

**AGREEMENT FOR DESIGN PROFESSIONAL SERVICES  
BETWEEN THE  
CITY OF SANTA CLARA, CALIFORNIA,  
AND  
V & A CONSULTING ENGINEERS, INC  
FOR  
SANITARY SEWER SYSTEM INFLOW/INFILTRATION EVALUATION FOR  
CHROMITE, MACHADO AND CABRILLO TRIBUTARY AREA**

**PREAMBLE**

This Agreement is entered into between the City of Santa Clara, California, a chartered California municipal corporation (City) and V & A Consulting Engineers, Inc, a California corporation, (Consultant). City and Consultant 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 design professional services more fully described in this Agreement, at Exhibit A, entitled "Scope of Services";
- B. "Design professional" includes licensed architects, licensed landscape architects, registered professional engineers and licensed professional land surveyors;
- C. Consultant represents that it, and its subconsultants, 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,
- D. 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 Consultant shall consist of these Terms and Conditions and the following Exhibits, which are hereby incorporated into this Agreement by this reference:

Exhibit A – Scope of Services

Exhibit B – Schedule of Fees

Exhibit C – Insurance Requirements

Exhibit D – Labor Compliance Addendum

Exhibit E – e-Builder Implementation Requirement

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 shall govern and control.

## **2. TERM OF AGREEMENT**

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 shall begin on December 18, 2019 and terminate on December 31, 2021.

## **3. SCOPE OF SERVICES & PERFORMANCE SCHEDULE**

Consultant shall perform those Services specified in Exhibit A within the time stated in Exhibit A. Time is of the essence.

- A. All reports, costs estimates, plans and other documentation which may be submitted or furnished by Consultant shall be approved and signed by an appropriate qualified licensed professional in the State of California.
- B. The title sheet for specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of certificate and signature of the design professional responsible for their preparation.

## **4. WARRANTY**

Consultant expressly warrants that all materials and services covered by this Agreement shall be free from defect and shall conform to the specifications, requirements and instructions upon which this Agreement is based. Consultant 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 Consultant. If Consultant fails to promptly correct or replace materials or services, City may make corrections or replace materials or services and charge Consultant for the cost incurred by City.

## **5. QUALIFICATIONS OF CONSULTANT - STANDARD OF CARE**

Consultant 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 Consultant's representations regarding its skills and knowledge. Consultant shall 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 Consultant's complete performance of Services, City shall pay Consultant for all materials provided and Services rendered by Consultant in accordance with Exhibit B, entitled "SCHEDULE OF FEES." The maximum compensation of this Agreement is Four Hundred Thirty Thousand Four Hundred Seventy Two dollars (\$430,472), 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 shall be at Consultant's expense. Consultant shall not be entitled to any payment above the maximum compensation under any circumstance.

## **7. TERMINATION**

- A. Termination for Convenience. City shall have the right to terminate this Agreement, without cause or penalty, by giving not less than Thirty (30) days' prior written notice to Consultant.
- B. Termination for Default. If Consultant fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided by law, City may terminate this Agreement immediately upon written notice to Consultant.
- C. Upon termination, each Party shall 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, Consultant will deliver to City all City information or material that Consultant has in its possession.

## **8. ASSIGNMENT AND SUBCONTRACTING**

City and Consultant bind themselves, their successors and assigns to all covenants of this Agreement. This Agreement shall not be assigned or transferred without the prior written approval of City. Consultant shall not hire subconsultants without express written permission from City.

Consultant shall be as fully responsible to City for the negligent acts and omissions of its subconsultants, and of persons either directly or indirectly employed by them, as Consultant is for the negligent acts and omissions of persons directly employed by it.

**9. NO THIRD PARTY BENEFICIARY**

This Agreement shall not be construed 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 under this Agreement for any cause whatsoever.

**10. INDEPENDENT CONTRACTOR**

Consultant and all person(s) employed by or contracted with Consultant to furnish labor and/or materials under this Agreement are independent contractors and do not act as agent(s) or employee(s) of City. Consultant 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 Consultant and all other written information submitted to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant and shall 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 Consultant which is otherwise known to Consultant or becomes generally known to the related industry shall be deemed confidential.

**12. OWNERSHIP OF MATERIAL**

All material, which shall 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 shall be the property of City but Consultant may retain and use copies thereof. City shall not be limited in any way or at any time in its use of said material. However, Consultant shall 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 CONSULTANT**

City, through its authorized employees, representatives or agents shall 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 Consultant for the purpose of verifying any and all charges

made by Consultant in connection with Consultant compensation under this Agreement, including termination of Consultant. Consultant 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 shall be disallowed by City. Consultant shall 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.

Consultant shall submit to City any and all reports concerning its performance under this Agreement that may be requested by City in writing. Consultant agrees to assist City in meeting City's reporting requirements to the State and other agencies with respect to Consultant's Services hereunder.

#### **14. HOLD HARMLESS/INDEMNIFICATION**

To the extent permitted by law, Consultant 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 attorney's fees in providing a defense to any such claim or other action, and whether sounding in law, contract, tort, or equity, to the extent arising out of, pertaining to, or related to the negligence, recklessness, or willful misconduct of the Consultant, its employees, subconsultants, or agents in the performance, or non-performance, of Services under this Agreement.

#### **15. INSURANCE REQUIREMENTS**

During the term of this Agreement, and for any time period set forth in Exhibit C, Consultant shall provide and maintain in full force and effect, at no cost to City, insurance policies as set forth in Exhibit C.

#### **16. WAIVER**

Consultant agrees that waiver by City of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement. Neither City's review, acceptance nor payments for any of the Services required under this Agreement shall 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 shall, unless otherwise requested in writing, be sent to City addressed as follows:

City of Santa Clara  
Attention: Department of Public Works  
1500 Warburton Avenue  
Santa Clara, CA 95050  
and by e-mail at [manager@santaclaraca.gov](mailto:manager@santaclaraca.gov)

And to Consultant addressed as follows:

V & A Consulting Engineers, Inc.  
1000 Broadway, Suite 320  
Oakland, CA 94607  
Attn: Glenn H. Willson, P.E., Western Regional Manager  
and by e-mail at [gwillson@vaengineering.com](mailto:gwillson@vaengineering.com)

The workday the e-mail was sent shall control the date notice was deemed given. An e-mail transmitted after 1:00 p.m. on a Friday shall be deemed to have been transmitted on the following business day.

## **18. COMPLIANCE WITH LAWS**

Consultant shall 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, Consultant'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 Consultant has read and agrees to comply with City's Ethical Standards (<http://santaclaraca.gov/home/showdocument?id=58299>).

## **19. CONFLICTS OF INTEREST**

Consultant certifies that to the best of its knowledge, no City officer, employee or authorized representative has any financial interest in the business of Consultant and that no person associated with Consultant has any interest, direct or indirect, which could conflict with the faithful performance of this Agreement. Consultant 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. Consultant will advise City if a conflict arises.

**20. FAIR EMPLOYMENT**

Consultant shall 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**

Consultant shall 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 shall 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 shall 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 shall, for any reason, be held invalid, illegal or unenforceable in any respect, it shall not affect the validity of the other provisions, which shall 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.

## **25. COUNTERPARTS**

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.

**CONTINUED ON PAGE 8**



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:

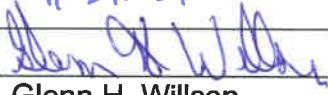
Dated: \_\_\_\_\_

\_\_\_\_\_  
BRIAN DOYLE  
City Attorney

\_\_\_\_\_  
DEANNA J. SANTANA  
City Manager  
1500 Warburton Avenue  
Santa Clara, CA 95050  
Telephone: (408) 615-2210  
Fax: (408) 241-6771

"CITY"

**V & A CONSULTING ENGINEERS, INC**  
a California corporation

Dated: 11-21-19  
By (Signature):   
Name: Glenn H. Willson  
Title: Western Regional Manager  
Principal Place of  
Business Address: 1000 Broadway, Suite 320, Oakland, CA 94607  
Email Address: gwillson@vaengineering.com  
Telephone: (510) 903-6600  
Fax: (510) 903-6601  
"CONSULTANT"

## **EXHIBIT A SCOPE OF SERVICES**

The Services to be performed for the City by the Consultant under this Agreement are set forth below.

### **I. GENERAL**

The Consultant will provide complete, professional, high-quality services and products; provide consultation to city personnel and others who are involved with the project; and provide the expertise, guidance, advice, and assistance in accomplishing the work.

### **II. BACKGROUND AND PROJECT**

The City has a population of approximately 130,000 and is served by a wastewater collection system consisting of approximately 270 miles of sewer pipelines and seven sewage pump stations. The system collects wastewater flows generated within the City limits and also flows from the major portion of the Cupertino Sanitary District (CuSD) via a connection at Homestead Road and Swallow Drive. Flow is conveyed eastward to the City of San Jose's sewer interceptor on Zanker Road and also northward to the Northside and Rabello Pump Stations, where the flow is pumped to the San Jose/Santa Clara Regional Wastewater Facility (RWF) for treatment and disposal.

The City's current sanitary sewer master plan was updated in 2016. As part of the sanitary sewer master plan update, flow monitoring was conducted in winter 2014/2015, and the results showed high inflow/infiltration (I/I) in the Chromite-Machado-Cabrillo trunk sewer tributary area. The same area also showed high I/I in 2006 flow monitoring. High inflow during rain events and high infiltration from ground water year-round in the sewer lines reduces sewer conveyance capacity of the City's sewer system and increases flow to the wastewater treatment facility.

The Chromite-Machado-Cabrillo trunk sewer tributary area is shown in Attachment F. The project tributary is approximately 1.25 square miles and has 27 miles of sewer lines. Most of the sewer lines within the project tributary area are 8 inches in diameter, some sewer lines are between 10 inches to 12 inches diameter, and the trunk sewer lines are between 20 inches and 27 inches diameter. The City's Water and Sewer Utilities Department has performed CCTV investigation on approximately 80% of the sewer lines in the project tributary area, and all CCTV video and Pipe Assessment Certification Program (PACP) rating are available.

### **III. RESPONSIBILITIES OF CITY**

City will provide the following information for the project:

- Record drawings (as available)
- Sanitary sewer block book maps
- CCTV pipe investigation records (as available)
- 2015 Sewer flow monitoring map and data
- Payment of encroachment permit fees, if required
- City standard details, specifications and design criteria

#### IV. BASIC SCOPE OF SERVICES

##### 1. Task 1: Project Management

###### 1.1. Meetings

Consultant shall:

- Attend five (5) meetings with the City to discuss the Project work plan, coordination, progress, evaluation, and recommendations. The five meetings include a kick-off meeting, a progress meeting during each monitoring, testing and investigation task, and a meeting to discuss evaluation and recommendations.
- Schedule the meetings.
- Prepare meeting agenda, meeting minutes, and action item log.

###### 1.2. Work Plan and Schedule

Consultant shall:

- Prepare a work plan and a schedule to show major milestones and highlight activities that require City's input.
- Monthly update the work schedule and notify City if there are delays. In case of delay, Consultant shall make up the schedule in subsequent phases for the Project or provide information to City substantiating a time extension.

###### 1.3. Coordination

Consultant shall:

- Coordinate with the City throughout the duration of the Project.
- Provide flow monitoring results to City's consultant for sanitary sewer hydraulic model and coordinate with City's consultant.
- Manage subconsultant's tasks, coordinate subconsultant's activities according to Project schedule and City's directions.

###### 1.4. Quality Assurance/Quality Control (QA/QC)

Consultant shall:

- Provide a QA/QC procedure specific to the Project.

- Review project team's work, including subconsultant's work, according to the QA/QC procedure.
- Prepare QA/QC memo at the end of each task.

#### 1.5. E-Builder Project Management Documentation Software.

The City currently uses e-Builder Enterprise™ (e-Builder), a web-based project management software, as median for project documentation and reporting. The Consultant is required to use e-Builder for the duration of the Project.

#### Deliverables:

1. Work plan and schedule.
2. Meeting agendas, meeting minutes, action items log.
3. QA/QC procedure.
4. Monthly progress reports and invoices.

#### 2. Task 2: Data Collection & Field Review

This task includes flow monitoring, smoke testing, and CCTV field investigations. Travel and equipment rental costs for field investigations are included in the corresponding sub-tasks below.

Consultant shall perform:

##### 2.1. Flow Monitoring

Review previous temporary flow meter locations and data from 2015 and tributary area map with potential flow meter locations (Attachment F) provided by City. Recommend number and locations of flow meters and rain gauges needed to identify source of high inflow/infiltration (I/I) for City to consider. After discussion with City, prepare a flow monitoring plan, which shall include the following:

- Flow meter locations list with manhole numbers and cross streets.
- Flow meter locations map with tributary area of each flow meter. Show rain gauge location on the same map.
- Schedule for field work, frequency of data collection, data collection after a storm.
- Site traffic control plan for field work.
- Health and Safety Plan for field work.

If a flow monitoring site is located within another agency's right-of-way, a "no fee" or "paid by City" encroachment permit shall be obtained from the agency. If within City limits, an encroachment permit and traffic

control plans will be submitted to and obtained by the City, with permit fees waived by the City.

Provide all necessary equipment for flow and rainfall monitoring. Field calibrate and verify accuracy and consistency of each flow meter at installation and then monthly. At a minimum collect data weekly and collect data within 48 hours after a storm. Review each data collection within one week and notify the City within one day of any observed irregularities in data. Notify the City of problem or unusual conditions encountered in the field during weekly and post-storm data collection. If the conditions at the meter site change during the flow monitoring period such that the Consultant determines that the site is no longer suitable for flow monitoring, City may authorize Consultant to relocate the meter as an additional service.

Prepare a flow monitoring report containing data of each flow meter site, weekly plots and flow and rainfall. Provide final electronic flow monitoring data and rain gauge data to the City's consultant (Woodard and Currant) for sanitary sewer hydraulic model calibration. Answer questions the City's consultant may have on the flow monitoring data.

Consultant to install two flow meter locations upstream of two of City's sewer lift stations listed below. These two flow meters are needed to verify backwater situation predicted in the sanitary sewer hydraulic model. This is not related to the high I/I issue.

- Westside Sewer Lift Station, 5345 Great America Parkway.
- Tasman Lift Station, southwest corner of Tasman Drive and Great America Parkway.

Basic Services include 15 flow meter sites, 2 flow meter sites upstream of lift stations, and 1 rain gauge for 2 months of flow monitoring. City may authorize extension of the flow monitoring for an additional month or additional flow meter sites if necessary in accordance with the fee schedule.

**Deliverables:**

1. Flow monitoring plan.
2. City Approved Traffic control plan for each site.
3. Health and Safety Plan for field work.
4. Required encroachment permit(s) from other agencies.
5. Preliminary flow meter data in electronic format to be provided approximately half-way through the monitoring period. [MS excel or other suitable format]
6. Final flow monitoring report in electronic format. [PDF]

7. Final flow meter data in electronic format. [MS excel or other suitable format]

## 2.2. Smoke Test

Evaluate the flow monitoring results and recommend smoke test location and strategy for the City's consideration. Obtain City's written approval to proceed with agreed upon smoke test locations. Basic Services include ten (10) smoke tests. It is estimated that ten (10) smoke tests will take approximately one crew day of work and will cover approximately 6,000 lineal feet of City pipe. City may authorize less than 10 smoke test locations, meeting set minimums of 5 smoke test locations. Testing less than 5 smoke locations will require a separate quote and fee schedule. City may also authorize additional smoke test locations if necessary in accordance with the fee schedule.

Prepare a smoke test plan and schedule, which shall include the following.

- Smoke test locations and monitoring locations
- Traffic control plan
- Draft of Initial Notification Letter and draft door hanger for smoke testing
- Draft schedule showing which segments will be done in each week
- Proposed field logs and report

Prepare a draft of Initial Notification Letter and a draft door hanger to be distributed prior to commencing smoke tests, which will inform affected residents of what will be done during the test and how to prepare for it. The City will work with the Consultant to produce an approved final letter and door hanger. Consultant shall distribute the approved letter and door hanger.

Provide all necessary equipment for smoke test and all necessary public notification materials. Coordinate with the City and provide a two (2) week lookahead schedule by Friday of every week showing in detail the location of smoke test.

### Deliverables:

1. Smoke test plan and schedule.
2. Documentations of smoke products, dye products and associated MSDS.
3. City Approved Traffic control plan for each site. (Typ. for all tasks where traffic control plan is required)

4. Health and Safety Plan for field work.
5. Draft public notification materials, letter and door hanger.
6. Required encroachment permit(s) from other agencies.
7. Final smoke test report.

### 2.3. CCTV Investigation

Review available existing CCTV inspection video and record including PACP rating information provided by City. Per NASSCO QA/QC requirements, review of 10% of the existing CCTV data to ensure accuracy and validate observations. Recommend pipe segments to be investigated via CCTV, based on available records, flow monitoring data and smoke test data.

After discussion with City, prepare CCTV investigation plan and schedule, which shall include the following:

- Pipe segments identified by the City sanitary sewer manhole numbers at upstream and downstream.
- Draft schedule showing which segment will be done in each week.
- Traffic control plan.

Obtain City's written approval before proceeding with CCTV investigation field work. Basic Services includes 6,000 feet of CCTV investigation on pipe diameter 12 inch or smaller, and 3,000 feet of CCTV investigation on pipe diameter 20 inch or larger. City may authorize less than the linear footage included in the basic service if CCTV investigation is not needed, meeting minimum footages for 2,500 feet combined small and large diameter pipe. Combined footages less than 2,500 feet will require a separate quote and fee schedule. City may also authorize additional CCTV investigation if necessary in accordance with the fee schedule.

Structural defects, debris, tree roots, high water levels, etc. can significantly reduce the ability to pass a CCTV camera or adequately see defects in the pipe. An attempt to inspect the pipe will be made from both the upstream and the downstream manholes before an inspection is abandoned. Bypass pumping will not be performed unless authorized separately by the City. Hydro-cleaning of the mains is not included in this task, but it is an optional service under Task 4.6.

#### Deliverables:

1. CCTV investigation plan and schedule.

2. CCTV investigation electronic data with PACP rating. [Format shall be consistent with the City's existing CCTV records and can be integrated with the City's current CCTV record system.]
3. Traffic control plan for each site.
4. Health and Safety Plan for field work.
5. Draft public notification materials, letter and door hanger.
6. Required encroachment permit(s) from other agencies.

### 3. Task 3: Recommendations

The Consultant shall perform:

#### 3.1. Alternatives

Review all field investigation results from previous tasks, as-built drawings, GIS and AutoCAD files, and maintenance records provided by the City.

For point defects identified (such as manhole defects, storm drain cross-connections, poor pipe-to-manhole connections, etc.), recommend up to three repair alternatives for reducing I/I. Six point repair locations are included..

For linear sources of I/I in each sub-basin (which include longitudinal defects and multiple joint, barrel, and lateral connection defects along an individual pipe), use the concepts of a risk assessment to prioritize sub-basins for rehab/replacement. Risk assessment includes both the likelihood of I/I occurring and the consequences of not rehabilitating/replacing sewers. Consequences that can be incurred by the City and the public include, but are not limited to public health impacts, higher maintenance costs, increased risk of regulatory violations, larger diameter trunk sewers and treatment volumes, etc.). For up to five of the highest-priority sub-basins, develop rehab/replacement method alternatives for discussion with the City.

For private sources of I/I (including uncapped cleanouts, roof leaders, yard drains, leaking upper laterals, etc.), track any defects found and provide the City with options to address private sources of I/I.

Meet with the City to discuss the advantages and disadvantages of the alternatives developed. Consider the City's inputs, then finalize improvement recommendations.

#### 3.2. Cost Estimate

Based on City's input on preferred improvement methods, prepare a planning level construction cost estimate and design cost estimate.



Constrains such as water way, busy roadway, and County's or Caltran's right-of-way shall be taken into consideration when estimating construction cost. Assume realistic construction methods based on the location, depth and size of improvements.

### 3.3. Evaluation Report

Prepare a draft report that includes the following:

- Summary of data collected during flow monitoring, smoke test and CCTV investigation, and field observations.
- Evaluation of observed I/I and pipe conditions.
- Discussion of recommended point repair alternatives and estimated design and construction cost.
- Discussion of recommended sub-basin rehab/replacement alternatives and estimated design and construction costs.
- Summary of private sources of I/I and discussion of options to address I/I sources on private property.

Prepare a final report to incorporate City's review comments.

#### Deliverables:

1. Draft Preliminary Design Report in electronic PDF format
2. Final Preliminary Design Report in electronic PDF format

### 4. Task 4: Optional Services

After the City provide written authorization, the Consultant shall perform:

#### 4.1 Additional Flow Meters

Task 2.1 includes review previous flow meter locations, data, maps and information, and to recommend number and locations of flow meters needed for I/I identification. The initial estimate of meters for this task is 15 flow meters for I/I flow monitoring and 2 flow meters for pump station backflow monitoring. Upon completion of Task 2.1, the number of flow meters may change from this initial total of 17 flow meters. City may authorize additional flow meters per the recommendation of the Consultant. All work associated with additional flow meters is included here.

#### 4.2 An Additional Month of Flow Monitoring

Task 2.1 includes 2 months of flow monitoring of the initial 17 flow meter sites and 1 rain gauge site. City may authorize to extend the flow

monitoring at initial sites for an additional month (third month). All work associated with flow monitoring for the additional month is included here. This also includes additional flow meters determined for Optional Task 4.1.

#### 4.3 Additional Smoke Testing

Task 2.2 basic services includes ten (10) smoke tests which is approximately one crew day of work and covers approximately 6,000 lineal feet of City pipe. City may also authorize additional smoke test locations. All work associated with additional smoke testing beyond basic services is included here.

#### 4.4 Night-Time I/I Reconnaissance and Manhole Investigation

City may authorize Night-Time I/I Reconnaissance and Manhole Investigations during flow monitoring period. Investigate manhole structures, sewer alignments, and other related sewer basin components, looking for evidence of infiltration and inflow. Work will be conducted during the low-flow hours of between 1:00 am and 4:30 am, when I/I flow is most evident ("clear-water" flow). Evidence of I/I that may be revealed during the investigations may include, but is not limited to, structural defects within manholes, visible tracking of I/I flow during a storm event, suspicious storm crossings, direct connections from roof leaders into sanitary sewer clean-outs. I/I rates will be quantified on a micro-basin basis.

One night of I/I reconnaissance is estimated to result in 20 to 25 confined space entries and will subdivide a sub-basin into approximately 20 to 30 micro-basins. It is estimated that two nights of I/I reconnaissance may be authorized for this task. It is estimated that this work would occur in February or March, 2020, later in the wet weather season during saturated soil conditions.

##### Deliverables:

1. I/I reconnaissance and investigation plan.
2. Traffic control plan
3. Health and Safety Plan for field work.
4. Required encroachment permit(s).
5. Final I/I investigation report.
6. Quantified I/I results in format consistent or compatible with City's GIS.

#### 4.5 Additional CCTV Investigation

City may authorize additional CCTV investigation beyond the 9,000 lineal feet specified in basic services.

#### 4.6 Hydro-Cleaning prior to CCTV Investigation

City may authorize hydro-cleaning the pipelines slated for CCTV investigation prior to CCTV investigation if deemed necessary. Cost for small-diameter pipes (12 inches or smaller) are known and work will follow the fee schedule. Costs assume that up to two passes of the jetter will be sufficient per pipe. Regular debris removal is included in the cost estimate. Heavy debris removal will be authorized separately by the City, if needed. Costs assume that the City will provide access to a City hydrant for flushing water.

For large-diameter pipelines (20 inches or larger), the volume and type of debris will need to be known before the Consultant can quote and perform the hydro-cleaning work. Large-diameter pipe cleaning is not included in this cost estimate.

#### V. SCHEDULE

Milestones	Duration	Due date
Notice to Proceed	1 day	December 18, 2019
Data Collection and Review	3 weeks	January 10, 2020
Flow Monitoring	3 months	April 10, 2020
Smoke Test and CCTV Investigation	1.5 months	June 1, 2020
Recommendations	2 months	July 31, 2020

Due dates shall shift based on the actual NTP date and durations in the schedule.

#### VI. CONTRACT OPTIONS: SUBSEQUENT PROJECT FOR BID DOCUMENT PREPARATION

The City reserves the right to negotiate with the Consultant on scope of work and fee for pipe repair bid document preparation.

## EXHIBIT B SCHEDULE OF FEES

### I. GENERAL PAYMENT

The total payment to the Consultant for Basic Services, as stated in **Exhibit A**, shall not exceed \$378,872, plus any authorized Reimbursable Expenses, which shall not exceed \$1,600. The amount billed to City for pre-approved Additional Services shall not exceed the sum of \$50,000. In no event shall the amount billed to City by Consultant for services under this Agreement exceed \$430,472 subject to budget appropriations

Consultant will bill City on a monthly basis for Services provided by Consultant during the preceding month on an invoice and in a format approved by City and subject to verification and approval by City. Consultant shall, during the term of this Agreement, invoice the City for hours and dollars of work completed under this Agreement. The invoice shall describe the Task invoiced, percent complete of the Task, time and materials expended by Task, and total amount during the invoice period. The invoice shall also show the total to be paid for the invoice period. City will pay Consultant within thirty (30) days of City's receipt of an approved invoice.

### II. BASIC SERVICES

The total payment to Consultant for all work necessary for performing all Tasks, as stated in **Exhibit A**, shall be in proportion to services rendered. The Consultant fee allocated to each Task, as shown below, shall be the Consultant's full compensation for all the Consultant services required by this Agreement, as directed by the City, and no additional compensation shall be allowed. City may reallocate remaining budget from completed Tasks to additional services. The total amount of all the Tasks is a not-to-exceed amount. Figures in table below include subconsultants' costs and their markup if any, but exclude reimbursable expenses.

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Task #	Description	Task subtotal
1	Project Management	\$ 43,982
2	Data Collection and Field Review	
	2.1 Flow Monitoring (17 meters, for 2 months)	\$ 109,731
	2.2 Smoke Test (10 tests)	\$ 27,031
	2.3 CCTV Investigation	\$ 50,221
3	Recommendations	\$ 49,339
4	Optional Services	
	4.1 Additional Flow Meters, 5 meters (rate=\$3,954 per meter for 2 months)	\$ 19,770
	4.2.1 Third Month of Flow Monitoring (for 17 sites under Task 2.1)	\$ 21,403
	4.2.2 Third Month for Task 4.1 Additional Flow Meters (5 meters, rate=\$1,259 per meter)	\$ 6,295
	4.3 Additional Smoke Testing, 1 additional set of 10 tests	\$ 16,351
	4.4 Night-Time I/I Reconnaissance, 2 nights	\$ 19,112
	4.5 Additional CCTV Investigation (5,000 feet, rate=\$1.40 per foot)	\$ 7,000
	4.6 Hydro-Cleaning, small diameter pipe (6,000 feet)	\$ 8,637
	<b>TOTAL</b>	<b>\$ 378,872</b>

For Task 2.1 Flow Monitoring, City may authorize extension of the flow monitoring for an additional month. Task 4.2.1 includes cost of 17 flow meters and 1 rain gauge for an additional month, which is \$21,403.

City may authorize additional flow meters beyond the initial 17 flow meters. Task 4.1 includes cost of five additional flow meter for two months. Unit cost is \$3,954 per flow meter for two months. If City authorizes extension of the flow monitoring for an additional month, Task 4.2.2 includes cost of the five additional flow meters for an additional month. Unit cost is \$1,259 per flow meter for an additional month. Cost includes all work necessary to perform flow monitoring.

For Task 2.2 Smoke Test, City may authorize additional smoke tests beyond the initial 10 smoke tests. Task 4.3 includes cost of additional smoke tests, which is \$16,351 per an additional set of 10 smoke tests. Cost include all work necessary to perform smoke tests.

For Task 2.3 CCTV Investigation, City may authorize additional CCTV investigation. Task 4.5 includes cost of additional CCTV investigation, which is \$1.40 per lineal foot for 5,000 feet of additional footage.

### III. REIMBURSABLE EXPENSES

Reimbursable Expenses shall not exceed \$1,600 without prior written approval by the City. Transportation cost up to \$1,244 is part of the reimbursable expenses for attending the 5 meetings specified in Task 1.1. The amount

allocated for Reimbursable Expenses shall be the Consultant's full compensation for all Reimbursable Expenses required for the Project and by this Agreement, as directed by the City, and no additional compensation shall be allowed.

Reimbursable Expenses are in addition to compensation for Basic and Additional Services. The following is a sample of items that are included as part of the Basic Services and are not considered Reimbursable Expenses:

- Basic Office Expenses such as overhead, paper, pens, pencils, ink cartridges
- Insurance Expenses, Applicable Taxes, Computer Time
- Travel expenses (travel time and mileages), excepting \$1,244 pre-approved and specified under this Item III, paragraph 1.
- Local and Long-Distance Telephone (landline, mobile) and Fax Expenses
- US Mail
- Copying and Plotting Cost

Reimbursable Expenses may include:

- Outside Duplicating Cost for Plans and Reports
- Presentation Materials
- Delivery, Courier Services when requested by City.

All other reimbursable costs shall be approved in advance by City in writing.

#### IV. ADDITIONAL SERVICES

Additional Services consists of work not included in the Scope of Services outlined within this Agreement. Pre-approved Additional Services shall be billed to City at the fixed hourly rates shown below in Section V, RATE SCHEDULE, or at an agreed negotiated price. Monthly billing for Additional Services shall be consistent with the term set forth in this Agreement. Payment for any Additional Services is allowed only if written authorization is given by the City Engineer in advance of the work to be performed. Additional Services shall not exceed \$50,000 without approval by the City.

#### V. RATE SCHEDULE

Labor Categories and Billing Rates. Rates shown are rates per hour.

V & A Consulting Engineers, Inc.

Billing Classifications	Rates
Principal-in-Charge	\$ 297
Project Manager	\$ 259
Field Lead	\$ 239
Project Engineer	\$ 199
Engineering Assistant	\$ 111
Admin	\$ 89

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Black & Veatch Corporation. No mark-up on B&V fees.

Billing Classifications	Rates
Principal-in-Charge	\$ 320
Senior Planner	\$ 275
CA Lead	\$ 250
Info-Master Lead	\$ 195
CA Support	\$ 165
Admin	\$ 115

CCTV Subconsultants are billed at rates below plus 10% markup. Markup is limited to 10% maximum.

Presidio System, Inc.

Billing Classifications	Rates
CCTV, 12" Diameter or less	\$ 1.10/ft
CCTV, 20" Diameter or more	\$ 1.10/ft
Hydro-Cleaning, 12" Diameter or less	\$ 1.20/ft
Hydro-Cleaning, 20" Diameter or more	Separate estimate

## **EXHIBIT C INSURANCE REQUIREMENTS**

Without limiting the Consultant's indemnification of the City, and prior to commencing any of the Services required under this Agreement, the Consultant shall provide and maintain in full force and effect during the period of performance of the Agreement and for twenty-four (24) months following acceptance by the City, at its sole cost and expense, the following insurance policies from insurance companies authorized to do business in the State of California. These policies shall be primary insurance as to the City of Santa Clara so that any other coverage held by the City shall not contribute to any loss under Consultant's insurance. The minimum coverages, provisions and endorsements are as follows:

### **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 shall in no event be less than, the following:  
  
\$1,000,000 Each Occurrence  
\$2,000,000 General Aggregate  
\$2,000,000 Products/Completed Operations Aggregate  
\$1,000,000 Personal Injury
2. Exact structure and layering of the coverage shall be left to the discretion of Consultant; however, any excess or umbrella policies used to meet the required limits shall be at least as broad as the underlying coverage and shall otherwise follow form.
3. The following provisions shall apply to the Commercial Liability policy as well as any umbrella policy maintained by the Consultant to comply with the insurance requirements of this Agreement:
  - a. Coverage shall be on a "pay on behalf" basis with defense costs payable in addition to policy limits;
  - b. There shall be no cross liability exclusion which precludes coverage for claims or suits by one insured against another; and
  - c. Coverage shall 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 not less than



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 shall apply to all owned (if any), non-owned and hired autos.

In the event that the Work being performed under this Agreement involves transporting of hazardous or regulated substances, hazardous or regulated wastes and/or hazardous or regulated materials, Consultant and/or its subconsultants involved in such activities shall provide coverage with a limit of one million dollars (\$1,000,000) per accident covering transportation of such materials by the addition to the Business Auto Coverage Policy of Environmental Impairment Endorsement MCS90 or Insurance Services Office endorsement form CA 99 48, which amends the pollution exclusion in the standard Business Automobile Policy to cover pollutants that are in or upon, being transported or towed by, being loaded onto, or being unloaded from a covered auto.

#### C. WORKERS' COMPENSATION

1. Workers' Compensation Insurance Policy as required by statute and employer's liability with limits of at least 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 Consultant included in this Agreement shall not be limited in any way by any limitation on the amount or type of damage, compensation or benefit payable by or for Consultant or any subconsultant 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. PROFESSIONAL LIABILITY

Professional Liability or Errors and Omissions Insurance as appropriate shall be written on a policy form coverage specifically designed to protect against negligent acts, errors or omissions of the Consultant. Covered services as designated in the policy must specifically include work performed under this agreement. Coverage shall be in an amount of not less than one million dollars (\$1,000,000) per claim or two million dollars (\$2,000,000) aggregate. Any coverage containing a deductible or self-retention must first be approved in writing by the City Attorney's Office.

## E. 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 Consultant'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 Consultant shall 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 shall be considered excess insurance only and shall not be called upon to contribute with Consultant's insurance.
3. Cancellation.
  - a. Each insurance policy shall contain language or be endorsed to reflect that no cancellation or modification of the coverage provided due to non-payment of premiums shall be effective until written notice has been given to City at least ten (10) days prior to the effective date of such modification or cancellation. In the event of non-renewal, written notice shall be given at least ten (10) days prior to the effective date of non-renewal.
  - b. Each insurance policy shall contain language or be endorsed to reflect that no cancellation or modification of the coverage provided for any cause save and except non-payment of premiums shall 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 shall 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 E of this Exhibit C, above.

## F. ADDITIONAL INSURANCE RELATED PROVISIONS

Consultant and City agree as follows:

1. Consultant agrees to ensure that subconsultants, and any other party involved with the Services, who is brought onto or involved in the performance of the Services by Consultant, provide the same minimum insurance coverage required of Consultant, except as with respect to limits. Consultant 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. Consultant agrees that upon request by City, all agreements with, and insurance compliance documents provided by, such subconsultants and others engaged in the project will be submitted to City for review.
2. Consultant 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 Consultant 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 shall 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 Consultant in the event of material noncompliance with the insurance requirements set forth in this Agreement.

## G. EVIDENCE OF COVERAGE

Prior to commencement of any Services under this Agreement, Consultant, and each and every subconsultant (of every tier) shall, 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 shall be maintained with insurers, and under forms of policies, satisfactory to City and as described in this Agreement. Consultant shall file with the City all certificates and endorsements for the required insurance policies for City's approval as to adequacy of the insurance protection.

## H. EVIDENCE OF COMPLIANCE

Consultant or its insurance broker shall 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 shall be delivered to City, or its representative as set forth below, at or prior to execution of this Agreement. Upon City's request, Consultant shall 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 shall be mailed to:

EBIX Inc.

City of Santa Clara Department of Public Works

P.O. Box 100085 – S2

or 1 Ebix Way

Duluth, GA 30096

John's Creek, GA 30097

Telephone number: 951-766-2280

Fax number: 770-325-0409

Email address: ctsantaclara@ebix.com

#### I. QUALIFYING INSURERS

All of the insurance companies providing insurance for Consultant shall have, and provide written proof of, an A. M. Best rating of at least A minus 6 (A- VI) or shall be an insurance company of equal financial stability that is approved by the City or its insurance compliance representatives.

## **EXHIBIT D LABOR COMPLIANCE ADDENDUM**

This Agreement is subject to the requirements of California Labor Code section 1720 *et seq.* requiring the payment of prevailing wages, the training of apprentices, and compliance with other applicable requirements.

### **A. Prevailing Wage Requirements**

1. Contractor shall be obligated to pay not less than the General Prevailing Wage Rate, which can be found at [www.dir.ca.gov](http://www.dir.ca.gov) and are on file with the City Clerk's office, which shall be available to any interested party upon request. Contractor is also required to have a copy of the applicable wage determination posted and/or available at each job site.
2. Specifically, contractors are reminded of the need for compliance with Labor Code Section 1774-1775 (the payment of prevailing wages and documentation of such), Section 1776 (the keeping and submission of accurate certified payrolls) and 1777.5 in the employment of apprentices on public works projects. Further, overtime must be paid for work in excess of 8 hours per day or 40 hours per week pursuant to Labor Code Section 1811-1813.
3. Special prevailing wage rates generally apply to work performed on weekends, holidays and for certain shift work. Depending on the location of the project and the amount of travel incurred by workers on the project, certain travel and subsistence payments may also be required. Contractors and subcontractors are on notice that information about such special rates, holidays, premium pay, shift work and travel and subsistence requirements can be found at [www.dir.ca.gov](http://www.dir.ca.gov).
4. Only bona fide apprentices actively enrolled in a California Division of Apprenticeship Standards approved program may be employed on the project as an apprentice and receive the applicable apprenticeship prevailing wage rates. Apprentices who are not properly supervised and employed in the appropriate ratio shall be paid the full journeyman wages for the classification of work performed.
5. As a condition to receiving progress payments, final payment and payment of retention on any and all projects on which the payment of prevailing wages is required, Contractor agrees to present to City, along with its request for payment, all applicable and necessary certified payrolls (for itself and all applicable subcontractors) for the time period covering such payment request. The term "certified payroll" shall include all required documentation to comply with the mandates set forth in Labor Code Section 1720 *et seq.*, as well as any additional documentation requested by the City or its designee including, but not limited to: certified payroll, fringe benefit statements and backup documentation such as monthly benefit statements, employee timecards, copies of wage

statements and cancelled checks, proof of training contributions (CAC2 if applicable), and apprenticeship forms such as DAS-140 and DAS-142.

6. In addition to submitting the certified payrolls and related documentation to City, Contractor and all subcontractors shall be required to submit certified payroll and related documents electronically to the California Department of Industrial Relations. Failure to submit payrolls to the DIR when mandated by the project parameters shall also result in the withholding of progress, retention and/or final payment.
7. Each contractor and every lower-tier Subcontractor will be required to submit certified payrolls and labor compliance documentations electronically via the software LCPtracker. Contractor shall cause all subcontractors to include the provision that all subcontractors submit certified payrolls and labor compliance documentation electronically via LCPtracker. Electronic submission will be a web-based system, accessed on the World Wide Web by a web browser. Each contractor user will be given a Log-On identification and password to access the City's reporting system. Access will be coordinated by a City representative.
8. No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
9. No contractor or subcontractor may be awarded a contract for public work on a public works project, unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Contractors MUST be a registered "public works contractor" with the DIR AT THE TIME OF BID. Where the prime contract is less than \$15,000 for maintenance work or less than \$25,000 for construction alternation, demolition or repair work, registration is not required.
10. All Contractors/subcontractors and related construction services subject to prevailing wage, including but not limited to: trucking, surveying and investigation work must be registered with the Department of Industrial Relations as a "public works contractor". Those you fail to register and maintain their status as a public works contractor shall not be permitted to perform work on the project.
11. Should any contractor or subcontractors not be a registered public works contractor and perform work on the project, Contractor agrees to fully indemnify the City for any fines assessed by the California Department of Industrial Relations against the City for such violation, including all staff costs and attorney's fee relating to such fine.
12. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

**B. Audit Rights**

All records or documents required to be kept pursuant to this Agreement to verify compliance with this Addendum shall be made available for audit at no cost to City, at any time during regular business hours, upon written request by the City Attorney, City Auditor, City Manager, or a designated representative of any of these officers. Copies of such records or documents shall be provided to City for audit at City Hall when it is practical to do so. Otherwise, unless an alternative is mutually agreed upon, the records or documents shall be made available at Contractor's address indicated for receipt of notices in this Agreement.

**C. Enforcement**

1. City shall withhold any portion of a payment; including the entire payment amount, until certified payroll forms and related documentation are properly submitted, reviewed and found to be in full compliance. In the event that certified payroll forms do not comply with the requirements of Labor Code Section 1720 et seq., City may continue to hold sufficient funds to cover estimated wages and penalties under the Agreement.
2. Based on State funding sources, this project may be subject to special labor compliance requirements of Proposition 84.
3. The City is not obligated to make any payment due to Contractor until Contractor has performed all of its obligations under these provisions. This provision means that City can withhold all or part of a payment to Contractor until all required documentation is submitted. Any payment by the City despite Contractor's failure to fully perform its obligations under these provisions shall not be deemed to be a waiver of any other term or condition contained in this Agreement or a waiver of the right to withhold payment for any subsequent breach of this Addendum.

City or the California Department of Industrial Relations may impose penalties upon contractors and subcontractors for failure to comply with prevailing wage requirements. These penalties are up to \$200 per day per worker for each wage violation identified; \$100 per day per worker for failure to provide the required paperwork and documentation requested within a 10-day window; and \$25 per day per worker for any overtime violation.

## **EXHIBIT E**

### **e-BUILDER IMPLEMENTATION REQUIREMENT**

#### **PART 1 ELECTRONIC DATA REQUIREMENTS**

##### **1.1 General Requirements:**

- A. Contractor and Subcontractors shall provide at a minimum, the following to its staff:
  - 1. Computer: Minimum Intel Pentium® 4 Processor 2.4 GHz or equivalent processor with 512MB of RAM; recommended Centrino Duo® Processors 1.6 GHz or equivalent with 2GB of RAM, or higher.
  - 2. Computer Operation System: Window XP, Window Vista, or Windows 7.
  - 3. Web Browser: Microsoft Internet Explorer 9.
  - 4. Work and Spreadsheet Processors: Microsoft Office Word, Excel and Outlook.
  - 5. Scheduling Software: Microsoft Project or Primavera;
  - 6. Internet Service Provider (ISP): A reliable ISP in the area of the Project;
  - 7. Connection Speed/Minimum Bandwidth: DSL, ADSL or T1 Line for transferring a minimum of 3 Mbps Downstream and 512 Kbps Upstream.
- B. Contractor and Subcontractors shall provide its management personnel assigned to this Project with access to personal computers and the Internet on a daily basis.

##### **1.2 Project Web Requirements:**

- A. This project utilizes a web-based project management tool, called e-Builder Enterprise™. This web-based application is a collaboration tool, which will allow all project team members continuous access through the Internet to important project data as well as up to the minute decision and approval status information.
- B. Contractor and Subcontractors shall conduct Project controls, outlined by the City, utilizing e-Builder. This designated web-based application will be provided by the City at no costs to the Contractor and the subcontractors. No additional software will be required. Furthermore, the City, through e-Builder, Project Manager will assist Contractor in providing training of Subcontractor's personnel.



- C. Contractor and Subcontractors shall have the responsibility for visiting the Project web site on a daily basis, and as necessary to be kept fully appraised of Project developments, for correspondence, assigned tasks and other matters that transpire on the site. These may include, but are not limited to: Contracts, Contract Exhibits, Contract Amendments, Drawing Issuances, Addenda, Bulletins, Permits, Insurance & Bonds, Safety Program Procedures, Safety Notices, Accident Reports, Personnel Injury Reports, Schedules, Site Logistics, Progress Reports, Daily Logs, Non-Conformance Notices, Quality Control Notices, Punch Lists, Meeting Minutes, Requests for Information, Submittal Packages, Substitution Requests, Monthly Payment Request Applications, Supplemental Instructions, Construction Change Directives, Potential Change Orders, Change Order Requests, Change Orders, etc. All supporting data including, but not limited to, shop drawings, product data sheets, manufacturer data sheets and instructions, method statements, safety MSDS sheets, Requests for Substitution, Submittals, etc. and the like will be submitted in digital format via e-Builder Enterprise™.

### **1.3 Electronic File Requirements:**

- A. In addition to the standard closeout submittal requirements detailed elsewhere in the Contract Documents, the Contractor and Subcontractors shall also submit all closeout documents including all "As-Built Drawings", catalog cuts, and Owner's Operation and Maintenance manuals in digital format. All documents (including as-built drawings) shall be converted or scanned into the Portable Document Format (PDF) file and uploaded to e-Builder Enterprise™.

## **PART 2 IMPLEMENTATION REQUIREMENTS**

### **2.1 General Information**

e-Builder Enterprise™ is a comprehensive Project and Program Management system that will be implemented for managing documents, communications, and costs between the Contractor, Subcontractors, Design Consultants, and City. e-Builder Enterprise™ includes extensive reporting capabilities to facilitate detailed project reporting in a web-based environment that is accessible to all parties and easy to use.

### **2.2 Central Document Vault:**

e-Builder Enterprise™ system includes a central database that maintains all project information and manages project communications amongst team members.

### **2.3 Communication/Correspondence**

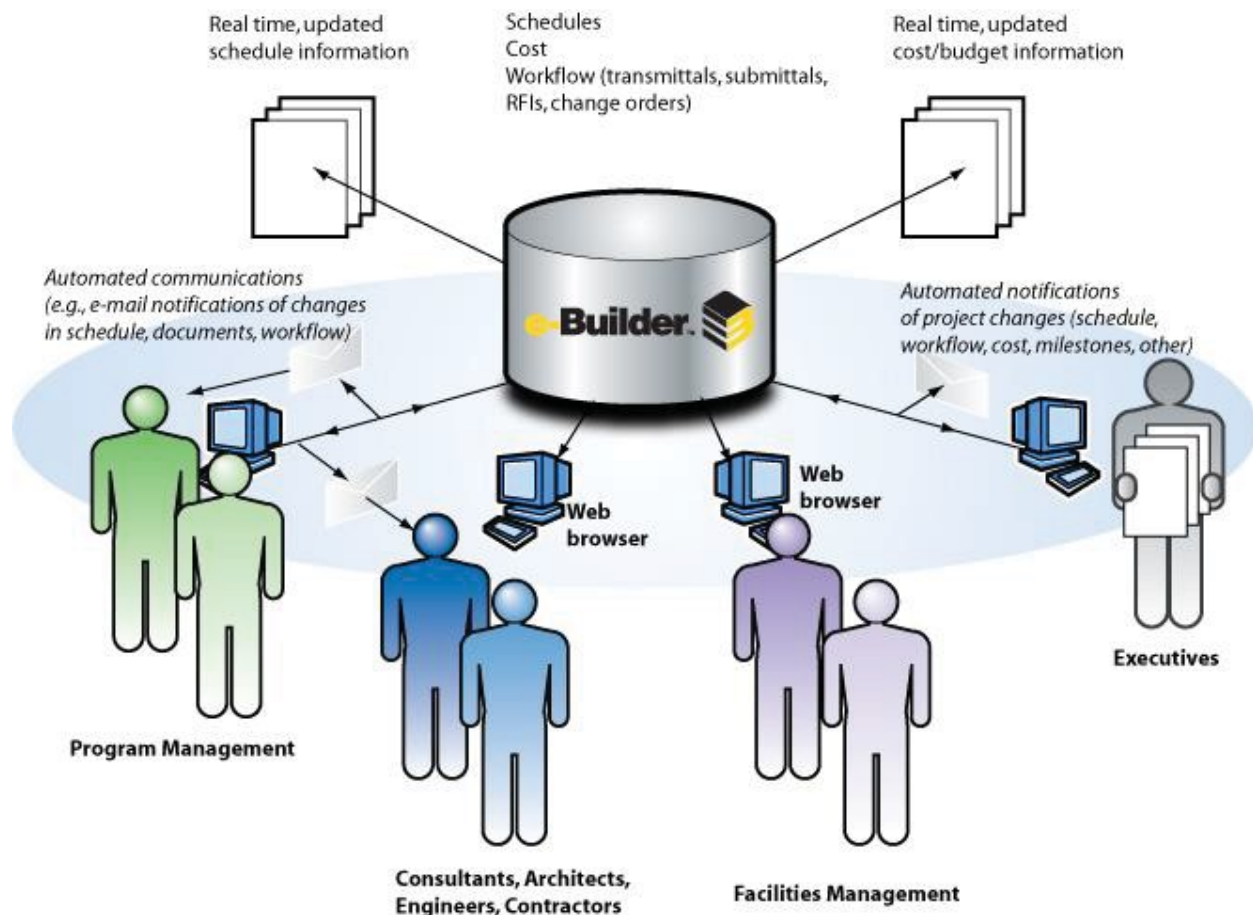
e-Builder Enterprise™ provides electronic routable communication forms that provide historical tracking, documentation, and increased accountability of project members.

## 2.4 Project Calendars

Meetings will be scheduled and maintained centrally on e-Builder Enterprise™.

## 2.5 Reporting

All of the project and program data including documents, communications, and costs are accessible through integrated online reports. These reporting tools are completely configurable by each user. All reports can be exported to Excel for added flexibility.



## PART 3 LICENSING REQUIREMENTS

Design Professional Agreement with V & A Consulting Engineers, Inc./Exhibit E- e-Builder Implementation Requirement  
Rev. 09-28-18

### **3.1 User Licenses**

Each user license is for access to the site consisting of unlimited data storage. Users can be direct employees of the Contractor as well as its Subcontractors and/or Suppliers.

### **3.2** Each user license includes full access to e-Builder Enterprise™, including all of the documents and reports mentioned above. Furthermore, each user license provides the e-Builder software as a service (SaS) including:

1. All hosting, operation, maintenance, and data backup of the e-Builder Enterprise™ software and documents which are maintained in state-of-the-art data centers located throughout the United States.
2. Quarterly e-Builder Enterprise™ software enhancements.
3. Unlimited phone, email, and web-based support 24-hours.

### **3.3** e-Builder Enterprise™ user licenses shall be obtained by the City, Department Manager, Design Consultants, QA/QC Agencies, and Project Management staff for which the Contractor is not responsible.