quality management systems – Requirements.

1.3 SUBMITTALS

1.3.1 Action Submittals

- A. Provide current printed data sheets for all products supplied.
- B. Provide samples, 6 inches x 6 inches or similar, for verification of such characteristics as color and surface texture for each manufactured product specified.
- C. Provide shop drawings prepared for Project illustrating layouts, details, dimensions and other pertinent data.
- D. Certification of performance characteristics specified shall be provided by the manufacturer.

1.3.2 Informational Submittals

- A. Provide manufacturer's current printed substrate surface preparation guidelines.
- B. Provide manufacturer's current printed installation guidelines for products supplied.

1.3.3 Closeout Submittals

- A. Provide manufacturer's current printed maintenance guidelines for Manufactured Product.
- B. Provide manufacturer's current printed standard warranty for Manufactured Product.

1.3.4 Maintenance Material Submittals

- A. Provide extra stock materials from original dye lots, for use in facility operations and maintenance (approximately 2% of the total floor surface for each color, surface texture and format of Manufactured Product specified).
- B. Provide operation and maintenance data for installed products. Specify methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.

1.4 QUALITY ASSURANCE

- 1.4.1. Manufacturer must have a minimum of ten (10) years of experience in the manufacturing of prefabricated resilient rubber flooring.

1.4.2. The installer of the prefabricated resilient rubber flooring, whether Contractor or any subcontractor (“Installer”) must be recognized and approved by the manufacturer to install the resilient rubber flooring.

1.4.3. Installer must have performed installations of the same scale in the last three (3) years.

1.4.4. A mock-up installation is highly recommended; always follow the same procedures and use the same materials that have been specified for the actual project. The Stadium Manager will be responsible for deeming the mock-up acceptable. Mock-up size: [48 in x 48 in] over concrete.

1.5 DELIVERY, STORAGE AND HANDLING

1.5.1. Products must be delivered in manufacturer’s original, unopened and undamaged packaging with identification labels intact.

1.5.2. Products must be protected from exposure to harmful weather conditions and must be safely stored on a clean, dry, flat surface. Store rolls of resilient athletic flooring upright; store tiles of resilient athletic flooring on a flat surface, carefully protecting corners and edges.

1.5.3. Climate controlled storage is recommended. Storage temperature must not be below 40-degrees F and must not exceed 100-degrees F. Materials must be delivered to site a minimum of 24 hours before work is scheduled to begin so that they may acclimate, or as specified by the manufacturer.

1.5.4. Avoid storing products for extended period or additional material trimming may be required.

1.6 SITE CONDITIONS

1.6.1. Contractor shall be responsible for ensuring all site conditions meet the installation and site condition requirements of the manufacturer.

1.6.2. Contractor to verify that the substrate surface and concrete finish meets the requirements of the manufacturer’s recommendations.

1.6.3. Contractor to ensure that the room and substrate temperatures comply with the manufacturer’s installation recommendation.

1.6.4. Contractor to verify actual measurements/openings by field measurements before fabrication and show recorded measurements on shop drawings. Contractor to coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

1.7 WARRANTY

1.7.1. The resilient athletic flooring shall be warranted to be free from manufacturing defects for a period of one (1) year from the date that is 30 days from shipment from the manufacturer, per the terms and conditions of the manufacturer's written Limited Warranty.

1.7.2. The resilient athletic flooring shall be warranted against excessive wear under normal usage for a period of five (5) years from the date that is 30 days from shipment from the manufacturer, per the terms and conditions of the manufacturer's written Limited Warranty.

PART 2 – PRODUCTS

2.1 MANUFACTURED PRODUCT

2.1.1 Manufacturer – Products must be by one of the following manufacturers, or equivalent.

A. Mondo S.p.A., Piazzale E. Stroppiana, 1, 12051 Alba, Fraz. Gallo – Italia

2.1.2 Description

A. Super X Performance is prefabricated rubber track surfacing, calendered and vulcanized with a particular closed cell structure, based on special isoprenic rubbers, mineral fillers, stabilizing agents and pigmentation, highly resistant to UV rays and atmospheric agents, with system of differential elasticity between top surface and base, as manufactured by Mondo S.p.A. or approved equal.

B. Manufactured in two layers, which are vulcanized together. The shore hardness of the top layer will be greater than that of the bottom layer; shore hardness of layers to be recommended by the manufacturer and the limits specified.

C. Health-Conscious Production: Product to be free from red listed ingredients (LBC Red List) and manufactured without bisphenol A (BPA), formaldehyde, halogens, heavy metals, isocyanates, phthalates and polyvinyl chloride (PVC), or equally hazardous ingredients.

D. Thickness: 10 mm or greater

E. Colors: Stadium Manager to select color prior to purchase. Color options should be provided in standard, solid background colors, preferably black or dark grey.

F. Surface Texture: Matte Super X Performance embossing. Non-directional, irregular tessellation patterns with interconnected surface channels. Directional patterns shall be deemed unacceptable..

G. Formats: Available in sheets that are at least 3' wide or greater.

2.1.3 Performance

A. Performance of the manufactured product to conform to the following minimum criteria:

- a. Elongation at Break: > or equal to 100% (ASTM D412)
- b. Tensile Strength: > or equal to 75 PSI (ASTM D412)
- c. Static Coefficient of Friction: > 0.6 (Wet and Dry) (ASTM D2047)
- d. Harness of Top Layer: 70 (ASTM D2240)
- e. Indoor Air Quality Certifications (CA 01350)

2.1.4 Materials

A. Provide Super X Performance resilient track surfacing manufactured by Mondo S.p.A. or approved equal.

B. Provide manufactured product as specified in Section 2.1.2 – Description.

2.1.5 Substitutions

A. Contractor may offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in the Contract including this Exhibit "A." Substitution requests, if any, shall be made within the time specified and otherwise in accordance with the requirements of the Contract.

B. The burden of proof as to the equality of any material, process or article shall rest with Contractor.

2.2 ACCESSORIES

2.2.1. Provide adhesive certified by manufacturer: Mondo PU 105 (polyurethane) or equal. For suitability, recommendations and use please refer to manufacturer's current printed adhesive guidelines. In some cases, Mondo EP 55 (epoxy) or equal may be used in areas that have not been specified to receive Everlay or equal, and that will not be subject to surface impacts (such as falling free weights) or heavier dynamic loads (such as bleachers).

2.2.2. Portland cement based patching or leveling compound to be supplied or recommended/approved by manufacturer, if necessary.

PART 3 – EXECUTION

3.1 INSTALLER

3.1.1. Refer to Section 1.4 of this document for information on Installer.

3.2 EXAMINATION

3.2.1. Prior to resilient athletic flooring installation, ensure substrate is ready to receive resilient flooring and has been prepared according to manufacturer's current substrate surface preparation guidelines.

3.3 PREPARATION

3.3.1. Prepare substrate surface in accordance with manufacturer's current printed guidelines.

3.4 INSTALLATION

3.4.1. Installation procedures may be altered to accommodate special project needs, as deemed necessary by the Stadium Manager and after Contractor has consulted the manufacturer to ensure suitability.

A. Install rolls of resilient athletic flooring following manufacturer's current printed guidelines.

B. Install all accessories following manufacturer's current printed guidelines.

3.5 REPAIR

3.5.1. Refer to section 1.3.4 for extra stock materials. Repair material must come from the same original dye lot as the Manufactured Product initially installed.

3.5.2. Repairs are to be performed by Contractor's qualified installers/technicians only.

3.6 CLEANING

3.6.1. Always maintain the resilient athletic flooring following manufacturer's current printed guidelines. Wait at least 72 hours after resilient athletic flooring has been completely installed before performing initial maintenance.

3.7 PROTECTION

3.7.1. As needed, protect resilient athletic flooring with 1/8" Masonite, or equivalent, during and after the installation, prior to its acceptance by the Owner.

3.7.2. Preserve the integrity of the installation and protect against direct sunlight/UV exposure.

PART 4 GENERAL REQUIREMENTS

4.1 Contractor is required to provide personal protective equipment (PPE) to perform the work.

4.2 The use of the safety equipment includes but is not limited to hard hats, eye protection, safety vests, hearing protection, fall protection, and safety boots as required by the California Occupational Safety and Health Administration (Cal OSHA).

4.3 Contractor shall maintain all necessary licenses to perform the work specified herein.

4.4 Contractor shall be in compliance with applicable prevailing wage laws and the California Labor Code.

4.5 Contractor shall provide protection for all existing building components beneath and around the work. Any damage to existing building components caused by contractor shall be immediately repaired or replaced at contractor's sole expense in a manner acceptable to and approved by Stadium Manager.

4.6 In all active work areas, contractor shall provide, install and maintain all necessary barricades and warnings to prohibit pedestrian access into any affected work area. This not only includes areas surrounding the work, but also includes areas below the work. Levi's Stadium is an active building containing employees, guests, and other contractors on a daily basis. Contractor shall be responsible for keeping others out of its active work areas and preventing the exposure of others to grinding, sanding, scraping, paint drips, overspray or any other material generated within the work area, both around and below

4.7 Cleaning and Protection

4.7.1 At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from project site. Secure, locate and position all unused materials and equipment, including man lifts, to the satisfaction of Stadium Manager.

4.7.2 After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished or unfinished surfaces. Do not allow coatings to drip, spatter onto or otherwise stain adjacent surfaces.

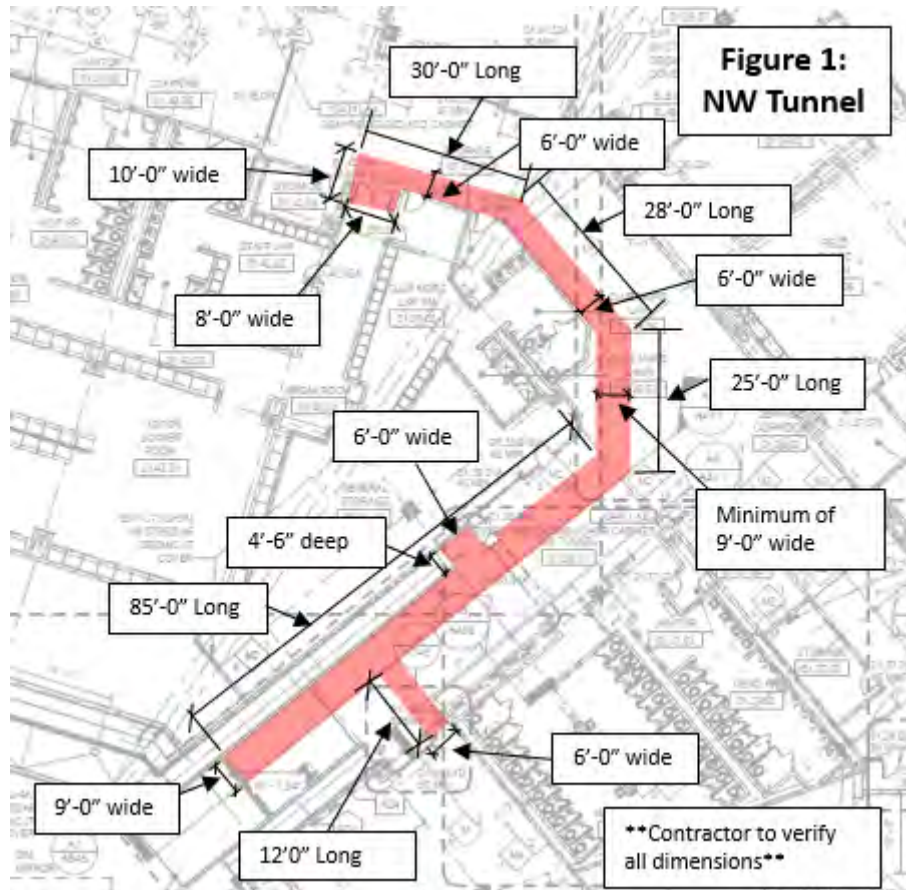
4.7.3 Protect work of other trades against damage from coating operation. Correct damage by cleaning, repairing, replacing, and recoating, as approved by Stadium Manager, and leave in an undamaged condition.

4.7.4 Protect all adjacent surfaces as required by field conditions.

Exhibit "A-1"

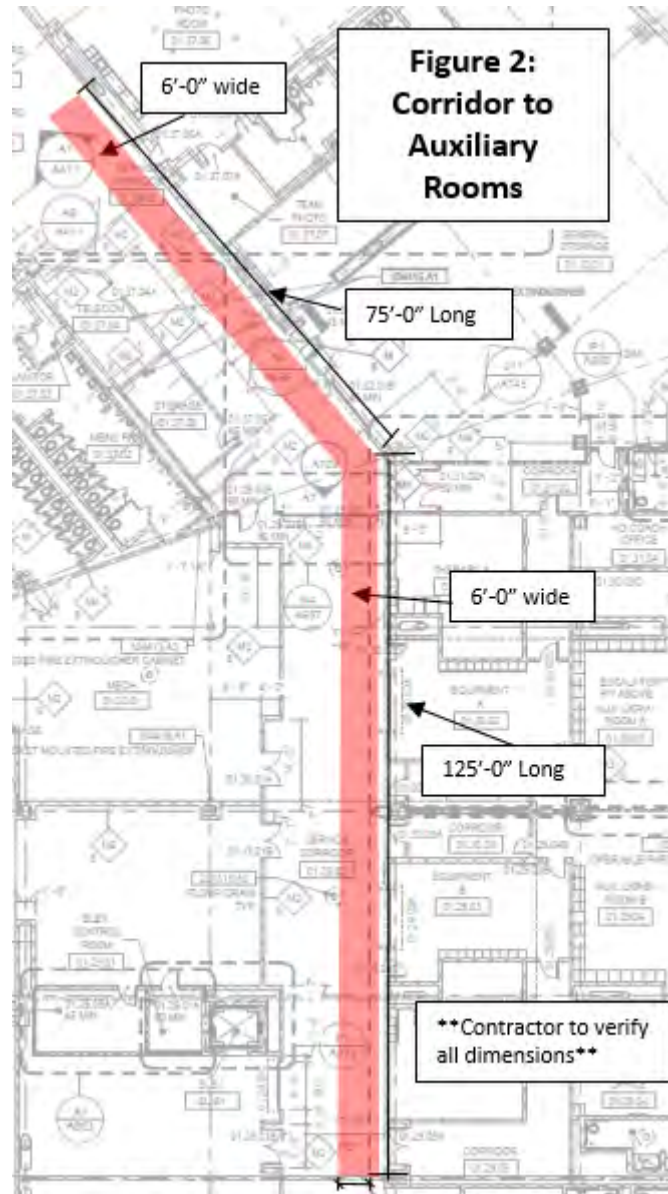
BASE BID SCOPE:

Contractor to install flooring product per manufacturer's recommendation from the locker room to the field tunnel (dimensions shown in Figure 1). The walking path dimensions are shown below in Figure 1. All dimensions to be verified by the Contractor.



ALTERNATE #1 BID SCOPE:

Contractor to install flooring product per manufacturer's recommendation along the service tunnel corridor from auxiliary rooms to the North West tunnel (dimensions shown in Figure 2). The walking path dimensions are shown below in Figure 2. All dimensions to be verified by the Contractor.





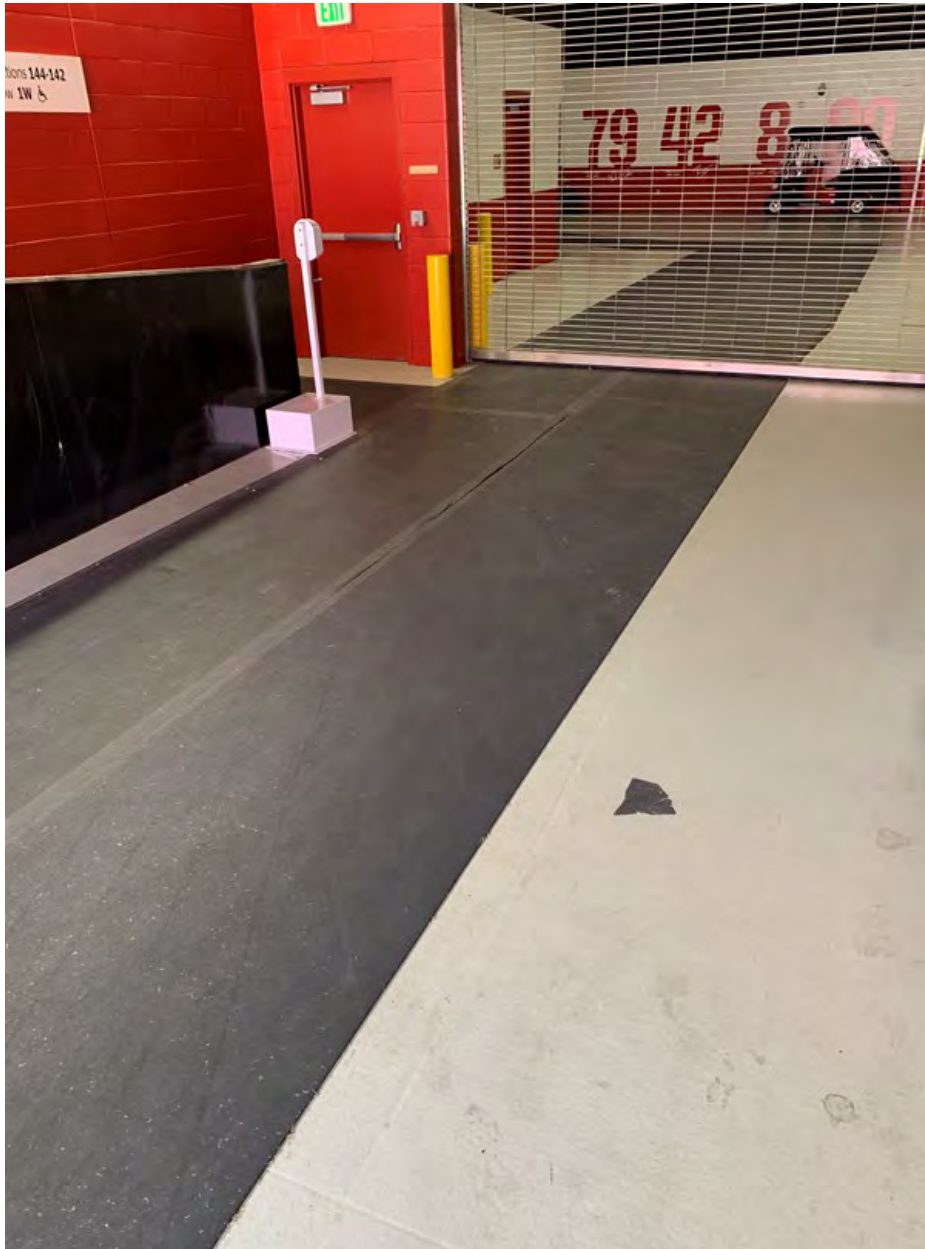




Figure 5: Photo of Corridor to Auxiliary Rooms (ALTERNATE #1 BID SCOPE) look into corridor tunnel area from field area.

EXHIBIT “B”

PLANS AND SPECIFICATIONS

Contractor shall refer to Exhibit “A” – Services/Schedule for the Project Plans and Specifications.

EXHIBIT “C”

SPECIAL CONDITIONS

ARTICLE 1. BONDS

Within ten (10) calendar days from the date the Contractor is notified of award of the Contract, the Contractor shall deliver to the Stadium Manager four identical counterparts of the Performance Bond and Payment Bond on the forms supplied by the Stadium Manager and included as Exhibit “F” to the Contract. Failure to do so may, in the sole discretion of Stadium Manager, result in the forfeiture of Contractor’s bid security. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the Stadium Manager. The Performance Bond and the Payment Bond shall be for one hundred percent (100%) of the Total Contract Price.

ARTICLE 2. STADIUM MANAGER’S REPRESENTATIVE DESIGNEE

For purposes of this Project, the Stadium Manager’s Representative Designee shall be: Vice President, Stadium Operations and Strategic Planning

ARTICLE 3. LOCATION OF THE PROJECT

The Project is located at Levi’s Stadium, 4900 Marie P. DeBartolo Way, Santa Clara, CA

ARTICLE 4. SCHEDULE CONSTRAINTS

It is anticipated that the Contractor will be unable to perform Work on the Project site at least 48 hours prior to and 24 hours after any event with a projected attendance greater than 10,000 people without prior written approval from the Stadium Manager. Specific known dates for these events at this time include the following dates:

1. August 14, 2021
2. August 29, 2021
3. September 26, 2021
4. October 3, 2021
5. October 24, 2021
6. November 7, 2021
7. November 15, 2021
8. November 28, 2021
9. December 19, 2021
10. January 2, 2022

Contractor is assumed to have accounted for such events during the duration of the Project as part of its bid and may not claim any time or cost impacts and will not be granted any time extensions or additional compensation as a result of these events.

Contractor shall ensure that any Work performed on the Project site is scheduled with the Stadium Manager in advance.

Stadium Manager has considered these schedule constraints when determining the Contract Time and no additional time or compensation will be added to the Contract due to these schedule constraints.

ARTICLE 5. NOISE RESTRICTIONS

Contractor shall use only such equipment on the Work and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by Cal/OSHA.

Contractor shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations and ordinances and (2) the requirements contained in this Contract, including hours of operation requirements.

No internal combustion engine shall be operated on the Project without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by the Contractor.

ARTICLE 6. SAFETY PROGRAMS

In addition to all other safety requirements of the Contract, Contractor must comply with Cal/OSHA safety requirements at all times during the performance of the Work.

Stadium Manager has considered these safety programs when determining the Contract Time and no additional time or compensation will be added to the Contract due to these safety programs.

EXHIBIT "D"

**CERTIFICATION
LABOR CODE - SECTION 1861**

I, the undersigned Contractor, am aware of the provisions of Section 3700, et seq., of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the Code, and I, the undersigned Contractor, agree to and will comply with such provisions before commencing the performance of the Work on this Contract.

R. E. CUDDIE CO.

By: _____
Signature

Name (Print)

Title (Print)

EXHIBIT "E"

PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code Sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Contractor hereby certifies that it is aware of the registration requirements set forth in Labor Code Sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.¹

Name of Contractor: _____

DIR Registration Number: _____

DIR Registration Expiration: _____

Small Project Exemption: _____ Yes or _____ No

Unless Contractor is exempt pursuant to the small project exemption, Contractor further acknowledges:

- Contractor shall maintain a current DIR registration for the duration of the project.
- Contractor shall include the requirements of Labor Code Sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
- Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Contractor _____

Signature _____

Name and Title _____

Dated _____

¹ If the Project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark "Yes" in response to "Small Project Exemption."

EXHIBIT “F”

PAYMENT AND PERFORMANCE BONDS

ATTACHED BEHIND THIS PAGE

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the Forty Niners Stadium Management Company LLC (hereinafter referred to as "Stadium Manager") has awarded to _____, (hereinafter referred to as the "Contractor") _____ an agreement for _____ (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the Stadium Manager in the sum of _____ DOLLARS, (\$_____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the Indemnified Parties, as stipulated and defined in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by Stadium Manager, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the Stadium Manager from loss or damage resulting from or caused by defective materials or faulty workmanship, Surety shall undertake and faithfully fulfill all such obligations. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the Stadium Manager's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the Stadium Manager to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the Stadium Manager's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the Stadium Manager, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the Stadium Manager under the Contract and any modification thereto, less any amount previously paid by the Stadium Manager to the Contractor and any other set offs pursuant to the Contract Documents.
- (3) Permit the Stadium Manager to complete the Project in any manner consistent with local, California and federal law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the Stadium Manager under the Contract and any modification thereto, less any amount previously paid by the Stadium Manager to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the Stadium Manager may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the Stadium Manager, when declaring the Contractor in default, notifies Surety of the Stadium Manager's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project, including but not limited to the provisions of Sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__).

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

(Attach Attorney-in-Fact Certificate)

Title _____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$_____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or
Representative for service of
process in California, if different
from above)

(Telephone number of Surety and
Agent or Representative for service
of process in California)

NOTE: A copy of the Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

Title or Type of Document

- ☐ Partner(s) ☐ Limited
 ☐ General

Number of Pages

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the Forty Niners Stadium Management Company LLC (hereinafter designated as the "Stadium Manager"), by action taken or a resolution passed _____, 20____ has awarded to _____ hereinafter designated as the "Principal," a contract for the work described as follows:

_____ (the "Project"); and

WHEREAS, the work to be performed by the Principal is more particularly set forth in the Contract Documents for the Project dated _____ ("Contract Documents"), the terms and conditions of which are expressly incorporated by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the Stadium Manager in the penal sum of _____ Dollars (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or

subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or Stadium Manager and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned and the provisions of Sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____
Attorney-in-Fact

Title _____

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached. A Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

NOTE: A copy of the Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)

- ☐ Partner(s) ☐ Limited
 ☐ General

- ☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

EXHIBIT "G"

PROCUREMENT AND CONTRACT PROCESS INTEGRITY AND CONFLICT OF INTEREST GUIDELINES

1 PURPOSE

1.1 The purpose of these Guidelines is to ensure integrity in the Stadium Manager's procurement and contract processes, to educate Stadium Manager employees, consultants, uncompensated outside parties and any person involved in the decision to award a contract about potential Conflicts of Interest, and to establish guidelines for procedural screening of Conflicts of Interest.

1.2 The Stadium Manager desires to provide a fair opportunity to participants in competitive processes for the award of Stadium Manager contracts by promulgating integrity and removal of Conflicts of Interest in all competitive solicitations.

2 DEFINITIONS

2.1 PURCHASING MANAGER

"Purchasing Manager" is the Stadium Manager representative designated by the Stadium Manager to be responsible for the Stadium Manager's procurement process.

2.2 ELECTED OFFICIAL

"Elected Official" means the City of Santa Clara Mayor, Council Members, City Clerk, and Chief of Police.

2.3 COUNCIL APPOINTEES

"Council Appointees" means the City of Santa Clara City Manager, City Attorney, and City Auditor.

2.4 SOLICITATION

"Solicitation" means, but is not limited to, specification development, preparation and issuance of requests for proposals, quotes, qualifications or bids, evaluation of responses and submissions, and other evaluations which lead to an award of a Stadium Manager contract.

3 GENERAL PROVISIONS

3.1 COMMUNICATION PROTOCOL

3.1.1 Prior to Issuance of Solicitations: Prior to the issuance of Solicitations, contact between prospective respondents and Stadium Manager staff, consultants or City of Santa Clara elected officials is permissible.

3.1.2 After Issuance of Solicitations and prior to Submission deadline for Solicitations: After issuance of Solicitations, all contact between prospective respondents and the Stadium Manager with regard to the Solicitation must be directed to the procurement contact designated in the Solicitation. Stadium Manager staff and consultants will refer all inquiries with regard to the Solicitation to the procurement contact. All requests for clarification, objections to the structure, content, or distribution of a Solicitation, or other inquiries must be made in writing and the Stadium Manager shall answer to these clarifications, objections, and inquiries in writing via addenda to the Solicitation.

3.1.3 After Submission Deadline of Solicitations and prior to Issuance of a Notice of Intended Award: After the submission deadline of Solicitations, all contact regarding the procurement between respondents and the Stadium Manager and participants in the evaluation process, who are not Stadium Manager employees or representatives, must be directed to the procurement

contact designated in the Solicitation. Stadium Manager staff and consultants will refer all inquiries to the procurement contact identified in the Solicitation document.

3.1.4 After Issuance of a Notice of Intended Award: The Stadium Manager will issue a notice of intended award to all respondents including the basis for selection and instructions for filing a protest. All respondents shall follow the procedures for protest as indicated in the Solicitation document. During the protest period, Stadium Manager staff and consultants will refer all inquiries to the procurement contact identified in the Solicitation document.

3.1.5 After Completion of Protest Period: After completion of the protest period contact between prospective respondents and Stadium Manager staff, consultants and City of Santa Clara elected officials is permissible.

4 RESPONDENT'S CODE OF CONDUCT

By submitting a response to a Stadium Manager Solicitation, respondents are individually and solely responsible for ensuring compliance with these Guidelines on behalf of the respondent's employees, agents, consultants, lobbyists, or other parties or individuals engaged for purposes of developing or supporting a response. In addition to adhering to these Guidelines, respondents may not collude, directly or indirectly among themselves in regard to the amount, terms or conditions of a Solicitation, influence any Stadium Manager staff member or evaluation team member throughout the solicitation process, including the development of specifications, submit incorrect information in the response to a Solicitation or misrepresent, or fail to disclose material facts during the evaluation process. Any evidence indicating a respondent has failed to adhere with any section of these Guidelines may result in the respondent's disqualification from the procurement as well as possible debarment.

5 CONFIDENTIALITY DURING EVALUATION PROCESS

5.1 Stadium Manager staff, consultants, and outside evaluators who are participants in the evaluation process are required to sign a confidentiality agreement which binds the participants not to share any information about responses received and the evaluation process until the Stadium Manager issues a notice of intended award.

6 CONFLICT OF INTEREST

6.1 Elected officials, appointed officials, their staffs, and Stadium Manager employees and consultants are expected to avoid any conflicts of interest. Further, such individuals should avoid the appearance of conflicts of interest in order to ensure that Stadium Manager decisions are made in an independent and impartial manner. In general, the designated Stadium Manager procurement contact, in consultation with the Stadium Manager's Chief Financial Officer ("CFO") shall take measures to ensure that the Stadium Manager avoid any conflict of interests in procurement processes of Stadium Manager contracts. Specifically, these measures include that:

6.1.1 Persons who may not be regularly involved in Stadium Manager procurements review this Exhibit and other ethical standards and elicit such information from them to enable the Stadium Manager to determine if the person's participation would create a conflict of interest. Such persons shall include, but are not limited to:

- authors of specifications
- paid and unpaid evaluators
- paid and unpaid consultants who assist in the procurement process

6.1.2 The CFO shall discuss any potential conflict of interest identified with Stadium Manager's legal department and document the resulting determination, and take appropriate action including, but not limited to, removal of an employee, consultant, or outside uncompensated party from the procurement activity or cancellation of a Solicitation.

7 ALLEGATIONS OF CONFLICT OF INTEREST

7.1.1 Prior to the Solicitation release, up to award of contract, any allegations of conflict of interest by a Stadium Manager employee, consultant, or other participant in the pre- Solicitation and Solicitation process shall be reported to the CFO. The CFO shall investigate the alleged conflict of interest in consultation with the Stadium Manager's legal department and document the resulting determination.

8 ALLEGATIONS OF MISCONDUCT

8.1.1 At any time during a Solicitation process, any misconduct by a Stadium Manager employee, consultant, or other participant in the pre-Solicitation and Solicitation process, shall be reported to the CFO. The CFO shall investigate the alleged misconduct, in consultation with the procurement contact, and others, as appropriate. Nothing in these guidelines is intended to prohibit anyone from communicating with the CFO or legal department about any alleged misconduct.

EXHIBIT “H”

LEVI’S STADIUM JOBSITE RULES

The Contractor (to include all contractors, vendors, subcontractor and employees of each) shall adhere to the following rules while on site:

1. Contractor shall park in only approved Contractor designated parking areas as identified by Stadium Manager.
2. No smoking, drugs, or alcohol permitted on site.
3. Contractor work area must be left in a clean, neat and orderly condition at the end of each day. If the Contractor fails to perform daily cleaning the Stadium Manager reserves the right to clean up debris at Contractor expense.
4. Contractor shall coordinate with Stadium Manager for use of restroom facilities prior to Project.
5. Contractor to schedule work hours with Stadium Manager prior to Project. Work outside of regularly schedule hours shall require prior written approval by Stadium Manager.
6. Contractor shall coordinate employee break areas with the Stadium Manager prior to Project. All lunch and break debris generated by the Contractor must be disposed of immediately in appropriate containers (i.e. glass, aluminum, cardboard, etc.).
7. No radios, iPods, music devices with earbuds, etc. allowed. NO EXCEPTIONS.
8. Contractor shall report Project status to the Stadium Manager weekly and provide an update on the progress of the work. Contractor shall contact Stadium Manager immediately should any incidents occur or if any conflicts with these jobsite rules should arise.
9. Personal Protective Equipment (“PPE”), including but not limited to, proper safety clothing MUST be worn at all times while on jobsite. Any personnel without proper safety clothing will not be allowed on site. This include office personnel and visitors. Appropriate PPE shall be coordinated with the Stadium Manager prior to Project.
10. The Contract supervisor assigned to this job must have the ability to make employees follow ALL jobsite rules.
11. NO children (under 18 years old) are allowed on site.
12. Contractor, to include all employees and visitors, must register each day for stadium access through the Stadium Manager provided visitor management and access control system. Contractor employees are subject to health screening prior to approval of site access. Contractor employees shall adhere to all Stadium Manager site access requirements.
13. Contractors and all employees must stay in their area as required and defined in the Project scope of work. Any Contractor employee found outside of the authorized Project area will be removed from the property and may not return to the site.
14. Contractor Equipment / Vehicles – Contractor shall coordinate delivery and use of all equipment brought and used on site (owned or rented) with the Stadium

Manager prior to Project. Equipment shall display markings identifying the following information for each piece of equipment while on site:

- Contractor's Company Name
- Contractor's Equipment Contact
- Contact Phone Number
- Duration On-Site (i.e. 06/02/21- 06/15/21)

Equipment requiring this information includes, but is not limited to, the following types of equipment:

- Material Handling Equipment (such as Forklifts and Pallet Jacks)
- Golf Carts
- Flatbeds
- Manlifts
- Vehicles
- Job Boxes
- Trailers
- Other Equipment

Anyone operating this equipment must have the proper certifications, operate them in compliance with Cal/OSHA standards, and shall follow any Stadium Manager safety protocols.

Social Media Policy

This policy governs contractors use of social media, including any online tools used to share content and profiles, such as personal web pages, message boards, networks, communities, and social networking websites including, but not limited to, Facebook, Twitter, Instagram, LinkedIn, Snapchat, Tumblr, Reddit, and web blogs. The lack of explicit reference to a specific site or type of social media does not limit the application of this policy.

The Contractor (and all employees) are prohibited from the following:

1. Using social media to post or to display comments about Stadium Manager, the San Francisco 49ers, Levi's Stadium, co-workers, supervisors, clients, vendors, suppliers or members of management that are vulgar, obscene, physically threatening or intimidating, harassing, or otherwise constitute a violation of the Stadium Manager's workplace policies against discrimination, retaliation, harassment, or hostility on account of any protected category, class, status, act or characteristic.
2. Infringing on Stadium's logos, brand names, taglines, slogans or other trademarks. Contractors and their agents, owners, and employees shall comply with the laws regarding copyrights, trademarks, rights or publicity and other third party rights.
3. Posting or displaying content that is an intentional public attack on the quality of the Stadium's products and/or services in a manner that a reasonable person would perceive as calculated to harm the Stadium's business and is unrelated to any employee concern involving wages, hours, or other terms and conditions of employment.
4. Posting a photograph of a supervisor, manager, co-worker (including players and coaches in non-public settings), vendor, supplier, or client without that individual's express permission.

Violations of this policy may result in disciplinary action up to and including removal from the jobsite. Please contact the Stadium Manager if you have any questions about this policy.



Agenda Report

21-1441

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Report from the Stadium Authority Regarding Stadium Manager's Request to Execute Agreement with R.E. Cuddie Co. for Non-Slip Floor Matting CapEx Project and Related Budget Amendment

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

BACKGROUND

On October 8, 2019, the Stadium Authority Board (Board) approved Ordinance No. 2005 amending Chapter 17.30 of the City Code (Stadium Authority Procurement Policy), which rescinded the delegation to the Executive Director to enter into agreements without prior Board approval. As result of Ordinance No. 2005, the Stadium Manager is also required to request Board approval before entering into agreements on behalf of the Stadium Authority. As of the effective date of the Ordinance (November 8, 2019), all Stadium Authority agreements for services, supplies, materials, and equipment require the approval of the Stadium Authority Board.

As the Stadium Manager, Forty Niners Stadium Management Company, LLC is responsible for maintaining "the Stadium in the Required Condition and operate the Stadium as a quality NFL and multi-purpose public sports, public assembly, exhibit and entertainment facility" as required by the Management Agreement between the Stadium Authority and ManCo.

The Stadium Manager is requesting approval for the following:

1. Award a one-time agreement to R.E. Cuddie Co. in the amount of \$53,955 for the removal and disposal of existing resilient athletic flooring from service tunnels, and the furnishing and installation of rubber resilient athletic flooring at Levi's Stadium. This work is included in the Stadium Authority FY 2021/22 CapEx budget under the Non-Slip Floor Matting line item. This was a carryover project from the FY 2019/20 CapEx Budget;
2. Authorization to execute any and all documents associated with and necessary for the award, completion, and acceptance of the project; and
3. Authorization to execute change orders up to approximately 10% of the contract cost, or \$5,396, for a total not to exceed amount of \$59,351.

DISCUSSION

Stadium Authority staff reviewed the Recommendation for Award memo, supporting procurement documents, and agreement with R.E. Cuddie Co. (these documents are attached to corresponding

report #21-1440). In reviewing the request, staff recommends that the Stadium Manager's request for delegated authority to execute any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and change orders up to approximately 10% of the contract cost, or \$1,461, be delegated instead to the Executive Director.

Section 2.1 in the First Amendment to the Management Agreement states that the Stadium Manager only has the ability to enter into contracts with providers to the extent has authority to enter into such Stadium Procurement contracts pursuant to the Santa Authority Procurement Policy. Currently, the Executive Director has no procurement delegated authority under the Stadium Authority Procurement Policy. As such, if the Board approves staff's recommendation to provide the Executive Director with such authority to execute any and all documents associated with, and necessary for the award, completion, and acceptance of the project; and change orders up to approximately 10% of the contract cost, the Stadium Manager would not have the same authority to do so. This approach accomplishes the expediency that the Stadium Manager seeks and is compliant with the First Amendment to the Management Agreement.

Staff has no additional comments regarding the Stadium Manager's request and recommends approval of the agreement with R.E. Cuddie Co. The Stadium Authority will require full supporting documentation including compliance with prevailing wage laws, if applicable, before respectively releasing public funds upon completion of work. This requirement is consistent with the Stadium Authority Board's March 27, 2019 direction to staff to stop payment of any additional invoices for services unless there is substantial documentation of services rendered which must also be in compliance with State law and City Code.

ENVIRONMENTAL REVIEW

The actions being considered do not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment or pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potential significant impact on the environment.

FISCAL IMPACT

The Stadium Authority FY 2021/22 CapEx budget includes \$52,500 for the Non-Slip Floor Matting line item which the described services fall under. There are not enough sufficient funds to cover the total cost of agreement (\$53,955) and the 10% contingency (\$5,396) that the Stadium Manager is recommending (\$59,351). The Stadium Manager has requested to use unspent and unobligated funds from the Stadium Authority FY 2021/22 CapEx Budget to cover the remaining amount of \$6,851 above the \$52,500 budgeted for the line item. This will require the Board's approval of a budget amendment in the amount of \$6,851 to fund the total agreement and 10% contingency amount exceeding the budgeted amount for the line item in the Stadium Authority FY 2021/22 CapEx Budget. A decrease to the Capital Reserve is recommended to offset this action.

The Stadium Manager advertised the Request for Bids in the San Jose Mercury News publication for the amount of \$791. On July 13, 2021, the Stadium Authority Board previously approved up to \$20,000 for the Stadium Manager to publish legal notices in the San Jose Mercury News and Santa Clara Weekly for various solicitations.

COORDINATION

This report has been coordinated with the City's Purchasing Manager, Stadium Treasurer's Office, and Chief Assistant City Attorney.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov.

RECOMMENDATION

1. Approve the Stadium Manager's request to execute an agreement with R.E. Cuddie Co. for the removal and disposal of existing resilient athletic flooring from service tunnels, and the furnishing and installation of rubber resilient athletic flooring at Levi's Stadium (Non-Slip Floor Matting CapEx line item) in an amount not to exceed \$53,955, and authorize the Executive Director to approve and process the reimbursement of such costs upon receiving final invoices and supporting documentation from the Stadium Manager;
2. Authorize the Executive Director to approve the execution of any and all documents associated with, and necessary for the award, completion, and acceptance of the project;
3. Authorize the Executive Director to approve the execution of change orders up to approximately 10% of the contract cost, or \$5,396, for a total not to exceed amount of \$59,351; and
4. Approve a budget amendment in the amount of \$6,851 to fund the total agreement and 10% contingency amount exceeding the budgeted amount for the line item in the Stadium Authority FY 2021/22 CapEx Budget, offset by a decrease in Capital Reserves.

Prepared by: Christine Jung, Assistant to the Executive Director

Reviewed by: Deanna J. Santana, Executive Director



Agenda Report

21-1442

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Request from the Stadium Manager to Incur Charges for Various Conferences, Events, and Meetings

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

DISCUSSION

On September 30, 2021, the Stadium Manager submitted a request for the following events, conferences, and meetings:

- October 21-22, 2021 VenuesNow Conference in Seattle, WA: Authorization to incur charges up to \$2,300 to cover registration fees, travel expenses and potential client entertainment for one Stadium Manager employee.
- November 2021 Billboard Live Music Summit + Awards in Los Angeles, CA: Authorization to incur charges up to \$4,550 to cover registration fees, travel expenses and potential client entertainment for two Stadium Manager employees.
- February/March 2022 Gridiron Stadium Network Annual Meeting in Austin, TX: Authorization to incur charges up to \$2,650 in order to cover travel expenses and potential client entertainment for two Stadium Manager employees.
- Client Meetings: Authorization to incur charges up to \$9,000 to cover travel and entertainment expenses for up to six client meetings.

The Stadium Manager's email describes these events, conferences, and meetings in more detail. Staff reviewed the request and sent follow up questions, which the Stadium Manager responded to, as documented in the attached email. The Stadium Manager also provided a copy of its Business Expense Reimbursement Policy which sets forth the travel and expense costs that are reimbursable to Stadium Manager employees.

Combined, the Stadium Manager's request totals a not to exceed amount of \$18,500 and if approved, will be charged to the Stadium Authority FY 2021/22, Non-NFL Events budget (Public Events), Networking/Dues and Subscriptions/Event tickets line item.

ATTACHMENTS

1. Stadium Manager's Email Request for Approval and Follow Up Responses
2. Stadium Manager's Business Expense Reimbursement Policy

From: [Mercurio, Jim](#)
To: [Christine Jung](#)
Cc: [Deanna Santana](#); [Sujata Reuter](#); [Kenn Lee](#); [Ruth Shikada](#); [Mercurio, Jim](#)
Subject: RE: Marketing Conferences - Public Events
Date: Thursday, October 7, 2021 11:50:12 AM
Attachments: [image002.png](#)
[image004.png](#)
[image005.png](#)

Hi Christine:

Entertainment for Public Event prospects/clients would typically involve 1-2 employees from the Stadium Manager and 1-4 attendees from the prospect/client. This would be in the range of \$100 per attendee for each entertainment event, and would often include a lunch/dinner at a higher end restaurant, or perhaps a less formal meeting for coffee or drinks. We strive to make the entertainment event attractive and unique for the prospect/client, so it really depends on what they are interested in.

Your comment that "Stadium Authority will not reimburse any alcohol charges" exhibits a lack of familiarity with the live event business: It would be very unusual to have a client entertainment event for decision makers in the live event industry that doesn't include beer/wine/spirits. This is typical in the sales industry generally. Often these prospects/clients are promoting events that are actually sponsored by companies in the beer/wine/spirits industry, and it would be counterproductive to invite a decision maker to an entertainment event and then tell them they need to pay for their own drinks.

It's also worth noting that the SCSA has covered the cost of beer/wine/sprits for prospects/clients in the past, and that has been a component of the success we have had in driving overall revenue, including \$500M+ in SBL sales.

Finally – please confirm that the following are set for Board consideration on the indicated dates:

- Tunnel Slip and Fall 10/19
- Conferences- Public Events 10/19
- Resilient Flooring 10/19
- A&E Services 10/19
- Genetec Training 10/26
- Goods and Services 10/19
 - Cintas
 - Twin Hill
 - Window Treatment
 - Floor Mats

Thanks very much

JIM

JIM MERCURIO

Executive Vice President & General Manager

Forty Niners Stadium Management Company

T 408.562-4944 | M 650 642-4909

Levi's® Stadium

4900 Marie P. DeBartolo Way

Santa Clara, CA 95054



#FTTB
49ers.com

From: Christine Jung <CJung@SantaClaraCA.gov>
Sent: Tuesday, October 5, 2021 11:06 AM
To: Mercurio, Jim <jim.mercurio@49ers.com>
Cc: Deanna Santana <DSantana@SantaClaraCA.gov>; Sujata Reuter <SReuter@SantaClaraCA.gov>; Kenn Lee <KLee@SantaClaraCA.gov>; Ruth Shikada <RShikada@SantaClaraCA.gov>
Subject: RE: Marketing Conferences - Public Events

Hi Jim,

Can you please provide more information about the client entertainment that the Stadium Manager is planning, such as what they entail and anticipated costs? Please note that the Stadium Authority will not reimburse any alcohol charges for meals or entertainment.

We see that the Stadium Manager is requesting approval by October 8; however, this item needs to go to the Stadium Authority Board for approval and will be placed on the agenda of our next scheduled meeting (October 19).

Please provide the requested information by noon this Thursday, October 7 so that we can include it in the corresponding agenda report.

Thank you,
Christine Jung | Assistant to the Executive Director
1500 Warburton Avenue | Santa Clara, CA 95050
D: 408.615.2218 | www.santaclaraca.gov/scsa

From: "Ly, Vinette" <Vinette.Ly@49ers.com>
Date: September 29, 2021 at 2:07:01 PM PDT
To: Deanna Santana <DSantana@santaclaraca.gov>
Subject: Marketing Conferences - Public Events

Deanna,

I write to request SCSA approval for the events, conferences, and meetings listed below with respect to lead generation for Non-NFL public events. Our goal is to use these opportunities to support the Stadium Manager's efforts in cultivating relationships with promoters in the industry and drive revenue for FY21 and beyond, with a particular focus on concerts and major public events. It's important to get this underway as we continue to build momentum and emerge from COVID-19 restrictions. In order to act on these opportunities,

we request approval by Friday, October 8th.

VenuesNow Conference

October 21 & 22, 2021

Seattle, WA

1 Attendee

VenuesNow Conference was developed in 2017 to provide industry leaders of live entertainment facilities with a forum to discuss some of the most comprehensive topics appearing in the pages of the VenuesNow magazine. The event includes a variety of discussions and networking events focused on the current and future vision of the industry, cutting-edge initiatives and trends in the world of venues. With two days of programming, the conference covers all aspects of the business to include Technology, Operations, Sustainability, Security, Sanitization, Tenants & Teams, Branding & Sponsorships, Ticketing, Concessions, Design, Financing, Inclusivity, Bookings & Content, and more.

VenuesNow brings together the thought leaders, influencers, and visionaries that help create a positive disruption in the sports and live entertainment venue industry. Over 80% of the audience holds the title of Director or above and is representative of various sectors of the business. With over 600 in-person attendees in 2019, this year's program will offer in-person and digital registration options for the first time. The event will be hosted during opening week of Climate Pledge Arena on Seattle Center campus and this year's projected audience is in the thousands.

Stadium Manager will use this conference as a key networking opportunity to cultivate relationships within the live entertainment industry. Attendance at this particular conference is instrumental for the future of public events at Levi's Stadium in order to stay up to date on industry trends.

We are requesting authorization to incur charges up to \$2,300 in order to cover registration fees, travel expenses and potential client entertainment for one Stadium Manager employee. This expense would fall under the "Attending Events | Conferences | Client/Prospect Meetings" line item in the non-NFL Public Event Budget, and we have room within this line item to cover this cost.

Billboard Live Music Summit + Awards

November 2021 (2-day conference - exact dates TBD)

Los Angeles, CA

2 Attendees

The Billboard Live Music Summit, which is the only live music awards show that honors acts, executives, venues, agents, managers, and events based primarily on data generated by Billboard Boxscore, has become one of the most powerful gatherings in the industry.

Attendees of the Billboard Live Music Summit include promoters for major artists and are the key decision makers when it comes to venue selection for large scale concerts.

Stadium Manager will use this conference as a key networking opportunity to cultivate relationships within the live entertainment industry. Attendance at this particular conference is instrumental in order to stay at the forefront of crucial decision makers that manage major artists and their touring schedules.

We are requesting authorization to incur charges up to \$4,550 in order to cover registration fees, travel expenses and potential client entertainment for two Stadium Manager employees. This expense would fall under the "Attending Events | Conferences | Client/Prospect Meetings" line item in the non-NFL Public Event Budget, and we have room

within this line item to cover this cost.

GSN Annual Meeting

February/March 2022 (2-day conference - exact dates TBD)

Austin, TX

2 Attendees

The Gridiron Stadium Network was established to create awareness and to promote the assets of its member stadiums. Today, the GSN represents 15 NFL facilities, working to optimize opportunities and expand the use of each member's state-of-the-art facilities for new sports, entertainment, public and private events. The GSN assists its members with attracting and developing events on either a single or multiple facility basis. From sold out concerts and sporting events to smaller, more intimate shows and conferences, GSN members are dedicated to providing the best experiences for audiences, artists, third party, corporate and community partners.

Stadium Manager will use this conference as a key networking opportunity to cultivate relationships within the sports and live entertainment industry. Attendance at this conference is instrumental in order to stay at the forefront of industry trends, best practices, and to remain relevant within the network of stadium managers.

We are requesting authorization to incur charges up to \$2,650 in order to cover travel expenses and potential client entertainment for two Stadium Manager employees.

This expense would fall under the "Attending Events | Conferences | Client/Prospect Meetings" line item in the non-NFL Public Event Budget, and we have room within this line item to cover this cost.

Client Meetings

1 Attendee per meeting

Stadium Manager requests authorization to incur charges in order to solidify in person meetings with key stakeholders within the live entertainment industry. Relevant promoters are located in various areas of the country and maintaining an existing relationship is essential to the growth of public event revenue. It is also necessary for the Stadium Manager to develop new relationships with promoters to ensure we are focusing on the long term revenue streams for future public events.

We are requesting authorization to incur charges up to \$9,000 in order to cover travel and entertainment expenses for up to (6) client meetings. This expense would fall under the "Networking | Dues and subscriptions | Event tickets" line item in the non-NFL Public Event Budget, and we have room within that line item to cover this cost.

Please note that T&E costs from Stadium Manager employees are reimbursable in accordance with the attached policy.

Should you have any questions or request further clarification please do not hesitate to reach out.

Thank you for your attention to this matter.

V.L. on behalf of
Larry MacNeil

VINETTE LY

Executive Assistant to the CFO

San Francisco 49ers

T 408.673.2034 | M 408.315.9736

SAP Performance Facility

4949 Marie P. DeBartolo Way

Santa Clara, CA 95054

#FTTB

[49ers.com](https://www.49ers.com)

Business Expense Reimbursement Policy

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Overview

The following provides an update on our business expense processes and reimbursement policies for business travel and other expenses.

The Business Expense Reimbursement Policy provides guidelines to reimburse staff for reasonable and necessary business expenses. All expense reports must be submitted through Concur. Please be timely in submitting your reimbursement request; reimbursements should be submitted within 60 days.

As a *general guideline*, an expense must meet the following criteria to qualify for reimbursement. The expense should be:

1. Necessary for the employee to perform their job and documented as such, and
2. Reasonable in cost – as always, common sense prevails

To streamline the process, employees will now book all airfare exclusively through Concur Travel. To assist with travel arrangements, we have added a dedicated travel resource who can assist with needs related to business travel. The travel service can be reached at Travel@49ers.com.

Employee expense reimbursements will no longer be accepted for air travel booked outside of the Concur Travel system. This update applies only to air travel and has no impact on hotel, auto, etc. As a reminder, **your supervisor with budget authority must pre-approve airfare and hotel reservations.**

Additionally, the importance of documenting a clear and concise business purpose for each expense line item cannot be overstated. The business purpose should be stated clearly and should relate directly to the employee's job responsibilities. This is necessary to help accounting determine the appropriate disposition of individual expense reimbursements. Failure to provide sufficient documentation will result in a delay in reimbursement. Below are general guidelines on the information that should be included when submitting expenses for reimbursement:

Business Purpose

When an expense report is submitted, you must provide a clear and detailed business purpose to support the expense.

Examples:

- Why was the expense incurred?
- What was purchased?
- What type of event does the business purpose relate to?
- When/where was the event?
- Please avoid using acronyms in the business purpose field.

The business purpose must be entered for each expense line on your Concur report. If there is not enough room, please continue your explanation in the Comments field. Incomplete information will delay reimbursement.

Travel Expenses

The Concur tool helps make managing business travel less time consuming. Concur will also help employees stay in compliance with the travel expense policies. As noted above, it is important for you to state a clear business purpose for all reimbursement requests.

Mileage: Mileage reimbursement is based on the maximum IRS standard mileage rate (56 cents per mile as of January 1, 2021) for use of a personal vehicle to travel from your normal place of work to another location for work (e.g., the airport for business travel). Current mileage rates can be found at <https://www.irs.gov/tax-professionals/standard-mileage-rates>.

- As a reminder, mileage from home to Levi's Stadium (i.e., normal commute) is not reimbursable per IRS guidelines. Mileage to and from a temporary place of work (meeting or conference) is reimbursable, less the mileage of the employee's normal commute.

Airfare, Hotel, Rental Cars: As noted above, airfare accommodations can only be booked through Concur via our travel partner, Direct Travel (Travel@49ers.com). Please work with Direct Travel or the individual in your department responsible for booking travel for assistance.

Airfare: Ensure that your Concur Profile is up to date with your legal name, address, DOB, and Travel Preference section filled out. Business purpose should be stated clearly as mentioned above. Some guidelines when booking airfare:

- The lowest coach/economy airfare with major carriers that works for the employee's travel schedule should be booked.
- Business Class and First-Class flights are not permitted. The only exception is if such travel is pre-approved by the President before purchase.
- Have flights booked as far in advance as possible to get reasonable fares.
- Any airfare of \$500 or more requires pre-approval by your supervisor with budget authority.
- Avoid booking flights and hotels based primarily on frequent flyer accounts if the cost is not reasonably close to comparable alternatives. Fees for airport clubs or frequent flyer programs are not reimbursable.
- Submit receipts for baggage fees, Wi-Fi, meals, etc.

Note: Airfare booked through Concur & Direct Travel will be paid by the Company directly. **The employee will not need to submit an expense report for airfare.**

Hotel: If needed, email Travel@49ers.com for booking assistance. The itemized hotel folio must be submitted; a hotel confirmation or other receipt showing payment is **not** considered to be sufficient documentation for reimbursement by the IRS.

- Hotel stays must be pre-approved by the budget manager. While high hotel costs are occasionally unavoidable (e.g., NFL-mandated meetings in NYC), as a general guideline, hotel stays for business travel should not exceed \$250 per night (plus taxes & fees). Attach supervisor email approval when submitting your expense report.
- Hotel stays can be booked via Concur. Unlike Concur's partnership with airlines through which the Company can pay airfare directly, hotels cannot be paid through Concur. Employees will pay for their own hotel stay and submit an expense report for reimbursement.
- Hotel stays for a conference in the Bay Area are generally not reimbursable.

- Other hotel expenses:
 - Parking – please self-park rather than valet whenever self-parking is available.
 - Room service – see *Meal Reimbursement* policy below.
 - Phone calls - reasonable phone charges are reimbursable if the employee has not been issued a company phone. Avoid excessive hotel long-distance charges.

Airport Transportation: In general, the mode of transportation used should be the most economical one suitable for the purpose of the trip.

- Mileage and economy parking will be reimbursed if parking at a Bay Area airport for business travel.
- Please use a shuttle, ride sharing service, or BART if the round-trip cost is less than economy parking at the airport.

Rental Cars:

- In general, the mode of transportation used should be the most economical one suitable for the purpose of the trip.
- When renting a car, employees should use the 49ers rental company accounts through Concur, unless these options are not available.
- As a general guideline, rentals should be mid-sized or full-sized cars. Please use your judgment and consider Lyft and Uber as alternative options.
- Employees booking rental cars through Concur can have the rental direct billed to the 49ers if using Hertz or Avis.
- If not booked through Concur, the employee will be responsible for the charges and will need to submit an expense report for reimbursement.
- Do not accept any insurance on rental vehicles – these charges will not be reimbursed.
- Please fill the vehicle with gas prior to returning it to avoid excessive “fill-up” charges added to the rental.
- Please reserve rental cars well in advance due to the high demand and lack of supply in the current market.

Meal Reimbursement:

- The employee in attendance who has the highest level of authority in a group should always pay for the expense (e.g., if a VP and a Director are at a business meal, the VP should pay).
- Staff meals are reimbursable up to a maximum of \$76 per full day (\$18 maximum for breakfast, \$22 maximum for lunch and \$36 maximum for dinner).
- Itemized receipts are required for reimbursement. Missing receipts will result in reimbursement delay.
- Overages for meals in certain high-cost cities will be reviewed on a case-by-case basis.
- Employees should note the business purpose of the meal, including the name/company of the person(s) in attendance, and submit the itemized receipt.

Business Entertainment

Business meals include reasonable amounts spent on food and other refreshments purchased in surroundings conducive to and including a business discussion with existing or prospective customers.

Entertainment expenses are reimbursable only if the entertainment will directly benefit Forty Niners Stadium Management Company or one of its clients (e.g. SCSA, StadCo, etc.), or if it directly precedes or follows a substantial and bona fide business discussion for the purposes of obtaining income or another business benefit.

Business entertainment expenses include, but are not limited to, such items as the cost of meals and beverages, and the cost of transportation directly related to the above.

If the employee is dining with others for business purposes, the meal and related expenses incurred are “entertainment,” not “meals.”

- “Entertainment” expenses require additional explanation on the expense reimbursement report.
- The expense report will include date, names of individuals, titles, and companies, as well as the business purpose (for example: “Lunch with SBL Customer prospect”. This will allow Accounting to charge the expense to the correct client.
- The most senior employee present should pay all business entertainment expenses.

Employees should always use their judgment and common sense when charging business meals and entertainment expenses.

Personal Travel Expenses

- As a reminder, airfare along with other personal travel expenses should not be booked on Concur or requested as a payroll deduction (AR1). Any such personal expenses (flights, hotel, meals, incidentals, etc.) should be paid directly by the employee (e.g., personal expenses incurred during hotel stay should be paid to hotel by employee via personal credit card). The only exception to the above is if personal expenses are pre-approved for payroll deduction via email by President AND the employee’s VP level manager. Personal expenses can also be pre-approved for payroll deduction by President AND ownership.

Team Outings/Offsite Events

- Team outings should be pre-approved by the budget manager and department VP prior to booking hotel and airfare.
- Expenses for the outing/event should follow the guidelines set above regarding hotel, airfare, meals, etc.

Employee Gifting

- Recognition for employees in the form of company gifts is administered through our Human Resources (HR) department. Expenses submitted for any “company” gifts that are not part of an HR initiative cannot be reimbursed. This includes gifts given in recognition of personal events or achievements unrelated to work (e.g., birthdays, weddings, baby showers) or in recognition of holidays (e.g., holiday gifts for employees are coordinated through HR).
- Please avoid using gift cards as incentives or employee gifts for work-related achievement. Gift cards and other non-cash gifts should be viewed as income and are taxable to the employee, even though they are not “cash.”

Office Equipment, FF&E

- Purchases of furniture, fixtures and equipment should be coordinated through your department VP and facilities (Bill Howell for SAP Performance Center or Stadium Operations for stadium purchases) and/or IT (computers and handheld devices).

Thank you for your assistance and cooperation. Please contact Esther Chi, Vice President, Controller or Chris Steele, Director, Accounting if you have any questions regarding the policy.



Agenda Report

21-1443

Agenda Date: 10/19/2021

REPORT TO STADIUM AUTHORITY BOARD

SUBJECT

Report from the Stadium Authority Regarding the Stadium Manager's Request to Incur Charges for Various Conferences, Events, and Meetings

BOARD PILLAR

Ensure Compliance with Measure J and Manage Levi's Stadium

BACKGROUND

Through the Stadium Management Agreement, the Forty Niners Stadium Management Company (Stadium Manager) manages and operates Levi's Stadium on behalf of the Stadium Authority for Non-National Football League (Non-NFL) Events, like concerts, sporting events, and non-ticketed events. On behalf of the Stadium Authority, the Stadium Manager is responsible for the marketing and booking of Non-NFL events among other duties at Levi's Stadium.

The Stadium Manager is required to develop an annual Marketing Plan to outline the Stadium Manager's plans to develop, implement, and monitor marketing, booking, advertising and promotion of Non-NFL Events for Levi's Stadium. The Marketing Plan needs to be mutually agreed upon by the Stadium Manager and the Stadium Authority. On March 10, 2021, the Stadium Manager's Draft 2021 Non-NFL Events Marketing Plan (Marketing Plan) was discussed during a Study Session. The Draft 2021 Marketing Plan was reviewed against data results, alignment to the Management Agreement and Naming Rights Agreement provisions, and other key information. The Board took no action on the Draft 2021 Marketing Plan on March 23, 2021 when it was brought forth with the Stadium Authority FY 2021/22 Budget and Stadium Operation and Maintenance Plan for approval; instead, the Board delegated authority to the Executive Director to conduct a competitive Request for Proposal to pursue an independent third-party consultant to review and assess the Non-NFL Events Marketing Plan and enter into an agreement for such services. At the time of writing this report, staff is currently implementing a Statement of Qualifications (SOQ) process for that service and is in process of evaluating proposals.

Separately, on September 17, 2019, the Stadium Authority Board approved the introduction of Ordinance No. 2005, which rescinded the Executive Director's delegated purchasing authority and requires all contracts or agreements to acquire supplies, materials, equipment and services to require Board approval by amending Chapter 17.30 of the Santa Clara City Code. On October 8, 2019, the Board adopted Ordinance No. 2005, which became effective on November 8, 2019. As a result of the Board's revocation of the Executive Director's authority to procure good and services on behalf of the Stadium Authority as of November 8, 2019, the Stadium Manager must now seek approval from the Board and demonstrate that the Stadium Manager has properly and legally procured goods and services before contracts may be executed.

The Stadium Manager is requesting approval for the following marketing activities:

- October 21-22, 2021 VenuesNow Conference in Seattle, WA: Authorization to incur charges up to \$2,300 to cover registration fees, travel expenses and potential client entertainment for one Stadium Manager employee.
- November 2021 Billboard Live Music Summit + Awards in Los Angeles, CA: Authorization to incur charges up to \$4,550 to cover registration fees, travel expenses and potential client entertainment for two Stadium Manager employees.
- February/March 2022 Gridiron Stadium Network Annual Meeting in Austin, TX: Authorization to incur charges up to \$2,650 in order to cover travel expenses and potential client entertainment for two Stadium Manager employees.
- Client Meetings: Authorization to incur charges up to \$9,000 to cover travel and entertainment expenses for up to six client meetings.

Per the Stadium Manager, the cost for this activity will be charged to the FY 2021/22 Non-NFL Events budget (Public Events), Networking/Dues and Subscriptions/Event tickets line item.

DISCUSSION

Staff reviewed the Stadium Manager's email request and Business Expense Reimbursement Policy (attached to corresponding report #21-1442) and sent questions to the Stadium Manager for response. Staff requested clarification on the client entertainment that the Stadium Manager was planning since the Business Expense Reimbursement Policy's Business Entertainment section was very broad compared to Travel Expenses, which had some parameters for flights, hotels, and meals. Staff also shared that the Stadium Authority would not reimburse alcohol charges because that is not permitted as a general practice with the use of public funds. Such exchange of questions is standard practice while reviewing requests for procurement and/or funding.

The Stadium Manager's response is copied below:

Entertainment for Public Event prospects/clients would typically involve 1-2 employees from the Stadium Manager and 1-4 attendees from the prospect/client. This would be in the range of \$100 per attendee for each entertainment event, and would often include a lunch/dinner at a higher end restaurant, or perhaps a less formal meeting for coffee or drinks. We strive to make the entertainment event attractive and unique for the prospect/client, so it really depends on what they are interested in.

Your comment that "Stadium Authority will not reimburse any alcohol charges" exhibits a lack of familiarity with the live event business: It would be very unusual to have a client entertainment event for decision makers in the live event industry that doesn't include beer/wine/spirits. This is typical in the sales industry generally. Often these prospects/clients are promoting events that are actually sponsored by companies in the beer/wine/spirits industry, and it would be counterproductive to invite a decision maker to an entertainment event and then tell them they need to pay for their own drinks.

It's also worth noting that the SCSA has covered the cost of beer/wine/sprits for prospects/clients in the past, and that has been a component of the success we have had in driving overall revenue, including \$500M+ in SBL sales.

The Stadium Manager's response acknowledges that alcohol consumption is a part of the business marketing that they utilize to pursue Non-NFL events. While the use of public funds for alcohol consumption is generally not permitted by public agencies, the legislative body of the public agency can authorize this business expense. Therefore, there is an appropriate Board recommendation transmitted in this report to authorize the use of public funds to cover alcohol consumption as detailed in the documents submitted by the Stadium Manager. Further, the Stadium Authority should be covered for the risk or liability arising from auto accidents or other such losses occurring at any of these marketing events (including liability arising from consumption of alcohol) pursuant to the Indemnification Clause in Article 12 of the Management Agreement.

As the Stadium Manager's request pertains to marketing activities, staff also reviewed it against the Draft 2021 Marketing Plan. While the Draft 2021 Marketing Plan was not mutually agreed upon, it is the only document that the Stadium Authority has that outlines the Stadium Manager's planned marketing efforts. The requested marketing activity aligns to one of the key initiatives ("Utilize Marketing Budget to Regenerate Active Event Pipeline") the Stadium Manager identified in their Draft 2021 Marketing Plan. The Stadium Manager planned to prepare for the return to in-person events to build out new packages, create a strategic communications plan and reintroduce Levi's Stadium to local and national clients through a marketing campaign. It had planned to achieve this by utilizing a marketing budget to communicate its message through digital advertising, client/prospecting events, sales events/trade shows, and swag/gifts. The marketing activities which the Stadium Manager is requesting to incur charges for fall under the client/prospecting events and sales events/trade shows categories.

Based on this review, staff recommends approval of the request to incur charges for registration fees, travel expenses, and client entertainment, including alcohol, for the described conferences, events, and meetings. The Stadium Authority will require full supporting documentation before respectively releasing public funds upon procurement of registration fees, travel expenses, and client entertainment. This requirement is consistent with the Stadium Authority Board's March 27, 2019 direction to staff to stop payment of any additional invoices for services unless there is substantial documentation of services rendered which must also be in compliance with State law and City Code.

ENVIRONMENTAL REVIEW

The actions being considered do not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment or pursuant to CEQA Guidelines section 15378(b)(4) in that it is a fiscal activity that does not involve any commitment to any specific project which may result in a potential significant impact on the environment.

FISCAL IMPACT

The Stadium Authority FY 2021/22 Non-NFL Events budget (Public Events) contains \$25,000 for Networking/Dues and Subscriptions/Event Tickets. There are sufficient funds to cover the Stadium Manager's request to incur up to \$18,500 for the conferences, events, and meetings.

COORDINATION

This report has been coordinated with the Chief Assistant City Attorney and Stadium Treasurer's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov.

RECOMMENDATION

1. Approve the Stadium Manager's request to incur charges up to \$2,300 to cover registration fees, travel expenses and potential client entertainment, including the purchase of alcohol with public funds, for one Stadium Manager employee for the October 21-22, 2021 VenuesNow Conference in Seattle, WA;
2. Approve the Stadium Manager's request to incur charges up to \$4,550 to cover registration fees, travel expenses and potential client entertainment, including the purchase of alcohol with public funds, for two Stadium Manager employees for the November 2021 Billboard Live Music Summit + Awards in Los Angeles, CA;
3. Approve the Stadium Manager's request to incur charges up to \$2,650 in order to cover travel expenses and potential client entertainment, including the purchase of alcohol with public funds, for two Stadium Manager employees for the February/March 2022 Gridiron Stadium Network Annual Meeting in Austin, TX; and
4. Approve the Stadium Manager's request to incur charges up to \$9,000 to cover travel and entertainment expenses, including the purchase of alcohol with public funds, for up to six client meetings.

Prepared by: Christine Jung, Assistant to the Executive Director

Reviewed by: Deanna J. Santana, Executive Director



Agenda Report

21-198

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Public Hearing: Action on a Resolution of Necessity to Acquire Certain Real Property Interests on 999 Martin Avenue, Santa Clara, California, from Pollack Enterprises, Inc.

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

The City of Santa Clara's Electric Utility, Silicon Valley Power (SVP), is proposing to construct approximately 3.5 miles of new single and double circuit 60 kilovolt (kV) overhead transmission line within the northeastern area of the City of Santa Clara. SVP's primary objective of the South Loop Reconfigure Project (Project) is to shift the electrical load demand that is currently being seen on the South Loop Circuit to the East Loop Circuit to increase system capacity and reliability.

The majority of the new 60 kV transmission line would be constructed along the following city streets in areas where existing power lines do not currently exist: Lafayette Street, Mathew Street, Martin Avenue, and De La Cruz Boulevard. The remaining segments of the Project would be along routes that have existing distribution power lines and/or telecommunication lines.

The City Council has previously taken a number of actions on the project:

- June 16, 2015 - Adopted the FY 2015/16 Capital Improvement Program (CIP) Budget which included the initial funding for the engineering for this 60kV reconductoring and upgrading project.
- July 12, 2016 - Approved a professional services agreement with Electrical Consultants, Inc. to provide transmission line engineering design services which included reconfiguring the south transmission loop.
- January 14, 2020 - Amended a service agreement with Valbridge Property Advisors to perform appraisal services as part of the easement acquisition for the Project.
- July 7, 2020 - Adopted the Negative Declaration and Mitigation, Monitoring and Reporting Program for the Project and increased the capital funding of the Transmission System Reinforcements Capital Improvement Program Project (No. 2124) by \$6,300,000.
- October 13, 2020 - Approved three Purchase and Sale Agreements for Electric Utility Easements.
- November 10, 2020 - Approved two Purchase and Sale Agreements for Electric Utility Easements.
- November 17, 2020 - Approved four Purchase and Sale Agreements for Electric Utility Easements.
- November 17, 2020 - Adopted three Resolutions of Necessity to Acquire Certain Real Property

Interests and Directed the Filing of Eminent Domain Proceedings.

- December 16, 2020 - Approved one Purchase and Sale Agreement for Electric Utility Easement.
- February 9, 2021 - Approved two Purchase and Sale Agreements for Electric Utility Easements.
- March 9, 2021 - Adopted two Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- April 6, 2021- Approved six Purchase and Sale Agreements for Electric Utility Easements.
- June 22, 2021- Adopted one Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- August 24, 2021- Adopted one Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- September 28, 2021 - Approved one Purchase and Sale Agreements for Electric Utility Easements.

DISCUSSION

The adoption of the attached Resolution of Necessity requires the City to consider and make the following findings:

- The public interest and necessity require the Project.
- The Project is planned or located in the manner that will be the most compatible with the greatest public good and the least private injury.
- The property sought to be acquired is necessary for the Project.
- The offer required by Section 7267.2 of the Government Code has been made to the Owner of record for the full amount established as the fair market value of the property.

The public interest and necessity require the Project.

The project is critical to maintain reliability of the power system in Santa Clara. SVP maintains a redundant system on its 60kV network, allowing for the loss of a single line without interrupting power delivery and cause outages. This Project ensures that this ability remains as the electrical demand in Santa Clara grows. The project is also necessary for future development in the area.

The Project is planned or located in the manner that will be the most compatible with the greatest public good and the least private injury.

SVP identified a study area that considered criteria necessary to meet the Project objectives, e.g., maintain system reliability while allowing for an increase in electrical demand. Staff engineers and design consultants looked for route alternatives, focusing on locations that paralleled existing roads and/or existing overhead utilities, and our own existing transmission corridors. In places where we could not use our existing transmission corridors or did not have an existing transmission corridor, staff considered route alternatives looking at their potential impacts to the environment, existing and probable future development, the topography/terrain, roadway access, scenic areas, and recreation uses, among other factors. Weighing the above considerations with the technical needs for the project, the final Transmission route was determined.

The property sought to be acquired is necessary for the Project.

The Electric Overhead Easement on 999 Martin Avenue is necessary to achieve the technical needs of the project.

The offer required by Section 7267.2 of the Government Code has been made to the Owner of record for the full amount established as the fair market value of the property.

On May 6, 2020, the City made an offer to Pollack Enterprises, Inc to acquire the Electric Overhead Easement upon the value determined by an independent state licensed and certified appraiser in accordance with the above referenced Government Code.

The Resolution of Necessity requires approval by a two-thirds vote of the Council. If the Council adopts the recommended Resolution of Necessity, the City would deposit the necessary funds for the Easement's probable compensation with the State Condemnation Deposit Fund and file an eminent domain complaint with the Court to seek possession of the property.

As always, the parties can continue to negotiate in an effort to come to a mutual agreement on compensation for the leasehold (including any compensation due for furniture, fixtures, and equipment) and loss of business goodwill.

ENVIRONMENTAL REVIEW

This project was analyzed in accordance with the requirements of the California Environmental Quality Act (CEQA). A Mitigated Negative Declaration (MND) [SCH#2020-05-9009] was prepared for the project by the environmental consultant firm, Aspen Environmental Group, and adopted by Council on July 7, 2020 by Resolution No. 20-8869.

FISCAL IMPACT

The South Loop reconfiguration cost was approved as part of the Adopted FY 2020/21 and FY 2021/22 Biennial Capital Improvement Program in the Transmission System Reinforcement CIP Project. This action has no fiscal impact to the General Fund as the Project is funded by developer contributions and customer service charges.

COORDINATION

This report has been coordinated with the Finance Department and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Adopt a Resolution of Necessity to Acquire Certain Real Property Interests.
2. Do not adopt a Resolution of Necessity.

RECOMMENDATION

Alternative 1: Adopt a Resolution of Necessity to Acquire Certain Real Property Interests on 999 Martin Avenue, Santa Clara, California, from Pollack Enterprises, Inc. (Five affirmative votes required [California Code of Civil Procedure section 1245.245]).

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. May 6, 2020 Offer Letter
2. Resolution of Necessity



Powering The Center of What's Possible

May 6, 2020

Pollack Enterprises, Inc
Attn: Michael Pollack
14500 Big Basin Way Unit C
Saratoga, CA, 95070

SUBJECT: OFFER TO PURCHASE OVERHEAD POWER LINE EASEMENT
SITE: 999 Martin Avenue, Santa Clara; APN 224-60-005
South Loop Project

Dear Mr. Pollack:

The City of Santa Clara, acting by and through its municipally owned utility, Silicon Valley Power (SVP) is currently pursuing acquisition of power line easements for the South Loop Project ("Project"). The power lines that are proposed to be built for the project requires the acquisition of property rights affecting approximately 1,774 square feet over a portion of your property located at 999 Martin Avenue, Santa Clara, CA ("Property").

SVP's primary objective of the South Loop Project is to increase system capacity and reliability. The majority of the new 60 kilo-volt (kV) transmission line would be constructed along the following city streets: Lafayette Street, Mathew Street, Martin Avenue, Walsh Avenue and De La Cruz Boulevard. Approximately 2.5 miles of the proposed route would be located in areas where existing power lines do not currently exist. The remaining segments of the Proposed Project would be along routes that have existing distribution power lines and/or telecommunication lines. The project is anticipated to be completed in 2021.

SVP designs its transmission system so that a loss of a single transmission line does not result in the loss of power for its customers. This design philosophy ensures the maximum reliability for its customers. As the power demands of the City grow, so does the necessity to construct infrastructure upgrades, such as this project, to continue to maintain this level of service reliability and increase the power capacity to support load growth and development. SVP is proactive about addressing future reliability issues and committed to providing the best service reliability for its customers.

Our preliminary title report shows Pollack Enterprises, Inc a California corporation to be the owner of the property located at 999 Martin Avenue Santa Clara, CA. This property is within the Project area, and is also identified by the County Assessor as Parcel No. APN 224-60-005.



Powering The Center of What's Possible

Subject to, and upon the terms and conditions set forth herein, SVP officers to purchase an easement over your property, as defined in the Easement Deed attached hereto. SVP hereby offers the sum of Twenty Eight Thousand Eight Hundred Dollars (\$28,800) as just compensation for the acquisition of the easement.

It is the policy of SVP to acquire property interests that are in private interests through voluntary purchase, if possible, and only when it is necessary to do so. In accordance with applicable law, SVP has obtained, reviewed and approved an appraisal to establish the fair market value of the property to be acquired. The attached Appraisal Summary outlines the basis for this offer pursuant to Government Code §7267.2.

Pursuant to Code of Civil Procedure §1263.025, SVP offers to pay your reasonable costs up to five thousand dollars (\$5,000) for an independent appraisal of the property interests. By law, an appraiser licensed by the Office of Real Estate Appraisers must prepare the independent appraisal. Although you are not required to obtain an appraisal at this time, or at all, if you believe such appraisal can assist you in evaluating this offer, it is in your interest to obtain an independent appraisal as expeditiously as possible. If you choose to obtain an appraisal, please forward SVP an invoice from your appraiser, identifying the Property at 999 Martin Avenue Santa Clara, CA is the subject of the appraisal and the fee charged.

Materials enclosed for your information include:

- An Easement with Exhibit showing the location of the acquisition area(s);
- The Appraisal Summary for your easement area.

The agent assigned to your property and to whom you will be working with is Keith Corry Senior Right of Way Professional, who can be reached at (801) 419-4507 or by email at keith.corry@eciusa.com. Please contact him if you have any questions or if you wish further clarification of this offer.

If you are agreeable to the offer please indicate your acceptance by signing in the space provided below and return an original signed copy of this letter to Mr. Corry using the postage paid return envelope, which is attached, for your use. Upon receipt of your acceptance of this purchase offer, a contract for sale and escrow instructions will be prepared for your execution. SVP will pay all of the conveyance and escrow costs. All taxes and assessments, if any, will be pro-rated, and possession will be delivered to SVP at the close of escrow.



Powering The Center of What's Possible

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Pineda".

Manuel Pineda

Assistant City Manager/ Chief Electric Utility Officer

Enclosures:

SVP Easement with exhibit

Appraisal Summary

Postage paid return envelope

ACCEPTANCE OF OFFER

This offer, dated May 6, 2020 from the City of Santa Clara acting by and through its municipally owned utility, Silicon Valley Power, for \$28,800 is accepted for the acquisition of a permanent surface utility easement.

Owner's Name

By: _____

Name: _____

Title: _____

Date: _____

Recording Requested by:
Office of the City Attorney
City of Santa Clara, California

When Recorded, Mail to:
Office of the City Clerk
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

[SPACE ABOVE THIS LINE FOR RECORDER'S USE]

EXEMPT FROM RECORDING FEE
PER GOV'T CODE §§ 6103 and 27383

EXEMPT FROM FEE
PER GOV'T CODE § 27388.1 (a)(2)(D)

OVERHEAD ELECTRIC EASEMENT DEED

999 Martin Avenue & APN 224-60-005
Santa Clara, California

For valuable consideration, the receipt of which is hereby acknowledged, Pollack Enterprises, Inc., a California corporation (herein "**Grantor**"), hereby grants to the **CITY OF SANTA CLARA**, California, a chartered municipal corporation, (herein "**Grantee**"), an easement and right-of-way (herein "**Easement**") in, on, over, along and across the real property owned by Grantor in the City of Santa Clara, State of California, described in **Exhibit A** attached hereto and incorporated herein by this reference ("**Easement Area**").

This Easement shall be used by Grantee for the purpose of constructing and reconstructing, installing, operating, inspecting, maintaining, repairing, removing and/or replacing overhead electrical transmission, distribution and/or communication systems, and appurtenances thereto, including a reasonable right of ingress and egress over adjoining lands of Grantor. In exercising said right of ingress and egress, Grantee shall, wherever practical, use existing roads and lanes across lands of Grantor, if such there be, and if not, by such route or routes as shall result in the least practicable inconvenience to Grantor and any occupants of Grantor's property.

The overhead system will consist of poles, wire supports, wires and conductors suspended from pole to pole, transformers and other equipment mounted on the poles, anchors, guy attachments, and other appurtenances.

Portions of the Easement Area may be used by the Grantor for driveway(s), landscaping (excluding trees), and parking, as will not interfere with the Grantee's use of the Easement. Any other use of the Easement Area by Grantor shall be subject to Grantee's express written consent and only after Grantee's review of plans and specifications and determination that such use will not interfere with its use of the Easement. Grantee may trim any trees or remove any tree or structure which is in or adjacent to the Easement Area which, in its reasonable determination, interferes with its use of the Easement. Grantee may trim any trees or remove any tree which is in or adjacent to the Easement Area which exceeds a height of 20 Feet or poses a risk of falling onto the Grantee's facilities or equipment located within the Easement.

[SIGNATURE(S) APPEAR ON THE FOLLOWING PAGE]

///

///

IN WITNESS WHEREOF, said grantors have hereunto set their hands this _____ day of _____, 20____.

APPROVED FOR FORM:

Brian Doyle
City Attorney

By: _____

Print Name: _____

Title: _____

By: _____

Print Name: _____

Title: _____

"OWNER" APN 224-60-005 (2020-04)

ALL LEGAL OWNERS OF PROPERTY MUST EXECUTE THIS DOCUMENT. IF GRANTOR IS A CORPORATION, THE COMPLETE LEGAL NAME AND CORPORATE SEAL OF THE CORPORATION AND CORPORATE TITLES OF THE PERSONS SIGNING FOR THE CORPORATION SHALL APPEAR ABOVE. WRITTEN EVIDENCE OF AUTHORITY OF PERSON OR PERSONS EXECUTING THIS DOCUMENT ON BEHALF OF CORPORATION, PARTNERSHIP, OR JOINT VENTURE, OR ANY OTHER ORGANIZATION OTHER THAN A SOLE PROPRIETORSHIP SHALL BE ATTACHED.
ATTACH THE ALL-PURPOSE NOTARY ACKNOWLEDGMENT FORM FOR THE PERSON OR PERSONS EXECUTING THIS DOCUMENT ON BEHALF OF THE GRANTOR.

CALIFORNIA NOTARY ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____

On _____ before me, _____ (name and title of officer), personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that she/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

Appendix A

May 4, 2020

**City of Santa Clara
South Loop Interconnect Project
Appraisal Summary Statement And
Summary of the Basis for Just Compensation
(Pursuant to Government Code Section 7267.2)**

The following is a statement of and summary of the basis for the appraisal and the amount that Silicon Valley Power has established as just compensation required by California Government Code Section 7267.2. The appraisal on which this summary is based was made in accordance with accepted appraisal principles, consistent with California valuation law.

The purpose of this appraisal is to estimate the fair market value of the proposed acquisition appraised. Section 1263.320 of the Code of Civil Procedure defines fair market value as:

- A. *The fair market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available.*
- B. *The fair market value of property taken for which there is no relevant market is its value on the date of valuation as determined by any method of valuation that is just and equitable.*

The date of value is November 25, 2019, which was the date of inspection.

The intended use of this appraisal is to provide information on the value of the acquisition for the Silicon Valley Power Project, which is called the South Loop Interconnect Project. The intended user is Silicon Valley Power.

The scope of work included inspecting the property, research and analysis of comparable data, and highest and best use analysis.

The appraised rights are further identified as follows:

- 1) The fair market value of a 1,774-square-foot permanent powerline easement.

Statement of the Amount Established as Just Compensation

The amount Silicon Valley Power has established as just compensation for the property rights described in the accompanying offer is: **\$28,800 (Twenty Eight Thousand Eight Hundred Dollars).**

Summary of Basis for the Amount Established as Just Compensation

This Summary of the Basis for the Amount Established as Just Compensation (prepared pursuant to Government Code Section 7267.2) is a summary of the appraisal used by Silicon Valley Power to determine the amount it established as just compensation for an easement.

(A) Property Identification – Subject Property

Owner of Record:	Pollock Enterprises, Inc.
Assessor's Parcel Numbers (APNs):	Santa Clara County Assessor's Parcel Number (APN) Error! Reference source not found.
Property Address:	999 Martin Avenue and 2550 Lafayette Street, Santa Clara, Santa Clara County, CA 95050
Property Transfers in the Past Three Years:	The property has not been sold within the past three years.
General Character of Interest Being Appraised:	Easement
Larger Parcel Land Size:	121,394 square feet
Improvements:	There are industrial buildings onsite.
Topography:	Level
Shape:	Irregular

Access:	Access to the Larger Parcel is available off of Martin Avenue and Lafayette Street.
Utilities:	Typical municipal utilities are available.
Environmental Conditions:	We did not receive a Phase I report for the Subject Property, and we assume there are no adverse environmental conditions.
Date of Valuation:	November 25, 2019
Highest and Best Use	The most probable use of a property which is physically possible, appropriately justified, legally permissible, financially feasible, and which results in the highest value of the property being valued.
Highest and Best Use – As If Vacant:	Industrial
Highest and Best Use – As Improved:	Existing use
Present Use Subject Property:	The Larger Parcel is currently improved with industrial uses.
Applicable Zoning:	MH, Heavy Industrial

(B) Approaches Used in the Appraisal

We employed the "before" and "after" methodology for the Larger Parcel. In the "before" condition, we have not considered the Project.

In the "after" condition, we have considered the impacts attributed to the proposed easement and the Project.

Three methods of valuation can be applied to the appraisal of land. The most often used approach is the Direct Sales Comparison Approach. This method involves the comparison of the subject with recent sales of comparable properties.

A second method of land appraisal is the Land Development Approach. This approach involves estimating the development costs of installing all utilities and off-sites. These costs can be subtracted from a known improved lot value (established by sales comparison) to arrive at an estimate of raw land value or added to the known raw land value to arrive at the value of an improved site.

The third method employed is an Income Residual Method. An estimate is made of the potential net income, which can be earned from the site improved with buildings. The cost of these improvements is estimated to determine the portion of the income needed to supply a fair return on these costs. The residual income is available for a return on the land. Therefore, this income is capitalized into an indicated land value.

For purposes of this appraisal, the Sales Comparison Approach has been employed. Sufficient sales data was available that it was felt this method yielded a reliable result. This is the method that would most often be applied by a typical buyer of this type of property. The comparable sales are provided in Exhibit A.

Sales Comparison Approach

The sales comparison approach is used to derive a value indication by comparing the property being appraised to similar properties that have sold recently, applying appropriate units of comparison, and making adjustments to the comparables based on the elements of comparison.

Based on our analysis of sale comparables provided in Exhibit A, we estimate the land value of the Larger Parcel to be \$7,890,610 (land only). This is based on a price per square foot of land of \$65 x 121,394 square feet.

(C) Value of Part Taken

We have valued the part taken next. This consists of the value of the permanent easement in the easement area that will be removed.

Permanent Easement

In the "after" condition, the highest and best use of the Larger Parcel remains for continuation of the existing use.

For this valuation, the rationale for estimating the easement value can be shown as an equation:

Fee simple land value x % of fee rights being acquired = easement value

Based on our experience, an easement that is solely for subsurface utilities, as one example, may command a 10-35% share of the fee rights. As another example, exclusive control of surface rights may capture 90-100% of the fee simple value.

The subject is a perpetual easement. The grantor has significant remaining rights at the surface, landscaping, parking and signage for example. We estimate that the easement encumbers 25% of the total bundle of rights.

Therefore, the fair market value for the permanent easement is estimated at **\$28,827**, or 1,774 square feet x \$65 x 25%.

(D) Severance Damages/Benefits Analysis

Severance damages and benefits involve measuring the effect that the "acquisition" and "Project" have on the value of the property remaining, i.e., on the "remainder."

The acquisition is not expected to result in any severance damages to the remainder.

The highest and best use of the Larger Parcel upon partial acquisition is unchanged, relative to the "before" condition. We have not identified any damages from the Project.

Benefits result when the value of the remainder increases because of either the Project or the acquisition. Any resulting benefits are offset only against severance damages and not against acquisition value.

Each case for benefits is unique. In the case of the subject, we envision that the electric utility upgrades would be superior relative to the existing conditions. Since we have not identified any severance damages, we have not quantified any potential benefits.

(E) Conclusion of Just Compensation and Value in the "After" Condition

The market value of the acquisition is shown on the following page.

Summary of Valuation

A. Land Value of the whole before acquisition: (\$65 x 121,394 SF)		\$7,890,610
B. Value of the part acquired as part of the whole:		\$28,827
Permanent Easement (\$65 x 1,774 SF x 25%)	\$28,827	
Site Improvements (e.g. trees)	\$0	
C. Value of the remainder as part of the whole: (Line A less Line B)		\$7,861,783
D. Value of the remainder after the acquisition and before consideration of benefits (Line C - Line E)		\$7,861,783
E. Severance Damages/Cost to Cure		\$0
F. Value of the remainder after the acquisition and after considering benefits		\$7,861,783
G. Benefits (Line F less Line D)		0
H. Net Damages or Net Benefits (Line E minus Line G)		\$0
Plus: TCE:		<u>\$0</u>
Total		\$0
I. Market Value of the Acquisition (Just Compensation) (Line B plus Line H)		\$28,827
		\$0
Subtotal		\$28,827
Rounded		<u>\$28,800</u>

The resulting land value of the remainder in the "after" condition is \$7,861,783, or \$7,890,610 - \$28,827.

The fair market value for the acquisition is, **\$28,800**, as summarized below:

Value Conclusions: 999 Martin Avenue				
	Permanent Easement	Site Improvements	Net Severance Damages	Total Fair Market Value
Value Type	Fair Market Value	Fair Market Value	Fair Market Value	Fair Market Value
Property Rights Appraised	Permanent Easement			Acquisition
Date of Value	November 25, 2019	November 25, 2019	November 25, 2019	November 25, 2019
Fair Market Value	\$28,827	\$0	\$0	Total: \$28,800 (rounded)

The previous is a summary of the appraisal prepared at the request of Silicon Valley Power to comply with Government Code Section 7267.2 that fairly and correctly states my opinions and knowledge.

Dated: May 4, 2020

Addenda

Exhibit A: Land Sales

Exhibit B: Easement Area

Exhibit A: Land Sales

Comparable Sales Summary

Comp	No.	Address	COE date	Land SF	Sale Price	Price per SF of Land	Grantor / Grantee and Recording #
1		1000 South 3rd Street San Jose APN: 472-15-027	Aug-17	51,401	\$2,100,000	\$40.86	Grifall Trucking Inc. Richard Cohen Trust Recording # 23716163
2		650 Martin Avenue Santa Clara APN: 224-35-017	Aug-16	207,128	\$12,310,000	\$59.43	Recology Properties Inc. Peninsula Building Materials Recording # 23398465
3		720 Comstock Street Santa Clara APN: 224-36-025	Oct-18	7,100	\$370,000	\$80.28	Jeff Olofsen Parker Albanese I LLC Recording # 24065356

Exhibit B: Easement Area

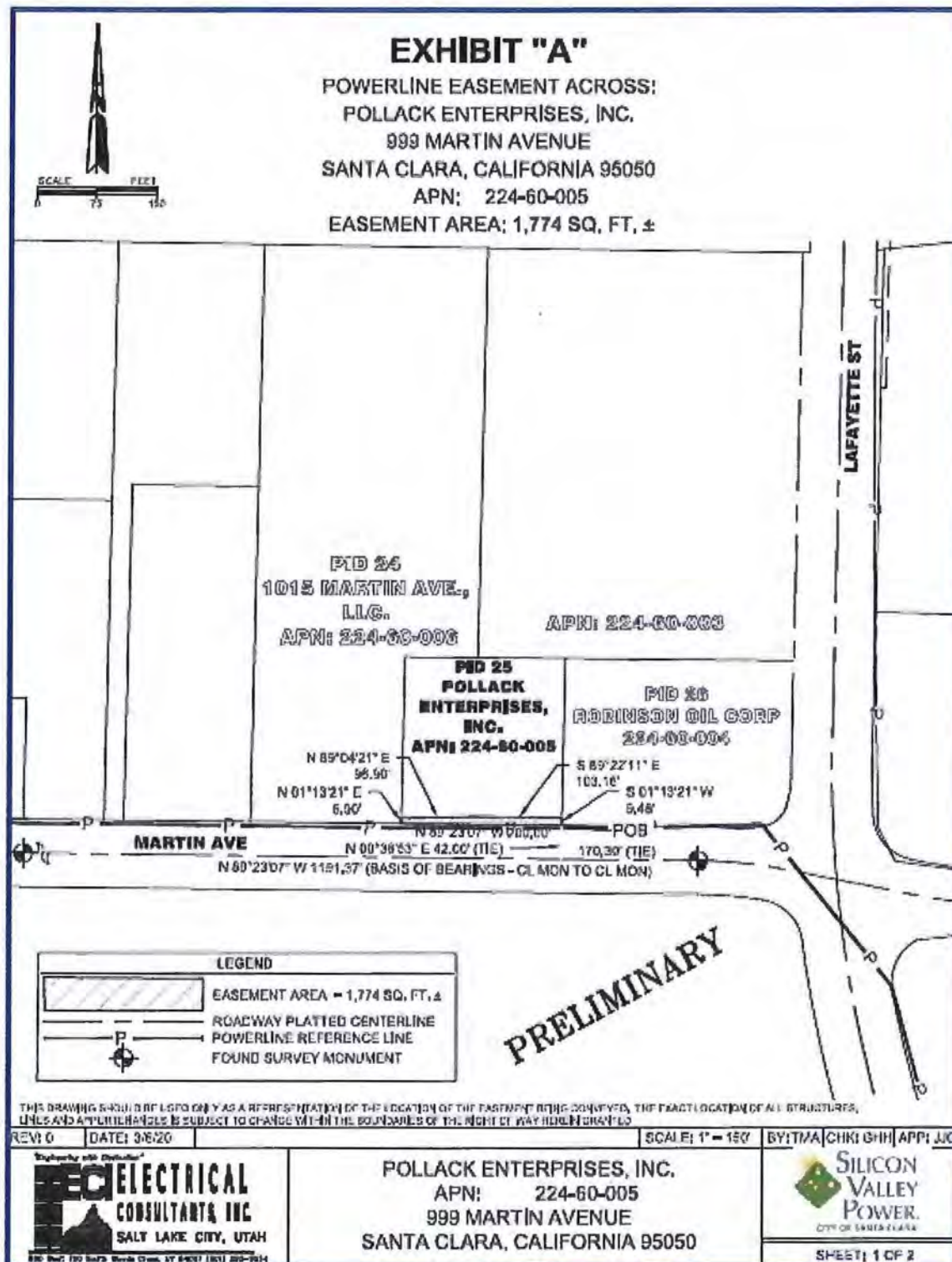


EXHIBIT "A"

POWERLINE EASEMENT ACROSS:

POLLACK ENTERPRISES, INC.

999 MARTIN AVENUE

SANTA CLARA, CALIFORNIA 95050

APN: 224-60-005

EASEMENT AREA: 1,774 SQ. FT. ±

DESCRIPTION:

A portion of that parcel of land conveyed in that certain Grant Deed recorded November 23, 1962 as Document No. 2298684 in Book 58000 at Pages 537 and 538 in the Office of the Recorder of the County Santa Clara (ORCSC), herein after referred to as the Grantor's Parcel, being located in the City of Santa Clara, County of Santa Clara, State of California and described as follows:

COMMENCING at a monument in the centerline of Martin Avenue; thence North 89°23'07" West 170.30 feet along said centerline; thence North 00°36'53" East 42.00 feet to the southeasterly corner of said Grantor's Parcel and the **POINT OF BEGINNING**; thence North 89°23'07" West 200.00 feet along the northerly right-of-way line of said Martin Avenue to the southwesterly corner of said Grantor's Parcel; thence North 01°13'21" East 6.90 feet along the westerly line of said Grantor's Parcel; thence North 89°04'21" East 96.90 feet; thence South 89°22'11" East 103.16 feet to the easterly line of said Grantor's Parcel; thence South 01°13'21" West 9.48 feet along said easterly line to the **POINT OF BEGINNING**.

Containing 1,774 square feet, more or less.



REV: 0	DATE: 5/7/20	SCALE: N/A	BY: TMA	CHK: GHH	APP: JJC
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Engineering with Distinction
NEC ELECTRICAL
CONSULTANTS, INC.
 SALT LAKE CITY, UTAH
 660 West 700 South Woods Cross, UT 84087 (801) 292-9954

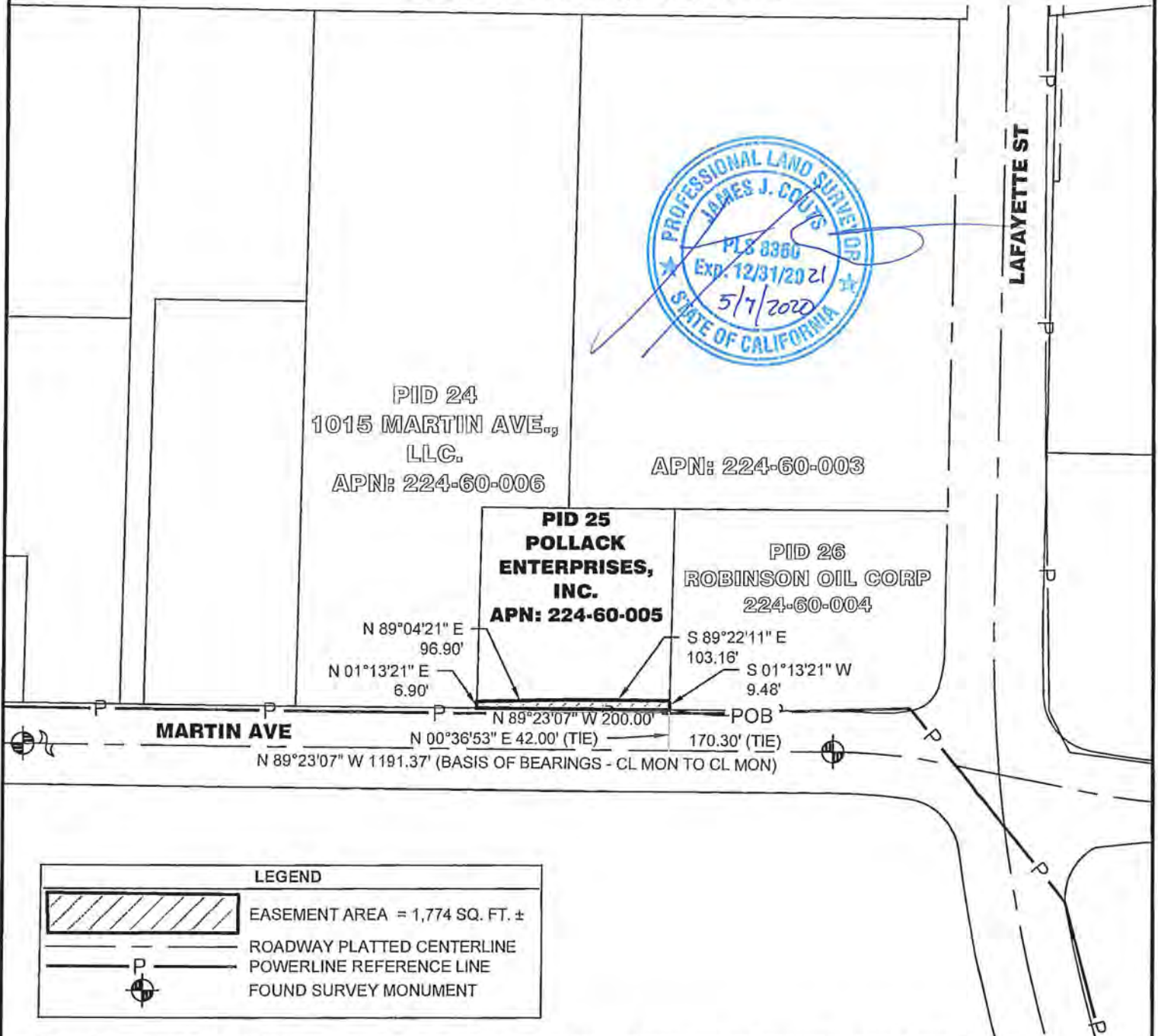
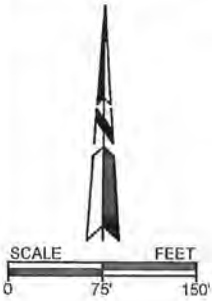
POLLACK ENTERPRISES, INC.
 APN: 224-60-005
 999 MARTIN AVENUE
 SANTA CLARA, CALIFORNIA 95050

 **SILICON VALLEY POWER**
 CITY OF SANTA CLARA

SHEET: 2 OF 2

EXHIBIT "A"

POWERLINE EASEMENT ACROSS:
 POLLACK ENTERPRISES, INC.
 999 MARTIN AVENUE
 SANTA CLARA, CALIFORNIA 95050
 APN: 224-60-005
 EASEMENT AREA: 1,774 SQ. FT. ±



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REV: 0 DATE: 5/7/2020

SCALE: 1" = 150'

BY: TMA CHK: GHH APP: JJC

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA,
DETERMINING THAT THE PUBLIC INTEREST AND NECESSITY
REQUIRE THE ACQUISITION OF CERTAIN REAL PROPERTY
INTERESTS FOR A PUBLIC PROJECT AND DIRECTING THE
FILING OF EMINENT DOMAIN PROCEEDINGS**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, the City of Santa Clara, a chartered city and municipal corporation acting by and through its municipally owned electric utility, Silicon Valley Power (hereinafter the “City”), is engaged in a continuing effort to upgrade and enhance its Overhead and Underground Distribution and Transmission system to meet new customer demand and to maintain the system’s reliability. The South Loop Reconfigure Project (Project) is a keystone project for this effort;

WHEREAS, the Project will involve the placement of multiple new monopole steel structures and result in either the expansion of existing Electric Overhead and Wire Clearance Easements or the acquisition of new easements;

WHEREAS, it is desirable and necessary for the City to acquire the following real property interests for the project.

A 1,774 square foot permanent Easement in, on, over, along and across the real property described and depicted in Exhibit “A” and incorporated herein by this reference (“Easement Area”) for the purpose of constructing and reconstructing, installing, operating, inspecting, maintaining, repairing, removing and/or replacing overhead electrical transmission, distribution and/or communication systems, and appurtenances thereto, including a reasonable right of ingress and egress over adjoining lands of fee owner. In exercising said right of ingress and egress, easement holder shall, wherever practical, use existing roads and lanes across lands of fee owner, if such there be, and if not, by such route or routes as shall result in the least practicable inconvenience to fee owner and any occupants of fee owner’s property.

The overhead system will consist of poles, wire supports, wires and conductors suspended from pole to pole, transformers and other equipment mounted on the poles, anchors, guy attachments, and other appurtenances. Portions of the Easement Area may be used by the fee owner for driveway(s), landscaping (excluding trees), and parking, as will not interfere with the easement holder's use of the Easement. Any other use of the Easement Area by fee owner shall be subject to easement holder's express written consent and only after easement holder's review of plans and specifications and determination that such use will not interfere with its use of the Easement. Easement holder may trim any trees or remove any tree or structure which are in or adjacent to the Easement Area which, in easement holder's reasonable determination, interferes with its use of the Easement. Easement holder may trim any trees or remove any tree which is in or adjacent to the Easement Area which exceeds a height of 20 feet or poses a risk of falling;

WHEREAS, the City is vested with the power of eminent domain to acquire real property by virtue of Article I, Section 19 of the Constitution of the State of California, Sections 37350.5 of the California Government Code, Section 612 of the California Public Utilities Code and Sections 1240.010 and 1240.220 of the California Code of Civil Procedure;

WHEREAS, pursuant to the provisions of Section 1245.235 of the California Code of Civil Procedure, notice has been duly given to Pollack Enterprises, Inc. whose property interests are to be acquired by eminent domain and whose name and address appears on the Santa Clara County Equalized Assessment Roll, and the property owner has been given a reasonable opportunity to appear and be heard before the City Council;

WHEREAS, on July 7, 2020, by Resolution No. 20-8869, the City Council [certified the Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP)] for the Project in accordance with California Environmental Quality Act (CEQA). No further environmental review is necessary pursuant to CEQA; and

WHEREAS, pursuant to the provisions of Section 7267.2 of the California Government Code, the City has made an offer to the owner(s) of record to acquire its interests under the Lease for the amount which it has established to be just compensation, therefore.

**NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA THAT
THE CITY FINDS AND DETERMINES AS FOLLOWS:**

1. That the public interest and necessity require the Project.
2. That the Project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury.
3. That the Subject Property Interests sought to be acquired is necessary for the Project.
4. That all environmental review required by law has been prepared and adopted.
5. That the offer required by Section 7267.2 of the California Government Code has been made to the owner(s) of record of the Subject Property Interests.
6. That the necessary notice of hearing has been given, as required by Code of Civil Procedure Section 1245.235.
7. That to the extent the Subject Property Interests are already devoted to a public use, the use of the Subject Property Interests for the Project is a compatible use that will not unreasonably interfere with or impair the continuance of the public use as it presently exists or may reasonably be expected to exist in the future (California Code of Civil Procedure Section 1240.510), or the use of the Subject Property Interests for the Project is a more necessary public use than the presently existing public use (California Code of Civil Procedure Section 1240.610).
8. That the City has complied with requirements of CEQA for the Project.
9. That the City Attorney or his duly authorized designee is hereby authorized and directed to institute and conduct to conclusion an action in eminent domain for the acquisition of the estates and interests aforesaid and to take such actions as he may deem advisable or necessary in connection therewith.
10. That the City may deposit with the State Treasury the probable amount of compensation

and obtain an order for prejudgment possession of the Subject Property Interests.

11. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING
THEREOF HELD ON THE ____ DAY OF _____, 2021, BY THE FOLLOWING VOTE:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:

1. Exhibit A

EXHIBIT A

SVP REF: SC 19-297

EXHIBIT "A"

POWERLINE EASEMENT ACROSS:
POLLACK ENTERPRISES, INC.
999 MARTIN AVENUE
SANTA CLARA, CALIFORNIA 95050
APN: 224-60-005
EASEMENT AREA: 1,774 SQ. FT. ±

DESCRIPTION:

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Containing 1,774 square feet, more or less.





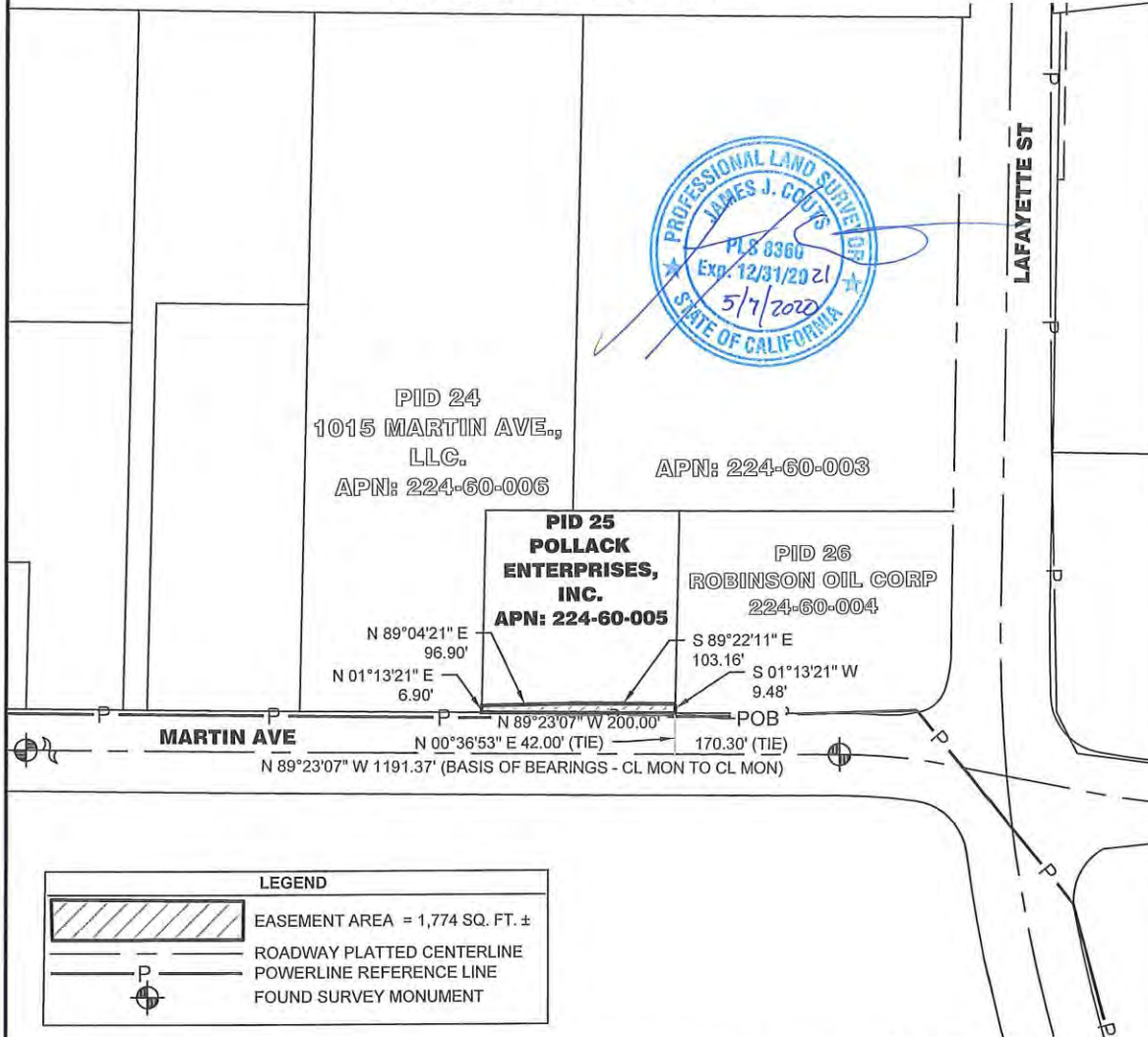
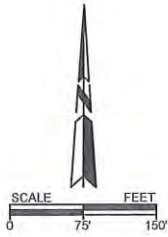
REV: 0	DATE: 5/7/20	SCALE: N/A	BY: TMA	CHK: GHH	APP: JJC
 660 West 700 South Woods Cross, UT 84087 (801) 292-9954		POLLACK ENTERPRISES, INC. APN: 224-60-005 999 MARTIN AVENUE SANTA CLARA, CALIFORNIA 95050		 CITY OF SANTA CLARA SHEET: 2 OF 2	

EXHIBIT "A"

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REV: 0 DATE: 5/7/2020 SCALE: 1" = 150' BY: TMA CHK: GHJ APP: JJC

NEC ELECTRICAL CONSULTANTS, INC.
 SALT LAKE CITY, UTAH
 660 West 700 South Woods Cross, UT 84087 (801) 292-9954

POLLACK ENTERPRISES, INC.
 APN: 224-60-005
 999 MARTIN AVENUE
 SANTA CLARA, CALIFORNIA 95050

SILICON VALLEY POWER.
 CITY OF SANTA CLARA

SHEET: 1 OF 2



Agenda Report

21-1385

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Public Hearing: Action on a Resolution of Necessity to Acquire Certain Real Property Interests on 1261 Martin Avenue, Santa Clara, California, from Martin Investment Properties, LLC

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

The City of Santa Clara's Electric Utility, Silicon Valley Power (SVP), is proposing to construct approximately 3.5 miles of new single and double circuit 60 kilovolt (kV) overhead transmission line within the northeastern area of the City of Santa Clara. SVP's primary objective of the South Loop Reconfigure Project (Project) is to shift the electrical load demand that is currently being seen on the South Loop Circuit to the East Loop Circuit to increase system capacity and reliability.

The majority of the new 60 kV transmission line would be constructed along the following city streets in areas where existing power lines do not currently exist: Lafayette Street, Mathew Street, Martin Avenue, and De La Cruz Boulevard. The remaining segments of the Project would be along routes that have existing distribution power lines and/or telecommunication lines.

The City Council has previously taken a number of actions on the project:

- June 16, 2015 - Adopted the FY 2015/16 Capital Improvement Program (CIP) Budget which included the initial funding for the engineering for this 60kV reconductoring and upgrading project.
- July 12, 2016 - Approved a professional services agreement with Electrical Consultants, Inc. to provide transmission line engineering design services which included reconfiguring the south transmission loop.
- January 14, 2020 - Amended a service agreement with Valbridge Property Advisors to perform appraisal services as part of the easement acquisition for the Project.
- July 7, 2020 - Adopted the Negative Declaration and Mitigation, Monitoring and Reporting Program for the Project and increased the capital funding of the Transmission System Reinforcements Capital Improvement Program Project (No. 2124) by \$6,300,000.
- October 13, 2020 - Approved three Purchase and Sale Agreements for Electric Utility Easements.
- November 10, 2020 - Approved two Purchase and Sale Agreements for Electric Utility Easements.
- November 17, 2020 - Approved four Purchase and Sale Agreements for Electric Utility Easements.
- November 17, 2020 - Adopted three Resolutions of Necessity to Acquire Certain Real Property

Interests and Directed the Filing of Eminent Domain Proceedings.

- December 16, 2020 - Approved one Purchase and Sale Agreement for Electric Utility Easement.
- February 9, 2021 - Approved two Purchase and Sale Agreements for Electric Utility Easements.
- March 9, 2021 - Adopted two Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- April 6, 2021- Approved six Purchase and Sale Agreements for Electric Utility Easements.
- June 22, 2021- Adopted one Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- August 24, 2021- Adopted one Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- September 28, 2021 - Approved one Purchase and Sale Agreements for Electric Utility Easement.

DISCUSSION

The adoption of the attached Resolution of Necessity requires the City to consider and make the following findings:

- The public interest and necessity require the Project.
- The Project is planned or located in the manner that will be the most compatible with the greatest public good and the least private injury.
- The property sought to be acquired is necessary for the Project.
- The offer required by Section 7267.2 of the Government Code has been made to the Owner of record for the full amount established as the fair market value of the property.

The public interest and necessity require the Project.

The project is critical to maintain reliability of the power system in Santa Clara. SVP maintains a redundant system on its 60kV network, allowing for the loss of a single line without interrupting power delivery and cause outages. This Project ensures that this ability remains as the electrical demand in Santa Clara grows. The project is also necessary for future development in the area.

The Project is planned or located in the manner that will be the most compatible with the greatest public good and the least private injury.

SVP identified a study area that considered criteria necessary to meet the Project objectives, e.g., maintain system reliability while allowing for an increase in electrical demand. Staff engineers and design consultants looked for route alternatives, focusing on locations that paralleled existing roads and/or existing overhead utilities, and our own existing transmission corridors. In places where we could not use our existing transmission corridors or did not have an existing transmission corridor, staff considered route alternatives looking at their potential impacts to the environment, existing and probable future development, the topography/terrain, roadway access, scenic areas, and recreation uses, among other factors. Weighing the above considerations with the technical needs for the project, the final Transmission route was determined.

The property sought to be acquired is necessary for the Project.

The Electric Overhead Easement on 1261 Martin Avenue is necessary to achieve the technical needs of the project.

The offer required by Section 7267.2 of the Government Code has been made to the Owner of record for the full amount established as the fair market value of the property.

On May 5, 2020, the City made an offer to Martin Investment Properties, LLC to acquire the Electric Overhead Easement upon the value determined by an independent state licensed and certified appraiser in accordance with the above referenced Government Code.

The Resolution of Necessity requires approval by a two-thirds vote of the Council. If the Council adopts the recommended Resolution of Necessity, the City would deposit the necessary funds for the Easement's probable compensation with the State Condemnation Deposit Fund and file an eminent domain complaint with the Court to seek possession of the property.

As always, the parties can continue to negotiate in an effort to come to a mutual agreement on compensation for the leasehold (including any compensation due for furniture, fixtures, and equipment) and loss of business goodwill.

ENVIRONMENTAL REVIEW

This project was analyzed in accordance with the requirements of the California Environmental Quality Act (CEQA). A Mitigated Negative Declaration (MND) [SCH#2020-05-9009] was prepared for the project by the environmental consultant firm, Aspen Environmental Group, and adopted by Council on July 7, 2020 by Resolution No. 20-8869.

FISCAL IMPACT

The South Loop reconfiguration cost was approved as part of the Adopted FY 2020/21 and FY 2021/22 Biennial Capital Improvement Program in the Transmission System Reinforcement CIP Project. This action has no fiscal impact to the General Fund as the Project is funded by developer contributions and customer service charges.

COORDINATION

This report has been coordinated with the Finance Department and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Adopt a Resolution of Necessity to Acquire Certain Real Property Interests.
2. Do not adopt a Resolution of Necessity.

RECOMMENDATION

Alternative 1: Adopt a Resolution of Necessity to Acquire Certain Real Property Interests on 1261 Martin Avenue, Santa Clara, California, from Martin Investment Properties, LLC. (Five affirmative votes required [California Code of Civil Procedure section 1245.245]).

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. May 5, 2020 Offer Letter
2. Resolution of Necessity



May 5, 2020

Martin Investment Properties LLC
Attn: William Chan
1261 Martin Avenue
Santa Clara, CA, 95050

SUBJECT: OFFER TO PURCHASE OVERHEAD POWER LINE EASEMENT
SITE: 1261 Martin Avenue, Santa Clara; APN 224-60-014
South Loop Project

Dear Mr. Chan:

The City of Santa Clara, acting by and through its municipally owned utility, Silicon Valley Power (SVP) is currently pursuing acquisition of power line easements for the South Loop Project ("Project"). The power lines that are proposed to be built for the project requires the acquisition of property rights affecting approximately 300 square feet over a portion of your property located at 1261 Martin Avenue, Santa Clara, CA ("Property").

SVP's primary objective of the South Loop Project is to increase system capacity and reliability. The majority of the new 60 kilo-volt (kV) transmission line would be constructed along the following city streets: Lafayette Street, Mathew Street, Martin Avenue, Walsh Avenue and De La Cruz Boulevard. Approximately 2.5 miles of the proposed route would be located in areas where existing power lines do not currently exist. The remaining segments of the Proposed Project would be along routes that have existing distribution power lines and/or telecommunication lines. The project is anticipated to be completed in 2021.

SVP designs its transmission system so that a loss of a single transmission line does not result in the loss of power for its customers. This design philosophy ensures the maximum reliability for its customers. As the power demands of the City grow, so does the necessity to construct infrastructure upgrades, such as this project, to continue to maintain this level of service reliability and increase the power capacity to support load growth and development. SVP is proactive about addressing future reliability issues and committed to providing the best service reliability for its customers.

Our preliminary title report shows Martin Investment Properties, LLC, a California Limited Liability Company to be the owner of the property located at 1261 Martin Avenue, Santa Clara,



Powering The Center of What's Possible

CA. This property is within the Project area, and is also identified by the County Assessor as Parcel No. APN 224-60-014.

Subject to, and upon the terms and conditions set forth herein, SVP officers to purchase an easement over your property, as defined in the Easement Deed attached hereto. SVP hereby offers the sum of Four Thousand Nine Hundred Dollars (\$4,900) as just compensation for the acquisition of the easement.

It is the policy of SVP to acquire property interests that are in private interests through voluntary purchase, if possible, and only when it is necessary to do so. In accordance with applicable law, SVP has obtained, reviewed and approved an appraisal to establish the fair market value of the property to be acquired. The attached Appraisal Summary outlines the basis for this offer pursuant to Government Code §7267.2.

Pursuant to Code of Civil Procedure §1263.025, SVP offers to pay your reasonable costs up to five thousand dollars (\$5,000) for an independent appraisal of the property interests. By law, an appraiser licensed by the Office of Real Estate Appraisers must prepare the independent appraisal. Although you are not required to obtain an appraisal at this time, or at all, if you believe such appraisal can assist you in evaluating this offer, it is in your interest to obtain an independent appraisal as expeditiously as possible. If you choose to obtain an appraisal, please forward SVP an invoice from your appraiser, identifying the Property at 1261 Martin Avenue Santa Clara, CA is the subject of the appraisal and the fee charged.

Materials enclosed for your information include:

- An Easement with Exhibit showing the location of the acquisition area(s);
- The Appraisal Summary for your easement area.

The agent assigned to your property and to whom you will be working with is Keith Corry Senior Right of Way Professional, who can be reached at (801) 419-4507 or by email at keith.corry@eciusa.com. Please contact him if you have any questions or if you wish further clarification of this offer.

If you are agreeable to the offer please indicate your acceptance by signing in the space provided below and return an original signed copy of this letter to Mr. Corry using the postage paid return envelope, which is attached, for your use. Upon receipt of your acceptance of this purchase offer, a contract for sale and escrow instructions will be prepared for your execution. SVP will pay all of the conveyance and escrow costs. All taxes and assessments, if any, will be pro-rated, and possession will be delivered to SVP at the close of escrow.



Powering The Center of What's Possible

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Pineda".

Manuel Pineda

Assistant City Manager/ Chief Electric Utility Officer

Enclosures:

SVP Easement with exhibit

Appraisal Summary

Postage paid return envelope

ACCEPTANCE OF OFFER

This offer, dated May 5, 2020 from the City of Santa Clara acting by and through its municipally owned utility, Silicon Valley Power, for \$4,900 is accepted for the acquisition of a permanent surface utility easement.

Owner's Name

By: _____

Name: _____

Title: _____

Date: _____

Recording Requested by:
Office of the City Attorney
City of Santa Clara, California

When Recorded, Mail to:
Office of the City Clerk
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

[SPACE ABOVE THIS LINE FOR RECORDER'S USE]

EXEMPT FROM RECORDING FEE
PER GOV'T CODE §§ 6103 and 27383

EXEMPT FROM FEE
PER GOV'T CODE § 27388.1 (a)(2)(D)

OVERHEAD ELECTRIC EASEMENT DEED

1261 Martin Avenue & APN 224-60-014
Santa Clara, California

For valuable consideration, the receipt of which is hereby acknowledged, Martin Investment Properties, LLC, a California limited liability company (herein "**Grantor**"), hereby grants to the **CITY OF SANTA CLARA**, California, a chartered municipal corporation, (herein "**Grantee**"), an easement and right-of-way (herein "**Easement**") in, on, over, along and across the real property owned by Grantor in the City of Santa Clara, State of California, described in **Exhibit A** attached hereto and incorporated herein by this reference ("**Easement Area**").

This Easement shall be used by Grantee for the purpose of constructing and reconstructing, installing, operating, inspecting, maintaining, repairing, removing and/or replacing overhead electrical transmission, distribution and/or communication systems, and appurtenances thereto, including a reasonable right of ingress and egress over adjoining lands of Grantor. In exercising said right of ingress and egress, Grantee shall, wherever practical, use existing roads and lanes across lands of Grantor, if such there be, and if not, by such route or routes as shall result in the least practicable inconvenience to Grantor and any occupants of Grantor's property.

The overhead system will consist of poles, wire supports, wires and conductors suspended from pole to pole, transformers and other equipment mounted on the poles, anchors, guy attachments, and other appurtenances.

Portions of the Easement Area may be used by the Grantor for driveway(s), landscaping (excluding trees), and parking, as will not interfere with the Grantee's use of the Easement. Any other use of the Easement Area by Grantor shall be subject to Grantee's express written consent and only after Grantee's review of plans and specifications and determination that such use will not interfere with its use of the Easement. Grantee may trim any trees or remove any tree or structure which is in or adjacent to the Easement Area which, in its reasonable determination, interferes with its use of the Easement. Grantee may trim any trees or remove any tree which is in or adjacent to the Easement Area which exceeds a height of 20 Feet or poses a risk of falling onto the Grantee's facilities or equipment located within the Easement.

[SIGNATURE(S) APPEAR ON THE FOLLOWING PAGE]

///
///

IN WITNESS WHEREOF, said grantors have hereunto set their hands this _____ day of _____, 20__.

APPROVED FOR FORM:

Brian Doyle
City Attorney

By: _____

Print Name: _____

Title: _____

By: _____

Print Name: _____

Title: _____

-
"OWNER" APN 224-60-014 (2020-04)

ALL LEGAL OWNERS OF PROPERTY MUST EXECUTE THIS DOCUMENT. IF GRANTOR IS A CORPORATION, THE COMPLETE LEGAL NAME AND CORPORATE SEAL OF THE CORPORATION AND CORPORATE TITLES OF THE PERSONS SIGNING FOR THE CORPORATION SHALL APPEAR ABOVE. WRITTEN EVIDENCE OF AUTHORITY OF PERSON OR PERSONS EXECUTING THIS DOCUMENT ON BEHALF OF CORPORATION, PARTNERSHIP, OR JOINT VENTURE, OR ANY OTHER ORGANIZATION OTHER THAN A SOLE PROPRIETORSHIP SHALL BE ATTACHED.
ATTACH THE ALL-PURPOSE NOTARY ACKNOWLEDGMENT FORM FOR THE PERSON OR PERSONS EXECUTING THIS DOCUMENT ON BEHALF OF THE GRANTOR.

CALIFORNIA NOTARY ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____

On _____ before me, _____ (name and title of officer), personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that she/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

Appendix A

May 4, 2020

**City of Santa Clara
South Loop Interconnect Project
Appraisal Summary Statement And
Summary of the Basis for Just Compensation
(Pursuant to Government Code Section 7267.2)**

The following is a statement of and summary of the basis for the appraisal and the amount that Silicon Valley Power has established as just compensation required by California Government Code Section 7267.2. The appraisal on which this summary is based was made in accordance with accepted appraisal principles, consistent with California valuation law.

The purpose of this appraisal is to estimate the fair market value of the proposed acquisition appraised. Section 1263.320 of the Code of Civil Procedure defines fair market value as:

- A. *The fair market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available.*
- B. *The fair market value of property taken for which there is no relevant market is its value on the date of valuation as determined by any method of valuation that is just and equitable.*

The date of value is January 31, 2020, which was the date of inspection.

The intended use of this appraisal is to provide information on the value of the acquisition for the Silicon Valley Power Project, which is called the South Loop Interconnect Project. The intended user is Silicon Valley Power.

The scope of work included inspecting the property, research and analysis of comparable data, and highest and best use analysis.

The appraised rights are further identified as follows:

- 1) The fair market value of a 300-square-foot permanent powerline easement.

Statement of the Amount Established as Just Compensation

The amount Silicon Valley Power has established as just compensation for the property rights described in the accompanying offer is: **\$4,900 (Four Thousand Nine Hundred Dollars).**

Summary of Basis for the Amount Established as Just Compensation

This Summary of the Basis for the Amount Established as Just Compensation (prepared pursuant to Government Code Section 7267.2) is a summary of the appraisal used by Silicon Valley Power to determine the amount it established as just compensation for an easement.

(A) Property Identification – Subject Property

Owner of Record:	Martin Investment Properties, LLC
Assessor's Parcel Numbers (APNs):	Santa Clara County Assessor's Parcel Number (APN) 224-60-014
Property Address:	1261 Martin Avenue, Santa Clara, Santa Clara County, CA 95050
Property Transfers in the Past Three Years:	The property has not been sold within the past three years.
General Character of Interest Being Appraised:	Easement
Larger Parcel Land Size:	188,179 square feet
Improvements:	There is an existing industrial building onsite.
Topography:	Level
Shape:	Flag

Access:	Access to the Larger Parcel is available off of Martin Avenue.
Utilities:	Typical municipal utilities are available.
Environmental Conditions:	We did not receive a Phase I report for the Subject Property, and we assume there are no adverse environmental conditions.
Date of Valuation:	January 31, 2020
Highest and Best Use	The most probable use of a property which is physically possible, appropriately justified, legally permissible, financially feasible, and which results in the highest value of the property being valued.
Highest and Best Use – As If Vacant:	Industrial
Highest and Best Use – As Improved:	Existing use
Present Use	
Subject Property:	The Larger Parcel is currently used as an industrial building.
Applicable Zoning:	MH, Heavy Industrial

(B) Approaches Used in the Appraisal

We employed the "before" and "after" methodology for the Larger Parcel. In the "before" condition, we have not considered the Project.

In the "after" condition, we have considered the impacts attributed to the proposed easement and the Project.

Three methods of valuation can be applied to the appraisal of land. The most often used approach is the Direct Sales Comparison Approach. This method involves the comparison of the subject with recent sales of comparable properties.

A second method of land appraisal is the Land Development Approach. This approach involves estimating the development costs of installing all utilities and off-sites. These costs can be subtracted from a known improved lot value (established by sales comparison) to arrive at an estimate of raw land value or added to the known raw land value to arrive at the value of an improved site.

The third method employed is an Income Residual Method. An estimate is made of the potential net income, which can be earned from the site improved with buildings. The cost of these improvements

is estimated to determine the portion of the income needed to supply a fair return on these costs. The residual income is available for a return on the land. Therefore, this income is capitalized into an indicated land value.

For purposes of this appraisal, the Sales Comparison Approach has been employed. Sufficient sales data was available that it was felt this method yielded a reliable result. This is the method that would most often be applied by a typical buyer of this type of property. The comparable sales are provided in Exhibit A.

Sales Comparison Approach

The sales comparison approach is used to derive a value indication by comparing the property being appraised to similar properties that have sold recently, applying appropriate units of comparison, and making adjustments to the comparables based on the elements of comparison.

Based on our analysis of sale comparables provided in Exhibit A, we estimate the land value of the Larger Parcel to be \$12,231,635 (land only). This is based on a price per square foot of land of \$65 x 188,179 square feet.

(C) Value of Part Taken

We have valued the part taken next. This consists of the value of the permanent easement in the easement area that will be removed.

Permanent Easement

In the "after" condition, the highest and best use of the Larger Parcel remains for continuation of the existing use.

For this valuation, the rationale for estimating the easement value can be shown as an equation:

Fee simple land value x % of fee rights being acquired = easement value

Based on our experience, an easement that is solely for subsurface utilities, as one example, may command a 10-35% share of the fee rights. As another example, exclusive control of surface rights may capture 90-100% of the fee simple value.

The subject is a perpetual easement. The grantor has significant remaining rights at the surface, landscaping, parking and signage for example. We estimate that the easement encumbers 25% of the total bundle of rights.

Therefore, the fair market value for the permanent easement is estimated at **\$4,875**, or 300 square feet x \$65 x 25%.

(D) Severance Damages/Benefits Analysis

Severance damages and benefits involve measuring the effect that the "acquisition" and "Project" have on the value of the property remaining, i.e., on the "remainder."

The acquisition is not expected to result in any severance damages to the remainder.

The highest and best use of the Larger Parcel upon partial acquisition is unchanged, relative to the "before" condition. We have not identified any damages from the Project.

Benefits result when the value of the remainder increases because of either the Project or the acquisition. Any resulting benefits are offset only against severance damages and not against acquisition value.

Each case for benefits is unique. In the case of the subject, we envision that the electric utility upgrades would be superior relative to the existing conditions. Since we have not identified any severance damages, we have not quantified any potential benefits.

(E) Conclusion of Just Compensation and Value in the "After" Condition

The market value of the acquisition is shown on the following page.

Summary of Valuation

A. Land Value of the whole before acquisition: (\$65 x 188,179 SF)		\$12,231,635
B. Value of the part acquired as part of the whole:		\$4,875
Permanent Easement (\$65 x 300 SF x 25%)	\$4,875	
Site Improvements (e.g. trees)	\$0	
C. Value of the remainder as part of the whole: (Line A less Line B)		\$12,226,760
D. Value of the remainder after the acquisition and before consideration of benefits (Line C - Line E)		\$12,226,760
E. Severance Damages/Cost to Cure		\$0
F. Value of the remainder after the acquisition and after considering benefits		\$12,226,760
G. Benefits (Line F less Line D)		0
H. Net Damages or Net Benefits (Line E minus Line G)		\$0
Plus: TCE:		<u>\$0</u>
Total		\$0
I. Market Value of the Acquisition (Just Compensation) (Line B plus Line H)		\$4,875
		\$0
Subtotal		\$4,875
Rounded		<u>\$4,900</u>

The resulting land value of the remainder in the "after" condition is \$12,226,760, or \$12,231,635 - \$4,875.

The fair market value for the acquisition is, **\$4,900**, as summarized below:

Value Conclusions: 1261 Martin Avenue

	Permanent Easement	Site Improvements	Net Severance Damages	Total Fair Market Value
Value Type	Fair Market Value	Fair Market Value	Fair Market Value	Fair Market Value
Property Rights Appraised	Permanent Easement			Acquisition
Date of Value	January 31, 2020	January 31, 2020	January 31, 2020	January 31, 2020
Fair Market Value	\$4,875	\$0	\$0	Total: \$4,900 (rounded)

The previous is a summary of the appraisal prepared at the request of Silicon Valley Power to comply with Government Code Section 7267.2 that fairly and correctly states my opinions and knowledge.

Dated: May 4, 2020

Addenda

Exhibit A: Land Sales

Exhibit B: Easement Area

Exhibit A: Land Sales

Comparable Sales Summary							
Comp	No.	Address	COE date	Land SF	Sale Price	Price per SF of Land	Grantor / Grantee and Recording #
1		1000 South 3rd Street San Jose APN: 472-15-027	Aug-17	51,401	\$2,100,000	\$40.86	Grifall Trucking Inc. Richard Cohen Trust Recording # 23716163
2		650 Martin Avenue Santa Clara APN: 224-35-017	Aug-16	207,128	\$12,310,000	\$59.43	Recology Properties Inc. Peninsula Building Materials Recording # 23398465
3		720 Comstock Street Santa Clara APN: 224-36-025	Oct-18	7,100	\$570,000	\$80.28	Jeff Olofsen Parker Albanese I LLC Recording # 24065356

Exhibit B: Easement Area

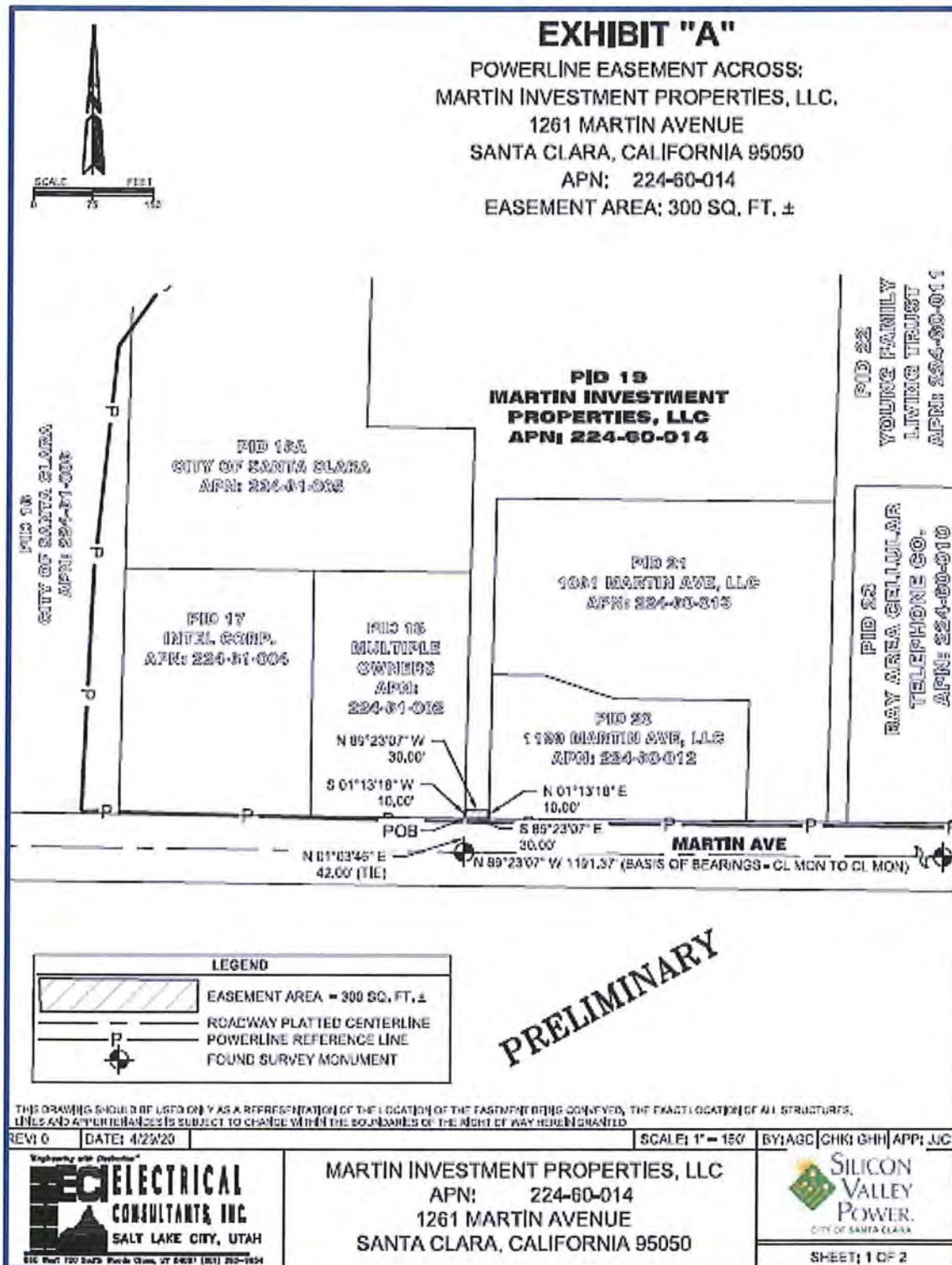


EXHIBIT "A"

POWERLINE EASEMENT ACROSS:
 MARTIN INVESTMENT PROPERTIES, LLC.
 1261 MARTIN AVENUE
 SANTA CLARA, CALIFORNIA 95050
 APN: 224-60-014
 EASEMENT AREA: 300 SQ. FT. ±

DESCRIPTION:

A portion of Lot 3, as shown on that certain Parcel Map filed for record in the Office of the Recorder of Santa Clara County (ORSCC), State of California on May 29, 1996 in Book 677 of Maps, at pages 12 and 13, being located in the City of Santa Clara, County of Santa Clara, State of California, and described as follows:

COMMENCING at a monument in the centerline of Martin Avenue (as shown on sheet 2); thence North 01°03'46" East 42.00 feet (Basis of Bearings is North 89°23'07" West along the centerline of said Martin Avenue) to the southwest corner of said Lot 3 and the **POINT OF BEGINNING**; thence South 89°23'07" East 30.00 feet along the northerly right-of-way line of said Martin Avenue to a southeasterly corner of said Lot 3; thence North 01°13'18" East 10.00 feet along said easterly line; thence North 89°23'07" West 30.00 feet to a westerly line of said Lot 3; thence South 01°13'18" West 10.00 feet along said westerly line to the **POINT OF BEGINNING**.

Containing 300 square feet, more or less.

Sheet 2 of 2, by this reference made a part hereof.




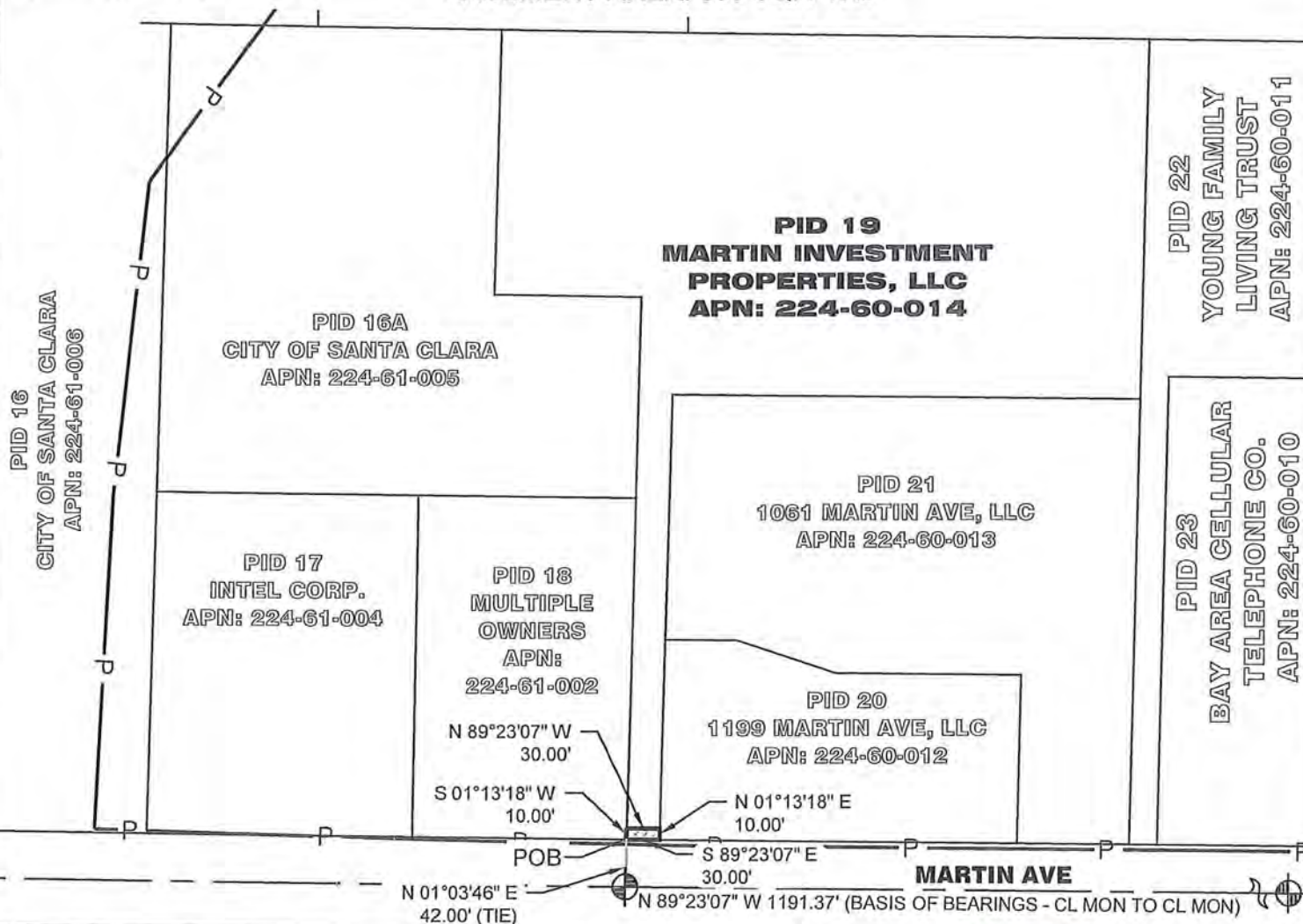
REV: 0	DATE: 5/7/20		SCALE: N/A	BY: AGD	CHK: GHH	APP: JJC
<p>"Engineering with Distinction"</p> <p>NEC ELECTRICAL</p> <p>CONSULTANTS, INC.</p> <p>SALT LAKE CITY, UTAH</p> <p>680 West 700 South Woods Cross, UT 84087 (801) 292-9954</p>		<p>MARTIN INVESTMENT PROPERTIES, LLC</p> <p>APN: 224-60-014</p> <p>1261 MARTIN AVENUE</p> <p>SANTA CLARA, CALIFORNIA 95050</p>			<p></p> <p>SILICON VALLEY POWER.</p> <p>CITY OF SANTA CLARA</p>	
SHEET: 1 OF 2						

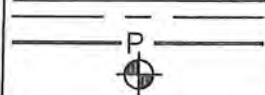
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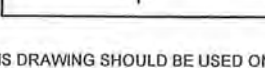
SCALE
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 FEET

**LEGEND**

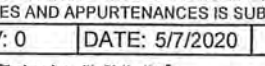
EASEMENT AREA = 300 SQ. FT. ±



ROADWAY PLATTED CENTERLINE



POWERLINE REFERENCE LINE



FOUND SURVEY MONUMENT



THIS DRAWING SHOULD BE USED ONLY AS A REPRESENTATION OF THE LOCATION OF THE EASEMENT BEING CONVEYED. THE EXACT LOCATION OF ALL STRUCTURES, LINES AND APPURTENANCES IS SUBJECT TO CHANGE WITHIN THE BOUNDARIES OF THE RIGHT OF WAY HEREIN GRANTED

REV: 0 | DATE: 5/7/2020 | SCALE: 1" = 150' | BY: AGD | CHK: GHH | APP: JJC

ECI ELECTRICAL
 CONSULTANTS, INC.
 SALT LAKE CITY, UTAH
 660 West 700 South Woods Cross, UT 84087 (801) 292-9954

MARTIN INVESTMENT PROPERTIES, LLC
 APN: 224-60-014
 1261 MARTIN AVENUE
 SANTA CLARA, CALIFORNIA 95050

SILICON VALLEY
 POWER
 CITY OF SANTA CLARA

SHEET: 2 OF 2

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA
DETERMINING THAT THE PUBLIC INTEREST AND NECESSITY
REQUIRE THE ACQUISITION OF CERTAIN REAL PROPERTY
INTERESTS FOR A PUBLIC PROJECT AND DIRECTING THE
FILING OF EMINENT DOMAIN PROCEEDINGS**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, the City of Santa Clara, a chartered city and municipal corporation acting by and through its municipally owned electric utility, Silicon Valley Power (hereinafter the “City”), is engaged in a continuing effort to upgrade and enhance its Overhead and Underground Distribution and Transmission system to meet new customer demand and to maintain the system’s reliability. The South Loop Reconfigure Project (Project) is a keystone project for this effort;

WHEREAS, the Project will involve the placement of multiple new monopole steel structures and result in either the expansion of existing Electric Overhead and Wire Clearance Easements or the acquisition of new easements;

WHEREAS, it is desirable and necessary for the City to acquire the following real property interests for the project.

A 300 square foot permanent Easement in, on, over, along and across the real property described and depicted in Exhibit “A” and incorporated herein by this reference (“Easement Area”) for the purpose of constructing and reconstructing, installing, operating, inspecting, maintaining, repairing, removing and/or replacing overhead electrical transmission, distribution and/or communication systems, and appurtenances thereto, including a reasonable right of ingress and egress over adjoining lands of fee owner. In exercising said right of ingress and egress, easement holder shall, wherever practical, use existing roads and lanes across lands of fee owner, if such there be, and if not, by such route or routes as shall result in the least practicable inconvenience to fee owner and any occupants of fee owner’s property. The overhead system will consist of

poles, wire supports, wires and conductors suspended from pole to pole, transformers and other equipment mounted on the poles, anchors, guy attachments, and other appurtenances. Portions of the Easement Area may be used by the fee owner for driveway(s), landscaping (excluding trees), and parking, as will not interfere with the easement holder's use of the Easement. Any other use of the Easement Area by fee owner shall be subject to easement holder's express written consent and only after easement holder's review of plans and specifications and determination that such use will not interfere with its use of the Easement. Easement holder may trim any trees or remove any tree or structure which are in or adjacent to the Easement Area which, in easement holder's reasonable determination, interferes with its use of the Easement. Easement holder may trim any trees or remove any tree which is in or adjacent to the Easement Area which exceeds a height of 20 feet or poses a risk of falling onto the easement holder's facilities or equipment located within the Easement;

WHEREAS, the City is vested with the power of eminent domain to acquire real property by virtue of Article I, Section 19 of the Constitution of the State of California, Sections 37350.5 of the California Government Code, Section 612 of the California Public Utilities Code and Sections 1240.010 and 1240.220 of the California Code of Civil Procedure;

WHEREAS, pursuant to the provisions of Section 1245.235 of the California Code of Civil Procedure, notice has been duly given to Martin Investment Properties, LLC whose property interests are to be acquired by eminent domain and whose name and address appears on the Santa Clara County Equalized Assessment Roll, and the property owner has been given a reasonable opportunity to appear and be heard before the City Council;

WHEREAS, on July 7, 2020, by Resolution No. 20-8869, the City Council [certified the Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP)] for the Project in accordance with California Environmental Quality Act (CEQA). No further environmental review is necessary pursuant to CEQA; and

WHEREAS, pursuant to the provisions of Section 7267.2 of the California Government Code, the City has made an offer to the owner(s) of record to acquire its interests under the Lease for the amount which it has established to be just compensation, therefore.

**NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA THAT
THE CITY FINDS AND DETERMINES AS FOLLOWS:**

1. That the public interest and necessity require the Project.
2. That the Project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury.
3. That the Subject Property Interests sought to be acquired is necessary for the Project.
4. That all environmental review required by law has been prepared and adopted.
5. That the offer required by Section 7267.2 of the California Government Code has been made to the owner(s) of record of the Subject Property Interests.
6. That the necessary notice of hearing has been given, as required by Code of Civil Procedure Section 1245.235.
7. That to the extent the Subject Property Interests are already devoted to a public use, the use of the Subject Property Interests for the Project is a compatible use that will not unreasonably interfere with or impair the continuance of the public use as it presently exists or may reasonably be expected to exist in the future (California Code of Civil Procedure Section 1240.510), or the use of the Subject Property Interests for the Project is a more necessary public use than the presently existing public use (California Code of Civil Procedure Section 1240.610).
8. That the City has complied with requirements of CEQA for the Project.
9. That the City Attorney or his duly authorized designee is hereby authorized and directed to institute and conduct to conclusion an action in eminent domain for the acquisition of the estates and interests aforesaid and to take such actions as he may deem advisable or necessary in connection therewith.
10. That the City may deposit with the State Treasury the probable amount of compensation

and obtain an order for prejudgment possession of the Subject Property Interests.

11. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING
THEREOF HELD ON THE ____ DAY OF _____, 2021, BY THE FOLLOWING VOTE:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:
1. Exhibit A

EXHIBIT A

SVP REF: SC 19-197

EXHIBIT "A"

POWERLINE EASEMENT ACROSS:
MARTIN INVESTMENT PROPERTIES, LLC.
1261 MARTIN AVENUE
SANTA CLARA, CALIFORNIA 95050
APN: 224-60-014
EASEMENT AREA: 300 SQ. FT. ±

DESCRIPTION:



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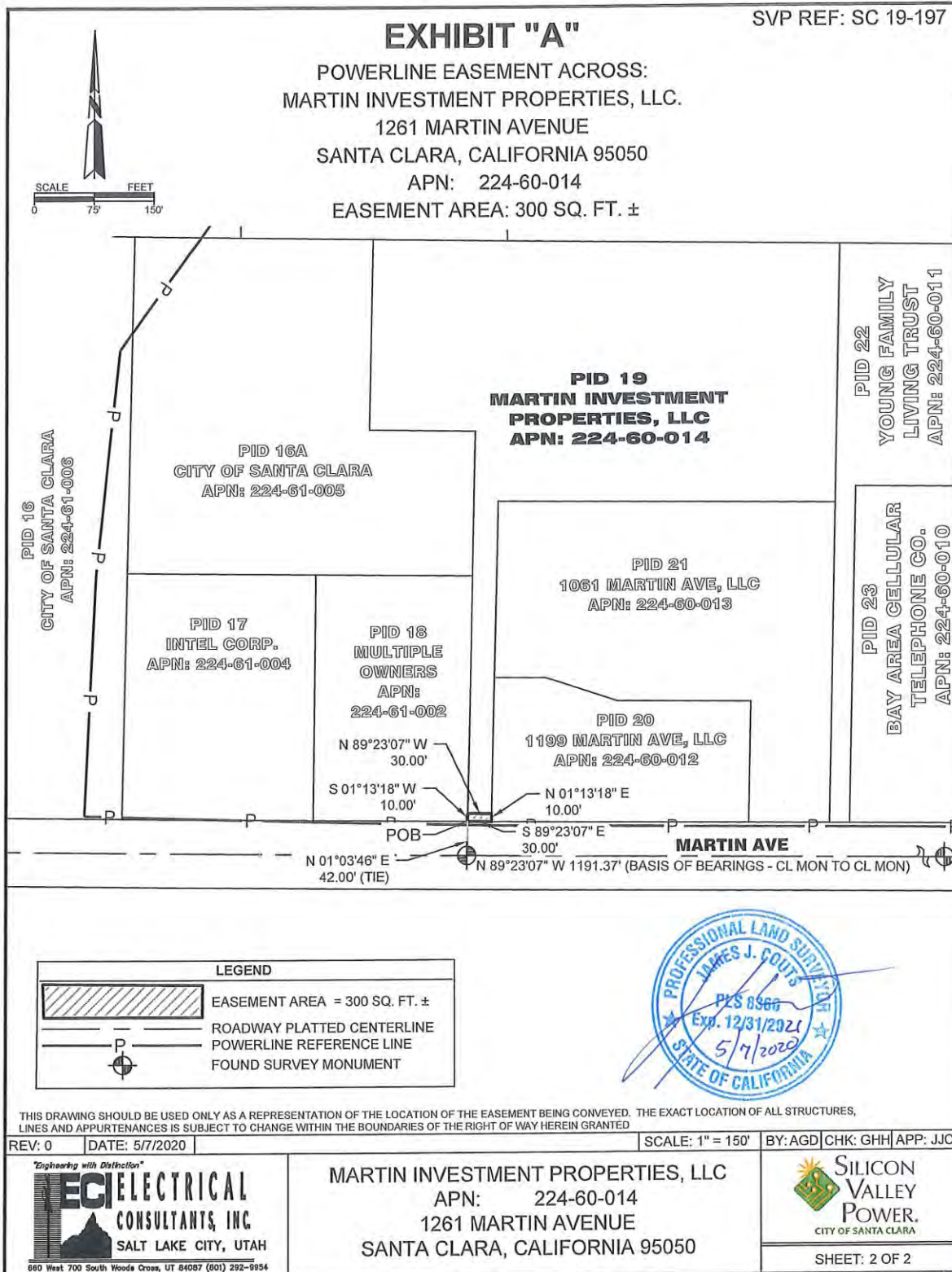
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Containing 300 square feet, more or less.

Sheet 2 of 2, by this reference made a part hereof.



REV: 0	DATE: 5/7/20	SCALE: N/A	BY: AGD	CHK: GHF	APP: JJC
		MARTIN INVESTMENT PROPERTIES, LLC APN: 224-60-014 1261 MARTIN AVENUE SANTA CLARA, CALIFORNIA 95050		 SHEET: 1 OF 2	





Agenda Report

21-1386

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Public Hearing: Action on a Resolution of Necessity to Acquire Certain Real Property Interests on 1199 & 1061 Martin Avenue, Santa Clara, California, from 1065 Martin Ave, LLC

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

The City of Santa Clara's Electric Utility, Silicon Valley Power (SVP), is proposing to construct approximately 3.5 miles of new single and double circuit 60 kilovolt (kV) overhead transmission line within the northeastern area of the City of Santa Clara. SVP's primary objective of the South Loop Reconfigure Project (Project) is to shift the electrical load demand that is currently being seen on the South Loop Circuit to the East Loop Circuit to increase system capacity and reliability.

The majority of the new 60 kV transmission line would be constructed along the following city streets in areas where existing power lines do not currently exist: Lafayette Street, Mathew Street, Martin Avenue, and De La Cruz Boulevard. The remaining segments of the Project would be along routes that have existing distribution power lines and/or telecommunication lines.

The City Council has previously taken a number of actions on the project:

- June 16, 2015 - Adopted the FY 2015/16 Capital Improvement Program (CIP) Budget which included the initial funding for the engineering for this 60kV reconductoring and upgrading project.
- July 12, 2016 - Approved a professional services agreement with Electrical Consultants, Inc. to provide transmission line engineering design services which included reconfiguring the south transmission loop.
- January 14, 2020 - Amended a service agreement with Valbridge Property Advisors to perform appraisal services as part of the easement acquisition for the Project.
- July 7, 2020 - Adopted the Negative Declaration and Mitigation, Monitoring and Reporting Program for the Project and increased the capital funding of the Transmission System Reinforcements Capital Improvement Program Project (No. 2124) by \$6,300,000.
- October 13, 2020 - Approved three Purchase and Sale Agreements for Electric Utility Easements.
- November 10, 2020 - Approved two Purchase and Sale Agreements for Electric Utility Easements.
- November 17, 2020 - Approved four Purchase and Sale Agreement for Electric Utility Easement.
- November 17, 2020 - Adopted three Resolutions of Necessity to Acquire Certain Real Property

Interests and Directed the Filing of Eminent Domain Proceedings.

- December 16, 2020 - Approved one Purchase and Sale Agreement for Electric Utility Easement.
- February 9, 2021 - Approved two Purchase and Sale Agreements for Electric Utility Easements.
- March 9, 2021 - Adopted two Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- April 6, 2021- Approved six Purchase and Sale Agreements for Electric Utility Easements.
- June 22, 2021- Adopted one Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- August 24, 2021- Adopted one Resolutions of Necessity to Acquire Certain Real Property Interests and Directed the Filing of Eminent Domain Proceedings.
- September 28, 2021 - Approved one Purchase and Sale Agreements for Electric Utility Easements.

DISCUSSION

The adoption of the attached Resolution of Necessity requires the City to consider and make the following findings:

- The public interest and necessity require the Project.
- The Project is planned or located in the manner that will be the most compatible with the greatest public good and the least private injury.
- The property sought to be acquired is necessary for the Project.
- The offer required by Section 7267.2 of the Government Code has been made to the Owner of record for the full amount established as the fair market value of the property.

The public interest and necessity require the Project.

The project is critical to maintain reliability of the power system in Santa Clara. SVP maintains a redundant system on its 60kV network, allowing for the loss of a single line without interrupting power delivery and cause outages. This Project ensures that this ability remains as the electrical demand in Santa Clara grows. The project is also necessary for future development in the area.

The Project is planned or located in the manner that will be the most compatible with the greatest public good and the least private injury.

SVP identified a study area that considered criteria necessary to meet the Project objectives, e.g., maintain system reliability while allowing for an increase in electrical demand. Staff engineers and design consultants looked for route alternatives, focusing on locations that paralleled existing roads and/or existing overhead utilities, and our own existing transmission corridors. In places where we could not use our existing transmission corridors or did not have an existing transmission corridor, staff considered route alternatives looking at their potential impacts to the environment, existing and probable future development, the topography/terrain, roadway access, scenic areas, and recreation uses, among other factors. Weighing the above considerations with the technical needs for the project, the final Transmission route was determined.

The property sought to be acquired is necessary for the Project.

The Electric Overhead Easement on 1199 & 1061 Martin Avenue is necessary to achieve the technical needs of the project.

The offer required by Section 7267.2 of the Government Code has been made to the Owner of record for the full amount established as the fair market value of the property.

On March 27, 2020, the City made an offer to 1065 Martin Ave, LLC to acquire the Electric Overhead Easement upon the value determined by an independent state licensed and certified appraiser in accordance with the above referenced Government Code.

The Resolution of Necessity requires approval by a two-thirds vote of the Council. If the Council adopts the recommended Resolution of Necessity, the City would deposit the necessary funds for the Easement's probable compensation with the State Condemnation Deposit Fund and file an eminent domain complaint with the Court to seek possession of the property.

As always, the parties can continue to negotiate in an effort to come to a mutual agreement on compensation for the leasehold (including any compensation due for furniture, fixtures, and equipment) and loss of business goodwill.

ENVIRONMENTAL REVIEW

This project was analyzed in accordance with the requirements of the California Environmental Quality Act (CEQA). A Mitigated Negative Declaration (MND) [SCH#2020-05-9009] was prepared for the project by the environmental consultant firm, Aspen Environmental Group, and adopted by Council on July 7, 2020 by Resolution No. 20-8869.

FISCAL IMPACT

The South Loop reconfiguration cost was approved as part of the Adopted FY 2020/21 and FY 2021/22 Biennial Capital Improvement Program in the Transmission System Reinforcement CIP Project. This action has no fiscal impact to the General Fund as the Project is funded by developer contributions and customer service charges.

COORDINATION

This report has been coordinated with the Finance Department and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Adopt a Resolution of Necessity to Acquire Certain Real Property Interests.
2. Do not adopt a Resolution of Necessity.

RECOMMENDATION

Alternative 1: Adopt a Resolution of Necessity to Acquire Certain Real Property Interests on 1199 & 1061 Martin Avenue, Santa Clara, California, from 1065 Martin Ave, LLC. (Five affirmative votes required [California Code of Civil Procedure section 1245.245]).

Reviewed by: Manuel Pineda, Chief Electric Utility Officer

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. March 27, 2020 Offer Letter
2. Resolution of Necessity



March 27, 2020

1065 Martin Ave LLC
Attn: Alex Elfar
2338 Walsh Ave.
Santa Clara, CA, 95051-1301

SUBJECT: OFFER TO PURCHASE OVERHEAD POWER LINE EASEMENT
SITE: 1199 Martin Ave & 1061 Martin Ave, Santa Clara; APN 224-60-012 &
224-60-013
South Loop Project

Dear Mr. Elfar:

The City of Santa Clara, acting by and through its municipally owned utility, Silicon Valley Power (SVP) is currently pursuing acquisition of power line easements for the South Loop Project ("Project"). The power lines that are proposed to be built for the project requires the acquisition of property rights affecting approximately 3,468 square feet over a portion of your property located at 1199 Martin Ave & 1061 Martin Ave, Santa Clara, CA ("Property").

SVP's primary objective of the South Loop Project is to increase system capacity and reliability. The majority of the new 60 kilo-volt (kV) transmission line would be constructed along the following city streets: Lafayette Street, Mathew Street, Martin Avenue, Walsh Avenue and De La Cruz Boulevard. Approximately 2.5 miles of the proposed route would be located in areas where existing power lines do not currently exist. The remaining segments of the Proposed Project would be along routes that have existing distribution power lines and/or telecommunication lines. The project is anticipated to be completed in 2021.

SVP designs its transmission system so that a loss of a single transmission line does not result in the loss of power for its customers. This design philosophy ensures the maximum reliability for its customers. As the power demands of the City grow, so does the necessity to construct infrastructure upgrades, such as this project, to continue to maintain this level of service reliability and increase the power capacity to support load growth and development. SVP is proactive about addressing future reliability issues and committed to providing the best service reliability for its customers.



Our preliminary title report shows [1065 Martin Avenue, LLC] to be the owner of the property located at [1199 Martin Ave and 1061 Martin Ave]. This property is within the Project area, and is also identified by the County Assessor as Parcel No. [224-60-012 & 224-60-013].

Subject to, and upon the terms and conditions set forth herein, SVP officers to purchase an easement over your property, as defined in the Easement Deed attached hereto. SVP hereby offers the sum of Fifty Six Thousand Four Hundred Dollars (\$56,400) as just compensation for the acquisition of the easement.

It is the policy of SVP to acquire property interests that are in private interests through voluntary purchase, if possible, and only when it is necessary to do so. In accordance with applicable law, SVP has obtained, reviewed and approved an appraisal to establish the fair market value of the property to be acquired. The attached Appraisal Summary outlines the basis for this offer pursuant to Government Code §7267.2.

Pursuant to Code of Civil Procedure §1263.025, SVP offers to pay your reasonable costs up to five thousand dollars (\$5,000) for an independent appraisal of the property interests. By law, an appraiser licensed by the Office of Real Estate Appraisers must prepare the independent appraisal. Although you are not required to obtain an appraisal at this time, or at all, if you believe such appraisal can assist you in evaluating this offer, it is in your interest to obtain an independent appraisal as expeditiously as possible. If you choose to obtain an appraisal, please forward SVP an invoice from your appraiser, identifying Property at 1199 Martin Ave and 1061 Martin Ave Santa Clara, CA are the subject of the appraisal and the fee charged.

Materials enclosed for your information include:

- An Easement with Exhibit showing the location of the acquisition area(s);
- The Appraisal Summary for your easement area.

The agent assigned to your property and to whom you will be working with is Keith Corry Senior Right of Way Professional, who can be reached at (801) 419-4507 or by email at keith.corry@eciusa.com. Please contact him if you have any questions or if you wish further clarification of this offer.

If you are agreeable to the offer please indicate your acceptance by signing in the space provided below and return an original signed copy of this letter to Mr. Corry using the postage paid return envelope, which is attached, for your use. Upon receipt of your acceptance of this purchase offer, a contract for sale and escrow instructions will be prepared for your execution. SVP will pay all of the conveyance and escrow costs. All taxes and assessments, if any, will be pro-rated, and possession will be delivered to SVP at the close of escrow.



Sincerely,

Manuel Pineda

Assistant City Manager/ Chief Electric Utility Officer

Enclosures:

SVP Easement with exhibit

Appraisal Summary

Postage paid return envelope

ACCEPTANCE OF OFFER

This offer, dated March 27, 2020 from the City of Santa Clara acting by and through its municipally owned utility, Silicon Valley Power, for \$56,400 is accepted for the acquisition of a permanent surface utility easement.

Owner's Name

By: _____

Name: _____

Title: _____

Date: _____

Recording Requested by:
Office of the City Attorney
City of Santa Clara, California

When Recorded, Mail to:
Office of the City Clerk
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

[SPACE ABOVE THIS LINE FOR RECORDER'S USE]

EXEMPT FROM RECORDING FEE
PER GOV'T CODE §§ 6103 and 27383

EXEMPT FROM FEE
PER GOV'T CODE § 27388.1 (a)(2)(D)

OVERHEAD ELECTRIC EASEMENT DEED

**1199 Martin Ave and 1061 Martin Ave & APN 224-60-012 and APN 224-60-013
Santa Clara, California**

For valuable consideration, the receipt of which is hereby acknowledged, **1065 Martin Avenue, LLC** (herein "**Grantor**"), hereby grants to the **CITY OF SANTA CLARA**, California, a chartered municipal corporation, (herein "**Grantee**"), an easement and right-of-way (herein "**Easement**") in, on, over, along and across the real property owned by Grantor in the City of Santa Clara, State of California, described in **Exhibit A** attached hereto and incorporated herein by this reference ("**Easement Area**").

This Easement shall be used by Grantee for the purpose of constructing and reconstructing, installing, operating, inspecting, maintaining, repairing, removing and/or replacing overhead electrical transmission, distribution and/or communication systems, and appurtenances thereto, including a reasonable right of ingress and egress over adjoining lands of Grantor. In exercising said right of ingress and egress, Grantee shall, wherever practical, use existing roads and lanes across lands of Grantor, if such there be, and if not, by such route or routes as shall result in the least practicable inconvenience to Grantor and any occupants of Grantor's property.

The overhead system will consist of poles, wire supports, wires and conductors suspended from pole to pole, transformers and other equipment mounted on the poles, anchors, guy attachments, and other appurtenances.

Portions of the Easement Area may be used by the Grantor for driveway(s), landscaping (excluding trees), and parking, as will not interfere with the Grantee's use of the Easement. Any other use of the Easement Area by Grantor shall be subject to Grantee's express written consent and only after Grantee's review of plans and specifications and determination that such use will not interfere with its use of the Easement. Grantee may trim any trees or remove any tree or structure which is in or adjacent to the Easement Area which, in its reasonable determination, interferes with its use of the Easement. Grantee may trim any trees or remove any tree which is in or adjacent to the Easement Area which exceeds a height of 20 Feet or poses a risk of falling onto the Grantee's facilities or equipment located within the Easement.

[SIGNATURE(S) APPEAR ON THE FOLLOWING PAGE]

///
///

IN WITNESS WHEREOF, said grantors have hereunto set their hands this _____ day of _____, 20__.

APPROVED FOR FORM:

Brian Doyle
City Attorney

By: _____

Print Name: _____

Title: _____

By: _____

Print Name: _____

Title: _____

-

"OWNER" APN 224-60-012 & 224-60-013 (2020-03)

ALL LEGAL OWNERS OF PROPERTY MUST EXECUTE THIS DOCUMENT. IF GRANTOR IS A CORPORATION, THE COMPLETE LEGAL NAME AND CORPORATE SEAL OF THE CORPORATION AND CORPORATE TITLES OF THE PERSONS SIGNING FOR THE CORPORATION SHALL APPEAR ABOVE. WRITTEN EVIDENCE OF AUTHORITY OF PERSON OR PERSONS EXECUTING THIS DOCUMENT ON BEHALF OF CORPORATION, PARTNERSHIP, OR JOINT VENTURE, OR ANY OTHER ORGANIZATION OTHER THAN A SOLE PROPRIETORSHIP SHALL BE ATTACHED.
ATTACH THE ALL-PURPOSE NOTARY ACKNOWLEDGMENT FORM FOR THE PERSON OR PERSONS EXECUTING THIS DOCUMENT ON BEHALF OF THE GRANTOR.

CALIFORNIA NOTARY ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of _____

On _____ before me, _____ (name and title of officer), personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that she/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

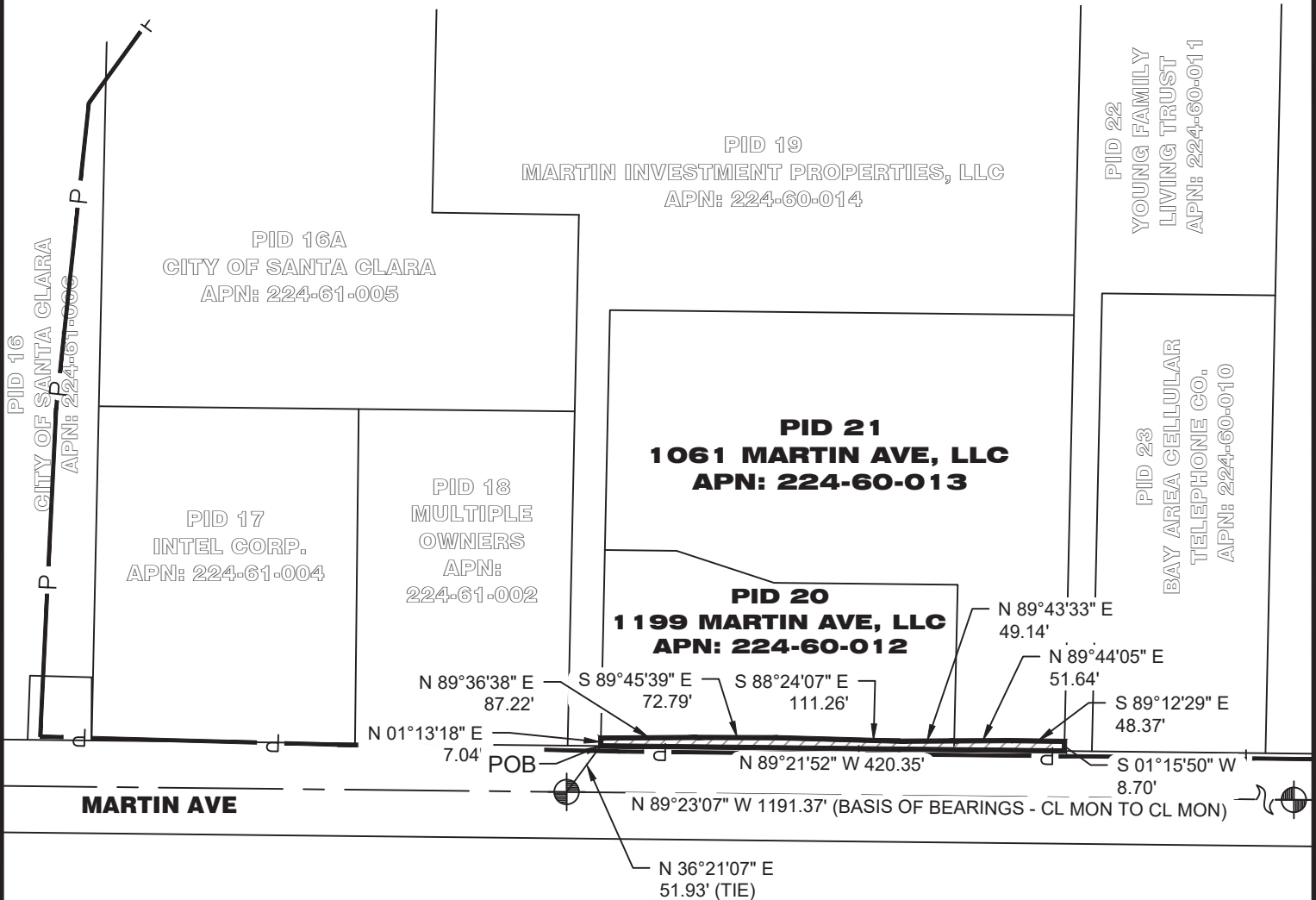
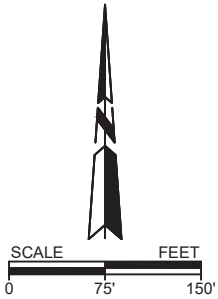
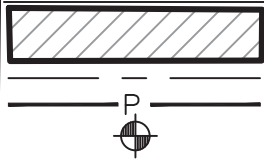
WITNESS my hand and official seal.

Signature _____

(Seal)

EXHIBIT "A"

POWERLINE EASEMENT ACROSS:
 1065 MARTIN AVENUE, LLC
 1199 & 1061 MARTIN AVENUE
 SANTA CLARA, CALIFORNIA 95050
 APN: 224-60-012 & 224-60-013
 EASEMENT AREA: 3,468 SQ. FT. ±

**LEGEND**

EASEMENT AREA = 3,468 SQ. FT. ±
 ROADWAY PLATTED CENTERLINE
 POWERLINE REFERENCE LINE
 FOUND SURVEY MONUMENT

THIS DRAWING SHOULD BE USED ONLY AS A REPRESENTATION OF THE LOCATION OF THE EASEMENT BEING CONVEYED. THE EXACT LOCATION OF ALL STRUCTURES, LINES AND APPURTENANCES IS SUBJECT TO CHANGE WITHIN THE BOUNDARIES OF THE RIGHT OF WAY HEREIN GRANTED

REV: 0 DATE: 3/27/20 SCALE: 1" = 150' BY: AGD CHK: GHM APP: JJC

"Engineering with Distinction"

ECI ELECTRICAL
 CONSULTANTS INC.
 SALT LAKE CITY, UTAH

660 West 700 South Woods Cross, UT 84087 (801) 292-9954

1065 MARTIN AVENUE, LLC
 APN: 224-60-012 & 224-60-013
 1061 & 1199 MARTIN AVENUE
 SANTA CLARA, CALIFORNIA 95050

SILICON VALLEY POWER
 CITY OF SANTA CLARA

SHEET: 2 OF 2

EXHIBIT "A"

POWERLINE EASEMENT ACROSS:

1065 MARTIN AVENUE, LLC

1199 & 1061 MARTIN AVENUE

SANTA CLARA, CALIFORNIA 95050

APN: 224-60-012 & 224-60-013

EASEMENT AREA: 3,468 SQ. FT. ±



DESCRIPTION:

A portion of those parcels of land conveyed, in that certain Grant Deed recorded October 18, 2005 as Document No. 18627655 in the Office of the Recorder of the County of Santa Clara (ORCSC), being Lots 1 and 2, as shown upon that certain Map entitled "Parcel Map being a subdivision of Parcel "B" of that Parcel Map filed for record in Book 374 of Maps at page 40, Santa Clara County Records", which Map was filed for record in the Office of the Recorder of the County of Santa Clara, State of California on May 29, 1996 in Book 677 of Maps, at pages 12 and 13, herein after referred to as the Grantor's Parcels, being located in teh City of Santa Clara, County of Santa Clara, State of California, and described as follows:

COMMENCING at a Centerline Monument in Martin Avenue (as shown on Page 2 of this Exhibit); thence North 36°21'07" East 51.93 feet (Basis of Bearings is North 89°23'07" West along the monument line) to the southeasterly corner of said Grantor's Parcels and the **POINT OF BEGINNING**; thence North 01°13'18" East 7.04 feet along the westerly line of said Grantor's parcels; thence North 89°36'38" East 87.22 feet; thence South 89°45'39" East 72.79 feet; thence South 88°24'07" East 111.26 feet; thence North 89°43'33" East 49.14 feet; thence North 89°44'05" East 51.64 feet; thence South 89°12'29" East 48.37 feet to the easterly line of said Grantor's Parcels; thence South 01°15'50" West 8.70 feet along said easterly line to the southeast corner of said Grantor's Parcels; thence North 89°21'52" West 420.35 feet along the northerly right-of-way line of said Martin Avenue to the **POINT OF BEGINNING**.

Containing 3,468 square feet, more or less.

EXHIBIT A PAGE 2 by this reference made a a part hereof.

REV: 0	DATE: 3/27/20	SCALE: N/A	BY: AGD	CHK: GHH	APP: JJC
 ECI ELECTRICAL CONSULTANTS INC. SALT LAKE CITY, UTAH <small>660 West 700 South Woods Cross, UT 84087 (801) 292-9954</small>		1065 MARTIN AVENUE, LLC APN: 224-60-012 & 224-60-013 1061 & 1199 MARTIN AVENUE SANTA CLARA, CALIFORNIA 95050		 SHEET: 1 OF 2	

Appendix A

March 17, 2020

**City of Santa Clara
South Loop Interconnect Project
Appraisal Summary Statement And
Summary of the Basis for Just Compensation
(Pursuant to Government Code Section 7267.2)**

The following is a statement of and summary of the basis for the appraisal and the amount that Silicon Valley Power has established as just compensation required by California Government Code Section 7267.2. The appraisal on which this summary is based was made in accordance with accepted appraisal principles, consistent with California valuation law.

The purpose of this appraisal is to estimate the fair market value of the proposed acquisition appraised. Section 1263.320 of the Code of Civil Procedure defines fair market value as:

- A. The fair market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available.*
- B. The fair market value of property taken for which there is no relevant market is its value on the date of valuation as determined by any method of valuation that is just and equitable.*

The date of value is January 31, 2020, which was the date of inspection.

The intended use of this appraisal is to provide information on the value of the acquisition for the Silicon Valley Power Project, which is called the South Loop Interconnect Project. The intended user is Silicon Valley Power.

The scope of work included inspecting the property, research and analysis of comparable data, and highest and best use analysis.

The appraised rights are further identified as follows:

- 1) The fair market value of a 3,468-square-foot permanent powerline easement.

Statement of the Amount Established as Just Compensation

The amount Silicon Valley Power has established as just compensation for the property rights described in the accompanying offer is: **\$56,400 (Fifty Six Thousand Four Hundred Dollars).**

Summary of Basis for the Amount Established as Just Compensation

This Summary of the Basis for the Amount Established as Just Compensation (prepared pursuant to Government Code Section 7267.2) is a summary of the appraisal used by Silicon Valley Power to determine the amount it established as just compensation for an easement.

(A) Property Identification – Subject Property

Owner of Record:	1065 Martin Avenue, LLC
Assessor's Parcel Numbers (APNs):	Santa Clara County Assessor's Parcel Number (APN)s 224-60-012 and 224-60-013
Property Address:	1199 & 1061 Martin Avenue, Santa Clara, Santa Clara County, CA 95054
Property Transfers in the Past Three Years:	There have been no other transfers within three years.
General Character of Interest Being Appraised:	Easement
Larger Parcel Land Size:	166,181 square feet
Improvements:	There is an existing industrial building on the property.
Topography:	Level
Shape:	Rectangular

Access:	Access to the Larger Parcel is available off of Martin Avenue.
Utilities:	Typical municipal and public utilities are available.
Environmental Conditions:	We did not receive a Phase I report for the Subject Property, and we assume there are no adverse environmental conditions.
Date of Valuation:	January 31, 2020
Highest and Best Use	The most probable use of a property which is physically possible, appropriately justified, legally permissible, financially feasible, and which results in the highest value of the property being valued.
Highest and Best Use – As If Vacant:	Industrial
Highest and Best Use – As Improved:	Existing use
Present Use Subject Property:	The Larger Parcel is currently used as an industrial property.
Applicable Zoning:	MH, Heavy Industrial

(B) Approaches Used in the Appraisal

We employed the “before” and “after” methodology for the Larger Parcel. In the “before” condition, we have not considered the Project.

In the “after” condition, we have considered the impacts attributed to the proposed easement and the Project.

Three methods of valuation can be applied to the appraisal of land. The most often used approach is the Direct Sales Comparison Approach. This method involves the comparison of the subject with recent sales of comparable properties.

A second method of land appraisal is the Land Development Approach. This approach involves estimating the development costs of installing all utilities and off-sites. These costs can be subtracted from a known improved lot value (established by sales comparison) to arrive at an estimate of raw land value or added to the known raw land value to arrive at the value of an improved site.

The third method employed is an Income Residual Method. An estimate is made of the potential net income, which can be earned from the site improved with buildings. The cost of these improvements is estimated to determine the portion of the income needed to supply a fair return on these costs. The residual income is available for a return on the land. Therefore, this income is capitalized into an indicated land value.

For purposes of this appraisal, the Sales Comparison Approach has been employed. Sufficient sales data was available that it was felt this method yielded a reliable result. This is the method that would most often be applied by a typical buyer of this type of property. The comparable sales are provided in Exhibit A.

Sales Comparison Approach

The sales comparison approach is used to derive a value indication by comparing the property being appraised to similar properties that have sold recently, applying appropriate units of comparison, and making adjustments to the comparables based on the elements of comparison.

Based on our analysis of sale comparables provided in Exhibit A, we estimate the land value of the Larger Parcel to be \$10,801,765 (land only). This is based on a price per square foot of land of \$65 x 166,181 square feet.

(C) Value of Part Taken

We have valued the part taken next. This consists of the value of the permanent easement and one tree in the easement area that will be removed.

Permanent Easement

In the "after" condition, the highest and best use of the Larger Parcel remains for continuation of the existing use.

For this valuation, the rationale for estimating the easement value can be shown as an equation:

Fee simple land value x % of fee rights being acquired = easement value

Based on our experience, an easement that is solely for subsurface utilities, as one example, may command a 10-35% share of the fee rights. As another example, exclusive control of surface rights may capture 90-100% of the fee simple value.

The subject is a perpetual easement. The grantor has significant remaining rights at the surface, landscaping, parking and signage for example. We estimate that the easement encumbers 25% of the total bundle of rights.

Therefore, the fair market value for the permanent easement is estimated at \$56,355, or 3,468 square feet x \$65 x 25%.

(D) Severance Damages/Benefits Analysis

Severance damages and benefits involve measuring the effect that the "acquisition" and "Project" have on the value of the property remaining, i.e., on the "remainder."

The acquisition is not expected to result in any severance damages to the remainder.

The highest and best use of the Larger Parcel upon partial acquisition is unchanged, relative to the "before" condition. We have not identified any damages from the Project.

Benefits result when the value of the remainder increases because of either the Project or the acquisition. Any resulting benefits are offset only against severance damages and not against acquisition value.

Each case for benefits is unique. In the case of the subject, we envision that the electric utility upgrades would be superior relative to the existing conditions. Since we have not identified any severance damages, we have not quantified any potential benefits.

(E) Conclusion of Just Compensation and Value in the "After" Condition

The market value of the acquisition is shown on the following page.

Summary of Valuation

A. Land Value of the whole before acquisition: (166,181 SF x \$65 PSF)		\$10,801,765
B. Value of the part acquired as part of the whole:		\$56,355
Permanent Easement (\$65 x 3,468 SF x 25%)	\$56,355	
Site Improvements (e.g. trees)	\$0	
C. Value of the remainder as part of the whole: (Line A less Line B)		\$10,745,410
D. Value of the remainder after the acquisition and before consideration of benefits (Line C - Line E)		\$10,745,410
E. Severance Damages/Cost to Cure		\$0
F. Value of the remainder after the acquisition and after considering benefits		\$10,745,410
G. Benefits (Line F less Line D)		0
H. Net Damages or Net Benefits (Line E minus Line G)		\$0
Plus: TCE:		<u>\$0</u>
Total		\$0
I. Market Value of the Acquisition (Just Compensation) (Line B plus Line H)		\$56,355
		\$0
Subtotal		\$56,355
Rounded		<u>\$56,400</u>

The resulting land value of the remainder in the "after" condition is \$10,745,410, or \$10,801,765 - \$56,355.

In summary, the value of the acquisition was valued in the "before" condition and then we valued the partial acquisition. The fair market value for the acquisition is, **\$56,400**, as summarized below:

Value Conclusions: 1199 and 1061 Martin Avenue

	Permanent Easement	Site Improvements	Net Severance Damages	Total Fair Market Value
Value Type	Fair Market Value	Fair Market Value	Fair Market Value	Fair Market Value
Property Rights Appraised	Permanent Easement			Acquisition
Date of Value	January 31, 2020	January 31, 2020	January 31, 2020	January 31, 2020
Fair Market Value	\$56,355	\$1,940	\$0	Total: \$56,400 (rounded)

The previous is a summary of the appraisal prepared at the request of Silicon Valley Power to comply with Government Code Section 7267.2 that fairly and correctly states my opinions and knowledge.

Dated: March 17, 2020

Addenda

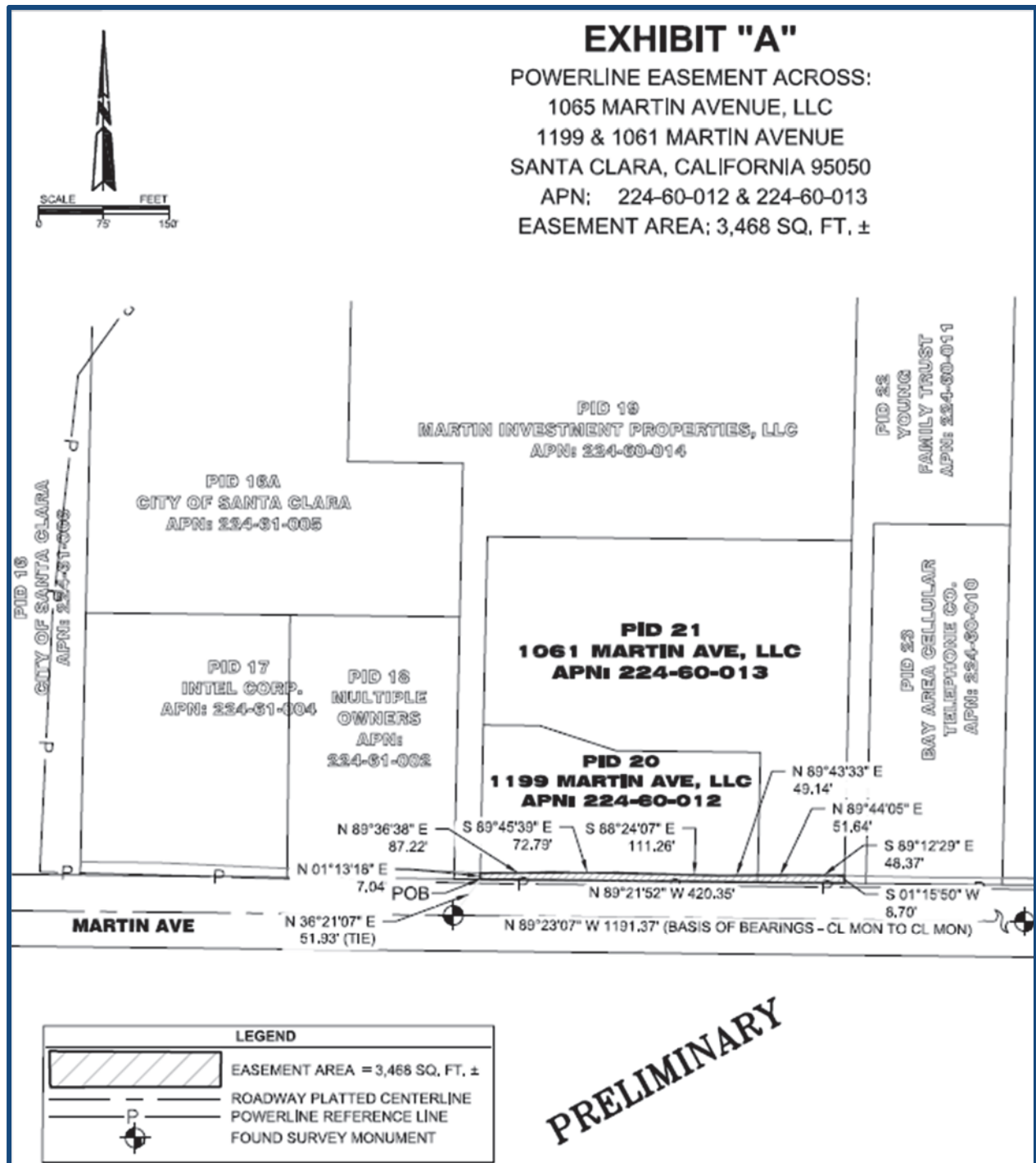
Exhibit A: Land Sales

Exhibit B: Easement Area

Exhibit A: Land Sales

Comparable Sales Summary							
Comp	No.	Address	COE date	Land SF	Sale Price	Price per SF of Land	Grantor / Grantee and Recording #
1		1000 South 3rd Street San Jose APN: 472-15-027	Aug-17	51,401	\$2,100,000	\$40.86	Grifall Trucking Inc. Richard Cohen Trust Recording # 23716163
2		650 Martin Avenue Santa Clara APN: 224-35-017	Aug-16	207,128	\$12,310,000	\$59.43	Recology Properties Inc. Peninsula Building Materials Recording # 23398465
3		720 Comstock Street Santa Clara APN: 224-36-025	Oct-18	7,100	\$570,000	\$80.28	Jeff Olofsen Parker Albanese I LLC Recording # 24065356
Valbridge Property Advisors							

Exhibit B: Easement Area



RESOLUTION NO. _____

**A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA
DETERMINING THAT THE PUBLIC INTEREST AND NECESSITY
REQUIRE THE ACQUISITION OF CERTAIN REAL PROPERTY
INTERESTS FOR A PUBLIC PROJECT AND DIRECTING THE
FILING OF EMINENT DOMAIN PROCEEDINGS**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, the City of Santa Clara, a chartered city and municipal corporation acting by and through its municipally owned electric utility, Silicon Valley Power (hereinafter the “City”) is engaged in a continuing effort to upgrade and enhance its Overhead and Underground Distribution and Transmission system to meet new customer demand and to maintain the system’s reliability. The South Loop Reconfigure Project (Project) is a keystone project for this effort;

WHEREAS, the Project will involve the placement of multiple new monopole steel structures and result in either the expansion of existing Electric Overhead and Wire Clearance Easements or the acquisition of new easements;

WHEREAS, it is desirable and necessary for the City to acquire the following real property interests for the project.

A 3,468 square foot permanent Easement in, on, over, along and across the real property described and depicted in Exhibit “A” and incorporated herein by this reference (“Easement Area”) for the purpose of constructing and reconstructing, installing, operating, inspecting, maintaining, repairing, removing and/or replacing overhead electrical transmission, distribution and/or communication systems, and appurtenances thereto, including a reasonable right of ingress and egress over adjoining lands of fee owner. In exercising said right of ingress and egress, easement holder shall, wherever practical, use existing roads and lanes across lands of fee owner, if such there be, and if not, by such route or routes as shall result in the least practicable inconvenience to fee owner and any occupants of fee owner’s property.

The overhead system will consist of poles, wire supports, wires and conductors suspended from pole to pole, transformers and other equipment mounted on the poles, anchors, guy attachments, and other appurtenances. Portions of the Easement Area may be used by the fee owner for driveway(s), landscaping (excluding trees), and parking, as will not interfere with the easement holder's use of the Easement. Any other use of the Easement Area by fee owner shall be subject to easement holder's express written consent and only after easement holder's review of plans and specifications and determination that such use will not interfere with its use of the Easement. Easement holder may trim any trees or remove any tree or structure which are in or adjacent to the Easement Area which, in easement holder's reasonable determination, interferes with its use of the Easement. Easement holder may trim any trees or remove any tree which is in or adjacent to the Easement Area which exceeds a height of 20 feet or poses a risk of falling onto the easement holder's facilities or equipment located within the Easement;

WHEREAS, the City is vested with the power of eminent domain to acquire real property by virtue of Article I, Section 19 of the Constitution of the State of California, Sections 37350.5 of the California Government Code, Section 612 of the California Public Utilities Code and Sections 1240.010 and 1240.220 of the California Code of Civil Procedure;

WHEREAS, pursuant to the provisions of Section 1245.235 of the California Code of Civil Procedure, notice has been duly given to 1065 Martin Avenue, LLC whose property interests are to be acquired by eminent domain and whose name and address appears on the Santa Clara County Equalized Assessment Roll, and the property owner has been given a reasonable opportunity to appear and be heard before the City Council;

WHEREAS, on July 7, 2020, by Resolution No. 20-8869, the City Council [certified the Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP)] for the Project in accordance with California Environmental Quality Act (CEQA). No further environmental review is necessary pursuant to CEQA; and

WHEREAS, pursuant to the provisions of Section 7267.2 of the California Government Code, the City has made an offer to the owner(s) of record to acquire its interests under the Lease for the amount which it has established to be just compensation, therefore.

**NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA THAT
THE CITY FINDS AND DETERMINES AS FOLLOWS:**

1. That the public interest and necessity require the Project.
2. That the Project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury.
3. That the Subject Property Interests sought to be acquired is necessary for the Project.
4. That all environmental review required by law has been prepared and adopted.
5. That the offer required by Section 7267.2 of the California Government Code has been made to the owner(s) of record of the Subject Property Interests.
6. That the necessary notice of hearing has been given, as required by Code of Civil Procedure Section 1245.235.
7. That to the extent the Subject Property Interests are already devoted to a public use, the use of the Subject Property Interests for the Project is a compatible use that will not unreasonably interfere with or impair the continuance of the public use as it presently exists or may reasonably be expected to exist in the future (California Code of Civil Procedure Section 1240.510), or the use of the Subject Property Interests for the Project is a more necessary public use than the presently existing public use (California Code of Civil Procedure Section 1240.610).
8. The City has complied with requirements of CEQA for the Project.
9. That the City Attorney or his duly authorized designee is hereby authorized and directed to institute and conduct to conclusion an action in eminent domain for the acquisition of the estates and interests aforesaid and to take such actions as he may deem advisable or necessary in connection therewith.
10. That the City may deposit with the State Treasury the probable amount of compensation

and obtain an order for prejudgment possession of the Subject Property Interests.

11. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED
AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING
THEREOF HELD ON THE ____ DAY OF _____, 2021, BY THE FOLLOWING VOTE:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:
1. Exhibit A

EXHIBIT A

SVP REF: SC 19-184

EXHIBIT "A"

POWERLINE EASEMENT ACROSS:

1065 MARTIN AVENUE, LLC
1199 & 1061 MARTIN AVENUE
SANTA CLARA, CALIFORNIA 95050
APN: 224-60-012 & 224-60-013
EASEMENT AREA: 3,468 SQ. FT. ±

DESCRIPTION:



A portion of those parcels of land conveyed, in that certain Grant Deed recorded October 18, 2005 as Document No. 18627655 in the Office of the Recorder of the County of Santa Clara (ORCSC), being Lots 1 and 2, as shown upon that certain Map entitled "Parcel Map being a subdivision of Parcel "B" of that Parcel Map filed for record in Book 374 of Maps at page 40, Santa Clara County Records", which Map was filed for record in the Office of the Recorder of the County of Santa Clara, State of California on May 29, 1996 in Book 677 of Maps, at pages 12 and 13, herein after referred to as the Grantor's Parcels, being located in the City of Santa Clara, County of Santa Clara, State of California, and described as follows:

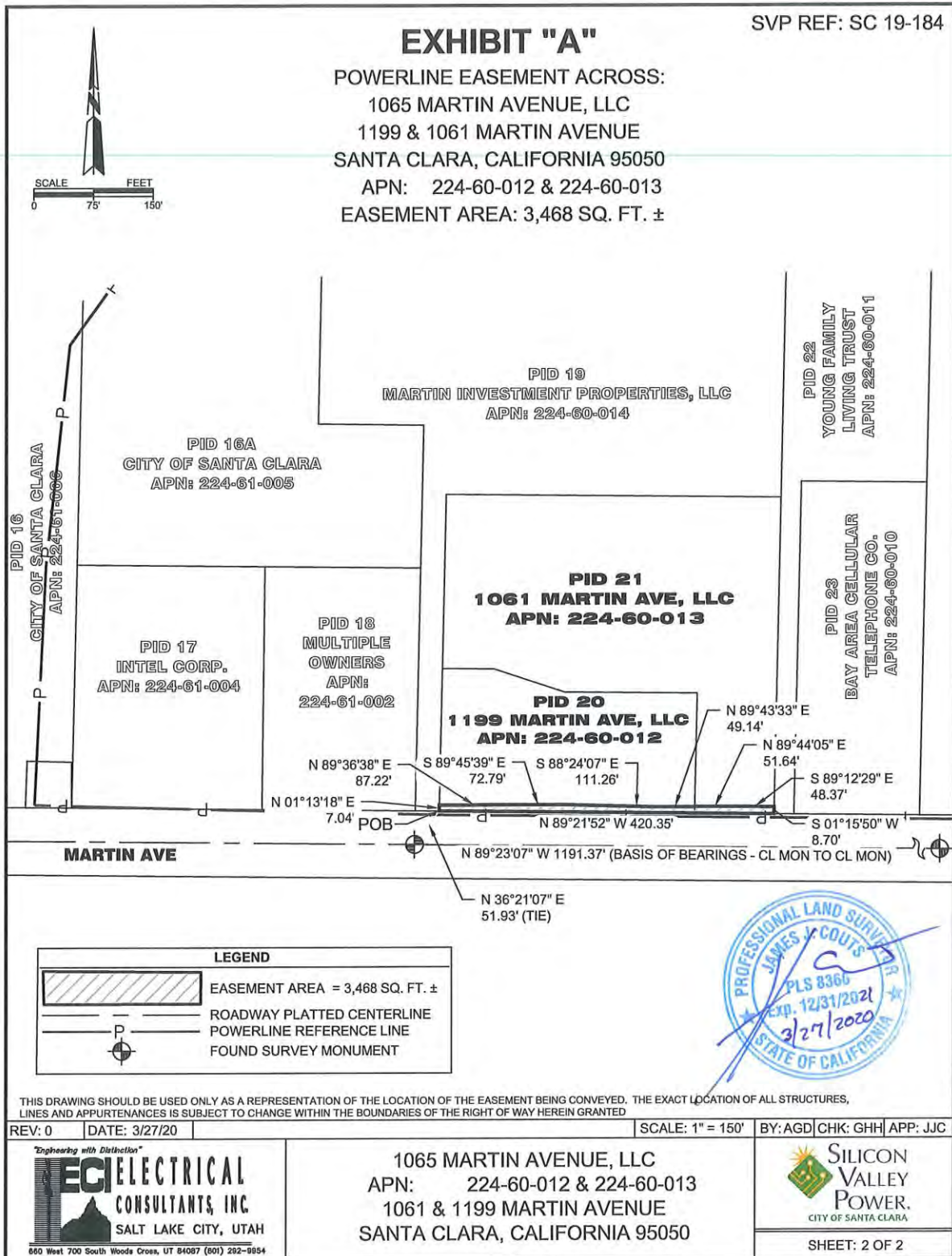
COMMENCING at a Centerline Monument in Martin Avenue (as shown on Page 2 of this Exhibit); thence North 36°21'07" East 51.93 feet (Basis of Bearings is North 89°23'07" West along the monument line) to the southeasterly corner of said Grantor's Parcels and the **POINT OF BEGINNING**; thence North 01°13'18" East 7.04 feet along the westerly line of said Grantor's parcels; thence North 89°36'38" East 87.22 feet; thence South 89°45'39" East 72.79 feet; thence South 88°24'07" East 111.26 feet; thence North 89°43'33" East 49.14 feet; thence North 89°44'05" East 51.64 feet; thence South 89°12'29" East 48.37 feet to the easterly line of said Grantor's Parcels; thence South 01°15'50" West 8.70 feet along said easterly line to the southeast corner of said Grantor's Parcels; thence North 89°21'52" West 420.35 feet along the northerly right-of-way line of said Martin Avenue to the **POINT OF BEGINNING**.

Containing 3,468 square feet, more or less.

EXHIBIT A PAGE 2 by this reference made a part hereof.



REV: 0	DATE: 3/27/20	SCALE: N/A	BY: AGD	CHK: GHH	APP: JJC
		1065 MARTIN AVENUE, LLC APN: 224-60-012 & 224-60-013 1061 & 1199 MARTIN AVENUE SANTA CLARA, CALIFORNIA 95050		 SHEET: 1 OF 2	





Agenda Report

21-1432

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on the Introduction of an All-Electric Reach Code Ordinance, including Electric Vehicle (EV) Charging, that Amends Chapter 15.36 (Energy Code) and Chapter 15.38 (Green Building Code) of Title 15 (Buildings and Construction) of the Santa Clara City Code (Deferred from September 28, 2021)

COUNCIL PILLAR

Promote Sustainability and Environmental Protection

EXECUTIVE SUMMARY

At the City Council Meeting on March 2, 2021, staff presented greenhouse gas (GHG) emissions trends and forecasts as part of the discussion around setting City Climate Action Plan (CAP) Update targets. During this study session, staff also requested Council direction on a “reach code” for building electrification and electric vehicle (EV) charging. Reach codes are local building code amendments that go beyond the State of California’s requirements for energy efficiency and green building standards. At this meeting, Council provided direction to proceed with development of an all-electric reach code that included electric vehicle (EV) charging requirements.

The consideration of reach codes was further reinforced at the July 13, 2021 CAP Update study session, confirming the Draft Climate Action Plan Update GHG targets as a key step to meeting emissions reduction goals. Additionally, Council directed staff to modify the EV charging requirement in the reach codes as follows:

Original: Implement proposed Reach Code to require all new multi-family projects (20 units or less) to install one Level 2 EV ready charging station per unit. Require all new multi-family projects (over 20 units) to install 25% of parking spaces Level 2 EV ready and 75% of parking spaces Level 1 EV ready.

New Council Directive: Require all new multi-family projects (over 20 units) to provide 25% of parking spaces with Level 2 EV ready spaces and 75% of parking spaces with Lite Level 2 EV ready spaces at 3.8 kW using an automatic load management software to balance the loads.

Per Council’s direction, staff have prepared an all-electric reach code with EV charging requirements for council consideration. The proposed ordinance factors in regional and State consistency and Santa Clara specific circumstances while setting a course to achieve critical decarbonization goals and meet EV charging demand.

BACKGROUND

In California, the building sector accounts for approximately 25% of GHG emissions Statewide. Within the building sector, water and space heating account for approximately 85% of the natural gas use in residential buildings and nearly 70% in non-residential buildings. Additionally, the transportation sector represents nearly 40% of State-wide emissions, with almost 2/3 coming of that coming from passenger vehicles.

Building and transportation electrification are thus key strategies to achieve GHG emissions reductions and advance decarbonization efforts. Reach codes are local building code amendments that establish higher standards for energy efficiency and green building practices beyond the State of California's requirements. Recently municipalities have begun to adopt reach codes to locally increase energy efficiency, reduce GHG emissions and meet climate action goals.

Over 40 municipalities across California have now adopted reach codes, predominantly in the Bay Area and Central Coast regions. Municipalities across Santa Clara County have widely adopted some form of reach code with the all-electric option comprising many adopted ordinances. An all-electric reach code requires that buildings use electricity as the energy source for all appliances, including space heating, water heating, clothes-drying, and cooking. While not all reach codes have included EV infrastructure in their amendments, including EV infrastructure requirements in a reach code supports both State and local targets around the transition to cleaner transportation.

State and Local Policy Targets

Several State policies establish GHG reduction targets, including:

- Executive order B-55-18 (EO B-55-18), pledging that the California economy will be carbon neutral by 2045
- Assembly Bill 3232 (AB 3232) - requiring the California Energy Commission (CEC) to create a plan by 2021 to reduce building sector emissions by 40 percent below 1990 levels by 2030.
- Senate Bill 32 (SB 32) set mid-term and long-term goals of reducing GHG emissions 40% below baseline levels by 2030 and 80% by 2050.
- Executive order N-79-20 (EO N-79-20), setting a goal for 100% of all in-state sales of new passenger cars and trucks to be zero emission by 2035 and 100% of medium and heavy-duty vehicles be zero emissions by 2045.

With this context, there is a significant potential for future state emissions regulations that could impact the use of natural gas, including potential requirements that all new buildings be natural gas emissions-free, and possibly also requiring retrofit of existing buildings to eliminate the use of natural gas.

During the March 2, 2021 City Council meeting, staff requested direction on proceeding with establishment of an all-electric reach code to address building electrification and EV infrastructure. The City Council provided direction to proceed with preparing an all-electric reach code with EV charging requirements. Additionally, at the July 13, 2021 City Council CAP study session, the City Council confirmed the inclusion of an all-electric reach code with EV charging to be incorporated into the proposed CAP Update.

Reach Code Adoption Process

Every three years, the State of California adopts new building standards that are organized in Title 24 of the California Code of Regulations, referred to as the California Building Standards Code. The

most recent code cycle was adopted in 2019 with an effective date of January 1, 2020.

This code cycle is an opportunity for cities and counties to adopt optional local energy code amendments, known as reach codes, that exceed or enhance State code standards. Historically, jurisdictions have adopted reach codes to the California Energy Code (Title 24, Part 6) and the California Green Building Standards Code (CALGreen) (Title 24, Part 11), to meet local climate action goals.

While the requirements of the 2019 version of the code move in the direction of zero-net-energy performance, the City of Santa Clara has the opportunity to achieve greater energy savings and accelerate decarbonization through an all-electric reach code that also prepares the community for the transition to transportation electrification.

After ordinance adoption, these local amendments to the Energy Code must be approved by the California Energy Commission (CEC) and filed with the California Building Standards Commission (CBSC) for the amendments to take effect.

Community Outreach

The City of Santa Clara conducted community engagement efforts to involve the public in the process. This included seeking feedback on various reach code alternatives through four community and stakeholder meetings and written feedback. Outreach included a community survey, and community meetings throughout 2020 including meetings on February 3, June 10, and August 29, followed by a public City Council Study Session on March 2, 2021. The proposed reach codes were also broadly brought to the public through the August-September 2021 CAP community feedback effort which included a community workshop, focus groups and CAP online public comment period and were posted on the City's website.

DISCUSSION

For multiple reasons including health, safety, economics, and environmental benefits, there is recently considerable interest from environmental stakeholders and policy decision makers in mandating that new construction be all-electric and in phasing out the use of natural gas appliances in existing buildings, or "building electrification," so that buildings would not have any fossil fuel services. Building electrification, phasing out the use of natural gas, will assist the City in achieving its goals for environmental leadership as set forth in the City's General Plan, which incorporates the City's Climate Action Plan, as well as expressed by the City Council at prior Council meetings.

The general scope of the all-electric ordinance being proposed was developed specific to the City of Santa Clara while keeping an overall regional consistency in approach for all-electric codes. An initial draft was developed based on the model ordinance prepared by Peninsula Clean Energy (PCE), Silicon Valley Clean Energy (SVCE), and the County of San Mateo Office of Sustainability. After following community outreach for this initial draft, which emphasized a performance-based approach, staff redrafted the ordinance in light of the actions of surrounding jurisdictions and direction provided by the City Council to take a prescriptive approach. With the exception of Gilroy, all other Santa Clara County jurisdictions have adopted some form of reach code, with many electing an all-electric code approach. In preparing the draft reach code for City Council consideration, City staff used the successfully adopted reach codes from the neighboring cities of Sunnyvale and San Jose as a model, while also incorporating the specific direction provided by the City Council at a study session in March of this year.

While many reach codes only address building electrification, the City Council has specifically directed staff to include enhanced requirements for electric vehicle (EV) charging infrastructure in new construction as part of the reach code adoption. Staff have accordingly developed a draft ordinance for Council consideration that captures both the all-electric building requirement and an enhanced alternative to the EV infrastructure directive that takes into consideration forward thinking industry standard charging options to proactively prepare for future demand as transportation electrification expands.

Energy Code Amendments - All-Electric New Construction

The proposed ordinance calls for all new construction to be all-electric. All-electric is defined as a building or building design that has no natural gas or propane plumbing installed within the building, and that uses electricity as the source of energy for its space heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances, not excluding any exemptions. The definition of “newly constructed buildings” is broadly defined to include additions and improvement to existing buildings where more than 50 percent of exterior walls are removed or 50 percent of the wall plate height is raised.

Exceptions to the All-Electric Code

As discussed at the March City Council study session and also seen in the reach codes adopted by other neighboring jurisdictions, the proposed reach code includes specific exceptions that may be granted by the Building Official or their designee. These exceptions address specific instances where technological or financial challenges or the lack of availability of electric appliances, may make near-term implementation of an all-electric code infeasible. Proposed Exceptions within the all-electric code include:

Exception 1: F (Factory Industrial), H (High Hazard), and L (Laboratory) Occupancies may utilize natural gas, provided that they provide installed rewiring for future use of electric appliances.

Exception 2: Exemption for public agency owned and operated emergency centers. To take advantage of this exception, an applicant must provide third party verification that the All-Electric space heating requirement is not cost effective and feasible.

Exception 3: Hotels with eighty or more guestrooms may utilize natural gas in on-site commercial laundry facilities only.

Exception 4: Non-residential kitchens may not utilize natural gas for cooking appliances unless the applicant establishes that there is not an all-electric option for the kitchen using commercially available technology. If the Building Official grants an exception, EnergySTAR-rated natural gas appliances shall be used.

Exception 5: If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building under the Energy Code, and that the building is not able to achieve the performance compliance standard applicable to the building under the Energy Code using commercially available technology and an approved calculation method or if it is demonstrated that there is equivalent greenhouse gas reduction, then the Building Official may

grant an exception.

Exception Process:

- a. **Granting of Exception.** If the Building Official determines that it is infeasible for the applicant to fully meet the requirements of the Energy Code and one of the exceptions listed above applies, the Building Official shall determine the maximum feasible threshold of compliance reasonably achievable for the project. The decision of the Building Official or designee shall be provided to the applicant in writing. If an exception is granted, the applicant shall be required to comply with the Energy Code in all other respects and shall be required to achieve, in accordance with this Chapter, the threshold of compliance determined to be achievable by the Building Official or designee.
- b. **Denial of Exception.** If the Building Official determines that it is reasonably possible for the applicant to fully meet the requirements of the Energy Code, the request shall be denied, and the Building Official shall so notify the applicant in writing. The project and compliance documentation shall be modified to comply with this Chapter prior to further review of any pending planning or building permit application.
- c. **Appeals of Exception Denial.** If denied the infeasibility exemption, the applicant may appeal in writing to the Director of Community Development Department (DCD). The DCD will consider the information provided and render a written decision regarding infeasibility based on the factors set forth in this Chapter. The decision of the DCD shall be final.

Solar-ready Requirement for New Construction

Additionally, the proposed ordinance, as discussed at the March City Council study session, expands the mandatory requirements for solar ready buildings and solar panel system requirements as set forth in the 2019 California Energy Code to include the following additional construction types:

1. Hotel/Motel Occupancies and High-rise Multifamily buildings with ten habitable stories or fewer
2. Nonresidential Buildings with three habitable stories or fewer, other than healthcare facilities

Table 110.10-A: Solar panel requirements for all new nonresidential and high-rise residential buildings

Square footage of building	Size of panel
Less than 10,000 sq. ft.	Minimum of 3-kilowatt PV systems
Greater than or equal to 10,000 sq. ft.	Minimum of 5-kilowatt PV systems
EXCEPTION: As an alternative to a solar PV system, the building type may provide a solar water system (solar thermal) with a minimum collector area of 40 square feet, additional to other solar thermal equipment otherwise required for compliance with Part 6.	

Staff also request direction from Council on how to address developments that cannot achieve solar on their property due to infeasibility constraints, as proven by the developer and approved by the Building Official. One option, that supports the intent of this ordinance, would be to establish a fund for developers that cannot achieve the requirements to pay into a Community Energy Program that would allow the City to support community related energy initiatives. This option would require a study to determine the details of how the offset costs would be established, collected and administered programmatically.

Green Building Code Amendments - Electric Vehicle Charging Infrastructure

The March 2021 City Council Study Session provided specific language for proposed EV charging requirements, modifying the initial staff proposal from EV ready parking spaces in new development from 25% Level 2 and 75% Level 1 chargers to 25% Level 2 and 75% Lite Level 2 at 3.8 kW using an automatic load management software to balance the loads.

The proposed Green Building code amendments include additional electric vehicle charging infrastructure (EVCI) for the construction of new buildings. Increased EVCI would enable more people to purchase, drive and charge EVs in Santa Clara. It is especially important to have chargers where vehicles are parked for long periods of time including the home and workplace.

Unlike amendments to the Energy Code, a cost-effectiveness study is not required for amendments to the Green Building Code, including the proposed EV charging infrastructure requirements. However, to evaluate the financial impact on first costs, PCE/SVCE commissioned an analysis of the total cost of implementing various EV infrastructure measures. Staff have utilized the Peninsula Clean Energy, Silicon Valley Clean Energy, and Statewide Program's analysis and balanced that with council directive on taking a bold approach to advancing EV charging to establish new construction EV requirements which are more in-line with local EV adoption trends and near future EV charging demand. The proposed EV reach codes also provide flexibility for the builder while still allowing Santa Clara to meet state and local climate targets and support a healthy community.

The proposed ordinance calls for the following EV charging requirements:

New Construction Type	Charging Requirements
New One-and Two-Family Dwellings and Townhouses	Private garages with two or more parking spaces, provide one Level 2 EV Ready Space, one Level 1 EV Ready Space Dwellings with only one parking space, provide one Level 2 EV Ready Space For spaces not assigned to a dwelling unit: • 25% of the unassigned parking space (s) shall be Level 2 EV Ready Space(s) • 75% of the unassigned spaces shall be Low Power Level 2 EV Ready Space(s)
New Multifamily Dwellings	For buildings with 20 or less dwelling units, provide one Level 2 EV Ready Space per unit with parking. For buildings with over 20 dwelling units, provide one Level 2 EV Ready Space for each of the first 20 dwelling units with parking space(s) For all additional dwelling units above 20 with parking spaces: • 25% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space • 75% of dwelling units with parking space(s) shall be provided with at least one Low Power Level 2 EV Ready Space(s) Secured bicycle parking with 110v electrical outlets shall be provided
New Multifamily Affordable	10% of dwelling units with parking space(s) provided with at least one Level 2 EV Ready Space Remaining dwelling units with parking space (s) provided with at least one Level 1 EV Ready Space

New Hotels/Motels	10% of parking spaces provided with Level 2 EVCS Additional 50% of parking spaces provided with EV Capable spaces
New Offices & Other New Non-Residential	35% of parking spaces provided with one Level 2 EVCS Additional 35% of parking spaces EV Capable

Additionally, the proposed reach code allows for Automatic Load Management Systems (ALMS). ALMS is a control system which permits multiple EV chargers or EV-Ready electric vehicle outlets to share a circuit or panel and automatically reduce power at each charger, providing the opportunity to reduce electrical infrastructure costs and/or provide demand response capability.

Cost Effectiveness

In order to obtain CEC approval, the City must demonstrate that the amendments to the Energy Code would be cost effective and would not represent an unreasonable burden to builders and ultimately, the building's occupants. Unlike amendments to the Energy Code, a cost-effectiveness study is not required for amendments to CalGREEN for increased amounts of EV infrastructure.

A Statewide Cost-Effectiveness Study for Energy Code Reach Codes was funded by the California investor-owned utilities (IOUs). The California Statewide Codes and Standards Program (Statewide Program) led the development of a cost-effectiveness study for Energy Code reach codes that examined different performance-based approaches for new construction of specific building types. There are two kinds of reach code approaches: performance-based ordinances and prescriptive ordinances. Performance-based ordinances mandate an increase in the overall energy efficiency required but leave flexibility for the builder on how to achieve this goal. In contrast, prescriptive ordinances mandate implementation of a specific measure. While the Statewide Program's analysis focused on performance-based ordinances, the City is able to utilize the analysis as some conclusions about prescriptive measures can be made from the results.

Because the City of Santa Clara leveraged the Bay Area reach code adoption efforts from Peninsula Clean Energy (PCE), Silicon Valley Clean Energy (SVCE), and the County of San Mateo Office of Sustainability to draft a model code and contracted with TRC to provide technical support for the City's reach code outreach and modeled the draft code in large part on successfully adopted codes developed in other jurisdictions, staff does not anticipate a challenge with obtaining CEC approval.

Community Benefit

Reducing or eliminating natural gas usage in the building sector is an important component of climate mitigation to achieve the State's goal of Carbon Neutrality by 2045. Since Senate Bill 100 requires a 100% clean electric grid by 2045, passing a reach code that disincentivizes natural gas infrastructure will enable Santa Clara to work towards achieving carbon neutrality no later than 2045. While this change may go against the preferences of some home users, and/or result in additional construction costs, there are other significant benefits, including:

- Improvement of indoor air quality due to elimination of chemicals produced through indoor fuel combustion.
 - Ex: Gas stoves in homes increase children's asthma risk by 42%
- Elimination of the leading cause of house fires with transition to induction ranges

- Potential developer and building occupant cost savings
- Decrease in public safety risks associated with leaking natural gas legacy infrastructure between the point of extraction and entry to homes that has been the source of catastrophic explosions throughout California and the US.

Conclusion

As discussed above, adoption of the proposed reach code would enable the City to better achieve its CAP goals for a local reduction in GHG emissions and to maintain a position of environmental leadership. The draft reach code was developed with community input and makes use of provisions similar to those used in other neighboring jurisdictions, while also incorporating the specific input provided by the City Council at two recent Council meetings.

ENVIRONMENTAL REVIEW

The local amendments are exempt from the requirements of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15061(b)(3) as the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. The proposed standards are more stringent than the State energy standards, there are no reasonably foreseeable adverse impacts and there is no possibility that the activity in question would have a significant effect on the environment.

FISCAL IMPACT

The proposed adoption of the reach code may have some impact to future construction costs for City projects. This cost is warranted in that the adoption of the reach code will enable the City to implement its CAP and other policy goals, which in turn could result in fiscal benefits.

COORDINATION

This report has been coordinated with the City Manager's Office, Silicon Valley Power, the Community Development Department, and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

ALTERNATIVES

1. Take no action at this time and continue to use the previously adopted State model codes without adopting any local amendments.
2. Direct staff to revise or remove specific local amendments.
3. Request staff to bring back additional information for further consideration including bringing back the final version of the amended ordinance for adoption.

RECOMMENDATION

Staff recommend that City Council introduce electrification reach codes as written, to be established on January 1, 2022; to help reduce carbon emissions associated with new construction, reduce costs in new construction, improve indoor air quality and safety of our building stock, support affordable housing, and increase adoption of electric vehicles.

Reviewed by: Andrew Crabtree, Director of Community Development

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS:

1. Draft Ordinance
2. Cost-Effectiveness Studies - High-rise New Construction
3. Cost-Effectiveness Studies - Mid-rise New Construction
4. Cost-Effectiveness Studies - New Attached ADU's
5. Cost-Effectiveness Studies - Non-residential New Construction
6. Cost-Effectiveness Studies -Residential New Construction
7. Electric Vehicle Infrastructure Cost Analysis Report for Peninsula Clean Energy (PCE) & Silicon Valley Clean Energy(SVCE)
8. Post Meeting Material from September 28, 2021 Council Meeting

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF SANTA CLARA, CALIFORNIA TO AMEND CHAPTER 15.36 (ENERGY CODE) AND CHAPTER 15.38 (GREEN BUILDING STANDARDS CODE) OF TITLE 15 (BUILDINGS AND CONSTRUCTION) OF “THE CODE OF THE CITY OF SANTA CLARA, CALIFORNIA” TO ADOPT PROVISIONS OF THE 2019 CALIFORNIA ENERGY CODE AND THE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE WITH CERTAIN EXCEPTIONS, MODIFICATIONS, AND ADDITIONS TO INCREASE BUILDING EFFICIENCY AND INCREASE REQUIREMENTS RELATED TO ELECTRIC VEHICLE CHARGING STATIONS

BE IT ORDAINED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, Santa Clara’s Climate Action Plan, adopted in 2013 includes strategies to reduce greenhouse gas (GHG) emissions and is in the process of being updated to further strengthen emissions reductions;

WHEREAS, pursuant to Sections 17922, 17958, 17958.5 and 17958.7 of the California Health and Safety Code, the City may adopt modifications to the provisions of the California Building Standards Code that are reasonably necessary to protect the health, welfare and safety of the residents of Santa Clara because of local climatic, geological or topographical conditions;

WHEREAS, on November 19, 2019, the City Council adopted Ordinance No. 2008 adopted the 2019 California Energy Code in Section 15.36.010 of the Santa Clara City Code and adopted the 2019 California Green Building Standards Code in Section 15.38.010 of the Santa Clara City Code;

WHEREAS, the City now intends to adopt modifications to the Energy Code and Green Building Standards Code to address local geological, topographical, and climatic conditions.

WHEREAS, the City Council hereby makes the following findings with respect to local geological, topographical and climatic conditions relating to the amendments to the California Energy Code and California Green Building Standards Code:

- A. Santa Clara is located in the Santa Clara Valley, which is densely populated and located in an area of high seismic activities. Santa Clara is situated on alluvial soils between San Francisco Bay and the San Andreas Fault zone. The City's location makes it particularly vulnerable to damage by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and numerous potentially active faults;
- B. Concern for fire-life safety associated with gas appliances and associated piping located in the ground and in the buildings increases with the risk of explosion or fire if there is a structural failure due to a seismic event considering the increasing number of buildings in the region;
- C. Severe seismic events could disrupt communications, damage gas mains, and place extreme demands on the limited and widely dispersed resources of the Public Safety Department necessary for the life safety needs of the community;
- D. The local geographic, topographic, and climatic conditions pose an increased hazard in acceleration, spread, magnitude, and severity of potential fires in the City, and may cause a delayed response from emergency responders, allowing further growth of the fire;
- E. Over the next century, increasing levels of atmospheric greenhouse gas concentrates are expected to result in global temperature increases, causing a

variety of local changes, including extreme weather conditions, sea level rise, more frequent heat waves and extended period of drought. Sea level rise as a result of climate change will have a dramatic local impact on the City. The City's northern area borders the southern end of the San Francisco Bay and is particularly vulnerable to sea level rise and is at an increased risk of flooding. Increased heat as a result of climate change can have a local impact on the health, safety, and welfare of the City's population, especially those without resources to purchase air conditioning, the elderly, disabled, or those with children. Failure to address and substantially reduce Greenhouse Gas creates an increased risk to the health, safety and welfare of the City residents;

- F. Amendments to the California Codes have been adopted in the past by the City Council based on specific findings of local geographic, topographic and climatic conditions; and the City Council hereby reaffirms such findings and confirms that the facts on which such findings were based continue to exist; and
- G. The provisions of this Ordinance establishing certain more restrictive standards than the California Codes will better serve to prevent or minimize structural and environmental damage resulting from local conditions;

WHEREAS, the City Council hereby makes the following additional findings with respect to cost effectiveness of any amendments to the California Codes for which such findings are required:

- A. An August 1, 2019 Low Rise Residential Reach Code Cost Effectiveness Study prepared by Frontier Energy, Inc. and Misti Bruceri & Associates, LLC, funded by California utility ratepayers and submitted to the California Energy Commission,

supports and documents the cost-effectiveness of the Ordinance;

- B. A July 25, 2019 Non-residential New Construction Reach Code Cost Effectiveness Study prepared by TRC Advanced Energy and Energy Soft, funded by California utility ratepayers and submitted to the California Energy Commission, further supports and documents the cost-effectiveness of the Ordinance;
- C. This Ordinance is in alignment with the cost effectiveness studies referenced above and therefore the City Council finds them to be cost-effective; and
- D. None of the provisions of this Ordinance change minimum efficiency standards, and therefore, this Ordinance is not preempted by federal appliance regulations.

NOW THEREFORE, BE IT FURTHER ORDAINED BY THE CITY OF SANTA CLARA AS FOLLOWS:

SECTION 1: RECITALS. The recitals set forth above are hereby incorporated herein by this reference.

SECTION 2: Chapter 15.36 AMENDED. Chapter 15.36 (Energy Code) of Title 15 (Buildings and Construction) of the Santa Clara City Code is hereby repealed and re-adopted to read as stated in Exhibit "A", attached hereto and incorporated herein by this reference.

SECTION 3: Chapter 15.38 AMENDED. Chapter 15.38 (Green Building Code) of Title 15 (Buildings and Construction) of the Santa Clara City Code is hereby repealed and re-adopted to read as stated in Exhibit "B", attached hereto and incorporated herein by this reference.

SECTION 4: STATUTORY REFERENCES, INCLUSIONS OF AMENDMENTS AND ADDITIONS. Whenever reference is made to any portion of this ordinance, or of any other

chapter or section of the Santa Clara City Code, or of any other ordinance of the City of Santa Clara, or of any law of the State of California, the reference applies to all amendments and additions now or thereafter made.

SECTION 5: INTERPRETATIONS. In interpreting and applying the provisions of this ordinance, the requirements contained herein are declared to be minimum requirements for the purposes set forth. The provisions of this ordinance, insofar as they are substantially the same as existing statutory provisions relating to the same subject matter, shall be construed as restatements and continuations and not as new enactments. This ordinance shall not nullify the more restrictive provisions of covenants, agreements or other ordinances or laws, but shall prevail as to such provisions which are less restrictive.

SECTION 6: FINDINGS. To the extent the changes and modifications set forth in this ordinance to the 2019 California Building Standards Code are deemed more restrictive than the standards contained in the 2019 California Building Standards Code, thus requiring findings describing local conditions that justify such modifications, the Council finds and determines that the changes are reasonably necessary because of local climatic, geologic, or topographic conditions, as set forth in the recitals to this ordinance.

SECTION 7: Savings clause. The changes provided for in this ordinance shall not affect any offense or act committed or done or any penalty or forfeiture incurred or any right established or accruing before the effective date of this ordinance; nor shall it affect any prosecution, suit or proceeding pending or any judgment rendered prior to the effective date of this ordinance. All fee schedules shall remain in force until superseded by the fee schedules adopted by the City Council.

SECTION 8: EFFECTIVE DATE. This ordinance shall take effect on January 1, 2022, and

prior to its final adoption it shall be published in accordance with the requirements of Section 808 and 812 of "The Charter of the City of Santa Clara, California." Notwithstanding the foregoing, the local modifications to the California Energy Code shall not be enforced until the California Energy Commission has made a finding that the standards will require buildings to be designed to consume less energy than permitted by the California Energy Code.

PASSED FOR THE PURPOSE OF PUBLICATION this XX day of XXXXXX, 2021, by the following vote:

AYES: COUNCILORS:

NOES: COUNCILORS:

ABSENT: COUNCILORS:

ABSTAINED: COUNCILORS:

ATTEST:

NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:

1. Exhibit A: Chapter 15.36 – Energy Code
2. Exhibit B: Chapter 15.38 – Green Building Standards Code

EXHIBIT A

CHAPTER 15.36 —ENERGY CODE

- 15.36.010. Title.**
- 15.36.020. Adoption by Reference.**
- 15.36.030. Definitions.**
- 15.36.040. Scope.**
- 15.36.050. Space-conditioning equipment.**
- 15.36.060. Service water-heating systems and equipment.**
- 15.36.070. Pool and spa systems and equipment.**
- 15.36.080. Natural gas pilot lights.**
- 15.36.090. Solar requirements.**

15.36.010. Adoption of Energy Code.

This chapter shall be known and may be cited and referred to as the “Energy Code for the City of Santa Clara.”

15.36.020. Adoption by reference.

The “2019 California Energy Code” adopted by the State Building Standards Commission in California Code of Regulations (CCR) Title 24, Part 6 is hereby adopted by reference, with changes and modifications as hereinafter set forth, as the “Energy Code” for the City of Santa Clara.

15.36.030. Definitions.

2019 California Energy Code Section 100.1(b) (Definitions) is hereby amended by adding the following definitions:

ALL ELECTRIC BUILDING: is a building or building design that has no natural gas or propane plumbing installed within the building, and that uses electricity as the source of energy for its space heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances not excluding any exceptions as defined below. All Electric Buildings may include solar thermal pool heating.

NEW CONSTRUCTION: For the purposes of All-Electric Building requirements, “newly constructed buildings” shall include the buildings defined in Section 100.1 as well as newly constructed additions and improvements in existing buildings where more than 50 percent of the exterior walls are removed or 50 percent of the wall plate height is raised. The Chief Building Official shall make the final determination regarding the application of this section.

For the purposes of All-Electric Building requirements, “newly constructed buildings” shall not include newly constructed additions and tenant improvements in existing buildings except as defined above.

15.36.040 Scope.

- (a) Any project that has submitted an application deemed complete by the Director of Community Development for either a planning or building entitlement prior to January 1, 2022, is exempt from the All-Electric Building requirements.
- (b) 2019 California Energy Code Section 100.0(e)2A (Newly constructed buildings – All newly constructed buildings) is hereby amended to read as follows:

100.0(e)2A. All newly constructed buildings. Sections 110.0 through 110.12 apply to all newly constructed buildings within the scope of Section 100.0(a). In addition, newly constructed buildings shall meet the requirements of Subsections B, C, D or E, as applicable, and shall be an All-Electric Building as defined in Section 100.1(b).

Exception 1: F, H, L Occupancies may utilize natural gas and shall provide installed rewiring for future use of electric appliances.

Exception 2: Exception for public agency owned and operated emergency centers. To take advantage of this exception, applicant shall provide third party verification that All-Electric space heating requirement is not cost effective and feasible.

Exception 3: Hotels with eighty or more guestrooms may utilize natural gas in on-site commercial laundry facilities only.

Exception 4: Non-residential kitchens may not utilize natural gas for cooking appliances unless the applicant establishes that there is not an all-electric option for the kitchen using commercially available technology. If the Building Official grants an exception, EnergySTAR rated natural gas appliances shall be used.

Exception 5: If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building under the Energy Code, and that the building is not able to achieve the performance compliance standard applicable to the building under the Energy Code using commercially available technology and an approved calculation method or if it is demonstrated that there is equivalent greenhouse gas reduction, then the Building Official may grant an exception.

Exception Process:

- a. Granting of Exception. If the Building Official or designee determines that it is infeasible for the applicant to fully meet the

requirements of this Chapter and one of the exceptions listed above applies, the Building Official or designee, shall determine the maximum feasible threshold of compliance reasonably achievable for the project. The decision of the Building Official or designee shall be provided to the applicant in writing. If an exception is granted, the applicant shall be required to comply with this Chapter in all other respects and shall be required to achieve, in accordance with this Chapter, the threshold of compliance determined to be achievable by the Building Official or designee.

- b. Denial of Exception. If the Building Official or designee determines that it is reasonably possible for the applicant to fully meet the requirements of this Chapter, the request shall be denied and the Building Official or designee shall so notify the applicant in writing. The project and compliance documentation shall be modified to comply with this Chapter prior to further review of any pending planning or building permit application.
- c. Appeals of Exception Denial. If denied the infeasibility exception, the applicant may appeal in writing to the Director of Community Development. The Director will consider the information provided and render a written decision regarding infeasibility based on the factors set forth in this Chapter. The decision of the Director shall be final.

Note 1: If natural gas appliances are used in any of the above exceptions 1-5, natural gas appliance locations must also be electrically pre-wired for future electric appliance installation. They shall include the following:

- 1. A dedicated circuit, phased appropriately, for each appliance, with a minimum amperage requirement for a comparable electric appliance (see manufacturer's recommendations) with an electrical receptacle or junction box that is connected to the electric panel with conductors of adequate capacity, extending to within 3 feet of the appliance and accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors;
- 2. Both ends of the conductor or conduit shall be labeled with the words "For Future Electric appliance" and be electrically isolated;
- 3. A circuit breaker shall be installed in the electrical panel for the branch circuit and labeled for each circuit, an example is as follows (i.e "For Future Electric Range;") and
- 4. All electrical components, including conductors, receptacles, junction boxes, or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

Note 2: If any of the exceptions 1-5 are granted, the Building Official shall have the authority to approve alternative materials, design and methods of construction or equipment per CBC 104.

15.36.050 Space-conditioning equipment.

2019 California Energy Code Section 110.2 (Mandatory Requirements for Space-Conditioning Equipment), first paragraph, is hereby amended to read as follows:

Certification by Manufacturers. Any space-conditioning equipment listed in this section may be installed only if the manufacturer has certified to the Commission that the equipment complies with all the applicable requirements of this section and section 100.0(e)2A.

15.36.060 Service water-heating systems and equipment.

2019 California Energy Code Section 110.3 (Mandatory Requirements for Service Water-Heating Systems and Equipment), subsection (a), first paragraph, is hereby amended to read as follows:

Certification by manufacturers. Any service water-heating system or equipment may be installed only if the manufacturer has certified that the system or equipment complies with all of the requirements of this subsection and section 100.0(e)2A for that system or equipment.

15.36.070 Pool and spa systems and equipment.

2019 California Energy Code Section 110.4 (Mandatory Requirements for Pool and Spa Systems and Equipment), subsection (a), first paragraph, is hereby amended to read as follows:

(a) Certification by manufacturers. Any pool or spa heating system or equipment may be installed only if the system or equipment meets the requirements of section 100.0(e)2A and the manufacturer has certified that the system or equipment has all of the following:

15.36.080. Natural gas pilot lights.

2019 California Energy Code Section 110.5 (Natural Gas Central Furnaces, Cooking Equipment, Pool and Spa Heaters, and Fireplaces: Pilot Lights Prohibited), first paragraph, is amended as follows:

110.5. Any natural gas system or equipment listed below may be installed only if it meets the requirements of Section 100.0(e)2A and does not have a continuously burning pilot light:

15.36.090. Solar requirements.

(a) **Title.** 2019 California Energy Code Section 110.10 (Mandatory Requirements for Solar-Ready Buildings), title, is hereby amended to read as follows:

SECTION 110.10 – MANDATORY REQUIREMENTS FOR SOLAR READY BUILDINGS AND SOLAR PANEL SYSTEM REQUIREMENTS FOR NON-RESIDENTIAL NEW BUILDINGS

- (b) **Hotel/Motel Occupancies and High-rise Multifamily Buildings.** 2019 California Energy Code Section 110.10(a)3 (Covered Occupancies – Hotel/Motel Occupancies and High-rise Multifamily Buildings) is hereby amended to read as follows:

3. Hotel/Motel Occupancies and High-rise Multifamily Buildings. Hotel/motel occupancies and high-rise multifamily buildings with ten habitable stories or fewer shall comply with the requirements of Section 110.10(b) through 110.10(d) and Table 110.10-A.

- (c) **Nonresidential Buildings.** 2019 California Energy Code Section 110.10(a)4 (Covered Occupancies – Nonresidential Buildings) is hereby amended to read as follows:

4. Nonresidential Buildings. Nonresidential buildings with three habitable stories or fewer, other than healthcare facilities, shall comply with the requirements of Section 110.10(b) through 110.10(d) and Table 110.10-A.

- (d) **Solar panel requirements for all new nonresidential and high-rise residential buildings.** 2019 California Energy Code Section 110.10(a) (Covered Occupancies) is hereby amended by adding the following table to the end of subsection (a):

Table 110.10-A: Solar panel requirements for all new nonresidential and high-rise residential buildings	
Square footage of building	Size of panel
Less than 10,000 sq. ft.	Minimum of 3-kilowatt PV systems
Greater than or equal to 10,000 sq. ft.	Minimum of 5-kilowatt PV systems
EXCEPTION: As an alternative to a solar PV system, the building type may provide a solar hot water system (solar thermal) with a minimum collector area of 40 square feet, additional to any other solar thermal equipment otherwise required for compliance with Part 6.	

- (e) **Minimum solar area - exceptions.** 2019 California Energy Code Section 110.10(b)1B (Minimum Solar Zone Area – Low-rise and High-rise Multifamily Buildings, Hotel/Motel Occupancies, and Nonresidential Buildings), Exception 2, is hereby amended to read as follows:

EXCEPTION 2 to Section 110.10(b)1B: High-rise multifamily buildings, hotel/motel occupancies with a permanently installed domestic solar water-

heating system complying with Section 150.1(c)8Biii and an additional collector area of 40 square feet.

- (f) **Minimum solar area – performance equivalency.** 2019 California Energy Code Section 110.10(b)1B (Minimum Solar Zone Area – Low-rise and High-rise Multifamily Buildings, Hotel/Motel Occupancies, and Nonresidential Buildings) is hereby amended by adding the following new Exception 6 after Exception 5:

EXCEPTION 6 to Section 110.10(b)1B: Performance equivalency approved by the building official.

- (g) **Minimum solar area – shading.** 2019 California Energy Code Section 110.10(b)3 (Minimum Solar Zone Area – Shading) is hereby amended by adding the following:

110.10(b)3C. The solar zone needs to account for shading from obstructions that may impact the area required in 110.10(b)1B. When determined by the Building Official that conditions exist where excessive shading occurs and solar zones cannot be met, a performance equivalency approved by the Building Official may be used as an alternative.

EXHIBIT B

CHAPTER 15.38—GREEN BUILDING CODE

- 15.38.010. Title.**
15.38.020. Adoption by Reference.
15.38.030. Definitions.
15.38.040. Residential mandatory measures—Electric vehicle (EV) charging.
15.38.050. Non-residential mandatory measures—Electric vehicle (EV) charging.

15.38.010. Title.

This chapter shall be known and may be cited and referred to as the “Green Building Code” for the City of Santa Clara.

15.38.020. Adoption by reference.

The “2019 California Green Building Standards Code” adopted by the State Building Standards Commission in California Code of Regulations (CCR) Title 24, Part 11 is hereby adopted by reference, with changes and modifications as hereinafter set forth, as the Green Building Code of the City of Santa Clara.

15.38.030. Definitions.

2019 California Green Building Standards Code Section 202 (Definitions) is hereby amended by adding the following definitions:

EV Capable: A parking space linked to a listed electrical panel with sufficient

capacity to provide at least 110/120 volts and 20 amperes to the parking space. Raceways linking the electrical panel and parking space only need to be installed in spaces that will be inaccessible in the future, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits. Raceways must be at least 1" in diameter and may be sized for multiple circuits as allowed by the California Electrical Code. The panel circuit directory shall identify the overcurrent protective device space(s) reserved for EV charging as "EV CAPABLE." Construction documents shall indicate future completion of raceway from the panel to the parking space, via the installed inaccessible raceways. The parking space shall contain signage with at least a ½" font adjacent to the parking space indicating the space is designated as EV Capable for future connection of infrastructure at the designed voltage and amperage levels.

Level 1 EV Ready Space: A parking space served by a complete electric circuit with a minimum of 110/120 volt, 20-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE).

Low Power Level 2 EV Ready Space: A parking space served by a complete electric circuit with 208/240 volt, 20 ampere minimum branch circuit capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE) with a minimum output of 15 amperes.

Level 2 EV Ready Space: A parking space served by a complete electric circuit with 208/240 volt, 40-ampere capacity including electrical panel capacity, overprotection device, a minimum 1" diameter raceway that may include multiple circuits as allowed by the California Electrical Code, wiring, and either a) a receptacle labelled "Electric Vehicle Outlet" with at least a ½" font adjacent to the parking space, or b) electric vehicle supply equipment (EVSE) with a minimum output of 30 amperes.

Level 3/Direct Current Fast Charger (DCFC): A parking space that includes the installation of a charger with the capacity to provide at least 80 kW of output.

Electric Vehicle Charging Station (EVCS): A parking space that includes installation of electric vehicle supply equipment (EVSE) with a minimum capacity of 30 amperes connected to a circuit serving a Level 2 EV Ready Space. EVCS installation may be used to satisfy a Level 2 EV Ready Space requirement. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.

Automatic Load Management Systems (ALMS): A control system which allows multiple EV chargers or EV-Ready electric vehicle outlets to share a circuit or panel and automatically reduce power at each charger, providing the opportunity to reduce electrical infrastructure costs and/or provide demand response capability. ALMS systems must be designed to deliver at least 1.4kW to each EV Capable, EV Ready or EVCS space served by the ALMS. ALMS systems must be designed to meet the requirements of California Electrical Code Article 625. The connected amperage on-site shall not be lower than the required connected amperage per Part 11, 2019 California Green Building Standards Code for the relevant building types.

Affordable Housing: Residential buildings that entirely consist of units below market rate and whose rents or sales prices are governed by local agencies to be affordable based on area median income.

15.38.040. Residential mandatory measures—Electric vehicle (EV) charging.

- (a) 2019 California Green Building Standards Code Section 4.106.4 (Electric vehicle (EV) charging for new construction) is hereby amended to read as follows:

4.106.4. Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.

Exceptions:

As per the CalGreen code, the Chief Building Official will make determination of exceptions.

1. Where there is no commercial power supply.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities, and without electrical panel upgrade or new panel installation. ADUs and JADUs without additional parking but with electrical panel upgrades or new panels must have reserved breakers and electrical capacity according to the requirements of 4.106.4.1.
3. Multifamily residential building projects with valid entitlements granted by the City that have not otherwise expired before the effective date of this ordinance shall provide at least ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, with Level 2 EV Ready Circuits. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

4. Spaces Accessible only by automated mechanical car parking systems are excepted from providing EV charging infrastructure.
- (b) 2019 California Green Building Standards Code Section 4.106.4.1 (New one- and two-family dwellings and townhouses with attached private garages) is hereby amended to read as follows:

4.106.4.1. New one- and two-family dwellings and townhouses.

1. In private garages with two or more parking spaces, install one Level 2 EV Ready Space and one Level 1 EV Ready Space.
2. For each dwelling unit with only one parking space, install a Level 2 EV Ready Space
3. For parking spaces not assigned to a dwelling unit:
 - a. 25% of the unassigned parking space(s) shall be Level 2 EV Ready Space(s)
 - b. 75% of the unassigned space(s) shall be Low Power Level 2 EV Ready Space(s)

Calculations for the required minimum number of EV Ready spaces shall be rounded up to the nearest whole number.

- (c) 2019 California Green Building Code Section 4.106.4.1.1 (Identification) is hereby amended to read as follows:

4.106.4.1.1. Identification. The raceway termination location shall be permanently and visibly marked as "Level 2 EV-Ready".

- (d) 2019 California Green Building Code Section 4.106.4.2 (New multifamily dwellings) is hereby amended to read as follows:

4.106.4.2. New multifamily dwellings. The following requirements apply to all new multifamily dwellings:

1. For multifamily buildings with less than or equal to 20 dwelling units, one parking space per dwelling unit with parking shall be provided with a Level 2 EV Ready Space.
2. When more than 20 multifamily dwelling units are constructed on a building site:
 - a. Provide one Level 2 EV Ready Space for each of the first 20 dwelling units with parking space(s)
 - b. For all additional dwelling units above 20 with parking space(s):

- i. 25% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space
- ii. 75% of dwelling units with parking spaces shall be provided with at least one Low Power Level 2 EV Ready Space

3. Additionally, all multifamily residential developments shall include secured bicycle parking with 110v electrical outlets.

Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number.

Exception: For all Multifamily Affordable housing, 10% of dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. The remaining dwelling units with parking space(s) shall each be provided with at least one Level 1 EV Ready Space.

Notes:

1. ALMS may be installed to decrease electrical service and transformer costs associated with EV Charging Equipment subject to review of the authority having jurisdiction.
2. Installation of Level 2 EV Ready Spaces above the minimum number required level may offset the minimum number Level 1 EV Ready Spaces required on a 1:1 basis.
3. The requirements apply to multifamily buildings with parking spaces including: a) assigned or leased to individual dwelling units, and b) unassigned residential parking.
4. In order to adhere to accessibility requirements in accordance with California Building Code Chapters 11A and/or 11B, it is recommended that all accessible parking spaces for covered newly constructed multifamily dwellings are provided with Level 1 or Level 2 EV Ready Spaces.

- (e) 2019 California Green Building Code Section 4.106.4.2.2 (Electric vehicle charging space (EV space) dimensions) is hereby amended to add an Exception to the end of the Section:

Exception: Where the City's Municipal Code permits parking space dimensions that are less than the minimum requirements stated in this section 4.106.4.2.2,

and the compliance with which would be infeasible due to particular circumstances of a project, an exception may be granted while remaining in compliance with 2019 California Building Code Section Table 11B-228.3.2.1 and 11B-812, as applicable.

- (f) 2019 California Green Building Code Section 4.106.4.2.3 (Electric vehicle charging space (EV space) dimensions) is hereby replaced to read as follows:

4.106.4.2.3 Automated Load Management Systems. As defined in Section 2, ALMS shall be allowed to meet the requirements of 4.106.4.2.

- (g) 2019 California Green Building Code Section 4.106.4.3 (New Hotels and Motels) is hereby amended to read as follows:

4.106.4.3 New Hotels and Motels: In residential new construction buildings designated primarily for hotel and motel use with parking spaces:

1. 10% of parking spaces shall be Level 2 EVCS.
2. An additional 50% of parking spaces shall be EV Capable spaces.

Calculations for the required minimum number of spaces equipped with Level 2 Ready Space and EV Capable spaces shall all be rounded up to the nearest whole number.

Construction plans and specifications shall demonstrate that all raceways shall be a minimum of 1" and sufficient for installation of Level 2 Ready Space and all required EV Capable spaces; Electrical calculations shall substantiate the design of the electrical system to include the rating of equipment and any on-site distribution transformers, and have sufficient capacity to simultaneously charge EVs at all required EV spaces including EV Capable spaces; and service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

Notes:

1. ALMS may be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without ALMS.
- (h) The following sections of the 2019 California Green Building Code Section are deleted in their entirety: 4.106.4.3.1 (Number of required EV spaces), 4.106.4.3.3 (Single EV space required), 4.106.4.3.4 (Multiple EV spaces required), and 4.106.4.3.5 (Identification).

15.38.050. Nonresidential mandatory measures—Electric vehicle (EV) charging.

- (a) 2019 California Green Building Code Section 5.106.5.3 (Electric vehicle (EV) charging) is hereby amended to read as follows:

5.106.5.3. Electric vehicle (EV) charging. New construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation and use of EVSE.

Exceptions:

1. Where there is no commercial power supply.
2. Spaces accessible only by automated mechanical car parking systems are excepted from providing EV charging infrastructure.
3. Installation of each Level 3/Direct Current Fast Charger with the capacity to provide at least 80 kW output may substitute for 11 Level 2 EVCS spaces after a minimum of 11 Level 2 EVCS spaces are installed.

- (b) 2019 California Green Building Code Section 5.106.5.3.1 (Single charging space requirements) is hereby amended to read as follows:

5.106.5.3.1. Office buildings: In nonresidential new construction buildings designated primarily for office use with parking:

1. 35% of parking spaces shall be provided with at least one Level 2 EVCS.
2. An additional 35% of parking spaces shall be EV Capable.

Calculations for the required minimum number of spaces equipped with Level 2 EVCS and EV Capable spaces shall all be rounded up to the nearest whole number.

Construction plans and specifications shall demonstrate that all raceways shall be a minimum of 1" and sufficient for installation at all required EVCS; Electrical calculations shall substantiate the design of the electrical system to include the rating of equipment and any on-site distribution transformers, and have sufficient capacity to simultaneously charge EVs at all required EVCE including EV Capable spaces; and service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

Notes:

1. ALMS may be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without ALMS.

- (c) 2019 California Green Building Code Section 5.106.5.3.2 (Multiple charging space requirements) is hereby amended to read as follows:

5.106.5.3.2. Other nonresidential buildings. In nonresidential new construction buildings that are not designated primarily for office use, such as retail or institutional uses:

1. 35% of parking spaces shall be provided with at least one Level 2 EVCS.
2. An additional 35% of parking spaces shall be EV Capable.

Calculations for the required minimum number of spaces equipped with Level 2 EVCS shall be rounded up to the nearest whole number

Notes:

1. ALMS may be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without ALMS.

- (d) 2019 California Green Building Code Section 5.106.5.3.3 (EV charging space calculation) is hereby amended to read as follows:

5.106.5.3.3. Clean Air Vehicle Parking Designation. EVCS qualify as designated parking as described in Section 5.106.5.2 (Designated parking for clean air vehicles).

Notes:

1. The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD) to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives number 13-01. www.dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/f0018447-13-01-a11y.pdf
2. See Vehicle Code Section 22511 for EV charging spaces signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor's Office of Planning and Research published a Zero-Emission Vehicle Community Readiness Guidebook which provides helpful information for local governments, residents and businesses. www.opr.ca.gov/docs/ZEV_Guidebook.pdf.

4. Section 11B-812 of the California Building Code requires that a facility providing EVCS for public and common use also provide one or more accessible EVCS as specified in Table 11B-228.3.2.1.
5. It is encouraged that shared parking, EV Ready are designated as "EV preferred."

(e) 2019 California Green Building Code Section 5.106.5.3.4 (Identification) is hereby amended to read as follows:

5.106.5.3.4. Identification. The raceway termination location shall be permanently and visibly marked as "EV Ready".

(f) 2019 California Green Building Code Section 5.106.5.3.5 (Future charging stations) is hereby deleted in its entirety and replaced with the following:

5.106.5.3.5 Automated Load Management Systems. As defined in Section 2, ALMS shall be allowed to meet the requirements of 5.106.5.3.1

2019 Cost-Effectiveness Study: 2020 Analysis of High-Rise Residential New Construction

Last Modified: 2021-02-22

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Acronym List

2020 PV\$	Present Value costs in 2020 dollars
ACM	Alternative Calculation Method
B/C	Benefit-to-Cost as in Benefit-to-Cost ratio
BSC	Building Standards Commission
CALGreen	California Green Building Standards Code (California Code of Regulations Title 24, Part 11)
CASE	Codes and Standards Enhancement
CBECC-Com	California Building Energy Code Compliance software program developed by the California Energy Commission for use in demonstrating compliance with the Non-Residential California Building Energy Efficiency Standards
cfm	Cubic Feet per Minute
CPAU	City of Palo Alto Utilities
CPC	California Plumbing Code
CZ	California Climate Zone
DOAS	Dedicated Outdoor Air System
ERV/HRV	Energy- or Heat-Recovery Ventilation
EPS	Expanded Polystyrene
ft ²	Square foot
GHG	Greenhouse Gas
GRC	General Rate Case
HERS Rater	Home Energy Rating System Rater
HPWH	Heat Pump Water Heater
HVAC	Heating, Ventilation, and Air Conditioning
IOU	Investor-Owned Utility
kBtu	kilo-British thermal unit
kWh	kilowatt-hour
KWDC	Direct Current kilowatt. Nominal rated power of a photovoltaic system
LCC	Lifecycle Cost
NEM	Net Energy Metering
NPV	Net Present Value
PG&E	Pacific Gas and Electric Company
PV	Photovoltaic
SCE	Southern California Edison

SDG&E	San Diego Gas and Electric
SHGC	Solar Heat Gain Coefficient
SMUD	Sacramento Municipal Utility District
TDV	Time Dependent Valuation
therm	Unit for quantity of heat that equals 100,000 British thermal units
Title 24	California Code of Regulations Title 24, Part 6
TOU	Time-Of-Use
UEF	Uniform Energy Factor
W	Watt
WDC	Watt Direct Current.

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1 Introduction

The California Codes and Standards Reach Codes program provides technical support to local governments considering adopting a local ordinance (reach code) intended to support meeting local and/or statewide energy and greenhouse gas (GHG) reduction goals. The program facilitates adoption and implementation of the code when requested by local jurisdictions by providing resources such as cost-effectiveness studies, model language, sample findings, and other supporting documentation. This cost-effectiveness study was sponsored by Pacific Gas and Electric Company (PG&E). Local jurisdictions that are considering adopting ordinances may contact the program for support through its website, [LocalEnergyCodes.com](https://www.localenergycodes.com).

The California Building Energy Efficiency Standards Title 24, or Title 24, Part 6 (Title 24) (California Energy Commission, 2018a) is maintained and updated every three years by two state agencies: the California Energy Commission (Energy Commission) and the Building Standards Commission (BSC). In addition to enforcing the code, local jurisdictions have the authority to adopt local energy efficiency ordinances—or reach codes—that exceed the minimum standards defined by Title 24 (as established by Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards). Local jurisdictions must demonstrate that the requirements of the proposed ordinance are cost-effective and result in buildings consuming less energy than is permitted by Title 24. In addition, the jurisdiction must obtain approval from the Energy Commission and file the ordinance with the BSC for the ordinance to be legally enforceable.

This report documents cost-effective combinations of measures that exceed the minimum state requirements, 2019 Title 24, effective January 1, 2020. Local jurisdictions in California may consider adopting local energy ordinances to achieve energy savings beyond what will be accomplished by enforcing building efficiency requirements that apply statewide. This report was developed in coordination with the California Statewide Investor-Owned Utilities (IOUs) Codes and Standards Program, key consultants, and engaged cities—collectively known as the Statewide Reach Codes Team.

The focus of this study is on new high-rise (eight stories and higher) multifamily residential construction. The analysis evaluates both mixed-fuel and all-electric residential construction, documenting performance requirements that can be met by either type of building design. Compliance package options and cost-effectiveness analysis in all 16 California climate zones (CZs) are presented (see Appendix A – Map of California Climate Zones for a graphical depiction of climate zone locations). This analysis complements the analysis conducted for mid-rise multifamily residential construction in June 2020 (Statewide Reach Codes Team, 2020).

2 Methodology and Assumptions

This analysis uses two different metrics to assess cost effectiveness. Both methodologies require estimating and quantifying the incremental costs and energy savings associated with energy efficiency measures. The main difference between the methodologies is the way they value energy and thus the cost savings of reduced or avoided energy use:

- **Utility Bill Impacts (On-Bill):** Customer-based Lifecycle Cost (LCC) approach that values energy based upon estimated site energy usage and customer On-Bill savings using electricity and natural gas utility rate schedules over a 30-year duration accounting for discount rate and energy cost inflation.
- **Time Dependent Valuation (TDV):** Energy Commission LCC methodology, which is intended to capture the “societal value or cost” of energy use including long-term projected costs, such as the cost of providing energy during peak periods of demand and other societal costs, such as projected costs for carbon emissions, as well as grid transmission and distribution impacts. This metric values energy use differently depending on the fuel source (natural gas, electricity, and propane), time of day, and season. Electricity used (or saved) during peak periods has a much higher value than electricity used (or saved) during off-peak periods (Horii et al., 2014). This is the methodology used by the Energy Commission in evaluating cost effectiveness for efficiency measures in Title 24. Both 2019 and 2022 TDV multipliers are evaluated and documented in this analysis.

The general approach applied in this analysis is to evaluate performance and determine cost effectiveness of various packages of energy measures in high-rise multifamily dwelling units. The California Building Energy Code Compliance – Commercial (CBECC-Com) 2019.1.3 and 2022 beta compliance simulation tools were used to evaluate energy savings for all measures. 2022 weather files were used to evaluate site energy use and TDV cost effectiveness along with the 2022 TDV.

2.1 Building Prototypes

The Energy Commission defines building prototypes which it uses to evaluate the cost effectiveness of proposed changes to Title 24 requirements. The Energy Commission recently developed new prototype designs for multifamily buildings to more closely reflect typical designs for new multifamily buildings across the state. The new prototypes include two low-rise residential designs, a mid-rise, and a high-rise design. This analysis uses the new high-rise multifamily prototype (TRC, 2019), which is a variation of the previous ten-story high-rise prototype used in prior code cycles. The high-rise prototype is a ten-story building with two below-grade parking levels, ground floor commercial space, and nine stories of residential space. Table 1 describes the basic characteristics of the high-rise prototype and Figure 1 shows a depiction of the building.

Table 1: Prototype Characteristics

Multifamily 10-Story High-Rise	
Conditioned Floor Area	125,400 Square Foot (ft ²) Total: 24,960 ft ² Nonresidential ^a & 100,440 ft ² Residential
Number of Stories	12 Stories Total: 2-Story Parking Garage (below grade) 1 Story of Nonresidential Space 9 Stories of Residential Space
Number of Dwelling Units/Bedrooms	(18) Studios, (54) 1-Bed Units, & (45) 2-Bed Units
Foundation	Concrete Podium with Underground Parking
Wall Assembly	Steel Frame
Roof Assembly	Flat Roof
Window-to-Wall Area Ratio	40%
HVAC System	Ducted split system heat pumps at each dwelling unit. Dedicated outdoor air system for dwelling unit ventilation.
Domestic Hot Water System	Gas central boiler with solar thermal sized to meet the prescriptive requirements by climate zone.

^a. includes ground floor commercial space, corridors and common areas.

Source: TRC, 2019.



Figure 1: Ten-story high-rise multifamily prototype depiction.

Source: TRC, 2019.

The methodology used in the analyses for the prototypical building type begins with a design that meets the minimum 2019 Title 24 prescriptive requirements (zero compliance margin). Table 140.3-B and 140.3-C in the 2019 Title 24 (California Energy Commission, 2018a) list the prescriptive measures that determine the baseline design in each climate zone for the nonresidential and high-rise residential spaces, respectively. Other features are consistent with the Standard Design in the Nonresidential Alternative Calculation Method (ACM) Reference Manual (California Energy Commission, 2019a) with two exceptions:

1. The dwelling units use split system heat pumps instead of a split furnace and air conditioner that is prescribed in Table 2 of the Nonresidential ACM Reference Manual. This modeling choice was made to better reflect current market data, which shows heat pumps to be the most common system type and a very low prevalence of gas furnaces for multifamily buildings four stories and greater (TRC, 2019). In most climate zones the difference between a heat pump or gas furnace is nearly compliance neutral.
2. A dedicated outdoor air system (DOAS) is used for ventilation serving the dwelling units. This is based on anecdotal information that this practice is more common than individual ventilation systems in high-rise buildings. It also provides variability across the mid- and high-rise analysis, which is important so that this analysis provides more realistic solutions for the high-rise multifamily building type. The selection of a DOAS does not match the Standard Design, which applies individual balanced fans for ventilation at all residential spaces, and results in a small compliance penalty.¹

The analysis also assumed electric resistance cooking in the dwelling unit units to reflect the current market based on anecdotal information. Laundry was not addressed in this study. The building prototype assumes central laundry facilities and no laundry in the units.

2.2 Measure Analysis

EnergyPro software, using CBECC-Com as the simulation engine, was used to evaluate energy impacts and code compliance applying the 2019 Title 24 prescriptive standards as the benchmark. TDV is the energy metric used by Title 24 since 2005 to evaluate compliance. Although both the 2019 and 2022 compliance software were used for evaluation, the 2019 software was used for reporting compliance margins and the 2022 software, with the 2022 weather, was used for reporting site energy and utility bill impacts.

Using the 2019 baseline as the starting point, prospective energy efficiency measures were identified and modeled to determine the projected site energy (therm and kWh) and compliance impacts. Annual utility costs were calculated using hourly data output from CBECC-Com, and electricity and natural gas tariffs for each of the IOUs.

The Statewide Reach Codes Team selected measures for evaluation based on prior residential and nonresidential 2019 reach code analysis ((Statewide Reach Codes Team, 2019a), (Statewide Reach Codes Team, 2019b), (Statewide Reach Codes Team, 2020)) as well as experience with and outreach to architects, builders, and engineers and general knowledge of the relative acceptance of many measures. This analysis focuses on the residential dwelling units only. A prior study and report demonstrated the cost effectiveness of above code packages for nonresidential buildings (Statewide Reach Codes Team, 2019a).

2.2.1 Federal Preemption

The United States Department of Energy sets minimum efficiency standards for equipment and appliances that are federally regulated under the National Appliance Energy Conservation Act of 1975, including heating, cooling, and water heating equipment. Since state and local governments are prohibited from adopting policies that mandate higher minimum efficiencies than the federal standards require (federal preemption), the focus of this study is to identify and evaluate cost-effective packages that do not include high efficiency equipment. While this

¹ The compliance penalty is not reflected in the results in this analysis since the baseline and proposed designs both include a DOAS.

study is limited by federal preemption, in practice builders may use any package of compliant measures to achieve the performance goals, including high efficiency appliances. Often, these measures are the simplest and most affordable measures to increase energy performance.

2.2.2 Energy Efficiency Measures

Following are descriptions of each of the efficiency measures evaluated for the residential spaces under this analysis. Because not all of the measures described below were found to be cost-effective, and cost effectiveness varied by climate zone, not all measures are included in all packages and some of the measures listed are not included in any final package.

Improved Fenestration – Lower U-factor: Reduce window U-factor to 0.25 Btu/hour-ft²-°F. The prescriptive maximum U-factor is 0.36 in all climates. This measure applies to all windows on floors two through ten.

Improved Fenestration – Lower SHGC: Reduce window solar heat gain coefficient (SHGC) to 0.22. The prescriptive maximum SHGC is 0.25 for fixed windows in all climates. The Statewide Reach Codes Team evaluated increased SHGC in heating dominated climates (Climate Zones 1, 3, 5, and 16) but results were better with a lower SHGC. This measure applies to all windows on floors two through ten.

Exterior Wall Insulation: Additional R-4 exterior continuous insulation on exterior walls. To meet the prescriptive wall requirements, it is assumed that exterior wall insulation is used in the base case, therefore this measure adds the additional R-value to existing exterior insulation. This measure applies to all walls on floors two through ten.

HERS Verification of Hot Water Pipe Insulation: The California Plumbing Code (CPC) requires pipe insulation on all hot water lines. This measure provides credit for HERS Rater verification of pipe insulation requirements according to the procedures outlined in the 2019 Reference Appendices RA3.6.3. (California Energy Commission, 2018b).

Low Pressure Drop Ducts: Upgrade the duct distribution system to reduce external static pressure and meet a maximum fan efficacy of 0.25 watts (W) per cubic feet per minute (cfm) operating at full speed. This may involve upsizing ductwork, reducing the total effective length of ducts, and/or selecting low pressure drop components, such as filters. This measure is applied to the ducted split system heat pumps serving the dwelling units.

Energy- or Heat- Recovery Ventilation: An energy- or heat-recovery ventilation (ERV/HRV) system installed on the central DOAS with 67 percent sensible recovery effectiveness and 1.0 W/cfm fan efficacy (total including both supply and return fans). The DOAS in the base case model also has a 1.0 W/cfm fan efficacy, so there is no fan efficacy credit or penalty evaluated for this measure.

Solar Thermal: Prescriptively, central water heating systems require a solar thermal system with a 20 percent solar fraction in Climate Zones 1 through 9 and 35 percent solar fraction in Climate Zones 10 through 16. This measure upgrades the prescriptive solar thermal system to meet a 50 percent solar fraction in all climates, assuming there is available roof space for the additional collectors.

2.2.3 Equipment Fuel Substitution Measures – Water Heating

Since the base case prototype model assumes individual heat pumps for space heating and all-electric appliances in the dwelling units, the central domestic hot water system is the only equipment serving the dwelling unit spaces to electrify in the all-electric design. The Statewide Reach Codes Team evaluated two configurations for electric heat pump water heaters (HPWHs) described below.

New functionality was added to CBECC-Com 2019.1.3 with the ability to model central HPWH systems. There are two primary system types: “Small, Integrated, Packaged System” and “Large Single Pass Primary”. The former allows for modeling 40- to 85-gallon residential HPWHs including Northwest Energy Efficiency Alliance rated units and is how the clustered approach referred to in this analysis is modeled. The latter models large central HPWHs and covers various product models over six manufacturers (at the time of writing this report). CBECC-Com 2019.1.3 also provides a “Solar Thermal Flexibility Credit” to allow for projects with electric central water heating to use a photovoltaic (PV) system to offset the energy use of the solar thermal system in the Standard Design base case. Under these conditions, PV’s impact on compliance margin is limited to the value of the solar thermal credit.

Central HPWH with Recirculation: Per Section 150.1(c)8C of 2019 Title 24, the Energy Commission made an executive determination outlining requirements of a prescriptive approach for central heat pump water heating systems in December 2019 (California Energy Commission, 2019b). Key aspects of the prescriptive approach are described below:

- The system must be configured with a design similar to what is presented in the schematic in Figure 2, copied from the executive determination document.
- HPWH must be a single-pass split system with the compressor located outdoors and be able to operate down to -20°F.
- The system must include either a solar thermal water heating system that meets the current prescriptive requirements or 0.1 direct current kilowatt (kW_{DC}) of PV system capacity per dwelling unit/dwelling unit.

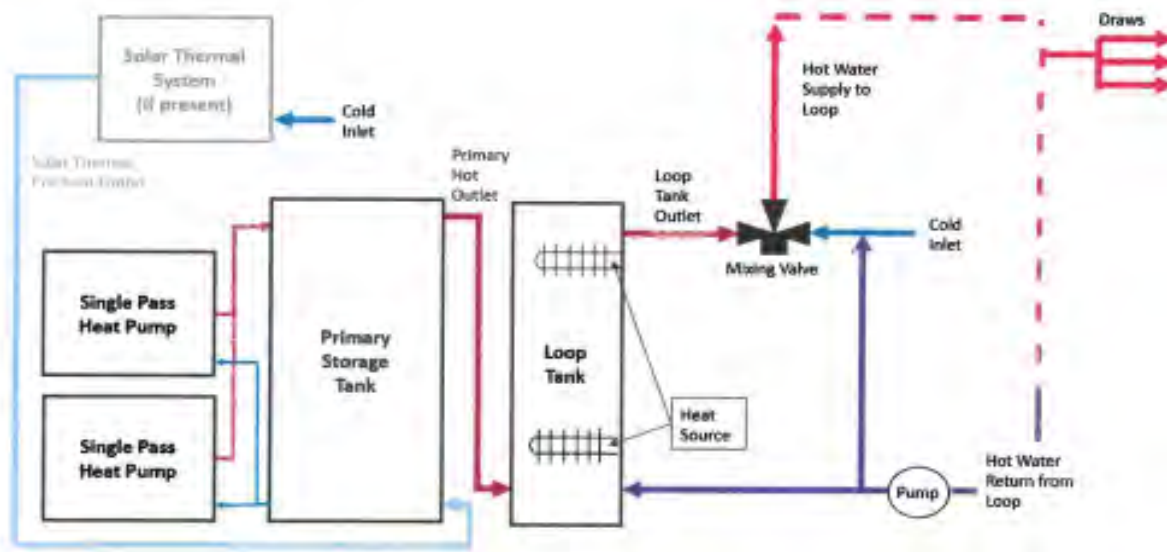


Figure 2: Prescriptive central HPWH system schematic.

Source: Energy Commission (California Energy Commission, 2019b).

For this configuration, the Statewide Reach Codes Team evaluated a central recirculating HPWH system using Sanden compressors that meet the prescriptive requirements. Based on the system sizing requirements, 19 Sanden units and 1,520 gallons of primary storage capacity are required for the 117-dwelling unit building. The system is modeled with the tanks located indoors in a conditioned zone and source air provided from outdoors with the Sanden units likely located on rooftops. The rooftop space required for the heat pump units and the prescriptive PV system (0.1 kW_{DC} per dwelling unit) will be similar or less than that required for the prescriptive solar thermal water heating system. The recirculation system is demand controlled meeting the requirements of the 2019 Reference Appendices RA4.4.13.

Clustered HPWH: This clustered design uses residential integrated storage HPWHs to serve more than one dwelling unit; four to five bedrooms on average for a total of 38 HPWHs in the 117-dwelling unit, 162-bed building. The water heaters are located in conditioned interior closets throughout the building and designed for short plumbing runs without using a hot water recirculation loop. A minimum efficiency 2.0 uniform energy factor (UEF) HPWH was used for this analysis (to avoid federal preemption). This approach has been selectively used in multifamily projects because of its reliance on lower cost, small capacity HPWH products. The clustered strategy is not a prescriptive option but is allowed in the performance path if the water heater serves no more than eight units. Since each water heater serves multiple dwelling units, the Standard Design includes a solar thermal water heating system and the project is penalized in compliance if a solar thermal or PV system is not included.

2.2.4 Renewable Energy

PV: There is no existing requirement for PV in the 2019 Title 24 nonresidential code for high-rise residential buildings (four or more stories). The PV sizing methodology was developed to offset a portion of annual residential electricity use and avoid oversizing which would violate net energy metering (NEM) rules. In all cases, PV is evaluated with the PV simulations within CBECC-Com using a standard module type, 180-degree azimuth, and 22-degree tilt. The analysis evaluated a PV system capacity equal to 0.1 and 0.2 kW_{DC} per dwelling unit. Assuming 15 W per ft² this requires 780 to 1,560 ft² of the 12,540 ft² rooftop. The benefit of the PV was applied to the dwelling units assuming virtual NEM.

2.2.5 Nonresidential and Common Area Spaces

Efficiency measure packages and electric equipment (for the all-electric analysis) found to be cost-effective in the nonresidential building reach code analysis were applied to the nonresidential spaces for evaluating performance relative to compliance, but the incremental costs and energy impacts of these measures on the nonresidential spaces were not included in this analysis. Refer to the nonresidential reach code study for more details (Statewide Reach Codes Team, 2019a).

2.3 Package Development

Three types of measure packages were evaluated for each climate zone to identify cost-effective combinations, as described below.

1. **Efficiency Packages:** These packages combine efficiency measures that do not trigger federal preemption including envelope, water heating distribution, and duct distribution efficiency measures.
2. **Fuel Substitution:** In addition to applying the efficiency measures these packages also use electric appliances in place of natural gas appliances. For the residential spaces, only water heating is converted from using natural gas to electricity.
 - a. For water heating both a central design with recirculation and a clustered design are evaluated.
3. **Efficiency and PV Packages (with or without fuel substitution):** In addition to applying efficiency measures these packages have a PV system to offset a portion of dwelling unit estimated electricity use.

2.4 Measure Cost

Measure costs were obtained from various sources, including prior reach code studies, past Title 24 Codes and Standards Enhancement (CASE) work (developed by the Statewide CASE Team), local contractors, internet searches, past projects, and technical reports.

2.4.1 Energy Efficiency and Renewable Measures

Table 2 summarizes the incremental cost assumptions for the residential measures evaluated in this study. Incremental costs represent the equipment, installation, replacement, and maintenance costs of the proposed measures relative to the base case. Replacement costs are applied to PV inverters and water heating equipment over the 30-year evaluation period. There is no assumed incremental maintenance on the envelope, HVAC, or water heating measures. Costs were estimated to reflect costs to the building owner. When costs were obtained from a source that did not already include builder overhead and profit, a markup of ten percent was added. All costs are provided as present value in 2020 (2020 PV\$). Costs due to variations in heat pump capacity by climate zone were not accounted for in the analysis. While the efficiency measures will reduce required cooling and heating capacities, in most cases they will not be reduced enough to drop to the next nominal capacity system.

Table 2: Incremental Cost Details

Measure	Performance Level	Incremental Cost (2020 PV\$)	Source & Notes
Non-Preempted Measures			
Window U-factor	0.25 vs 0.36	\$27,342	\$6.95/ft ² window area based on analysis conducted for the 2019 and 2022 Title 24 code cycles (Statewide CASE Team, 2018).
Window SHGC	0.22 vs 0.25	\$0	Data from CASE Report along with direct feedback from Statewide CASE Team that higher SHGC does not necessarily have any incremental cost impact (Statewide CASE Team, 2017b).
Exterior Wall Insulation	Add 1 inch	\$8,497	\$0.86/ft ² based on adding 1 inch of exterior insulation on exterior walls with some level of existing exterior insulation. Costs are averaged from two sources ((Statewide CASE Team, 2014), (Statewide CASE Team, 2017a)) and for both expanded polystyrene (EPS) and polyisocyanurate products with a 10% mark-up added to account for cost increases since the time of the report.
HERS Verified Pipe Insulation	HERS verified pipe insulation vs no verification	\$13,275	\$83 per dwelling unit for a HERS Rater to conduct verification of pipe insulation based on feedback from HERS Raters.
Low Pressure Drop Duct Design	0.25 W/cfm vs 0.35 W/cfm	\$16,824	\$144 per dwelling unit. Costs assume 1.5 hours labor per multifamily dwelling unit. Labor rate of \$96 per hour is from 2019 RSMeans for sheet metal workers and includes an average City Cost Index for labor for California cities.
ERV/HRV (on central DOAS)	67% sensible recovery effectiveness	\$110,331	Based on costs from the Multifamily Indoor Air Quality 2022 CASE Report (Statewide CASE Team, 2020b).
Solar Thermal System	50% solar fraction vs prescriptive 20%-35%	\$59,452 - \$84,932	Costs based on 2022 multifamily solar thermal measure CASE proposal (Statewide CASE Team, 2020a) and include first cost of \$70,727 and \$8,834 present value for replacement/maintenance costs.
Renewable Energy (PV)			
PV System	0.1 and 0.2 kW _{DC} per dwelling unit	\$3.17/W _{DC}	<p>First costs are from Lawrence Berkeley National Laboratory's Tracking the Sun 2018 costs (Barbose et al., 2018) and represent costs for the first half of 2018 of \$2.90/W_{DC} for nonresidential systems ≤ 500 kW_{DC}. These costs were reduced by 16% for the solar investment tax credit, which is the average credit over years 2020-2022.</p> <p>Inverter replacement cost of \$0.14/W_{DC} present value includes replacements at year 11 at \$0.15/W_{DC} (nominal) and at year 21 at \$0.12/W_{DC} (nominal) per the 2019 PV CASE Report (California Energy Commission, 2017).</p> <p>System maintenance costs of \$0.31/W_{DC} present value assumes additional \$0.02/W_{DC} (nominal) annually per the 2019 PV CASE Report (California Energy Commission, 2017).</p> <p>10% overhead and profit added to all costs.</p>

2.4.2 Equipment Fuel Substitution Measures – Water Heating

The Statewide Reach Codes Team reached out to stakeholders to collect project cost information for central gas boilers and central recirculating and clustered HPWH designs. Project data sources included Association for Energy Affordability, Redwood Energy, Mithun, Ecotope, and the All-Electric Multifamily Compliance Pathway 2022 CASE Report (Statewide CASE Team, 2020a). Costs are presented in Table 3 and do not include PV system costs. The cases were evaluated with and without PV even though PV or solar thermal is prescriptively required as part of the electric central water heating prescriptive approach.

Table 3: Gas and Electric Water Heating Equipment Present Value (2020\$) Costs over 30-Year Period of Analysis

	Central Gas Boiler (CZs 1-9)	Central Gas Boiler (CZs 10-16)	Central Recirculating HPWH	Clustered HPWH
System Quantity/Description	1 boiler recirculation		19 units, 1,547-gallon total	38 units, 80-gallon each
Total Equipment Cost	\$131,270		\$270,261	\$153,409
Solar Thermal System	(20% solar fraction) \$122,216	(35% solar fraction) \$147,696	-	-
Total First Cost	\$253,486	\$278,966	\$270,261	\$153,409
Maintenance/Replacement Cost (PV)	\$90,167	\$90,167	\$147,450	\$98,467
Total Cost (NPV)	\$343,653	\$369,133	\$417,710	\$251,876
Incremental Cost CZ 1-9 (PV)	-	-	\$74,057	(\$91,777)
Incremental Cost CZ 10-16 (PV)	-	-	\$48,577	(\$117,257)

Source: Statewide CASE Team, 2020a.

Typical costs for the water heating systems are based on the following assumptions:

Central Gas Boiler: Based on the average of total estimated project costs from contractors for four multi-family projects ranging from 32 to 340 dwelling units and cost estimates for mid- and high-rise buildings from the All-Electric Multifamily Compliance Pathway 2022 CASE Report (Statewide CASE Team, 2020a). The cost per dwelling unit ranged from \$547 to \$2,089 and the average cost applied in this analysis was \$1,122 per dwelling unit. Costs include installation of gas piping from the building meter to the water heater. Water heater lifetime is assumed to be 15 years and the net present value (NPV) replacement cost at year 15 is \$84,257.

Central Recirculating HPWH: Based on average total installed project costs from four multi-family projects with Sanden HPWHs ranging from four to 16 Sanden units per project. The cost per Sanden HPWH ranged from \$13,094 to \$15,766 and the average cost applied in this analysis was \$14,224 per HPWH. Based on the prescriptive system sizing requirements, 19 Sanden units are required for the 117-dwelling unit building, resulting in a total first cost of \$270,261. Water heater lifetime is assumed to be 15 years. Because Sanden HPWHs are an emerging technology in the United States, it is expected that over time their costs will decrease and for replacement at year 15 the costs are assumed to have decreased by 15 percent.

Clustered HPWH: Based on costs from one project with RHEEM HPWHs used in a clustered design. Costs include water heater interior closet, electrical outlets, and increased breaker size and sub feed. Water heater based on 2.0 UEF 80-gallon appliance with 38 total HPWHs serving the building (one per four to five bedrooms). Water heater lifetime is assumed to be 15 years and the NPV replacement cost at year 15 is \$98,467. While this has an impact on leasable floor area, the design impacts have been found to be minimal when addressed early in design and is equivalent to less than one percent of the residential floor area. This design assumes eight water heater closets per floor, at approximately 15 ft² per closet.

Solar Thermal: Based on system costs provided in the All-Electric Multifamily Compliance Pathway 2022 CASE Report (Statewide CASE Team, 2020a). First costs for materials for the 35 percent solar fraction case and the markup percentage reflect that presented in the CASE Report for the high-rise prototype. The labor costs and 20 percent solar fraction case costs are estimated based on detailed costs in the CASE Report. Replacement and maintenance costs assume replacement of the solar thermal tank at year 15 at \$6,110 and glycol replacement of \$1,300 each time at years 9, 18, and 27. The cost of the remaining useful life of the glycol at year 30 is deducted from the final cost. The CASE Report included costs for replacing the solar collectors at year 20. Collectors can have longer lifetimes up to 30 years if well maintained, therefore this analysis does not assume any replacement of the collectors over the 30-year analysis period. See Table 4 for details.

Table 4: Solar Thermal Detailed Costs over 30-Year Period of Analysis

Solar Fraction	20%	35%
Materials	\$39,854	\$57,450
Labor	\$56,001	\$58,390
Markup	27.5%	27.5%
First Cost	\$122,216	\$147,696
Replacement/Maintenance (2020 \$PV)	\$5,910	\$5,910
Total Cost (2020 \$PV)	\$128,126	\$153,605

Source: Statewide CASE Team, 2020a.

2.4.3 Natural Gas Infrastructure Costs

This analysis assumes that in an all-electric new construction project, natural gas would not be supplied to the building. Eliminating natural gas to the building would save costs associated with connecting a service line from the street main to the building, piping distribution within the building, and monthly meter customer charges from the utility. Incremental costs for natural gas infrastructure in the mixed-fuel building are presented in Table 5. Cost data for the plan review and service extension was estimated on a per building basis and then apportioned to the residential and nonresidential portions of the buildings based on annual gas consumption. For the base case prototype building 49 to 82 percent of estimated building annual gas use is attributed to the residential water heating system across all climate zones. A statewide average of 75 percent was calculated and applied to the costs in Table 5 based on housing starts provided by the Energy Commission for the 2019 Title 24 code development process. The meter costs were based on the service provided to the residential and nonresidential portion of the building separately. Following the table are descriptions of assumptions for each of the cost components. Costs for gas piping from the meter to the gas boilers are included in the central gas boiler costs above. Gas piping distribution costs were typically included in total project costs and could not be broken out in all cases.

Table 5: Natural Gas Infrastructure Cost Savings for All-Electric Building

Item	Source	Total	Nonresidential Portion	Residential Portion
Natural Gas Plan Review	(TRC, 2018)	\$2,316	\$588	\$1,728
Service Extension ^a	(PG&E, 2019)	\$4,600	\$1,169	\$3,431
Meter	(PG&E, 2019)	\$7,200	\$3,600	\$3,600
Total First Cost		\$14,116	\$5,357	\$8,759

^a Service extension costs include 50 percent reduction assuming portion of the costs are passed on to gas customers.

Natural Gas Plan Review: Total costs are based on TRC’s 2019 reach code analysis for Palo Alto (TRC, 2018) and then split between the residential and nonresidential spaces in the building proportionately according to annual gas consumption with 75 percent of the annual load is attributed to residential units on a statewide basis.

Service Extension: Service extension costs to the building were taken from a PG&E memo dated December 5, 2019 to Energy Commission staff. They include costs for trenching and assume nonresidential new construction within a developed area (see Appendix C – PG&E Gas Infrastructure Cost Memo). The total cost of \$9,200 from the memo is reduced by 50 percent to account for the portion of the costs paid for by all customers due to application of Utility Gas Main Extensions rules². The resultant cost is apportioned between the residential and nonresidential spaces in the building based on annual gas consumption of residential and nonresidential uses, with 75 percent of the annual natural gas use attributed to residential units on a statewide basis.

Meter: Cost per meter provided by PG&E for commercial meters (see Appendix C – PG&E Gas Infrastructure Cost Memo). Assume one meter for nonresidential boilers serving space heating and service water heating, and another for residential boilers serving domestic hot water.

2.5 Cost Effectiveness

Cost effectiveness was evaluated for all climate zones and is presented based on both TDV energy, using the Energy Commission’s LCC methodology, and an On-Bill approach using residential customer utility rates. Both methodologies require estimating and quantifying the value of the energy impact associated with energy efficiency measures over the life of the measures (30 years) as compared to the prescriptive Title 24 requirements.

Additional analysis included evaluating the measures using both the 2019 and proposed 2022 TDV multipliers. The proposed 2022 weather files were also used to calculate site energy use and evaluate On-Bill energy performance. The 2022 weather files were updated in 2019 and are considered to better represent conditions now and in the future. They tend to increase cooling and reduce space heating energy use, based on recent warming trends throughout the state.

Cost effectiveness is presented using both lifecycle NPV savings and benefit-to-cost (B/C) ratio metrics, which represent the cost effectiveness of a measure over a 30-year lifetime taking into account discounting of future savings and costs.

- **NPV Savings:** PV benefits minus PV costs is reported as a cost-effectiveness metric. If the net savings of a measure or package is positive, it is considered cost-effective. Negative savings represent net costs. A measure that has negative energy cost benefits (energy cost increase) can still be cost-effective if the costs to implement the measure are more negative (i.e., material and maintenance cost savings).
- **B/C Ratio:** Ratio of the present value of all benefits to the present value of all costs over 30 years (PV benefits divided by PV costs). The criterion for cost effectiveness is a B/C ratio greater than one. A value of one indicates the NPV of the savings over the life of the measure is equivalent to the NPV of the lifetime incremental cost of that measure. A value greater than one represents a positive return on investment. The B/C ratio is calculated according to Equation 1.

Equation 1

$$\text{Benefit – to – Cost Ratio} = \frac{\text{PV of lifetime benefit}}{\text{PV of lifetime cost}}$$

² PG&E Rule 15: https://www.pge.com/tariffs/tm2/pdf/GAS_RULES_15.pdf

SoCalGas Rule 20: <https://www.socalgas.com/regulatory/tariffs/tm2/pdf/20.pdf>

SDG&E Rule 15: http://regarchive.sdge.com/tm2/pdf/GAS_GAS-RULES_GRULE15.pdf

Improving the efficiency of a project often requires an initial incremental investment. In most cases the benefit is represented by annual On-Bill utility or TDV savings, and the cost by incremental first cost and replacement costs. However, some packages result in initial construction cost savings (negative incremental cost), and either energy cost savings (positive benefits), or increased energy costs (negative benefits). In cases where both construction costs and energy-related savings are negative, the construction cost savings are treated as the 'benefit' while the increased energy costs are the 'cost.' In cases where a measure or package is cost-effective immediately (i.e. upfront construction cost savings and lifetime energy cost savings), B/C ratio cost effectiveness is represented by ">1". Because of these situations, NPV savings are also reported, which, in these cases, are positive values.

The lifetime costs or benefits are calculated according to Equation 2.

Equation 2

$$PV \text{ of lifetime cost or benefit} = \sum_{t=0}^n \frac{(Annual \text{ cost or benefit})_t}{(1 + r)^t}$$

Where:

- n = analysis term
- r = discount rate
- t = year at which cost/benefit is incurred

The following summarizes the assumptions applied in this analysis to both methodologies.

- Analysis term of 30-years
- Real discount rate of three percent (does not include inflation)

2.5.1 On-Bill Customer LCC

Residential utility rates were used to calculate utility costs for all cases and determine On-Bill customer cost effectiveness for the proposed packages. Utility costs of the nonresidential spaces were not evaluated in this study, only dwelling unit and water heating energy use. The Statewide Reach Codes Team obtained the recommended utility rates from the representative utility based on the assumption that the reach codes go into effect in 2020. Annual utility costs were calculated using hourly electricity and gas output from CBECC-Com and applying the utility tariffs summarized in Table 6. Appendix B – Utility Rate Schedules includes details on the utility rate schedules used for this study. The applicable residential time-of-use (TOU) rate was applied to all cases. For cases with PV generation, the approved NEM2 tariffs were applied along with minimum daily use billing and mandatory non-bypassable charges. For the PV cases annual electric production was always less than annual electricity consumption; and therefore, no credits for surplus generation were necessary. Future changes to the NEM tariffs are likely; however, there is a lot of uncertainty about what those changes will be and when they will become effective.

There are no master metered multifamily service electric tariffs available from the IOUs. Based on guidance from the IOUs, the residential electric TOU tariffs that apply to individually metered residential dwelling units were also used to calculate electricity costs for the central water heating systems. Baseline allowances included in the electric tariff were applied on a per unit basis for all-electric service.

Based on guidance from the IOUs, master metered multifamily service gas tariffs were used to calculate gas costs for the central water heating systems. The baseline quantities were applied on a per unit basis, as is defined in the schedules, and when available water heating only baseline values were used.

Utility rates were applied to each climate zone based on the predominant IOU serving the population of each zone according to Table 6. Climate Zones 10 and 14 are evaluated with both SCE/SoCalGas and SDG&E tariffs since each utility has customers within these climate zones. Climate Zone 5 is evaluated under both PG&E and SoCalGas natural gas rates. Two municipal utility rates were also evaluated, Sacramento Municipal Utility District (SMUD) in Climate Zone 12 and City of Palo Alto Utilities (CPAU) in Climate Zone 4.

Table 6: IOU Tariffs Applied Based on Climate Zone

Climate Zone	Electric/Gas Utility	Electricity (Dwelling Unit Use)	Electricity (Central Water Heating)	Natural Gas (Central Water Heating) ^a
1-5, 11-13, 16	PG&E	E-TOU-C	E-TOU-C	PG&E GM
5	PG&E/SoCalGas			SoCalGas GM-E
6, 8-10, 14, 15	SCE/SoCalGas	TOU-D (Option 4-9)	TOU-D (Option 4-9)	
7, 10, 14	SDG&E	TOU-DR1	TOU-DR1	SDG&E GM
12	SMUD/PG&E	R-TOD (RT02)	GSN-T	PG&E GM
4	CPAU	E-1	E-2	G-2

^a These rates are allowed assuming no gas is used in the dwelling units.

Utility rates are assumed to escalate over time, using assumptions from research conducted by Energy and Environmental Economics (E3) in the 2019 study Residential Building Electrification in California (Energy & Environmental Economics, 2019). Escalation of natural gas rates between 2019 and 2022 is based on the currently filed GRCs for PG&E, SoCalGas, and SDG&E. Consistent with the E3 study, gas rates are assumed to escalate at four percent per year above inflation from 2023 through 2025, which reflects historical rate increases between 2013 and 2018. Escalation of electricity rates from 2019 through 2025 is assumed to be two percent per year above inflation, based on electric utility estimates. After 2025 escalation rates for both natural gas and electric rates are assumed to drop to a more conservative one percent escalation per year above inflation for long-term rate trajectories beginning in 2026 through 2050. See Appendix B – Utility Rate Schedules for additional details.

2.5.2 TDV LCC

Cost effectiveness was also assessed using the Energy Commission's TDV LCC methodology. TDV is a normalized monetary format developed and used by the Energy Commission for comparing electricity and natural gas savings, and it considers the cost of electricity and natural gas consumed during different times of the day and year. Two versions of TDV were evaluated in this study: the 2019 TDV values used under current 2019 Title 24 for compliance and the 2022 TDV values recently developed and approved by the Energy Commission for the upcoming 2022 Title 24 cycle which will become effective January 1, 2023.

The Energy Commission adopted the TDV methodology to more accurately reflect the variations in the value of energy used (or saved) based on the mix of generation resources and demand on the grid at any given time, as well as impacts on retail energy costs. The 2022 TDV values reflect changes in the generation mix as well as the shift in the peak demand time from mid-afternoon toward early evenings.

The TDV values are based on long term discounted costs of 30 years for all residential measures. The CBECC-Com simulation software results are expressed in terms of TDV kBtu. The present value of the energy cost savings in dollars is calculated by multiplying the TDV kBtu savings by a NPV factor, also developed by the Energy Commission. The 30-year NPV factor is \$0.154/TDV kBtu for nonresidential projects under both the 2019 and 2022 Title 24.

Like the customer B/C ratio, a TDV B/C ratio value of one indicates the savings over the life of the measure are equivalent to the incremental cost of that measure. A value greater than one represents a positive return on investment. The ratio is calculated according to Equation 3.

Equation 3

$$TDV \text{ Benefit} - to - Cost \text{ Ratio} = \frac{TDV \text{ energy savings} * NPV \text{ factor}}{PV \text{ of lifetime incremental cost}}$$

2.5.2.1 2019 and 2022 TDV Differences

There were key changes to the 2022 TDV methodology as compared to the 2019 TDV. Major updates include the following and are further described in the final 2022 TDV methodology report (Energy & Environmental Economics, 2020).

- Updated weather files to reflect historical data from recent years.
- New load profiles representing building and transportation electrification and renewable generation.
- Addition of internalized cost streams to account for carbon emissions.
- Shaped retail rate adjustment partially scaled to hourly marginal cost of service.
- Addition of non-combustion emissions from methane and refrigerant leakage.

The impact of these key changes for electricity TDV are lower values during the mid-day that correspond with an abundance of solar production and a shift of the peak TDV to later in the day as a result of increasing levels of rooftop PV systems. However, the overall magnitude of the electricity 2022 TDV does not increase significantly relative to 2019 TDV. For natural gas TDV there is a large increase in magnitude with the 2022 TDV roughly 40 percent higher than in 2019. This is driven by the new retail rate forecast, increased fixed costs for maintaining the distribution system, and the new carbon cost component.

The updated 2022 weather files represent an updated dataset based on historical weather sampled from recent years (1998-2017) to reflect the impacts of climate change. Cooling loads increase significantly, particularly for the mild climate zones where cooling energy use was previously low. Heating loads decrease on average 30 percent across all climate zones. The weather files used for the 2019 code cycle had not been updated since the 2013 code cycle and represented data only up until 2009. The Energy Commission and the Statewide Reach Codes Team contend that the updated 2022 weather files better reflect changing climate conditions in California. Therefore, the 2022 files are used for all the analysis reported in this study.

2.6 GHG Emissions Reductions

Equivalent CO₂ emission reductions were calculated based on estimates from Zero Code reports available in CBECC-Com simulation software.³ Electricity emissions vary by region and by hour of the year, accounting for time dependent energy use and carbon emissions based on source emissions, including renewable portfolio standard projections. Hourly profiles reflect Climate Zones 1 through 5 and 11 through 13 as a single region and Climate Zones 6 through 10 and 14 through 16 as another. For natural gas, a fixed factor of 11.7 pounds (lb) per therm is used. To compare the mixed-fuel and all-electric cases side-by-side, GHG emissions are presented as CO₂-equivalent (CO₂e) emissions per dwelling unit.

³ More information at: <https://zero-code.org/wp-content/uploads/2018/11/ZERO-Code-TSD-California.pdf>

3 Results

The primary objective of this evaluation is to identify cost-effective, non-preempted performance targets for high-rise multifamily buildings, under both mixed-fuel and all-electric cases, to support the design of local ordinances requiring new high-rise residential buildings to exceed the minimum state requirements. The packages presented are representative examples of designs and measures that can be used to meet the requirements. In practice, a builder can use any combination of non-preempted or preempted compliant measures to meet the requirements.

This analysis evaluated a package of efficiency measures applied to a mixed-fuel design and a similar package for an all-electric design. Each design was evaluated using the predominant utility rates in all climate zones. PV was also added to the efficiency packages.

The following measures are included in at least one package:

- Lower SHGC fenestration
- Wall insulation
- Low pressure-drop HVAC distribution system
- HERS verified pipe insulation

The following measures were evaluated but were found to not be cost-effective in any of the climate zones and were not included in any of the packages:

- Solar thermal system with higher solar fraction than prescriptive requirements
- ERV/HRV System
- Lower U-factor fenestration

Table 7 describes the efficiency measures included in the mixed-fuel and all-electric packages.

Table 7: Measure Package Summary

Climate Zone	MEASURE SPECIFICATION			
	Window SHGC	Add Exterior Wall Insulation (inch)	Fan Watt Draw (W/cfm)	HERS Pipe Insulation
1		+ 1	0.25	No
2	0.22		0.25	No
3	0.22	+ 1 (all-electric only)	0.25	Yes (all-electric only)
4	0.22		0.25	No
5	0.22	+ 1 (all-electric only)	0.25	Yes (all-electric only)
6	0.22		0.25	No
7	0.22		0.25	No
8	0.22		0.25	No
9	0.22		0.25	No
10	0.22		0.25	No
11	0.22	+ 1	0.25	No
12	0.22	+ 1	0.25	No
13	0.22	+ 1	0.25	No
14	0.22	+ 1	0.25	No
15	0.22	+ 1	0.25	No
16	0.22	+ 1	0.25	No

Table 8 presents results for the mixed-fuel packages and Table 9 through Table 11 present results for the all-electric packages. Both mixed-fuel and all-electric results are relative to the mixed-fuel 2019 Title 24 prescriptive baseline model with in-unit heat pumps for heating and cooling and central gas water heating. B/C ratios for all packages are calculated according to the On-Bill, 2019 TDV, and 2022 TDV methodologies. The all-electric results are presented both without PV and with a PV system sized based on 0.1 and 0.2 kW_{DC} per dwelling unit. The mixed-fuel package was also evaluated with 0.1 kW_{DC} per dwelling unit and results are presented in Appendix D – Detailed Results - Mixed Fuel. Appendix E – Detailed Results - All-Electric provides detailed results for the all-electric packages.

Compliance margins for the mixed-fuel efficiency packages range from six to eight percent (except in Climate Zone 1), which meets the Title 24, Part 11 (CALGreen) Tier 1 energy performance requirement for high-rise residential buildings (minimum five percent compliance margin). The packages are cost-effective based on all metrics in Climate Zones 2 through 16.

The all-electric efficiency packages with central recirculating HPWH equipment meet minimum Title 24 requirements in all climate zones except 1 and 16, with compliance margins ranging from 0.1 to 4.7 percent. The all-electric packages result in natural gas savings and an increase in electricity use. The central recirculating case is not cost-effective On-Bill with higher lifecycle utility costs except in SMUD territory but is cost-effective based on 2022 TDV in all climates.

The clustered HPWH case only meets minimum Title 24 requirements in Climate Zones 4, 6 through 9, and 15. Even though the clustered HPWH is cost-effective in almost all climate zones, it is not code compliant in many and may not be used to support a local reach code in those zones. The package is cost-effective On-Bill everywhere except Climate Zones 1, 3, 5, and 16. The clustered approach has lower installed costs compared to the mixed fuel baseline but results in higher utility costs in all Climate Zones except 8, 9, 15, 4 (in CPAU territory), and 12 (in SMUD territory). The clustered HPWH case is cost-effective based on TDV in all climates.

The all-electric packages become cost-effective On-Bill when either 0.1 or 0.2 kW_{DC} of PV per dwelling unit is installed, except with the central HPWH with recirculation design in Climate Zone 1. The all-electric packages in Climate Zones 1 and 16 are not code compliant with PV and may not be used to support a local reach code in those climate zones.

Table 8: Mixed-Fuel Package Results: Efficiency Only (Savings/Cost Per Dwelling Unit)^a

Climate Zone	Elec Utility	Gas Utility	Comp. Margin	Total Gas Savings (therm)	Total Electric Savings (kWh)	Utility Cost Savings (2020 PV\$)	Incremental Cost (2020 PV\$)	On-Bill		2019 TDV		2022 TDV	
								B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	4.5%	0	39	\$199	\$216	0.9	(\$17)	0.6	(\$83)	0.8	(\$42)
2	PGE	PGE	6.5%	0	79	\$570	\$144	4.0	\$426	3.0	\$289	2.7	\$247
3	PGE	PGE	6.7%	0	60	\$420	\$144	2.9	\$276	2.3	\$184	1.9	\$131
4	PGE	PGE	7.2%	0	95	\$678	\$144	4.7	\$534	3.2	\$321	3.2	\$313
4	CPAU	CPAU	7.2%	0	95	\$394	\$144	2.7	\$250	3.2	\$321	3.2	\$313
5	PGE	PGE	6.8%	0	71	\$484	\$144	3.4	\$340	2.3	\$180	1.9	\$122
5	PGE	SCG	6.8%	0	71	\$484	\$144	3.4	\$340	2.3	\$180	1.9	\$122
6	SCE	SCG	7.8%	0	113	\$619	\$144	4.3	\$475	3.4	\$344	3.2	\$315
7	SDGE	SDGE	8.1%	0	105	\$789	\$144	5.5	\$645	3.4	\$339	2.8	\$264
8	SCE	SCG	7.8%	0	128	\$728	\$144	5.1	\$585	3.9	\$413	3.9	\$421
9	SCE	SCG	7.6%	0	125	\$695	\$144	4.8	\$551	4.2	\$461	3.9	\$413
10	SCE	SCG	7.5%	0	130	\$623	\$144	4.3	\$479	4.2	\$457	3.9	\$415
10	SDGE	SDGE	7.5%	0	130	\$972	\$144	6.8	\$828	4.2	\$457	3.9	\$415
11	PGE	PGE	7.7%	0	148	\$897	\$216	4.1	\$681	3.7	\$584	3.4	\$523
12	PGE	PGE	7.5%	0	122	\$736	\$216	3.4	\$519	3.1	\$448	2.8	\$397
12	SMUD	PGE	7.5%	0	122	\$401	\$216	1.9	\$185	3.1	\$448	2.8	\$397
13	PGE	PGE	7.4%	0	152	\$923	\$216	4.3	\$706	3.4	\$523	3.5	\$534
14	SCE	SCG	7.9%	0	152	\$735	\$216	3.4	\$518	3.6	\$556	3.5	\$532
14	SDGE	SDGE	7.9%	0	152	\$1,055	\$216	4.9	\$838	3.6	\$556	3.5	\$532
15	SCE	SCG	7.8%	0	213	\$1,021	\$216	4.7	\$804	4.5	\$768	4.4	\$725
16	PGE	PGE	6.0%	0	115	\$679	\$216	3.1	\$463	2.3	\$279	2.1	\$244

^a Values in red indicate B/C ratios less than 1 or negative values.

Table 9: All-Electric Package Results: Central Recirculating vs Clustered HPWH Approach with Efficiency (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Total Gas Savings (therm)	Central Recirculating						Clustered					
				Comp Margin	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	B/C Ratio			Comp Margin	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	B/C Ratio		
							On-Bill	2019 TDV	2022 TDV				On-Bill	2019 TDV	2022 TDV
1	PGE	PGE	96	-4.6%	(671)	\$775	0.0	0.0	2.1	-6.2%	(770)	(\$643)	0.6	1.9	>1
2	PGE	PGE	87	1.0%	(557)	\$702	0.0	0.5	2.5	-0.8%	(648)	(\$715)	1.3	>1	>1
3	PGE	PGE	87	0.1%	(549)	\$888	0.0	0.3	1.9	-1.9%	(642)	(\$529)	0.9	>1	>1
4	PGE	PGE	81	4.1%	(495)	\$702	0.2	0.5	2.5	2.4%	(578)	(\$715)	2.3	>1	>1
4	CPAU	CPAU	81	4.1%	(495)	\$702	0.6	0.5	2.5	2.4%	(578)	(\$715)	>1	>1	>1
5	PGE	PGE	87	0.2%	(536)	\$888	0.0	0.3	1.7	-1.1%	(630)	(\$529)	1.0	>1	>1
5	PGE	SCG	87	0.2%	(536)	\$888	0.0	0.3	1.7	-1.1%	(630)	(\$529)	0.6	>1	>1
6	SCE	SCG	78	3.4%	(447)	\$702	0.6	0.7	2.4	0.6%	(532)	(\$715)	10.7	>1	>1
7	SDGE	SDGE	78	3.5%	(452)	\$702	0.2	0.7	2.2	1.1%	(537)	(\$715)	1.8	>1	>1
8	SCE	SCG	76	4.6%	(416)	\$702	0.7	0.9	2.7	1.4%	(492)	(\$715)	>1	>1	>1
9	SCE	SCG	76	4.2%	(428)	\$702	0.7	0.9	2.7	1.9%	(503)	(\$715)	>1	>1	>1
10	SCE	SCG	63	1.5%	(422)	\$484	0.0	0.4	2.5	-0.8%	(494)	(\$933)	2.2	>1	>1
10	SDGE	SDGE	63	1.5%	(422)	\$484	0.0	0.4	2.5	-0.8%	(494)	(\$933)	1.5	>1	>1
11	PGE	PGE	65	2.0%	(434)	\$557	0.0	0.7	2.4	-1.2%	(495)	(\$861)	2.0	>1	>1
12	PGE	PGE	68	1.4%	(474)	\$557	0.0	0.5	2.2	-1.9%	(550)	(\$861)	1.2	10.9	>1
12	SMUD	PGE	68	1.4%	(474)	\$557	1.5	0.5	2.2	-1.9%	(550)	(\$861)	>1	10.9	>1
13	PGE	PGE	63	1.7%	(411)	\$557	0.0	0.6	2.4	-1.9%	(467)	(\$861)	2.4	7.1	>1
14	SCE	SCG	65	2.3%	(433)	\$557	0.1	0.8	2.6	-0.7%	(498)	(\$861)	2.4	>1	>1
14	SDGE	SDGE	65	2.3%	(433)	\$557	0.0	0.8	2.6	-0.7%	(498)	(\$861)	1.4	>1	>1
15	SCE	SCG	51	4.7%	(252)	\$557	0.9	1.4	2.7	2.1%	(279)	(\$861)	>1	>1	>1
16	PGE	PGE	78	-7.5%	(622)	\$557	0.0	0.0	1.3	-7.1%	(698)	(\$861)	0.7	1.3	>1

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

Table 10: All-Electric Central Recirculating HPWH Results: With and Without PV (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Comp Margin		No PV			0.1 kW _{DC} /dwelling unit			0.2 kW _{DC} /dwelling unit		
			No PV	With PV ^b	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	On-Bill B/C Ratio	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	On-Bill B/C Ratio	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	On-Bill B/C Ratio
1	PGE	PGE	-4.6%	-2.5%	(671)	\$775	0.0	(538)	\$1,091	0.2	(406)	\$1,408	0.72
2	PGE	PGE	1.0%	3.0%	(557)	\$702	0.0	(400)	\$1,018	1.0	(242)	\$1,335	1.54
3	PGE	PGE	0.1%	3.0%	(549)	\$888	0.0	(386)	\$1,205	0.8	(224)	\$1,521	1.36
4	PGE	PGE	4.1%	6.1%	(495)	\$702	0.2	(329)	\$1,018	1.2	(163)	\$1,335	1.75
4	CPAU	CPAU	4.1%	6.1%	(495)	\$702	0.6	(329)	\$1,018	1.1	(163)	\$1,335	1.25
5	PGE	PGE	0.2%	2.3%	(536)	\$888	0.0	(362)	\$1,205	0.9	(188)	\$1,521	1.48
5	PGE	SCG	0.2%	2.3%	(536)	\$888	0.0	(362)	\$1,205	0.7	(188)	\$1,521	1.25
6	SCE	SCG	3.4%	5.7%	(447)	\$702	0.6	(270)	\$1,018	1.2	(94)	\$1,335	1.60
7	SDGE	SDGE	3.5%	5.6%	(452)	\$702	0.2	(288)	\$1,018	1.3	(123)	\$1,335	1.80
8	SCE	SCG	4.6%	6.6%	(416)	\$702	0.7	(246)	\$1,018	1.3	(75)	\$1,335	1.64
9	SCE	SCG	4.2%	5.8%	(428)	\$702	0.7	(250)	\$1,018	1.2	(72)	\$1,335	1.52
10	SCE	SCG	1.5%	5.7%	(422)	\$484	0.0	(244)	\$801	1.0	(67)	\$1,117	1.36
10	SDGE	SDGE	1.5%	5.7%	(422)	\$484	0.0	(244)	\$801	1.3	(67)	\$1,117	1.96
11	PGE	PGE	2.0%	6.7%	(434)	\$557	0.0	(275)	\$873	1.0	(116)	\$1,190	1.46
12	PGE	PGE	1.4%	6.3%	(474)	\$557	0.0	(311)	\$873	0.8	(147)	\$1,190	1.36
12	SMUD	PGE	1.4%	6.3%	(474)	\$557	1.5	(311)	\$873	1.5	(147)	\$1,190	1.51
13	PGE	PGE	1.7%	6.8%	(411)	\$557	0.0	(245)	\$873	1.1	(80)	\$1,190	1.56
14	SCE	SCG	2.3%	6.5%	(433)	\$557	0.1	(242)	\$873	1.0	(51)	\$1,190	1.40
14	SDGE	SDGE	2.3%	6.5%	(433)	\$557	0.0	(242)	\$873	1.2	(51)	\$1,190	1.90
15	SCE	SCG	4.7%	7.7%	(252)	\$557	0.9	(75)	\$873	1.4	102	\$1,190	1.66
16	PGE	PGE	-7.5%	-3.2%	(622)	\$557	0.0	(453)	\$873	0.3	(283)	\$1,190	1.03

^a Values in red indicate B/C ratios less than 1 or negative values.^b 0.1 kW_{DC}/dwelling unit sufficient in all climate zones to achieve reported compliance margins except in Climate Zones 11-13 0.2 kW_{DC}/dwelling unit is necessary.

Table 11: All-Electric Clustered HPWH Results: With and Without PV (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Comp Margin		No PV			0.1 kW _{DC} /dwelling unit			0.2 kW _{DC} /dwelling unit		
			No PV	With PV ^c	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	On-Bill B/C Ratio	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	On-Bill B/C Ratio	Total Electric Savings (kWh)	Incremental Cost (2020 PV\$)	On-Bill B/C Ratio
1	PGE	PGE	-6.2%	-4.1%	(770)	(\$643)	0.6	(637)	(\$326)	0.96	(504)	(\$10)	>1
2	PGE	PGE	-0.8%	1.2%	(648)	(\$715)	1.3	(490)	(\$399)	>1	(333)	(\$82)	>1
3	PGE	PGE	-1.9%	0.9%	(642)	(\$529)	0.9	(479)	(\$213)	>1	(317)	\$104	14.67
4	PGE	PGE	2.4%	4.3%	(578)	(\$715)	2.3	(412)	(\$399)	>1	(246)	(\$82)	>1
4	CPAU	CPAU	2.4%	4.3%	(578)	(\$715)	>1	(412)	(\$399)	>1	(246)	(\$82)	>1
5	PGE	PGE	-1.1%	0.9%	(630)	(\$529)	1.0	(457)	(\$213)	>1	(283)	\$104	16.38
5	PGE	SCG	-1.1%	0.9%	(630)	(\$529)	0.6	(457)	(\$213)	>1	(283)	\$104	12.97
6	SCE	SCG	0.6%	2.9%	(532)	(\$715)	10.7	(355)	(\$399)	>1	(179)	(\$82)	>1
7	SDGE	SDGE	1.1%	3.1%	(537)	(\$715)	1.8	(372)	(\$399)	>1	(207)	(\$82)	>1
8	SCE	SCG	1.4%	3.5%	(492)	(\$715)	>1	(322)	(\$399)	>1	(151)	(\$82)	>1
9	SCE	SCG	1.9%	3.4%	(503)	(\$715)	>1	(325)	(\$399)	>1	(148)	(\$82)	>1
10	SCE	SCG	-0.8%	3.5%	(494)	(\$933)	2.2	(316)	(\$617)	>1	(139)	(\$300)	>1
10	SDGE	SDGE	-0.8%	3.5%	(494)	(\$933)	1.5	(316)	(\$617)	>1	(139)	(\$300)	>1
11	PGE	PGE	-1.2%	3.5%	(495)	(\$861)	2.0	(336)	(\$544)	>1	(177)	(\$228)	>1
12	PGE	PGE	-1.9%	3.0%	(550)	(\$861)	1.2	(387)	(\$544)	>1	(223)	(\$228)	>1
12	SMUD	PGE	-1.9%	3.0%	(550)	(\$861)	>1	(387)	(\$544)	>1	(223)	(\$228)	>1
13	PGE	PGE	-1.9%	3.3%	(467)	(\$861)	2.4	(301)	(\$544)	>1	(136)	(\$228)	>1
14	SCE	SCG	-0.7%	3.5%	(498)	(\$861)	2.4	(308)	(\$544)	>1	(117)	(\$228)	>1
14	SDGE	SDGE	-0.7%	3.5%	(498)	(\$861)	1.4	(308)	(\$544)	>1	(117)	(\$228)	>1
15	SCE	SCG	2.1%	5.1%	(279)	(\$861)	>1	(102)	(\$544)	>1	75	(\$228)	>1
16	PGE	PGE	-7.1%	-2.9%	(698)	(\$861)	0.7	(529)	(\$544)	2.70	(359)	(\$228)	>1

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

^c 0.1 kW_{DC}/dwelling unit sufficient in all climate zones to achieve reported compliance margins except in Climate Zones 11-13 0.2 kW_{DC}/dwelling unit is necessary.

4 Conclusions and Summary

This report evaluated the feasibility and cost effectiveness of “above code” performance specifications for newly constructed high-rise multifamily buildings. The analysis included application of efficiency measures, electric appliances, and PV in all climate zones and found cost-effective packages across the state. For the building designs and climate zones where cost-effective packages were identified, the results of this analysis can be used by local jurisdictions to support the adoption of reach codes. Cost effectiveness was evaluated according to three metrics: On-Bill customer, 2019 TDV, and 2022 TDV LCC B/C ratio.

For mixed-fuel buildings, this analysis demonstrates that there are cost-effective efficiency packages based on at least one of the evaluated cost-effectiveness metrics that achieve a minimum five percent compliance margin in most climate zones. The exception is Climate Zone 1 where the package only resulted in a 4.5 percent compliance margin. Although the Climate Zone 1 package is not cost-effective based on either the 2019 TDV or the On-Bill methodologies, it is cost-effective based on 2022 TDV.

This study evaluated electrification of residential loads in new high-rise multifamily buildings. Based on typical construction across California, the base case condition incorporated all-electric appliances within the dwelling unit spaces. As a result, only central water heating was converted from natural gas to electric as part of this analysis. For all-electric buildings, this analysis demonstrates that there are cost-effective efficiency packages with a HPWH that are Title 24 compliant in all climate zones except Climate Zones 1 and 16.

The case with the central recirculating HPWH is cost-effective based on the 2022 TDV methodology in all climate zones. Additionally, in Climate Zone 15 it is cost-effective based on 2019 TDV and in Climate Zone 12 in SMUD territory it is cost-effective On-Bill. Utility cost savings were found in Climate Zones 2, 4, 5 (in PG&E territory), 6-9, 10 (in SCE territory), 12 (in SMUD territory), 14 (in SCE territory), and 15. This case (Table 9) demonstrates how the analysis results differ under the 2019 and 2022 TDV metrics. The B/C ratios are typically two to five times greater under 2022 than 2019 because of the higher relative gas versus electric TDV multipliers in 2022. When 0.1 to 0.2 kW_{DC} per dwelling unit is included, the package is cost-effective based on On-Bill in all climate zones except Climate Zone 1.

The central recirculating HPWH case is based on the Energy Commission’s approved prescriptive design and applies Sanden HPWHs, which are higher cost than other available products. As HPWHs gain market share, installed costs are anticipated to decrease as the labor force becomes more familiar with the technology, performance improvements are achieved, and available product options increase. It is also anticipated that modeling of central HPWHs will improve as results from field and lab testing inform the modeling algorithms. This will allow for more accurate modeling of system performance and modeling of other design strategies such as multi-pass HPWH systems.

The clustered HPWH case is cost-effective without PV On-Bill everywhere except Climate Zones 1, 3, 5 (in SoCalGas territory), and 16, although the package is not code compliant in numerous climate zones. It was found to have a much lower installed cost than the recirculating HPWH case but higher operating cost because federal minimum efficiency was assumed (2.0 UEF). When 0.1 to 0.2 kW_{DC} per dwelling unit is included, the package is cost-effective On-Bill in all climate zones, although still not code compliant in Climate Zone 1 or 16.

Table 12 summarizes compliance margin and cost-effectiveness results for the mixed-fuel and all-electric cases. Compliance margin is reported in the cells and cost effectiveness is indicated by the color of the cell according to the following:

- Cells highlighted in green depict cost-effective results using the On-Bill approach. In most cases results are also cost-effective based on TDV.
- Cells highlighted in blue depict cost-effective results using both the 2019 and 2022 TDV approach, but not On-Bill.
- Cells highlighted in yellow depict cost-effective results using the 2022 TDV approach only.
- Cells highlighted in red depict a package that was not cost-effective using any metric.
- Red text depicts a negative compliance margin.

For more detail on the results, please refer to Appendix D – Detailed Results - Mixed Fuel and Appendix E – Detailed Results - All-Electric.

Table 12: High-Rise Multifamily Summary of Compliance Margin and Cost Effectiveness

Climate Zone	Elec Utility	Gas Utility	Mixed Fuel (No PV)	Central Recirculating HPWH			Clustered HPWH		
				No PV	0.1 kW _{DC} /apt	0.2 kW _{DC} /apt	No PV	0.1 kW _{DC} /apt	0.2 kW _{DC} /apt
1	PGE	PGE	4.5%	-4.6%	-2.5%	-2.5%	-6.2%	-4.1%	-4.1%
2	PGE	PGE	6.5%	1.0%	3.0%	3.0%	-0.8%	1.2%	1.2%
3	PGE	PGE	6.7%	0.1%	3.0%	3.0%	-1.9%	0.9%	0.9%
4	PGE	PGE	7.2%	4.1%	6.1%	6.1%	2.4%	4.3%	4.3%
4	CPAU	CPAU	7.2%	4.1%	6.1%	6.1%	2.4%	4.3%	4.3%
5	PGE	PGE	6.8%	0.2%	2.3%	2.3%	-1.1%	0.9%	0.9%
5	PGE	SCG	6.8%	0.2%	2.3%	2.3%	-1.1%	0.9%	0.9%
6	SCE	SCG	7.8%	3.4%	5.7%	5.7%	0.6%	2.9%	2.9%
7	SDGE	SDGE	8.1%	3.5%	5.6%	5.6%	1.1%	3.1%	3.1%
8	SCE	SCG	7.8%	4.6%	6.6%	6.6%	1.4%	3.5%	3.5%
9	SCE	SCG	7.6%	4.2%	5.8%	5.8%	1.9%	3.4%	3.4%
10	SCE	SCG	7.5%	1.5%	5.7%	5.7%	-0.8%	3.5%	3.5%
10	SDGE	SDGE	7.5%	1.5%	5.7%	5.7%	-0.8%	3.5%	3.5%
11	PGE	PGE	7.7%	2.0%	2.0%	6.7%	-1.2%	-1.2%	3.5%
12	PGE	PGE	7.5%	1.4%	1.4%	6.3%	-1.9%	-1.9%	3.0%
12	SMUD	PGE	7.5%	1.4%	1.4%	6.3%	-1.9%	-1.9%	3.0%
13	PGE	PGE	7.4%	1.7%	1.7%	6.8%	-1.9%	-1.9%	3.3%
14	SCE	SCG	7.9%	2.3%	6.5%	6.5%	-0.7%	3.5%	3.5%
14	SDGE	SDGE	7.9%	2.3%	6.5%	6.5%	-0.7%	3.5%	3.5%
15	SCE	SCG	7.8%	4.7%	7.7%	7.7%	2.1%	5.1%	5.1%
16	PGE	PGE	6.0%	-7.5%	-7.5%	-3.2%	-7.1%	-7.1%	-2.9%

4.1 Additional conclusions

- This study found that electrification of central domestic hot water loads, in combination with efficiency measures, can result in an overall benefit to the consumer through lower utility bills, depending on the HPWH strategy and electricity and gas tariff. The all-electric results demonstrate a trend with On-Bill cost effectiveness across the different electric utilities. B/C ratios and NPV in SCE, SMUD, and CPAU territories are typically higher than the cases in PG&E and SDG&E territories. This indicates that rate design can play an important role in encouraging or discouraging electrification. Refer to Appendix D – Detailed Results - Mixed Fuel and Appendix E – Detailed Results - All-Electric for utility cost data.
- Two electric water heating scenarios were evaluated. The most appropriate HPWH design approach for any particular building will depend on many aspects including number and size of dwelling units, building layout, and first costs.
- In multifamily buildings with central water heating where multiple people or entities are responsible for the utility bills, utility impacts may not align. If tenants pay dwelling unit utility bills and the owner pays the water heating bill, the benefits of efficiency measures or PV serving the dwelling unit will benefit the tenant and savings would not directly impact any water heating electrification cost increases.
- This study did not evaluate federally preempted high efficiency appliances. Specifying high efficiency equipment is a viable approach to meeting Title 24 compliance and local ordinance requirements and is commonly used by project teams. Other studies have found that efficiency packages and electrification packages that employ high efficiency equipment can be quite cost-effective ((Statewide Reach Codes Team, 2019b), (Energy & Environmental Economics, 2019)).
- When PV capacity is added to the all-electric packages, all cases are cost-effective based on the On-Bill metric (except Climate Zone 1 with the central recirculating HPWH). In some cases, PV improves cost effectiveness, and in other cases it reduces it. The cost effectiveness of adding PV as an independent measure results in On-Bill B/C ratios between 2.4 and 3.5 for PG&E territory, 2.4 to 2.7 for SCE territory, and 3.5 to 3.8 for SDG&E territory. The B/C ratio is 1.9 and 1.5 in CPAU and SMUD territories, respectively. Adding PV in addition to the efficiency packages improves cost effectiveness where the B/C ratios for the efficiency measures alone are lower than the B/C ratios for PV alone, and vice versa where they are higher. Annual base case electricity costs and annual utility savings from PV are lower in SCE territory than in PG&E and SDG&E territories. This is due to lower off-peak rates and a bigger difference in peak versus off-peak rates for the TOU-D SCE electricity rate tariff. Most PV production occurs during off-peak times (4 pm to 9 pm peak period).

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6 Appendices

6.1 Appendix A – Map of California Climate Zones

Climate zone geographical boundaries are depicted in Figure 3. The map in Figure 3 along with a zip-code search directory is available at: https://ww2.energy.ca.gov/maps/renewable/building_climate_zones.html.

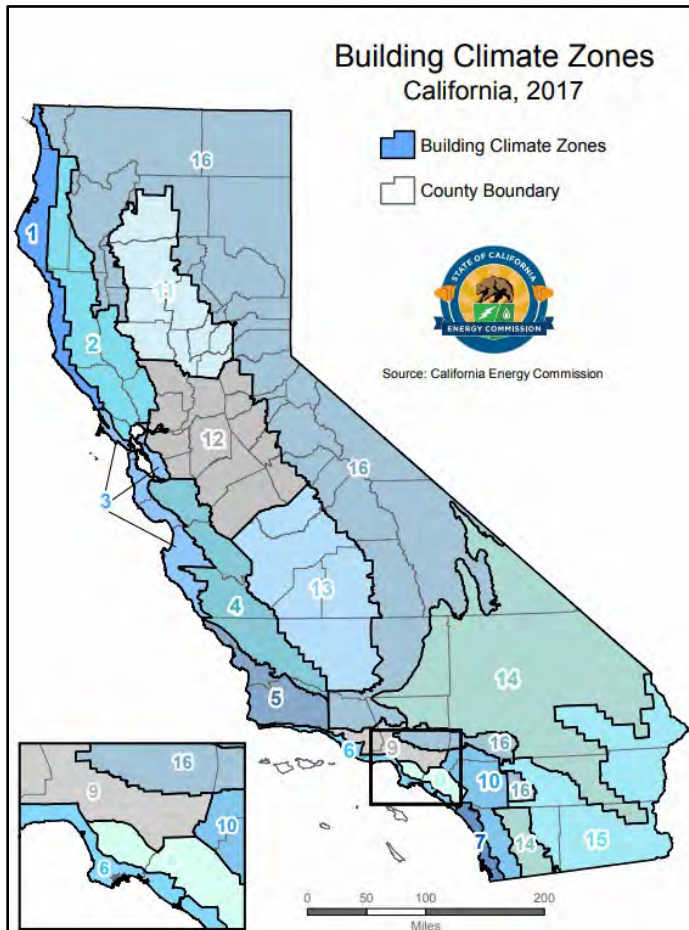


Figure 3: Map of California climate zones.

Source: Energy Commission.

6.2 Appendix B – Utility Rate Schedules

PG&E

The following pages provide details on the PG&E electricity and natural gas tariffs applied in this study. Table 13 describes the baseline territories that were assumed for each climate zone.

Table 13: PG&E Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
1	V
2	X
3	T
4	X
5	T
11	R
12	S
13	R
16	Y

Source: PG&E.

The PG&E monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending April 2020 according to the rates shown in Table 14. Rates are based on historical data provided by PG&E.⁴

Table 14: PG&E Monthly Gas Rate (\$/therm)

Month	Procurement Charge	Transportation Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
Jan 2020	\$0.45813	\$0.99712	\$1.59540	\$1.45525	\$2.05353
Feb 2020	\$0.44791	\$0.99712	\$1.59540	\$1.44503	\$2.04331
Mar 2020	\$0.35346	\$1.13126	\$1.64861	\$1.48472	\$2.00207
Apr 2020	\$0.23856	\$1.13126	\$1.64861	\$1.36982	\$1.88717
May 2019	\$0.21791	\$0.99933	\$1.59892	\$1.21724	\$1.81683
June 2019	\$0.20648	\$0.99933	\$1.59892	\$1.20581	\$1.80540
July 2019	\$0.28462	\$0.99933	\$1.59892	\$1.28395	\$1.88354
Aug 2019	\$0.30094	\$0.96652	\$1.54643	\$1.26746	\$1.84737
Sept 2019	\$0.25651	\$0.96652	\$1.54643	\$1.22303	\$1.80294
Oct 2019	\$0.27403	\$0.98932	\$1.58292	\$1.26335	\$1.85695
Nov 2019	\$0.33311	\$0.96729	\$1.54767	\$1.30040	\$1.88078
Dec 2019	\$0.40178	\$0.96729	\$1.54767	\$1.36907	\$1.94945

Source: PG&E.

⁴ The PG&E procurement and transportation charges were obtained from the following site:
<https://www.pge.com/tariffs/GRF.SHTML#RESGAS>



**Pacific Gas and
Electric Company**

San Francisco, California

Cancelling Revised Cal. P.U.C. Sheet No. 35447-G
Revised Cal. P.U.C. Sheet No. 34307-G

GAS SCHEDULE GM
MASTER-METERED MULTIFAMILY SERVICE

Sheet 3

**BASELINE
QUANTITIES:**

The above rates are applicable only to residential use. PG&E may require the Customer to submit a completed "Declaration of Eligibility for Baseline Quantities for Residential Rates." The delivered quantities of gas shown below are billed at the rates for baseline use. As an exception, service under this schedule not used to supply space heating but used to supply water heating from a central source to residential dwelling units that are individually metered by PG&E for either gas or electricity will be billed using a baseline quantity of 0.5 therms per dwelling unit per day (Code W) in all baseline territories and in both seasons.

Baseline Territories	BASELINE QUANTITIES (Therms Per Day Per Dwelling Unit)						(T) (T)
	Summer		Winter Off-Peak		Winter On-Peak		
	(April-October)		(Nov, Feb, Mar)		(Dec, Jan)		
	Effective Apr. 1, 2020		Effective Nov. 1, 2019		Effective Dec. 1, 2019		
**							
P	0.29	(R)	0.87	(R)	1.00	(I)	
Q	0.49	(R)	0.64	(R)	0.77	(I)	
R	0.33	(R)	0.84	(R)	1.19	(I)	
S	0.29	(R)	0.54	(R)	0.68	(I)	
T	0.49	(R)	0.94	(R)	1.06	(R)	
V	0.56		1.18	(R)	1.29	(I)	
W	0.23	(R)	0.61	(R)	0.87	(R)	
X	0.33	(R)	0.64	(R)	0.77	(I)	
Y	0.36		0.87	(R)	1.00	(I)	

**SEASONAL
CHANGES:**

The summer season is April-October, the winter off-peak season is November, February and March, and the winter on-peak season is December and January. Baseline quantities for bills that include the April 1, November 1 and December 1 seasonal changeover dates will be calculated by multiplying the applicable daily baseline quantity for each season by the number of days in each season for the billing period.

**STANDARD
MEDICAL
QUANTITIES:**

Additional medical quantities (Code M) are available as provided in Rule 19.

**RESIDENTIAL
DWELLING
UNITS:**

It is the responsibility of the Customer to advise PG&E within 15 days following any change in the number of residential dwelling units, mobile home spaces, and permanent-residence RV units receiving gas service.

**CENTRAL
BOILERS:**

Service to central boilers for water and/or space heating will be billed with monthly baseline quantities related to the number of dwelling units furnished such water and/or space heating.



**Pacific Gas and
Electric Company**

San Francisco, California

Cancelling Revised
Revised

Cal. P.U.C. Sheet No. 46539-E
Cal. P.U.C. Sheet No. 46325-E

ELECTRIC SCHEDULE E-TOU-C Sheet 2
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

RATES:
(Cont'd.)

E-TOU-C TOTAL RATES

Total Energy Rates (\$ per kWh)	PEAK		OFF-PEAK	
<i>Summer</i>				
Total Usage	\$0.41333	(I)	\$0.34989	(I)
Baseline Credit (Applied to Baseline Usage Only)	(\$0.08633)	(R)	(\$0.08633)	(R)
<i>Winter</i>				
Total Usage	\$0.31624	(I)	\$0.29891	(I)
Baseline Credit (Applied to Baseline Usage Only)	(\$0.08633)	(R)	(\$0.08633)	(R)
Delivery Minimum Bill Amount (\$ per meter per day)	\$0.32854			
California Climate Credit (per household, per semi-annual payment occurring in the April and October bill cycles)	(\$35.73)			(T)

Total bundled service charges shown on customer's bills are unbundled according to the component rates shown below. Where the delivery minimum bill amount applies, the customer's bill will equal the sum of (1) the delivery minimum bill amount plus (2) for bundled service, the generation rate times the number of kWh used. For revenue accounting purposes, the revenues from the delivery minimum bill amount will be assigned to the Transmission, Transmission Rate Adjustments, Reliability Services, Public Purpose Programs, Nuclear Decommissioning, Competition Transition Charges, Energy Cost Recovery Amount, DWR Bond, and New System Generation Charges based on kWh usage times the corresponding unbundled rate component per kWh, with any residual revenue assigned to Distribution.

[†] Pursuant to D.20-04-027, distribution of the October 2020 California Climate Credit will be advanced and split to the May 2020 and June 2020 bill cycles, \$17.87 and \$17.86 respectively.. (N)
(N)

(Continued)

Advice	5661-E-B	Issued by	Submitted	April 28, 2020
Decision		Robert S. Kenney	Effective	May 1, 2020
		Vice President, Regulatory Affairs	Resolution	



**Pacific Gas and
Electric Company**

U 39

San Francisco, California

Cancelling Revised Cal. P.U.C. Sheet No. 46540-E
Revised Cal. P.U.C. Sheet No. 46252-E

ELECTRIC SCHEDULE E-TOU-C Sheet 3
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

RATES:
(Cont'd.)

UNBUNDLING OF E-TOU-C TOTAL RATES

Energy Rates by Component (\$ per kWh)	PEAK		OFF-PEAK	
Generation:				
Summer (all usage)	\$0.16735	(R)	\$0.11391	(R)
Winter (all usage)	\$0.11859	(R)	\$0.10356	(R)
Distribution**:				
Summer (all usage)	\$0.12767	(I)	\$0.11767	(I)
Winter (all usage)	\$0.07935	(I)	\$0.07705	(I)
Conservation Incentive Adjustment (Baseline Usage)			(\$0.03294)	(I)
Conservation Incentive Adjustment (Over Baseline Usage)			\$0.05339	(I)
Transmission* (all usage)			\$0.03595	
Transmission Rate Adjustments* (all usage)			\$0.00314	
Reliability Services* (all usage)			(\$0.00066)	
Public Purpose Programs (all usage)			\$0.01296	(I)
Nuclear Decommissioning (all usage)			\$0.00101	(I)
Competition Transition Charges (all usage)			\$0.00096	(R)
Energy Cost Recovery Amount (all usage)			\$0.00005	(I)
DWR Bond (all usage)			\$0.00580	
New System Generation Charge (all usage)**			\$0.00571	(I)

* Transmission, Transmission Rate Adjustments and Reliability Service charges are combined for presentation on customer bills.

** Distribution and New System Generation Charges are combined for presentation on customer bills.

(Continued)

Advice	5661-E-B	Issued by	Submitted	April 28, 2020
Decision		Robert S. Kenney	Effective	May 1, 2020
		Vice President, Regulatory Affairs	Resolution	



**Pacific Gas and
Electric Company**

U 39

San Francisco, California

Cancelling Revised
Revised

Cal. P.U.C. Sheet No. 46190-E
Cal. P.U.C. Sheet No. 43414-E

ELECTRIC SCHEDULE E-TOU-C
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

Sheet 4 (T)

**SPECIAL
CONDITIONS:**

1. **BASELINE (TIER 1) QUANTITIES:** The following quantities of electricity are to be used to define usage eligible for the baseline credit (also see Rule 19 for additional allowances for medical needs):

Baseline Territory*	BASELINE QUANTITIES (kWh PER DAY)			
	Code B - Basic Quantities		Code H - All-Electric Quantities	
	Summer	Winter	Summer	Winter
	Tier I	Tier I	Tier I	Tier I
P	14.2	12.0	16.0	27.4
Q	10.3	12.0	8.9	27.4
R	18.8	11.3	20.9	28.1
S	15.8	11.1	18.7	24.9
T	6.8	8.2	7.5	13.6
V	7.5	8.8	10.9	16.9
W	20.2	10.7	23.6	20.0
X	10.3	10.5	8.9	15.4
Y	11.0	12.1	12.6	25.3
Z	8.2	8.1	7.0	16.5

2. **TIME PERIODS FOR E-TOU-C:** Times of the year and times of the day are defined as follows: (T)

Summer (service from June 1 through September 30):

Peak: 4:00 p.m. to 9:00 p.m. All days

Off-Peak: All other times

Winter (service from October 1 through May 31):

Peak: 4:00 p.m. to 9:00 p.m. All days

Off-Peak: All other times

* The applicable baseline territory is described in Part A of the Preliminary Statement

(Continued)

Advice	5759-E	Issued by	Submitted	February 14, 2020
Decision	D.19-07-004	Robert S. Kenney	Effective	March 1, 2020
		Vice President, Regulatory Affairs	Resolution	

SCE

The following pages provide details on are the SCE electricity tariffs applied in this study. Table 15 describes the baseline territories that were assumed for each climate zone.

Table 15: SCE Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
6	6
8	8
9	9
10	10
14	14
15	15

Source: SCE.

Summer Daily Allocations (June through September)

Baseline Region Number	Daily kWh Allocation	All-Electric Allocation
5	17.2	17.9
6	11.4	8.8
8	12.6	9.8
9	16.5	12.4
10	18.9	15.8
13	22.0	24.6
14	18.7	18.3
15	46.4	24.1
16	14.4	13.5

Winter Daily Allocations (October through May)

Baseline Region Number	Daily kWh Allocation	All-Electric Allocation
5	18.7	29.1
6	11.3	13.0
8	10.6	12.7
9	12.3	14.3
10	12.5	17.0
13	12.6	24.3
14	12.0	21.3
15	9.9	18.2
16	12.6	23.1

Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 12 (T)

SPECIAL CONDITIONS

1. Applicable rate time periods are defined as follows:

Option 4-9 PM, Option 4-9 PM-CPP, Option PRIME, Option PRIME-CPP :

TOU Period	Weekdays		Weekends and Holidays	
	Summer	Winter	Summer	Winter
On-Peak	4 p.m. - 9 p.m.	N/A	N/A	N/A
Mid-Peak	N/A	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.
Off-Peak	All other hours	9 p.m. - 8 a.m.	All other hours	9 p.m. - 8 a.m.
Super-Off-Peak	N/A	8 a.m. - 4 p.m.	N/A	8 a.m. - 4 p.m.
CPP Event Period	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	N/A	N/A

(T)

Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 2

RATES

Customers receiving service under this Schedule will be charged the applicable rates under Option 4-9 PM, Option 4-9 PM-CPP, Option 5-8 PM, Option 5-8 PM-CPP, Option PRIME, Option PRIME-CPP Option A, Option A-CPP, Option B, or Option B-CPP, as listed below. CPP Event Charges will apply to all energy usage during CPP Event Energy Charge periods and CPP Non-Event Energy Credits will apply as a reduction on CPP Non-Event Energy Credit Periods during Summer Season weekdays, 4:00 p.m. to 9:00 p.m., as described in Special Conditions 1 and 3, below:

		Delivery Service		
		Total ¹	UG ^{***}	DWREC ²
<u>Option 4-9 PM / Option 4-9 PM-CPP</u>				
Energy Charge - \$/kWh				
	Summer Season - On-Peak	0.21574 (I)	0.17870 (I)	(0.00007)
	Mid-Peak	0.21574 (I)	0.10434 (R)	(0.00007)
	Off-Peak	0.17099 (I)	0.07584 (R)	(0.00007)
	Winter Season - Mid-Peak	0.21574 (I)	0.12676 (R)	(0.00007)
	Off-Peak	0.17099 (I)	0.08874 (R)	(0.00007)
	Super-Off-Peak	0.16567 (I)	0.07025 (R)	(0.00007)
Baseline Credit ^{****} - \$/kWh		(0.07456) (R)	0.00000	
Basic Charge - \$/day				
	Single-Family Residence	0.031		
	Multi-Family Residence	0.024		
Minimum Charge ^{**} - \$/day				
	Single Family Residence	0.346		
	Multi-Family Residence	0.346		
Minimum Charge (Medical Baseline) ^{**} - \$/day				
	Single Family Residence	0.173		
	Multi-Family Residence	0.173		
California Climate Credit ⁴		(37.00) (I)		
California Alternate Rates for Energy Discount - %		100.00 [*]		
Family Electric Rate Assistance Discount - %		100.00		
<u>Option 4-9 PM-CPP</u>				
CPP Event Energy Charge - \$/kWh			0.80000	
Summer CPP Non-Event Credit				
On-Peak Energy Credit - \$/kWh			(0.15170)	
Maximum Available Credit - \$/kWh ^{*****}				
	Summer Season		(0.58504) (R)	

^{*} Represents 100% of the discount percentage as shown in the applicable Special Condition of this Schedule.

^{**} The Minimum Charge is applicable when the Delivery Service Energy Charge, plus the applicable Basic Charge is less than the Minimum Charge.

^{***} The ongoing Competition Transition Charge CTC of \$0.00089 per kWh is recovered in the UG component of Generation.

^{****} The Baseline Credit applies up to 100% of the Baseline Allocation, regardless of Time of Use. The Baseline Allocation is set forth in Preliminary Statement, Part H.

^{*****} The Maximum Available Credit is the capped credit amount for CPP Customers dual participating in other demand response programs.

1 Total = Total Delivery Service rates are applicable to Bundled Service, Direct Access (DA) and Community Choice Aggregation Service (CCA Service) Customers, except DA and CCA Service Customers are not subject to the DWRBC rate component of this Schedule but instead pay the DWRBC as provided by Schedule DA-CRS or Schedule CCA-CRS.

2 Generation = The Gen rates are applicable only to Bundled Service Customers.

3 DWREC = Department of Water Resources (DWR) Energy Credit - For more information on the DWR Energy Credit, see the Billing Calculation Special Condition of this Schedule.

4 Applied on an equal basis, per household, semi-annually. See the Special Conditions of this Schedule for more information.

SoCalGas

Following are the SoCalGas natural gas tariffs applied in this study. Table 16 describes the baseline territories that were assumed for each climate zone.

Table 16: SoCalGas Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
5	2
6	1
8	1
9	1
10	1
14	2
15	1

Source: SoCalGas.

The SoCalGas monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending April 2020 according to the rates shown in Table 17. Historical natural gas rate data were only available for SoCalGas' procurement charges.⁵ To estimate total costs by month, the baseline and excess transmission charges were assumed to be consistent and applied for the entire year based on April 2020 costs.

Table 17: SoCalGas Monthly Gas Rate (\$/therm)

Month	Procurement Charge	Transmission Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
Jan 2020	\$0.34730	\$0.81742	\$1.17186	\$1.16472	\$1.51916
Feb 2020	\$0.28008	\$0.81742	\$1.17186	\$1.09750	\$1.45194
Mar 2020	\$0.22108	\$0.81742	\$1.17186	\$1.03850	\$1.39294
Apr 2020	\$0.20307	\$0.81742	\$1.17186	\$1.02049	\$1.37493
May 2019	\$0.23790	\$0.81742	\$1.17186	\$1.05532	\$1.40976
June 2019	\$0.24822	\$0.81742	\$1.17186	\$1.06564	\$1.42008
July 2019	\$0.28475	\$0.81742	\$1.17186	\$1.10217	\$1.45661
Aug 2019	\$0.27223	\$0.81742	\$1.17186	\$1.08965	\$1.44409
Sept 2019	\$0.26162	\$0.81742	\$1.17186	\$1.07904	\$1.43348
Oct 2019	\$0.30091	\$0.81742	\$1.17186	\$1.11833	\$1.47277
Nov 2019	\$0.27563	\$0.81742	\$1.17186	\$1.09305	\$1.44749
Dec 2019	\$0.38067	\$0.81742	\$1.17186	\$1.19809	\$1.55253

Source: SoCalGas.

⁵ The SoCalGas procurement and transmission charges were obtained from the following site: <https://www.socalgas.com/for-your-business/energy-market-services/gas-prices>

SOUTHERN CALIFORNIA GAS COMPANY Revised CAL. P.U.C. SHEET NO. 57458-G
LOS ANGELES, CALIFORNIA CANCELING Revised CAL. P.U.C. SHEET NO. 57432-G

Schedule No. GM		Sheet 2
<u>MULTI-FAMILY SERVICE</u>		
(Includes GM-E, GM-C, GM-EC, GM-CC, GT-ME, GT-MC and all GMB Rates)		
(Continued)		
<u>APPLICABILITY</u> (Continued)		
Multi-family Accommodations built prior to December 15, 1981 and currently served under this schedule may also be eligible for service under Schedule No. GS. If an eligible Multi-family Accommodation served under this schedule converts to an applicable submetered tariff, the tenant rental charges shall be revised for the duration of the lease to reflect removal of the energy related charges.		
Eligibility for service hereunder is subject to verification by the Utility.		
<u>TERRITORY</u>		
Applicable throughout the service territory.		
<u>RATES</u>		
	<u>GM/GT-M</u>	<u>GMB/GT-MB</u>
Customer Charge, per meter, per day:	16.438¢	\$16.357
For "Space Heating Only" customers, a daily		
Customer Charge applies during the winter period		
from November 1 through April 30 ^{1/2} :	33.149¢	

SOUTHERN CALIFORNIA GAS COMPANY Revised CAL P.U.C. SHEET NO. 57168-G
LOS ANGELES, CALIFORNIA CANCELING Revised CAL P.U.C. SHEET NO. 41015-G

Schedule No. GM
MULTI-FAMILY SERVICE

Sheet 5

(Includes GM-E, GM-C, GM-EC, GM-CC, GT-ME, GT-MC and all GMB Rates)

(Continued)

SPECIAL CONDITIONS (Continued)

3. (Continued)

Codes	Per Residence	Daily Therm Allowance for Climate Zones*		
		1	2	3
1	Space heating only			
	Summer	0.000	0.000	0.000
	Winter	1.210	1.343	2.470
2	Water heating and cooking	0.477	0.477	0.477
3	Cooking, water heating and space heating			
	Summer	0.473	0.473	0.473
	Winter	1.691	1.823	2.950
4	Cooking and space heating			
	Summer	0.088	0.088	0.088
	Winter	1.299	1.432	2.559
5	Cooking only	0.089	0.089	0.089
6	Water heating only	0.388	0.388	0.388
7	Water heating and space heating			
	Summer	0.385	0.385	0.385
	Winter	1.601	1.734	2.861

* Climate Zones are described in the Preliminary Statement.

4. **Medical Baseline:** Upon completion of an application and verification by a state-licensed physician, nurse practitioner, physician's assistant, or osteopath (Form No. 4859-E), an additional Baseline allowance of 0.822 therms per day will be provided for paraplegic, quadriplegic, or hemiplegic persons, those afflicted with multiple sclerosis or scleroderma, or persons being treated for a life threatening illness or who have a compromised immune system.

Where it is established that the energy required for a Life-Support Device, as defined in Rule No. 1, exceeds 0.822 therms per day, an additional uniform daily Baseline allowance will be provided. The amount of the additional allowance will be determined by the Utility from load and operating time data of the Life-Support Device.

5. **Space Heating Only:** Applies to customers who are using gas primarily for space heating, as determined by survey or under the presumption that customers who use less than 11 Ccf per month during each of the regular billing periods ending in August and September qualify for Heat Only billing.

(Continued)

(TO BE INSERTED BY UTILITY)
ADVICE LETTER NO. 5576-A
DECISION NO. 02-04-026

ISSUED BY
Dan Skopec
Vice President

(TO BE INSERTED BY CAL. PUC)
SUBMITTED Jan 31, 2020
EFFECTIVE Feb 27, 2020

T
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SDG&E

Following are the SDG&E electricity and natural gas tariffs applied in this study. Table 18 describes the baseline territories that were assumed for each climate zone. All-Electric baseline allowances were applied.

Table 18: SDG&E Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
7	Coastal
10	Inland
14	Mountain

Source: SDG&E.

The SDG&E monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending April 2020 according to the rates shown in Table 19. Historical natural gas rate data from SDG&E were reviewed to identify the procurement and transmission charges⁶ used to calculate the monthly total gas rate.

Table 19: SDG&E Monthly Gas Rate (\$/therm)

Month	Procurement Charge	Transmission Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
Jan 2020	\$0.34761	\$1.36166	\$1.59166	\$1.70927	\$1.93927
Feb 2020	\$0.28035	\$1.36166	\$1.59166	\$1.64201	\$1.87201
Mar 2020	\$0.22130	\$1.36166	\$1.59166	\$1.58296	\$1.81296
Apr 2020	\$0.20327	\$1.35946	\$1.59125	\$1.56273	\$1.79452
May 2019	\$0.23804	\$1.06349	\$1.25253	\$1.30153	\$1.49057
June 2019	\$0.24838	\$1.06349	\$1.25253	\$1.31187	\$1.50091
July 2019	\$0.28491	\$1.06349	\$1.25253	\$1.34840	\$1.53744
Aug 2019	\$0.27239	\$1.06349	\$1.25253	\$1.33588	\$1.52492
Sept 2019	\$0.26178	\$1.06349	\$1.25253	\$1.32527	\$1.51431
Oct 2019	\$0.30109	\$1.06349	\$1.25253	\$1.36458	\$1.55362
Nov 2019	\$0.27580	\$1.06349	\$1.25253	\$1.33929	\$1.52833
Dec 2019	\$0.38090	\$1.06349	\$1.25253	\$1.44439	\$1.63343

Source: SDG&E.

⁶ The SDG&E procurement and transmission charges were obtained from the following sets of documents:

http://regarchive.sdge.com/tm2/pdf/GAS_GAS-SCHEDS_GM_2020.pdf

http://regarchive.sdge.com/tm2/pdf/GAS_GAS-SCHEDS_GM_2019.pdf

<u>RATES</u>	<u>GM</u>	<u>GM-C</u>	<u>GTC/GTCA¹</u>
Minimum Bill, per day ³			
Non-CARE customers.....	\$0.09863	\$0.09863	\$0.09863
CARE customers.....	\$0.07890	\$0.07890	\$0.07890

Baseline Usage. The following quantities of gas are to be billed at the baseline rate for multi-family units. Usage in excess of applicable baseline usage will be billed at non-baseline rates.

	Daily Therm Allowance Per Residential Unit
Summer (May 1 to October 31, inclusive)	0.345
Winter (November 1 to April 30, inclusive)	1.082

SDGE
San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 33144-E
Canceling Revised Cal. P.U.C. Sheet No. 32930-E

SCHEDULE TOU-DR1
RESIDENTIAL TIME-OF-USE

Sheet 2

RATES

Total Rates:

Description – TOU DR1	UDC Total Rate	DWR-BC Rate	EECC Rate + DWR Credit	Total Rate
Summer:				
On-Peak	0.22374	I 0.00580	0.29042 R	0.51996 R
Off-Peak	0.22374	I 0.00580	0.09305 R	0.32269 R
Super Off-Peak	0.22374	I 0.00580	0.04743 R	0.27697 R
Winter:				
On-Peak	0.25734	R 0.00580	0.07844 R	0.34158 R
Off-Peak	0.25734	R 0.00580	0.06961 R	0.33275 R
Super Off-Peak	0.25734	R 0.00580	0.05981 R	0.32295 R
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.07506)	I		(0.07506) I
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.06833)	I		(0.06833) I
Minimum Bill (\$/day)	0.338			0.338

Time Periods

All time periods listed are applicable to local time. The definition of time will be based upon the date service is rendered.

TOU Periods – Weekdays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	6:00 a.m. – 4:00 p.m.; 9:00 p.m. – midnight	6:00 a.m. – 4:00 p.m. Excluding 10:00 a.m. – 2:00 p.m. in March and April; 9:00 p.m. – midnight
Super Off-Peak	Midnight – 6:00 a.m.	Midnight – 6:00 a.m. 10:00 a.m. – 2:00 p.m. in March and April
TOU Period – Weekends and Holidays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	2:00 p.m. – 4:00 p.m.; 9:00 p.m. – midnight	2:00 p.m. – 4:00 p.m.; 9:00 p.m. – midnight
Super Off-Peak	Midnight – 2:00 p.m.	Midnight – 2:00 p.m.

Seasons: Summer June 1 – October 31
Winter November 1 – May 31

Baseline Usage: The following quantities of electricity are used to calculate the baseline adjustment credit.

	Baseline Allowance For Climatic Zones*			
	Coastal	Inland	Mountain	Desert
Basic Allowance				
Summer (June 1 to October 31)	9.0	10.4	13.6	15.9
Winter (November 1 to May 31)	9.2	9.6	12.9	10.9
All Electric**				
Summer (June 1 to October 31)	6.8	9.2	15.6	17.5
Winter (November 1 to May 31)	10.4	13.4	23.4	18.1

* Climatic Zones are shown on the Territory Served, Map No. 1.

** All Electric allowances are available upon application to those customers who have permanently installed space heating or who have electric water heating and receive no energy from another source.

SMUD

Following are the SMUD electricity tariffs applied in this study.

RTOD Rate Schedule**II. Firm Service Rates****A. Time-of-Day (5-8 p.m.) Rate** **Rate Category RT01****Non-Summer Prices* – January 1 through May 31**

System Infrastructure Fixed Charge per month	\$21.05
--	---------

Electricity Usage Charge

Peak \$/kWh	\$0.1388
-------------	----------

Off-Peak \$/kWh	\$0.1006
-----------------	----------

Summer Prices - June 1 through September 30

System Infrastructure Fixed Charge per month	\$21.05
--	---------

Electricity Usage Charge

Peak \$/kWh	\$0.2941
-------------	----------

Mid-Peak \$/kWh	\$0.1671
-----------------	----------

Off-Peak \$/kWh	\$0.1209
-----------------	----------

Non-Summer Prices* – October 1 through December 31

System Infrastructure Fixed Charge per month	\$21.70
--	---------

Electricity Usage Charge

Peak \$/kWh	\$0.1430
-------------	----------

Off-Peak \$/kWh	\$0.1035
-----------------	----------

* Non-Summer Season includes Fall (Oct 1 – Nov 30), Winter (Dec 1 – Mar 31) and Spring (Apr 1 – May 31) periods.

Summer (Jun 1 - Sept 30)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Mid-Peak	Weekdays between noon and midnight except during the Peak hours.
	Off-Peak	All other hours, including weekends and holidays ¹ .
Non-Summer (Oct 1 - May 31)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Off-Peak	All other hours, including weekends and holidays ¹ .

GSN_T Rate Schedule:

II. Firm Service Rates

Rate Category	Nondemand GSN_T	Flat GFN	Demand GSS_T
Winter Season – January 1 through May 31			
System Infrastructure Fixed Charge - per month per meter	\$21.15	\$9.45	\$25.75
Site Infrastructure Charge <i>(per 12 months max kW or contract capacity)</i>	n/a	n/a	\$7.94
Electricity Usage Charge			
All day \$/kWh	\$0.1365	\$0.1381	\$0.1071
Summer Season - June 1 through September 30			
System Infrastructure Fixed Charge - per month per meter	\$21.15	\$9.45	\$25.75
Site Infrastructure Charge <i>(per 12 months max kW or contract capacity)</i>	n/a	n/a	\$7.94
Electricity Usage Charge			
On-peak \$/kWh	\$0.3151	\$0.1381	\$0.2733
Off-peak \$/kWh	\$0.1152	\$0.1381	\$0.0948
Rate Category	Nondemand GSN_T	Flat GFN	Demand GSS_T
Winter Season - October 1 through December 31			
System Infrastructure Fixed Charge - per month per meter	\$21.80	\$9.70	\$26.50
Site Infrastructure Charge <i>(per 12 months max kW or contract capacity)</i>	n/a	n/a	\$8.18
Electricity Usage Charge			
All day \$/kWh	\$0.1406	\$0.1423	\$0.1103

D. Billing Periods

1. Winter (October 1 – May 31) All hours are off-peak.

2. Summer Time-of-Use Billing Periods (June 1 – September 30)

On-Peak	Summer weekdays between 3:00 p.m. and 6:00 p.m.
Off-Peak	All other hours, including holidays shown below

CPAU

Following are the CPAU electricity and natural gas tariffs applied in this study.

E1 Rate Schedule:

RESIDENTIAL ELECTRIC SERVICE

UTILITY RATE SCHEDULE E-1

A. APPLICABILITY:

This Rate Schedule applies to separately metered single-family residential dwellings receiving Electric Service from the City of Palo Alto Utilities.

B. TERRITORY:

This rate schedule applies everywhere the City of Palo Alto provides Electric Service.

C. UNBUNDLED RATES:

<u>Per kilowatt-hour (kWh)</u>	<u>Commodity</u>	<u>Distribution</u>	<u>Public Benefits</u>	<u>Total</u>
Tier 1 usage	\$0.08339	\$0.04971	\$0.00447	\$0.13757
Tier 2 usage Any usage over Tier 1	0.11569	0.07351	0.00447	0.19367
<u>Minimum Bill (\$/day)</u>				0.3283

E2 Rate Schedule:

RESIDENTIAL MASTER-METERED AND SMALL NON-RESIDENTIAL ELECTRIC SERVICE

UTILITY RATE SCHEDULE E-2

A. APPLICABILITY:

This Rate Schedule applies to the following Customers receiving Electric Service from the City of Palo Alto Utilities:

1. Small non-residential Customers receiving Non-Demand Metered Electric Service; and
2. Customers with Accounts at Master-Metered multi-family facilities.

B. TERRITORY:

This rate schedule applies everywhere the City of Palo Alto provides Electric Service.

C. UNBUNDLED RATES:

<u>Per kilowatt-hour (kWh)</u>	<u>Commodity</u>	<u>Distribution</u>	<u>Public Benefits</u>	<u>Total</u>
Summer Period	\$0.11855	\$0.08551	\$0.00447	\$0.20853
Winter Period	0.08502	0.05675	0.00447	0.14624
<u>Minimum Bill (\$/day)</u>				0.8359

The CPAU monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending June 2020 according to the rates shown in Table 20.

Table 20: CPAU Monthly Gas Rate (\$/therm)

Effective Date	Commodity Rate	Cap and Trade Compliance Charge	Transportation Charge	Carbon Offset Charge	G2 Total Volumetric Rate
1/1/20	\$0.3289	0.033	0.09941	0.040	1.11151
2/1/20	0.2466	0.033	0.09941	0.040	1.02921
3/1/20	0.2416	0.033	0.09891	0.040	1.02371
4/1/20	0.2066	0.033	0.09891	0.040	0.98871
5/1/20	0.2258	0.033	0.09891	0.040	1.00791
6/1/20	0.2279	0.033	0.09891	0.040	1.01001
7/1/19	0.2471	0.033	0.11757	0.040	1.04787
8/1/19	0.2507	0.033	0.10066	0.040	1.03456
9/1/19	0.2461	0.033	0.10066	0.040	1.02996
10/1/19	0.2811	0.033	0.10288	0.040	1.06718
11/1/19	0.2923	0.033	0.10288	0.040	1.07838
12/1/19	0.3781	0.033	0.10288	0.040	1.16418

Source: CPAU.

RESIDENTIAL MASTER-METERED AND COMMERCIAL GAS SERVICE

UTILITY RATE SCHEDULE G-2

A. APPLICABILITY:

This schedule applies to the following Customers receiving Gas Service from the City of Palo Alto Utilities:

1. Commercial Customers who use less than 250,000 therms per year at one site.
2. Master-metered residential Customers in multi-family residential facilities.

B. TERRITORY:

This schedule applies anywhere the City of Palo Alto provides Gas Service.

C. UNBUNDLED RATES:

Per Service

Monthly Service Charge:\$104.95

Per Therm

Supply Charges:

1. Commodity (Monthly Market Based) \$0.10-\$2.00
2. Cap and Trade Compliance Charges \$0.00-0.25
3. Transportation Charge.....\$0.00-\$0.15
4. Carbon Offset Charge\$0.00-\$0.10

Distribution Charge: \$0.6102

Escalation Assumptions

The average annual escalation rates in Table 21 were used in this study and are from E3's 2019 study Residential Building Electrification in California (Energy & Environmental Economics, 2019). These rates are applied to the 2019 rate schedules over a 30-year period beginning in 2020. SDG&E was not covered in the E3 study. The Statewide Reach Codes Team reviewed SDG&E's GRC filing and applied the same approach that E3 applied for PG&E and SoCalGas to arrive at average escalation rates between 2020 and 2022. The statewide electricity escalation rates were also applied to the analysis for SMUD and CPAU. PG&E gas escalation rates were applied to CPAU as the best available estimate since CPAU uses PG&E gas infrastructure.

Table 21: Real Utility Rate Escalation Rate Assumptions

Year	Statewide Electric Residential Average Rate Escalation (%/year, real)	Natural Gas Residential Core Rate Escalation (%/year, real)		
		PG&E	SoCalGas	SDG&E
2020	2.0%	1.48%	6.37%	5.00%
2021	2.0%	5.69%	4.12%	3.14%
2022	2.0%	1.11%	4.12%	2.94%
2023	2.0%	4.0%	4.0%	4.0%
2024	2.0%	4.0%	4.0%	4.0%
2025	2.0%	4.0%	4.0%	4.0%
2026	1.0%	1.0%	1.0%	1.0%
2027	1.0%	1.0%	1.0%	1.0%
2028	1.0%	1.0%	1.0%	1.0%
2029	1.0%	1.0%	1.0%	1.0%
2030	1.0%	1.0%	1.0%	1.0%
2031	1.0%	1.0%	1.0%	1.0%
2032	1.0%	1.0%	1.0%	1.0%
2033	1.0%	1.0%	1.0%	1.0%
2034	1.0%	1.0%	1.0%	1.0%
2035	1.0%	1.0%	1.0%	1.0%
2036	1.0%	1.0%	1.0%	1.0%
2037	1.0%	1.0%	1.0%	1.0%
2038	1.0%	1.0%	1.0%	1.0%
2039	1.0%	1.0%	1.0%	1.0%
2040	1.0%	1.0%	1.0%	1.0%
2041	1.0%	1.0%	1.0%	1.0%
2042	1.0%	1.0%	1.0%	1.0%
2043	1.0%	1.0%	1.0%	1.0%
2044	1.0%	1.0%	1.0%	1.0%
2045	1.0%	1.0%	1.0%	1.0%
2046	1.0%	1.0%	1.0%	1.0%
2047	1.0%	1.0%	1.0%	1.0%
2048	1.0%	1.0%	1.0%	1.0%
2049	1.0%	1.0%	1.0%	1.0%

Source: Energy & Environmental Economics, 2019.

6.3 Appendix C – PG&E Gas Infrastructure Cost Memo



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December 5, 2019

Energy Commission Staff:

On March 2, 2018, PG&E provided gas extension cost estimates for residential existing and new subdivisions (see attached memo). We have recently updated our estimates and are therefore providing an updated memo.

In addition to mainline and service extension costs, we are also providing estimates of the cost of gas meters for different building types including both residential and commercial customers. These estimates are based on PG&E historical jobs.

Developing gas extension cost estimates is complex and the actual costs are project dependent. Costs vary widely with location, terrain, distance to the nearest main, joint trenching, materials, number of dwellings per development, and several other site and job-specific conditions. For these reasons, it is not practical to come up with estimates that represent every case. Instead we are including estimates based on historical averages taken from projects within PG&E's territory. It is not recommended to compare specific project costs to these estimates as any number of factors could lead to higher or lower costs than these averages are representing.

We are also including estimates for in-house gas infrastructure costs and specific plan review costs. These estimates are from external sources, and are not based on PG&E data, but have been provided for the sake of completeness and for use in energy efficiency analysis.

To further anchor the estimates, several assumptions have been made:

1. It is assumed that during new construction, gas infrastructure will likely be joint trenched with electric infrastructure. As a result, the incremental cost of trenching associated with the gas infrastructure alone is minimal. Therefore, all mainline cost estimates exclude trench costs. Service extension cost estimates include both estimates with and without trench costs. In the case where new construction would require overhead electric and underground gas infrastructure, the estimates with trench costs included for service extensions should be utilized.
2. It is assumed that new construction in an existing subdivision would not generally require a mainline extension. In cases where a mainline extension would be required to an existing subdivision, the costs are highly dependent on the location, terrain, and distance to the nearest main.



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1. These estimates are for total costs. The cost estimates have not been reduced to account for the portion of the costs paid by all customers due to application of Rule 15¹ and Rule 16² allowances. Hence, costs to the specific customer may be lower than the estimates below, as the specific customer benefits from the Rule 15 and Rule 16 allowances.

Table 1: PG&E Gas Infrastructure Cost Estimates

	Existing Subdivision/Development	New Greenfield Subdivision/Development
Mainline Extension	N/A ³	<u>Single-Family</u> \$17/ft ⁴ <u>Multi-Family</u> \$11/ft ⁴
Service Extension (Typically 1" pipe from mainline to the meter)	\$6750 per service/building ⁴ (excludes trench costs) \$9200 per service/building ⁴ (includes trench costs)	\$1300 per service/building ⁴ (includes mainline extension costs within the subdivision; excludes trench costs) \$1850 per service/building ⁴ (includes mainline extension costs within the subdivision; includes trench costs)
Meter	<u>Residential Single Family</u> \$300 per meter ⁵ <u>Residential Multi-Family</u> \$300 per meter + \$300 per meter manifold outlet ⁵ <u>Small/Medium Commercial</u> \$3600 per meter ⁶	<u>Residential Single Family</u> \$300 per meter ⁵ <u>Residential Multi-Family</u> \$300 per meter + \$300 per meter manifold outlet ⁵ <u>Small/Medium Commercial</u> \$3600 per meter ⁶

¹ https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_15.pdf

² https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_16.pdf

³ It is assumed that new construction in an existing subdivision would not require a main extension.

⁴ Estimates based on PG&E jobs from Jan 2016 - Dec 2017 from PG&E's Service Planning team.

⁵ Estimates from PG&E's Dedicated Estimating Team. For Multi-Family units, the costs of \$300 per meter and \$300 per meter manifold outlet should be combined for a total of \$600 per meter.

⁶ PG&E Marginal-Customer Access Cost Estimates presented in the 2018 Gas Cost Allocation Proceedings (GCAP), A.17-09-006, Exhibit PG&E-2, Appendix A, Section A, Table A-1. The Average Connection Cost per Customer values were included in the MCAC worksheet that accompanied the GCAP testimony.



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	<u>Large Commercial</u> \$32,000 per meter ⁶	<u>Large Commercial</u> \$32,000 per meter ⁵
--	--	--

Note: Service extension cost estimates for New Greenfield Subdivisions include mainline extension costs as well. Therefore, mainline cost estimates can be ignored for the purpose of estimating total project costs.

Table 2: Gas Infrastructure Cost Estimates from Other Sources

	Existing Subdivision/Development	New Greenfield Subdivision/Development
In-House Infrastructure	<u>Single-Family</u> \$800 ⁷	<u>Single-Family</u> \$800 ⁷
	<u>Multi-Family</u> \$600 per unit ⁷	<u>Multi-Family</u> \$600 per unit ⁷
	<u>Medium Office</u> \$600-4500 ^{7,8}	<u>Medium Office</u> \$600-4500 ^{7,8}
	<u>Medium Retail</u> \$10,000 ⁸	<u>Medium Retail</u> \$10,000 ⁸
Plan Review (Will vary by city and often not a fixed fee)	<u>Residential</u> Palo Alto - \$850 ⁹	<u>Residential</u> Palo Alto - \$850 ⁹
	<u>Nonresidential</u> Palo Alto - \$2316 ⁹	<u>Nonresidential</u> Palo Alto - \$2316 ⁹

Please let us know if there are any follow-up questions or clarifications.

Best regards,

⁷ Frontier Energy, Inc., Misti Brucini & Associates, LLC. 2019. "2019 Cost-effectiveness Study: Low Rise Residential New Construction." Available at: <https://localenergycodes.com/content/performance-ordinances>

⁸ TRC, EnergySoft. 2019. "2019 Nonresidential New Construction Reach Code Cost Effectiveness Study." Available at: <https://localenergycodes.com/content/performance-ordinances>

⁹ TRC. 2018. "City of Palo Alto 2019 Title 24 Energy Reach Code Cost Effectiveness Analysis Draft." Available at: <http://cityofpaloalto.org/civicax/filebank/documents/66742>

6.4 Appendix D – Detailed Results - Mixed Fuel

Table 22: Mixed-Fuel Efficiency Only Package Results (Savings/Cost Per Dwelling Unit)^a

Climate Zone	Elec Utility	Gas Utility	Dwelling Units		Central Water Heating			Total On-Bill			On-Bill		2019 TDV		2022 TDV	
			Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)	On-Bill Savings (2020 PV\$)	Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	39	\$8	0.0	0	\$0	26	\$199	\$216	0.9	(\$17)	0.6	(\$83)	0.8	(\$42)
2	PGE	PGE	79	\$24	0.0	0	\$0	45	\$570	\$144	4.0	\$426	3.0	\$289	2.7	\$247
3	PGE	PGE	60	\$18	0.0	0	\$0	33	\$420	\$144	2.9	\$276	2.3	\$184	1.9	\$131
4	PGE	PGE	95	\$29	0.0	0	\$0	54	\$678	\$144	4.7	\$534	3.2	\$321	3.2	\$313
4	CPAU	CPAU	95	\$17	0.0	0	\$0	54	\$394	\$144	2.7	\$250	3.2	\$321	3.2	\$313
5	PGE	PGE	71	\$20	0.0	0	\$0	39	\$484	\$144	3.4	\$340	2.3	\$180	1.9	\$122
5	PGE	SCG	71	\$20	0.0	0	\$0	39	\$484	\$144	3.4	\$340	2.3	\$180	1.9	\$122
6	SCE	SCG	113	\$26	0.0	0	\$0	62	\$619	\$144	4.3	\$475	3.4	\$344	3.2	\$315
7	SDGE	SDGE	105	\$33	0.0	0	\$0	59	\$789	\$144	5.5	\$645	3.4	\$339	2.8	\$264
8	SCE	SCG	128	\$31	0.0	0	\$0	72	\$728	\$144	5.1	\$585	3.9	\$413	3.9	\$421
9	SCE	SCG	125	\$29	0.0	0	\$0	70	\$695	\$144	4.8	\$551	4.2	\$461	3.9	\$413
10	SCE	SCG	130	\$26	0.0	0	\$0	73	\$623	\$144	4.3	\$479	4.2	\$457	3.9	\$415
10	SDGE	SDGE	130	\$41	0.0	0	\$0	73	\$972	\$144	6.8	\$828	4.2	\$457	3.9	\$415
11	PGE	PGE	148	\$38	0.0	0	\$0	91	\$897	\$216	4.1	\$681	3.7	\$584	3.4	\$523
12	PGE	PGE	122	\$31	0.0	0	\$0	74	\$736	\$216	3.4	\$519	3.1	\$448	2.8	\$397
12	SMUD	PGE	122	\$17	0.0	0	\$0	74	\$401	\$216	1.9	\$185	3.1	\$448	2.8	\$397
13	PGE	PGE	152	\$39	0.0	0	\$0	93	\$923	\$216	4.3	\$706	3.4	\$523	3.5	\$534
14	SCE	SCG	152	\$31	0.0	0	\$0	91	\$735	\$216	3.4	\$518	3.6	\$556	3.5	\$532
14	SDGE	SDGE	152	\$45	0.0	0	\$0	91	\$1,055	\$216	4.9	\$838	3.6	\$556	3.5	\$532
15	SCE	SCG	213	\$43	0.0	0	\$0	124	\$1,021	\$216	4.7	\$804	4.5	\$768	4.4	\$725
16	PGE	PGE	115	\$29	0.0	0	\$0	73	\$679	\$216	3.1	\$463	2.3	\$279	2.1	\$244

^a Values in red indicate B/C ratios less than 1.

Table 23: Mixed-Fuel Efficiency + 0.1 kW_{DC} PV per Dwelling Unit Results (Savings/Cost Per Dwelling Unit)^a

Climate Zone	Elec Utility	Gas Utility	Dwelling Units		Central Water Heating			Total On-Bill Utility Savings (2020 PV\$)			On-Bill		2019 TDV		2022 TDV	
			Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)		Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	172	\$40	0.0	0	\$0	81	\$955	\$533	1.8	\$422	1.2	\$93	1.0	\$21
2	PGE	PGE	236	\$67	0.0	0	\$0	112	\$1,597	\$460	3.5	\$1,137	2.2	\$574	1.9	\$417
3	PGE	PGE	222	\$62	0.0	0	\$0	102	\$1,472	\$460	3.2	\$1,011	2.0	\$455	1.6	\$290
4	PGE	PGE	261	\$74	0.0	0	\$0	125	\$1,762	\$460	3.8	\$1,302	2.4	\$628	2.2	\$538
4	CPAU	CPAU	261	\$43	0.0	0	\$0	125	\$1,025	\$460	2.2	\$565	2.4	\$628	2.2	\$538
5	PGE	PGE	245	\$67	0.0	0	\$0	113	\$1,596	\$460	3.5	\$1,136	2.1	\$498	1.7	\$312
5	PGE	SCG	245	\$67	0.0	0	\$0	113	\$1,596	\$460	3.5	\$1,136	2.1	\$498	1.7	\$312
6	SCE	SCG	290	\$63	0.0	0	\$0	138	\$1,489	\$460	3.2	\$1,029	2.4	\$650	2.2	\$558
7	SDGE	SDGE	270	\$81	0.0	0	\$0	130	\$1,918	\$460	4.2	\$1,458	2.4	\$664	2.0	\$441
8	SCE	SCG	299	\$66	0.0	0	\$0	146	\$1,573	\$460	3.4	\$1,113	2.6	\$750	2.5	\$712
9	SCE	SCG	303	\$63	0.0	0	\$0	147	\$1,502	\$460	3.3	\$1,042	2.8	\$807	2.5	\$697
10	SCE	SCG	308	\$58	0.0	0	\$0	150	\$1,376	\$460	3.0	\$916	2.7	\$779	2.5	\$682
10	SDGE	SDGE	308	\$90	0.0	0	\$0	150	\$2,132	\$460	4.6	\$1,671	2.7	\$779	2.5	\$682
11	PGE	PGE	307	\$76	0.0	0	\$0	160	\$1,800	\$533	3.4	\$1,267	2.7	\$903	2.3	\$695
12	PGE	PGE	286	\$70	0.0	0	\$0	144	\$1,663	\$533	3.1	\$1,130	2.4	\$755	2.1	\$579
12	SMUD	PGE	286	\$37	0.0	0	\$0	144	\$874	\$533	1.6	\$341	2.4	\$755	2.1	\$579
13	PGE	PGE	317	\$78	0.0	0	\$0	164	\$1,858	\$533	3.5	\$1,325	2.5	\$811	2.4	\$729
14	SCE	SCG	343	\$65	0.0	0	\$0	172	\$1,542	\$533	2.9	\$1,009	2.8	\$980	2.6	\$854
14	SDGE	SDGE	343	\$95	0.0	0	\$0	172	\$2,247	\$533	4.2	\$1,714	2.8	\$980	2.6	\$854
15	SCE	SCG	390	\$75	0.0	0	\$0	199	\$1,768	\$533	3.3	\$1,235	3.1	\$1,123	2.8	\$981
16	PGE	PGE	284	\$69	0.0	0	\$0	147	\$1,641	\$533	3.1	\$1,108	2.1	\$595	1.8	\$428

^a Values in red indicate B/C ratios less than 1 or negative values.

6.5 Appendix E – Detailed Results - All-Electric

Table 24: All-Electric Central Recirculating HPWH Efficiency Package Results (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Dwelling Units		Central Water Heating			Total			On-Bill		2019 TDV		2022 TDV	
			Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)	Utility Savings (2020 PV\$)	Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	39	\$8	95.7	(710)	(\$38)	838	(\$493)	\$775	0.0	(\$1,268)	0.0	(\$744)	2.1	\$850
2	PGE	PGE	78	\$24	86.9	(635)	(\$32)	785	\$5	\$702	0.0	(\$697)	0.5	(\$371)	2.5	\$1,067
3	PGE	PGE	70	\$20	86.7	(618)	(\$29)	788	(\$33)	\$888	0.0	(\$921)	0.3	(\$635)	1.9	\$763
4	PGE	PGE	95	\$29	81.4	(590)	(\$29)	750	\$174	\$702	0.2	(\$528)	0.5	(\$317)	2.5	\$1,084
4	CPAU	CPAU	95	\$17	81.4	(590)	(\$5)	750	\$447	\$702	0.6	(\$255)	0.5	(\$317)	2.5	\$1,084
5	PGE	PGE	80	\$22	86.7	(616)	(\$29)	792	\$30	\$888	0.0	(\$858)	0.3	(\$608)	1.7	\$656
5	PGE	SCG	80	\$22	86.7	(616)	(\$49)	792	(\$324)	\$888	0.0	(\$1,212)	0.3	(\$608)	1.7	\$656
6	SCE	SCG	113	\$26	78.3	(560)	(\$21)	732	\$399	\$702	0.6	(\$303)	0.7	(\$214)	2.4	\$960
7	SDGE	SDGE	105	\$33	78.0	(558)	(\$37)	727	\$174	\$702	0.2	(\$528)	0.7	(\$237)	2.2	\$810
8	SCE	SCG	128	\$31	75.5	(544)	(\$21)	715	\$501	\$702	0.7	(\$201)	0.9	(\$65)	2.7	\$1,174
9	SCE	SCG	125	\$29	76.3	(552)	(\$21)	721	\$463	\$702	0.7	(\$239)	0.9	(\$64)	2.7	\$1,217
10	SCE	SCG	130	\$26	63.2	(552)	(\$36)	555	\$10	\$484	0.0	(\$474)	0.4	(\$279)	2.5	\$745
10	SDGE	SDGE	130	\$41	63.2	(552)	(\$55)	555	(\$116)	\$484	0.0	(\$600)	0.4	(\$279)	2.5	\$745
11	PGE	PGE	147	\$38	64.8	(582)	(\$47)	580	(\$66)	\$557	0.0	(\$623)	0.7	(\$150)	2.4	\$767
12	PGE	PGE	122	\$31	67.7	(596)	(\$48)	589	(\$238)	\$557	0.0	(\$795)	0.5	(\$254)	2.2	\$682
12	SMUD	PGE	122	\$17	67.7	(596)	\$12	589	\$849	\$557	1.5	\$292	0.5	(\$254)	2.2	\$682
13	PGE	PGE	152	\$39	62.8	(562)	(\$45)	566	(\$9)	\$557	0.0	(\$566)	0.6	(\$200)	2.4	\$801
14	SCE	SCG	152	\$31	65.3	(585)	(\$39)	581	\$53	\$557	0.1	(\$503)	0.8	(\$126)	2.6	\$892
14	SDGE	SDGE	152	\$44	65.3	(585)	(\$59)	581	(\$121)	\$557	0.0	(\$678)	0.8	(\$126)	2.6	\$892
15	SCE	SCG	213	\$43	51.2	(465)	(\$31)	507	\$481	\$557	0.9	(\$76)	1.4	\$239	2.7	\$950
16	PGE	PGE	115	\$29	77.8	(737)	(\$66)	642	(\$696)	\$557	0.0	(\$1,252)	0.0	(\$997)	1.3	\$170

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

Table 25: All-Electric Central Recirculating HPWH + 0.1 kW_{DC} PV per Dwelling Unit Results (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Dwelling Units		Central Water Heating			Total On-Bill Utility Savings			On-Bill		2019 TDV		2022 TDV	
			Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)	(2020 PV\$)	Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	171	\$40	95.7	(710)	(\$38)	894	\$262	\$1,091	0.2	(\$829)	0.5	(\$569)	1.8	\$914
2	PGE	PGE	236	\$67	86.9	(635)	(\$32)	852	\$1,032	\$1,018	1.0	\$14	0.9	(\$87)	2.2	\$1,237
3	PGE	PGE	232	\$64	86.7	(618)	(\$29)	857	\$1,019	\$1,205	0.8	(\$185)	0.7	(\$364)	1.8	\$922
4	PGE	PGE	261	\$74	81.4	(590)	(\$29)	821	\$1,258	\$1,018	1.2	\$239	1.0	(\$10)	2.3	\$1,309
4	CPAU	CPAU	261	\$43	81.4	(590)	(\$5)	821	\$1,079	\$1,018	1.1	\$60	1.0	(\$10)	2.3	\$1,309
5	PGE	PGE	254	\$69	86.7	(616)	(\$29)	867	\$1,142	\$1,205	0.9	(\$62)	0.8	(\$290)	1.7	\$847
5	PGE	SCG	254	\$69	86.7	(616)	(\$49)	867	\$789	\$1,205	0.7	(\$416)	0.8	(\$290)	1.7	\$847
6	SCE	SCG	290	\$63	78.3	(560)	(\$21)	808	\$1,269	\$1,018	1.2	\$251	1.1	\$92	2.2	\$1,203
7	SDGE	SDGE	270	\$81	78.0	(558)	(\$37)	798	\$1,303	\$1,018	1.3	\$284	1.1	\$88	2.0	\$987
8	SCE	SCG	299	\$66	75.5	(544)	(\$21)	789	\$1,345	\$1,018	1.3	\$327	1.3	\$272	2.4	\$1,465
9	SCE	SCG	303	\$63	76.3	(552)	(\$21)	797	\$1,270	\$1,018	1.2	\$251	1.3	\$281	2.5	\$1,501
10	SCE	SCG	308	\$58	63.2	(552)	(\$36)	632	\$763	\$801	1.0	(\$37)	1.1	\$43	2.3	\$1,013
10	SDGE	SDGE	308	\$90	63.2	(552)	(\$55)	632	\$1,044	\$801	1.3	\$243	1.1	\$43	2.3	\$1,013
11	PGE	PGE	307	\$76	64.8	(582)	(\$47)	648	\$837	\$873	1.0	(\$36)	1.2	\$169	2.1	\$939
12	PGE	PGE	285	\$70	67.7	(596)	(\$48)	659	\$690	\$873	0.8	(\$184)	1.1	\$53	2.0	\$864
12	SMUD	PGE	285	\$37	67.7	(596)	\$12	659	\$1,321	\$873	1.5	\$448	1.1	\$53	2.0	\$864
13	PGE	PGE	317	\$78	62.8	(562)	(\$45)	637	\$926	\$873	1.1	\$52	1.1	\$87	2.1	\$997
14	SCE	SCG	343	\$65	65.3	(585)	(\$39)	663	\$861	\$873	1.0	(\$13)	1.3	\$299	2.4	\$1,214
14	SDGE	SDGE	343	\$95	65.3	(585)	(\$59)	663	\$1,071	\$873	1.2	\$198	1.3	\$299	2.4	\$1,214
15	SCE	SCG	390	\$75	51.2	(465)	(\$31)	582	\$1,228	\$873	1.4	\$354	1.7	\$594	2.4	\$1,206
16	PGE	PGE	284	\$69	77.8	(737)	(\$66)	716	\$266	\$873	0.3	(\$607)	0.2	(\$681)	1.4	\$353

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

Table 26: All-Electric Central Recirculating HPWH + 0.2 kW_{DC} PV per Dwelling Unit Results (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Dwelling Units		Central Water Heating			Total On-Bill Utility Savings			On-Bill		2019 TDV		2022 TDV	
			Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)	Inc. Cost (2020 PV\$)	Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	304	\$72	95.7	(710)	(\$38)	949	\$1,018	\$1,408	0.72	(\$390)	0.7	(\$393)	1.7	\$977
2	PGE	PGE	393	\$111	86.9	(635)	(\$32)	920	\$2,060	\$1,335	1.54	\$725	1.1	\$197	2.1	\$1,407
3	PGE	PGE	395	\$109	86.7	(618)	(\$29)	926	\$2,071	\$1,521	1.36	\$550	0.9	(\$93)	1.7	\$1,080
4	PGE	PGE	427	\$120	81.4	(590)	(\$29)	892	\$2,342	\$1,335	1.75	\$1,007	1.2	\$297	2.1	\$1,534
4	CPAU	CPAU	427	\$68	81.4	(590)	(\$5)	892	\$1,669	\$1,335	1.25	\$334	1.2	\$297	2.1	\$1,534
5	PGE	PGE	428	\$116	86.7	(616)	(\$29)	941	\$2,255	\$1,521	1.48	\$734	1.0	\$27	1.7	\$1,037
5	PGE	SCG	428	\$116	86.7	(616)	(\$49)	941	\$1,901	\$1,521	1.25	\$380	1.0	\$27	1.7	\$1,037
6	SCE	SCG	466	\$100	78.3	(560)	(\$21)	884	\$2,140	\$1,335	1.60	\$805	1.3	\$397	2.1	\$1,446
7	SDGE	SDGE	435	\$127	78.0	(558)	(\$37)	869	\$2,404	\$1,335	1.80	\$1,069	1.3	\$414	1.9	\$1,164
8	SCE	SCG	470	\$102	75.5	(544)	(\$21)	863	\$2,190	\$1,335	1.64	\$855	1.5	\$609	2.3	\$1,755
9	SCE	SCG	480	\$95	76.3	(552)	(\$21)	874	\$2,027	\$1,335	1.52	\$692	1.5	\$627	2.3	\$1,785
10	SCE	SCG	485	\$90	63.2	(552)	(\$36)	708	\$1,517	\$1,117	1.36	\$400	1.3	\$365	2.1	\$1,280
10	SDGE	SDGE	485	\$138	63.2	(552)	(\$55)	708	\$2,184	\$1,117	1.96	\$1,067	1.3	\$365	2.1	\$1,280
11	PGE	PGE	466	\$114	64.8	(582)	(\$47)	717	\$1,740	\$1,190	1.46	\$550	1.4	\$488	1.9	\$1,111
12	PGE	PGE	449	\$109	67.7	(596)	(\$48)	729	\$1,617	\$1,190	1.36	\$427	1.3	\$361	1.9	\$1,046
12	SMUD	PGE	449	\$57	67.7	(596)	\$12	729	\$1,793	\$1,190	1.51	\$604	1.3	\$361	1.9	\$1,046
13	PGE	PGE	482	\$118	62.8	(562)	(\$45)	708	\$1,861	\$1,190	1.56	\$671	1.3	\$375	2.0	\$1,192
14	SCE	SCG	534	\$99	65.3	(585)	(\$39)	744	\$1,668	\$1,190	1.40	\$478	1.6	\$723	2.3	\$1,537
14	SDGE	SDGE	534	\$145	65.3	(585)	(\$59)	744	\$2,263	\$1,190	1.90	\$1,073	1.6	\$723	2.3	\$1,537
15	SCE	SCG	567	\$106	51.2	(465)	(\$31)	657	\$1,975	\$1,190	1.66	\$785	1.8	\$949	2.2	\$1,463
16	PGE	PGE	454	\$110	77.8	(737)	(\$66)	789	\$1,228	\$1,190	1.03	\$38	0.7	(\$366)	1.5	\$537

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

Table 27: All-Electric Clustered HPWH Efficiency Only Package Results (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Dwelling Units		Central Water Heating			Total			On-Bill		2019 TDV		2022 TDV	
			Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)	On-Bill Savings (2020 PV\$)	Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	39	\$8	95.7	(809)	(\$64)	838	(\$1,096)	(\$643)	0.6	(\$453)	1.9	\$297	>1	\$1,793
2	PGE	PGE	78	\$24	86.9	(726)	(\$55)	785	(\$535)	(\$715)	1.3	\$180	>1	\$843	>1	\$2,069
3	PGE	PGE	70	\$20	86.7	(711)	(\$53)	788	(\$583)	(\$529)	0.9	(\$54)	>1	\$542	>1	\$1,786
4	PGE	PGE	95	\$29	81.4	(673)	(\$50)	750	(\$317)	(\$715)	2.3	\$399	>1	\$908	>1	\$2,025
4	CPAU	CPAU	95	\$17	81.4	(673)	(\$19)	750	\$97	(\$715)	>1	\$813	>1	\$908	>1	\$2,025
5	PGE	PGE	80	\$22	86.7	(711)	(\$53)	792	(\$527)	(\$529)	1.0	\$2	>1	\$539	>1	\$1,782
5	PGE	SCG	80	\$22	86.7	(711)	(\$73)	792	(\$881)	(\$529)	0.6	(\$352)	>1	\$539	>1	\$1,782
6	SCE	SCG	113	\$26	78.3	(645)	(\$41)	732	(\$67)	(\$715)	10.7	\$649	>1	\$928	>1	\$2,042
7	SDGE	SDGE	105	\$33	78.0	(642)	(\$61)	727	(\$388)	(\$715)	1.8	\$328	>1	\$947	>1	\$2,080
8	SCE	SCG	128	\$31	75.5	(620)	(\$39)	715	\$71	(\$715)	>1	\$786	>1	\$994	>1	\$2,123
9	SCE	SCG	125	\$29	76.3	(628)	(\$40)	721	\$26	(\$715)	>1	\$742	>1	\$1,062	>1	\$2,202
10	SCE	SCG	130	\$26	63.2	(624)	(\$53)	555	(\$415)	(\$933)	2.2	\$518	>1	\$936	>1	\$1,832
10	SDGE	SDGE	130	\$41	63.2	(624)	(\$77)	555	(\$621)	(\$933)	1.5	\$313	>1	\$936	>1	\$1,832
11	PGE	PGE	147	\$38	64.8	(643)	(\$63)	580	(\$439)	(\$861)	2.0	\$421	>1	\$884	>1	\$1,926
12	PGE	PGE	122	\$31	67.7	(672)	(\$67)	589	(\$691)	(\$861)	1.2	\$170	10.9	\$781	>1	\$1,896
12	SMUD	PGE	122	\$17	67.7	(672)	(\$2)	589	\$515	(\$861)	>1	\$1,375	10.9	\$781	>1	\$1,896
13	PGE	PGE	152	\$39	62.8	(618)	(\$60)	566	(\$354)	(\$861)	2.4	\$506	7.1	\$740	>1	\$1,954
14	SCE	SCG	152	\$31	65.3	(650)	(\$56)	581	(\$363)	(\$861)	2.4	\$498	>1	\$942	>1	\$1,863
14	SDGE	SDGE	152	\$44	65.3	(650)	(\$80)	581	(\$610)	(\$861)	1.4	\$250	>1	\$942	>1	\$1,863
15	SCE	SCG	213	\$43	51.2	(492)	(\$42)	507	\$201	(\$861)	>1	\$1,062	>1	\$1,288	>1	\$2,068
16	PGE	PGE	115	\$29	77.8	(813)	(\$85)	642	(\$1,163)	(\$861)	0.7	(\$302)	1.3	\$189	>1	\$1,462

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

Table 28: All-Electric Clustered HPWH + 0.1 kW_{DC} PV per Dwelling Unit Results (Savings/Cost Per Dwelling Unit)^{a, b}

			Dwelling Units	Central Water Heating	Total	On-Bill	2019 TDV	2022 TDV
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High-Rise Residential New Construction Cost-Effectiveness Study

Climate Zone	Elec Utility	Gas Utility	Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)	On-Bill Utility Savings (2020 PV\$)	Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	171	\$32	95.7	(809)	(\$64)	894	-\$341	(\$326)	0.96	(\$14)	>1	\$472	>1	\$1,856
2	PGE	PGE	236	\$43	86.9	(726)	(\$55)	852	\$492	(\$399)	>1	\$891	>1	\$1,127	>1	\$2,239
3	PGE	PGE	232	\$46	86.7	(711)	(\$53)	857	\$469	(\$213)	>1	\$682	>1	\$814	>1	\$1,945
4	PGE	PGE	261	\$46	81.4	(673)	(\$50)	821	\$768	(\$399)	>1	\$1,166	>1	\$1,215	>1	\$2,250
4	CPAU	CPAU	261	\$27	81.4	(673)	(\$19)	821	\$729	(\$399)	>1	\$1,128	>1	\$1,215	>1	\$2,250
5	PGE	PGE	254	\$49	86.7	(711)	(\$53)	867	\$585	(\$213)	>1	\$798	>1	\$856	>1	\$1,973
5	PGE	SCG	254	\$49	86.7	(711)	(\$73)	867	\$232	(\$213)	>1	\$445	>1	\$856	>1	\$1,973
6	SCE	SCG	290	\$37	78.3	(645)	(\$41)	808	\$803	(\$399)	>1	\$1,202	>1	\$1,233	>1	\$2,285
7	SDGE	SDGE	270	\$48	78.0	(642)	(\$61)	798	\$742	(\$399)	>1	\$1,141	>1	\$1,273	>1	\$2,256
8	SCE	SCG	299	\$36	75.5	(620)	(\$39)	789	\$915	(\$399)	>1	\$1,314	>1	\$1,331	>1	\$2,414
9	SCE	SCG	303	\$34	76.3	(628)	(\$40)	797	\$833	(\$399)	>1	\$1,232	>1	\$1,407	>1	\$2,486
10	SCE	SCG	308	\$32	63.2	(624)	(\$53)	632	\$338	(\$617)	>1	\$955	>1	\$1,258	>1	\$2,100
10	SDGE	SDGE	308	\$49	63.2	(624)	(\$77)	632	\$539	(\$617)	>1	\$1,156	>1	\$1,258	>1	\$2,100
11	PGE	PGE	307	\$38	64.8	(643)	(\$63)	648	\$464	(\$544)	>1	\$1,008	>1	\$1,203	>1	\$2,098
12	PGE	PGE	285	\$39	67.7	(672)	(\$67)	659	\$237	(\$544)	>1	\$781	>1	\$1,089	>1	\$2,078
12	SMUD	PGE	285	\$20	67.7	(672)	(\$2)	659	\$987	(\$544)	>1	\$1,531	>1	\$1,089	>1	\$2,078
13	PGE	PGE	317	\$39	62.8	(618)	(\$60)	637	\$581	(\$544)	>1	\$1,125	>1	\$1,027	>1	\$2,149
14	SCE	SCG	343	\$34	65.3	(650)	(\$56)	663	\$445	(\$544)	>1	\$989	>1	\$1,366	>1	\$2,185
14	SDGE	SDGE	343	\$50	65.3	(650)	(\$80)	663	\$582	(\$544)	>1	\$1,126	>1	\$1,366	>1	\$2,185
15	SCE	SCG	390	\$32	51.2	(492)	(\$42)	582	\$948	(\$544)	>1	\$1,492	>1	\$1,643	>1	\$2,324
16	PGE	PGE	284	\$41	77.8	(813)	(\$85)	716	-\$201	(\$544)	2.7	\$343	13.6	\$504	>1	\$1,645

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

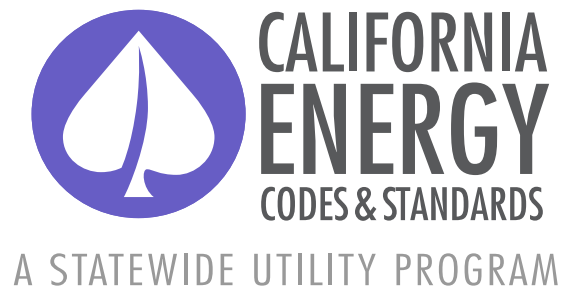
^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

Table 29: All-Electric Clustered HPWH + 0.2 kW_{DC} PV per Dwelling Unit Results (Savings/Cost Per Dwelling Unit)^{a, b}

Climate Zone	Elec Utility	Gas Utility	Dwelling Units		Central Water Heating			Total On-Bill Utility Savings			On-Bill		2019 TDV		2022 TDV	
			Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therm)	Elec Savings (kWh)	Year 1 Utility Cost Savings	GHG Savings (lb CO ₂)	(2020 PV\$)	Inc. Cost (2020 PV\$)	B/C Ratio	NPV	B/C Ratio	NPV	B/C Ratio	NPV
1	PGE	PGE	304	\$64	95.7	(809)	(\$64)	949	\$415	(\$10)	>1	\$425	>1	\$648	>1	\$1,919
2	PGE	PGE	393	\$87	86.9	(726)	(\$55)	920	\$1,520	(\$82)	>1	\$1,602	>1	\$1,411	>1	\$2,410
3	PGE	PGE	395	\$91	86.7	(711)	(\$53)	926	\$1,521	\$104	14.7	\$1,417	11.5	\$1,085	21.3	\$2,104
4	PGE	PGE	427	\$92	81.4	(673)	(\$50)	892	\$1,852	(\$82)	>1	\$1,934	>1	\$1,523	>1	\$2,474
4	CPAU	CPAU	427	\$52	81.4	(673)	(\$19)	892	\$1,319	(\$82)	>1	\$1,401	>1	\$1,523	>1	\$2,474
5	PGE	PGE	428	\$96	86.7	(711)	(\$53)	941	\$1,698	\$104	16.4	\$1,594	12.3	\$1,173	21.9	\$2,163
5	PGE	SCG	428	\$96	86.7	(711)	(\$73)	941	\$1,344	\$104	13.0	\$1,241	12.3	\$1,173	21.9	\$2,163
6	SCE	SCG	466	\$74	78.3	(645)	(\$41)	884	\$1,674	(\$82)	>1	\$1,756	>1	\$1,539	>1	\$2,528
7	SDGE	SDGE	435	\$94	78.0	(642)	(\$61)	869	\$1,842	(\$82)	>1	\$1,925	>1	\$1,598	>1	\$2,433
8	SCE	SCG	470	\$71	75.5	(620)	(\$39)	863	\$1,760	(\$82)	>1	\$1,842	>1	\$1,668	>1	\$2,705
9	SCE	SCG	480	\$66	76.3	(628)	(\$40)	874	\$1,590	(\$82)	>1	\$1,673	>1	\$1,752	>1	\$2,771
10	SCE	SCG	485	\$64	63.2	(624)	(\$53)	708	\$1,092	(\$300)	>1	\$1,392	>1	\$1,580	>1	\$2,368
10	SDGE	SDGE	485	\$97	63.2	(624)	(\$77)	708	\$1,680	(\$300)	>1	\$1,980	>1	\$1,580	>1	\$2,368
11	PGE	PGE	466	\$76	64.8	(643)	(\$63)	717	\$1,367	(\$228)	>1	\$1,594	>1	\$1,521	>1	\$2,270
12	PGE	PGE	449	\$78	67.7	(672)	(\$67)	729	\$1,164	(\$228)	>1	\$1,392	>1	\$1,396	>1	\$2,260
12	SMUD	PGE	449	\$40	67.7	(672)	(\$2)	729	\$1,459	(\$228)	>1	\$1,687	>1	\$1,396	>1	\$2,260
13	PGE	PGE	482	\$79	62.8	(618)	(\$60)	708	\$1,516	(\$228)	>1	\$1,743	>1	\$1,315	>1	\$2,344
14	SCE	SCG	534	\$68	65.3	(650)	(\$56)	744	\$1,252	(\$228)	>1	\$1,480	>1	\$1,791	>1	\$2,507
14	SDGE	SDGE	534	\$101	65.3	(650)	(\$80)	744	\$1,774	(\$228)	>1	\$2,002	>1	\$1,791	>1	\$2,507
15	SCE	SCG	567	\$63	51.2	(492)	(\$42)	657	\$1,695	(\$228)	>1	\$1,923	>1	\$1,998	>1	\$2,580
16	PGE	PGE	454	\$81	77.8	(813)	(\$85)	789	\$760	(\$228)	>1	\$988	>1	\$820	>1	\$1,829

^a Values in red indicate B/C ratios less than 1 or negative values. Values in grey indicate cases which are cost-effective but are not code compliant and cannot be used to support a reach code.

^b ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.



Title 24, Parts 6 and 11
Local Energy Efficiency Ordinances

2019 Mid-Rise New Construction Reach Code Cost-Effectiveness Study

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Acronyms

2020 PV\$	Present value costs in 2020
ACM	Alternative Calculation Method
B/C	Lifecycle Benefit-to-Cost Ratio
BSC	Building Standards Commission
CBECC-Com	Computer program developed by the California Energy Commission for use in demonstrating compliance with the California Residential Building Energy Efficiency Standards
CFI	California Flexible Installation
CFM	Cubic Feet per Minute
CPC	California Plumbing Code
CZ	California Climate Zone
DHW	Domestic Hot Water
DOE	Department of Energy
DWHR	Drain Water Heat Recovery
EDR	Energy Design Rating
EER	Energy Efficiency Ratio
EF	Energy Factor
EPS	Expanded Polystyrene
HERS Rater	Home Energy Rating System Rater
HPWH	Heat Pump Water Heater
HVAC	Heating, Ventilation, and Air Conditioning
IOU	Investor Owned Utility
kBtu	kilo-British thermal unit
kWh	Kilowatt Hour
kW _{DC}	Kilowatt Direct Current. Nominal rated power of a photovoltaic system
LBNL	Lawrence Berkeley National Laboratory
LCC	Lifecycle Cost
MF	Multifamily
NAECA	National Appliance Energy Conservation Act
NEM	Net Energy Metering
NPV	Net Present Value
PG&E	Pacific Gas and Electric Company
PV	Photovoltaic
SCE	Southern California Edison

SDG&E	San Diego Gas and Electric
SF	Solar Fraction
SHGC	Solar Heat Gain Coefficient
SMUD	Sacramento Municipal Utility District
CASE	Codes and Standards Enhancement
TDV	Time Dependent Valuation
Therm	Unit for quantity of heat that equals 100,000 British thermal units
Title 24	Title 24, Part 6
TOU	Time-Of-Use
UEF	Uniform Energy Factor
W	Watts

1 Introduction

The California Building Energy Efficiency Standards Title 24, Part 6 (Title 24) (California Energy Commission, 2018b) is maintained and updated every three years by two state agencies, the California Energy Commission (Energy Commission) and the Building Standards Commission (BSC). In addition to enforcing the code, local jurisdictions have the authority to adopt local energy efficiency ordinances, or reach codes, that exceed the minimum standards defined by Title 24 (as established by Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards). Local jurisdictions must demonstrate that the requirements of the proposed ordinance are cost-effective and do not result in buildings consuming more energy than is permitted by Title 24. In addition, the jurisdiction must obtain approval from the Energy Commission and file the ordinance with the BSC for the ordinance to be legally enforceable.

This report documents cost-effective combinations of measures that exceed the minimum state requirements, the 2019 Building Energy Efficiency Standards, effective January 1, 2020, for new mid-rise (four- to seven-story) multifamily residential construction. The analysis includes evaluation of both mixed-fuel and all-electric residential construction, documenting that the performance requirements can be met by either type of building design. Compliance package options and cost-effectiveness analysis in all 16 California climate zones (CZs) are presented (see Appendix A – California Climate Zone Map for a graphical depiction of Climate Zone locations).

2 Methodology and Assumptions

This analysis uses two different metrics to assess cost-effectiveness. Both methodologies require estimating and quantifying the incremental costs and energy savings associated with energy efficiency measures. The main difference between the methodologies is the manner in which they value energy and thus the cost savings of reduced or avoided energy use:

- **Utility Bill Impacts (On-Bill):** Customer-based Lifecycle Cost (LCC) approach that values energy based upon estimated site energy usage and customer on-bill savings using electricity and natural gas utility rate schedules over a 30-year duration accounting for discount rate and energy cost inflation.
- **Time Dependent Valuation (TDV):** Energy Commission LCC methodology, which is intended to capture the “societal value or cost” of energy use including long-term projected costs, such as the cost of providing energy during peak periods of demand and other societal costs, such as projected costs for carbon emissions, as well as grid transmission and distribution impacts. This metric values energy use differently depending on the fuel source (gas, electricity, and propane), time of day, and season. Electricity used (or saved) during peak periods has a much higher value than electricity used (or saved) during off-peak periods (Horii et al., 2014). This is the methodology used by the Energy Commission in evaluating cost-effectiveness for efficiency measures in Title 24, Part 6.

2.1 Building Prototypes

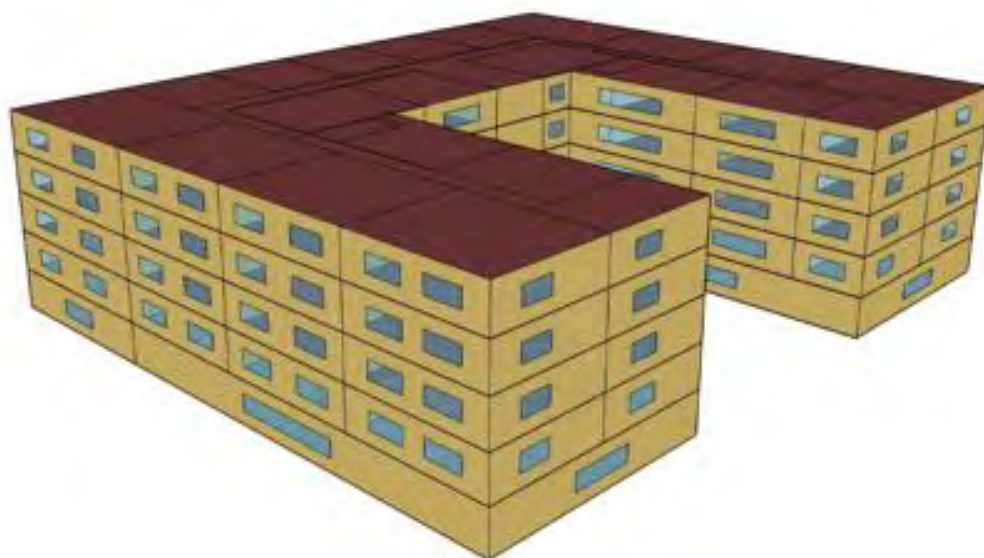
The Energy Commission defines building prototypes which it uses to evaluate the cost-effectiveness of proposed changes to Title 24 requirements. The CEC recently developed new prototype designs for multifamily buildings to more closely reflect typical designs for new multifamily buildings across the state. The new prototypes include two low-rise residential designs, a mid-rise, and a high-rise design. At the time that this report was written, there was one mid-rise multifamily prototype, which is used in this analysis in development of the above-code packages (TRC, 2019). The midrise prototype is a 6-story building with one below-grade parking level, ground floor commercial space, and four stories of residential space. Table 1 describes the basic characteristics of the mid-rise prototype and Figure 1 shows a depiction of the building.



Table 1: Prototype Characteristics

Characteristic	Multifamily 5-Story Mid-Rise
Conditioned Floor Area	113,100 ft ² Total: 33,660 ft ² Nonresidential & 79,440 ft ² Residential
Number of Stories	6 Stories Total: 1 Story Parking Garage (below grade) 1 Story of Nonresidential Space 4 Stories of Residential Space
Number of Dwelling Units / Bedrooms	(8) studios, (40) 1-bed units, (32) 2-bed units, & (8) 3-bed units
Foundation	Concrete podium with underground parking
Wall Assembly	Wood frame over a first-floor concrete podium
Roof Assembly	Flat roof
Window-to-Wall Area Ratio	22.5%
HVAC System	Ducted split heat pumps at each apartment
Domestic Hot Water System	Gas central boiler with solar thermal sized to meet the prescriptive requirements by climate zone

Source: TRC 2019



Source: TRC 2019

Figure 1: 5-story mid-rise multifamily prototype depiction.

The methodology used in the analyses for the prototypical building type begins with a design that meets the minimum 2019 Title 24 prescriptive requirements (zero compliance margin). Table 140.3-B and 140.3-C in the 2019 Title 24 (California Energy Commission, 2018a) lists the prescriptive measures that determine the baseline design in each climate zone for the nonresidential and high-rise residential spaces, respectively. Other features are consistent with the Standard Design in the Nonresidential ACM Reference Manual (California Energy Commission, 2019a) with one exception. The apartments use split system heat pumps instead of a split furnace

and air conditioner that is prescribed in Table 2 of the Nonresidential ACM Reference Manual. This modeling choice was made to better reflect current market data, which shows heat pumps to be the most common system type and a very low prevalence of gas furnaces for multifamily buildings four stories and greater. This is based on a report completed by TRC (TRC, 2019) and validated by analysis of CA HERS Registry Data by SCE that showed 47% of low-rise multifamily new construction in the 2013 and 2016 code cycles had electric space heating. The analysis also assumed electric cooking in the apartment units to reflect current market data. Laundry was not addressed in this study. The building prototype assumes central laundry facilities and no laundry in the units.

2.2 Measure Analysis

EnergyPro 8.1, which uses the California Building Energy Code Compliance simulation tool, CBECC-Com 2019.1.2, as the simulation engine, was used to evaluate energy impacts using the 2019 Title 24 prescriptive standards as the benchmark, and the 2019 TDV values. CBECC-Com was used for this analysis to evaluate the mid-rise building for code compliance under the 2019 non-residential standards. TDV is the energy metric used by the Energy Commission since the 2005 Title 24 energy code to evaluate compliance with the Title 24 Standards.

Using the 2019 baseline as the starting point, prospective energy efficiency measures were identified and modeled to determine the projected site energy (Therm and kWh) and compliance impacts. Annual utility costs were calculated using hourly data output from CBECC-Com, and electricity and natural gas tariffs for each of the investor owned utilities (IOUs).

This analysis focused on the residential apartments only. A prior study and report demonstrated the cost-effectiveness of above code packages for nonresidential buildings (Statewide Reach Code Team, 2019a). The Statewide Reach Code Team selected measures for evaluation based on the residential and nonresidential 2019 reach code analysis ((Statewide Reach Code Team, 2019a), (Statewide Reach Code Team, 2019b)) as well as experience with and outreach to architects, builders, and engineers along with general knowledge of the relative acceptance of many measures. Efficiency measure packages found to be cost-effective in the nonresidential building reach code analysis were applied to the nonresidential spaces for evaluating performance relative to compliance, but the incremental costs and energy impacts of these measures on the nonresidential spaces were not included in this analysis. Refer to the nonresidential reach code study for more details (Statewide Reach Code Team, 2019a).

2.2.1 Federal Preemption

The Department of Energy (DOE) sets minimum efficiency standards for equipment and appliances that are federally regulated under the National Appliance Energy Conservation Act (NAECA), including heating, cooling, and water heating equipment. Since state and local governments are prohibited from adopting policies that mandate higher minimum efficiencies than the federal standards require, the focus of this study is to identify and evaluate cost-effective packages that do not include high efficiency equipment. While this study is limited by federal preemption, in practice builders may use any package of compliant measures to achieve the performance goals, including high efficiency appliances. Often, these measures are the simplest and most affordable measures to increase energy performance.

2.2.2 Energy Efficiency Measures

Following are descriptions of each of the efficiency measures evaluated for the residential spaces under this analysis. Because not all of the measures described below were found to be cost-effective, and cost-effectiveness varied by climate zone, not all measures are included in all packages and some of the measures listed are not included in any final package.

Improved Fenestration – Lower U-factor: Reduce window U-factor to 0.25 Btu/hr-ft²-°F. The prescriptive maximum U-factor is 0.36 in all climates. This measure is applied to all windows on floors two through five.



Improved Fenestration – Lower SHGC: Reduce window solar heat gain coefficient (SHGC) to 0.22. The prescriptive maximum SHGC is 0.25 for fixed windows in all climates. The Statewide Reach Code Team evaluated increased SHGC in heating dominated climates (Climate Zone 1, 3, 5, and 16) but results were better with a lower SHGC. This measure is applied to all windows on floors two through five.

Exterior Wall Insulation: Add one inch of R-4 exterior continuous insulation. To meet the prescriptive wall requirements, it's assumed that exterior wall insulation is used in the basecase, therefore this measure adds additional R-value to existing exterior insulation. This measure is applied to all walls on floors two through five.

HERS Verification of Hot Water Pipe Insulation: The California Plumbing Code (CPC) requires pipe insulation on all hot water lines. This measure provides credit for HERS Rater verification of pipe insulation requirements according to the procedures outlined in the 2019 Reference Appendices RA3.6.3. (California Energy Commission, 2018b).

Low Pressure Drop Ducts: Upgrade the duct distribution system to reduce external static pressure and meet a maximum fan efficacy of 0.25 watts per cfm operating at full speed. This may involve upsizing ductwork, reducing the total effective length of ducts, and/or selecting low pressure drop components, such as filters. This measure is applied to the ducted split heat pumps serving the apartments.

Solar Thermal: Prescriptively, central water heating systems require a solar thermal system with a 20% solar fraction in Climates Zones 1 through 9 and 35% solar fraction in Climate Zones 10 through 16. This measure upgrades the prescriptive solar thermal system to meet a 50% solar fraction in all climates, assuming there is available roof space for the additional collectors.

Drain Water Heat Recovery: Add drain water heat recovery with a 50% effectiveness to serve all the apartments. The assumption is for an unequal flow design where the output of the heat exchanger feeds only the cold water inlets to the apartment showers, not the water heater cold water makeup.

Efficiency measures were applied to the nonresidential spaces based on the 2019 Nonresidential Reach Code Cost-Effectiveness Study (Statewide Reach Code Team, 2019a).

2.2.3 All Electric Measures

This analysis assumes that the basecase prototype model uses individual heat pumps for space heating and all electric appliances in the apartments. Therefore, the domestic hot water system is the only equipment serving the apartment spaces to electrify in the all-electric design. The Statewide Reach Code Team evaluated two configurations for electric heat pump water heaters (HPWHs) described below.

Clustered Heat Pump Water Heater: This clustered design uses residential integrated storage HPWHs to serve more than one apartment; 4 to 5 bedrooms on average for a total of 32 HPWHs in the 88-unit building. The water heaters are located in interior closets throughout the building and designed for short plumbing runs without using a hot water recirculation loop. A minimum efficiency 2.0 UEF HPWH was used for this analysis (to avoid federal preemption). This approach has been selectively used in multifamily projects because of its reliance on lower cost small capacity HPWH products. Since it uses residential equipment with each HPWH serving fewer than 8 apartments the CBECC-Com compliance software had the capability to evaluate this design strategy, even before central HPWH recirculation options were incorporated into the software. The clustered strategy is not a prescriptive option but is allowed in the performance path if the water heater serves no more than 8 units and has no recirculation control. The standard design assumes solar thermal, so the proposed design is penalized in compliance for no solar thermal and made up with other efficiency measures.



Prescriptive Central Heat Pump Water Heater: Per Section 150.1(c)8C of the 2019 Standards, the Energy Commission made an executive determination outlining requirements of a prescriptive approach for central heat pump water heating systems in December 2019 (California Energy Commission, 2019b). Key aspects of the prescriptive approach are described below:

- The system must be configured with a design similar to what is presented in the schematic in Figure 2 of the executive determination document.
- HPWH must be single-pass split system with the compressor located outdoors and be able to operate down to -20°F. In CBECC-Com 2019.1.2, the current version at the time of writing this report, the software only has the capability of modeling Sanden HPWHs.
- The system must include either a solar thermal water heating system that meets the current prescriptive requirements or 0.1 kW_{DC} of photovoltaic system capacity per apartment/dwelling unit.

For this configuration the Statewide Reach Code Team evaluated costs for a central HPWH system using Sanden compressors that met these prescriptive requirements. Based on the system sizing requirements, 15 Sanden units and 1,200 gallons of primary storage capacity are required for the 88-unit building. At the time that cost-effectiveness was initially compared for the two HPWH configurations, the latest CBECC-Com software with the ability to model central HPWH systems was not yet available. To estimate the energy use for the central configuration, the water heating energy use for the clustered configuration was used. It is expected that the energy use of the central system will be higher than the clustered approach primarily as a result of recirculation pump energy and losses.

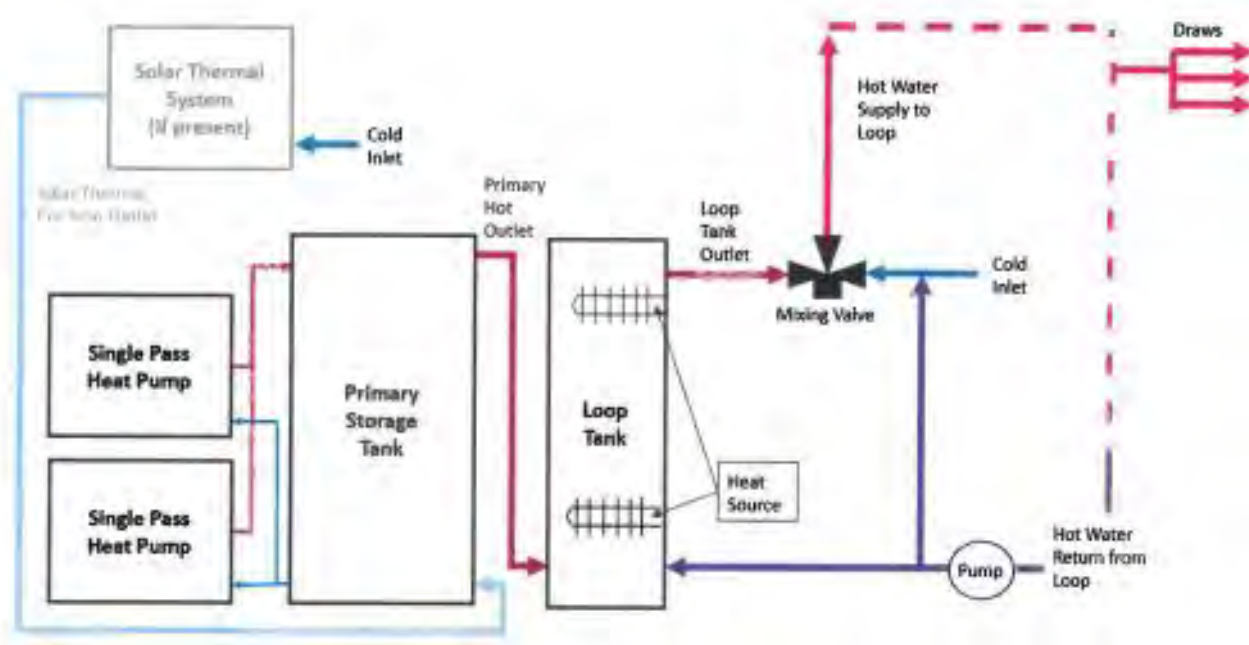


Figure 2: Prescriptive central heat pump water heater system schematic.

All-electric measures were applied to the nonresidential spaces based on the 2019 Nonresidential Reach Code Cost-Effectiveness Study (Statewide Reach Code Team, 2019a).

2.2.4 Renewable Energy

Solar Photovoltaic (PV): There is no existing requirement for PV in the 2019 Title 24 nonresidential code for high-rise residential buildings (four or more stories). The PV sizing methodology was developed to offset a portion of annual residential electricity use and avoid oversizing which would violate net energy metering (NEM)

rules. In all cases, PV is evaluated using the PV simulations within CBECC-Com using a Standard module type, 180 degree azimuth, and 22 degree .tilt. The analysis evaluated PV system capacities equal to 0.1, 0.2, 0.3, and 1 kW_{DC} per apartment. The PV system offsets approximately XX4%, XX8%, XX13%, and 42%, of the apartment electricity usage, respectively. Assuming 15 Watts per square foot for a typical commercial PV system, 1 kW_{DC} per apartment, or 88 kW_{DC} total, would take up about 25% of the total roof area.

2.3 Package Development

Four packages were evaluated for each climate zone, as described below.

- 1) **Efficiency – Mixed-fuel:** This package applies efficiency measures that don't trigger federal preemption including envelope, water heating distribution, and duct distribution efficiency measures.
- 2) **Efficiency – All Electric:** This package applies efficiency measures that don't trigger federal preemption in addition to converting any natural gas appliances to electric appliances. For the residential spaces, only water heating is converted from natural gas to electric.
- 3) **Efficiency & PV – Mixed-fuel:** Beginning with the Efficiency Package , PV was added to offset a portion of the apartment estimated electricity use.
- 4) **Efficiency & PV – All Electric:** Beginning with the Efficiency Package, PV was added to offset a portion of the apartment estimated electricity use.

2.4 Incremental Costs

2.4.1 Energy Efficiency Measure Costs

Table 22 summarizes the incremental cost assumptions for measures evaluated in this study relative to the residential parts of the building. Incremental costs represent the equipment, installation, replacement, and maintenance costs of the proposed measures relative to the base case. Replacement costs are applied to PV inverters and battery systems over the 30-year evaluation period. There is no assumed maintenance on the envelope, HVAC, or DHW measures. Costs were estimated to reflect costs to the building owner. When costs were obtained from a source that did not already include builder overhead and profit, a markup of 10% was added. All costs are provided as present value in 2020 (2020 PV\$). Costs due to variations in furnace, air conditioner, and heat pump capacity by climate zone were not accounted for in the analysis.



Table 2: Incremental Cost Assumptions

Measure	Performance Level	Incremental Cost (2020 PV\$)	Source & Notes
Non-Preempted Measures			
Window U-factor	0.25 vs 0.36	\$28,301	\$6.95/ft ² window area based on analysis conducted for the 2019 and 2022 Title 24 code cycles (Statewide CASE Team, 2018).
Window SHGC	0.22 vs 0.25	\$0	Data from CASE Report along with direct feedback from Statewide CASE Team that higher SHGC does not necessarily have any incremental cost impact (Statewide CASE Team, 2017b).
Exterior Wall Insulation	Add 1-inch	\$14,058	\$0.86/ft ² based on adding 1" of exterior insulation on a wall with some level of existing exterior insulation. Costs are averaged from two sources ((Statewide CASE Team, 2014), (Statewide CASE Team, 2017a)) and for expanded polystyrene (EPS) and polyisocyanurate products with a 10% mark-up added to account for cost increases over time.
HERS Verified Pipe Insulation	HERS verified pipe insulation vs no verification	\$7,260	\$83 per apartment for a HERS Rater to conduct verification of pipe insulation based on feedback from HERS Raters.
Low Pressure Drop Ducts	0.25 W/cfm vs 0.35 W/cfm	\$12,654	\$144 per apartment. Costs assume 1.5 hours labor per multifamily apartment. Labor rate of \$96 per hour is from 2019 RSMeans for sheet metal workers and includes an average City Cost Index for labor for California cities.
Solar Thermal	50% solar fraction vs prescriptive 20%-35%	\$79,560	Costs based on 2022 multifamily solar thermal measure CASE proposal (Statewide CASE Team, 2020) and include first cost of \$70,727 and \$8,834 present value for replacement/maintenance costs.
Drain Water Heat Recovery	50% effectiveness, flows to shower	\$16,984	Costs from 2019 DWHR CASE Report which assumes 1 heat exchanger per 4 units (Statewide CASE Team, 2017c). Costs do not include additional cost of water meters at each apartment (per SB7), which would add approx. \$175 per dwelling unit.
Renewable Energy (PV)			
PV System	System size varies	\$3.17/W _{DC}	First costs are from LBNL's Tracking the Sun 2018 costs (Barbose et al., 2018) and represent costs for the first half of 2018 of \$2.90/W _{DC} for nonresidential systems ≤500 kW _{DC} . These costs were reduced by 16% for the solar investment tax credit, which is the average credit over years 2020-2022. Inverter replacement cost of \$0.14/W _{DC} present value includes replacements at year 11 at \$0.15/W _{DC} (nominal) and at year 21 at \$0.12/W _{DC} (nominal) per the 2019 PV CASE Report (California Energy Commission, 2017). System maintenance costs of \$0.31/W _{DC} present value assumes additional \$0.02/W _{DC} (nominal) annually per the 2019 PV CASE Report (California Energy Commission, 2017). 10% overhead and profit added to all costs.



2.4.2 All Electric Measure Costs

The Statewide Reach Code Team reached out to stakeholders to collect project cost information for central gas boilers and both clustered and central HPWH designs. Project data sources included Association for Energy Affordability (AEA), Redwood Energy, Mithun, Ecotope, and the All-Electric Multifamily Compliance Pathway 2022 Draft CASE Report (Statewide CASE Team, 2020). Costs are presented in Table 3.

Table 3: Costs for Gas versus Electric Water Heating Equipment over 30-Year Period of Analysis

	Central Gas Boiler (CZs 1-9)	Central Gas Boiler (CZs 10-16)	Clustered HPWH	Central HPWH
System Quantity/Description	1 boiler recirc		32 units 80 gal. each no recirc	15 units .1,200-gal total recirc
Total Equipment Cost	\$98,733		\$126,778	\$213,364
Solar Thermal	(20% SF) 110,096	(35% SF) \$131,817	-	-
Solar PV	-	-	-	\$23,580 (8.8 kW _{DC})
Total First Cost	\$202,920	\$224,641	\$126,778	\$236,944
Maintenance/Replacement Cost (NPV)	\$69,283	\$69,283	\$81,374	\$120,683
Total Cost (NPV)	\$272,203	\$293,924	\$208,152	\$357,627
Incremental Cost CZ 1-9 (NPV)			(\$64,051)	\$85,424
Incremental Cost CZ 10-16 (NPV)			(\$85,772)	\$63,703

Typical costs for the water heating systems are based on the following assumptions:

Central Gas Boiler: Based on the average of total estimated project costs from contractors for four multi-family projects ranging from 32 to 340 apartments and cost estimates for mid-rise and high-rise buildings from the All-Electric Multifamily Compliance Pathway 2022 Draft CASE Report (Statewide CASE Team, 2020). The cost per dwelling unit ranged from \$547 to \$2,089 and the average cost applied in this analysis was \$1,122 per dwelling unit. Costs include installation of gas piping from the building meter to the water heater. Water heater lifetime is assumed to be 15 years and the net present value replacement cost at year 15 is \$63,373.

Clustered HPWH: Based on costs from one project with RHEEM HPWHs used in a clustered design. Costs include water heater interior closet, electrical outlets, and increased breaker size and sub feed. Water heater based on 2.0 UEF 80-gallon appliance with 32 total HPWHs serving the building (1 per 4 to 5 bedrooms). Water heater lifetime is assumed to be 15 years and the net present value replacement cost at year 15 is \$81,374. This design assumes 8 water heater closets per floor, at approximately 15 square feet per closet. While this has an impact on leasable floor area, the design impacts have been found to be minimal when addressed early in design.

Central HPWH: Based on average total installed project costs from four multi-family projects with Sanden HPWHs ranging from 4 to 16 Sanden units per project. The cost per Sanden HPWH ranged from \$13,094 to \$15,766 and the average cost applied in this analysis was \$14,224 per HPWH. Based on the prescriptive system sizing requirements, 15 Sanden units are required for the 88-unit building, resulting in a total first cost of \$213,364. Water heater lifetime is assumed to be 15 years. Because Sanden HPWHs are an emerging technology in the United States, it is expected that over time their costs will decrease and for replacement at year 15 the costs are assumed to have decreased by 15%.



Solar Thermal: Based on system costs provided in the All-Electric Multifamily Compliance Pathway 2022 Draft CASE Report (Statewide CASE Team, 2020). First costs reflect the material, labor, and markup costs presented in the Draft CASE Report for the mid-rise prototype. Replacement and maintenance costs assume replacement of the solar thermal tank at year 15 at \$6,110 and glycol replacement of \$1,300 each time at years 9, 18, and 27. The cost of the remaining useful life of the glycol at year 30 is deducted from the final cost. The Draft CASE Report included costs for replacing the solar collectors at year 20. Collectors can have longer lifetimes up to 30 years if well maintained, therefore this analysis does not assume any replacement of the collectors over the 30 year analysis period.

Table 4: Solar Thermal Detailed Costs over 30-Year Period of Analysis

Solar Fraction	20%	35%
Materials	\$33,975	\$48,975
Labor	\$47,740	\$49,776
Markup	27.5%	27.5%
First Cost	\$104,187	\$125,908
Replacement/Maintenance (PV)	\$5,910	\$5,910
Total PV Cost	\$110,096	\$131,817

2.4.3 Natural Gas Infrastructure Costs

This analysis assumes that in an all-electric new construction project, natural gas would not be supplied to the building. Eliminating natural gas to the building would save costs associated with connecting a service line from the street main to the building, piping distribution within the building, and monthly meter connection charges from the utility. Incremental costs for natural gas infrastructure in the mixed-fuel building are presented in Table 5. Cost data for the plan review and service extension was estimated on a per building basis and then apportioned to the residential and nonresidential portions of the buildings based on annual gas consumption. For the basecase prototype building 49% to 93% of estimated building annual gas use is attributed to the residential water heating system across all climate zones. A statewide average of 80% was calculated and applied to the costs in Table 5 based on housing starts provided by the California Energy Commission for the 2019 Title 24 code development process. The meter costs were based on the service provided to the residential and nonresidential portion of the building separately. Following the table are descriptions of assumptions for each of the cost components. Costs for gas piping from the meter to the gas boilers are included in the central gas boiler costs above. Gas piping distribution costs were typically included in total project costs and could not be broken out in all cases.

Table 5: Natural Gas Infrastructure Cost Savings for All-Electric Building

Item	Total	NonResidential Portion	Residential Portion
Natural Gas Plan Review	\$2,316	\$452	\$1,864
Service Extension ¹	\$4,600	\$898	\$3,702
Meter	\$7,200	\$3,600	\$3,600
Total First Cost	\$14,116	\$4,950	\$9,166

¹Service extension costs include 50% reduction assuming portion of the costs are passed on to gas customers.

Natural Gas Plan Review: Total costs are based on TRC's 2019 reach code analysis for Palo Alto (TRC, 2019) and then split between the residential and nonresidential spaces in the building proportionately according to annual gas consumption with 80% of the annual load is attributed to residential units on a statewide basis.

Service Extension: Service extension costs to the building were taken from PG&E memo dated December 5, 2019, to Energy Commission staff, include costs for trenching, and assume non-residential new construction within a developed area (see Appendix C – PG&E Gas Infrastructure Cost Memo, PG&E, 2019). The total cost of



\$9,200 from the memo is reduced by 50% to account for the portion of the costs paid for by all customers due to application of Utility Gas Main Extensions rules¹. The resultant cost is apportioned between the residential and nonresidential spaces in the building based on annual gas consumption of residential and nonresidential uses, with 80% of the annual load natural gas use attributed to residential units on a statewide basis.

Meter: Cost per meter provided by PG&E for commercial meters. Assume one meter for nonresidential boilers serving space heating and service water heating, and another for residential boilers serving domestic hot water.

2.5 Cost-effectiveness

Cost-effectiveness was evaluated for all 16 California climate zones and is presented based on both TDV energy, using the Energy Commission's LCC methodology, and an On-Bill approach using residential customer utility rates. Both methodologies require estimating and quantifying the value of the energy impact associated with energy efficiency measures over the life of the measures (30 years) as compared to the prescriptive Title 24 requirements.

Cost-effectiveness is presented using both lifecycle net present value (NPV) savings and benefit-to-cost (B/C) ratio metrics, which represent the cost-effectiveness of a measure over a 30-year lifetime taking into account discounting of future savings and costs.

- **Net Present Value (NPV) Savings:** NPV benefits minus NPV costs is reported as a cost effectiveness metric. If the net savings of a measure or package is positive, it is considered cost effective. Negative savings represent net costs. A measure that has negative energy cost benefits (energy cost increase) can still be cost effective if the costs to implement the measure are more negative (i.e., material and maintenance cost savings).
- **Benefit-to-Cost (B/C) Ratio:** Ratio of the present value of all benefits to the present value of all costs over 30 years (NPV benefits divided by NPV costs). The criteria for cost effectiveness is a B/C greater than 1.0. A value of one indicates the NPV of the savings over the life of the measure is equivalent to the NPV of the lifetime incremental cost of that measure. A value greater than one represents a positive return on investment. The B/C ratio is calculated according to Equation 1.

Equation 1

$$\text{Benefit-to-Cost Ratio} = \frac{\text{NPV of lifetime benefit}}{\text{NPV of lifetime cost}}$$

Improving the efficiency of a project often requires an initial incremental investment. In most cases the benefit is represented by annual "On-Bill" utility or TDV savings, and the cost by incremental first cost and replacement costs. However, some packages result in initial construction cost savings (negative incremental cost), and either energy cost savings (positive benefits), or increased energy costs (negative benefits). In cases where both construction costs and energy-related savings are negative, the construction cost savings are treated as the 'benefit' while the increased energy costs are the 'cost.' In cases where a measure or package is cost-effective immediately (i.e. upfront construction cost savings and lifetime energy cost savings), B/C ratio cost-effectiveness is represented by ">1". Because of these situations, NPV savings are also reported, which, in these cases, are positive values.

¹ PG&E Rule 15: https://www.pge.com/tariffs/tm2/pdf/GAS_RULES_15.pdf

SoCalGas Rule 20: <https://www.socalgas.com/regulatory/tariffs/tm2/pdf/20.pdf>

SDG&E Rule 15: http://regarchive.sdge.com/tm2/pdf/GAS_RULES_GRULE15.pdf



The lifetime costs or benefits are calculated according to Equation 2.

Equation 2

$$PV \text{ of lifetime cost/benefit} = \sum_{t=1}^n \text{Annual cost/benefit}_t * (1 + r)^t$$

Where:

- n = analysis term
- r = real discount rate
- t = year at which cost/benefit is incurred

The following summarizes the assumptions applied in this analysis to both methodologies.

- Analysis term of 30 years
- Real discount rate of 3% (does not include inflation)

2.5.1 On-Bill Customer Lifecycle Cost

Residential utility rates were used to calculate utility costs for all cases and determine On-Bill customer cost-effectiveness for the proposed packages. Utility costs of the nonresidential spaces were not evaluated in this study, only apartment and water heating energy use. The Statewide Reach Code Team obtained the recommended utility rates from each IOU based on the assumption that the reach codes go into effect in 2020. Annual utility costs were calculated using hourly electricity and gas output from CBECC-Com, and applying the utility tariffs summarized in Table 6. Appendix B – Utility Tariff Details includes details on the utility rate schedules used for this study. The applicable residential time-of-use (TOU) rate was applied to all cases. For cases with PV generation, the approved NEM2 tariffs were applied along with minimum daily use billing and mandatory non-bypassable charges. For the PV cases annual electric production was always less than annual electricity consumption; and therefore, no credits for surplus generation were necessary. Future changes to the NEM tariffs are likely; however, there is a lot of uncertainty about what those changes will be and if they will become effective during the 2019 Title 24 code cycle (2020-2022).

Based on guidance from the IOUs, the residential electric TOU tariffs that apply to individually metered residential apartments were also used to calculate electricity costs for the central water heating systems. Where baseline allowances are included in the tariffs (SCE TOU-D and SDG&E TOU-DR1) the allowances were applied on a per unit basis for all-electric service.

Based on guidance from the IOUs, master metered multifamily service gas tariffs were used to calculate gas costs for the central water heating systems. The baseline quantities were applied on a per unit basis, as is defined in the schedules, and when available water heating only baseline values were used.

Utility rates were applied to each climate zone based on the predominant IOU serving the population of each zone according to Table 6. Climate Zones 10 and 14 are evaluated with both SCE/SoCalGas and SDG&E tariffs since each utility has customers within these climate zones. Climate Zone 5 is evaluated under both PG&E and SoCalGas natural gas rates. Two municipal utility rates were also evaluated, Sacramento Municipal Utility District (SMUD) in Climate Zone 12 and City of Palo Alto Utilities (CPAU) in Climate Zone 4.



Table 6: IOU Utility Tariffs Applied Based on Climate Zone

Climate Zones	Electric/Gas Utility	Electricity (Apartment Use)	Electricity (Central Water Heating)	Natural Gas (Central Water Heating) ¹
1-5, 11-13, 16	PG&E	E-TOU-C	E-TOU-C	PG&E GM
5	PG&E/SoCalGas			SoCalGas GM-E
6, 8-10, 14,15	SCE/SoCalGas	TOU-D (Option 4-9)	TOU-D (Option 4-9)	
7, 10, 14	SDG&E	TOU-DR1	TOU-DR1	SDG&E GM
12	SMUD/PG&E	R-TOD (RT02)	GSN-T	PG&E GM
4	CPAU	E-1	E-2	G-2

¹ These rates are allowed assuming no gas is used in the apartments.

Utility rates are assumed to escalate over time, using assumptions from research conducted by Energy and Environmental Economics (E3) in the 2019 study Residential Building Electrification in California (Energy & Environmental Economics, 2019). Escalation of natural gas rates between 2019 and 2022 is based on the currently filed General Rate Cases (GRCs) for PG&E, SoCalGas and SDG&E. From 2023 through 2025, gas rates are assumed to escalate at 4% per year above inflation, which reflects historical rate increases between 2013 and 2018. Escalation of electricity rates from 2019 through 2025 is assumed to be 2% per year above inflation, based on electric utility estimates. After 2025, escalation rates for both natural gas and electric rates are assumed to drop to a more conservative 1% escalation per year above inflation for long-term rate trajectories beginning in 2026 through 2050. See Appendix B – Utility Tariff Details for additional details.

2.5.2 TDV Lifecycle Cost

Cost-effectiveness was also assessed using the Energy Commission’s TDV LCC methodology. TDV is a normalized monetary format developed and used by the Energy Commission for comparing electricity and natural gas savings, and it considers the cost of electricity and natural gas consumed during different times of the day and year. The 2019 TDV values are based on long term discounted costs of 30 years for all residential measures. The CBECC-Com simulation software results are expressed in terms of TDV kBtus. The present value of the energy cost savings in dollars is calculated by multiplying the TDV kBtu savings by a net present value (NPV) factor, also developed by the Energy Commission. The 30-year NPV factor is \$0.154/TDV kBtu for nonresidential projects under 2019 Title 24.

Like the customer B/C ratio, a TDV B/C ratio value of one indicates the savings over the life of the measure are equivalent to the incremental cost of that measure. A value greater than one represents a positive return on investment. The ratio is calculated according to Equation 3.

Equation 3

$$TDV \text{ Benefit} - \text{to} - \text{Cost Ratio} = \frac{TDV \text{ energy savings} * NPV \text{ factor}}{NPV \text{ of lifetime incremental cost}}$$

2.6 Greenhouse Gas Emissions

Equivalent CO2 emission savings were calculated based on estimates from Zero Code reports available in CBECC-Com simulation software.² Electricity emissions vary by region and by hour of the year, accounting for time dependent energy use and carbon emissions based on source emissions, including renewable portfolio standard

² More information at: : <https://zero-code.org/wp-content/uploads/2018/11/ZERO-Code-TSD-California.pdf>



projections. Two distinct hourly profiles, one for Climate Zones 1 through 5 and 11 through 13 and another for Climate Zones 6 through 10 and 14 through 16. For natural gas a fixed factor of 0.005307 metric tons/therm is used. To compare the mixed fuel and all-electric cases side-by-side, greenhouse gas (GHG) emissions are presented as CO₂-equivalent emissions per dwelling unit.

3 Results

The primary objective of the evaluation is to identify cost-effective, non-preempted performance targets for mid-rise multifamily buildings, under both mixed-fuel and all-electric cases, to support the design of local ordinances requiring new mid-rise residential buildings to exceed the minimum state requirements. The packages presented are representative examples of designs and measures that can be used to meet the requirements. In practice, a builder can use any combination of non-preempted or preempted compliant measures to meet the requirements.

This analysis evaluated a package of efficiency measures applied to a mixed-fuel design and a similar package for an all-electric design. Each design was evaluated using the predominant utility rates in all 16 California climate zones. Solar PV was also added to the efficiency packages and a sensitivity analysis was conducted at various PV system capacities to optimize cost-effectiveness.

Although some of the efficiency measures evaluated were not cost-effective and were eliminated, the following measures are included in at least one package:

- Improved fenestration
- Wall insulation
- Low pressure-drop distribution system
- HERS verified pipe insulation

The following measures were evaluated but were found to not be cost-effective and were not included in any of the packages.

- Solar thermal system with higher solar fraction than prescriptive requirements
- Drain water heat recovery

Cost-effectiveness results for the all-electric case are based upon the clustered HPWH approach only. Lower first costs with the clustered approach resulted in better cost-effectiveness than the central HPWH design.

3.1 Mid-Rise Multifamily Results

Table 7 and Table 9 present results for the mixed-fuel and all-electric packages, respectively. Each table shows cost-effectiveness results for **Efficiency Only** packages and **Efficiency + PV** packages (with a 17.6 kW_{DC} PV system sized based on 0.2 kW_{DC} per apartment). Both mixed-fuel and all-electric results are relative to the mixed-fuel 2019 Title 24 prescriptive baseline. B/C ratios for all packages are presented according to both the On-Bill and TDV methodologies for the mixed-fuel and the all-electric cases, respectively. Detailed results are presented in *Appendix D – Detailed Results Mixed-Fuel* and *Appendix E – Detailed Results All-Electric*.

Efficiency Only:

Compliance margins for the **Mixed-Fuel Efficiency Only** cases range from 5% to 8%, which meets the CALGreen Tier 1 energy performance requirement for high-rise residential buildings. **Mixed-Fuel Efficiency Only** cases are cost-effective based on TDV in all climate zones except for 1 and 16. The cases are cost-effective from an On-Bill perspective in all climate zones except 1.

The **All-Electric Efficiency Only** package does not meet minimum code requirements in Climate Zones 1 and 16. Compliance margins for all other climate zones range from 1% to 5%. **All-Electric Efficiency Only** cases are cost-



effective in all climate zones based on TDV. Cost-effectiveness from an On-Bill perspective is favorable in all climate zones except 1, 16, and 5 in SCG territory.

Efficiency + PV:

Several PV system size options were evaluated for the **Efficiency + PV** packages. Of the PV system sizes evaluated, 0.2 kW_{DC} per apartment represents the smallest system that resulted in B/C ratios greater than one based on both metrics in all climate zones for the mixed-fuel scenario. Adding a 0.1 kW_{DC} per apartment in the all-electric cases, resulted in B/C ratios greater than one in all climate zones.

Table 11 and Table 12 describe the efficiency measures included in the mixed-fuel and all-electric packages, respectively.



Table 7: Mixed-Fuel Package Results: Efficiency Only (SAVINGS/COST PER APARTMENT)

Climate Zone	Elec Utility	Gas Utility	Comp. Margin	Total Gas Savings (therms)	Total Electric Savings (kWh)	GHG Reductions (lb. CO2)	Savings (2020 PV\$)		Incremental Cost (2020 PV\$)	B/C Ratio ¹		NPV	
							Utility Cost Savings	TDV Savings		On-Bill	TDV	On-Bill	TDV
CZ01	PGE	PGE	5.8%	0	26	18	\$133	\$105	\$304	0.44	0.35	(\$171)	(\$199)
CZ02	PGE	PGE	5.9%	0	47	29	\$391	\$285	\$144	2.72	1.98	\$248	\$141
CZ03	PGE	PGE	6.7%	0	44	27	\$345	\$226	\$144	2.40	1.57	\$202	\$82
CZ04	PGE	PGE	6.6%	0	61	37	\$465	\$331	\$144	3.24	2.31	\$321	\$188
CZ04-2	CPAU	CPAU	6.6%	0	61	37	\$248	\$331	\$144	1.73	2.31	\$104	\$188
CZ05	PGE	PGE	6.7%	0	42	24	\$320	\$206	\$144	2.22	1.43	\$176	\$62
CZ05-2	PGE	SCG	6.7%	0	42	24	\$320	\$206	\$144	2.22	1.43	\$176	\$62
CZ06	SCE	SCG	7.1%	0	74	42	\$424	\$351	\$144	2.95	2.44	\$280	\$207
CZ07	SDGE	SDGE	7.6%	0	81	48	\$593	\$374	\$144	4.13	2.60	\$449	\$230
CZ08	SCE	SCG	7.0%	0	84	50	\$484	\$420	\$144	3.37	2.92	\$341	\$276
CZ09	SCE	SCG	6.5%	0	83	51	\$468	\$441	\$144	3.26	3.06	\$324	\$297
CZ10	SCE	SCG	6.5%	0	82	50	\$410	\$427	\$144	2.85	2.97	\$266	\$283
CZ10-2	SDGE	SDGE	6.5%	0	82	50	\$599	\$427	\$144	4.16	2.97	\$455	\$283
CZ11	PGE	PGE	6.8%	0	104	70	\$637	\$635	\$625	1.02	1.02	\$11	\$10
CZ12	PGE	PGE	6.8%	0	93	60	\$572	\$568	\$304	1.88	1.87	\$268	\$265
CZ12-2	SMUD	PGE	6.8%	0	93	71	\$319	\$568	\$304	1.05	1.87	\$15	\$265
CZ13	PGE	PGE	7.3%	0	132	89	\$798	\$779	\$625	1.28	1.25	\$173	\$154
CZ14	SCE	SCG	6.0%	0	80	49	\$407	\$449	\$304	1.34	1.48	\$103	\$145
CZ14-2	SDGE	SDGE	6.0%	0	80	49	\$576	\$449	\$304	1.90	1.48	\$273	\$145
CZ15	SCE	SCG	6.8%	0	145	93	\$719	\$802	\$625	1.15	1.28	\$94	\$177
CZ16	PGE	PGE	7.4%	0	117	76	\$646	\$563	\$625	1.03	0.90	\$21	(\$62)

¹ Values in red indicate B/C ratios less than 1.

Table 8: Mixed-Fuel Package Results: PV + Efficiency 0.2 kW_{DC} per Apartment (SAVINGS/COST PER APARTMENT)

Climate Zone	Elec Utility	Gas Utility	Comp. Margin	Total Gas Savings (therms)	Total Electric Savings (kWh)	GHG Reductions (lb. CO ₂)	Savings (2020 PV\$)		Incremental Cost (2020 PV\$)	B/C Ratio ¹		NPV	
							Utility Cost Savings	TDV Savings		On-Bill	TDV	On-Bill	TDV
CZ01	PGE	PGE	5.8%	0	291	131	\$1,637	\$1,090	\$937	1.75	1.16	\$701	\$153
CZ02	PGE	PGE	5.9%	0	360	163	\$2,431	\$1,469	\$777	3.13	1.89	\$1,655	\$692
CZ03	PGE	PGE	6.7%	0	359	161	\$2,400	\$1,397	\$777	3.09	1.80	\$1,624	\$620
CZ04	PGE	PGE	6.6%	0	385	176	\$2,579	\$1,562	\$777	3.32	2.01	\$1,802	\$785
CZ04-2	CPAU	CPAU	6.6%	0	61	176	\$1,335	\$1,562	\$777	1.72	2.01	\$558	\$785
CZ05	PGE	PGE	6.7%	0	379	168	\$2,480	\$1,461	\$777	3.19	1.88	\$1,704	\$685
CZ05-2	PGE	SCG	6.7%	0	379	168	\$2,480	\$1,461	\$777	3.19	1.88	\$1,704	\$685
CZ06	SCE	SCG	7.1%	0	392	178	\$1,987	\$1,587	\$777	2.56	2.04	\$1,210	\$810
CZ07	SDGE	SDGE	7.6%	0	411	189	\$2,770	\$1,647	\$777	3.57	2.12	\$1,993	\$870
CZ08	SCE	SCG	7.0%	0	402	186	\$2,059	\$1,708	\$777	2.65	2.20	\$1,282	\$931
CZ09	SCE	SCG	6.5%	0	410	192	\$1,876	\$1,742	\$777	2.41	2.24	\$1,099	\$965
CZ10	SCE	SCG	6.5%	0	409	190	\$1,797	\$1,681	\$777	2.31	2.16	\$1,020	\$904
CZ10-2	SDGE	SDGE	6.5%	0	409	190	\$2,646	\$1,681	\$777	3.41	2.16	\$1,869	\$904
CZ11	PGE	PGE	6.8%	0	422	206	\$2,438	\$1,877	\$1,258	1.94	1.49	\$1,180	\$619
CZ12	PGE	PGE	6.8%	0	406	193	\$2,352	\$1,794	\$937	2.51	1.91	\$1,415	\$857
CZ12-2	SMUD	PGE	6.8%	0	406	193	\$1,226	\$1,794	\$937	1.31	1.91	\$289	\$857
CZ13	PGE	PGE	7.3%	0	441	221	\$2,548	\$1,965	\$1,258	2.03	1.56	\$1,290	\$707
CZ14	SCE	SCG	6.0%	0	439	201	\$1,923	\$1,901	\$937	2.05	2.03	\$987	\$964
CZ14-2	SDGE	SDGE	6.0%	0	439	201	\$2,819	\$1,901	\$937	3.01	2.03	\$1,882	\$964
CZ15	SCE	SCG	6.8%	0	478	234	\$2,128	\$2,110	\$1,258	1.69	1.68	\$870	\$852
CZ16	PGE	PGE	7.4%	0	457	222	\$2,567	\$1,818	\$1,258	2.04	1.44	\$1,309	\$560

¹ Values in red indicate B/C ratios less than 1.

Table 9: All-Electric Package Results: Efficiency Only (SAVINGS/COSTS PER APARTMENT)

Climate Zone	Elec Utility	Gas Utility	Comp. Margin	Total Gas Savings (therms)	Total Electric Savings (kWh)	GHG Reductions (lb. CO2)	Savings (2020 PV\$)		Incremental Cost (2020 PV\$)	B/C Ratio ^{1,2}		NPV	
							Utility Cost Savings	TDV Savings		On-Bill	TDV	On-Bill	TDV
CZ01	PGE	PGE	-0.4%	125	-873	1040	-\$674	\$199	-\$446	0.7	>1	(\$228)	\$645
CZ02	PGE	PGE	1.6%	114	-762	971	-\$238	\$528	-\$606	2.5	>1	\$368	\$1,134
CZ03	PGE	PGE	1.1%	115	-767	975	-\$287	\$390	-\$606	2.1	>1	\$319	\$996
CZ04	PGE	PGE	3.4%	111	-714	952	-\$102	\$625	-\$606	6.0	>1	\$504	\$1,231
CZ04-2	CPAU	CPAU	3.4%	111	-714	952	\$345	\$625	-\$606	>1	>1	\$951	\$1,231
CZ05	PGE	PGE	1.3%	117	-788	991	-\$350	\$391	-\$606	1.7	>1	\$255	\$996
CZ05-2	PGE	SCG	1.3%	117	-788	991	-\$827	\$391	-\$606	0.7	>1	(\$221)	\$996
CZ06	SCE	SCG	3.7%	107	-670	933	\$153	\$612	-\$606	>1	>1	\$759	\$1,218
CZ07	SDGE	SDGE	4.8%	106	-653	930	-\$58	\$665	-\$606	10.4	>1	\$547	\$1,271
CZ08	SCE	SCG	3.9%	104	-633	912	\$227	\$693	-\$606	>1	>1	\$833	\$1,298
CZ09	SCE	SCG	3.8%	104	-633	912	\$212	\$739	-\$606	>1	>1	\$817	\$1,345
CZ10	SCE	SCG	1.8%	90	-626	743	-\$214	\$396	-\$853	4.0	>1	\$639	\$1,249
CZ10-2	SDGE	SDGE	1.8%	90	-626	743	-\$478	\$396	-\$853	1.8	>1	\$375	\$1,249
CZ11	PGE	PGE	2.0%	91	-619	769	-\$241	\$430	-\$371	1.5	>1	\$130	\$802
CZ12	PGE	PGE	1.4%	94	-662	773	-\$414	\$288	-\$693	1.7	>1	\$279	\$980
CZ12-2	SMUD	PGE	1.4%	94	-662	773	\$1,060	\$288	-\$693	>1	>1	\$1,753	\$980
CZ13	PGE	PGE	2.6%	90	-579	777	-\$62	\$505	-\$371	6.0	>1	\$309	\$876
CZ14	SCE	SCG	1.1%	92	-653	759	-\$258	\$305	-\$693	2.7	>1	\$435	\$998
CZ14-2	SDGE	SDGE	1.1%	92	-653	759	-\$532	\$305	-\$693	1.3	>1	\$161	\$998
CZ15	SCE	SCG	4.4%	74	-409	679	\$332	\$832	-\$371	>1	>1	\$704	\$1,203
CZ16	PGE	PGE	-5.8%	108	-777	895	-\$621	\$127	-\$371	0.6	>1	(\$250)	\$498

¹ Values in red indicate B/C ratios less than 1.

² ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.



Table 10: All-Electric Package Results: PV + Efficiency 0.1 kW_{DC} per Apartment (SAVINGS/COSTS PER APARTMENT)

Climate Zone	Elec Utility	Gas Utility	Comp. Margin	Total Gas Savings (therms)	Total Electric Savings (kWh)	GHG Reductions (lb. CO ₂)	Savings (2020 PV\$)		Incremental Cost (2020 PV\$)	B/C Ratio ^{1,2}		NPV	
							Utility Cost Savings	TDV Savings		On-Bill	TDV	On-Bill	TDV
CZ01	PGE	PGE	-0.4%	125	-741	1,097	\$78	\$692	-\$129	>1	>1	\$208	\$821
CZ02	PGE	PGE	1.6%	114	-606	1,038	\$782	\$1,120	-\$289	>1	>1	\$1,071	\$1,409
CZ03	PGE	PGE	1.1%	115	-609	1,042	\$741	\$975	-\$289	>1	>1	\$1,030	\$1,264
CZ04	PGE	PGE	3.4%	111	-552	1,021	\$955	\$1,240	-\$289	>1	>1	\$1,244	\$1,529
CZ04-2	CPAU	CPAU	3.4%	111	-714	1,021	\$904	\$1,240	-\$289	>1	>1	\$1,194	\$1,529
CZ05	PGE	PGE	1.3%	117	-619	1,063	\$730	\$1,018	-\$289	>1	>1	\$1,019	\$1,307
CZ05-2	PGE	SCG	1.3%	117	-619	1,063	\$254	\$1,018	-\$289	>1	>1	\$543	\$1,307
CZ06	SCE	SCG	3.7%	107	-512	1,001	\$935	\$1,231	-\$289	>1	>1	\$1,224	\$1,520
CZ07	SDGE	SDGE	4.8%	106	-488	1,000	\$1,049	\$1,302	-\$289	>1	>1	\$1,339	\$1,591
CZ08	SCE	SCG	3.9%	104	-474	981	\$1,014	\$1,337	-\$289	>1	>1	\$1,304	\$1,626
CZ09	SCE	SCG	3.8%	104	-469	983	\$924	\$1,390	-\$289	>1	>1	\$1,213	\$1,679
CZ10	SCE	SCG	1.8%	90	-463	813	\$480	\$1,023	-\$536	>1	>1	\$1,016	\$1,559
CZ10-2	SDGE	SDGE	1.8%	90	-463	813	\$546	\$1,023	-\$536	>1	>1	\$1,082	\$1,559
CZ11	PGE	PGE	2.0%	91	-460	837	\$660	\$1,052	-\$55	>1	>1	\$714	\$1,106
CZ12	PGE	PGE	1.4%	94	-505	839	\$476	\$900	-\$376	>1	>1	\$852	\$1,276
CZ12-2	SMUD	PGE	1.4%	94	-505	839	\$1,513	\$900	-\$376	>1	>1	\$1,890	\$1,276
CZ13	PGE	PGE	2.6%	90	-424	843	\$813	\$1,098	-\$55	>1	>1	\$867	\$1,153
CZ14	SCE	SCG	1.1%	92	-473	835	\$500	\$1,031	-\$376	>1	>1	\$877	\$1,407
CZ14-2	SDGE	SDGE	1.1%	92	-473	835	\$589	\$1,031	-\$376	>1	>1	\$965	\$1,407
CZ15	SCE	SCG	4.4%	74	-242	750	\$1,037	\$1,485	-\$55	>1	>1	\$1,091	\$1,540
CZ16	PGE	PGE	-5.8%	108	-608	969	\$339	\$754	-\$55	>1	>1	\$394	\$809

¹ Values in red indicate B/C ratios less than 1.² ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.

Table 11: Mixed-Fuel Measure Package Summary

Climate Zone	Compliance Margin	MEASURE SPECIFICATION				
		Window U-value	Window SHGC	Add Wall Ins.	Fan Watt Draw	HERS Pipe Ins.
CZ01	5.8%			+ 1"	0.25 W/cfm	No
CZ02	5.9%		0.22		0.25 W/cfm	No
CZ03	6.7%		0.22		0.25 W/cfm	No
CZ04	6.6%		0.22		0.25 W/cfm	No
CZ05	6.7%		0.22		0.25 W/cfm	No
CZ06	7.1%		0.22		0.25 W/cfm	No
CZ07	7.6%		0.22		0.25 W/cfm	No
CZ08	7.0%		0.22		0.25 W/cfm	No
CZ09	6.5%		0.22		0.25 W/cfm	No
CZ10	6.5%		0.22		0.25 W/cfm	No
CZ11	6.8%	0.25	0.22	+ 1"	0.25 W/cfm	No
CZ12	7.3%		0.22	+ 1"	0.25 W/cfm	No
CZ13	7.3%	0.25	0.22	+ 1"	0.25 W/cfm	No
CZ14	6.8%		0.22	+ 1"	0.25 W/cfm	No
CZ15	6.8%	0.25	0.22	+ 1"	0.25 W/cfm	No
CZ16	7.4%	0.25	0.22	+ 1"	0.25 W/cfm	No

Table 12: All-Electric Measure Package Summary

Climate Zone	Compliance Margin	MEASURE SPECIFICATION				
		Window U-value	Window SHGC	Add Wall Ins.	Fan Watt Draw	HERS Pipe Ins.
CZ01	-0.4%			+ 1"	0.25 W/cfm	Yes
CZ02	1.6%		0.22		0.25 W/cfm	Yes
CZ03	1.1%		0.22		0.25 W/cfm	Yes
CZ04	3.4%		0.22		0.25 W/cfm	Yes
CZ05	1.3%		0.22		0.25 W/cfm	Yes
CZ06	3.7%		0.22		0.25 W/cfm	Yes
CZ07	4.8%		0.22		0.25 W/cfm	Yes
CZ08	3.9%		0.22		0.25 W/cfm	Yes
CZ09	3.8%		0.22		0.25 W/cfm	Yes
CZ10	1.8%		0.22		0.25 W/cfm	Yes
CZ11	2.0%	0.25	0.22	+ 1"	0.25 W/cfm	Yes
CZ12	2.0%		0.22	+ 1"	0.25 W/cfm	Yes
CZ13	2.6%	0.25	0.22	+ 1"	0.25 W/cfm	Yes
CZ14	2.0%		0.22	+ 1"	0.25 W/cfm	Yes
CZ15	4.4%	0.25	0.22	+ 1"	0.25 W/cfm	Yes
CZ16	-5.8%	0.25	0.22	+ 1"	0.25 W/cfm	Yes



4 Conclusions & Summary

This report evaluated the feasibility and cost-effectiveness of “above code” performance specifications for newly constructed mid-rise multifamily buildings. The analysis included application of efficiency measures, electric appliances, and PV in all 16 California climate zones, and found cost-effective packages across the state. For the building designs and climate zones where cost-effective packages were identified, the results of this analysis can be used by local jurisdictions to support the adoption of reach codes. Cost-effectiveness was evaluated according to two metrics: On-Bill customer lifecycle benefit-to-cost ratio and TDV lifecycle benefit-to-cost ratio.

For mixed-fuel buildings, this analysis demonstrates that there are cost-effective **Efficiency Only** packages that achieve a minimum 5% compliance margin in most climate zones. The exception is Climate Zone 1 where the package was not cost-effective based on either the TDV or the On-Bill methodology. In all other cases the package is cost-effective for at least one of the metrics.

When 0.1 kW_{DC} per apartment is included, all climate zones are cost-effective based on at least one of the metrics. The addition of 0.1 kW_{DC} per apartment, or 8.8 kW_{DC} total for the building, results in an incremental cost for the PV system of \$27,855. When 0.2 kW_{DC} per apartment is included, all climate zones are cost-effective based on both metrics. The addition of 0.2 kW_{DC} per apartment, or 17.6 kW_{DC} for the building, results in an incremental cost for the PV system of \$55,711.

This study evaluated electrification of residential loads in new mid-rise multifamily buildings. Based on typical construction across California, the basecase condition incorporated all electric appliances within the apartment spaces. As a result, only central water heating was converted from natural gas to electric as part of this analysis. For all-electric buildings, this analysis demonstrates that there are cost-effective **All-Electric Efficiency Only** packages that meet minimum Title 24 code compliance in all climate zones except 1 and 16. The package is cost-effective based on the TDV methodology in all climate zones. It is cost-effective based on the On-Bill methodology in Climate Zones 2 through 15, except for Climate Zones 5 in SCG territory.

When 0.1 kW_{DC} per apartment is included, all climate zones are cost-effective based on both metrics. The addition of 0.1 kW_{DC} per apartment, or 8.8 kW_{DC} for the building, results in an incremental cost for the PV system of \$27,855.

Additional considerations

- This study found that electrification of central domestic hot water loads, in combination with efficiency measures, can result in a benefit to the consumer through lower utility bills under certain electricity and gas tariff scenarios (Climate Zones 6, 8, 9, 15, 4 in CPAU territory, and 12 in SMUD territory). The all-electric results demonstrate a trend with On-Bill cost-effectiveness across the different electric utilities. Net Present Value in SCE and SDG&E territories, as well as SMUD and CPAU territories, are typically higher than the cases in PG&E territory. This indicates that rate design can play an important role in encouraging or discouraging electrification.
- This study did not evaluate federally preempted high efficiency appliances. Specifying high efficiency equipment is a viable approach to meeting Title 24 code compliance and local ordinance requirements and is commonly used by project teams. Other studies have found that efficiency packages and electrification packages that employ high efficiency equipment can be quite cost-effective ((Statewide Reach Code Team, 2019b), (Energy & Environmental Economics. 2019)).
- If PV capacity is added to both the mixed-fuel and all-electric efficiency packages, all cases are cost-effective based on at least one of the two evaluated metrics. In some cases, cost-effectiveness improves, and in other cases it decreases relative to the case with efficiency and/or electrification measures only. The cost-effectiveness of adding PV up to 1 kW per apartment, as an independent measure, results in On-Bill benefit-to-cost ratios between 2.3 and 3.1 for PGE territory, 2.1 to 2.3 for SCE territory, and 3.2 to 3.5 for SDG&E territory. The TDV B/C ratio for PV alone is approximately 2.0 for most climate zones



for all service territories. Adding PV in addition to the efficiency packages improves cost-effectiveness where the B/C ratios for the efficiency measures alone are lower than the B/C ratios for PV alone, and vice versa where they are higher. Annual basecase electricity costs and annual utility savings from PV are lower in SCE territory than in PG&E and SDG&E territories. This is due to lower off-peak cost and a bigger difference in peak versus off-peak rate for the TOU-D SCE electricity rate tariff. Most PV production occurs during off-peak times (4 pm to 9 pm peak period).

Table 13 summarizes compliance margin and cost-effectiveness results for the mixed-fuel and all-electric cases. Compliance margin is reported in the cells and cost-effectiveness is indicated by the color of the cell according to the following:

- Cells highlighted in green depict a positive compliance margin and cost-effective results using both On-Bill and TDV approaches.
- Cells highlighted in yellow depict a positive compliance margin and cost-effective results using either the On-Bill or TDV approach but not both.
- Cells not highlighted either depict a negative compliance margin (red text) or a package that was not cost-effective using either the On-Bill or TDV approach.

For more detail on the results, please refer to *Section 3.1 Mid-Rise Multifamily Results, Appendix D – Detailed Results Mixed-Fuel* and *Appendix E – Detailed Results All-Electric*.

Table 13: Mid-Rise Multifamily Summary of Compliance Margin and Cost-Effectiveness

Climate Zone	Elec Utility	Gas Utility	Mixed-Fuel				All-Electric			
			No PV	0.1 kW _{DC} /Apt	0.2 kW _{DC} /Apt	0.3 kW _{DC} /Apt	No PV	0.1 kW _{DC} /Apt	0.2 kW _{DC} /Apt	0.3 kW _{DC} /Apt
CZ01	PGE	PGE	5.8%	5.8%	5.8%	5.8%	-0.4%	-0.4%	-0.4%	-0.4%
CZ02	PGE	PGE	5.9%	5.9%	5.9%	5.9%	1.6%	1.6%	1.6%	1.6%
CZ03	PGE	PGE	6.7%	6.7%	6.7%	6.7%	1.1%	1.1%	1.1%	1.1%
CZ04	PGE	PGE	6.6%	6.6%	6.6%	6.6%	3.4%	3.4%	3.4%	3.4%
CZ04-2	CPAU	CPAU	6.6%	6.6%	6.6%	6.6%	3.4%	3.4%	3.4%	3.4%
CZ05	PGE	PGE	6.7%	6.7%	6.7%	6.7%	1.3%	1.3%	1.3%	1.3%
CZ05-2	PGE	SCG	6.7%	6.7%	6.7%	6.7%	1.3%	1.3%	1.3%	1.3%
CZ06	SCE	SCG	7.1%	7.1%	7.1%	7.1%	3.7%	3.7%	3.7%	3.7%
CZ07	SDGE	SDGE	7.6%	7.6%	7.6%	7.6%	4.8%	4.8%	4.8%	4.8%
CZ08	SCE	SCG	7.0%	7.0%	7.0%	7.0%	3.9%	3.9%	3.9%	3.9%
CZ09	SCE	SCG	6.5%	6.5%	6.5%	6.5%	3.8%	3.8%	3.8%	3.8%
CZ10	SCE	SCG	6.5%	6.5%	6.5%	6.5%	1.8%	1.8%	1.8%	1.8%
CZ10-2	SDGE	SDGE	6.5%	6.5%	6.5%	6.5%	1.8%	1.8%	1.8%	1.8%
CZ11	PGE	PGE	6.8%	6.8%	6.8%	6.8%	2.0%	2.0%	2.0%	2.0%
CZ12	PGE	PGE	6.8%	6.8%	6.8%	6.8%	1.4%	1.4%	1.4%	1.4%
CZ12-2	SMUD	PGE	6.8%	6.8%	6.8%	6.8%	1.4%	1.4%	1.4%	1.4%
CZ13	PGE	PGE	7.3%	7.3%	7.3%	7.3%	2.6%	2.6%	2.6%	2.6%
CZ14	SCE	SCG	6.0%	6.0%	6.0%	6.0%	1.1%	1.1%	1.1%	1.1%
CZ14-2	SDGE	SDGE	6.0%	6.0%	6.0%	6.0%	1.1%	1.1%	1.1%	1.1%
CZ15	SCE	SCG	6.8%	6.8%	6.8%	6.8%	4.4%	4.4%	4.4%	4.4%
CZ16	PGE	PGE	7.4%	7.4%	7.4%	7.4%	-5.8%	-5.8%	-5.8%	-5.8%



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Appendix A – California Climate Zone Map

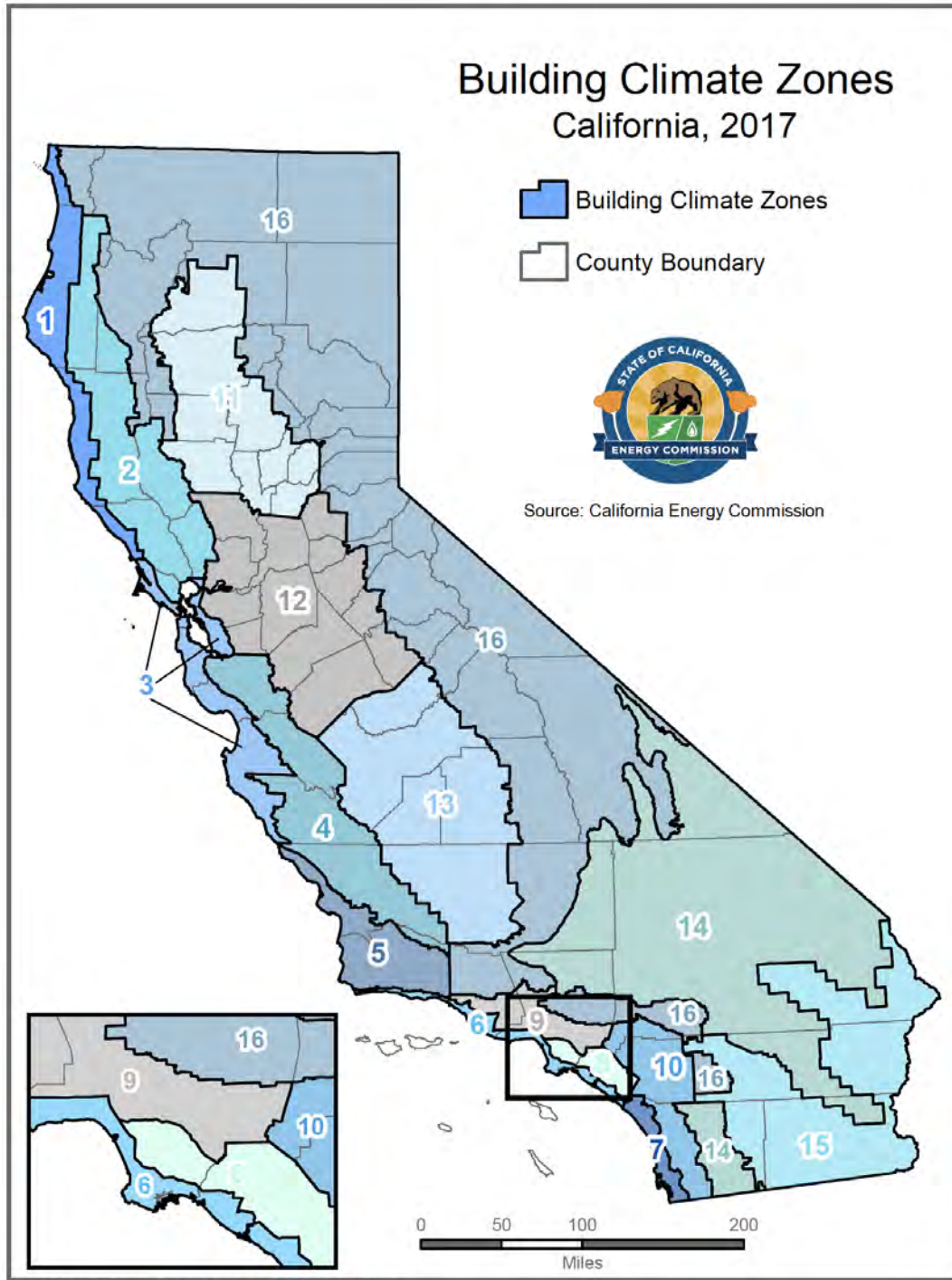


Figure 3: Map of California climate zones. (Source, California Energy Commission³)

³ https://ww2.energy.ca.gov/maps/renewable/building_climate_zones.html



Appendix B – Utility Tariff Details

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PG&E

The following pages provide details on the PG&E electricity and natural gas tariffs applied in this study. Table 14 describes the baseline territories that were assumed for each climate zone.

Table 14: PG&E Baseline Territory by Climate Zone

	Baseline Territory
CZ01	V
CZ02	X
CZ03	T
CZ04	X
CZ05	T
CZ11	R
CZ12	S
CZ13	R
CZ16	Y

The PG&E monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending April 2020 according to the rates shown in Table 15. Rates are based on historical data provided by PG&E.⁴

Table 15: PG&E Monthly Gas Rate (\$/Therm)

Month	Procurement Charge	Transportation Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
Jan 2020	\$0.45813	\$0.99712	\$1.59540	\$1.45525	\$2.05353
Feb 2020	\$0.44791	\$0.99712	\$1.59540	\$1.44503	\$2.04331
Mar 2020	\$0.35346	\$1.13126	\$1.64861	\$1.48472	\$2.00207
Apr 2020	\$0.23856	\$1.13126	\$1.64861	\$1.36982	\$1.88717
May 2019	\$0.21791	\$0.99933	\$1.59892	\$1.21724	\$1.81683
June 2019	\$0.20648	\$0.99933	\$1.59892	\$1.20581	\$1.80540
July 2019	\$0.28462	\$0.99933	\$1.59892	\$1.28395	\$1.88354
Aug 2019	\$0.30094	\$0.96652	\$1.54643	\$1.26746	\$1.84737
Sept 2019	\$0.25651	\$0.96652	\$1.54643	\$1.22303	\$1.80294
Oct 2019	\$0.27403	\$0.98932	\$1.58292	\$1.26335	\$1.85695
Nov 2019	\$0.33311	\$0.96729	\$1.54767	\$1.30040	\$1.88078
Dec 2019	\$0.40178 ^{7/}	\$0.96729	\$1.54767	\$1.36907	\$1.94945

⁴The PG&E procurement and transportation charges were obtained from the following site:

<https://www.pge.com/tariffs/GRF.SHTML#RESGAS>





**Pacific Gas and
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U 39

San Francisco, California

Cancelling

Revised

Revised

Cal. P.U.C. Sheet No. 46539-E

Cal. P.U.C. Sheet No. 46325-E

ELECTRIC SCHEDULE E-TOU-C
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

Sheet 2

RATES:
(Cont'd.)

E-TOU-C TOTAL RATES

Total Energy Rates (\$ per kWh)	PEAK		OFF-PEAK	
<i>Summer</i>				
Total Usage	\$0.41333	(I)	\$0.34989	(I)
Baseline Credit (Applied to Baseline Usage Only)	(\$0.08633)	(R)	(\$0.08633)	(R)
<i>Winter</i>				
Total Usage	\$0.31624	(I)	\$0.29891	(I)
Baseline Credit (Applied to Baseline Usage Only)	(\$0.08633)	(R)	(\$0.08633)	(R)
Delivery Minimum Bill Amount (\$ per meter per day)	\$0.32854			
California Climate Credit (per household, per semi-annual payment occurring in the April and October bill cycles) [†]	(\$35.73)			(T)

Total bundled service charges shown on customer's bills are unbundled according to the component rates shown below. Where the delivery minimum bill amount applies, the customer's bill will equal the sum of (1) the delivery minimum bill amount plus (2) for bundled service, the generation rate times the number of kWh used. For revenue accounting purposes, the revenues from the delivery minimum bill amount will be assigned to the Transmission, Transmission Rate Adjustments, Reliability Services, Public Purpose Programs, Nuclear Decommissioning, Competition Transition Charges, Energy Cost Recovery Amount, DWR Bond, and New System Generation Charges based on kWh usage times the corresponding unbundled rate component per kWh, with any residual revenue assigned to Distribution.

[†] Pursuant to D.20-04-027, distribution of the October 2020 California Climate Credit will be advanced and split to the May 2020 and June 2020 bill cycles, \$17.87 and \$17.86 respectively.. (N)
(N)

(Continued)

Advice 5661-E-B
Decision

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted April 28, 2020
Effective May 1, 2020
Resolution





**Pacific Gas and
Electric Company**

San Francisco, California

Revised
Cancelling Revised

Cal. P.U.C. Sheet No. 46540-E
Cal. P.U.C. Sheet No. 46252-E

ELECTRIC SCHEDULE E-TOU-C
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

Sheet 3

RATES:
(Cont'd.)

UNBUNDLING OF E-TOU-C TOTAL RATES

Energy Rates by Component (\$ per kWh)	PEAK		OFF-PEAK	
Generation:				
Summer (all usage)	\$0.16735	(R)	\$0.11391	(R)
Winter (all usage)	\$0.11859	(R)	\$0.10356	(R)
Distribution**:				
Summer (all usage)	\$0.12767	(I)	\$0.11767	(I)
Winter (all usage)	\$0.07935	(I)	\$0.07705	(I)
Conservation Incentive Adjustment (Baseline Usage)			(\$0.03294)	(I)
Conservation Incentive Adjustment (Over Baseline Usage)			\$0.05339	(I)
Transmission* (all usage)			\$0.03595	
Transmission Rate Adjustments* (all usage)			\$0.00314	
Reliability Services* (all usage)			(\$0.00066)	
Public Purpose Programs (all usage)			\$0.01296	(I)
Nuclear Decommissioning (all usage)			\$0.00101	(I)
Competition Transition Charges (all usage)			\$0.00096	(R)
Energy Cost Recovery Amount (all usage)			\$0.00005	(I)
DWR Bond (all usage)			\$0.00580	
New System Generation Charge (all usage)**			\$0.00571	(I)

* Transmission, Transmission Rate Adjustments and Reliability Service charges are combined for presentation on customer bills.

** Distribution and New System Generation Charges are combined for presentation on customer bills.

(Continued)

Advice 5861-E-B
Decision

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted April 28, 2020
Effective May 1, 2020
Resolution





**Pacific Gas and
Electric Company**
U 39 San Francisco, California

Cancelling Revised
Revised

Cal. P.U.C. Sheet No. 48190-E
Cal. P.U.C. Sheet No. 43414-E

ELECTRIC SCHEDULE E-TOU-C
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

Sheet 4 (T)

- SPECIAL CONDITIONS:**
- 1. BASELINE (TIER 1) QUANTITIES:** The following quantities of electricity are to be used to define usage eligible for the baseline credit (also see Rule 19 for additional allowances for medical needs):

BASELINE QUANTITIES (kWh PER DAY)				
Baseline Territory*	Code B - Basic Quantities		Code H - All-Electric Quantities	
	Summer	Winter	Summer	Winter
	Tier I	Tier I	Tier I	Tier I
P	14.2	12.0	16.0	27.4
Q	10.3	12.0	8.9	27.4
R	18.8	11.3	20.9	28.1
S	15.8	11.1	18.7	24.9
T	6.8	8.2	7.5	13.6
V	7.5	8.8	10.9	16.9
W	20.2	10.7	23.6	20.0
X	10.3	10.5	8.9	15.4
Y	11.0	12.1	12.6	25.3
Z	6.2	8.1	7.0	16.5

- 2. TIME PERIODS FOR E-TOU-C:** Times of the year and times of the day are defined as follows: (T)

Summer (service from June 1 through September 30):

Peak: 4:00 p.m. to 9:00 p.m. All days

Off-Peak: All other times

Winter (service from October 1 through May 31):

Peak: 4:00 p.m. to 9:00 p.m. All days

Off-Peak: All other times

* The applicable baseline territory is described in Part A of the Preliminary Statement

(Continued)

Advice	5759-E	Issued by	Submitted	February 14, 2020
Decision	D.19-07-004	Robert S. Kenney	Effective	March 1, 2020
		Vice President, Regulatory Affairs	Resolution	





**Pacific Gas and
Electric Company®**

San Francisco, California

Cancelling

Revised
Revised

Cal. P.U.C. Sheet No.
Cal. P.U.C. Sheet No.

35762-G
35696-G

GAS SCHEDULE GM
MASTER-METERED MULTIFAMILY SERVICE

Sheet 2

RATES: Customers on this schedule pay a Procurement Charge and a Transportation Charge, per meter, as follows:

	<u>Baseline</u>		<u>Per Therm</u>		<u>Excess</u>
<u>Procurement Charge:</u>	\$0.23856	(R)	\$0.23856	(R)	
<u>Transportation Charge:</u>	\$1.13126		\$1.64861		
<u>Total:</u>	\$1.36982	(R)	\$1.88717	(R)	

California Natural Gas Climate Credit (\$27.18)
(per Household, annual payment
occurring in the April bill cycle)

Public Purpose Program Surcharge:

Customers served under this schedule are subject to a gas Public Purpose Program (PPP) Surcharge under Schedule G-PPPS.

See Preliminary Statement, Part B for the Default Tariff Rate Components.

The Procurement Charge on this schedule is equivalent to the rate shown on informational Schedule G-CP—Gas Procurement Service to Core End-Use Customers.





**Pacific Gas and
Electric Company®**

U 39

San Francisco, California

Cancelling

Revised

Revised

Cal. P.U.C. Sheet No. 35447-G

Cal. P.U.C. Sheet No. 34307-G

GAS SCHEDULE GM
MASTER-METERED MULTIFAMILY SERVICE

Sheet 3

**BASELINE
QUANTITIES:**

The above rates are applicable only to residential use. PG&E may require the Customer to submit a completed "Declaration of Eligibility for Baseline Quantities for Residential Rates." The delivered quantities of gas shown below are billed at the rates for baseline use. As an exception, service under this schedule not used to supply space heating but used to supply water heating from a central source to residential dwelling units that are individually metered by PG&E for either gas or electricity will be billed using a baseline quantity of 0.5 therms per dwelling unit per day (Code W) in all baseline territories and in both seasons.

Baseline Territories	BASELINE QUANTITIES (Therms Per Day Per Dwelling Unit)						(T) (T)
	Summer		Winter Off-Peak		Winter On-Peak		
	(April-October)		(Nov, Feb, Mar)		(Dec, Jan)		
	Effective Apr. 1, 2020		Effective Nov. 1, 2019		Effective Dec. 1, 2019		
**							
P	0.29	(R)	0.87	(R)	1.00	(I)	
Q	0.49	(R)	0.64	(R)	0.77	(I)	
R	0.33	(R)	0.84	(R)	1.19	(I)	
S	0.29	(R)	0.54	(R)	0.68	(I)	
T	0.49	(R)	0.94	(R)	1.06	(R)	
V	0.56		1.18	(R)	1.29	(I)	
W	0.23	(R)	0.61	(R)	0.87	(R)	
X	0.33	(R)	0.64	(R)	0.77	(I)	
Y	0.36		0.87	(R)	1.00	(I)	

**SEASONAL
CHANGES:**

The summer season is April-October, the winter off-peak season is November, February and March, and the winter on-peak season is December and January. Baseline quantities for bills that include the April 1, November 1 and December 1 seasonal changeover dates will be calculated by multiplying the applicable daily baseline quantity for each season by the number of days in each season for the billing period.

**STANDARD
MEDICAL
QUANTITIES:**

Additional medical quantities (Code M) are available as provided in Rule 19.

**RESIDENTIAL
DWELLING
UNITS:**

It is the responsibility of the Customer to advise PG&E within 15 days following any change in the number of residential dwelling units, mobile home spaces, and permanent-residence RV units receiving gas service.

**CENTRAL
BOILERS:**

Service to central boilers for water and/or space heating will be billed with monthly baseline quantities related to the number of dwelling units furnished such water and/or space heating.



SCE

The following pages provide details on are the SCE electricity tariffs applied in this study. Table 16 describes the baseline territories that were assumed for each climate zone.

Table 16: SCE Baseline Territory by Climate Zone

	Baseline Territory
CZ06	6
CZ08	8
CZ09	9
CZ10	10
CZ14	14
CZ15	15

Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 2

RATES

Customers receiving service under this Schedule will be charged the applicable rates under Option 4-9 PM, Option 4-9 PM-CPP, Option 5-8 PM, Option 5-8 PM-CPP, Option PRIME, Option PRIME-CPP Option A, Option A-CPP, Option B, or Option B-CPP, as listed below. CPP Event Charges will apply to all energy usage during CPP Event Energy Charge periods and CPP Non-Event Energy Credits will apply as a reduction on CPP Non-Event Energy Credit Periods during Summer Season weekdays, 4:00 p.m. to 9:00 p.m., as described in Special Conditions 1 and 3, below:

		Delivery Service		
		Total*	UG***	DWREC*
Option 4-9 PM / Option 4-9 PM-CPP				
Energy Charge - \$/kWh				
	Summer Season - On-Peak	0.21574 (I)	0.17870 (I)	(0.00007)
	Mid-Peak	0.21574 (I)	0.10434 (R)	(0.00007)
	Off-Peak	0.17099 (I)	0.07584 (R)	(0.00007)
	Winter Season - Mid-Peak	0.21574 (I)	0.12676 (R)	(0.00007)
	Off-Peak	0.17099 (I)	0.08874 (R)	(0.00007)
	Super-Off-Peak	0.16567 (I)	0.07025 (R)	(0.00007)
Baseline Credit**** - \$/kWh		(0.07456) (R)	0.00000	
Basic Charge - \$/day				
	Single-Family Residence	0.031		
	Multi-Family Residence	0.024		
Minimum Charge** - \$/day				
	Single Family Residence	0.346		
	Multi-Family Residence	0.346		
Minimum Charge (Medical Baseline)** - \$/day				
	Single Family Residence	0.173		
	Multi-Family Residence	0.173		
California Climate Credit†		(37.00) (I)		
California Alternate Rates for				
Energy Discount - %		100.00*		
Family Electric Rate Assistance Discount - %		100.00		
Option 4-9 PM-CPP				
CPP Event Energy Charge - \$/kWh			0.80000	
Summer CPP Non-Event Credit				
On-Peak Energy Credit - \$/kWh			(0.15170)	
Maximum Available Credit - \$/kWh*****				
	Summer Season		(0.58504) (R)	

* Represents 100% of the discount percentage as shown in the applicable Special Condition of this Schedule.

** The Minimum Charge is applicable when the Delivery Service Energy Charge, plus the applicable Basic Charge is less than the Minimum Charge.

*** The ongoing Competition Transition Charge CTC of \$0.00089 per kWh is recovered in the UG component of Generation.

**** The Baseline Credit applies up to 100% of the Baseline Allocation, regardless of Time of Use. The Baseline Allocation is set forth in Preliminary Statement, Part H.

***** The Maximum Available Credit is the capped credit amount for CPP Customers dual participating in other demand response programs.

1 Total - Total Delivery Service rates are applicable to Bundled Service, Direct Access (DA) and Community Choice Aggregation Service (CCA Service) Customers, except DA and CCA Service Customers are not subject to the DWRBC rate component of this Schedule but instead pay the DWRBC as provided by Schedule DA-CRS or Schedule CCA-CRS.

2 Generation - The Gen rates are applicable only to Bundled Service Customers.

3 DWREC - Department of Water Resources (DWR) Energy Credit - For more information on the DWR Energy Credit, see the Billing Calculation Special Condition of this Schedule.

4 Applied on an equal basis, per household, semi-annually. See the Special Conditions of this Schedule for more information.



Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 12 (T)

SPECIAL CONDITIONS

1. Applicable rate time periods are defined as follows:

Option 4-9 PM, Option 4-9 PM-CPP, Option PRIME, Option PRIME-CPP:

(T)

TOU Period	Weekdays		Weekends and Holidays	
	Summer	Winter	Summer	Winter
On-Peak	4 p.m. - 9 p.m.	N/A	N/A	N/A
Mid-Peak	N/A	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.
Off-Peak	All other hours	9 p.m. - 8 a.m.	All other hours	9 p.m. - 8 a.m.
Super-Off-Peak	N/A	8 a.m. - 4 p.m.	N/A	8 a.m. - 4 p.m.
CPP Event Period	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	N/A	N/A

Summer Daily Allocations (June through September)

Baseline Region Number	Daily kWh Allocation	All-Electric Allocation
5	17.2	17.9
6	11.4	8.8
8	12.6	9.8
9	16.5	12.4
10	18.9	15.8
13	22.0	24.6
14	18.7	18.3
15	46.4	24.1
16	14.4	13.5



Winter Daily Allocations (October through May)

Baseline Region Number	Daily kWh Allocation	All-Electric Allocation
5	18.7	29.1
6	11.3	13.0
8	10.6	12.7
9	12.3	14.3
10	12.5	17.0
13	12.6	24.3
14	12.0	21.3
15	9.9	18.2
16	12.6	23.1



SoCalGas

Following are the SoCalGas natural gas tariffs applied in this study. Table 17 describes the baseline territories that were assumed for each climate zone.

Table 17: SoCalGas Baseline Territory by Climate Zone

	Baseline Territory
CZ05	2
CZ06	1
CZ08	1
CZ09	1
CZ10	1
CZ14	2
CZ15	1

The SoCalGas monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending April 2020 according to the rates shown in Table 18. Historical natural gas rate data was only available for SoCalGas' procurement charges⁵. To estimate total costs by month, the baseline and excess transmission charges were assumed to be relatively consistent and applied for the entire year based on April 2020 costs.

Table 18: SoCalGas Monthly Gas Rate (\$/Therm)

Month	Procurement Charge	Transmission Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
Jan 2020	\$0.34730	\$0.81742	\$1.17186	\$1.16472	\$1.51916
Feb 2020	\$0.28008	\$0.81742	\$1.17186	\$1.09750	\$1.45194
Mar 2020	\$0.22108	\$0.81742	\$1.17186	\$1.03850	\$1.39294
Apr 2020	\$0.20307	\$0.81742	\$1.17186	\$1.02049	\$1.37493
May 2019	\$0.23790	\$0.81742	\$1.17186	\$1.05532	\$1.40976
June 2019	\$0.24822	\$0.81742	\$1.17186	\$1.06564	\$1.42008
July 2019	\$0.28475	\$0.81742	\$1.17186	\$1.10217	\$1.45661
Aug 2019	\$0.27223	\$0.81742	\$1.17186	\$1.08965	\$1.44409
Sept 2019	\$0.26162	\$0.81742	\$1.17186	\$1.07904	\$1.43348
Oct 2019	\$0.30091	\$0.81742	\$1.17186	\$1.11833	\$1.47277
Nov 2019	\$0.27563	\$0.81742	\$1.17186	\$1.09305	\$1.44749
Dec 2019	\$0.38067	\$0.81742	\$1.17186	\$1.19809	\$1.55253

⁵ The SoCalGas procurement and transmission charges were obtained from the following site:

<https://www.socalgas.com/for-your-business/energy-market-services/gas-prices>



SOUTHERN CALIFORNIA GAS COMPANY Revised CAL P.U.C. SHEET NO. 57458-G
LOS ANGELES, CALIFORNIA CANCELING Revised CAL P.U.C. SHEET NO. 57432-G

Schedule No. GM

Sheet 2

MULTI-FAMILY SERVICE

(Includes GM-E, GM-C, GM-EC, GM-CC, GT-ME, GT-MC and all GMB Rates)

(Continued)

APPLICABILITY (Continued)

Multi-family Accommodations built prior to December 15, 1981 and currently served under this schedule may also be eligible for service under Schedule No. GS. If an eligible Multi-family Accommodation served under this schedule converts to an applicable submetered tariff, the tenant rental charges shall be revised for the duration of the lease to reflect removal of the energy related charges.

Eligibility for service hereunder is subject to verification by the Utility.

TERRITORY

Applicable throughout the service territory.

RATES

	<u>GM/GT-M</u>	<u>GMB/GT-MB</u>
Customer Charge, per meter, per day:	16.438¢	\$16.357

For "Space Heating Only" customers, a daily Customer Charge applies during the winter period from November 1 through April 30^{1/}: 33.149¢

GM

	<u>GM-E</u>	<u>GM-EC^{3/}</u>	<u>GT-ME</u>	
<u>Baseline Rate, per therm (baseline usage defined per Special Conditions 3 and 4):</u>				
Procurement Charge: ^{2/}	20.307¢	20.307¢	N/A	R
Transmission Charge:	81.742¢	81.742¢	81.742¢	
Total Baseline Charge (all usage):	102.049¢	102.049¢	81.742¢	R
<u>Non-Baseline Rate, per therm (usage in excess of baseline usage):</u>				
Procurement Charge: ^{2/}	20.307¢	20.307¢	N/A	R
Transmission Charge:	117.186¢	117.186¢	117.186¢	
Total Non Baseline Charge (all usage):	137.493¢	137.493¢	117.186¢	R
	<u>GM-C</u>	<u>GM-CC^{3/}</u>	<u>GT-MC</u>	
<u>Non-Baseline Rate, per therm (usage in excess of baseline usage):</u>				
Procurement Charge: ^{2/}	20.307¢	20.307¢	N/A	R
Transmission Charge:	117.186¢	117.186¢	117.186¢	
Total Non Baseline Charge (all usage):	137.493¢	137.493¢	117.186¢	R

^{1/} For the summer period beginning May 1 through October 31, with some exceptions, usage will be accumulated to at least 20 Ccf (100 cubic feet) before billing, or it will be included with the first bill of the heating season which may cover the entire duration since a last bill was generated for the current calendar year. (Footnotes continue next page.)

(Continued)

(TO BE INSERTED BY UTILITY)

ADVICE LETTER NO. 5614

DECISION NO.

207

ISSUED BY

Dan Skopec

Vice President

Regulatory Affairs

(TO BE INSERTED BY CAL. PUC)

SUBMITTED Apr 6, 2020

EFFECTIVE Apr 10, 2020

RESOLUTION NO. G-3351



SOUTHERN CALIFORNIA GAS COMPANY Revised CAL. P.U.C. SHEET NO. 57168-G
LOS ANGELES, CALIFORNIA CANCELING Revised CAL. P.U.C. SHEET NO. 41015-G

Schedule No. GM
MULTI-FAMILY SERVICE

Sheet 5

(Includes GM-E, GM-C, GM-EC, GM-CC, GT-ME, GT-MC and all GMB Rates)

(Continued)

SPECIAL CONDITIONS (Continued)

3. (Continued)

Codes	Per Residence	Daily Therm Allowance for Climate Zones*		
		1	2	3
1	Space heating only			
	Summer	0.000	0.000	0.000
	Winter	1.210	1.343	2.470
2	Water heating and cooking	0.477	0.477	0.477
3	Cooking, water heating and space heating			
	Summer	0.473	0.473	0.473
	Winter	1.691	1.823	2.950
4	Cooking and space heating			
	Summer	0.088	0.088	0.088
	Winter	1.299	1.432	2.559
5	Cooking only	0.089	0.089	0.089
6	Water heating only	0.388	0.388	0.388
7	Water heating and space heating			
	Summer	0.385	0.385	0.385
	Winter	1.601	1.734	2.861

* Climate Zones are described in the Preliminary Statement.

4. **Medical Baseline:** Upon completion of an application and verification by a state-licensed physician, nurse practitioner, physician's assistant, or osteopath (Form No. 4859-E), an additional Baseline allowance of 0.822 therms per day will be provided for paraplegic, quadriplegic, or hemiplegic persons, those afflicted with multiple sclerosis or scleroderma, or persons being treated for a life threatening illness or who have a compromised immune system.

Where it is established that the energy required for a Life-Support Device, as defined in Rule No. 1, exceeds 0.822 therms per day, an additional uniform daily Baseline allowance will be provided. The amount of the additional allowance will be determined by the Utility from load and operating time data of the Life-Support Device.

5. **Space Heating Only:** Applies to customers who are using gas primarily for space heating, as determined by survey or under the presumption that customers who use less than 11 Ccf per month during each of the regular billing periods ending in August and September qualify for Heat Only billing.

(Continued)

(TO BE INSERTED BY UTILITY)
ADVICE LETTER NO. 5576-A
DECISION NO. 02-04-026

ISSUED BY
Dan Skopec
Vice President

(TO BE INSERTED BY CAL. PUC)
SUBMITTED Jan 31, 2020
EFFECTIVE Feb 27, 2020



SDG&E

Following are the SDG&E electricity and natural gas tariffs applied in this study. Table 19 describes the baseline territories that were assumed for each climate zone. All-Electric baseline allowances were applied.

Table 19: SDG&E Baseline Territory by Climate Zone

	Baseline Territory
CZ07	Coastal
CZ10	Inland
CZ14	Mountain



San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No.

33144-E

Canceling Revised Cal. P.U.C. Sheet No.

32930-E

SCHEDULE TOU-DR1
RESIDENTIAL TIME-OF-USE

Sheet 2

RATES**Total Rates:**

Description – TOU DR1	UDC Total Rate	DWR-BC Rate	EECC Rate + DWR Credit	Total Rate
Summer:				
On-Peak	0.22374	I 0.00580	0.29042 R	0.51996 R
Off-Peak	0.22374	I 0.00580	0.09305 R	0.32259 R
Super Off-Peak	0.22374	I 0.00580	0.04743 R	0.27697 R
Winter:				
On-Peak	0.25734	R 0.00580	0.07844 R	0.34158 R
Off-Peak	0.25734	R 0.00580	0.06961 R	0.33275 R
Super Off-Peak	0.25734	R 0.00580	0.05981 R	0.32295 R
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.07506)	I		(0.07506) I
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.06833)	I		(0.06833) I
Minimum Bill (\$/day)	0.338			0.338

Note:

- (1) Total Rates consist of UDC, Schedule DWR-BC (Department of Water Resources Bond Charge), and Schedule EECC (Electric Energy Commodity Cost) rates, with the EECC rates reflecting a DWR Credit.
- (2) Total Rates presented are for customers that receive commodity supply and delivery service from Utility.
- (3) DWR-BC charges do not apply to CARE customers.
- (4) As identified in the rates tables, customer bills will also include line-item summer and winter credits for usage up to 130% of baseline to provide the rate capping benefits adopted by Assembly Bill 1X and Senate Bill 695.

(Continued)

2C8

Advice Ltr. No. 3514-E

Decision No. D.20-01-021

Issued by

Dan Skopec

Vice President
Regulatory Affairs

Submitted

Mar 26, 2020

Effective

Apr 1, 2020

Resolution No.



Time Periods

All time periods listed are applicable to local time. The definition of time will be based upon the date service is rendered.

TOU Periods – Weekdays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	6:00 a.m. – 4:00 p.m.; 9:00 p.m. – midnight	6:00 a.m. – 4:00 p.m. Excluding 10:00 a.m. – 2:00 p.m. in March and April; 9:00 p.m. – midnight
Super Off-Peak	Midnight – 6:00 a.m.	Midnight – 6:00 a.m. 10:00 a.m. – 2:00 p.m. in March and April
TOU Period – Weekends and Holidays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	2:00 p.m. – 4:00 p.m.; 9:00 p.m. – midnight	2:00 p.m. – 4:00 p.m.; 9:00 p.m. – midnight
Super Off-Peak	Midnight – 2:00 p.m.	Midnight – 2:00 p.m.

Seasons: Summer June 1 – October 31
Winter November 1 – May 31

Baseline Usage: The following quantities of electricity are used to calculate the baseline adjustment credit.

	Baseline Allowance For Climatic Zones*			
	Coastal	Inland	Mountain	Desert
Basic Allowance				
Summer (June 1 to October 31)	9.0	10.4	13.6	15.9
Winter (November 1 to May 31)	9.2	9.6	12.9	10.9
All Electric**				
Summer (June 1 to October 31)	6.8	9.2	15.6	17.5
Winter (November 1 to May 31)	10.4	13.4	23.4	18.1

* Climatic Zones are shown on the Territory Served, Map No. 1.

** All Electric allowances are available upon application to those customers who have permanently installed space heating or who have electric water heating and receive no energy from another source.





San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 24487-G

Canceling Revised Cal. P.U.C. Sheet No. 24422-G

SCHEDULE GM

Sheet 2

MULTI-FAMILY NATURAL GAS SERVICE (Includes Rates for GM, GM-C and GTC/GTCA)

RATES

	GM	GM-C	GTC/GTCA ¹
<u>Baseline Rate, per therm (baseline usage defined in Special Condition 4)</u>			
Procurement Charge ²	\$0.20327 R	\$0.22130	N/A
Transmission Charge.....	<u>\$1.35946</u>	<u>\$1.35946</u>	<u>\$1.37374</u>
Total Baseline Charge.....	\$1.56273 R	\$1.58076	\$1.37374
<u>Non-Baseline Rate (usage in excess of baseline usage)</u>			
Procurement Charge ²	\$0.20327 R	\$0.22130	N/A
Transmission Charge.....	<u>\$1.59125</u>	<u>\$1.59125</u>	<u>\$1.60553</u>
Total Non-Baseline Charge.....	\$1.79452 R	\$1.81255	\$1.60553
<u>Minimum Bill, per day³</u>			
Non-CARE customers.....	\$0.09863	\$0.09863	\$0.09863
CARE customers.....	\$0.07890	\$0.07890	\$0.07890

(Continued)

2C6

Advice Ltr. No. 2858-G

Decision No. _____

Issued by
Dan Skopec
Vice President
Regulatory Affairs

Submitted Mar 31, 2020

Effective Apr 1, 2020

Resolution No. _____

Baseline Usage. The following quantities of gas are to be billed at the baseline rate for multi-family units. Usage in excess of applicable baseline usage will be billed at non-baseline rates.

Summer (May 1 to October 31, inclusive)
Winter (November 1 to April 30, inclusive)

Daily Therm
Allowance Per
Residential Unit
0.345
1.082



The SDG&E monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending April 2020 according to the rates shown in Table 20. Historical natural gas rate data was only available for SoCalGas' procurement charges⁶. To estimate total costs by month, the baseline and excess transmission charges were assumed to be relatively consistent and applied for the entire year based on April 2020 costs.

Table 20: SDG&E Monthly Gas Rate (\$/Therm)

Month	Procurement Charge	Transmission Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
Jan 2020	\$0.34761	\$1.36166	\$1.59166	\$1.70927	\$1.93927
Feb 2020	\$0.28035	\$1.36166	\$1.59166	\$1.64201	\$1.87201
Mar 2020	\$0.22130	\$1.36166	\$1.59166	\$1.58296	\$1.81296
Apr 2020	\$0.20327	\$1.35946	\$1.59125	\$1.56273	\$1.79452
May 2019	\$0.23804	\$1.06349	\$1.25253	\$1.30153	\$1.49057
June 2019	\$0.24838	\$1.06349	\$1.25253	\$1.31187	\$1.50091
July 2019	\$0.28491	\$1.06349	\$1.25253	\$1.34840	\$1.53744
Aug 2019	\$0.27239	\$1.06349	\$1.25253	\$1.33588	\$1.52492
Sept 2019	\$0.26178	\$1.06349	\$1.25253	\$1.32527	\$1.51431
Oct 2019	\$0.30109	\$1.06349	\$1.25253	\$1.36458	\$1.55362
Nov 2019	\$0.27580	\$1.06349	\$1.25253	\$1.33929	\$1.52833
Dec 2019	\$0.38090	\$1.06349	\$1.25253	\$1.44439	\$1.63343

⁶ The SDG&E procurement and transmission charges were obtained from the following sets of documents:

http://regarchive.sdge.com/tm2/pdf/GAS_GAS-SCHEDS_GM_2020.pdf

http://regarchive.sdge.com/tm2/pdf/GAS_GAS-SCHEDS_GM_2019.pdf



SMUD

Following are the SMUD electricity tariffs applied in this study.

RTOD Rate Schedule**II. Firm Service Rates**

A. Time-of-Day (5-8 p.m.) Rate	Rate Category RT02
Non-Summer Prices* – January 1 through May 31	
System Infrastructure Fixed Charge per month	\$21.05
Electricity Usage Charge	
Peak \$/kWh	\$0.1388
Off-Peak \$/kWh	\$0.1006
Summer Prices – June 1 through September 30	
System Infrastructure Fixed Charge per month	\$21.05
Electricity Usage Charge	
Peak \$/kWh	\$0.2941
Mid-Peak \$/kWh	\$0.1671
Off-Peak \$/kWh	\$0.1209
Non-Summer Prices* – October 1 through December 31	
System Infrastructure Fixed Charge per month	\$21.70
Electricity Usage Charge	
Peak \$/kWh	\$0.1430
Off-Peak \$/kWh	\$0.1035

* Non-Summer Season includes Fall (Oct 1 – Nov 30), Winter (Dec 1 – Mar 31) and Spring (Apr 1 – May 31) periods.

Summer (Jun 1 - Sept 30)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Mid-Peak	Weekdays between noon and midnight except during the Peak hours.
	Off-Peak	All other hours, including weekends and holidays ¹ .
Non-Summer (Oct 1 - May 31)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Off-Peak	All other hours, including weekends and holidays ¹ .



GSN_T Rate Schedule:

II. Firm Service Rates

Rate Category	Nondemand GSN_T	Flat GFN	Demand GSS_T
Winter Season – January 1 through May 31			
System Infrastructure Fixed Charge - per month per meter	\$21.15	\$9.45	\$25.75
Site Infrastructure Charge (per 12 months max kW or contract capacity)	n/a	n/a	\$7.94
Electricity Usage Charge			
All day \$/kWh	\$0.1365	\$0.1381	\$0.1071
Summer Season - June 1 through September 30			
System Infrastructure Fixed Charge - per month per meter	\$21.15	\$9.45	\$25.75
Site Infrastructure Charge (per 12 months max kW or contract capacity)	n/a	n/a	\$7.94
Electricity Usage Charge			
On-peak \$/kWh	\$0.3151	\$0.1381	\$0.2733
Off-peak \$/kWh	\$0.1152	\$0.1381	\$0.0948
Rate Category	Nondemand GSN_T	Flat GFN	Demand GSS_T
Winter Season - October 1 through December 31			
System Infrastructure Fixed Charge - per month per meter	\$21.80	\$9.70	\$26.50
Site Infrastructure Charge (per 12 months max kW or contract capacity)	n/a	n/a	\$8.18
Electricity Usage Charge			
All day \$/kWh	\$0.1406	\$0.1423	\$0.1103

D. Billing Periods

1. Winter (October 1 – May 31) All hours are off-peak.

2. Summer Time-of-Use Billing Periods (June 1 – September 30)

On-Peak	Summer weekdays between 3:00 p.m. and 6:00 p.m.
Off-Peak	All other hours, including holidays shown below



CPAU

Following are the CPAU electricity and natural gas tariffs applied in this study.

E1 Rate Schedule:**RESIDENTIAL ELECTRIC SERVICE**UTILITY RATE SCHEDULE E-1**A. APPLICABILITY:**

This Rate Schedule applies to separately metered single-family residential dwellings receiving Electric Service from the City of Palo Alto Utilities.

B. TERRITORY:

This rate schedule applies everywhere the City of Palo Alto provides Electric Service.

C. UNBUNDLED RATES:

<u>Per kilowatt-hour (kWh)</u>	<u>Commodity</u>	<u>Distribution</u>	<u>Public Benefits</u>	<u>Total</u>
Tier 1 usage	\$0.08339	\$0.04971	\$0.00447	\$0.13757
Tier 2 usage Any usage over Tier 1	0.11569	0.07351	0.00447	0.19367
<u>Minimum Bill (\$/day)</u>				0.3283

E2 Rate Schedule:**RESIDENTIAL MASTER-METERED AND SMALL NON-RESIDENTIAL ELECTRIC SERVICE**UTILITY RATE SCHEDULE E-2**A. APPLICABILITY:**

This Rate Schedule applies to the following Customers receiving Electric Service from the City of Palo Alto Utilities:

1. Small non-residential Customers receiving Non-Demand Metered Electric Service; and
2. Customers with Accounts at Master-Metered multi-family facilities.

B. TERRITORY:

This rate schedule applies everywhere the City of Palo Alto provides Electric Service.

C. UNBUNDLED RATES:

<u>Per kilowatt-hour (kWh)</u>	<u>Commodity</u>	<u>Distribution</u>	<u>Public Benefits</u>	<u>Total</u>
Summer Period	\$0.11855	\$0.08551	\$0.00447	\$0.20853
Winter Period	0.08502	0.05675	0.00447	0.14624
<u>Minimum Bill (\$/day)</u>				0.8359



G-2 Rate Schedule:

RESIDENTIAL MASTER-METERED AND COMMERCIAL GAS SERVICEUTILITY RATE SCHEDULE G-2**A. APPLICABILITY:**

This schedule applies to the following Customers receiving Gas Service from the City of Palo Alto Utilities:

1. Commercial Customers who use less than 250,000 therms per year at one site.
2. Master-metered residential Customers in multi-family residential facilities.

B. TERRITORY:

This schedule applies anywhere the City of Palo Alto provides Gas Service.

C. UNBUNDLED RATES:Per Service

Monthly Service Charge:\$104.95

Per Therm

Supply Charges:

1. Commodity (Monthly Market Based) \$0.10-\$2.00
2. Cap and Trade Compliance Charges \$0.00-0.25
3. Transportation Charge.....\$0.00-\$0.15
4. Carbon Offset Charge\$0.00-\$0.10

Distribution Charge: \$0.6102

G2 Monthly Per Therm Rates:

Effective Date	Commodity Rate	Cap and Trade Compliance Charge	Transportation Charge	Carbon Offset Charge	G2 Total Volumetric Rate
1/1/20	\$0.3289	0.033	0.09941	0.040	1.11151
2/1/20	0.2466	0.033	0.09941	0.040	1.02921
3/1/20	0.2416	0.033	0.09891	0.040	1.02371
4/1/20	0.2066	0.033	0.09891	0.040	0.98871
5/1/20	0.2258	0.033	0.09891	0.040	1.00791
6/1/20	0.2279	0.033	0.09891	0.040	1.01001
7/1/19	0.2471	0.033	0.11757	0.040	1.04787
8/1/19	0.2507	0.033	0.10066	0.040	1.03456
9/1/19	0.2461	0.033	0.10066	0.040	1.02996
10/1/19	0.2811	0.033	0.10288	0.040	1.06718
11/1/19	0.2923	0.033	0.10288	0.040	1.07838
12/1/19	0.3781	0.033	0.10288	0.040	1.16418



Escalation Assumptions

The average annual escalation rates in the following table were used in this study and are from E3's 2019 study Residential Building Electrification in California (Energy & Environmental Economics, 2019). These rates are applied to the 2019 rate schedules over a 30-year period beginning in 2020. SDG&E was not covered in the E3 study. The Statewide Reach Code Team reviewed SDG&E's GRC filing and applied the same approach that E3 applied for PG&E and SoCalGas to arrive at average escalation rates between 2020 and 2022. The statewide electricity escalation rates were also applied to the analysis for SMUD and CPAU. PG&E gas escalation rates were applied to CPAU as the best available estimate since CPAU uses PG&E gas infrastructure.

Table 21: Real Utility Rate Escalation Rate Assumptions
Statewide Electric Residential Average Rate (%/year, real)
Natural Gas Residential Core Rate (%/yr escalation, real)

	Statewide Electric Residential Average Rate (%/year, real)	PG&E	SoCalGas	SDG&E
2020	2.0%	1.48%	6.37%	5.00%
2021	2.0%	5.69%	4.12%	3.14%
2022	2.0%	1.11%	4.12%	2.94%
2023	2.0%	4.0%	4.0%	4.0%
2024	2.0%	4.0%	4.0%	4.0%
2025	2.0%	4.0%	4.0%	4.0%
2026	1.0%	1.0%	1.0%	1.0%
2027	1.0%	1.0%	1.0%	1.0%
2028	1.0%	1.0%	1.0%	1.0%
2029	1.0%	1.0%	1.0%	1.0%
2030	1.0%	1.0%	1.0%	1.0%
2031	1.0%	1.0%	1.0%	1.0%
2032	1.0%	1.0%	1.0%	1.0%
2033	1.0%	1.0%	1.0%	1.0%
2034	1.0%	1.0%	1.0%	1.0%
2035	1.0%	1.0%	1.0%	1.0%
2036	1.0%	1.0%	1.0%	1.0%
2037	1.0%	1.0%	1.0%	1.0%
2038	1.0%	1.0%	1.0%	1.0%
2039	1.0%	1.0%	1.0%	1.0%
2040	1.0%	1.0%	1.0%	1.0%
2041	1.0%	1.0%	1.0%	1.0%
2042	1.0%	1.0%	1.0%	1.0%
2043	1.0%	1.0%	1.0%	1.0%
2044	1.0%	1.0%	1.0%	1.0%
2045	1.0%	1.0%	1.0%	1.0%
2046	1.0%	1.0%	1.0%	1.0%
2047	1.0%	1.0%	1.0%	1.0%
2048	1.0%	1.0%	1.0%	1.0%
2049	1.0%	1.0%	1.0%	1.0%



Appendix C – PG&E Gas Infrastructure Cost Memo



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December 5, 2019

Energy Commission Staff:

On March 2, 2018, PG&E provided gas extension cost estimates for residential existing and new subdivisions (see attached memo). We have recently updated our estimates and are therefore providing an updated memo.

In addition to mainline and service extension costs, we are also providing estimates of the cost of gas meters for different building types including both residential and commercial customers. These estimates are based on PG&E historical jobs.

Developing gas extension cost estimates is complex and the actual costs are project dependent. Costs vary widely with location, terrain, distance to the nearest main, joint trenching, materials, number of dwellings per development, and several other site and job-specific conditions. For these reasons, it is not practical to come up with estimates that represent every case. Instead we are including estimates based on historical averages taken from projects within PG&E's territory. It is not recommended to compare specific project costs to these estimates as any number of factors could lead to higher or lower costs than these averages are representing.

We are also including estimates for in-house gas infrastructure costs and specific plan review costs. These estimates are from external sources, and are not based on PG&E data, but have been provided for the sake of completeness and for use in energy efficiency analysis.

To further anchor the estimates, several assumptions have been made:

1. It is assumed that during new construction, gas infrastructure will likely be joint trenched with electric infrastructure. As a result, the incremental cost of trenching associated with the gas infrastructure alone is minimal. Therefore, all mainline cost estimates exclude trench costs. Service extension cost estimates include both estimates with and without trench costs. In the case where new construction would require overhead electric and underground gas infrastructure, the estimates with trench costs included for service extensions should be utilized.
2. It is assumed that new construction in an existing subdivision would not generally require a mainline extension. In cases where a mainline extension would be required to an existing subdivision, the costs are highly dependent on the location, terrain, and distance to the nearest main.





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3. These estimates are for total costs. The cost estimates have not been reduced to account for the portion of the costs paid by all customers due to application of Rule 15¹ and Rule 16² allowances. Hence, costs to the specific customer may be lower than the estimates below, as the specific customer benefits from the Rule 15 and Rule 16 allowances.

Table 1: PG&E Gas Infrastructure Cost Estimates

	Existing Subdivision/Development	New Greenfield Subdivision/Development
Mainline Extension	N/A ³	<u>Single-Family</u> \$17/ft ⁴ <u>Multi-Family</u> \$11/ft ⁴
Service Extension (Typically 1" pipe from mainline to the meter)	\$6750 per service/building ⁴ (excludes trench costs) \$9200 per service/building ⁴ (includes trench costs)	\$1300 per service/building ⁴ (includes mainline extension costs within the subdivision; excludes trench costs) \$1850 per service/building ⁴ (includes mainline extension costs within the subdivision; includes trench costs)
Meter	<u>Residential Single Family</u> \$300 per meter ⁵ <u>Residential Multi-Family</u> \$300 per meter + \$300 per meter manifold outlet ⁵ <u>Small/Medium Commercial</u> \$3600 per meter ⁶	<u>Residential Single Family</u> \$300 per meter ⁵ <u>Residential Multi-Family</u> \$300 per meter + \$300 per meter manifold outlet ⁵ <u>Small/Medium Commercial</u> \$3600 per meter ⁶

¹ https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_15.pdf

² https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_16.pdf

³ It is assumed that new construction in an existing subdivision would not require a main extension.

⁴ Estimates based on PG&E Jobs from Jan 2016 - Dec 2017 from PG&E's Service Planning team.

⁵ Estimates from PG&E's Dedicated Estimating Team. For Multi-Family units, the costs of \$300 per meter and \$300 per meter manifold outlet should be combined for a total of \$600 per meter.

⁶ PG&E Marginal Customer Access Cost Estimates presented in the 2018 Gas Cost Allocation Proceedings (GCAP), A.17-09-006, Exhibit PG&E-2, Appendix A, Section A, Table A-1. The Average Connection Cost per Customer values were included in the MCAC workpaper that accompanied the GCAP testimony.





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	<u>Large Commercial</u> \$32,000 per meter ^c	<u>Large Commercial</u> \$32,000 per meter ^d
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Note: Service extension cost estimates for New Greenfield Subdivisions include mainline extension costs as well. Therefore, mainline cost estimates can be ignored for the purpose of estimating total project costs.

Table 2: Gas Infrastructure Cost Estimates from Other Sources

	Existing Subdivision/Development	New Greenfield Subdivision/Development
In-House Infrastructure	<u>Single-Family</u> \$800 ⁷	<u>Single-Family</u> \$800 ⁷
	<u>Multi-Family</u> \$600 per unit ⁷	<u>Multi-Family</u> \$600 per unit ⁷
	<u>Medium Office</u> \$600-4500 ^{7,8}	<u>Medium Office</u> \$600-4500 ^{7,8}
	<u>Medium Retail</u> \$10,000 ⁸	<u>Medium Retail</u> \$10,000 ⁸
Plan Review (Will vary by city and often not a fixed fee)	<u>Residential</u> Palo Alto - \$850 ⁹	<u>Residential</u> Palo Alto - \$850 ⁹
	<u>Nonresidential</u> Palo Alto - \$2316 ⁹	<u>Nonresidential</u> Palo Alto - \$2316 ⁹

Please let us know if there are any follow-up questions or clarifications.

Best regards,

⁷ Frontier Energy, Inc., Mistli Brunner & Associates, LLC. 2019. "2019 Cost-effectiveness Study: Low Rise Residential New Construction." Available at: <https://localenergycodes.com/content/performance-ordinances>

⁸ TRC, EnergySoft. 2019. "2019 Nonresidential New Construction Reach Code Cost Effectiveness Study." Available at: <https://localenergycodes.com/content/performance-ordinances>

⁹ TRC. 2018. "City of Palo Alto 2019 Title 24 Energy Reach Code Cost Effectiveness Analysis Draft." Available at: <http://cityofpaloalto.org/civicax/filebank/documents/66742>



Appendix D – Detailed Results Mixed-Fuel

Table 22: Mixed-Fuel Efficiency Only Package Results (SAVINGS/COST PER APARTMENT)¹

Climate Zone	Elec Utility	Gas Utility	Apartments			Central Water Heating			Total	Savings (2020 PV\$)			B/C Ratio ¹	
			Gas Savings (therms)	Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therms)	Elec Savings (kWh)	Year 1 Utility Cost Savings	Year 1 Utility Cost Savings	On-Bill Utility Cost Savings	TDV Cost Savings	Total Inc. Cost (\$)	On-Bill	TDV
CZ01	PGE	PGE	0.0	26	\$6	0.0	0	\$0	\$6	\$133	\$105	\$304	0.44	0.35
CZ02	PGE	PGE	0.0	47	\$17	0.0	0	\$0	\$17	\$391	\$285	\$144	2.72	1.98
CZ03	PGE	PGE	0.0	44	\$15	0.0	0	\$0	\$15	\$345	\$226	\$144	2.40	1.57
CZ04	PGE	PGE	0.0	61	\$20	0.0	0	\$0	\$20	\$465	\$331	\$144	3.24	2.31
CZ04-2	CPAU	CPAU	0.0	61	\$10	0.0	0	\$0	\$10	\$248	\$331	\$144	1.73	2.31
CZ05	PGE	PGE	0.0	42	\$14	0.0	0	\$0	\$14	\$320	\$206	\$144	2.22	1.43
CZ05-2	PGE	SCG	0.0	42	\$14	0.0	0	\$0	\$14	\$320	\$206	\$144	2.22	1.43
CZ06	SCE	SCG	0.0	74	\$18	0.0	0	\$0	\$18	\$424	\$351	\$144	2.95	2.44
CZ07	SDGE	SDGE	0.0	81	\$25	0.0	0	\$0	\$25	\$593	\$374	\$144	4.13	2.60
CZ08	SCE	SCG	0.0	84	\$20	0.0	0	\$0	\$20	\$484	\$420	\$144	3.37	2.92
CZ09	SCE	SCG	0.0	83	\$20	0.0	0	\$0	\$20	\$468	\$441	\$144	3.26	3.06
CZ10	SCE	SCG	0.0	82	\$17	0.0	0	\$0	\$17	\$410	\$427	\$144	2.85	2.97
CZ10-2	SDGE	SDGE	0.0	82	\$25	0.0	0	\$0	\$25	\$599	\$427	\$144	4.16	2.97
CZ11	PGE	PGE	0.0	104	\$27	0.0	0	\$0	\$27	\$637	\$635	\$625	1.02	1.02
CZ12	PGE	PGE	0.0	93	\$24	0.0	0	\$0	\$24	\$572	\$568	\$304	1.88	1.87
CZ12-2	SMUD	PGE	0.0	93	\$13	0.0	0	\$0	\$13	\$319	\$568	\$304	1.05	1.87
CZ13	PGE	PGE	0.0	132	\$34	0.0	0	\$0	\$34	\$798	\$779	\$625	1.28	1.25
CZ14	SCE	SCG	0.0	80	\$17	0.0	0	\$0	\$17	\$407	\$449	\$304	1.34	1.48
CZ14-2	SDGE	SDGE	0.0	80	\$24	0.0	0	\$0	\$24	\$576	\$449	\$304	1.90	1.48
CZ15	SCE	SCG	0.0	145	\$30	0.0	0	\$0	\$30	\$719	\$802	\$625	1.15	1.28
CZ16	PGE	PGE	0.0	117	\$27	0.0	0	\$0	\$27	\$646	\$563	\$625	1.03	0.90

¹ Values in red indicate B/C ratios less than 1.



Table 23: Mixed-Fuel Efficiency + PV Package Results (SAVINGS/COST PER APARTMENT)¹

Climate Zone	Elec Utility	Gas Utility	0.1 kW _{DC} per Apartment					0.2 kW _{DC} per Apartment				
			On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio	On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio
CZ01	PGE	PGE	\$885	\$597	\$620	1.43	0.96	\$1,637	\$1,090	\$937	1.75	1.16
CZ02	PGE	PGE	\$1,411	\$877	\$460	3.07	1.91	\$2,431	\$1,469	\$777	3.13	1.89
CZ03	PGE	PGE	\$1,373	\$812	\$460	2.98	1.76	\$2,400	\$1,397	\$777	3.09	1.80
CZ04	PGE	PGE	\$1,522	\$947	\$460	3.31	2.06	\$2,579	\$1,562	\$777	3.32	2.01
CZ04-2	CPAU	CPAU	\$807	\$947	\$460	1.75	2.06	\$1,335	\$1,562	\$777	1.72	2.01
CZ05	PGE	PGE	\$1,400	\$834	\$460	3.04	1.81	\$2,480	\$1,461	\$777	3.19	1.88
CZ05-2	PGE	SCG	\$1,400	\$834	\$460	3.04	1.81	\$2,480	\$1,461	\$777	3.19	1.88
CZ06	SCE	SCG	\$1,206	\$969	\$460	2.62	2.11	\$1,987	\$1,587	\$777	2.56	2.04
CZ07	SDGE	SDGE	\$1,701	\$1,010	\$460	3.69	2.19	\$2,770	\$1,647	\$777	3.57	2.12
CZ08	SCE	SCG	\$1,272	\$1,064	\$460	2.76	2.31	\$2,059	\$1,708	\$777	2.65	2.20
CZ09	SCE	SCG	\$1,181	\$1,091	\$460	2.57	2.37	\$1,876	\$1,742	\$777	2.41	2.24
CZ10	SCE	SCG	\$1,104	\$1,054	\$460	2.40	2.29	\$1,797	\$1,681	\$777	2.31	2.16
CZ10-2	SDGE	SDGE	\$1,622	\$1,054	\$460	3.52	2.29	\$2,646	\$1,681	\$777	3.41	2.16
CZ11	PGE	PGE	\$1,537	\$1,256	\$942	1.63	1.33	\$2,438	\$1,877	\$1,258	1.94	1.49
CZ12	PGE	PGE	\$1,462	\$1,181	\$620	2.36	1.90	\$2,352	\$1,794	\$937	2.51	1.91
CZ12-2	SMUD	PGE	\$772	\$1,181	\$620	1.25	1.90	\$1,226	\$1,794	\$937	1.31	1.91
CZ13	PGE	PGE	\$1,673	\$1,372	\$942	1.78	1.46	\$2,548	\$1,965	\$1,258	2.03	1.56
CZ14	SCE	SCG	\$1,165	\$1,175	\$620	1.88	1.89	\$1,923	\$1,901	\$937	2.05	2.03
CZ14-2	SDGE	SDGE	\$1,697	\$1,175	\$620	2.74	1.89	\$2,819	\$1,901	\$937	3.01	2.03
CZ15	SCE	SCG	\$1,423	\$1,456	\$942	1.51	1.55	\$2,128	\$2,110	\$1,258	1.69	1.68
CZ16	PGE	PGE	\$1,606	\$1,191	\$942	1.71	1.26	\$2,567	\$1,818	\$1,258	2.04	1.44

¹ Values in red indicate B/C ratios less than 1.

Table 24: Mixed-Fuel Efficiency + PV Package Results, cont. (SAVINGS/COST PER APARTMENT)¹

Climate Zone	Elec Utility	Gas Utility	0.3 kW _{DC} per Apartment					1 kW _{DC} per Apartment				
			On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio	On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio
CZ01	PGE	PGE	\$2,389	\$1,582	\$1,253	1.91	1.26	\$7,466	\$5,029	\$3,469	2.15	1.45
CZ02	PGE	PGE	\$3,452	\$2,061	\$1,093	3.16	1.88	\$9,590	\$6,203	\$3,309	2.90	1.87
CZ03	PGE	PGE	\$3,428	\$1,982	\$1,093	3.14	1.81	\$9,687	\$6,079	\$3,309	2.93	1.84
CZ04	PGE	PGE	\$3,635	\$2,177	\$1,093	3.32	1.99	\$9,992	\$6,483	\$3,309	3.02	1.96
CZ04-2	CPAU	CPAU	\$1,863	\$2,177	\$1,093	1.70	1.99	\$5,184	\$6,483	\$3,309	1.57	1.96
CZ05	PGE	PGE	\$3,561	\$2,089	\$1,093	3.26	1.91	\$10,109	\$6,482	\$3,309	3.05	1.96
CZ05-2	PGE	SCG	\$3,561	\$2,089	\$1,093	3.26	1.91	\$10,109	\$6,482	\$3,309	3.05	1.96
CZ06	SCE	SCG	\$2,769	\$2,206	\$1,093	2.53	2.02	\$7,593	\$6,534	\$3,309	2.29	1.97
CZ07	SDGE	SDGE	\$3,805	\$2,283	\$1,093	3.48	2.09	\$10,818	\$6,739	\$3,309	3.27	2.04
CZ08	SCE	SCG	\$2,838	\$2,352	\$1,093	2.60	2.15	\$7,543	\$6,861	\$3,309	2.28	2.07
CZ09	SCE	SCG	\$2,570	\$2,393	\$1,093	2.35	2.19	\$7,285	\$6,948	\$3,309	2.20	2.10
CZ10	SCE	SCG	\$2,490	\$2,308	\$1,093	2.28	2.11	\$7,197	\$6,697	\$3,309	2.17	2.02
CZ10-2	SDGE	SDGE	\$3,670	\$2,308	\$1,093	3.36	2.11	\$10,636	\$6,697	\$3,309	3.21	2.02
CZ11	PGE	PGE	\$3,338	\$2,498	\$1,575	2.12	1.59	\$9,480	\$6,846	\$3,791	2.50	1.81
CZ12	PGE	PGE	\$3,242	\$2,406	\$1,253	2.59	1.92	\$9,299	\$6,694	\$3,469	2.68	1.93
CZ12-2	SMUD	PGE	\$1,680	\$2,406	\$1,253	1.34	1.92	\$4,855	\$6,694	\$3,469	1.40	1.93
CZ13	PGE	PGE	\$3,423	\$2,558	\$1,575	2.17	1.62	\$9,402	\$6,709	\$3,791	2.48	1.77
CZ14	SCE	SCG	\$2,682	\$2,626	\$1,253	2.14	2.10	\$7,820	\$7,707	\$3,469	2.25	2.22
CZ14-2	SDGE	SDGE	\$3,940	\$2,626	\$1,253	3.14	2.10	\$11,557	\$7,707	\$3,469	3.33	2.22
CZ15	SCE	SCG	\$2,832	\$2,764	\$1,575	1.80	1.76	\$7,676	\$7,342	\$3,791	2.03	1.94
CZ16	PGE	PGE	\$3,527	\$2,445	\$1,575	2.24	1.55	\$10,032	\$6,836	\$3,791	2.65	1.80

¹ Values in red indicate B/C ratios less than 1.

Appendix E – Detailed Results All-Electric

Table 25: All-Electric Efficiency Only Package Results (SAVINGS/COST PER APARTMENT)^{1,2}

Climate Zone	Elec Utility	Gas Utility	Apartments			Central Water Heating			Total	Savings (2020 PV\$)		Total Inc. Cost (\$)	B/C Ratio	
			Gas Savings (therms)	Elec Savings (kWh)	Year 1 Utility Cost Savings	Gas Savings (therms)	Elec Savings (kWh)	Year 1 Utility Cost Savings	Year 1 Utility Cost Savings	On-Bill Utility Cost Savings	TDV Cost Savings		On-Bill	TDV
CZ01	PGE	PGE	0.0	26	\$6	124.6	-899	-\$46	-\$40	-\$674	\$199	-\$446	0.7	>1
CZ02	PGE	PGE	0.0	48	\$17	114.3	-810	-\$38	-\$21	-\$238	\$528	-\$606	2.5	>1
CZ03	PGE	PGE	0.0	44	\$15	114.9	-811	-\$38	-\$23	-\$287	\$390	-\$606	2.1	>1
CZ04	PGE	PGE	0.0	62	\$20	110.7	-775	-\$35	-\$15	-\$102	\$625	-\$606	6.0	>1
CZ04-2	CPAU	CPAU	0.0	62	\$11	110.7	-775	-\$5	\$5	\$345	\$625	-\$606	>1	>1
CZ05	PGE	PGE	0.0	42	\$14	117.3	-830	-\$40	-\$26	-\$350	\$391	-\$606	1.7	>1
CZ05-2	PGE	SCG	0.0	42	\$14	117.3	-830	-\$66	-\$53	-\$827	\$391	-\$606	0.7	>1
CZ06	SCE	SCG	0.0	74	\$18	107.0	-744	-\$28	-\$10	\$153	\$612	-\$606	>1	>1
CZ07	SDGE	SDGE	0.0	81	\$25	105.9	-734	-\$43	-\$18	-\$58	\$665	-\$606	10.4	>1
CZ08	SCE	SCG	0.0	84	\$20	103.6	-717	-\$27	-\$6	\$227	\$693	-\$606	>1	>1
CZ09	SCE	SCG	0.0	83	\$20	103.5	-716	-\$27	-\$7	\$212	\$739	-\$606	>1	>1
CZ10	SCE	SCG	0.0	83	\$17	90.0	-709	-\$40	-\$23	-\$214	\$396	-\$853	4.0	>1
CZ10-2	SDGE	SDGE	0.0	83	\$25	90.0	-709	-\$59	-\$34	-\$478	\$396	-\$853	1.8	>1
CZ11	PGE	PGE	0.0	104	\$27	91.1	-723	-\$46	-\$19	-\$241	\$430	-\$371	1.5	>1
CZ12	PGE	PGE	0.0	93	\$24	93.9	-755	-\$51	-\$27	-\$414	\$288	-\$693	1.7	>1
CZ12-2	SMUD	PGE	0.0	93	\$13	93.9	-755	\$22	\$36	\$1,060	\$288	-\$693	>1	>1
CZ13	PGE	PGE	0.0	132	\$34	89.6	-711	-\$45	-\$11	-\$62	\$505	-\$371	6.0	>1
CZ14	SCE	SCG	0.0	80	\$17	92.2	-733	-\$42	-\$25	-\$258	\$305	-\$693	2.7	>1
CZ14-2	SDGE	SDGE	0.0	80	\$24	92.2	-733	-\$61	-\$36	-\$532	\$305	-\$693	1.3	>1
CZ15	SCE	SCG	0.0	145	\$30	73.8	-554	-\$28	\$3	\$332	\$832	-\$371	>1	>1
CZ16	PGE	PGE	0.0	119	\$28	107.8	-896	-\$64	-\$37	-\$621	\$127	-\$371	0.6	>1

¹ Values in red indicate B/C ratios less than 1.

² ">1" indicates cases where there are both incremental measure cost savings and energy cost savings.



Table 26: Table 19: All-Electric Efficiency + PV Package Results (SAVINGS/COST PER APARTMENT)^{1,2}

Climate Zone	Elec Utility	Gas Utility	0.1 kW _{DC} per Apartment					0.2 kW _{DC} per Apartment				
			On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio	On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio
CZ01	PGE	PGE	\$78	\$692	-\$129	>1	>1	\$830	\$1,184	\$187	4.44	6.33
CZ02	PGE	PGE	\$782	\$1,120	-\$289	>1	>1	\$1,802	\$1,712	\$27	65.85	62.55
CZ03	PGE	PGE	\$741	\$975	-\$289	>1	>1	\$1,768	\$1,560	\$27	64.62	57.02
CZ04	PGE	PGE	\$955	\$1,240	-\$289	>1	>1	\$2,012	\$1,855	\$27	73.51	67.79
CZ04-2	CPAU	CPAU	\$904	\$1,240	-\$289	>1	>1	\$1,432	\$1,855	\$27	52.33	67.79
CZ05	PGE	PGE	\$730	\$1,018	-\$289	>1	>1	\$1,810	\$1,646	\$27	66.14	60.14
CZ05-2	PGE	SCG	\$254	\$1,018	-\$289	>1	>1	\$1,334	\$1,646	\$27	48.74	60.14
CZ06	SCE	SCG	\$935	\$1,231	-\$289	>1	>1	\$1,716	\$1,849	\$27	62.71	67.56
CZ07	SDGE	SDGE	\$1,049	\$1,302	-\$289	>1	>1	\$2,118	\$1,938	\$27	77.41	70.82
CZ08	SCE	SCG	\$1,014	\$1,337	-\$289	>1	>1	\$1,802	\$1,981	\$27	65.83	72.37
CZ09	SCE	SCG	\$924	\$1,390	-\$289	>1	>1	\$1,619	\$2,040	\$27	59.16	74.56
CZ10	SCE	SCG	\$480	\$1,023	-\$536	>1	>1	\$1,173	\$1,650	-\$219	>1	>1
CZ10-2	SDGE	SDGE	\$546	\$1,023	-\$536	>1	>1	\$1,570	\$1,650	-\$219	>1	>1
CZ11	PGE	PGE	\$660	\$1,052	-\$55	>1	>1	\$1,560	\$1,673	\$262	5.96	6.39
CZ12	PGE	PGE	\$476	\$900	-\$376	>1	>1	\$1,366	\$1,513	-\$60	>1	>1
CZ12-2	SMUD	PGE	\$1,513	\$900	-\$376	>1	>1	\$1,967	\$1,513	-\$60	>1	>1
CZ13	PGE	PGE	\$813	\$1,098	-\$55	>1	>1	\$1,687	\$1,691	\$262	6.44	6.46
CZ14	SCE	SCG	\$500	\$1,031	-\$376	>1	>1	\$1,259	\$1,757	-\$60	>1	>1
CZ14-2	SDGE	SDGE	\$589	\$1,031	-\$376	>1	>1	\$1,710	\$1,757	-\$60	>1	>1
CZ15	SCE	SCG	\$1,037	\$1,485	-\$55	>1	>1	\$1,741	\$2,139	\$262	6.65	8.17
CZ16	PGE	PGE	\$339	\$754	-\$55	>1	>1	\$1,299	\$1,381	\$262	4.96	5.27

¹ Values in red indicate B/C ratios less than 1.² ">1" indicates cases where there are both incremental measure cost savings and energy cost savings. Values in red indicate B/C ratios less than 1.0

Table 27: All-Electric Package Results with PV, cont. (SAVINGS/COST PER APARTMENT)^{1,2}

Climate Zone	Elec Utility	Gas Utility	0.3 kW _{DC} per Apartment					1.0 kW _{DC} per Apartment				
			On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio	On-Bill Utility Cost Savings (2020 PV\$)	TDV Cost Savings (2020 PV\$)	Total Inc. Cost	On-Bill B/C Ratio	TDV B/C Ratio
CZ01	PGE	PGE	\$1,582	\$1,676	\$504	3.14	3.33	\$6,660	\$5,123	\$2,719	2.45	1.88
CZ02	PGE	PGE	\$2,822	\$2,304	\$344	8.21	6.70	\$8,960	\$6,446	\$2,560	3.50	2.52
CZ03	PGE	PGE	\$2,796	\$2,146	\$344	8.13	6.24	\$9,055	\$6,242	\$2,560	3.54	2.44
CZ04	PGE	PGE	\$3,069	\$2,470	\$344	8.92	7.18	\$9,425	\$6,777	\$2,560	3.68	2.65
CZ04-2	CPAU	CPAU	\$1,960	\$2,470	\$344	5.70	7.18	\$5,281	\$6,777	\$2,560	2.06	2.65
CZ05	PGE	PGE	\$2,890	\$2,274	\$344	8.40	6.61	\$9,439	\$6,667	\$2,560	3.69	2.60
CZ05-2	PGE	SCG	\$2,414	\$2,274	\$344	7.02	6.61	\$8,962	\$6,667	\$2,560	3.50	2.60
CZ06	SCE	SCG	\$2,498	\$2,467	\$344	7.26	7.17	\$7,322	\$6,796	\$2,560	2.86	2.65
CZ07	SDGE	SDGE	\$3,154	\$2,575	\$344	9.17	7.49	\$10,166	\$7,030	\$2,560	3.97	2.75
CZ08	SCE	SCG	\$2,581	\$2,625	\$344	7.51	7.63	\$7,286	\$7,133	\$2,560	2.85	2.79
CZ09	SCE	SCG	\$2,314	\$2,691	\$344	6.73	7.83	\$7,028	\$7,247	\$2,560	2.75	2.83
CZ10	SCE	SCG	\$1,866	\$2,277	\$97	19.22	23.46	\$6,573	\$6,666	\$2,313	2.84	2.88
CZ10-2	SDGE	SDGE	\$2,594	\$2,277	\$97	26.72	23.46	\$9,560	\$6,666	\$2,313	4.13	2.88
CZ11	PGE	PGE	\$2,461	\$2,294	\$578	4.25	3.97	\$8,602	\$6,641	\$2,794	3.08	2.38
CZ12	PGE	PGE	\$2,256	\$2,125	\$257	8.78	8.28	\$8,313	\$6,413	\$2,473	3.36	2.59
CZ12-2	SMUD	PGE	\$2,421	\$2,125	\$257	9.43	8.28	\$5,596	\$6,413	\$2,473	2.26	2.59
CZ13	PGE	PGE	\$2,562	\$2,284	\$578	4.43	3.95	\$8,541	\$6,435	\$2,794	3.06	2.30
CZ14	SCE	SCG	\$2,017	\$2,482	\$257	7.85	9.67	\$7,155	\$7,563	\$2,473	2.89	3.06
CZ14-2	SDGE	SDGE	\$2,831	\$2,482	\$257	11.02	9.67	\$10,448	\$7,563	\$2,473	4.23	3.06
CZ15	SCE	SCG	\$2,445	\$2,793	\$578	4.23	4.83	\$7,289	\$7,371	\$2,794	2.61	2.64
CZ16	PGE	PGE	\$2,260	\$2,009	\$578	3.91	3.47	\$8,764	\$6,399	\$2,794	3.14	2.29

¹ Values in red indicate B/C ratios less than 1.² ">1" indicates cases where there are both incremental measure cost savings and energy cost savings. Values in red indicate B/C ratios less than 1.0

2020 REACH CODE
COST-EFFECTIVENESS ANALYSIS:
Detached Accessory Dwelling Units

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Acronym List

B/C – Benefit-to-Cost Ratio

CBECC - California Building Energy Code Compliance

CBSC - California Building Standards Commission

CEC - California Energy Commission

CZ – Climate Zone

GHG - Greenhouse Gas

IOU – Investor-Owned Utility

POU – Publicly Owned Utility

PG&E – Pacific Gas & Electric (utility)

SCE – Southern California Edison (utility)

SCG – Southern California Gas (utility)

SDG&E – San Diego Gas & Electric (utility)

CPAU – City of Palo Alto Utilities

SMUD – Sacramento Municipal Utility District

LADWP – Los Angeles Department of Water and Power

kWh – Kilowatt Hour

NPV – Net Present Value

PV - Solar Photovoltaic

TDV - Time Dependent Valuation

Title 24 – California Code of Regulations Title 24, Part 6



Summary of Revisions		
Date	Description	Reference (page or section)
3/12/2021	Original Release	NA

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1 Introduction

The California Building Energy Efficiency Standards Title 24, Part 6 (Title 24) (CEC, 2019) is maintained and updated every three years by two state agencies: the California Energy Commission (the Energy Commission) and the Building Standards Commission (BSC). In addition to enforcing the code, local jurisdictions have the authority to adopt local energy efficiency ordinances—or reach codes—that exceed the minimum standards defined by Title 24 (as established by Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards). Local jurisdictions must demonstrate that the requirements of the proposed ordinance are cost-effective and do not result in buildings consuming more energy than is permitted by Title 24. In addition, the jurisdiction must obtain approval from the Energy Commission and file the ordinance with the BSC for the ordinance to be legally enforceable.

This report documents cost-effective combinations of measures that exceed the minimum state requirements, the 2019 Building Energy Efficiency Standards, effective January 1, 2020, for newly constructed detached Accessory Dwelling Unit (ADU) buildings. This report was developed in coordination with the California Statewide Investor-Owned Utilities (CA IOUs) Codes and Standards Program, key consultants, and engaged cities—collectively known as the Reach Code Team.

The Reach Code Team published a residential new construction report in 2019 that documented the cost-effectiveness of energy measure packages of single family and low-rise multifamily prototypes (Statewide Reach Code Team, 2019). Based on stakeholder requests, this report extends that analysis to Residential Detached Accessory Dwelling Units (ADUs). Measures include energy efficiency, electrification, solar photovoltaics (PV), and battery storage.

The Department of Energy (DOE) sets minimum efficiency standards for equipment and appliances that are federally regulated under the National Appliance Energy Conservation Act, including heating, cooling, and water heating equipment (E-CFR, 2020). Since state and local governments are prohibited from adopting higher minimum efficiencies than the federal standards require, the focus of this study is to identify and evaluate cost-effective packages that do not include high efficiency heating, cooling, and water heating equipment. High efficiency appliances are often the easiest and most affordable measures to increase energy performance. While federal preemption limits reach code mandatory requirements for covered appliances, in practice, builders may install any package of compliant measures to achieve the performance requirements.

2 Methodology and Assumptions

The Reach Codes Team analyzed one prototype design to represent a detached ADU building using the cost-effectiveness methodology detailed in this section below. The general methodology is consistent with analyses of other prototypes, whereas some specifics such as utility rate selection are customized for the residential detached ADU prototype.

2.1 Reach Codes

This section describes the approach to calculating cost-effectiveness including benefits, costs, metrics, and utility rate selection.

2.1.1 Benefits

This analysis used both on-bill and time dependent valuation (TDV) of energy-based approaches to evaluate cost-effectiveness. Both on-bill and TDV require estimating and quantifying the energy savings and costs associated with energy measures. The primary difference between on-bill and TDV is how energy is valued:

- **On-Bill:** Customer-based lifecycle cost approach that values energy based upon estimated site energy usage and customer on-bill savings using electricity and natural gas utility rate schedules over a 30-year duration for the detached ADU accounting for a three percent discount rate and energy cost inflation per Appendix 7.4 .
- **TDV:** TDV was developed by the Energy Commission to reflect the time dependent value of energy including long-term projected costs of energy such as the cost of providing energy during peak periods of demand and other societal costs including projected costs for carbon emissions and grid transmission impacts. This metric values energy use differently depending on the fuel source (gas, electricity, and propane), time of day, and season. Electricity used (or saved) during peak periods has a much higher value than electricity used (or saved) during off-peak periods.

The Reach Code Team performed energy simulations using the most recent software available for 2019 Title 24 code compliance analysis, CBECC-Res 2019.1.3. The Team also used CBECC-Res 2022.0.1 RV for testing the impacts of updated weather files and 2022 TDV multipliers on cost-effectiveness. 2022 weather files have more cooling loads and less heating loads, and 2022 TDV multipliers increased significantly for fossil-fuel sources to reflect CO2 price forecasts and emissions abatement, while comparatively reducing for electricity to reflect increased renewable generation penetration (California Energy Commission, 2019).

2.1.2 Costs

The Reach Code Team assessed the incremental costs and savings of the energy packages over the lifecycle of 30 years. Incremental costs represent the equipment, installation, replacements, and maintenance costs of the proposed measure relative to the 2019 Title 24 Standards minimum requirements or standard industry practices. The Reach Code Team obtained measure costs from manufacturer distributors, contractors, literature review, and online sources such as Home Depot and RS Means. Taxes and contractor markups were added as appropriate. Maintenance and replacement costs are included.

2.1.3 Metrics

Cost-effectiveness is presented using net present value (NPV) and benefit-to-cost (B/C) ratio metrics.

- **NPV:** The Reach Code Team uses net savings (NPV benefits minus NPV costs) as the cost-effectiveness metric. If the net savings of a measure or package is positive, it is considered cost effective. Negative net savings represent net costs to the consumer. A measure that has negative energy cost benefits (energy cost increase) can still be cost effective if the costs to implement the measure are even more negative (i.e., construction and maintenance cost savings).

- **B/C Ratio:** Ratio of the present value of all benefits to the present value of all costs over 30 years (NPV benefits divided by NPV costs). The criteria for cost-effectiveness is a B/C greater than 1.0. A value of one indicates the savings over the life of the measure are equivalent to the incremental cost of that measure. A value greater than one represents a positive return on investment.

Improving the energy performance of a building often requires an initial investment. In most cases the benefit is represented by annual on-bill utility or TDV savings, and the cost by incremental first cost and replacement costs. However, some packages result in initial construction cost savings (negative incremental cost), and either energy cost savings (positive benefits), or increased energy costs (negative benefits). In cases where both construction costs and energy-related savings are negative, the construction cost savings are treated as the benefit while the increased energy costs are the cost. In cases where a measure or package is cost-effective immediately (i.e., upfront construction cost savings and lifetime energy cost savings), B/C ratio cost-effectiveness is represented by “>1”. Because of these situations, NPV savings are also reported, which, in these cases, are positive values.

2.1.4 Utility Rates

In coordination with the CA IOU rate team, and the publicly available information for several Publicly-Owned-Utilities (POUs), the Reach Code Team determined appropriate utility rates for each climate zone and package. The utility tariffs, summarized in Table 1, were determined based on the annual load profile of the prototype and the corresponding package, the most prevalent rate in each territory, and information assuring that the rates were not getting phased out.

TRC assumed that the ADU would have a separate electric and gas meter. A time-of-use (TOU) rate was applied to all cases. For cases with PV generation, the approved NEM tariffs were applied along with minimum daily use billing and mandatory non-bypassable charges. For the PV cases annual electric production was always less than annual electricity consumption; and therefore, no credits for surplus generation were necessary. For a more detailed breakdown of the rates selected refer to Appendix 7.2 - Utility Rate Schedules.

Table 1. Utility Tariffs Used Based on Climate Zone

Climate Zones	Electric / Gas Utility	Electricity	Natural Gas
IOUs			
1-5,11-13,16	PG&E	E-TOU Option C	G-1
6, 8-10, 14, 15	SCE / Southern California Gas Company	TOU-D Option 4-9	GM
7, 10, 14	San Diego Gas and Electric Company (SDG&E)	TOU-DR-1	GM
POUs			
4	City of Palo Alto (CPAU)	E-1	G-1
12	Sacramento Municipal Utility District (SMUD) / PG&E	R TOD Option 5-8	G-1
6, 8, 9	Los Angeles Department of Water and Power (LADWP) / SCG	R-1	GM (GM-E)
16	Los Angeles Department of Water and Power (LADWP) / PG&E	R-1	G-1

Utility rates are assumed to escalate over time, using assumptions from research conducted by Energy and Environmental Economics (E3) in the 2019 study Residential Building Electrification in California (Energy & Environmental Economics, 2019). Escalation of natural gas rates between 2020 and 2022 is based on the currently

filed General Rate Cases for PG&E, SoCalGas and SDG&E. From 2023 through 2025, gas rates are assumed to escalate at four percent per year above inflation, which reflects historical rate increases between 2013 and 2018. Escalation of electricity rates from 2020 through 2025 is assumed to be four percent per year above inflation, based on electric utility estimates. After 2025, escalation rates for both natural gas and electric rates are assumed to drop to a more conservative one percent escalation per year above inflation for long-term rate trajectories beginning in 2026 through 2050. See Appendix 7.4 - **Utility Rate Schedules** for additional details.

2.2 Greenhouse Gas Emissions

The analysis uses the greenhouse gas (GHG) emissions estimates built-in to CBECC-Res. There are 8760 hourly multipliers accounting for time dependent energy use and carbon emissions based on source emissions, including renewable portfolio standard projections. Natural gas fugitive emissions, which are shown to be substantial, are not included. There are two strings of multipliers—one for Northern California climate zones, and another for Southern California climate zones.¹

¹ CBECC-Res multipliers are the same for CZs 1-5 and 11-13 (presumed to be Northern California), while there is another set of multipliers for CZs 6-10 and 14-16 (assumed to be Southern California).

3 Prototypes, Measure Packages, and Costs

This section describes the prototype and the scope of analysis drawing from previous 2019 Reach Code research where necessary.

A customized detached ADU prototype was built to reflect California construction. TRC designed the baseline prototype to be mixed fuel and have total EDR margins as close to zero as possible to reflect a prescriptively compliant new construction building in each climate zone.

ADUs are additional dwelling units typically built on the property of an existing single-family parcel. ADUs are defined as new construction in the energy code when they are ground-up developments, do not convert an existing space to livable space, and are not attached to the primary dwelling. The Reach Code Team leveraged prior research and performed interviews to help define the detached ADU baseline and measure packages, primarily to include infrastructural costs.

3.1 Prior Reach Code Research

In 2019, the Statewide CA IOU Reach Codes Team analyzed the cost-effectiveness of residential new construction projects for mixed-fuel plus efficiency, all-electric plus efficiency, and demand flexibility packages (Statewide Reach Codes Team 2019a). Using this analysis, several cities and counties in California adopted local energy code amendments encouraging or requiring that low-rise residential new construction to be all-electric. However, many jurisdictions exempted ADUs from these requirements due to uncertainties around how infrastructural and operational costs may be different between mixed-fuel and all-electric detached ADUs, and to avoid potentially stifling ADU development.

Because the mixed-fuel packages plus efficiency ADUs are not subject to jurisdictional exemptions, this study focuses on a new construction all-electric detached ADU and discerns how infrastructural costs and operational costs may impact the cost-effectiveness compared to a mixed-fuel baseline.

3.2 Prototype Characteristics

To determine a typical set of ADU characteristics, the Reach Code team contacted over twenty ADU builders and city staff members from regions representing Sacramento, the San Francisco Bay Area, the Los Angeles area, and the San Diego area. Ultimately, four builders with construction experience with multiple projects and two city staff members with experience reviewing and approving ADU project plans were interviewed. Respondents indicated that there are not particular determinants for siting and sizing detached ADUs other than the site conditions—maximizing available space is the key consideration. Responses varied greatly on detached ADU size, as client preference, location, and avoidance of impact fees were expressed as considerations. Sizes can range from roughly 300 ft² for a studio to over 1200 ft² for a two-bedroom unit. The Reach Code team selected an average size of 750 ft² as a typical size for a detached ADU. 750 ft² also relates to a threshold for state regulation over which impact fees and discretionary approval would be applied. Some other findings include:

- **Setback requirements** follow the four-foot setback requirements of state Assembly Bill 881. Mechanical equipment may not reside in the setbacks, however, interviewees indicated that there is always one side of the ADU that isn't against a setback. Mechanical equipment can usually be placed along those sides and be hidden by a shed or fence.
- **Mechanical equipment footprints** may be too big to include inside an ADU with limited floor area, so clients tend to want to locate the mechanical equipment outside. This is reflected in the all-electric Package 2 (see [Section 3.4](#)).
- Some cities have **noise ordinances** that limit maximum decibels at the property line, which may pose issues for exterior heat pump water heaters or heating, ventilation, and air-conditioning (HVAC) equipment. These maximum noise requirements range from 50-66 decibels (dBs), and exterior heat pump equipment commonly ranges between 45-60 decibels at the equipment. Interviewees did not express significant concerns about

noise ordinances because manufacturers can provide sound blankets to reduce the decibel rating by five or more decibels, or developers can locate equipment in an insulated shed to reduce noise.

- When adding a detached ADU the primary dwelling's **electrical panel and service connection** nearly always needs to be upgraded at least to a 125-amp panel, and at least a 200-amp panel where solar PV is being installed. A 225-amp panel is also common. Electrical upgrades cost roughly \$3500, for most common existing panel sizes or upgraded panel sizes.
- The **distance** between the detached ADU and primary dwelling can range widely due to lot size and location of meter and other infrastructure, from as little as five feet to over 100 feet. Based on respondent feedback, the Reach Code Team used an average distance of 50 feet as the length for both the natural gas and electrical line extensions for costing purposes.
- Cities do not impose a differing **fee structure** between all-electric or mixed-fuel ADU design. Fees range from \$4,000 - \$6,000 including inspections.

Table 2 summarizes the ADU prototype characteristics, based on prescriptive Title 24 new construction requirements.

Table 2. Detached ADU Baseline Mixed-fuel Prototype Characteristics

Conditioned floor area (ft²)	750
Number of stories	1
Distance from primary dwelling (ft)	50
Wall U-factor	0.048 (CZ 1-5, 8-16), 0.065 (CZ 6,7)
Roof Assembly	Option B in Table 150.1-A of Title 24 2019
Window-to-floor area ratio	20%
Solar PV size	Each climate zone sized as 'Specific PV System Scaling' = 1 offsetting 100% of electricity load

3.3 Measure Definitions and Costs

ADU measures fall into two categories: those associated with building all-electric, and those associated with general efficiency and demand flexibility.

3.3.1 All-Electric

For HVAC and water heating appliance-related costs, the Reach Code Team primarily leveraged measure definitions and costs from the 2019 Residential New Construction Reach Code Cost-Effectiveness Study. For HVAC system, air-conditioning is included in both baseline and proposed models. For in-house and site infrastructure the Reach Code Team developed new data based on interviews and RS Means.

The Reach Code Team found that a new detached ADU would require that the building owner upgrade the service connection to the lot in both the mixed-fuel ADU design and the all-electric design. The most common size for this upgrade is 225A, which would not represent an incremental cost from the mixed-fuel project to the all-electric project. Feeder wiring to the ADU and the ADU subpanel will need to be slightly upgraded for the all-electric design. Electric vehicle (EV) infrastructure upgrades are excluded from this analysis as ADUs are not required to have dedicated parking – however, a 225-amp panel is likely to be sufficient for some EV infrastructure for a majority of existing homes. The total cost for the all-electric measures is summarized in Table 3.

Table 3. New Construction Detached ADU Construction Costs, All CZs

	Mixed-Fuel Cost	All-Electric Measure	All-Electric Cost	All-Electric Incremental Cost	Source
Appliances: Space heater, water heater, clothes dryer, range.				(\$221)	Residential New Construction Report (2019) Table 6
In-house gas plumbing	\$540	In-house electrical upgrades for branch circuits	\$600	\$60	RSMeans
Site gas service extension	\$1,998	No site gas service	\$0	(\$1998)	Interviews, RSMeans
Site electrical service connection upgrade 225A	\$3,500	Site electrical service connection upgrade 225A	\$3,500	\$0	
100A Feeder to ADU with breaker	\$933	125A feeder to ADU	\$1,206	\$273	
100A ADU subpanel	\$733	125A ADU subpanel	\$946	\$213	
Outdoor closet	n/a	Heat pump water heater closet*	\$650	\$650	
Total (HPWH outside closet)	\$7,704		\$6,901	(\$1,024)	
Total (HPWH in conditioned space)	\$7,704		\$6,251	(\$1,674)	

* Additional cost for outdoor closet is required only for climate zones where heat pump water heater is located 'Outside'.

3.3.2 Efficiency and Solar PV

The Reach Code team used the efficiency measures and costs developed in the 2019 Residential New Construction report (2019). The measures are summarized below by climate zone, including measure costs, in Table 4.

Table 4. Measures for Detached ADU

Measure Name	Applicable Climate Zones	Incremental Cost Description	Cost for ADU Prototype
Verified low leakage ducts in conditioned space (including HERS* verification)	All	\$0.31/ft ² of floor area + \$110 HERS test	\$343
Low pressure drop ducts - 2% vs 5%	All	\$96/hr labor for installation	\$96
Reduced infiltration: 3ACH50 vs 5ACH50	13, 14, 16	\$0.115/ft ² + \$100 HERS test	\$186
Exterior wall insulation: R-7.5 vs R-5 (U-0.043)	15	\$0.36/ft ² of floor area	\$272
High performance attics: R-38 attic floor + R-30 Under Deck	1, 11-16	\$0.34/ft ² attic floor + \$1.61/ft ² roof	\$1,563
Cool roof - 0.25 vs 0.20	9-15	\$0.09/ft ² of roof	\$73
Improved fenestration	1, 2, 16	\$4.23/ft ² of window	\$381

Measure Name	Applicable Climate Zones	Incremental Cost Description	Cost for ADU Prototype
Slab edge insulation: R-10 vs R-0	1-5, 10-15	\$4/linear foot	\$339
Solar PV to offset 90% of the annual electricity use**	All	\$3.99/Wdc	\$800-\$6,200 depending on climate zone
Total Costs			\$4,500 - \$10,253 depending on climate zone.

*HERS = Home Energy Rating System

**Incremental cost for added PV over and above the prescriptive PV size in baseline models.

The cost for solar PV is derived from an LBNL study (Barbose, 2019) and Rooftop Solar PV System Measure Study (California Energy Commission, 2017), summarized in Table 5. Solar PV prices have been discounted to reflect the federal solar investment tax credit, by an average of 26% over 2021 and 2022.

Table 5. Solar PV Measure Cost Breakdown

	Unit Cost, \$2020 Present Value	Useful Life (yrs.)	Source
Solar PV System	\$3.70 / Wdc	30	LBNL Study
Inverter Replacement, year 11	\$0.15 / Wdc	10	E3 Rooftop Solar PV System Report (CEC 2017) ²
Inverter Replacement, year 21	\$0.12 / Wdc	10	
Annual Maintenance Costs	\$0.02 / Wdc	1	
Total	\$3.99 / Wdc		

3.4 Measure Packages

The Reach Code Team examined the two electrification packages against a baseline mixed-fuel prescriptive package:

- Detached ADU Baseline Package: Mixed-fuel prescriptively built, including gas utility extension from primarily dwelling to detached ADU.
- All-Electric Prescriptive Minimum: All-electric prescriptively built, including heat pump water heater location per Residential Alternate Calculation Method (ACM), shown in Table 6. Includes electric utility extension upgrade from the primary dwelling to the detached ADU and avoided cost of gas utility extension. This package has the same PV size as mixed-fuel prescriptive baseline model, offsetting 100 percent of annual electricity demand.
- All-Electric Energy Efficiency + PV: All-electric prescriptively built as above, except water heater location is outside in exterior closet in all climate zones except Climate Zones 14, 15, and 16, plus energy efficiency measures, and additional solar PV (offsetting 90 percent of kWh load) to improve cost-effectiveness based on prior reach code research.

² Available at: <https://efiling.energy.ca.gov/getdocument.aspx?tn=221366>

Table 6. Heat Pump Water Heater Location, All-Electric Prescriptive Baseline

Climate Zone	Single-Family
01	Outside
02	Conditioned
03	Outside
04	Conditioned
05	Outside
06	Outside
07	Outside
08	Conditioned
09	Conditioned
10	Conditioned
11	Conditioned
12	Conditioned
13	Conditioned
14	Conditioned
15	Conditioned
16	Conditioned

Source: California Energy Commission, Residential ACM

The Reach Code Team analyzed some additional measure packages:

- 2022 TDV: Both electrification packages, 'Prescriptive Minimum' and 'Energy Efficiency + PV' are analyzed against the mixed-fuel baseline package using 2022 TDV multipliers and weather files in CBECC-Res 2022 software.
- Efficiency-Only: The All-Electric Energy Efficiency + PV package is analyzed using CBECC-Res 2019 without solar PV measure to evaluate the impact of efficiency measures alone, in the case that solar PV cannot be installed due to shading.

4 Results

Results are presented as per the prototype-specific Measure Packages described in Section 3.

There are several overarching factors to keep in mind when reviewing the results include:

- What constitutes a ‘**benefit**’ or a ‘**cost**’ varies with the scenarios because both energy savings, and incremental construction costs may be negative depending on the package. Typically, utility bill savings are categorized as a ‘benefit’ while incremental construction costs are treated as ‘costs.’ In cases where both construction costs are negative and utility bill savings are negative, the construction cost savings are treated as the ‘benefit’ while the utility bill negative savings are the ‘cost.’
- All-electric packages will have lower **GHG emissions** than mixed-fuel packages in all cases, due to the clean power sources currently available from California’s power providers.
- Since January 2020, compliance of low-rise residential building is analyzed using **Energy Design Rating (EDR)**. This rating scales from 1 to 100 with 100 being the performance equivalent of a 2006 International Energy Conservation Code (IECC). This study uses ‘Total EDR Margin’ as a compliance metric that accounts for all compliant loads along with renewable energy and battery storage. ‘Total EDR Margin’ of 0 represents a prescriptively compliant building that exactly matches the minimum energy budget prescribed by the 2019 T24 code.
- To receive the Energy Commission’s approval, local reach codes that amend the energy code must **both be cost effective** compared to the mixed-fuel baseline package **and exceed the energy performance budget** using ‘Total EDR Margin’ metric (i.e., have a positive compliance margin) compared to the standard model in the compliance software. To emphasize these two important factors, the figures in this Section highlight in green the modeling results that have a positive compliance margin and/or are cost effective. This will allow readers to identify whether a scenario is fully or partially supportive of a reach code, and the opportunities/challenges that the scenario presents. Conversely, *Section 5* only highlights results that have **both** a positive compliance margin and are cost effective, to allow readers to identify reach code-ready scenarios.
- When performance modeling residential buildings of three stories or less (such as the Detached ADU), the Standard Design is electric if the Proposed Design is electric, which removes TDV-related penalties and associated negative compliance margins. This essentially allows for a **compliance pathway for all-electric residential buildings**.
- As mentioned in *Section 2.1.4*, the Reach Code Team coordinated with utilities to select tariffs for each prototype given the annual energy demand profile and the most prevalent rates in each utility territory. The Reach Code Team **did not compare a variety of tariffs** to determine their impact on cost-effectiveness although utility rate changes or updates can affect on-bill cost-effectiveness results.
- As a point of comparison, **mixed-fuel baseline** energy figures are provided in *Appendix 7.2*.
- The cost-effectiveness results for 2022 analysis differs from 2019 mainly in \$TDV savings, but also differs slightly in energy consumption which translates in minor difference in on-bill energy savings. The Reach Code Team has not reported the software outputs for 2022 EDR margins as the 2022 Title 24 Part 6 code is still being developed.

4.1 All-Electric Prescriptive Minimum Results

Table 7 shows results of the ADU all-electric prescriptive minimum compared to a mixed-fuel baseline using 2019 TDV, with heat pump water heater location as per Residential ACM manual (reference Table 6). With federal-minimum efficiencies for mechanical equipment, the all-electric prescriptive pathway is not cost effective in any climate zone using IOU rates with 2019 TDV. However, with relatively lower electric prices and higher gas prices of POUs, the package is on-bill cost effective in some climate zones.

Table 7. Cost-Effectiveness for ADU: All-Electric Prescriptive Minimum, 2019 TDV

CZ	Utility	Annual Elec Savings (kWh)	Annual Gas Savings (therms)	Annual GHG Reductions (mtons)	Total EDR Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	Lifecycle \$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
CZ01	PG&E	(3,600)	259	0.1	0.00	(\$1,024)	(\$7,213)	(\$6,951)	0.1	0.1	(\$6,190)	(\$5,927)
CZ02	PG&E	(2,646)	198	0.3	0.00	(\$1,674)	(\$3,753)	(\$3,897)	0.4	0.4	(\$2,079)	(\$2,223)
CZ03	PG&E	(2,397)	174	0.3	0.00	(\$1,024)	(\$3,518)	(\$4,366)	0.3	0.2	(\$2,495)	(\$3,342)
CZ04	PG&E	(2,263)	170	0.3	0.00	(\$1,674)	(\$2,996)	(\$2,765)	0.6	0.6	(\$1,322)	(\$1,092)
CZ04-2	CPAU	(2,263)	170	0.3	0.00	(\$1,674)	\$1,389	(\$2,765)	>1	0.6	\$3,062	(\$1,092)
CZ05	PG&E	(2,524)	170	0.2	0.00	(\$1,024)	(\$4,969)	(\$4,883)	0.2	0.2	(\$3,945)	(\$3,860)
CZ05-2	SCG	(2,524)	170	0.2	0.00	(\$1,024)	(\$4,842)	(\$4,883)	0.2	0.2	(\$3,818)	(\$3,860)
CZ06	SCE	(1,853)	136	0.3	0.00	(\$1,024)	(\$2,943)	(\$3,154)	0.3	0.3	(\$1,920)	(\$2,131)
CZ06-2	LA	(1,853)	136	0.3	0.00	(\$1,024)	\$1,357	(\$3,154)	>1	0.3	\$2,381	(\$2,131)
CZ07	SDG&E	(1,604)	121	0.3	0.00	(\$1,024)	(\$3,993)	(\$3,035)	0.3	0.3	(\$2,970)	(\$2,012)
CZ08	SCE	(1,594)	122	0.4	0.00	(\$1,674)	(\$2,282)	(\$2,279)	0.7	0.7	(\$609)	(\$605)
CZ08-2	LA	(1,594)	122	0.4	0.00	(\$1,674)	\$1,477	(\$2,279)	>1	0.7	\$3,151	(\$605)
CZ09	SCE	(1,669)	128	0.6	0.00	(\$1,674)	(\$2,403)	(\$2,476)	0.7	0.7	(\$729)	(\$803)
CZ09-2	LA	(1,669)	128	0.6	0.00	(\$1,674)	\$1,509	(\$2,476)	>1	0.7	\$3,183	(\$803)
CZ10	SDG&E	(1,714)	130	0.5	0.00	(\$1,674)	(\$5,035)	(\$2,544)	0.3	0.7	(\$3,362)	(\$871)
CZ10-2	SCE	(1,714)	130	0.5	0.00	(\$1,674)	(\$2,549)	(\$2,544)	0.7	0.7	(\$876)	(\$871)
CZ11	PG&E	(2,333)	177	0.4	0.00	(\$1,674)	(\$3,533)	(\$3,676)	0.5	0.5	(\$1,859)	(\$2,003)
CZ12	PG&E	(2,319)	182	0.5	0.00	(\$1,674)	(\$2,695)	(\$3,257)	0.6	0.5	(\$1,022)	(\$1,584)
CZ12-2	SMUD	(2,319)	182	0.5	0.00	(\$1,674)	\$627	(\$3,257)	>1	0.5	\$2,301	(\$1,584)
CZ13	PG&E	(2,158)	167	0.3	0.00	(\$1,674)	(\$2,683)	(\$3,334)	0.6	0.5	(\$1,009)	(\$1,661)
CZ14	SDG&E	(2,388)	175	0.7	0.00	(\$1,674)	(\$7,894)	(\$3,378)	0.2	0.5	(\$6,220)	(\$1,705)
CZ14-2	SCE	(2,388)	175	0.7	0.00	(\$1,674)	(\$4,476)	(\$3,378)	0.4	0.5	(\$2,803)	(\$1,705)
CZ15	SCE	(1,330)	99	(0.2)	0.00	(\$1,674)	(\$1,766)	(\$2,398)	0.9	0.7	(\$92)	(\$724)
CZ16	PG&E	(3,439)	274	(0.3)	0.00	(\$1,674)	(\$5,558)	(\$6,187)	0.3	0.3	(\$3,885)	(\$4,514)
CZ16-2	LA	(3,439)	274	(0.3)	0.00	(\$1,674)	\$2,821	(\$6,187)	>1	0.3	\$4,495	(\$4,514)

As shown in Table 8 below, the all-electric prescriptive minimum detached ADU is cost effective on TDV basis in all climate zones except 1 and 16 when using 2022 TDV and weather files, in contrast with results using 2019 TDV.

Table 8. Cost-Effectiveness for ADU: All-Electric Prescriptive Minimum, 2022 TDV

CZ	Utility	Annual Elec Savings (kWh)	Annual Gas Savings (therms)	Annual GHG Reductions (mtons)	Total EDR Margin	Upfront Incremental Package Cost	Lifecycle Utility Cost Savings	Lifecycle \$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
CZ01	PG&E	(3,353)	242	0.7	0.00	(\$1,024)	(\$6,533)	(\$1,656)	0.2	0.6	(\$5,509)	(\$632)
CZ02	PG&E	(2,445)	180	0.7	0.00	(\$1,674)	(\$3,617)	\$219	0.5	>1	(\$1,944)	\$1,893
CZ03	PG&E	(2,111)	153	0.6	0.00	(\$1,024)	(\$3,192)	(\$7)	0.3	137.2	(\$2,168)	\$1,016
CZ04	PG&E	(1,880)	142	0.6	0.00	(\$1,674)	(\$2,437)	(\$167)	0.7	10.0	(\$763)	\$1,507
CZ04-2	CPAU	(1,880)	142	0.6	0.00	(\$1,674)	\$2,513	(\$167)	>1	10.0	\$4,186	\$1,507
CZ05	PG&E	(2,113)	145	0.6	0.00	(\$1,024)	(\$3,904)	(\$811)	0.3	1.3	(\$2,880)	\$212
CZ05-2	SCG	(2,113)	145	0.6	0.00	(\$1,024)	(\$3,564)	(\$811)	0.3	1.3	(\$2,541)	\$212
CZ06	SCE	(1,623)	121	0.4	0.00	(\$1,024)	(\$2,545)	\$62	0.4	>1	(\$1,521)	\$1,086
CZ06-2	LA	(1,623)	121	0.4	0.00	(\$1,024)	\$1,381	\$62	>1	>1	\$2,405	\$1,086
CZ07	SDG&E	(1,563)	117	0.4	0.00	(\$1,024)	(\$4,231)	\$98	0.2	>1	(\$3,207)	\$1,122
CZ08	SCE	(1,426)	114	0.4	0.00	(\$1,674)	(\$1,738)	\$606	1.0	>1	(\$64)	\$2,279
CZ08-2	LA	(1,426)	114	0.4	0.00	(\$1,674)	\$1,598	\$606	>1	>1	\$3,271	\$2,279
CZ09	SCE	(1,517)	119	0.4	0.00	(\$1,674)	(\$1,986)	\$239	0.8	>1	(\$312)	\$1,912
CZ09-2	LA	(1,517)	119	0.4	0.00	(\$1,674)	\$1,556	\$239	>1	>1	\$3,229	\$1,912
CZ10	SDG&E	(1,631)	125	0.4	0.00	(\$1,674)	(\$4,978)	\$537	0.3	>1	(\$3,304)	\$2,210
CZ10-2	SCE	(1,631)	125	0.4	0.00	(\$1,674)	(\$2,363)	\$537	0.7	>1	(\$689)	\$2,210
CZ11	PG&E	(2,155)	163	0.7	0.00	(\$1,674)	(\$3,472)	\$192	0.5	>1	(\$1,798)	\$1,865
CZ12	PG&E	(2,108)	163	0.7	0.00	(\$1,674)	(\$2,788)	\$244	0.6	>1	(\$1,114)	\$1,917
CZ12-2	SMUD	(2,108)	163	0.7	0.00	(\$1,674)	\$464	\$244	>1	>1	\$2,138	\$1,917
CZ13	PG&E	(1,887)	143	0.7	0.00	(\$1,674)	(\$2,765)	(\$93)	0.6	18.0	(\$1,092)	\$1,581
CZ14	SDG&E	(2,187)	158	0.4	0.00	(\$1,674)	(\$7,311)	(\$321)	0.2	5.2	(\$5,638)	\$1,353
CZ14-2	SCE	(2,187)	158	0.4	0.00	(\$1,674)	(\$4,058)	(\$321)	0.4	5.2	(\$2,385)	\$1,353
CZ15	SCE	(1,286)	97	0.5	0.00	(\$1,674)	(\$1,636)	(\$112)	1.0	15.0	\$38	\$1,562
CZ16	PG&E	(3,137)	249	0.5	0.00	(\$1,674)	(\$4,873)	(\$2,248)	0.3	0.7	(\$3,200)	(\$575)
CZ16-2	LA	(3,137)	249	0.5	0.00	(\$1,674)	\$2,502	(\$2,248)	>1	0.7	\$4,175	(\$575)

4.2 All Electric Plus Efficiency and PV Results

Table 9 shows results of the all-electric prescriptive minimum using 2019 TDV with 1) heat pump water heater location is outside in exterior closet in all climate zones except Climate Zones 14, 15, and 16, 2) energy efficiency measures, and 3) additional solar PV capacity. The all-electric detached ADU is cost effective using either the on-bill or TDV approach in several climate zones. Also, similar to the package above, it is always on-bill cost effective using POU rates.

Table 9. Cost-Effectiveness for ADU: All-Electric Energy Efficiency + Additional PV, 2019 TDV

CZ	Utility	Annual Elec Savings (kWh)	Annual Gas Savings (therms)	Annual GHG Reductions (mtons)	Total EDR Margin	Upfront Incremental Package Cost	Lifecycle Utility Cost Savings	Lifecycle \$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
CZ01	PG&E	(524)	259	0.8	29.30	\$5,794	\$4,323	\$4,123	0.7	0.7	(\$1,472)	(\$1,671)
CZ02	PG&E	(497)	198	0.8	18.70	\$3,207	\$2,159	\$3,333	0.7	1.0	(\$1,048)	\$126
CZ03	PG&E	(459)	174	0.8	19.00	\$2,363	\$2,331	\$2,348	1.0	1.0	(\$32)	(\$15)
CZ04	PG&E	(465)	170	0.7	16.10	\$2,314	\$1,934	\$2,635	0.8	1.1	(\$380)	\$320
CZ04-2	CPAU	(465)	170	0.7	16.10	\$2,314	\$5,434	\$2,635	2.3	1.1	\$3,120	\$320
CZ05	PG&E	(472)	170	0.7	20.00	\$2,339	\$2,538	\$2,206	1.1	0.9	\$199	(\$133)
CZ05-2	SCG	(472)	170	0.7	20.00	\$2,339	\$2,664	\$2,206	1.1	0.9	\$326	(\$133)
CZ06	SCE	(427)	136	0.6	16.10	\$1,512	\$1,836	\$1,898	1.2	1.3	\$324	\$386
CZ06-2	LA	(427)	136	0.6	16.10	\$1,512	\$4,487	\$1,898	3.0	1.3	\$2,975	\$386
CZ07	SDG&E	(404)	121	0.6	14.00	\$1,170	\$2,843	\$1,134	2.4	1.0	\$1,672	(\$36)
CZ08	SCE	(421)	122	0.6	12.20	\$1,244	\$1,503	\$1,618	1.2	1.3	\$260	\$375
CZ08-2	LA	(421)	122	0.6	12.20	\$1,244	\$4,058	\$1,618	3.3	1.3	\$2,814	\$375
CZ09	SCE	(439)	128	0.8	12.90	\$1,317	\$1,641	\$2,170	1.2	1.6	\$324	\$853
CZ09-2	LA	(439)	128	0.8	12.90	\$1,317	\$4,227	\$2,170	3.2	1.6	\$2,910	\$853
CZ10	SDG&E	(449)	130	0.8	12.20	\$1,680	\$2,168	\$2,065	1.3	1.2	\$488	\$385
CZ10-2	SCE	(449)	130	0.8	12.20	\$1,680	\$1,632	\$2,065	1.0	1.2	(\$49)	\$385
CZ11	PG&E	(535)	177	0.9	15.00	\$3,975	\$1,994	\$3,433	0.5	0.9	(\$1,980)	(\$542)
CZ12	PG&E	(494)	182	0.9	15.60	\$4,121	\$1,508	\$3,510	0.4	0.9	(\$2,613)	(\$611)
CZ12-2	SMUD	(494)	182	0.9	15.60	\$4,121	\$4,685	\$3,510	1.1	0.9	\$564	(\$611)
CZ13	PG&E	(525)	167	0.7	13.30	\$3,991	\$1,917	\$3,109	0.5	0.8	(\$2,074)	(\$881)
CZ14	SDG&E	(515)	175	1.1	15.90	\$3,316	\$3,257	\$3,874	1.0	1.2	(\$59)	\$558
CZ14-2	SCE	(515)	175	1.1	15.90	\$3,316	\$2,363	\$3,874	0.7	1.2	(\$953)	\$558
CZ15	SCE	(544)	99	0.2	7.40	\$1,744	\$1,630	\$1,534	0.9	0.9	(\$115)	(\$210)
CZ16	PG&E	(547)	274	0.4	23.10	\$4,091	\$3,785	\$3,801	0.9	0.9	(\$306)	(\$290)
CZ16-2	LA	(547)	274	0.4	23.10	\$4,091	\$9,042	\$3,801	2.2	0.9	\$4,951	(\$290)

Table 10 shows that All-Electric detached ADUs are TDV cost effective in all climate zones using 2022 TDV when including efficiency measures and additional solar PV. Note that the EDR margins have been removed since the 2022 Title 24 Part 6 code has not yet completed rulemaking at the time of the draft, but preliminary results indicate that all EDR margins will be positive.

Table 10. Cost-Effectiveness for ADU: All-Electric Energy Efficiency + Additional PV, 2022 TDV Results

CZ	Utility	Annual Elec Savings (kWh)	Annual Gas Savings (therms)	Annual GHG Reductions (mtons)	Total EDR Margin	Upfront Incremental Package Cost	Lifecycle Utility Cost Savings	Lifecycle \$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
CZ01	PG&E	(512)	242	0.3	>0	\$5,648	\$3,588	\$7,903	0.6	1.4	(\$2,060)	\$2,255
CZ02	PG&E	(479)	180	0.4	>0	\$3,012	\$1,936	\$6,490	0.6	2.2	(\$1,076)	\$3,478
CZ03	PG&E	(441)	153	0.3	>0	\$2,070	\$2,119	\$5,235	1.0	2.5	\$49	\$3,165
CZ04	PG&E	(444)	142	0.4	>0	\$1,875	\$1,780	\$4,473	0.9	2.4	(\$95)	\$2,597
CZ04-2	CPAU	(444)	142	0.4	>0	\$1,875	\$5,210	\$4,473	2.8	2.4	\$3,335	\$2,597
CZ05	PG&E	(443)	145	0.4	>0	\$1,949	\$2,121	\$4,416	1.1	2.3	\$173	\$2,468
CZ05-2	SCG	(443)	145	0.4	>0	\$1,949	\$2,461	\$4,416	1.3	2.3	\$513	\$2,468
CZ06	SCE	(413)	121	0.3	>0	\$1,049	\$1,550	\$4,256	1.5	4.1	\$501	\$3,208
CZ06-2	LA	(413)	121	0.3	>0	\$1,049	\$4,067	\$4,256	3.9	4.1	\$3,018	\$3,208
CZ07	SDG&E	(409)	117	0.3	>0	\$1,073	\$2,480	\$3,899	2.3	3.6	\$1,407	\$2,826
CZ08	SCE	(431)	114	0.3	>0	\$975	\$1,458	\$4,086	1.5	4.2	\$483	\$3,110
CZ08-2	LA	(431)	114	0.3	>0	\$975	\$3,825	\$4,086	3.9	4.2	\$2,850	\$3,110
CZ09	SCE	(434)	119	0.3	>0	\$1,049	\$1,608	\$4,002	1.5	3.8	\$560	\$2,954
CZ09-2	LA	(434)	119	0.3	>0	\$1,049	\$3,960	\$4,002	3.8	3.8	\$2,912	\$2,954
CZ10	SDG&E	(457)	125	0.3	>0	\$1,485	\$1,760	\$4,404	1.2	3.0	\$274	\$2,919
CZ10-2	SCE	(457)	125	0.3	>0	\$1,485	\$1,525	\$4,404	1.0	3.0	\$40	\$2,919
CZ11	PG&E	(524)	163	0.4	>0	\$3,853	\$1,517	\$5,752	0.4	1.5	(\$2,336)	\$1,899
CZ12	PG&E	(481)	163	0.4	>0	\$3,829	\$1,293	\$5,448	0.3	1.4	(\$2,535)	\$1,619
CZ12-2	SMUD	(481)	163	0.4	>0	\$3,829	\$4,066	\$5,448	1.1	1.4	\$237	\$1,619
CZ13	PG&E	(514)	143	0.4	>0	\$3,503	\$2,400	\$4,852	0.7	1.4	(\$1,103)	\$1,349
CZ14	SDG&E	(496)	158	0.3	>0	\$2,731	\$2,772	\$5,873	1.0	2.2	\$41	\$3,142
CZ14-2	SCE	(496)	158	0.3	>0	\$2,731	\$2,090	\$5,873	0.8	2.2	(\$641)	\$3,142
CZ15	SCE	(539)	97	0.5	>0	\$1,549	\$1,608	\$3,383	1.0	2.2	\$58	\$1,834
CZ16	PG&E	(526)	249	0.3	>0	\$3,871	\$3,173	\$6,689	0.8	1.7	(\$698)	\$2,818
CZ16-2	LA	(526)	249	0.8	>0	\$3,871	\$8,099	\$6,689	2.1	1.7	\$4,227	\$2,818

5 Summary

The Reach Codes Team developed packages of energy efficiency measures as well as packages combining energy efficiency with solar PV generation, simulated them in building modeling software, and gathered costs to determine the cost-effectiveness of multiple scenarios. The Reach Codes Team coordinated assumptions with multiple utilities, cities, and building community experts to develop a set of assumptions considered reasonable in the current market. Changing assumptions, such as the period of analysis, measure selection, cost assumptions, energy escalation rates, or utility tariffs are likely to change results.

Table 11 summarizes results for each prototype and depicts the compliance margins achieved for each climate zone and package. Because local reach codes must both exceed the Energy Commission performance budget (i.e., have a positive compliance margin) and be cost-effective, the Reach Code Team highlighted cells meeting these two requirements to help clarify the upper boundary for potential reach code policies:

- Cells highlighted in **green** depict a positive compliance margin and cost-effective results using both On-Bill and TDV approaches.
- Cells highlighted in **yellow** depict a positive compliance and cost-effective results using either the On-Bill or TDV approach.
- Cells **not highlighted** either depict a negative compliance margin or a package that was not cost effective using either the On-Bill or TDV approach.

The Reach Code Team found that all-electric detached ADUs can have positive compliance margins and are cost effective in all climate zones through either the utility bill or TDV metrics when compared to a mixed fuel baseline. This is true for either prescriptive minimum or efficiency + PV packages. To promote decarbonization, local jurisdictions may choose to include new construction detached ADUs in all-electric requirements.

Table 11. Detached ADU Summary of EDR Margin and Cost-Effectiveness

CZ	Utility	All Electric, 2019 EDR		All Electric, 2022 EDR	
		Code Minimum	EE+PV	Code Minimum	EE+PV
CZ01	PG&E	0.0	29.3	0.0	>0
CZ02	PG&E	0.0	18.7	0.0	>0
CZ03	PG&E	0.0	19.0	0.0	>0
CZ04	PG&E	0.0	16.1	0.0	>0
CZ04-2	CPAU	0.0	16.1	0.0	>0
CZ05	PG&E	0.0	20.0	0.0	>0
CZ05-2	SCG	0.0	20.0	0.0	>0
CZ06	SCE	0.0	16.1	0.0	>0
CZ06-2	LADWP	0.0	16.1	0.0	>0
CZ07	SDG&E	0.0	14.0	0.0	>0
CZ08	SCE	0.0	12.2	0.0	>0
CZ08-2	LADWP	0.0	12.2	0.0	>0
CZ09	SCE	0.0	12.9	0.0	>0
CZ09-2	LADWP	0.0	12.9	0.0	>0
CZ10	SDG&E	0.0	12.2	0.0	>0
CZ10-2	SCE	0.0	12.2	0.0	>0
CZ11	PG&E	0.0	15.0	0.0	>0
CZ12	PG&E	0.0	15.6	0.0	>0
CZ12-2	SMUD	0.0	15.6	0.0	>0
CZ13	PG&E	0.0	13.3	0.0	>0
CZ14	SDG&E	0.0	15.9	0.0	>0
CZ14-2	SCE	0.0	15.9	0.0	>0
CZ15	SCE	0.0	7.4	0.0	>0
CZ16	PG&E	0.0	23.1	0.0	>0
CZ16-2	LADWP	0.0	23.1	0.0	>0

6 References

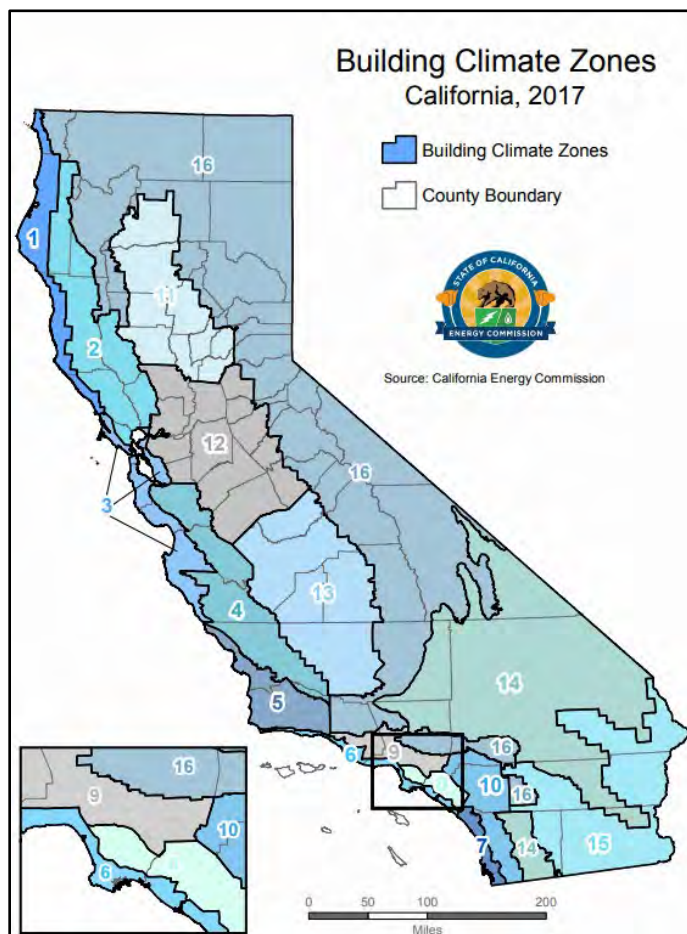
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7 Appendices

7.1 Map of California Climate Zones

Climate zone geographical boundaries are depicted in Figure 1. The map in Figure 1 along with a zip-code search directory is available at: https://ww2.energy.ca.gov/maps/renewable/building_climate_zones.html

Figure 1. Map of California climate zones.



7.2 Mixed Fuel Baseline Energy Figures

Table 12 show the annual electricity and natural gas consumption and on-bill cost, total EDR margin, and GHG emissions for each prototype under the mixed-fuel design baseline. The non-zero EDR margins are largely a result of compliance software complexities, and they are not expected to significantly impact the proposed case results or nature of recommendations. The annual kWh usage is 0 since code requires that PV offset 100 percent of kWh usage.

Table 12. Detached ADU Mixed Fuel Baseline

CZ	Utility	Annual Electricity Consumption (kWh)	Annual Natural Gas Consumption (Therms)	Annual Electricity Cost	Annual Natural Gas Cost	Total Annual Utility Cost	Annual GHG Emissions (mtons)
CZ01	PG&E	0	259	\$194	\$358	\$552	1.0
CZ02	PG&E	0	198	\$194	\$269	\$463	0.9
CZ03	PG&E	0	174	\$189	\$237	\$425	0.9
CZ04	PG&E	0	170	\$185	\$231	\$416	0.8
CZ04-2	CPAU	0	170	\$131	\$297	\$429	0.8
CZ05	PG&E	0	170	\$167	\$232	\$399	0.8
CZ05-2	SCG	0	170	\$167	\$237	\$404	0.8
CZ06	SCE	0	136	\$156	\$202	\$358	0.8
CZ06-2	LA	0	136	\$124	\$202	\$326	0.8
CZ07	SDG&E	0	121	\$160	\$200	\$359	0.8
CZ08	SCE	0	122	\$161	\$187	\$348	0.9
CZ08-2	LA	0	122	\$124	\$187	\$311	0.9
CZ09	SCE	0	128	\$172	\$193	\$366	1.1
CZ09-2	LA	0	128	\$125	\$193	\$318	1.1
CZ10	SDG&E	0	130	\$166	\$215	\$381	1.0
CZ10-2	SCE	0	130	\$183	\$195	\$379	1.0
CZ11	PG&E	0	177	\$205	\$244	\$450	1.0
CZ12	PG&E	0	182	\$197	\$250	\$447	1.0
CZ12-2	SMUD	0	182	\$293	\$250	\$542	1.0
CZ13	PG&E	0	167	\$224	\$231	\$454	0.9
CZ14	SDG&E	0	175	\$178	\$290	\$468	1.4
CZ14-2	SCE	0	175	\$212	\$243	\$455	1.4
CZ15	SCE	0	99	\$333	\$163	\$496	0.5
CZ16	PG&E	0	274	\$181	\$379	\$560	0.6
CZ16-2	LA	0	274	\$123	\$379	\$502	0.6

7.3 All-Electric Energy Efficiency Only Results

Table 13 and Table 14 show the cost-effectiveness results for the all-electric energy efficiency package without PV compared to the mixed-fuel baseline without PV, in scenarios where PV cannot be installed. Without PV, the efficiency packages selected are cost effective under 2022 TDV in most Climate Zones. It is likely that a different set of efficiency measures can improve cost effectiveness, given that the all-electric prescriptive minimum is TDV cost-effective (reference Table 8), though optimization of efficiency measure packages have not been examined in this study.

Note that the 2022 EDR margins have been removed since the 2022 Title 24 Part 6 code has not yet completed rulemaking at the time of the draft, but preliminary results indicate that all EDR margins will be positive.

Table 13. Cost-Effectiveness for ADU: All-Electric Energy Efficiency Without PV, 2019 TDV

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Total EDR Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
CZ01	PG&E	(2,760)	259	0.8	9.30	\$1,698	(\$7,485)	(\$3,679)	-4.4	-2.2	(\$9,183)	(\$5,377)
CZ02	PG&E	(2,492)	198	0.6	1.00	\$135	(\$7,004)	(\$3,739)	-51.9	-27.7	(\$7,139)	(\$3,874)
CZ03	PG&E	(2,151)	174	0.5	2.80	(\$246)	(\$6,522)	(\$3,578)	0.0	0.1	(\$6,276)	(\$3,332)
CZ04	PG&E	(2,171)	170	0.5	0.30	(\$246)	(\$6,890)	(\$3,428)	0.0	0.1	(\$6,644)	(\$3,182)
CZ04-2	CPAU	(2,171)	170	0.5	0.30	(\$246)	(\$3,483)	(\$3,428)	0.1	0.1	(\$3,237)	(\$3,182)
CZ05	PG&E	(2,284)	170	0.5	2.70	(\$246)	(\$7,393)	(\$4,140)	0.0	0.1	(\$7,147)	(\$3,894)
CZ05-2	SCG	(2,284)	170	0.5	2.70	(\$246)	(\$7,266)	(\$4,140)	0.0	0.1	(\$7,021)	(\$3,894)
CZ06	SCE	(1,790)	136	0.4	1.70	(\$585)	(\$3,428)	(\$2,823)	0.2	0.2	(\$2,843)	(\$2,238)
CZ06-2	LA	(1,790)	136	0.4	1.70	(\$585)	\$1,475	(\$2,823)	>1	0.2	\$2,060	(\$2,238)
CZ07	SDG&E	(1,592)	121	0.4	0.70	(\$585)	(\$5,304)	(\$3,042)	0.1	0.2	(\$4,719)	(\$2,457)
CZ08	SCE	(1,622)	122	0.4	0	(\$585)	(\$2,987)	(\$2,644)	0.2	0.2	(\$2,402)	(\$2,059)
CZ08-2	LA	(1,622)	122	0.4	0	(\$585)	\$1,405	(\$2,644)	>1	0.2	\$1,990	(\$2,059)
CZ09	SCE	(1,685)	128	0.4	1.50	(\$512)	(\$2,763)	(\$2,198)	0.2	0.2	(\$2,251)	(\$1,686)
CZ09-2	LA	(1,685)	128	0.4	1.50	(\$512)	\$1,481	(\$2,198)	>1	0.2	\$1,993	(\$1,686)
CZ10	SDG&E	(1,714)	130	0.4	1.60	(\$173)	(\$6,070)	(\$2,211)	0.0	0.1	(\$5,897)	(\$2,038)
CZ10-2	SCE	(1,714)	130	0.4	1.60	(\$173)	(\$2,821)	(\$2,211)	0.1	0.1	(\$2,649)	(\$2,038)
CZ11	PG&E	(2,255)	177	0.5	2.60	\$1,390	(\$5,976)	(\$2,879)	-4.3	-2.1	(\$7,366)	(\$4,270)
CZ12	PG&E	(2,282)	182	0.5	1.20	\$1,390	(\$6,151)	(\$3,012)	-4.4	-2.2	(\$7,541)	(\$4,403)
CZ12-2	SMUD	(2,282)	182	0.5	1.20	\$1,390	\$730	(\$3,012)	0.5	-2.2	(\$661)	(\$4,403)
CZ13	PG&E	(2,084)	167	0.5	2.40	\$1,577	(\$5,407)	(\$2,465)	-3.4	-1.6	(\$6,983)	(\$4,041)
CZ14	SDG&E	(2,066)	175	0.6	4.50	\$927	(\$5,783)	(\$1,635)	-6.2	-1.8	(\$6,710)	(\$2,562)
CZ14-2	SCE	(2,066)	175	0.6	4.50	\$927	(\$3,804)	(\$1,635)	-4.1	-1.8	(\$4,731)	(\$2,562)
CZ15	SCE	(949)	99	0.4	4.80	\$1,013	(\$413)	(\$10)	-0.4	0.0	(\$1,426)	(\$1,023)
CZ16	PG&E	(2,872)	274	0.9	5.10	\$799	(\$6,367)	(\$4,021)	-8.0	-5.0	(\$7,166)	(\$4,820)
CZ16-2	LA	(2,872)	274	0.9	5.10	\$799	\$3,889	(\$4,021)	4.9	-5.0	\$3,090	(\$4,820)

Table 14. Cost-Effectiveness for ADU: All-Electric Energy Efficiency Without PV, 2022 TDV

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Total EDR Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
CZ01	PG&E	(2,629)	242	0.7	>0	\$1,698	(\$7,361)	\$1,769	-4.3	1.0	(\$9,059)	\$71
CZ02	PG&E	(2,279)	180	0.5	>0	\$135	(\$6,500)	\$1,060	-48.2	7.9	(\$6,635)	\$925
CZ03	PG&E	(1,958)	153	0.4	>0	(\$246)	(\$6,269)	\$764	0.0	>1	(\$6,023)	\$1,009
CZ04	PG&E	(1,852)	142	0.4	>0	(\$246)	(\$6,124)	\$57	0.0	>1	(\$5,879)	\$303
CZ04-2	CPAU	(1,852)	142	0.4	>0	(\$246)	(\$3,703)	\$57	0.1	>1	(\$3,457)	\$303
CZ05	PG&E	(1,984)	145	0.4	>0	(\$246)	(\$6,680)	(\$167)	0.0	1.5	(\$6,434)	\$78
CZ05-2	SCG	(1,984)	145	0.4	>0	(\$246)	(\$6,340)	(\$167)	0.0	1.5	(\$6,095)	\$78
CZ06	SCE	(1,585)	121	0.4	>0	(\$585)	(\$2,706)	\$615	0.2	>1	(\$2,121)	\$1,200
CZ06-2	LA	(1,585)	121	0.4	>0	(\$585)	\$1,466	\$615	>1	>1	\$2,051	\$1,200
CZ07	SDG&E	(1,520)	117	0.4	>0	(\$585)	(\$5,017)	\$528	0.1	>1	(\$4,432)	\$1,113
CZ08	SCE	(1,499)	114	0.3	>0	(\$585)	(\$2,627)	\$493	0.2	>1	(\$2,042)	\$1,078
CZ08-2	LA	(1,499)	114	0.3	>0	(\$585)	\$1,456	\$493	>1	>1	\$2,041	\$1,078
CZ09	SCE	(1,545)	119	0.3	>0	(\$512)	(\$2,351)	\$421	0.2	>1	(\$1,839)	\$933
CZ09-2	LA	(1,545)	119	0.3	>0	(\$512)	\$1,511	\$421	>1	>1	\$2,023	\$933
CZ10	SDG&E	(1,641)	125	0.4	>0	(\$173)	(\$5,824)	\$674	0.0	>1	(\$5,651)	\$847
CZ10-2	SCE	(1,641)	125	0.4	>0	(\$173)	(\$2,814)	\$674	0.1	>1	(\$2,641)	\$847
CZ11	PG&E	(2,087)	163	0.4	>0	\$1,390	(\$5,602)	\$1,063	-4.0	0.8	(\$6,993)	(\$328)
CZ12	PG&E	(2,094)	163	0.4	>0	\$1,390	(\$5,856)	\$634	-4.2	0.5	(\$7,246)	(\$757)
CZ12-2	SMUD	(2,094)	163	0.4	>0	\$1,390	\$500	\$634	0.4	0.5	(\$890)	(\$757)
CZ13	PG&E	(1,786)	143	0.4	>0	\$1,577	(\$4,659)	\$995	-3.0	0.6	(\$6,236)	(\$582)
CZ14	SDG&E	(1,887)	158	0.5	>0	\$927	(\$5,466)	\$1,460	-5.9	1.6	(\$6,393)	\$534
CZ14-2	SCE	(1,887)	158	0.5	>0	\$927	(\$3,266)	\$1,460	-3.5	1.6	(\$4,193)	\$534
CZ15	SCE	(917)	97	0.3	>0	\$1,013	(\$361)	\$2,200	-0.4	2.2	(\$1,374)	\$1,187
CZ16	PG&E	(2,642)	249	0.8	>0	\$799	(\$6,054)	\$354	-7.6	0.4	(\$6,853)	(\$445)
CZ16-2	LA	(2,642)	249	0.8	>0	\$799	\$3,419	\$354	4.3	0.4	\$2,620	(\$445)

7.4 Utility Rate Schedules

The Reach Codes Team used the CA IOU and POU rate tariffs detailed below to determine the On-Bill savings for each package.

7.4.1 Pacific Gas & Electric

ELECTRIC SCHEDULE E-TOU-C				Sheet 2	
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)					
RATES: (Cont'd.)		E-TOU-C TOTAL RATES			
Total Energy Rates (\$ per kWh)		PEAK		OFF-PEAK	
<i>Summer</i>					
Total Usage		\$0.41333	(I)	\$0.34989	(I)
Baseline Credit (Applied to Baseline Usage Only)		(\$0.08633)	(R)	(\$0.08633)	(R)
<i>Winter</i>					
Total Usage		\$0.31624	(I)	\$0.29891	(I)
Baseline Credit (Applied to Baseline Usage Only)		(\$0.08633)	(R)	(\$0.08633)	(R)
Delivery Minimum Bill Amount (\$ per meter per day)		\$0.32854			
California Climate Credit (per household, per semi-annual payment occurring in the April and October bill cycles) [†]		(\$35.73)			

ELECTRIC SCHEDULE E-TOU-C
 RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

Sheet 4

- SPECIAL CONDITIONS:** 1. **BASELINE (TIER 1) QUANTITIES:** The following quantities of electricity are to be used to define usage eligible for the baseline credit (also see Rule 19 for additional allowances for medical needs):

BASELINE QUANTITIES (kWh PER DAY)				
Baseline Territory*	Code B - Basic Quantities		Code H - All-Electric Quantities	
	Summer	Winter	Summer	Winter
	Tier I	Tier I	Tier I	Tier I
P	14.2	12.0	16.0	27.4
Q	10.3	12.0	8.9	27.4
R	18.6	11.3	20.9	28.1
S	15.8	11.1	18.7	24.9
T	6.8	8.2	7.5	13.6
V	7.5	8.8	10.9	16.9
W	20.2	10.7	23.6	20.0
X	10.3	10.5	8.9	15.4
Y	11.0	12.1	12.6	25.3
Z	6.2	8.1	7.0	16.5

2. **TIME PERIODS FOR E-TOU-C:** Times of the year and times of the day are defined as follows:

Summer (service from June 1 through September 30):

Peak: 4:00 p.m. to 9:00 p.m. All days

Off-Peak: All other times

Winter (service from October 1 through May 31):

Peak: 4:00 p.m. to 9:00 p.m. All days

Off-Peak: All other times



**Pacific Gas and
Electric Company**

U 39

San Francisco, California

Cancelling Revised
Revised

Cal. P.U.C. Sheet No. 35808-G
Cal. P.U.C. Sheet No. 35753-G

**GAS SCHEDULE G-1
RESIDENTIAL SERVICE**

Sheet 1

APPLICABILITY: This rate schedule¹ applies to natural gas service to Core End-Use Customers on PG&E's Transmission and/or Distribution Systems. To qualify, service must be to individually-metered single family premises for residential use, including those in a multifamily complex, and to separately-metered common areas in a multifamily complex where Schedules GM, GS, or GT are not applicable. Common area accounts that are separately metered by PG&E have an option of switching to a core commercial rate schedule. Common area accounts are those accounts that provide gas service to common use areas as defined in Rule 1.

Per D.15-10-032 and D.18-03-017, transportation rates include GHG Compliance Cost for non-covered entities. Customers who are directly billed by the Air Resources Board (ARB), i.e., covered entities, are exempt from paying AB 32 GHG Compliance Costs through PG&E's rates.² A "Cap-and-Trade Cost Exemption" credit for these costs will be shown as a line item on exempt customers' bills.^{3, 4}

TERRITORY: Schedule G-1 applies everywhere within PG&E's natural gas Service Territory.

RATES: Customers on this schedule pay a Procurement Charge and a Transportation Charge, per meter, as shown below. The Transportation Charge will be no less than the Minimum Transportation Charge, as follows:

Minimum Transportation Charge:⁵

	<u>Per Day</u>	
	\$0.13151	
	<u>Per Therm</u>	
	<u>Baseline</u>	<u>Excess</u>
<u>Procurement:</u>	\$0.23187 (R)	\$0.23187 (R)
<u>Transportation Charge:</u>	\$1.13126	\$1.64861
Total:	\$1.36313 (R)	\$1.88048 (R)
California Natural Gas Climate Credit (per Household, annual payment occurring in the April bill cycle)	(\$27.18)	

GAS SCHEDULE G-1
RESIDENTIAL SERVICE

Sheet 2

**BASELINE
QUANTITIES:**

The delivered quantities of gas shown below are billed at the rates for baseline use.


<u>Baseline Territories</u>	BASELINE QUANTITIES (Therms Per Day Per Dwelling Unit)					
	Summer (April-October)		Winter Off-Peak (Nov, Feb, Mar)		Winter On-Peak (Dec, Jan)	
	Effective Apr. 1, 2020		Effective Nov. 1, 2019		Effective Dec. 1, 2019	

P	0.39	(R)	1.88	(R)	2.16	(I)
Q	0.59	(R)	1.55	(R)	2.16	(I)
R	0.36	(R)	1.28	(R)	1.97	(I)
S	0.39	(R)	1.38	(R)	2.06	(I)
T	0.59	(R)	1.38	(R)	1.81	(I)
V	0.62	(R)	1.51	(R)	1.84	(I)
W	0.39	(R)	1.18	(R)	1.84	(I)
X	0.49	(R)	1.55	(R)	2.16	(I)
Y	0.69	(R)	2.15	(R)	2.65	(I)

**SEASONAL
CHANGES:**

The summer season is April-October, the winter off-peak season is November, February and March, and the winter on-peak season is December and January. Baseline quantities for bills that include the April 1, November 1 and December 1 seasonal changeover dates will be calculated by multiplying the applicable daily baseline quantity for each season by the number of days in each season for the billing period.

7.4.2 Southern California Edison



Southern California Edison
Rosemead, California (U 338-E)

Revised Cal. PUC Sheet No. 68632-E
Cancelling Revised Cal. PUC Sheet No. 68540-E

Schedule TOU-D Sheet 2
TIME-OF-USE
DOMESTIC
(Continued)

RATES

Customers receiving service under this Schedule will be charged the applicable rates under Option 4-9 PM, Option 4-9 PM-CPP, Option 5-8 PM, Option 5-8 PM-CPP, Option PRIME, Option PRIME-CPP Option A, Option A-CPP, Option B, or Option B-CPP, as listed below. CPP Event Charges will apply to all energy usage during CPP Event Energy Charge periods and CPP Non-Event Energy Credits will apply as a reduction on CPP Non-Event Energy Credit Periods during Summer Season weekdays, 4:00 p.m. to 9:00 p.m., as described in Special Conditions 1 and 3, below:

	Delivery Service		
	Total ¹	UG ^{***}	DWRBC ²
Option 4-9 PM / Option 4-9 PM-CPP			
Energy Charge - \$/kWh			
Summer Season - On-Peak	0.21574 (I)	0.17570 (I)	(0.00007)
Mid-Peak	0.21574 (I)	0.10434 (R)	(0.00007)
Off-Peak	0.17099 (I)	0.07584 (R)	(0.00007)
Winter Season - Mid-Peak	0.21574 (I)	0.12676 (R)	(0.00007)
Off-Peak	0.17099 (I)	0.08874 (R)	(0.00007)
Super-Off-Peak	0.16567 (I)	0.07025 (R)	(0.00007)
Baseline Credit ^{****} - \$/kWh	(0.07456) (R)	0.00000	
Basic Charge - \$/day			
Single-Family Residence	0.031		
Multi-Family Residence	0.024		
Minimum Charge ^{**} - \$/day			
Single Family Residence	0.346		
Multi-Family Residence	0.346		
Minimum Charge (Medical Baseline) ^{**} - \$/day			
Single Family Residence	0.173		
Multi-Family Residence	0.173		
California Climate Credit ⁴	(37.00) (I)		
California Alternate Rates for			
Energy Discount - %	100.00 [*]		
Family Electric Rate Assistance Discount - %	100.00		
Option 4-9 PM-CPP			
CPP Event Energy Charge - \$/kWh		0.80000	
Summer CPP Non-Event Credit			
On-Peak Energy Credit - \$/kWh		(0.15170)	
Maximum Available Credit - \$/kWh ^{*****}			
Summer Season		(0.58504) (R)	

^{*} Represents 100% of the discount percentage as shown in the applicable Special Condition of this Schedule.

^{**} The Minimum Charge is applicable when the Delivery Service Energy Charge, plus the applicable Basic Charge is less than the Minimum Charge.

^{***} The ongoing Competition Transition Charge CTC of \$0.00089 per kWh is recovered in the UG component of Generation.

^{****} The Baseline Credit applies up to 100% of the Baseline Allocation, regardless of Time of Use. The Baseline Allocation is set forth in Preliminary Statement, Part H.

^{*****} The Maximum Available Credit is the capped credit amount for CPP Customers dual participating in other demand response programs.

1 Total = Total Delivery Service rates are applicable to Bundled Service, Direct Access (DA) and Community Choice Aggregation Service (CCA Service) Customers, except DA and CCA Service Customers are not subject to the DWRBC rate component of this Schedule but instead pay the DWRBC as provided by Schedule DA-CRS or Schedule CCA-CRS.

2 Generation = The Gen rates are applicable only to Bundled Service Customers.

3 DWRBC = Department of Water Resources (DWR) Energy Credit - For more information on the DWR Energy Credit, see the Billing Calculation Special Condition of this Schedule.

4 Applied on an equal basis, per household, semi-annually. See the Special Conditions of this Schedule for more information.

(Continued)

(To be inserted by utility)

Advice 4172-E-A

Decision _____

2012

Issued by

Carla Peterman

Senior Vice President

(To be inserted by Cal. PUC)

Date Submitted Mar 13, 2020

Effective Apr 13, 2020

Resolution _____

Schedule TOU-D
 TIME-OF-USE
 DOMESTIC
 (Continued)

Sheet 12

SPECIAL CONDITIONS

- Applicable rate time periods are defined as follows:

Option 4-9 PM, Option 4-9 PM-CPP, Option PRIME, Option PRIME-CPP :

TOU Period	Weekdays		Weekends and Holidays	
	Summer	Winter	Summer	Winter
On-Peak	4 p.m. - 9 p.m.	N/A	N/A	N/A
Mid-Peak	N/A	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.
Off-Peak	All other hours	9 p.m. - 8 a.m.	All other hours	9 p.m. - 8 a.m.
Super-Off-Peak	N/A	8 a.m. - 4 p.m.	N/A	8 a.m. - 4 p.m.
CPP Event Period	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	N/A	N/A

7.4.3 Southern California Gas

SOUTHERN CALIFORNIA GAS COMPANY LOS ANGELES, CALIFORNIA CANCELING		Revised Revised	CAL. P.U.C. SHEET NO. 57658-G CAL. P.U.C. SHEET NO. 57573-G
Schedule No. GM MULTI-FAMILY SERVICE (Includes GM-E, GM-C, GM-EC, GM-CC, GT-ME, GT-MC and all GMB Rates) (Continued)			Sheet 2
APPLICABILITY (Continued)			
Multi-family Accommodations built prior to December 15, 1981 and currently served under this schedule may also be eligible for service under Schedule No. GS. If an eligible Multi-family Accommodation served under this schedule converts to an applicable submetered tariff, the tenant rental charges shall be revised for the duration of the lease to reflect removal of the energy related charges.			
Eligibility for service hereunder is subject to verification by the Utility.			
TERRITORY			
Applicable throughout the service territory.			
RATES			
Customer Charge, per meter, per day:	<u>GM/GT-M</u> 16.438¢	<u>GMB/GT-MB</u> \$16.357	
For "Space Heating Only" customers, a daily Customer Charge applies during the winter period from November 1 through April 30 ¹⁷ : 33.149¢			
GM			
Baseline Rate, per therm (baseline usage defined per Special Conditions 3 and 4):	<u>GM-E</u>	<u>GM-EC¹⁷</u>	<u>GT-ME</u>
Procurement Charge: ²⁰	27.580¢	25.654¢	N/A
Transmission Charge:	77.909¢	77.909¢	77.909¢
Total Baseline Charge (all usage):	105.489¢	103.563¢	77.909¢
Non-Baseline Rate, per therm (usage in excess of baseline usage):			
Procurement Charge: ²⁰	27.580¢	25.654¢	N/A
Transmission Charge:	114.709¢	114.709¢	114.709¢
Total Non Baseline Charge (all usage):	142.289¢	140.363¢	114.709¢
Non-Baseline Rate, per therm (usage in excess of baseline usage):	<u>GM-C</u>	<u>GM-CC¹⁷</u>	<u>GT-MC</u>
Procurement Charge: ²⁰	27.580¢	25.654¢	N/A
Transmission Charge:	114.709¢	114.709¢	114.709¢
Total Non Baseline Charge (all usage):	142.289¢	140.363¢	114.709¢
¹⁷ For the summer period beginning May 1 through October 31, with some exceptions, usage will be accumulated to at least 20 Ccf (100 cubic feet) before billing, or it will be included with the first bill of the heating season which may cover the entire duration since a last bill was generated for the current calendar year. (Footnotes continue next page.)			
(Continued)			
(TO BE INSERTED BY UTILITY) ADVICE LETTER NO. 5636 DECISION NO. 98-07-068 208	ISSUED BY Dan Skopec Vice President Regulatory Affairs	(TO BE INSERTED BY CAL. PUC) SUBMITTED <u>May 29, 2020</u> EFFECTIVE <u>Jun 1, 2020</u> RESOLUTION NO. _____	

3. Baseline Usage: The following usage is to be billed at the Baseline rate for Multi-family Accommodation units. Usage in excess of applicable Baseline allowances will be billed at the Non-Baseline rate.

<u>Per Residence</u>	<u>Daily Therm Allowance for Climate Zones*</u>		
	<u>1</u>	<u>2</u>	<u>3</u>
Summer (May 1-Oct.31)	0.473	0.473	0.473
Winter (Nov. 1-Apr.30)	1.691	1.823	2.950

* Climate Zones are described in the Preliminary Statement.

7.4.4 San Diego Gas & Electric

SCHEDULE TOU-DR1 **RESIDENTIAL TIME-OF-USE**

RATES

Total Rates:

Description – TOU DR1	UDC Total Rate	DWR-BC Rate	EECC Rate + DWR Credit	Total Rate
Summer:				
On-Peak	0.20577	0.00580	0.29042	0.50199
Off-Peak	0.20577	0.00580	0.09305	0.30462
Super Off-Peak	0.20577	0.00580	0.04743	0.25900
Winter:				
On-Peak	0.27206	0.00580	0.07844	0.35630
Off-Peak	0.27206	0.00580	0.06961	0.34747
Super Off-Peak	0.27206	0.00580	0.05981	0.33767
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.07136)			(0.07136)
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.07136)			(0.07136)
Minimum Bill (\$/day)	0.338			0.338



San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 24762-G
Canceling Revised Cal. P.U.C. Sheet No. 24749-G

SCHEDULE GM

Sheet 2

MULTI-FAMILY NATURAL GAS SERVICE
(Includes Rates for GM, GM-C and GTC/GTCA)

RATES

	GM	GM-C	GTC/GTCA ¹
<u>Baseline Rate, per therm (baseline usage defined in Special Condition 4)</u>			
Procurement Charge ²	\$0.26263	\$0.26263	R N/A
Transmission Charge.....	\$1.39202	\$1.39202	\$1.40414
Total Baseline Charge.....	\$1.65465	\$1.65465	R \$1.40414
<u>Non-Baseline Rate (usage in excess of baseline usage)</u>			
Procurement Charge ²	\$0.26263	\$0.26263	R N/A
Transmission Charge.....	\$1.62888	\$1.62888	\$1.64100
Total Non-Baseline Charge.....	\$1.89151	\$1.89151	R \$1.64100
<u>Minimum Bill, per day³</u>			
Non-CARE customers.....	\$0.13151	\$0.13151	\$0.13151
CARE customers.....	\$0.10521	\$0.10521	\$0.10521

Franchise Fee Differential:

A Franchise Fee Differential of 1.03% will be applied to the monthly billings calculated under this schedule for all customers within the corporate limits of the City of San Diego. Such Franchise Fee Differential shall be so indicated and added as a separate item to bills rendered to such customers.

Additional Charges

Rates may be adjusted to reflect any applicable taxes, franchise fees or other fees, regulatory surcharges, and interstate or intrastate pipeline charges that may occur.

SPECIAL CONDITIONS


- Definitions.** The definitions of principal terms used in this schedule are found either herein or in Rule 1, Definitions.
- Number of Therms.** The number of therms to be billed shall be determined in accordance with Rule 2. The daily therm allowance in the Baseline Usage, shown in Special Condition 4, shall be multiplied by the number of qualified residential units. It is the responsibility of the customer to advise the Utility within 15 days following any change in the submetering arrangements or the number of dwelling units or Mobilehome Park spaces provided gas service. The number of qualifying units is subject to verification by the Utility.
- Exclusions.** Gas service for non-domestic enterprises such as rooming houses, boarding houses, dormitories, rest homes, military barracks, transient trailer parks, stores, restaurants, service stations, and other similar establishments will be separately metered and billed under the applicable schedules.

¹ The rates for core transportation-only customers, with the exception of customers taking service under Schedule GT-NGV, include any FERC Settlement Proceeds Memorandum Account (FSPMA) credit adjustments.
² This charge is applicable to Utility Procurement Customers and includes the GPC and GPC-A Procurement Charges shown in Schedule GPC which are subject to change monthly as set forth in Special Condition 7.
³ Effective starting May 1, 2020, the minimum bill is calculated as the minimum bill charge of \$0.13151 per day times the number of days in the billing cycle (approximately \$4 per month) with a 20% discount applied for CARE customer resulting in a minimum bill charge of \$0.10521 per day (approximately \$3.20 per month).

(Continued)

206
 Advice Ltr. No. 2889-G
 Decision No. _____
 Issued by
Dan Skopec
 Vice President
 Regulatory Affairs
 Submitted Aug 7, 2020
 Effective Aug 10, 2020
 Resolution No. _____

7.4.5 City of Palo Alto Utilities

RESIDENTIAL ELECTRIC SERVICE				
UTILITY RATE SCHEDULE E-1				
A. APPLICABILITY:				
This Rate Schedule applies to separately metered single-family residential dwellings receiving Electric Service from the City of Palo Alto Utilities.				
B. TERRITORY:				
This rate schedule applies everywhere the City of Palo Alto provides Electric Service.				
C. UNBUNDLED RATES:				
<u>Per kilowatt-hour (kWh)</u>	<u>Commodity</u>	<u>Distribution</u>	<u>Public Benefits</u>	<u>Total</u>
Tier 1 usage	\$0.08339	\$0.04971	\$0.00447	\$0.13757
Tier 2 usage Any usage over Tier 1	0.11569	0.07351	0.00447	0.19367
<u>Minimum Bill (\$/day)</u>				0.3283
D. SPECIAL NOTES:				
1. Calculation of Cost Components				
The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or taxes. On a Customer's bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.				
2. Calculation of Usage Tiers				
Tier 1 Electricity usage shall be calculated and billed based upon a level of 11 kWh per day, prorated by Meter reading days of Service. As an example, for a 30-day bill, the Tier 1 level would be 330 kWh. For further discussion of bill calculation and proration, refer to Rule and Regulation 11.				
{End}				
CITY OF PALO ALTO UTILITIES				
Issued by the City Council				
Supersedes Sheet No E-1-1 dated 7-1-2018		 CITY OF PALO ALTO UTILITIES		Sheet No E-1-1 Effective 7-1-2019

RESIDENTIAL GAS SERVICE

UTILITY RATE SCHEDULE G-1

A. APPLICABILITY:

This schedule applies to the following Customers receiving Gas Service from City of Palo Alto Utilities:

1. Separately-metered single-family residential Customers.
2. Separately-metered multi-family residential Customers in multi-family residential facilities.

B. TERRITORY:

This schedule applies anywhere the City of Palo Alto provides Gas Service.

C. UNBUNDLED RATES:

Per Service

Monthly Service Charge:\$10.37

Tier 1 Rates:

Per Therm

Supply Charges:

- | | |
|--|---------------|
| 1. Commodity (Monthly Market Based)..... | \$0.10-\$2.00 |
| 2. Cap and Trade Compliance Charge | \$0.00-\$0.25 |
| 3. Transportation Charge | \$0.00-\$0.15 |
| 4. Carbon Offset Charge | \$0.00-\$0.10 |

Distribution Charge:..... \$0.5038

Tier 2 Rates: (All usage over 100% of Tier 1)

Supply Charges:

- | | |
|--|---------------|
| 1. Commodity (Monthly Market Based)..... | \$0.10-2.00 |
| 2. Cap and Trade Compliance Charge | \$0.00-\$0.25 |
| 3. Transportation Charge | \$0.00-\$0.15 |
| 4. Carbon Offset Charge | \$0.00-\$0.10 |

Distribution Charge:..... \$1.2882

D. SPECIAL NOTES:

1. Calculation of Cost Components

CITY OF PALO ALTO UTILITIES

Issued by the City Council

Supersedes Sheet No G-1-1
 dated 7-1-2019



CITY OF
PALO ALTO
 UTILITIES

Sheet No G-1-1
 Effective 7-1-2020

The 'Commodity and Volumetric Rates' are selected for the latest available month of December 2020.³

7.4.6 Sacramento Municipal Utilities District (Electric Only)

**Residential Time-of-Day Service
Rate Schedule R-TOD**

Applicability

This Rate Schedule R-TOD applies to single- and three-phase service for the following types of residential premises:

1. Individual or dual metered residences with digital communicating meter installed, including single-family homes, duplexes, apartments, and condominiums; and
2. General farm service where the meter also serves the residence or additional meters on a farm where the electricity consumed is solely for domestic purposes.

Master-metered service to a qualifying multifamily accommodation or mobile home parks are not eligible for Time-of-Day rates under rate schedule R-TOD.

For the purposes of this schedule a "month" is considered to be a single billing period of 27 to 34 days.

A. Time-of-Day (5-8 p.m.) Rate (rate category RT02)

1. The TOD (5-8 p.m.) Rate is the standard rate for SMUD's residential customers. Eligible customers can elect the Fixed Rate under Rate Schedule R as an alternative rate.
2. Customers who have an eligible renewable electrical generation facility under Rate Schedule NEM1 that was approved for installation by SMUD after December 31, 2017, must be on the TOD (5-8 p.m.) Rate.
3. Customers who have an eligible renewable electrical generation facility under Rate Schedule NEM2 must be on the TOD (5-8 p.m.) Rate.
4. This rate has five kilowatt-hour (kWh) prices, depending on the time-of-day and season as shown below. Holidays are detailed in Section V. Conditions of Service.

Summer (Jun 1 - Sept 30)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Mid-Peak	Weekdays between noon and midnight except during the Peak hours.
	Off-Peak	All other hours, including weekends and holidays ¹ .
Non-Summer (Oct 1 - May 31)	Peak	Weekdays between 5:00 p.m. and 8:00 p.m.
	Off-Peak	All other hours, including weekends and holidays ¹ .

¹ See Section V. Conditions of Service

³ <https://www.cityofpaloalto.org/civicax/filebank/documents/30399>

II. Firm Service Rates		
A. Time-of-Day (5-8 p.m.) Rate		Rate Category RT02
Non-Summer Prices* – January 1 through May 31		
System Infrastructure Fixed Charge per month		\$21.05
Electricity Usage Charge		
Peak \$/kWh		\$0.1388
Off-Peak \$/kWh		\$0.1006
Summer Prices – June 1 through September 30		
System Infrastructure Fixed Charge per month		\$21.05
Electricity Usage Charge		
Peak \$/kWh		\$0.2941
Mid-Peak \$/kWh		\$0.1671
Off-Peak \$/kWh		\$0.1209
Non-Summer Prices* – October 1 through December 31		
System Infrastructure Fixed Charge per month		\$21.70
Electricity Usage Charge		
Peak \$/kWh		\$0.1430
Off-Peak \$/kWh		\$0.1035
* Non-Summer Season includes Fall (Oct 1 – Nov 30), Winter (Dec 1 – Mar 31) and Spring (Apr 1 – May 31) periods.		

7.4.7 Los Angeles Department of Water and Power (Electric Only)

Residential Service Rate Summary Time of Use R-1(B)

Eligibility

Applicable to service to single-family, single-family with guest house, individually metered accommodations, as well as to separately metered common areas of condominiums and cooperatives devoted primarily to residential uses and whose energy and capacity requirements do not exceed those for Small General Service Schedule A-1. Battery chargers, motors and appliances, which conform in capacities to applicable electrical codes, and meet requirements of the Department's Rules, may be served under this schedule. Not applicable to single-family residential customers with an on-site transformer dedicated solely to that individual customer.

The Department requires mandatory service under Rate B for customers whose annual monthly average consumption reach or exceed 3000 kWh during the preceding 12 month period. If a customer's annual monthly average consumption does not reach or exceed 3,000 kWh in a year's period, a customer may choose to receive service either under Rate A or B. However, when a customer served under Rate B requests a change to Rate A, that customer may not revert to Rate B before 12 months have elapsed.

Monthly rates beginning July 1, 2019	High Season June - Sep.			Low Season Oct. - May		
	Capped	Incremental	Total	Capped	Incremental	Total
Residential R-1(B)						
Rate B - Time of Use						
Service Charge \$ per month	\$8.00	\$4.00	\$12.00	\$8.00	\$4.00	\$12.00
Energy Charge - \$ per kWh						
High Peak Period	\$0.16061	-\$0.00203	\$0.15858	\$0.06515	\$0.03503	\$0.10018
Low Peak Period	\$0.08144	\$0.01874	\$0.10018	\$0.06515	\$0.03503	\$0.10018
Base Period	\$0.04655	\$0.02619	\$0.07274	\$0.05045	\$0.02619	\$0.07664
Electric Vehicle Discount \$ (1)	-\$0.02500	\$0.00000	-\$0.02500	-\$0.02500	\$0.00000	-\$0.02500
Rates below are in addition to above Charges						
Elements Only in Capped Ordinance						
ECA - per kWh	\$0.05690	\$0.00000	\$0.05690	\$0.05690	\$0.00000	\$0.05690
ESA - per kWh	\$0.00147	\$0.00000	\$0.00147	\$0.00147	\$0.00000	\$0.00147
RCA - per kWh	\$0.00300	\$0.00000	\$0.00300	\$0.00300	\$0.00000	\$0.00300
Elements Only in Incremental Ordinance						
VEA - per kWh*	Refer to www.LADWP.com >About Us >Power Rates >Variable Energy Factors and Reliability Cost Adjustment Factor for current Quarterly Electric Adjustment Factors					
CRPSEA - per kWh*						
VRPSEA - per kWh*						
IRCA - per kWh						

ECA- Energy Cost Adjustment

ESA - Electric Subsidy Adjustment

RCA - Reliability Cost Adjustment

VEA - Variable Energy Adjustment

CRPSEA - Capped Renewable Portfolio Standard Energy Adjustment

VRPSEA - Variable Renewable Portfolio Standard Energy Adjustment

IRCA - Incremental Reliability Cost Adjustment

High Peak Period : 1:00 p.m. – 5:00 p.m., Monday through Friday

Low Peak Period: 10:00 a.m. – 1:00 p.m., Monday through Friday, and 5:00 p.m. – 8:00 p.m., Monday through Friday.

Base Period: 8:00 p.m. – 10:00 a.m., Monday through Friday, all day Saturday and Sunday.

(1) Conditions for this element set in the capped ordinance.

*This value will be computed quarterly in accordance with the incremental electric rate ordinance.

7.4.8 Fuel Escalation Rates

Escalation of natural gas rates between 2020 and 2022 is based on the currently filed General Rate Cases for PG&E, SoCalGas, and SDG&E. From 2023 through 2025, gas rates are assumed to escalate at 4 percent per year above inflation, which reflects historical rate increases between 2013 and 2018. Escalation of electricity rates from 2020 through 2025 is assumed to be 2 percent per year above inflation, based on electric utility estimates. After 2025, escalation rates for both natural gas and electric rates are assumed to drop to a more conservative 1 percent escalation per year above inflation for long-term rate trajectories beginning in 2026 through 2050.

Table 15 below demonstrate the escalation rates used for residential (detached ADU) buildings.

Table 15. Real Utility Rate Escalation Rate Assumptions

	Statewide Electric Residential Average Rate (%/year, real)	Natural Gas Residential Core Rate (%/yr escalation, real)		
		<u>PG&E</u>	<u>SoCalGas</u>	<u>SDG&E</u>
2020	2.0%	1.48%	6.37%	5.00%
2021	2.0%	5.69%	4.12%	3.14%
2022	2.0%	1.11%	4.12%	2.94%
2023	2.0%	4.0%	4.0%	4.0%
2024	2.0%	4.0%	4.0%	4.0%
2025	2.0%	4.0%	4.0%	4.0%
2026	1.0%	1.0%	1.0%	1.0%
2027	1.0%	1.0%	1.0%	1.0%
2028	1.0%	1.0%	1.0%	1.0%
2029	1.0%	1.0%	1.0%	1.0%
2030	1.0%	1.0%	1.0%	1.0%
2031	1.0%	1.0%	1.0%	1.0%
2032	1.0%	1.0%	1.0%	1.0%
2033	1.0%	1.0%	1.0%	1.0%
2034	1.0%	1.0%	1.0%	1.0%
2035	1.0%	1.0%	1.0%	1.0%
2036	1.0%	1.0%	1.0%	1.0%
2037	1.0%	1.0%	1.0%	1.0%
2038	1.0%	1.0%	1.0%	1.0%
2039	1.0%	1.0%	1.0%	1.0%
2040	1.0%	1.0%	1.0%	1.0%
2041	1.0%	1.0%	1.0%	1.0%
2042	1.0%	1.0%	1.0%	1.0%
2043	1.0%	1.0%	1.0%	1.0%
2044	1.0%	1.0%	1.0%	1.0%
2045	1.0%	1.0%	1.0%	1.0%
2046	1.0%	1.0%	1.0%	1.0%
2047	1.0%	1.0%	1.0%	1.0%
2048	1.0%	1.0%	1.0%	1.0%
2049	1.0%	1.0%	1.0%	1.0%

Source: Energy & Environmental Economics, 2019, Reach Code Team

Get In Touch

The adoption of reach codes can differentiate jurisdictions as efficiency leaders and help accelerate the adoption of new equipment, technologies, code compliance, and energy savings strategies.

As part of the Statewide Codes & Standards Program, the Reach Codes Subprogram is a resource available to any local jurisdiction located throughout the state of California.

Our experts develop robust toolkits as well as provide specific technical assistance to local jurisdictions (cities and counties) considering adopting energy reach codes. These include cost-effectiveness research and analysis, model ordinance language and other code development and implementation tools, and specific technical assistance throughout the code adoption process.

If you are interested in finding out more about local energy reach codes, the Reach Codes Team stands ready to assist jurisdictions at any stage of a reach code project.



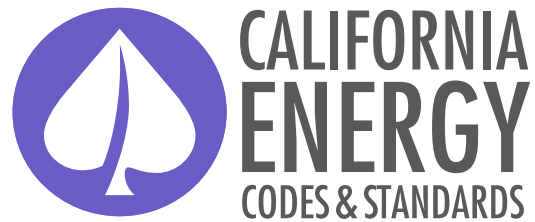
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A STATEWIDE UTILITY PROGRAM

Title 24, Parts 6 and 11
Local Energy Efficiency Ordinances

2019 Nonresidential New Construction Reach Code Cost Effectiveness Study

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Last Modified: July 25, 2019



LEGAL NOTICE

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1 Introduction

The California Building Energy Efficiency Standards Title 24, Part 6 (Title 24) (CEC, 2019) is maintained and updated every three years by two state agencies: the California Energy Commission (the Energy Commission) and the Building Standards Commission (BSC). In addition to enforcing the code, local jurisdictions have the authority to adopt local energy efficiency ordinances—or reach codes—that exceed the minimum standards defined by Title 24 (as established by Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards). Local jurisdictions must demonstrate that the requirements of the proposed ordinance are cost-effective and do not result in buildings consuming more energy than is permitted by Title 24. In addition, the jurisdiction must obtain approval from the Energy Commission and file the ordinance with the BSC for the ordinance to be legally enforceable. This report was developed in coordination with the California Statewide Investor Owned Utilities (IOUs) Codes and Standards Program, key consultants, and engaged cities—collectively known as the Reach Code Team.

This report documents cost-effective combinations of measures that exceed the minimum state requirements for design in newly-constructed nonresidential buildings. Buildings specifically examined include medium office, medium retail, and small hotels. Measures include energy efficiency, solar photovoltaics (PV), and battery storage. In addition, the report includes a comparison between a baseline mixed-fuel design and all-electric design for each occupancy type.

The Reach Code team analyzed the following seven packages as compared to 2019 code compliant mixed-fuel design baseline:

- ◆ **Package 1A – Mixed-Fuel + Energy Efficiency (EE):** Mixed-fuel design with energy efficiency measures and federal minimum appliance efficiencies.
- ◆ **Package 1B – Mixed-Fuel + EE + PV + Battery (B):** Same as Package 1A, plus solar PV and batteries.
- ◆ **Package 1C – Mixed-fuel + High Efficiency (HE):** Baseline code-minimum building with high efficiency appliances, triggering federal preemption. The intent of this package is to assess the standalone contribution that high efficiency appliances would make toward achieving high performance thresholds.
- ◆ **Package 2 – All-Electric Federal Code-Minimum Reference:** All-electric design with federal code minimum appliance efficiency. No solar PV or battery.
- ◆ **Package 3A – All-Electric + EE:** Package 2 all-electric design with energy efficiency measures and federal minimum appliance efficiencies.
- ◆ **Package 3B – All-Electric + EE + PV + B:** Same as Package 3A, plus solar PV and batteries.
- ◆ **Package 3C – All-Electric + HE:** All-electric design with high efficiency appliances, triggering federal preemption.

Figure 1 summarizes the baseline and measure packages. Please refer to *Section 3* for more details on the measure descriptions.



Figure 1. Measure Category and Package Overview

Measure Category	Report Section	Mixed Fuel				All-Electric			
		Baseline	1A	1B	1C	2	3A	3B	3C
		Fed Code Minimum Efficiency	EE	EE+ PV + B	HE	Fed Code Minimum Efficiency	EE	EE+ PV + B	HE
Energy Efficiency Measures	3.1		X	X			X	X	
Solar PV + Battery	3.2			X				X	
All-Electric Measures	3.3					X	X	X	X
Preemptive Appliance Measures	3.4				X				X

The team separately developed cost effectiveness results for PV-only and PV+Battery packages, excluding any efficiency measures. For these packages, the PV is modeled as a “minimal” size of 3 kW and a larger size based on the available roof area and electric load of the building. PV sizes are combined with two sizes of battery storage for both mixed fuel and all electric buildings to form eight different package combinations as outlined below:

- ◆ **Mixed-Fuel + 3 kW PV Only**
- ◆ **Mixed-Fuel + 3 kW PV + 5 kWh Battery**
- ◆ **Mixed-Fuel + PV Only:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller
- ◆ **Mixed-Fuel + PV + 50 kWh Battery:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller, along with 50 kWh battery
- ◆ **All-Electric + 3 kW PV Only**
- ◆ **All-Electric + 3 kW PV + 5 kWh Battery**
- ◆ **All-Electric + PV Only:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller
- ◆ **All-Electric + PV + 50 kWh Battery:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller, along with 50 kWh battery.

Each of the eight packages are evaluated against a baseline model designed as per 2019 Title 24 Part 6 requirements. The Standards baseline for all occupancies in this report is a mixed-fuel design.

The Department of Energy (DOE) sets minimum efficiency standards for equipment and appliances that are federally regulated under the National Appliance Energy Conservation Act (NAECA), including heating, cooling, and water heating equipment.¹ Since state and local governments are prohibited from adopting

¹ https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=8de751f141aaa1c1c9833b36156faf67&mc=true&n=pt10.3.431&r=PART&ty=HTML#se10.3.431_197



higher minimum efficiencies than the federal standards require, the focus of this study is to identify and evaluate cost-effective packages that do not include high efficiency equipment. However, because high efficiency appliances are often the easiest and most affordable measures to increase energy performance, this study provides an analysis of high efficiency appliances for informational purposes. While federal preemption would limit a reach code, in practice, builders may install any package of compliant measures to achieve the performance requirements, including higher efficiency appliances that are federally regulated.

2 Methodology and Assumptions

With input from several stakeholders, the Reach Codes team selected three building types—medium office, medium retail, and small hotel—to represent a predominant segment of nonresidential new construction in the state.

This analysis used both on-bill and time dependent valuation of energy (TDV) based approaches to evaluate cost-effectiveness. Both methodologies require estimating and quantifying the energy savings associated with energy efficiency measures, as well as quantifying the costs associated with the measures. The main difference between the methodologies is the valuation of energy and thus the cost savings of reduced or avoided energy use. TDV was developed by the Energy Commission to reflect the time dependent value of energy including long-term projected costs of energy such as the cost of providing energy during peak periods of demand and other societal costs including projected costs for carbon emissions. With the TDV approach, electricity used (or saved) during peak periods has a much higher value than electricity used (or saved) during off-peak periods.²

The Reach Code Team performed energy simulations using EnergyPro 8.0 software for 2019 Title 24 code compliance analysis, which uses CBECC-Com 2019.1.0 for the calculation engine. The baseline prototype models in all climate zones have been designed to have compliance margins as close as possible to 0 to reflect a prescriptively-built building.³

2.1 Building Prototypes

The DOE provides building prototype models which, when modified to comply with 2019 Title 24 requirements, can be used to evaluate the cost effectiveness of efficiency measures. These prototypes have historically been used by the California Energy Commission to assess potential code enhancements. The Reach Code Team performed analysis on a medium office, a medium retail, and a small hotel prototype.

Water heating includes both service water heating (SWH) for office and retail buildings and domestic hot water for hotels. In this report, water heating or SWH is used to refer to both. The Standard Design HVAC and SWH systems are based on the system maps included in the 2019 Nonresidential Alternate

² Horii, B., E. Cutter, N. Kapur, J. Arent, and D. Conotyannis. 2014. "Time Dependent Valuation of Energy for Developing Building Energy Efficiency Standards." Available at: http://www.energy.ca.gov/title24/2016standards/prerulemaking/documents/2014-07-09_workshop/2017_TDV_Documents

³ EnergySoft and TRC were able to develop most baseline prototypes to achieve a compliance margin of less than +/-1 percent except for few models that were at +/- 6 percent. This indicates these prototypes are not exactly prescriptive according to compliance software calculations. To calculate incremental impacts, TRC conservatively compared the package results to that of the proposed design of baseline prototypes (not the standard design).

Calculation Method Reference Manual.⁴ The Standard Design is the baseline for all nonresidential projects and assumes a mixed-fuel design using natural gas as the space heating source in all cases. Baseline HVAC and SWH system characteristics are described below and in Figure 2:

- ◆ The baseline medium office HVAC design package includes two gas hot water boilers, three packaged rooftop units (one for each floor), and variable air volume (VAV) terminal boxes with hot water reheat coils. The SWH design includes one 8.75 kW electric resistance hot water heater with a 30-gallon storage tank.
- ◆ The baseline medium retail HVAC design includes five single zone packaged rooftop units (variable flow and constant flow depending on the zone) with gas furnaces for heating. The SWH design includes one 8.75 kW electric resistance hot water heater with a 30-gallon storage tank.
- ◆ The small hotel has two baseline equipment systems, one for the nonresidential spaces and one for the guest rooms.
 - ◆ The nonresidential HVAC design includes two gas hot water boilers, four packaged rooftop units and twelve VAV terminal boxes with hot water reheat coils. The SWH design include a small electric resistance water heater with 30-gallon storage tank.
 - ◆ The residential HVAC design includes one single zone air conditioner (AC) unit with gas furnace for each guest room and the water heating design includes one central gas water heater with a recirculation pump for all guest rooms.

Figure 2. Prototype Characteristics Summary

	Medium Office	Medium Retail	Small Hotel
Conditioned Floor Area	53,628	24,691	42,552
Number of Stories	3	1	4
Number of Guest Rooms	0	0	78
Window-to-Wall Area Ratio	0.33	0.07	0.11
Baseline HVAC System	Packaged DX VAV with gas furnaces + VAV terminal units with hot water reheat. Central gas hot water boilers	Single zone packaged DX units with gas furnaces	<u>Nonresidential</u> : Packaged DX VAV with hot water coil + VAV terminal units with hot water reheat. Central gas hot water boilers. <u>Residential</u> : Single zone DX AC unit with gas furnaces
Baseline Water Heating System	30-gallon electric resistance water heater	30-gallon electric resistance water heater	<u>Nonresidential</u> : 30-gallon electric resistance water heater <u>Residential</u> : Central gas water heater with recirculation loop

⁴ Nonresidential Alternative Calculation Method Reference Manual For the 2019 Building Energy Efficiency Standards. Available at: <https://www.energy.ca.gov/2019publications/CEC-400-2019-006/CEC-400-2019-006-CMF.pdf>

2.2 Cost Effectiveness

The Reach Code Team analyzed the cost effectiveness of the packages by applying them to building prototypes (as applicable) using the life cycle cost methodology, which is approved and used by the Energy Commission to establish cost effective building energy standards (Title 24, Part 6).⁵

Per Energy Commission's methodology, the Reach Code Team assessed the incremental costs of the energy efficiency measure packages and compared them to the energy cost savings over the measure life of 15 years. Incremental costs represent the equipment, installation, replacements, and maintenance costs of the proposed measure relative to the 2019 Title 24 Standards minimum requirements. The energy savings benefits are estimated using both TDV of energy and typical utility rates for each building type:

- ◆ **Time Dependent Valuation:** TDV is a normalized monetary format developed and used by the Energy Commission for comparing electricity and natural gas savings, and it considers the cost of electricity and natural gas consumed during different times of the day and year. Simulation outputs are translated to TDV savings benefits using 2019 TDV multipliers and 15-year discounted costs for the nonresidential measure packages.
- ◆ **Utility bill impacts (On-bill):** Utility energy costs are estimated by applying appropriate IOU rates to estimated annual electricity and natural gas consumption. The energy bill savings are calculated as the difference in utility costs between the baseline and proposed package over a 15-year duration accounting for discount rate and energy cost escalation.

In coordination with the IOU rate team, and rate experts at a few electric publicly owned utilities (POUs), the Reach Code Team used the current nonresidential utility rates publicly available at the time of analysis to analyze the cost effectiveness for each proposed package. The utility tariffs, summarized in Figure 3, were determined based on the annual load profile of each prototype, and the most prevalent rate in each territory. For some prototypes there are multiple options for rates because of the varying load profiles of mixed-fuel buildings versus all-electric buildings. Tariffs were integrated in EnergyPro software to be applied to the hourly electricity and gas outputs. The Reach Code Team did not attempt to compare or test a variety of tariffs to determine their impact on cost effectiveness.

The currently available and applicable time-of-use (TOU) nonresidential rates are applied to both the base and proposed cases with PV systems.⁶ Any annual electricity production in excess of annual electricity consumption is credited at the applicable wholesale rate based on the approved NEM tariffs for that utility. For a more detailed breakdown of the rates selected refer to *Appendix 6.4 Utility Rate Schedules*. Note that most utility time-of-use rates will be updated in the near future, which can affect cost effectiveness results. For example, Pacific Gas and Electric Company (PG&E) will introduce new rates for new service connections in late 2019, and existing accounts will be automatically rolled over to new rates in November 2020.

⁵ Architectural Energy Corporation (January 2011) Life-Cycle Cost Methodology. California Energy Commission. Available at: http://www.energy.ca.gov/title24/2013standards/prerulemaking/documents/general_cec_documents/2011-01-14_LCC_Methodology_2013.pdf

⁶ Under NEM rulings by the CPUC (D-16-01-144, 1/28/16), all new PV customers shall be in an approved TOU rate structure. As of March 2016, all new PG&E net energy metering (NEM) customers are enrolled in a time-of-use rate. (<http://www.pge.com/en/myhome/saveenergymoney/plans/tou/index.page?>).



Figure 3. Utility Tariffs used based on Climate Zone

Climate Zones	Electric / Gas Utility	Electricity (Time-of-use)	Natural Gas
IOUs			
1-5,11-13,16	PG&E	A-1/A-10	G-NR1
5	PG&E / Southern California Gas Company	A-1/A-10	G-10 (GN-10)
6,8-10,14,15	SCE / Southern California Gas Company	TOU-GS-1/TOU-GS-2/TOU-GS-3	G-10 (GN-10)
7,10,14	San Diego Gas and Electric Company (SDG&E)	A-1/A-10	GN-3
Electric POUs			
4	City of Palo Alto (CPAU)	E-2	n/a
12	Sacramento Municipal Utility District (SMUD)	GS	n/a
6,7,8,16	Los Angeles Department of Water and Power (LADWP)	A-2 (B)	n/a

The Reach Code Team obtained measure costs through interviews with contractors and California distributors and review of online sources, such as Home Depot and RS Means. Taxes and contractor markups were added as appropriate. Maintenance costs were not included because there is no assumed maintenance on the envelope measures. For HVAC and SWH measures the study assumes there are no additional maintenance cost for a more efficient version of the same system type as the baseline. Replacement costs for inverters were included for PV systems, but the useful life all other equipment exceeds the study period.

The Reach Code Team compared the energy benefits with incremental measure cost data to determine cost effectiveness for each measure package. The calculation is performed for a duration of 15 years for all nonresidential prototypes with a 3 percent discount rate and fuel escalation rates based on the most recent General Rate Case filings and historical escalation rates.⁷ Cost effectiveness is presented using net present value and benefit-to-cost ratio metrics.

- ◆ **Net Present Value (NPV):** The Reach Code Team uses net savings (NPV benefits *minus* NPV costs) as the cost effectiveness metric. If the net savings of a measure or package is positive, it is considered cost effective. Negative savings represent net costs. A measure that has negative energy cost benefits (energy cost increase) can still be cost effective if the costs to implement the measure are more negative (i.e., material and maintenance cost savings).
- ◆ **Benefit-to-Cost Ratio (B/C):** Ratio of the present value of all benefits to the present value of all costs over 15 years (NPV benefits *divided by* NPV costs). The criteria for cost effectiveness is a B/C greater than 1.0. A value of one indicates the savings over the life of the measure are equivalent to the incremental cost of that measure.

⁷ 2019 TDV Methodology Report, California Energy Commission, Docket number: 16-BSTD-06
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=216062>



There are several special circumstances to consider when reviewing these results:

- ◆ Improving the efficiency of a project often requires an initial incremental investment. However, some packages result in initial construction cost savings (negative incremental cost), and either energy cost savings (positive benefits), or increased energy costs (negative benefits). Typically, utility bill savings are categorized as a 'benefit' while incremental construction costs are treated as 'costs.' In cases where both construction costs are negative and utility bill savings are negative, the construction cost savings are treated as the 'benefit' while the utility bill negative savings are the 'cost.'
- ◆ In cases where a measure package is cost effective immediately (i.e., there are upfront cost savings and lifetime energy cost savings), cost effectiveness is represented by ">1".
- ◆ The B/C ratios sometimes appear very high even though the cost numbers are not very high (for example, an upfront cost of \$1 but on-bill savings of \$200 over 30 years would equate to a B/C ratio of 200). NPV is also displayed to clarify these potentially confusing conclusions – in the example, the NPV would be equal to a modest \$199.

3 Measure Description and Cost

Using the 2019 Title 24 code baseline as the starting point, The Reach Code Team identified potential measure packages to determine the projected energy (therm and kWh) and compliance impacts. The Reach Code Team developed an initial measure list based on experience with designers and contractors along with general knowledge of the relative acceptance and preferences of many measures, as well as their incremental costs.

The measures are categorized into energy efficiency, solar PV and battery, all-electric, and preempted high efficiency measures in subsections below.

3.1 Energy Efficiency Measures

This section describes all the energy efficiency measures considered for this analysis to develop a non-preempted, cost-effective efficiency measure package. The Reach Code Team assessed the cost-effectiveness of measures for all climate zones individually and found that the packages did not need to vary by climate zone, with the exception of a solar heat gain coefficient measure in hotels, as described in more detail below. The measures were developed based on reviews of proposed 2022 Title 24 codes and standards enhancement measures, as well as ASHRAE 90.1 and ASHRAE 189.1 Standards. Please refer to *Appendix Section 6.86.7* for a list of efficiency measures that were considered but not implemented.

Figure 4 provides a summary of the cost of each measure and the applicability of each measure to the prototype buildings.

3.1.1 Envelope

◆ **Modify Solar Heat Gain Coefficient (SHGC) fenestration**

- ◆ Office and Retail - All Climate Zones: reduce window SHGC from the prescriptive value of 0.25 to 0.22
- ◆ Hotel
 - ◆ Climate zones 1, 2, 3, 5, and 16: Increase the SHGC for all nonresidential spaces from the prescriptive value of 0.25 to 0.45 in both common and guest room spaces.
 - ◆ Climate zones 4, and 6-15: Reduce window SHGC from the prescriptive value of 0.25 to 0.22, only for common spaces.

In all cases, the fenestration visible transmittance and U-factor remain at prescriptive values.

- ◆ **Fenestration as a function of orientation:** Limit the amount of fenestration area as a function of orientation. East-facing and west-facing windows are each limited to one-half of the average amount of north-facing and south-facing windows.

3.1.2 HVAC and SWH

- ◆ **Drain water heat recovery (DWHR):** Add shower drain heat recovery in hotel guest rooms. DWHR captures waste heat from a shower drain line and uses it to preheat hot water. Note that this measure cannot currently be modeled on hotel/motel spaces, and the Reach Code Team integrated estimated savings outside of modeling software based on SWH savings in residential scenarios. Please see *Appendix Section 6.3* for details on energy savings analysis.
- ◆ **VAV box minimum flow:** Reduce VAV box minimum airflows from the current T24 prescriptive requirement of 20 percent of maximum (design) airflow to the T24 zone ventilation minimums.
- ◆ **Economizers on small capacity systems:** Require economizers and staged fan control in units with cooling capacity $\geq 33,000$ Btu/hr and $\leq 54,000$ Btu/hr, which matches the requirement in the 2018 International Green Construction Code and adopts ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1. This measure reduces the T24 prescriptive threshold on air handling units that are required to have economizers, which is $> 54,000$ Btu/hr.
- ◆ **Solar thermal hot water:** For all-electric hotel only, add solar thermal water heating to supply the following portions of the water heating load, measured in solar savings fraction (SSF):
 - ◆ 20 percent SSF in CZs 2, 3, and 5-9
 - ◆ 25 percent in CZ4
 - ◆ 35 percent SSF in CZs 1 and 10-16.



3.1.3 Lighting

- ◆ **Interior lighting reduced lighting power density (LPD):** Reduce LPD by 15 percent for Medium Office, 10 percent for Medium Retail and by 10 percent for the nonresidential areas of the Small Hotel.
- ◆ **Institutional tuning:** Limit the maximum output or maximum power draw of lighting to 85 percent of full light output or full power draw.
- ◆ **Daylight dimming plus off:** Turn daylight-controlled lights completely off when the daylight available in the daylit zone is greater than 150 percent of the illuminance received from the general lighting system at full power. There is no associated cost with this measure, as the 2019 T24 Standards already require multilevel lighting and daylight sensors in primary and secondary daylit spaces. This measure is simply a revised control strategy and does not increase the number of sensors required or labor to install and program a sensor.
- ◆ **Occupant sensing in open plan offices:** In an open plan office area greater than 250 ft², control lighting based on occupant sensing controls. Two workstations per occupancy sensor.

Details on the applicability and impact of each measure by building type and by space function can be found in *Appendices 6.2*. The appendix also includes the resulting LPD that is modeled as the proposed by building type and by space function.



Figure 4. Energy Efficiency Measures - Specification and Cost

Measure	Baseline T24 Requirement	Measure Applicability				Incremental Cost	Sources & Notes
		● Included in Packages 1A, 1B, 3A, 3C — Not applicable					
		Med Office	Med Retail	Small Hotel			
Guest rooms	Comm Spaces						
Envelope							
Modify SHGC Fenestration	SHGC of 0.25	●	●	●	●	\$1.60 /ft ² window for SHGC decreases, \$0/ft ² for SHGC increases	Costs from one manufacturer.
Fenestration as a Function of Orientation	Limit on total window area and west-facing window area as a function of wall area.	●	—	—	—	\$0	No additional cost associated with the measure which is a design consideration not an equipment cost.
HVAC and SHW							
Drain Water Heat Recovery	No heat recovery required	—	—	●	—	\$841 /unit	Assume 1 heat recovery unit for every 3 guestrooms. Costs from three manufacturers.
VAV Box Minimum Flow	20 percent of maximum (design) airflow	●	—	—	●	\$0	No additional cost associated with the measure which is a design consideration not an equipment cost.
Economizers on Small Capacity Systems	Economizers required for units > 54,000 Btu/hr	—	●	—	—	\$2,857 /unit	Costs from one manufacturer's representative and one mechanical contractor.



Measure	Baseline T24 Requirement	Measure Applicability				Incremental Cost	Sources & Notes
		● Included in Packages 1A, 1B, 3A, 3C — Not applicable					
		Med Office	Med Retail	Small Hotel			
Guest rooms	Comm Spaces						
Solar Thermal Hot Water	For central heat pump water heaters, there is no prescriptive baseline requirement.	—	—	● (electric only)	—	\$33/therm-yr	Installed costs reported in the California Solar Initiative Thermal Program Database, 2015-present. ⁸ Costs include tank and were only available for gas backup systems. Costs are reduced by 19 percent per federal income tax credit average through 2022.
Lighting							
Interior Lighting Reduced LPD	Per Area Category Method, varies by Primary Function Area. Office area 0.60 – 0.70 W/ft ² depending on area of space. Hotel function area 0.85 W/ft ² . Retail Merchandise Sales 1.00 W/ft ²	●	●	—	●	\$0	Industry report on LED pricing analysis shows that costs are not correlated with efficacy. ⁹

⁸ <http://www.csithermalstats.org/download.html>

⁹ http://calmac.org/publications/LED_Pricing_Analysis_Report_-_Revised_1.19.2018_Final.pdf



Measure	Baseline T24 Requirement	Measure Applicability				Incremental Cost	Sources & Notes
		● Included in Packages 1A, 1B, 3A, 3C – Not applicable					
		Med Office	Med Retail	Small Hotel			
Guest rooms	Comm Spaces						
Institutional Tuning	No requirement, but Power Adjustment Factor (PAF) credit of 0.10 available for luminaires in non-daylit areas and 0.05 for luminaires in daylit areas ¹⁰	●	●	–	●	\$0.06/ft²	Industry report on institutional tuning ¹¹
Daylight Dimming Plus Off	No requirement, but PAF credit of 0.10 available.	●	–	–	–	\$0	Given the amount of lighting controls already required, this measure is no additional cost.
Occupant Sensing in Open Plan Offices	No requirement, but PAF credit of 0.30 available.	●	–	–	–	\$189 /sensor; \$74 /powered relay; \$108 /secondary relay	2 workstations per sensor; 1 fixture per workstation; 4 workstations per master relay; 120 ft²/workstation in open office area, which is 53% of total floor area of the medium office

¹⁰ Power Adjustment Factors allow designers to tradeoff increased lighting power densities for more efficient designs. In this study, PAF-related measures assume that the more efficient design is incorporated without a tradeoff for increased lighting power density.

¹¹ <https://slipstreaminc.org/sites/default/files/2018-12/task-tuning-report-mndoc-2015.pdf>



3.2 Solar Photovoltaics and Battery Measures

This section describes the PV and battery measures considered for this analysis. The Reach Code Team estimated the required PV sizes for each building prototype for the efficiency measure packages and the stand alone PV and battery options.

3.2.1 Solar Photovoltaics

2019 Title 24 requires nonresidential buildings to reserve at least 15 percent of the roof area as a “solar zone,” but does not include any requirements or compliance credits for the installation of photovoltaic systems. The Reach Code Team analyzed a range of PV system sizes to determine cost effectiveness. To determine upper end of potential PV system size, the Reach Code Team assumed a PV generation capacity of either

- ◆ 15 W/ft² covering 50 percent of the roof area, or
- ◆ Enough to nearly offset the annual energy consumption.

The medium office and small hotel prototypes had small roof areas compared to their annual electricity demand, thus the PV system capacity at 50 percent of the roof area was less than the estimated annual usage. The medium office and small hotel had a 135 kW and 80 kW array, respectively. The medium retail building has a substantially large roof area that would accommodate a PV array that generates more than the annual electricity load of the building. The PV array for the medium retail building was sized at 110 kW to not exceed the annual electricity consumption of the building when accounting for the minimum annual energy demand across climate zones with efficiency packages.

The modeling software for nonresidential buildings does not allow auto-sizing of PV based on a desired percent offset of electricity use. Moreover, the PV size is also constrained by the availability of roof area. Hence, a common size of PV is modeled for all the packages including all electric design. Figure 5 through Figure 7 below demonstrate the percent of electricity offset by PV for both mixed fuel and all electric buildings over their respective federal minimum design package.

Figure 5. Medium Office – Annual Percent kWh Offset with 135 kW Array

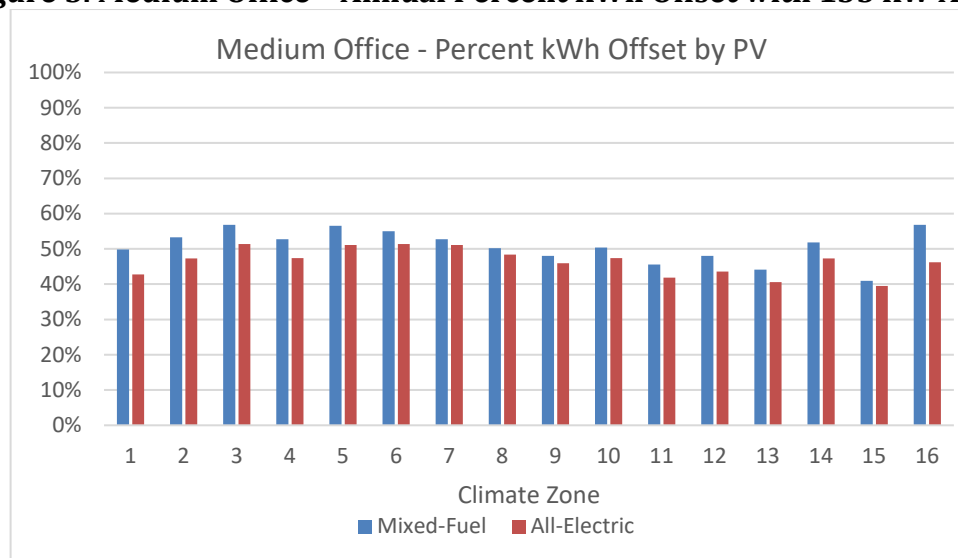


Figure 6. Medium Retail – Annual Percent kWh Offset with 110 kW Array

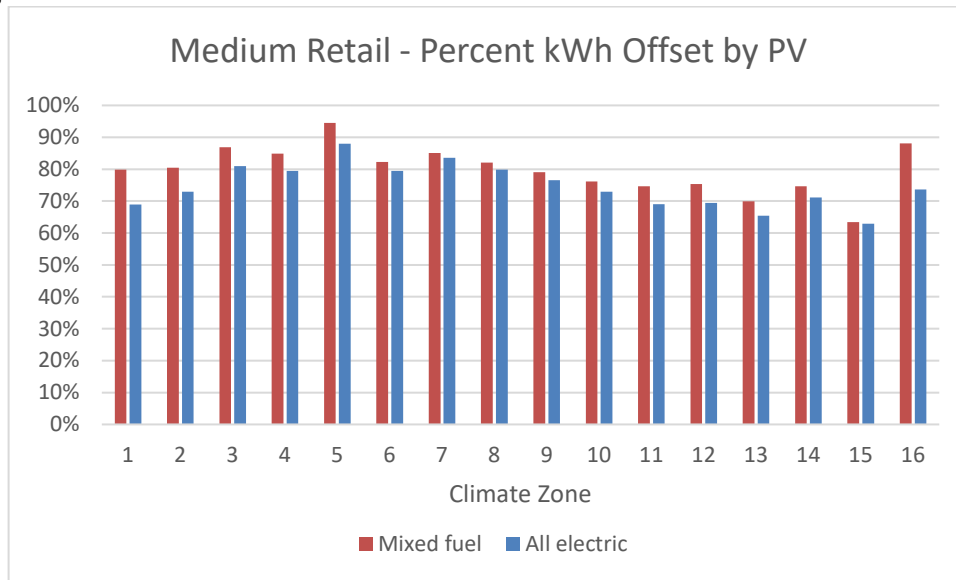
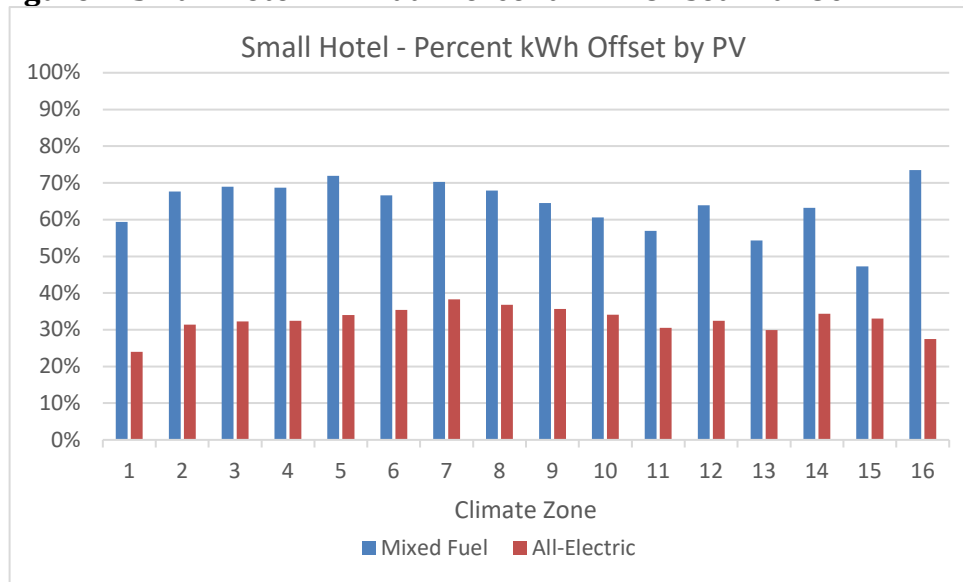


Figure 7. Small Hotel – Annual Percent kWh Offset with 80 kW Array



The costs for PV include first cost to purchase and install the system, inverter replacement costs, and annual maintenance costs. A summary of the medium office costs and sources is given in Figure 8. Upfront solar PV system costs are reduced by the federal income tax credit (ITC), approximately 19 percent due to a phased reduction in the credit through the year 2022.¹²

¹² The federal credit drops to 26% in 2020, and 22% in 2021 before dropping permanently to 10% for commercial projects and 0% for residential projects in 2022. More information on federal Investment Tax Credits available at: <https://www.seia.org/initiatives/solar-investment-tax-credit-itc>

Figure 8. Medium Office Upfront PV Costs

	Unit Cost	Cost	Useful Life (yrs.)	Source
Solar PV System	\$2.30 / Wdc	\$310,500	30	National Renewable Energy Laboratory (NREL) Q1 2016 ¹³ E3 Rooftop Solar PV System Report ¹⁴
Inverter Replacement	\$0.15 / Wdc	\$20,250	10	
Maintenance Costs	\$0.02 / Wdc	\$2,700	1	

PV energy output is built into CBECC-Com and is based on NREL's PVWatts calculator, which includes long term performance degradation estimates.¹⁵

3.2.2 **Battery Storage**

This measure includes installation of batteries to allow energy generated through PV to be stored and used later, providing additional energy cost benefits. This report does not focus on optimizing battery sizes or controls for each prototype and climate zone, though the Reach Code Team ran test simulations to assess the impact of battery sizes on TDV savings and found diminishing returns as the battery size increased.

The team set battery control to the Time of Use Control (TOU) method, which assumes batteries are charged anytime PV generation is greater than the building load but discharges to the electric grid beginning during the highest priced hours of the day (the "First Hour of the Summer Peak"). Because there is no default hour available in CBECC-Com, the team applied the default hour available in CBECC-Res to start discharging (hour 19 in CZs 2, 4, and 8-15, and hour 20 in other CZs). This control option is most reflective of the current products on the market. While this control strategy is being used in the analysis, there would be no mandate on the control strategy used in practice.

The current simulation software has approximations of how performance characteristics change with environmental conditions, charge/discharge rates, and degradation with age and use. More information is on the software battery control capabilities and associated qualification requirements are available in the Residential Alternative Calculation Method Reference Manual and the 2019 Reference Appendices for the 2019 Title 24 Standards.^{16,17}

The Reach Code Team used costs of \$558 kWh based on a 2018 IOU Codes and Standards Program report, assuming a replacement is necessary in year 15.¹⁸ Batteries are also eligible for the ITC if they are installed at the same time as the renewable generation source and at least 75 percent of the energy used to charge

¹³ Available at: <https://www.nrel.gov/docs/fy16osti/66532.pdf>

¹⁴ Available at: <https://efiling.energy.ca.gov/getdocument.aspx?tn=221366>

¹⁵ More information available at: <https://pvwatts.nrel.gov/downloads/pvwattsv5.pdf>

¹⁶ Battery controls are discussed in Sections 2.1.5.4 and Appendix D of the Residential Alternative Calculation Method Reference Manual, available here: <https://ww2.energy.ca.gov/2019publications/CEC-400-2019-005/CEC-400-2019-005-CMF.pdf>

¹⁷ Qualification Requirements for Battery Storage Systems are available in JA12 of the 2019 Reference Appendices: <https://ww2.energy.ca.gov/2018publications/CEC-400-2018-021/CEC-400-2018-021-CMF.pdf>

¹⁸ Available at: http://localenergycodes.com/download/430/file_path/fieldList/PV%20Plus%20Battery%20Storage%20Report



the battery comes from a renewable source. Thus, the Reach Code Team also applied a 19 percent cost reduction to battery costs.

3.2.3 PV-only and PV+Battery Packages

The Reach Code Team analyzed solar PV and battery storage only, without other efficiency measures in both mixed-fuel and all-electric building designs. Two different sizes of solar PV and battery storage were analyzed.

- ◆ **Small PV Size:** 3 kW, assumed to be the minimal PV system considered for installation in a nonresidential building.
- ◆ **Large PV Size:** PV capacity equal to 15 W/ft² over 50 percent of the roof area, or sized to nearly offset annual electricity consumption, as described in Section 3.2.1.
- ◆ **Small Battery Size:** 5 kWh, assumed to be the minimal battery system considered for installation in a nonresidential building, and representative of smaller products currently available on the market.
- ◆ **Large Battery Size:** 50 kWh, assumed to be a substantially large size for a nonresidential setting. Generally, the reach code team found diminishing on-bill and TDV benefits as the battery size increased.

As described in Section 1 and Section 4.4, each PV size was run as a standalone measure. When packaged with a battery measure, the small PV size was paired with the small battery size, and the large PV size was paired with the large battery size.

3.3 All Electric Measures

The Reach Code Team investigated the cost and performance impacts and associated infrastructure costs associated with changing the baseline HVAC and water heating systems to all-electric equipment. This includes heat pump space heating, electric resistance reheat coils, electric water heater with storage tank, heat pump water heating, increasing electrical capacity, and eliminating natural gas connections that would have been present in mixed-fuel new construction. The Reach Code Team selected electric systems that would be installed instead of gas-fueled systems in each prototype.

3.3.1 HVAC and Water Heating

The nonresidential standards use a mixed-fuel baseline for the Standard Design systems. In most nonresidential occupancies, the baseline is natural gas space heating. Hotel/motels and high-rise residential occupancies also assume natural gas baseline water heating systems for the guest rooms and dwelling units. In the all-electric scenario, gas equipment serving these end-uses is replaced with electric equipment, as described in Figure 9.

Figure 9. All-Electric HVAC and Water Heating Characteristics Summary.

		Medium Office	Medium Retail	Small Hotel
HVAC System	Baseline	Packaged DX + VAV with HW reheat. Central gas boilers.	Single zone packaged DX with gas furnaces	<u>NonRes</u> : Packaged DX + VAV with HW reheat. Central gas boilers. <u>Res</u> : Single zone DX AC unit with gas furnaces
	Proposed All-Electric	Packaged DX + VAV with electric resistance reheat.	Single zone packaged heat pumps	<u>NonRes</u> : Packaged DX + VAV with electric resistance reheat <u>Res</u> : Single zone heat pumps
Water Heating System	Baseline	Electric resistance with storage	Electric resistance with storage	<u>NonRes</u> : Electric resistance storage <u>Res</u> : Central gas storage with recirculation
	Proposed All-Electric	Electric resistance with storage	Electric resistance with storage	<u>NonRes</u> : Electric resistance storage <u>Res</u> : Individual heat pumps

The Reach Code Team received cost data for baseline mixed-fuel equipment as well as electric equipment from an experienced mechanical contractor in the San Francisco Bay Area. The total construction cost includes equipment and material, labor, subcontractors (for example, HVAC and SHW control systems), and contractor overhead.

3.3.1.1 Medium Office

The baseline HVAC system includes two gas hot water boilers, three packaged rooftop units, and VAV hot water reheat boxes. The SHW design includes one 8.75 kW electric resistance hot water heater with a 30-gallon storage tank.

For the medium office all-electric HVAC design, the Reach Code Team investigated several potential all-electric design options, including variable refrigerant flow, packaged heat pumps, and variable volume and temperature systems. After seeking feedback from the design community, the Reach Code Team determined that the most feasible all-electric HVAC system, given the software modeling constraints is a VAV system with an electric resistance reheat instead of hot water reheat coil. A parallel fan-powered box (PFPB) implementation of electric resistance reheat would further improve efficiency due to reducing ventilation requirements, but an accurate implementation of PFPBs is not currently available in compliance software.

Note that the actual natural gas consumption for the VAV hot water reheat baseline may be higher than the current simulation results due to a combination of boiler and hot water distribution losses. A recent research study shows that the total losses can account for as high as 80 percent of the boiler energy use.¹⁹

¹⁹ Raftery, P., A. Geronazzo, H. Cheng, and G. Paliaga. 2018. Quantifying energy losses in hot water reheat systems. *Energy and Buildings*, 179: 183-199. November. <https://doi.org/10.1016/j.enbuild.2018.09.020>. Retrieved from <https://escholarship.org/uc/item/3qs8f8qx>



If these losses are considered savings for the electric resistance reheat (which has zero associated distribution loss) may be higher.

The all-electric SHW system remains the same electric resistance water heater as the baseline and has no associated incremental costs.

Cost data for medium office designs are presented in Figure 10. The all-electric HVAC system presents cost savings compared to the hot water reheat system from elimination of the hot water boiler and associated hot water piping distribution. CZ10 and CZ15 all-electric design costs are slightly higher because they require larger size rooftop heat pumps than the other climate zones.

Figure 10. Medium Office HVAC System Costs

Climate Zone	Mixed Fuel Baseline	All Electric System	Incremental cost for All-Electric
CZ01	\$1,202,538	\$1,106,432	\$(96,106)
CZ02	\$1,261,531	\$1,178,983	\$(82,548)
CZ03	\$1,205,172	\$1,113,989	\$(91,183)
CZ04	\$1,283,300	\$1,205,434	\$(77,865)
CZ05	\$1,207,345	\$1,113,989	\$(93,356)
CZ06	\$1,216,377	\$1,131,371	\$(85,006)
CZ07	\$1,227,932	\$1,148,754	\$(79,178)
CZ08	\$1,250,564	\$1,172,937	\$(77,626)
CZ09	\$1,268,320	\$1,196,365	\$(71,955)
CZ10	\$1,313,580	\$1,256,825	\$(56,755)
CZ11	\$1,294,145	\$1,221,305	\$(72,840)
CZ12	\$1,274,317	\$1,197,121	\$(77,196)
CZ13	\$1,292,884	\$1,221,305	\$(71,579)
CZ14	\$1,286,245	\$1,212,236	\$(74,009)
CZ15	\$1,357,023	\$1,311,994	\$(45,029)
CZ16	\$1,295,766	\$1,222,817	\$(72,949)

3.3.1.2 Medium Retail

The baseline HVAC system includes five packaged single zone rooftop ACs with gas furnaces. Based on fan control requirements in section 140.4(m), units with cooling capacity $\geq 65,000$ Btu/h have variable air volume fans, while smaller units have constant volume fans. The SHW design includes one 8.75 kW electric resistance hot water heater with a 30-gallon storage tank.

For the medium retail all-electric HVAC design, the Reach Code Team assumed packaged heat pumps instead of the packaged ACs. The all-electric SHW system remains the same electric resistance water heater as the baseline and has no associated incremental costs.

Cost data for medium retail designs are presented in Figure 11. Costs for rooftop air-conditioning systems are very similar to rooftop heat pump systems.

Figure 11. Medium Retail HVAC System Costs

Climate Zone	Mixed Fuel Baseline	All Electric System	Incremental cost for All-Electric
CZ01	\$328,312	\$333,291	\$4,978
CZ02	\$373,139	\$373,702	\$563
CZ03	\$322,849	\$326,764	\$3,915
CZ04	\$329,900	\$335,031	\$5,131
CZ05	\$359,888	\$362,408	\$2,520
CZ06	\$335,728	\$341,992	\$6,265
CZ07	\$345,544	\$349,808	\$4,265
CZ08	\$368,687	\$369,792	\$1,104
CZ09	\$415,155	\$411,069	\$(4,087)
CZ10	\$345,993	\$346,748	\$755
CZ11	\$418,721	\$414,546	\$(4,175)
CZ12	\$405,110	\$400,632	\$(4,477)
CZ13	\$376,003	\$375,872	\$(131)
CZ14	\$405,381	\$406,752	\$1,371
CZ15	\$429,123	\$427,606	\$(1,517)
CZ16	\$401,892	\$404,147	\$2,256

3.3.1.3 Small Hotel

The small hotel has two different baseline equipment systems, one for the nonresidential spaces and one for the guest rooms. The nonresidential HVAC system includes two gas hot water boilers, four packaged rooftop units and twelve VAV terminal boxes with hot water reheat coil. The SHW design includes a small electric water heater with storage tank. The residential HVAC design includes one single zone AC unit with gas furnace for each guest room and the water heating design includes one central gas storage water heater with a recirculation pump for all guest rooms.

For the small hotel all-electric design, the Reach Code Team assumed the nonresidential HVAC system to be packaged heat pumps with electric resistance VAV terminal units, and the SHW system to remain a small electric resistance water heater.

For the guest room all-electric HVAC system, the analysis used a single zone (packaged terminal) heat pump and a central heat pump water heater serving all guest rooms. Central heat pump water heating with recirculation serving guest rooms cannot yet be modeled in CBECC-Com, and energy impacts were modeled by simulating individual heat pump water heaters in each guest room. The reach code team believes this is a conservative assumption, since individual heat pump water heaters will have much higher tank standby losses. The Reach Code Team attained costs for central heat pump water heating installation including storage tanks and controls and used these costs in the study.

Cost data for small hotel designs are presented in Figure 12. The all-electric design presents substantial cost savings because there is no hot water plant or piping distribution system serving the nonresidential spaces, as well as the lower cost of packaged terminal heat pumps serving the residential spaces compared to split DX/furnace systems with individual flues.



Figure 12. Small Hotel HVAC and Water Heating System Costs

Climate Zone	Mixed Fuel Baseline	All Electric System	Incremental cost for All-Electric
CZ01	\$2,337,531	\$1,057,178	\$(1,280,353)
CZ02	\$2,328,121	\$1,046,795	\$(1,281,326)
CZ03	\$2,294,053	\$1,010,455	\$(1,283,598)
CZ04	\$2,302,108	\$1,018,675	\$(1,283,433)
CZ05	\$2,298,700	\$1,015,214	\$(1,283,486)
CZ06	\$2,295,380	\$1,011,753	\$(1,283,627)
CZ07	\$2,308,004	\$1,026,029	\$(1,281,975)
CZ08	\$2,333,662	\$1,053,717	\$(1,279,946)
CZ09	\$2,312,099	\$1,030,355	\$(1,281,744)
CZ10	\$2,354,093	\$1,075,348	\$(1,278,745)
CZ11	\$2,347,980	\$1,068,426	\$(1,279,554)
CZ12	\$2,328,654	\$1,047,660	\$(1,280,994)
CZ13	\$2,348,225	\$1,068,858	\$(1,279,367)
CZ14	\$2,345,988	\$1,066,263	\$(1,279,725)
CZ15	\$2,357,086	\$1,079,241	\$(1,277,845)
CZ16	\$2,304,094	\$1,019,973	\$(1,284,121)

3.3.2 *Infrastructure Impacts*

Electric heating appliances and equipment often require a larger electrical connection than an equivalent natural gas appliance because of the higher voltage and amperage necessary to electrically generate heat. Thus, many buildings may require larger electrical capacity than a comparable building with natural gas appliances. This includes:

- ◆ Electric resistance VAV space heating in the medium office and common area spaces of the small hotel.
- ◆ Heat pump water heating for the guest room spaces of the small hotel.

3.3.2.1 *Electrical Panel Sizing and Wiring*

This section details the additional electrical panel sizing and wiring required for all-electric measures. In an all-electric new construction scenario, heat pumps replace packaged DX units which are paired with either a gas furnace or a hot water coil (supplied by a gas boiler). The electrical requirements of the replacement heat pump would be the same as the packaged DX unit it replaces, as the electrical requirements would be driven by the cooling capacity, which would remain the same between the two units.

VAV terminal units with hot water reheat coils that are replaced with electric resistance reheat coils require additional electrical infrastructure. In the case of electric resistance coils, the Reach Code Team assumed that on average, a VAV terminal unit serves around 900 ft² of conditioned space and has a heating capacity of 5 kW (15 kBtu/hr/ft²). The incremental electrical infrastructure costs were determined based on RS Means. Calculations for the medium office shown in Figure 13 include the cost to add electrical panels as well as the cost to add electrical lines to each VAV terminal unit electric resistance coil in the medium office prototype. Additionally, the Reach Code Team subtracted the electrical infrastructure costs associated with hot water pumps required in the mixed fuel baseline, which are not required in the all-electric measures.



The Reach Code Team calculated costs to increase electrical capacity for heat pump water heaters in the small hotel similarly.

Figure 13. Medium Office Electrical Infrastructure Costs for All-Electric Design

A	-	No. VAV Boxes	60
B	-	VAV box heating capacity (watts)	4,748
C	-	No. hot water pumps	2
D	-	Hot water pump power (watts)	398
E	-	Voltage	208
F	$(A \times B - C \times D) / E$	Panel ampacity required	1,366
G	$F / 400$	Number of 400-amp panels required	4
H	-	Cost per 400-amp panel	\$3,100
I	$G \times H$	Total panel cost	\$12,400
J	-	Total electrical line length required (ft)	4,320
K	-	Cost per linear foot of electrical line	\$3.62
L	$J \times K$	Total electrical line cost	\$15,402
	I + L	Total electrical infrastructure incremental cost	\$27,802

3.3.2.2 Natural Gas

This analysis assumes that in an all-electric new construction scenario natural gas would not be supplied to the site. Eliminating natural gas in new construction would save costs associated with connecting a service line from the street main to the building, piping distribution within the building, and monthly connection charges by the utility.

The Reach Code Team determined that for a new construction building with natural gas piping, there is a service line (branch connection) from the natural gas main to the building meter. In the medium office prototype, natural gas piping is routed to the boiler. The Reach Code Team assumed that the boiler is on the first floor, and that 30 feet of piping is required from the connection to the main to the boiler. The Reach Code Team assumed 1" corrugated stainless steel tubing (CSST) material is used for the plumbing distribution. The Reach Code Team included costs for a natural gas plan review, service extension, and a gas meter, as shown in Figure 14 below. The natural gas plan review cost is based on information received from the City of Palo Alto Utilities. The meter costs are from PG&E and include both material and labor. The service extension costs are based on guidance from PG&E, who noted that the cost range is highly varied and that there is no "typical" cost, with costs being highly dependent on length of extension, terrain, whether the building is in a developed or undeveloped area, and number of buildings to be served. While an actual service extension cost is highly uncertain, the team believes the costs assumed in this analysis are within a reasonable range based on a sample range of costs provided by PG&E. These costs assume development in a previously developed area.

Figure 14. Natural Gas Infrastructure Cost Savings for All-Electric Prototypes

Cost Type	Medium Office	Medium Retail	Small Hotel
Natural Gas Plan Review	\$2,316	\$2,316	\$2,316
Service Extension	\$13,000	\$13,000	\$13,000
Meter	\$3,000	\$3,000	\$3,000
Plumbing Distribution	\$633	\$9,711	\$37,704
Total Cost	\$18,949	\$28,027	\$56,020

3.4 Preempted High Efficiency Appliances

The Reach Code Team developed a package of high efficiency (HE) space and water heating appliances based on commonly available products for both the mixed-fuel and all-electric scenarios. This package assesses the standalone contribution that high efficiency measures would make toward achieving high performance thresholds. The Reach Code Team reviewed the Air Conditioning, Heating, and Refrigeration Institute (AHRI) certified product database to estimate appropriate efficiencies.²⁰

The Reach Code Team determined the efficiency increases to be appropriate based on equipment type, summarized in Figure 15, with cost premiums attained from a Bay Area mechanical contractor. The ranges in efficiency are indicative of varying federal standard requirements based on equipment size.

Figure 15. High Efficiency Appliance Assumptions

	Federal Minimum Efficiency	Preempted Efficiency	Cost Premium for HE Appliance
Gas space heating and water heating	80-82%	90-95%	10-15%
Large packaged rooftop cooling	9.8-12 EER 11.4-12.9 IEER	10.5-13 EER 15-15.5 IEER	10-15%
Single zone heat pump space heating	7.7 HSPF 3.2 COP	10 HSPF 3.5 COP	6-15%
Heat pump water heating	2.0 UEF	3.3 UEF	None (market does not carry 2.0 UEF)

3.5 Greenhouse Gas Emissions

The analysis uses the greenhouse gas (GHG) emissions estimates from Zero Code reports available in CBECC-Com.²¹ Zero Code uses 8760 hourly multipliers accounting for time dependent energy use and carbon emissions based on source emissions, including renewable portfolio standard projections. Fugitive

²⁰ Available at: <https://www.ahridirectory.org/Search/SearchHome?ReturnUrl=%2f>

²¹ More information available at: <https://zero-code.org/wp-content/uploads/2018/11/ZERO-Code-TSD-California.pdf>



emissions are not included. There are two strings of multipliers – one for Northern California climate zones, and another for Southern California climate zones.²²

4 Results

The Reach Code Team evaluated cost effectiveness of the following measure packages over a 2019 mixed-fuel code compliant baseline for all climate zones, as detailed in Sections 4.1 -- 4.3 and reiterated in Figure 16:

- ◆ **Package 1A – Mixed-Fuel + EE:** Mixed-fuel design with energy efficiency measures and federal minimum appliance efficiencies.
- ◆ **Package 1B – Mixed-Fuel + EE + PV + B:** Same as Package 1A, plus solar PV and batteries.
- ◆ **Package 1C – Mixed-fuel + HE:** Alternative design with high efficiency appliances, triggering federal preemption.
- ◆ **Package 2 – All-Electric Federal Code-Minimum Reference:** All-electric design with federal code minimum appliance efficiency. No solar PV or battery.
- ◆ **Package 3A – All-Electric + EE:** All-electric design with energy efficiency measures and federal minimum appliance efficiencies.
- ◆ **Package 3B – All-Electric + EE + PV + B:** Same as Package 3A, plus solar PV and batteries.
- ◆ **Package 3C – All-Electric + HE:** All-electric design with high efficiency appliances, triggering federal preemption.

Figure 16. Package Summary

Package	Fuel Type		Energy Efficiency Measures	PV & Battery (PV + B)	High Efficiency Appliances (HE)
	Mixed Fuel	All-Electric			
Mixed-Fuel Code Minimum Baseline	X				
1A – Mixed-Fuel + EE	X		X		
1B – Mixed-Fuel + EE + PV + B	X		X	X	
1C – Mixed-fuel + HE	X				X
2 – All-Electric Federal Code-Minimum Reference		X			
3A – All-Electric + EE		X	X		
3B – All-Electric + EE + PV + B		X	X	X	
3C – All-Electric + HE		X			X

²² CBECC-Com documentation does not state which climate zones fall under which region. CBECC-Res multipliers are the same for CZs 1-5 and 11-13 (presumed to be Northern California), while there is another set of multipliers for CZs 6-10 and 14-16 (assumed to be Southern California).



Section 4.4 presents the results of the PV-only and PV+Battery analysis.

The TDV and on-bill based cost effectiveness results are presented in terms of B/C ratio and NPV in this section. What constitutes a ‘benefit’ or a ‘cost’ varies with the scenarios because both energy savings and incremental construction costs may be negative depending on the package. Typically, utility bill savings are categorized as a ‘benefit’ while incremental construction costs are treated as ‘costs.’ In cases where both construction costs are negative and utility bill savings are negative, the construction cost savings are treated as the ‘benefit’ while the utility bill negative savings are as the ‘cost.’

Overarching factors to keep in mind when reviewing the results include:

- ◆ To pass the Energy Commission’s application process, local reach codes must both be cost effective and exceed the energy performance budget using TDV (i.e., have a positive compliance margin). To emphasize these two important factors, the figures in this Section highlight in green the modeling results that have **either** a positive compliance margin or are cost effective. This will allow readers to identify whether a scenario is fully or partially supportive of a reach code, and the opportunities/challenges that the scenario presents. Conversely, Section 4.4 only highlights results that **both** have a positive compliance margin and are cost effective, to allow readers to identify reach code-ready scenarios.
- ◆ **Note:** Compliance margin represents the proportion of energy usage that is saved compared to the baseline, measured on a TDV basis.
- ◆ The Energy Commission does not currently allow compliance credit for either solar PV or battery storage. Thus, the compliance margins in Packages 1A are the same as 1B, and Package 3A is the same as 3B. However, The Reach Code Team did include the impact of solar PV and battery when calculating TDV cost-effectiveness.
- ◆ When performance modeling residential buildings, the Energy Commission allows the Standard Design to be electric if the Proposed Design is electric, which removes TDV-related penalties and associated negative compliance margins. This essentially allows for a compliance pathway for all-electric residential buildings. Nonresidential buildings are not treated in the same way and are compared to a mixed-fuel standard design.
- ◆ Results do not include an analysis and comparison of utility rates. As mentioned in *Section 2.2*, The Reach Code Team coordinated with utilities to select tariffs for each prototype given the annual energy demand profile and the most prevalent rates in each utility territory. The Reach Code Team did not compare a variety of tariffs to determine their impact on cost effectiveness. Note that most utility time-of-use rates are continuously updated, which can affect cost effectiveness results.
- ◆ As a point of comparison, mixed-fuel baseline energy figures are provided in *Appendix 6.5*.

4.1 Cost Effectiveness Results – Medium Office

Figure 17 through Figure 23 contain the cost-effectiveness findings for the Medium Office packages. Notable findings for each package include:

- ◆ **1A – Mixed-Fuel + EE:** Packages achieve +12 to +20 percent compliance margins depending on climate zone. All packages are cost effective in all climate zones using the TDV approach. All packages are cost effective using the On-Bill approach except for LADWP territory.



- ◆ **1B – Mixed-Fuel + EE + PV + B:** All packages are cost effective using the On-Bill and TDV approaches, except On-Bill in LADWP territory. When compared to 1A, the B/C ratio changes depending on the utility and climate zone (some increase while others decrease). However, NPV savings are increased across the board, suggesting that larger investments yield larger returns.
- ◆ **1C – Mixed-Fuel + HE:** Packages achieve +3 to +5 percent compliance margins depending on climate zone, but no packages were cost effective. The incremental costs of a high efficiency condensing boiler compared to a non-condensing boiler contributes to 26-47% of total incremental cost depending on boiler size. Benefits of condensing boiler efficiency come from resetting hot water return temperature as boiler efficiency increases at lower hot water temperature. However, hot water temperature reset control cannot currently be implemented in the software. In addition, the natural gas energy cost constitutes no more than 5% of total cost for 15 climate zones, so improving boiler efficiency has limited contribution to reduction of total energy cost.
- ◆ **2 – All-Electric Federal Code-Minimum Reference:**
 - ◆ Packages achieve between -27 percent and +1 percent compliance margins depending on climate zone. This is likely because the modeled system is electric resistance, and TDV values electricity consumption more heavily than natural gas. This all-electric design without other efficiency measures does not comply with the Energy Commission’s TDV performance budget.
 - ◆ All incremental costs are negative due to the elimination of natural gas infrastructure.
 - ◆ Packages achieve utility cost savings and are cost effective using the On-Bill approach in CZs 6-10 and 14-15. Packages do not achieve savings and are not cost effective using the On-Bill approach in most of PG&E territory (CZs 1,2,4, 11-13, and 16). Packages achieve savings and are cost effective using TDV in all climate zones except CZ16.
- ◆ **3A – All-Electric + EE:** Packages achieve positive compliance margins except -15 percent in CZ16, which has a higher space heating load than other climate zones. All packages are cost effective in all climate zones except CZ16.
- ◆ **3B – All-Electric + EE + PV + B:** Packages achieve positive compliance margins except -15 percent in CZ16. All packages are cost-effective from a TDV perspective in all climate zones. All packages are cost effective from an On-Bill perspective in all climate zones except in CZ 2 and CZ 16 in LADWP territory.
- ◆ **3C – All-Electric + HE:** Packages achieve between -26 percent and +2 percent compliance margins depending on climate zone. The only packages that are cost effective and with a positive compliance margin are in CZs 7-9 and 15. As described in Package 1C results, space heating is a relatively low proportion of energy costs in most climate zones, limiting the costs gains for higher efficiency equipment.

Figure 17. Cost Effectiveness for Medium Office Package 1A – Mixed-Fuel + EE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 1A: Mixed Fuel + EE												
CZ01	PG&E	34,421	-808	4.5	18%	\$66,649	\$125,902	\$71,307	1.9	1.1	\$59,253	\$4,658
CZ02	PG&E	40,985	-505	8.1	17%	\$66,649	\$163,655	\$99,181	2.5	1.5	\$97,005	\$32,532
CZ03	PG&E	36,266	-463	7.0	20%	\$66,649	\$141,897	\$84,051	2.1	1.3	\$75,248	\$17,401
CZ04	PG&E	40,590	-547	7.7	14%	\$66,649	\$162,139	\$95,410	2.4	1.4	\$95,489	\$28,761
CZ04-2	CPAU	40,590	-547	7.7	14%	\$66,649	\$85,537	\$95,410	1.3	1.4	\$18,887	\$28,761
CZ05	PG&E	38,888	-499	7.4	18%	\$66,649	\$154,044	\$91,115	2.3	1.4	\$87,395	\$24,465
CZ05-2	SCG	38,888	-499	7.4	18%	\$66,649	\$156,315	\$91,115	2.3	1.4	\$89,665	\$24,465
CZ06	SCE	39,579	-305	8.7	20%	\$66,649	\$86,390	\$100,469	1.3	1.5	\$19,741	\$33,820
CZ06-2	LADWP	39,579	-305	8.7	20%	\$66,649	\$51,828	\$100,469	0.8	1.5	(\$14,821)	\$33,820
CZ07	SDG&E	41,817	-6	11.3	20%	\$66,649	\$204,394	\$112,497	3.1	1.7	\$137,745	\$45,848
CZ08	SCE	41,637	-60	10.8	18%	\$66,649	\$89,783	\$113,786	1.3	1.7	\$23,134	\$47,137
CZ08-2	LADWP	41,637	-60	10.8	18%	\$66,649	\$54,876	\$113,786	0.8	1.7	(\$11,773)	\$47,137
CZ09	SCE	42,539	-210	10.1	16%	\$66,649	\$95,636	\$115,647	1.4	1.7	\$28,987	\$48,998
CZ09-2	LADWP	42,539	-210	10.1	16%	\$66,649	\$58,168	\$115,647	0.9	1.7	(\$8,481)	\$48,998
CZ10	SDG&E	41,857	-216	9.8	17%	\$66,649	\$210,303	\$108,726	3.2	1.6	\$143,654	\$42,077
CZ10-2	SCE	41,857	-216	9.8	17%	\$66,649	\$92,736	\$108,726	1.4	1.6	\$26,087	\$42,077
CZ11	PG&E	42,523	-390	9.1	13%	\$66,649	\$166,951	\$104,001	2.5	1.6	\$100,301	\$37,352
CZ12	PG&E	41,521	-466	8.4	14%	\$66,649	\$161,594	\$100,135	2.4	1.5	\$94,945	\$33,486
CZ12-2	SMUD	41,521	-466	8.4	14%	\$66,649	\$71,734	\$100,135	1.1	1.5	\$5,085	\$33,486
CZ13	PG&E	42,898	-434	9.0	13%	\$66,649	\$169,107	\$99,992	2.5	1.5	\$102,457	\$33,343
CZ14	SDG&E	42,224	-441	8.6	14%	\$66,649	\$211,529	\$106,913	3.2	1.6	\$144,880	\$40,264
CZ14-2	SCE	42,224	-441	8.6	14%	\$66,649	\$95,809	\$106,913	1.4	1.6	\$29,160	\$40,264
CZ15	SCE	45,723	-147	11.2	12%	\$66,649	\$102,714	\$118,034	1.5	1.8	\$36,065	\$51,384
CZ16	PG&E	37,758	-736	5.8	14%	\$66,649	\$145,947	\$79,755	2.2	1.2	\$79,297	\$13,106
CZ16-2	LADWP	37,758	-736	5.8	14%	\$66,649	\$40,115	\$79,755	0.6	1.2	(\$26,534)	\$13,106



Figure 18. Cost Effectiveness for Medium Office Package 1B – Mixed-Fuel + EE + PV + B

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (mtons)	Compliance Margin (%)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + PV + Battery												
CZ01	PG&E	211,225	-808	39.9	18%	\$397,405	\$645,010	\$454,284	1.6	1.1	\$247,605	\$56,879
CZ02	PG&E	255,787	-505	50.6	17%	\$397,405	\$819,307	\$573,033	2.1	1.4	\$421,902	\$175,628
CZ03	PG&E	245,421	-463	48.8	20%	\$397,405	\$777,156	\$536,330	2.0	1.3	\$379,751	\$138,925
CZ04	PG&E	267,612	-547	52.7	14%	\$397,405	\$836,221	\$597,471	2.1	1.5	\$438,816	\$200,066
CZ04-2	CPAU	267,612	-547	52.7	14%	\$397,405	\$621,879	\$597,471	1.6	1.5	\$224,474	\$200,066
CZ05	PG&E	264,581	-499	52.5	18%	\$397,405	\$897,216	\$578,856	2.3	1.5	\$499,811	\$181,451
CZ05-2	SCG	264,581	-499	52.5	18%	\$397,405	\$899,487	\$578,856	2.3	1.5	\$502,082	\$181,451
CZ06	SCE	257,474	-305	52.1	20%	\$397,405	\$484,229	\$594,416	1.2	1.5	\$86,824	\$197,011
CZ06-2	LA	257,474	-305	52.1	20%	\$397,405	\$282,360	\$594,416	0.7	1.5	(\$115,045)	\$197,011
CZ07	SDG&E	264,530	-6	55.7	20%	\$397,405	\$817,528	\$610,548	2.1	1.5	\$420,123	\$213,143
CZ08	SCE	258,348	-60	54.0	18%	\$397,405	\$479,073	\$625,249	1.2	1.6	\$81,668	\$227,844
CZ08-2	LA	258,348	-60	54.0	18%	\$397,405	\$275,704	\$625,249	0.7	1.6	(\$121,701)	\$227,844
CZ09	SCE	262,085	-210	54.3	16%	\$397,405	\$480,241	\$622,528	1.2	1.6	\$82,836	\$225,123
CZ09-2	LA	262,085	-210	54.3	16%	\$397,405	\$282,209	\$622,528	0.7	1.6	(\$115,196)	\$225,123
CZ10	SDG&E	258,548	-216	53.4	17%	\$397,405	\$839,931	\$595,323	2.1	1.5	\$442,526	\$197,918
CZ10-2	SCE	258,548	-216	53.4	17%	\$397,405	\$485,523	\$595,323	1.2	1.5	\$88,118	\$197,918
CZ11	PG&E	253,623	-390	50.9	13%	\$397,405	\$826,076	\$585,682	2.1	1.5	\$428,671	\$188,277
CZ12	PG&E	252,868	-466	50.3	14%	\$397,405	\$802,715	\$582,866	2.0	1.5	\$405,310	\$185,461
CZ12-2	SMUD	252,868	-466	50.3	14%	\$397,405	\$415,597	\$582,866	1.0	1.5	\$18,192	\$185,461
CZ13	PG&E	250,915	-434	50.4	13%	\$397,405	\$806,401	\$573,606	2.0	1.4	\$408,996	\$176,201
CZ14	SDG&E	283,684	-441	56.4	14%	\$397,405	\$874,753	\$676,271	2.2	1.7	\$477,348	\$278,866
CZ14-2	SCE	283,684	-441	56.4	14%	\$397,405	\$493,888	\$676,271	1.2	1.7	\$96,483	\$278,866
CZ15	SCE	274,771	-147	56.0	12%	\$397,405	\$476,327	\$640,379	1.2	1.6	\$78,922	\$242,974
CZ16	PG&E	266,490	-736	51.8	14%	\$397,405	\$842,205	\$575,563	2.1	1.4	\$444,800	\$178,158
CZ16-2	LA	266,490	-736	51.8	14%	\$397,405	\$260,372	\$575,563	0.7	1.4	(\$137,033)	\$178,158



Figure 19. Cost Effectiveness for Medium Office Package 1C – Mixed-Fuel + HE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 1C: Mixed Fuel + HE												
CZ01	PG&E	288	688	4.1	3%	\$61,253	\$18,656	\$12,314	0.3	0.2	(\$42,597)	(\$48,939)
CZ02	PG&E	3,795	550	4.3	4%	\$68,937	\$36,683	\$24,676	0.5	0.4	(\$32,254)	(\$44,261)
CZ03	PG&E	1,241	439	2.9	3%	\$57,529	\$20,150	\$11,885	0.4	0.2	(\$37,379)	(\$45,644)
CZ04	PG&E	5,599	529	4.7	5%	\$72,074	\$44,915	\$30,928	0.6	0.4	(\$27,158)	(\$41,145)
CZ04-2	CPAU	5,599	529	4.7	5%	\$72,074	\$24,175	\$30,928	0.3	0.4	(\$47,898)	(\$41,145)
CZ05	PG&E	3,470	453	3.6	4%	\$60,330	\$35,072	\$18,232	0.6	0.3	(\$25,258)	(\$42,097)
CZ05-2	SCG	3,470	453	3.6	4%	\$60,330	\$32,777	\$18,232	0.5	0.3	(\$27,553)	(\$42,097)
CZ06	SCE	3,374	298	2.6	3%	\$55,594	\$19,446	\$16,132	0.3	0.3	(\$36,148)	(\$39,462)
CZ06-2	LADWP	3,374	298	2.6	3%	\$55,594	\$13,450	\$16,132	0.2	0.3	(\$42,145)	(\$39,462)
CZ07	SDG&E	5,257	140	2.3	4%	\$54,111	\$41,086	\$19,903	0.8	0.4	(\$13,025)	(\$34,208)
CZ08	SCE	5,921	176	2.7	4%	\$60,497	\$22,210	\$24,055	0.4	0.4	(\$38,287)	(\$36,442)
CZ08-2	LADWP	5,921	176	2.7	4%	\$60,497	\$14,064	\$24,055	0.2	0.4	(\$46,434)	(\$36,442)
CZ09	SCE	7,560	224	3.5	4%	\$61,311	\$28,576	\$31,835	0.5	0.5	(\$32,735)	(\$29,476)
CZ09-2	LADWP	7,560	224	3.5	4%	\$61,311	\$18,262	\$31,835	0.3	0.5	(\$43,049)	(\$29,476)
CZ10	SDG&E	5,786	288	3.2	4%	\$62,685	\$50,717	\$24,628	0.8	0.4	(\$11,968)	(\$38,057)
CZ10-2	SCE	5,786	288	3.2	4%	\$62,685	\$24,575	\$24,628	0.4	0.4	(\$38,110)	(\$38,057)
CZ11	PG&E	8,128	441	4.9	5%	\$71,101	\$54,188	\$37,849	0.8	0.5	(\$16,912)	(\$33,252)
CZ12	PG&E	6,503	478	4.7	5%	\$68,329	\$47,329	\$34,556	0.7	0.5	(\$20,999)	(\$33,773)
CZ12-2	SMUD	6,503	478	4.7	5%	\$68,329	\$24,003	\$34,556	0.4	0.5	(\$44,325)	(\$33,773)
CZ13	PG&E	8,398	432	5.0	5%	\$69,474	\$51,347	\$37,229	0.7	0.5	(\$18,128)	(\$32,246)
CZ14	SDG&E	7,927	470	5.0	5%	\$69,463	\$62,744	\$37,133	0.9	0.5	(\$6,718)	(\$32,329)
CZ14-2	SCE	7,927	470	5.0	5%	\$69,463	\$32,517	\$37,133	0.5	0.5	(\$36,946)	(\$32,329)
CZ15	SCE	15,140	219	5.5	5%	\$66,702	\$43,773	\$52,359	0.7	0.8	(\$22,929)	(\$14,344)
CZ16	PG&E	3,111	912	6.3	5%	\$71,765	\$36,002	\$24,914	0.5	0.3	(\$35,763)	(\$46,851)
CZ16-2	LADWP	3,111	912	6.3	5%	\$71,765	\$23,057	\$24,914	0.3	0.3	(\$48,708)	(\$46,851)



Figure 20. Cost Effectiveness for Medium Office Package 2 – All-Electric Federal Code Minimum

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost*	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 2: All-Electric Federal Code Minimum												
CZ01	PG&E	-53,657	4967	10.1	-15%	(\$87,253)	(\$98,237)	(\$58,420)	0.9	1.5	(\$10,984)	\$28,833
CZ02	PG&E	-49,684	3868	5.0	-7%	(\$73,695)	(\$101,605)	(\$41,429)	0.7	1.8	(\$27,910)	\$32,266
CZ03	PG&E	-35,886	3142	5.6	-7%	(\$82,330)	(\$57,345)	(\$29,592)	1.4	2.8	\$24,986	\$52,738
CZ04	PG&E	-48,829	3759	4.7	-6%	(\$69,012)	(\$90,527)	(\$40,570)	0.8	1.7	(\$21,515)	\$28,443
CZ04-2	CPAU	-48,829	3759	4.7	-6%	(\$69,012)	(\$19,995)	(\$40,570)	3.5	1.7	\$49,018	\$28,443
CZ05	PG&E	-40,531	3240	4.5	-8%	(\$84,503)	(\$63,663)	(\$39,997)	1.3	2.1	\$20,840	\$44,506
CZ06	SCE	-26,174	2117	3.1	-4%	(\$76,153)	\$24,908	(\$20,571)	>1	3.7	\$101,061	\$55,581
CZ06-2	LADWP	-26,174	2117	3.1	-4%	(\$76,153)	\$26,366	(\$20,571)	>1	3.7	\$102,518	\$55,581
CZ07	SDG&E	-12,902	950	0.9	-2%	(\$70,325)	\$46,879	(\$11,407)	>1	6.2	\$117,204	\$58,918
CZ08	SCE	-15,680	1219	1.5	-2%	(\$68,774)	\$17,859	(\$12,648)	>1	5.4	\$86,633	\$56,125
CZ08-2	LADWP	-15,680	1219	1.5	-2%	(\$68,774)	\$18,603	(\$12,648)	>1	5.4	\$87,376	\$56,125
CZ09	SCE	-19,767	1605	2.4	-2%	(\$63,102)	\$20,920	(\$14,462)	>1	4.4	\$84,022	\$48,640
CZ09-2	LADWP	-19,767	1605	2.4	-2%	(\$63,102)	\$21,929	(\$14,462)	>1	4.4	\$85,030	\$48,640
CZ10	SDG&E	-27,414	2053	2.2	-4%	(\$47,902)	\$38,918	(\$23,339)	>1	2.1	\$86,820	\$24,562
CZ10-2	SCE	-27,414	2053	2.2	-4%	(\$47,902)	\$20,765	(\$23,339)	>1	2.1	\$68,666	\$24,562
CZ11	PG&E	-40,156	3062	3.6	-4%	(\$63,987)	(\$72,791)	(\$32,837)	0.9	1.9	(\$8,804)	\$31,150
CZ12	PG&E	-43,411	3327	4.1	-5%	(\$68,343)	(\$85,856)	(\$35,463)	0.8	1.9	(\$17,512)	\$32,880
CZ12-2	SMUD	-43,411	3327	4.1	-5%	(\$68,343)	(\$5,109)	(\$35,463)	13.4	1.9	\$63,234	\$32,880
CZ13	PG&E	-39,649	3063	3.8	-4%	(\$62,726)	(\$70,705)	(\$32,408)	0.9	1.9	(\$7,980)	\$30,318
CZ14	SDG&E	-44,322	3266	3.4	-5%	(\$65,156)	\$6,043	(\$38,422)	>1	1.7	\$71,199	\$26,735
CZ14-2	SCE	-44,322	3266	3.4	-5%	(\$65,156)	\$4,798	(\$38,422)	>1	1.7	\$69,954	\$26,735
CZ15	SCE	-19,917	1537	1.8	-2%	(\$36,176)	\$12,822	(\$15,464)	>1	2.3	\$48,998	\$20,711
CZ16	PG&E	-94,062	6185	5.6	-27%	(\$64,096)	(\$212,158)	(\$150,871)	0.3	0.4	(\$148,062)	(\$86,775)
CZ16-2	LADWP	-94,062	6185	5.6	-27%	(\$64,096)	\$1,493	(\$150,871)	>1	0.4	\$65,589	(\$86,775)

*The Incremental Package Cost is equal to the sum of the incremental HVAC and water heating equipment costs from

Figure 10, the electrical infrastructure incremental cost of \$27,802 (see section 3.3.2.1), and the natural gas infrastructure incremental costs of \$(18,949) (see section 3.3.2.2).



Figure 21. Cost Effectiveness for Medium Office Package 3A – All-Electric + EE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 3A: All-Electric + EE												
CZ01	PG&E	-19,115	4967	19.4	7%	(\$20,604)	\$20,630	\$28,112	>1	>1	\$41,234	\$48,716
CZ02	PG&E	-11,811	3868	15.2	10%	(\$7,046)	\$39,260	\$58,563	>1	>1	\$46,306	\$65,609
CZ03	PG&E	2,530	3142	16.2	16%	(\$15,681)	\$85,241	\$68,682	>1	>1	\$100,922	\$84,363
CZ04	PG&E	-10,839	3759	14.8	9%	(\$2,363)	\$59,432	\$58,420	>1	>1	\$61,795	\$60,783
CZ04-2	CPAU	-10,839	3759	14.8	9%	(\$2,363)	\$70,680	\$58,420	>1	>1	\$73,043	\$60,783
CZ05	PG&E	-2,316	3240	14.6	12%	(\$17,854)	\$85,380	\$58,802	>1	>1	\$103,234	\$76,656
CZ06	SCE	15,399	2117	14.3	18%	(\$9,503)	\$114,962	\$89,921	>1	>1	\$124,466	\$99,425
CZ06-2	LADWP	15,399	2117	14.3	18%	(\$9,503)	\$82,389	\$89,921	>1	>1	\$91,893	\$99,425
CZ07	SDG&E	33,318	950	13.8	20%	(\$3,676)	\$256,704	\$111,399	>1	>1	\$260,380	\$115,076
CZ08	SCE	30,231	1219	14.2	18%	(\$2,124)	\$110,144	\$111,781	>1	>1	\$112,268	\$113,906
CZ08-2	LADWP	30,231	1219	14.2	18%	(\$2,124)	\$76,069	\$111,781	>1	>1	\$78,194	\$113,906
CZ09	SCE	24,283	1605	14.3	15%	\$3,547	\$119,824	\$108,249	33.8	30.5	\$116,277	\$104,702
CZ09-2	LADWP	24,283	1605	14.3	15%	\$3,547	\$83,549	\$108,249	23.6	30.5	\$80,001	\$104,702
CZ10	SDG&E	12,344	2053	12.6	13%	\$18,748	\$230,553	\$82,905	12.3	4.4	\$211,806	\$64,158
CZ10-2	SCE	12,344	2053	12.6	13%	\$18,748	\$105,898	\$82,905	5.6	4.4	\$87,150	\$64,158
CZ11	PG&E	929	3062	14.5	10%	\$2,662	\$85,988	\$75,030	32.3	28.2	\$83,326	\$72,368
CZ12	PG&E	-3,419	3327	14.8	10%	(\$1,694)	\$68,866	\$69,589	>1	>1	\$70,560	\$71,283
CZ12-2	SMUD	-3,419	3327	14.8	10%	(\$1,694)	\$71,761	\$69,589	>1	>1	\$73,455	\$71,283
CZ13	PG&E	1,398	3063	14.8	9%	\$3,923	\$89,799	\$71,307	22.9	18.2	\$85,875	\$67,384
CZ14	SDG&E	-5,469	3266	13.5	9%	\$1,493	\$206,840	\$69,016	138.6	46.2	\$205,347	\$67,523
CZ14-2	SCE	-5,469	3266	13.5	9%	\$1,493	\$94,143	\$69,016	63.1	46.2	\$92,650	\$67,523
CZ15	SCE	25,375	1537	13.7	10%	\$30,474	\$114,909	\$104,335	3.8	3.4	\$84,435	\$73,862
CZ16	PG&E	-65,877	6185	12.7	-15%	\$2,553	(\$91,477)	(\$85,673)	-35.8	-33.6	(\$94,030)	(\$88,226)
CZ16-2	LADWP	-65,877	6185	12.7	-15%	\$2,553	\$72,780	(\$85,673)	28.5	-33.6	\$70,227	(\$88,226)



Figure 22. Cost Effectiveness for Medium Office Package 3B – All-Electric + EE + PV + B

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (mtons)	Compliance Margin (%)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + PV + B												
CZ01	PG&E	157,733	4967	54.9	7%	\$310,152	\$518,421	\$410,946	1.7	1.3	\$208,269	\$100,794
CZ02	PG&E	203,026	3868	57.8	10%	\$323,710	\$692,336	\$532,273	2.1	1.6	\$368,626	\$208,563
CZ03	PG&E	211,706	3142	58.0	16%	\$315,075	\$708,235	\$520,866	2.2	1.7	\$393,160	\$205,791
CZ04	PG&E	216,204	3759	59.9	9%	\$328,393	\$741,382	\$560,576	2.3	1.7	\$412,989	\$232,183
CZ04-2	CPAU	216,204	3759	59.9	9%	\$328,393	\$607,074	\$560,576	1.8	1.7	\$278,681	\$232,183
CZ05	PG&E	223,399	3240	59.8	12%	\$312,902	\$799,992	\$546,592	2.6	1.7	\$487,090	\$233,690
CZ06	SCE	233,299	2117	57.7	18%	\$321,252	\$509,969	\$583,963	1.6	1.8	\$188,716	\$262,711
CZ06-2	LA	233,299	2117	57.7	18%	\$321,252	\$311,931	\$583,963	1.0	1.8	(\$9,322)	\$262,711
CZ07	SDG&E	256,034	950	58.3	20%	\$327,079	\$870,156	\$609,498	2.7	1.9	\$543,076	\$282,419
CZ08	SCE	246,944	1219	57.4	18%	\$328,631	\$499,506	\$623,292	1.5	1.9	\$170,874	\$294,661
CZ08-2	LA	246,944	1219	57.4	18%	\$328,631	\$296,991	\$623,292	0.9	1.9	(\$31,640)	\$294,661
CZ09	SCE	243,838	1605	58.5	15%	\$334,303	\$504,498	\$615,178	1.5	1.8	\$170,195	\$280,875
CZ09-2	LA	243,838	1605	58.5	15%	\$334,303	\$307,626	\$615,178	0.9	1.8	(\$26,677)	\$280,875
CZ10	SDG&E	229,044	2053	56.2	13%	\$349,503	\$851,810	\$569,549	2.4	1.6	\$502,306	\$220,046
CZ10-2	SCE	229,044	2053	56.2	13%	\$349,503	\$491,383	\$569,549	1.4	1.6	\$141,880	\$220,046
CZ11	PG&E	212,047	3062	56.4	10%	\$333,418	\$743,403	\$556,758	2.2	1.7	\$409,985	\$223,340
CZ12	PG&E	207,955	3327	56.7	10%	\$329,062	\$713,054	\$552,415	2.2	1.7	\$383,993	\$223,353
CZ12-2	SMUD	207,955	3327	56.7	10%	\$329,062	\$414,371	\$552,415	1.3	1.7	\$85,310	\$223,353
CZ13	PG&E	209,431	3063	56.3	9%	\$334,679	\$728,822	\$544,969	2.2	1.6	\$394,143	\$210,289
CZ14	SDG&E	236,002	3266	61.3	9%	\$332,249	\$865,181	\$638,517	2.6	1.9	\$532,933	\$306,269
CZ14-2	SCE	236,002	3266	61.3	9%	\$332,249	\$488,163	\$638,517	1.5	1.9	\$155,914	\$306,269
CZ15	SCE	254,426	1537	58.5	10%	\$361,229	\$487,715	\$626,728	1.4	1.7	\$126,486	\$265,499
CZ16	PG&E	162,915	6185	58.6	-15%	\$333,309	\$580,353	\$406,746	1.7	1.2	\$247,044	\$73,437
CZ16-2	LA	162,915	6185	58.6	-15%	\$333,309	\$290,566	\$406,746	0.9	1.2	(\$42,742)	\$73,437



Figure 23. Cost Effectiveness for Medium Office Package 3C – All-Electric + HE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 3C: All-Electric + HE												
CZ01	PG&E	-53,390	4967	10.2	-14%	(\$43,987)	(\$93,740)	(\$57,752)	0.5	0.8	(\$49,753)	(\$13,765)
CZ02	PG&E	-45,916	3868	6.1	-5%	(\$22,722)	(\$77,212)	(\$26,394)	0.3	0.9	(\$54,490)	(\$3,672)
CZ03	PG&E	-34,656	3142	6.0	-6%	(\$38,261)	(\$45,796)	(\$25,153)	0.8	1.5	(\$7,535)	\$13,108
CZ04	PG&E	-43,248	3759	6.3	-3%	(\$15,229)	(\$56,932)	(\$18,996)	0.3	0.8	(\$41,703)	(\$3,767)
CZ04-2	CPAU	-43,248	3759	6.3	-3%	(\$15,229)	(\$5,298)	(\$18,996)	2.9	0.8	\$9,932	(\$3,767)
CZ05	PG&E	-37,068	3240	5.4	-6%	(\$40,434)	(\$38,330)	(\$29,544)	1.1	1.4	\$2,104	\$10,890
CZ06	SCE	-22,805	2117	4.0	-2%	(\$30,237)	\$39,812	(\$9,594)	>1	3.2	\$70,050	\$20,644
CZ06-2	LADWP	-22,805	2117	4.0	-2%	(\$30,237)	\$35,414	(\$9,594)	>1	3.2	\$65,651	\$20,644
CZ07	SDG&E	-7,646	950	2.5	1%	(\$22,564)	\$86,159	\$6,062	>1	>1	\$108,722	\$28,625
CZ08	SCE	-9,761	1219	3.2	1%	(\$18,443)	\$37,375	\$8,305	>1	>1	\$55,818	\$26,748
CZ08-2	LADWP	-9,761	1219	3.2	1%	(\$18,443)	\$29,973	\$8,305	>1	>1	\$48,416	\$26,748
CZ09	SCE	-12,211	1605	4.5	2%	(\$10,282)	\$46,335	\$13,364	>1	>1	\$56,617	\$23,646
CZ09-2	LADWP	-12,211	1605	4.5	2%	(\$10,282)	\$37,030	\$13,364	>1	>1	\$47,313	\$23,646
CZ10	SDG&E	-21,642	2053	3.7	-1%	\$11,340	\$84,901	(\$3,818)	7.5	-0.3	\$73,561	(\$15,158)
CZ10-2	SCE	-21,642	2053	3.7	-1%	\$11,340	\$40,659	(\$3,818)	3.6	-0.3	\$29,319	(\$15,158)
CZ11	PG&E	-32,052	3062	5.9	0%	(\$8,519)	(\$29,013)	(\$3,007)	0.3	2.8	(\$20,495)	\$5,512
CZ12	PG&E	-36,926	3327	6.0	-1%	(\$15,443)	(\$48,955)	(\$9,546)	0.3	1.6	(\$33,511)	\$5,898
CZ12-2	SMUD	-36,926	3327	6.0	-1%	(\$15,443)	\$9,916	(\$9,546)	>1	1.6	\$25,359	\$5,898
CZ13	PG&E	-31,253	3063	6.3	0%	(\$7,257)	(\$27,782)	(\$3,055)	0.3	2.4	(\$20,525)	\$4,202
CZ14	SDG&E	-36,402	3266	5.7	-1%	(\$10,651)	\$61,605	(\$9,832)	>1	1.1	\$72,256	\$819
CZ14-2	SCE	-36,402	3266	5.7	-1%	(\$10,651)	\$30,625	(\$9,832)	>1	1.1	\$41,276	\$819
CZ15	SCE	-4,775	1537	6.0	3%	\$28,927	\$52,955	\$32,790	1.8	1.1	\$24,028	\$3,863
CZ16	PG&E	-90,949	6185	6.5	-26%	(\$8,467)	(\$194,115)	(\$142,041)	0.0	0.1	(\$185,648)	(\$133,574)
CZ16-2	LADWP	-90,949	6185	6.5	-26%	(\$8,467)	\$37,127	(\$142,041)	>1	0.1	\$45,594	(\$133,574)



4.2 Cost Effectiveness Results – Medium Retail

Figure 24 through Figure 30 contain the cost-effectiveness findings for the Medium Retail packages. Notable findings for each package include:

- ◆ **1A – Mixed-Fuel + EE:**
 - ◆ Packages achieve +9% to +18% compliance margins depending on climate zone, and all packages are cost effective in all climate zones.
 - ◆ Incremental package costs vary across climate zones because of the HVAC system size in some climate zones are small enough (<54 kBtu/h) to have the economizers measure applied.
 - ◆ B/C ratios are high compared to other prototypes because the measures applied are primarily low-cost lighting measures. This suggests room for the inclusion of other energy efficiency measures with lower cost-effectiveness to achieve even higher compliance margins for a cost effective package.
- ◆ **1B – Mixed-Fuel + EE + PV + B:** All packages are cost effective using both the On-Bill and TDV approach, except On-Bill in LADWP territory. Adding PV and battery to the efficiency packages reduces the B/C ratio but increases overall NPV savings.
- ◆ **1C – Mixed-fuel + HE:** Packages achieve +1 to +4% compliance margins depending on climate zone, and packages are cost effective in all climate zones except CZs 1, 3 and 5 using the TDV approach.
- ◆ **2 – All-Electric Federal Code-Minimum Reference:**
 - ◆ Packages achieve between -12% and +1% compliance margins depending on climate zone.
 - ◆ Packages achieve positive savings using both the On-Bill and TDV approaches in CZs 6-10 and 14-15. Packages do not achieve On-Bill or TDV savings in most of PG&E territory (CZs 1, 2, 4, 5, 12-13, and 16).
 - ◆ Packages are cost effective in all climate zones except CZ16.
 - ◆ All incremental costs are negative primarily due to elimination of natural gas infrastructure.
- ◆ **3A – All-Electric + EE:** Packages achieve between +3% and +16% compliance margins depending on climate zone. All packages are cost effective in all climate zones.
- ◆ **3B – All-Electric + EE + PV + B:** All packages are cost effective using both the On-Bill and TDV approaches, except On-Bill in LADWP territory. Adding PV and Battery to the efficiency package reduces the B/C ratio but increases overall NPV savings.
- ◆ **3C – All-Electric + HE:** Packages achieve between -8% and +5% compliance margins depending on climate zone, and packages are cost effective using both On-Bill and TDV approaches in all CZs except CZs 1 and 16.



Figure 24. Cost Effectiveness for Medium Retail Package 1A – Mixed-Fuel + EE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 1A: Mixed Fuel + EE												
CZ01	PG&E	15,210	1209	11.10	18%	\$2,712	\$68,358	\$60,189	25.2	22.2	\$65,646	\$57,478
CZ02	PG&E	18,885	613	8.73	13%	\$5,569	\$76,260	\$59,135	13.7	10.6	\$70,691	\$53,566
CZ03	PG&E	18,772	462	7.87	16%	\$5,569	\$66,813	\$57,135	12.0	10.3	\$61,244	\$51,566
CZ04	PG&E	19,100	439	7.84	14%	\$5,569	\$75,989	\$58,036	13.6	10.4	\$70,420	\$52,467
CZ04-2	CPAU	19,100	439	7.84	14%	\$5,569	\$51,556	\$58,036	9.3	10.4	\$45,987	\$52,467
CZ05	PG&E	17,955	415	7.41	16%	\$5,569	\$63,182	\$55,003	11.3	9.9	\$57,613	\$49,435
CZ05-2	SCG	17,955	415	7.41	16%	\$5,569	\$61,810	\$55,003	11.1	9.9	\$56,241	\$49,435
CZ06	SCE	12,375	347	5.54	10%	\$2,712	\$31,990	\$41,401	11.8	15.3	\$29,278	\$38,689
CZ06-2	LADWP	12,375	347	5.54	10%	\$2,712	\$21,667	\$41,401	8.0	15.3	\$18,956	\$38,689
CZ07	SDG&E	17,170	136	5.65	13%	\$5,569	\$73,479	\$49,883	13.2	9.0	\$67,910	\$44,314
CZ08	SCE	12,284	283	5.15	10%	\$2,712	\$30,130	\$41,115	11.1	15.2	\$27,419	\$38,403
CZ08-2	LADWP	12,284	283	5.15	10%	\$2,712	\$20,243	\$41,115	7.5	15.2	\$17,531	\$38,403
CZ09	SCE	13,473	302	5.51	10%	\$5,569	\$32,663	\$46,126	5.9	8.3	\$27,094	\$40,557
CZ09-2	LADWP	13,473	302	5.51	10%	\$5,569	\$22,435	\$46,126	4.0	8.3	\$16,866	\$40,557
CZ10	SDG&E	19,873	267	6.99	12%	\$5,569	\$83,319	\$58,322	15.0	10.5	\$77,751	\$52,753
CZ10-2	SCE	19,873	267	6.99	12%	\$5,569	\$39,917	\$58,322	7.2	10.5	\$34,348	\$52,753
CZ11	PG&E	21,120	578	9.14	13%	\$5,569	\$86,663	\$67,485	15.6	12.1	\$81,095	\$61,916
CZ12	PG&E	20,370	562	8.85	13%	\$5,569	\$81,028	\$64,409	14.6	11.6	\$75,459	\$58,840
CZ12-2	SMUD	20,370	562	8.85	13%	\$5,569	\$44,991	\$64,409	8.1	11.6	\$39,422	\$58,840
CZ13	PG&E	22,115	620	9.98	15%	\$2,712	\$109,484	\$83,109	40.4	30.6	\$106,772	\$80,398
CZ14	SDG&E	25,579	406	9.38	13%	\$2,712	\$116,354	\$80,055	42.9	29.5	\$113,643	\$77,343
CZ14-2	SCE	26,327	383	9.42	13%	\$2,712	\$57,290	\$83,065	21.1	30.6	\$54,578	\$80,354
CZ15	SCE	26,433	169	8.35	12%	\$2,712	\$57,152	\$79,506	21.1	29.3	\$54,440	\$76,794
CZ16	PG&E	15,975	752	8.72	13%	\$2,712	\$72,427	\$55,025	26.7	20.3	\$69,715	\$52,314
CZ16-2	LADWP	15,975	752	8.72	13%	\$2,712	\$31,906	\$55,025	11.8	20.3	\$29,194	\$52,314



Figure 25. Cost Effectiveness for Medium Retail Package 1B – Mixed-Fuel + EE + PV + B

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Compliance Margin (%)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + PV + Battery												
CZ01	PG&E	158,584	1209	40.79	18%	\$277,383	\$509,092	\$383,683	1.8	1.4	\$231,709	\$106,300
CZ02	PG&E	189,400	613	43.75	13%	\$280,240	\$590,043	\$465,474	2.1	1.7	\$309,803	\$185,234
CZ03	PG&E	191,016	462	43.52	16%	\$280,240	\$578,465	\$452,795	2.1	1.6	\$298,224	\$172,554
CZ04	PG&E	195,014	439	44.14	14%	\$280,240	\$605,369	\$480,989	2.2	1.7	\$325,129	\$200,748
CZ04-2	CPAU	195,014	439	44.14	14%	\$280,240	\$451,933	\$480,989	1.6	1.7	\$171,693	\$200,748
CZ05	PG&E	196,654	415	44.30	16%	\$280,240	\$589,771	\$464,749	2.1	1.7	\$309,530	\$184,509
CZ05-2	SCG	196,654	415	44.30	16%	\$280,240	\$588,407	\$464,749	2.1	1.7	\$308,167	\$184,509
CZ06	SCE	185,903	347	41.61	10%	\$277,383	\$322,495	\$456,596	1.2	1.6	\$45,111	\$179,213
CZ06-2	LA	185,903	347	41.61	10%	\$277,383	\$191,428	\$456,596	0.7	1.6	(\$85,955)	\$179,213
CZ07	SDG&E	197,650	136	43.24	13%	\$280,240	\$496,786	\$477,582	1.8	1.7	\$216,545	\$197,342
CZ08	SCE	187,869	283	41.48	10%	\$277,383	\$326,810	\$478,132	1.2	1.7	\$49,427	\$200,749
CZ08-2	LA	187,869	283	41.48	10%	\$277,383	\$190,379	\$478,132	0.7	1.7	(\$87,004)	\$200,749
CZ09	SCE	191,399	302	42.32	10%	\$280,240	\$334,869	\$472,770	1.2	1.7	\$54,629	\$192,530
CZ09-2	LA	191,399	302	42.32	10%	\$280,240	\$201,759	\$472,770	0.7	1.7	(\$78,481)	\$192,530
CZ10	SDG&E	200,033	267	44.01	12%	\$280,240	\$547,741	\$472,880	2.0	1.7	\$267,501	\$192,640
CZ10-2	SCE	200,033	267	44.01	12%	\$280,240	\$340,822	\$472,880	1.2	1.7	\$60,582	\$192,640
CZ11	PG&E	192,846	578	44.07	13%	\$280,240	\$582,969	\$490,855	2.1	1.8	\$302,728	\$210,615
CZ12	PG&E	191,720	562	43.70	13%	\$280,240	\$586,836	\$485,076	2.1	1.7	\$306,596	\$204,836
CZ12-2	SMUD	191,720	562	43.70	13%	\$280,240	\$319,513	\$485,076	1.1	1.7	\$39,273	\$204,836
CZ13	PG&E	195,031	620	45.19	15%	\$277,383	\$605,608	\$486,285	2.2	1.8	\$328,225	\$208,901
CZ14	SDG&E	217,183	406	47.86	13%	\$277,383	\$559,148	\$534,915	2.0	1.9	\$281,765	\$257,532
CZ14-2	SCE	217,927	383	47.91	14%	\$277,383	\$354,757	\$538,058	1.3	1.9	\$77,373	\$260,674
CZ15	SCE	208,662	169	44.51	12%	\$277,383	\$338,772	\$496,107	1.2	1.8	\$61,389	\$218,724
CZ16	PG&E	210,242	752	48.76	13%	\$277,383	\$608,779	\$490,262	2.2	1.8	\$331,395	\$212,879
CZ16-2	LA	210,242	752	48.76	13%	\$277,383	\$207,160	\$490,262	0.7	1.8	(\$70,223)	\$212,879



Figure 26. Cost Effectiveness for Medium Retail Package 1C – Mixed-Fuel + HE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 1C: Mixed Fuel + HE												
CZ01	PG&E	57	346	2.04	2%	\$9,006	\$6,301	\$6,065	0.7	0.7	(\$2,705)	(\$2,941)
CZ02	PG&E	2,288	229	2.01	3%	\$9,726	\$23,016	\$13,998	2.4	1.4	\$13,291	\$4,273
CZ03	PG&E	1,087	171	1.31	2%	\$9,063	\$6,782	\$7,186	0.7	0.8	(\$2,282)	(\$1,877)
CZ04	PG&E	1,862	159	1.46	3%	\$9,004	\$17,891	\$10,878	2.0	1.2	\$8,887	\$1,874
CZ04-2	CPAU	1,862	159	1.46	3%	\$9,004	\$7,821	\$10,878	0.9	1.2	(\$1,182)	\$1,874
CZ05	PG&E	664	162	1.11	1%	\$9,454	\$5,119	\$4,725	0.5	0.5	(\$4,335)	(\$4,729)
CZ05-2	SCG	664	162	1.11	1%	\$9,454	\$4,558	\$4,725	0.5	0.5	(\$4,896)	(\$4,729)
CZ06	SCE	2,648	90	1.24	3%	\$8,943	\$11,646	\$11,427	1.3	1.3	\$2,703	\$2,484
CZ06-2	LADWP	2,648	90	1.24	3%	\$8,943	\$7,329	\$11,427	0.8	1.3	(\$1,614)	\$2,484
CZ07	SDG&E	2,376	49	0.95	2%	\$9,194	\$20,103	\$9,779	2.2	1.1	\$10,909	\$585
CZ08	SCE	2,822	72	1.20	3%	\$9,645	\$11,989	\$12,877	1.2	1.3	\$2,344	\$3,233
CZ08-2	LADWP	2,822	72	1.20	3%	\$9,645	\$7,427	\$12,877	0.8	1.3	(\$2,218)	\$3,233
CZ09	SCE	4,206	88	1.73	4%	\$10,446	\$16,856	\$18,745	1.6	1.8	\$6,410	\$8,299
CZ09-2	LADWP	4,206	88	1.73	4%	\$10,446	\$10,604	\$18,745	1.0	1.8	\$158	\$8,299
CZ10	SDG&E	4,226	119	1.88	4%	\$9,514	\$36,412	\$19,008	3.8	2.0	\$26,898	\$9,494
CZ10-2	SCE	4,226	119	1.88	4%	\$9,514	\$17,094	\$19,008	1.8	2.0	\$7,580	\$9,494
CZ11	PG&E	4,188	225	2.56	4%	\$10,479	\$31,872	\$22,393	3.0	2.1	\$21,392	\$11,913
CZ12	PG&E	3,675	214	2.34	4%	\$10,409	\$29,653	\$20,525	2.8	2.0	\$19,243	\$10,115
CZ12-2	SMUD	3,675	214	2.34	4%	\$10,409	\$12,823	\$20,525	1.2	2.0	\$2,414	\$10,115
CZ13	PG&E	4,818	180	2.46	4%	\$9,809	\$34,149	\$23,623	3.5	2.4	\$24,340	\$13,814
CZ14	SDG&E	6,439	153	2.71	4%	\$12,103	\$44,705	\$26,348	3.7	2.2	\$32,601	\$14,245
CZ14-2	SCE	6,439	153	2.71	4%	\$12,103	\$22,032	\$26,348	1.8	2.2	\$9,929	\$14,245
CZ15	SCE	8,802	48	2.76	5%	\$12,534	\$25,706	\$31,402	2.1	2.5	\$13,171	\$18,868
CZ16	PG&E	2,316	390	2.97	3%	\$11,999	\$22,663	\$13,888	1.9	1.2	\$10,665	\$1,890
CZ16-2	LADWP	2,316	390	2.97	3%	\$11,999	\$11,921	\$13,888	1.0	1.2	(\$78)	\$1,890



Figure 27. Cost Effectiveness for Medium Retail Package 2 – All-Electric Federal Code Minimum

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost*	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 2: All-Electric Federal Code Minimum												
CZ01	PG&E	-29,155	3893	13.85	-4.1%	(\$23,048)	(\$8,333)	(\$13,910)	2.8	1.7	\$14,715	\$9,138
CZ02	PG&E	-21,786	2448	7.49	-1.0%	(\$27,464)	(\$16,476)	(\$4,483)	1.7	6.1	\$10,987	\$22,981
CZ03	PG&E	-14,583	1868	6.26	-0.4%	(\$24,111)	\$263	(\$1,450)	>1	16.6	\$24,374	\$22,661
CZ04	PG&E	-14,186	1706	5.30	-0.1%	(\$22,896)	(\$8,753)	(\$220)	2.6	104.2	\$14,143	\$22,676
CZ04-2	CPAU	-14,186	1706	5.30	-0.1%	(\$22,896)	\$12,493	(\$220)	>1	104.2	\$35,389	\$22,676
CZ05	PG&E	-14,334	1746	5.47	-1.2%	(\$25,507)	(\$1,567)	(\$4,197)	16.3	6.1	\$23,940	\$21,309
CZ06	SCE	-7,527	1002	3.32	0.5%	(\$21,762)	\$18,590	\$1,868	>1	>1	\$40,351	\$23,630
CZ06-2	LADWP	-7,527	1002	3.32	0.5%	(\$21,762)	\$19,309	\$1,868	>1	>1	\$41,071	\$23,630
CZ07	SDG&E	-3,812	522	1.76	0.3%	(\$23,762)	\$54,345	\$1,318	>1	>1	\$78,107	\$25,080
CZ08	SCE	-5,805	793	2.70	0.4%	(\$26,922)	\$16,735	\$1,846	>1	>1	\$43,658	\$28,768
CZ08-2	LADWP	-5,805	793	2.70	0.4%	(\$26,922)	\$17,130	\$1,846	>1	>1	\$44,052	\$28,768
CZ09	SCE	-7,241	970	3.32	0.4%	(\$32,113)	\$18,582	\$1,978	>1	>1	\$50,695	\$34,091
CZ09-2	LADWP	-7,241	970	3.32	0.4%	(\$32,113)	\$19,089	\$1,978	>1	>1	\$51,202	\$34,091
CZ10	SDG&E	-10,336	1262	3.99	0.1%	(\$27,272)	\$54,453	\$505	>1	>1	\$81,724	\$27,777
CZ10-2	SCE	-10,336	1262	3.99	0.1%	(\$27,272)	\$20,996	\$505	>1	>1	\$48,268	\$27,777
CZ11	PG&E	-19,251	2415	7.95	0.5%	(\$32,202)	(\$7,951)	\$2,615	4.1	>1	\$24,251	\$34,817
CZ12	PG&E	-19,471	2309	7.28	-0.1%	(\$32,504)	(\$14,153)	(\$461)	2.3	70.4	\$18,351	\$32,042
CZ12-2	SMUD	-19,471	2309	7.28	-0.1%	(\$32,504)	\$12,939	(\$461)	>1	70.4	\$45,443	\$32,042
CZ13	PG&E	-16,819	1983	6.15	-0.4%	(\$28,158)	(\$10,575)	(\$2,022)	2.7	13.9	\$17,582	\$26,136
CZ14	SDG&E	-13,208	1672	5.44	0.7%	(\$26,656)	\$41,117	\$4,461	>1	>1	\$67,772	\$31,117
CZ14-2	SCE	-13,208	1672	5.44	0.7%	(\$26,656)	\$18,467	\$4,461	>1	>1	\$45,123	\$31,117
CZ15	SCE	-2,463	518	2.14	0.9%	(\$29,544)	\$16,796	\$5,823	>1	>1	\$46,339	\$35,367
CZ16	PG&E	-41,418	4304	13.23	-12.2%	(\$25,771)	(\$49,862)	(\$52,542)	0.5	0.5	(\$24,091)	(\$26,771)
CZ16-2	LADWP	-41,418	4304	13.23	-12.2%	(\$25,771)	\$39,319	(\$52,542)	>1	0.5	\$65,090	(\$26,771)

*The Incremental Package Cost is the addition of the incremental HVAC and water heating equipment costs from Figure 11 and the natural gas infrastructure incremental cost savings of \$28,027 (see section 3.3.2.2).



Figure 28. Cost Effectiveness for Medium Retail Package 3A – All-Electric + EE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 3A: All-Electric + EE												
CZ01	PG&E	-5,478	3893	20.64	15%	(\$20,336)	\$63,593	\$51,224	>1	>1	\$83,929	\$71,560
CZ02	PG&E	2,843	2448	14.58	13%	(\$21,895)	\$74,997	\$56,893	>1	>1	\$96,892	\$78,788
CZ03	PG&E	7,791	1868	12.73	16%	(\$18,542)	\$68,968	\$56,586	>1	>1	\$87,511	\$75,128
CZ04	PG&E	8,572	1706	11.89	14%	(\$17,327)	\$81,957	\$57,904	>1	>1	\$99,284	\$75,231
CZ04-2	CPAU	8,572	1706	11.89	14%	(\$17,327)	\$63,082	\$57,904	>1	>1	\$80,408	\$75,231
CZ05	PG&E	6,973	1746	11.68	15%	(\$19,938)	\$63,677	\$51,949	>1	>1	\$83,615	\$71,887
CZ06	SCE	7,431	1002	7.72	11%	(\$19,050)	\$47,072	\$42,610	>1	>1	\$66,122	\$61,660
CZ06-2	LADWP	7,431	1002	7.72	11%	(\$19,050)	\$37,078	\$42,610	>1	>1	\$56,128	\$61,660
CZ07	SDG&E	14,350	522	6.98	13%	(\$18,193)	\$127,461	\$50,828	>1	>1	\$145,654	\$69,021
CZ08	SCE	8,524	793	6.90	10%	(\$24,210)	\$43,679	\$42,258	>1	>1	\$67,890	\$66,468
CZ08-2	LADWP	8,524	793	6.90	10%	(\$24,210)	\$34,038	\$42,258	>1	>1	\$58,248	\$66,468
CZ09	SCE	8,403	970	7.81	10%	(\$26,545)	\$47,819	\$47,356	>1	>1	\$74,364	\$73,901
CZ09-2	LADWP	8,403	970	7.81	10%	(\$26,545)	\$37,934	\$47,356	>1	>1	\$64,478	\$73,901
CZ10	SDG&E	11,737	1262	10.23	12%	(\$21,703)	\$137,436	\$58,761	>1	>1	\$159,139	\$80,464
CZ10-2	SCE	11,737	1262	10.23	12%	(\$21,703)	\$58,257	\$58,761	>1	>1	\$79,959	\$80,464
CZ11	PG&E	5,892	2415	15.13	12%	(\$26,633)	\$85,256	\$65,859	>1	>1	\$111,889	\$92,492
CZ12	PG&E	5,548	2309	14.46	12%	(\$26,935)	\$80,631	\$63,903	>1	>1	\$107,566	\$90,838
CZ12-2	SMUD	5,548	2309	14.46	12%	(\$26,935)	\$59,311	\$63,903	>1	>1	\$86,246	\$90,838
CZ13	PG&E	10,184	1983	14.15	14%	(\$25,446)	\$110,105	\$80,604	>1	>1	\$135,551	\$106,050
CZ14	SDG&E	16,583	1672	13.83	15%	(\$23,944)	\$171,200	\$88,471	>1	>1	\$195,145	\$112,415
CZ14-2	SCE	16,583	1672	13.83	15%	(\$23,944)	\$656,178	\$159,604	>1	>1	\$680,122	\$183,548
CZ15	SCE	23,642	518	9.44	12%	(\$26,832)	\$65,573	\$76,781	>1	>1	\$92,404	\$103,612
CZ16	PG&E	-18,232	4304	19.80	3%	(\$23,059)	\$38,796	\$14,152	>1	>1	\$61,855	\$37,211
CZ16-2	LADWP	-18,232	4304	19.80	3%	(\$23,059)	\$67,793	\$14,152	>1	>1	\$90,852	\$37,211



Figure 29. Cost Effectiveness for Medium Retail Package 3B – All-Electric + EE + PV + B

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Compliance Margin (%)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + PV + B												
CZ01	PG&E	137,956	3893	50.51	15%	\$254,335	\$510,831	\$374,432	2.0	1.5	\$256,496	\$120,097
CZ02	PG&E	173,387	2448	49.87	13%	\$252,777	\$590,112	\$463,431	2.3	1.8	\$337,336	\$210,654
CZ03	PG&E	180,055	1868	48.55	16%	\$256,129	\$585,861	\$452,399	2.3	1.8	\$329,732	\$196,270
CZ04	PG&E	184,499	1706	48.38	14%	\$257,345	\$608,814	\$481,011	2.4	1.9	\$351,470	\$223,666
CZ04-2	CPAU	184,499	1706	48.38	14%	\$257,345	\$465,690	\$481,011	1.8	1.9	\$208,345	\$223,666
CZ05	PG&E	185,690	1746	48.84	15%	\$254,734	\$600,933	\$461,804	2.4	1.8	\$346,199	\$207,071
CZ06	SCE	180,968	1002	43.91	11%	\$255,621	\$335,909	\$457,959	1.3	1.8	\$80,288	\$202,337
CZ06-2	LADWP	180,968	1002	43.91	11%	\$255,621	\$206,021	\$457,959	0.8	1.8	(\$49,601)	\$202,337
CZ07	SDG&E	194,837	522	44.67	13%	\$256,478	\$550,714	\$478,637	2.1	1.9	\$294,236	\$222,159
CZ08	SCE	184,120	793	43.32	10%	\$250,461	\$340,301	\$479,406	1.4	1.9	\$89,840	\$228,945
CZ08-2	LADWP	184,120	793	43.32	10%	\$250,461	\$203,813	\$479,406	0.8	1.9	(\$46,648)	\$228,945
CZ09	SCE	186,346	970	44.77	10%	\$248,127	\$349,524	\$474,176	1.4	1.9	\$101,397	\$226,049
CZ09-2	LADWP	186,346	970	44.77	10%	\$248,127	\$216,654	\$474,176	0.9	1.9	(\$31,473)	\$226,049
CZ10	SDG&E	191,923	1262	47.46	12%	\$252,969	\$593,514	\$473,605	2.3	1.9	\$340,545	\$220,636
CZ10-2	SCE	191,923	1262	47.46	12%	\$252,969	\$356,958	\$473,605	1.4	1.9	\$103,989	\$220,636
CZ11	PG&E	177,639	2415	50.26	12%	\$248,039	\$585,689	\$489,317	2.4	2.0	\$337,650	\$241,278
CZ12	PG&E	176,919	2309	49.46	12%	\$247,736	\$591,104	\$484,702	2.4	2.0	\$343,368	\$236,966
CZ12-2	SMUD	176,919	2309	49.46	12%	\$247,736	\$335,286	\$484,702	1.4	2.0	\$87,550	\$236,966
CZ13	PG&E	183,129	1983	49.48	14%	\$249,226	\$608,560	\$483,670	2.4	1.9	\$359,334	\$234,444
CZ14	SDG&E	208,183	1672	52.54	15%	\$250,727	\$593,232	\$544,079	2.4	2.2	\$342,505	\$293,351
CZ14-2	SCE	264,589	1672	80.97	15%	\$250,727	\$656,178	\$580,403	2.6	2.3	\$405,450	\$329,676
CZ15	SCE	205,869	518	45.67	12%	\$247,840	\$347,125	\$493,339	1.4	2.0	\$99,285	\$245,499
CZ16	PG&E	176,114	4304	60.13	3%	\$251,612	\$567,822	\$446,795	2.3	1.8	\$316,210	\$195,183
CZ16-2	LADWP	176,114	4304	60.13	3%	\$251,612	\$241,757	\$446,795	1.0	1.8	(\$9,856)	\$195,183



Figure 30. Cost Effectiveness for Medium Retail Package 3C – All-Electric + HE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 3C: All-Electric + HE												
CZ01	PG&E	-26,199	3893	14.76	-2%	(\$587)	\$369	(\$5,757)	>1	0.1	\$956	(\$5,170)
CZ02	PG&E	-16,989	2448	8.95	3%	(\$4,211)	\$12,323	\$11,251	>1	>1	\$16,534	\$15,463
CZ03	PG&E	-11,703	1868	7.15	2%	(\$2,213)	\$9,159	\$6,944	>1	>1	\$11,372	\$9,157
CZ04	PG&E	-10,675	1706	6.37	3%	(\$316)	\$14,317	\$11,383	>1	>1	\$14,633	\$11,700
CZ04-2	CPAU	-10,675	1706	6.37	3%	(\$316)	\$20,599	\$11,383	>1	>1	\$20,915	\$11,700
CZ05	PG&E	-11,969	1746	6.19	1%	(\$2,298)	\$5,592	\$1,824	>1	>1	\$7,890	\$4,122
CZ06	SCE	-3,919	1002	4.35	3%	\$1,418	\$29,751	\$13,734	21.0	9.7	\$28,333	\$12,316
CZ06-2	LADWP	-3,919	1002	4.35	3%	\$1,418	\$25,891	\$13,734	18.3	9.7	\$24,473	\$12,316
CZ07	SDG&E	-955	522	2.59	3%	(\$710)	\$74,518	\$11,229	>1	>1	\$75,227	\$11,939
CZ08	SCE	-2,224	793	3.74	4%	(\$3,719)	\$28,067	\$15,075	>1	>1	\$31,785	\$18,793
CZ08-2	LADWP	-2,224	793	3.74	4%	(\$3,719)	\$23,848	\$15,075	>1	>1	\$27,566	\$18,793
CZ09	SCE	-2,089	970	4.84	4%	(\$8,268)	\$34,648	\$21,162	>1	>1	\$42,916	\$29,430
CZ09-2	LADWP	-2,089	970	4.84	4%	(\$8,268)	\$28,837	\$21,162	>1	>1	\$37,105	\$29,430
CZ10	SDG&E	-4,868	1262	5.58	4%	(\$5,222)	\$91,136	\$20,041	>1	>1	\$96,358	\$25,263
CZ10-2	SCE	-4,868	1262	5.58	4%	(\$5,222)	\$37,200	\$20,041	>1	>1	\$42,422	\$25,263
CZ11	PG&E	-12,651	2415	9.95	5%	(\$8,217)	\$29,015	\$26,172	>1	>1	\$37,232	\$34,389
CZ12	PG&E	-13,479	2309	9.10	4%	(\$9,239)	\$20,839	\$21,228	>1	>1	\$30,078	\$30,466
CZ12-2	SMUD	-13,479	2309	9.10	4%	(\$9,239)	\$26,507	\$21,228	>1	>1	\$35,746	\$30,466
CZ13	PG&E	-9,935	1983	8.23	4%	(\$4,975)	\$30,123	\$24,063	>1	>1	\$35,097	\$29,037
CZ14	SDG&E	-5,407	1672	7.71	5%	\$121	\$88,669	\$31,029	732.5	256.3	\$88,547	\$30,908
CZ14-2	SCE	-5,407	1672	7.71	5%	\$121	\$40,709	\$31,029	336.3	256.3	\$40,588	\$30,908
CZ15	SCE	6,782	518	4.77	6%	(\$2,508)	\$42,238	\$37,379	>1	>1	\$44,745	\$39,887
CZ16	PG&E	-35,297	4304	15.03	-8%	\$1,102	(\$21,384)	(\$33,754)	-19.4	-30.6	(\$22,486)	(\$34,856)
CZ16-2	LADWP	-35,297	4304	15.03	-8%	\$1,102	\$48,625	(\$33,754)	44.1	-30.6	\$47,523	(\$34,856)



4.3 Cost Effectiveness Results – Small Hotel

The following issues must be considered when reviewing the Small Hotel results:

- ◆ The Small Hotel is a mix of residential and nonresidential space types, which results in different occupancy and load profiles than the office and retail prototypes.
- ◆ A potential laundry load has not been examined for the Small Hotel. The Reach Code Team attempted to characterize and apply the energy use intensity of laundry loads in hotels but did not find readily available data for use. Thus, cost effectiveness including laundry systems has not been examined.
- ◆ Contrary to the office and retail prototypes, the Small Hotel baseline water heater is a central gas storage type. Current compliance software cannot model central heat pump water heater systems with recirculation serving guest rooms.²³ The only modeling option for heat pump water heating is individual water heaters at each guest room even though this is a very uncommon configuration. TRC modeled individual heat pump water heaters but as a proxy for central heat pump water heating performance, but integrated costs associated with tank and controls for central heat pump water heating into cost effectiveness calculations.
- ◆ Assuming central heat pump water heating also enabled the inclusion of a solar hot water thermal collection system, which was a key efficiency measure to achieving compliance in nearly all climate zones.

Figure 31 through Figure 37 contain the cost-effectiveness findings for the Small Hotel packages. Notable findings for each package include:

- ◆ **1A – Mixed-Fuel + EE:**
 - ◆ Packages achieve +3 to +10% compliance margins depending on climate zone.
 - ◆ Packages are cost effective using either the On-Bill or TDV approach in all CZs except 12 (using SMUD rates), 14 (using SCE rates), and 15 (with SCE rates).
 - ◆ The hotel is primarily guest rooms with a smaller proportion of nonresidential space. Thus, the inexpensive VAV minimum flow measure and lighting measures that have been applied to the entirety of the Medium Office and Medium Retail prototypes have a relatively small impact in the Small Hotel.²⁴
- ◆ **1B – Mixed-Fuel + EE + PV + B:** Packages are cost effective using either the On-Bill or TDV approach in all CZs. Solar PV generally increases cost effectiveness compared to efficiency-only, particularly when using an NPV metric.
- ◆ **1C – Mixed-Fuel + HE:** Packages achieve +2 to +5% compliance margins depending on climate zone. The package is cost effective using the On-Bill approach in a minority of climate zones, and cost effective using TDV approach only in CZ15.

²³ The IOUs and CEC are actively working on including central heat pump water heater modeling with recirculation systems in early 2020.

²⁴ Title 24 requires that hotel/motel guest room lighting design comply with the residential lighting standards, which are all mandatory and are not awarded compliance credit for improved efficacy.



◆ **2 – All-Electric Federal Code-Minimum Reference:**

- ◆ This all-electric design does not comply with the Energy Commission's TDV performance budget. Packages achieve between -50% and -4% compliance margins depending on climate zone. This may be because the modeled HW system is constrained to having an artificially low efficiency to avoid triggering federal pre-emption, and the heat pump space heating systems must operate overnight when operation is less efficient.

- ◆ All packages are cost effective in all climate zones.

◆ **3A – All-Electric + EE:** Packages achieve positive compliance margins in all CZs ranging from 0% to +17%, except CZ16 which had a -18% compliance margin. All packages are cost effective in all climate zones. The improved degree of cost effectiveness outcomes in Package 3A compared to Package 1A appear to be due to the significant incremental package cost savings.

◆ **3B – All-Electric + EE + PV + B:** All packages are cost effective. Packages improve in B/C ratio when compared to 3A and increase in magnitude of overall NPV savings. PV appears to be more cost-effective with higher building electricity loads.

◆ **3C – All-Electric + HE:**

- ◆ Packages do not comply with Title 24 in all CZs except CZ15 which resulted in a +0.04% compliance margin.
- ◆ All packages are cost effective.

Figure 31. Cost Effectiveness for Small Hotel Package 1A – Mixed-Fuel + EE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 1A: Mixed Fuel + EE												
CZ01	PG&E	3,855	1288	5.65	9%	\$20,971	\$34,339	\$36,874	1.6	1.8	\$13,368	\$15,903
CZ02	PG&E	3,802	976	3.91	7%	\$20,971	\$26,312	\$29,353	1.3	1.4	\$5,341	\$8,381
CZ03	PG&E	4,153	1046	4.48	10%	\$20,971	\$31,172	\$35,915	1.5	1.7	\$10,201	\$14,944
CZ04	PG&E	5,007	395	0.85	6%	\$21,824	\$24,449	\$24,270	1.1	1.1	\$2,625	\$2,446
CZ04-2	CPAU	4,916	422	0.98	6%	\$21,824	\$18,713	\$24,306	0.9	1.1	(\$3,111)	\$2,483
CZ05	PG&E	3,530	1018	4.13	9%	\$20,971	\$28,782	\$34,448	1.4	1.6	\$7,810	\$13,477
CZ05-2	SCG	3,530	1018	4.13	9%	\$20,971	\$23,028	\$34,448	1.1	1.6	\$2,057	\$13,477
CZ06	SCE	5,137	418	1.16	8%	\$21,824	\$16,001	\$26,934	0.7	1.2	(\$5,823)	\$5,110
CZ06-2	LADWP	5,137	418	1.16	8%	\$21,824	\$11,706	\$26,934	0.5	1.2	(\$10,118)	\$5,110
CZ07	SDG&E	5,352	424	1.31	8%	\$21,824	\$26,699	\$27,975	1.2	1.3	\$4,876	\$6,152
CZ08	SCE	5,151	419	1.21	7%	\$21,824	\$15,931	\$23,576	0.7	1.1	(\$5,893)	\$1,752
CZ08-2	LADWP	5,151	419	1.21	7%	\$21,824	\$11,643	\$23,576	0.5	1.1	(\$10,180)	\$1,752
CZ09	SCE	5,229	406	1.16	6%	\$21,824	\$15,837	\$22,365	0.7	1.0	(\$5,987)	\$541
CZ09-2	LADWP	5,229	406	1.16	6%	\$21,824	\$11,632	\$22,365	0.5	1.0	(\$10,192)	\$541
CZ10	SDG&E	4,607	342	0.92	5%	\$21,824	\$25,506	\$22,219	1.2	1.0	\$3,683	\$396
CZ10-2	SCE	4,607	342	0.92	5%	\$21,824	\$13,868	\$22,219	0.6	1.0	(\$7,956)	\$396
CZ11	PG&E	4,801	325	0.87	4%	\$21,824	\$22,936	\$19,503	1.1	0.9	\$1,112	(\$2,321)
CZ12	PG&E	5,276	327	0.90	5%	\$21,824	\$22,356	\$21,305	1.0	0.98	\$532	(\$519)
CZ12-2	SMUD	5,276	327	0.90	5%	\$21,824	\$15,106	\$21,305	0.7	0.98	(\$6,717)	(\$519)
CZ13	PG&E	4,975	310	0.87	4%	\$21,824	\$23,594	\$19,378	1.1	0.9	\$1,770	(\$2,445)
CZ14	SDG&E	4,884	370	0.82	4%	\$21,824	\$24,894	\$21,035	1.1	0.96	\$3,070	(\$789)
CZ14-2	SCE	4,884	370	0.82	4%	\$21,824	\$14,351	\$21,035	0.7	0.96	(\$7,473)	(\$789)
CZ15	SCE	5,187	278	1.23	3%	\$21,824	\$13,645	\$18,089	0.6	0.8	(\$8,178)	(\$3,735)
CZ16	PG&E	2,992	1197	4.95	6%	\$20,971	\$27,813	\$30,869	1.3	1.5	\$6,842	\$9,898
CZ16-2	LADWP	2,992	1197	4.95	6%	\$20,971	\$19,782	\$30,869	0.9	1.5	(\$1,190)	\$9,898



Figure 32. Cost Effectiveness for Small Hotel Package 1B – Mixed-Fuel + EE + PV + B

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 1B: Mixed Fuel + EE + PV + B												
CZ01	PG&E	107,694	1288	28.73	9%	\$228,341	\$366,509	\$295,731	1.6	1.3	\$138,168	\$67,390
CZ02	PG&E	130,144	976	31.14	7%	\$228,341	\$359,248	\$336,575	1.6	1.5	\$130,907	\$108,233
CZ03	PG&E	129,107	1046	31.57	10%	\$228,341	\$430,737	\$335,758	1.9	1.5	\$202,396	\$107,416
CZ04	PG&E	132,648	395	28.46	6%	\$229,194	\$355,406	\$338,455	1.6	1.5	\$126,212	\$109,262
CZ04-2	CPAU	132,556	422	28.59	6%	\$229,194	\$322,698	\$338,492	1.4	1.5	\$93,504	\$109,298
CZ05	PG&E	136,318	1018	32.73	9%	\$228,341	\$452,611	\$352,342	2.0	1.5	\$224,269	\$124,001
CZ05-2	SCG	136,318	1018	32.73	9%	\$228,341	\$446,858	\$352,342	2.0	1.5	\$218,516	\$124,001
CZ06	SCE	131,051	418	28.47	8%	\$229,194	\$217,728	\$336,843	0.9	1.5	(\$11,466)	\$107,649
CZ06-2	LADWP	131,051	418	28.47	8%	\$229,194	\$131,052	\$336,843	0.6	1.5	(\$98,142)	\$107,649
CZ07	SDG&E	136,359	424	29.63	8%	\$229,194	\$306,088	\$345,378	1.3	1.5	\$76,894	\$116,184
CZ08	SCE	132,539	419	28.85	7%	\$229,194	\$227,297	\$353,013	1.0	1.5	(\$1,897)	\$123,819
CZ08-2	LADWP	132,539	419	28.85	7%	\$229,194	\$134,739	\$353,013	0.6	1.5	(\$94,455)	\$123,819
CZ09	SCE	131,422	406	28.82	6%	\$229,194	\$230,791	\$343,665	1.0	1.5	\$1,597	\$114,471
CZ09-2	LADWP	131,422	406	28.82	6%	\$229,194	\$136,024	\$343,665	0.6	1.5	(\$93,170)	\$114,471
CZ10	SDG&E	134,146	342	29.05	5%	\$229,194	\$339,612	\$342,574	1.5	1.5	\$110,418	\$113,380
CZ10-2	SCE	134,146	342	29.05	5%	\$229,194	\$226,244	\$342,574	1.0	1.5	(\$2,949)	\$113,380
CZ11	PG&E	128,916	325	27.62	4%	\$229,194	\$352,831	\$337,208	1.5	1.5	\$123,637	\$108,014
CZ12	PG&E	131,226	327	28.04	5%	\$229,194	\$425,029	\$338,026	1.9	1.5	\$195,835	\$108,832
CZ12-2	SMUD	131,226	327	28.04	5%	\$229,194	\$213,176	\$338,026	0.9	1.5	(\$16,018)	\$108,832
CZ13	PG&E	127,258	310	27.33	4%	\$229,194	\$351,244	\$324,217	1.5	1.4	\$122,050	\$95,023
CZ14	SDG&E	147,017	370	30.96	4%	\$229,194	\$861,445	\$217,675	3.8	0.9	\$632,251	(\$11,518)
CZ14-2	SCE	147,017	370	30.96	4%	\$229,194	\$244,100	\$381,164	1.1	1.7	\$14,906	\$151,970
CZ15	SCE	137,180	278	29.12	3%	\$229,194	\$225,054	\$348,320	1.0	1.5	(\$4,140)	\$119,127
CZ16	PG&E	141,478	1197	34.60	6%	\$228,341	\$377,465	\$357,241	1.7	1.6	\$149,124	\$128,899
CZ16-2	LADWP	141,478	1197	34.60	6%	\$228,341	\$136,563	\$357,241	0.6	1.6	(\$91,778)	\$128,899



Figure 33. Cost Effectiveness for Small Hotel Package 1C – Mixed-Fuel + HE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 1C: Mixed Fuel + HE												
CZ01	PG&E	10	632	3.76	2%	\$22,839	\$11,015	\$10,218	0.5	0.4	(\$11,823)	(\$12,621)
CZ02	PG&E	981	402	2.69	3%	\$23,092	\$16,255	\$11,808	0.7	0.5	(\$6,837)	(\$11,284)
CZ03	PG&E	81	383	2.30	2%	\$20,510	\$7,066	\$6,850	0.3	0.3	(\$13,444)	(\$13,660)
CZ04	PG&E	161	373	2.26	2%	\$22,164	\$8,593	\$7,645	0.4	0.3	(\$13,571)	(\$14,519)
CZ04-2	CPAU	161	373	2.26	2%	\$22,164	\$7,097	\$7,645	0.3	0.3	(\$15,067)	(\$14,519)
CZ05	PG&E	154	361	2.19	2%	\$21,418	\$6,897	\$6,585	0.3	0.3	(\$14,521)	(\$14,833)
CZ05-2	SCG	154	361	2.19	2%	\$21,418	\$4,786	\$6,585	0.2	0.3	(\$16,632)	(\$14,833)
CZ06	SCE	237	201	1.27	2%	\$20,941	\$3,789	\$4,882	0.2	0.2	(\$17,152)	(\$16,059)
CZ06-2	LADWP	237	201	1.27	2%	\$20,941	\$3,219	\$4,882	0.2	0.2	(\$17,722)	(\$16,059)
CZ07	SDG&E	1,117	158	1.28	2%	\$19,625	\$13,771	\$7,342	0.7	0.4	(\$5,854)	(\$12,283)
CZ08	SCE	1,302	169	1.39	2%	\$20,678	\$8,378	\$8,591	0.4	0.4	(\$12,300)	(\$12,088)
CZ08-2	LADWP	1,302	169	1.39	2%	\$20,678	\$5,802	\$8,591	0.3	0.4	(\$14,877)	(\$12,088)
CZ09	SCE	1,733	178	1.56	3%	\$20,052	\$10,489	\$11,164	0.5	0.6	(\$9,563)	(\$8,888)
CZ09-2	LADWP	1,733	178	1.56	3%	\$20,052	\$7,307	\$11,164	0.4	0.6	(\$12,745)	(\$8,888)
CZ10	SDG&E	3,170	220	2.29	4%	\$22,682	\$35,195	\$19,149	1.6	0.8	\$12,513	(\$3,533)
CZ10-2	SCE	3,170	220	2.29	4%	\$22,682	\$16,701	\$19,149	0.7	0.8	(\$5,981)	(\$3,533)
CZ11	PG&E	3,343	323	2.96	4%	\$23,344	\$27,633	\$20,966	1.2	0.9	\$4,288	(\$2,379)
CZ12	PG&E	1,724	320	2.44	4%	\$22,302	\$11,597	\$15,592	0.5	0.7	(\$10,705)	(\$6,710)
CZ12-2	SMUD	1,724	320	2.44	4%	\$22,302	\$11,156	\$15,592	0.5	0.7	(\$11,146)	(\$6,710)
CZ13	PG&E	3,083	316	2.81	3%	\$22,882	\$23,950	\$17,068	1.0	0.7	\$1,068	(\$5,814)
CZ14	SDG&E	3,714	312	2.99	4%	\$23,299	\$35,301	\$21,155	1.5	0.9	\$12,002	(\$2,144)
CZ14-2	SCE	3,714	312	2.99	4%	\$23,299	\$18,460	\$21,155	0.8	0.9	(\$4,839)	(\$2,144)
CZ15	SCE	8,684	97	3.21	5%	\$20,945	\$26,738	\$31,600	1.3	1.5	\$5,792	\$10,655
CZ16	PG&E	836	700	4.42	3%	\$24,616	\$18,608	\$14,494	0.8	0.6	(\$6,007)	(\$10,121)
CZ16-2	LADWP	836	700	4.42	3%	\$24,616	\$15,237	\$14,494	0.6	0.6	(\$9,378)	(\$10,121)



Figure 34. Cost Effectiveness for Small Hotel Package 2 – All-Electric Federal Code Minimum

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost*	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 2: All-Electric Federal Code Minimum												
CZ01	PG&E	-159,802	16917	53.92	-28%	(\$1,296,784)	(\$582,762)	(\$115,161)	2.2	11.3	\$714,022	\$1,181,623
CZ02	PG&E	-118,739	12677	40.00	-12%	(\$1,297,757)	(\$245,434)	(\$51,620)	5.3	25.1	\$1,052,322	\$1,246,137
CZ03	PG&E	-110,595	12322	40.48	-14%	(\$1,300,029)	(\$326,633)	(\$51,166)	4.0	25.4	\$973,396	\$1,248,863
CZ04	PG&E	-113,404	11927	36.59	-13%	(\$1,299,864)	(\$225,307)	(\$53,134)	5.8	24.5	\$1,074,556	\$1,246,730
CZ04-2	CPAU	-113,404	11927	36.59	-13%	(\$1,299,864)	(\$17,768)	(\$53,134)	73.2	24.5	\$1,282,096	\$1,246,730
CZ05	PG&E	-108,605	11960	38.34	-15%	(\$1,299,917)	(\$350,585)	(\$54,685)	3.7	23.8	\$949,332	\$1,245,232
CZ06	SCE	-78,293	8912	29.36	-5%	(\$1,300,058)	(\$61,534)	(\$28,043)	21.1	46.4	\$1,238,524	\$1,272,015
CZ06-2	LA	-78,293	8912	29.36	-5%	(\$1,300,058)	\$43,200	(\$28,043)	>1	46.4	\$1,343,258	\$1,272,015
CZ07	SDG&E	-69,819	8188	28.04	-7%	(\$1,298,406)	(\$137,638)	(\$23,199)	9.4	56.0	\$1,160,768	\$1,275,207
CZ08	SCE	-71,914	8353	28.21	-6%	(\$1,296,376)	(\$53,524)	(\$22,820)	24.2	56.8	\$1,242,852	\$1,273,556
CZ08-2	LA	-71,914	8353	28.21	-6%	(\$1,296,376)	\$42,841	(\$22,820)	>1	56.8	\$1,339,217	\$1,273,556
CZ09	SCE	-72,262	8402	28.38	-6%	(\$1,298,174)	(\$44,979)	(\$21,950)	28.9	59.1	\$1,253,196	\$1,276,224
CZ09-2	LA	-72,262	8402	28.38	-6%	(\$1,298,174)	\$46,679	(\$21,950)	>1	59.1	\$1,344,853	\$1,276,224
CZ10	SDG&E	-80,062	8418	26.22	-8%	(\$1,295,176)	(\$172,513)	(\$36,179)	7.5	35.8	\$1,122,663	\$1,258,997
CZ10-2	SCE	-80,062	8418	26.22	-8%	(\$1,295,176)	(\$63,974)	(\$36,179)	20.2	35.8	\$1,231,202	\$1,258,997
CZ11	PG&E	-99,484	10252	30.99	-10%	(\$1,295,985)	(\$186,037)	(\$49,387)	7.0	26.2	\$1,109,948	\$1,246,598
CZ12	PG&E	-99,472	10403	32.08	-10%	(\$1,297,425)	(\$340,801)	(\$45,565)	3.8	28.5	\$956,624	\$1,251,860
CZ12-2	SMUD	-99,067	10403	32.21	-10%	(\$1,297,425)	\$5,794	(\$44,354)	>1	29.3	\$1,303,219	\$1,253,071
CZ13	PG&E	-96,829	10029	30.60	-10%	(\$1,295,797)	(\$184,332)	(\$50,333)	7.0	25.7	\$1,111,465	\$1,245,464
CZ14	SDG&E	-101,398	10056	29.68	-11%	(\$1,296,156)	(\$325,928)	(\$56,578)	4.0	22.9	\$970,228	\$1,239,578
CZ14-2	SCE	-101,398	10056	29.68	-11%	(\$1,296,156)	(\$121,662)	(\$56,578)	10.7	22.9	\$1,174,494	\$1,239,578
CZ15	SCE	-49,853	5579	18.07	-4%	(\$1,294,276)	\$209	(\$21,420)	>1	60.4	\$1,294,485	\$1,272,856
CZ16	PG&E	-216,708	17599	41.89	-50%	(\$1,300,552)	(\$645,705)	(\$239,178)	2.0	5.4	\$654,847	\$1,061,374
CZ16-2	LA	-216,708	17599	41.89	-50%	(\$1,300,552)	\$30,974	(\$239,178)	>1	5.4	\$1,331,526	\$1,061,374

*The Incremental Package Cost is the addition of the incremental HVAC and water heating equipment costs from Figure 12, the electrical infrastructure incremental cost of \$26,800 (see section 3.3.2.1), and the natural gas infrastructure incremental cost savings of \$56,020 (see section 3.3.2.2).



Figure 35. Cost Effectiveness for Small Hotel Package 3A – All-Electric + EE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 3A: All-Electric + EE												
CZ01	PG&E	-113,259	16917	62.38	1.3%	(\$1,251,544)	(\$200,367)	\$5,460	6.2	>1	\$1,051,177	\$1,257,005
CZ02	PG&E	-90,033	12677	45.46	4%	(\$1,265,064)	(\$108,075)	\$15,685	11.7	>1	\$1,156,989	\$1,280,749
CZ03	PG&E	-83,892	12322	45.93	6%	(\$1,267,509)	(\$198,234)	\$20,729	6.4	>1	\$1,069,274	\$1,288,237
CZ04	PG&E	-91,197	11927	40.36	0.2%	(\$1,263,932)	(\$112,892)	\$703	11.2	>1	\$1,151,041	\$1,264,635
CZ04-2	CPAU	-90,981	11927	40.42	0.2%	(\$1,263,932)	\$32,557	\$918	>1	>1	\$1,296,489	\$1,264,850
CZ05	PG&E	-82,491	11960	43.62	5%	(\$1,267,355)	(\$221,492)	\$18,488	5.7	>1	\$1,045,863	\$1,285,843
CZ06	SCE	-61,523	8912	32.45	7%	(\$1,267,916)	(\$33,475)	\$15,142	37.9	>1	\$1,234,441	\$1,283,057
CZ06-2	LADWP	-61,523	8912	32.45	7%	(\$1,267,916)	\$57,215	\$15,142	>1	>1	\$1,325,130	\$1,283,057
CZ07	SDG&E	-53,308	8188	31.22	7%	(\$1,266,354)	(\$81,338)	\$22,516	15.6	>1	\$1,185,015	\$1,288,870
CZ08	SCE	-55,452	8353	31.33	3%	(\$1,264,408)	(\$23,893)	\$9,391	52.9	>1	\$1,240,515	\$1,273,800
CZ08-2	LADWP	-55,452	8353	31.33	3%	(\$1,264,408)	\$57,058	\$9,391	>1	>1	\$1,321,466	\$1,273,800
CZ09	SCE	-55,887	8402	31.40	2%	(\$1,266,302)	(\$19,887)	\$9,110	63.7	>1	\$1,246,415	\$1,275,412
CZ09-2	LADWP	-55,887	8402	31.40	2%	(\$1,266,302)	\$60,441	\$9,110	>1	>1	\$1,326,743	\$1,275,412
CZ10	SDG&E	-60,239	8418	29.96	2%	(\$1,256,002)	(\$126,072)	\$7,365	10.0	>1	\$1,129,930	\$1,263,367
CZ10-2	SCE	-60,239	8418	29.96	2%	(\$1,256,002)	(\$33,061)	\$7,365	38.0	>1	\$1,222,940	\$1,263,367
CZ11	PG&E	-77,307	10252	35.12	1%	(\$1,256,149)	(\$80,187)	\$3,114	15.7	>1	\$1,175,962	\$1,259,263
CZ12	PG&E	-75,098	10403	36.73	2%	(\$1,256,824)	(\$234,275)	\$9,048	5.4	>1	\$1,022,550	\$1,265,872
CZ12-2	SMUD	-75,098	10403	36.73	2%	(\$1,256,824)	\$54,941	\$9,048	>1	>1	\$1,311,765	\$1,265,872
CZ13	PG&E	-75,052	10029	34.72	0.3%	(\$1,256,109)	(\$79,378)	\$1,260	15.8	>1	\$1,176,731	\$1,257,369
CZ14	SDG&E	-76,375	10056	34.28	0.1%	(\$1,255,704)	(\$170,975)	\$543	7.3	>1	\$1,084,729	\$1,256,247
CZ14-2	SCE	-76,375	10056	34.28	0.1%	(\$1,255,704)	(\$34,418)	\$543	36.5	>1	\$1,221,286	\$1,256,247
CZ15	SCE	-33,722	5579	21.43	2%	(\$1,257,835)	\$26,030	\$12,262	>1	>1	\$1,283,864	\$1,270,097
CZ16	PG&E	-139,676	17599	55.25	-14%	(\$1,255,364)	(\$197,174)	(\$66,650)	6.4	18.8	\$1,058,190	\$1,188,714
CZ16-2	LADWP	-139,676	17599	55.25	-14%	(\$1,255,364)	\$165,789	(\$66,650)	>1	18.8	\$1,421,153	\$1,188,714



Figure 36. Cost Effectiveness for Small Hotel Package 3B – All-Electric + EE + PV + B

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 3B: All-Electric + EE + PV + B												
CZ01	PG&E	-8,900	16917	87.15	1%	(\$1,044,174)	\$90,964	\$324,376	>1	>1	\$1,135,139	\$1,368,551
CZ02	PG&E	36,491	12677	73.03	4%	(\$1,057,694)	\$242,514	\$313,711	>1	>1	\$1,300,208	\$1,371,405
CZ03	PG&E	41,239	12322	73.43	6%	(\$1,060,139)	\$155,868	\$308,385	>1	>1	\$1,216,007	\$1,368,524
CZ04	PG&E	36,628	11927	69.70	0.2%	(\$1,056,562)	\$240,799	\$308,682	>1	>1	\$1,297,361	\$1,365,244
CZ04-2	CPAU	36,844	11927	69.76	0.2%	(\$1,056,562)	\$336,813	\$418,836	>1	>1	\$1,393,375	\$1,475,398
CZ05	PG&E	36,365	11960	73.11	5%	(\$1,059,985)	\$119,173	\$317,952	>1	>1	\$1,179,158	\$1,377,937
CZ06	SCE	64,476	8912	60.47	7%	(\$1,060,545)	\$156,327	\$311,730	>1	>1	\$1,216,872	\$1,372,275
CZ06-2	LADWP	64,476	8912	60.47	7%	(\$1,060,545)	\$180,648	\$311,730	>1	>1	\$1,241,193	\$1,372,275
CZ07	SDG&E	77,715	8188	60.45	7%	(\$1,058,983)	\$197,711	\$330,458	>1	>1	\$1,256,694	\$1,389,441
CZ08	SCE	71,990	8353	59.49	3%	(\$1,057,038)	\$165,393	\$320,814	>1	>1	\$1,222,432	\$1,377,852
CZ08-2	LADWP	71,990	8353	60.24	3%	(\$1,057,038)	\$180,367	\$443,809	>1	>1	\$1,237,405	\$1,500,847
CZ09	SCE	70,465	8402	59.29	2%	(\$1,058,932)	\$175,602	\$301,459	>1	>1	\$1,234,534	\$1,360,391
CZ09-2	LADWP	70,465	8402	59.29	2%	(\$1,058,932)	\$183,220	\$301,459	>1	>1	\$1,242,152	\$1,360,391
CZ10	SDG&E	69,581	8418	58.04	2%	(\$1,048,632)	\$161,513	\$294,530	>1	>1	\$1,210,145	\$1,343,162
CZ10-2	SCE	69,581	8418	58.04	2%	(\$1,048,632)	\$164,837	\$294,530	>1	>1	\$1,213,469	\$1,343,162
CZ11	PG&E	47,260	10252	61.57	1%	(\$1,048,779)	\$253,717	\$286,797	>1	>1	\$1,302,496	\$1,335,576
CZ12	PG&E	51,115	10403	64.07	2%	(\$1,049,454)	\$104,523	\$305,446	>1	>1	\$1,153,977	\$1,354,900
CZ12-2	SMUD	51,115	10403	64.99	2%	(\$1,049,454)	\$253,197	\$430,977	>1	>1	\$1,302,651	\$1,480,431
CZ13	PG&E	47,757	10029	60.77	0.3%	(\$1,048,739)	\$251,663	\$281,877	>1	>1	\$1,300,402	\$1,330,616
CZ14	SDG&E	66,084	10056	64.54	0.1%	(\$1,048,334)	\$148,510	\$334,938	>1	>1	\$1,196,844	\$1,383,272
CZ14-2	SCE	66,084	10056	64.54	0.1%	(\$1,048,334)	\$185,018	\$334,938	>1	>1	\$1,233,352	\$1,383,272
CZ15	SCE	98,755	5579	49.04	2.1%	(\$1,050,465)	\$233,308	\$311,121	>1	>1	\$1,283,772	\$1,361,585
CZ16	PG&E	-873	17599	84.99	-14%	(\$1,047,994)	\$191,994	\$240,724	>1	>1	\$1,239,987	\$1,288,718
CZ16-2	LADWP	-873	17599	84.99	-14%	(\$1,047,994)	\$291,279	\$240,724	>1	>1	\$1,339,273	\$1,288,718



Figure 37. Cost Effectiveness for Small Hotel Package 3C – All-Electric + HE

CZ	Utility	Elec Savings (kWh)	Gas Savings (therms)	GHG Reductions (mtons)	Compliance Margin	Incremental Package Cost	Lifecycle Utility Cost Savings	\$TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Package 3C: All-Electric + HE												
CZ01	PG&E	-154,840	16917	56.24	-24%	(\$1,281,338)	(\$606,619)	(\$101,272)	2.1	12.7	\$674,719	\$1,180,066
CZ02	PG&E	-118,284	12677	41.18	-11%	(\$1,283,243)	(\$395,641)	(\$44,505)	3.2	28.8	\$887,602	\$1,238,738
CZ03	PG&E	-113,413	12322	40.80	-14%	(\$1,288,782)	(\$522,458)	(\$51,582)	2.5	25.0	\$766,324	\$1,237,200
CZ04	PG&E	-115,928	11927	37.09	-13%	(\$1,287,878)	(\$383,177)	(\$53,285)	3.4	24.2	\$904,701	\$1,234,593
CZ04-2	CPAU	-115,928	11927	37.09	-13%	(\$1,287,878)	(\$24,170)	(\$53,285)	53.3	24.2	\$1,263,708	\$1,234,593
CZ05	PG&E	-111,075	11960	38.75	-15%	(\$1,288,242)	(\$530,740)	(\$56,124)	2.4	23.0	\$757,502	\$1,232,119
CZ06	SCE	-83,000	8912	29.41	-15%	(\$1,288,695)	(\$154,625)	(\$32,244)	8.3	40.0	\$1,134,069	\$1,256,451
CZ06-2	LADWP	-83,000	8912	29.41	-15%	(\$1,288,695)	(\$17,626)	(\$32,244)	73.1	40.0	\$1,271,068	\$1,256,451
CZ07	SDG&E	-73,823	8188	28.32	-7%	(\$1,285,759)	(\$268,207)	(\$24,069)	4.8	53.4	\$1,017,552	\$1,261,690
CZ08	SCE	-75,573	8353	28.56	-6%	(\$1,281,241)	(\$157,393)	(\$21,912)	8.1	58.5	\$1,123,848	\$1,259,329
CZ08-2	LADWP	-75,573	8353	28.56	-6%	(\$1,281,241)	(\$18,502)	(\$21,912)	69.2	58.5	\$1,262,739	\$1,259,329
CZ09	SCE	-74,790	8402	29.04	-4%	(\$1,285,139)	(\$138,746)	(\$16,992)	9.3	75.6	\$1,146,393	\$1,268,147
CZ09-2	LADWP	-74,790	8402	29.04	-4%	(\$1,285,139)	(\$6,344)	(\$16,992)	202.6	75.6	\$1,278,794	\$1,268,147
CZ10	SDG&E	-80,248	8418	27.57	-5%	(\$1,278,097)	(\$235,479)	(\$24,107)	5.4	53.0	\$1,042,617	\$1,253,990
CZ10-2	SCE	-80,248	8418	27.57	-5%	(\$1,278,097)	(\$123,371)	(\$24,107)	10.4	53.0	\$1,154,726	\$1,253,990
CZ11	PG&E	-98,041	10252	32.73	-7%	(\$1,279,528)	(\$278,242)	(\$35,158)	4.6	36.4	\$1,001,286	\$1,244,370
CZ12	PG&E	-100,080	10403	33.24	-9%	(\$1,282,834)	(\$480,347)	(\$38,715)	2.7	33.1	\$802,487	\$1,244,119
CZ12-2	SMUD	-100,080	10403	33.24	-9%	(\$1,282,834)	(\$23,362)	(\$38,715)	54.9	33.1	\$1,259,472	\$1,244,119
CZ13	PG&E	-94,607	10029	32.47	-7%	(\$1,279,301)	(\$276,944)	\$244,552	4.6	>1	\$1,002,357	\$1,523,853
CZ14	SDG&E	-97,959	10056	31.91	-7%	(\$1,279,893)	(\$302,123)	(\$37,769)	4.2	33.9	\$977,770	\$1,242,124
CZ14-2	SCE	-97,959	10056	31.91	-7%	(\$1,279,893)	(\$129,082)	(\$37,769)	9.9	33.9	\$1,150,811	\$1,242,124
CZ15	SCE	-45,226	5579	20.17	0.04%	(\$1,276,847)	(\$6,533)	\$227	195.4	>1	\$1,270,314	\$1,277,074
CZ16	PG&E	-198,840	17599	47.73	-39%	(\$1,288,450)	(\$605,601)	(\$185,438)	2.1	6.9	\$682,848	\$1,103,011
CZ16-2	LADWP	-198,840	17599	47.73	-39%	(\$1,288,450)	\$40,268	(\$185,438)	>1	6.9	\$1,328,718	\$1,103,011



4.4 Cost Effectiveness Results – PV-only and PV+Battery

The Reach Code Team ran packages of PV-only and PV+Battery measures, without any additional efficiency measures, to assess cost effectiveness on top of the mixed-fuel baseline building and the all-electric federal code minimum reference (Package 2 in Sections 4.1 – 4.3).

Jurisdictions interested in adopting PV-only reach codes should reference the mixed-fuel cost effectiveness results because a mixed-fuel building is the baseline for the nonresidential prototypes analyzed in this study. PV or PV+Battery packages are added to all-electric federal code minimum reference which (in many scenarios) do not have a positive compliance margin compared to the mixed-fuel baseline model, and are solely provided for informational purposes. Jurisdictions interested in reach codes requiring all-electric+PV or all-electric+PV+battery should reference package 3B results in Sections 4.1 – 4.3.²⁵

Each of the following eight packages were evaluated against a mixed fuel baseline designed as per 2019 Title 24 Part 6 requirements.

- ◆ **Mixed-Fuel + 3 kW PV Only:**
- ◆ **Mixed-Fuel + 3 kW PV + 5 kWh battery**
- ◆ **Mixed-Fuel + PV Only:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller
- ◆ **Mixed-Fuel + PV + 50 kWh Battery:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller, along with 50 kWh battery
- ◆ **All-Electric + 3 kW PV Only**
- ◆ **All-Electric + 3 kW PV + 5 kWh Battery**
- ◆ **All-Electric + PV Only:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller
- ◆ **All-Electric + PV + 50 kWh Battery:** PV sized per the roof size of the building, or to offset the annual electricity consumption, whichever is smaller, along with 50 kWh battery

Figure 38 through Figure 40 summarize the on-bill and TDV B/C ratios for each prototype for the two PV only packages and the two PV plus battery packages. Compliance margins are 0 percent for all mixed-fuel packages. For all-electric packages, compliance margins are equal to those found in Package 2 for each prototype in Sections 4.1 – 4.3. The compliance margins are not impacted by renewables and battery storage measures and hence not shown in the tables. These figures are formatted in the following way:

- ◆ Cells highlighted in green have a B/C ratio greater than 1 and are cost-effective. The shade of green gets darker as cost effectiveness increases.
- ◆ Cells not highlighted have a B/C ratio less than one and are not cost effective.

²⁵ Because this study shows that the addition of battery generally reduces cost effectiveness, removing a battery measure would only increase cost effectiveness. Thus, a jurisdiction can apply the EE+PV+Battery cost effectiveness findings to support EE+PV reach codes, because EE+PV would still remain cost effective without a battery.

Please see Appendix 6.7 for results in full detail. Generally, for mixed-fuel packages across all prototypes, all climate zones were proven to have cost effective outcomes using TDV except in CZ1 with a 3 kW PV + 5 kWh Battery scenario. Most climate zones also had On-Bill cost effectiveness. The addition of a battery slightly reduces cost effectiveness.

In all-electric packages, the results for most climate zones were found cost effective using both TDV and On-Bill approaches with larger PV systems or PV+Battery systems. Most 3 kW PV systems were also found to be cost effective except in some scenarios analyzing the Medium Office using the On-Bill method. CZ16 results continue to show challenges being cost effective with all electric buildings, likely due to the high heating loads in this climate. The addition of a battery slightly reduces the cost effectiveness for all-electric buildings with PV.



Figure 38. Cost Effectiveness for Medium Office - PV and Battery

CZ	PV Battery Utility	Mixed Fuel								All-Electric							
		3kW		3kW		135kW		135kW		3kW		3kW		135kW		135kW	
		0		5kWh		0		50kWh		0		5kWh		0		50kWh	
		On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV
CZ01	PG&E	2.8	1.5	1.7	0.9	1.7	1.3	1.6	1.2	0.9	1.6	0.9	1.6	2.5	2.0	2.1	1.7
CZ02	PG&E	3.7	1.9	2.1	1.1	2.2	1.6	2.0	1.4	0.8	2.2	0.9	2.6	3.2	2.4	2.7	2.1
CZ03	PG&E	3.7	1.8	2.2	1.0	2.1	1.5	1.9	1.4	1.9	3.9	2.0	4.0	3.4	2.5	2.9	2.2
CZ04	PG&E	3.6	2.0	2.1	1.2	2.3	1.6	2.1	1.5	0.9	2.1	1.1	2.7	3.3	2.5	2.9	2.2
CZ04-2	CPAU	2.1	2.0	1.3	1.2	1.8	1.6	1.6	1.5	7.7	2.1	9.8	2.7	2.9	2.5	2.5	2.2
CZ05	PG&E	4.2	1.9	2.4	1.1	2.5	1.6	2.3	1.5	1.8	2.7	1.9	2.7	4.0	2.7	3.4	2.3
CZ05-2	SCG	4.2	1.9	2.4	1.1	2.5	1.6	2.3	1.5	>1	>1	>1	>1	>1	3.0	9.4	2.6
CZ06	SCE	2.0	2.0	1.2	1.1	1.3	1.6	1.2	1.5	>1	7.2	>1	8.2	2.4	2.7	2.1	2.3
CZ06-2	LA	1.2	2.0	0.7	1.1	0.8	1.6	0.7	1.5	>1	7.2	>1	8.2	1.5	2.7	1.3	2.3
CZ07	SDG&E	3.2	2.0	1.9	1.2	2.1	1.6	1.9	1.5	>1	>1	>1	>1	3.7	2.7	3.2	2.3
CZ08	SCE	1.9	2.0	1.1	1.2	1.3	1.7	1.2	1.5	>1	>1	>1	>1	2.2	2.7	1.9	2.4
CZ08-2	LA	1.2	2.0	0.7	1.2	0.7	1.7	0.7	1.5	>1	>1	>1	>1	1.3	2.7	1.1	2.4
CZ09	SCE	1.9	2.0	1.1	1.2	1.3	1.7	1.2	1.5	>1	>1	>1	>1	2.2	2.6	1.9	2.3
CZ09-2	LA	1.1	2.0	0.7	1.2	0.7	1.7	0.7	1.5	>1	>1	>1	>1	1.3	2.6	1.2	2.3
CZ10	SDG&E	3.8	1.9	2.2	1.1	2.1	1.6	1.9	1.5	>1	3.3	>1	6.3	3.3	2.3	2.9	2.0
CZ10-2	SCE	2.1	1.9	1.2	1.1	1.3	1.6	1.2	1.5	>1	3.3	>1	6.3	2.0	2.3	1.8	2.0
CZ11	PG&E	3.6	1.9	2.1	1.1	2.2	1.6	2.0	1.5	1.1	2.6	1.5	3.6	3.2	2.4	2.8	2.1
CZ12	PG&E	3.5	1.9	2.1	1.1	2.2	1.6	2.0	1.5	0.9	2.5	1.2	3.2	3.1	2.4	2.7	2.1
CZ12-2	SMUD	1.4	1.9	0.8	1.1	1.1	1.6	1.04	1.5	>1	2.5	>1	3.2	1.9	2.4	1.6	2.1
CZ13	PG&E	3.5	1.8	2.0	1.1	2.2	1.5	2.0	1.4	1.1	2.5	1.5	3.6	3.1	2.3	2.7	2.0
CZ14	SDG&E	3.4	2.3	2.0	1.3	2.2	1.9	2.0	1.7	>1	2.3	>1	3.1	3.6	2.8	3.2	2.5
CZ14-2	SCE	1.9	2.3	1.1	1.3	1.3	1.9	1.2	1.7	>1	2.3	>1	3.1	2.2	2.8	1.9	2.5
CZ15	SCE	1.8	2.1	1.1	1.2	1.2	1.7	1.1	1.6	>1	7.5	>1	>1	1.8	2.4	1.6	2.1
CZ16	PG&E	3.9	2.0	2.3	1.1	2.3	1.6	2.1	1.5	0.3	0.4	0.4	0.6	2.5	1.8	2.2	1.6
CZ16-2	LA	1.2	2.0	0.7	1.1	0.7	1.6	0.7	1.5	>1	0.4	>1	0.6	1.3	1.8	1.2	1.6



Figure 39. Cost Effectiveness for Medium Retail - PV and Battery

CZ		Mixed Fuel								All-Electric							
		3kW		3kW		90 kW		90 kW		3kW		3kW		90 kW		90 kW	
		0		5kWh		0		50kWh		0		5kWh		0		50kWh	
		On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV
CZ01	PG&E	2.3	1.5	1.3	0.9	1.8	1.3	1.6	1.2	>1	3.0	>1	2.7	2.5	1.6	2.2	1.5
CZ02	PG&E	3.2	1.8	1.9	1.1	1.9	1.5	1.8	1.5	>1	>1	>1	>1	2.7	2.1	2.3	1.9
CZ03	PG&E	2.7	1.8	1.6	1.1	2.2	1.5	2.0	1.4	>1	>1	>1	>1	3.0	2.1	2.6	1.9
CZ04	PG&E	3.3	1.9	1.9	1.1	2.0	1.6	1.9	1.5	>1	>1	>1	>1	2.7	2.1	2.5	2.0
CZ04-2	CPAU	2.1	1.9	1.2	1.1	1.7	1.6	1.5	1.5	>1	>1	>1	>1	2.4	2.1	2.1	2.0
CZ05	PG&E	2.8	1.9	1.6	1.1	2.3	1.6	2.0	1.5	>1	>1	>1	>1	3.2	2.1	2.7	2.0
CZ05-2	SCG	2.8	1.9	1.6	1.1	2.3	1.6	2.0	1.5	>1	>1	>1	>1	3.7	1.9	3.2	1.6
CZ06	SCE	2.0	1.9	1.2	1.1	1.2	1.6	1.1	1.5	>1	>1	>1	>1	1.7	2.2	1.5	2.0
CZ06-2	LA	1.3	1.9	0.7	1.1	0.7	1.6	0.6	1.5	>1	>1	>1	>1	1.01	2.2	0.9	2.0
CZ07	SDG&E	4.0	2.0	2.4	1.2	1.5	1.6	1.6	1.6	>1	>1	>1	>1	2.4	2.3	2.3	2.1
CZ08	SCE	2.1	2.0	1.2	1.2	1.2	1.7	1.1	1.6	>1	>1	>1	>1	1.7	2.4	1.5	2.1
CZ08-2	LA	1.3	2.0	0.8	1.2	0.7	1.7	0.6	1.6	>1	>1	>1	>1	1.01	2.4	0.9	2.1
CZ09	SCE	2.0	2.0	1.2	1.2	1.2	1.7	1.1	1.5	>1	>1	>1	>1	1.8	2.4	1.6	2.1
CZ09-2	LA	1.2	2.0	0.7	1.2	0.7	1.7	0.7	1.5	>1	>1	>1	>1	1.1	2.4	0.99	2.1
CZ10	SDG&E	3.8	2.0	2.2	1.2	1.7	1.6	1.7	1.5	>1	>1	>1	>1	2.6	2.3	2.5	2.0
CZ10-2	SCE	2.0	2.0	1.2	1.2	1.2	1.6	1.1	1.5	>1	>1	>1	>1	1.8	2.3	1.6	2.0
CZ11	PG&E	2.8	1.9	1.6	1.1	1.9	1.6	1.8	1.5	>1	>1	>1	>1	2.7	2.3	2.5	2.1
CZ12	PG&E	3.0	1.9	1.7	1.1	1.9	1.6	1.8	1.5	>1	>1	>1	>1	2.7	2.3	2.5	2.1
CZ12-2	SMUD	1.5	1.9	0.9	1.1	1.1	1.6	0.997	1.5	>1	>1	>1	>1	1.7	2.3	1.4	2.1
CZ13	PG&E	3.0	1.9	1.7	1.1	1.9	1.6	1.8	1.4	>1	>1	>1	>1	2.7	2.2	2.4	1.9
CZ14	SDG&E	3.5	2.2	2.1	1.3	1.6	1.8	1.5	1.6	>1	>1	>1	>1	2.5	2.6	2.2	2.2
CZ14-2	SCE	1.8	2.2	1.1	1.3	1.2	1.8	1.1	1.6	>1	>1	>1	>1	1.7	2.6	1.5	2.2
CZ15	SCE	1.9	2.0	1.1	1.2	1.1	1.7	1.02	1.5	>1	>1	>1	>1	1.7	2.4	1.5	2.1
CZ16	PG&E	3.7	2.0	2.1	1.2	2.1	1.7	1.9	1.6	0.6	0.5	0.5	0.4	2.7	2.0	2.3	1.8
CZ16-2	LA	1.3	2.0	0.7	1.2	0.7	1.7	0.6	1.6	>1	0.5	>1	0.4	1.2	2.0	1.0	1.8



Figure 40. Cost Effectiveness for Small Hotel - PV and Battery

CZ		Mixed Fuel								All-Electric							
		3kW		3kW		80kW		80kW		3kW		3kW		80kW		80kW	
		0		5kWh		0		50kWh		0		5kWh		0		50kWh	
		On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV	On-Bill	TDV
CZ01	PG&E	2.3	1.5	1.3	0.9	1.9	1.2	1.6	1.1	2.3	>1	2.3	>1	4.8	>1	4.7	>1
CZ02	PG&E	2.3	1.9	1.3	1.1	1.8	1.5	1.6	1.4	5.6	>1	5.6	>1	>1	>1	>1	>1
CZ03	PG&E	2.7	1.8	1.6	1.05	2.3	1.5	1.9	1.4	4.2	>1	4.2	>1	>1	>1	>1	>1
CZ04	PG&E	2.4	1.9	1.4	1.1	1.8	1.6	1.6	1.5	6.2	>1	6.2	>1	>1	>1	>1	>1
CZ04-2	CPAU	2.1	1.9	1.2	1.1	1.7	1.6	1.5	1.5	>1	>1	>1	>1	>1	>1	>1	>1
CZ05	PG&E	2.9	1.9	1.7	1.1	2.4	1.6	2.0	1.5	3.9	>1	3.9	>1	>1	>1	>1	>1
CZ05-2	SCG	2.9	1.9	1.7	1.1	2.4	1.6	2.0	1.5	>1	>1	>1	>1	>1	>1	>1	>1
CZ06	SCE	1.8	1.9	1.1	1.1	1.1	1.6	0.9	1.4	>1	>1	>1	>1	>1	>1	>1	>1
CZ06-2	LA	1.1	1.9	0.7	1.1	0.7	1.6	0.6	1.4	>1	>1	>1	>1	>1	>1	>1	>1
CZ07	SDG&E	2.6	2.0	1.5	1.1	1.4	1.6	1.3	1.5	>1	>1	>1	>1	>1	>1	>1	>1
CZ08	SCE	1.9	2.0	1.1	1.2	1.2	1.7	1.0	1.5	>1	>1	>1	>1	>1	>1	>1	>1
CZ08-2	LA	1.2	2.0	0.7	1.2	0.7	1.7	0.6	1.5	>1	>1	>1	>1	>1	>1	>1	>1
CZ09	SCE	1.9	1.9	1.1	1.1	1.2	1.6	0.997	1.4	>1	>1	>1	>1	>1	>1	>1	>1
CZ09-2	LA	1.1	1.9	0.7	1.1	0.7	1.6	0.6	1.4	>1	>1	>1	>1	>1	>1	>1	>1
CZ10	SDG&E	2.9	1.9	1.7	1.1	1.5	1.6	1.4	1.4	8.2	>1	8.2	>1	>1	>1	>1	>1
CZ10-2	SCE	1.7	1.9	0.99	1.1	1.2	1.6	0.99	1.4	>1	>1	>1	>1	>1	>1	>1	>1
CZ11	PG&E	2.6	1.9	1.5	1.1	1.8	1.6	1.5	1.4	7.6	>1	7.6	>1	>1	>1	>1	>1
CZ12	PG&E	2.7	1.9	1.6	1.1	2.3	1.6	1.9	1.4	4.0	>1	4.0	>1	>1	>1	>1	>1
CZ12-2	SMUD	1.4	1.9	0.8	1.1	1.1	1.6	0.95	1.4	>1	>1	>1	>1	>1	>1	>1	>1
CZ13	PG&E	2.6	1.8	1.5	1.1	1.8	1.5	1.5	1.4	7.7	>1	7.7	>1	>1	>1	>1	>1
CZ14	SDG&E	3.0	2.2	1.7	1.3	1.7	1.8	1.5	1.6	4.2	>1	4.2	>1	>1	>1	>1	>1
CZ14-2	SCE	1.8	2.2	1.1	1.3	1.3	1.8	1.1	1.6	>1	>1	>1	>1	>1	>1	>1	>1
CZ15	SCE	1.7	2.0	1.002	1.2	1.2	1.7	1.003	1.4	>1	>1	>1	>1	>1	>1	>1	>1
CZ16	PG&E	2.7	2.0	1.6	1.2	1.9	1.6	1.7	1.5	2.1	5.7	2.1	5.6	5.8	>1	5.8	>1
CZ16-2	LA	1.02	2.0	0.6	1.2	0.6	1.6	0.6	1.5	>1	5.7	>1	5.6	>1	>1	>1	>1



5 Summary, Conclusions, and Further Considerations

The Reach Codes Team developed packages of energy efficiency measures as well as packages combining energy efficiency with PV generation and battery storage systems, simulated them in building modeling software, and gathered costs to determine the cost effectiveness of multiple scenarios. The Reach Codes team coordinated assumptions with multiple utilities, cities, and building community experts to develop a set of assumptions considered reasonable in the current market. Changing assumptions, such as the period of analysis, measure selection, cost assumptions, energy escalation rates, or utility tariffs are likely to change results.

5.1 Summary

Figure 41 through Figure 43 summarize results for each prototype and depict the compliance margins achieved for each climate zone and package. Because local reach codes must both exceed the Energy Commission performance budget (i.e., have a positive compliance margin) and be cost-effective, the Reach Code Team highlighted cells meeting these two requirements to help clarify the upper boundary for potential reach code policies:

- ◆ Cells highlighted in green depict a positive compliance margin and cost-effective results using both On-Bill and TDV approaches.
- ◆ Cells highlighted in yellow depict a positive compliance and cost-effective results using either the On-Bill or TDV approach.
- ◆ Cells not highlighted either depict a negative compliance margin or a package that was not cost effective using either the On-Bill or TDV approach.

For more detail on the results in the Figures, please refer to *Section 4 Results*. As described in Section 4.4, PV-only and PV+Battery packages in the mixed-fuel building were found to be cost effective across all prototypes, climate zones, and packages using the TDV approach, and results are not reiterated in the following figures.



Figure 41. Medium Office Summary of Compliance Margin and Cost Effectiveness

CZ	Utility	Mixed Fuel			All Electric			
		EE	EE + PV + B	HE	Fed Code	EE	EE + PV + B	HE
CZ01	PG&E	18%	18%	3%	-15%	7%	7%	-14%
CZ02	PG&E	17%	17%	4%	-7%	10%	10%	-5%
CZ03	PG&E	20%	20%	3%	-7%	16%	16%	-6%
CZ04	PG&E	14%	14%	5%	-6%	9%	9%	-3%
CZ04-2	CPAU	14%	14%	5%	-6%	9%	9%	-3%
CZ05	PG&E	18%	18%	4%	-8%	12%	12%	-6%
CZ05-2	SCG	18%	18%	4%	NA	NA	NA	NA
CZ06	SCE	20%	20%	3%	-4%	18%	18%	-2%
CZ06-2	LADWP	20%	20%	3%	-4%	18%	18%	-2%
CZ07	SDG&E	20%	20%	4%	-2%	20%	20%	1%
CZ08	SCE	18%	18%	4%	-2%	18%	18%	1%
CZ08-2	LADWP	18%	18%	4%	-2%	18%	18%	1%
CZ09	SCE	16%	16%	4%	-2%	15%	15%	2%
CZ09-2	LADWP	16%	16%	4%	-2%	15%	15%	2%
CZ10	SDG&E	17%	17%	4%	-4%	13%	13%	-1%
CZ10-2	SCE	17%	17%	4%	-4%	13%	13%	-1%
CZ11	PG&E	13%	13%	5%	-4%	10%	10%	0%
CZ12	PG&E	14%	14%	5%	-5%	10%	10%	-1%
CZ12-2	SMUD	14%	14%	5%	-5%	10%	10%	-1%
CZ13	PG&E	13%	13%	5%	-4%	9%	9%	0%
CZ14	SDG&E	14%	14%	5%	-5%	9%	9%	-1%
CZ14-2	SCE	14%	14%	5%	-5%	9%	9%	-1%
CZ15	SCE	12%	12%	5%	-2%	10%	10%	3%
CZ16	PG&E	14%	14%	5%	-27%	-15%	-15%	-26%
CZ16-2	LADWP	14%	14%	5%	-27%	-15%	-15%	-26%



Figure 42. Medium Retail Summary of Compliance Margin and Cost Effectiveness

CZ	Utility	Mixed Fuel			All Electric			
		EE	EE + PV + B	HE	Fed Code	EE	EE + PV + B	HE
CZ01	PG&E	18%	18%	2%	-4.1%	15%	15%	-2%
CZ02	PG&E	13%	13%	3%	-1.0%	13%	13%	3%
CZ03	PG&E	16%	16%	2%	-0.4%	16%	16%	2%
CZ04	PG&E	14%	14%	3%	-0.1%	14%	14%	3%
CZ04-2	CPAU	14%	14%	3%	-0.1%	14%	14%	3%
CZ05	PG&E	16%	16%	1%	-1.2%	15%	15%	1%
CZ05-2	SCG	16%	16%	1%	NA	NA	NA	NA
CZ06	SCE	10%	10%	3%	0.5%	11%	11%	3%
CZ06-2	LADWP	10%	10%	3%	0.5%	11%	11%	3%
CZ07	SDG&E	13%	13%	2%	0.3%	13%	13%	3%
CZ08	SCE	10%	10%	3%	0.4%	10%	10%	4%
CZ08-2	LADWP	10%	10%	3%	0.4%	10%	10%	4%
CZ09	SCE	10%	10%	4%	0.4%	10%	10%	4%
CZ09-2	LADWP	10%	10%	4%	0.4%	10%	10%	4%
CZ10	SDG&E	12%	12%	4%	0.1%	12%	12%	4%
CZ10-2	SCE	12%	12%	4%	0.1%	12%	12%	4%
CZ11	PG&E	13%	13%	4%	0.5%	12%	12%	5%
CZ12	PG&E	13%	13%	4%	-0.1%	12%	12%	4%
CZ12-2	SMUD	13%	13%	4%	-0.1%	12%	12%	4%
CZ13	PG&E	15%	15%	4%	-0.4%	14%	14%	4%
CZ14	SDG&E	13%	13%	4%	0.7%	15%	15%	5%
CZ14-2	SCE	13%	13%	4%	0.7%	15%	15%	5%
CZ15	SCE	12%	12%	5%	0.9%	12%	12%	6%
CZ16	PG&E	13%	13%	3%	-12.2%	3%	3%	-8%
CZ16-2	LADWP	13%	13%	3%	-12.2%	3%	3%	-8%



Figure 43. Small Hotel Summary of Compliance Margin and Cost Effectiveness

CZ	Utility	Mixed Fuel			All Electric			
		EE	EE + PV + B	HE	Fed Code	EE	EE + PV + B	HE
CZ01	PG&E	9%	9%	2%	-28%	1%	1%	-24%
CZ02	PG&E	7%	7%	3%	-12%	4%	4%	-11%
CZ03	PG&E	10%	10%	2%	-14%	6%	6%	-14%
CZ04	PG&E	6%	6%	2%	-13%	0.2%	0.2%	-13%
CZ04-2	CPAU	6%	6%	2%	-13%	0.2%	0.2%	-13%
CZ05	PG&E	9%	9%	2%	-15%	5%	5%	-15%
CZ05-2	SCG	9%	9%	2%	NA	NA	NA	NA
CZ06	SCE	8%	8%	2%	-5%	7%	7%	-15%
CZ06-2	LADWP	8%	8%	2%	-5%	7%	7%	-15%
CZ07	SDG&E	8%	8%	2%	-7%	7%	7%	-7%
CZ08	SCE	7%	7%	2%	-6%	3%	3%	-6%
CZ08-2	LADWP	7%	7%	2%	-6%	3%	3%	-6%
CZ09	SCE	6%	6%	3%	-6%	2%	2%	-4%
CZ09-2	LADWP	6%	6%	3%	-6%	2%	2%	-4%
CZ10	SDG&E	5%	5%	4%	-8%	2%	2%	-5%
CZ10-2	SCE	5%	5%	4%	-8%	2%	2%	-5%
CZ11	PG&E	4%	4%	4%	-10%	1%	1%	-7%
CZ12	PG&E	5%	5%	4%	-10%	2%	2%	-9%
CZ12-2	SMUD	5%	5%	4%	-10%	2%	2%	-9%
CZ13	PG&E	4%	4%	3%	-10%	0.3%	0.3%	-7%
CZ14	SDG&E	4%	4%	4%	-11%	0.1%	0.1%	-7%
CZ14-2	SCE	4%	4%	4%	-11%	0.1%	0.1%	-7%
CZ15	SCE	3%	3%	5%	-4%	2%	2%	0.04%
CZ16	PG&E	6%	6%	3%	-50%	-14%	-14%	-39%
CZ16-2	LADWP	6%	6%	3%	-50%	-14%	-14%	-39%

5.2 Conclusions and Further Considerations

Findings are specific to the scenarios analyzed under this specific methodology, and largely pertain to office, retail, and hotel-type occupancies. Nonresidential buildings constitute a wide variety of occupancy profiles and process loads, making findings challenging to generalize across multiple building types.

Findings indicate the following overall conclusions:

1. This study assumed that electrifying space heating and service water heating could eliminate natural gas infrastructure alone, because these were the only gas end-uses included the prototypes. Avoiding the installation of natural gas infrastructure results in significant cost savings and is a primary factor toward cost-effective outcomes in all-electric designs, even with necessary increases in electrical capacity.
2. There is ample opportunity for cost effective energy efficiency improvements, as demonstrated by the compliance margins achieved in many of the efficiency-only and efficiency + PV packages. Though much of the energy savings are attributable to lighting measures, efficiency measures selected for these prototypes are confined to the building systems that can be modeled. There is



likely further opportunity for energy savings through measures that cannot be currently demonstrated in compliance software, such as high-performance control sequences or variable speed parallel fan powered boxes.

3. High efficiency appliances triggering federal preemption do not achieve as high compliance margins as the other efficiency measures analyzed in this study. Cost effectiveness appears to be dependent on the system type and building type. Nonetheless, specifying high efficiency equipment will always be a key feature in integrated design.
4. Regarding the Small Hotel prototype:
 - a. The Small Hotel presents a challenging prototype to cost-effectively exceed the state's energy performance budget without efficiency measures. The Reach Code Team is uncertain of the precision of the results due to the inability to directly model either drain water heat recovery or a central heat pump water heater with a recirculation loop.
 - b. Hotel results may be applicable to high-rise (4 or more stories) multifamily buildings. Both hotel and multifamily buildings have the same or similar mandatory and prescriptive compliance options for hot water systems, lighting, and envelope. Furthermore, the Alternate Calculation Method Reference Manual specifies the same baseline HVAC system for both building types.
 - c. Hotel compliance margins were the lowest among the three building types analyzed, and thus the most conservative performance thresholds applicable to other nonresidential buildings not analyzed in this study. As stated previously, the varying occupancy and energy profiles of nonresidential buildings makes challenging to directly apply these results across all buildings.
5. Many all-electric and solar PV packages demonstrated greater GHG reductions than their mixed-fuel counterparts, contrary to TDV-based performance, suggesting a misalignment among the TDV metric and California's long-term GHG-reduction goals. The Energy Commission has indicated that they are aware of this issue and are seeking to address it.
6. Changes to the Nonresidential Alternative Calculation Method (ACM) Reference Manual can drastically impact results. Two examples include:
 - a. When performance modeling residential buildings, the Standard Design is electric if the Proposed Design is electric, which removes TDV-related penalties and associated negative compliance margins. This essentially allows for a compliance pathway for all-electric residential buildings. If nonresidential buildings were treated in the same way, all-electric cost effectiveness using the TDV approach would improve.
 - b. The baseline mixed-fuel system for a hotel includes a furnace in each guest room, which carries substantial plumbing costs and labor costs for assembly. A change in the baseline system would lead to different base case costs and different cost effectiveness outcomes.
7. All-electric federal code-minimum packages appear to be cost effective, largely due to avoided natural gas infrastructure, but in most cases do not comply with the Energy Commission's minimum performance budget (as described in item 7a above). For most cases it appears that adding cost-effective efficiency measures achieves compliance. All-electric nonresidential projects can leverage the initial cost savings of avoiding natural gas infrastructure by adding energy efficiency measures that would not be cost effective independently.

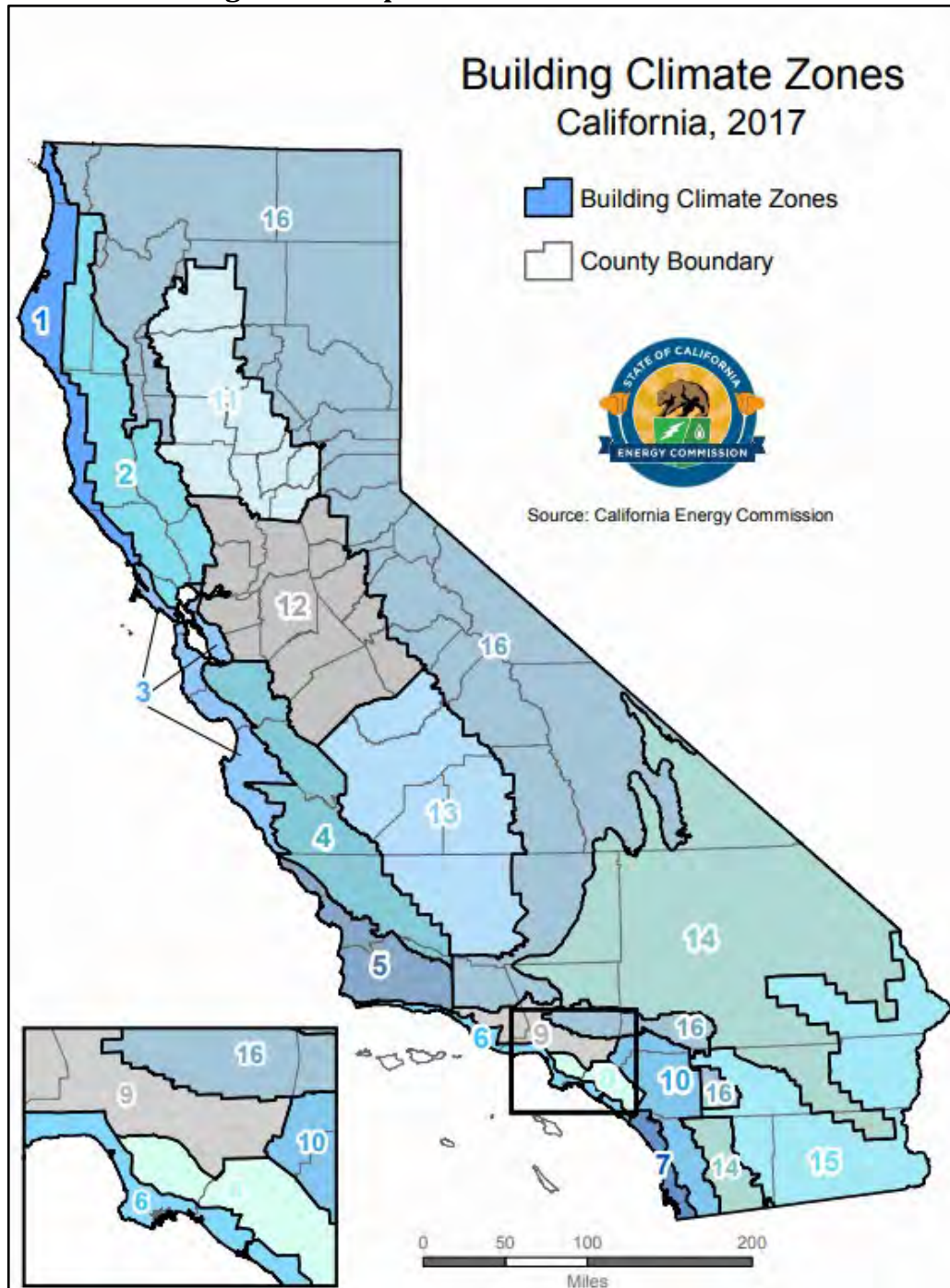
6 Appendices

6.1 Map of California Climate Zones

Climate zone geographical boundaries are depicted in Figure 44. The map in Figure 44 along with a zip-code search directory is available at:

https://ww2.energy.ca.gov/maps/renewable/building_climate_zones.html

Figure 44. Map of California Climate Zones



6.2 Lighting Efficiency Measures

Figure 45 details the applicability and impact of each lighting efficiency measure by prototype and space function and includes the resulting LPD that is modeled as the proposed by building type and by space function.

Figure 45. Impact of Lighting Measures on Proposed LPDs by Space Function

Space Function	Baseline	Impact				Modeled Proposed
	LPD (W/ft ²)	Interior Lighting Reduced LPD	Institutional Tuning	Daylight Dimming Plus OFF	Occupant Sensing in Open Office Plan	LPD (W/ft ²)
Medium Office						
Office Area (Open plan office) - Interior	0.65	15%	10%	-	17%	0.429
Office Area (Open plan office) - Perimeter	0.65	15%	5%	10%	30%	0.368
Medium Retail						
Commercial/Industrial Storage (Warehouse)	0.45	10%	5%	-	-	0.386
Main Entry Lobby	0.85	10%	5%	-	-	0.729
Retail Sales Area (Retail Merchandise Sales)	0.95	5%	5%	-	-	0.857
Small Hotel						
Commercial/Industrial Storage (Warehouse)	0.45	10%	5%	-	-	0.386
Convention, Conference, Multipurpose, and Meeting	0.85	10%	5%	-	-	0.729
Corridor Area	0.60	10%	5%	-	-	0.514
Exercise/Fitness Center and Gymnasium Areas	0.50	10%	-	-	-	0.450
Laundry Area	0.45	10%	-	-	-	0.405
Lounge, Breakroom, or Waiting Area	0.65	10%	5%	-	-	0.557
Mechanical	0.40	10%	-	-	-	0.360
Office Area (>250 ft ²)	0.65	10%	5%	-	-	0.557

6.3 Drain Water Heat Recovery Measure Analysis

To support potential DWHR savings in the Small Hotel prototype, the Reach Code Team modeled the drain water heat recovery measure in CBECC-Res 2019 in the all-electric and mixed fuel 6,960 ft² prototype residential buildings. The Reach Code Team assumed one heat recovery device for every three showers assuming unequal flow to the shower. Based on specifications from three different drain water heat recovery device manufacturers for device effectiveness in hotel applications, the team assumed a heat recovery efficiency of 50 percent.

The Reach Code Team modeled mixed fuel and all-electric residential prototype buildings both with and without heat recovery in each climate zone. Based on these model results, the Reach Code Team determined the percentage savings of domestic water heating energy in terms of gas, electricity, and TDV for mixed fuel and all-electric, in each climate zone. The Reach Code Team then applied the savings



percentages to the Small Hotel prototype domestic water heating energy in both the mixed-fuel and all-electric to determine energy savings for the drain water heat recovery measure in the Small Hotel. The Reach Code Team applied volumetric energy rates to estimate on-bill cost impacts from this measure.

6.4 Utility Rate Schedules

The Reach Codes Team used the IOU and POU rates depicted in Figure 46 to determine the On-Bill savings for each prototype.

Figure 46. Utility Tariffs Analyzed Based on Climate Zone – Detailed View

Climate Zones	Electric / Gas Utility	Electricity (Time-of-use)			Natural Gas
		Medium Office	Medium Retail	Small Hotel	All Prototypes
CZ01	PG&E	A-10	A-1	A-1 or A-10	G-NR1
CZ02	PG&E	A-10	A-10	A-1 or A-10	G-NR1
CZ03	PG&E	A-10	A-1 or A-10	A-1 or A-10	G-NR1
CZ04	PG&E	A-10	A-10	A-1 or A-10	G-NR1
CZ04-2	CPAU/PG&E	E-2	E-2	E-2	G-NR1
CZ05	PG&E	A-10	A-1	A-1 or A-10	G-NR1
CZ05-2	PG&E/SCG	A-10	A-1	A-1 or A-10	G-10 (GN-10)
CZ06	SCE/SCG	TOU-GS-2	TOU-GS-2	TOU-GS-2 or TOU-GS-3	G-10 (GN-10)
CZ06	LADWP/SCG	TOU-GS-2	TOU-GS-2	TOU-GS-2 or TOU-GS-3	G-10 (GN-10)
CZ07	SDG&E	AL-TOU+EECC (AL-TOU)	AL-TOU+EECC (AL-TOU)	AL-TOU+EECC (AL-TOU)	GN-3
CZ08	SCE/SCG	TOU-GS-2	TOU-GS-2	TOU-GS-2 or TOU-GS-3	G-10 (GN-10)
CZ08-2	LADWP/SCG	A-2 (B)	A-2 (B)	A-2 (B)	G-10 (GN-10)
CZ09	SCE/SCG	TOU-GS-2	TOU-GS-2	TOU-GS-2 or TOU-GS-3	G-10 (GN-10)
CZ09-2	LADWP/SCG	A-2 (B)	A-2 (B)	A-2 (B)	G-10 (GN-10)
CZ10	SCE/SCG	TOU-GS-2	TOU-GS-2	TOU-GS-2	G-10 (GN-10)
CZ10-2	SDG&E	AL-TOU+EECC (AL-TOU)	AL-TOU+EECC (AL-TOU)	AL-TOU+EECC (AL-TOU)	GN-3
CZ11	PG&E	A-10	A-10	A-10	G-NR1
CZ12	PG&E	A-10	A-10	A-1 or A-10	G-NR1
CZ12-2	SMUD/PG&E	GS	GS	GS	G-NR1
CZ13	PG&E	A-10	A-10	A-10	G-NR1
CZ14	SCE/SCG	TOU-GS-3	TOU-GS-3	TOU-GS-3	G-10 (GN-10)
CZ14-2	SDG&E	AL-TOU+EECC (AL-TOU)	AL-TOU+EECC (AL-TOU)	AL-TOU+EECC (AL-TOU)	GN-3
CZ15	SCE/SCG	TOU-GS-3	TOU-GS-2	TOU-GS-2	G-10 (GN-10)
CZ16	PG&E	A-10	A-10	A-1 or A-10	G-NR1
CZ16-2	LADWP/SCG	A-2 (B)	A-2 (B)	A-2 (B)	G-10 (GN-10)



6.5 Mixed Fuel Baseline Energy Figures

Figures 47 to 49 show the annual electricity and natural gas consumption and cost, compliance TDV, and GHG emissions for each prototype under the mixed fuel design baseline.

Figure 47. Medium Office – Mixed Fuel Baseline

Climate Zone	Utility	Electricity Consumption (kWh)	Natural Gas Consumption (Therms)	Electricity Cost	Natural Gas Cost	Compliance TDV	GHG Emissions (lbs)
Medium Office Mixed Fuel Baseline							
CZ01	PG&E	358,455	4,967	\$109,507	\$6,506	84	266,893
CZ02	PG&E	404,865	3,868	\$130,575	\$5,256	122	282,762
CZ03	PG&E	370,147	3,142	\$116,478	\$4,349	88	251,759
CZ04	PG&E	431,722	3,759	\$140,916	\$5,144	141	299,993
CZ04-2	CPAU	431,722	3,759	\$75,363	\$5,144	141	299,993
CZ05	PG&E	400,750	3,240	\$131,277	\$4,481	106	269,768
CZ05-2	SCG	400,750	3,240	\$131,277	\$3,683	106	269,768
CZ06	SCE	397,441	2,117	\$74,516	\$2,718	105	253,571
CZ06-2	LA	397,441	2,117	\$44,311	\$2,718	105	253,571
CZ07	SDG&E	422,130	950	\$164,991	\$4,429	118	257,324
CZ08	SCE	431,207	1,219	\$79,181	\$1,820	132	265,179
CZ08-2	LA	431,207	1,219	\$46,750	\$1,820	132	265,179
CZ09	SCE	456,487	1,605	\$86,190	\$2,196	155	287,269
CZ09-2	LA	456,487	1,605	\$51,111	\$2,196	155	287,269
CZ10	SDG&E	431,337	2,053	\$173,713	\$5,390	130	272,289
CZ10-2	SCE	431,337	2,053	\$80,636	\$2,603	130	272,289
CZ11	PG&E	464,676	3,062	\$150,520	\$4,333	163	310,307
CZ12	PG&E	441,720	3,327	\$142,902	\$4,647	152	299,824
CZ12-2	SMUD	441,720	3,327	\$65,707	\$4,647	152	299,824
CZ13	PG&E	471,540	3,063	\$150,919	\$4,345	161	316,228
CZ14	SDG&E	467,320	3,266	\$185,812	\$6,448	165	314,258
CZ14-2	SCE	467,320	3,266	\$92,071	\$3,579	165	314,258
CZ15	SCE	559,655	1,537	\$105,388	\$2,058	211	347,545
CZ16	PG&E	405,269	6,185	\$127,201	\$8,056	116	312,684
CZ16-2	LA	405,269	6,185	\$43,115	\$8,056	116	312,684



Figure 48. Medium Retail – Mixed Fuel Baseline

Climate Zone	Utility	Electricity Consumption (kWh)	Natural Gas Consumption (Therms)	Electricity Cost	Natural Gas Cost	Compliance TDV	GHG Emissions (lbs)
Medium Retail Mixed Fuel Baseline							
CZ01	PG&E	184,234	3,893	\$43,188	\$5,247	155	156,972
CZ02	PG&E	214,022	2,448	\$70,420	\$3,572	202	157,236
CZ03	PG&E	199,827	1,868	\$47,032	\$2,871	165	140,558
CZ04	PG&E	208,704	1,706	\$66,980	\$2,681	187	143,966
CZ04-2	CPAU	208,704	1,706	\$36,037	\$2,681	187	143,966
CZ05	PG&E	195,864	1,746	\$45,983	\$2,697	155	135,849
CZ05-2	SCG	195,864	1,746	\$45,983	\$2,342	155	135,849
CZ06	SCE	211,123	1,002	\$36,585	\$1,591	183	135,557
CZ06-2	LA	211,123	1,002	\$21,341	\$1,591	183	135,557
CZ07	SDG&E	211,808	522	\$75,486	\$4,055	178	130,436
CZ08	SCE	212,141	793	\$36,758	\$1,373	190	133,999
CZ08-2	LA	212,141	793	\$21,436	\$1,373	190	133,999
CZ09	SCE	227,340	970	\$40,083	\$1,560	218	146,680
CZ09-2	LA	227,340	970	\$23,487	\$1,560	218	146,680
CZ10	SDG&E	235,465	1,262	\$87,730	\$4,700	228	154,572
CZ10-2	SCE	235,465	1,262	\$41,000	\$1,853	228	154,572
CZ11	PG&E	234,560	2,415	\$76,670	\$3,547	244	170,232
CZ12	PG&E	228,958	2,309	\$75,084	\$3,426	234	165,133
CZ12-2	SMUD	228,958	2,309	\$32,300	\$3,426	234	165,133
CZ13	PG&E	242,927	1,983	\$81,995	\$3,034	258	170,345
CZ14	SDG&E	264,589	1,672	\$97,581	\$5,059	277	178,507
CZ14-2	SCE	264,589	1,672	\$46,217	\$2,172	277	178,507
CZ15	SCE	290,060	518	\$50,299	\$1,083	300	179,423
CZ16	PG&E	212,204	4,304	\$67,684	\$5,815	197	180,630
CZ16-2	LA	212,204	4,304	\$20,783	\$5,815	197	180,630



Figure 49. Small Hotel – Mixed Fuel Baseline

Climate Zone	Utility	Electricity Consumption (kWh)	Natural Gas Consumption (Therms)	Electricity Cost	Natural Gas Cost	Compliance TDV	GHG Emissions (lbs)
Small Hotel Mixed Fuel Baseline							
CZ01	PG&E	177,734	16,936	40,778	20,465	110	340,491
CZ02	PG&E	189,319	12,696	53,396	15,664	110	293,056
CZ03	PG&E	183,772	12,341	42,325	15,210	98	284,217
CZ04	PG&E	187,482	11,945	52,118	14,806	106	281,851
CZ04-2	CPAU	187,482	11,945	32,176	14,806	106	281,851
CZ05	PG&E	187,150	11,979	43,182	14,733	98	281,183
CZ05-2	SCG	187,150	11,979	43,182	10,869	98	281,183
CZ06	SCE	191,764	8,931	28,036	8,437	98	244,664
CZ06-2	LA	191,764	8,931	16,636	8,437	98	244,664
CZ07	SDG&E	189,174	8,207	58,203	10,752	90	233,884
CZ08	SCE	190,503	8,372	27,823	7,991	94	236,544
CZ08-2	LA	190,503	8,372	16,555	7,991	94	236,544
CZ09	SCE	198,204	8,421	30,262	8,030	103	242,296
CZ09-2	LA	198,204	8,421	17,951	8,030	103	242,296
CZ10	SDG&E	215,364	8,437	71,713	10,926	122	255,622
CZ10-2	SCE	215,364	8,437	33,736	8,043	122	255,622
CZ11	PG&E	219,852	10,271	63,724	12,882	131	282,232
CZ12	PG&E	199,499	10,422	46,245	13,022	115	270,262
CZ12-2	SMUD	199,499	10,422	26,872	13,022	115	270,262
CZ13	PG&E	226,925	10,048	65,559	12,629	132	284,007
CZ14	SDG&E	226,104	10,075	73,621	12,167	134	283,287
CZ14-2	SCE	226,104	10,075	35,187	9,350	134	283,287
CZ15	SCE	280,595	5,598	42,852	5,777	152	260,378
CZ16	PG&E	191,231	17,618	51,644	21,581	127	358,590
CZ16-2	LA	191,231	17,618	16,029	21,581	127	358,590

6.6 Hotel TDV Cost Effectiveness with Propane Baseline

The Reach Codes Team further analyzed TDV cost effectiveness of the all-electric packages with a mixed-fuel design baseline using propane instead of natural gas. Results for each package are shown in Figure 50. through Figure 53. below.

All electric models compared to a propane baseline have positive compliance margins in all climate zones when compared to results using a natural gas baseline. Compliance margin improvement is roughly 30 percent, which also leads to improved cost effectiveness for the all-electric packages. These outcomes are likely due to the TDV penalty associated with propane when compared to natural gas.



Across packages, TDV cost effectiveness with a propane baseline follows similar trends as the natural gas baseline. Adding efficiency measures increased compliance margins by 3 to 10 percent depending on climate zone, while adding high efficiency HVAC and SHW equipment alone increased compliance margins by smaller margins of about 2 to 4 percent compared to the All-Electric package.

Figure 50. TDV Cost Effectiveness for Small Hotel, Propane Baseline – Package 2 All-Electric Federal Code Minimum

Climate Zone	Compliance Margin (%)	Incremental Package Cost	\$-TDV Savings	B/C Ratio (TDV)	NPV (TDV)
CZ01	-4%	(\$1,271,869)	(\$28,346)	44.9	\$1,243,523
CZ02	27%	(\$1,272,841)	\$170,263	>1	\$1,443,104
CZ03	-3%	(\$1,275,114)	(\$16,425)	77.6	\$1,258,689
CZ04	26%	(\$1,274,949)	\$155,466	>1	\$1,430,414
CZ05	27%	(\$1,275,002)	\$154,709	>1	\$1,429,710
CZ06	17%	(\$1,275,143)	\$126,212	>1	\$1,401,355
CZ07	25%	(\$1,273,490)	\$117,621	>1	\$1,391,111
CZ08	24%	(\$1,271,461)	\$122,087	>1	\$1,393,548
CZ09	23%	(\$1,273,259)	\$123,525	>1	\$1,396,784
CZ10	18%	(\$1,270,261)	\$109,522	>1	\$1,379,783
CZ11	19%	(\$1,271,070)	\$129,428	>1	\$1,400,498
CZ12	-4%	(\$1,272,510)	(\$26,302)	48.4	\$1,246,208
CZ13	18%	(\$1,270,882)	\$124,357	>1	\$1,395,239
CZ14	17%	(\$1,271,241)	\$117,621	>1	\$1,388,861
CZ15	-7%	(\$1,269,361)	(\$45,338)	28.0	\$1,224,023
CZ16	9%	(\$1,275,637)	\$68,272	>1	\$1,343,908



Figure 51. TDV Cost Effectiveness for Small Hotel, Propane Baseline – Package 3A (All-Electric + EE)

Climate Zone	Compliance Margin (%)	Incremental Package Cost	\$-TDV Savings	B/C Ratio (TDV)	NPV (TDV)
CZ01	35%	(\$1,250,898)	\$252,831	>1	\$1,503,729
CZ02	34%	(\$1,251,870)	\$217,238	>1	\$1,469,108
CZ03	37%	(\$1,254,142)	\$218,642	>1	\$1,472,784
CZ04	31%	(\$1,250,769)	\$191,393	>1	\$1,442,162
CZ05	36%	(\$1,254,031)	\$208,773	>1	\$1,462,804
CZ06	25%	(\$1,250,964)	\$159,714	>1	\$1,410,677
CZ07	32%	(\$1,249,311)	\$154,111	>1	\$1,403,422
CZ08	29%	(\$1,247,282)	\$146,536	>1	\$1,393,818
CZ09	27%	(\$1,249,080)	\$146,671	>1	\$1,395,751
CZ10	22%	(\$1,246,081)	\$134,477	>1	\$1,380,559
CZ11	23%	(\$1,246,891)	\$157,138	>1	\$1,404,029
CZ12	27%	(\$1,248,330)	\$167,945	>1	\$1,416,276
CZ13	22%	(\$1,246,703)	\$149,270	>1	\$1,395,973
CZ14	21%	(\$1,247,061)	\$145,269	>1	\$1,392,331
CZ15	14%	(\$1,245,182)	\$93,647	>1	\$1,338,829
CZ16	20%	(\$1,254,665)	\$154,035	>1	\$1,408,701

Figure 52. TDV Cost Effectiveness for Small Hotel, Propane Baseline – Package 3B (All-Electric + EE + PV)

Climate Zone	Compliance Margin (%)	Incremental Package Cost	\$-TDV Savings	B/C Ratio (TDV)	NPV (TDV)
CZ01	35%	(\$1,043,528)	\$511,688	>1	\$1,555,215
CZ02	34%	(\$1,044,500)	\$524,460	>1	\$1,568,960
CZ03	37%	(\$1,046,772)	\$518,485	>1	\$1,565,257
CZ04	31%	(\$1,043,399)	\$505,579	>1	\$1,548,978
CZ05	36%	(\$1,046,660)	\$526,668	>1	\$1,573,328
CZ06	25%	(\$1,043,594)	\$469,623	>1	\$1,513,216
CZ07	32%	(\$1,041,941)	\$471,513	>1	\$1,513,454
CZ08	29%	(\$1,039,912)	\$475,973	>1	\$1,515,885
CZ09	27%	(\$1,041,710)	\$467,971	>1	\$1,509,681
CZ10	22%	(\$1,038,711)	\$454,832	>1	\$1,493,543
CZ11	23%	(\$1,039,521)	\$474,844	>1	\$1,514,364
CZ12	27%	(\$1,040,960)	\$484,667	>1	\$1,525,627
CZ13	22%	(\$1,039,333)	\$454,108	>1	\$1,493,441
CZ14	21%	(\$1,039,691)	\$505,398	>1	\$1,545,090
CZ15	14%	(\$1,037,811)	\$423,879	>1	\$1,461,691
CZ16	20%	(\$1,047,295)	\$480,407	>1	\$1,527,702



Figure 53. TDV Cost Effectiveness for Small Hotel, Propane Baseline – Package 3C (All Electric + HE)

Climate Zone	Compliance Margin (%)	Incremental Package Cost	\$-TDV Savings	B/C Ratio (TDV)	NPV (TDV)
CZ01	27%	(\$1,256,423)	\$194,975	>1	\$1,451,398
CZ02	28%	(\$1,258,328)	\$177,378	>1	\$1,435,706
CZ03	28%	(\$1,263,867)	\$164,094	>1	\$1,427,961
CZ04	26%	(\$1,262,963)	\$155,314	>1	\$1,418,277
CZ05	26%	(\$1,263,327)	\$153,271	>1	\$1,416,598
CZ06	17%	(\$1,263,779)	\$122,011	>1	\$1,385,790
CZ07	24%	(\$1,260,844)	\$116,751	>1	\$1,377,594
CZ08	25%	(\$1,256,326)	\$122,995	>1	\$1,379,321
CZ09	24%	(\$1,260,223)	\$128,482	>1	\$1,388,706
CZ10	20%	(\$1,253,181)	\$121,595	>1	\$1,374,776
CZ11	21%	(\$1,254,613)	\$143,658	>1	\$1,398,271
CZ12	23%	(\$1,257,919)	\$142,901	>1	\$1,400,820
CZ13	21%	(\$1,254,386)	\$138,625	>1	\$1,393,011
CZ14	20%	(\$1,254,978)	\$136,430	>1	\$1,391,407
CZ15	14%	(\$1,251,932)	\$96,087	>1	\$1,348,019
CZ16	15%	(\$1,263,534)	\$122,011	>1	\$1,385,545



6.7 PV-only and PV+Battery-only Cost Effectiveness Results Details

The Reach Code Tea evaluated cost effectiveness of installing a PV system and battery storage in six different measure combinations over a 2019 code-compliant baseline for all climate zones. The baseline for all nonresidential buildings is a mixed-fuel design.

All mixed fuel models are compliant with 2019 Title24, whereas all electric models can show negative compliance. The compliance margin is the same as that of their respective federal minimum design and is not affected by addition of solar PV or battery. These scenarios evaluate the cost effectiveness of PV and/or battery measure individually. The climate zones where all-electric design is not compliant will have the flexibility to ramp up the efficiency of appliance or add another measure to be code compliant, as per package 1B and 3B in main body of the report. The large negative lifecycle costs in all electric packages are due to lower all-electric HVAC system costs and avoided natural gas infrastructure costs. This is commonly applied across all climate zones and packages over any additional costs for PV and battery.

6.7.1 Cost Effectiveness Results – Medium Office

Figure 54 through Figure 61 contain the cost-effectiveness findings for the Medium Office packages. Notable findings for each package include:

- ◆ **Mixed-Fuel + 3 kW PV Only:** All packages are cost effective using the On-Bill and TDV approaches.
- ◆ **Mixed-Fuel + 3 kW PV + 5 kWh Battery:** The packages are mostly cost effective on a TDV basis except in CZ1. As compared to the 3 kW PV only package, battery reduces cost effectiveness. This package is not cost effective for LADWP and SMUD territories using an On-Bill approach.
- ◆ **Mixed-Fuel + PV only:** The packages are less cost effective as compared to 3 kW PV packages in most climate zones. In areas served by LADWP, the B/C ratio is narrowly less than 1 and not cost effective.
- ◆ **Mixed-Fuel + PV + 50 kWh Battery:** The packages are cost effective in all climate zones except for in the areas served by LADWP. On-Bill and TDV B/C ratios are slightly lower compared to the PV only package.
- ◆ **All-Electric + 3 kW PV:** Packages are on-bill cost effective in ten of sixteen climate zones. Climate zones 1,2,4,12, and 16 were not found to be cost-effective from an on-bill perspective. These zones are within PG&E's service area. Packages are cost effective using TDV in all climate zones except CZ16.
- ◆ **All-Electric + 3 kW PV + 5 kWh Battery:** Packages are slightly more cost effective than the previous minimal PV only package. Packages are on-bill cost effective in most climate zones except for 1,2 and 16 from an on-bill perspective. These zones are within PG&E's service area. Packages are cost effective using TDV in all climate zones except CZ16.
- ◆ **All-Electric + PV only:** All packages are cost effective and achieve savings using the On-Bill and TDV approaches.



- ◆ **All-Electric + PV + 50 kWh Battery:** All packages are cost effective and achieve savings using the On-Bill and TDV approaches. On-Bill and TDV B/C ratios are slightly lower compared to the PV only package.



Figure 54. Cost Effectiveness for Medium Office - Mixed Fuel + 3kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle \$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 3kW PV											
CZ01	PG&E	3,941	0	0.8	\$5,566	\$15,743	\$8,448	2.8	1.5	\$10,177	\$2,882
CZ02	PG&E	4,785	0	0.9	\$5,566	\$20,372	\$10,500	3.7	1.9	\$14,806	\$4,934
CZ03	PG&E	4,660	0	0.9	\$5,566	\$20,603	\$9,975	3.7	1.8	\$15,037	\$4,409
CZ04	PG&E	5,056	0	1.0	\$5,566	\$20,235	\$11,073	3.6	2.0	\$14,669	\$5,507
CZ04-2	CPAU	5,056	0	1.0	\$5,566	\$11,945	\$11,073	2.1	2.0	\$6,379	\$5,507
CZ05	PG&E	5,027	0	1.0	\$5,566	\$23,159	\$10,834	4.2	1.9	\$17,593	\$5,268
CZ06	SCE	4,853	0	0.9	\$5,566	\$10,968	\$10,930	2.0	2.0	\$5,402	\$5,364
CZ06-2	LADWP	4,853	0	0.9	\$5,566	\$6,575	\$10,930	1.2	2.0	\$1,009	\$5,364
CZ07	SDG&E	4,960	0	1.0	\$5,566	\$17,904	\$11,025	3.2	2.0	\$12,338	\$5,459
CZ08	SCE	4,826	0	0.9	\$5,566	\$10,768	\$11,359	1.9	2.0	\$5,202	\$5,793
CZ08-2	LADWP	4,826	0	0.9	\$5,566	\$6,503	\$11,359	1.2	2.0	\$937	\$5,793
CZ09	SCE	4,889	0	1.0	\$5,566	\$10,622	\$11,216	1.9	2.0	\$5,056	\$5,650
CZ09-2	LADWP	4,889	0	1.0	\$5,566	\$6,217	\$11,216	1.1	2.0	\$651	\$5,650
CZ10	SDG&E	4,826	0	0.9	\$5,566	\$21,280	\$10,787	3.8	1.9	\$15,714	\$5,221
CZ10-2	SCE	4,826	0	0.9	\$5,566	\$11,598	\$10,787	2.1	1.9	\$6,032	\$5,221
CZ11	PG&E	4,701	0	0.9	\$5,566	\$19,869	\$10,644	3.6	1.9	\$14,303	\$5,078
CZ12	PG&E	4,707	0	0.9	\$5,566	\$19,643	\$10,644	3.5	1.9	\$14,077	\$5,078
CZ12-2	SMUD	4,707	0	0.9	\$5,566	\$8,005	\$10,644	1.4	1.9	\$2,439	\$5,078
CZ13	PG&E	4,633	0	0.9	\$5,566	\$19,231	\$10,262	3.5	1.8	\$13,665	\$4,696
CZ14	SDG&E	5,377	0	1.0	\$5,566	\$18,789	\$12,600	3.4	2.3	\$13,223	\$7,034
CZ14-2	SCE	5,377	0	1.0	\$5,566	\$10,512	\$12,600	1.9	2.3	\$4,946	\$7,034
CZ15	SCE	5,099	0	1.0	\$5,566	\$10,109	\$11,550	1.8	2.1	\$4,543	\$5,984
CZ16	PG&E	5,096	0	1.0	\$5,566	\$21,836	\$10,882	3.9	2.0	\$16,270	\$5,316
CZ16-2	LADWP	5,096	0	1.0	\$5,566	\$6,501	\$10,882	1.2	2.0	\$935	\$5,316



Figure 55. Cost Effectiveness for Medium Office – Mixed Fuel + 3kW PV + 5 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 3kW PV + 5kWh Battery											
CZ01	PG&E	3,941	0	0.8	\$9,520	\$15,743	\$8,448	1.7	0.9	\$6,223	(\$1,072)
CZ02	PG&E	4,785	0	0.9	\$9,520	\$20,372	\$10,500	2.1	1.1	\$10,852	\$980
CZ03	PG&E	4,660	0	0.9	\$9,520	\$20,603	\$9,975	2.2	1.0	\$11,083	\$455
CZ04	PG&E	5,056	0	1.0	\$9,520	\$20,235	\$11,073	2.1	1.2	\$10,714	\$1,553
CZ04-2	CPAU	5,056	0	1.0	\$9,520	\$11,945	\$11,073	1.3	1.2	\$2,425	\$1,553
CZ05	PG&E	5,027	0	1.0	\$9,520	\$23,159	\$10,834	2.4	1.1	\$13,639	\$1,314
CZ06	SCE	4,853	0	0.9	\$9,520	\$10,968	\$10,930	1.2	1.1	\$1,448	\$1,410
CZ06-2	LADWP	4,853	0	0.9	\$9,520	\$6,575	\$10,930	0.7	1.1	(\$2,945)	\$1,410
CZ07	SDG&E	4,960	0	1.0	\$9,520	\$17,904	\$11,025	1.9	1.2	\$8,384	\$1,505
CZ08	SCE	4,826	0	0.9	\$9,520	\$10,768	\$11,359	1.1	1.2	\$1,248	\$1,839
CZ08-2	LADWP	4,826	0	0.9	\$9,520	\$6,503	\$11,359	0.7	1.2	(\$3,017)	\$1,839
CZ09	SCE	4,889	0	1.0	\$9,520	\$10,622	\$11,216	1.1	1.2	\$1,102	\$1,696
CZ09-2	LADWP	4,889	0	1.0	\$9,520	\$6,217	\$11,216	0.7	1.2	(\$3,303)	\$1,696
CZ10	SDG&E	4,826	0	0.9	\$9,520	\$21,280	\$10,787	2.2	1.1	\$11,760	\$1,267
CZ10-2	SCE	4,826	0	0.9	\$9,520	\$11,598	\$10,787	1.2	1.1	\$2,078	\$1,267
CZ11	PG&E	4,701	0	0.9	\$9,520	\$19,869	\$10,644	2.1	1.1	\$10,349	\$1,123
CZ12	PG&E	4,707	0	0.9	\$9,520	\$19,643	\$10,644	2.1	1.1	\$10,123	\$1,123
CZ12-2	SMUD	4,707	0	0.9	\$9,520	\$8,005	\$10,644	0.8	1.1	(\$1,515)	\$1,123
CZ13	PG&E	4,633	0	0.9	\$9,520	\$19,231	\$10,262	2.0	1.1	\$9,711	\$742
CZ14	SDG&E	5,377	0	1.0	\$9,520	\$18,789	\$12,600	2.0	1.3	\$9,269	\$3,080
CZ14-2	SCE	5,377	0	1.0	\$9,520	\$10,512	\$12,600	1.1	1.3	\$992	\$3,080
CZ15	SCE	5,099	0	1.0	\$9,520	\$10,109	\$11,550	1.1	1.2	\$589	\$2,030
CZ16	PG&E	5,096	0	1.0	\$9,520	\$21,836	\$10,882	2.3	1.1	\$12,316	\$1,362
CZ16-2	LADWP	5,096	0	1.0	\$9,520	\$6,501	\$10,882	0.7	1.1	(\$3,019)	\$1,362



Figure 56. Cost Effectiveness for Medium Office – Mixed Fuel + 135kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel +135kW PV											
CZ01	PG&E	177,340	0	34.3	\$302,856	\$526,352	\$380,399	1.7	1.3	\$223,497	\$77,544
CZ02	PG&E	215,311	0	41.5	\$302,856	\$666,050	\$471,705	2.2	1.6	\$363,194	\$168,849
CZ03	PG&E	209,717	0	40.7	\$302,856	\$645,010	\$449,797	2.1	1.5	\$342,154	\$146,942
CZ04	PG&E	227,535	0	44.0	\$302,856	\$686,434	\$497,431	2.3	1.6	\$383,578	\$194,575
CZ04-2	CPAU	227,535	0	44.0	\$302,856	\$537,521	\$497,431	1.8	1.6	\$234,665	\$194,575
CZ05	PG&E	226,195	0	44.1	\$302,856	\$753,230	\$486,596	2.5	1.6	\$450,374	\$183,741
CZ06	SCE	218,387	0	42.3	\$302,856	\$401,645	\$492,515	1.3	1.6	\$98,789	\$189,659
CZ06-2	LADWP	218,387	0	42.3	\$302,856	\$233,909	\$492,515	0.8	1.6	(\$68,947)	\$189,659
CZ07	SDG&E	223,185	0	43.3	\$302,856	\$623,078	\$496,667	2.1	1.6	\$320,223	\$193,811
CZ08	SCE	217,171	0	42.0	\$302,856	\$389,435	\$510,270	1.3	1.7	\$86,579	\$207,414
CZ08-2	LADWP	217,171	0	42.0	\$302,856	\$222,066	\$510,270	0.7	1.7	(\$80,790)	\$207,414
CZ09	SCE	220,010	0	43.2	\$302,856	\$387,977	\$505,783	1.3	1.7	\$85,122	\$202,928
CZ09-2	LADWP	220,010	0	43.2	\$302,856	\$226,516	\$505,783	0.7	1.7	(\$76,340)	\$202,928
CZ10	SDG&E	217,148	0	42.5	\$302,856	\$632,726	\$485,451	2.1	1.6	\$329,870	\$182,595
CZ10-2	SCE	217,148	0	42.5	\$302,856	\$394,884	\$485,451	1.3	1.6	\$92,028	\$182,595
CZ11	PG&E	211,556	0	40.9	\$302,856	\$671,691	\$478,912	2.2	1.6	\$368,835	\$176,056
CZ12	PG&E	211,824	0	40.9	\$302,856	\$653,242	\$478,101	2.2	1.6	\$350,386	\$175,245
CZ12-2	SMUD	211,824	0	40.9	\$302,856	\$345,255	\$478,101	1.1	1.6	\$42,399	\$175,245
CZ13	PG&E	208,465	0	40.5	\$302,856	\$651,952	\$462,732	2.2	1.5	\$349,096	\$159,876
CZ14	SDG&E	241,965	0	46.7	\$302,856	\$659,487	\$566,351	2.2	1.9	\$356,632	\$263,496
CZ14-2	SCE	241,965	0	46.7	\$302,856	\$401,712	\$566,351	1.3	1.9	\$98,856	\$263,496
CZ15	SCE	229,456	0	43.9	\$302,856	\$378,095	\$520,102	1.2	1.7	\$75,239	\$217,246
CZ16	PG&E	229,317	0	44.8	\$302,856	\$707,095	\$489,508	2.3	1.6	\$404,239	\$186,652
CZ16-2	LADWP	229,317	0	44.8	\$302,856	\$223,057	\$489,508	0.7	1.6	(\$79,799)	\$186,652



Figure 57. Cost Effectiveness for Medium Office – Mixed Fuel + 135kW PV + 50 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 135kW PV + 50 kWh Battery											
CZ01	PG&E	176,903	0	35.3	\$330,756	\$525,948	\$381,450	1.6	1.2	\$195,192	\$50,694
CZ02	PG&E	214,861	0	42.6	\$330,756	\$665,864	\$472,898	2.0	1.4	\$335,108	\$142,142
CZ03	PG&E	209,255	0	41.8	\$330,756	\$644,170	\$451,611	1.9	1.4	\$313,414	\$120,855
CZ04	PG&E	227,076	0	45.0	\$330,756	\$685,605	\$502,108	2.1	1.5	\$354,849	\$171,352
CZ04-2	CPAU	227,076	0	45.0	\$330,756	\$536,463	\$502,108	1.6	1.5	\$205,707	\$171,352
CZ05	PG&E	225,752	0	45.1	\$330,756	\$753,558	\$487,742	2.3	1.5	\$422,803	\$156,986
CZ06	SCE	217,939	0	43.4	\$330,756	\$401,356	\$494,042	1.2	1.5	\$70,601	\$163,286
CZ06-2	LADWP	217,939	0	43.4	\$330,756	\$233,673	\$494,042	0.7	1.5	(\$97,083)	\$163,286
CZ07	SDG&E	222,746	0	44.4	\$330,756	\$628,383	\$498,147	1.9	1.5	\$297,627	\$167,391
CZ08	SCE	216,724	0	43.1	\$330,756	\$389,184	\$511,511	1.2	1.5	\$58,428	\$180,755
CZ08-2	LADWP	216,724	0	43.1	\$330,756	\$221,839	\$511,511	0.7	1.5	(\$108,917)	\$180,755
CZ09	SCE	219,563	0	44.2	\$330,756	\$387,728	\$506,929	1.2	1.5	\$56,972	\$176,173
CZ09-2	LADWP	219,563	0	44.2	\$330,756	\$226,303	\$506,929	0.7	1.5	(\$104,453)	\$176,173
CZ10	SDG&E	216,700	0	43.5	\$330,756	\$638,040	\$486,644	1.9	1.5	\$307,284	\$155,888
CZ10-2	SCE	216,700	0	43.5	\$330,756	\$394,633	\$486,644	1.2	1.5	\$63,877	\$155,888
CZ11	PG&E	211,129	0	41.9	\$330,756	\$670,932	\$481,298	2.0	1.5	\$340,177	\$150,543
CZ12	PG&E	211,386	0	41.9	\$330,756	\$652,465	\$482,826	2.0	1.5	\$321,709	\$152,070
CZ12-2	SMUD	211,386	0	41.9	\$330,756	\$344,668	\$482,826	1.0	1.5	\$13,913	\$152,070
CZ13	PG&E	208,045	0	41.5	\$330,756	\$651,191	\$473,280	2.0	1.4	\$320,435	\$142,524
CZ14	SDG&E	241,502	0	47.7	\$330,756	\$672,601	\$569,454	2.0	1.7	\$341,846	\$238,698
CZ14-2	SCE	241,502	0	47.7	\$330,756	\$401,450	\$569,454	1.2	1.7	\$70,694	\$238,698
CZ15	SCE	229,062	0	44.8	\$330,756	\$377,827	\$521,963	1.1	1.6	\$47,071	\$191,208
CZ16	PG&E	228,825	0	45.9	\$330,756	\$706,201	\$496,190	2.1	1.5	\$375,445	\$165,434
CZ16-2	LADWP	228,825	0	45.9	\$330,756	\$222,802	\$496,190	0.7	1.5	(\$107,953)	\$165,434



Figure 58. Cost Effectiveness for Medium Office– All-Electric + 3kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 3kW PV											
CZ01	PG&E	-49,716	4967	10.9	(\$80,523)	(\$84,765)	(\$49,972)	0.9	1.6	(\$4,242)	\$30,551
CZ02	PG&E	-44,899	3868	6.0	(\$66,965)	(\$83,115)	(\$30,928)	0.8	2.2	(\$16,150)	\$36,037
CZ03	PG&E	-31,226	3142	6.5	(\$75,600)	(\$39,441)	(\$19,617)	1.9	3.9	\$36,159	\$55,983
CZ04	PG&E	-43,772	3759	5.7	(\$62,282)	(\$70,999)	(\$29,496)	0.9	2.1	(\$8,717)	\$32,786
CZ04-2	CPAU	-43,772	3759	5.7	(\$62,282)	(\$8,050)	(\$29,496)	7.7	2.1	\$54,232	\$32,786
CZ05	PG&E	-35,504	3240	5.5	(\$77,773)	(\$42,559)	(\$29,162)	1.8	2.7	\$35,214	\$48,611
CZ06	SCE	-21,321	2117	4.0	(\$69,422)	\$35,862	(\$9,641)	>1	7.2	\$105,284	\$59,781
CZ06-2	LADWP	-21,321	2117	4.0	(\$69,422)	\$32,936	(\$9,641)	>1	7.2	\$102,358	\$59,781
CZ07	SDG&E	-7,943	950	1.9	(\$63,595)	\$64,781	(\$382)	>1	166.6	\$128,376	\$63,214
CZ08	SCE	-10,854	1219	2.5	(\$62,043)	\$28,651	(\$1,289)	>1	48.1	\$90,694	\$60,755
CZ08-2	LADWP	-10,854	1219	2.5	(\$62,043)	\$25,122	(\$1,289)	>1	48.1	\$87,165	\$60,755
CZ09	SCE	-14,878	1605	3.3	(\$56,372)	\$31,542	(\$3,246)	>1	17.4	\$87,913	\$53,126
CZ09-2	LADWP	-14,878	1605	3.3	(\$56,372)	\$28,145	(\$3,246)	>1	17.4	\$84,517	\$53,126
CZ10	SDG&E	-22,588	2053	3.1	(\$41,171)	\$59,752	(\$12,553)	>1	3.3	\$100,924	\$28,619
CZ10-2	SCE	-22,588	2053	3.1	(\$41,171)	\$32,039	(\$12,553)	>1	3.3	\$73,211	\$28,619
CZ11	PG&E	-35,455	3062	4.5	(\$57,257)	(\$53,776)	(\$22,194)	1.1	2.6	\$3,481	\$35,063
CZ12	PG&E	-38,704	3327	5.0	(\$61,613)	(\$66,808)	(\$24,819)	0.9	2.5	(\$5,195)	\$36,794
CZ12-2	SMUD	-38,704	3327	5.0	(\$61,613)	\$2,897	(\$24,819)	>1	2.5	\$64,510	\$36,794
CZ13	PG&E	-35,016	3063	4.7	(\$55,996)	(\$52,159)	(\$22,146)	1.1	2.5	\$3,836	\$33,849
CZ14	SDG&E	-38,945	3266	4.5	(\$58,426)	\$24,867	(\$25,821)	>1	2.3	\$83,293	\$32,605
CZ14-2	SCE	-38,945	3266	4.5	(\$58,426)	\$15,338	(\$25,821)	>1	2.3	\$73,764	\$32,605
CZ15	SCE	-14,818	1537	2.8	(\$29,445)	\$22,852	(\$3,914)	>1	7.5	\$52,298	\$25,532
CZ16	PG&E	-88,966	6185	6.6	(\$57,366)	(\$193,368)	(\$139,989)	0.3	0.4	(\$136,002)	(\$82,623)
CZ16-2	LADWP	-88,966	6185	6.6	(\$57,366)	\$36,354	(\$139,989)	>1	0.4	\$93,720	(\$82,623)



Figure 59. Cost Effectiveness for Medium Office – All-Electric + 3kW PV + 5 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 3kW PV + 5 kWh Battery											
CZ01	PG&E	-49,716	4967	10.9	(\$78,897)	(\$84,765)	(\$49,972)	0.9	1.6	(\$5,868)	\$28,925
CZ02	PG&E	-44,899	3868	6.0	(\$78,897)	(\$83,115)	(\$30,928)	0.9	2.6	(\$4,218)	\$47,969
CZ03	PG&E	-31,226	3142	6.5	(\$78,897)	(\$39,441)	(\$19,617)	2.0	4.0	\$39,456	\$59,280
CZ04	PG&E	-43,772	3759	5.7	(\$78,897)	(\$70,999)	(\$29,496)	1.1	2.7	\$7,898	\$49,400
CZ04-2	CPAU	-43,772	3759	5.7	(\$78,897)	(\$8,050)	(\$29,496)	9.8	2.7	\$70,847	\$49,400
CZ05	PG&E	-35,504	3240	5.5	(\$78,897)	(\$42,559)	(\$29,162)	1.9	2.7	\$36,338	\$49,735
CZ06	SCE	-21,321	2117	4.0	(\$78,897)	\$35,862	(\$9,641)	>1	8.2	\$114,759	\$69,256
CZ06-2	LADWP	-21,321	2117	4.0	(\$78,897)	\$32,936	(\$9,641)	>1	8.2	\$111,833	\$69,256
CZ07	SDG&E	-7,943	950	1.9	(\$78,897)	\$64,781	(\$382)	>1	206.6	\$143,678	\$78,515
CZ08	SCE	-10,854	1219	2.5	(\$78,897)	\$28,651	(\$1,289)	>1	61.2	\$107,548	\$77,608
CZ08-2	LADWP	-10,854	1219	2.5	(\$78,897)	\$25,122	(\$1,289)	>1	61.2	\$104,019	\$77,608
CZ09	SCE	-14,878	1605	3.3	(\$78,897)	\$31,542	(\$3,246)	>1	24.3	\$110,439	\$75,651
CZ09-2	LADWP	-14,878	1605	3.3	(\$78,897)	\$28,145	(\$3,246)	>1	24.3	\$107,042	\$75,651
CZ10	SDG&E	-22,588	2053	3.1	(\$78,897)	\$59,752	(\$12,553)	>1	6.3	\$138,649	\$66,344
CZ10-2	SCE	-22,588	2053	3.1	(\$78,897)	\$32,039	(\$12,553)	>1	6.3	\$110,936	\$66,344
CZ11	PG&E	-35,455	3062	4.5	(\$78,897)	(\$53,776)	(\$22,194)	1.5	3.6	\$25,121	\$56,703
CZ12	PG&E	-38,704	3327	5.0	(\$78,897)	(\$66,808)	(\$24,819)	1.2	3.2	\$12,089	\$54,078
CZ12-2	SMUD	-38,704	3327	5.0	(\$78,897)	\$2,897	(\$24,819)	>1	3.2	\$81,794	\$54,078
CZ13	PG&E	-35,016	3063	4.7	(\$78,897)	(\$52,159)	(\$22,146)	1.5	3.6	\$26,738	\$56,751
CZ14	SDG&E	-38,945	3266	4.5	(\$78,897)	\$24,867	(\$25,821)	>1	3.1	\$103,764	\$53,076
CZ14-2	SCE	-38,945	3266	4.5	(\$78,897)	\$15,338	(\$25,821)	>1	3.1	\$94,235	\$53,076
CZ15	SCE	-14,818	1537	2.8	(\$78,897)	\$22,852	(\$3,914)	>1	20.2	\$101,749	\$74,983
CZ16	PG&E	-88,966	6185	6.6	(\$78,897)	(\$193,368)	(\$139,989)	0.4	0.6	(\$114,472)	(\$61,092)
CZ16-2	LADWP	-88,966	6185	6.6	(\$78,897)	\$36,354	(\$139,989)	>1	0.6	\$115,250	(\$61,092)



Figure 60. Cost Effectiveness for Medium Office – All-Electric + 135kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 135kW PV											
CZ01	PG&E	123,683	4967	44.5	\$163,217	\$405,731	\$321,979	2.5	2.0	\$242,514	\$158,762
CZ02	PG&E	165,627	3868	46.6	\$176,775	\$562,528	\$430,276	3.2	2.4	\$385,753	\$253,501
CZ03	PG&E	173,831	3142	46.3	\$168,140	\$575,864	\$420,205	3.4	2.5	\$407,725	\$252,066
CZ04	PG&E	178,706	3759	48.7	\$181,458	\$601,431	\$456,861	3.3	2.5	\$419,973	\$275,403
CZ04-2	CPAU	178,706	3759	48.7	\$181,458	\$517,526	\$456,861	2.9	2.5	\$336,069	\$275,403
CZ05	PG&E	185,664	3240	48.6	\$165,967	\$664,842	\$446,600	4.0	2.7	\$498,875	\$280,633
CZ06	SCE	192,214	2117	45.3	\$174,317	\$423,657	\$471,944	2.4	2.7	\$249,340	\$297,626
CZ06-2	LADWP	192,214	2117	45.3	\$174,317	\$259,270	\$471,944	1.5	2.7	\$84,953	\$297,626
CZ07	SDG&E	210,282	950	44.3	\$180,145	\$669,979	\$485,260	3.7	2.7	\$489,834	\$305,115
CZ08	SCE	201,491	1219	43.5	\$181,696	\$407,277	\$497,622	2.2	2.7	\$225,580	\$315,925
CZ08-2	LADWP	201,491	1219	43.5	\$181,696	\$240,657	\$497,622	1.3	2.7	\$58,960	\$315,925
CZ09	SCE	200,242	1605	45.6	\$187,368	\$408,922	\$491,322	2.2	2.6	\$221,554	\$303,953
CZ09-2	LADWP	200,242	1605	45.6	\$187,368	\$248,452	\$491,322	1.3	2.6	\$61,084	\$303,953
CZ10	SDG&E	189,734	2053	44.7	\$202,568	\$667,551	\$462,111	3.3	2.3	\$464,982	\$259,543
CZ10-2	SCE	189,734	2053	44.7	\$202,568	\$412,659	\$462,111	2.0	2.3	\$210,091	\$259,543
CZ11	PG&E	171,399	3062	44.5	\$186,483	\$597,807	\$446,074	3.2	2.4	\$411,324	\$259,592
CZ12	PG&E	168,413	3327	45.0	\$182,127	\$571,758	\$442,638	3.1	2.4	\$389,632	\$260,511
CZ12-2	SMUD	168,413	3327	45.0	\$182,127	\$343,602	\$442,638	1.9	2.4	\$161,475	\$260,511
CZ13	PG&E	168,817	3063	44.3	\$187,744	\$581,964	\$430,324	3.1	2.3	\$394,220	\$242,580
CZ14	SDG&E	197,643	3266	50.1	\$185,314	\$667,762	\$527,930	3.6	2.8	\$482,449	\$342,616
CZ14-2	SCE	197,643	3266	50.1	\$185,314	\$408,424	\$527,930	2.2	2.8	\$223,110	\$342,616
CZ15	SCE	209,539	1537	45.7	\$214,294	\$390,267	\$504,638	1.8	2.4	\$175,972	\$290,343
CZ16	PG&E	135,255	6185	50.4	\$186,374	\$470,199	\$338,637	2.5	1.8	\$283,825	\$152,263
CZ16-2	LADWP	135,255	6185	50.4	\$186,374	\$250,807	\$338,637	1.3	1.8	\$64,433	\$152,263



Figure 61. Cost Effectiveness for Medium Office – All-Electric + 135kW PV + 50 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 135kW PV + 50 kWh Battery											
CZ01	PG&E	123,280	4967	45.4	\$191,117	\$404,994	\$323,077	2.1	1.7	\$213,877	\$131,960
CZ02	PG&E	165,200	3868	47.7	\$204,675	\$561,747	\$431,469	2.7	2.1	\$357,072	\$226,795
CZ03	PG&E	173,384	3142	47.4	\$196,040	\$575,043	\$422,019	2.9	2.2	\$379,003	\$225,979
CZ04	PG&E	178,259	3759	49.8	\$209,358	\$600,621	\$461,634	2.9	2.2	\$391,263	\$252,276
CZ04-2	CPAU	178,259	3759	49.8	\$209,358	\$516,495	\$461,634	2.5	2.2	\$307,137	\$252,276
CZ05	PG&E	185,229	3240	49.7	\$193,867	\$664,046	\$447,793	3.4	2.3	\$470,179	\$253,926
CZ06	SCE	191,767	2117	46.5	\$202,217	\$423,369	\$473,519	2.1	2.3	\$221,152	\$271,301
CZ06-2	LADWP	191,767	2117	46.5	\$202,217	\$259,033	\$473,519	1.3	2.3	\$56,816	\$271,301
CZ07	SDG&E	209,848	950	45.4	\$208,045	\$675,307	\$486,787	3.2	2.3	\$467,262	\$278,743
CZ08	SCE	201,047	1219	44.7	\$209,596	\$407,027	\$498,910	1.9	2.4	\$197,430	\$289,314
CZ08-2	LADWP	201,047	1219	44.7	\$209,596	\$240,432	\$498,910	1.1	2.4	\$30,835	\$289,314
CZ09	SCE	199,802	1605	46.6	\$215,268	\$408,676	\$492,515	1.9	2.3	\$193,408	\$277,246
CZ09-2	LADWP	199,802	1605	46.6	\$215,268	\$248,242	\$492,515	1.2	2.3	\$32,974	\$277,246
CZ10	SDG&E	189,293	2053	45.7	\$230,468	\$672,867	\$463,352	2.9	2.0	\$442,399	\$232,884
CZ10-2	SCE	189,293	2053	45.7	\$230,468	\$412,412	\$463,352	1.8	2.0	\$181,944	\$232,884
CZ11	PG&E	170,987	3062	45.5	\$214,383	\$597,062	\$448,509	2.8	2.1	\$382,680	\$234,126
CZ12	PG&E	167,995	3327	46.0	\$210,027	\$571,002	\$447,411	2.7	2.1	\$360,975	\$237,384
CZ12-2	SMUD	167,995	3327	46.0	\$210,027	\$343,043	\$447,411	1.6	2.1	\$133,017	\$237,384
CZ13	PG&E	168,408	3063	45.3	\$215,644	\$581,225	\$440,920	2.7	2.0	\$365,580	\$225,275
CZ14	SDG&E	197,188	3266	51.2	\$213,214	\$680,893	\$531,080	3.2	2.5	\$467,679	\$317,866
CZ14-2	SCE	197,188	3266	51.2	\$213,214	\$408,166	\$531,080	1.9	2.5	\$194,952	\$317,866
CZ15	SCE	209,148	1537	46.6	\$242,194	\$390,000	\$506,499	1.6	2.1	\$147,806	\$264,305
CZ16	PG&E	134,809	6185	51.4	\$214,274	\$469,378	\$341,978	2.2	1.6	\$255,105	\$127,704
CZ16-2	LADWP	134,809	6185	51.4	\$214,274	\$250,580	\$341,978	1.2	1.6	\$36,306	\$127,704



6.7.2 **Cost Effectiveness Results – Medium Retail**

Figure 62 through Figure 69 contain the cost-effectiveness findings for the Medium Retail packages. Notable findings for each package include:

- ◆ **Mixed-Fuel + 3 kW PV:** Packages are cost effective and achieve savings for all climate zones using the On-Bill and TDV approaches.
- ◆ **Mixed-Fuel + 3 kW PV + 5 kWh Battery:** The packages are less cost effective as compared to the 3 kW PV only package and not cost effective for LADWP and SMUD service area.
- ◆ **Mixed-Fuel + PV only:** Packages achieve positive energy cost savings and are cost effective using the On-Bill approach for all climate zones except for LADWP territory (CZs 6, 8, 9 and 16). Packages achieve positive savings and are cost effective using the TDV approach for all climate zones.
- ◆ **Mixed Fuel + PV + 5 kWh Battery:** Adding battery slightly reduces On-Bill B/C ratios but is still cost effective for all climate zones except for LADWP territory. Packages achieve savings and cost effective using the TDV approach for all climate zones.
- ◆ **All-Electric + 3 kW PV:** Packages are cost effective using the On-Bill and TDV approach for all climate zones except for CZ16 under PG&E service.
- ◆ **All-Electric + 3 kW PV + 5 kWh Battery:** Similar to minimal PV only package, adding battery is cost effective as well using the On-Bill and TDV approach for all climate zones except for CZ16 under PG&E service.
- ◆ **All-Electric + PV only:** Packages are cost effective and achieve savings in all climate zones for both the On-Bill and TDV approaches
- ◆ **All-Electric + PV + 50 kWh Battery:** Adding battery slightly reduces B/C ratios for both the On-Bill and TDV approaches. Packages are not cost effective for all climate zones except CZ6, CZ8 and CZ9 under LADWP service area.



Figure 62. Cost Effectiveness for Medium Retail – Mixed-Fuel + 3kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 3kW PV											
CZ01	PG&E	3,941	0	0.76	\$5,566	\$12,616	\$8,460	2.3	1.5	\$7,050	\$2,894
CZ02	PG&E	4,685	0	0.91	\$5,566	\$17,635	\$10,262	3.2	1.8	\$12,069	\$4,696
CZ03	PG&E	4,733	0	0.92	\$5,566	\$15,146	\$10,152	2.7	1.8	\$9,580	\$4,586
CZ04	PG&E	4,834	0	0.94	\$5,566	\$18,519	\$10,614	3.3	1.9	\$12,953	\$5,048
CZ04-2	CPAU	4,834	0	0.94	\$5,566	\$11,507	\$10,614	2.1	1.9	\$5,941	\$5,048
CZ05	PG&E	4,910	0	0.95	\$5,566	\$15,641	\$10,548	2.8	1.9	\$10,075	\$4,982
CZ06	SCE	4,769	0	0.93	\$5,566	\$11,374	\$10,724	2.0	1.9	\$5,808	\$5,158
CZ06-2	LA	4,769	0	0.93	\$5,566	\$7,069	\$10,724	1.3	1.9	\$1,503	\$5,158
CZ07	SDG&E	4,960	0	0.96	\$5,566	\$22,452	\$11,031	4.0	2.0	\$16,886	\$5,465
CZ08	SCE	4,826	0	0.93	\$5,566	\$11,838	\$11,339	2.1	2.0	\$6,272	\$5,773
CZ08-2	LA	4,826	0	0.93	\$5,566	\$7,342	\$11,339	1.3	2.0	\$1,776	\$5,773
CZ09	SCE	4,889	0	0.96	\$5,566	\$11,187	\$11,229	2.0	2.0	\$5,621	\$5,663
CZ09-2	LA	4,889	0	0.96	\$5,566	\$6,728	\$11,229	1.2	2.0	\$1,162	\$5,663
CZ10	SDG&E	4,948	0	0.97	\$5,566	\$20,999	\$10,987	3.8	2.0	\$15,433	\$5,421
CZ10-2	SCE	4,948	0	0.97	\$5,566	\$11,384	\$10,987	2.0	2.0	\$5,818	\$5,421
CZ11	PG&E	4,718	0	0.91	\$5,566	\$15,381	\$10,680	2.8	1.9	\$9,815	\$5,114
CZ12	PG&E	4,707	0	0.91	\$5,566	\$16,442	\$10,614	3.0	1.9	\$10,876	\$5,048
CZ12-2	SMUD	4,707	0	0.91	\$5,566	\$8,247	\$10,614	1.5	1.9	\$2,681	\$5,048
CZ13	PG&E	4,750	0	0.92	\$5,566	\$16,638	\$10,592	3.0	1.9	\$11,072	\$5,026
CZ14	SDG&E	5,258	0	1.01	\$5,566	\$19,576	\$12,218	3.5	2.2	\$14,010	\$6,652
CZ14-2	SCE	5,258	0	1.01	\$5,566	\$10,227	\$12,218	1.8	2.2	\$4,661	\$6,652
CZ15	SCE	4,997	0	0.96	\$5,566	\$10,476	\$11,339	1.9	2.0	\$4,910	\$5,773
CZ16	PG&E	5,336	0	1.04	\$5,566	\$20,418	\$11,361	3.7	2.0	\$14,852	\$5,795
CZ16-2	LA	5,336	0	1.04	\$5,566	\$6,987	\$11,361	1.3	2.0	\$1,421	\$5,795



Figure 63. Cost Effectiveness for Medium Retail – Mixed Fuel + 3kW PV + 5 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 3kW PV + 5 kWh Battery											
CZ01	PG&E	3,941	0	0.76	\$9,520	\$12,616	\$8,460	1.3	0.9	\$3,096	(\$1,060)
CZ02	PG&E	4,685	0	0.91	\$9,520	\$17,635	\$10,262	1.9	1.1	\$8,115	\$742
CZ03	PG&E	4,733	0	0.92	\$9,520	\$15,146	\$10,152	1.6	1.1	\$5,626	\$632
CZ04	PG&E	4,834	0	0.94	\$9,520	\$18,519	\$10,614	1.9	1.1	\$8,999	\$1,094
CZ04-2	CPAU	4,834	0	0.94	\$9,520	\$11,507	\$10,614	1.2	1.1	\$1,987	\$1,094
CZ05	PG&E	4,910	0	0.95	\$9,520	\$15,641	\$10,548	1.6	1.1	\$6,120	\$1,028
CZ05-2	SCG	4,910	0	0.95	\$9,520	\$15,641	\$10,548	1.6	1.1	\$6,120	\$1,028
CZ06	SCE	4,769	0	0.93	\$9,520	\$11,374	\$10,724	1.2	1.1	\$1,854	\$1,204
CZ06-2	LA	4,769	0	0.93	\$9,520	\$7,069	\$10,724	0.7	1.1	(\$2,452)	\$1,204
CZ07	SDG&E	4,960	0	0.96	\$9,520	\$22,452	\$11,031	2.4	1.2	\$12,932	\$1,511
CZ08	SCE	4,826	0	0.93	\$9,520	\$11,838	\$11,339	1.2	1.2	\$2,317	\$1,819
CZ08-2	LA	4,826	0	0.93	\$9,520	\$7,342	\$11,339	0.8	1.2	(\$2,178)	\$1,819
CZ09	SCE	4,889	0	0.96	\$9,520	\$11,187	\$11,229	1.2	1.2	\$1,667	\$1,709
CZ09-2	LA	4,889	0	0.96	\$9,520	\$6,728	\$11,229	0.7	1.2	(\$2,792)	\$1,709
CZ10	SDG&E	4,948	0	0.97	\$9,520	\$20,999	\$10,987	2.2	1.2	\$11,479	\$1,467
CZ10-2	SCE	4,948	0	0.97	\$9,520	\$11,384	\$10,987	1.2	1.2	\$1,863	\$1,467
CZ11	PG&E	4,718	0	0.91	\$9,520	\$15,381	\$10,680	1.6	1.1	\$5,861	\$1,160
CZ12	PG&E	4,707	0	0.91	\$9,520	\$16,442	\$10,614	1.7	1.1	\$6,922	\$1,094
CZ12-2	SMUD	4,707	0	0.91	\$9,520	\$8,247	\$10,614	0.9	1.1	(\$1,273)	\$1,094
CZ13	PG&E	4,750	0	0.92	\$9,520	\$16,638	\$10,592	1.7	1.1	\$7,117	\$1,072
CZ14	SDG&E	5,258	0	1.01	\$9,520	\$19,576	\$12,218	2.1	1.3	\$10,056	\$2,698
CZ14-2	SCE	5,258	0	1.01	\$9,520	\$10,227	\$12,218	1.1	1.3	\$707	\$2,698
CZ15	SCE	4,997	0	0.96	\$9,520	\$10,476	\$11,339	1.1	1.2	\$956	\$1,819
CZ16	PG&E	5,336	0	1.04	\$9,520	\$20,418	\$11,361	2.1	1.2	\$10,898	\$1,841
CZ16-2	LA	5,336	0	1.04	\$9,520	\$6,987	\$11,361	0.7	1.2	(\$2,533)	\$1,841



Figure 64. Cost Effectiveness for Medium Retail – Mixed-Fuel + 110kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 110kW PV											
CZ01	PG&E	144,499	0	27.97	\$201,904	\$454,462	\$309,935	2.3	1.5	\$252,558	\$108,031
CZ02	PG&E	171,790	0	33.31	\$201,904	\$477,584	\$376,300	2.4	1.9	\$275,681	\$174,396
CZ03	PG&E	173,534	0	33.55	\$201,904	\$538,530	\$372,146	2.7	1.8	\$336,626	\$170,243
CZ04	PG&E	177,229	0	34.42	\$201,904	\$489,934	\$389,067	2.4	1.9	\$288,030	\$187,163
CZ04-2	CPAU	177,229	0	34.42	\$201,904	\$418,173	\$389,067	2.1	1.9	\$216,269	\$187,163
CZ05	PG&E	180,044	0	34.84	\$201,904	\$556,787	\$386,958	2.8	1.9	\$354,883	\$185,054
CZ06	SCE	174,855	0	33.92	\$201,904	\$288,188	\$393,198	1.4	1.9	\$86,284	\$191,295
CZ06-2	LA	174,855	0	33.92	\$201,904	\$165,538	\$393,198	0.8	1.9	(\$36,366)	\$191,295
CZ07	SDG&E	181,854	0	35.32	\$201,904	\$373,974	\$404,713	1.9	2.0	\$172,070	\$202,809
CZ08	SCE	176,954	0	34.23	\$201,904	\$284,481	\$415,789	1.4	2.1	\$82,577	\$213,885
CZ08-2	LA	176,954	0	34.23	\$201,904	\$161,366	\$415,789	0.8	2.1	(\$40,538)	\$213,885
CZ09	SCE	179,267	0	35.18	\$201,904	\$289,050	\$412,097	1.4	2.0	\$87,146	\$210,193
CZ09-2	LA	179,267	0	35.18	\$201,904	\$168,822	\$412,097	0.8	2.0	(\$33,082)	\$210,193
CZ10	SDG&E	181,443	0	35.41	\$201,904	\$410,310	\$402,999	2.0	2.0	\$208,406	\$201,095
CZ10-2	SCE	181,443	0	35.41	\$201,904	\$291,236	\$402,999	1.4	2.0	\$89,332	\$201,095
CZ11	PG&E	172,983	0	33.46	\$201,904	\$464,776	\$391,550	2.3	1.9	\$262,872	\$189,646
CZ12	PG&E	172,597	0	33.33	\$201,904	\$467,870	\$389,573	2.3	1.9	\$265,966	\$187,669
CZ12-2	SMUD	172,597	0	33.33	\$201,904	\$267,086	\$389,573	1.3	1.9	\$65,182	\$187,669
CZ13	PG&E	174,151	0	33.81	\$201,904	\$478,857	\$387,968	2.4	1.9	\$276,953	\$186,065
CZ14	SDG&E	192,789	0	36.97	\$201,904	\$396,181	\$448,268	2.0	2.2	\$194,277	\$246,364
CZ14-2	SCE	192,789	0	36.97	\$201,904	\$288,782	\$448,268	1.4	2.2	\$86,878	\$246,364
CZ15	SCE	183,214	0	35.12	\$201,904	\$277,867	\$415,789	1.4	2.1	\$75,963	\$213,885
CZ16	PG&E	195,665	0	37.97	\$201,904	\$522,352	\$416,558	2.6	2.1	\$320,448	\$214,654
CZ16-2	LA	195,665	0	37.97	\$201,904	\$171,802	\$416,558	0.9	2.1	(\$30,101)	\$214,654



Figure 65. Cost Effectiveness for Medium Retail – Mixed-Fuel + 110 kW PV + 50 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 110kW PV + 50 kWh Battery											
CZ01	PG&E	143,423	0	29.48	\$229,804	\$452,119	\$324,373	2.0	1.4	\$222,315	\$94,569
CZ02	PG&E	170,542	0	35.14	\$229,804	\$486,704	\$398,363	2.1	1.7	\$256,900	\$168,559
CZ03	PG&E	172,266	0	35.66	\$229,804	\$535,974	\$395,374	2.3	1.7	\$306,170	\$165,570
CZ04	PG&E	175,940	0	36.32	\$229,804	\$525,788	\$422,579	2.3	1.8	\$295,984	\$192,775
CZ04-2	CPAU	175,940	0	36.32	\$229,804	\$416,019	\$422,579	1.8	1.8	\$186,216	\$192,775
CZ05	PG&E	178,728	0	36.91	\$229,804	\$554,968	\$409,086	2.4	1.8	\$325,164	\$179,283
CZ06	SCE	173,567	0	35.99	\$229,804	\$290,599	\$412,690	1.3	1.8	\$60,795	\$182,886
CZ06-2	LA	173,567	0	35.99	\$229,804	\$169,786	\$412,690	0.7	1.8	(\$60,018)	\$182,886
CZ07	SDG&E	180,508	0	37.61	\$229,804	\$425,793	\$427,040	1.9	1.9	\$195,989	\$197,236
CZ08	SCE	175,616	0	36.29	\$229,804	\$296,318	\$434,687	1.3	1.9	\$66,514	\$204,883
CZ08-2	LA	175,616	0	36.29	\$229,804	\$170,489	\$434,687	0.7	1.9	(\$59,315)	\$204,883
CZ09	SCE	177,966	0	36.74	\$229,804	\$300,540	\$421,195	1.3	1.8	\$70,736	\$191,391
CZ09-2	LA	177,966	0	36.74	\$229,804	\$178,852	\$421,195	0.8	1.8	(\$50,952)	\$191,391
CZ10	SDG&E	180,248	0	36.91	\$229,804	\$459,486	\$410,537	2.0	1.8	\$229,683	\$180,733
CZ10-2	SCE	180,248	0	36.91	\$229,804	\$301,219	\$410,537	1.3	1.8	\$71,415	\$180,733
CZ11	PG&E	171,779	0	34.85	\$229,804	\$490,245	\$417,679	2.1	1.8	\$260,442	\$187,875
CZ12	PG&E	171,392	0	34.77	\$229,804	\$497,363	\$417,371	2.2	1.8	\$267,559	\$187,567
CZ12-2	SMUD	171,392	0	34.77	\$229,804	\$273,783	\$417,371	1.2	1.8	\$43,979	\$187,567
CZ13	PG&E	173,052	0	34.97	\$229,804	\$488,196	\$397,791	2.1	1.7	\$258,392	\$167,987
CZ14	SDG&E	191,703	0	38.31	\$229,804	\$420,241	\$452,641	1.8	2.0	\$190,437	\$222,837
CZ14-2	SCE	191,703	0	38.31	\$229,804	\$294,010	\$452,641	1.3	2.0	\$64,206	\$222,837
CZ15	SCE	182,299	0	36.01	\$229,804	\$279,036	\$416,382	1.2	1.8	\$49,232	\$186,578
CZ16	PG&E	194,293	0	40.00	\$229,804	\$535,137	\$432,951	2.3	1.9	\$305,333	\$203,147
CZ16-2	LA	194,293	0	40.00	\$229,804	\$175,573	\$432,951	0.8	1.9	(\$54,231)	\$203,147



Figure 66. Cost Effectiveness for Medium Retail – All-Electric + 3kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 3kW PV											
CZ01	PG&E	-25,214	3893	14.61	(\$16,318)	\$4,288	(\$5,450)	>1	3.0	\$20,606	\$10,868
CZ02	PG&E	-17,101	2448	8.40	(\$20,734)	\$859	\$5,779	>1	>1	\$21,593	\$26,513
CZ03	PG&E	-9,851	1868	7.18	(\$17,381)	\$15,418	\$8,702	>1	>1	\$32,799	\$26,083
CZ04	PG&E	-9,353	1706	6.24	(\$16,166)	\$9,110	\$10,394	>1	>1	\$25,276	\$26,560
CZ04-2	CPAU	-9,353	1706	6.24	(\$16,166)	\$24,000	\$10,394	>1	>1	\$40,166	\$26,560
CZ05	PG&E	-9,423	1746	6.42	(\$18,776)	\$14,076	\$6,351	>1	>1	\$32,852	\$25,127
CZ06	SCE	-2,759	1002	4.24	(\$15,032)	\$29,710	\$12,592	>1	>1	\$44,741	\$27,623
CZ06-2	LA	-2,759	1002	4.24	(\$15,032)	\$26,292	\$12,592	>1	>1	\$41,324	\$27,623
CZ07	SDG&E	1,148	522	2.72	(\$17,032)	\$76,810	\$12,350	>1	>1	\$93,842	\$29,382
CZ08	SCE	-979	793	3.64	(\$20,192)	\$28,576	\$13,185	>1	>1	\$48,768	\$33,377
CZ08-2	LA	-979	793	3.64	(\$20,192)	\$24,475	\$13,185	>1	>1	\$44,667	\$33,377
CZ09	SCE	-2,352	970	4.28	(\$25,383)	\$29,776	\$13,207	>1	>1	\$55,159	\$38,590
CZ09-2	LA	-2,352	970	4.28	(\$25,383)	\$25,823	\$13,207	>1	>1	\$51,207	\$38,590
CZ10	SDG&E	-5,388	1262	4.95	(\$20,541)	\$75,458	\$11,493	>1	>1	\$95,999	\$32,034
CZ10-2	SCE	-5,388	1262	4.95	(\$20,541)	\$32,394	\$11,493	>1	>1	\$52,936	\$32,034
CZ11	PG&E	-14,533	2415	8.86	(\$25,471)	\$7,618	\$13,295	>1	>1	\$33,090	\$38,766
CZ12	PG&E	-14,764	2309	8.19	(\$25,774)	\$2,210	\$10,152	>1	>1	\$27,984	\$35,926
CZ12-2	SMUD	-14,764	2309	8.19	(\$25,774)	\$21,215	\$10,152	>1	>1	\$46,988	\$35,926
CZ13	PG&E	-12,069	1983	7.08	(\$21,428)	\$5,647	\$8,570	>1	>1	\$27,075	\$29,998
CZ14	SDG&E	-7,950	1672	6.45	(\$19,926)	\$60,412	\$16,679	>1	>1	\$80,338	\$36,605
CZ14-2	SCE	-7,950	1672	6.45	(\$19,926)	\$28,631	\$16,679	>1	>1	\$48,557	\$36,605
CZ15	SCE	2,534	518	3.10	(\$22,813)	\$27,271	\$17,162	>1	>1	\$50,084	\$39,976
CZ16	PG&E	-36,081	4304	14.26	(\$19,041)	(\$30,111)	(\$41,181)	0.6	0.5	(\$11,070)	(\$22,140)
CZ16-2	LA	-36,081	4304	14.26	(\$19,041)	\$45,706	(\$41,181)	>1	0.5	\$64,747	(\$22,140)



Figure 67. Cost Effectiveness for Medium Retail – All-Electric + 3kW PV + 5 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 3kW PV + 5 kWh Battery											
CZ01	PG&E	-25,214	3893	14.61	(\$14,692)	\$4,288	(\$5,450)	>1	2.7	\$18,980	\$9,242
CZ02	PG&E	-17,101	2448	8.40	(\$14,692)	\$859	\$5,779	>1	>1	\$15,551	\$20,472
CZ03	PG&E	-9,851	1868	7.18	(\$14,692)	\$15,418	\$8,702	>1	>1	\$30,110	\$23,394
CZ04	PG&E	-9,353	1706	6.24	(\$14,692)	\$9,110	\$10,394	>1	>1	\$23,802	\$25,086
CZ04-2	CPAU	-9,353	1706	6.24	(\$14,692)	\$24,000	\$10,394	>1	>1	\$38,693	\$25,086
CZ05	PG&E	-9,423	1746	6.42	(\$14,692)	\$14,076	\$6,351	>1	>1	\$28,768	\$21,043
CZ06	SCE	-2,759	1002	4.24	(\$14,692)	\$29,710	\$12,592	>1	>1	\$44,402	\$27,284
CZ06-2	LA	-2,759	1002	4.24	(\$14,692)	\$26,292	\$12,592	>1	>1	\$40,984	\$27,284
CZ07	SDG&E	1,148	522	2.72	(\$14,692)	\$76,810	\$12,350	>1	>1	\$91,502	\$27,042
CZ08	SCE	-979	793	3.64	(\$14,692)	\$28,576	\$13,185	>1	>1	\$43,268	\$27,877
CZ08-2	LA	-979	793	3.64	(\$14,692)	\$24,475	\$13,185	>1	>1	\$39,167	\$27,877
CZ09	SCE	-2,352	970	4.28	(\$14,692)	\$29,776	\$13,207	>1	>1	\$44,468	\$27,899
CZ09-2	LA	-2,352	970	4.28	(\$14,692)	\$25,823	\$13,207	>1	>1	\$40,516	\$27,899
CZ10	SDG&E	-5,388	1262	4.95	(\$14,692)	\$75,458	\$11,493	>1	>1	\$90,150	\$26,185
CZ10-2	SCE	-5,388	1262	4.95	(\$14,692)	\$32,394	\$11,493	>1	>1	\$47,086	\$26,185
CZ11	PG&E	-14,533	2415	8.86	(\$14,692)	\$7,618	\$13,295	>1	>1	\$22,310	\$27,987
CZ12	PG&E	-14,764	2309	8.19	(\$14,692)	\$2,210	\$10,152	>1	>1	\$16,902	\$24,845
CZ12-2	SMUD	-14,764	2309	8.19	(\$14,692)	\$21,215	\$10,152	>1	>1	\$35,907	\$24,845
CZ13	PG&E	-12,069	1983	7.08	(\$14,692)	\$5,647	\$8,570	>1	>1	\$20,339	\$23,262
CZ14	SDG&E	-7,950	1672	6.45	(\$14,692)	\$60,412	\$16,679	>1	>1	\$75,104	\$31,371
CZ14-2	SCE	-7,950	1672	6.45	(\$14,692)	\$28,631	\$16,679	>1	>1	\$43,323	\$31,371
CZ15	SCE	2,534	518	3.10	(\$14,692)	\$27,271	\$17,162	>1	>1	\$41,963	\$31,855
CZ16	PG&E	-36,081	4304	14.26	(\$14,692)	(\$30,111)	(\$41,181)	0.5	0.4	(\$15,419)	(\$26,489)
CZ16-2	LA	-36,081	4304	14.26	(\$14,692)	\$45,706	(\$41,181)	>1	0.4	\$60,398	(\$26,489)



Figure 68. Cost Effectiveness for Medium Retail – All-Electric + 110kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 110kW PV											
CZ01	PG&E	115,344	3893	41.82	\$143,932	\$454,277	\$296,025	3.2	2.1	\$310,345	\$152,093
CZ02	PG&E	150,004	2448	40.80	\$139,516	\$470,236	\$371,817	3.4	2.7	\$330,720	\$232,301
CZ03	PG&E	158,951	1868	39.82	\$142,869	\$544,095	\$370,696	3.8	2.6	\$401,226	\$227,827
CZ04	PG&E	163,043	1706	39.73	\$144,084	\$488,619	\$388,847	3.4	2.7	\$344,534	\$244,763
CZ04-2	CPAU	163,043	1706	39.73	\$144,084	\$432,905	\$388,847	3.0	2.7	\$288,821	\$244,763
CZ05	PG&E	165,711	1746	40.30	\$141,473	\$565,525	\$382,760	4.0	2.7	\$424,051	\$241,287
CZ06	SCE	167,328	1002	37.24	\$145,218	\$306,670	\$395,066	2.1	2.7	\$161,452	\$249,848
CZ06-2	LA	167,328	1002	37.24	\$145,218	\$184,797	\$395,066	1.3	2.7	\$39,579	\$249,848
CZ07	SDG&E	178,042	522	37.07	\$143,218	\$428,332	\$406,032	3.0	2.8	\$285,114	\$262,814
CZ08	SCE	171,149	793	36.94	\$140,058	\$301,219	\$417,635	2.2	3.0	\$161,161	\$277,577
CZ08-2	LA	171,149	793	36.94	\$140,058	\$178,419	\$417,635	1.3	3.0	\$38,361	\$277,577
CZ09	SCE	172,027	970	38.50	\$134,867	\$307,640	\$414,075	2.3	3.1	\$172,773	\$279,208
CZ09-2	LA	172,027	970	38.50	\$134,867	\$187,813	\$414,075	1.4	3.1	\$52,946	\$279,208
CZ10	SDG&E	171,107	1262	39.40	\$139,708	\$463,692	\$403,505	3.3	2.9	\$323,984	\$263,796
CZ10-2	SCE	171,107	1262	39.40	\$139,708	\$311,464	\$403,505	2.2	2.9	\$171,755	\$263,796
CZ11	PG&E	153,732	2415	41.41	\$134,778	\$467,356	\$394,165	3.5	2.9	\$332,578	\$259,387
CZ12	PG&E	153,126	2309	40.61	\$134,476	\$467,106	\$389,111	3.5	2.9	\$332,630	\$254,635
CZ12-2	SMUD	153,126	2309	40.61	\$134,476	\$283,343	\$389,111	2.1	2.9	\$148,867	\$254,635
CZ13	PG&E	157,332	1983	39.97	\$138,822	\$477,831	\$385,947	3.4	2.8	\$339,008	\$247,124
CZ14	SDG&E	179,582	1672	42.42	\$140,324	\$437,575	\$452,729	3.1	3.2	\$297,251	\$312,405
CZ14-2	SCE	179,582	1672	42.42	\$140,324	\$309,064	\$452,729	2.2	3.2	\$168,740	\$312,405
CZ15	SCE	180,751	518	37.26	\$137,436	\$294,877	\$421,612	2.1	3.1	\$157,440	\$284,176
CZ16	PG&E	154,248	4304	51.20	\$141,209	\$473,892	\$364,016	3.4	2.6	\$332,682	\$222,807
CZ16-2	LA	154,248	4304	51.20	\$141,209	\$211,677	\$364,016	1.5	2.6	\$70,467	\$222,807



Figure 69. Cost Effectiveness for Medium Retail – All-Electric + 110kW PV + 50 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 90kW PV + 50 kWh Battery											
CZ01	PG&E	114,356	3893	43.52	\$171,832	\$451,043	\$310,265	2.6	1.8	\$279,211	\$138,433
CZ02	PG&E	148,793	2448	42.89	\$167,416	\$475,081	\$394,099	2.8	2.4	\$307,664	\$226,683
CZ03	PG&E	157,707	1868	42.12	\$170,769	\$541,418	\$394,034	3.2	2.3	\$370,649	\$223,265
CZ04	PG&E	161,769	1706	41.82	\$171,984	\$523,603	\$422,535	3.0	2.5	\$351,618	\$250,551
CZ04-2	CPAU	161,769	1706	41.82	\$171,984	\$430,567	\$422,535	2.5	2.5	\$258,582	\$250,551
CZ05	PG&E	164,408	1746	42.68	\$169,373	\$561,966	\$405,087	3.3	2.4	\$392,592	\$235,714
CZ06	SCE	166,052	1002	39.48	\$173,118	\$306,697	\$414,756	1.8	2.4	\$133,579	\$241,638
CZ06-2	LA	166,052	1002	39.48	\$173,118	\$187,941	\$414,756	1.1	2.4	\$14,823	\$241,638
CZ07	SDG&E	176,705	522	39.47	\$171,118	\$479,038	\$428,490	2.8	2.5	\$307,920	\$257,372
CZ08	SCE	169,825	793	39.14	\$167,958	\$312,602	\$436,709	1.9	2.6	\$144,645	\$268,751
CZ08-2	LA	169,825	793	39.14	\$167,958	\$187,142	\$436,709	1.1	2.6	\$19,185	\$268,751
CZ09	SCE	170,747	970	40.23	\$162,767	\$318,113	\$423,370	2.0	2.6	\$155,346	\$260,604
CZ09-2	LA	170,747	970	40.23	\$162,767	\$197,006	\$423,370	1.2	2.6	\$34,240	\$260,604
CZ10	SDG&E	169,935	1262	41.08	\$167,608	\$503,504	\$411,284	3.0	2.5	\$335,896	\$243,675
CZ10-2	SCE	169,935	1262	41.08	\$167,608	\$317,927	\$411,284	1.9	2.5	\$150,319	\$243,675
CZ11	PG&E	152,559	2415	42.99	\$162,678	\$491,775	\$420,667	3.0	2.6	\$329,096	\$257,989
CZ12	PG&E	151,956	2309	42.21	\$162,376	\$494,703	\$417,063	3.0	2.6	\$332,327	\$254,687
CZ12-2	SMUD	151,956	2309	42.21	\$162,376	\$288,950	\$417,063	1.8	2.6	\$126,573	\$254,687
CZ13	PG&E	156,271	1983	41.25	\$166,722	\$485,422	\$395,770	2.9	2.4	\$318,699	\$229,047
CZ14	SDG&E	178,505	1672	43.94	\$168,224	\$452,456	\$457,387	2.7	2.7	\$284,232	\$289,163
CZ14-2	SCE	178,505	1672	43.94	\$168,224	\$311,520	\$457,387	1.9	2.7	\$143,296	\$289,163
CZ15	SCE	179,840	518	38.23	\$165,336	\$296,004	\$422,293	1.8	2.6	\$130,668	\$256,957
CZ16	PG&E	152,965	4304	53.53	\$169,109	\$483,205	\$378,299	2.9	2.2	\$314,096	\$209,190
CZ16-2	LA	152,965	4304	53.53	\$169,109	\$215,341	\$378,299	1.3	2.2	\$46,231	\$209,190



6.7.3 Cost Effectiveness Results – Small Hotel

Figure 70 through Figure 77 contain the cost-effectiveness findings for the Small Hotel packages. Notable findings for each package include:

- ◆ **Mixed-Fuel + 3 kW PV:** Packages are cost effective and achieve savings for all climate zones for both the On-Bill and TDV approaches.
- ◆ **Mixed-Fuel + 3 kW PV + 5 kWh Battery:** The packages are less cost effective as compared to the previous minimal PV only package and not cost effective for LADWP and SMUD service area. The addition of battery reduces the cost effectiveness of packages.
- ◆ **Mixed-Fuel + PV only:** Packages are cost effective and achieve savings for the On-Bill approach for all climate zones except for LADWP territory. Packages are cost effective and achieve savings for the TDV approach for all climate zones.
- ◆ **Mixed-Fuel + PV + 50 kWh Battery:** Adding battery slightly reduces On-Bill B/C ratios. Packages are not cost effective for LADWP territory, SMUD territory as well as for climate zones 6,8,9 under PG&E service area.
- ◆ **All-Electric + 3 kW PV:** All packages are cost effective using the On-Bill approach. All packages are cost effective using the TDV approach but do not achieve positive energy cost savings.
- ◆ **All-Electric + 3 kW PV + 5 kWh Battery:** Similar to minimal PV only package, all packages are cost effective using the On-Bill approach. All packages are cost effective using the TDV approach but do not achieve positive energy cost savings.
- ◆ **All-Electric + PV only:** All packages are cost effective for both On-Bill and TDV approaches. Packages achieve on-bill savings for all climate zones.
- ◆ **All-Electric + PV + 50 kWh Battery:** Adding battery slightly reduces On-Bill B/C ratios but is still cost effective for all climate zones.



Figure 70. Cost Effectiveness for Small Hotel – Mixed Fuel + 3kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle \$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 3kW PV											
CZ01	PG&E	3,941	0	0.8	\$5,566	\$12,616	\$8,326	2.3	1.5	\$7,050	\$2,760
CZ02	PG&E	4,785	0	0.9	\$5,566	\$12,639	\$10,332	2.3	1.9	\$7,073	\$4,766
CZ03	PG&E	4,733	0	0.9	\$5,566	\$15,146	\$9,991	2.7	1.8	\$9,580	\$4,425
CZ04	PG&E	4,834	0	1.0	\$5,566	\$13,266	\$10,445	2.4	1.9	\$7,700	\$4,879
CZ04-2	CPAU	4,834	0	1.0	\$5,566	\$11,507	\$10,445	2.1	1.9	\$5,941	\$4,879
CZ05	PG&E	5,027	0	1.0	\$5,566	\$16,048	\$10,634	2.9	1.9	\$10,482	\$5,068
CZ06	SCE	4,769	0	0.9	\$5,566	\$10,276	\$10,559	1.8	1.9	\$4,710	\$4,993
CZ06-2	LA	4,769	0	0.9	\$5,566	\$6,307	\$10,559	1.1	1.9	\$741	\$4,993
CZ07	SDG&E	4,960	0	1.0	\$5,566	\$14,576	\$10,861	2.6	2.0	\$9,010	\$5,295
CZ08	SCE	4,824	0	0.9	\$5,566	\$10,837	\$11,202	1.9	2.0	\$5,271	\$5,636
CZ08-2	LA	4,824	0	0.9	\$5,566	\$6,505	\$11,202	1.2	2.0	\$939	\$5,636
CZ09	SCE	4,779	0	0.9	\$5,566	\$10,298	\$10,824	1.9	1.9	\$4,732	\$5,258
CZ09-2	LA	4,779	0	0.9	\$5,566	\$6,201	\$10,824	1.1	1.9	\$635	\$5,258
CZ10	SDG&E	4,905	0	1.0	\$5,566	\$16,302	\$10,710	2.9	1.9	\$10,736	\$5,144
CZ10-2	SCE	4,905	0	1.0	\$5,566	\$9,468	\$10,710	1.7	1.9	\$3,902	\$5,144
CZ11	PG&E	4,701	0	0.9	\$5,566	\$14,193	\$10,483	2.6	1.9	\$8,627	\$4,917
CZ12	PG&E	4,770	0	0.9	\$5,566	\$15,262	\$10,596	2.7	1.9	\$9,696	\$5,030
CZ12-2	SMUD	4,770	0	0.9	\$5,566	\$7,848	\$10,596	1.4	1.9	\$2,282	\$5,030
CZ13	PG&E	4,633	0	0.9	\$5,566	\$14,674	\$10,105	2.6	1.8	\$9,108	\$4,539
CZ14	SDG&E	5,377	0	1.1	\$5,566	\$16,615	\$12,375	3.0	2.2	\$11,049	\$6,809
CZ14-2	SCE	5,377	0	1.1	\$5,566	\$10,021	\$12,375	1.8	2.2	\$4,455	\$6,809
CZ15	SCE	4,997	0	1.0	\$5,566	\$9,542	\$11,164	1.7	2.0	\$3,976	\$5,598
CZ16	PG&E	5,240	0	1.0	\$5,566	\$14,961	\$10,975	2.7	2.0	\$9,395	\$5,409
CZ16-2	LA	5,240	0	1.0	\$5,566	\$5,670	\$10,975	1.0	2.0	\$104	\$5,409



Figure 71. Cost Effectiveness for Small Hotel – Mixed Fuel + 3kW PV + 5 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 3kW PV + 5kWh Battery											
CZ01	PG&E	3,941	0	0.8	\$9,520	\$12,616	\$8,326	1.3	0.9	\$3,096	(\$1,194)
CZ02	PG&E	4,785	0	0.9	\$9,520	\$12,639	\$10,332	1.3	1.1	\$3,119	\$811
CZ03	PG&E	4,733	0	0.9	\$9,520	\$15,146	\$9,991	1.6	1.0	\$5,626	\$471
CZ04	PG&E	4,834	0	1.0	\$9,520	\$13,266	\$10,445	1.4	1.1	\$3,746	\$925
CZ04-2	CPAU	4,834	0	1.0	\$9,520	\$11,507	\$10,445	1.2	1.1	\$1,987	\$925
CZ05	PG&E	5,027	0	1.0	\$9,520	\$16,048	\$10,634	1.7	1.1	\$6,528	\$1,114
CZ05-2	SCG	5,027	0	1.0	\$9,520	\$16,048	\$10,634	1.7	1.1	\$6,528	\$1,114
CZ06	SCE	4,769	0	0.9	\$9,520	\$10,276	\$10,559	1.1	1.1	\$756	\$1,039
CZ06-2	LA	4,769	0	0.9	\$9,520	\$6,307	\$10,559	0.7	1.1	(\$3,213)	\$1,039
CZ07	SDG&E	4,960	0	1.0	\$9,520	\$14,576	\$10,861	1.5	1.1	\$5,056	\$1,341
CZ08	SCE	4,824	0	0.9	\$9,520	\$10,837	\$11,202	1.1	1.2	\$1,317	\$1,682
CZ08-2	LA	4,824	0	0.9	\$9,520	\$6,505	\$11,202	0.7	1.2	(\$3,015)	\$1,682
CZ09	SCE	4,779	0	0.9	\$9,520	\$10,298	\$10,824	1.1	1.1	\$778	\$1,303
CZ09-2	LA	4,779	0	0.9	\$9,520	\$6,201	\$10,824	0.7	1.1	(\$3,319)	\$1,303
CZ10	SDG&E	4,905	0	1.0	\$9,520	\$16,302	\$10,710	1.7	1.1	\$6,782	\$1,190
CZ10-2	SCE	4,905	0	1.0	\$9,520	\$9,468	\$10,710	0.99	1.1	(\$52)	\$1,190
CZ11	PG&E	4,701	0	0.9	\$9,520	\$14,193	\$10,483	1.5	1.1	\$4,673	\$963
CZ12	PG&E	4,770	0	0.9	\$9,520	\$15,262	\$10,596	1.6	1.1	\$5,742	\$1,076
CZ12-2	SMUD	4,770	0	0.9	\$9,520	\$7,848	\$10,596	0.8	1.1	(\$1,672)	\$1,076
CZ13	PG&E	4,633	0	0.9	\$9,520	\$14,674	\$10,105	1.5	1.1	\$5,154	\$584
CZ14	SDG&E	5,377	0	1.1	\$9,520	\$16,615	\$12,375	1.7	1.3	\$7,095	\$2,855
CZ14-2	SCE	5,377	0	1.1	\$9,520	\$10,021	\$12,375	1.1	1.3	\$501	\$2,855
CZ15	SCE	4,997	0	1.0	\$9,520	\$9,542	\$11,164	1.0	1.2	\$22	\$1,644
CZ16	PG&E	5,240	0	1.0	\$9,520	\$14,961	\$10,975	1.6	1.2	\$5,441	\$1,455
CZ16-2	LA	5,240	0	1.0	\$9,520	\$5,670	\$10,975	0.6	1.2	(\$3,851)	\$1,455



Figure 72. Cost Effectiveness for Small Hotel - Mixed Fuel +80kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 80kW PV											
CZ01	PG&E	105,090	0	20.6	\$179,470	\$336,440	\$221,883	1.9	1.2	\$156,970	\$42,413
CZ02	PG&E	127,592	0	25.0	\$179,470	\$320,009	\$275,130	1.8	1.5	\$140,539	\$95,660
CZ03	PG&E	126,206	0	24.8	\$179,470	\$403,900	\$266,426	2.3	1.5	\$224,430	\$86,956
CZ04	PG&E	128,894	0	25.4	\$179,470	\$322,782	\$278,536	1.8	1.6	\$143,312	\$99,066
CZ04-2	CPAU	128,894	0	25.4	\$179,470	\$306,862	\$278,536	1.7	1.6	\$127,392	\$99,066
CZ05	PG&E	134,041	0	26.5	\$179,470	\$427,935	\$283,834	2.4	1.6	\$248,465	\$104,364
CZ06	SCE	127,168	0	25.0	\$179,470	\$200,425	\$281,488	1.1	1.6	\$20,955	\$102,018
CZ06-2	LA	127,168	0	25.0	\$179,470	\$119,357	\$281,488	0.7	1.6	(\$60,113)	\$102,018
CZ07	SDG&E	132,258	0	26.1	\$179,470	\$247,646	\$289,700	1.4	1.6	\$68,176	\$110,230
CZ08	SCE	128,641	0	25.3	\$179,470	\$207,993	\$298,594	1.2	1.7	\$28,523	\$119,124
CZ08-2	LA	128,641	0	25.3	\$179,470	\$122,591	\$298,594	0.7	1.7	(\$56,879)	\$119,124
CZ09	SCE	127,447	0	25.3	\$179,470	\$211,567	\$288,830	1.2	1.6	\$32,096	\$109,360
CZ09-2	LA	127,447	0	25.3	\$179,470	\$123,486	\$288,830	0.7	1.6	(\$55,984)	\$109,360
CZ10	SDG&E	130,792	0	25.8	\$179,470	\$274,832	\$285,386	1.5	1.6	\$95,361	\$105,916
CZ10-2	SCE	130,792	0	25.8	\$179,470	\$206,865	\$285,386	1.2	1.6	\$27,395	\$105,916
CZ11	PG&E	125,366	0	24.6	\$179,470	\$316,781	\$279,331	1.8	1.6	\$137,311	\$99,861
CZ12	PG&E	127,203	0	25.0	\$179,470	\$406,977	\$282,358	2.3	1.6	\$227,507	\$102,888
CZ12-2	SMUD	127,203	0	25.0	\$179,470	\$198,254	\$282,358	1.1	1.6	\$18,784	\$102,888
CZ13	PG&E	123,535	0	24.4	\$179,470	\$317,261	\$269,908	1.8	1.5	\$137,791	\$90,437
CZ14	SDG&E	143,387	0	28.1	\$179,470	\$309,521	\$330,345	1.7	1.8	\$130,051	\$150,875
CZ14-2	SCE	143,387	0	28.1	\$179,470	\$225,083	\$330,345	1.3	1.8	\$45,612	\$150,875
CZ15	SCE	133,246	0	25.9	\$179,470	\$207,277	\$297,648	1.2	1.7	\$27,807	\$118,177
CZ16	PG&E	139,738	0	27.3	\$179,470	\$341,724	\$292,728	1.9	1.6	\$162,254	\$113,258
CZ16-2	LA	139,738	0	27.3	\$179,470	\$114,215	\$292,728	0.6	1.6	(\$65,255)	\$113,258



Figure 73. Cost Effectiveness for Small Hotel – Mixed Fuel + 80kW PV + 50 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Mixed Fuel + 80kW PV + 50kWh Battery											
CZ01	PG&E	104,026	0	23.2	\$207,370	\$332,596	\$237,740	1.6	1.1	\$125,226	\$30,370
CZ02	PG&E	126,332	0	28.1	\$207,370	\$336,179	\$296,058	1.6	1.4	\$128,809	\$88,688
CZ03	PG&E	124,934	0	28.0	\$207,370	\$399,220	\$289,360	1.9	1.4	\$191,850	\$81,990
CZ04	PG&E	127,602	0	28.5	\$207,370	\$332,161	\$308,887	1.6	1.5	\$124,790	\$101,517
CZ04-2	CPAU	127,602	0	28.5	\$207,370	\$303,828	\$308,887	1.5	1.5	\$96,458	\$101,517
CZ05	PG&E	132,725	0	29.8	\$207,370	\$423,129	\$303,627	2.0	1.5	\$215,758	\$96,257
CZ06	SCE	125,880	0	28.4	\$207,370	\$193,814	\$297,950	0.9	1.4	(\$13,556)	\$90,580
CZ06-2	LA	125,880	0	28.4	\$207,370	\$123,083	\$297,950	0.6	1.4	(\$84,287)	\$90,580
CZ07	SDG&E	130,940	0	29.5	\$207,370	\$274,313	\$309,682	1.3	1.5	\$66,943	\$102,312
CZ08	SCE	127,332	0	28.5	\$207,370	\$199,786	\$312,899	1.0	1.5	(\$7,584)	\$105,529
CZ08-2	LA	127,332	0	28.5	\$207,370	\$124,651	\$312,899	0.6	1.5	(\$82,719)	\$105,529
CZ09	SCE	126,232	0	28.2	\$207,370	\$206,706	\$292,804	1.0	1.4	(\$664)	\$85,433
CZ09-2	LA	126,232	0	28.2	\$207,370	\$126,710	\$292,804	0.6	1.4	(\$80,660)	\$85,433
CZ10	SDG&E	129,683	0	28.4	\$207,370	\$292,202	\$287,278	1.4	1.4	\$84,832	\$79,908
CZ10-2	SCE	129,683	0	28.4	\$207,370	\$206,171	\$287,278	1.0	1.4	(\$1,199)	\$79,908
CZ11	PG&E	124,337	0	26.9	\$207,370	\$315,330	\$283,683	1.5	1.4	\$107,960	\$76,313
CZ12	PG&E	126,013	0	27.8	\$207,370	\$403,127	\$297,118	1.9	1.4	\$195,757	\$89,748
CZ12-2	SMUD	126,013	0	27.8	\$207,370	\$198,007	\$297,118	1.0	1.4	(\$9,363)	\$89,748
CZ13	PG&E	122,591	0	26.5	\$207,370	\$315,541	\$280,996	1.5	1.4	\$108,171	\$73,626
CZ14	SDG&E	142,257	0	30.7	\$207,370	\$317,565	\$334,697	1.5	1.6	\$110,195	\$127,327
CZ14-2	SCE	142,257	0	30.7	\$207,370	\$224,195	\$334,697	1.1	1.6	\$16,824	\$127,327
CZ15	SCE	132,418	0	27.8	\$207,370	\$208,044	\$299,199	1.0	1.4	\$674	\$91,829
CZ16	PG&E	138,402	0	30.7	\$207,370	\$358,582	\$315,699	1.7	1.5	\$151,212	\$108,329
CZ16-2	LA	138,402	0	30.7	\$207,370	\$118,770	\$315,699	0.6	1.5	(\$88,600)	\$108,329



Figure 74. Cost Effectiveness for Small Hotel – All-Electric + 3kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost*	Lifecycle Energy Cost Savings	Lifecycle TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 3kW PV											
CZ01	PG&E	-155,861	16917	54.7	(\$1,265,139)	(\$568,892)	(\$106,835)	2.2	11.8	\$696,246	\$1,158,304
CZ02	PG&E	-113,954	12677	40.9	(\$1,266,111)	(\$229,433)	(\$41,288)	5.5	30.7	\$1,036,679	\$1,224,823
CZ03	PG&E	-105,862	12322	41.4	(\$1,268,383)	(\$309,874)	(\$41,175)	4.1	30.8	\$958,510	\$1,227,208
CZ04	PG&E	-108,570	11927	37.5	(\$1,268,218)	(\$208,239)	(\$42,689)	6.1	29.7	\$1,059,980	\$1,225,530
CZ04-2	CPAU	-108,570	11927	37.5	(\$1,268,218)	(\$6,261)	(\$42,689)	202.6	29.7	\$1,261,958	\$1,225,530
CZ05	PG&E	-103,579	11960	39.3	(\$1,268,272)	(\$332,879)	(\$44,051)	3.8	28.8	\$935,393	\$1,224,221
CZ06	SCE	-73,524	8912	30.3	(\$1,268,413)	\$48,898	(\$17,484)	>1	72.5	\$1,317,311	\$1,250,929
CZ06-2	LA	-64,859	8188	29.0	(\$1,266,760)	(\$120,842)	(\$12,337)	10.5	102.7	\$1,145,918	\$1,254,423
CZ07	SDG&E	-67,090	8353	29.2	(\$1,264,731)	(\$43,964)	(\$11,618)	28.8	108.9	\$1,220,767	\$1,253,113
CZ08	SCE	-67,090	8353	29.2	(\$1,264,731)	\$48,736	(\$11,618)	>1	108.9	\$1,313,467	\$1,253,113
CZ08-2	LA	-67,483	8402	29.3	(\$1,266,529)	(\$35,547)	(\$11,126)	35.6	113.8	\$1,230,982	\$1,255,403
CZ09	SCE	-67,483	8402	29.3	(\$1,266,529)	\$52,410	(\$11,126)	>1	113.8	\$1,318,939	\$1,255,403
CZ09-2	LA	-75,157	8418	27.2	(\$1,263,531)	(\$156,973)	(\$25,469)	8.0	49.6	\$1,106,558	\$1,238,061
CZ10	SDG&E	-75,157	8418	27.2	(\$1,263,531)	(\$54,711)	(\$25,469)	23.1	49.6	\$1,208,820	\$1,238,061
CZ10-2	SCE	-94,783	10252	31.9	(\$1,264,340)	(\$169,847)	(\$38,904)	7.4	32.5	\$1,094,493	\$1,225,436
CZ11	PG&E	-94,702	10403	33.0	(\$1,265,779)	(\$324,908)	(\$34,968)	3.9	36.2	\$940,872	\$1,230,811
CZ12	PG&E	-94,297	10403	33.1	(\$1,265,779)	\$13,603	(\$33,757)	>1	37.5	\$1,279,382	\$1,232,022
CZ12-2	SMUD	-92,196	10029	31.5	(\$1,264,152)	(\$168,358)	(\$40,229)	7.5	31.4	\$1,095,794	\$1,223,923
CZ13	PG&E	-96,021	10056	30.7	(\$1,264,510)	(\$308,542)	(\$44,202)	4.1	28.6	\$955,969	\$1,220,308
CZ14	SDG&E	-96,021	10056	30.7	(\$1,264,510)	(\$110,730)	(\$44,202)	11.4	28.6	\$1,153,780	\$1,220,308
CZ14-2	SCE	-44,856	5579	19.0	(\$1,262,631)	\$8,996	(\$10,256)	>1	123.1	\$1,271,627	\$1,252,375
CZ15	SCE	-211,468	17599	42.9	(\$1,268,907)	(\$625,671)	(\$228,203)	2.0	5.6	\$643,236	\$1,040,704
CZ16	PG&E	-211,468	17599	42.9	(\$1,268,907)	\$37,142	(\$228,203)	>1	5.6	\$1,306,049	\$1,040,704
CZ16-2	LA	-155,861	16917	54.7	(\$1,265,139)	(\$568,892)	(\$106,835)	2.2	11.8	\$696,246	\$1,158,304



Figure 75. Cost Effectiveness for Small Hotel – All-Electric + 3kW PV + 5 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 3kW PV + 5kWh Battery											
CZ01	PG&E	-155,861	16917	54.7	(\$1,288,428)	(\$568,892)	(\$106,835)	2.3	12.1	\$719,536	\$1,181,593
CZ02	PG&E	-113,954	12677	40.9	(\$1,288,428)	(\$229,433)	(\$41,288)	5.6	31.2	\$1,058,996	\$1,247,140
CZ03	PG&E	-105,862	12322	41.4	(\$1,288,428)	(\$309,874)	(\$41,175)	4.2	31.3	\$978,554	\$1,247,253
CZ04	PG&E	-108,570	11927	37.5	(\$1,288,428)	(\$208,239)	(\$42,689)	6.2	30.2	\$1,080,190	\$1,245,740
CZ04-2	CPAU	-108,570	11927	37.5	(\$1,288,428)	(\$6,261)	(\$42,689)	205.8	30.2	\$1,282,167	\$1,245,740
CZ05	PG&E	-103,579	11960	39.3	(\$1,288,428)	(\$332,879)	(\$44,051)	3.9	29.2	\$955,549	\$1,244,377
CZ06	SCE	-73,524	8912	30.3	(\$1,288,428)	(\$52,341)	(\$17,484)	24.6	73.7	\$1,236,087	\$1,270,944
CZ06-2	LA	-73,524	8912	30.3	(\$1,288,428)	\$48,898	(\$17,484)	>1	73.7	\$1,337,326	\$1,270,944
CZ07	SDG&E	-64,859	8188	29.0	(\$1,288,428)	(\$120,842)	(\$12,337)	10.7	104.4	\$1,167,586	\$1,276,091
CZ08	SCE	-67,090	8353	29.2	(\$1,288,428)	(\$43,964)	(\$11,618)	29.3	110.9	\$1,244,464	\$1,276,810
CZ08-2	LA	-67,090	8353	29.2	(\$1,288,428)	\$48,736	(\$11,618)	>1	110.9	\$1,337,164	\$1,276,810
CZ09	SCE	-67,483	8402	29.3	(\$1,288,428)	(\$35,547)	(\$11,126)	36.2	115.8	\$1,252,881	\$1,277,302
CZ09-2	LA	-67,483	8402	29.3	(\$1,288,428)	\$52,410	(\$11,126)	>1	115.8	\$1,340,838	\$1,277,302
CZ10	SDG&E	-75,157	8418	27.2	(\$1,288,428)	(\$156,973)	(\$25,469)	8.2	50.6	\$1,131,455	\$1,262,959
CZ10-2	SCE	-75,157	8418	27.2	(\$1,288,428)	(\$54,711)	(\$25,469)	23.5	50.6	\$1,233,718	\$1,262,959
CZ11	PG&E	-94,783	10252	31.9	(\$1,288,428)	(\$169,847)	(\$38,904)	7.6	33.1	\$1,118,582	\$1,249,524
CZ12	PG&E	-94,702	10403	33.0	(\$1,288,428)	(\$324,908)	(\$34,968)	4.0	36.8	\$963,520	\$1,253,460
CZ12-2	SMUD	-94,297	10403	33.1	(\$1,288,428)	\$13,603	(\$33,757)	>1	38.2	\$1,302,031	\$1,254,671
CZ13	PG&E	-92,196	10029	31.5	(\$1,288,428)	(\$168,358)	(\$40,229)	7.7	32.0	\$1,120,071	\$1,248,199
CZ14	SDG&E	-96,021	10056	30.7	(\$1,288,428)	(\$308,542)	(\$44,202)	4.2	29.1	\$979,887	\$1,244,226
CZ14-2	SCE	-96,021	10056	30.7	(\$1,288,428)	(\$110,730)	(\$44,202)	11.6	29.1	\$1,177,698	\$1,244,226
CZ15	SCE	-44,856	5579	19.0	(\$1,288,428)	\$8,996	(\$10,256)	>1	125.6	\$1,297,425	\$1,278,172
CZ16	PG&E	-211,468	17599	42.9	(\$1,288,428)	(\$625,671)	(\$228,203)	2.1	5.6	\$662,757	\$1,060,225
CZ16-2	LA	-211,468	17599	42.9	(\$1,288,428)	\$37,142	(\$228,203)	>1	5.6	\$1,325,570	\$1,060,225



Figure 76. Cost Effectiveness for Small Hotel – All-Electric + 80kW PV

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 80kW PV											
CZ01	PG&E	-54,712	16917	74.6	(\$1,123,442)	(\$240,170)	\$106,722	4.7	>1	\$883,272	\$1,230,164
CZ02	PG&E	8,853	12677	65.0	(\$1,124,415)	\$128,649	\$223,510	>1	>1	\$1,253,063	\$1,347,925
CZ03	PG&E	15,612	12322	65.3	(\$1,126,687)	\$44,532	\$215,260	>1	>1	\$1,171,219	\$1,341,947
CZ04	PG&E	15,490	11927	62.0	(\$1,126,522)	\$145,778	\$225,402	>1	>1	\$1,272,300	\$1,351,924
CZ04-2	CPAU	15,490	11927	62.0	(\$1,126,522)	\$289,094	\$225,402	>1	>1	\$1,415,616	\$1,351,924
CZ05	PG&E	25,436	11960	64.8	(\$1,126,575)	\$56,019	\$229,149	>1	>1	\$1,182,594	\$1,355,724
CZ06	SCE	48,875	8912	54.4	(\$1,126,716)	\$163,343	\$253,445	>1	>1	\$1,290,060	\$1,380,161
CZ06-2	LA	62,439	8188	54.1	(\$1,125,064)	\$115,822	\$266,502	>1	>1	\$1,240,886	\$1,391,565
CZ07	SDG&E	56,727	8353	53.5	(\$1,123,034)	\$147,987	\$275,773	>1	>1	\$1,271,022	\$1,398,808
CZ08	SCE	56,727	8353	53.5	(\$1,123,034)	\$163,971	\$275,773	>1	>1	\$1,287,005	\$1,398,808
CZ08-2	LA	55,185	8402	53.7	(\$1,124,832)	\$155,101	\$266,880	>1	>1	\$1,279,933	\$1,391,712
CZ09	SCE	55,185	8402	53.7	(\$1,124,832)	\$169,010	\$266,880	>1	>1	\$1,293,843	\$1,391,712
CZ09-2	LA	50,731	8418	52.0	(\$1,121,834)	\$113,936	\$249,207	>1	>1	\$1,235,770	\$1,371,041
CZ10	SDG&E	50,731	8418	52.0	(\$1,121,834)	\$138,265	\$249,207	>1	>1	\$1,260,099	\$1,371,041
CZ10-2	SCE	25,882	10252	55.6	(\$1,122,643)	\$162,626	\$229,944	>1	>1	\$1,285,269	\$1,352,587
CZ11	PG&E	27,731	10403	57.1	(\$1,124,083)	\$12,954	\$236,794	>1	>1	\$1,137,037	\$1,360,876
CZ12	PG&E	28,136	10403	57.2	(\$1,124,083)	\$206,756	\$238,005	>1	>1	\$1,330,839	\$1,362,087
CZ12-2	SMUD	26,706	10029	55.0	(\$1,122,455)	\$165,991	\$219,574	>1	>1	\$1,288,446	\$1,342,030
CZ13	PG&E	41,989	10056	57.8	(\$1,122,814)	\$22,333	\$273,768	>1	>1	\$1,145,147	\$1,396,582
CZ14	SDG&E	41,989	10056	57.8	(\$1,122,814)	\$120,943	\$273,768	>1	>1	\$1,243,757	\$1,396,582
CZ14-2	SCE	83,393	5579	44.0	(\$1,120,934)	\$210,511	\$276,228	>1	>1	\$1,331,445	\$1,397,162
CZ15	SCE	-76,971	17599	69.2	(\$1,127,210)	(\$199,308)	\$53,550	5.7	>1	\$927,902	\$1,180,760
CZ16	PG&E	-76,971	17599	69.2	(\$1,127,210)	\$172,787	\$53,550	>1	>1	\$1,299,997	\$1,180,760
CZ16-2	LA	-54,712	16917	74.6	(\$1,123,442)	(\$240,170)	\$106,722	4.7	>1	\$883,272	\$1,230,164



Figure 77. Cost Effectiveness for Small Hotel – All-Electric + 80kW PV + 50 kWh Battery

CZ	IOU territory	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
All-Electric + 80kW PV + 50kWh Battery											
CZ01	PG&E	-55,323	16917	75.7	(\$1,095,542)	(\$238,351)	\$118,605	4.6	>1	\$857,191	\$1,214,147
CZ02	PG&E	7,849	12677	67.4	(\$1,096,515)	\$129,794	\$239,632	>1	>1	\$1,226,309	\$1,336,146
CZ03	PG&E	14,594	12322	67.7	(\$1,098,787)	\$43,166	\$235,280	>1	>1	\$1,141,953	\$1,334,067
CZ04	PG&E	14,459	11927	64.4	(\$1,098,622)	\$148,698	\$249,244	>1	>1	\$1,247,320	\$1,347,866
CZ04-2	CPAU	14,459	11927	64.4	(\$1,098,622)	\$286,573	\$249,244	>1	>1	\$1,385,195	\$1,347,866
CZ05	PG&E	24,292	11960	67.6	(\$1,098,675)	\$53,719	\$244,514	>1	>1	\$1,152,394	\$1,343,189
CZ06	SCE	47,762	8912	57.2	(\$1,098,816)	\$165,763	\$267,221	>1	>1	\$1,264,579	\$1,366,037
CZ06-2	LA	61,252	8188	57.1	(\$1,097,164)	\$138,060	\$283,797	>1	>1	\$1,235,223	\$1,380,960
CZ07	SDG&E	55,588	8353	56.2	(\$1,095,134)	\$138,718	\$286,483	>1	>1	\$1,233,852	\$1,381,618
CZ08	SCE	55,588	8353	56.2	(\$1,095,134)	\$165,932	\$286,483	>1	>1	\$1,261,066	\$1,381,618
CZ08-2	LA	54,162	8402	56.1	(\$1,096,932)	\$149,615	\$269,453	>1	>1	\$1,246,548	\$1,366,386
CZ09	SCE	54,162	8402	56.1	(\$1,096,932)	\$171,168	\$269,453	>1	>1	\$1,268,101	\$1,366,386
CZ09-2	LA	49,832	8418	54.1	(\$1,093,934)	\$120,627	\$250,720	>1	>1	\$1,214,561	\$1,344,654
CZ10	SDG&E	49,832	8418	54.1	(\$1,093,934)	\$136,144	\$250,720	>1	>1	\$1,230,078	\$1,344,654
CZ10-2	SCE	25,148	10252	57.3	(\$1,094,743)	\$160,744	\$233,842	>1	>1	\$1,255,487	\$1,328,585
CZ11	PG&E	26,813	10403	59.2	(\$1,096,183)	\$10,314	\$247,504	>1	>1	\$1,106,497	\$1,343,686
CZ12	PG&E	27,217	10403	59.3	(\$1,096,183)	\$206,749	\$248,790	>1	>1	\$1,302,931	\$1,344,973
CZ12-2	SMUD	26,027	10029	56.5	(\$1,094,555)	\$164,506	\$229,300	>1	>1	\$1,259,061	\$1,323,856
CZ13	PG&E	41,123	10056	59.7	(\$1,094,914)	\$25,707	\$276,947	>1	>1	\$1,120,621	\$1,371,860
CZ14	SDG&E	41,123	10056	59.7	(\$1,094,914)	\$119,382	\$276,947	>1	>1	\$1,214,296	\$1,371,860
CZ14-2	SCE	82,697	5579	45.5	(\$1,093,034)	\$209,837	\$277,287	>1	>1	\$1,302,871	\$1,370,321
CZ15	SCE	-77,815	17599	71.1	(\$1,099,310)	(\$193,758)	\$65,850	5.7	>1	\$905,552	\$1,165,160
CZ16	PG&E	-77,815	17599	71.1	(\$1,099,310)	\$175,872	\$65,850	>1	>1	\$1,275,182	\$1,165,160
CZ16-2	LA	-55,323	16917	75.7	(\$1,095,542)	(\$238,351)	\$118,605	4.6	>1	\$857,191	\$1,214,147



6.8 List of Relevant Efficiency Measures Explored

The Reach Code Team started with a potential list of energy efficiency measures proposed for 2022 Title 24 codes and standards enhancement measures, as well as measures from the 2018 International Green Construction Code, which is based on ASHRAE Standard 189.1-2017. The team also developed new measures based on their experience. This original list was over 100 measures long. The measures were filtered based on applicability to the prototypes in this study, ability to model in simulation software, previously demonstrated energy savings potential, and market readiness. The list of 28 measures below represent the list of efficiency measures that meet these criteria and were investigated to some degree. The column to the far right indicates whether the measure was ultimately included in analysis or not.

Figure 78. List of Relevant Efficiency Measures Explored

Building Component	Measure Name	Measure Description	Notes	Include?
Water Heating	Drain water Heat Recovery	Add drain water heat recovery in hotel prototype	Requires calculations outside of modeling software.	Y
Envelope	High performance fenestration	Improved fenestration SHGC (reduce to 0.22).		Y
Envelope	High SHGC for cold climates	Raise prescriptive fenestration SHGC (to 0.45) in cold climates where additional heat is beneficial.		Y
Envelope	Allowable fenestration by orientation	Limit amount of fenestration as a function of orientation		Y
Envelope	High Thermal Mass Buildings	Increase building thermal mass. Thermal mass slows the change in internal temperature of buildings with respect to the outdoor temperature, allowing the peak cooling load during summer to be pushed to the evening, resulting in lower overall cooling loads.	Initial energy modeling results showed marginal cooling savings, negative heating savings.	N
Envelope	Opaque Insulation	Increases the insulation requirement for opaque envelopes (i.e., roof and above-grade wall).	Initial energy modeling results showed marginal energy savings at significant costs which would not meet c/e criteria.	N
Envelope	Triple pane windows	U-factor of 0.20 for all windows	Initial energy modeling results showed only marginal energy savings and, in some cases, increased energy use.	N



Building Component	Measure Name	Measure Description	Notes	Include?
Envelope	Duct Leakage Testing	Expand duct leakage testing requirements based on ASHRAE Standard 215-2018: Method of Test to Determine Leakage of Operating HVAC Air Distribution Systems (ANSI Approved).	More research needs to be done on current duct leakage and how it can be addressed.	N
Envelope	Fenestration area	Reduce maximum allowable fenestration area to 30%.	Instead of this measure, analyzed measure which looked at limiting fenestration based on wall orientation.	N
Envelope	Skinny triple pane windows	U-factor of 0.20 for all windows, with no changes to existing framing or building structure.	Market not ready. No commercially-available products for commercial buildings.	N
Envelope	Permanent projections	Detailed prescriptive requirements for shading based on ASHRAE 189. PF >0.50 for first story and >0.25 for other floors. Many exceptions. Corresponding SHGC multipliers to be used.	Title 24 already allows owner to trade off SHGC with permanent projections. Also, adding requirements for permanent projections would raise concerns.	N
Envelope	Reduced infiltration	Reduce infiltration rates by improving building sealing.	Infiltration rates are a fixed ACM input and cannot be changed. A workaround attempt would not be precise, and the practicality of implementation by developers is low given the modeling capabilities and the fact that in-field verification is challenging. Benefits would predominantly be for air quality rather than energy.	N



Building Component	Measure Name	Measure Description	Notes	Include?
HVAC	Heat recovery ventilation	For the hotel, recover and transfer heat from exhausted air to ventilation air.	<p>For small hotels, the ventilation requirement could be met by various approaches, and the most common ones are:</p> <ul style="list-style-type: none"> a. Exhaust only system, and ventilation is met by infiltration or window operation. b. Through a Z-duct that connects the zone AC unit's intake to an outside air intake louver. c. Centralized ventilation system (DOAS) <p>The prototype developed for the small hotel is using Type 2 above. The major consideration is that currently, HRV + PTACs cannot be modeled at each guest room, only at the rooftop system. Option 1 would require the same type of HRV implementation as Option 2. Option 3 may be pursuable, but would require a significant redesign of the system, with questionable impacts. Previous studies have found heat recovery as cost effective in California only in buildings with high loads or high air exchange rates, given the relatively mild climate.</p>	N
HVAC	Require Economizers in Smaller Capacity Systems	Lower the capacity trigger for air economizers. Previous studies have shown cost effectiveness for systems as low as 3 tons.		Y
HVAC	Reduce VAV minimum flow limit	Current T24 and 90.1 requirements limit VAV minimum flow rates to no more than 20% of maximum flow. Proposal based on ASHRAE Guideline 36 which includes sequences that remove technical barriers that previously existed. Also, most new DDC controllers are now capable of lower limits. The new limit may be as low as the required ventilation rate. A non-energy benefit of this measure is a reduction in over-cooling, thus improving comfort.		Y



Building Component	Measure Name	Measure Description	Notes	Include?
HVAC	Building Automation System (BAS) improvements	With adoption of ASHRAE Guideline 36 (GDL-36), there is now a national consensus standard for the description of high-performance sequences of operation. This measure will update BAS control requirements to improve usability and enforcement and to increase energy efficiency. BAS control requirement language will be improved either by adoption of similar language to GDL-36, or reference to GDL-36. Specific T24 BAS control topics that will be addressed include at a minimum: DCV, demand-based reset of SAT, demand-based reset of SP, dual-maximum zone sequences, and zone groups for scheduling.	In order to realize any savings in the difference, we would need a very detailed energy model with space-by-space load/occupant diversity, etc. We would also need more modeling capability than is currently available in CBECC-Com.	N
HVAC	Fault Detection Devices (FDD)	Expand FDD requirements to a wider range of AHU faults beyond the economizer. Fault requirements will be based on NIST field research, which has consequently been integrated into ASHRAE Guideline 36 Best in Class Sequences of Operations. Costs are solely to develop the sequences, which is likely minimal, and much of the hardware required for economizer FDD is also used to detect other faults.	Market not ready.	N
HVAC	Small circulator pumps ECM, trim to flow rate	Circulator pumps for industry and commercial.	Hot water pump energy use is small already (<1% building electricity usage) so not much savings potential. More savings for CHW pumps. Modeling limitations as well.	N
HVAC	High Performance Ducts to Reduce Static Pressure	Revise requirements for duct sizing to reduce static pressure.	Preliminary energy modeling results showed only marginal energy savings compared to measure cost.	N
HVAC	Parallel fan-powered boxes	Use of parallel fan-powered boxes	Unable to model PFPB with variable speed fans in modeling software.	N
Lighting	Daylight Dimming Plus OFF	Automatic daylight dimming controls requirements include the OFF step.		Y
Lighting	Occupant Sensing in Open Plan Offices	Take the PAF without allowing for increased design wattage		Y
Lighting	Institutional tuning	Take the PAF without allowing for increased design wattage		Y

Building Component	Measure Name	Measure Description	Notes	Include?
Lighting	Reduced Interior Lighting Power Density	Reduced interior LPD values.		Y
Lighting	Shift from general to task illumination	Low levels of general illumination with task and accent lighting added to locations where higher light levels are required. The shift from general to task illumination measure is based on the assumption that proper lighting of a desk surface with high efficacy lighting can allow for the significant reduction of ambient general lighting.	This is a tough measure to require as the LPDs decrease.	N
Lighting	Future-proof lighting controls	Fill any holes in the current code that could lead to the situations where TLEDs or LED fixtures that are not dimmable or upgradable in the future, or any other issues with code that make it hard to transition to ALCS/IoT lighting in the future	Major lighting controls already covered in other measures being considered	N
Lighting	Integrated control of lighting and HVAC systems	Formalize the definition of "lighting and HVAC control integration" by defining the level of data sharing required between systems and the mechanism needed to share such data. The highest savings potential would likely be generated from VAV HVAC systems by closing the damper in unoccupied zones based on the occupancy sensor information from the lighting systems.	Not market ready enough.	N
Other	NR Plug Load Controls	Energy savings opportunities for plug loads, which may include: energy efficient equipment, equipment power management, occupancy sensor control, and occupant awareness programs. The proposal could be extending controlled receptacles requirements in Section 130.5(d) to more occupancy types. It would also consider circuit-level controls.	Office equipment now all have their own standby power modes that use very little power, making plug load controls very difficult to be cost-effective.	N



6.9 Additional Rates Analysis - Healdsburg

After the final version of the report was released, the Reach Code Team provided additional cost effectiveness analysis in Climate Zone 2 using City of Healdsburg electric utility rates and PG&E gas rates. All aspects of the methodology remain the same, and the results for each package and prototype are aggregated below in Figure 79 through Figure 81. Results generally indicate:

- ◆ Mixed fuel prototypes achieve positive compliance margins for EE packages and are cost effective.
- ◆ All-electric prototypes achieve slightly lower compliance margins than mixed fuel for EE packages and are cost effective.
- ◆ All PV and PV+Battery packages are cost effective both using an on-bill and TDV approach.



Figure 79. Healdsburg Utility Rates Analysis – Medium Office, All Packages Cost Effectiveness Summary

Prototype	Package	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Compliance Margin (%)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Medium Office	Mixed Fuel + EE	40,985	-505	8.1	17%	\$66,649	\$89,645	\$99,181	1.3	1.5	\$22,996	\$32,532
	Mixed Fuel + EE + PVB	255,787	-505	50.6	17%	\$359,648	\$510,922	\$573,033	1.4	1.6	\$151,274	\$213,385
	Mixed Fuel + HE	3,795	550	4.3	4%	\$68,937	\$24,204	\$24,676	0.4	0.4	-\$44,733	-\$44,261
	All-Electric	-49,684	3,868	5.0	-7%	-\$73,695	-\$7,042	-\$41,429	10.5	1.8	\$66,653	\$32,266
	All-Electric + EE	-11,811	3,868	15.2	10%	-\$7,046	\$83,285	\$58,563	>1	>1	\$90,331	\$65,609
	All-Electric + EE + PVB	203,026	3,868	57.8	10%	\$285,953	\$511,954	\$532,273	1.8	1.9	\$226,001	\$246,320
	All-Electric + HE	-45,916	3,868	6.1	-5%	-\$22,722	\$6,983	-\$26,394	>1	0.9	\$29,705	-\$3,672
	Mixed Fuel + 3kW	4,785	0	0.9	n/a	\$5,566	\$10,430	\$10,500	1.9	1.9	\$4,864	\$4,934
	Mixed Fuel + 3kW + 5kWh	4,785	0	0.9	n/a	\$8,356	\$10,430	\$10,500	1.2	1.3	\$2,074	\$2,144
	Mixed Fuel + 135kW	215,311	0	41.5	n/a	\$250,470	\$424,452	\$471,705	1.7	1.9	\$173,982	\$221,235
	Mixed Fuel + 135kW + 50kWh	214,861	0	42.6	n/a	\$278,370	\$423,721	\$472,898	1.5	1.7	\$145,351	\$194,528
	All-Electric + 3kW	-44,899	3,868	6.0	n/a	-\$68,129	\$3,299	-\$30,928	>1	2.2	\$71,429	\$37,201
	All-Electric + 3kW + 5kWh	-44,899	3,868	6.0	n/a	-\$65,339	\$3,299	-\$30,928	>1	2.1	\$68,639	\$34,411
	All-Electric + 135kW	165,627	3,868	46.6	n/a	\$176,775	\$424,146	\$430,276	2.4	2.4	\$247,371	\$253,501
	All-Electric + 135kW + 50kWh	165,200	3,868	47.7	n/a	\$204,675	\$423,466	\$431,469	2.1	2.1	\$218,792	\$226,795
	All-Electric + 80kW + 50kWh	40,985	-505	8.1	17%	\$66,649	\$89,645	\$99,181	1.3	1.5	\$22,996	\$32,532



Figure 80. Healdsburg Utility Rates Analysis – Medium Retail, All Packages Cost Effectiveness Summary

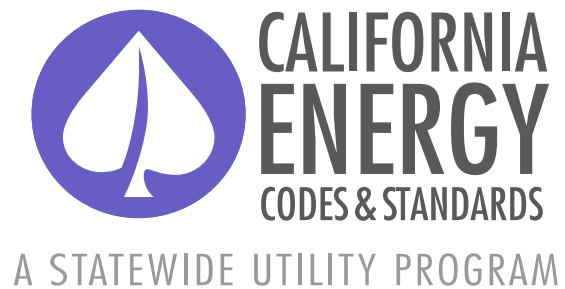
Prototype	Package	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Compliance Margin (%)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Medium Retail	Mixed Fuel + EE	18,885	613	8.7	13%	\$5,569	\$49,546	\$59,135	8.9	10.6	\$43,977	\$53,566
	Mixed Fuel + EE + PVB	189,400	613	43.8	13%	\$249,475	\$376,219	\$465,474	1.5	1.9	\$126,744	\$215,999
	Mixed Fuel + HE	2,288	229	2.0	3%	\$9,726	\$13,143	\$13,998	1.4	1.4	\$3,417	\$4,273
	All-Electric	-21,786	2,448	7.5	-1%	-\$27,464	\$9,228	-\$4,483	>1	6.1	\$36,692	\$22,981
	All-Electric + EE	2,843	2,448	14.6	13%	-\$21,895	\$61,918	\$56,893	>1	>1	\$83,813	\$78,788
	All-Electric + EE + PVB	173,387	2,448	49.9	13%	\$222,012	\$391,257	\$463,431	1.8	2.1	\$169,245	\$241,419
	All-Electric + HE	-16,989	2,448	8.9	3%	-\$4,211	\$23,567	\$11,251	>1	>1	\$27,779	\$15,463
	Mixed Fuel + 3kW	4,685	0	0.9	n/a	\$5,566	\$10,256	\$10,262	1.8	1.8	\$4,690	\$4,696
	Mixed Fuel + 3kW + 5kWh	4,685	0	0.9	n/a	\$8,356	\$10,256	\$10,262	1.2	1.2	\$1,900	\$1,906
	Mixed Fuel + 110kW	171,790	0	33.3	n/a	\$204,087	\$316,293	\$376,300	1.5	1.8	\$112,206	\$172,213
	Mixed Fuel + 110kW + 50kWh	170,542	0	35.1	n/a	\$231,987	\$320,349	\$398,363	1.4	1.7	\$88,363	\$166,376
	All-Electric + 3kW	-17,101	2,448	8.4	n/a	-\$21,898	\$19,523	\$5,779	>1	>1	\$41,421	\$27,677
	All-Electric + 3kW + 5kWh	-17,101	2,448	8.4	n/a	-\$19,108	\$19,523	\$5,779	>1	>1	\$38,631	\$24,887
	All-Electric + 110kW	150,004	2,448	40.8	n/a	\$176,623	\$332,213	\$371,817	1.9	2.1	\$155,591	\$195,194
	All-Electric + 110kW + 50kWh	148,793	2,448	42.9	n/a	\$204,523	\$335,043	\$394,099	1.6	1.9	\$130,520	\$189,577



Figure 81. Healdsburg Utility Rates Analysis – Small Hotel, All Packages Cost Effectiveness Summary

Prototype	Package	Elec Savings (kWh)	Gas Savings (therms)	GHG savings (tons)	Compliance Margin (%)	Incremental Package Cost	Lifecycle Energy Cost Savings	\$-TDV Savings	B/C Ratio (On-bill)	B/C Ratio (TDV)	NPV (On-bill)	NPV (TDV)
Small Hotel	Mixed Fuel + EE	3,802	976	3.9	7%	\$20,971	\$22,829	\$29,353	1.1	1.4	\$1,857	\$8,381
	Mixed Fuel + EE + PVB	130,144	976	31.1	7%	\$205,967	\$254,577	\$336,575	1.2	1.6	\$48,610	\$130,608
	Mixed Fuel + HE	981	402	2.7	3%	\$23,092	\$12,291	\$11,808	0.5	0.5	-\$10,801	-\$11,284
	All-Electric	-	12,677	40.0	-12%	-\$1,297,757	-\$24,318	-\$51,620	53.4	25.1	\$1,273,439	\$1,246,137
	All-Electric + EE	-88,410	12,677	45.9	5%	-\$1,265,064	\$45,918	\$20,860	>1	>1	\$1,310,982	\$1,285,924
	All-Electric + EE + PVB	38,115	12,677	73.5	5%	-\$1,080,068	\$296,233	\$317,296	>1	>1	\$1,376,301	\$1,397,365
	All-Electric + HE	-	12,677	41.2	-11%	-\$1,283,243	-\$83,994	-\$44,505	15.3	28.8	\$1,199,249	\$1,238,738
	Mixed Fuel + 3kW	4,785	0	0.9	n/a	\$5,566	\$8,927	\$10,332	1.6	1.9	\$3,361	\$4,766
	Mixed Fuel + 3kW + 5kWh	4,785	0	0.9	n/a	\$8,356	\$8,927	\$10,332	1.1	1.2	\$571	\$1,976
	Mixed Fuel + 80kW	127,592	0	25.0	n/a	\$148,427	\$229,794	\$275,130	1.5	1.9	\$81,367	\$126,703
	Mixed Fuel + 80kW + 50kWh	126,332	0	28.1	n/a	\$176,327	\$236,570	\$296,058	1.3	1.7	\$60,243	\$119,731
	All-Electric + 3kW	-	12,677	40.9	n/a	-\$1,292,191	-\$14,447	-\$41,288	89.4	31.3	\$1,277,744	\$1,250,902
	All-Electric + 3kW + 5kWh	-	12,677	40.9	n/a	-\$1,289,401	-\$14,447	-\$41,288	89.3	31.2	\$1,274,954	\$1,248,112
	All-Electric + 80kW	8,853	12,677	65.0	n/a	-\$1,149,330	\$222,070	\$223,510	>1	>1	\$1,371,400	\$1,372,840
	All-Electric + 80kW + 50kWh	7,849	12,677	67.4	n/a	-\$1,121,430	\$223,812	\$239,632	>1	>1	\$1,345,241	\$1,361,062





Title 24, Parts 6 and 11
Local Energy Efficiency Ordinances

2019 Cost-effectiveness Study: Low-Rise Residential New Construction

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Acronyms

2020 PV\$	Present value costs in 2020
ACH50	Air Changes per Hour at 50 pascals pressure differential
ACM	Alternative Calculation Method
AFUE	Annual Fuel Utilization Efficiency
B/C	Lifecycle Benefit-to-Cost Ratio
BEopt	Building Energy Optimization Tool
BSC	Building Standards Commission
CAHP	California Advanced Homes Program
CBECC-Res	Computer program developed by the California Energy Commission for use in demonstrating compliance with the California Residential Building Energy Efficiency Standards
CFI	California Flexible Installation
CFM	Cubic Feet per Minute
CMFNH	California Multifamily New Homes
CO ₂	Carbon Dioxide
CPC	California Plumbing Code
CZ	California Climate Zone
DHW	Domestic Hot Water
DOE	Department of Energy
DWHR	Drain Water Heat Recovery
EDR	Energy Design Rating
EER	Energy Efficiency Ratio
EF	Energy Factor
GHG	Greenhouse Gas
HERS Rater	Home Energy Rating System Rater
HPA	High Performance Attic
HPWH	Heat Pump Water Heater
HSPF	Heating Seasonal Performance Factor
HVAC	Heating, Ventilation, and Air Conditioning
IECC	International Energy Conservation Code
IOU	Investor Owned Utility
kBtu	kilo-British thermal unit
kWh	Kilowatt Hour
LBNL	Lawrence Berkeley National Laboratory

LCC	Lifecycle Cost
LLAHU	Low Leakage Air Handler Unit
VLLDCS	Verified Low Leakage Ducts in Conditioned Space
MF	Multifamily
NAECA	National Appliance Energy Conservation Act
NEEA	Northwest Energy Efficiency Alliance
NEM	Net Energy Metering
NPV	Net Present Value
NREL	National Renewable Energy Laboratory
PG&E	Pacific Gas and Electric Company
PV	Photovoltaic
SCE	Southern California Edison
SDG&E	San Diego Gas and Electric
SEER	Seasonal Energy Efficiency Ratio
SF	Single Family
CASE	Codes and Standards Enhancement
TDV	Time Dependent Valuation
Therm	Unit for quantity of heat that equals 100,000 British thermal units
Title 24	Title 24, Part 6
TOU	Time-Of-Use
UEF	Uniform Energy Factor
ZNE	Zero-net Energy

1 Introduction

The California Building Energy Efficiency Standards Title 24, Part 6 (Title 24) (Energy Commission, 2018b) is maintained and updated every three years by two state agencies, the California Energy Commission (Energy Commission) and the Building Standards Commission (BSC). In addition to enforcing the code, local jurisdictions have the authority to adopt local energy efficiency ordinances, or reach codes, that exceed the minimum standards defined by Title 24 (as established by Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards). Local jurisdictions must demonstrate that the requirements of the proposed ordinance are cost-effective and do not result in buildings consuming more energy than is permitted by Title 24. In addition, the jurisdiction must obtain approval from the Energy Commission and file the ordinance with the BSC for the ordinance to be legally enforceable.

This report documents cost-effective combinations of measures that exceed the minimum state requirements, the 2019 Building Energy Efficiency Standards, effective January 1, 2020, for new single family and low-rise (one-to three-story) multifamily residential construction. The analysis includes evaluation of both mixed fuel and all-electric homes, documenting that the performance requirements can be met by either type of building design. Compliance package options and cost-effectiveness analysis in all sixteen California climate zones (CZs) are presented (see Appendix A – California Climate Zone Map for a graphical depiction of Climate Zone locations). All proposed package options include a combination of efficiency measures and on-site renewable energy.

2 Methodology and Assumptions

This analysis uses two different metrics to assess cost-effectiveness. Both methodologies require estimating and quantifying the incremental costs and energy savings associated with energy efficiency measures. The main difference between the methodologies is the manner in which they value energy and thus the cost savings of reduced or avoided energy use.

- **Utility Bill Impacts (On-Bill):** Customer-based Lifecycle Cost (LCC) approach that values energy based upon estimated site energy usage and customer on-bill savings using electricity and natural gas utility rate schedules over a 30-year duration accounting for discount rate and energy cost inflation.
- **Time Dependent Valuation (TDV):** Energy Commission LCC methodology, which is intended to capture the “societal value or cost” of energy use including long-term projected costs such as the cost of providing energy during peak periods of demand and other societal costs such as projected costs for carbon emissions, as well as grid transmission and distribution impacts. This metric values energy use differently depending on the fuel source (gas, electricity, and propane), time of day, and season. Electricity used (or saved) during peak periods has a much higher value than electricity used (or saved) during off-peak periods (Horie et al., 2014). This is the methodology used by the Energy Commission in evaluating cost-effectiveness for efficiency measures in Title 24, Part 6.

2.1 Building Prototypes

The Energy Commission defines building prototypes which it uses to evaluate the cost-effectiveness of proposed changes to Title 24 requirements. At the time that this report was written, there are two single family prototypes and one low-rise multifamily prototype. All three are used in this analysis in development of the above-code packages. Table 1 describes the basic characteristics of each prototype. Additional details on the prototypes can be found in the Alternative Calculation Method (ACM) Approval Manual (Energy Commission, 2018a). The prototypes have equal geometry on all walls, windows and roof to be orientation neutral.



Table 1: Prototype Characteristics

Characteristic	Single Family One-Story	Single Family Two-Story	Multifamily
Conditioned Floor Area	2,100 ft ²	2,700 ft ²	6,960 ft ² : (4) 780 ft ² & (4) 960 ft ² units
Num. of Stories	1	2	2
Num. of Bedrooms	3	3	(4) 1-bed & (4) 2-bed units
Window-to-Floor Area Ratio	20%	20%	15%

Source: 2019 Alternative Calculation Method Approval Manual (California Energy Commission, 2018a).

The Energy Commission's protocol for single family prototypes is to weight the simulated energy impacts by a factor that represents the distribution of single-story and two-story homes being built statewide, assuming 45 percent single-story and 55 percent two-story. Simulation results in this study are characterized according to this ratio, which is approximately equivalent to a 2,430-square foot (ft²) house.¹

The methodology used in the analyses for each of the prototypical building types begins with a design that precisely meets the minimum 2019 prescriptive requirements (zero compliance margin). Table 150.1-A in the 2019 Standards (Energy Commission, 2018b) lists the prescriptive measures that determine the baseline design in each climate zone. Other features are consistent with the Standard Design in the ACM Reference Manual (Energy Commission, 2019), and are designed to meet, but not exceed, the minimum requirements. Each prototype building has the following features:

- Slab-on-grade foundation.
- Vented attic.
- High performance attic in climate zones where prescriptively required (CZ 4, 8-16) with insulation installed at the ceiling and below the roof deck per Option B. (Refer to Table 150.1-A in the 2019 Standards.)
- Ductwork located in the attic for single family and within conditioned space for multifamily.

Both mixed fuel and all-electric prototypes are evaluated in this study. While in past code cycles an all-electric home was compared to a home with gas for certain end-uses, the 2019 code includes separate prescriptive and performance paths for mixed-fuel and all-electric homes. The fuel specific characteristics of the mixed fuel and all-electric prototypes are defined according to the 2019 ACM Reference Manual and described in Table 2.²

¹ 2,430 ft² = (45% x 2,100 ft²) + (55% x 2,700 ft²)

² Standards Section 150.1(c)8.A.iv.a specifies that compact hot water distribution design and a drain water heat recovery system or extra PV capacity are required when a heat pump water heater is installed prescriptively. The efficiency of the distribution and the drain water heat recovery systems as well as the location of the water heater applied in this analysis are based on the Standard Design assumptions in CBECC-Res which result in a zero-compliance margin for the 2019 basecase model.



Table 2: Characteristics of the Mixed Fuel vs All-Electric Prototype

Characteristic	Mixed Fuel	All-Electric
Space Heating/Cooling¹	Gas furnace 80 AFUE Split A/C 14 SEER, 11.7 EER	Split heat pump 8.2 HSPF, 14 SEER, 11.7 EER
Water Heater^{1,2, 3, 4}	Gas tankless UEF = 0.81	50gal HPWH UEF = 2.0 SF: located in the garage MF CZ 2,4,6-16: located in living space MF CZ 1,3,5: located in exterior closet
Hot Water Distribution	Code minimum. All hot water lines insulated	Basic compact distribution credit, (CZ 6-8,15) Expanded compact distribution credit, compactness factor = 0.6 (CZ 1-5,9-14,16)
Drain Water Heat Recovery Efficiency	None	CZ 1: unequal flow to shower = 42% CZ 16: equal flow to shower & water heater = 65% None in other CZs
Cooking	Gas	Electric
Clothes Drying	Gas	Electric

¹Equipment efficiencies are equal to minimum federal appliance efficiency standards.

²The multifamily prototype is evaluated with individual water heaters. HPWHs located in the living space do not have ducting for either inlet or exhaust air; CBECC-Res does not have the capability to model ducted HPWHs.

³UEF = uniform energy factor. HPWH = heat pump water heater. SF = single family. MF = multifamily.

⁴CBECC-Res applies a 50gal water heater when specifying a storage water heater. Hot water draws differ between the prototypes based on number of bedrooms.

2.2 Measure Analysis

The California Building Energy Code Compliance simulation tool, CBECC-RES 2019.1.0, was used to evaluate energy impacts using the 2019 Title 24 prescriptive standards as the benchmark, and the 2019 TDV values. TDV is the energy metric used by the Energy Commission since the 2005 Title 24 energy code to evaluate compliance with the Title 24 standards.

Using the 2019 baseline as the starting point, prospective energy efficiency measures were identified and modeled in each of the prototypes to determine the projected energy (Therm and kWh) and compliance impacts. A large set of parametric runs were conducted to evaluate various options and develop packages of measures that exceed minimum code performance. The analysis utilizes a parametric tool based on Micropas³ to automate and manage the generation of CBECC-Res input files. This allows for quick evaluation of various efficiency measures across multiple climate zones and prototypes and improves quality control. The batch process functionality of CBECC-Res is utilized to simulate large groups of input files at once. Annual utility costs were calculated using hourly data output from CBECC-Res and electricity and natural gas tariffs for each of the investor owned utilities (IOUs).

³ Developed by Ken Nittler of Enercomp, Inc.



The Reach Codes Team selected packages and measures based on cost-effectiveness as well as decades of experience with residential architects, builders, and engineers along with general knowledge of the relative acceptance of many measures.

2.2.1 Federal Preemption

The Department of Energy (DOE) sets minimum efficiency standards for equipment and appliances that are federally regulated under the National Appliance Energy Conservation Act (NAECA), including heating, cooling, and water heating equipment. Since state and local governments are prohibited from adopting policies that mandate higher minimum efficiencies than the federal standards require, the focus of this study is to identify and evaluate cost-effective packages that do not include high efficiency equipment. While this study is limited by federal preemption, in practice builders may use any package of compliant measures to achieve the performance goals, including high efficiency appliances. Often, these measures are the simplest and most affordable measures to increase energy performance.

2.2.2 Energy Design Rating

The 2019 Title 24 code introduces California's Energy Design Rating (EDR) as the primary metric to demonstrate compliance with the energy code. EDR is still based on TDV but it uses a building that is compliant with the 2006 International Energy Conservation Code (IECC) as the reference building. The reference building has an EDR score of 100 while a zero-net energy (ZNE) home has an EDR score of zero (Energy Commission, 2018d). See Figure 1 for a graphical representation of this. While the Reference Building is used to determine the rating, the Proposed Design is still compared to the Standard Design based on the prescriptive baseline assumptions to determine compliance.

The EDR is calculated by CBECC-Res and has two components:

1. An "Efficiency EDR" which represents the building's energy use without solar generation.⁴
2. A "Total EDR" that represents the final energy use of the building based on the combined impact of efficiency measures, PV generation and demand flexibility.

For a building to comply, two criteria are required:

- (1) the proposed Efficiency EDR must be equal to or less than the Efficiency EDR of the Standard Design, and
- (2) the proposed Total EDR must be equal to or less than the Total EDR of the Standard Design.

Single family prototypes used in this analysis that are minimally compliant with the 2019 Title 24 code achieve a Total EDR between 20 and 35 in most climates.

This concept, consistent with California's "loading order" which prioritizes energy efficiency ahead of renewable generation, requires projects meet a minimum Efficiency EDR before PV is credited but allows for PV to be traded off with additional efficiency when meeting the Total EDR. A project may improve on building efficiency beyond the minimum required and subsequently reduce the PV generation capacity required to achieve the required Total EDR but may not increase the size of the PV system and trade this off with a reduction of efficiency measures. Figure 1 graphically summarizes how both Efficiency EDR and PV / demand flexibility EDR are used to calculate the Total EDR used in the 2019 code and in this analysis.

⁴ While there is no compliance credit for solar PV as there is under the 2016 Standards, the credit for installing electric storage battery systems that meet minimum qualifications can be applied to the Efficiency EDR.

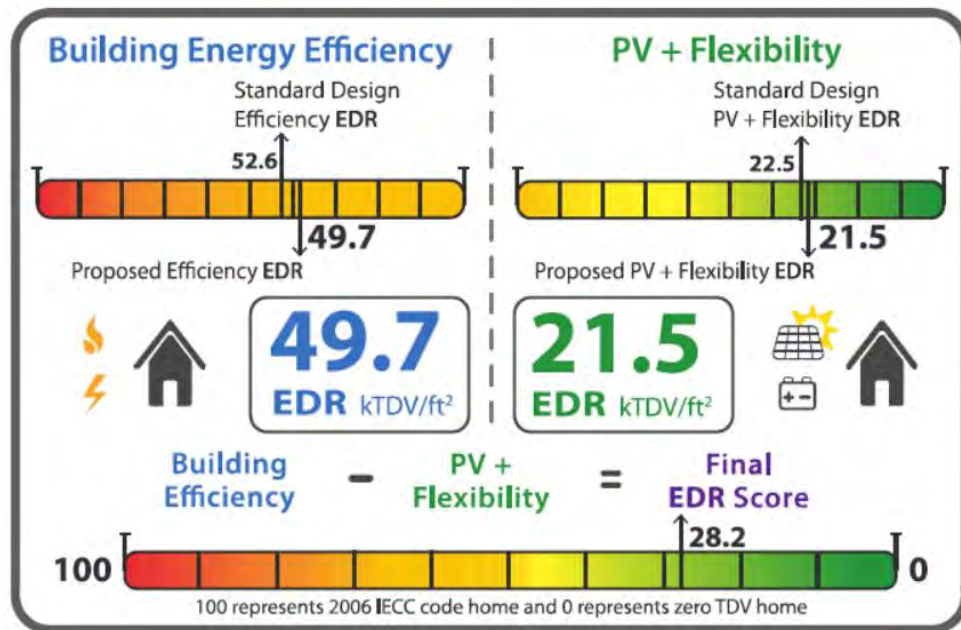


Figure 1: Graphical description of EDR scores (courtesy of Energy Code Ace⁵)

Results from this analysis are presented as EDR Margin, a reduction in the EDR score relative to the Standard Design. EDR Margin is a better metric to use than absolute EDR in the context of a reach code because absolute values vary, based on the home design and characteristics such as size and orientation. This approach aligns with how compliance is determined for the 2019 Title 24 code, as well as utility incentive programs, such as the California Advanced Homes Program (CAHP) & California Multifamily New Homes (CMFNH), which require minimum performance criteria based on an EDR Margin for low-rise residential projects. The EDR Margin is calculated according to Equation 1 for the two efficiency packages and Equation 2 for the Efficiency & PV and Efficiency & PV/Battery packages (see Section 2.3).

Equation 1

$$EDR\ Margin_{efficiency} = Standard\ Design\ \textit{Efficiency EDR} - Proposed\ Design\ \textit{Efficiency EDR}$$

Equation 2

$$EDR\ Margin_{efficiency\ \&\ PV} = Standard\ Design\ \textit{Total EDR} - Proposed\ Design\ \textit{Total EDR}$$

2.2.3 Energy Efficiency Measures

Following are descriptions of each of the efficiency measures evaluated under this analysis. Because not all of the measures described below were found to be cost-effective and cost-effectiveness varied by climate zone, not all measures are included in all packages and some of the measures listed are not included in any final package. For a list of measures included in each efficiency package by climate zone, see Appendix D – Single Family Measure Summary and Appendix F – Multifamily Measure Summary.

Reduced Infiltration (ACH50): Reduce infiltration in single family homes from the default infiltration assumption of five (5) air changes per hour at 50 Pascals (ACH50)⁶ by 40 to 60 percent to either 3 ACH50 or 2 ACH50. HERS

⁵ <https://energycodeace.com/>

⁶ Whole house leakage tested at a pressure difference of 50 Pascals between indoors and outdoors.

rater field verification and diagnostic testing of building air leakage according to the procedures outlined in the 2019 Reference Appendices RA3.8 (Energy Commission, 2018c). This measure was not applied to multifamily homes because CBECC-Res does not allow reduced infiltration credit for multifamily buildings.

Improved Fenestration: Reduce window U-factor to 0.24. The prescriptive U-factor is 0.30 in all climates. In climate zones 1, 3, 5, and 16 where heating loads dominate, an increase in solar heat gain coefficient (SHGC) from the default assumption of 0.35 to 0.50 was evaluated in addition to the reduction in U-factor.

Cool Roof: Install a roofing product that's rated by the Cool Roof Rating Council to have an aged solar reflectance (ASR) equal to or greater than 0.25. Steep-sloped roofs were assumed in all cases. Title 24 specifies a prescriptive ASR of 0.20 for Climate Zones 10 through 15 and assumes 0.10 in other climate zones.

Exterior Wall Insulation: Decrease wall U-factor in 2x6 walls to 0.043 from the prescriptive requirement of 0.048 by increasing exterior insulation from one-inch R-5 to 1-1/2 inch R-7.5. This was evaluated for single family buildings only in all climate zones except 6 and 7 where the prescriptive requirement is higher (U-factor of 0.065) and improving beyond the prescriptive value has little impact.

High Performance Attics (HPA): HPA with R-38 ceiling insulation and R-30 insulation under the roof deck. In climates where HPA is already required prescriptively this measure requires an incremental increase in roof insulation from R-19 or R-13 to R-30. In climates where HPA is not currently required (Climate Zones 1 through 3, and 5 through 7), this measure adds roof insulation to an uninsulated roof as well as increasing ceiling insulation from R-30 to R-38 in Climate Zones 3, 5, 6 and 7.

Slab Insulation: Install R-10 perimeter slab insulation at a depth of 16-inches. For climate zone 16, where slab insulation is required, prescriptively this measure increases that insulation from R-7 to R-10.

Duct Location (Ducts in Conditioned Space): Move the ductwork and equipment from the attic to inside the conditioned space in one of the three following ways.

1. Locate ductwork in conditioned space. The air handler may remain in the attic provided that 12 linear feet or less of duct is located outside the conditioned space including the air handler and plenum. Meet the requirements of 2019 Reference Appendices RA3.1.4.1.2. (Energy Commission, 2018c)
2. All ductwork and equipment located entirely in conditioned space meeting the requirements of 2019 Reference Appendices RA3.1.4.1.3. (Energy Commission, 2018c)
3. All ductwork and equipment located entirely in conditioned space with ducts tested to have less than or equal to 25 cfm leakage to outside. Meet the requirements of Verified Low Leakage Ducts in Conditioned Space (VLLDCS) in the 2019 Reference Appendices RA3.1.4.3.8. (Energy Commission, 2018c)

Option 1 and 2 above apply to single family only since the basecase for multifamily assumes ducts are within conditioned space. Option 3 applies to both single family and multifamily cases.

Reduced Distribution System (Duct) Leakage: Reduce duct leakage from 5% to 2% and install a low leakage air handler unit (LLAHU). This is only applicable to single family homes since the basecase for multifamily assumes ducts are within conditioned space and additional duct leakage credit is not available.

Low Pressure Drop Ducts: Upgrade the duct distribution system to reduce external static pressure and meet a maximum fan efficacy of 0.35 Watts per cfm for gas furnaces and 0.45 Watts per cfm for heat pumps operating at full speed. This may involve upsizing ductwork, reducing the total effective length of ducts, and/or selecting low pressure drop components such as filters. Fan watt draw must be verified by a HERS rater according to the procedures outlined in the 2019 Reference Appendices RA3.3 (Energy Commission, 2018c). New federal regulations that went into effect July 3, 2019 require higher fan efficiency for gas furnaces than for heat pumps and air handlers, which is why the recommended specification is different for mixed fuel and all-electric homes.



HERS Verification of Hot Water Pipe Insulation: The California Plumbing Code (CPC) requires pipe insulation on all hot water lines. This measure provides credit for HERS rater verification of pipe insulation requirements according to the procedures outlined in the 2019 Reference Appendices RA3.6.3. (Energy Commission, 2018c)

Compact Hot Water Distribution: Two credits for compact hot water distribution were evaluated.

1. **Basic Credit:** Design the hot water distribution system to meet minimum requirements for the basic compact hot water distribution credit according to the procedures outlined in the 2019 Reference Appendices RA4.4.6 (Energy Commission, 2018c). In many single family homes this may require moving the water heater from an exterior to an interior garage wall. Multifamily homes with individual water heaters are expected to easily meet this credit with little or no alteration to plumbing design. CBECC-Res software assumes a 30% reduction in distribution losses for the basic credit.
2. **Expanded Credit:** Design the hot water distribution system to meet minimum requirements for the expanded compact hot water distribution credit according to the procedures outlined in the 2019 Reference Appendices RA3.6.5 (Energy Commission, 2018c). In addition to requiring HERS verification that the minimum requirements for the basic compact distribution credit are met, this credit also imposes limitations on pipe location, maximum pipe diameter, and recirculation system controls allowed.

Drain Water Heat Recovery (DWHR): For multifamily buildings add DWHR that serves the showers in an unequal flow configuration (pre-heated water is piped directly to the shower) with 50% efficiency. This upgrade assumes all apartments are served by a DWHR with one unit serving each apartment individually. For a slab-on-grade building this requires a horizontal unit for the first-floor apartments.

Federally Preempted Measures:

The following additional measures were evaluated. Because these measures require upgrading appliances that are federally regulated to high efficiency models, they cannot be used to show cost-effectiveness in a local ordinance. The measures and packages are presented here to show that there are several options for builders to meet the performance targets. Heating and cooling capacities are autosized by CBECC-Res in all cases.

High Efficiency Furnace: For the mixed-fuel prototypes, upgrade natural gas furnace to one of two condensing furnace options with an efficiency of 92% or 96% AFUE.

High Efficiency Air Conditioner: For the mixed-fuel prototypes, upgrade the air conditioner to either single-stage SEER 16 / EER 13 or two-stage SEER 18 / EER 14 equipment.

High Efficiency Heat Pump: For the all-electric prototypes, upgrade the heat pump to either single-stage SEER 16 / EER 13 / HSPF 9 or two-stage SEER 18 / EER 14 / HSPF 10 equipment.

High Efficiency Tankless Water Heater: For the mixed-fuel prototype, upgrade tankless water heater to a condensing unit with a rated Uniform Energy Factor (UEF) of 0.96.

High Efficiency Heat Pump Water Heater (HPWH): For the all-electric prototypes, upgrade the federal minimum heat pump water heater to a HPWH that meets the Northwest Energy Efficiency Alliance (NEEA)⁷ Tier 3 rating. The evaluated NEEA water heater is an 80gal unit and is applied to all three building prototypes. Using the same

⁷ Based on operational challenges experienced in the past, NEEA established rating test criteria to ensure newly installed HPWHs perform adequately, especially in colder climates. The NEEA rating requires an Energy Factor equal to the ENERGY STAR performance level and includes requirements regarding noise and prioritizing heat pump use over supplemental electric resistance heating.



water heater provides consistency in performance across all the equipment upgrade cases, even though hot water draws differ across the prototypes.

2.3 Package Development

Three to four packages were evaluated for each prototype and climate zone, as described below.

- 1) **Efficiency – Non-Preempted**: This package uses only efficiency measures that don't trigger federal preemption issues including envelope, and water heating and duct distribution efficiency measures.
- 2) **Efficiency – Equipment, Preempted**: This package shows an alternative design that applies HVAC and water heating equipment that are more efficient than federal standards. The Reach Code Team considers this more reflective of how builders meet above code requirements in practice.
- 3) **Efficiency & PV**: Using the Efficiency – Non-Preempted Package as a starting point⁸, PV capacity is added to offset most of the estimated electricity use. This only applies to the all-electric case, since for the mixed fuel cases, 100% of the projected electricity use is already being offset as required by 2019 Title 24, Part 6.
- 4) **Efficiency & PV/Battery**: Using the Efficiency & PV Package as a starting point, PV capacity is added as well as a battery system.

2.3.1 Solar Photovoltaics (PV)

Installation of on-site PV is required in the 2019 residential code. The PV sizing methodology in each package was developed to offset annual building electricity use and avoid oversizing which would violate net energy metering (NEM) rules.⁹ In all cases, PV is evaluated in CBECC-Res according to the California Flexible Installation (CFI) assumptions.

The Reach Code Team used two options within the CBECC-Res software for sizing the PV system, described below. Analysis was conducted to determine the most appropriate sizing method for each package which is described in the results.

- Standard Design PV – the same PV capacity as is required for the Standard Design case¹⁰
- Specify PV System Scaling – a PV system sized to offset a specified percentage of the estimated electricity use of the Proposed Design case

2.3.2 Energy Storage (Batteries)

A battery system was evaluated in CBECC-Res with control type set to "Time of Use" and with default efficiencies of 95% for both charging and discharging. The "Time of Use" option assumes batteries are charged anytime PV generation is greater than the house load but controls when the battery storage system discharges. During the summer months (July – September) the battery begins to discharge at the beginning of the peak period at a maximum rate until fully discharged. During discharge the battery first serves the house load but will

⁸ In cases where there was no cost-effective Efficiency – Non-Preempted Package, the most cost-effective efficiency measures for that climate zone were also included in the Efficiency & PV Package in order to provide a combination of both efficiency and PV beyond code minimum.

⁹ NEM rules apply to the IOU territories only.

¹⁰ The Standard Design PV system is sized to offset the electricity use of the building loads which are typically electric in a mixed fuel home, which includes all loads except space heating, water heating, clothes drying, and cooking.



discharge to the electric grid if there is excess energy available. During other months the battery discharges whenever the PV system does not cover the entire house load and does not discharge to the electric grid. This control option is considered to be most reflective of the current products on the market. This control option requires an input for the “First Hour of the Summer Peak” and the Statewide CASE Team applied the default hour in CBECC-Res which differs by climate zone (either a 6pm or 7pm start). The Self Utilization Credit was taken when the battery system was modeled.

2.4 Incremental Costs

Table 4 below summarizes the incremental cost assumptions for measures evaluated in this study. Incremental costs represent the equipment, installation, replacement, and maintenance costs of the proposed measures relative to the base case.¹¹ Replacement costs are applied to HVAC and DHW equipment, PV inverters, and battery systems over the 30-year evaluation period. There is no assumed maintenance on the envelope, HVAC, or DHW measures since there should not be any additional maintenance cost for a more efficient version of the same system type as the baseline. Costs were estimated to reflect costs to the building owner. When costs were obtained from a source that didn’t already include builder overhead and profit, a markup of ten percent was added. All costs are provided as present value in 2020 (2020 PV\$). Costs due to variations in furnace, air conditioner, and heat pump capacity by climate zone were not accounted for in the analysis.

Equipment lifetimes applied in this analysis for the water heating and space conditioning measures are summarized in Table 3.

Table 3: Lifetime of Water Heating & Space Conditioning Equipment Measures

Measure	Lifetime
Gas Furnace	20
Air Conditioner	20
Heat Pump	15
Gas Tankless Water Heater	20
Heat Pump Water Heater	15

Source: City of Palo Alto 2019 Title 24 Energy Reach Code Cost-effectiveness Analysis Draft (TRC, 2018) which is based on the Database of Energy Efficiency Resources (DEER).¹²

¹¹ Interest costs due to financing are not included in the incremental costs presented in the Table 4 but are accounted for in the lifetime cost analysis. All first costs are assumed to be financed in a mortgage, see Section 2.5 for details.

¹² <http://www.deeresources.com>



Table 4: Incremental Cost Assumptions

Measure	Performance Level	Incremental Cost (2020 PV\$)		Source & Notes
		Single Family	Multifamily (Per Dwelling Unit)	
Non-Preempted Measures				
Reduced Infiltration	3.0 vs 5.0 ACH50	\$391	n/a	NREL’s BEopt cost database (\$0.115/ft² for 3 ACH50 & \$0.207/ft² for 2 ACH50) + \$100 HERS rater verification.
	2.0 vs 5.0 ACH50	\$613	n/a	
Window U-factor	0.24 vs 0.30	\$2,261	\$607	\$4.23/ft² window area based on analysis conducted for the 2019 and 2022 Title 24 cycles (Statewide CASE Team, 2018).
Window SHGC	0.50 vs 0.35	\$0	\$0	Data from CASE Report along with direct feedback from Statewide CASE Team that higher SHGC does not necessarily have any incremental cost (Statewide CASE Team, 2017d). Applies to CZ 1,3,5,16.
Cool Roof - Aged Solar Reflectance	0.25 vs 0.20	\$237	\$58	Costs based on 2016 Cost-effectiveness Study for Cool Roofs reach code analysis for 0.28 solar reflectance product. (Statewide Reach Codes Team, 2017b).
	0.20 vs 0.10	\$0	\$0	
Exterior Wall Insulation	R-7.5 vs R-5	\$818	n/a	Based on increasing exterior insulation from 1” R-5 to 1.5” R-7.5 in a 2x6 wall (Statewide CASE Team, 2017c). Applies to single family only in all climates except CZ 6, 7.
Under-Deck Roof Insulation (HPA)	R-13 vs R-0	\$1,338	\$334	Costs for R-13 (\$0.64/ft²), R-19 (\$0.78/ft²) and R-30 (\$1.61/ft²) based on data presented in the 2019 HPA CASE Report (Statewide CASE Team, 2017b) along with data collected directly from builders during the 2019 CASE process. The R-30 costs include additional labor costs for cabling. Costs for R-38 from NREL’s BEopt cost database.
	R-19 vs R-13	\$282	\$70	
	R-30 vs R-19	\$1,831	\$457	
	R-38 vs R-30	\$585	\$146	
Attic Floor Insulation	R-38 vs R-30	\$584	\$146	NREL’s BEopt cost database: \$0.34/ft² ceiling area
Slab Edge Insulation	R-10 vs R-0	\$553	\$121	\$4/linear foot of slab perimeter based on internet research. Assumes 16in depth.
	R-10 vs R-7	\$157	\$21	\$1.58/linear foot of slab perimeter based on NREL’s BEopt cost database. This applies to CZ 16 only where R-7 slab edge insulation is required prescriptively. Assumes 16in depth.
Duct Location	<12 feet in attic	\$358	n/a	Costs based on a 2015 report on the Evaluation of Ducts in Conditioned Space for New California Homes (Davis Energy Group, 2015). HERS verification cost of \$100 for the Verified Low Leakage Ducts in Conditioned Space credit.
	Ducts in Conditioned Space	\$658	n/a	
	Verified Low Leakage Ducts in Conditioned Space	\$768	\$110	



Table 4: Incremental Cost Assumptions

Measure	Performance Level	Incremental Cost (2020 PV\$)		Source & Notes
		Single Family	Multifamily (Per Dwelling Unit)	
Distribution System Leakage	2% vs 5%	\$96	n/a	1-hour labor. Labor rate of \$96 per hour is from 2019 RSMeans for sheet metal workers and includes an average City Cost Index for labor for California cities & 10% for overhead and profit. Applies to single family only since ducts are assumed to be in conditioned space for multifamily
	Low Leakage Air Handler	\$0	n/a	Negligible cost based on review of available products. There are more than 6,000 Energy Commission certified units and the list includes many furnace and heat pump air handler product lines from the major manufacturers, including minimum efficiency, low cost product lines.
Low Pressure Drop Ducts (Fan W/cfm)	0.35 vs 0.45	\$96	\$48	Costs assume one-hour labor for single family and half-hour per multifamily apartment. Labor rate of \$96 per hour is from 2019 RSMeans for sheet metal workers and includes an average City Cost Index for labor for California cities.
	0.45 vs 0.58	\$96	\$48	
Hot Water Pipe Insulation	HERS verified	\$110	\$83	Cost for HERS verification only, based on feedback from HERS raters. \$100 per single family home and \$75 per multifamily unit before markup.
Compact Hot Water Distribution	Basic credit	\$150	\$0	For single family add 20-feet venting at \$12/ft to locate water heater on interior garage wall, less 20-feet savings for less PEX and pipe insulation at \$4.88/ft. Costs from online retailers. Many multifamily buildings are expected to meet this credit without any changes to distribution design.
	Expanded credit	n/a	\$83	Cost for HERS verification only. \$75 per multifamily unit before markup. This was only evaluated for multifamily buildings.
Drain Water Heat Recovery	50% efficiency	n/a	\$690	Cost from the 2019 DWHR CASE Report assuming a 2-inch DWHR unit. The CASE Report multifamily costs were based on one unit serving 4 dwelling units with a central water heater. Since individual water heaters serve each dwelling unit in this analysis, the Reach Code Team used single family costs from the CASE Report. Costs in the CASE Report were based on a 46.1% efficient unit, a DWHR device that meets the 50% efficiency assumed in this analysis may cost a little more. (Statewide CASE Team, 2017a).
Federally Pre-empted Measures				
Furnace AFUE	92% vs 80%	\$139	\$139	Equipment costs from online retailers for 40-kBtu/h unit. Cost saving for 6-feet of venting at \$26/foot due to lower cost venting requirements for condensing (PVC) vs non-condensing (stainless) furnaces. Replacement at year 20 assumes a 50% reduction in first cost. Value at year 30 based on remaining useful life is included.
	96% vs 80%	\$244	\$244	
Air Conditioner SEER/EER	16/13 vs 14/11.7	\$111	\$111	Costs from online retailers for 2-ton unit. Replacement at year 20 assumes a 50% reduction in first cost. Value at year 30 based on remaining useful life is included.
	18/14 vs 14/11.7	\$1,148	\$1,148	



Table 4: Incremental Cost Assumptions

Measure	Performance Level	Incremental Cost (2020 PV\$)		Source & Notes
		Single Family	Multifamily (Per Dwelling Unit)	
Heat Pump SEER/EER /HSPF	16/13/9 vs 14/11.7/8.2	\$411	\$411	Costs from online retailers for 2-ton unit. Replacement at year 15 assumes a 50% reduction in first cost.
	18/14/10 vs 14/11.7/8.2	\$1,511	\$1,511	
Tankless Water Heater Energy Factor	0.96 vs 0.81	\$203	\$203	Equipment costs from online retailers for 40-kBtu/h unit. Cost saving for 6-feet of venting at \$26/foot due to lower cost venting requirements for condensing (PVC) vs non-condensing (stainless) furnaces. Replacement at year 15 assumes a 50% reduction in first cost.
HPWH	NEEA Tier 3 vs 2.0 EF	\$294	\$294	Equipment costs from online retailers. Replacement at year 15 assumes a 50% reduction in first cost.
PV + Battery				
PV System	System size varies	\$3.72/W-DC	\$3.17/W-DC	First costs are from LBNL's Tracking the Sun 2018 costs (Barbose et al., 2018) and represent costs for the first half of 2018 of \$3.50/W-DC for residential system and \$2.90/W-DC for non-residential system ≤500 kW-DC. These costs were reduced by 16% for the solar investment tax credit, which is the average credit over years 2020-2022. Inverter replacement cost of \$0.14/W-DC present value includes replacements at year 11 at \$0.15/W-DC (nominal) and at year 21 at \$0.12/W-DC (nominal) per the 2019 PV CASE Report (California Energy Commission, 2017). System maintenance costs of \$0.31/W-DC present value assume \$0.02/W-DC (nominal) annually per the 2019 PV CASE Report (California Energy Commission, 2017). 10% overhead and profit added to all costs
Battery	System size varies by building type	\$656/kWh	\$656/kWh	\$633/kWh first cost based on the PV Plus Battery Study report (Statewide Reach Codes Team, 2018) as the average cost of the three systems that were analyzed. This cost was reduced by 16% for the solar investment tax credit, which is the average credit over years 2020-2022. Replacement cost at year 15 of \$100/kWh based on target price reductions (Penn, 2018).



2.5 Cost-effectiveness

Cost-effectiveness was evaluated for all sixteen climate zones and is presented based on both TDV energy, using the Energy Commission's LCC methodology, and an On-Bill approach using residential customer utility rates. Both methodologies require estimating and quantifying the value of the energy impact associated with energy efficiency measures over the life of the measures (30 years) as compared to the prescriptive Title 24 requirements.

Results are presented as a lifecycle benefit-to-cost (B/C) ratio, a net present value (NPV) metric which represents the cost-effectiveness of a measure over a 30-year lifetime taking into account discounting of future savings and costs and financing of incremental first costs. A value of one indicates the NPV of the savings over the life of the measure is equivalent to the NPV of the lifetime incremental cost of that measure. A value greater than one represents a positive return on investment. The B/C ratio is calculated according to Equation 3.

Equation 3

$$\text{Benefit-to-Cost Ratio} = \frac{\text{NPV of lifetime benefit}}{\text{NPV of lifetime cost}}$$

In most cases the benefit is represented by annual utility savings or TDV savings and the cost by incremental first cost and replacement costs. However, in some cases a measure may have incremental cost savings but with increased energy related costs. In this case, the benefit is the lower first cost and the cost is the increase in utility bills. The lifetime costs or benefits are calculated according to Equation 4.

Equation 4

$$\text{NPV of lifetime cost/benefit} = \sum_{t=1}^n \text{Annual cost/benefit}_t * (1 + r)^t$$

Where:

- n = analysis term
- r = discount rate

The following summarizes the assumptions applied in this analysis to both methodologies.

- Analysis term of 30-years
- Real discount rate of 3 percent
- Inflation rate of 2 percent
- First incremental costs are financed into a 30-year mortgage
- Mortgage interest rate of 4.5 percent
- Average tax rate of 20 percent (to account for tax savings due to loan interest deductions)

2.5.1 On-Bill Customer Lifecycle Cost

Residential utility rates were used to calculate utility costs for all cases and determine On-Bill customer cost-effectiveness for the proposed packages. The Reach Codes Team obtained the recommended utility rates from each IOU based on the assumption that the reach codes go into effect January of 2020. Annual utility costs were calculated using hourly electricity and gas output from CBECC-Res and applying the utility tariffs summarized in Table 5. Appendix B – Utility Tariff Details includes the utility rate schedules used for this study. The applicable residential time-of-use (TOU) rate was applied to all cases.¹³ Annual electricity production in excess of annual electricity consumption is credited to the utility account at the applicable wholesale rate based on the approved

¹³ Under NEM rulings by the CPUC (D-16-01-144, 1/28/16), all new PV customers shall be in an approved TOU rate structure. <https://www.cpuc.ca.gov/General.aspx?id=3800>



NEM2 tariffs for that utility. Minimum daily use billing and mandatory non-bypassable charges have been applied. Future change to the NEM tariffs are likely; however, there is a lot of uncertainty about what those changes will be and if they will become effective during the 2019 code cycle (2020-2022).

The net surplus compensation rates for each utility are as follows:¹⁴

- PG&E: \$0.0287 / kWh
- SCE: \$0.0301 / kWh
- SDG&E: \$0.0355 / kWh

Utility rates were applied to each climate zone based on the predominant IOU serving the population of each zone according to Two SCE tariff options were evaluated: TOU-D-4-9 and TOU-D-PRIME. The TOU-D-PRIME rate is only available to customers with heat pumps for either space or water heating, a battery storage system, or an electric vehicle and therefore was only evaluated for the all-electric cases and the Efficiency & PV/Battery packages. The rate which resulted in the lowest annual cost to the customer was used for this analysis, which was TOU-D-4-9 in all cases with the exception of the single family all-electric cases in Climate Zone 14.

Table 5. Climate Zones 10 and 14 are evaluated with both SCE/SoCalGas and SDG&E tariffs since each utility has customers within these climate zones. Climate Zone 5 is evaluated under both PG&E and SoCalGas natural gas rates.

Two SCE tariff options were evaluated: TOU-D-4-9 and TOU-D-PRIME. The TOU-D-PRIME rate is only available to customers with heat pumps for either space or water heating, a battery storage system, or an electric vehicle and therefore was only evaluated for the all-electric cases and the Efficiency & PV/Battery packages. The rate which resulted in the lowest annual cost to the customer was used for this analysis, which was TOU-D-4-9 in all cases with the exception of the single family all-electric cases in Climate Zone 14.

Table 5: IOU Utility Tariffs Applied Based on Climate Zone

Climate Zones	Electric / Gas Utility	Electricity (Time-of-use)	Natural Gas
1-5, 11-13, 16	PG&E	E-TOU, Option B	G1
5	PG&E / SoCalGas	E-TOU, Option B	GR
6, 8-10, 14, 15	SCE / SoCal Gas	TOU-D-4-9 or TOU-D-PRIME	GR
7, 10, 14	SDG&E	TOU-DR1	GR

Source: Utility websites, See Appendix B – Utility Tariff Details for details on the tariffs applied.

Utility rates are assumed to escalate over time, using assumptions from research conducted by Energy and Environmental Economics (E3) in the 2019 study Residential Building Electrification in California study (Energy & Environmental Economics, 2019). Escalation of natural gas rates between 2019 and 2022 is based on the currently filed General Rate Cases (GRCs) for PG&E, SoCalGas and SDG&E. From 2023 through 2025, gas rates are assumed to escalate at 4% per year above inflation, which reflects historical rate increases between 2013 and 2018. Escalation of electricity rates from 2019 through 2025 is assumed to be 2% per year above inflation, based on electric utility estimates. After 2025, escalation rates for both natural gas and electric rates are assumed to drop to a more conservative 1% escalation per year above inflation for long-term rate trajectories beginning in 2026 through 2050. See Appendix B – Utility Tariff Details for additional details.

¹⁴ Net surplus compensation rates based on 1-year average February 2018 – January 2019.



2.5.2 *TDV Lifecycle Cost*

Cost-effectiveness was also assessed using the Energy Commission's TDV LCC methodology. TDV is a normalized monetary format developed and used by the Energy Commission for comparing electricity and natural gas savings, and it considers the cost of electricity and natural gas consumed during different times of the day and year. The 2019 TDV values are based on long term discounted costs of 30 years for all residential measures. The CBECC-Res simulation software outputs are in terms of TDV kBtUs. The present value of the energy cost savings in dollars is calculated by multiplying the TDV kBtU savings by a net present value (NPV) factor, also developed by the Energy Commission. The NPV factor is \$0.173/TDV kBtu for residential buildings.

Like the customer B/C ratio, a TDV B/C ratio value of one indicates the savings over the life of the measure are equivalent to the incremental cost of that measure. A value greater than one represents a positive return on investment. The ratio is calculated according to Equation 5.

Equation 5

$$TDV \text{ Benefit} - to - Cost \text{ Ratio} = \frac{TDV \text{ energy savings} * NPV \text{ factor}}{NPV \text{ of lifetime incremental cost}}$$

2.6 *Electrification Evaluation*

In addition to evaluating upgrades to mixed fuel and all-electric buildings independently that do not result in fuel switching, the Reach Code Team also analyzed the impact on construction costs, utility costs, and TDV when a builder specifies and installs electric appliances instead of the gas appliances typically found in a mixed fuel building. This analysis compared the code compliant mixed fuel prototype, which uses gas for space heating, water heating, cooking, and clothes drying, with the code compliant all-electric prototype. It also compared the all-electric Efficiency & PV Package with the code compliance mixed fuel prototype. In these cases, the relative costs between natural gas and electric appliances, differences between in-house electricity and gas infrastructure and the associated infrastructure costs for providing gas to the building were also included.

A variety of sources were reviewed when determining incremental costs. The sources are listed below.

- SMUD All-Electric Homes Electrification Case Study (EPRI, 2016)
- City of Palo Alto 2019 Title 24 Energy Reach Code Cost-effectiveness Analysis (TRC, 2018)
- Building Electrification Market Assessment (E3, 2019)
- Decarbonization of Heating Energy Use in California Buildings (Hopkins et al., 2018)
- Analysis of the Role of Gas for a Low-Carbon California Future (Navigant, 2008)
- Rulemaking No. 15-03-010 An Order Instituting Rulemaking to Identify Disadvantaged Communities in the San Joaquin Valley and Analyze Economically Feasible Options to Increase Access to Affordable Energy in Those Disadvantages Communities (California Public Utilities Commission, 2016)
- 2010-2012 WO017 Ex Ante Measure Cost Study: Final Report (Itron, 2014)
- Natural gas infrastructure costs provided by utility staff through the Reach Code subprogram
- Costs obtained from builders, contractors and developers

Incremental costs are presented in Table 6. Values in parentheses represent a lower cost or cost reduction in the electric option relative to mixed fuel. The costs from the available sources varied widely, making it difficult to develop narrow cost estimates for each component. For certain components data is provided with a low to high range as well as what were determined to be typical costs and ultimately applied in this analysis. Two sets of typical costs are presented, one which is applied in the On-Bill cost effectiveness methodology and another applied in the TDV methodology. Details of these differences are explained in the discussion of site gas infrastructure costs in the following pages.



Table 6: Incremental Costs – All-Electric Code Compliant Home Compared to a Mixed Fuel Code Compliant Home

Measure	Incremental Cost (2020 PV\$) Single Family ¹				Incremental Cost (2020 PV\$) Multifamily ¹ (Per Dwelling Unit)			
	Low	High	Typical (On-Bill)	Typical (TDV)	Low	High	Typical (On-Bill)	Typical (TDV)
Heat Pump vs Gas Furnace/Split AC	(\$2,770)	\$620	(\$221)		Same as Single Family			
Heat Pump Water Heater vs Gas Tankless	(\$1,120)	\$1,120	\$0					
Electric vs Gas Clothes Dryer ²	(\$428)	\$820	\$0					
Electric vs Gas Cooking ²	\$0	\$1,800	\$0					
Electric Service Upgrade	\$200	\$800	\$600		\$150	\$600	\$600	
In-House Gas Infrastructure	(\$1,670)	(\$550)	(\$800)		(\$600)	(\$150)	(\$600)	
Site Gas Infrastructure	(\$25,000)	(\$900)	(\$5,750)	(\$11,836)	(\$16,250)	(\$310)	(\$3,140)	(\$6,463)
Total First Cost	(\$30,788)	\$3,710	(\$6,171)	(\$12,257)	(\$20,918)	\$4,500	(\$3,361)	(\$6,684)
Present Value of Equipment Replacement Cost			\$1,266				\$1,266	
Lifetime Cost Including Replacement & Financing of First Cost			(\$5,349)	(\$11,872)			(\$2,337)	(\$5,899)

¹Low and high costs represent the potential range of costs and typical represents the costs used in this analysis and determined to be most representative of the conditions described in this report. Two sets of typical costs are presented, one which is applied in the On-Bill cost effectiveness methodology and another applied in the TDV methodology.

²Typical costs assume electric resistance technology. The high range represents higher end induction cooktops and heat pump clothes dryers. Lower cost induction cooktops are available.

Typical incremental costs for switching from a mixed fuel design to an all-electric design are based on the following assumptions:

Appliances: The Reach Code Team determined that the typical first installed cost for electric appliances is very similar to that for natural gas appliances. This was based on information provided by HVAC contractors, plumbers and builders as well as a review of other studies. After review of various sources, the Reach Code Team concluded that the cost difference between gas and electric resistance options for clothes dryers and stoves is negligible and that the lifetimes of the two technologies are also similar.

HVAC: Typical HVAC incremental costs were based on the City of Palo Alto 2019 Title 24 Energy Reach Code Cost-effectiveness Analysis (TRC, 2018) which assumes approximately \$200 first cost savings for the heat pump relative to the gas furnace and air conditioner. Table 6 also includes the present value of the incremental replacement costs for the heat pump based on a 15-year lifetime and a 20-year lifetime for the gas furnace in the mixed fuel home.

DHW: Typical costs for the water heating system were based on equivalent installed first costs for the HPWH and tankless gas water heater. This accounts for slightly higher equipment cost but lower installation labor due to the elimination of the gas flue. Incremental replacement costs for the HPWH are based on a 15-year lifetime and a 20-year lifetime for the tankless water heater.

For multifamily, less data was available and therefore a range of low and high costs is not provided. The typical first cost for multifamily similarly is expected to be close to the same for the mixed fuel and all-electric designs. However, there are additional considerations with multifamily such as greater complexity for venting of natural gas appliances as well as for locating the HPWH within the conditioned space (all climates except Climate Zones 1, 3, and 5, see Table 2) that may impact the total costs.

Electric service upgrade: The study assumes an incremental cost to run 220V service to each appliance of \$200 per appliance for single family homes and \$150 per appliance per multifamily apartment based on cost estimates from builders and contractors. The Reach Code Team reviewed production builder utility plans for



mixed-fuel homes and consulted with contractors to estimate which electricity and/or natural gas services are usually provided to the dryer and oven. Typical practice varied, with some builders providing both gas and electric service to both appliances, others providing both services to only one of the appliances, and some only providing gas. For this study, the Reach Code Team determined that for single family homes the typical cost is best qualified by the practice of providing 220V service and gas to either the dryer and the oven and only gas service to the other. For multifamily buildings it's assumed that only gas is provided to the dryer and oven in the mixed fuel home.

It is assumed that no upgrades to the electrical panel are required and that a 200 Amp panel is typically installed for both mixed fuel and all-electric new construction homes. There are no incremental electrical site infrastructure requirements.

In-house gas infrastructure (from meter to appliances): Installation cost to run a gas line from the meter to the appliance location is \$200 per appliance for single family and \$150 per appliance per multifamily apartment based on cost estimates from builders and contractors. The cost estimate includes providing gas to the water heater, furnace, dryer and cooktop.

Site gas infrastructure: The cost-effective analysis components with the highest degree of variability are the costs for on-site gas infrastructure. These costs can be project dependent and may be significantly impacted by such factors as utility territory, site characteristics, distance to the nearest gas main and main location, joint trenching, whether work is conducted by the utility or a private contractor, and number of dwelling units per development. All gas utilities participating in this study were solicited for cost information. The typical infrastructure costs for single family homes presented in Table 6 are based on cost data provided by PG&E and reflect those for a new subdivision in an undeveloped area requiring the installation of natural gas infrastructure, including a main line. Infrastructure costs for infill development can also be highly variable and may be higher than in an undeveloped area. The additional costs associated with disruption of existing roads, sidewalks, and other structures can be significant. Total typical costs in Table 6 assume \$10,000 for extension of a gas main, \$1,686 for a service lateral, and \$150 for the meter.

Utility Gas Main Extensions rules¹⁵ specify that the developer has the option to only pay 50% of the total cost for a main extension after subtraction of allowances for installation of gas appliances. This 50% refund and the appliance allowance deductions are accounted for in the site gas infrastructure costs under the On-Bill cost-effectiveness methodology. The net costs to the utility after partial reimbursement from the developer are included in utility ratebase and recovered via rates to all customers. The total cost of \$5,750 presented in Table 6 reflects a 50% refund on the \$10,000 extension and appliance deductions of \$1,086 for a furnace, water heater, cooktop, and dryer. Under the On-Bill methodology this analysis assumes this developer option will remain available through 2022 and that the cost savings are passed along to the customer.

The 50% refund and appliance deductions were not applied to the site gas infrastructure costs under the TDV cost-effectiveness methodology based on input received from the Energy Commission and agreement from the Reach Code technical advisory team that the approach is appropriate. TDV cost savings impacts extend beyond the customer and account for societal impacts of energy use. Accounting for the full cost of the infrastructure upgrades was determined to be justified when evaluating under the TDV methodology.

¹⁵ PG&E Rule 15: https://www.pge.com/tariffs/tm2/pdf/GAS_RULES_15.pdf

SoCalGas Rule 20: <https://www.socalgas.com/regulatory/tariffs/tm2/pdf/20.pdf>

SDG&E Rule 15: http://regarchive.sdge.com/tm2/pdf/GAS_GAS-RULES_GRULE15.pdf



Less information was available for the costs associated with gas infrastructure for low-rise multifamily development. The typical cost in Table 6 for the On-Bill methodology is based on TRC's City of Palo Alto 2019 Title 24 Energy Reach Code Cost-effectiveness Analysis (TRC, 2018). These costs, provided by the City of Palo Alto, are approximately \$25,100 for an 8-unit new construction building and reflect connection to an existing main for infill development. Specific costs include plan review, connection charges, meter and manifold, plumbing distribution, and street cut fees. While these costs are specifically based on infill development and from one municipal utility, the estimates are less than those provided by PG&E reflecting the average cost differences charged to the developer between single family and multifamily in an undeveloped area (after accounting for deductions per the Gas Main Extensions rule). To convert costs charged to the developer to account for the full infrastructure upgrade cost (costs applied in the TDV methodology analysis), a factor of 2.06¹⁶ was calculated based on the single family analysis. This same factor was applied to the multifamily cost of \$3,140 to arrive at \$6,463 (see Table 6).

2.7 Greenhouse Gas Emissions

Equivalent CO₂ emission savings were calculated based on outputs from the CBECC-Res simulation software. Electricity emissions vary by region and by hour of the year. CBECC-Res applies two distinct hourly profiles, one for Climate Zones 1 through 5 and 11 through 13 and another for Climate Zones 6 through 10 and 14 through 16. For natural gas a fixed factor of 0.005307 metric tons/therm is used. To compare the mixed fuel and all-electric cases side-by-side, greenhouse gas (GHG) emissions are presented as CO₂-equivalent emissions per square foot of conditioned floor area.

3 Results

The primary objective of the evaluation is to identify cost-effective, non-preempted performance targets for both single family and low-rise multifamily prototypes, under both mixed fuel and all-electric cases, to support the design of local ordinances requiring new low-rise residential buildings to exceed the minimum state requirements. The packages presented are representative examples of designs and measures that can be used to meet the requirements. In practice, a builder can use any combination of non-preempted or preempted compliant measures to meet the requirements.

This analysis covered all sixteen climate zones and evaluated two efficiency packages, including a non-preempted package and a preempted package that includes upgrades to federally regulated equipment, an Efficiency & PV Package for the all-electric scenario only, and an Efficiency & PV/Battery Package. For the efficiency-only packages, measures were refined to ensure that the non-preempted package was cost-effective based on one of the two metrics applied in this study, TDV or On-Bill. The preempted equipment package, which the Reach Code Team considers to be a package of upgrades most reflective of what builders commonly apply to exceed code requirements, was designed to be cost-effective based on the On-Bill cost-effectiveness approach.

Results are presented as EDR Margin instead of compliance margin. EDR is the metric used to determine code compliance in the 2019 cycle. Target EDR Margin is based on taking the calculated EDR Margin for the case and rounding down to the next half of a whole number. Target EDR Margin for the Efficiency Package are defined based on the lower of the EDR Margin of the non-preempted package and the equipment, preempted package. For example, if for a particular case the cost-effective non-preempted package has an EDR Margin of 3 and the preempted package an EDR Margin of 4, the Target EDR Margin is set at 3.

¹⁶ This factor includes the elimination of the 50% refund for the main extension and adding back in the appliance allowance deductions.



For a package to qualify, a minimum EDR Margin of 0.5 was required. This is to say that a package that only achieved an EDR Margin of 0.4, for example, was not considered. An EDR Margin less than 0.5 generally corresponds to a compliance margin lower than 5% and was considered too small to ensure repeatable results. In certain cases, the Reach Code Team did not identify a cost-effective package that achieved the minimum EDR Margin of 0.5.

Although some of the efficiency measures evaluated were not cost-effective and were eliminated, the following measures are included in at least one package:

- Reduced infiltration
- Improved fenestration
- Improved cool roofs
- High performance attics
- Slab insulation
- Reduced duct leakage
- Verified low leakage ducts in conditioned space
- Low pressure-drop distribution system
- Compact hot water distribution system, basic and expanded
- High efficiency furnace, air conditioner & heat pump (*preempted*)
- High efficiency tankless water heater & heat pump water heater (*preempted*)

3.1 PV and Battery System Sizing

The approach to determining the size of the PV and battery systems varied based on each package and the source fuel. Table 7 describes the PV and battery sizing approaches applied to each of the four packages. For the **Efficiency Non-preempted and Efficiency – Equipment, Preempted packages** a different method was applied to each the two fuel scenarios. In all **mixed fuel cases**, the PV was sized to offset 100% of the estimated electrical load and any electricity savings from efficiency measures were traded off with a smaller PV system. Not downsizing the PV system after adding efficiency measures runs the risk of producing more electricity than is consumed, reducing cost-effectiveness and violating NEM rules. While the impact of this in most cases is minor, analysis confirmed that cost-effectiveness improved when reducing the system size to offset 100% of the electricity usage as opposed to keeping the PV system the same size as the Standard Design.

In the **all-electric Efficiency cases**, the PV system size was left to match the Standard Design (Std Design PV), and the inclusion of energy efficiency measures was not traded off with a reduced capacity PV system. Because the PV system is sized to meet the electricity load of a mixed fuel home, it is cost-effective to keep the PV system the same size and offset a greater percentage of the electrical load.

For the **Efficiency & PV case on the all-electric home**, the Reach Code Team evaluated PV system sizing to offset 100%, 90% and 80% of the total calculated electricity use. Of these three, sizing to 90% proved to be the most cost-effective based on customer utility bills. This is a result of the impact of the annual minimum bill which is around \$120 across all the utilities. The “sweet spot” is a PV system that reduces electricity bills just enough to match the annual minimum bill; increasing the PV size beyond this adds first cost but does not result in utility bill savings.



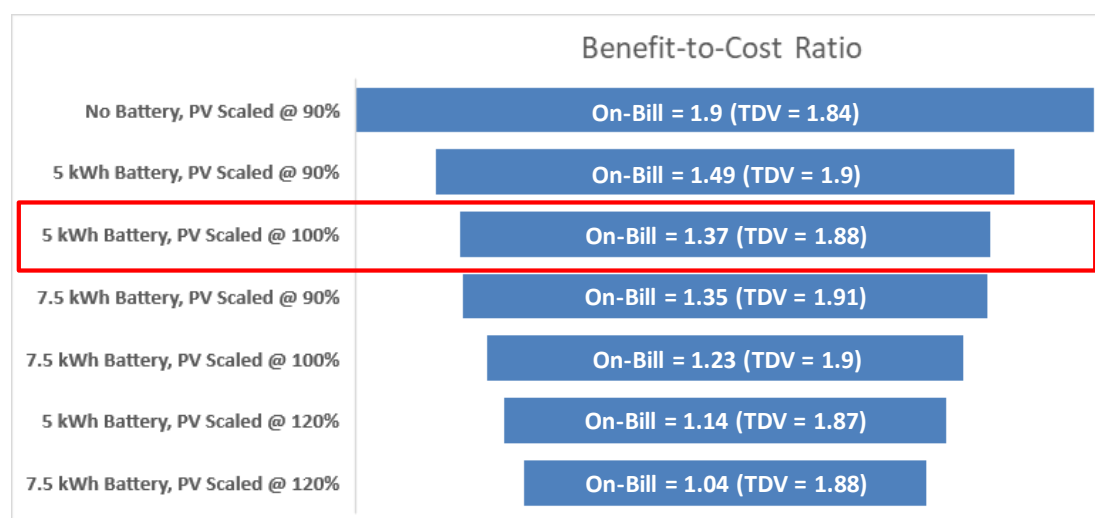
Table 7: PV & Battery Sizing Details by Package Type

Package	Mixed Fuel	All-Electric
Efficiency (Envelope & Equipment)	PV Scaled @ 100% electricity	Std Design PV
Efficiency & PV	n/a	PV Scaled @ 90%
Efficiency & PV/Battery	PV Scaled @ 100% electricity 5kWh / SF home 2.75kWh/ MF apt	PV Scaled @ 100% 5kWh / SF home 2.75kWh/ MF apt

A sensitivity analysis was conducted to determine the appropriate battery and PV capacity for the Efficiency & PV/Battery Packages using the 1-story 2,100 square foot prototype in Climate Zone 12. Results are shown in Figure 2. The current version of CBECC-Res requires a minimum battery size of 5 kWh to qualify for the self-utilization credit. CBECC-Res allows for PV oversizing up to 160% of the building's estimated electricity load when battery storage systems are installed; however, the Reach Code Team considered this high, potentially problematic from a grid perspective, and likely not acceptable to the utilities or customers. The Reach Code Team compared cost-effectiveness of 5kWh and 7.5kWh battery systems as well as of PV systems sized to offset 90%, 100%, or 120% of the estimated electrical load.

Results show that from an on-bill perspective a smaller battery size is more cost-effective. The sensitivity analysis also showed that increasing the PV capacity from 90% to 120% of the electricity use reduced cost-effectiveness. From the TDV perspective there was little difference in results across all the scenarios, with the larger battery size being marginally more cost-effective. Based on these results, the Reach Code Team applied to the Efficiency & PV/Battery Package a 5kWh battery system for single family homes with PV sized to offset 100% of the electricity load. Even though PV scaled to 90% was the most cost-effective, sizing was increased to 100% to evaluate greater generation beyond the Efficiency & PV Package and to achieve zero net electricity. These results also show that in isolation, the inclusion of a battery system reduces cost-effectiveness compared to the same size PV system without batteries.

For multifamily buildings the battery capacity was scaled to reflect the average ratio of battery size to PV system capacity (kWh/kW) for the single family Efficiency & PV Package. This resulted in a 22kWh battery for the multifamily building, or 2.75kWh per apartment.

**Figure 2: B/C ratio comparison for PV and battery sizing**

3.2 Single Family Results

Table 8 through Table 10 contain cost effectiveness findings for the single family packages. Table 8 summarizes the package costs for all of the mixed fuel and all-electric efficiency, PV and battery packages. The mixed fuel results are evaluated and presented relative to a mixed fuel code compliant basecase while the all-electric results are relative to an all-electric code compliant basecase.

Table 9 and Table 10 present the B/C ratios for all the single family packages according to both the On-Bill and TDV methodologies for the mixed fuel and the all-electric cases, respectively. Results are cost-effective based on TDV for all cases except for Climate Zone 7 where no cost-effective combination of non-preempted efficiency measures was found that met the minimum 0.5 EDR Margin threshold. Cases where the B/C ratio is indicated as “>1” refer to instances where there are incremental cost savings in addition to annual utility bill savings. In these cases, there is no cost associated with the upgrade and benefits are realized immediately.

Figure 3 presents a comparison of Total EDRs for single family buildings and Figure 4 presents the EDR Margin results. Each graph compares the mixed fuel and all-electric cases as well as the various packages. The EDR Margin for the **Efficiency Package** for most climates is between 1.0 and 5.5 for mixed fuel cases and slightly higher, between 1.5 and 6.5, for the all-electric design. No cost-effective **mixed fuel or all-electric non-preempted Efficiency package** was found Climate Zone 7.

For the **mixed fuel case, the Efficiency & PV/Battery** Package increased the EDR Margin to values between 7.0 and 10.5. Because of the limitations on oversizing PV systems to offset natural gas use it is not feasible to achieve higher EDR Margins by increasing PV system capacity.

For the **all-electric case, the Efficiency & PV** Package resulted in EDR Margins of 11.0 to 19.0 for most climates; adding a battery system increased the EDR Margin by an additional 7 to 13 points. Climate zones 1 and 16, which have high heating loads, have much higher EDR Margins for the Efficiency & PV package (26.5-31.0). The Standard Design PV, which is what is applied in the all-electric Efficiency Package, is not sized to offset any of the heating load. When the PV system is sized to offset 90% of the total electricity use, the increase is substantial as a result. In contrast, in Climate Zone 15 the Standard Design PV system is already sized to cover the cooling electricity load, which represents 40% of whole building electricity use. Therefore, increasing the PV size to offset 90% of the electric load in this climate only results in adding approximately 120 Watts of PV capacity and subsequently a negligible impact on the EDR.

Additional results details can be found in Appendix C – Single Family Detailed Results with summaries of measures included in each of the packages in Appendix D – Single Family Measure Summary. A summary of results by climate zone is presented in Appendix G – Results by Climate Zone.



Table 8: Single Family Package Lifetime Incremental Costs

Climate Zone	Mixed Fuel			All-Electric			
	Non-Preempted	Equipment - Preempted	Efficiency & PV/Battery	Non-Preempted	Equipment - Preempted	Efficiency & PV	Efficiency & PV/Battery
CZ01	+\$1,355	+\$1,280	+\$5,311	+\$7,642	+\$2,108	+\$18,192	+\$24,770
CZ02	+\$1,504	+\$724	+\$5,393	+\$3,943	+\$2,108	+\$12,106	+\$18,132
CZ03	+\$1,552	+\$1,448	+\$5,438	+\$1,519	+\$2,108	+\$8,517	+\$14,380
CZ04	+\$1,556	+\$758	+\$5,434	+\$1,519	+\$2,108	+\$8,786	+\$14,664
CZ05	+\$1,571	+\$772	+\$5,433	+\$1,519	+\$2,108	+\$8,307	+\$14,047
CZ06	+\$1,003	+\$581	+\$4,889	+\$926	+\$846	+\$6,341	+\$12,036
CZ07	n/a	+\$606	+\$4,028	n/a	+\$846	+\$4,436	+\$9,936
CZ08	+\$581	+\$586	+\$4,466	+\$926	+\$412	+\$5,373	+\$11,016
CZ09	+\$912	+\$574	+\$4,785	+\$1,180	+\$846	+\$5,778	+\$11,454
CZ10	+\$1,648	+\$593	+\$5,522	+\$1,773	+\$949	+\$6,405	+\$12,129
CZ11	+\$3,143	+\$1,222	+\$7,026	+\$3,735	+\$2,108	+\$10,827	+\$17,077
CZ12	+\$1,679	+\$654	+\$5,568	+\$3,735	+\$2,108	+\$11,520	+\$17,586
CZ13	+\$3,060	+\$611	+\$6,954	+\$4,154	+\$2,108	+\$10,532	+\$16,806
CZ14	+\$1,662	+\$799	+\$5,526	+\$4,154	+\$2,108	+\$10,459	+\$16,394
CZ15	+\$2,179	-\$936	+\$6,043	+\$4,612	+\$2,108	+\$5,085	+\$11,382
CZ16	+\$3,542	+\$2,441	+\$7,399	+\$5,731	+\$2,108	+\$16,582	+\$22,838



Table 9: Single Family Package Cost-Effectiveness Results for the Mixed Fuel Case ^{1,2}

CZ	Utility	Efficiency							Efficiency & PV/Battery			
		Non-Preempted			Equipment - Preempted			Target				Target
		Efficiency	On-Bill	TDV	Efficiency	On-Bill	TDV	Efficiency	Total	On-Bill	TDV	Total
		EDR	B/C	B/C	EDR	B/C	B/C	EDR	EDR	B/C	B/C	EDR
		Margin	Ratio	Ratio	Margin	Ratio	Ratio	Margin	Margin	Ratio	Ratio	Margin
01	PG&E	5.3	3.4	2.8	6.9	4.9	4.1	5.0	10.6	0.9	1.6	10.5
02	PG&E	3.3	1.6	1.7	3.3	3.8	3.6	3.0	10.1	0.5	1.6	10.0
03	PG&E	3.0	1.3	1.3	4.1	1.9	2.0	2.5	10.0	0.4	1.4	10.0
04	PG&E	2.5	0.9	1.2	2.7	2.4	2.7	2.5	10.1	0.3	1.5	10.0
05	PG&E	2.7	1.1	1.2	2.6	2.3	2.5	2.5	9.4	0.4	1.3	9.0
05	PG&E/SoCalGas	2.7	0.9	1.2	2.6	2.0	2.5	2.5	9.4	0.3	1.3	9.0
06	SCE/SoCalGas	2.0	0.7	1.2	2.0	1.6	2.0	1.5	9.8	0.8	1.3	9.5
07	SDG&E	0.0	-	-	1.5	1.5	1.4	0.0	9.2	0.1	1.3	9.0
08	SCE/SoCalGas	1.3	0.6	1.4	1.6	1.3	1.8	1.0	8.4	0.9	1.3	8.0
09	SCE/SoCalGas	2.6	0.7	2.0	2.9	1.8	3.7	2.5	8.8	1.0	1.5	8.5
10	SCE/SoCalGas	3.2	0.6	1.3	3.2	2.0	3.8	3.0	9.6	1.0	1.5	9.5
10	SDG&E	3.2	0.8	1.3	3.2	2.6	3.8	3.0	9.6	0.6	1.5	9.5
11	PG&E	4.3	0.8	1.2	5.1	2.5	3.7	4.0	9.2	0.4	1.5	9.0
12	PG&E	3.5	1.2	1.8	3.4	3.3	4.6	3.0	9.6	0.4	1.7	9.5
13	PG&E	4.6	0.8	1.3	5.8	5.3	8.4	4.5	9.7	0.4	1.6	9.5
14	SCE/SoCalGas	5.0	1.6	2.5	5.8	4.0	6.1	4.5	9.0	1.3	1.7	9.0
14	SDG&E	5.0	1.9	2.5	5.8	4.9	6.1	4.5	9.0	1.2	1.7	9.0
15	SCE/SoCalGas	4.8	1.0	1.6	5.0	>1	>1	4.5	7.1	1.1	1.5	7.0
16	PG&E	5.4	1.6	1.5	6.2	2.2	2.2	5.0	10.5	0.9	1.4	10.5

¹">1" indicates cases where there are both first cost savings and annual utility bill savings.

²Information about the measures included for each climate zone are described in Appendix D – Single Family Measure Summary.



Table 10: Single Family Package Cost-Effectiveness Results for the All-Electric Case^{1,2}

CZ	Utility	Efficiency							Efficiency & PV				Efficiency & PV/Battery			
		Non-Preempted			Equipment - Preempted			Target				Target				Target
		Efficiency EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio	Efficiency EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio	Efficiency EDR Margin	Total EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR Margin	Total EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR Margin
01	PG&E	15.2	1.8	1.7	6.9	2.9	2.7	6.5	31.4	1.8	1.5	31.0	41.2	1.4	1.4	41.0
02	PG&E	4.9	1.2	1.1	5.1	2.3	2.1	4.5	19.4	1.8	1.4	19.0	30.1	1.4	1.4	30.0
03	PG&E	4.7	2.6	2.4	4.4	1.8	1.6	4.0	18.5	2.2	1.7	18.0	29.3	1.5	1.6	29.0
04	PG&E	3.4	1.9	1.8	3.9	1.5	1.5	3.0	17.2	2.1	1.6	17.0	28.6	1.5	1.6	28.5
05	PG&E	4.4	2.6	2.3	4.4	1.9	1.7	4.0	18.2	2.3	1.8	18.0	28.7	1.6	1.6	28.5
05	PG&E/SoCalGas	4.4	2.6	2.3	4.4	1.9	1.7	4.0	18.2	2.3	1.8	18.0	28.7	1.6	1.6	28.5
06	SCE/SoCalGas	2.0	1.3	1.4	2.9	2.2	2.3	2.0	14.3	1.2	1.5	14.0	26.1	1.2	1.4	26.0
07	SDG&E	0.0	-	-	2.2	1.6	1.7	0.0	11.3	1.9	1.5	11.0	24.2	1.3	1.5	24.0
08	SCE/SoCalGas	1.6	0.6	1.2	1.8	2.8	3.0	1.5	10.9	1.0	1.5	10.5	21.6	1.1	1.4	21.5
09	SCE/SoCalGas	2.8	0.8	2.0	3.3	2.1	3.2	2.5	11.5	1.1	1.6	11.5	21.3	1.1	1.5	21.0
10	SCE/SoCalGas	3.1	0.9	1.5	3.4	2.3	3.2	3.0	11.1	1.1	1.5	11.0	21.2	1.1	1.5	21.0
10	SDG&E	3.1	1.1	1.5	3.4	2.6	3.2	3.0	11.1	1.7	1.5	11.0	21.2	1.4	1.5	21.0
11	PG&E	4.6	1.2	1.5	5.9	3.0	3.3	4.5	14.2	1.8	1.6	14.0	23.2	1.5	1.6	23.0
12	PG&E	3.8	0.8	1.1	5.1	2.0	2.5	3.5	15.7	1.7	1.4	15.5	25.4	1.3	1.5	25.0
13	PG&E	5.1	1.1	1.4	6.0	2.9	3.3	5.0	13.4	1.7	1.5	13.0	22.5	1.4	1.5	22.0
14	SCE/SoCalGas	5.6	1.0	1.5	6.0	2.3	3.1	5.5	15.5	1.2	1.6	15.5	23.9	1.4	1.6	23.5
14	SDG&E	5.6	1.3	1.5	6.0	2.9	3.1	5.5	15.5	1.8	1.6	15.5	23.9	1.7	1.6	23.5
15	SCE/SoCalGas	5.6	1.1	1.6	7.3	3.3	4.5	5.5	6.2	1.1	1.6	6.0	13.5	1.2	1.5	13.0
16	PG&E	9.7	1.7	1.7	4.9	2.4	2.3	4.5	27.0	2.1	1.6	26.5	35.4	1.7	1.5	35.0

¹">1" indicates cases where there are both first cost savings and annual utility bill savings.

²Information about the measures included for each climate zone are described in Appendix D – Single Family Measure Summary



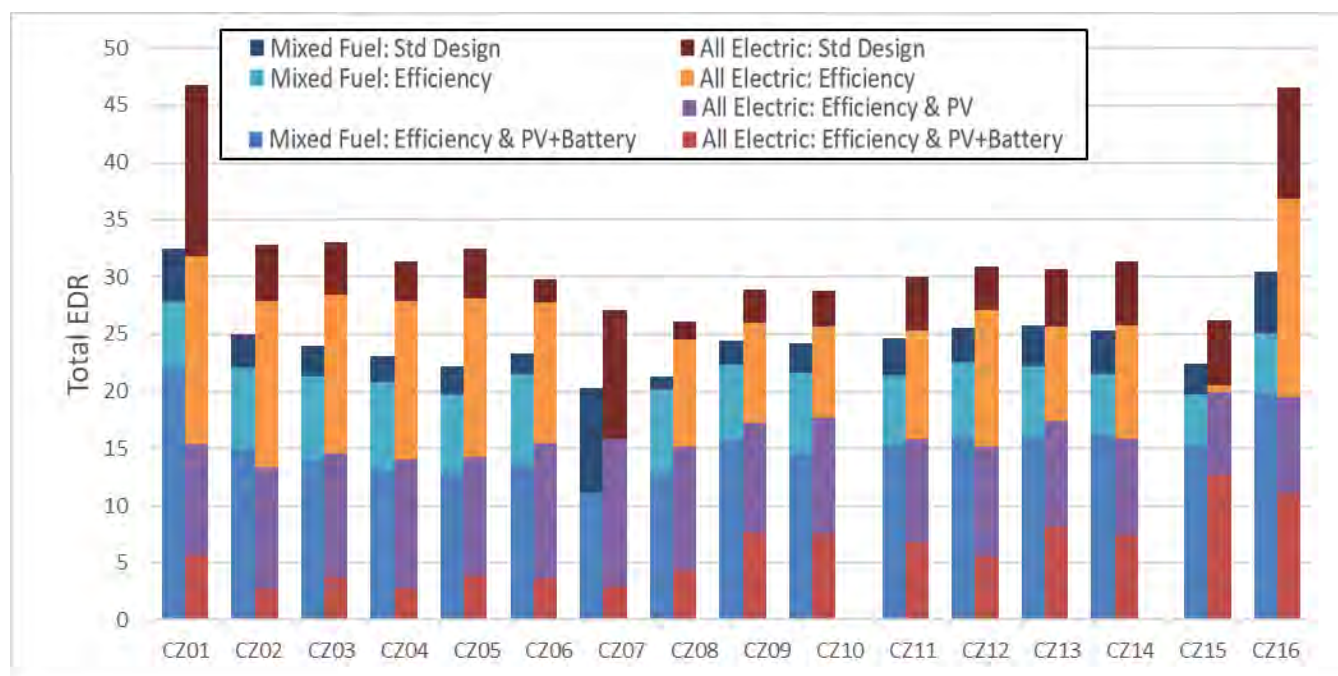


Figure 3: Single family Total EDR comparison

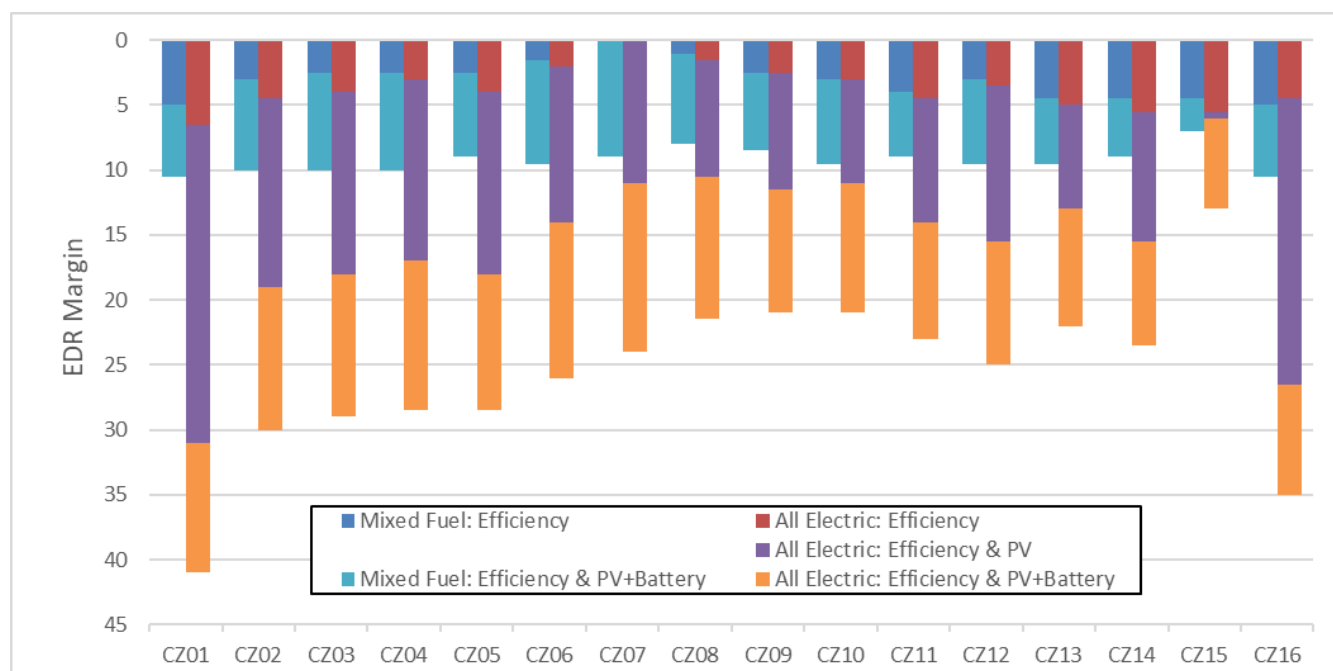


Figure 4: Single family EDR Margin comparison (based on Efficiency EDR Margin for the Efficiency packages and the Total EDR Margin for the Efficiency & PV and Efficiency & PV/Battery packages)

3.2.1 GHG Emission Reductions

Figure 5 compares annual GHG emissions for both mixed fuel and all-electric single family 2019 code compliant cases with Efficiency, Efficiency & PV and Efficiency & PV/Battery packages. GHG emissions vary by climate but are consistently higher in mixed fuel cases than all-electric. Standard Design mixed fuel emissions range from 1.3 (CZ 7) to 3.3 (CZ 16) lbs CO₂e/square foot of floor area, where all-electric Standard Design emissions range from 0.7 to 1.7 lbs CO₂e/ ft². Adding efficiency, PV and batteries to the mixed fuel code compliant prototype reduces GHG emissions by 20% on average to between 1.0 and 1.8 lbs CO₂e/ft², with the exception of Climate Zones 1 and 16. Adding efficiency, PV and batteries to the all-electric code compliant prototype reduces annual GHG emissions by 65% on average to 0.8 lbs CO₂e/ft² or less. None of the cases completely eliminate GHG emissions. Because of the time value of emissions calculation for electricity in CBECC-Res, there is always some amount of GHG impacts with using electricity from the grid.

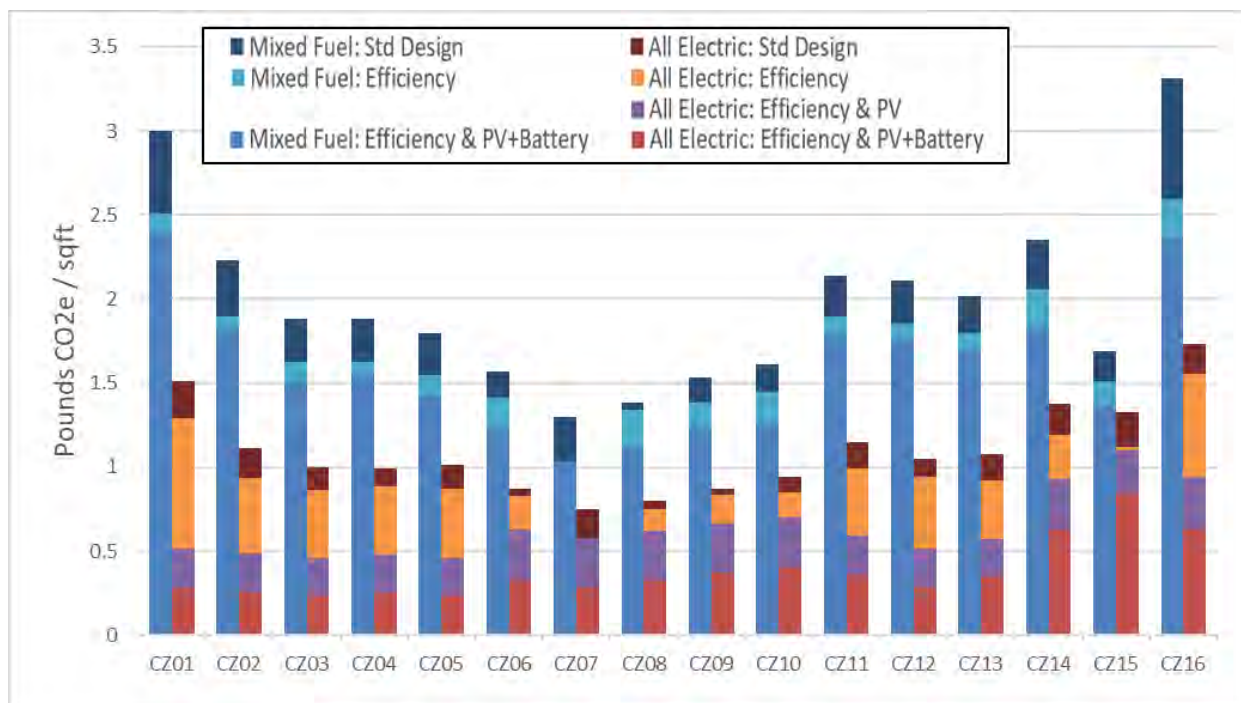


Figure 5: Single family greenhouse gas emissions comparison

3.3 Multifamily Results

Table 11 through Table 13 contain cost effectiveness findings for the multifamily packages. Table 11 summarizes the package costs for all the mixed fuel and all-electric efficiency, PV and battery packages.

Table 12 and Table 13 present the B/C ratios for all the packages according to both the On-Bill and TDV methodologies for the mixed fuel and the all-electric cases, respectively. All the packages are cost-effective based on TDV except Climate Zone 3 for the all-electric cases where no cost-effective combination of non-preempted efficiency measures was found that met the minimum 0.5 EDR Margin threshold. Cases where the B/C ratio is indicated as ">1" refer to instances where there are incremental cost savings in addition to annual utility bill savings. In these cases, there is no cost associated with this upgrade and benefits are realized immediately.

It is generally more challenging to achieve equivalent savings targets cost-effectively for the multifamily cases than for the single family cases. With less exterior surface area per floor area the impact of envelope measures



is diminished in multifamily buildings. Ducts are already assumed to be within conditioned space and therefore only one of the duct measures found to be cost-effective in single family homes can be applied.

Figure 6 presents a comparison of Total EDRs for the multifamily cases and Figure 7 presents the EDR Margin results. Each graph compares the mixed fuel and all-electric cases as well as the various packages. Cost-effective efficiency packages were found for all **mixed fuel cases**. The Target EDR Margins for the **mixed fuel Efficiency Package** are 0.5 for Climate Zones 3, 5 and 7, between 1.0 and 2.5 for Climate Zones 1, 2, 4, 6, 8 through 12 and 16, and between 3.0 and 4.0 in Climate Zones 13 through 15. For the **all-electric case, no cost-effective non-preempted efficiency packages** were found in Climate Zone 3. The Target EDR Margins are between 0.5 and 2.5 for Climate Zones 2, 4 through 10 and 12, and between 3.0 and 4.0 in Climate Zones 1, 11, and 13 through 16.

For the **mixed fuel case, the Efficiency & PV/Battery Package** results in an EDR Margin of between 8.5 and 11.5 across all climate zones. Most of these packages were not found to be cost-effective based on utility bill savings alone, but they all are cost-effective based on TDV energy savings. For the **all-electric case, the Efficiency & PV Package** resulted in EDR Margins of 10.5 to 17.5 for most climates; adding a battery system increased the EDR Margin by an additional 10 to 15 points. Climate zones 1 and 16, which have high heating loads, have much higher EDR Margins for the **Efficiency & PV package** (19.5-22.5). The Standard Design PV, which is what is applied in the **Efficiency Package**, is not sized to offset any of the heating load. When the PV system is sized to offset 90% of the total electricity use, the increase is substantial as a result. In Climate Zone 15 the Standard Design PV system is already sized to cover the cooling electricity load, which represents 30% of whole building electricity use. Therefore, increasing the PV size to offset 90% of the electric load in this climate only results in adding approximately 240 Watts of PV capacity per apartment and subsequently a much smaller impact on the EDR than in other climate zones. Because of the limitations on oversizing PV systems to offset natural gas use it is not feasible to achieve comparable EDR Margins for the mixed fuel case as in the all-electric case.

Additional results details can be found in Appendix E – Multifamily Detailed Results with summaries of measures included in each of the packages in Appendix F – Multifamily Measure Summary. A summary of results by climate zone is presented in Appendix G – Results by Climate Zone.



Table 11: Multifamily Package Incremental Costs per Dwelling Unit

Climate Zone	Mixed Fuel			All-Electric			
	Non-Preempted	Equipment - Preempted	Efficiency & PV/Battery	Non-Preempted	Equipment - Preempted	Efficiency & PV	Efficiency & PV/Battery
CZ01	+\$960	+\$507	+\$3,094	+\$949	+\$795	+\$5,538	+\$8,919
CZ02	+\$309	+\$497	+\$2,413	+\$361	+\$795	+\$3,711	+\$6,833
CZ03	+\$175	+\$403	+\$2,279	n/a	+\$795	+\$3,272	+\$6,344
CZ04	+\$329	+\$351	+\$2,429	+\$361	+\$795	+\$3,158	+\$6,201
CZ05	+\$180	+\$358	+\$2,273	+\$247	+\$795	+\$3,293	+\$6,314
CZ06	+\$190	+\$213	+\$2,294	+\$231	+\$361	+\$2,580	+\$5,590
CZ07	+\$90	+\$366	+\$2,188	+\$202	+\$361	+\$2,261	+\$5,203
CZ08	+\$250	+\$213	+\$2,353	+\$231	+\$361	+\$2,240	+\$5,249
CZ09	+\$136	+\$274	+\$2,234	+\$231	+\$361	+\$2,232	+\$5,236
CZ10	+\$278	+\$250	+\$2,376	+\$361	+\$361	+\$2,371	+\$5,395
CZ11	+\$850	+\$317	+\$2,950	+\$1,011	+\$795	+\$3,601	+\$6,759
CZ12	+\$291	+\$434	+\$2,394	+\$1,011	+\$795	+\$3,835	+\$6,943
CZ13	+\$831	+\$290	+\$2,936	+\$1,011	+\$795	+\$3,462	+\$6,650
CZ14	+\$874	+\$347	+\$2,957	+\$1,011	+\$795	+\$3,356	+\$6,380
CZ15	+\$510	-\$157	+\$2,604	+\$1,011	+\$1,954	+\$1,826	+\$5,020
CZ16	+\$937	+\$453	+\$3,028	+\$843	+\$795	+\$4,423	+\$7,533



Table 12: Multifamily Package Cost-Effectiveness Results for the Mixed Fuel Case^{1,2}

CZ	Utility	Efficiency							Efficiency & PV/Battery			
		Non-Preempted			Equipment - Preempted			Target				Target
		Efficiency	On-Bill	TDV	Efficiency	On-Bill	TDV	Efficiency	Total	On-Bill	TDV	Total
		EDR	B/C	B/C	EDR	B/C	B/C	EDR	EDR	B/C	B/C	EDR
		Margin	Ratio	Ratio	Margin	Ratio	Ratio	Margin	Margin	Ratio	Ratio	Margin
01	PG&E	3.4	1.1	1.2	2.3	1.3	1.4	2.0	11.5	0.4	1.2	11.5
02	PG&E	1.8	1.0	1.7	2.3	1.1	1.5	1.5	10.9	0.2	1.6	10.5
03	PG&E	0.6	1.0	1.1	1.6	1.1	1.2	0.5	10.3	0.1	1.4	10.0
04	PG&E	1.3	0.8	1.2	1.9	1.1	1.7	1.0	11.2	0.2	1.6	11.0
05	PG&E	0.5	1.0	1.0	1.5	1.2	1.3	0.5	9.9	0.2	1.4	9.5
05	PG&E/SoCalGas	0.5	0.8	1.0	1.5	1.1	1.3	0.5	9.9	0.1	1.4	9.5
06	SCE/SoCalGas	1.3	0.6	1.5	1.3	1.4	1.7	1.0	10.7	0.6	1.4	10.5
07	SDG&E	0.9	0.7	2.2	2.0	1.1	1.4	0.5	11.0	0.0	1.4	11.0
08	SCE/SoCalGas	1.5	0.7	1.4	1.1	1.4	1.7	1.0	9.9	0.7	1.3	9.5
09	SCE/SoCalGas	1.8	1.5	3.3	2.8	1.7	2.9	1.5	9.7	0.9	1.5	9.5
10	SCE/SoCalGas	1.7	0.8	1.7	2.9	2.0	3.3	1.5	10.4	1.0	1.6	10.0
10	SDG&E	1.7	1.1	1.7	2.9	2.6	3.3	1.5	10.4	0.2	1.6	10.0
11	PG&E	2.9	0.7	1.2	3.2	1.8	3.3	2.5	10.5	0.4	1.6	10.5
12	PG&E	1.9	1.1	2.2	2.8	1.2	2.2	1.5	10.3	0.3	1.7	10.0
13	PG&E	3.1	0.6	1.3	3.4	2.0	3.8	3.0	10.7	0.4	1.6	10.5
14	SCE/SoCalGas	3.1	0.7	1.2	3.3	2.0	3.0	3.0	9.6	1.1	1.4	9.5
14	SDG&E	3.1	0.9	1.2	3.3	2.5	3.0	3.0	9.6	0.5	1.4	9.5
15	SCE/SoCalGas	4.2	1.4	2.3	4.4	>1	>1	4.0	8.8	1.3	1.7	8.5
16	PG&E	2.4	1.1	1.2	2.9	1.8	2.1	2.0	9.9	0.5	1.3	9.5

¹">1" indicates cases where there are both first cost savings and annual utility bill savings.

²Information about the measures included for each climate zone are described in Appendix F – Multifamily Measure Summary.



Table 13: Multifamily Package Cost-effectiveness Results for the All-Electric Case^{1,2}

CZ	Utility	Efficiency							Efficiency & PV				Efficiency & PV/Battery			
		Non-Preempted			Equipment - Preempted			Target Efficiency EDR Margin				Target Total EDR Margin				Target Total EDR Margin
		Efficiency EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio	Efficiency EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio		Total EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio		Total EDR Margin	On-Bill B/C Ratio	TDV B/C Ratio	
01	PG&E	3.6	1.6	1.4	3.3	2.4	2.3	3.0	22.5	2.0	1.5	22.5	34.5	1.3	1.4	34.5
02	PG&E	1.9	1.7	2.1	3.2	1.6	1.6	1.5	17.5	2.4	1.8	17.5	30.9	1.4	1.7	30.5
03	PG&E	0.0	-	-	2.7	1.7	1.6	0.0	16.1	2.4	1.7	16.0	29.5	1.3	1.6	29.5
04	PG&E	1.4	1.4	1.5	2.2	1.2	1.1	1.0	15.0	2.4	1.8	15.0	28.9	1.3	1.8	28.5
05	PG&E	0.6	1.1	0.9	3.6	2.1	2.0	0.5	17.1	2.5	1.8	17.0	30.3	1.4	1.7	30.0
05	PG&E/SoCalGas	0.6	1.1	0.9	3.6	2.1	2.0	0.5	17.1	2.5	1.8	17.0	30.3	1.4	1.7	30.0
06	SCE/SoCalGas	1.0	0.7	1.3	2.2	1.6	1.9	1.0	13.8	1.2	1.7	13.5	27.5	1.2	1.6	27.5
07	SDG&E	0.6	0.6	1.0	1.9	1.6	1.7	0.5	12.8	2.1	1.8	12.5	27.1	1.2	1.6	27.0
08	SCE/SoCalGas	1.2	0.9	1.7	1.9	1.6	1.8	1.0	11.6	1.3	1.8	11.5	24.2	1.2	1.6	24.0
09	SCE/SoCalGas	1.6	1.3	2.7	1.5	1.6	1.6	1.5	11.3	1.3	1.9	11.0	23.3	1.3	1.7	23.0
10	SCE/SoCalGas	1.8	1.2	2.0	1.8	1.7	2.0	1.5	10.8	1.3	1.8	10.5	23.3	1.3	1.7	23.0
10	SDG&E	1.8	1.5	2.0	1.8	2.0	2.0	1.5	10.8	2.1	1.8	10.5	23.3	1.4	1.7	23.0
11	PG&E	3.5	1.4	1.6	3.9	2.0	2.3	3.5	13.4	2.2	1.8	13.0	25.3	1.4	1.8	25.0
12	PG&E	2.6	0.9	1.1	2.9	1.6	1.6	2.5	14.4	2.1	1.6	14.0	26.6	1.3	1.7	26.5
13	PG&E	3.3	1.3	1.6	3.8	2.0	2.3	3.0	12.2	2.1	1.7	12.0	23.9	1.4	1.7	23.5
14	SCE/SoCalGas	3.7	1.2	1.6	3.8	1.6	2.2	3.5	14.0	1.4	1.9	14.0	24.8	1.4	1.8	24.5
14	SDG&E	3.7	1.5	1.6	3.8	2.0	2.2	3.5	14.0	2.2	1.9	14.0	24.8	1.7	1.8	24.5
15	SCE/SoCalGas	4.4	1.5	2.3	6.4	1.2	1.7	4.0	7.1	1.4	2.1	7.0	16.9	1.3	1.8	16.5
16	PG&E	4.1	2.1	2.1	3.2	1.6	1.7	3.0	19.6	2.6	1.9	19.5	29.9	1.6	1.7	29.5

¹">1" indicates cases where there are both first cost savings and annual utility bill savings.

²Information about the measures included for each climate zone are described in Appendix F – Multifamily Measure Summary.



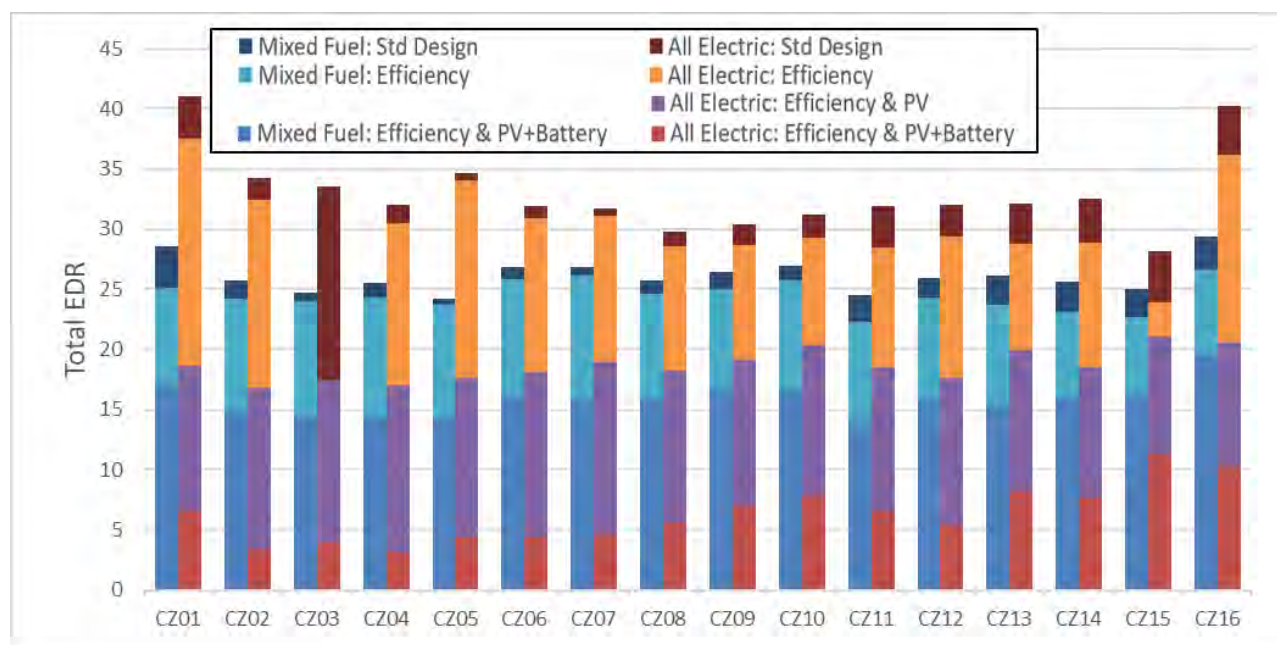


Figure 6: Multifamily Total EDR comparison

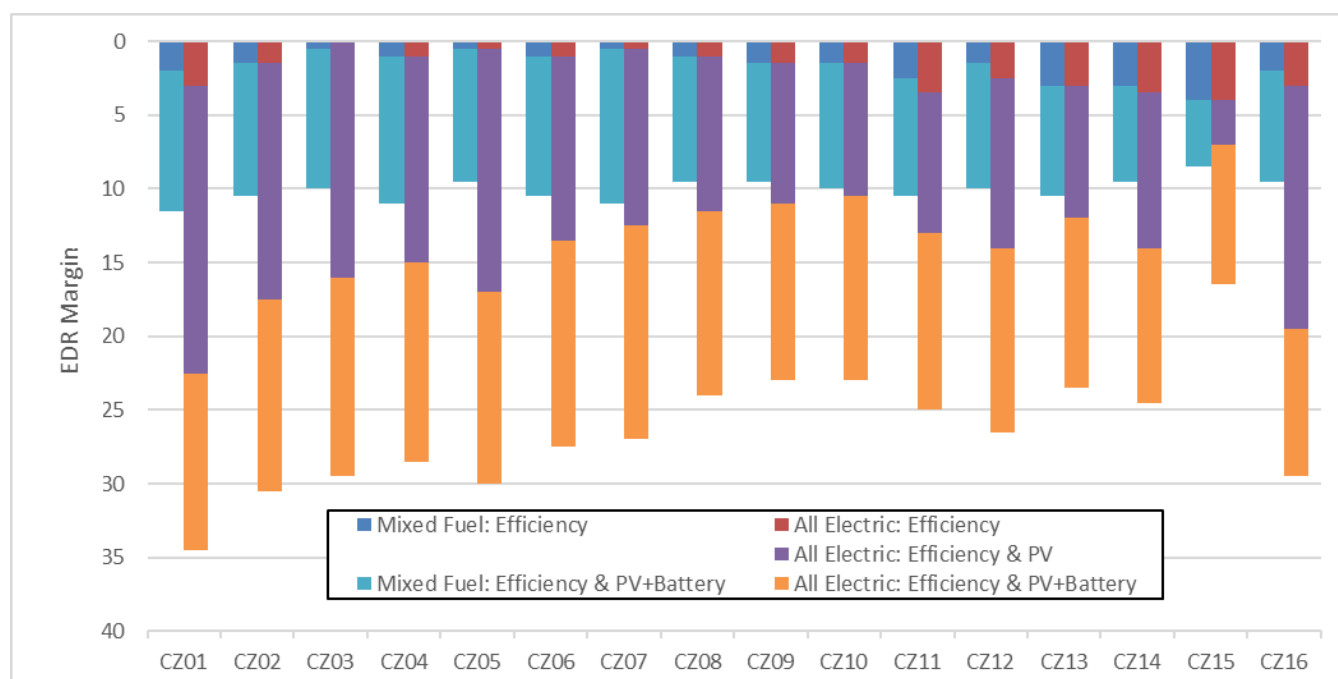


Figure 7: Multifamily EDR Margin comparison (based on Efficiency EDR Margin for the Efficiency packages and the Total EDR Margin for the Efficiency & PV and Efficiency & PV/Battery packages)

3.3.1 GHG Emission Reductions

Figure 8 compares annual GHG emissions for both mixed fuel and all-electric multifamily 2019 code compliant cases with Efficiency, Efficiency & PV and Efficiency & PV/Battery packages. GHG emissions vary by climate but are consistently higher in mixed fuel cases than all-electric. Standard design mixed fuel emissions range from 2.0 to 3.0 lbs CO₂e/square foot of floor area, where all-electric standard design emissions range from 1.2 to 1.7 lbs CO₂e/ ft². Adding PV, batteries and efficiency to the mixed fuel code compliant prototype reduces annual GHG emissions by 17% on average to between 1.7 and 2.2 lbs CO₂e/ft², except Climate Zone 16. Adding PV, batteries and efficiency to the all-electric code compliant prototype reduces annual GHG emissions by 64% on average to 0.6 lbs CO₂e/ft² or less with the exception of Climate Zones 14, 15 and 16. As in the single family case, none of the cases completely eliminate GHG emissions because of the time value of emissions calculation for electricity in CBECC-Res.

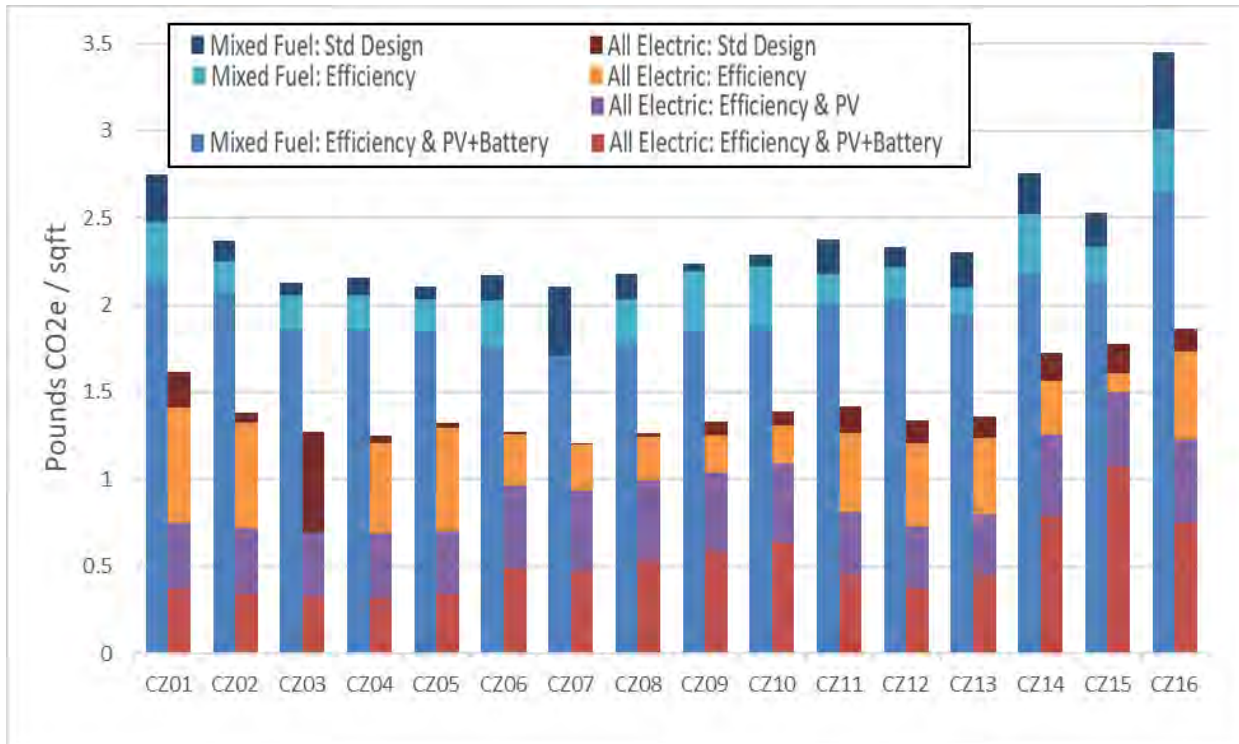


Figure 8: Multifamily greenhouse gas emissions comparison

3.4 Electrification Results

Cost-effectiveness results comparing mixed fuel and all-electric cases are summarized below. The tables show average annual utility bill impacts and lifetime utility bill impacts, which account for fuel escalation for electricity and natural gas (see Section 2.5), lifetime equipment cost savings, and both On-Bill and TDV cost-effectiveness (B/C ratio). Positive utility bill values indicate lower utility costs for the all-electric home relative to the mixed fuel case while negative values in red and parenthesis indicate higher utility costs for the all-electric case. Lifetime equipment cost savings include savings due to eliminating natural gas infrastructure and replacement costs for appliances based on equipment life. Positive values for the lifetime equipment cost savings indicate lower installed costs for the all-electric and negative values indicate higher costs. B/C ratios 1.0 or greater indicate positive cost-effectiveness. Cases where the B/C ratio is indicated as ">1" refer to instances where there was incremental cost savings in addition to annual utility bill savings. In these cases, there is no cost associated with this upgrade and benefits are realized immediately.



Three scenarios were evaluated:

1. **2019 Code Compliant:** Compares a 2019 code compliant all-electric home with a 2019 code compliant mixed fuel home.
2. **Efficiency & PV Package:** Compares an all-electric home with efficiency and PV sized to 90% of the annual electricity use to a 2019 code compliant mixed fuel home. The first cost savings in the code compliant all-electric house is invested in above code efficiency and PV reflective of the Efficiency & PV packages described above.
3. **Neutral Cost Package:** Compares an all-electric home with PV beyond code minimum with a 2019 code compliant mixed fuel home. The PV system for the all-electric case is sized to result in a zero lifetime incremental cost relative to a mixed fuel home.

3.4.1 Single Family

Table 14, Table 15, Figure 9, Figure 10, and Figure 11 present results of cost-effectiveness analysis for electrification of single family buildings, according to both the On-Bill and TDV methodologies. Based on typical cost assumptions arrived at for this analysis, the lifetime equipment costs for the single family code compliant all-electric option are approximately \$5,350 less than the mixed fuel code compliant option. Cost savings are entirely due to the elimination of gas infrastructure, which was assumed to be a savings of \$5,750. When evaluating cost-effectiveness based on TDV, the Utility Gas Main Extensions rules 50% refund and appliance allowance deduction are not applied and therefore the cost savings are twice as much.

Under the Efficiency & PV Package and the On-Bill analysis, the incremental cost of the efficiency and PV is typically more than the cost savings seen in the code compliant case, which results in a net cost increase in most climate zones for the all-electric case. In climates with small heating loads (7 and 15) there continues to be an incremental cost savings for the all-electric home. With the TDV analysis, there is still an incremental cost savings in all climates except 1 and 16 for single family.

Utility impacts differ by climate zone and utility, but utility costs for the code compliant all-electric option are typically higher than for the compliant mixed fuel design. There are utility cost savings across all climate zones and building types for the all-electric Efficiency & PV Package, resulting in a more cost-effective option.

The all-electric code compliant option is cost-effective based on the On-Bill approach for single family homes in Climate Zones 6 through 9, 10 (SCE/SoCalGas territory only), and 15. The code compliant option is cost-effective based on the TDV methodology in all climate zones except 1 and 16. If the same costs used for the On-Bill approach are also used for the TDV approach (incorporating the Utility Gas Main Extensions rules 50% refund and appliance allowance deduction), the all-electric code compliant option is cost-effective in Climate Zones 6 through 10. The Efficiency & PV all-electric option is cost-effective in all climate zones based on both the On-Bill and TDV methodologies. In many cases it is cost-effective immediately with lower equipment and utility costs.

The last set of results in Table 14 shows the neutral cost case where the cost savings for the all-electric code compliant home is invested in a larger PV system, resulting in a lifetime incremental cost of zero based on the On-Bill approach. This package results in utility cost savings in all cases except Climate Zones 1, 14 (SCE/SoCalGas territory only), and 16. For these three cases the Reach Code Team evaluated how much additional PV would be required to result in a cost-effective package. These results are presented in Table 15 and show that an additional 1.6kW in Climate Zone 1 results in a B/C ratio of 1.1. For Climate Zone 14 and 16 adding 0.25kW and 1.2kW, respectively, results in a B/C ratio of 1.2. Neutral cost cases are cost-effective based on the TDV methodology in all climate zones except 16.

3.4.2 Multifamily

Multifamily results are found in Table 16, Table 17, Figure 12, Figure 13, and Figure 14. Lifetime costs for the multifamily code compliant all-electric option are approximately \$2,300 less than the mixed fuel code compliant option, entirely due to the elimination of gas infrastructure. When evaluating cost-effectiveness based on TDV,



the Utility Gas Main Extensions rules 50% refund and appliance allowance deduction are not applied and therefore the cost savings are approximately 2.5 times higher.

With the Efficiency & PV Package and the On-Bill analysis, due to the added cost of the efficiency and PV there is a net cost increase for the all-electric case in all climate zones for except 7, 8, 9, and 15. With the TDV analysis, there is still an incremental cost savings in all climates. Like the single family results, utility costs are typically higher for the code compliant all-electric option but lower than the code compliant mixed fuel option with the Efficiency & PV Package.

The all-electric code compliant option is cost-effective based on the On-Bill approach for multifamily in Climate Zones 6 through 9, 10 and 14 (SCE/SoCalGas territory only), and 15. Based on the TDV methodology, the code compliant option for multifamily is cost-effective for all climate zones. If the same costs used for the On-Bill approach are also used for the TDV approach (incorporating the Utility Gas Main Extensions rules 50% refund and appliance allowance deduction), the all-electric code compliant option is cost-effective in Climate Zones 8 and 9. Like the single family cases, the Efficiency & PV all-electric option is cost-effective in all climate zones based on both the On-Bill and TDV methodologies.

The last set of results in Table 16 show the neutral cost case where the cost savings for the all-electric code compliant home is invested in a larger PV system, resulting in a lifetime incremental cost of zero based on the On-Bill approach. This package results in utility cost savings in all cases except Climate Zone 1. For this case the Reach Code Team evaluated how much additional PV would be required to result in a cost-effective package. These results are presented in Table 17 and show that an additional 0.3kW per apartment results in a B/C ratio of 1.1. Neutral cost cases are cost-effective based on the TDV methodology in all climate zones except 16.

Table 14: Single Family Electrification Results

		On-Bill Cost-effectiveness ¹						TDV Cost-effectiveness		
		Average Annual Utility Bill Savings			Lifetime NPV			Lifetime NPV		
			Natural Gas	Net Utility Savings	Utility Bill Savings	Equipment Cost Savings	On-Bill B/C Ratio ²	TDV Cost Savings	Equipment Cost Savings	TDV B/C Ratio
CZ	Utility	Electricity	Gas	Savings	Savings	Savings	Ratio ²	Savings	Savings	Ratio
	2019 Code Compliant Home									
01	PG&E	-\$(\$1,194)	+\$712	-\$(\$482)	-\$(\$14,464)	+\$5,349	0.4	-\$(\$13,081)	+\$11,872	0.9
02	PG&E	-\$(\$825)	+\$486	-\$(\$340)	-\$(\$10,194)	+\$5,349	0.5	-\$(\$7,456)	+\$11,872	1.6
03	PG&E	-\$(\$717)	+\$391	-\$(\$326)	-\$(\$9,779)	+\$5,349	0.5	-\$(\$7,766)	+\$11,872	1.5
04	PG&E	-\$(\$710)	+\$387	-\$(\$322)	-\$(\$9,671)	+\$5,349	0.6	-\$(\$7,447)	+\$11,872	1.6
05	PG&E	-\$(\$738)	+\$367	-\$(\$371)	-\$(\$11,128)	+\$5,349	0.5	-\$(\$8,969)	+\$11,872	1.3
05	PG&E/SoCalGas	-\$(\$738)	+\$370	-\$(\$368)	-\$(\$11,034)	+\$5,349	0.5	-\$(\$8,969)	+\$11,872	1.3
06	SCE/SoCalGas	-\$(\$439)	+\$289	-\$(\$149)	-\$(\$4,476)	+\$5,349	1.2	-\$(\$4,826)	+\$11,872	2.5
07	SDG&E	-\$(\$414)	+\$243	-\$(\$171)	-\$(\$5,134)	+\$5,349	1.0	-\$(\$4,678)	+\$11,872	2.5
08	SCE/SoCalGas	-\$(\$347)	+\$249	-\$(\$97)	-\$(\$2,921)	+\$5,349	1.8	-\$(\$3,971)	+\$11,872	3.0
09	SCE/SoCalGas	-\$(\$377)	+\$271	-\$(\$107)	-\$(\$3,199)	+\$5,349	1.7	-\$(\$4,089)	+\$11,872	2.9
10	SCE/SoCalGas	-\$(\$403)	+\$280	-\$(\$123)	-\$(\$3,684)	+\$5,349	1.5	-\$(\$4,458)	+\$11,872	2.7
10	SDG&E	-\$(\$496)	+\$297	-\$(\$198)	-\$(\$5,950)	+\$5,349	0.9	-\$(\$4,458)	+\$11,872	2.7
11	PG&E	-\$(\$810)	+\$447	-\$(\$364)	-\$(\$10,917)	+\$5,349	0.5	-\$(\$7,024)	+\$11,872	1.7
12	PG&E	-\$(\$740)	+\$456	-\$(\$284)	-\$(\$8,533)	+\$5,349	0.6	-\$(\$6,281)	+\$11,872	1.9
13	PG&E	-\$(\$742)	+\$413	-\$(\$329)	-\$(\$9,870)	+\$5,349	0.5	-\$(\$6,480)	+\$11,872	1.8
14	SCE/SoCalGas	-\$(\$661)	+\$413	-\$(\$248)	-\$(\$7,454)	+\$5,349	0.7	-\$(\$7,126)	+\$11,872	1.7
14	SDG&E	-\$(\$765)	+\$469	-\$(\$296)	-\$(\$8,868)	+\$5,349	0.6	-\$(\$7,126)	+\$11,872	1.7
15	SCE/SoCalGas	-\$(\$297)	+\$194	-\$(\$103)	-\$(\$3,090)	+\$5,349	1.7	-\$(\$5,364)	+\$11,872	2.2
16	PG&E	-\$(\$1,287)	+\$712	-\$(\$575)	-\$(\$17,250)	+\$5,349	0.3	-\$(\$17,391)	+\$11,872	0.7



		On-Bill Cost-effectiveness ¹						TDV Cost-effectiveness		
		Average Annual Utility Bill Savings			Lifetime NPV			Lifetime NPV		
			Natural Gas	Net Utility Savings	Utility Bill Savings	Equipment Cost Savings	On-Bill B/C Ratio ²	TDV Cost Savings	Equipment Cost Savings	TDV B/C Ratio
CZ	Utility	Electricity	Gas	Savings	Savings	Savings		Savings	Savings	Ratio
	Efficiency & PV Package									
01	PG&E	-\$(\$99)	+\$712	+\$613	+\$18,398	-\$(\$12,844)	1.4	+\$13,364	-\$(\$6,321)	2.1
02	PG&E	-\$(\$89)	+\$486	+\$397	+\$11,910	-\$(\$6,758)	1.8	+\$9,307	-\$(\$234)	39.7
03	PG&E	-\$(\$87)	+\$391	+\$304	+\$9,119	-\$(\$3,169)	2.9	+\$6,516	+\$3,355	>1
04	PG&E	-\$(\$85)	+\$387	+\$302	+\$9,074	-\$(\$3,438)	2.6	+\$6,804	+\$3,086	>1
05	PG&E	-\$(\$98)	+\$367	+\$268	+\$8,054	-\$(\$2,959)	2.7	+\$5,625	+\$3,564	>1
05	PG&E/SoCalGas	-\$(\$98)	+\$370	+\$272	+\$8,148	-\$(\$2,959)	2.8	+\$5,625	+\$3,564	>1
06	SCE/SoCalGas	-\$(\$188)	+\$289	+\$102	+\$3,049	-\$(\$992)	3.1	+\$4,585	+\$5,531	>1
07	SDG&E	-\$(\$137)	+\$243	+\$106	+\$3,174	+\$912	>1	+\$2,176	+\$7,436	>1
08	SCE/SoCalGas	-\$(\$160)	+\$249	+\$89	+\$2,664	-\$(\$25)	107.9	+\$3,965	+\$6,499	>1
09	SCE/SoCalGas	-\$(\$169)	+\$271	+\$102	+\$3,067	-\$(\$429)	7.1	+\$5,368	+\$6,094	>1
10	SCE/SoCalGas	-\$(\$173)	+\$280	+\$107	+\$3,216	-\$(\$1,057)	3.0	+\$5,165	+\$5,466	>1
10	SDG&E	-\$(\$137)	+\$297	+\$160	+\$4,805	-\$(\$1,057)	4.5	+\$5,165	+\$5,466	>1
11	PG&E	-\$(\$147)	+\$447	+\$300	+\$8,988	-\$(\$5,478)	1.6	+\$9,776	+\$1,045	>1
12	PG&E	-\$(\$92)	+\$456	+\$364	+\$10,918	-\$(\$6,172)	1.8	+\$9,913	+\$352	>1
13	PG&E	-\$(\$144)	+\$413	+\$269	+\$8,077	-\$(\$5,184)	1.6	+\$8,960	+\$1,339	>1
14	SCE/SoCalGas	-\$(\$241)	+\$413	+\$172	+\$5,164	-\$(\$5,111)	1.0	+\$9,850	+\$1,412	>1
14	SDG&E	-\$(\$139)	+\$469	+\$330	+\$9,910	-\$(\$5,111)	1.9	+\$9,850	+\$1,412	>1
15	SCE/SoCalGas	-\$(\$107)	+\$194	+\$87	+\$2,603	+\$264	>1	+\$2,598	+\$6,787	>1
16	PG&E	-\$(\$130)	+\$712	+\$582	+\$17,457	-\$(\$11,234)	1.6	+\$9,536	-\$(\$4,710)	2.0
	Neutral Cost Package									
01	PG&E	-\$(\$869)	+\$712	-\$(\$157)	-\$(\$4,704)	+\$0	0	-\$(\$6,033)	+\$6,549	1.1
02	PG&E	-\$(\$445)	+\$486	+\$40	+\$1,213	+\$0	>1	+\$868	+\$6,505	>1
03	PG&E	-\$(\$335)	+\$391	+\$56	+\$1,671	+\$0	>1	+\$483	+\$6,520	>1
04	PG&E	-\$(\$321)	+\$387	+\$66	+\$1,984	+\$0	>1	+\$1,062	+\$6,521	>1
05	PG&E	-\$(\$335)	+\$367	+\$31	+\$938	+\$0	>1	-\$(\$163)	+\$6,519	40.1
05	PG&E/SoCalGas	-\$(\$335)	+\$370	+\$34	+\$1,031	+\$0	>1	-\$(\$163)	+\$6,519	40.1
06	SCE/SoCalGas	-\$(\$227)	+\$289	+\$63	+\$1,886	+\$0	>1	+\$3,258	+\$6,499	>1
07	SDG&E	-\$(\$72)	+\$243	+\$171	+\$5,132	+\$0	>1	+\$3,741	+\$6,519	>1
08	SCE/SoCalGas	-\$(\$144)	+\$249	+\$105	+\$3,162	+\$0	>1	+\$4,252	+\$6,515	>1
09	SCE/SoCalGas	-\$(\$170)	+\$271	+\$100	+\$3,014	+\$0	>1	+\$4,271	+\$6,513	>1
10	SCE/SoCalGas	-\$(\$199)	+\$280	+\$81	+\$2,440	+\$0	>1	+\$3,629	+\$6,494	>1
10	SDG&E	-\$(\$155)	+\$297	+\$143	+\$4,287	+\$0	>1	+\$3,629	+\$6,494	>1
11	PG&E	-\$(\$426)	+\$447	+\$21	+\$630	+\$0	>1	+\$1,623	+\$6,504	>1
12	PG&E	-\$(\$362)	+\$456	+\$94	+\$2,828	+\$0	>1	+\$2,196	+\$6,525	>1
13	PG&E	-\$(\$370)	+\$413	+\$43	+\$1,280	+\$0	>1	+\$1,677	+\$6,509	>1
14	SCE/SoCalGas	-\$(\$416)	+\$413	-\$(\$4)	-\$(\$107)	+\$0	0	+\$2,198	+\$6,520	>1
14	SDG&E	-\$(\$391)	+\$469	+\$79	+\$2,356	+\$0	>1	+\$2,198	+\$6,520	>1
15	SCE/SoCalGas	-\$(\$98)	+\$194	+\$97	+\$2,900	+\$0	>1	+\$2,456	+\$6,483	>1
16	PG&E	-\$(\$878)	+\$712	-\$(\$166)	-\$(\$4,969)	+\$0	0	-\$(\$8,805)	+\$6,529	0.7

¹Red values in parentheses indicate an increase in utility bill costs or an incremental first cost for the all-electric home.

²>1" indicates cases where there are both first cost savings and annual utility bill savings.



Table 15: Comparison of Single Family On-Bill Cost Effectiveness Results with Additional PV

CZ	Utility	Neutral Cost				Min. Cost Effectiveness			
		PV Capacity (kW)	Utility Bill Savings	Equipment Cost Savings	On-Bill B/C Ratio	PV Capacity (kW)	Utility Bill Savings	Equipment Cost Savings	On-Bill B/C Ratio
01	PG&E	4.7	-\$4,704	+\$0	0	6.3	+\$6,898	-\$6,372	1.1
14	SCE/SoCalGas	4.5	-\$107	+\$0	0	4.8	+\$1,238	-\$1,000	1.2
16	PG&E	4.1	-\$4,969	+\$0	0	5.3	+\$5,883	-\$4,753	1.2

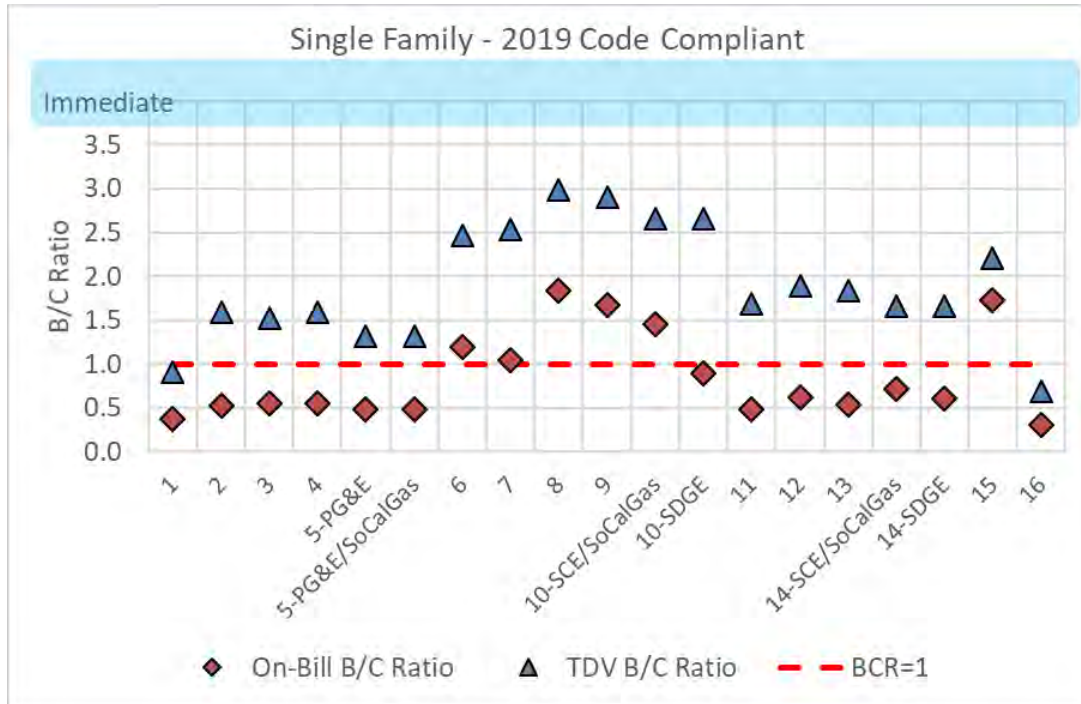


Figure 9: B/C ratio results for a single family all-electric code compliant home versus a mixed fuel code compliant home

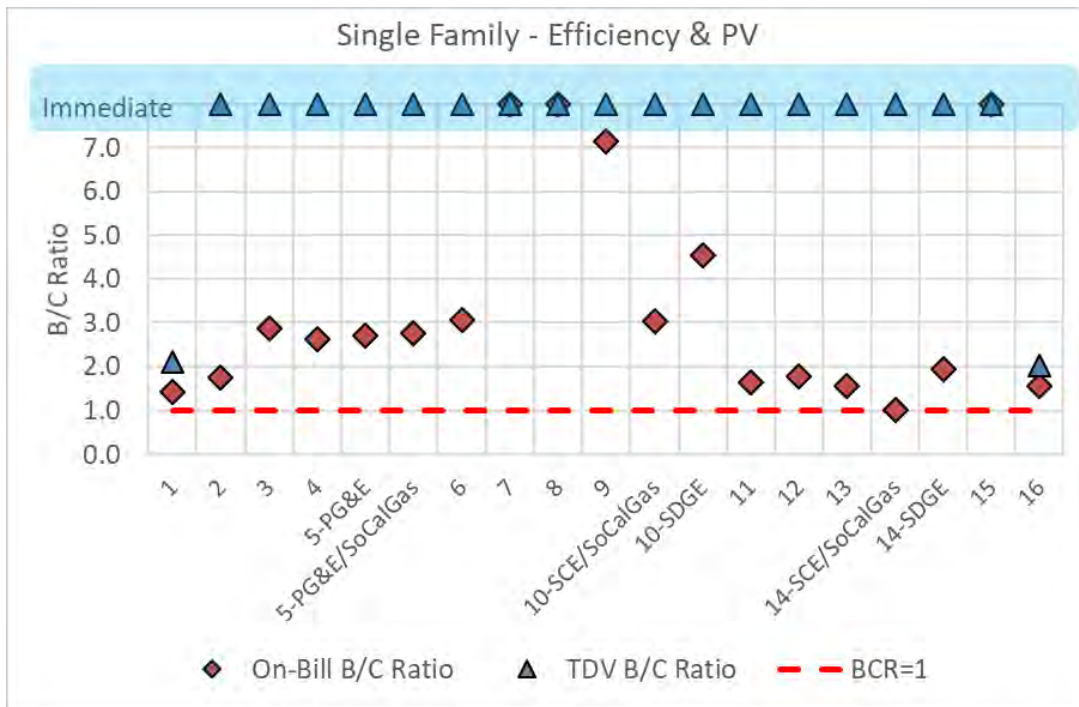


Figure 10: B/C ratio results for the single family Efficiency & PV all-electric home versus a mixed fuel code compliant home

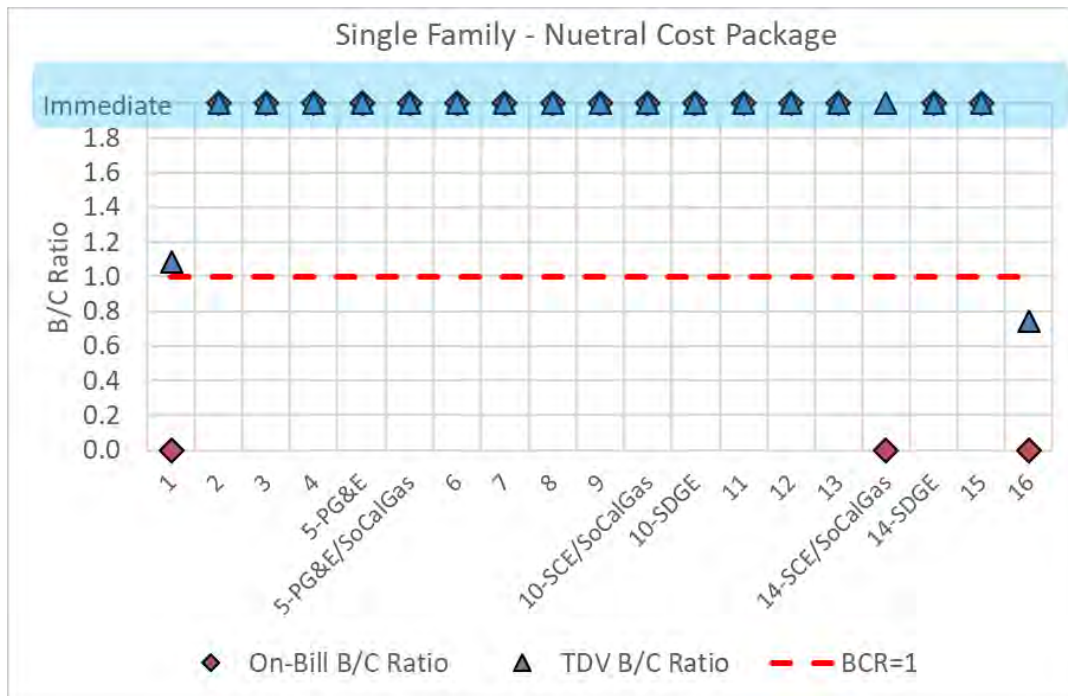


Figure 11: B/C ratio results for the single family neutral cost package all-electric home versus a mixed fuel code compliant home

Table 16: Multifamily Electrification Results (Per Dwelling Unit)

		On-Bill Cost-effectiveness ¹						TDV Cost-effectiveness		
		Average Annual Utility Bill Savings			Lifetime NPV			Lifetime NPV		
				Net		Equipment	On-Bill		Equipment	TDV
CZ	Utility	Electricity	Natural Gas	Utility Savings	Utility Bill Savings	Cost Savings	B/C Ratio ²	TDV Cost Savings	Cost Savings	B/C Ratio
	2019 Code Compliant Home									
01	PG&E	-\$(\$396)	+\$193	-\$(\$203)	-\$(\$6,079)	+\$2,337	0.4	-\$(\$5,838)	+\$5,899	1.0
02	PG&E	-\$(\$310)	+\$162	-\$(\$148)	-\$(\$4,450)	+\$2,337	0.5	-\$(\$4,144)	+\$5,899	1.4
03	PG&E	-\$(\$277)	+\$142	-\$(\$135)	-\$(\$4,041)	+\$2,337	0.6	-\$(\$4,035)	+\$5,899	1.5
04	PG&E	-\$(\$264)	+\$144	-\$(\$120)	-\$(\$3,595)	+\$2,337	0.6	-\$(\$3,329)	+\$5,899	1.8
05	PG&E	-\$(\$297)	+\$140	-\$(\$157)	-\$(\$4,703)	+\$2,337	0.5	-\$(\$4,604)	+\$5,899	1.3
05	PG&E/SoCalGas	-\$(\$297)	+\$178	-\$(\$119)	-\$(\$3,573)	+\$2,337	0.7	-\$(\$4,604)	+\$5,899	1.3
06	SCE/SoCalGas	-\$(\$191)	+\$161	-\$(\$30)	-\$(\$902)	+\$2,337	2.6	-\$(\$2,477)	+\$5,899	2.4
07	SDG&E	-\$(\$206)	+\$136	-\$(\$70)	-\$(\$2,094)	+\$2,337	1.1	-\$(\$2,390)	+\$5,899	2.5
08	SCE/SoCalGas	-\$(\$169)	+\$157	-\$(\$12)	-\$(\$349)	+\$2,337	6.7	-\$(\$2,211)	+\$5,899	2.7
09	SCE/SoCalGas	-\$(\$177)	+\$159	-\$(\$18)	-\$(\$533)	+\$2,337	4.4	-\$(\$2,315)	+\$5,899	2.5
10	SCE/SoCalGas	-\$(\$183)	+\$159	-\$(\$23)	-\$(\$697)	+\$2,337	3.4	-\$(\$2,495)	+\$5,899	2.4
10	SDG&E	-\$(\$245)	+\$139	-\$(\$106)	-\$(\$3,192)	+\$2,337	0.7	-\$(\$2,495)	+\$5,899	2.4
11	PG&E	-\$(\$291)	+\$153	-\$(\$138)	-\$(\$4,149)	+\$2,337	0.6	-\$(\$4,420)	+\$5,899	1.3
12	PG&E	-\$(\$277)	+\$155	-\$(\$122)	-\$(\$3,665)	+\$2,337	0.6	-\$(\$3,557)	+\$5,899	1.7
13	PG&E	-\$(\$270)	+\$146	-\$(\$124)	-\$(\$3,707)	+\$2,337	0.6	-\$(\$3,821)	+\$5,899	1.5
14	SCE/SoCalGas	-\$(\$255)	+\$187	-\$(\$69)	-\$(\$2,062)	+\$2,337	1.1	-\$(\$3,976)	+\$5,899	1.5
14	SDG&E	-\$(\$328)	+\$175	-\$(\$154)	-\$(\$4,607)	+\$2,337	0.5	-\$(\$3,976)	+\$5,899	1.5
15	SCE/SoCalGas	-\$(\$154)	+\$142	-\$(\$12)	-\$(\$367)	+\$2,337	6.4	-\$(\$2,509)	+\$5,899	2.4
16	PG&E	-\$(\$404)	+\$224	-\$(\$180)	-\$(\$5,411)	+\$2,337	0.4	-\$(\$5,719)	+\$5,899	1.0
	Efficiency & PV Package									
01	PG&E	-\$(\$19)	+\$193	+\$174	+\$5,230	-\$(\$3,202)	1.6	+\$2,467	+\$361	>1
02	PG&E	-\$(\$10)	+\$162	+\$152	+\$4,549	-\$(\$1,375)	3.3	+\$2,605	+\$2,187	>1
03	PG&E	-\$(\$12)	+\$142	+\$130	+\$3,910	-\$(\$936)	4.2	+\$1,632	+\$2,626	>1
04	PG&E	-\$(\$8)	+\$144	+\$136	+\$4,080	-\$(\$822)	5.0	+\$2,381	+\$2,740	>1
05	PG&E	-\$(\$19)	+\$140	+\$121	+\$3,635	-\$(\$956)	3.8	+\$1,403	+\$2,606	>1
05	PG&E/SoCalGas	-\$(\$19)	+\$178	+\$159	+\$4,765	-\$(\$956)	5.0	+\$1,403	+\$2,606	>1
06	SCE/SoCalGas	-\$(\$84)	+\$161	+\$77	+\$2,309	-\$(\$243)	9.5	+\$1,940	+\$3,319	>1
07	SDG&E	-\$(\$49)	+\$136	+\$87	+\$2,611	+\$75	>1	+\$1,583	+\$3,638	>1
08	SCE/SoCalGas	-\$(\$74)	+\$157	+\$83	+\$2,480	+\$96	>1	+\$1,772	+\$3,658	>1
09	SCE/SoCalGas	-\$(\$76)	+\$159	+\$82	+\$2,469	+\$104	>1	+\$1,939	+\$3,667	>1
10	SCE/SoCalGas	-\$(\$79)	+\$159	+\$80	+\$2,411	-\$(\$34)	70.9	+\$1,737	+\$3,528	>1
10	SDG&E	-\$(\$77)	+\$139	+\$61	+\$1,842	-\$(\$34)	54.2	+\$1,737	+\$3,528	>1
11	PG&E	-\$(\$25)	+\$153	+\$128	+\$3,834	-\$(\$1,264)	3.0	+\$2,080	+\$2,298	>1
12	PG&E	-\$(\$11)	+\$155	+\$144	+\$4,316	-\$(\$1,498)	2.9	+\$2,759	+\$2,064	>1
13	PG&E	-\$(\$26)	+\$146	+\$121	+\$3,625	-\$(\$1,125)	3.2	+\$2,083	+\$2,437	>1
14	SCE/SoCalGas	-\$(\$99)	+\$187	+\$87	+\$2,616	-\$(\$1,019)	2.6	+\$2,422	+\$2,543	>1
14	SDG&E	-\$(\$86)	+\$175	+\$88	+\$2,647	-\$(\$1,019)	2.6	+\$2,422	+\$2,543	>1
15	SCE/SoCalGas	-\$(\$67)	+\$142	+\$75	+\$2,247	+\$511	>1	+\$1,276	+\$4,073	>1
16	PG&E	-\$(\$24)	+\$224	+\$200	+\$5,992	-\$(\$2,087)	2.9	+\$2,629	+\$1,476	>1



		On-Bill Cost-effectiveness ¹						TDV Cost-effectiveness		
		Average Annual Utility Bill Savings			Lifetime NPV			Lifetime NPV		
			Natural Gas	Net Utility Savings	Utility Bill Savings	Equipment Cost Savings	On-Bill B/C	TDV Cost Savings	Equipment Cost Savings	TDV B/C
CZ	Utility	Electricity	Gas	Savings	Savings	Savings	Ratio ²	Savings	Savings	Ratio
	Neutral Cost Package									
01	PG&E	-\$228	+\$193	-\$35)	-\$1,057)	+\$0	0	-\$2,267)	+\$3,564	1.6
02	PG&E	-\$115)	+\$162	+\$47	+\$1,399	+\$0	>1	+\$59	+\$3,563	>1
03	PG&E	-\$81)	+\$142	+\$61	+\$1,843	+\$0	>1	+\$138	+\$3,562	>1
04	PG&E	-\$64)	+\$144	+\$80	+\$2,402	+\$0	>1	+\$983	+\$3,563	>1
05	PG&E	-\$90)	+\$140	+\$50	+\$1,490	+\$0	>1	-\$152)	+\$3,564	23.4
05	PG&E/SoCalGas	-\$90)	+\$178	+\$87	+\$2,620	+\$0	>1	-\$152)	+\$3,564	23.4
06	SCE/SoCalGas	-\$90)	+\$161	+\$71	+\$2,144	+\$0	>1	+\$1,612	+\$3,562	>1
07	SDG&E	-\$32)	+\$136	+\$105	+\$3,135	+\$0	>1	+\$1,886	+\$3,560	>1
08	SCE/SoCalGas	-\$67)	+\$157	+\$90	+\$2,705	+\$0	>1	+\$1,955	+\$3,564	>1
09	SCE/SoCalGas	-\$71)	+\$159	+\$87	+\$2,623	+\$0	>1	+\$1,924	+\$3,561	>1
10	SCE/SoCalGas	-\$78)	+\$159	+\$81	+\$2,431	+\$0	>1	+\$1,588	+\$3,561	>1
10	SDG&E	-\$71)	+\$139	+\$68	+\$2,033	+\$0	>1	+\$1,588	+\$3,561	>1
11	PG&E	-\$93)	+\$153	+\$59	+\$1,783	+\$0	>1	-\$48)	+\$3,562	74.0
12	PG&E	-\$82)	+\$155	+\$73	+\$2,184	+\$0	>1	+\$739	+\$3,564	>1
13	PG&E	-\$79)	+\$146	+\$68	+\$2,034	+\$0	>1	+\$310	+\$3,560	>1
14	SCE/SoCalGas	-\$141)	+\$187	+\$45	+\$1,359	+\$0	>1	+\$747	+\$3,562	>1
14	SDG&E	-\$137)	+\$175	+\$38	+\$1,131	+\$0	>1	+\$747	+\$3,562	>1
15	SCE/SoCalGas	-\$50)	+\$142	+\$92	+\$2,771	+\$0	>1	+\$1,738	+\$3,560	>1
16	PG&E	-\$194)	+\$224	+\$30	+\$900	+\$0	>1	-\$1,382)	+\$3,564	2.6

¹Red values in parentheses indicate an increase in utility bill costs or an incremental first cost for the all-electric home.

²">1" indicates cases where there are both first cost savings and annual utility bill savings.

Table 17: Comparison of Multifamily On-Bill Cost Effectiveness Results with Additional PV (Per Dwelling Unit)

CZ	Utility	Neutral Cost				Min. Cost Effectiveness			
		PV Capacity (kW)	Utility Bill Savings	Equipment Cost Savings	On-Bill B/C Ratio	PV Capacity (kW)	Utility Bill Savings	Equipment Cost Savings	On-Bill B/C Ratio
01	PG&E	2.7	-(\$1,057)	+\$0	0	3.0	+\$1,198	-(\$1,052)	1.1



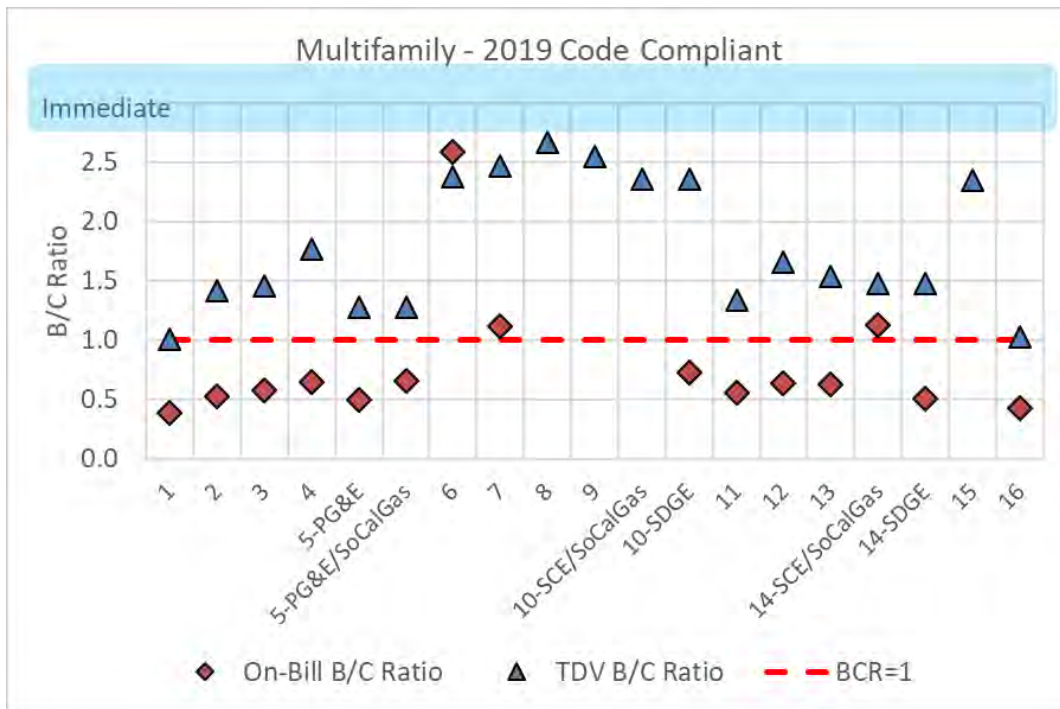


Figure 12: B/C ratio results for a multifamily all-electric code compliant home versus a mixed fuel code compliant home

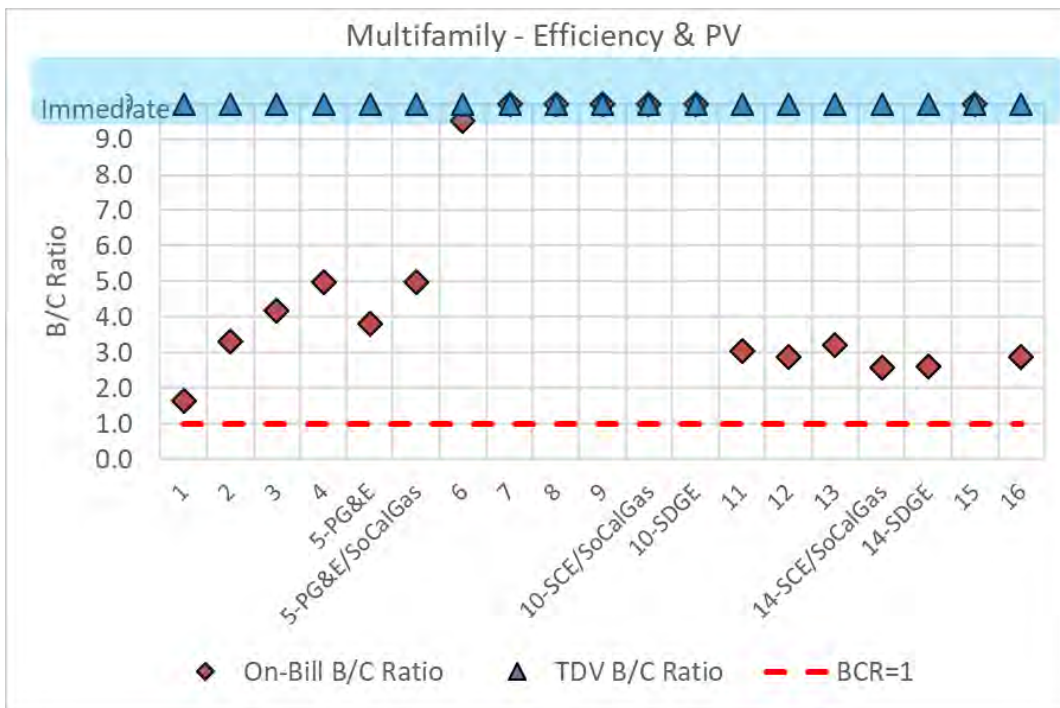


Figure 13: B/C ratio results for the multifamily Efficiency & PV all-electric home versus a mixed fuel code compliant home

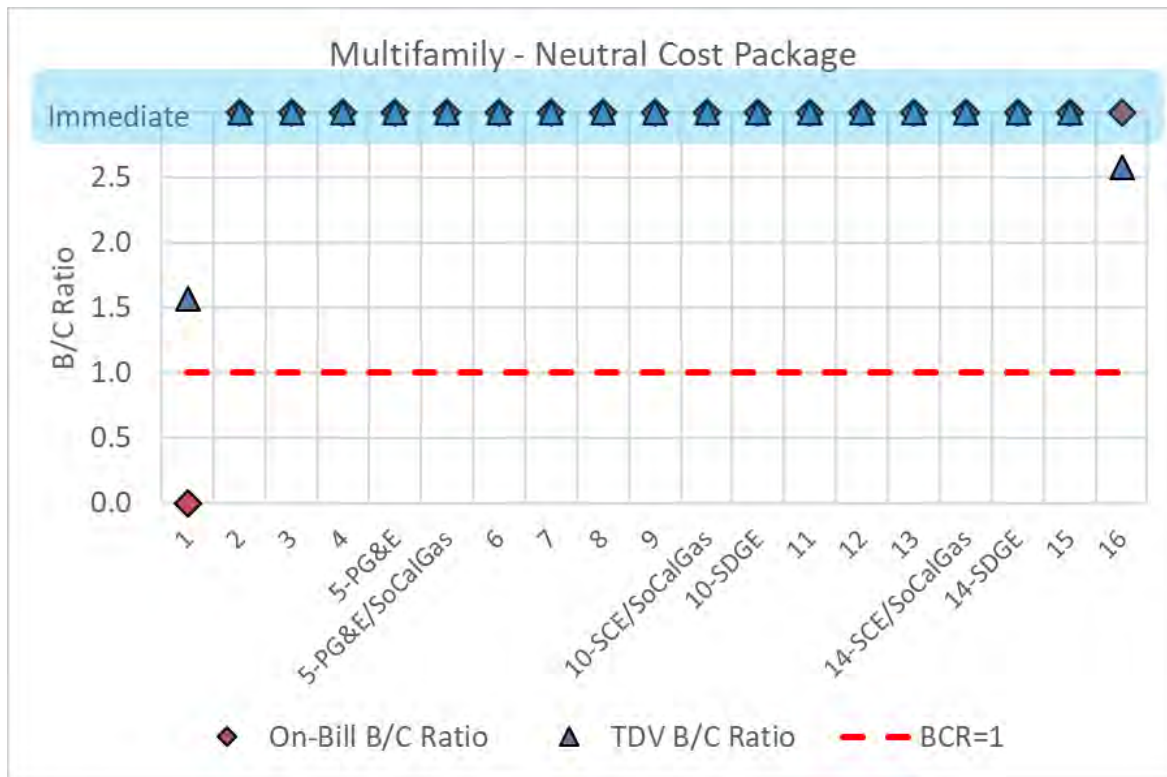


Figure 14: B/C ratio results for the multifamily neutral cost package all-electric home versus a mixed fuel code compliant home

4 Conclusions & Summary

This report evaluated the feasibility and cost-effectiveness of “above code” performance specifications through the application of efficiency measures, PV, and electric battery storage in all 16 California climate zones. The analysis found cost-effective packages across the state for both single family and low-rise multifamily buildings. For the building types and climate zones where cost-effective packages were identified, the results of this analysis can be used by local jurisdictions to support the adoption of reach codes. Cost-effectiveness was evaluated according to two metrics: On-Bill customer lifecycle benefit-to-cost and TDV lifecycle benefit-to-cost. While all the above code targets presented are based on packages that are cost-effective under at least one of these metrics, they are not all cost-effective under both metrics. Generally, the test for being cost-effective under the TDV methodology is less challenging than under the On-Bill methodology. Therefore, all packages presented are cost-effective based on TDV, and may or may not be cost-effective based on the On-Bill method. It is up to each jurisdiction to determine what metric is most appropriate for their application. A summary of results by climate zone are presented in Appendix G – Results by Climate Zone.

Above code targets are presented as Target EDR Margin, which have been defined for each scenario where a cost-effective package was identified. Target EDR Margins represent the maximum “reach” values that meet the requirements. Jurisdictions may adopt less stringent requirements. For the Efficiency Package the Target EDR Margin was defined based on the lower EDR Margin of the Efficiency – Non-Preempted Package and the Efficiency – Equipment, Preempted Package. For example, if the cost-effective Non-Preempted package has an EDR Margin of 3 and the Preempted package an EDR Margin of 4, the Target EDR Margin is set at 3.

The average incremental cost for the single family Efficiency packages is ~\$1,750. The Efficiency & PV Package average incremental cost is \$9,180 and for the Efficiency & PV/Battery Package it is approximately \$5,600 for the

mixed fuel cases and \$15,100 for the all-electric cases. The incremental costs for each multifamily apartment are approximately 30-40% lower. See Table 8 and Table 11 for a summary of package costs by case.

Table 18 and Table 19 summarize the maximum Target EDR Margins determined to be cost effective for each package for single family and multifamily, respectively. Cases labeled as “n/a” in the tables indicate where no cost-effective package was identified under either On-Bill or TDV methodology.

This analysis also looked at the GHG emissions impacts of the various packages. An all-electric design reduces GHG emissions 40-50% in most cases relative to a comparable mixed fuel design.

There is significant interest throughout California on electrification of new buildings. The Reach Code Team assembled data on the cost differences between a code compliant mixed fuel building and a code compliant all-electric building. Based on lifetime equipment cost savings (the difference in first cost for equipment and infrastructure combined with incremental replacement costs) of \$5,349 for an all-electric single family home this analysis found that from a customer on-bill perspective, the all-electric code compliant option is cost-effective in Climates Zones 6 through 9, 10 (SCE/SoCalGas territory only), and 15, and cost-effective in all climate zones except 1 and 16 based on TDV. For multifamily buildings, based on a cost savings of \$2,337 per apartment, the code compliant option is cost-effective in Climates Zones 6 through 9, 10 & 14 (SCE/SoCalGas territory only), and 15, and cost-effective based on TDV.

Adding efficiency and PV to the code compliant all-electric buildings increases the cost-effectiveness in all climate zones. The Efficiency & PV Package is cost-effective when compared to a mixed fuel code compliant building in all climate zones for both single family and multifamily buildings based on both the On-Bill and TDV methodologies. The Efficiency & PV package adds PV to offset 90% of the electricity use of the home. While this results in higher installed costs, the reduced lifetime utility costs are larger (\$0 to \$6,000 lifetime incremental equipment costs in many climates for single family homes and an associated \$4,500 to \$13,500 lifetime utility cost savings across the same cases), resulting in positive B/C ratios for all cases.

The Reach Code Team also evaluated a neutral cost electrification scenario where the cost savings for the all-electric code compliant home is invested in a larger PV system, resulting in a lifetime incremental cost of zero based on the On-Bill approach. This package results in utility cost savings and positive on-bill B/C ratio in all cases except Climate Zones 1 and 16 for single family, and Climate Zone 1 for low-rise multifamily. Increasing the PV sizes in those climates by approximately 30% resulted in positive on-bill B/C ratios, while still not resulting in oversizing of PV systems.

Other studies have shown that cost-effectiveness of electrification increases with high efficiency space conditioning and water heating equipment in the all-electric home. This was not directly evaluated in this analysis but based on the favorable cost-effectiveness results of the Equipment, Preempted package for the individual mixed fuel and all-electric upgrades it's expected that applying similar packages to the electrification analysis would result in increased cost-effectiveness.

The Reach Code Team found there can be substantial variability in first costs, particularly related to natural gas infrastructure. Costs are project-dependent and will be impacted by such factors as site characteristics, distance to the nearest gas main, joint trenching, whether work is conducted by the utility or a private contractor, and number of homes per development among other things. While the best cost data available to the Reach Code Team was applied in this analysis, individual projects may experience different costs, either higher or lower than the estimates presented here.



Table 18: Summary of Single Family Target EDR Margins

Climate Zone	Mixed Fuel		All-Electric		
	Efficiency	Efficiency & PV/Battery	Efficiency	Efficiency & PV	Efficiency & PV/Battery
01	5.0	10.5	6.5	31.0	41.0
02	3.0	10.0	4.5	19.0	30.0
03	2.5	10.0	4.0	18.0	29.0
04	2.5	10.0	3.0	17.0	28.5
05	2.5	9.0	4.0	18.0	28.5
06	1.5	9.5	2.0	14.0	26.0
07	n/a	9.0	n/a	11.0	24.0
08	1.0	8.0	1.5	10.5	21.5
09	2.5	8.5	2.5	11.5	21.0
10	3.0	9.5	3.0	11.0	21.0
11	4.0	9.0	4.5	14.0	23.0
12	3.0	9.5	3.5	15.5	25.0
13	4.5	9.5	5.0	13.0	22.0
14	4.5	9.0	5.5	15.5	23.5
15	4.5	7.0	5.5	6.0	13.0
16	5.0	10.5	4.5	26.5	35.0

Table 19: Summary of Multifamily Target EDR Margins

Climate Zone	Mixed Fuel		All-Electric		
	Efficiency	Efficiency & PV/Battery	Efficiency	Efficiency & PV	Efficiency & PV/Battery
01	2.0	11.5	3.0	22.5	34.5
02	1.5	10.5	1.5	17.5	30.5
03	0.5	10.0	n/a	16.0	29.5
04	1.0	11.0	1.0	15.0	28.5
05	0.5	9.5	0.5	17.0	30.0
06	1.0	10.5	1.0	13.5	27.5
07	0.5	11.0	0.5	12.5	27.0
08	1.0	9.5	1.0	11.5	24.0
09	1.5	9.5	1.5	11.0	23.0
10	1.5	10.0	1.5	10.5	23.0
11	2.5	10.5	3.5	13.0	25.0
12	1.5	10.0	2.5	14.0	26.5
13	3.0	10.5	3.0	12.0	23.5
14	3.0	9.5	3.5	14.0	24.5
15	4.0	8.5	4.0	7.0	16.5
16	2.0	9.5	3.0	19.5	29.5



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Appendix A – California Climate Zone Map

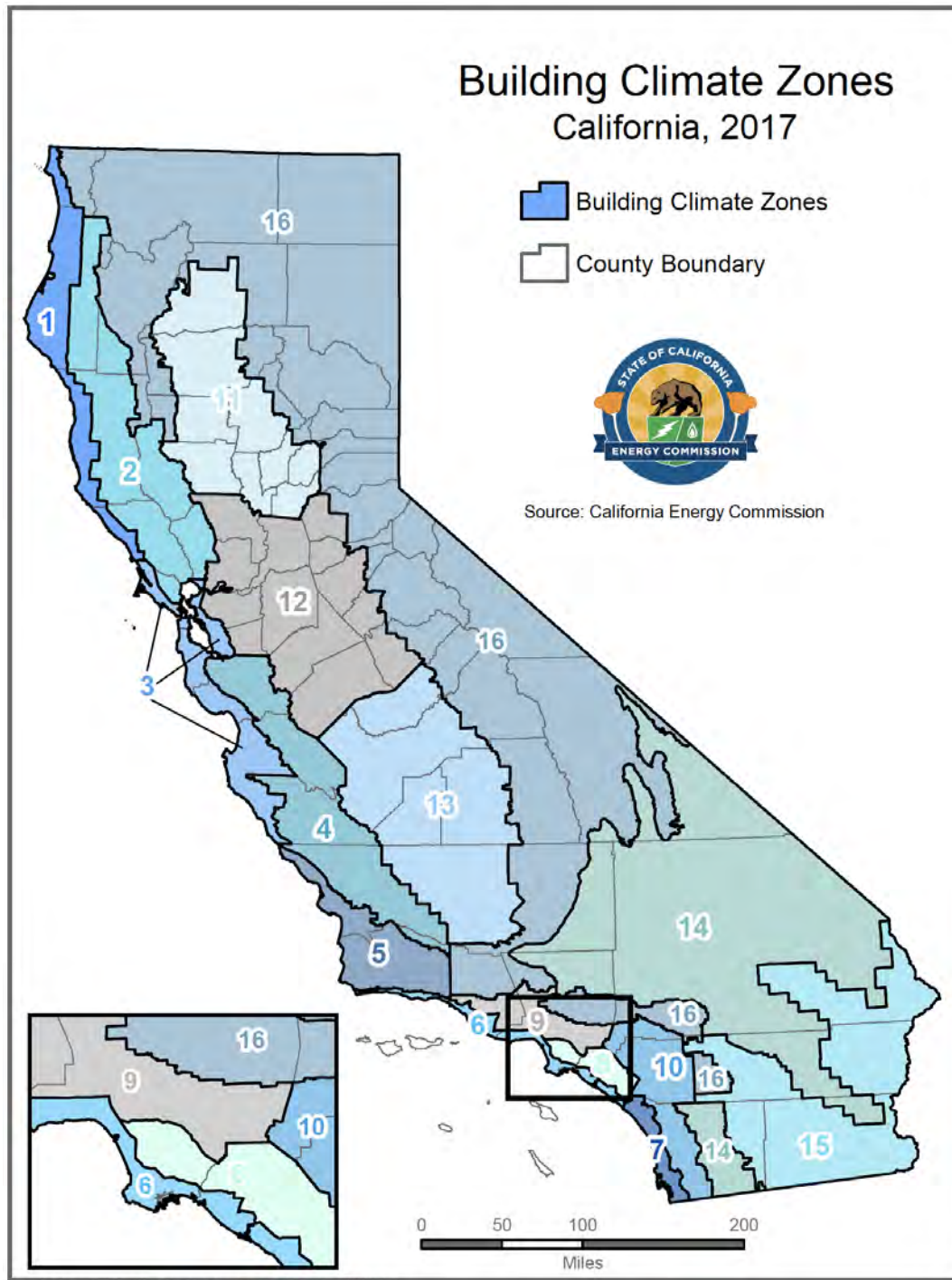


Figure 15: Map of California Climate Zones (courtesy of the California Energy Commission¹⁷)

¹⁷ https://ww2.energy.ca.gov/maps/renewable/building_climate_zones.html



Appendix B – Utility Tariff Details

PG&E	48
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Escalation Assumptions	56



PG&E

The following pages provide details on the PG&E electricity and natural gas tariffs applied in this study. Table 20 describes the baseline territories that were assumed for each climate zone.

Table 20: PG&E Baseline Territory by Climate Zone

	Baseline Territory
CZ01	V
CZ02	X
CZ03	T
CZ04	X
CZ05	T
CZ11	R
CZ12	S
CZ13	R
CZ16	Y

The PG&E monthly gas rate in \$/therm was applied on a monthly basis for the 12-month period ending January 2019 according to the rates shown below.

Pacific Gas and Electric Company							
Residential Non-CARE and CARE Gas Tariff Rates							
January 1, 2018, to Present							
(\$/therm) ^{1/}							
Effective Date	Advice Letter Number	Minimum Transportation Charge ^{2/} (per day)	Procurement Charge	Transportation Charge ^{2/}		TOTAL Residential Non-CARE Schedules Charge ^{3/}	
				Baseline	Excess	Baseline	Excess
01/01/18	3918-G	\$0.09863	\$0.37310	\$0.91828	\$1.46925	\$1.29138	\$1.84235
02/01/18	3931-G	\$0.09863	\$0.40635	\$0.91828	\$1.46925	\$1.32463	\$1.87560
03/01/18	3941-G	\$0.09863	\$0.32103	\$0.91828	\$1.46925	\$1.23931	\$1.79028
04/01/18	3959-G	\$0.09863	\$0.34783	\$0.91828	\$1.46925	\$1.26611	\$1.81708
05/01/18	3969-G	\$0.09863	\$0.26995	\$0.91828	\$1.46925	\$1.18823	\$1.73920
06/01/18	3980-G	\$0.09863	\$0.21571	\$0.91828	\$1.46925	\$1.13399	\$1.68496
07/01/18	3984-G	\$0.09863	\$0.22488	\$0.93438	\$1.49502	\$1.15926	\$1.71990
08/01/18	3995-G	\$0.09863	\$0.28814	\$0.93438	\$1.49502	\$1.22252	\$1.78316
09/01/18	4008-G	\$0.09863	\$0.25597	\$0.93438	\$1.49502	\$1.19035	\$1.75099
10/01/18	4018-G	\$0.09863	\$0.27383	\$0.93438	\$1.49502	\$1.20821	\$1.76885
11/01/18	4034-G	\$0.09863	\$0.35368	\$0.93438	\$1.49502	\$1.28806	\$1.84870
12/01/18	4046-G	\$0.09863	\$0.42932	\$0.93438	\$1.49502	\$1.36370	\$1.92434
01/01/19	4052-G	\$0.09863	\$0.43394 ^{7/}	\$0.99414	\$1.59063	\$1.42808	\$2.02457

^{1/} Unless otherwise noted

^{2/} Effective July 1, 2005, the Transportation Charge will be no less than the Minimum Transportation Charge of \$0.09863 (per day). Applicable to Rate Schedule G-1 only and does not apply to submetered tenants of master-metered customers served under gas Rate Schedule GS and GT.

^{3/} Schedule G-PPPS (Public Purpose Program Surcharge) needs to be added to the TOTAL Non-CARE Charge and TOTAL CARE Charge for bill calculation. See Schedule G-PPPS for details and exempt customers.

^{4/} CARE Schedules include California Solar Initiative (CSI) Exemption in accordance with Advice Letter 3257-G-A.

^{5/} Per dwelling unit per day (Multifamily Service)

^{6/} Per installed space per day (Mobilehome Park Service)

^{7/} This procurement rate includes a charge of \$0.03686 per therm to reflect account balance amortizations in accordance with Advice Letter 3157-G.

^{8/} Residential bill credit of (\$29.85) per household, annual bill credit occurring in the October 2018 bill cycle, thereafter in the April bill cycle.

Seasons: Winter = Nov-Mar Summer = April-Oct





**Pacific Gas and
Electric Company**
U 39 San Francisco, California

Cancelling

Revised
RevisedCal. P.U.C. Sheet No. 43533-E
Cal. P.U.C. Sheet No. 42728-E

**ELECTRIC SCHEDULE E-TOU
RESIDENTIAL TIME-OF-USE SERVICE**

Sheet 4

RATES:
(Cont'd.)

OPTION B TOTAL RATES

Total Energy Rates (\$ per kWh)	PEAK	OFF-PEAK
Summer (all usage)	\$0.37188 (R)	\$0.26882 (R)
Winter (all usage)	\$0.23441 (R)	\$0.21561 (R)

Delivery Minimum Bill Amount (\$ per meter per day) \$0.32854

California Climate Credit (per household, per semi-annual payment occurring in the April and October bill cycles) (\$39.42)

Total bundled service charges shown on customer's bills are unbundled according to the component rates shown below. Where the delivery minimum bill amount applies, the customer's bill will equal the sum of (1) the delivery minimum bill amount plus (2) for bundled service, the generation rate times the number of kWh used. For revenue accounting purposes, the revenues from the delivery minimum bill amount will be assigned to the Transmission, Transmission Rate Adjustments, Reliability Services, Public Purpose Programs, Nuclear Decommissioning, Competition Transition Charges, Energy Cost Recovery Amount, DWR Bond, and New System Generation Charges based on kWh usage times the corresponding unbundled rate component per kWh, with any residual revenue assigned to Distribution.***

UNBUNDLING OF OPTION B TOTAL RATES

Generation	PEAK	OFF-PEAK
Summer (all usage)	\$0.21238	\$0.10932
Winter (all usage)	\$0.10554	\$0.08674
Distribution**		
Summer (all usage)	\$0.10716 (R)	\$0.10716 (R)
Winter (all usage)	\$0.07653 (R)	\$0.07653 (R)
Transmission* (all usage)	\$0.02469 (R)	
Transmission Rate Adjustments* (all usage)	\$0.00214	
Reliability Services* (all usage)	\$0.00260	
Public Purpose Programs (all usage)	\$0.01413	
Nuclear Decommissioning (all usage)	\$0.00020	
Competition Transition Charges (all usage)	\$0.00132	
Energy Cost Recovery Amount (all usage)	(\$0.00005)	
DWR Bond (all usage)	\$0.00503 (R)	
New System Generation Charge (all usage)**	\$0.00228	

* Transmission, Transmission Rate Adjustments and Reliability Service charges are combined for presentation on customer bills.

** Distribution and New System Generation Charges are combined for presentation on customer bills.

*** This same assignment of revenues applies to direct access and community choice aggregation customers.

(Continued)

Advice	5444-E	Issued by	Submitted	December 18, 2018
Decision	18-08-013	Robert S. Kenney	Effective	January 1, 2019
		Vice President, Regulatory Affairs	Resolution	





Cancelling Revised Cal. P.U.C. Sheet No. 34735-G
Revised Cal. P.U.C. Sheet No. 34691-G

**GAS SCHEDULE G-1
RESIDENTIAL SERVICE**

Sheet 1

APPLICABILITY: This rate schedule¹ applies to natural gas service to Core End-Use Customers on PG&E's Transmission and/or Distribution Systems. To qualify, service must be to individually-metered single family premises for residential use, including those in a multifamily complex, and to separately-metered common areas in a multifamily complex where Schedules GM, GS, or GT are not applicable. Common area accounts that are separately metered by PG&E have an option of switching to a core commercial rate schedule. Common area accounts are those accounts that provide gas service to common use areas as defined in Rule 1.

Per D.15-10-032 and D.18-03-017, transportation rates include GHG Compliance Cost for non-covered entities. Customers who are directly billed by the Air Resources Board (ARB), i.e., covered entities, are exempt from paying AB 32 GHG Compliance Costs through PG&E's rates.² A "Cap-and-Trade Cost Exemption" credit for these costs will be shown as a line item on exempt customers' bills.^{3,4}

TERRITORY: Schedule G-1 applies everywhere within PG&E's natural gas Service Territory.

RATES: Customers on this schedule pay a Procurement Charge and a Transportation Charge, per meter, as shown below. The Transportation Charge will be no less than the Minimum Transportation Charge, as follows:

<u>Minimum Transportation Charge:</u> ⁵		<u>Per Day</u>	
		\$0.08863	
		<u>Per Therm</u>	
	<u>Baseline</u>		<u>Excess</u>
<u>Procurement:</u>	\$0.43394	(l)	\$0.43394 (l)
<u>Transportation Charge:</u>	\$0.99414	(l)	\$1.59063 (l)
<u>Total:</u>	\$1.42808	(l)	\$2.02457 (l)
California Natural Gas Climate Credit (per Household, annual payment occurring in October 2018 bill cycle, and thereafter in the April bill cycle)	(\$25.45)	(l)	

Public Purpose Program Surcharge:

Customers served under this schedule are subject to a gas Public Purpose Program (PPP) Surcharge under Schedule G-PPPS.

See Preliminary Statement, Part B for the Default Tariff Rate Components.

The Procurement Charge on this schedule is equivalent to the rate shown on informational Schedule G-CP—Gas Procurement Service to Core End-Use Customers.

¹ PG&E's gas tariffs are available online at www.pge.com.

² Covered entities are not exempt from paying costs associated with LUAF Gas and Gas used by Company Facilities.

³ The exemption credit will be equal to the effective non-exempt AB 32 GHG Compliance Cost Rate (\$ per therm) included in Preliminary Statement – Part B, multiplied by the customer's billed volumes (therms) for each billing period.

⁴ PG&E will update its billing system annually to reflect newly exempt or newly excluded customers to conform with lists of Directly Billed Customers provided annually by the ARB.

⁵ The Minimum Transportation charge does not apply to submetered tenants of master-metered customers served under gas rate Schedules GS and GT.

(Continued)

<i>Advice</i>	4052-G	<i>Issued by</i>	<i>Submitted</i>	December 21, 2018
<i>Decision</i>	97-10-065 & 98-07-025	<i>Robert S. Kenney</i>	<i>Effective</i>	January 1, 2019
		<i>Vice President, Regulatory Affairs</i>	<i>Resolution</i>	



SCE

The following pages provide details on are the SCE electricity tariffs applied in this study. Table 21 describes the baseline territories that were assumed for each climate zone.

Table 21: SCE Baseline Territory by Climate Zone

	Baseline Territory
CZ06	6
CZ08	8
CZ09	9
CZ10	10
CZ14	14
CZ15	15

	Delivery	Generation	Total Rate
TOU-Default-Rate-1 (On-Peak 4:00 pm - 9:00 pm)			
Energy Charge - \$/kWh			
Summer Season - On-Peak	0.19880	0.20072	0.39952
Mid-Peak	0.19880	0.05948	0.25828
Off-Peak	0.15574	0.06023	0.21597
Winter Season - Mid-Peak	0.19880	0.08308	0.28188
Off-Peak	0.15574	0.11309	0.26883
Super-Off-Peak	0.15062	0.01344	0.16406
Basic Charge - \$/day			
Single-Family Residence	0.031	0.000	0.031
Multi-Family Residence	0.024	0.000	0.024
Minimum Charge - \$/day			
Single Family Residence	0.338	0.000	0.338
Multi-Family Residence	0.338	0.000	0.338
Baseline Credit - \$/kWh	(0.06512)	0.00000	(0.06512)



	Delivery	Generation	Total Rate
TOU-D-Rate PRIME			
Energy Charge - \$/kWh			
Summer Season - On-Peak	0.15926	0.19811	0.35737
Mid-Peak	0.15926	0.10092	0.26018
Off-Peak	0.08308	0.04687	0.12995
Winter Season - Mid-Peak	0.16268	0.16761	0.33029
Off-Peak	0.08081	0.04331	0.12412
Super-Off-Peak	0.08081	0.04331	0.12412
Customer Charge - \$/day	0.395	0.000	0.395

TOU Period	Weekdays		Weekends and Holidays	
	Summer	Winter	Summer	Winter
On-Peak	4 p.m. - 9 p.m.			
Mid-Peak		4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.
Off-Peak	All other hours	9 p.m. - 8 a.m.	All other hours	9 p.m. - 8 a.m.
Super-Off-Peak		8 a.m. - 4 p.m.		8 a.m. - 4 p.m.

PROPOSED
(7 Year Average 2010-2016)

Summer kWh per Day			Winter kWh per Day		
Baseline Region	Basic	All Electric	Baseline Region	Basic	All Electric
05	17.2	17.9	05	18.7	29.1
06	11.4	8.8	06	11.3	13.0
08	12.6	9.8	08	10.6	12.7
09	16.5	12.4	09	12.3	14.3
10	18.9	15.8	10	12.5	17.0
13	22.0	24.6	13	12.6	24.3
14	18.7	18.3	14	12.0	21.3
15	46.4	24.1	15	9.9	18.2
16	14.4	13.5	16	12.6	23.1



SoCalGas

Following are the SoCalGas natural gas tariffs applied in this study. Table 22 describes the baseline territories that were assumed for each climate zone.

Table 22: SoCalGas Baseline Territory by Climate Zone

	Baseline Territory
CZ05	2
CZ06	1
CZ08	1
CZ09	1
CZ10	1
CZ14	2
CZ15	1

SOUTHERN CALIFORNIA GAS COMPANY Revised CAL P.U.C. SHEET NO. 55854-G
LOS ANGELES, CALIFORNIA CANCELING Revised CAL P.U.C. SHEET NO. 55828-G

Schedule No. GR <u>RESIDENTIAL SERVICE</u> (Includes GR, GR-C and GT-R Rates)				Sheet 1
APPLICABILITY				
The GR rate is applicable to natural gas procurement service to individually metered residential customers.				
The GR-C, cross-over rate, is a core procurement option for individually metered residential core transportation customers with annual consumption over 50,000 therms, as set forth in Special Condition 10.				
The GT-R rate is applicable to Core Aggregation Transportation (CAT) service to individually metered residential customers, as set forth in Special Condition 11.				
The California Alternate Rates for Energy (CARE) discount of 20%, reflected as a separate line item on the bill, is applicable to income-qualified households that meet the requirements for the CARE program as set forth in Schedule No. G-CARE.				
TERRITORY				
Applicable throughout the service territory.				
RATES				
<u>Customer Charge</u> , per meter per day:	GR 16.438¢	GR-C 16.438¢	GT-R 16.438¢	
For "Space Heating Only" customers, a daily Customer Charge applies during the winter period from November 1 through April 30 ^{1/} :				
	33.149¢	33.149¢	33.149¢	
<u>Baseline Rate</u> , per therm (baseline usage defined in Special Conditions 3 and 4):				
Procurement Charge: ^{2/}	41.589¢	42.676¢	N/A	R
<u>Transmission Charge</u> :	63.566¢	63.566¢	63.566¢	R
Total Baseline Charge:	105.155¢	106.242¢	63.566¢	R
<u>Non-Baseline Rate</u> , per therm (usage in excess of baseline usage):				
Procurement Charge: ^{2/}	41.589¢	42.676¢	N/A	R
<u>Transmission Charge</u> :	96.806¢	96.806¢	96.806¢	R
Total Non-Baseline Charge:	138.395¢	139.482¢	96.806¢	
^{1/} For the summer period beginning May 1 through October 31, with some exceptions, usage will be accumulated to at least 20 Ccf (100 cubic feet) before billing.				
(Footnotes continue next page.)				

(Continued)

(TO BE INSERTED BY UTILITY)

ADVICE LETTER NO. 5410
DECISION NO.

106

ISSUED BY

Dan Skopec
Vice President
Regulatory Affairs

(TO BE INSERTED BY CAL. PUC)

SUBMITTED Jan 7, 2019
EFFECTIVE Jan 10, 2019
RESOLUTION NO. G-3351




SDG&E

Following are the SDG&E electricity and natural gas tariffs applied in this study. Table 23 describes the baseline territories that were assumed for each climate zone.

Table 23: SDG&E Baseline Territory by Climate Zone

	Baseline Territory
CZ07	Coastal
CZ10	Inland
CZ14	Mountain



San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 31320-E

Canceling Revised Cal. P.U.C. Sheet No. 31103-E

SCHEDULE TOU-DR1
RESIDENTIAL TIME-OF-USE

Sheet 2

RATES

Total Rates:

Description – TOU DR1	UDC Total Rate	DWR-BC Rate	EECC Rate + DWR Credit	Total Rate
Summer:				
On-Peak	0.29562	R 0.00503	R 0.35013	R 0.65078
Off-Peak	0.29562	R 0.00503	R 0.11235	R 0.41300
Super Off-Peak	0.29562	R 0.00503	R 0.05739	R 0.35804
Winter:				
On-Peak	0.32037	R 0.00503	R 0.07618	R 0.40158
Off-Peak	0.32037	R 0.00503	R 0.06762	R 0.39302
Super Off-Peak	0.32037	R 0.00503	R 0.05812	R 0.38352
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.19921)	I		(0.19921)
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.16853)	I		(0.16853)
Minimum Bill (\$/day)	0.329			0.329

Description – TOU DR1	UDC Total Rate	DWR-BC Rate	EECC Rate + DWR Credit	Total Rate	Total Effective Care Rate
Summer – CARE					
On-Peak	0.29494	R 0.00000	R 0.35013	R 0.64507	R 0.41628
Off-Peak	0.29494	R 0.00000	R 0.11235	R 0.40729	R 0.26077
Super Off-Peak	0.29494	R 0.00000	R 0.05739	R 0.35233	R 0.22483
Winter – CARE					
On-Peak	0.31969	R 0.00000	R 0.07618	R 0.39587	R 0.25330
Off-Peak	0.31969	R 0.00000	R 0.06762	R 0.38731	R 0.24770
Super Off-Peak	0.31969	R 0.00000	R 0.05812	R 0.37781	R 0.24149
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.19921)	I		(0.19921)	(0.13028)
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.16853)	I		(0.16853)	(0.11022)
Minimum Bill (\$/day)	0.164			0.164	0.164

Note:

- Total Rates consist of UDC, Schedule DWR-BC (Department of Water Resources Bond Charge), and Schedule EECC (Electric Energy Commodity Cost) rates, with the EECC rates reflecting a DWR Credit.
- Total Rates presented are for customers that receive commodity supply and delivery service from Utility.
- DWR-BC charges do not apply to CARE customers.
- As identified in the rates tables, customer bills will also include line-item summer and winter credits for usage up to 130% of baseline to provide the rate capping benefits adopted by Assembly Bill 1X and Senate Bill 695.

(Continued)

2011

Advice Ltr. No. 3326-E

Decision No. _____

Issued by

Dan Skopec

Vice President

Regulatory Affairs

Submitted Dec 28, 2018

Effective Jan 1, 2019

Resolution No. _____





San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 23614-G

Canceling Revised Cal. P.U.C. Sheet No. 23601-G

SCHEDULE GR

Sheet 1

RESIDENTIAL NATURAL GAS SERVICE (Includes Rates for GR, GR-C, GTC/GTCA)

APPLICABILITY

The GR rate is applicable to natural gas procurement service for individually metered residential customers.

The GR-C, cross-over rate, is a core procurement option for individually metered residential core transportation customers with annual consumption over 50,000 therms, as set forth in Special Condition 10.

The GTC/GTCA rate is applicable to intrastate gas transportation-only services to individually metered residential customers, as set forth in Special Condition 11.

Customers taking service under this schedule may be eligible for a 20% California Alternate Rate for Energy (CARE) program discount, reflected as a separate line item on the bill, if they qualify to receive service under the terms and conditions of Schedule G-CARE.

TERRITORY

Within the entire territory served natural gas by the utility.

RATES

	<u>GR</u>	<u>GR-C</u>	<u>GTC/GTCA^{1/}</u>
<u>Baseline Rate</u> , per therm (baseline usage defined in Special Conditions 3 and 4):			
Procurement Charge: ^{2/}	\$0.41614	\$0.41614 R	N/A
Transmission Charge:	\$1.01230	\$1.01230	\$1.01230
Total Baseline Charge:	\$1.42844	\$1.42844 R	\$1.01230
<u>Non-Baseline Rate</u> , per therm (usage in excess of baseline usage):			
Procurement Charge: ^{2/}	\$0.41614	\$0.41614 R	N/A
Transmission Charge:	\$1.19980	\$1.19980	\$1.19980
Total Non-Baseline Charge:	\$1.61594	\$1.61594 R	\$1.19980
<u>Minimum Bill</u> , per day: ^{3/}			
Non-CARE customers:	\$0.09863	\$0.09863	\$0.09863
CARE customers:	\$0.07890	\$0.07890	\$0.07890

^{1/} The rates for core transportation-only customers, with the exception of customers taking service under Schedule GT-NGV, include any FERC Settlement Proceeds Memorandum Account (FSPMA) credit adjustments.

^{2/} This charge is applicable to Utility Procurement Customers and includes the GPC and GPC-A Procurement Charges shown in Schedule GPC which are subject to change monthly as set forth in Special Condition 7.

^{3/} Effective starting May 1, 2017, the minimum bill is calculated as the minimum bill charge of \$0.09863 per day times the number of days in the billing cycle (approximately \$3 per month) with a 20% discount applied for CARE customer resulting in a minimum bill charge of \$0.07890 per day (approximately \$2.40 per month).

(Continued)

1C5
Advice Ltr. No. 2735-G
Decision No.

Issued by
Dan Skopec
Vice President
Regulatory Affairs

Submitted Jan 7, 2019
Effective Jan 10, 2019
Resolution No.



Escalation Assumptions

The average annual escalation rates in the following table were used in this study and are from E3's 2019 study Residential Building Electrification in California (Energy & Environmental Economics, 2019). These rates are applied to the 2019 rate schedules over a thirty-year period beginning in 2020. SDG&E was not covered in the E3 study. The Reach Code Team reviewed SDG&E's GRC filing and applied the same approach that E3 applied for PG&E and SoCalGas to arrive at average escalation rates between 2020 and 2022.

Table 24: Real Utility Rate Escalation Rate Assumptions

	Statewide Electric Residential Average Rate (%/year, real)	Natural Gas Residential Core Rate (%/yr escalation, real)		
		PG&E	SoCalGas	SDG&E
2020	2.0%	1.48%	6.37%	5.00%
2021	2.0%	5.69%	4.12%	3.14%
2022	2.0%	1.11%	4.12%	2.94%
2023	2.0%	4.0%	4.0%	4.0%
2024	2.0%	4.0%	4.0%	4.0%
2025	2.0%	4.0%	4.0%	4.0%
2026	1.0%	1.0%	1.0%	1.0%
2027	1.0%	1.0%	1.0%	1.0%
2028	1.0%	1.0%	1.0%	1.0%
2029	1.0%	1.0%	1.0%	1.0%
2030	1.0%	1.0%	1.0%	1.0%
2031	1.0%	1.0%	1.0%	1.0%
2032	1.0%	1.0%	1.0%	1.0%
2033	1.0%	1.0%	1.0%	1.0%
2034	1.0%	1.0%	1.0%	1.0%
2035	1.0%	1.0%	1.0%	1.0%
2036	1.0%	1.0%	1.0%	1.0%
2037	1.0%	1.0%	1.0%	1.0%
2038	1.0%	1.0%	1.0%	1.0%
2039	1.0%	1.0%	1.0%	1.0%
2040	1.0%	1.0%	1.0%	1.0%
2041	1.0%	1.0%	1.0%	1.0%
2042	1.0%	1.0%	1.0%	1.0%
2043	1.0%	1.0%	1.0%	1.0%
2044	1.0%	1.0%	1.0%	1.0%
2045	1.0%	1.0%	1.0%	1.0%
2046	1.0%	1.0%	1.0%	1.0%
2047	1.0%	1.0%	1.0%	1.0%
2048	1.0%	1.0%	1.0%	1.0%
2049	1.0%	1.0%	1.0%	1.0%



Appendix C – Single Family Detailed Results

Table 25: Single Family Mixed Fuel Efficiency Package Cost-Effectiveness Results

CZ	Utility	BASECASE						Non-Preempted								Equipment - Preempted							
		Total EDR	Efficiency EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW	On-Bill B/C Ratio	TDV B/C Ratio	
1	PG&E	32.5	54.2	23	3.0	3.3	27.9	49.0	5.3	18.8%	2.5	3.2	3.4	2.8	26.0	47.3	6.9	25.1%	2.3	3.2	4.9	4.1	
2	PG&E	25.0	46.0	12	2.2	2.8	22.0	42.7	3.3	16.3%	1.9	2.8	1.6	1.7	21.8	42.6	3.3	16.4%	1.9	2.8	3.8	3.6	
3	PG&E	23.9	46.9	10	1.9	2.7	21.3	43.9	3.0	16.7%	1.6	2.7	1.3	1.3	20.1	42.8	4.1	22.8%	1.5	2.7	1.9	2.0	
4	PG&E	23.1	44.9	8	1.9	2.7	20.8	42.4	2.5	13.9%	1.7	2.7	0.9	1.2	20.5	42.2	2.7	14.9%	1.6	2.7	2.4	2.7	
5	PG&E	22.2	44.4	10	1.8	2.6	19.7	41.7	2.7	16.7%	1.6	2.5	1.1	1.2	19.7	41.7	2.6	16.2%	1.5	2.5	2.3	2.5	
5	PG&E/SoCalGas	22.2	44.4	10	1.8	2.6	19.7	41.7	2.7	16.7%	1.6	2.5	0.9	1.2	19.7	41.7	2.6	16.2%	1.5	2.5	2.0	2.5	
6	SCE/SoCalGas	23.3	49.9	10	1.6	2.7	21.5	47.8	2.0	12.1%	1.5	2.7	0.7	1.2	21.5	47.9	2.0	11.8%	1.4	2.7	1.6	2.0	
7	SDG&E	20.3	49.1	5	1.3	2.6	20.3	49.1	0.0	0.0%	1.3	2.6	-	-	18.8	47.6	1.5	12.4%	1.2	2.6	1.5	1.4	
8	SCE/SoCalGas	21.3	46.9	10	1.4	2.9	20.1	45.6	1.3	7.7%	1.3	2.9	0.6	1.4	19.7	45.3	1.6	9.4%	1.3	2.9	1.3	1.8	
9	SCE/SoCalGas	24.5	47.7	13	1.5	2.9	22.3	45.1	2.6	11.7%	1.5	2.9	0.7	2.0	21.9	44.8	2.9	13.4%	1.4	2.9	1.8	3.7	
10	SCE/SoCalGas	24.2	46.3	10	1.6	3.0	21.7	43.1	3.2	14.3%	1.5	3.0	0.6	1.3	21.5	43.1	3.2	14.6%	1.4	3.0	2.0	3.8	
10	SDG&E	24.2	46.3	10	1.6	3.0	21.7	43.1	3.2	14.3%	1.5	3.0	0.8	1.3	21.5	43.1	3.2	14.6%	1.4	3.0	2.6	3.8	
11	PG&E	24.6	44.9	11	2.1	3.6	21.3	40.6	4.3	16.4%	1.9	3.4	0.8	1.2	20.7	39.9	5.1	19.2%	1.8	3.4	2.5	3.7	
12	PG&E	25.5	44.8	12	2.1	3.0	22.5	41.3	3.5	14.9%	1.9	2.9	1.2	1.8	22.5	41.4	3.4	14.4%	1.9	3.0	3.3	4.6	
13	PG&E	25.7	46.5	11	2.0	3.8	22.2	41.9	4.6	16.9%	1.8	3.6	0.8	1.3	21.2	40.7	5.8	21.4%	1.7	3.6	5.3	8.4	
14	SCE/SoCalGas	25.3	46.3	15	2.3	3.2	21.5	41.3	5.0	18.5%	2.1	3.0	1.6	2.5	20.8	40.4	5.8	21.7%	2.0	3.0	4.0	6.1	
14	SDG&E	25.3	46.3	15	2.3	3.2	21.5	41.3	5.0	18.5%	2.1	3.0	1.9	2.5	20.8	40.4	5.8	21.7%	2.0	3.0	4.9	6.1	
15	SCE/SoCalGas	22.4	49.1	11	1.7	5.4	19.7	44.3	4.8	14.8%	1.6	5.0	1.0	1.6	19.5	44.1	5.0	15.4%	1.5	5.0	>1	>1	
16	PG&E	30.4	48.9	22	3.3	2.7	25.0	43.5	5.4	20.6%	2.6	2.7	1.6	1.5	24.8	42.7	6.2	23.5%	2.7	2.6	2.2	2.2	

">1" = indicates cases where there is both first cost savings and annual utility bill savings.



Table 26: Single Family Mixed Fuel Efficiency & PV/Battery Package Cost-Effectiveness Results

CZ	Utility	BASECASE				Efficiency & PV/Battery						
		Total EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW	Total EDR	Total EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW	On-Bill B/C Ratio	TDV B/C Ratio
1	PG&E	32.5	23	3.0	3.3	21.9	10.6	31.8%	2.4	3.3	0.9	1.6
2	PG&E	25.0	12	2.2	2.8	14.9	10.1	27.3%	1.8	2.9	0.5	1.6
3	PG&E	23.9	10	1.9	2.7	13.9	10.0	27.7%	1.5	2.8	0.4	1.4
4	PG&E	23.1	8	1.9	2.7	13.0	10.1	24.9%	1.5	2.8	0.3	1.5
5	PG&E	22.2	10	1.8	2.6	12.8	9.4	29.7%	1.4	2.6	0.4	1.3
5	PG&E/SoCalGas	22.2	10	1.8	2.6	12.8	9.4	29.7%	1.4	2.6	0.3	1.3
6	SCE/SoCalGas	23.3	10	1.6	2.7	13.6	9.8	20.1%	1.2	2.8	0.8	1.3
7	SDG&E	20.3	5	1.3	2.6	11.1	9.2	9.0%	1.0	2.7	0.1	1.3
8	SCE/SoCalGas	21.3	10	1.4	2.9	12.9	8.4	23.7%	1.1	3.0	0.9	1.3
9	SCE/SoCalGas	24.5	13	1.5	2.9	15.7	8.8	24.7%	1.2	3.0	1.0	1.5
10	SCE/SoCalGas	24.2	10	1.6	3.0	14.6	9.6	27.3%	1.3	3.1	1.0	1.5
10	SDG&E	24.2	10	1.6	3.0	14.6	9.6	27.3%	1.3	3.1	0.6	1.5
11	PG&E	24.6	11	2.1	3.6	15.4	9.2	29.4%	1.8	3.5	0.4	1.5
12	PG&E	25.5	12	2.1	3.0	15.9	9.6	28.9%	1.8	3.0	0.4	1.7
13	PG&E	25.7	11	2.0	3.8	16.1	9.7	28.9%	1.7	3.7	0.4	1.6
14	SCE/SoCalGas	25.3	15	2.3	3.2	16.3	9.0	30.1%	1.8	3.1	1.3	1.7
14	SDG&E	25.3	15	2.3	3.2	16.3	9.0	30.1%	1.8	3.1	1.2	1.7
15	SCE/SoCalGas	22.4	11	1.7	5.4	15.3	7.1	25.1%	1.4	5.1	1.1	1.5
16	PG&E	30.4	22	3.3	2.7	19.9	10.5	32.6%	2.4	2.8	0.9	1.4

">1" = indicates cases where there is both first cost savings and annual utility bill savings.



Table 27: Single Family All-Electric Efficiency Package Cost-Effectiveness Results

		BASECASE					Non-Preempted								Equipment - Preempted							
CZ	Utility	Total EDR	Efficiency EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW	On-Bill B/C Ratio	TDV B/C Ratio
1	PG&E	46.8	68.2	36	1.5	3.3	31.8	53.0	15.2	40.2%	1.0	3.3	1.8	1.7	39.9	61.3	6.9	18.3%	1.3	3.3	2.9	2.7
2	PG&E	32.8	53.7	16	1.1	2.8	27.9	48.7	4.9	20.5%	0.9	2.8	1.2	1.1	27.7	48.5	5.1	21.2%	0.9	2.8	2.3	2.1
3	PG&E	33.1	55.6	14	1.0	2.7	28.5	50.9	4.7	20.6%	0.8	2.7	2.6	2.4	28.7	51.2	4.4	19.6%	0.9	2.7	1.8	1.6
4	PG&E	31.3	52.8	12	1.0	2.7	27.9	49.4	3.4	15.5%	0.9	2.7	1.9	1.8	27.4	48.9	3.9	17.6%	0.9	2.7	1.5	1.5
5	PG&E	32.5	54.2	16	1.0	2.6	28.1	49.9	4.4	19.7%	0.9	2.6	2.6	2.3	28.0	49.8	4.4	20.3%	0.9	2.6	1.9	1.7
5	PG&E/SoCalGas	32.5	54.2	16	1.0	2.6	28.1	49.9	4.4	19.7%	0.9	2.6	2.6	2.3	28.0	49.8	4.4	20.3%	0.9	2.6	1.9	1.7
6	SCE/SoCalGas	29.7	55.8	12	0.9	2.7	27.7	53.8	2.0	10.9%	0.8	2.7	1.3	1.4	26.8	53.0	2.9	16.0%	0.8	2.7	2.2	2.3
7	SDG&E	27.1	55.3	7	0.7	2.6	27.1	55.3	0.0	0.0%	0.7	2.6	-	-	24.8	53.0	2.2	16.9%	0.7	2.6	1.6	1.7
8	SCE/SoCalGas	26.1	51.5	10	0.8	2.9	24.5	49.9	1.6	8.9%	0.8	2.9	0.6	1.2	24.4	49.7	1.8	9.7%	0.8	2.9	2.8	3.0
9	SCE/SoCalGas	28.8	51.9	13	0.9	2.9	26.0	49.1	2.8	12.5%	0.8	2.9	0.8	2.0	25.5	48.6	3.3	14.7%	0.8	2.9	2.1	3.2
10	SCE/SoCalGas	28.8	50.7	11	0.9	3.0	25.7	47.6	3.1	14.0%	0.9	3.0	0.9	1.5	25.3	47.2	3.4	15.5%	0.8	3.0	2.3	3.2
10	SDG&E	28.8	50.7	11	0.9	3.0	25.7	47.6	3.1	14.0%	0.9	3.0	1.1	1.5	25.3	47.2	3.4	15.5%	0.8	3.0	2.6	3.2
11	PG&E	30.0	50.2	12	1.1	3.6	25.4	45.6	4.6	16.2%	1.0	3.6	1.2	1.5	24.1	44.3	5.9	20.8%	0.9	3.6	3.0	3.3
12	PG&E	30.9	50.1	13	1.0	3.0	27.1	46.3	3.8	15.3%	0.9	3.0	0.8	1.1	25.8	45.0	5.1	20.4%	0.9	3.0	2.0	2.5
13	PG&E	30.7	51.5	13	1.1	3.8	25.7	46.4	5.1	17.4%	0.9	3.8	1.1	1.4	24.7	45.4	6.0	20.9%	0.9	3.8	2.9	3.3
14	SCE/SoCalGas	31.3	52.2	16	1.4	3.2	25.7	46.6	5.6	18.9%	1.2	3.2	1.0	1.5	25.3	46.2	6.0	20.5%	1.2	3.2	2.3	3.1
14	SDG&E	31.3	52.2	16	1.4	3.2	25.7	46.6	5.6	18.9%	1.2	3.2	1.3	1.5	25.3	46.2	6.0	20.5%	1.2	3.2	2.9	3.1
15	SCE/SoCalGas	26.2	52.8	8	1.3	5.4	20.6	47.2	5.6	16.8%	1.1	5.4	1.1	1.6	18.9	45.5	7.3	21.8%	1.0	5.4	3.3	4.5
16	PG&E	46.5	64.6	39	1.7	2.7	36.8	54.9	9.7	25.2%	1.4	2.7	1.7	1.7	41.6	59.7	4.9	12.7%	1.6	2.7	2.4	2.3



Table 28: Single Family All-Electric Efficiency & PV-PV/Battery Package Cost-Effectiveness Results

CZ	Utility	BASECASE				Efficiency & PV							Efficiency & PV/Battery						
		Total EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW	Total EDR	Total EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR	Total EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW	On-Bill B/C Ratio	TDV B/C Ratio
1	PG&E	46.8	36	1.5	3.3	15.4	31.4	40.2%	0.5	6.0	1.8	1.5	5.6	41.2	51.9%	0.3	6.76	1.4	1.4
2	PG&E	32.8	16	1.1	2.8	13.4	19.4	20.5%	0.5	4.9	1.8	1.4	2.7	30.1	31.5%	0.3	5.51	1.4	1.4
3	PG&E	33.1	14	1.0	2.7	14.6	18.5	20.6%	0.5	4.5	2.2	1.7	3.7	29.3	31.6%	0.2	5.10	1.5	1.6
4	PG&E	31.3	12	1.0	2.7	14.1	17.2	15.5%	0.5	4.5	2.1	1.6	2.8	28.6	26.5%	0.2	5.15	1.5	1.6
5	PG&E	32.5	16	1.0	2.6	14.3	18.2	19.7%	0.5	4.3	2.3	1.8	3.8	28.7	32.7%	0.2	4.84	1.6	1.6
5	PG&E/SoCalGas	32.5	16	1.0	2.6	14.3	18.2	19.7%	0.5	4.3	2.3	1.8	3.8	28.7	32.7%	0.2	4.84	1.6	1.6
6	SCE/SoCalGas	29.7	12	0.9	2.7	15.5	14.3	10.9%	0.6	4.1	1.2	1.5	3.6	26.1	18.9%	0.3	4.68	1.2	1.4
7	SDG&E	27.1	7	0.7	2.6	15.8	11.3	0.7%	0.6	3.7	1.9	1.5	2.9	24.2	6.7%	0.3	4.21	1.3	1.5
8	SCE/SoCalGas	26.1	10	0.8	2.9	15.1	10.9	8.9%	0.6	4.0	1.0	1.5	4.5	21.6	24.9%	0.3	4.54	1.1	1.4
9	SCE/SoCalGas	28.8	13	0.9	2.9	17.3	11.5	12.5%	0.7	4.1	1.1	1.6	7.6	21.3	25.5%	0.4	4.66	1.1	1.5
10	SCE/SoCalGas	28.8	11	0.9	3.0	17.7	11.1	14.0%	0.7	4.2	1.1	1.5	7.6	21.2	27.0%	0.4	4.78	1.1	1.5
10	SDG&E	28.8	11	0.9	3.0	17.7	11.1	14.0%	0.7	4.2	1.7	1.5	7.6	21.2	27.0%	0.4	4.78	1.4	1.5
11	PG&E	30.0	12	1.1	3.6	15.8	14.2	16.2%	0.6	5.4	1.8	1.6	6.8	23.2	29.2%	0.4	6.11	1.5	1.6
12	PG&E	30.9	13	1.0	3.0	15.2	15.7	15.3%	0.5	5.0	1.7	1.4	5.6	25.4	29.3%	0.3	5.62	1.3	1.5
13	PG&E	30.7	13	1.1	3.8	17.3	13.4	17.4%	0.6	5.4	1.7	1.5	8.2	22.5	29.4%	0.4	6.14	1.4	1.5
14	SCE/SoCalGas	31.3	16	1.4	3.2	15.8	15.5	18.9%	0.9	4.8	1.2	1.6	7.4	23.9	30.9%	0.6	5.39	1.4	1.6
14	SDG&E	31.3	16	1.4	3.2	15.8	15.5	18.9%	0.9	4.8	1.8	1.6	7.4	23.9	30.9%	0.6	5.39	1.7	1.6
15	SCE/SoCalGas	26.2	8	1.3	5.4	20.0	6.2	16.8%	1.1	5.5	1.1	1.6	12.7	13.5	27.0%	0.8	6.25	1.2	1.5
16	PG&E	46.5	39	1.7	2.7	19.6	27.0	25.2%	0.9	5.5	2.1	1.6	11.1	35.4	34.3%	0.6	6.17	1.7	1.5

">1" = indicates cases where there is both first cost savings and annual utility bill savings.



Appendix D – Single Family Measure Summary

Table 29: Single Family Mixed Fuel Efficiency – Non-Preempted Package Measure Summary

CZ	Duct	Infiltratio	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
2	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
3	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
4	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
6	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	1.0 PV scaling
8	< 12 ft ducts in attic	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
9	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
11	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
12	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
13	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
14	VLLDCS	3 ACH50	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
15	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling

VLLDCS – Verified Low Leakage Ducts in Conditioned Space



Table 30: Single Family Mixed Fuel Efficiency – Equipment, Preempted Package Measure Summary

<u>CZ</u>	<u>Duct</u>	<u>Infiltratio</u>	<u>Wall</u>	<u>Attic</u>	<u>Roof</u>	<u>Glazing</u>	<u>Slab</u>	<u>DHW</u>	<u>HVAC</u>	<u>PV</u>
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	96 AFUE, 0.35W/cfm	1.0 PV scaling
2	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	96 AFUE, 0.35W/cfm	1.0 PV scaling
3	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	96 AFUE, 0.35W/cfm	1.0 PV scaling
4	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	96 AFUE, 0.35W/cfm	1.0 PV scaling
5	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	96 AFUE, 0.35W/cfm	1.0 PV scaling
6	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	92 AFUE, 0.35W/cfm	1.0 PV scaling
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	92 AFUE, 0.35W/cfm	1.0 PV scaling
8	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	92 AFUE, 0.35W/cfm	1.0 PV scaling
9	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
10	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
11	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	18 SEER, 96 AFUE, 0.35W/cfm	1.0 PV scaling
12	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
13	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
14	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
15	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	18 SEER, 96 AFUE, 0.35W/cfm	1.0 PV scaling

LLAHU - Low Leakage Air Handling Unit

VLLDCS – Verified Low Leakage Ducts in Conditioned Space



Table 31: Single Family Mixed Fuel Efficiency & PV/Battery Package Measure Summary

CZ	Duct	Infiltration	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
2	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
3	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
4	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
6	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Basic CHW credit (0.7)	Code Min	1.0 PV scaling + 5kWh batt
8	< 12 ft ducts in attic	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
9	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
11	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
12	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
13	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
14	VLLDCS	3 ACH50	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
15	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 5kWh batt

VLLDCS – Verified Low Leakage Ducts in Conditioned Space



Table 32: Single Family All-Electric Efficiency – Non-Preempted Package Measure Summary

CZ	Duct	Infiltratio	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
2	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
3	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
4	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
6	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	Std Design PV
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Std Design PV
8	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	Std Design PV
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	Std Design PV
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
11	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
12	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
13	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
14	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
15	VLLDCS	Code Min	0.043 wall	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
16	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	Code Min	0.24/0.50 windows	Code Min	Code Min	0.45 W/cfm	Std Design PV

VLLDCS – Verified Low Leakage Ducts in Conditioned Space



Table 33: Single Family All-Electric Efficiency – Equipment, Preempted Package Measure Summary

CZ	Duct	Infiltratio	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
2	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
3	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
4	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
5	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
6	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
8	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	0.45 W/cfm	Std Design PV
9	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
10	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
11	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
12	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
13	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
14	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
15	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
16	LLAHU + 2% leakage	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV

LLAHU - Low Leakage Air Handling Unit

VVLDCS – Verified Low Leakage Ducts in Conditioned Space



Table 34: Single Family All-Electric Efficiency & PV Package Measure Summary

CZ	Duct	Infiltratio	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
2	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
3	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
4	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
6	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
8	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
11	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
12	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
13	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
14	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
15	VLLDCS	Code Min	0.043 wall	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
16	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	Code Min	0.24/0.50 windows	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling

VLLDCS – Verified Low Leakage Ducts in Conditioned Space



Table 35: Single Family All-Electric Efficiency & PV/Battery Package Measure Summary

CZ	Duct	Infiltration	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
2	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
3	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
4	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
6	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
8	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
11	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
12	VLLDCS	Code Min	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
13	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
14	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
15	VLLDCS	Code Min	0.043 wall (SF); 0.048 wall (MF)	R-38 + R-30 attic	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt
16	VLLDCS	3 ACH50	Code Min	R-38 + R-30 attic	Code Min	0.24/0.50 windows	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 5kWh batt

VLLDCS – Verified Low Leakage Ducts in Conditioned Space



Appendix E – Multifamily Detailed Results

Table 36: Multifamily Mixed Fuel Efficiency Package Cost-Effectiveness Results

Climate Zone	Utility	BASECASE					Non-Preempted								Equipment - Preempted							
		Total EDR	Efficiency EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW per Building	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW per Building	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW per Building	On-Bill B/C Ratio	TDV B/C Ratio
01	PG&E	28.6	60.7	23	2.7	15.9	25.1	57.3	3.4	19.3%	2.3	16.0	1.1	1.2	26.4	58.4	2.3	12.2%	2.5	15.9	1.3	1.4
02	PG&E	25.7	56.5	12	2.4	13.9	24.2	54.7	1.8	9.9%	2.3	13.8	1.0	1.7	23.6	54.2	2.3	12.5%	2.2	13.9	1.1	1.5
03	PG&E	24.7	57.8	10	2.1	13.5	24.0	57.2	0.6	4.7%	2.1	13.5	1.0	1.1	23.1	56.2	1.6	11.2%	1.9	13.4	1.1	1.2
04	PG&E	25.5	56.8	8	2.2	13.6	24.3	55.5	1.3	7.7%	2.1	13.5	0.8	1.2	23.8	54.9	1.9	10.9%	2.0	13.5	1.1	1.7
05	PG&E	24.2	57.4	10	2.1	12.6	23.7	56.9	0.5	4.4%	2.0	12.6	1.0	1.0	22.7	55.9	1.5	10.9%	1.9	12.6	1.2	1.3
05	PG&E/SoCalGas	24.2	57.4	10	2.1	12.6	23.7	56.9	0.5	4.4%	2.0	12.6	0.8	1.0	22.7	55.9	1.5	10.9%	1.9	12.6	1.1	1.3
06	SCE/SoCalGas	26.8	63.2	10	2.2	13.9	25.8	61.9	1.3	7.0%	2.1	13.8	0.6	1.5	25.5	61.9	1.3	7.4%	2.0	13.9	1.4	1.7
07	SDG&E	26.8	64.5	5	2.1	13.2	26.1	63.6	0.9	5.3%	2.1	13.1	0.7	2.2	25.0	62.5	2.0	12.2%	2.0	13.2	1.1	1.4
08	SCE/SoCalGas	25.7	61.8	10	2.2	14.6	24.6	60.3	1.5	7.4%	2.1	14.5	0.7	1.4	24.6	60.7	1.1	5.7%	2.0	14.6	1.4	1.7
09	SCE/SoCalGas	26.4	59.7	13	2.2	14.7	25.0	57.9	1.8	8.2%	2.2	14.4	1.5	3.3	24.1	56.9	2.8	12.9%	2.1	14.4	1.7	2.9
10	SCE/SoCalGas	27.0	58.7	10	2.3	15.1	25.7	57.0	1.7	7.7%	2.2	14.9	0.8	1.7	24.7	55.8	2.9	13.0%	2.1	14.8	2.0	3.3
10	SDG&E	27.0	58.7	10	2.3	15.1	25.7	57.0	1.7	7.7%	2.2	14.9	1.1	1.7	24.7	55.8	2.9	13.0%	2.1	14.8	2.6	3.3
11	PG&E	24.5	54.5	11	2.4	16.6	22.3	51.6	2.9	11.9%	2.2	16.3	0.7	1.2	22.2	51.3	3.2	13.2%	2.2	16.1	1.8	3.3
12	PG&E	25.9	55.3	12	2.3	14.9	24.3	53.4	1.9	8.8%	2.2	14.8	1.1	2.2	23.5	52.5	2.8	12.8%	2.1	14.7	1.2	2.2
13	PG&E	26.1	55.9	11	2.3	17.5	23.7	52.8	3.1	12.1%	2.1	17.1	0.6	1.3	23.7	52.5	3.4	13.2%	2.1	16.9	2.0	3.8
14	SCE/SoCalGas	25.6	55.9	15	2.8	14.6	23.1	52.8	3.1	12.8%	2.5	14.3	0.7	1.2	23.2	52.6	3.3	13.3%	2.5	14.2	2.0	3.0
14	SDG&E	25.6	55.9	15	2.8	14.6	23.1	52.8	3.1	12.8%	2.5	14.3	0.9	1.2	23.2	52.6	3.3	13.3%	2.5	14.2	2.5	3.0
15	SCE/SoCalGas	25.0	59.2	11	2.5	21.6	22.7	55.0	4.2	12.9%	2.4	20.4	1.4	2.3	22.6	54.8	4.4	13.5%	2.3	20.4	>1	>1
16	PG&E	29.4	57.3	22	3.5	13.4	26.6	54.9	2.4	11.3%	3.0	13.7	1.1	1.2	26.9	54.4	2.9	13.1%	3.1	13.2	1.8	2.1

">1" = indicates cases where there is both first cost savings and annual utility bill savings.



Table 37: Multifamily Mixed Fuel Efficiency & PV/Battery Package Cost-Effectiveness Results

CZ	Utility	BASECASE				Efficiency & PV/Battery						
		Total EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW per Building	Total EDR	Total EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW per Building	On-Bill B/C Ratio	TDV B/C Ratio
01	PG&E	28.6	23	2.7	15.9	17.1	11.5	29.3%	2.1	16.5	0.4	1.2
02	PG&E	25.7	12	2.4	13.9	14.8	10.9	16.9%	2.1	14.2	0.2	1.6
03	PG&E	24.7	10	2.1	13.5	14.4	10.3	10.7%	1.9	13.9	0.1	1.4
04	PG&E	25.5	8	2.2	13.6	14.3	11.2	15.7%	1.9	13.9	0.2	1.6
05	PG&E	24.2	10	2.1	12.6	14.3	9.9	9.4%	1.8	13.1	0.2	1.4
05	PG&E/SoCalGas	24.2	10	2.1	12.6	14.3	9.9	9.4%	1.8	13.1	0.1	1.4
06	SCE/SoCalGas	26.8	10	2.2	13.9	16.1	10.7	10.0%	1.8	14.2	0.6	1.4
07	SDG&E	26.8	5	2.1	13.2	15.8	11.0	7.3%	1.7	13.6	0.0	1.4
08	SCE/SoCalGas	25.7	10	2.2	14.6	15.8	9.9	13.4%	1.8	14.9	0.7	1.3
09	SCE/SoCalGas	26.4	13	2.2	14.7	16.7	9.7	15.2%	1.8	14.9	0.9	1.5
10	SCE/SoCalGas	27.0	10	2.3	15.1	16.6	10.4	13.7%	1.9	15.3	1.0	1.6
10	SDG&E	27.0	10	2.3	15.1	16.6	10.4	13.7%	1.9	15.3	0.2	1.6
11	PG&E	24.5	11	2.4	16.6	14.0	10.5	19.9%	2.0	16.7	0.4	1.6
12	PG&E	25.9	12	2.3	14.9	15.6	10.3	17.8%	2.0	15.2	0.3	1.7
13	PG&E	26.1	11	2.3	17.5	15.4	10.7	20.1%	2.0	17.5	0.4	1.6
14	SCE/SoCalGas	25.6	15	2.8	14.6	16.0	9.6	20.8%	2.2	14.7	1.1	1.4
14	SDG&E	25.6	15	2.8	14.6	16.0	9.6	20.8%	2.2	14.7	0.5	1.4
15	SCE/SoCalGas	25.0	11	2.5	21.6	16.2	8.8	18.9%	2.1	20.9	1.3	1.7
16	PG&E	29.4	22	3.5	13.4	19.5	9.9	19.3%	2.7	14.1	0.5	1.3

"inf" = indicates cases where there is both first cost savings and annual utility bill savings.



Table 38: Multifamily All-Electric Efficiency Package Cost-Effectiveness Results

CZ	Utility	BASECASE					Non-Preempted								Equipment - Preempted							
		Total EDR	Efficiency EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW per Building	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW per Building	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR	Efficiency EDR	Efficiency EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW per Building	On-Bill B/C Ratio	TDV B/C Ratio
01	PG&E	41.1	70.6	36	1.6	15.9	37.5	67.0	3.6	14.6%	1.5	15.9	1.6	1.4	37.1	67.3	3.3	18.4%	1.4	15.9	2.4	2.3
02	PG&E	34.3	63.4	16	1.4	13.9	32.4	61.5	1.9	9.1%	1.3	13.9	1.7	2.1	31.1	60.2	3.2	15.1%	1.3	13.9	1.6	1.6
03	PG&E	33.5	64.2	14	1.3	13.5	33.5	64.2	0.0	0.0%	1.3	13.5	-	-	30.4	61.5	2.7	19.5%	1.1	13.5	1.7	1.6
04	PG&E	32.0	61.4	12	1.3	13.6	30.5	60.0	1.4	8.0%	1.2	13.6	1.4	1.5	29.7	59.2	2.2	12.2%	1.2	13.6	1.2	1.1
05	PG&E	34.7	65.4	16	1.3	12.6	34.1	64.8	0.6	3.4%	1.3	12.6	1.1	0.9	30.6	61.8	3.6	23.5%	1.2	12.6	2.1	2.0
05	PG&E/SoCalGas	34.7	65.4	16	1.3	12.6	34.1	64.8	0.6	3.4%	1.3	12.6	1.1	0.9	30.6	61.8	3.6	23.5%	1.2	12.6	2.1	2.0
06	SCE/SoCalGas	31.9	65.9	12	1.3	13.9	30.9	64.9	1.0	5.9%	1.3	13.9	0.7	1.3	29.8	63.7	2.2	13.0%	1.2	13.9	1.6	1.9
07	SDG&E	31.7	66.6	7	1.2	13.2	31.1	66.0	0.6	4.6%	1.2	13.2	0.6	1.0	29.7	64.7	1.9	13.6%	1.1	13.2	1.6	1.7
08	SCE/SoCalGas	29.8	63.6	10	1.3	14.6	28.6	62.4	1.2	6.5%	1.2	14.6	0.9	1.7	27.9	61.7	1.9	10.3%	1.2	14.6	1.6	1.8
09	SCE/SoCalGas	30.4	61.9	13	1.3	14.7	28.7	60.3	1.6	8.1%	1.3	14.7	1.3	2.7	28.8	60.4	1.5	7.4%	1.2	14.7	1.6	1.6
10	SCE/SoCalGas	31.2	61.3	11	1.4	15.1	29.3	59.5	1.8	8.7%	1.3	15.1	1.2	2.0	29.3	59.5	1.8	8.6%	1.3	15.1	1.7	2.0
10	SDG&E	31.2	61.3	11	1.4	15.1	29.3	59.5	1.8	8.7%	1.3	15.1	1.5	2.0	29.3	59.5	1.8	8.6%	1.3	15.1	2.0	2.0
11	PG&E	31.9	60.6	12	1.4	16.6	28.5	57.1	3.5	13.1%	1.3	16.6	1.4	1.6	28.1	56.7	3.9	14.4%	1.3	16.6	2.0	2.3
12	PG&E	32.0	59.9	13	1.3	14.9	29.4	57.3	2.6	11.4%	1.2	14.9	0.9	1.1	29.0	57.0	2.9	13.0%	1.2	14.9	1.6	1.6
13	PG&E	32.1	60.5	13	1.4	17.5	28.8	57.2	3.3	12.6%	1.2	17.5	1.3	1.6	28.3	56.7	3.8	14.3%	1.2	17.5	2.0	2.3
14	SCE/SoCalGas	32.5	61.6	16	1.7	14.6	28.9	57.9	3.7	13.8%	1.6	14.6	1.2	1.6	28.7	57.8	3.8	14.3%	1.6	14.6	1.6	2.2
14	SDG&E	32.5	61.6	16	1.7	14.6	28.9	57.9	3.7	13.8%	1.6	14.6	1.5	1.6	28.7	57.8	3.8	14.3%	1.6	14.6	2.0	2.2
15	SCE/SoCalGas	28.2	61.0	8	1.8	21.6	23.9	56.6	4.4	14.2%	1.6	21.6	1.5	2.3	21.9	54.6	6.4	20.6%	1.5	21.6	1.2	1.7
16	PG&E	40.2	66.6	39	1.9	13.4	36.2	62.5	4.1	15.0%	1.7	13.4	2.1	2.1	37.1	63.4	3.2	11.4%	1.7	13.4	1.6	1.7

">1" = indicates cases where there is both first cost savings and annual utility bill savings.



Table 39: Multifamily All-Electric Efficiency & PV-PV/Battery Package Cost-Effectiveness Results

Climate Zone	Utility	BASECASE				Efficiency & PV							Efficiency & PV/Battery						
		Total EDR	CALGreen Tier 1 EDR Target	lbs CO2 per sqft	PV kW per Building	Total EDR	Total EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW per Building	On-Bill B/C Ratio	TDV B/C Ratio	Total EDR	Total EDR Margin	% Comp Margin	lbs CO2 per sqft	PV kW per Building	On-Bill B/C Ratio	TDV B/C Ratio
01	PG&E	41.1	36	1.6	15.9	18.6	22.5	14.6%	0.8	26.9	2.0	1.5	6.6	34.5	24.6%	0.4	30.3	1.3	1.4
02	PG&E	34.3	16	1.4	13.9	16.8	17.5	9.1%	0.7	21.9	2.4	1.8	3.4	30.9	16.1%	0.3	24.8	1.4	1.7
03	PG&E	33.5	14	1.3	13.5	17.4	16.1	2.6%	0.7	20.8	2.4	1.7	4.0	29.5	8.6%	0.3	23.6	1.3	1.6
04	PG&E	32.0	12	1.3	13.6	17.0	15.0	8.0%	0.7	20.2	2.4	1.8	3.1	28.9	16.0%	0.3	22.9	1.30	1.77
05	PG&E	34.7	16	1.3	12.6	17.6	17.1	3.4%	0.7	19.9	2.5	1.8	4.4	30.3	8.4%	0.3	22.5	1.4	1.7
05	PG&E/SoCalGas	34.7	16	1.3	12.6	17.6	17.1	3.4%	0.7	19.9	2.5	1.8	4.4	30.3	8.4%	0.3	22.5	1.4	1.7
06	SCE/SoCalGas	31.9	12	1.3	13.9	18.1	13.8	5.9%	1.0	19.5	1.2	1.7	4.4	27.5	8.9%	0.5	22.1	1.2	1.6
07	SDG&E	31.7	7	1.2	13.2	18.9	12.8	4.6%	0.9	18.1	2.1	1.8	4.6	27.1	6.6%	0.5	20.5	1.2	1.6
08	SCE/SoCalGas	29.8	10	1.3	14.6	18.2	11.6	6.5%	1.0	19.4	1.3	1.8	5.6	24.2	12.5%	0.5	22.0	1.2	1.6
09	SCE/SoCalGas	30.4	13	1.3	14.7	19.1	11.3	8.1%	1.0	19.4	1.3	1.9	7.1	23.3	15.1%	0.6	22.0	1.3	1.7
10	SCE/SoCalGas	31.2	11	1.4	15.1	20.4	10.8	8.7%	1.1	19.9	1.3	1.8	7.9	23.3	14.7%	0.6	22.5	1.3	1.7
10	SDG&E	31.2	11	1.4	15.1	20.4	10.8	8.7%	1.1	19.9	2.1	1.8	7.9	23.3	14.7%	0.6	22.5	1.4	1.7
11	PG&E	31.9	12	1.4	16.6	18.5	13.4	13.1%	0.8	22.8	2.2	1.8	6.6	25.3	21.1%	0.4	25.8	1.4	1.8
12	PG&E	32.0	13	1.3	14.9	17.6	14.4	11.4%	0.7	21.7	2.1	1.6	5.4	26.6	20.4%	0.4	24.5	1.3	1.7
13	PG&E	32.1	13	1.4	17.5	19.9	12.2	12.6%	0.8	23.3	2.1	1.7	8.2	23.9	20.6%	0.4	26.4	1.4	1.7
14	SCE/SoCalGas	32.5	16	1.7	14.6	18.5	14.0	13.8%	1.3	20.2	1.4	1.9	7.7	24.8	21.8%	0.8	22.8	1.4	1.8
14	SDG&E	32.5	16	1.7	14.6	18.5	14.0	13.8%	1.3	20.2	2.2	1.9	7.7	24.8	21.8%	0.8	22.8	1.7	1.8
15	SCE/SoCalGas	28.2	8	1.8	21.6	21.1	7.1	14.2%	1.5	23.6	1.4	2.1	11.3	16.9	20.2%	1.1	26.6	1.3	1.8
16	PG&E	40.2	39	1.9	13.4	20.6	19.6	15.0%	1.2	22.0	2.6	1.9	10.3	29.9	23.0%	0.8	24.8	1.6	1.7

">1" = indicates cases where there is both first cost savings and annual utility bill savings.



Appendix F – Multifamily Measure Summary

Table 40: Multifamily Mixed Fuel Efficiency – Non-Preempted Package Measure Summary

CZ	Duct	Infiltration	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
2	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
3	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
4	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
5	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
6	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
7	Code Min	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
8	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Enh CHW credit (0.6)	0.35 W/cfm	1.0 PV scaling
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
11	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
12	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
13	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
14	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
15	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling

VLLDCS – Verified Low-Leakage Ducts in Conditioned Space



Table 41: Multifamily Mixed Fuel Efficiency – Equipment, Preempted Package Measure Summary

CZ	Duct	Infiltratio	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
2	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
3	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	92 AFUE, 0.35W/cfm	1.0 PV scaling
4	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 0.35 W/cfm	1.0 PV scaling
5	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	92 AFUE, 0.45W/cfm	1.0 PV scaling
6	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	Code Min	1.0 PV scaling
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 0.35 W/cfm	1.0 PV scaling
8	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	Code Min	1.0 PV scaling
9	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 0.35 W/cfm	1.0 PV scaling
10	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 0.35 W/cfm	1.0 PV scaling
11	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
12	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
13	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
14	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling
15	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 0.35 W/cfm	1.0 PV scaling
16	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	95 EF, basic compact dist.	16 SEER, 92 AFUE, 0.35W/cfm	1.0 PV scaling

VLLDCS – Verified Low-Leakage Ducts in Conditioned Space



Table 42: Multifamily Mixed Fuel Efficiency & PV/Battery Package Measure Summary

CZ	Duct	Infiltration	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
2	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
3	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
4	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
5	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
6	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
7	Code Min	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
8	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Enh CHW credit (0.6)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
11	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
12	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
13	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
14	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
15	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Basic CHW credit (0.7)	0.35 W/cfm	1.0 PV scaling + 22kWh batt

VLLDCS – Verified Low-Leakage Ducts in Conditioned Space



Table 43: Multifamily All-Electric Efficiency – Non-Preempted Package Measure Summary

CZ	Duct	Infiltration	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
2	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
3	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Std Design PV
4	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	Code Min	Std Design PV
6	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	Std Design PV
7	Code Min	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	Std Design PV
8	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	Std Design PV
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	Std Design PV
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
11	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
12	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
13	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
14	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
15	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	Std Design PV

VLLDCS – Verified Low-Leakage Ducts in Conditioned Space



Table 44: Multifamily All-Electric Efficiency – Equipment, Preempted Package Measure Summary

CZ	Duct	Infiltratio	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
2	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
3	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
4	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
5	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
6	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	0.45 W/cfm	Std Design PV
7	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	0.45 W/cfm	Std Design PV
8	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	0.45 W/cfm	Std Design PV
9	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	0.45 W/cfm	Std Design PV
10	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	0.45 W/cfm	Std Design PV
11	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
12	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
13	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
14	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV
15	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	18 SEER, 10 HSPF, 0.45W/cfm	Std Design PV
16	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	NEEA Tier 3 HPWH	16 SEER, 9 HSPF, 0.45W/cfm	Std Design PV

VLLDCS – Verified Low-Leakage Ducts in Conditioned Space



Table 45: Multifamily All-Electric Efficiency & PV Package Measure Summary

CZ	Duct	Infiltration	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
2	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
3	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
4	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	Code Min	0.9 PV scaling
6	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
7	Code Min	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
8	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	0.9 PV scaling
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
11	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
12	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
13	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
14	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
15	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	0.9 PV scaling

VLLDCS – Verified Low-Leakage Ducts in Conditioned Space



Table 46: Multifamily All-Electric Efficiency & PV/Battery Package Measure Summary

CZ	Duct	Infiltration	Wall	Attic	Roof	Glazing	Slab	DHW	HVAC	PV
1	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
2	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
3	Code Min	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
4	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
5	VLLDCS	Code Min	Code Min	Code Min	Code Min	Code Min	R-10 slab insulation	Code Min	Code Min	1.0 PV scaling + 22kWh batt
6	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
7	Code Min	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
8	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
9	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	Code Min	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
10	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	Code Min	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
11	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
12	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
13	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
14	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
15	VLLDCS	Code Min	Code Min	Code Min	0.25 solar reflectance	0.24/0.23 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt
16	VLLDCS	Code Min	Code Min	Code Min	Code Min	0.24/0.50 windows	R-10 slab insulation	Code Min	0.45 W/cfm	1.0 PV scaling + 22kWh batt

VLLDCS – Verified Low-Leakage Ducts in Conditioned Space



Appendix G – Results by Climate Zone

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Climate Zone 1**Table 47: Single Family Climate Zone 1 Results Summary**

Climate Zone 1 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel¹	Code Compliant	(0)	581	n/a	n/a	3.00	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	480	5.0	(0.08)	2.51	0.49	\$1,355	3.38	2.82
	Efficiency-Equipment	0	440	6.5	(0.07)	2.32	0.68	\$1,280	4.92	4.10
	Efficiency & PV/Battery	(28)	480	10.5	0.04	2.40	0.60	\$5,311	0.87	1.61
All-Electric²	Code Compliant	7,079	0	n/a	n/a	1.51	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	4,461	0	15.0	0.00	1.01	0.50	\$7,642	1.79	1.66
	Efficiency-Equipment	5,933	0	6.5	0.00	1.29	0.22	\$2,108	2.94	2.74
	Efficiency & PV	889	0	31.0	2.67	0.52	1.00	\$18,192	1.81	1.45
	Efficiency & PV/Battery	(14)	0	41.0	3.45	0.28	1.23	\$24,770	1.45	1.40
Mixed Fuel to All-Electric³	Code Compliant	7,079	0	0.0	0.00	1.51	1.49	(\$5,349)	0.37	0.91
	Efficiency & PV	889	0	31.0	2.67	0.52	2.48	\$12,844	1.43	2.11
	Neutral Cost	5,270	0	8.0	1.35	1.26	1.74	\$0	0.00	1.09
	Min Cost Effectiveness	3,106	0	18.0	2.97	0.95	2.04	(\$6,372)	1.08	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, Neutral Cost, and Min Cost Effectiveness packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 48: Multifamily Climate Zone 1 Results Summary (Per Dwelling Unit)

Climate Zone 1 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	180	n/a	n/a	2.75	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	147	3.0	0.00	2.31	0.44	\$960	1.10	1.18
	Efficiency-Equipment	(0)	159	2.0	(0.01)	2.48	0.27	\$507	1.29	1.41
	Efficiency & PV/Battery	(14)	147	11.5	0.07	2.13	0.61	\$3,094	0.35	1.21
All-Electric ²	Code Compliant	2,624	0	n/a	n/a	1.62	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,328	0	3.5	0.00	1.46	0.15	\$949	1.55	1.40
	Efficiency-Equipment	2,278	0	3.0	0.00	1.41	0.20	\$795	2.39	2.26
	Efficiency & PV	499	0	22.5	1.37	0.75	0.86	\$5,538	2.04	1.50
	Efficiency & PV/Battery	(7)	0	34.5	1.80	0.38	1.24	\$8,919	1.33	1.43
Mixed Fuel to All-Electric ³	Code Compliant	2,624	0	0.0	0.00	1.62	1.13	(\$2,337)	0.38	1.01
	Efficiency & PV	62	0	22.5	1.37	0.75	2.00	\$3,202	1.63	>1
	Neutral Cost	1,693	0	9.5	0.70	1.25	1.50	\$0	0.00	1.57
	Min Cost Effectiveness	1,273	0	14.0	1.01	1.09	1.66	(\$1,052)	1.14	3.76

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, Neutral Cost, and Min Cost Effectiveness packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 2**Table 49: Single Family Climate Zone 2 Results Summary**

Climate Zone 2 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	421	n/a	n/a	2.23	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	360	3.0	(0.04)	1.94	0.30	\$1,504	1.63	1.66
	Efficiency-Equipment	(0)	352	3.0	(0.03)	1.90	0.33	\$724	3.77	3.63
	Efficiency & PV/Battery	(22)	360	10.0	0.06	1.82	0.41	\$5,393	0.47	1.56
All-Electric ²	Code Compliant	5,014	0	n/a	n/a	1.11	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	4,079	0	4.5	0.00	0.94	0.18	\$3,943	1.21	1.07
	Efficiency-Equipment	4,122	0	5.0	0.00	0.94	0.17	\$2,108	2.25	2.10
	Efficiency & PV	847	0	19.0	2.07	0.49	0.63	\$12,106	1.83	1.38
	Efficiency & PV/Battery	(15)	0	30.0	2.71	0.26	0.86	\$18,132	1.37	1.43
Mixed Fuel to All-Electric ³	Code Compliant	5,014	0	0.0	0.00	1.11	1.12	(\$5,349)	0.52	1.59
	Efficiency & PV	847	0	19.0	2.07	0.49	1.75	\$6,758	1.76	39.70
	Neutral Cost	2,891	0	9.5	1.36	0.82	1.41	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 50: Multifamily Climate Zone 2 Results Summary (Per Dwelling Unit)

Climate Zone 2 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	150	n/a	n/a	2.37	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	142	1.5	(0.02)	2.25	0.12	\$309	0.97	1.75
	Efficiency-Equipment	(0)	134	2.0	(0.01)	2.15	0.22	\$497	1.08	1.49
	Efficiency & PV/Battery	(11)	142	10.5	0.04	2.07	0.30	\$2,413	0.17	1.60
All-Electric ²	Code Compliant	2,151	0	n/a	n/a	1.38	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,038	0	1.5	0.00	1.32	0.06	\$361	1.73	2.05
	Efficiency-Equipment	1,928	0	3.0	0.00	1.25	0.13	\$795	1.56	1.56
	Efficiency & PV	476	0	17.5	1.00	0.72	0.67	\$3,711	2.42	1.82
	Efficiency & PV/Battery	(7)	0	30.5	1.36	0.35	1.04	\$6,833	1.38	1.74
Mixed Fuel to All-Electric ³	Code Compliant	2,151	0	0.0	0.00	1.38	0.99	(\$2,337)	0.53	1.42
	Efficiency & PV	60	0	17.5	1.00	0.72	1.65	\$1,375	3.31	>1
	Neutral Cost	1,063	0	10.5	0.70	0.96	1.41	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 3**Table 51: Single Family Climate Zone 3 Results Summary**

Climate Zone 3 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	348	n/a	n/a	1.88	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	296	2.5	(0.03)	1.63	0.26	\$1,552	1.28	1.31
	Efficiency-Equipment	(0)	273	4.0	(0.03)	1.52	0.37	\$1,448	1.91	1.97
	Efficiency & PV/Battery	(20)	296	10.0	0.07	1.50	0.38	\$5,438	0.38	1.38
All-Electric ²	Code Compliant	4,355	0	n/a	n/a	1.00	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,584	0	4.5	0.00	0.85	0.15	\$1,519	2.60	2.36
	Efficiency-Equipment	3,670	0	4.0	0.00	0.86	0.14	\$2,108	1.76	1.62
	Efficiency & PV	790	0	18.0	1.77	0.46	0.54	\$8,517	2.22	1.68
	Efficiency & PV/Battery	(12)	0	29.0	2.37	0.23	0.76	\$14,380	1.50	1.58
Mixed Fuel to All-Electric ³	Code Compliant	4,355	0	0.0	0.00	1.00	0.89	(\$5,349)	0.55	1.53
	Efficiency & PV	790	0	18.0	1.77	0.46	1.43	\$3,169	2.88	>1
	Neutral Cost	2,217	0	10.5	1.35	0.70	1.18	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 52: Multifamily Climate Zone 3 Results Summary (Per Dwelling Unit)

Climate Zone 3 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	133	n/a	n/a	2.13	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	127	0.5	(0.00)	2.06	0.07	\$175	1.00	1.11
	Efficiency-Equipment	(0)	119	1.5	(0.00)	1.94	0.19	\$403	1.11	1.23
	Efficiency & PV/Battery	(10)	127	10.0	0.05	1.86	0.27	\$2,279	0.11	1.41
All-Electric ²	Code Compliant	1,944	0	n/a	n/a	1.27	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,944	0	0.0	0.00	1.27	0.00	\$0	-	-
	Efficiency-Equipment	1,698	0	2.5	0.00	1.13	0.14	\$795	1.73	1.58
	Efficiency & PV	457	0	16.0	0.92	0.69	0.58	\$3,272	2.43	1.73
	Efficiency & PV/Battery	(7)	0	29.5	1.26	0.33	0.94	\$6,344	1.32	1.64
Mixed Fuel to All-Electric ³	Code Compliant	1,944	0	0.0	0.00	1.27	0.86	(\$2,337)	0.58	1.46
	Efficiency & PV	57	0	16.0	0.92	0.69	1.43	\$936	4.18	>1
	Neutral Cost	845	0	11.5	0.70	0.85	1.28	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 4**Table 53: Single Family Climate Zone 4 Results Summary**

Climate Zone 4 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin⁴	PV Size Change (kW)⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel¹	Code Compliant	0	347	n/a	n/a	1.88	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	306	2.5	(0.03)	1.68	0.20	\$1,556	0.93	1.15
	Efficiency-Equipment	(0)	294	2.5	(0.02)	1.62	0.26	\$758	2.39	2.67
	Efficiency & PV/Battery	(18)	306	10.0	0.07	1.55	0.33	\$5,434	0.30	1.48
All-Electric²	Code Compliant	4,342	0	n/a	n/a	1.00	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,775	0	3.0	0.00	0.89	0.11	\$1,519	1.92	1.84
	Efficiency-Equipment	3,747	0	3.5	0.00	0.88	0.12	\$2,108	1.52	1.52
	Efficiency & PV	814	0	17.0	1.84	0.48	0.52	\$8,786	2.13	1.62
	Efficiency & PV/Battery	(11)	0	28.5	2.44	0.25	0.75	\$14,664	1.46	1.61
Mixed Fuel to All-Electric³	Code Compliant	4,342	0	0.0	0.00	1.00	0.88	(\$5,349)	0.55	1.59
	Efficiency & PV	814	0	17.0	1.84	0.48	1.40	\$3,438	2.64	>1
	Neutral Cost	2,166	0	10.0	1.35	0.70	1.18	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 54: Multifamily Climate Zone 4 Results Summary (Per Dwelling Unit)

Climate Zone 4 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	134	n/a	n/a	2.16	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	127	1.0	(0.01)	2.06	0.10	\$329	0.75	1.24
	Efficiency-Equipment	(0)	123	1.5	(0.01)	2.01	0.15	\$351	1.06	1.74
	Efficiency & PV/Battery	(9)	127	11.0	0.04	1.87	0.29	\$2,429	0.17	1.60
All-Electric ²	Code Compliant	1,887	0	n/a	n/a	1.25	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,794	0	1.0	0.00	1.21	0.05	\$361	1.38	1.54
	Efficiency-Equipment	1,712	0	2.0	0.00	1.15	0.10	\$795	1.23	1.09
	Efficiency & PV	453	0	15.0	0.83	0.69	0.57	\$3,158	2.43	1.81
	Efficiency & PV/Battery	(7)	0	28.5	1.17	0.32	0.93	\$6,201	1.30	1.77
Mixed Fuel to All-Electric ³	Code Compliant	1,887	0	0.0	0.00	1.25	0.90	(\$2,337)	0.65	1.77
	Efficiency & PV	57	0	15.0	0.83	0.69	1.47	\$822	4.96	>1
	Neutral Cost	767	0	11.0	0.70	0.82	1.33	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design..



Climate Zone 5 PG&E**Table 55: Single Family Climate Zone 5 PG&E Results Summary**

Climate Zone 5 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	331	n/a	n/a	1.79	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	281	2.5	(0.03)	1.55	0.24	\$1,571	1.10	1.22
	Efficiency-Equipment	(0)	279	2.5	(0.02)	1.54	0.25	\$772	2.29	2.48
	Efficiency & PV/Battery	(14)	281	9.0	0.07	1.43	0.36	\$5,433	0.37	1.32
All-Electric ²	Code Compliant	4,452	0	n/a	n/a	1.01	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,687	0	4.0	0.00	0.86	0.15	\$1,519	2.58	2.31
	Efficiency-Equipment	3,737	0	4.0	0.00	0.87	0.14	\$2,108	1.85	1.70
	Efficiency & PV	798	0	18.0	1.72	0.46	0.55	\$8,307	2.31	1.76
	Efficiency & PV/Battery	(8)	0	28.5	2.29	0.24	0.78	\$14,047	1.59	1.63
Mixed Fuel to All-Electric ³	Code Compliant	4,452	0	0.0	0.00	1.01	0.78	(\$5,349)	0.48	1.32
	Efficiency & PV	798	0	18.0	1.72	0.46	1.33	\$2,959	2.72	>1
	Neutral Cost	2,172	0	11.0	1.35	0.70	1.10	\$0	>1	40.07

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 56: Multifamily Climate Zone 5 PG&E Results Summary (Per Dwelling Unit)

Climate Zone 5 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	131	n/a	n/a	2.10	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	126	0.5	(0.00)	2.03	0.07	\$180	0.99	1.03
	Efficiency-Equipment	(0)	117	1.5	(0.00)	1.92	0.19	\$358	1.24	1.34
	Efficiency & PV/Battery	(7)	126	9.5	0.05	1.84	0.26	\$2,273	0.15	1.38
All-Electric ²	Code Compliant	2,044	0	n/a	n/a	1.32	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,990	0	0.5	0.00	1.30	0.03	\$247	1.09	0.86
	Efficiency-Equipment	1,738	0	3.5	0.00	1.15	0.17	\$795	2.15	2.03
	Efficiency & PV	465	0	17.0	0.91	0.70	0.62	\$3,293	2.53	1.82
	Efficiency & PV/Battery	(6)	0	30.0	1.24	0.34	0.98	\$6,314	1.44	1.69
Mixed Fuel to All-Electric ³	Code Compliant	2,044	0	0.0	0.00	1.32	0.78	(\$2,337)	0.50	1.28
	Efficiency & PV	58	0	17.0	0.91	0.70	1.40	\$956	3.80	>1
	Neutral Cost	874	0	12.5	0.70	0.87	1.23	\$0	>1	23.44

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 5 PG&E/SoCalGas**Table 57: Single Family Climate Zone 5 PG&E/SoCalGas Results Summary**

Climate Zone 5 PG&E/SoCalGas Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On- Bill	TDV
Mixed Fuel ¹	Code Compliant	0	331	n/a	n/a	1.79	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	281	2.5	(0.03)	1.55	0.24	\$1,571	0.92	1.22
	Efficiency-Equipment	(0)	279	2.5	(0.02)	1.54	0.25	\$772	1.98	2.48
	Efficiency & PV/Battery	(14)	281	9.0	0.07	1.43	0.36	\$5,433	0.31	1.32
All-Electric ²	Code Compliant	4,452	0	n/a	n/a	1.01	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,687	0	4.0	0.00	0.86	0.15	\$1,519	2.58	2.31
	Efficiency-Equipment	3,737	0	4.0	0.00	0.87	0.14	\$2,108	1.85	1.70
	Efficiency & PV	798	0	18.0	1.72	0.46	0.55	\$8,307	2.31	1.76
	Efficiency & PV/Battery	(8)	0	28.5	2.29	0.24	0.78	\$14,047	1.59	1.63
Mixed Fuel to All-Electric ³	Code Compliant	4,452	0	0.0	0.00	1.01	0.78	(\$5,349)	0.48	1.32
	Efficiency & PV	798	0	18.0	1.72	0.46	1.33	\$2,959	2.75	>1
	Neutral Cost	2,172	0	11.0	1.35	0.70	1.10	\$0	>1	40.07

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 58: Multifamily Climate Zone 5 PG&E/SoCalGas Results Summary (Per Dwelling Unit)

Climate Zone 5 PG&E/SoCalGas Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	131	n/a	n/a	2.10	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	126	0.5	(0.00)	2.03	0.07	\$180	0.85	1.03
	Efficiency-Equipment	(0)	117	1.5	(0.00)	1.92	0.19	\$358	1.09	1.34
	Efficiency & PV/Battery	(7)	126	9.5	0.05	1.84	0.26	\$2,273	0.14	1.38
All-Electric ²	Code Compliant	2,044	0	n/a	n/a	1.32	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,990	0	0.5	0.00	1.30	0.03	\$247	1.09	0.86
	Efficiency-Equipment	1,738	0	3.5	0.00	1.15	0.17	\$795	2.15	2.03
	Efficiency & PV	465	0	17.0	0.91	0.70	0.62	\$3,293	2.53	1.82
	Efficiency & PV/Battery	(6)	0	30.0	1.24	0.34	0.98	\$6,314	1.44	1.69
Mixed Fuel to All-Electric ³	Code Compliant	2,044	0	0.0	0.00	1.32	0.78	(\$2,337)	0.65	1.28
	Efficiency & PV	58	0	17.0	0.91	0.70	1.40	\$956	4.98	>1
	Neutral Cost	874	0	12.5	0.70	0.87	1.23	\$0	>1	23.44

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 6**Table 59: Single Family Climate Zone 6 Results Summary**

Climate Zone 6 SCE/SoCalGas Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	249	n/a	n/a	1.57	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	229	2.0	(0.02)	1.47	0.10	\$1,003	0.66	1.15
	Efficiency-Equipment	(0)	218	1.5	(0.01)	1.41	0.15	\$581	1.58	2.04
	Efficiency & PV/Battery	(13)	229	9.5	0.08	1.22	0.34	\$4,889	0.84	1.27
All-Electric ²	Code Compliant	3,099	0	n/a	n/a	0.87	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,885	0	2.0	0.00	0.83	0.05	\$926	1.31	1.41
	Efficiency-Equipment	2,746	0	2.5	0.00	0.80	0.08	\$846	2.20	2.29
	Efficiency & PV	722	0	14.0	1.37	0.63	0.24	\$6,341	1.19	1.48
	Efficiency & PV/Battery	(6)	0	26.0	1.93	0.33	0.55	\$12,036	1.15	1.43
Mixed Fuel to All-Electric ³	Code Compliant	3,099	0	0.0	0.00	0.87	0.69	(\$5,349)	1.19	2.46
	Efficiency & PV	722	0	14.0	1.37	0.63	0.93	\$992	3.07	>1
	Neutral Cost	959	0	12.0	1.36	0.67	0.89	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 60: Multifamily Climate Zone 6 Results Summary (Per Dwelling Unit)

Climate Zone 6 SCE/SoCalGas Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	114	n/a	n/a	2.17	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	112	1.0	(0.01)	2.14	0.03	\$190	0.65	1.49
	Efficiency-Equipment	(0)	103	1.0	(0.00)	2.03	0.15	\$213	1.43	1.74
	Efficiency & PV/Battery	(6)	112	10.5	0.04	1.76	0.41	\$2,294	0.56	1.35
All-Electric ²	Code Compliant	1,558	0	n/a	n/a	1.28	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,531	0	1.0	0.00	1.26	0.02	\$231	0.65	1.34
	Efficiency-Equipment	1,430	0	2.0	0.00	1.20	0.08	\$361	1.62	1.91
	Efficiency & PV	427	0	13.5	0.70	0.97	0.31	\$2,580	1.24	1.71
	Efficiency & PV/Battery	(5)	0	27.5	1.02	0.49	0.79	\$5,590	1.22	1.58
Mixed Fuel to All-Electric ³	Code Compliant	1,558	0	0.0	0.00	1.28	0.90	(\$2,337)	2.59	2.38
	Efficiency & PV	53	0	13.5	0.70	0.97	1.20	\$243	9.50	>1
	Neutral Cost	459	0	12.5	0.70	0.99	1.18	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 7**Table 61: Single Family Climate Zone 7 Results Summary**

Climate Zone 7 SDG&E Single Family		Annual Net kWh	Annual therms	EDR Margin⁴	PV Size Change (kW)⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel¹	Code Compliant	(0)	196	n/a	n/a	1.30	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	196	0.0	0.00	1.30	0.00	\$0	-	-
	Efficiency-Equipment	0	171	1.5	(0.00)	1.18	0.12	\$606	1.50	1.40
	Efficiency & PV/Battery	(12)	189	9.0	0.10	1.04	0.26	\$4,028	0.06	1.32
All-Electric²	Code Compliant	2,479	0	n/a	n/a	0.75	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,479	0	0.0	0.00	0.75	0.00	\$0	-	-
	Efficiency-Equipment	2,222	0	2.0	0.00	0.69	0.06	\$846	1.60	1.65
	Efficiency & PV	674	0	11.0	1.10	0.58	0.17	\$4,436	1.87	1.55
	Efficiency & PV/Battery	(6)	0	24.0	1.61	0.29	0.46	\$9,936	1.25	1.47
Mixed Fuel to All-Electric³	Code Compliant	2,479	0	0.0	0.00	0.75	0.55	(\$5,349)	1.04	2.54
	Efficiency & PV	674	0	11.0	1.10	0.58	0.72	(\$912)	>1	>1
	Neutral Cost	267	0	13.5	1.35	0.55	0.75	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 62: Multifamily Climate Zone 7 Results Summary (Per Dwelling Unit)

Climate Zone 7 SDG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	110	n/a	n/a	2.11	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	108	0.5	(0.01)	2.08	0.03	\$90	0.73	2.24
	Efficiency-Equipment	(0)	99	2.0	(0.00)	1.96	0.15	\$366	1.07	1.41
	Efficiency & PV/Battery	(6)	108	11.0	0.05	1.71	0.40	\$2,188	0.03	1.40
All-Electric ²	Code Compliant	1,434	0	n/a	n/a	1.21	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,416	0	0.5	0.00	1.20	0.01	\$202	0.60	1.02
	Efficiency-Equipment	1,319	0	1.5	0.00	1.14	0.07	\$361	1.59	1.71
	Efficiency & PV	412	0	12.5	0.61	0.94	0.27	\$2,261	2.08	1.76
	Efficiency & PV/Battery	(5)	0	27.0	0.92	0.47	0.74	\$5,203	1.19	1.62
Mixed Fuel to All-Electric ³	Code Compliant	1,434	0	0.0	0.00	1.21	0.90	(\$2,337)	1.12	2.47
	Efficiency & PV	51	0	12.5	0.61	0.94	1.17	(\$75)	>1	>1
	Neutral Cost	294	0	13.5	0.70	0.91	1.20	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 8**Table 63: Single Family Climate Zone 8 Results Summary**

Climate Zone 8 SCE/SoCalGas Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	206	n/a	n/a	1.38	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	198	1.0	(0.02)	1.34	0.05	\$581	0.57	1.41
	Efficiency-Equipment	0	181	1.5	(0.01)	1.27	0.12	\$586	1.30	1.82
	Efficiency & PV/Battery	(13)	198	8.0	0.08	1.11	0.27	\$4,466	0.90	1.31
All-Electric ²	Code Compliant	2,576	0	n/a	n/a	0.80	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,483	0	1.5	0.00	0.78	0.02	\$926	0.57	1.22
	Efficiency-Equipment	2,352	0	1.5	0.00	0.75	0.05	\$412	2.82	3.03
	Efficiency & PV	703	0	10.5	1.13	0.62	0.18	\$5,373	1.00	1.48
	Efficiency & PV/Battery	(7)	0	21.5	1.67	0.32	0.48	\$11,016	1.09	1.42
Mixed Fuel to All-Electric ³	Code Compliant	2,576	0	0.0	0.00	0.80	0.58	(\$5,349)	1.83	2.99
	Efficiency & PV	703	0	10.5	1.13	0.62	0.77	\$25	107.93	>1
	Neutral Cost	439	0	11.0	1.36	0.60	0.78	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 64: Multifamily Climate Zone 8 Results Summary (Per Dwelling Unit)

Climate Zone 8 SCE/SoCalGas Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	109	n/a	n/a	2.18	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	106	1.5	(0.02)	2.13	0.05	\$250	0.70	1.36
	Efficiency-Equipment	(0)	99	1.0	(0.00)	2.04	0.14	\$213	1.37	1.67
	Efficiency & PV/Battery	(6)	106	9.5	0.03	1.77	0.41	\$2,353	0.74	1.32
All-Electric ²	Code Compliant	1,409	0	n/a	n/a	1.26	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,373	0	1.0	0.00	1.24	0.02	\$231	0.87	1.72
	Efficiency-Equipment	1,276	0	1.5	0.00	1.18	0.08	\$361	1.63	1.75
	Efficiency & PV	426	0	11.5	0.60	0.99	0.27	\$2,240	1.26	1.78
	Efficiency & PV/Battery	(5)	0	24.0	0.92	0.53	0.73	\$5,249	1.24	1.59
Mixed Fuel to All-Electric ³	Code Compliant	1,409	0	0.0	0.00	1.26	0.91	(\$2,337)	6.69	2.67
	Efficiency & PV	53	0	11.5	0.60	0.99	1.18	(\$96)	>1	>1
	Neutral Cost	309	0	12.0	0.70	0.98	1.20	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 9**Table 65: Single Family Climate Zone 9 Results Summary**

Climate Zone 9 SCE/SoCalGas Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	229	n/a	n/a	1.53	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	216	2.5	(0.04)	1.46	0.07	\$912	0.69	1.97
	Efficiency-Equipment	0	201	2.5	(0.04)	1.38	0.15	\$574	1.80	3.66
	Efficiency & PV/Battery	(14)	216	8.5	0.05	1.23	0.30	\$4,785	0.99	1.48
All-Electric ²	Code Compliant	2,801	0	n/a	n/a	0.87	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,645	0	2.5	0.00	0.84	0.04	\$1,180	0.78	1.96
	Efficiency-Equipment	2,460	0	3.0	0.00	0.80	0.07	\$846	2.11	3.22
	Efficiency & PV	745	0	11.5	1.16	0.66	0.21	\$5,778	1.08	1.64
	Efficiency & PV/Battery	(9)	0	21.0	1.72	0.37	0.50	\$11,454	1.11	1.53
Mixed Fuel to All-Electric ³	Code Compliant	2,801	0	0.0	0.00	0.87	0.66	(\$5,349)	1.67	2.90
	Efficiency & PV	745	0	11.5	1.16	0.66	0.87	\$429	7.15	>1
	Neutral Cost	594	0	10.0	1.36	0.67	0.86	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 66: Multifamily Climate Zone 9 Results Summary (Per Dwelling Unit)

Climate Zone 9 SCE/SoCalGas Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	111	n/a	n/a	2.24	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	109	1.5	(0.03)	2.19	0.05	\$136	1.46	3.35
	Efficiency-Equipment	(0)	101	2.5	(0.03)	2.08	0.16	\$274	1.66	2.87
	Efficiency & PV/Battery	(7)	109	9.5	0.03	1.84	0.40	\$2,234	0.90	1.49
All-Electric ²	Code Compliant	1,468	0	n/a	n/a	1.33	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,414	0	1.5	0.00	1.30	0.03	\$231	1.29	2.70
	Efficiency-Equipment	1,334	0	1.5	0.00	1.25	0.08	\$361	1.63	1.58
	Efficiency & PV	441	0	11.0	0.60	1.04	0.29	\$2,232	1.34	1.91
	Efficiency & PV/Battery	(7)	0	23.0	0.92	0.58	0.75	\$5,236	1.28	1.67
Mixed Fuel to All-Electric ³	Code Compliant	1,468	0	0.0	0.00	1.33	0.91	(\$2,337)	4.38	2.55
	Efficiency & PV	55	0	11.0	0.60	1.04	1.20	(\$104)	>1	>1
	Neutral Cost	331	0	11.0	0.70	1.03	1.21	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 10 SCE/SoCalGas**Table 67: Single Family Climate Zone 10 SCE/SoCalGas Results Summary**

Climate Zone 10 SCE/SoCalGas Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	239	n/a	n/a	1.61	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	217	3.0	(0.07)	1.48	0.13	\$1,648	0.63	1.33
	Efficiency-Equipment	(0)	209	3.0	(0.06)	1.45	0.16	\$593	2.05	3.84
	Efficiency & PV/Battery	(12)	217	9.5	0.03	1.25	0.36	\$5,522	1.00	1.48
All-Electric ²	Code Compliant	2,981	0	n/a	n/a	0.94	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,673	0	3.0	0.00	0.88	0.07	\$1,773	0.92	1.52
	Efficiency-Equipment	2,563	0	3.0	0.00	0.85	0.10	\$949	2.27	3.19
	Efficiency & PV	762	0	11.0	1.17	0.70	0.24	\$6,405	1.08	1.50
	Efficiency & PV/Battery	(6)	0	21.0	1.74	0.41	0.53	\$12,129	1.11	1.51
Mixed Fuel to All-Electric ³	Code Compliant	2,981	0	0.0	0.00	0.94	0.67	(\$5,349)	1.45	2.66
	Efficiency & PV	762	0	11.0	1.17	0.70	0.91	\$1,057	3.04	>1
	Neutral Cost	770	0	9.0	1.36	0.74	0.87	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.²All reductions and incremental costs relative to the **all-electric** code compliant home.³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.⁵Positive values indicate an increase in PV capacity relative to the Standard Design.

Table 68: Multifamily Climate Zone 10 SCE/SoCalGas Results Summary (Per Dwelling Unit)

Climate Zone 10 SCE/SoCalGas Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	112	n/a	n/a	2.29	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	108	1.5	(0.02)	2.23	0.06	\$278	0.81	1.69
	Efficiency-Equipment	(0)	102	2.5	(0.04)	2.13	0.16	\$250	1.96	3.27
	Efficiency & PV/Battery	(6)	108	10.0	0.03	1.88	0.41	\$2,376	0.98	1.57
All-Electric ²	Code Compliant	1,507	0	n/a	n/a	1.39	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,425	0	1.5	0.00	1.34	0.05	\$361	1.16	2.00
	Efficiency-Equipment	1,369	0	1.5	0.00	1.31	0.08	\$361	1.71	1.98
	Efficiency & PV	450	0	10.5	0.60	1.09	0.30	\$2,371	1.31	1.79
	Efficiency & PV/Battery	(4)	0	23.0	0.93	0.63	0.76	\$5,395	1.27	1.69
Mixed Fuel to All-Electric ³	Code Compliant	1,507	0	0.0	0.00	1.39	0.90	(\$2,337)	3.35	2.36
	Efficiency & PV	56	0	10.5	0.60	1.09	1.20	\$34	70.89	>1
	Neutral Cost	372	0	10.5	0.70	1.10	1.19	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 10 SDGE**Table 69: Single Family Climate Zone 10 SDGE Results Summary**

Climate Zone 10 SDG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	239	n/a	n/a	1.61	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	217	3.0	(0.07)	1.48	0.13	\$1,648	0.80	1.33
	Efficiency-Equipment	(0)	209	3.0	(0.06)	1.45	0.16	\$593	2.64	3.84
	Efficiency & PV/Battery	(12)	217	9.5	0.03	1.25	0.36	\$5,522	0.58	1.48
All-Electric ²	Code Compliant	2,981	0	n/a	n/a	0.94	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,673	0	3.0	0.00	0.88	0.07	\$1,773	1.08	1.52
	Efficiency-Equipment	2,563	0	3.0	0.00	0.85	0.10	\$949	2.62	3.19
	Efficiency & PV	762	0	11.0	1.17	0.70	0.24	\$6,405	1.68	1.50
	Efficiency & PV/Battery	(6)	0	21.0	1.74	0.41	0.53	\$12,129	1.42	1.51
Mixed Fuel to All-Electric ³	Code Compliant	2,981	0	0.0	0.00	0.94	0.67	(\$5,349)	0.90	2.66
	Efficiency & PV	762	0	11.0	1.17	0.70	0.91	\$1,057	4.55	>1
	Neutral Cost	770	0	9.0	1.36	0.74	0.87	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.²All reductions and incremental costs relative to the **all-electric** code compliant home.³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.⁵Positive values indicate an increase in PV capacity relative to the Standard Design.

Table 70: Multifamily Climate Zone 10 SDGE Results Summary (Per Dwelling Unit)

Climate Zone 10 SDG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	112	n/a	n/a	2.29	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	108	1.5	(0.02)	2.23	0.06	\$278	1.09	1.69
	Efficiency-Equipment	(0)	102	2.5	(0.04)	2.13	0.16	\$250	2.60	3.27
	Efficiency & PV/Battery	(6)	108	10.0	0.03	1.88	0.41	\$2,376	0.23	1.57
All-Electric ²	Code Compliant	1,507	0	n/a	n/a	1.39	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,425	0	1.5	0.00	1.34	0.05	\$361	1.53	2.00
	Efficiency-Equipment	1,369	0	1.5	0.00	1.31	0.08	\$361	2.05	1.98
	Efficiency & PV	450	0	10.5	0.60	1.09	0.30	\$2,371	2.12	1.79
	Efficiency & PV/Battery	(4)	0	23.0	0.93	0.63	0.76	\$5,395	1.44	1.69
Mixed Fuel to All-Electric ³	Code Compliant	1,507	0	0.0	0.00	1.39	0.90	(\$2,337)	0.73	2.36
	Efficiency & PV	56	0	10.5	0.60	1.09	1.20	\$34	54.15	>1
	Neutral Cost	372	0	10.5	0.70	1.10	1.19	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 11**Table 71: Single Family Climate Zone 11 Results Summary**

Climate Zone 11 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	378	n/a	n/a	2.14	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	333	4.0	(0.19)	1.90	0.24	\$3,143	0.78	1.20
	Efficiency-Equipment	0	320	5.0	(0.21)	1.83	0.31	\$1,222	2.50	3.68
	Efficiency & PV/Battery	(18)	333	9.0	(0.09)	1.78	0.36	\$7,026	0.36	1.51
All-Electric ²	Code Compliant	4,585	0	n/a	n/a	1.15	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,815	0	4.5	0.00	0.99	0.16	\$3,735	1.24	1.47
	Efficiency-Equipment	3,533	0	5.5	0.00	0.93	0.22	\$2,108	2.97	3.33
	Efficiency & PV	957	0	14.0	1.79	0.60	0.55	\$10,827	1.84	1.55
	Efficiency & PV/Battery	(13)	0	23.0	2.49	0.36	0.79	\$17,077	1.49	1.61
Mixed Fuel to All-Electric ³	Code Compliant	4,585	0	0.0	0.00	1.15	0.99	(\$5,349)	0.49	1.69
	Efficiency & PV	957	0	14.0	1.79	0.60	1.54	\$5,478	1.64	>1
	Neutral Cost	2,429	0	7.0	1.36	0.85	1.29	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 72: Multifamily Climate Zone 11 Results Summary (Per Dwelling Unit)

Climate Zone 11 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	141	n/a	n/a	2.38	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	127	2.5	(0.05)	2.18	0.20	\$850	0.65	1.17
	Efficiency-Equipment	(0)	126	3.0	(0.06)	2.16	0.22	\$317	1.84	3.29
	Efficiency & PV/Battery	(9)	127	10.5	0.01	2.00	0.38	\$2,950	0.39	1.60
All-Electric ²	Code Compliant	1,974	0	n/a	n/a	1.42	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,732	0	3.5	0.00	1.29	0.13	\$1,011	1.40	1.64
	Efficiency-Equipment	1,707	0	3.5	0.00	1.26	0.16	\$795	2.02	2.33
	Efficiency & PV	504	0	13.0	0.77	0.81	0.61	\$3,601	2.22	1.81
	Efficiency & PV/Battery	(6)	0	25.0	1.14	0.45	0.98	\$6,759	1.42	1.81
Mixed Fuel to All-Electric ³	Code Compliant	1,974	0	0.0	0.00	1.42	0.96	(\$2,337)	0.56	1.33
	Efficiency & PV	63	0	13.0	0.77	0.81	1.56	\$1,264	3.03	>1
	Neutral Cost	866	0	9.0	0.70	0.99	1.38	\$0	>1	73.96

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 12**Table 73: Single Family Climate Zone 12 Results Summary**

Climate Zone 12 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	390	n/a	n/a	2.11	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	344	3.5	(0.06)	1.88	0.23	\$1,679	1.18	1.83
	Efficiency-Equipment	0	338	3.0	(0.05)	1.85	0.26	\$654	3.31	4.65
	Efficiency & PV/Battery	(23)	344	9.5	0.04	1.76	0.35	\$5,568	0.43	1.72
All-Electric ²	Code Compliant	4,492	0	n/a	n/a	1.05	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,958	0	3.5	0.00	0.94	0.10	\$3,735	0.78	1.06
	Efficiency-Equipment	3,721	0	5.0	0.00	0.90	0.15	\$2,108	2.00	2.51
	Efficiency & PV	867	0	15.5	1.97	0.51	0.53	\$11,520	1.69	1.41
	Efficiency & PV/Battery	(15)	0	25.0	2.62	0.29	0.76	\$17,586	1.29	1.48
Mixed Fuel to All-Electric ³	Code Compliant	4,492	0	0.0	0.00	1.05	1.07	(\$5,349)	0.63	1.89
	Efficiency & PV	867	0	15.5	1.97	0.51	1.60	\$6,172	1.77	>1
	Neutral Cost	2,374	0	8.0	1.35	0.76	1.36	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 74: Multifamily Climate Zone 12 Results Summary (Per Dwelling Unit)

Climate Zone 12 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	143	n/a	n/a	2.33	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	135	1.5	(0.02)	2.21	0.12	\$291	1.10	2.22
	Efficiency-Equipment	0	128	2.5	(0.03)	2.12	0.21	\$434	1.25	2.22
	Efficiency & PV/Battery	(11)	135	10.0	0.03	2.03	0.30	\$2,394	0.30	1.75
All-Electric ²	Code Compliant	1,963	0	n/a	n/a	1.34	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,792	0	2.5	0.00	1.24	0.09	\$1,011	0.91	1.12
	Efficiency-Equipment	1,744	0	2.5	0.00	1.21	0.13	\$795	1.56	1.63
	Efficiency & PV	472	0	14.0	0.84	0.73	0.60	\$3,835	2.08	1.65
	Efficiency & PV/Battery	(8)	0	26.5	1.20	0.38	0.96	\$6,943	1.26	1.68
Mixed Fuel to All-Electric ³	Code Compliant	1,963	0	0.0	0.00	1.34	1.00	(\$2,337)	0.64	1.66
	Efficiency & PV	59	0	14.0	0.84	0.73	1.60	\$1,498	2.88	>1
	Neutral Cost	872	0	9.5	0.70	0.92	1.42	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 13**Table 75: Single Family Climate Zone 13 Results Summary**

Climate Zone 13 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	352	n/a	n/a	2.02	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	311	4.5	(0.21)	1.80	0.22	\$3,060	0.76	1.28
	Efficiency-Equipment	(0)	292	5.5	(0.24)	1.70	0.32	\$611	5.26	8.40
	Efficiency & PV/Battery	(19)	311	9.5	(0.11)	1.69	0.33	\$6,954	0.36	1.56
All-Electric ²	Code Compliant	4,180	0	n/a	n/a	1.08	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,428	0	5.0	0.00	0.92	0.15	\$4,154	1.12	1.40
	Efficiency-Equipment	3,177	0	6.0	0.00	0.87	0.21	\$2,108	2.88	3.30
	Efficiency & PV	934	0	13.0	1.61	0.57	0.50	\$10,532	1.70	1.47
	Efficiency & PV/Battery	(11)	0	22.0	2.32	0.35	0.73	\$16,806	1.40	1.54
Mixed Fuel to All-Electric ³	Code Compliant	4,180	0	0.0	0.00	1.08	0.94	(\$5,349)	0.54	1.83
	Efficiency & PV	934	0	13.0	1.61	0.57	1.44	\$5,184	1.56	>1
	Neutral Cost	2,092	0	7.0	1.36	0.79	1.23	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 76: Multifamily Climate Zone 13 Results Summary (Per Dwelling Unit)

Climate Zone 13 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	135	n/a	n/a	2.30	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	123	3.0	(0.05)	2.12	0.18	\$831	0.63	1.27
	Efficiency-Equipment	(0)	121	3.0	(0.07)	2.10	0.21	\$290	1.95	3.75
	Efficiency & PV/Battery	(9)	123	10.5	0.00	1.95	0.35	\$2,936	0.38	1.64
All-Electric ²	Code Compliant	1,849	0	n/a	n/a	1.36	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,629	0	3.0	0.00	1.24	0.12	\$1,011	1.31	1.56
	Efficiency-Equipment	1,590	0	3.5	0.00	1.21	0.16	\$795	1.98	2.28
	Efficiency & PV	501	0	12.0	0.73	0.80	0.56	\$3,462	2.12	1.71
	Efficiency & PV/Battery	(5)	0	23.5	1.11	0.44	0.92	\$6,650	1.35	1.74
Mixed Fuel to All-Electric ³	Code Compliant	1,849	0	0.0	0.00	1.36	0.94	(\$2,337)	0.63	1.54
	Efficiency & PV	63	0	12.0	0.73	0.80	1.50	\$1,125	3.22	>1
	Neutral Cost	773	0	8.5	0.70	0.94	1.36	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 14 SCE/SoCalGas**Table 77: Single Family Climate Zone 14 SCE/SoCalGas Results Summary**

Climate Zone 14 SCE/SoCalGas Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	371	n/a	n/a	2.35	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	319	4.5	(0.17)	2.06	0.29	\$1,662	1.57	2.46
	Efficiency-Equipment	(0)	305	5.5	(0.19)	1.98	0.36	\$799	3.95	6.14
	Efficiency & PV/Battery	(5)	319	9.0	(0.08)	1.83	0.52	\$5,526	1.31	1.74
All-Electric ²	Code Compliant	4,725	0	n/a	n/a	1.38	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,819	0	5.5	0.00	1.19	0.19	\$4,154	0.95	1.46
	Efficiency-Equipment	3,676	0	6.0	0.00	1.16	0.22	\$2,108	2.29	3.13
	Efficiency & PV	953	0	15.5	1.60	0.93	0.45	\$10,459	1.21	1.62
	Efficiency & PV/Battery	(2)	0	23.5	2.21	0.63	0.75	\$16,394	1.35	1.59
Mixed Fuel to All-Electric ³	Code Compliant	4,725	0	0.0	0.00	1.38	0.97	(\$5,349)	0.72	1.67
	Efficiency & PV	953	0	15.5	1.60	0.93	1.42	\$5,111	1.01	>1
	Neutral Cost	2,299	0	8.5	1.35	1.15	1.19	\$0	0.00	>1
	Min Cost Effectiveness	1,853	0	10.0	1.61	1.12	1.23	(\$1,000)	1.24	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, Neutral Cost, and Min Cost Effectiveness packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 78: Multifamily Climate Zone 14 SCE/SoCalGas Results Summary (Per Dwelling Unit)

Climate Zone 14 SCE/SoCalGas Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	141	n/a	n/a	2.76	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	126	3.0	(0.04)	2.53	0.23	\$874	0.73	1.21
	Efficiency-Equipment	(0)	126	3.0	(0.05)	2.52	0.23	\$347	1.96	2.99
	Efficiency & PV/Battery	(3)	126	9.5	0.01	2.18	0.58	\$2,957	1.09	1.39
All-Electric ²	Code Compliant	2,022	0	n/a	n/a	1.73	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,759	0	3.5	0.00	1.58	0.15	\$1,011	1.24	1.65
	Efficiency-Equipment	1,748	0	3.5	0.00	1.56	0.16	\$795	1.59	2.20
	Efficiency & PV	504	0	14.0	0.70	1.26	0.47	\$3,356	1.39	1.91
	Efficiency & PV/Battery	(2)	0	24.5	1.03	0.79	0.94	\$6,380	1.36	1.77
Mixed Fuel to All-Electric ³	Code Compliant	2,022	0	0.0	0.00	1.73	1.03	(\$2,337)	1.13	1.48
	Efficiency & PV	63	0	14.0	0.70	1.26	1.50	\$1,019	2.57	>1
	Neutral Cost	772	0	10.0	0.70	1.41	1.35	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 14 SDGE**Table 79: Single Family Climate Zone 14 SDGE Results Summary**

Climate Zone 14 SDG&E Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	371	n/a	n/a	2.35	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	319	4.5	(0.17)	2.06	0.29	\$1,662	1.92	2.46
	Efficiency-Equipment	(0)	305	5.5	(0.19)	1.98	0.36	\$799	4.88	6.14
	Efficiency & PV/Battery	(5)	319	9.0	(0.08)	1.83	0.52	\$5,526	1.23	1.74
All-Electric ²	Code Compliant	4,725	0	n/a	n/a	1.38	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	3,819	0	5.5	0.00	1.19	0.19	\$4,154	1.30	1.46
	Efficiency-Equipment	3,676	0	6.0	0.00	1.16	0.22	\$2,108	2.92	3.13
	Efficiency & PV	953	0	15.5	1.60	0.93	0.45	\$10,459	1.80	1.62
	Efficiency & PV/Battery	(2)	0	23.5	2.21	0.63	0.75	\$16,394	1.67	1.59
Mixed Fuel to All-Electric ³	Code Compliant	4,725	0	0.0	0.00	1.38	0.97	(\$5,349)	0.60	1.67
	Efficiency & PV	953	0	15.5	1.60	0.93	1.42	\$5,111	1.94	>1
	Neutral Cost	2,299	0	8.5	1.35	1.15	1.19	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.²All reductions and incremental costs relative to the **all-electric** code compliant home.³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.⁵Positive values indicate an increase in PV capacity relative to the Standard Design.

Table 80: Multifamily Climate Zone 14 SDGE Results Summary (Per Dwelling Unit)

Climate Zone 14 SDG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	(0)	141	n/a	n/a	2.76	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	126	3.0	(0.04)	2.53	0.23	\$874	0.93	1.21
	Efficiency-Equipment	(0)	126	3.0	(0.05)	2.52	0.23	\$347	2.48	2.99
	Efficiency & PV/Battery	(3)	126	9.5	0.01	2.18	0.58	\$2,957	0.51	1.39
All-Electric ²	Code Compliant	2,022	0	n/a	n/a	1.73	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,759	0	3.5	0.00	1.58	0.15	\$1,011	1.47	1.65
	Efficiency-Equipment	1,748	0	3.5	0.00	1.56	0.16	\$795	2.00	2.20
	Efficiency & PV	504	0	14.0	0.70	1.26	0.47	\$3,356	2.16	1.91
	Efficiency & PV/Battery	(2)	0	24.5	1.03	0.79	0.94	\$6,380	1.69	1.77
Mixed Fuel to All-Electric ³	Code Compliant	2,022	0	0.0	0.00	1.73	1.03	(\$2,337)	0.51	1.48
	Efficiency & PV	63	0	14.0	0.70	1.26	1.50	\$1,019	2.60	>1
	Neutral Cost	772	0	10.0	0.70	1.41	1.35	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 15**Table 81: Single Family Climate Zone 15 Results Summary**

Climate Zone 15 SCE/SoCalGas Single Family		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	149	n/a	n/a	1.69	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	141	4.5	(0.43)	1.56	0.13	\$2,179	1.00	1.58
	Efficiency-Equipment	(0)	132	4.5	(0.45)	1.51	0.18	(\$936)	>1	>1
	Efficiency & PV/Battery	(3)	141	7.0	(0.34)	1.38	0.32	\$6,043	1.15	1.51
All-Electric ²	Code Compliant	2,149	0	n/a	n/a	1.32	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	1,230	0	5.5	0.00	1.12	0.20	\$4,612	1.12	1.58
	Efficiency-Equipment	866	0	7.0	0.00	1.04	0.28	\$2,108	3.30	4.47
	Efficiency & PV	1,030	0	6.0	0.12	1.10	0.22	\$5,085	1.12	1.57
	Efficiency & PV/Battery	(2)	0	13.0	0.83	0.84	0.48	\$11,382	1.16	1.54
Mixed Fuel to All-Electric ³	Code Compliant	2,149	0	0.0	0.00	1.32	0.37	(\$5,349)	1.73	2.21
	Efficiency & PV	1,030	0	6.0	0.12	1.10	0.59	(\$264)	>1	>1
	Neutral Cost	23	0	6.0	1.36	1.13	0.57	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.²All reductions and incremental costs relative to the **all-electric** code compliant home.³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.⁵Positive values indicate an increase in PV capacity relative to the Standard Design.

Table 82: Multifamily Climate Zone 15 Results Summary (Per Dwelling Unit)

Climate Zone 15 SCE/SoCalGas Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	93	n/a	n/a	2.53	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	92	4.0	(0.15)	2.42	0.11	\$510	1.35	2.28
	Efficiency-Equipment	0	86	4.0	(0.16)	2.33	0.20	(\$157)	>1	>1
	Efficiency & PV/Battery	(3)	92	8.5	(0.10)	2.13	0.40	\$2,604	1.29	1.70
All-Electric ²	Code Compliant	1,243	0	n/a	n/a	1.78	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	954	0	4.0	0.00	1.61	0.17	\$1,011	1.50	2.28
	Efficiency-Equipment	764	0	6.0	0.00	1.50	0.29	\$1,954	1.24	1.72
	Efficiency & PV	548	0	7.0	0.24	1.50	0.28	\$1,826	1.43	2.07
	Efficiency & PV/Battery	(3)	0	16.5	0.62	1.08	0.70	\$5,020	1.34	1.80
Mixed Fuel to All-Electric ³	Code Compliant	1,243	0	0.0	0.00	1.78	0.75	(\$2,337)	6.36	2.35
	Efficiency & PV	68	0	7.0	0.24	1.50	1.03	(\$511)	>1	>1
	Neutral Cost	78	0	7.5	0.70	1.48	1.05	\$0	>1	>1

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Climate Zone 16**Table 83: Single Family Climate Zone 16 Results Summary**

Climate Zone 16 PG&E Single Family		Annual Net kWh	Annual therms	EDR Margin⁴	PV Size Change (kW)⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel¹	Code Compliant	(0)	605	n/a	n/a	3.31	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	0	454	5.0	0.01	2.59	0.72	\$3,542	1.62	1.46
	Efficiency-Equipment	0	474	6.0	(0.08)	2.66	0.65	\$2,441	2.19	2.20
	Efficiency & PV/Battery	(18)	454	10.5	0.10	2.36	0.95	\$7,399	0.87	1.37
All-Electric²	Code Compliant	7,694	0	n/a	n/a	1.73	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	5,696	0	9.5	0.00	1.38	0.35	\$5,731	1.72	1.69
	Efficiency-Equipment	6,760	0	4.5	0.00	1.55	0.18	\$2,108	2.36	2.32
	Efficiency & PV	1,032	0	26.5	2.75	0.94	0.79	\$16,582	2.09	1.62
	Efficiency & PV/Battery	(11)	0	35.0	3.45	0.64	1.09	\$22,838	1.71	1.55
Mixed Fuel to All-Electric³	Code Compliant	7,694	0	0.0	0.00	1.73	1.58	(\$5,349)	0.31	0.68
	Efficiency & PV	1,032	0	26.5	2.75	0.94	2.37	\$11,234	1.55	2.02
	Neutral Cost	5,398	0	8.5	1.35	1.51	1.80	\$0	0.00	0.74
	Min Cost Effectiveness	3,358	0	16.0	2.56	1.32	1.99	(\$4,753)	1.24	1.40

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, Neutral Cost, and Min Cost Effectiveness packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Table 84: Multifamily Climate Zone 16 Results Summary (Per Dwelling Unit)

Climate Zone 16 PG&E Multifamily		Annual Net kWh	Annual therms	EDR Margin ⁴	PV Size Change (kW) ⁵	CO2-Equivalent Emissions (lbs/sf)		NPV of Lifetime Incremental Cost (\$)	Benefit to Cost Ratio (B/C)	
						Total	Reduction		On-Bill	TDV
Mixed Fuel ¹	Code Compliant	0	206	n/a	n/a	3.45	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	(0)	172	2.0	0.03	3.02	0.44	\$937	1.11	1.19
	Efficiency-Equipment	(0)	183	2.5	(0.02)	3.12	0.33	\$453	1.76	2.15
	Efficiency & PV/Battery	(9)	172	9.5	0.08	2.65	0.80	\$3,028	0.47	1.28
All-Electric ²	Code Compliant	2,699	0	n/a	n/a	1.86	n/a	n/a	n/a	n/a
	Efficiency-Non-Preempted	2,329	0	4.0	0.00	1.70	0.16	\$843	2.08	2.05
	Efficiency-Equipment	2,470	0	3.0	0.00	1.74	0.13	\$795	1.59	1.70
	Efficiency & PV	518	0	19.5	1.07	1.23	0.63	\$4,423	2.58	1.89
	Efficiency & PV/Battery	(6)	0	29.5	1.42	0.75	1.11	\$7,533	1.65	1.69
Mixed Fuel to All-Electric ³	Code Compliant	2,699	0	0.0	0.00	1.86	1.59	(\$2,337)	0.43	1.03
	Efficiency & PV	65	0	19.5	1.07	1.23	2.22	\$2,087	2.87	>1
	Neutral Cost	1,518	0	10.0	0.70	1.56	1.90	\$0	>1	2.58

¹All reductions and incremental costs relative to the **mixed fuel** code compliant home.

²All reductions and incremental costs relative to the **all-electric** code compliant home.

³All reductions and incremental costs relative to the **mixed fuel** code compliant home except the EDR Margins are relative to the Standard Design for each case which is the **all-electric** code compliant home. Incremental costs for these packages reflect the costs used in the On-Bill cost effectiveness methodology. Costs differ for the TDV methodology due to differences in the site gas infrastructure costs (see Section 2.6).

⁴This represents the Efficiency EDR Margin for the Efficiency-Non-Preempted and Efficiency-Equipment packages and Total EDR Margin for the Efficiency & PV, Efficiency & PV/Battery, and Neutral Cost packages.

⁵Positive values indicate an increase in PV capacity relative to the Standard Design.



Electric Vehicle Infrastructure Cost Analysis Report for Peninsula Clean Energy (PCE) & Silicon Valley Clean Energy (SVCE)

To: Peninsula Clean Energy & Silicon Valley Clean Energy

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Date: November 20, 2019

¹ Ed Pike contributed to this project while an employee at Energy Solutions.

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1. Executive Summary

California and the Bay Area are on the verge of a massive transformation. Current estimates² put electric vehicles (EVs) and plug-in hybrid vehicles (PHEVs) at a 5% market share but by 2030, that is expected to grow to 18-20%. Access to electric vehicles (EV) infrastructure is currently a major barrier for consumers' willingness to purchase electric vehicles. Meanwhile, several studies show that installation of EV infrastructure has significant costs, most notably in a retrofit scenario which has multiple cost factors. This report investigates infrastructure costs associated with EV infrastructure reach codes by building an EV cost effectiveness model, which examined three common building types and applied different EV infrastructure penetration rates. The model also studied utility-side infrastructure, such as distribution transformers, that potentially yield additional costs and affect a building owner's ability to comply with expanded EV infrastructure adoption, to understand the scale and frequency of those costs.

EV Infrastructure: New Construction vs. Retrofit: Customer costs

The cost effectiveness model compared three building scenarios: (1) a medium 60-unit multi-unit dwelling (MUD) with 60 parking spaces, (2) a high-density 150-unit MUD with 150 parking spaces, and (3) a medium commercial office building with 60 parking spots. The model compares customer-side electrical infrastructure costs, such as wiring, switch gear, conduit, trenching, and secondary transformer. Primary transformer costs which are usually the responsibility of utilities, were considered separately in a later section³. The building models were then analyzed to compare the new construction requirements with the retrofit requirements. Results from Table 1 below show that costs for new construction were significantly lower, at almost four times as much per spot compared to the retrofit scenario. This indicates that increasing code requirements for charging infrastructure could potentially save significant amounts of money to building owners in the new construction context rather than waiting for tenants to become interested in electric vehicles, at which point significant costs related to invasive demolition and electrical infrastructure replacement would be necessary.

Table 1. Estimated Cost of Installing EV Infrastructure (price per spot)

Code Scenario:	Market Rate 25% Level 2 75% Level 1		Affordable Housing 10% Level 2 90% Level 1	
	New Construction	Retrofit ⁴	New Construction	Retrofit
60-Unit MUD	\$1,410	\$4,443	\$1,049	+\$3,982
150-Unit MUD	\$1,197	\$4,101	\$1,002	+\$3,854
60-Space Office Building	\$1,166	\$3,232	N/A	N/A

² <http://businessportal.ca.gov/wp-content/uploads/2019/07/GoBIZ-EVCharging-Guidebook.pdf>

³ Primary transformers are owned and operated by the utility and covered in a subsequent section but have cost components that can spill over to customer fees in multiple ways (PG&E Electric [Rule 16](#)).

⁴ "New Construction" and "Retrofit" costs are relative to a CALGreen 2019 mandatory baseline building

In a retrofit context, there are significant known costs, such as those documented in this infrastructure costing model, but there are a high level of unknown opaque costs that either are born by the utility or by the customer, which while infrequent, can cause significant burden on a small number of building owners and tenants that are not present in New Construction projects. In addition, retrofitting parking structures for Americans with Disabilities Act (ADA) compliance can be a significant source of costs. Recent large-scale pilot studies conducted by the California utilities confirmed these cost burdens. For example, Pacific Gas & Electric's (PG&E) EV Charge Ready program reported an "Average Cost per Port" costs for retrofit projects in their program to be almost \$18,000⁵ with a range between \$10,000 and \$31,000⁶. The utility reports specifically call out ADA requirements and inconsistent requirements across jurisdictions, which required significant redesign costs for ADA compliance.

EV Infrastructure: Building size / Transformers

Distribution transformers are a key piece of EV infrastructure and their costs and magnitude are heavily influenced by building size. For most situations, small buildings utilize shared distribution transformers split between multiple electrical accounts; medium buildings feature a dedicated utility-owned transformer and large buildings may feature several transformers, some are utility-owned and some are customer-owned depending on the uses and electrical design of the building. The particular trigger points between building sizes are influenced by the utility rules on electrical infrastructure equipment specifications and are not comparative between utilities. The graph below illustrates when certain costs become important to assist policy makers:

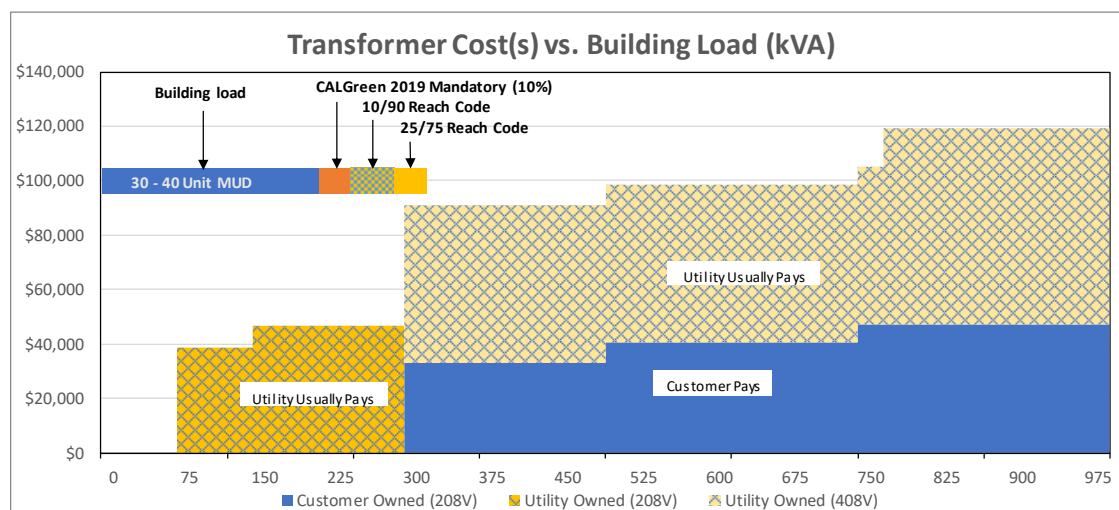


Figure 1: Costs of Transformers vs. Transformer system size (PG&E service territory)⁷

⁵ Note that these costs include extensive design and re-design as well as utility side costs:

[Pacific Gas and Electric Company EV Charge Network Quarterly Report \(Q1-2019\)](#)

⁶ [Q2 2019 Clean Transportation Program Advisory Council Meeting](#)

⁷ This graph shows PG&E's specific equipment sizing and is not comparable to other utilities. Calculations are based on estimates from the infrastructure cost model.

Costs of distribution and/or service-line upgrades are partially split between customer and utility. Customers are responsible for excavation, conduits, and protective structures. Utilities are typically responsible for wiring, metering, and transformer(s) (where necessary), however, utility costs can spill over into customer costs anytime that the costs exceed the preset “allowance” for a customer, based on historical energy usage.⁸ In addition, if new load, does not materialize, the utility is able to assess additional charges for the difference in expected revenue. Currently, costs are described by California Public Utilities Commission’s (CPUC) Electric Rules 2, 15, and 16 which lay out which party is responsible for these costs, however, these costs are complicated, opaque, and hard to predict. Luckily, the CPUC is tracking costs related to EV infrastructure and has found that utility-side infrastructure upgrades triggered by EV-only projects are rare. To date, for PG&E’s service territory found only 3% of projects required distribution or service-line upgrades to accommodate EV infrastructure. However those costs spanned a wide cost range from \$14 to \$338,274 (additional details on this study can be found in the Transformers section below).

Reach Code Context

This study investigated EV-infrastructure reach codes for communities in the jurisdiction of Silicon Valley Clean Energy (SVCE) and Peninsula Clean Energy (PCE), shown in Table 4 below. The study found that increasing the electric vehicle infrastructure requirements for new construction will save significant costs for all buildings when compared to a retrofitting. The study also found that transformer capacity limitations are not expected to occur very frequently and that even in the retrofit context most buildings should be able to meet the added load. For those that do not have significant capacity, utilizing lower power “Level 1” ports or load management may be a promising options.

Buildings near the boundary conditions highlighted above in Figure 1, in particular those that approach the 300 kVA capacity size⁹, face added risk of electrical infrastructure upgrade costs. For owners of those new buildings, the electrical systems would have to accommodate a second transformer and associated electrical infrastructure and the owner/developer would need to bear those costs estimated to be approximately \$50,000 (or significantly more in a retrofit context).

⁸ Customers have an “allowance” based on their billing history to fund utility upgrades, but if allowance costs are exceeded, they are charged directly to the customer (PG&E Electric [Rule 15](#) & [Rule 16](#)). This allowance is based on the net revenue of the customer account. In addition, if the expected load does not materialize to use the system upgrade, the utility is permitted to recover their costs from the customer.

⁹ For example, for a 30-40 unit MUD, this may be a consideration as shown in Figure 1.

2. Background and Purpose

Purpose

The purpose of this report is to provide cost analysis data on electric vehicle infrastructure and to support and inform potential adoption of reach codes for cities and municipalities in Santa Clara and San Mateo counties. This report investigates potential reach codes that would 1) require “EV-ready” parking spaces, parking spaces which are already equipped with wiring and simply need an electric vehicle supply equipment (EVSE) to provide charging, and 2) increase the EV charging space requirements for market-rate housing, affordable housing, and commercial-office buildings. The CALGreen nonresidential code currently requires only that “EV capable” parking spaces be provided, which requires conduit and electrical panel capacity for a 40 ampere, 208/240-volt circuit serving the space, but does not require wiring nor EVSE installation and associated expenses. The following table describes these EV equipment tiers:

EV Capable	Includes conduit / raceways
EV Ready (“Plug and play”)	Includes full circuit with a receptacle / outlet
EV Installed	Includes full charging capability with EVSE

This cost report estimates the incremental costs associated with expanding EV infrastructure requirements beyond existing CALGreen 2019 mandatory requirements and compares the incremental construction costs from a new construction project with those of a retrofit project, utilizing an EV infrastructure cost model for three prototype buildings: (1) a 60-unit medium MUD, (2) a 150-unit large MUD, and (3) a medium-sized commercial office with 60 parking spaces. In all residential cases, we assumed one parking space per unit was assumed.

In addition, the report also investigates distribution current transformers, which will be increasingly important as electrical loads increase due to building and transportation electrification. Specifically, the utility rules and electrical load requirements were analyzed to determine boundary conditions where transformers would be required, the relative cost to incorporate them, and points at which multiple current transformers may be required, and the relative magnitude of those costs. The report also delineates specific situations for when transformers are utility owned and when they become a customer costs

California’s EV Infrastructure Policy Goals

The increased proliferation of EV charging infrastructure supports many of California’s zero-emission vehicle adoption goals, including the objective to deploy 1.5 million zero-emission vehicles and 250,000 publicly

available EV charging stations including 10,000 direct current (DC) fast chargers by 2025.¹⁰ California also has a goal of deploying 5 million ZEVs by 2030, which will require an even larger scale-up of public stations in addition to millions of non-public EV charging stations.¹¹ As of October 2019, California had approximately 18,500 public Level 2 charging ports at over 5,000 locations and approximately 3,200 public DC fast charging stations at over 700 locations.¹² California must make significant progress quickly, including updating CALGreen requirements and for local communities, investigating reach codes and the potential costs.

Parking spaces at workplaces and other non-residential buildings will be needed to accommodate a California vehicle fleet that is expected to have 18%-24% ZEVs in 2030. The future percentage of ZEVs will require a much higher percentage of parking spaces than the current CALGreen code requirements.¹³

EV charging infrastructure is a critical policy to help California reach its climate and EV adoption goals by providing opportunities at homes and workplaces as well as overcoming the critical challenge of “range anxiety” associated with EV adoption.¹⁴ Surveys of communities in the Bay Area have shown that access to vehicle charging remains a main hurdle to wider adoption and in spite of that electric vehicle adoption is expected to grow significantly.

Building codes are an important way to facilitate access to EV charging so that residents, commuters, fleets, and car-sharing services can benefit from the significant operating cost advantages in a way that is cost-effective and accessible for all. Furthermore, because EV capable parking spaces can avoid or greatly reduce several types of costs associated with installing EV charging stations, public and private funding can achieve greater number of EV charging stations faster and more efficiently. Thus, increasing the levels of EV capable parking spaces beyond those set by CALGreen will lead to significant increases in EV charging infrastructure.

CALGreen and Beyond

CALGreen is the first mandatory green building standards code in the nation and often serves as a model for other state and local governments across the country. It was originally developed in 2007 by the California Building Standards Commission (CBSC) to help meet the goals of AB 32 in reducing greenhouse gases to 1990 levels by 2020.¹⁵ Every three years, the CALGreen code is reviewed, revised, and adopted statewide

¹⁰ Former Governor Edmund G. Brown Jr. Executive Order B-16-2012 set the goal of placing 1.5 million zero-emission vehicles on California’s roads by 2025. Former Governor Edmund G. Brown’s Executive Order B-48-18 set the goal of 250,000 electric vehicle charging stations, including 10,000 DCFC charging stations, by 2025. In addition, the Charge Ahead California Initiative, [SB 1275 (De León), Chapter 530, Statutes of 2014] set a goal of placing 1 million zero- and near-zero-emission vehicles into service on California’s roads by 2023.

¹¹ Former Governor Edmund G. Brown Jr. Executive Order B-48-18 set the goal of 5 million zero-emission vehicles on California’s roads by 2030.

¹² Statistics are from the Alternative Fueling Station Locator (August 2019): https://afdc.energy.gov/stations/#/analyze?region=US-CA&fuel=ELEC&ev_levels=dc_fast&country=US

¹³ The California Air Resources Board’s EMFAC2017 database estimates that 21.0 million “LDA” (automobiles) and “LDT1” (light duty trucks) will be on the road in 2030. The database also estimates that 6.3 million additional “LDT2” (a second category of light duty trucks) will be on the road, some of which could be used for workplace commuting or other trips to non-residential buildings.

¹⁴ “Range anxiety” refers to concerns about insufficient range and inability to find EV charging stations.

¹⁵ “CALGreen”, Department of General Service, <https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen>

along with other sections of Title 24 for residential and nonresidential buildings. The latest version of the CALGreen code takes effect on January 1, 2020 and is referred to by CBSC as “CALGreen 2019.”

The nonresidential CALGreen EV capable infrastructure requirements (California Code of Regulations, Title 24, Part 11 Sections 5.106 and A5.106) and the multifamily requirements (California Code of Regulations, Title 24, Part 11, Sections 4.106 and A4.106) which will take effect January 1, 2020 are shown in Table 2 and Table 3.

Table 2. Summary of Mandatory and Voluntary CALGreen 2019 EV Capable Parking Space Standards for New Construction (Non-Residential)

Current Mandatory	Voluntary Tier 1	Voluntary Tier 2
6%	8%	10%

Table 3. Summary of Mandatory and Voluntary CALGreen 2019 EV Capable Parking Space Standards for New Construction (Residential)

Current Mandatory	Voluntary Tier 1	Voluntary Tier 2
10%	15%	20%

The California Building Standards allow for more restrictive local amendments that are necessary because of local climatic, geological, or topographical conditions. Currently, two dozen municipalities in California have adopted local building codes that require more EV parking spaces than CALGreen and in many cases already require “EV ready” spaces with complete wiring.¹⁶ Given the findings of this report, local jurisdictions that expand upon CALGreen requirements, could yield improved cost-savings potential for local businesses and developers.

As mentioned above, this report investigated the cost effectiveness of “EV reach codes” for market-rate housing, affordable housing, and commercial-office buildings. Table 4 below shows the following code levels that were investigated. Note that the baseline CALGreen 2019 levels are shown in “()” for comparative purposes.

¹⁶ Pike, E. et. al. 2018. Driving Plug-in Electric Vehicle Adoption with Green Building Codes, August 17. ACEEE Summer Conference. Examples of agencies that are proposing local codes include Berkeley, Brisbane, San Jose, San Mateo, and many others.

Table 4. Summary of EV Reach Code Scenarios Analyzed

	MUD Market Rate (25/75)	MUD Affordable Housing (10/90)	Commercial Office
“EV Capable”	(10%)	(10%)	30% (6%)
Level 2	25%	10%	10%, EVSE
Level 1	75%	90%	10%

3. Cost Modeling

Scenarios

The model investigates three prototype building models at the CALGreen 2019 mandatory requirement level. Those models were then analyzed for EV infrastructure installation costs as described in the scenarios described in Table 4 above for a new construction scenario and a retrofit scenario for a total of thirteen runs in the cost model. Table 5 below provides a high-level view of the building prototype models in terms of number of parking spaces, approximate building area, parking lot area, and number of stories. These buildings represent hypothetical building scenarios that are based on several assumptions and may not be reflective of any one building. Please refer to the appendix and methodology for additional details.

Buildings Types Descriptions

60-unit MUD: A 60-unit apartment building with enclosed parking with 60 parking spaces to represent a medium-sized MUD building.

150-unit MUD: A 150-unit apartment building with enclosed parking with 150 parking spaces to representing a large MUD building.

60-space Commercial Office: An open parking lot with 60 spaces, to representing a medium-sized office building.

TRANSFORMER-RELATED DEFINITIONS:

Primary Transformer: A utility-owned transformer used to convert medium voltage utility distribution lines (normally 12kV) to customer level power at either 480V/277V for large buildings or 208V/120V or 240V/120V for medium buildings. Primary transformers are owned and operated by the utility but any upgrade installation costs are partially split with the building owner.

Secondary Transformer: A customer-owned transformer that converts 480V/277V power down to 208V/120V service (or 240V/120V). Usually only necessary for medium-sized or large-sized buildings.

Headroom: Additional space left for transformer sizing to account for future unspecified load, typically 20%.

Table 5. Building Prototypes & Baseline Conditions

Building Type	60-unit MUD	150-unit MUD	60-Space Office
Number of Units	60	150	n/a
Total number of parking spaces required	60	150	60
Building Area [ft²]	65,000	163,000	20,000
Number of Floors	4 to 5	8 to 9	1 to 3
Parking Lot Size [ft²]	14,000	38,800	14,000
Parking Lot Type	1-level structure	2-level structure	stand-alone lot
CALGreen Level 2 Charging Requirement	6	15	4
Building Load [kVA]	292	700	98
CALGreen EV Load [kVA]	43	86	29
Total Load [kVA]	335	786	126
Load with Headroom [kVA]	402	944	152
Percent of load from CalGreen EV Load	11%	11%	18%
Secondary Transformer [kVA] (480V -> 208V / 120V)	500	1000	225
Primary Transformer [kVA] (12kV -> 480V / 277V)	750	1000	300

Table 6. Load Comparisons across Scenarios

Building Type	60-Unit MUD ¹⁷		150-Unit MUD		60-Space Office Building
Baseline Building Load [kVA]	292		700		98
Baseline Level 2 [# of Ports] (CALGreen 2019)	6		15		4
Baseline EV Load [kVA] (CALGreen 2019)	43		86		29
Capacity Requirement (with headroom)	402 kVA		944 kVA		152 kVA
Secondary Transformer Size	500 kVA		1000 kVA		300 kVA
Reach Code Scenario	Market Rate	Affordable Housing	Market Rate	Affordable Housing	10% L2 40% L1
Additional Level 2 Ports	+12 ports	0 ports	+22 ports	0 ports	+2 ports
Additional Level 1 Ports	+45 ports	+54 ports	+113 ports	+135 L1	+24 ports
Additional EV Load [kVA]	+95 kVA	+54 kVA	+257 kVA	+156 kVA	+33 kVA
TOTAL EV Load [kVA]	430 kVA	389 kVA	1043 kVA	942 kVA	160 kVA
Secondary Transformer Size	500 kVA	500 kVA	1500 kVA ¹⁸	1000 kVA	300 kVA
Percent of load from EVs	32%	25%	33%	26%	39%

¹⁷ Some of the capacity loading calculations do not appear additive. For any parking scenario with more than 10 chargers, we utilized a diversity factor of 80% to account for non-coincident charging.

¹⁸ Our cost model assumes that for a retrofit scenario, a second 500 kVA transformer would be installed rather than demolition

Results

The results of the cost analysis model show that installing EV capable spaces as a stand-alone retrofit are close to four times as expensive compared to during new construction. Costs for these project types are shown in Table 7 and Table 9 with detailed breakdowns in Appendix A.

Several factors related to *building types* affect these results:

- Costs per space are generally higher for small buildings with a small number of retrofits for EV capable infrastructure. Smaller projects must divide fixed costs among fewer spaces than larger projects.
- Buildings that are at the cusp of needing an upgraded switch gear or transformers represent **significant cost** increases to add electric vehicles, particularly in a retrofit context where there are large costs from demolition and site disruption. The prototypes we studied were unable to illustrate this point so additional narrative about these costs have been added in the ‘Distribution Transformers’ section. For this study, the prototype buildings we used only surpassed the baseline transformer capacity on one scenario – and the loading was such that we did not expect significant demolition was not expected. Switch gear and secondary transformer costs were included but did not include added costs for demolition, removal, or expansion of electrical rooms¹⁹ -or- any costs associated with utility-owned primary transformer upgrades²⁰.
- Our cost model found that enclosed parking was less expensive than an open parking lot. This is because surface-mounted conduit is often less expensive to retrofit than trenching, and repairing surface parking areas. However, enclosed parking is usually much more expensive when considering ADA compliance due to grading, restriping, and accounting for path of travel.

Several factors related to *project type* affect these results:

- Installing conduit in new construction is much less expensive than retrofitting it later for several reasons.
 - Demolition, disposal of materials, and repair of surface parking areas is not required.
 - Conduit can be installed directly underneath parking rather than routing around existing barriers. In addition, less expensive PVC (plastic) conduit can be installed in the parking floor (tied to rebar before concrete is poured) rather than surface mounted later. While wiring of branch circuits is not included in this report, these shorter lengths will also reduce wiring costs.
 - Running conduit through existing buildings will likely require demolition of walls, and potentially through floors as well²¹
 - Requiring that new electrical service panels contain capacity for EV capable infrastructure can achieve economies of scale and avoid the situations where an electrical room must be

¹⁹ Demolition, Removal, and expansion of electrical rooms were not considered because they are highly dependent on site-specific factors that are difficult to estimate from the generic building prototypes we developed.

²⁰ Utility-side transformer costs are analyzed in a separate section

²¹ X-ray cameras are usually used to prevent damage to concrete structures.

expanded to add additional charging. This latter cost is not included in the model, and thus, some retrofits for EV capable spaces would be significantly more expensive.

- Compared to stand-alone retrofits, incremental “soft” costs will be lower for new construction. This is because fixed costs not related to EV capable spaces will already be required for construction and the incremental cost will be much lower.²²
- Equipment needed for trenching of surface parking will likely already be on-site during new construction, limiting costs.

Table 7. Incremental Costs Required to Install EV Infrastructure

Code Scenario	Market Rate 25% Level 2 75% Level 1		Affordable Housing 10% Level 2 90% Level 1	
	New Construction	Retrofit	New Construction	Retrofit
60-Unit MUD	\$76,142	\$239,909	\$56,629	\$215,051
150-Unit MUD	\$161,550	\$553,682	\$135,301	\$520,227
60-Space Office Building	\$34,971	\$96,970	N/A	N/A

²² Pike, Ed and Steuben, Jeff. “Plug-In Electric Vehicle Infrastructure, Cost-Effectiveness Report.” 2016

Table 8. Number of EV Charging Ports per Scenario

Code Scenario:	CALGreen 2019	Market Rate 25% Level 2 75% Level 1	Affordable Housing 10% Level 2 90% Level 1
60-Unit MUD	6 L2	15 L2 45 L1	6 L2 54 L1
150-Unit MUD	15 L2	38 L2 112 L1	15 L2 135 L1
60-Space Office Building	4 L2	6 L2 24 L1	N/A

Table 9. Estimated Cost of Installing EV Infrastructure (price per spot)²³

Code Scenario:	Market Rate 25% Level 2 75% Level 1		Affordable Housing 10% Level 2 90% Level 1	
Building Type	New Construction	Retrofit	New Construction	Retrofit
60-Unit MUD	\$1,410	\$4,443	\$1,049	\$3,982
150-Unit MUD	\$1,197	\$4,101	\$1,002	\$3,854
60-Space Office Building	\$1,166	\$3,232	N/A	N/A

Figure 2, 3, and 4 summarize the major categories of costs such as: demolishing and repairing parking lots and sidewalks, upgrading electrical service panels, obtaining permits and inspections, and installing conduit and associated equipment. CALGreen is the baseline cost - all other scenarios are costs *in addition* to the CALGreen baseline. Tables showing the specific dollar amounts and percent of total project cost by category are shown in the Appendix A.

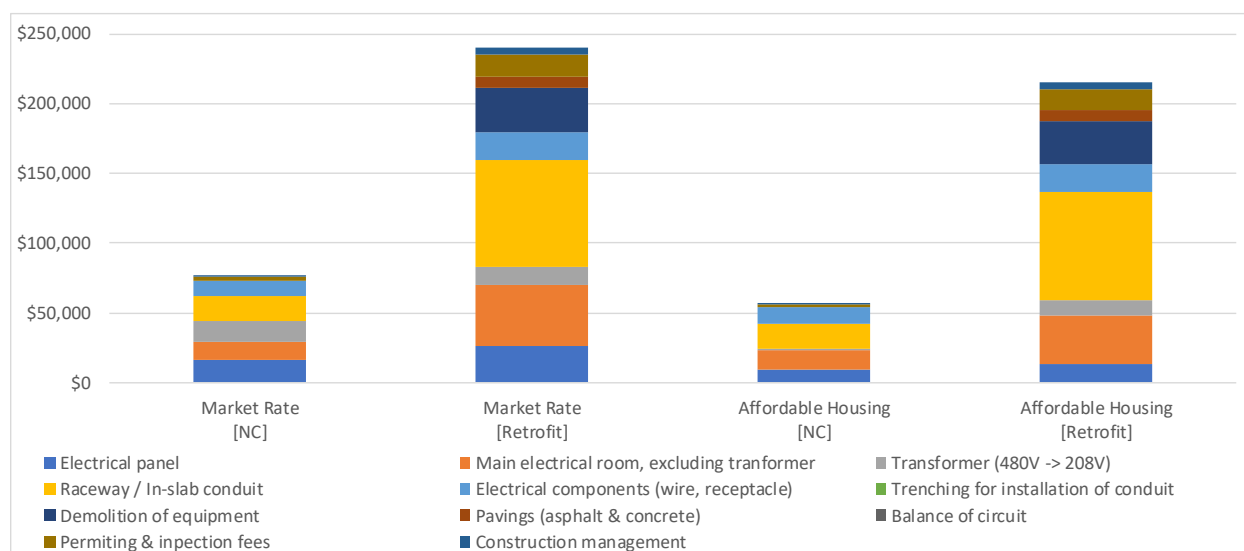


Figure 2. Cost Break-Down for 60-unit MUD

²³ Price per spot is calculated against the baseline CALGreen level. For illustrative purposes: 60-unit scenarios are divided by 54 spaces, which represents the incremental number of spaces added for the incremental cost.

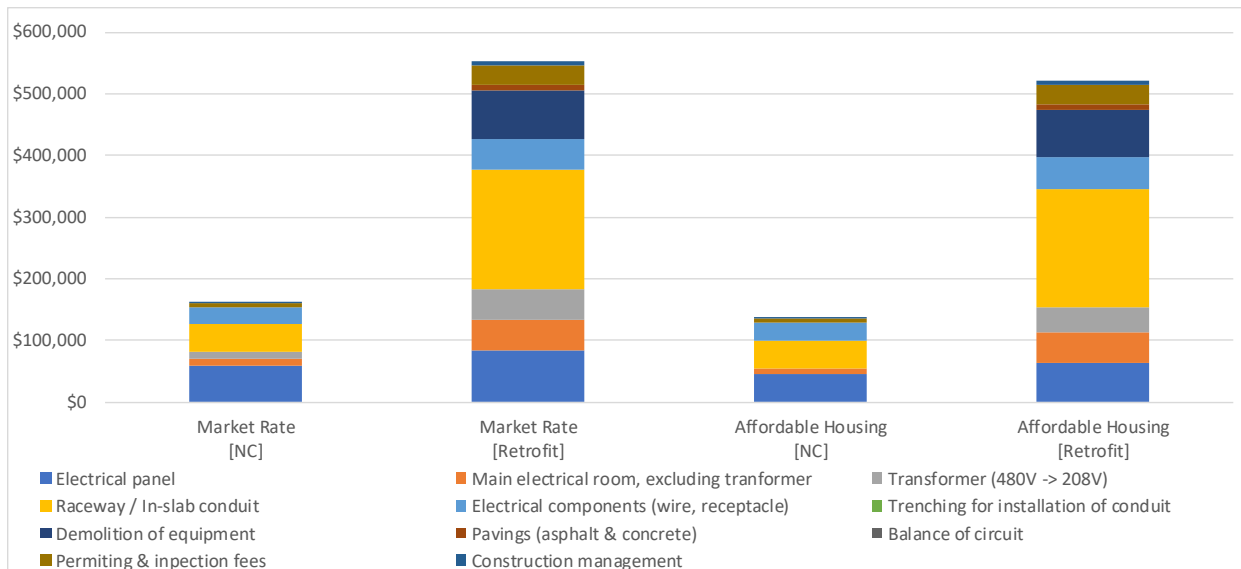


Figure 3. Cost Break-Down for 150-unit MUD

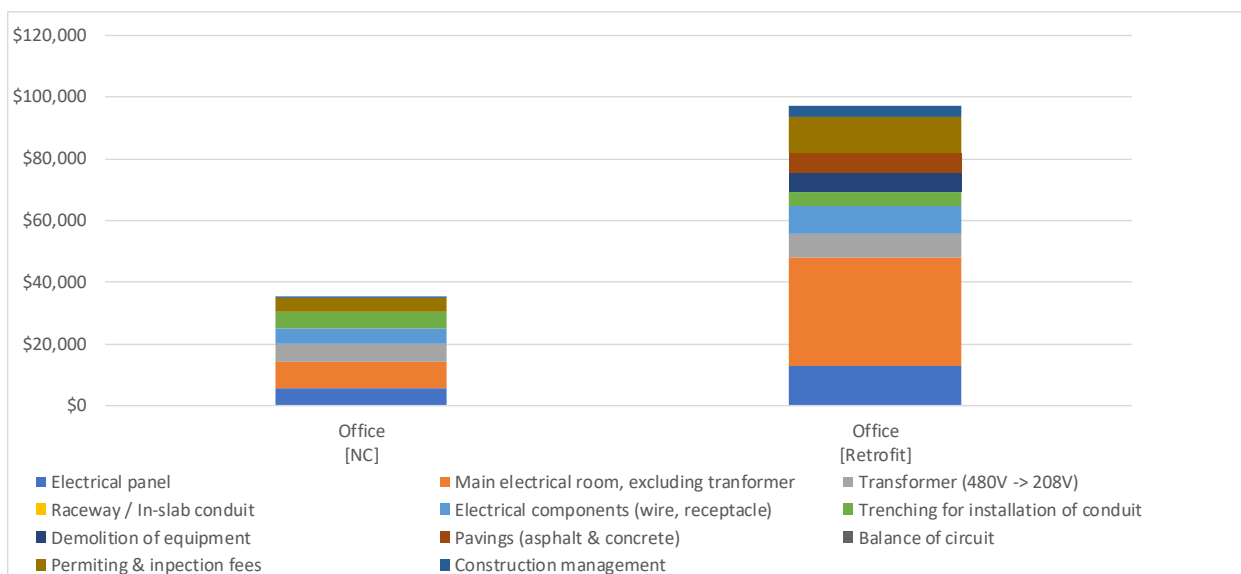


Figure 4. Cost Break-Down for 60-space Commercial Office (assumes surface-level parking)

Building code requirements for EV capable parking spaces can also reduce or avoid non-cost barriers such as coordinating between building owners/operators and tenants, potential loss of productive time for tenants during construction, lack of awareness of EV charging as an option, and the additional time and expense of undertaking a stand-alone EV charging infrastructure construction project. This study does not include specific accessibility requirements such as slope, vertical clearance, and path of travel and any of the associated costs with restriping, curb-cutting, or re-grading to meet ADA requirements, however a rough contingency to account for these ADA requirements has been included. For additional information on ADA compliance, the Governor's Office of Business and Economic Development recently released an Electric

Vehicle Charging Station Permitting Guidebook which highlights several ADA-specific issues around accessibility.²⁴

Cost Savings Due to EVSE Installation in New Construction

This section discusses the benefits of requiring EVSE installation in a subset of spaces. This section also discusses the potential benefits of good design practices to greatly reduce the potential for expensive redesign and engineering to meet accessibility requirements for buildings subject to Title 24, Part 2, Chapter 11B.

EVSE Installation

We note that several local jurisdictions already require the complete installation of an EVSE on a complete electrical circuit for some parking spaces in nonresidential new construction including Carlsbad, Contra Costa County, Palo Alto and Santa Cruz. Installing a complete electrical circuit, including wiring and circuit breakers, will achieve better economies of scale and avoid the overhead and time needed to hire an electrician. This includes the need for tenants to get approvals from building owner for an electrical wiring retrofit (for the residential sector, condo owners would typically need approval from the homeowners association).

In addition, many EVSE installation tasks can be completed during new construction at much lower cost than retrofitting later, such as:

- Retrofitting concrete pads for pedestals if needed to mount EVSE (and any associated payment kiosks) and/or bollards if needed, including concrete cutting, excavation, and repair;
- Mounting brackets for EVSE installed on walls or pillars;
- Any conduit or infrastructure needed to provide data for EVSE that are networked;
- Accessibility, as discussed further below in the Good Design Practices section;
- Soft costs such as customer (or customer representative) and contractor project management; project planning including design, engineering, and permitting; contractor mobilization; and any additional retrofit tasks needed for EVSE installations;
- Lighting, if required and not already installed on-site;
- Additional site-specific, real-world contingencies.

Installing a complete circuit with an EVSE installed will reduce burdens on local building officials and thus will tend to increase code compliance. Inspectors can more easily verify that a complete circuit is installed and operating correctly with an EVSE installed, rather than determining the specific electrical components that would be required for EV capable spaces.

Good Design Practices

Several local jurisdictions have adopted building codes that require good design practices to facilitate compliance with accessibility requirements for buildings subject to the CalGreen requirements, California

²⁴ <http://businessportal.ca.gov/wp-content/uploads/2019/07/GoBIZ-EVCharging-Guidebook.pdf>

Code of Regulations Title 24, Part 2, Chapter 11B Section 11B-812. Section 11B-812 requires that a facility providing Electric Vehicle Charging Stations (EVCS), i.e. a parking spaces with an EVSE installed, for public and common use also provide one or more accessible EVCS, as specified in Table 11B-228.3.2.1. Chapter 11B applies to certain facilities including, but not limited to, public accommodations and publicly-funded housing (see Part 2, Section 1.9 of the California Building Code). It does not require review prior to construction of whether a building is designed to allow compliance with these requirements, and local codes require good design practices to fill this gap.

These local codes typically require that projects subject to the California Code of Regulations Title 24, Part 2, Chapter 11B, document how many accessible EVCS would be required as per Title 24, Chapter 11B to convert all required EV capable or EV ready parking spaces to EVCS. They also typically require that the builder demonstrate that the facility is designed such that compliance with accessibility standards, including Chapter 11B accessible routes, will be feasible for the required accessible EVCS at the time of EVCS installation.²⁵

We note that retrofitting spaces that were not designed to facilitate compliance with accessibility requirements can be very expensive. For instance, this study finds that removing and repairing about 100 to 300 linear feet of surface parking that add conduit to non-accessible parking spaces for a small or medium facility can cost \$11,500 to \$32,000 in demolition and repair costs. While the scope of work for accessibility retrofits may be different from the conduit installation task, this information indicates that the types of costs required for accessibility retrofits (absent good design practices) may be similarly significant and in retrofit contexts may be cost prohibitive, space prohibitive, or both.

Methodology

The methodology for this report is similar to prior 2016 reports for the City of Oakland (with funding from the City of Oakland and grant funding from the California Energy Commission), and for the City and County of San Francisco (with funding from Pacific Gas & Electric and in-kind support from the City and County of San Francisco).^{26 27}

The cost analysis model that breaks each scenario and number of EV capable parking spaces into individual tasks and quantities, as shown in Appendix C. The model also contains estimates for the costs of each job task. Estimates of retrofit and new construction costs per job task are largely based on RS Means, a construction cost reference handbook for residential and nonresidential hardware and related installation

²⁵ For instance, section 11B-812 requires that "Parking spaces, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum." It also requires that parking spaces and access aisles meet maximum slope requirements of 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction at the time of new building construction or renovation. Section 11B-812.5 contains accessible route requirements. In addition, Title 24 Part 11 Section 4.106.4.2 requires that developers meet certain aspects of accessibility requirements at the time of new construction for a limited number of parking spaces.

²⁶ Pike, Ed and Steuben, Jeff. "Plug-In Electric Vehicle Infrastructure, Cost-Effectiveness Report." 2016; and Pike, Ed, Jeffrey Steuben, and Evan Kamei. 2016. "Plug-In Electric Vehicle Infrastructure Cost-Effectiveness Report for San Francisco."

²⁷ Pike, Ed, Jeffrey Steuben, and Evan Kamei. 2016. "Plug-In Electric Vehicle Infrastructure Cost-Effectiveness Report for San Francisco."

costs.²⁸ Additional costs for contractor labor, permits, architectural drawings, plans, site and/or load studies (for retrofit projects), inspections, and local permit and inspection fees are based on the resources listed in Appendix B and C. Additional information used to model these costs includes feedback from industry and utility experts, engineering estimates, and direct experience. For additional details on the methodology and information specific to the EV capable parking space details, please see Appendix C and Appendix D.

The cost analysis model includes hypothetical installation scenarios to compare costs between different numbers of EV capable parking space for new construction and retrofit projects. Actual project costs and configurations will vary; these cases are intended to provide representative examples for comparison purposes rather than to estimate site-specific costs. The model excludes project-specific costs outside the scope of EV capable parking space building code compliance such as acquisition and installation of the EVSE, signage, lighting, pedestal mounts, bollards, wheel stops, any required accessibility retrofit, and any other factors outside of CALGreen EV capable parking spaces requirements.²⁹ (Codes that address accessibility during alterations and additions such as the City of Fremont, City of Oakland, and City and County of San Francisco local codes can result in significant cost savings compared to changing these design parameters later as part of a stand-alone retrofit project.³⁰)

Recent editions to this model have added secondary transformers costs and electrical room costs (switchgear). The model still excludes utility-side infrastructure, such as concrete transformer pads, utility service connections, and associated demolition, to accommodate potential swap-out for a larger capacity primary transformer. Additional information on those costs can be found in the Table 7 of the Transformers section below.

Furthermore, the scenarios do not include sub-metering or separate metering equipment, which are optional, but could be selected by a building owner to access a special electricity rate.³¹ Primary model costs are based on the City of Sacramento with a correction for PCE and SVCE's service area based on an average of San Jose and San Mateo's labor and material costs for the first quarter of 2019.

²⁸ For additional information, see www.rsmeans.com.

²⁹ RS Means specifies a range of potential design costs, while noting that design costs will likely be 50 percent higher for alterations. We note that wheel stops may cost \$150-\$200 each and bollards may cost \$500-\$750 each based on input from an installer and RS Means costs for equipment types similar to bollards.

³⁰ San Francisco Green Building Code 2016:

[http://library.amlegal.com/nxt/gateway.dll/California/sfbuilding/greenbuildingcode2016edition?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$sanc=JD_GreenBuilding](http://library.amlegal.com/nxt/gateway.dll/California/sfbuilding/greenbuildingcode2016edition?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sanc=JD_GreenBuilding)

³¹ A sub-meter may be a desirable add-on for some building owners or PEV drivers to allocate electricity costs and/or provide access to utility PEV charging electricity tariffs, though some special electricity rates for PEV owners are available through whole-house rates and utilities are also conducting pilots of metering via electric vehicle service equipment. The authors believe that builders wishing to install a socket for a sub-meter at the time of new construction may achieve cost savings compared to retrofits but have not quantified this potential.

4. Distribution Transformer Study

One important distinction in transformer classifications is between primary transformers (which are owned and operated by the utility) and secondary “step-down” transformers (which are owned and operated by a building owner). The main distinguishing factor between these is the overall building load and the particular utility rules which specify trigger points for the electrical design. For most situations, small buildings utilize shared distribution primary transformers split between multiple electrical accounts; medium-sized buildings feature a dedicated utility-owned primary transformer; and large buildings may feature a dedicated utility-owned primary transformer along with secondary transformer(s) depending on the electrical design of the building.

Primary Transformers (utility-owned, often with customer costs)

Primary transformers are needed to convert medium voltage utility distribution lines (normally 12kV) to customer level power at either 480V/277V for large buildings or 208V/120V or 240V/120V for medium buildings (for the purposes of this report, small buildings are on a shared transformer). Primary transformers are owned and operated by the utility but costs are partially split with the building owner. The costs borne by the utility operate with a ceiling, insulating utilities from the ballooning costs of the upgrades, allowing any excess above to be charged to the customer. This mechanism is known as an “allowance,” effectively a budget for infrastructure upgrades funded through the electric rates. For PG&E, it is governed by Electric Rule 2³², Electric Rule 15³³ & Electric Rule 16³⁴ which together lay out the rules for expanding service, extending distribution lines, and upgrading transformers. The allowance is dictated by these rules and based on historical electrical usage. The following excerpt is from Electric Rule 15:

$$\text{Allowance} = \frac{\text{Net Revenue}}{\text{Cost-of Service Factor}}$$

where the Cost of Service Factor is the annualized utility-financed Cost of Ownership as (N)
stated in Electric Rule 2. (N)

As written, these formulas and rule exceptions are complex because they apply for all electrical infrastructure situations, including agricultural, industrial, or rural contexts. However, generally-speaking, utility infrastructure upgrades have costs that are broken down between the building owner and the utility. For utility-owned transformers, the building owner will pay for the following nine elements:

- 1- a load study from the utility’s service planning department,
- 2- trenching,
- 3- excavation
- 4- backfill,
- 5- compaction,
- 6- conduit,

³² https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_2.pdf

³³ https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_15.pdf

³⁴ https://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_16.pdf

- 7- substructures (boxes and pads),
- 8- pavings (cut, patch, and final repair), and
- 9- taxes and cost of ownership.

Meanwhile, the utility will pay (up to the allowance) for metering, wiring, and transformers. For any excess work required above the allowance, an advance is required by the customer, but can be converted to a monthly payment. If the revenue for the utility does not end up materializing in the first ten years, utilities have a mechanism to claw back funds called “deficiency billing.”

The CPUC has been tracking service and distribution system upgrades for EV-projects from the three major California Investor-Owned Utilities, publishing their 7th annual report in April 2019³⁵. The study indicates the relative frequency and magnitude of utility-side infrastructure costs that include both service upgrades and **primary** transformer upgrades. While this equipment is owned and operated by the utility, the customer will pay for upgrade costs until their allowance is exceeded.

In many cases this allowance is insufficient and costs can spread over to the customer in lump sum costs ahead of construction and/or higher monthly costs. The following table is pulled from the CPUC report and provides a high-level summary of these costs:

Table 10: Summary of Service Line and Distribution System Upgrades

	PG&E	SCE	SDG&E	Total
Residential Customers				
Estimated PEV customers through December 31, 2018	216,845	163,594	34,833	415,272
Residential Upgrades				
Number of PEV-related Infrastructure Checks Completed	10,138	Not tracked	Not tracked	N/A
Number of PEV-related Service Line and/or Distribution System Upgrades	323	243	52	618
Total Costs Incurred by Utility for Upgrades	\$6,627,544	\$351,675	\$53,365	\$7,032,584
Range of Costs for Upgrades	\$14 to \$338,274	\$1 to \$30,067	\$47 to \$10,958	N/A
Average Cost for Distribution System Upgrade	\$19,262	\$4,514	\$4,089	N/A
Average Cost for Service Line Upgrade	\$1,168	\$1,382	\$730	N/A
Number of Service Line Upgrades Exceeding Residential Allowance	39	33	0	72
Current Residential Allowance	\$2,431	\$3,084	\$3,241	N/A
Amount of Foregone Billings to Customers for Service Line Upgrades Pursuant to "Common Facility Treatment" Policy Exemption for PEVs	\$190,207	\$37,887	\$0	\$228,094

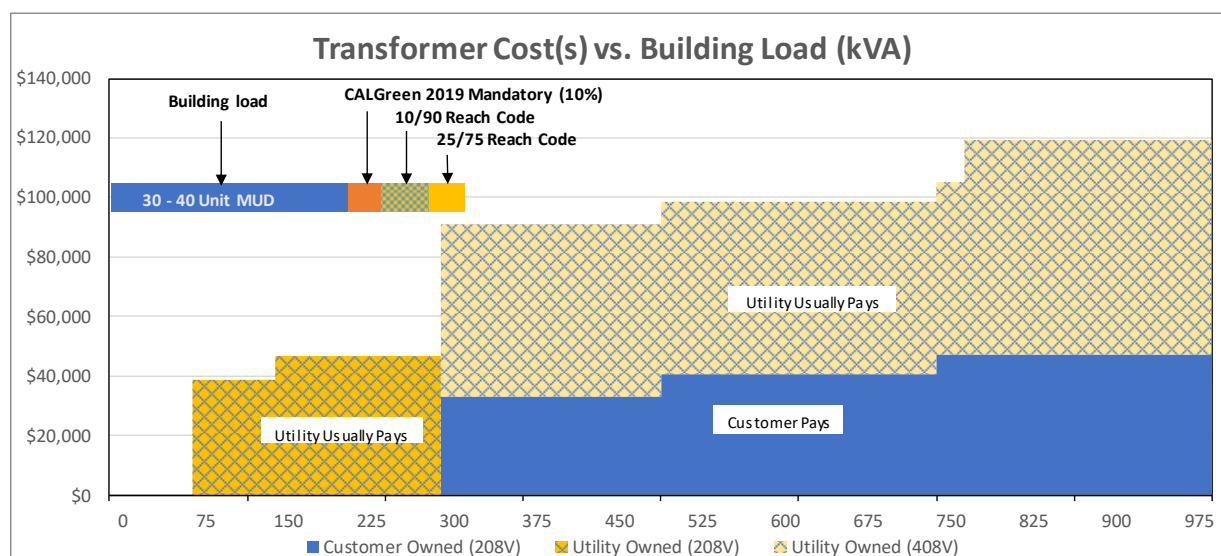
As shown above, PG&E’s service territory indicates just over 3% (323 service line upgrades of 10,138 PEV-related Infrastructure Checks) of sites required distribution or service-line upgrades to accommodate EV infrastructure, demonstrating projects that exceed existing transformer capacity is not common yet. And of these less than 0.4% (39) exceeded the residential allowance resulting in additional costs to the building owner beyond the baseline upgrade costs. Two large caveats should be highlighted here. The first is that most of

³⁵ [7th Joint IOU Electric Vehicle Load Research Report: April 2019 \(CPUC\)](#)

these early EV installations are residential customers and the second is that overall demand for charging infrastructure is increasing and it can be expected that more ports will be installed per parking lot than in the past. In addition, local jurisdictions may have local restrictions regarding placing transformers in public right of ways necessitating alternative siting such as placing transformers within the property line and under owner cost. The most important considerations are the “Range of Costs for Upgrades” (\$14 - \$338,274) and the “Average Cost for Distribution System Upgrade” (\$19,262) which indicate both a very wide range between projects and the average magnitude for transformers upgrades in PG&E territory. It should be noted that the distribution upgrade costs across utilities are significant with PG&E (\$19,262) incurring much higher costs than those of SCE (\$4,514) and SDG&E (\$4,089).

Secondary Transformers (customer-owned)

Secondary transformers are required from larger buildings based on the electrical service being provided by the utility. These rules are pre-determined by the utility’s electric rules. In the context of this report, secondary transformers are those that convert 480V/277V power down to 208V/120V service. PG&E’s Unit Cost Guide³⁶, PG&E’s Greenbook³⁷, and RS Means were investigated to develop a characterization of electrical infrastructure costs (transformers) vs. building load (kVA). In the graph below, primary transformers costs are indicated in gold/yellow with blue-accented patterns³⁸ and secondary transformers costs are indicated in solid blue (costs associated with site preparation are not included). In addition to this, load estimates that were utilized for the cost effectiveness model are overlaid to provide a rough back-of-the-envelope load calculation for MUDs, to illustrate when certain costs become important in order to assist policy makers of the relative situations in which these triggers would occur:



³⁶ PG&E Unit Cost Guide - April 2019

³⁷ 2017-2018 PG&E Greenbook: Electric & Gas Service Requirements:(<http://www.pge.com/greenbook>)

³⁸ The blue accent is to highlight that these costs often end up part of customer costs.

Figure 5: Costs of Transformers vs. Transformer system size (PG&E service territory)³⁹

The figure above shows the magnitude of these transformer costs along with boundary points for small/medium and medium/large buildings utilizing rough estimates for number of units in a MUD with electric vehicle charging equivalent CALGreen 2019 mandatory levels. The sample number of MUDs shown in the figure above are meant to point out sizeable non-linear costs associated with transformer upgrades for this climate and this utility. In particular, attention should be paid to the 300kV load point which may cause considerable cost escalation as the electrical service would switch from 208V/120V to 480V/277V. As mentioned previously, this graphic is high-level, intended for policy makers and does not provide appropriate level of detail for a specific microclimate or a specific site.⁴⁰

Transformer-sizing and other considerations

Electrical designers typically oversize transformers for future unspecified loads as “transformer headroom.” A typical approach to transformer sizing is to obtain the calculated design load from the electrical schedule (building plan documents) and add 20% spare capacity for future load growth to be shown in the equipment schedule, unless otherwise directed by the facility based on design parameters⁴¹. Due to the large step-wise nature of transformers, it is possible that after accounting for headroom significantly more capacity is afforded. The table below illustrates this for the building models produced for this report:

Table 11. Transformer Sizing & Capacity

Building Type	60-Unit MUD		150-Unit MUD		60-Space Office Building
Baseline Building Load [kVA]	292		700		95
Baseline EV Load [kVA] (CALGreen 2019)	43		99		29
Capacity Requirement [kVA]	335 kVA		786 kVA		126 kVA
Capacity Requirement (with 20% headroom) [kVA]	402 kVA		944 kVA		152 kVA
Secondary Transformer Size [kVA]	500 kVA		1000 kVA		300 kVA
Overall Unused Capacity [kVA (% unused)]	165 kVA (33%)		214 kVA (21%)		174 kVA (58%)
Code Scenario	Market Rate	Affordable Housing	Market Rate	Affordable Housing	10% L2 40% L1
Additional Level 2 Ports	+12 L2	0	+22 L2	0	+2 L2
Additional Level 1 Ports	+45 L1	+54 L1	+113 L1	+135 L1	+24 L1
Additional EV Load [kVA]	+95 kVA	+54 kVA	+257 kVA	+156 kVA	+33 kVA
TOTAL EV Load [kVA]	430	389	1043	942	160

³⁹ This graph shows PG&E’s specific equipment sizing and is not comparable to other utilities. Calculations are based on estimates from the infrastructure cost model.

⁴⁰ For example: Electrical system loading was developed by averaging climatic design data from Climate Zone 3 (Oakland) and 4 (San Jose) to develop a prototype HVAC system:

(https://www2.energy.ca.gov/maps/renewable/building_climate_zones.html)

⁴¹ <https://www.csemag.com/articles/selecting-sizing-transformers-for-commercial-buildings/>

In the table above, the scenarios that are able to meet the EV reach codes with the existing headroom have been highlighted in green and the one scenario that would be unable to do so is highlighted in red. In most of these cases, the 20% headroom for the secondary transformer afforded significant flexibility to meet the reach codes. Transformers are sized for a worse-case scenario based on the requirements in the electrical code and very seldom operate near capacity. While it may be tempting to oversize a transformer above the typical industry headroom, significant oversizing should be cautioned because it can result in transformer operation significantly out of the normal efficient operation. As shown in Figure 6 below, load factor (percentage of total rated capacity) can have a significant influence on the transformer efficiency. In most times of the day, the transformer is operating at part load and oversizing a transformer can move performance out of the normal operating range and result in inefficient operation. The following figure shows a generalized transformer efficiency curve for a residential distribution transformer sized and highlights where a 20% load point might fall were the transformer pushed to the next size up, typically 40-55% increase in capacity.

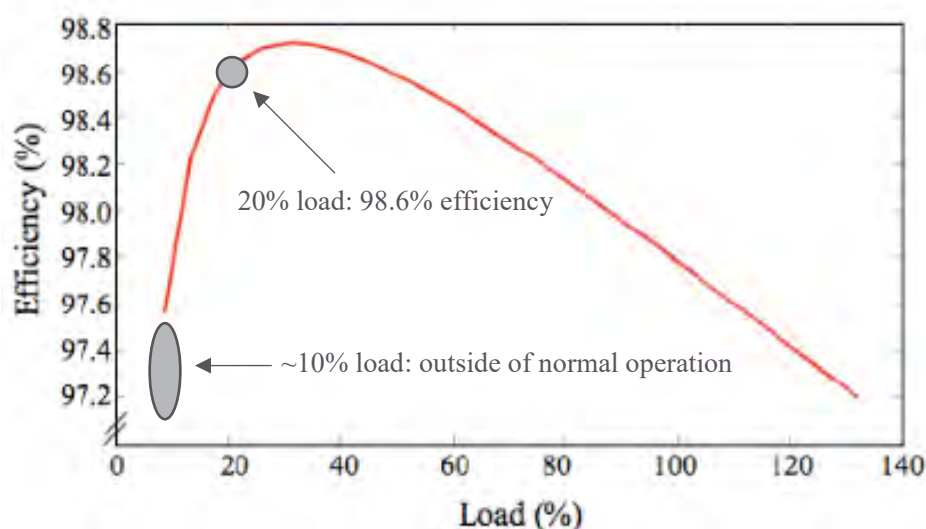


Figure 6: Transformer Efficiency vs. Load Factor⁴²

The primary concern around transformers and associated costs pertain to the boundary cases where buildings close to the boundary of (1) needing to host a utility's dedicated primary transformer or (2) will require different utility service (480V instead of 208V) and need to modify their site to provide a secondary transformer. Approximate ranges of which MUDs would need to contend with this are noted in Figure 1 and Figure 5 above. If more capacity is required, it is likely that a combination of solar, energy efficiency measures, or adding battery storage would be able to prevent a transformer upgrades. On the other hand, the interest in electrification of existing gas appliances may compete for the existing capacity.

In the face of all this, load management is a promising option to allow more electric vehicle charging ports without needing to pay for larger infrastructure upgrades. This technology works by managing the amount of

⁴²https://www.researchgate.net/publication/224598589_Challenges_of_PHEV_Penetration_to_the_Residential_Distribution_Network

throughput to individual charging ports based on what the control system defines for limitations. To date, this feature has primarily been marketed to limit electrical demand charges but could be utilized to prevent overloading panels and/or transformers. Load management for electric vehicles is still nascent technology and would benefit with more developed industry standards. However, the National Electric Code has permitted power management since 2014 but industry may need training to create packaged solutions that can reassure plan checkers and building inspectors.⁴³

⁴³ California Electrical Code (Title 24, Part 3): Article 750.30 – Load Management

Appendix A: Cost Estimates by Type of Expense

The following tables (Table 12 through Table 14) summarize model results for each type of expense per building. All costs below represent **incremental** costs compared to a baseline CALGreen 2019 mandatory building. See Appendix B and Appendix C for more details on the individual tasks included in each of the categories below. The per parking space costs are calculated by dividing the total incremental cost of by the number of added EV capable parking spaces. So for example, for the 60-unit MUD scenario shown below, a CALGreen 2019 mandatory baseline model was created to size the electrical use of a 60-unit MUD apartment building including electrical infrastructure associated with switchgear, panels, and secondary transformer. Under the new construction scenario, the additional 54 EV ports were added to the load and the system resized along with conduits added. For the retrofit scenario, the costs to upsize infrastructure, demolish structures, and provide raceways were added. NOTE: This study does not include costs for EVSE, and does not include and has a overall 20% contingency to account for ADA compliance. ADA can be a significant source of cost and in this study is only intended to capture a limited scope of ADA compliance.

Labor costs generally range from half to two-thirds of total project costs. Labor costs for small buildings with two EV capable parking spaces, based on current CALGreen six percent requirements, were estimated at about four fifths of the total project costs in new construction; however, this may not be representative of other projects for this building type with different site-specific circumstances.

Table 12. Estimated Incremental Cost of Installing EV Infrastructure: 60-Unit MUD

Retrofit	60-Unit MUD			
	Market Rate [NC]	Market Rate [Retrofit]	Affordable Housing [NC]	Affordable Housing [Retrofit]
Level 2 Ports Added	9	9	0	0
Level 1 Ports Added	45	45	54	54
Electrical panel	\$15,960	\$26,008	\$9,289	\$13,004
Main electrical room, excluding transformer	\$13,609	\$43,911	\$14,055	\$35,193
Transformer (480V -> 208V)	\$14,164	\$12,743	\$1,081	\$10,897
Raceway / In-slab conduit	\$18,059	\$77,247	\$18,059	\$77,247
Electrical components (wire, receptacle)	\$11,366	\$20,131	\$11,307	\$20,049
Trenching for installation of conduit	\$0	\$0	\$0	\$0
Demolition of equipment	\$0	\$31,940	\$0	\$30,918
Pavings (asphalt & concrete)	\$0	\$7,889	\$0	\$7,889
Permitting & inspection fees	\$2,435	\$15,592	\$2,435	\$15,592
Construction management	\$549	\$4,449	\$403	\$4,264
TOTAL	\$76,142	\$239,909	\$56,629	\$215,051
TOTAL (Price per Port)	\$1,410	\$4,443	\$1,049	\$3,982

Table 13. Estimated Incremental Cost of Installing EV Infrastructure: 150-Unit MUD

Retrofit	150-Unit MUD			
	Market Rate [NC]	Market Rate [Retrofit]	Affordable Housing [NC]	Affordable Housing [Retrofit]
Level 2 Ports Added	23	23	0	0
Level 1 Ports Added	112	112	135	135
Electrical panel	\$59,785	\$83,699	\$44,926	\$62,896
Main electrical room, excluding transformer	\$10,059	\$49,276	\$10,059	\$49,276
Transformer (480V -> 208V)	\$11,539	\$49,742	\$0	\$40,621
Raceway / In-slab conduit	\$45,147	\$193,116	\$45,147	\$193,116
Electrical components (wire, receptacle)	\$28,062	\$49,833	\$28,407	\$50,317
Trenching for installation of conduit	\$0	\$0	\$0	\$0
Demolition of equipment	\$0	\$79,850	\$0	\$77,294
Pavings (asphalt & concrete)	\$0	\$8,442	\$0	\$8,442
Permitting & inspection fees	\$5,798	\$33,069	\$5,798	\$33,069
Construction management	\$1,159	\$6,655	\$964	\$5,196
TOTAL	\$161,550	\$553,682	\$135,301	\$520,227
TOTAL (Price per Port)	\$1,197	\$4,101	\$1,002	\$3,854

Table 14. Estimated Incremental Cost of Installing EV Infrastructure: 60-Space Office

Retrofit	60-Space Office	
	Office [NC]	Office [Retrofit]
Level 2 Ports Added	2	2
Level 1 Ports Added	24	24
Electrical panel	\$5,571	\$13,004
Main electrical room, excluding transformer	\$8,558	\$35,005
Transformer (480V -> 208V)	\$5,748	\$7,786
Raceway / In-slab conduit	\$0	\$0
Electrical components (wire, receptacle)	\$5,285	\$9,031
Trenching for installation of conduit	\$5,133	\$4,562
Demolition of equipment	\$0	\$6,211
Pavings (asphalt & concrete)	\$0	\$6,305
Permitting & inspection fees	\$4,448	\$11,652
Construction management	\$227	\$3,414
TOTAL	\$34,971	\$96,970
TOTAL (Price per Port)	\$1,166	\$3,232

Appendix B: Permitting and Inspection Costs

Table 15 shows examples of permitting and inspection fees. These fees are not calculated in the model per project but as inputs based on the closest representative level for a project. Table 16 shows the details for these calculations based on the City and County of San Francisco and costs may vary by region.

Table 15. Examples of Total Permit and Inspection Cost Summary

# of Circuits	Stand-alone Retrofit			New Construction (Incremental Costs)		
	Fee	Builder Staff Time	Total	Fee	Builder Staff Time	Total
2	\$461	\$650	\$1,111	\$27	\$75	\$102
4	\$1,365	\$850	\$2,215	\$164	\$125	\$289

Table 16. Electrical and Building Permit and Inspection Cost Data

Electrical and Building Permit and Inspection Cost Data				
Electrical				
Fees				
\$335	Minimum inspection fee, which covers from 1 to 3 inspections			
\$11	Estimated average application fee per additional circuit beyond minimum			
Builder Time Costs				
New Construction, alterations &	Stand-alone			
	Retrofit			
\$25	\$100	Builder staff time to obtain new permit (inclusive of travel)		
\$25	\$100	Builder staff time per inspection (inclusive of travel)		
\$0	\$150	Electrical engineer staff time for load calculations		
Building				
Fees				
New Construction, alterations, additions		Stand-alone retrofit		
Plan	Permitting	Plan	Permitting	
-	-	\$ 144.85	\$ 62.08	up to \$500
-	-	\$ 2.93	\$ 1.26	per hundred from \$500 up to \$2000
-	-	\$ 1.78	\$ 0.76	per hundred from \$2000 up to \$50,000
\$ 0.19	\$ 0.10	-	-	per hundred from \$5,000,000 to \$50m
source: San Francisco Fee Table 1A-A				
note: only costs used in model are listed				
Builder Time Costs				
Incremental Cost, New	Retrofit			
\$25	\$100	Builder staff time to obtain new permit		
\$0	\$100	Builder staff time per inspection (inclusive of travel)		

Notes:

- Fees are calculated based on San Francisco Fee Table 1A-A (building) and Table 1A-E (electrical). New construction fees are based on the incremental cost of adding EV charging infrastructure to a project.
- Two building inspections are assumed for small retrofits, and no additional building inspections are assumed for new construction. One electrical inspection is assumed for adding two circuits and three are assumed for adding 12 circuits.

Appendix C: Methodology Details

This appendix provides additional details on the general assumptions used in the models, data sources for per unit equipment and other costs, and the methods used to determine the quantities needed for each expense type. This appendix does not contain data specific to the scenarios that were modeled, but rather a more general overview of the cost model.

General Assumptions

- Cost estimates include a fixed general overhead and profit factor.⁴⁴
- Labor costs and equipment costs are based on cost estimates from RSMeans 2019 Q1 and utilize standard union rates.
- RSMeans cost data specified Sacramento, CA with a geographic correction which averaged the RS Means City Cost Index of San Mateo and San Jose.
- In some cases, RS Means contains minimum retrofit task costs.⁴⁵ Where related tasks had separate minimum task costs but the labor crew could likely perform more than one related task, the model applied one minimum labor charge.
- Building electrical infrastructure was sized utilizing W/ft² engineering calculations for lighting, air conditioning, and other major appliances.
- Building area was estimated using US Census Data
- Common area is assumed for Laundry usage
- Air Conditioner sizing was calculated based on California Climate Zone data for Zone 3 and Zone 4
- California CEUS⁴⁶ data is utilized to determine demand for offices

Data Sources

Estimates of per unit equipment and installation costs were based on retrofit and new construction costs from RS Means, a construction cost reference handbook and online tool for hardware and related installation costs. The City and County of San Francisco rates were used for permit and inspection fee sheets; and the authors estimated costs for contractor labor for permitting, inspections, site inspection, and architectural plans. Cost data from RS Means was for 2018 and was scaled to 2019 using U.S. Bureau of Labor Statistics Producer Price Index statistics. Additional data sources include: feedback from industry experts, engineering estimates, and direct experience to capture different tasks required for the scenarios that were analyzed. This appendix contains a list of all tasks included in the analysis.

⁴⁴ Individual RS Means line items related to overhead (under General Requirements) are assumed to be addressed by overhead and profit.

⁴⁵ Minimum task costs are typically not relevant for new construction due to the overall project scale.

⁴⁶ <http://capabilities.itron.com/CeusWeb/ChartsSF/Default2.aspx>

Soft Costs

Permit and Inspection Fees

Permitting costs for breaking concrete and electrical permit fees are based on available information from the City and County of San Francisco fees.⁴⁷ The total estimated costs include rough and final building and electrical permit fees where applicable. The cost for adding EV capable spaces during construction of a new building is assumed to be relatively low. Builder time spent towards permit filing and inspections is included at \$100 per hour spent on site. Permit and inspection costs can vary between regions.

The model includes a small amount of labor to accommodate permitting and inspection of elements specific to EV capable parking spaces in new construction and alterations and additions, since these activities are already required and minimal additional effort should be needed to add EV capable infrastructure.

Since economies of scale occur with larger quantities, these fees generally scale up with increasing quantities of EV capable infrastructure, though they are not completely scalable. Costs are higher for outdoor circuits than for indoor circuits due to trenching and are higher for retrofits than for new construction or alterations and additions due to demolition, repaving, and repairs.⁴⁸

ARCHITECTURAL PLAN FEES

Costs to add EV capable parking spaces to architectural plans and drawings will vary between projects based on their overall complexity. They are based on the estimated number of hours for each project and a fee of \$150/hour before geographic adjustments. Costs will also vary if the project is new construction or a retrofit. In the former case, costs will be relatively minor because the architectural firm will likely be familiar with the plan of the building and can easily influence relevant design decisions like adding EV capable infrastructure. For retrofit projects, costs will likely be significantly higher due to the need to investigate and accommodate more complex on-site conditions such as: longer conduit runs, demolition and reconstruction, meeting accessibility requirements based on existing conditions, and/or more limited options for electrical room and panel placement.

A minimal incremental cost is required for adding several EV capable parking spaces to a new building or alteration and addition. In contrast, preparing construction plans for large numbers of EV capable parking spaces to an existing building may take a significant amount of time considering the layout and construction details for each parking space and existing site conditions. Costs will partially scale by the number of EV capable parking spaces.

LOAD STUDY/SITE CONDITIONS STUDY

Additional expenses are required for stand-alone retrofits at medium or large buildings to assess existing load and other conditions. The load study is necessary to determine the current electrical supply capacity, such as

⁴⁷ See [Table 1A-A](#) and [Table 1A-E](#)

⁴⁸ We note that efforts are underway to streamline permitting and inspections of EV charging infrastructure including EV capable parking spaces.

the transformer and other systems related to the main electrical supply and the current actual load.⁴⁹ The study will then determine which on-site upgrades may be needed to install EV capable parking spaces. In addition, site-specific conditions may need to be determined such as current concrete conditions, soils conditions, and/or other conditions. A load study at a facility where other site condition studies aren't needed is assumed to cost \$1,000. Factors such as demolition and/or a greater number of EV parking spaces will drive costs up and a more complex study is assumed to cost \$5,000 in this report (prior to prime contractor expenses). X-ray costs are roughly \$1,000 for a half dozen images, which may be enough for retrofit installations at a medium sized facility, however, more may be required for a 150-space garage.⁵⁰ A specific site may require more or less resources depending on actual conditions.

Assuming alterations and additions originally intended for non-EV charging purposes will require an assessment of load and existing conditions, the assessment would also suffice for EV charging as well.

ELECTRICAL PANEL LOCATIONS AND SIZING

Some electrical panels are located in the main electrical room while others are distributed closer to EV parking spaces to reduce branch circuit lengths and costs. Distributed panels are more practical in locations with convenient wall mounting locations protected from weather and vandalism. All panel and sub-panel conduits are assumed to be installed in 1 ½ inch steel surface-mounted conduits for 225 ampere panels (to carry 250 MCM wire) or 2-inch conduits for 400 ampere panels (to carry 600 MCM wire) to provide a high level of protection and allow for easy visual inspection.

In some cases, a panel installed in new construction can be upsized to serve both base loads (such as garage lighting, elevators, and miscellaneous outlets) and EV charging loads. In other cases, panels for EV charging are sized to their maximum practical size (typically 400 amperes) just to meet EV charging needs. (Panels are generally limited by electrical panel capacity rather than physical size for EV electrical infrastructure. A single-phase 400-ampere panel has electrical capacity for 10 circuits and typically has physical space for 15 40-amperes circuits even if they utilize double slot 20-ampere breakers.)

The type of electrical panels will depend on whether a building is served by three-phase (4-wire) electrical service or one-phase (3-wire) electrical service. Medium and large commercial buildings and multifamily buildings usually receive three-phase service. When a panel receives three phases of electricity instead of one, it can accommodate additional EV capable parking spaces. However, the phases must be “balanced”, which restricts how many additional circuits for EV capable parking spaces can be accommodated. We assumed that three-phase 225 ampere panels can accommodate 9 40-amp circuits and three-phase 400 ampere panels can accommodate 15 40 ampere circuits based on interviews with contractors and an electrical design firm.

⁴⁹ Transformers are usually sized based on the typical maximum actual load of a building. Unlike electrical panels and electrical circuits, transformers can be under loaded to extend their lifetime of fully loading, or even occasionally overloaded without causing an immediate reliability issue but with potential reduced long-term lifetime.

⁵⁰ Concrete X- Ray Imaging, Penhall, <https://www.penhall.com/concrete-x-ray-imaging/> accessed 7-4-2019.

Construction Management

The model also includes a cost factor to represent additional fixed costs incurred by contractors for retrofit installations prior to project initiation. These costs include contractor time spent traveling to a site for surveying, evaluating existing conditions, estimating project costs, and preparing bids. Costs will vary based on the complexity of the project.⁵¹ For new construction, these costs likely do not apply or require minimal additional effort to address EV capable electrical infrastructure. The construction management category also includes general permit application fees.

Raceways, Wire, and Termination Point

PVC materials (i.e. plastic) are included for branch circuit conduits installed in new construction of enclosed parking areas and alterations and additions to enclosed parking that remove the parking surface, while wall and ceiling-mounted metal conduit is assumed for stand-alone retrofits. The authors assumed that intermediate metal conduit was installed for any outdoor raceway in trenches to provide corrosion resistance and for any indoor retrofit cases where walls and floors will not be replaced. Additional raceways may be needed between floors and inaccessible areas.

1¼-inch raceways are generally assumed to carry up to twelve #8 wires rated at 40 amperes (three per circuit) to support 30-ampere EVSE, with the potential to add wiring for a fifth circuit where convenient.^{52,53} Some additional raceways are also needed to serve individual termination locations (i.e. a main conduit run carrying four wires may end at one receptacle pair and a local distribution conduit would carry the other pair to its termination point). These short distribution raceways were also sized at one and a quarter inches for simplicity; though they could be sized at one inch or below, we do not expect that this difference would be significant. In some cases, raceways installed in-slab during new construction will accommodate more and/or higher capacity wires than retrofits that are wall mounted and encounter additional bends at corners and obstacles, limiting their capacity. These potential cost savings are site-specific and not included in the model. Wire is not included for branch circuits for EV capable parking spaces. Wires for any distributed panels that are noted in the scenario summary table are included in the costs.

The length of raceways within a given floor for enclosed parking at new construction and repaving are calculated based on direct routes from the electrical panel to the termination point since no obstacles are present during new construction. Retrofitting surface-mounted conduit is generally assumed to be twice as long in new construction because they must follow walls and ceilings with less direct routing. Compared to new construction, raceway distances are increased by 125 percent for gut rehabilitation because significant

⁵¹ This estimate assumes that contractors win some of their bids for retrofit projects. The success rate will vary based on specific circumstances. For instance, a sole source contacting mechanism would result in a higher success rate while a contracting mechanism requiring three or more bids would result in a lower success rate. Actual costs will vary from project to project.

⁵² Because EV charging is consider a continuous load, the circuit capacity must be at least 25 percent higher than the end load.

⁵³ We note that higher capacity #6 wire could also be installed at a rate of four sets per 1 ¼ inch conduit without larger sized conduit, unless conduit capacity is limited due to bends that restrict fill rates. For an example of allowable fill rates, see Elliot Electric Supply "Conduit Fill Table" at https://www.elliotelectric.com/StaticPages/ElectricalReferences/ElectricalTables/Conduit_Fill_Table.aspx.

portions of the building are removed while some obstructions may remain. Raceway distances are also increased by 150 percent for stand-alone retrofits in outdoor trenches to account for indirect routing (i.e. avoiding existing infrastructure). Surface mounted retrofit distances are increased by 200 percent, compared to new construction, due to the long distances to follow existing walls and to account for routing around existing obstacles.

Actual configurations can vary based on site-specific circumstances. For instance, if several EV parking spaces are located a significant distance from the main electrical panel, a single (larger) raceway run to an additional electrical panel closer to EV parking spaces can be installed with raceways branching from the panel to the planned EVSE location. This configuration would most likely save costs in buildings where the reduced length of raceways would exceed additional electric panel costs. Raceways for electrical panels outside of the main electrical room are sized (at ½ inch intervals, i.e. 1 ½ inch or 2 inches) based on the wire needed to serve that panel.

Conduits will generally terminate at a receptacle with an outlet box with a face plate and no EVSE (i.e. the unit that connects to the vehicle) installed at the time of construction. Local municipal building codes can also require a specific type of receptacle, which does not have a large impact on the cost-effectiveness of code. Receptacles are assumed to be installed in pairs to serve parking spaces on either side of the pair.

No additional curbs or bollards are assumed at the termination point. Local jurisdictions may wish to include a requirement for anchor points for EVSE near the termination point if the EVSE can be wall-mounted, which should not significantly affect the cost of EV capable building codes.

Demolition, Reconstruction, and Repaving

The model contains several job types related to demolition, construction, and repaving for stand-alone projects and projects where parking areas and/or electrical rooms are undergoing renovations that would allow installation of this equipment without any further demolition and reconstruction.

For both enclosed and surface parking, demolition for electrical rooms includes cutting and/or drilling, breaking large pieces into smaller pieces, minimum equipment/labor costs, loading and disposal. Reconstruction costs include concrete work (cost for pouring slabs is used as a proxy), reinforcing rods, forms, and minimum labor charges.

Demolition for parking areas include cutting a three-foot-wide section of pavement to allow two-foot-wide trenches; backhoe rental to trench, mobilization and operation, and disposal of materials. Some trenching would also be required for adding EV capable parking spaces in new construction, when repaving existing parking or adding parking. In these cases, costs would likely be much lower due to the presence of trenching equipment on-site to meet other project needs unrelated to EV capable parking spaces.

Contingencies

A 20 percent contingency was applied for stand-alone retrofit projects based on RS Means. Contingencies are necessary because specific challenges may not be visible at the start of a stand-alone retrofit project or because existing conditions may be difficult to alter without expanding the scope and cost of a retrofit project - for instance if an electrical room lacks space for additional panel(s) or was originally constructed far from parking spaces. A general contingency was not added for EV capable parking spaces installed as part of a

larger retrofit project such as resurfacing or building new parking spaces at an existing site because the conditions will more closely resemble new construction, given their broader scope. In addition, specific cost increases were already included to address higher costs for alterations and additions compared to new construction, such as conservatively assuming that additional parking spaces would be located further from electrical power than existing spaces.

On top of this, another 20 percent contingency was applied to estimate potential costs for accessibility (ADA) compliance associated with restriping, adjusting path of travel, vertical clearances, and slope modifications. ADA compliance costs can be significant but are not the focus of this report.

Transformers

Transformer costs related to secondary or “step down” transformers have been incorporated into this cost model. Only the wiring costs are considered, not the additional costs for a concrete pad, or disposal of the previous transformer. As mentioned previously, these transformers are used to “step down” 480 V service to 208/240 V for buildings connected to 480 V power, which in PG&E’s service area consist of buildings in the 300kVA and up range. CARB has found that EV charging generally represents a relatively small fraction of overall building power demand in multifamily housing with 10% EV Capable parking spaces. These transformer upgrades are often not necessary to support EV charging infrastructure for buildings but may be more likely with the higher EV infrastructure requirements such as those considered in this report.

An electrical engineering firm and several contractors were consulted with and confirmed that they have found that levels of EV capable parking spaces proposed for CALGreen typically would not require a transformer upgrade, noting the typical headroom of 20% is usually sufficient to cover this growth. It was noted that in some cases, a potential off-site utility infrastructure upgrade could be required, as noted in the Primary Transformers section above.

In the case that EV infrastructure would trigger an expensive switchgear or transformer upgrade it should be investigated whether retrofits that include more energy-efficient lighting and other equipment meeting current mandatory California, ENERGY STAR®, and/or federal standards.

We expect that in cases where a transformer upgrade would be required to install EV capable infrastructure, building codes requiring EV capable parking spaces and associated electrical capacity could achieve significant cost savings related to these costs. Stand-alone transformer retrofits could require replacing conduits serving the transformer, replacing the transformer pad or adding a new pad, and adding an additional transformer or upgrading an existing transformer. By comparison, designing the electrical room for adequate capacity would allow the installation of larger sized conduits and/or transformer pads during initial construction at minimal cost. While we have not quantified all of these costs, the incremental cost of installing a 3” conduit instead of a 2” conduit would be very small compared to breaking existing concrete to install a larger sized conduit later.

Task Descriptions

Task descriptions for each scenario are listed below in Table 17. The table lists tasks with a note to designate where the task applies to retrofits, new construction, or both. A negative number indicates the avoidance of smaller electrical panel(s) due to installation of a larger panel. (Tasks that are listed with a “0” quantity were included as an option in detailed calculations used to determine project task descriptions, but the detailed design calculations resulted in a zero quantity for the specific task).

Table 17. Task Descriptions and Quantities

Task Description	Construction Type	Work Type	Unit	60-unit MUD			150-unit MUD			Medium Office	
				CALGreen	Market Rate	Affordable Housing	CalGreen	Market Rate	Affordable Housing	CalGreen	10% L2 40% L1
				Quantity for Each Scenario							
Rent core drill, electric, 2.5 H.P. 1" to 8" bit diameter, includes hourly operating cost	retro	demo	ea.		8	10		20	25		4
Rent mixer power mortar & concrete gas 6 CF, 18 HP, one day including 4 hours operating cost	retro	demo	Ea.		2	2		5	5		
Rent backhoe-loader 40 to 45 HP 5/8 CY capacity, one day including 4 hours operating cost	retro	demo	per day								3
Selective demolition, rubbish handling, dumpster, 6 C.Y., 2 ton capacity, weekly rental, includes one dump per week, cost to be added to demolition cost.	retro	demo	Week		2	2		5	5		0
Deconstruction of concrete, floors, concrete slab on grade, plain, 4" thick, up to 2 stories, excludes handling, packaging or disposal costs	retro	demo	S.F.		24	30		60	75		
Selective concrete demolition, reinforce less than 1% of cross-sectional area, break up into small pieces, excludes shoring, bracing, saw or torch cutting, loading, hauling, dumping	retro	demo	C.Y.		8	10		20	25		5
Selective concrete demolition, minimum labor/equipment charge	retro	demo	Job		2	2		5	5		
Concrete sawing, concrete slabs, rod reinforced, up to 3" deep	retro	demo	L.F.		24	30		60	75		16
Concrete sawing, concrete, existing slab, rod reinforced, for each additional inch of depth over 3"	retro	demo	L.F.		24	30		60	75		16
Selective demolition, concrete slab cutting/sawing, minimum labor/equipment charge	retro	demo	Job		2	2		5	5		1
Concrete core drilling, core, reinforced concrete slab, 2" diameter, up to 6" thick slab, includes bit, layout and set up	retro	demo	Ea.		60	60		150	150		
Receptacle devices, residential, duplex outlet, ivory, EMT & wire, 20', 15 amp, incl box & cover plate	new	electric	Ea.		27	23		68	56		12

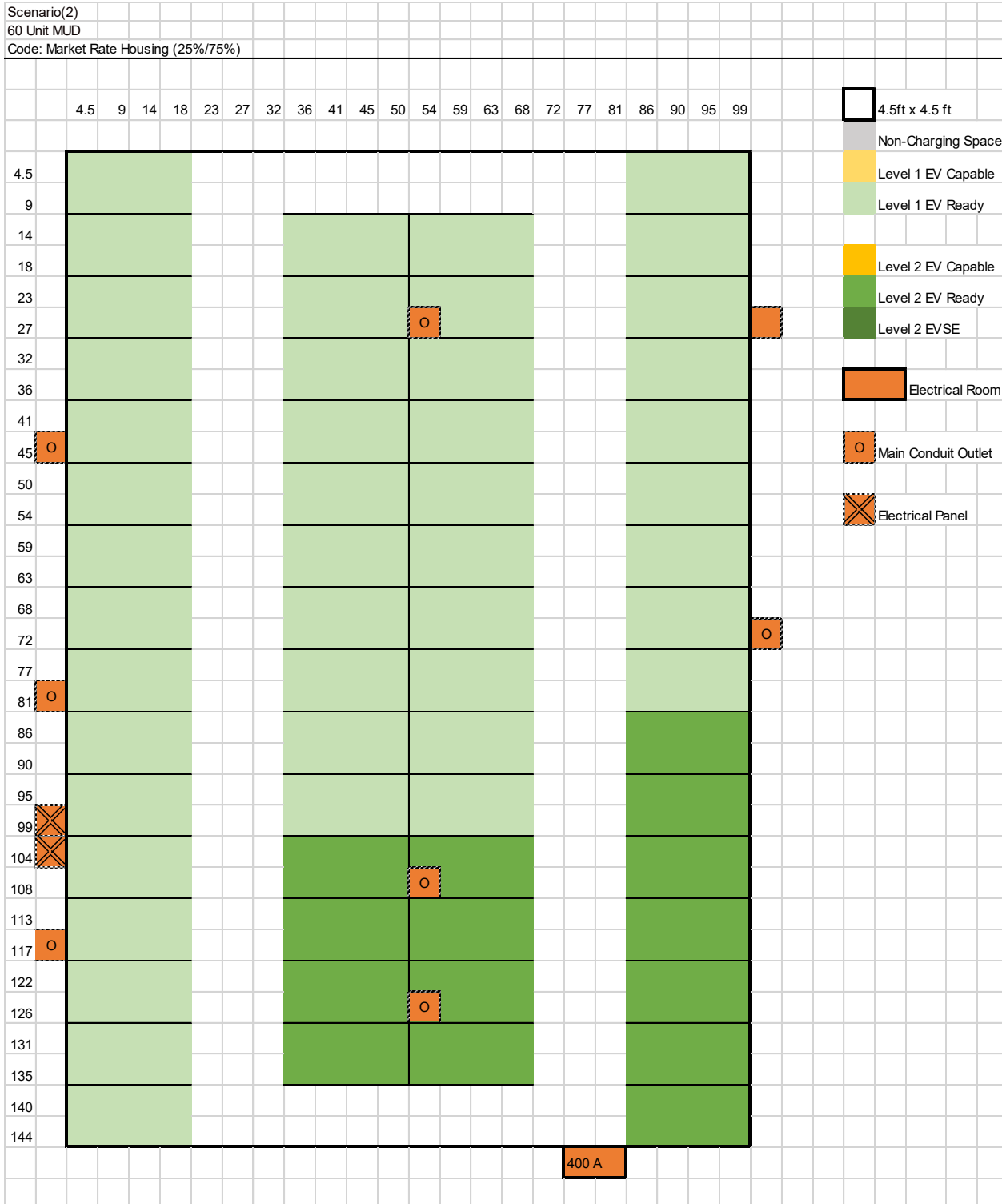
Task Description	Construction Type	Work Type	Unit	60-unit MUD			150-unit MUD			Medium Office	
				CALGreen	Market Rate	Affordable Housing	CalGreen	Market Rate	Affordable Housing	CalGreen	10% L2 40% L1
				Quantity for Each Scenario							
Receptacle, range, 50 Amp	retro	electric	Ea.		6	15		15	38		6
Receptacle devices, residential, duplex outlet, ivory, EMT & wire, 20', 15 amp, incl box & cover plate	retro	electric	Ea.		27	23		68	56		12
permitting & inspection, 2 internal circuits, excludes general building permit fees	new	fee	per job								
permitting & inspection, 4 internal and 2 external circuits, excludes general building permit fees	new	fee	per job							1	5
permitting & inspection, 4 internal circuits, excludes general building permit fees	new	fee	per job	1							
permitting & inspection, 14 internal circuits, excludes general building permit fees	new	fee	per job		1	1	1	1	1	1	1
permitting, per internal circuit over 4, excluding general building permit fees	new	fee	per circuit	2	20	20	1	60	60	2	
permitting & inspection, 14 internal and 7 external circuits, excludes general building permit fees	retro	fee	per job				1	1	1		
permitting & inspection, 14 internal circuits, excludes general building permit fees	retro	fee	per job		1	1					1
permitting, per internal circuit over 4, excluding general building permit fees	retro	fee	per circuit		20	20		60	60		20
architectural plans/drawings	retro	fee	per hour	8	14	14	14	38	38	6	9
architectural plans/drawings	new	fee	per hour	2	4	4	4	12	12	2	3
site and load study	retro	fee	per \$1000	1	3	3	3	5	5	1	2
Circuit Breakers - 480V 3-pole, 70 to 225Amp	new	main	Ea.	1	-1	-1					
Circuit Breakers - 480V 3-pole, 70 to 225Amp	retro	main	Ea.	1							
Switchboard - 3-pole, 4-wire, 400 Amp	retro	main	Ea.	1						1	
Circuit Breakers - 480V 3-pole, 450 to 600 Amp	retro	main	Ea.		1		1				
Circuit Breakers - 480V 3-pole, 700 to 800 Amp	new	main	Ea.			1					
Circuit Breakers - 480V 3-pole, 700 to 800 Amp	retro	main	Ea.			1					
Circuit Breakers - 480V 3-pole, 125 to 400Amp	new	main	Ea.								1
Circuit Breakers - 480V 3-pole, 125 to 400Amp	retro	main	Ea.								1
Circuit Breakers - 480V 3-pole, 15 - 60 Amp	retro	main	Ea.							1	
Distribution Switchboard Enclosure - 4 wire, 1000 Amp	new	main	Ea.					1	1		
Distribution Switchboard Enclosure - 4 wire, 1000 Amp	retro	main	Ea.					1	1		
Incoming Switchboards - 277/480V, 4 wire, 800 Amp	retro	main	Ea.			1					1
Incoming Switchboards - 277/480V, 4 wire, 800 Amp (w/ Fused Switch & CT Compartment)	new	main	Ea.					1	1		

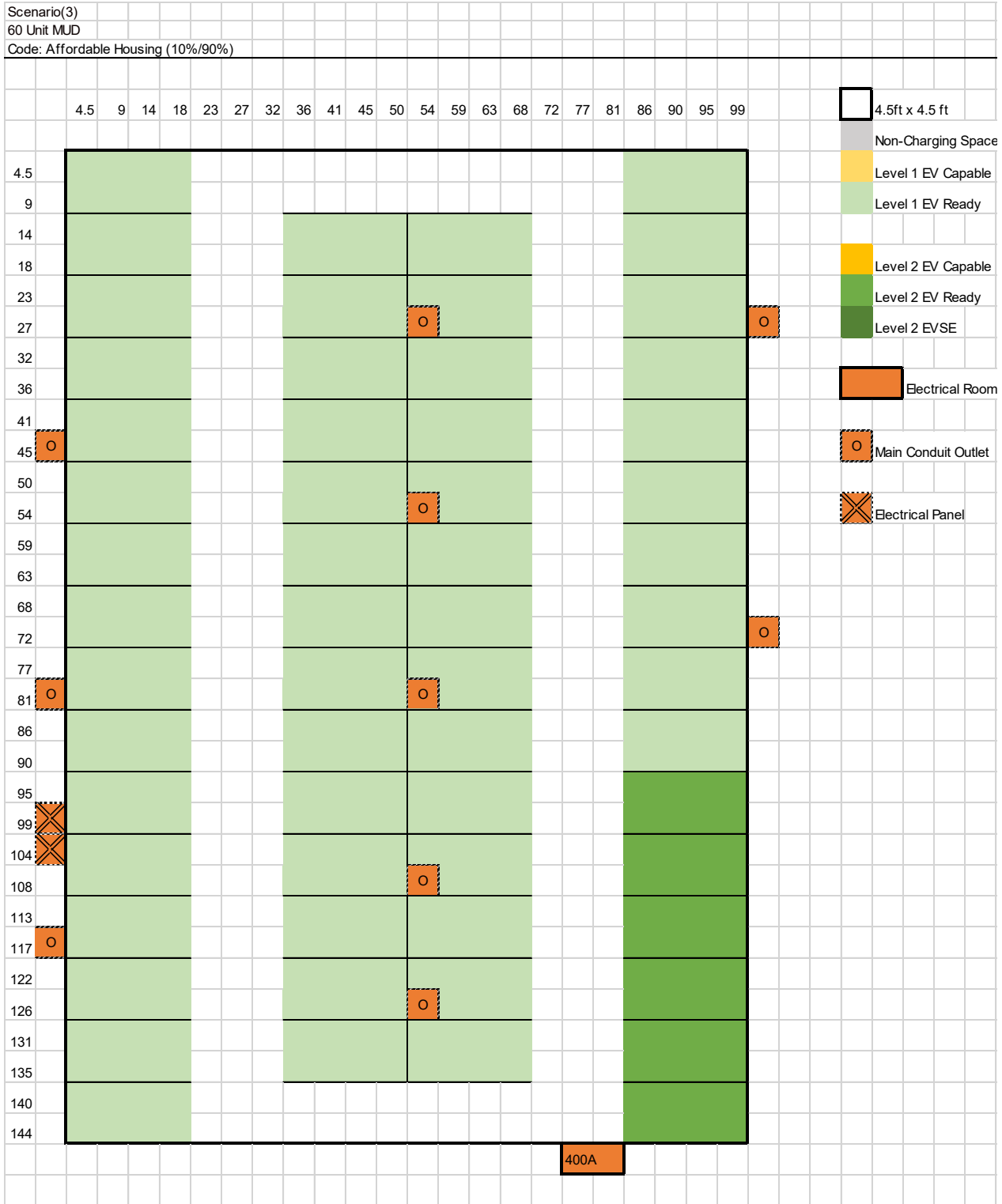
Task Description	Construction Type	Work Type	Unit	60-unit MUD			150-unit MUD			Medium Office	
				CALGreen	Market Rate	Affordable Housing	CalGreen	Market Rate	Affordable Housing	CalGreen	10% L2 40% L1
				Quantity for Each Scenario							
Incoming Switchboards - 277/480V, 4 wire, 800 Amp (w/ Fused Switch & CT Compartment)	retro	main	Ea.					1	1		
Switchboard - 3-pole, 4-wire, 2000 Amp	new	main	Ea.					1	1		
Switchboard - 3-pole, 4-wire, 2000 Amp	retro	main	Ea.					1	1		
Switchboard - 3-pole, 4-wire, 600 Amp	retro	main	Ea.		1		1				
Switchboard - 3-pole, 4-wire, 800 Amp	new	main	Ea.			1					1
Switchboard - 3-pole, 4-wire, 800 Amp	retro	main	Ea.			1					1
Panelboards, 1 phase 3 wire, main circuit breaker, 120/240 V, 225 amp, 30 circuits, NQOD, incl 20 A 1 pole bolt-on breakers	new	panel						1		1	-1
Panelboards, 1 phase 3 wire, main circuit breaker, 120/240 V, 225 amp, 30 circuits, NQOD, incl 20 A 1 pole bolt-on breakers	retro	panel						1			
Panelboards, 1 phase 3 wire, main circuit breaker, 120/240 V, 400 amp, 30 circuits, NQOD, incl 20 A 1 pole bolt-on breakers	new	panel		1	1	-1			1		
Panelboards, 1 phase 3 wire, main circuit breaker, 120/240 V, 400 amp, 30 circuits, NQOD, incl 20 A 1 pole bolt-on breakers	retro	panel			1	2			1		1
Reinforcing steel, in place, dowels, smooth, 12" long, 1/4" or 3/8" diameter, A615, grade 60	retro	pave	Ea.		90	90		72	72		48
Structural concrete, in place, slab on grade (3000 psi), 4" thick, includes concrete (Portland cement Type I), placing and textured finish, excludes forms and reinforcing	retro	pave	S.F.		30	30		24	24		16
Structural concrete, in place, minimum labor/equipment charge	retro	pave	Job		1	1		1	1		1
PVC conduit, schedule 40, 1-1/4" diameter, in concrete slab, includes terminations, fittings and supports	new	race	L.F.	324	2147	2147	1080	5366	5366		
LV Transformer, Dry Type - 480V primary, 120/208V secondary (112.5 kVA)	retro	trans	Ea.		1						
LV Transformer, Dry Type - 480V primary, 120/208V secondary (75 kVA)	Retro	trans	Ea.								1
LV Transformer, Dry Type - 480V primary, 120/208V secondary (150 kVA)	Retro	trans	Ea.			1				1	
LV Transformer, Dry Type - 480V primary, 120/208V secondary (225kVA)	Retro	trans	Ea.	1							
LV Transformer, Dry Type - 480V primary, 120/208V secondary (300 kVA)	New	trans	Ea.		1						
LV Transformer, Dry Type - 480V primary, 120/208V secondary (500 kVA)	New	trans	Ea.			1					

Task Description	Construction Type	Work Type	Unit	60-unit MUD			150-unit MUD			Medium Office	
				CALGreen	Market Rate	Affordable Housing	CalGreen	Market Rate	Affordable Housing	CalGreen	10% L2 40% L1
				Quantity for Each Scenario							
LV Transformer, Dry Type - 480V primary, 120/208V secondary (500 kVA)	Retro	trans	Ea.					1			
LV Transformer, Dry Type - 480V primary, 120/208V secondary (750 kVA)	Retro	trans	Ea.				2		1		

This section includes figures to generally depict the configuration of each scenario that was analyzed. They are not intended to include all details of a particular installation nor are they intended to represent any particular specific installation.







Scenario(4) - page 1 of 2

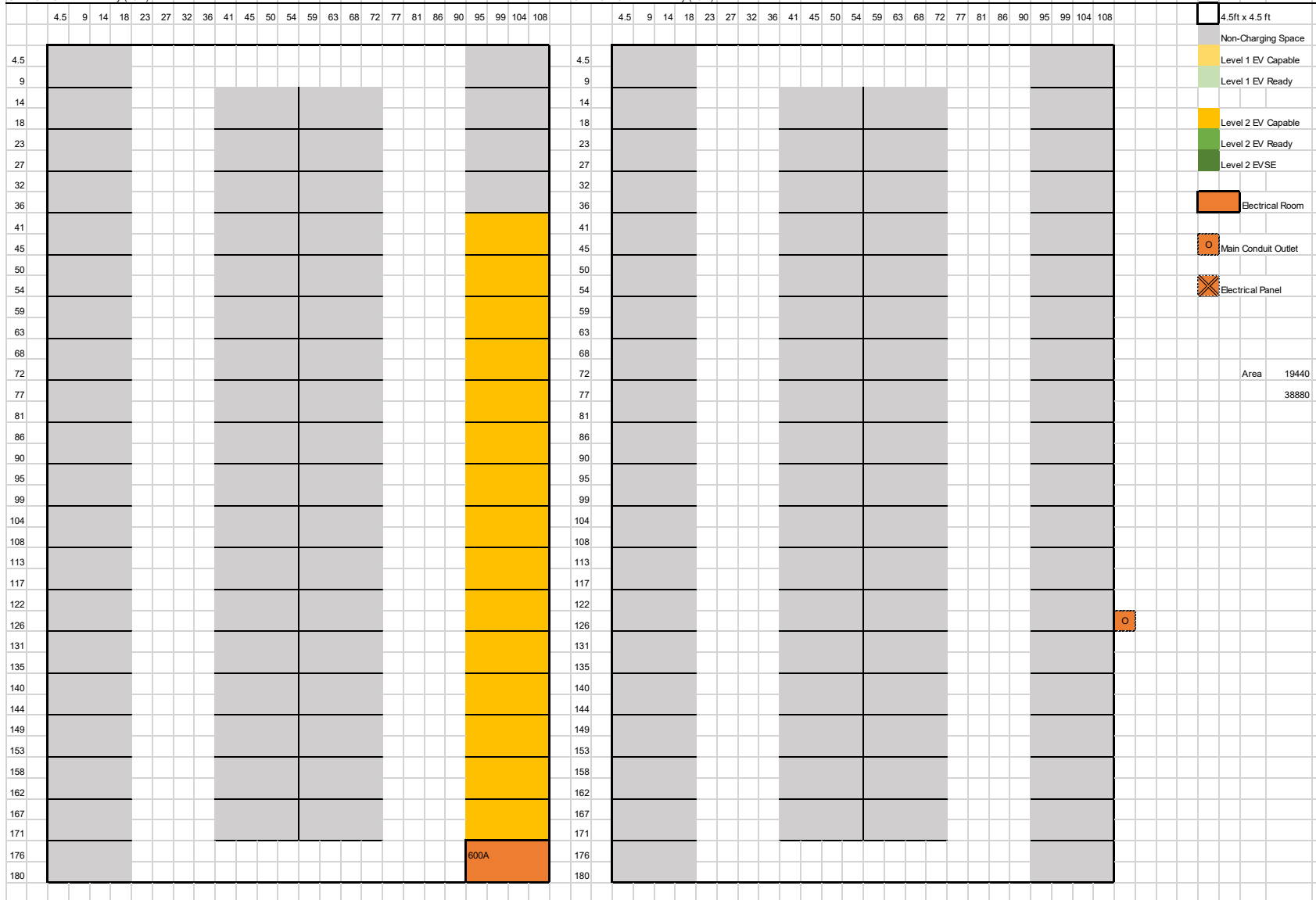
150 Unit MUD

Code: CALGreen Mandatory (10%)

Scenario(4) - page 2 of 2

150 Unit MUD

Code: CALGreen Mandatory (10%)



Scenario(5) - page 1 of 2

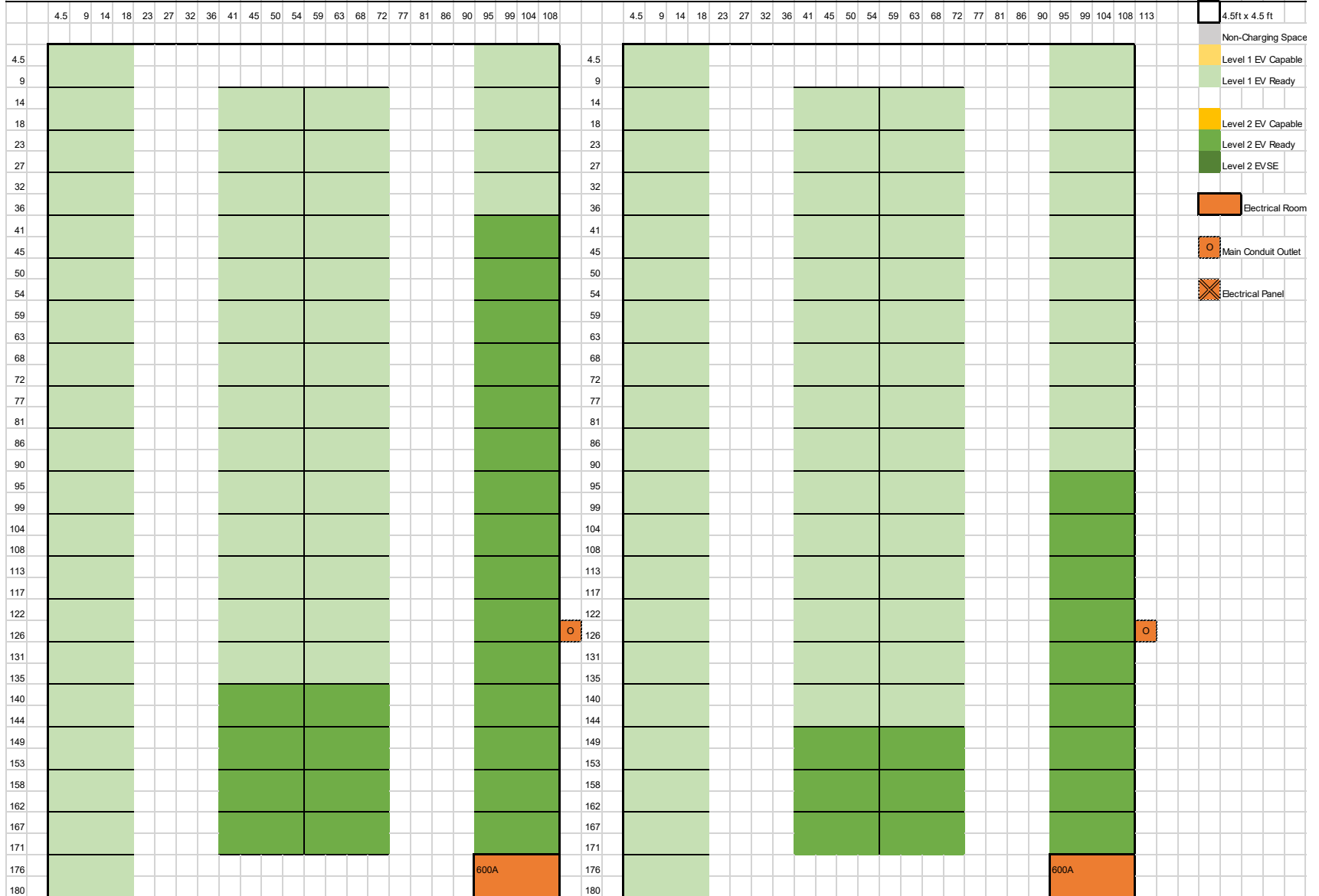
150 Unit MUD

Code: Market Rate Housing (25%/75%)

Scenario(5) - page 2 of 2

150 Unit MUD

Code: Market Rate Housing (25%/75%)



Scenario(6) - page 1 of 2

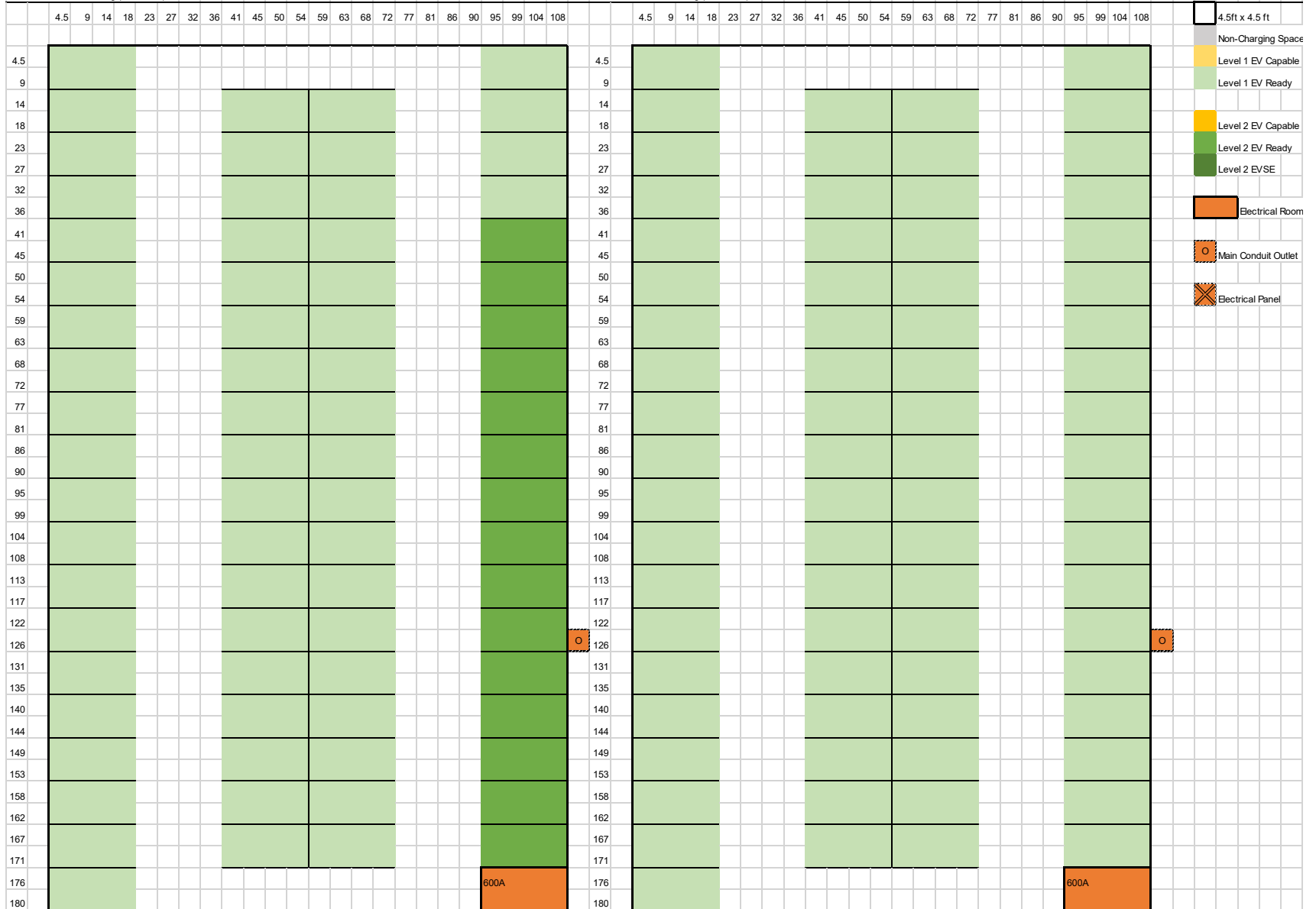
150 Unit MUD

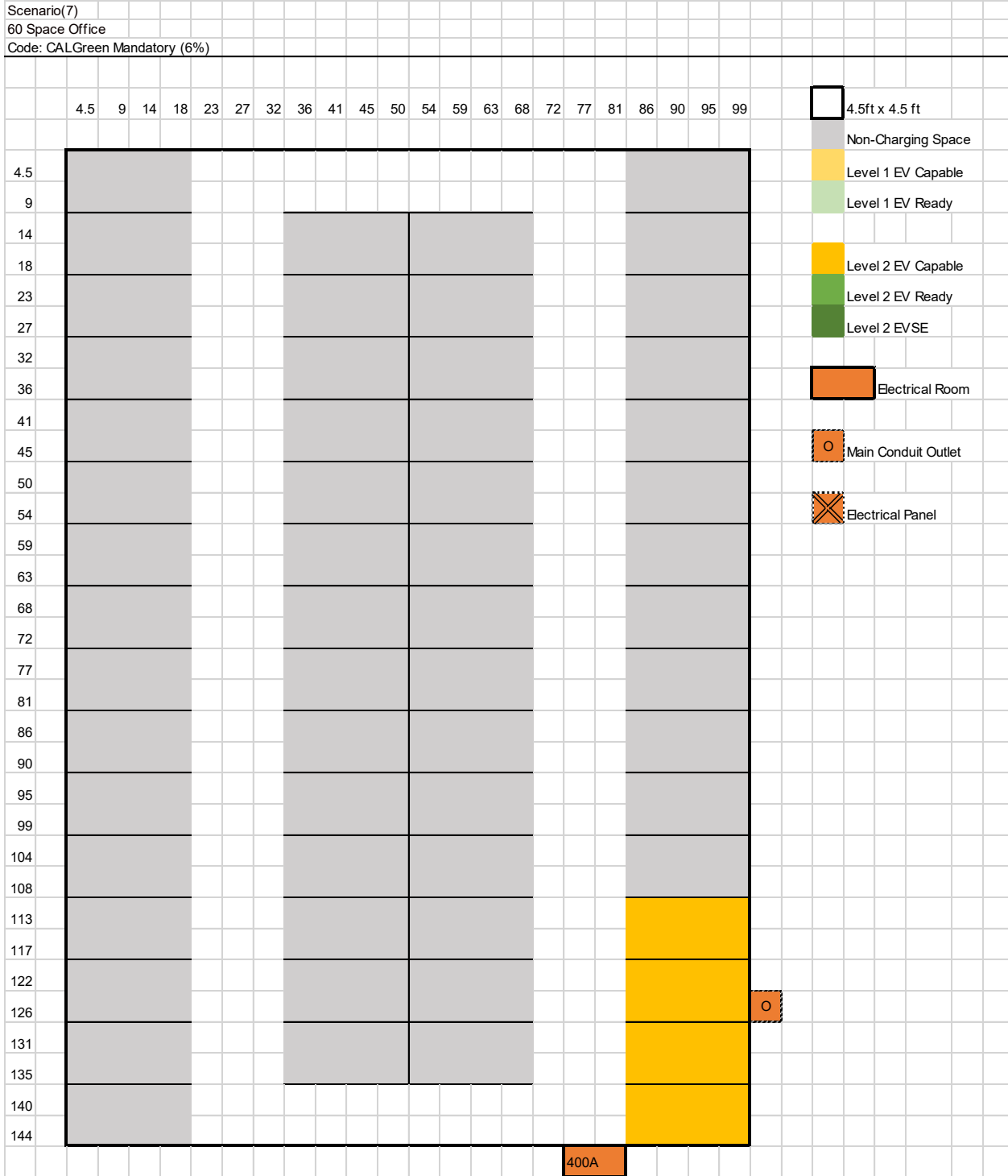
Code: Affordable Housing (10%/90%)

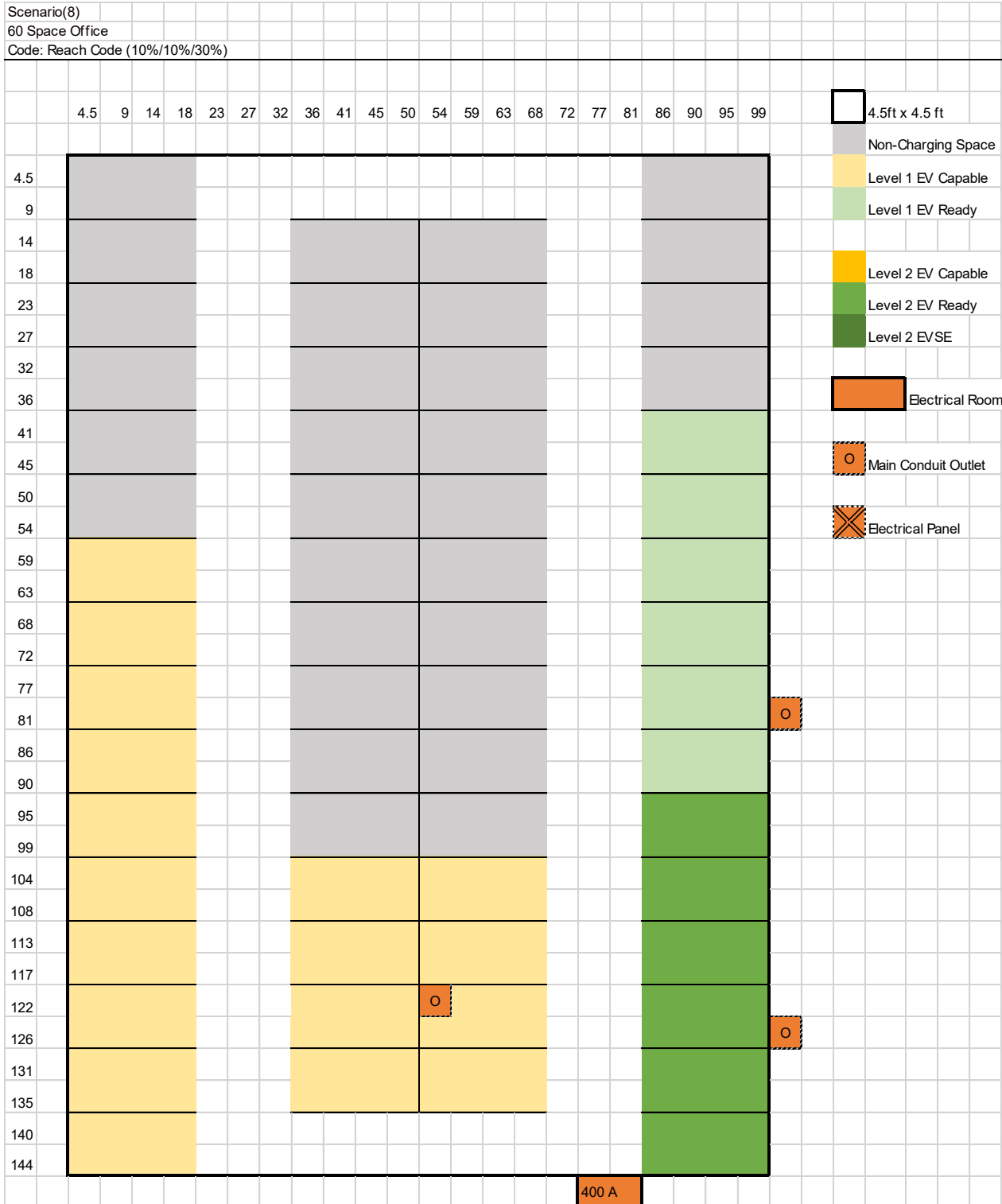
Scenario(6) - page 2 of 2

150 Unit MUD

Code: Affordable Housing (10%/90%)








9/28/2021

item 8



City Council Hearing

Item 21-1108

Introduction of an All-Electric Reach Code Ordinance, including Electric Vehicle (EV) Charging, that Amends Chapter 15.36 (Energy Code) and Chapter 15.38 (Green Building Code) of Title 15 (Buildings and Construction) of the Santa Clara City Code

September 28, 2021

1



City of Santa Clara
The Center of What's Possible

Reach Codes

What Are They, Why Adopt Them?

Emissions Reduction & Decarbonization

- Addresses City CAP targets
- Enables EV adoption
- Supports State Carbon Neutrality by 2045
- Utilizes a cleaner energy grid with more renewables



Health & Safety

- Improves indoor air quality
- Reduces illness tied to indoor combustion
- Eliminates leading cause of home fires with transition to induction cooking

Cost Savings

- Lowers first costs without natural gas infrastructure
- Benefits to residents \$
- Improves economic & environmental performance



Faster Recovery

- Electric distribution recovers more quickly than natural gas



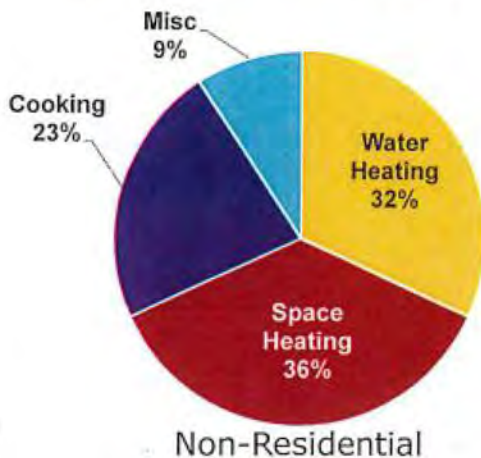
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POST MEETING MATERIAL

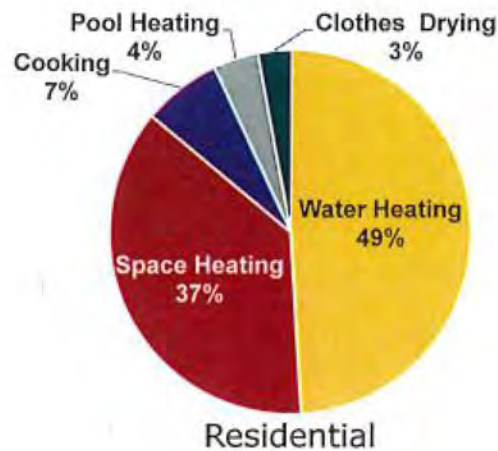
1



Thermal Energy Use in CA



2009 Residential Appliances Satisfaction Survey
2008 California Commercial End Use Survey



3

3



Amendment to CA Energy Code

Proposed All-electric NEW Construction Ordinance

All-electric building

- No gas or propane plumbing within building
- No gas meter
- All-electric appliances

New Construction

- Newly constructed buildings
- Additions/improvements to existing buildings:
 - 50% exterior walls removed or
 - 50% of wall plate height raised

4

4



Amendment to CA Energy Code **Proposed All-electric NEW Construction Ordinance**

Applies to New:

- Single- & two-family, townhouses
- Multi-family residential
- Hotels & motels
- Offices and other non-residential

Includes Solar-ready:

- Hotel/Motel Occupancies & High-rise Multifamily (10 stories)
- Nonresidential Buildings (3 stories)

Includes Exceptions:

- Factories, hazardous materials facilities, laboratories
- Emergency operating centers
- Hotel laundry facilities (80 rooms)
- Commercial kitchens
- Infeasibility

5

5



Amendment to CA Green Building Code

Code Element	Proposed Electric Vehicle (EV) Charging for NEW construction
Single and two-family & Townhouses	<ul style="list-style-type: none"> • One Level 2 EV Ready per dwelling + Level 1 EV Ready if two spaces <ul style="list-style-type: none"> • 25% of all unassigned spaces - Level 2 EV Ready • 75% of unassigned spaces – Low Power Level 2 EV Ready • 20 or less dwelling units with parking - one Level 2 EV Ready per dwelling
Multifamily & Multifamily Affordable	<ul style="list-style-type: none"> • Over 20 dwelling units with assigned parking: <ul style="list-style-type: none"> • First 20 dwellings - one Level 2 EV Ready per dwelling • 25% of all remaining units with assigned spaces - Level 2 EV Ready • 75% of all remaining units with assigned spaces – Low Power Level 2 EV Ready • Secured bicycle parking with 110v electrical outlets shall be provided • Affordable units with parking - 10% Level 2 EV Ready, 90% Level 1 EV Ready
Hotels & Motels	<ul style="list-style-type: none"> • 10% Level 2 Electric Vehicle Charging Station (EVCS) • 50% EV Capable
Offices & Other Non-residential	<ul style="list-style-type: none"> • 35% Level 2 Electric Vehicle Charging Station (EVCS) • 35% EV Capable

6



Proposed Building Electrification and Electric Vehicle Reach Codes

Recommendation

Introduce electrification reach codes as written, to be established on January 1, 2022; to help reduce carbon emissions associated with new construction, reduce costs in new construction, improve indoor air quality and safety of our building stock, support affordable housing, and increase adoption of electric vehicles.

7

7



City Council Hearing

Item 21-1108

Introduction of an All-Electric Reach Code Ordinance, including Electric Vehicle (EV) Charging, that Amends Chapter 15.36 (Energy Code) and Chapter 15.38 (Green Building Code) of Title 15 (Buildings and Construction) of the Santa Clara City Code

September 28, 2021

8

8/27/21

Item 8.

Julie Minot

From: Diane Bailey <diane@menlospark.org>
Sent: Monday, September 27, 2021 10:49 PM
To: Mayor and Council
Subject: Re: Support for an All-Electric Reach Code for Healthy Homes, Clean Air, and a Climate Resilient Community
Attachments: City of Santa Clara Electric Reach Code Support Letter 9 27 21.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

My apologies, please use the attached comment letter with correct signatories.

Thank you.

All the best,

Diane

From: Diane Bailey <diane@menlospark.org>
Date: Monday, September 27, 2021 at 5:33 PM
To: "MayorAndCouncil@santaclaraca.gov" <MayorAndCouncil@santaclaraca.gov>
Subject: Support for an All-Electric Reach Code for Healthy Homes, Clean Air, and a Climate Resilient Community

Dear Mayor Gillmor and City Council Members,
Please accept these comments (attached) on behalf of the Campaign for Fossil Free Buildings in Silicon Valley (FFBSV), expressing our strong support for the all-electric reach code to be considered in Santa Clara tomorrow, September 28. Although we are continuing to recover from the pandemic, local building electrification regulations are critically needed to address the magnitude of the climate crisis, as well as the air quality, health, and safety impacts of current fossil gas use in our homes and buildings. We strongly urge you to adopt an all-electric Reach Code now requiring electric heating and appliances, on-site solar energy, and electric vehicle charging infrastructure in all new construction, both residential and commercial.

Thank you for considering our comments.

Sincerely,

Diane Bailey

Diane Bailey (she/her), Climate Change Professional ([CC-P](#)) | Executive Director

MENLO SPARK

diane@menlospark.org | 650-281-7073

Visit us: www.MenloSpark.org & www.FossilFreeBuildings.org

Find us on [Facebook](#)

Follow us on [Twitter](#)



POST MEETING MATERIAL

Climate Neutral for a Healthy, Prosperous Menlo Park

EV, PV & Fossil Free: Guides for Electric Cars, solar & Fossil Free Homes at: <http://menlospark.org/what-we-do/>

*For there is always light, if only we're brave enough to see it.
If only we're brave enough to be it. – Amanda Gorman*



The Campaign for Fossil Free Buildings in Silicon Valley

350 Silicon Valley, Acterra, Bay Area for Clean Environment, Carbon Free Silicon Valley, Carbon Free Palo Alto, Carbon Free Mountain View, Cinnamon Energy Systems, Citizens' Climate Lobby San Mateo County, Citizens Environmental Council of Burlingame, Clean Coalition, Climate Reality Project: Silicon Valley, Coltura, Cool Block, Earthy B, Electrify Now, emeraldECO, Fossil Free Mid-Peninsula, GreenTown Los Altos, Indivisible Ross Valley, Kitchens of Life, Menlo Spark, Menlo Together, Mothers Out Front Silicon Valley, npc Solar, Pacifica Climate Committee, Peninsula Interfaith Climate Action, Project Green Home, Redwood Energy, SIDCO Homes, San Carlos Green, San Francisco Bay Physicians for Social Responsibility, Sierra Club Loma Prieta Chapter, Sustainable San Mateo County, Sustainable Silicon Valley, Sunnyvale Cool, Silicon Valley Youth Climate Action, and Silicon Valley Youth Climate Strike

September 27, 2021

Santa Clara City Hall
1500 Warburton Ave.
Santa Clara, CA 95050

Via email: MayorAndCouncil@santaclaraca.gov

RE: Support for an All-Electric Reach Code for Healthy Homes, Clean Air, and a Climate Resilient Community

Dear Mayor Gillmor and City Council Members,

On behalf of the Campaign for Fossil Free Buildings in Silicon Valley ([FFBSV](#)), this letter expresses our strong support for the all-electric reach code to be considered in Santa Clara on September 28. Although we are continuing to recover from the pandemic, local building electrification regulations are critically needed to address the magnitude of the climate crisis, as well as the air quality, health, and safety impacts of current fossil gas use in our homes and buildings. We strongly urge you to adopt an all-electric Reach Code now requiring electric heating and appliances, on-site solar energy, and electric vehicle charging infrastructure in all new construction, both residential and commercial. We also urge you not to allow exceptions for gas-powered fuel cells, as [one local company](#) that produces gas-powered fuel cells may have been urging you to do.

FFBSV includes the 37 local organizations listed above, working together to support an accelerated phase out of fossil fuels in buildings. A rapid transition away from fossil fuel use is critical to avoid the very worst and irreversible impacts of climate change. Preventing the use of fossil fuels, including natural gas, in new construction will create more affordable, cleaner, healthier, and more resilient housing and buildings for communities throughout Santa Clara.

Building Electrification is an Urgent Climate Action

Although the devastating increase in catastrophic wildfires throughout California has raised public awareness of climate change, the depth of the climate crisis is even worse than is commonly understood and demands urgent action. A sobering report from the Intergovernmental Panel on Climate Change (IPCC) released last month has found that humans have had an “unequivocal” influence on climate change and warns that this decade is humanity’s last chance to limit warming.¹ While the IPCC report revealed that sadly, a 1.5°C rise in planetary temperature is now unavoidable, the potential to limit warming to below 2°C—and avoid even more catastrophic climate impacts—is still possible if the world can achieve net-zero carbon emissions by 2050.² That means we need to accelerate phasing out fossil fuels now, including heating and cooking with methane gas (note that methane has an 84 time greater climate impact than CO₂ over a 20-year timespan).³

Nearly all cities in Santa Clara County have already adopted electric requirements for new construction that avoid new fossil gas use because there are many benefits to community health, safety, and a stable climate future, including:

- **Economic:** All-electric homes are less expensive to build (saving roughly \$10,000 for each single-family home and \$3,000 or more for each new apartment unit).⁴ In all of the buildings analyzed by the 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study by TRC and Energy Soft, all-electric versions cost less to construct than their mixed-fuel counterparts. **All-Electric buildings are also more efficient.** For example, according to the California Energy Commission, a modern high-efficiency heat pump electric water heater (available now at major retailers) costs roughly one-third less on utility bills to operate than the most efficient gas water heater.⁵ In addition, all-electric buildings include air-conditioning combined with heating, resulting in less equipment, reduced maintenance costs, and greater climate resilience.
- **Public Safety:** Fossil gas is highly flammable. In the past 10 years, 9,000 gas explosions in the U.S have killed more than 500 people, and gas leaks have displaced and sickened thousands of people.⁶ Methane gas also caused half the fires after two major California earthquakes.⁷
- **Public Health:** Gas stoves release smog-forming compounds such as nitrogen dioxide, unburnt hydrocarbons and carbon monoxide pollution that doubles risks for heart and lung disease and triples the use of asthma medications.⁸ *In fact, studies have shown that children living in homes using gas for cooking have a more than 40% higher risk of developing asthma.*⁹ Further, improperly vented gas appliances lead to carbon monoxide poisoning that results in thousands of emergency room visits and several hundred deaths every year.¹⁰
- **Climate:** All-electric buildings are a highly visible and practical step forward to address the climate crisis, by breaking the cycle of fossil fuel dependency in buildings. This is the single biggest step that cities and counties can take to address climate this year.
- **Construction Time Savings:** All-electric buildings are generally faster to design, permit, and build. The code is easier for building and planning staff to apply, and it is also easier for everyone to understand.
- **Resilience:** An all-electric code today heads off a complex, costly and likely inevitable switch to electricity in the future, since gas prices are expected to rise sharply, and California is planning

8/27/21

Item 8

Julie Minot

From: Barbara Kelsey <barbara.kelsey@sierraclub.org>
Sent: Monday, September 27, 2021 10:11 PM
To: Mayor and Council
Cc: Lisa Gillmor; Kathy Watanabe; Raj Chahal; Karen Hardy; Kevin Park; Sudhanshu Jain; Anthony Becker; Clerk; Manager; Dashiell Leeds; Gladwyn d'Souza; James Eggers; Mike Ferreira
Subject: Loma Prieta Chapter Sierra Club comment letter re: 9.28.2021 Agenda item 8: Action on the Introduction of an All-Electric Reach Code
Attachments: SCLP letter to Santa Clara 9.28.2021.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

September 28th, 2021

City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

Dear Mayor Gillmor and Santa Clara City Councilmembers,

The Sierra Club Loma Prieta Chapter strongly supports the all-electric reach code proposed for the September 28th City Council meeting. While the overall code is excellent, we believe there are a few small but important opportunities for the City Council to strengthen the Reach Code. If these modifications can be accepted without delaying the first reading, we hope the City Council moves to include these minor amendments. Please see our full comment letter attached.

Sincerely,

Dashiell Leeds
Conservation Assistant
Loma Prieta Chapter Sierra Club

Gladwyn d'Souza
Conservation Committee Chair
Loma Prieta Chapter Sierra Club

Cc: James Eggers
Executive Director
Loma Prieta Chapter Sierra Club

Sent by:

Barbara Kelsey

POST MEETING MATERIAL

she/her/hers

Chapter Coordinator

Sierra Club, Loma Prieta Chapter

3921 E. Bayshore Rd, Suite 204

Palo Alto, CA 94303

barbara.kelsey@sierraclub.org

We do not have a Chapter office
opening date yet, so email is the
best way to contact us.





SIERRA CLUB

LOMA PRIETA CHAPTER

SAN MATEO, SANTA CLARA & SAN BENITO COUNTIES

September 28th, 2021

City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

Via email to mayorandcouncil@santaclaraca.gov

Cc: Clerk@santaclaraca.gov

Manager@santaclaraca.gov

lgillmor@santaclaraca.gov

kwatanabe@santaclaraca.gov

rchahal@santaclaraca.gov

khardy@santaclaraca.gov

kpark@santaclaraca.gov

sjain@santaclaraca.gov

abecker@santaclaraca.gov

Re: 9.28.2021 Agenda item 8: Action on the Introduction of an All-Electric Reach Code

Dear Mayor Gillmor and Santa Clara City Councilmembers,

The Sierra Club Loma Prieta Chapter strongly supports the all-electric reach code proposed for the September 28th City Council meeting. While the overall code is excellent, we believe there are a few small but important opportunities for the City Council to strengthen the Reach Code. If these modifications can be accepted without delaying the first reading, we hope the City Council moves to include these minor amendments. Precedent has been set by many jurisdictions, including Los Gatos, San Mateo County, and Mountain View, which all removed and modified exception language on the day of the first reading without delaying that first reading.

Exception 1

The existing language is "F, H, L Occupancies may utilize natural gas and provide installed rewiring for future use of electric appliances." We propose adding "To take advantage of this exception, applicant should provide third party verification that an All-Electric building is not cost effective and feasible."

Exception 3

The existing language is "Hotels with eighty or more guestrooms may utilize natural gas in on-site commercial laundry facilities only." We propose adding "To take advantage of this exception, applicant should provide third party verification that an all-electric commercial laundry facility is not cost effective and feasible."

Exception 4

We propose adding the following modifications in bold:

Non-residential kitchens may not **utilize gas for** cooking appliances unless the applicant establishes that there is not an all-electric option for the kitchen using commercially available technology. If the building official grants an exception, EnergySTAR rated **propane** appliances shall be used.

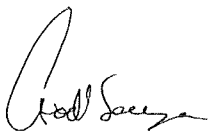
The default requirement for building types should be all-electric. Gas should be used only as a last resort in cases where technical infeasibility and a cost burden can be demonstrated by a third party to the Building Official. Such language would prevent the unnecessary expansion of the gas pipeline network which is a threat to the public health, finances, and climate of Santa Clara residents. The modified language could also send a stronger signal to the private marketplace, further accelerating the proliferation of all-electric technologies.

Adopting an All-Electric Reach Code is an important step towards reducing future gas use and limiting emissions that threaten the survival of ecosystems and organized human life on earth. Many more climate actions will need to be achieved by Santa Clara and other jurisdictions going forward. We look forward to supporting the City in fighting for the health and survival of its residents by rapidly reducing emissions.

Sincerely,



Dashiell Leeds
Conservation Assistant
Loma Prieta Chapter Sierra Club



Gladwyn d'Souza
Conservation Committee Chair
Loma Prieta Chapter Sierra Club

Cc: James Eggers
Executive Director
Loma Prieta Chapter Sierra Club

¹ <https://www.ipcc.ch/report/ar6/wg1/>

<https://www.bloomberg.com/news/features/2021-08-09/ipcc-report-human-caused-climate-change-unequivocal>

² https://www.nytimes.com/2021/08/09/climate/climate-change-report-ipcc-un.html?te=1&nl=climate-fwd:&emc=edit_clim_20210812

³ California Air Resources Board, <https://ww2.arb.ca.gov/our-work/programs/methane-research>

⁴ See www.PeninsulaReachCodes.org

⁵ Rider, Ken, Email correspondence, ken.rider@energy.ca.gov. March 2020.

⁶ Joseph, George. "30 Years of Oil and Gas Pipeline Accidents, Mapped." Citylab. November 30, 2016

Sellers, F., Weintraub, K. and Wootson, C. (2018). "Thousands of residents still out of their homes after gas explosions trigger deadly chaos in Massachusetts." Washington Post. https://www.washingtonpost.com/national/thousands-of-residents-still-out-of-their-homes-after-gas-explosions-trigger-deadly-chaos-in-massachusetts/2018/09/14/802ff690-b830-11e8-94eb-3bd52dfe917b_story.html

⁷ Los Angeles in 1994 and San Francisco in 1989, according to the California Seismic Safety Commission. (2002). "Improving Natural Gas Safety in Earthquakes." SSC-02-03

Taylor, Ann. "The Northridge Earthquake: 20 Years Ago Today." The Atlantic. January 17, 2014.

⁸ Jarvis et al. (1996) "Evaluation of asthma prescription measures and health system performance based on emergency department utilization." <https://www.ncbi.nlm.nih.gov/pubmed/8618483>

⁹ Lin, W., Brunekreef, B. & Gehring, U. Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children. Int. J. Epidemiol. 42, 1724–1737 (2013).

¹⁰ USDN, Methane Math, https://sfenvironment.org/sites/default/files/fliers/files/methane-math_natural-gas-report_final.pdf

to eventually end gas distribution. PG&E has asked for a 24% gas rate increase and SoCalGas, a 42% increase, over the next couple years, and this is just the beginning. **Building all-electric now will help future-proof Santa Clara.**

In addition to the many benefits of building all-electric new homes and buildings, including on-site solar energy generation, strong electric vehicle charging infrastructure standards will also help support a transition away from fossil fuels, boost resilience, and ensure equity in accessing EVs. Please adopt this important climate measure at your September 28 City Council Meeting.

Thank you for considering our comments. We would be pleased to provide additional information or respond to any questions that might arise.

Sincerely,

Lauren Weston, Executive Director, Acterra: Action for a Healthy Planet

Janelle London, Coltura

Jenny Green, Mothers Out Front Silicon Valley, leadership team volunteer

Bruce Naegel, Carbon Free Silicon Valley, Sustainable Silicon Valley

Terry Nagel, Chair, Sustainable San Mateo County, and former Mayor, Burlingame

Leane Eberhart, San Mateo Architect

Carolyn Zhao, Co-lead of Santa Clara Youth Climate Action

Hoai-An Truong, Leadership Team, Mothers Out Front Silicon Valley

Linda Hutchins-Knowles, Co-founder, Mothers Out Front Silicon Valley

Brianna Duarte, Beneficial Electrification, Acterra

Mary Dateo, Board member, Carbon Free Mountain View

James Tuleya, Chairperson, Carbon Free Silicon Valley

Hoi Poon, Chair, Environmental Committee, Silicon Valley Democratic Club; Co-Founder, Silicon Valley Youth Climate Action

Stephanie Morris, Mothers Out Front Silicon Valley Leadership Team

Suzanne Henderson Emerson, San Carlos Green

Sean Armstrong, Managing Partner, Redwood Energy

Bruce Hodge, Founder, Carbon Free Palo Alto

Jared Johnson, Sr. Manager of Policy & External Relations, Acterra

Robert M. Gould, MD, President San Francisco Bay Physicians for Social Responsibility

Gary Latshaw, Ph.D., Chair of the Guadalupe Group of the Sierra Club (Chapter Loma Prieta)

Diane Bailey, Executive Director, Menlo Spark



Agenda Report

21-1478

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on a Written Petition (Council Policy 030) submitted by Morteza Shafiei, as representative of HOAs on October 7, 2021 to add an Agenda Item to a future Council Agenda to Consider the Purchase of lot at 1601 Civic Center Drive

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Any member of the public may submit a written request raising any issue or item within the subject matter jurisdiction of the Council. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor, without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office has received a Written Petition for Council consideration from Morteza Shafiei, as representative of HOAs dated September 7, 2021 (Attachment 2) requesting to agendize on a future agenda a discussion to purchase the lot at 1601 Civic Center Drive, Santa Clara, in order to establish a park for the benefit of our Citizens and neighborhood. On 9-27-2021 our community of over 170 homes and 4 HOAs submitted a letter to the City Council detailing our concerns for the planned development of 1601 Civic Center Drive (Charities Housing) and requested that this Citizen Proposal be considered on equal footing with any other proposals.

FISCAL IMPACT

There is no fiscal impact associated with considering the request to be placed on a future agenda except for staff time.

ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b)(5) in that it is an administrative activity that will not result in direct or indirect physical changes to the environment.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a

Special Meeting. A hard copy of any report to council may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Set a future Council meeting date to take action on the Written Petition received.
2. Take no action.
3. Any other City Council Action, as determined by the City Council.

RECOMMENDATION

Staff makes no recommendation.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Policy and Procedure 030 - Adding an Item on the Agenda
2. Written Petition dated October 7, 2021 submitted by Morteze Shafiei

RESOLUTION NO. 20-8895

**A RESOLUTION OF THE CITY OF SANTA CLARA,
CALIFORNIA TO REPEAL RESOLUTION NO. 20-8809,
AMEND COUNCIL POLICY 030 ENTITLED “ADDING AN ITEM
ON THE AGENDA,” AND APPROVE THE COUNCIL ITEM
REQUEST FORM**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, amending the policy on adding an item on the agenda to establish a clear, effective and easily understood process for members of the City Council and the public to have items within the jurisdiction of the City Council placed on a meeting agenda;

WHEREAS, the amended version of the Adding an Item on the Agenda policy expands on the current policy language by clearly stating that, when a written request is first considered, discussion should be limited to whether an item should be added to an agenda and a date, not the merit of the item; and,

WHEREAS, the amended Adding an Item on the Agenda policy, attached hereto as Attachment 1, includes a Council Item Request Form for the City Council’s use when requesting an item for inclusion on a Council meeting agenda and adds the procedure for written requests from members of the City Council.

**NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS
FOLLOWS:**

1. That Resolution No. 20-8809 is hereby rescinded in its entirety.
2. That amended Council Policy 030 entitled “Adding an Item on the Agenda” with the Council Item Request Form, attached hereto as Attachment 1, is hereby approved and adopted, and the City Manager is directed to number (and renumber, as appropriate) the Council Policy Manual such that they are organized in a logical fashion.

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3. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING THEREOF HELD ON THE 27TH DAY OF OCTOBER, 2020, BY THE FOLLOWING VOTE:

AYES:	COUNCILORS:	Chahal, Davis, Hardy, O'Neill, and Watanabe, and Mayor Gillmor
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NOES:	COUNCILORS:	None
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ABSENT:	COUNCILORS:	None
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ABSTAINED:	COUNCILORS:	None
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ATTEST:


NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:

1. Council Policy 030 entitled "Adding an Item on the Agenda"



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

Members of the City Council:

The Mayor or any individual Councilmember may submit a written request by using the Council Item Request Form to the City Manager's Office for inclusion of an item on a City Council agenda, provided the request is received two (2) days prior to the public release of the agenda packet. At the meeting where the request is heard, discussion should be limited to whether the item should be added to an agenda and a date, not the merit of the item.

Referral from a Council Committee:

Council Committees may submit a written request to the City Manager's Office for inclusion of an item on a City Council agenda, provided the request is received two (2) days prior to the public release of the agenda packet.

Council Committees may bring forward a recommendation to the full City Council by way of the Committee minutes, which are typically prepared within three weeks following the Committee meeting.

Items Referred During a Council Meeting:

By Council action, an item may be referred to the City Manager for inclusion on a City Council agenda. If the request requires further study of the item from staff, a full analysis shall be prepared at the direction of the City Manager with at least thirty (30) calendar days prior to the meeting, unless otherwise directed by the City Council. If the request requires more than thirty (30) calendar days to prepare, status updates will be provided to the City Council every sixty (60) days as an informational memo.



ADDING AN ITEM ON THE AGENDA

Written Petitions and Public Presentations:

Any member of the public may submit a written request raising any issue or item within the subject matter jurisdiction of the City Council to be heard under the **“Written Petition”** section of the City Council's regular agenda within two (2) Council meetings after received. After the initial Written Petition is placed on the agenda, a majority vote of the City Council may add the item to a future Council meeting for action. Any member of the public may address the City Council under the **“Public Presentations”** section of the agenda. If the presentation includes a request of the Council, a majority vote of the City Council may refer the item to the City Manager to be properly added to a future meeting, in compliance with the Brown Act.

PROCEDURE FOR WRITTEN PETITIONS

1. All requests to address the City Council shall be submitted in writing. Written Petition forms are available for the petitioner's convenience on the City's website and in the City Manager's Office, City Clerk's Office, and the Mayor and Council Offices. Alternatively, an email may be submitted to clerk@santaclaraca.gov.
2. Once the Written Petition is received by the City Clerk's Office, it should immediately be forwarded to the City Manager for placement on an agenda within two (2) Council meetings after receipt of the original request from the City Clerk's Office. All written material (request and any support material) will be submitted on the agenda in the form substantially provided by the requester without any staff analysis, including fiscal review, legal review and policy review, until the City Council has had the opportunity to provide direction to the City Manager.
3. At the meeting where the item is first considered, if a majority of the City Council supports further study of the item, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council. Discussion should be limited to whether an item should be added to an agenda and a date, not the merit of the item.



ADDING AN ITEM ON THE AGENDA

**PROCEDURE
FOR WRITTEN
REQUESTS
FROM CITY
COUNCIL**

1. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda.
2. Once the Council Item Request Form is received by the City Clerk's Office, it should immediately be forwarded to the City Manager for placement on an agenda within two (2) Council meetings after receipt of the original request from the City Clerk's Office. All written material (Council Item Request Form and any support material) will be submitted on the agenda in the form substantially provided by the requester without any staff analysis, including fiscal review, legal review and policy review, until the City Council has had the opportunity to provide direction to the City Manager.
3. At the meeting where the item is first considered, if a majority of the City Council supports further study of the item, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council. Discussion should be limited to whether an item should be added to an agenda and a date, not the merit of the item.

Attachments: Council Item Request Form



The Council Item Request Form is for members of the City Council to submit written requests to the City Manager's Office for inclusion of an item on a future City Council meeting agenda. At the meeting where the initial written request is heard, discussion should be limited to whether the item should be added to an agenda and a date, not the merit of the item. A majority vote of the City Council is required for the item to be added to future Council meeting agenda for action.

CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:



City of
Santa Clara

RECEIVED

OCT 7 2021

City Clerk's Office
City of Santa Clara

CITY COUNCIL WRITTEN PETITION

Please provide the information requested below. When complete, please submit to the City Clerk's Office, 1500 Warburton Avenue, Santa Clara, CA 95050.

Date: 10/7/2021

I, Morteza Shafiei, as representative for HOAs below, am hereby requesting to be placed on the Santa Clara City Council Agenda for the following purpose:

To purchase the lot at 1601 Civic Center Drive, Santa Clara, CA, in order to establish a park for the
benefit of our Citizens and neighborhood. On 9-27- 2021 our community of over 170 homes and 4 HOAs
submitted a letter to the City Council detailing our concerns for the planned development at 1601 Civic
Center Drive (Charities Housing) and requested that this Citizen Proposal be considered on equal footing
with any other proposals, and placed for consideration on a future City Council Agenda.

I understand that it is important that I attend the meeting in the event there are any questions the Council wishes to ask me.

Signed: Morteza shafiei

NAME: Morteza Shafiei, representing Civic Center Village HOA, Civic Center HOA, Boulevard HOA
and Park Vista Circle HOA and numerous other neighborhood Citizens

ADDRESS: 1721 Triton Ct
Street

Santa Clara 95050
City Zip Code

TELEPHONE: * _____ email: emuloid@yahoo.com
Optional

DATE: 10-5-2021

*NOTE: This is a public document. If your telephone number is unlisted or if you do not want it to be public, please provide an alternate number where you can be reached.



Agenda Report

21-1477

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on a Written Petition (Council Petition 030) Submitted by Councilmember Jain Requesting to Place an Agenda Item at a Future Meeting to Discuss the Debt Acquisition Company of America Applying for a Conditional Use Permit to Build and Operate a 320 Acre Sand and Gravel Quarry at Sargent Ranch

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office has received a Written Petition for Council consideration from Councilmember Jain dated October 7, 2021 (Attachment 2) to discuss the Debt Acquisition Company of America (DACA) owns Sargent Ranch which is 6500 acres of nearly pristine open space which encompasses Juristac, considered by the Amah Mutsun Tribal Band to be a very sacred space which held healing ceremonies and dances for centuries.

DACA has applied to the County of Santa Clara for a conditional use permit to build and operate 320-acre sand and gravel quarry at Sargent Ranch. This quarry will violate the serenity of this place which is also a critical wildlife corridor.

The Amah Mustun Tribal Band and Greenbelt Alliance are asking Santa Clara to pass a resolution asking the County to reject the use permit and to preserve Juristac as open space. The cities of Morgan Hill and Santa Cruz have already passed similar resolutions. Also, a group of 279 staff and faculty and 90 students at SCU have signed a letter to deny the mining permits.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board

outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 6, 2021 submitted by Councilmember Jain



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

Members of the City Council:

The Mayor or any individual Councilmember may submit a written request by using the Council Item Request Form to the City Manager's Office for inclusion of an item on a City Council agenda, provided the request is received two (2) days prior to the public release of the agenda packet. At the meeting where the request is heard, discussion should be limited to whether the item should be added to an agenda and a date, not the merit of the item.

Referral from a Council Committee:

Council Committees may submit a written request to the City Manager's Office for inclusion of an item on a City Council agenda, provided the request is received two (2) days prior to the public release of the agenda packet.

Council Committees may bring forward a recommendation to the full City Council by way of the Committee minutes, which are typically prepared within three weeks following the Committee meeting.

Items Referred During a Council Meeting:

By Council action, an item may be referred to the City Manager for inclusion on a City Council agenda. If the request requires further study of the item from staff, a full analysis shall be prepared at the direction of the City Manager with at least thirty (30) calendar days prior to the meeting, unless otherwise directed by the City Council. If the request requires more than thirty (30) calendar days to prepare, status updates will be provided to the City Council every sixty (60) days as an informational memo.



ADDING AN ITEM ON THE AGENDA

Written Petitions and Public Presentations:

Any member of the public may submit a written request raising any issue or item within the subject matter jurisdiction of the City Council to be heard under the **“Written Petition”** section of the City Council's regular agenda within two (2) Council meetings after received. After the initial Written Petition is placed on the agenda, a majority vote of the City Council may add the item to a future Council meeting for action. Any member of the public may address the City Council under the **“Public Presentations”** section of the agenda. If the presentation includes a request of the Council, a majority vote of the City Council may refer the item to the City Manager to be properly added to a future meeting, in compliance with the Brown Act.

PROCEDURE FOR WRITTEN PETITIONS

1. All requests to address the City Council shall be submitted in writing. Written Petition forms are available for the petitioner's convenience on the City's website and in the City Manager's Office, City Clerk's Office, and the Mayor and Council Offices. Alternatively, an email may be submitted to clerk@santaclaraca.gov.
2. Once the Written Petition is received by the City Clerk's Office, it should immediately be forwarded to the City Manager for placement on an agenda within two (2) Council meetings after receipt of the original request from the City Clerk's Office. All written material (request and any support material) will be submitted on the agenda in the form substantially provided by the requester without any staff analysis, including fiscal review, legal review and policy review, until the City Council has had the opportunity to provide direction to the City Manager.
3. At the meeting where the item is first considered, if a majority of the City Council supports further study of the item, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council. Discussion should be limited to whether an item should be added to an agenda and a date, not the merit of the item.



ADDING AN ITEM ON THE AGENDA

**PROCEDURE
FOR WRITTEN
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FROM CITY
COUNCIL**

1. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda.
2. Once the Council Item Request Form is received by the City Clerk's Office, it should immediately be forwarded to the City Manager for placement on an agenda within two (2) Council meetings after receipt of the original request from the City Clerk's Office. All written material (Council Item Request Form and any support material) will be submitted on the agenda in the form substantially provided by the requester without any staff analysis, including fiscal review, legal review and policy review, until the City Council has had the opportunity to provide direction to the City Manager.
3. At the meeting where the item is first considered, if a majority of the City Council supports further study of the item, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council. Discussion should be limited to whether an item should be added to an agenda and a date, not the merit of the item.

Attachments: Council Item Request Form



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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
Santa Clara**
The Center of What's Possible

RECEIVED

OCT 6 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Suds Jain

Contact E-mail _sjain@santaclaraca.gov_

Contact Phone _408-499-2955_

Today's Date _10/6/2021_

WRITTEN REQUEST

I, Suds Jain, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

The Debt Acquisition Company of America (DACA) owns Sargent Ranch which is 6500 acres of nearly pristine open space which encompasses Juristac, considered by the Amah Mutsun Tribal Band to be a very sacred space which held healing ceremonies and dances for centuries.

DACA has applied to the County of Santa Clara for a conditional use permit to build and operate a 320 acre sand and gravel quarry at Sargent Ranch. This quarry will violate the serenity of this place which is also a critical wildlife corridor.

The Amah Mutsun Tribal Band and Greenbelt Alliance are asking Santa Clara to pass a resolution asking the County to reject the use permit and to preserve Juristac as open space. The cities of Morgan Hill and Santa Cruz have already passed similar resolutions. Also a group of 279 staff and faculty and 90 students at SCU have signed a letter to deny the mining permits.

**Reference: Council Policy 030 - Adding an Item on the Agenda
Resolution No. 20-8895**



Agenda Report

21-1431

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker
Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose including
a New City Hall Plan Incorporated into the New Santa Clara Downtown Plan

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 to propose including a New City Hall Plan into the new Santa Clara downtown plan.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

Members of the City Council:

The Mayor or any individual Councilmember may submit a written request by using the Council Item Request Form to the City Manager's Office for inclusion of an item on a City Council agenda, provided the request is received two (2) days prior to the public release of the agenda packet. At the meeting where the request is heard, discussion should be limited to whether the item should be added to an agenda and a date, not the merit of the item.

Referral from a Council Committee:

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Items Referred During a Council Meeting:

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ADDING AN ITEM ON THE AGENDA

Written Petitions and Public Presentations:

Any member of the public may submit a written request raising any issue or item within the subject matter jurisdiction of the City Council to be heard under the **“Written Petition”** section of the City Council's regular agenda within two (2) Council meetings after received. After the initial Written Petition is placed on the agenda, a majority vote of the City Council may add the item to a future Council meeting for action. Any member of the public may address the City Council under the **“Public Presentations”** section of the agenda. If the presentation includes a request of the Council, a majority vote of the City Council may refer the item to the City Manager to be properly added to a future meeting, in compliance with the Brown Act.

PROCEDURE FOR WRITTEN PETITIONS

1. All requests to address the City Council shall be submitted in writing. Written Petition forms are available for the petitioner's convenience on the City's website and in the City Manager's Office, City Clerk's Office, and the Mayor and Council Offices. Alternatively, an email may be submitted to clerk@santaclaraca.gov.
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ADDING AN ITEM ON THE AGENDA

**PROCEDURE
FOR WRITTEN
REQUESTS
FROM CITY
COUNCIL**

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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
Santa Clara**
The Center of What's Possible

RECEIVED

OCT 11 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker

Contact E-mail abecker@santacalaraca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

**Propose including a New City Hall plan
incorporated into the new Santa Clara downtown
plan.**



Agenda Report

21-1486

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker
Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose a Stricter
and more Regulated Ordinance for AirBNB Properties/Operations

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 to propose a stricter and more regulated Ordinance for AirBNB properties/operations.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

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Referral from a Council Committee:

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ADDING AN ITEM ON THE AGENDA

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PROCEDURE FOR WRITTEN PETITIONS

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ADDING AN ITEM ON THE AGENDA

**PROCEDURE
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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
Santa Clara**
The Center of What's Possible

RECEIVED

OCT 11 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker

Contact E-mail abecker@santacalaraca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

**Propose a stricter and more regulated ordinance
for AirBNB properties/operations.**



Agenda Report

21-1488

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker
Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose a New
Santa Clara City Commission, Film Commission

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 to propose a new Santa Clara City Commission, Film Commission.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

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ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

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POLICY

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ADDING AN ITEM ON THE AGENDA

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PROCEDURE FOR WRITTEN PETITIONS

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ADDING AN ITEM ON THE AGENDA

**PROCEDURE
FOR WRITTEN
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Attachments: Council Item Request Form



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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
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The Center of What's Possible

RECEIVED

OCT 11 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker

Contact E-mail abecker@santacalaraca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

Propose a new Santa Clara city commission, Film Commission.



Agenda Report

21-1489

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Change the Name of the City of Santa Clara Observed Holiday from Columbus Day to Indigenous People's Day

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

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DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 to change the name of the City of Santa Clara observed holiday from Columbus Day to Indigenous People's Day.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

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ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

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POLICY

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ADDING AN ITEM ON THE AGENDA

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Any member of the public may submit a written request raising any issue or item within the subject matter jurisdiction of the City Council to be heard under the **“Written Petition”** section of the City Council's regular agenda within two (2) Council meetings after received. After the initial Written Petition is placed on the agenda, a majority vote of the City Council may add the item to a future Council meeting for action. Any member of the public may address the City Council under the **“Public Presentations”** section of the agenda. If the presentation includes a request of the Council, a majority vote of the City Council may refer the item to the City Manager to be properly added to a future meeting, in compliance with the Brown Act.

PROCEDURE FOR WRITTEN PETITIONS

1. All requests to address the City Council shall be submitted in writing. Written Petition forms are available for the petitioner's convenience on the City's website and in the City Manager's Office, City Clerk's Office, and the Mayor and Council Offices. Alternatively, an email may be submitted to clerk@santaclaraca.gov.
2. Once the Written Petition is received by the City Clerk's Office, it should immediately be forwarded to the City Manager for placement on an agenda within two (2) Council meetings after receipt of the original request from the City Clerk's Office. All written material (request and any support material) will be submitted on the agenda in the form substantially provided by the requester without any staff analysis, including fiscal review, legal review and policy review, until the City Council has had the opportunity to provide direction to the City Manager.
3. At the meeting where the item is first considered, if a majority of the City Council supports further study of the item, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council. Discussion should be limited to whether an item should be added to an agenda and a date, not the merit of the item.



ADDING AN ITEM ON THE AGENDA

**PROCEDURE
FOR WRITTEN
REQUESTS
FROM CITY
COUNCIL**

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Attachments: Council Item Request Form



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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
Santa Clara**
The Center of What's Possible

RECEIVED

OCT 11 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker
Contact E-mail abecker@santaclearaca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

**Change the name of the City of Santa Clara
observed holiday from Columbus Day to
Indigenous People's Day.**



Agenda Report

21-1490

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker
Requesting to Place an Agenda Item at a Future Council Meeting for Discussion on Construction of
New Lawn Bowl Facility to Follow through on Past Promises

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 to discuss construction of new Lawn Bowl facility to follow through on past promises.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

Members of the City Council:

The Mayor or any individual Councilmember may submit a written request by using the Council Item Request Form to the City Manager's Office for inclusion of an item on a City Council agenda, provided the request is received two (2) days prior to the public release of the agenda packet. At the meeting where the request is heard, discussion should be limited to whether the item should be added to an agenda and a date, not the merit of the item.

Referral from a Council Committee:

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Items Referred During a Council Meeting:

By Council action, an item may be referred to the City Manager for inclusion on a City Council agenda. If the request requires further study of the item from staff, a full analysis shall be prepared at the direction of the City Manager with at least thirty (30) calendar days prior to the meeting, unless otherwise directed by the City Council. If the request requires more than thirty (30) calendar days to prepare, status updates will be provided to the City Council every sixty (60) days as an informational memo.



ADDING AN ITEM ON THE AGENDA

Written Petitions and Public Presentations:

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PROCEDURE FOR WRITTEN PETITIONS

1. All requests to address the City Council shall be submitted in writing. Written Petition forms are available for the petitioner's convenience on the City's website and in the City Manager's Office, City Clerk's Office, and the Mayor and Council Offices. Alternatively, an email may be submitted to clerk@santaclaraca.gov.
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ADDING AN ITEM ON THE AGENDA

**PROCEDURE
FOR WRITTEN
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FROM CITY
COUNCIL**

1. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda.
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Attachments: Council Item Request Form



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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
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OCT 11 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker
Contact E-mail abecker@santaclaraca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

Construction of new Lawn Bowl facility to follow through on past promises.



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
santaclaraca.gov
@SantaClaraCity

Agenda Report

21-1491

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker
Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Add a Ballot
Measure in 2022 Election for an Infrastructure Bond or Tax

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 to discuss adding a ballot measure in 2022 election cycle for an Infrastructure bond or tax that would modernize/remodel/upgrade all of Santa Clara's public pools including construction of a replicated new Central Park International swim center.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

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ADDING AN ITEM ON THE AGENDA

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PROCEDURE FOR WRITTEN PETITIONS

1. All requests to address the City Council shall be submitted in writing. Written Petition forms are available for the petitioner's convenience on the City's website and in the City Manager's Office, City Clerk's Office, and the Mayor and Council Offices. Alternatively, an email may be submitted to clerk@santaclaraca.gov.
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ADDING AN ITEM ON THE AGENDA

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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
Santa Clara**
The Center of What's Possible

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OCT 11 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker

Contact E-mail abecker@santacalaraca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

Discussion to add a ballot measure in 2022 election cycle for an Infrastructure bond or tax that would modernize/remodel/upgrade all of Santa Clara's public pools including construction of a replicated new Central Park International swim center.



Agenda Report

21-1492

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker Requesting to Place an Agenda Item at a Future Council Meeting for Discussion to Propose an Ordinance to make it a Crime to Promote or Encourage Sideshows on Social Media

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 to propose an ordinance to make it a crime to promote or encourage sideshows on social media. Violators can be charged with a misdemeanor and face fines of up to \$1,000, six months in jail or some combinations of two, if individuals promote, instigate, or encourage any such events online.

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

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ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

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ADDING AN ITEM ON THE AGENDA

**PROCEDURE
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COUNCIL**

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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
Santa Clara**
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OCT 11 2021

City Clerk's Office
City of Santa Clara

The Council Item Request Form is for members of the City Council to submit written requests to the City Manager's Office for inclusion of an item on a future City Council meeting agenda. At the meeting where the initial written request is heard, discussion should be limited to whether the item should be added to an agenda and a date, not the merit of the item. A majority vote of the City Council is required for the item to be added to future Council meeting agenda for action.

CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker

Contact E-mail abecker@santacalaraca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

Propose an ordinance to make it a crime to promote or encourage sideshows on social media. Violators can be charged with a misdemeanor and face fines of up to \$1,000, six months in jail or some combinations of the two, if individuals promote, instigate, or encourage any such events online.



Agenda Report

21-1493

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker
Requesting to Place an Agenda Item at a Future Council Meeting for Discussion of Installation of
RRFB Crosswalk at the Kiely/Mauricia Avenue Intersection

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 for installation of RRFB crosswalk at the Kiely/Mauricia Avenue intersection; in addition install a RRFB or lit crosswalk at the hazardous crosswalk on Mauricia Avenue (Eisenhower Elementary School pathway)

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

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ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

Members of the City Council:

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ADDING AN ITEM ON THE AGENDA

Written Petitions and Public Presentations:

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PROCEDURE FOR WRITTEN PETITIONS

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FOR WRITTEN
REQUESTS
FROM CITY
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CONTACT INFORMATION

Requesting Member of City Council _____

Contact E-mail _____

Contact Phone _____

Today's Date _____

WRITTEN REQUEST

I, _____, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

COUNCIL ITEM REQUEST FORM



**City of
Santa Clara**
The Center of What's Possible

RECEIVED

OCT 11 2021

City Clerk's Office
City of Santa Clara

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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker
Contact E-mail abecker@santacalaraca.gov
Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

**Installation of RRFB crosswalk at the
Kiely/Mauricia Ave intersection; In addition install
a RRFB or lit crosswalk at the hazardous
crosswalk on Mauricia Ave (Eisenhower
elementary school pathway)**



Agenda Report

21-1494

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Action on Written Petition (Council Petition 030) Submitted by Councilmember Becker
Requesting to Place an Agenda Item at a Future Council Meeting for Discussion of Installation of
Rainbow Crosswalk(s) in the City of Santa Clara

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND

Council Policy 030 - Adding an Item on the Agenda (Attachment 1) sets forth the procedure for written petitions. Members of the City Council shall use the Council Item Request Form to submit a written request for inclusion of an item on a future City Council agenda. Per the policy, the written request will be submitted on the agenda, in the form substantially provided by the requestor without any staff analysis, including fiscal review, legal review and policy review. If a simple majority of the City Council supports further study of the request, then a full staff analysis shall be prepared within thirty (30) days, unless otherwise directed by the City Council.

DISCUSSION

The City Clerk's Office received a Written Petition for Council consideration from Councilmember Becker dated October 11, 2021 for installation of Rainbow Crosswalk(s) in the City of Santa Clara

FISCAL IMPACT

There is no fiscal impact other than administrative staff time.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a Regular Meeting and 24 hours prior to a Special Meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>>.

ALTERNATIVES

1. Direct staff to agendize.
2. Note and file this report and take no further action.
3. Any other alternative as approved by Council.

RECOMMENDATION

Staff has no recommendation and seeks Council direction.

Reviewed by: Nora Pimentel, Assistant City Clerk
Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Council Policy 030 - Adding an Item on the Agenda
2. Written Petition dated October 11, 2021 from Councilmember Becker



ADDING AN ITEM ON THE AGENDA

PURPOSE

To establish a clear, effective, and easily understood process for members of the City Council and the public to have items, within the jurisdiction of the City Council, placed on the City Council agenda for consideration.

POLICY

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City Clerk's Office
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CONTACT INFORMATION

Requesting Member of City Council : Anthony Becker

Contact E-mail abecker@santaclearaca.gov

Contact Phone: 408 917 9434

Today's Date: October 11, 2021

WRITTEN REQUEST

I, Anthony Becker, hereby request that the following item be placed on the City of Santa Clara Council and Authorities Concurrent meeting agenda:

**Installation of Rainbow Crosswalk(s) in the city of
Santa Clara**



City of Santa Clara

1500 Warburton Avenue
Santa Clara, CA 95050
santaclaraca.gov
[@SantaClaraCity](https://twitter.com/SantaClaraCity)

Agenda Report

21-1502

Agenda Date: 10/19/2021

REPORT TO COUNCIL

SUBJECT

Tentative Meeting Agenda Calendar (TMAC)

COUNCIL PILLAR

Enhance Community Engagement and Transparency

BACKGROUND AND DISCUSSION

The purpose of the TMAC is to provide the public advanced notifications of tentative dates of Council Study Sessions, Joint Council/Commission meetings, as well as Council Public Hearing and General Business agenda items. It is important to note that the TMAC is a Tentative Calendar planning tool and reports listed are subject to change due to Public Hearing publication requirements and agenda management.

The TMAC will be published weekly no later than Friday on the City's website.



City of Santa Clara

Tentative Meeting Agenda Calendar

Tuesday, October 26, 2021 Council and Authorities Concurrent Meeting

Closed Session

- 21-1208** Threat to Public Services or Facilities (CC, SA)
Consultation with: Silicon Valley Power

Special Order of Business

- 21-0005** Proclaim November 2021 as Sikh Awareness and Acceptance Month
- 21-1255** Proclaim Family Court Awareness Month
- 21-1429** Verbal Report from City Manager regarding COVID-19 Pandemic
- 21-1430** Verbal Report Update from City Manager Regarding the Local Drought Emergency

Study Session

- 21-476** **Study Session:** Zoning Code Update

Public Hearing/General Business

- 21-1122** Information Report Regarding an Amendment to the Santa Clara Police Department's Automated License Plate Reader (ALPR) Policy
- 21-1246** Action on the Adoption of an Environmental Impact Report and Architectural Approval of a Data Center project located at 1200-1310 Memorex Drive
- 21-1380** Adoption of An Ordinance to Require a Tobacco Retail Permit; Authorization for the City Manager to Negotiate and Execute an Agreement with the County of Santa Clara to Administer and Enforce the Tobacco Retail Permit Program; and Approval of a Fee Resolution
- 21-14001** Follow Up Discussion on Consideration of the Sale of the Loyalton Ranch Property

Stadium Authority General Business

- 21-13270** Board Discussion and Potential Direction to Staff on Levi's Stadium's Conditions of Approval P22(c) Regarding Night Outdoor Non-NFL Events

Tuesday, November 9, 2021 Council and Authorities Concurrent Meeting

Study Session

- 21-1320** Study Session on the City's unhoused population: California Department of Housing and Community Development's (HCD) Project HomeKey, provision of basic services for the City's unhoused, and formation of a Housing Taskforce

Public Hearing/General Business

- 21-1435** Action to: 1) Introduction of Ordinance to amend Chapter 2.120, entitled Boards and Commissions, to add the City's Housing Commission and establish the powers, functions, and duties of the commission and Report and Update on the City's Implementation of the Community Plan to End Homelessness;
2) Amend Ordinances of non-chartered Boards, Commissions and Committees to update the Residency Requirement
- 21-785** Action on Formalization of the Bicycle and Pedestrian Advisory Committee
- 21-1147** Update on Sustainability Program and Provide Feedback on Program Priorities (Deferred from July 13, 2021 and October 19, 2021)
- 21-1472** PLACEHOLDER #1: Action on a Resolution of Necessity for the south Loop Reconfiguration Project
- 21-1473** PLACEHOLDER #2: Action on a Resolution of Necessity for the south Loop Reconfiguration Project
- 21-1474** PLACEHOLDER #3: Action on a Resolution of Necessity for the south Loop Reconfiguration Project

Tuesday, November 16, 2021 Joint Council and Authorities Concurrent and Stadium Authority Meeting

Study Session

- 21-1114** Study Session: on Patrick Henry Drive Specific Plan
- 21-1290** Study Session: on a Potential Quiet Zone and Vision Zero Policy

Public Hearing/General Business

- 21-1067** Public Hearing: SVP Rates
- 21-34** Action to Approve Amendments to the Water Supply Agreement (WSA) between the City and County of San Francisco and Bay Area Water Supply and Conservation Agency (BAWSCA) and is Represented Water Retailers

- 21-1023** Action on the Introduction of the Ordinance Repealing Chapter 12.35 “Trees and Shrubs” and Adoption of a new chapter 12.35 “Trees and Shrubs” of the Code of the City of Santa Clara to Incorporate New Best Practices and Regulations to Preserve the Urban Forest
- 21-791** Action on Introduction of an Ordinance to add Chapter 8.25.277, entitled Edible Food Recovery, to Implement Edible Food Recovery Programs and Require Certain Businesses to Arrange for the Donation of Edible Food That Would Otherwise Go to Waste
- 21-1075** Funding to Prepare Santa Clara Station Area Plan

Stadium Authority General Business

- 21-1126** Action on the Stadium Authority Financial Status Report for the Quarter Ending June 30, 2021

Tuesday, December 7, 2021 Council and Authorities Concurrent Meeting

Study Session

- 21-000** **Study Session:** Discussion on the Senate Bills 9 and 10 and Housing Development/Land Use Impacts (***This will be a Joint City Council/Planning Commission Meeting***)

Public Hearing/General Business

- 21-199** Silicon Valley Power Quarterly Strategic Plan Update
- 21-860** Approval to Execute Agreements with Sol CES Projects, LLC for the Purchase and Installation of a Battery Energy Storage System
- 21-930** Action on FY 2020/21 Budget Year-End Report, Approve the Related Budget Amendments, and Approve a Position Reallocation in the City Attorney’s Office
- 21-1138** Approve Non-Exclusive Franchise Agreements for Hauling of Industrial Refuse and Recyclables
- 21-1179** Adoption of an Ordinance and Resolution to establish a Bicycle and Scooter Share Program

Tuesday, December 14, 2021 Joint Council and Authorities Concurrent and Stadium Authority Meeting

Special Order of Business

- 21-174** Task Force on Diversity, Equity, and Inclusion Update

Public Hearing/General Business

21-1251 Action on the Warburton Avenue - Civic Center Drive Area Parking Analysis and Related Budget Amendment

21-937 Action on the Santa Clara Stadium Authority Financial Status Report for Quarter Ending June 30, 2021

Monday, January 10, 2022 Joint Council and Valley Water District Meeting @ 4:30 PM (Tentative Date)

Tuesday, January 11, 2022 Council and Authorities Concurrent Meeting

Public Hearing/General Business

Tuesday, January 25, 2021 Joint Council and Authorities Concurrent and Stadium Authority Meeting

Public Hearing/General Business

21-208 Action on the Introduction of a Resolution to Modify the Files Management Manual for the City of Santa Clara

Tuesday, February 8, 2022 Council and Authorities Concurrent Meeting

Public Hearing/General Business

22-000 Council's Priority Setting Session

Tuesday, February 22, 2022 Joint Council and Authorities Concurrent and Stadium Authority Meeting

Public Hearing/General Business

22-376 Review of Alternatives to Assist Sanitary Sewer Customers with the Cost of Sewer Lateral Maintenance and Repair, with Cost and Funding Sources Identified

Tuesday, March 8, 2022 Council and Authorities Concurrent Meeting

Public Hearing/General Business

22-000 Action on Adoption of Ordinance Amending the District Map

AGENDA ITEMS TO BE SCHEDULED TO A FUTURE DATE

- 21-1318** Action on Amendment No. 1 to the Agreement for Services with NewGen Strategies and Solutions LLC to Perform a Cost of Service Analysis and Rate Study for Silicon Valley Power