City of Santa Clara

Meeting Agenda

Development Review Hearing

Wednesday, May 10, 2023 **3:00 PM** **Hybrid Meeting**
City Hall Council
Chambers/Virtual
1500 Warburton Avenue
Santa Clara, CA 95050

The City of Santa Clara is conducting the Development Review Hearing meeting in a hybrid manner (in-person and method for the public to participate remotely)

• Via Zoom:
o https://santaclaraca.zoom.us/j/92950218717 or
o Phone: 1 (669) 900-6833

Meeting ID: 929 5021 8717

How to Submit Written Public Comment Before Development Review Hearing Meeting:
By email to PlanningPublicComment@santaclaraca.gov by 12 p.m. the day of the meeting. Those emails will be forwarded to the Staff and will be uploaded to the Development Review Agenda as supplemental meeting material. Emails received after 12:00 P.M. cutoff time up through the end of the on the meeting will form part of the meeting record. Please identify the Agenda Item Number in the subject line of your email.

Please note Emails received as public comment will not be read aloud during the meeting.

Agendas, Staff Reports and some associated documents for Development Review Hearing items may be viewed on the Internet at https://santaclara.legistar.com/Calendar.aspx

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the Office of the City Clerk at Santa Clara City Hall, 1500 Warburton Avenue, Santa Clara, CA 95050 at the same time that the public records are distributed or made available to the legislative body.

PUBLIC PARTICIPATION IN ZOOM

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.

CALL TO ORDER AND ROLL CALL

23-611 Declaration of Procedures

REQUEST FOR EXCEPTIONS, WITHDRAWALS AND CONTINUANCES

PUBLIC PRESENTATIONS

[This item is reserved for persons to address the body on any matter not on the agenda that is within the subject matter jurisdiction of the body. 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 CALENDAR

Consent Calendar items may be enacted, approved, or adopted by the action of the Development Review Hearing Officer unless requested to be removed by anyone for discussion or explanation. If any member of the staff, the applicant, or a member of the public wishes to comment on a Consent Calendar item, or would like the item to be heard on the regular agenda, please notify Planning staff, or request this action at the Development Review Hearing during the Consent Calendar review. Items listed on the Consent Calendar with associated file numbers constitute Public Hearing items.

1.A **23-545** Action on the construction of a 366 square foot attached Accessory Dwelling Unit (ADU) within the rear yard building setback area of a single-family residence located at 3849 De La Cruz Boulevard. (CEQA: Exempt, Section 15301(e) (1) Existing Structures)

Recommendation: **Use of a** CEQA Categorical Exemption Section 15301(e) (1) Existing Structures and **Approve** the attached accessory dwelling unit within the rear setback of a single-family residence, subject to conditions.

1.B **23-555** Action on a 982 square-foot second story addition, 238 squarefoot first floor addition, and 1,030 square feet remodel. (CEQA: Class 1 Categorical Exemption 15301(e)(1), Existing Facilities)

Recommendation: **Approve** the 982 square feet second story addition, 238 square feet first floor addition, and 1,030 square feet remodel of the existing residence at 74 Woodhams Road, subject to conditions.

1.C **23-560** Action on a 594 square foot first floor addition and a 271 square-foot second floor addition to an existing two-story residence resulting in 3,274 square-foot two-story residence at 462 Muriel Court (CEQA: Categorical Exemption,15301 (e)(1), Existing Facilities)

Recommendation: **Use** of a Categorical Exemption per CEQA 15301 (e) (1), Existing Facilities and **Approve** the 594 square foot first floor addition, and 271 second floor addition to an existing two-story residence resulting in a 3,274 square foot 5-bedroom, 4.5-bathroom two-story residence at 462 Muriel Court, subject to conditions.

GENERAL BUSINESS

The following items from this Development Review Hearing agenda will be scheduled for further review following the conclusion of hearings and recommendations by the Development Review Hearing. Please contact the Planning Division office for information on the schedule of hearings for these items.

2. **23-529** Action on a proposed 822 square-foot first and second floor addition to an existing one-story single-family residence located at 3876 Baldwin Drive. (CEQA: Exempt Section 15301-Existing Facilities)

Recommendation: **Redesign** the proposed project to lower the front porch entry feature by at least a foot in conformance with the Single-Family Residential Design Guidelines and resubmit for architectural approval, subject to conditions of approval.

3. **23-546** Action on a 466 square-foot front addition that would expand a single-family residence resulting in five bedrooms. (CEQA: Exempt, Section 15301(e) (1) Existing Structures)

Recommendation: **Redesign** the front porch of the proposed addition consistent with the Single-Family Design Guidelines.

4. **23-589** Action on the conversion of a garage to a fourth bedroom and the construction of a new two-story garage with attic space at an existing single-family residence at 4628 Demaret Avenue. (CEQA: Exempt, Section 15301 (e)(3) New Construction or Conversion of small structures). Continued from April 19, 2023 Development Review Hearing:

Recommendation: **Redesign** the second story of the proposed addition consistent with the Single-Family Design Guidelines.

ADJOURNMENT

The next regular scheduled meeting is on Wednesday, June 7, 2023 at 3 p.m.

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.

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.

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

23-611 **Agenda Date: 5/10/2023**

REPORT TO DEVELOPMENT REVIEW HEARING

SUBJECT

Declaration of Procedures

City of Santa Clara
The Center of What's Possible

DEVELOPMENT REVIEW HEARING
DECLARATION OF PROCEDURES

The Hearing Officer for this agenda will be Planning Manager Lesley Xavier onbehalf of and delegated by the Director of Community Development Andrew Crabtree.

The hearing procedure and order of input will be as follows:

1. Each project will be identified as described on the agenda.
2. For those items on the Consent Calendar, the Hearing Officer will ask if anyone wishes to speak on the item. If a separate discussion is warranted, the item will be moved to the Public Hearing portion of the agenda. If a separate discussion is not needed, the item will remain on the Consent Calendar for approval.
3. For those items listed under Public Hearing, staff will provide a brief report.
4. The applicant or their representative will have up to five minutes to speak at the microphone and should identify themselves by stating their name for the record.
5. After the applicant or their representative has spoken, any member of the public who wishes to speak on the item may provide testimony, up to two minutes per speaker, either for or against the project. All speakers are required to state their name for the record.
6. Following comments from the public, the applicant may make additional remarks for up to five minutes.
7. The Hearing Officer will then close the public hearing, and may ask staff to answer questions, respond to comments made by the applicant or the public, or further discuss the item. The Hearing Officer will then take action on the item.

If you challenge these land use decisions in court, you may be limited to raising only those issues you or someone else raised at this public hearing or in written correspondence delivered to the City at, or prior to, the public hearing.

The Hearing Officer's actions on agenda items are final unless appealed within seven calendar days.

23-545 **Agenda Date: 5/10/2023**

REPORT TO DEVELOPMENT REVIEW HEARING

SUBJECT

Action on the construction of a 366 square foot attached Accessory Dwelling Unit (ADU) within the rear yard building setback area of a single-family residence located at 3849 De La Cruz Boulevard. (CEQA: Exempt, Section 15301(e) (1) Existing Structures)

File No.(s): PLN23-00143
Location: 3849 De La Cruz Boulevard a 6,442 square foot lot located at the northeast corner of De La Cruz Avenue and Oakwood Drive, APN: 101-25-006; property is zoned Single Family Residential (R1-6L).
Applicant: James Watson
Owner: Nic Joseph
Request: **Architectural Review** to allow for the construction of a 366 square foot attached Accessory Dwelling Unit (ADU) in the rear building setback area.

Project Data

The Project Data Table is included as Attachment 2.

Points for Consideration

- The project includes a one-story 366 square foot attached rear accessory dwelling unit to be located 10 feet from the rear property line.
- The proposed accessory dwelling unit is a studio with one bathroom.
- Windows of the ADU are consistent with the City's Single-Family Residential Design Guidelines in that the window style and proportion are similar to the existing architectural style of the building.
- The proposed project complies with the R1-6L zoning district development standards for new construction; is generally consistent with the Single-Family Residential Design Guidelines; and is generally compatible with neighboring homes along the streetscape.
- A neighborhood notice was distributed to properties within a 300-foot radius of the subject site for this project review.
- There are no active code enforcement cases for this property.

Findings

1) *That any off-street parking area, screening strips and other facilitates and improvements necessary to secure the purpose and intent of this title and the general plan of the City area a part of the proposed development, in that;*
    - Additional off-street parking is not required for the construction of an ADU.
    - The proposed ADU would not remove any off-street parking on the property.

2) *That the design and location of the proposed development and its relation to neighboring developments and traffic is such that it will not impair the desirability of investment or occupation in the neighborhood, will not unreasonably interfere with the use and enjoyment of neighboring developments, and will not create traffic congestion or hazard, in that;*
    - The proposed accessory dwelling unit would not create traffic congestion or hazards.
    - Public streets are adequate in size and design to serve the proposed accessory dwelling unit, and the use will not create a substantive increase in traffic.

3) *That the design and location of the proposed development is such that it is in keeping with the character of the neighborhood and is such as not to be detrimental to the harmonious development contemplated by this title and the general plan of the City, in that;*
    - The proposed ADU has a rear setback of 10 feet, which is located within the 20-foot required rear setback area for the principle single-family unit.
    - The ADU is proposed to have a similar design and characteristics as other dwelling units in the surrounding neighborhood.

4) *That the granting of such approval will not, under the circumstances of the particular case, materially affect adversely the health, comfort or general welfare of persons residing or working in the neighborhood of said development, and will not be materially detrimental to the public welfare or injuries to property or improvements in said neighborhood, in that;*
    - The project is subject to the California Building Code and City Code requirements, which serve to regulate new construction to protect public health, safety and general welfare.

5) *That the proposed development, as set forth in the plans and drawings, are consistent with the set of more detailed policies and criteria for architectural review as approved and updated from time to time by the City Council, which set shall be maintained in the planning division office. The policies and criteria so approved shall be fully effective and operative to the same extent as if written into and made a part of this title, in that;*
    - The project proposes a residential design that is compatible in scale and character with the housing types that are typical in the neighborhood as the proposed design of the accessory dwelling unit will have similar massing and height to other accessory dwelling units in the area.
    - The proposed project complies with the R1-6L zoning districts development standards for accessory dwelling units but requires approval for an attached accessory dwelling unit being placed within the rear 20-foot setback.

<u>Conditions of Approval</u>

1) Permit Expiration. This Architectural Permit shall automatically be revoked and terminated if not used within two years of original grant or within the period of any authorized extensions thereof. The date of granting of this Permit is the date this Permit is approved by the Development Review Officer.
2) The garage shall be maintained clear and free for vehicle parking use at all times. It shall not be used only for storage.
3) Prior to the issuance of a Building Permit, the development of the site and all associated improvements shall conform to the approved plans with File No. **PLN23-00143**, on file with the

Community Development Department, Planning Division.

4) Landscaping installation shall meet City water conservation criteria in a manner acceptable to the Director of Community Development.
5) Maintain the front yard landscaping between the house and sidewalk. New landscape areas of 500 square feet or more or rehabilitated landscape areas of 2,500 square feet or more shall conform to the California Department of Water Resources Water Efficient Landscape Ordinance.
6) Developer/Owner is responsible for collection and pick-up of all trash and debris on-site and adjacent public right-of-way.
7) Construction activity shall be limited to the hours of 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. Saturdays for projects within 300 feet of a residential use and shall not be allowed on recognized State and Federal holidays.
8) Incorporate Best Management Practices (BMPs) into construction plans and incorporate post construction water runoff measures into project plans in accordance with the City's Urban Runoff Pollution Prevention Program standards prior to the issuance of permits.

ENVIRONMENTAL REVIEW

The proposed project is categorically exempt from the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15301(e) (1) Existing Structures, in that the project is a small accessory dwelling addition to the existing single-family residence.

PUBLIC CONTACT

On April 27, 2023, a notice of public hearing of this item was posted within 300 feet of the project site and mailed to property owners within 300 feet of the project site. Planning Staff has not received public comments for this application.

RECOMMENDATION

Use of a CEQA Categorical Exemption Section 15301(e) (1) Existing Structures and **Approve** the attached accessory dwelling unit within the rear setback of a single-family residence, subject to conditions.

Prepared by: Daniel Sobczak, Assistant Planner, Community Development Department
Approved by: Lesley Xavier, Planning Manager, Community Development Department

ATTACHMENTS

1. Development Plans
2. Project Data

General Notes:

1. CONTRACTOR SHALL FIELD INSPECT JOB SITE PRIOR TO COMMENCEMENT OF WORK AND SHALL ADHERE TO ALL RULES GOVERNING CONSTRUCTION, SAFETY, BUILDING ACCESS, AND THE USE OF FACILITIES AS SET BY THE BUILDING OWNER, BUILDING DEPARTMENT, FIRE DEPARTMENT AND STATE AUTHORITIES.
2. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
3. ALL MECHANICAL, ELECTRICAL, PLUMBING WORK AND ENGINEERING IS DESIGNATED TO BE "DESIGN BUILD" AND IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS ASSIGNED DESIGN BUILD SUB-CONTRACTORS. THEY ARE THEREBY IN SOLE CHARGE OF DESIGN ENGINEERING, PERMITS, FEES, CALCULATIONS, REPORTS, DRAWINGS, ETC. REQUIRED BY LOCAL AND ALL OTHER GOVERNING AGENCIES FOR THE WORK SO DESIGNATED.
4. THE CONTRACTOR AND ALL SUB-CONTRACTORS AGREES TO DEFEND, INDEMNIFY AND HOLD THIS DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF ALL WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.
5. CONTRACTOR SHALL NOTIFY DESIGN PROFESSIONAL OF ANY DISCREPANCIES ENCOUNTERED ON THE DRAWINGS. SUCH DISCREPANCIES SHALL BE RESOLVED TO THE SATISFACTION OF THE DESIGN PROFESSIONAL PRIOR TO THE START OF THE AFFECTED WORK.
6. CONTRACTOR IS RESPONSIBLE FOR COORDINATION ALL SUB-CONTRACTORS TO ENSURE A TIMELY COMPLETION OF THE JOB. NO ALLOWANCE SHALL BE MADE FOR INCREASED COSTS INCURRED DUE TO LACK OF PROPER COORDINATION.
7. GENERAL AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR INSPECTING THE PREMISES DURING ANY BIDDING/CONTRACT NEGOTIATIONS TO ASCERTAIN EXISTING CONDITIONS WHICH MIGHT AFFECT THE COST OR SCHEDULE OF CONSTRUCTION. DISCREPANCIES AND/OR CONFLICTS SHALL BE REPORTED TO THE OWNER AND THE DESIGN PROFESSIONAL BEFORE SUBMITTING BIDS OR CONCLUSION OF ANY CONTRACT NEGOTIATIONS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION AND/OR DEMOLITION.
9. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PROPERTY OR CONSTRUCTION RESULTING FROM WORK PERFORMED BY CONTRACTOR AND/OR SUB-CONTRACTORS, AND SHALL REPAIR ALL SUCH DAMAGE TO ORIGINAL CONDITION AT NO ADDITIONAL COST.
10. GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR EXECUTION OF WORK IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS. BIDDING ON DOCUMENTS IS CONSIDERED ACCEPTANCE OF ALL NOTES AND INFORMATION HEREIN.
11. THESE CONSTRUCTION DOCUMENTS ARE PROVIDED TO ILLUSTRATE THE DESIGN AND GENERAL TYPE OF CONSTRUCTION DESIRED AND TO IMPLY THE FINEST QUALITY OF CONSTRUCTION, MATERIAL AND/OR WORKMANSHIP THROUGHOUT. THE GENERAL CONTRACTOR, IN ASSUMING RESPONSIBILITY FOR THE WORK INDICATED, SHALL COMPLY WITH THE SPIRIT AS WELL AS THE LETTER IN WHICH THEY WERE WRITTEN.
12. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES, AND SHALL PROVIDE ALL SUBCONTRACTORS WITH CURRENT CONSTRUCTION DOCUMENTS AS REQUIRED.
13. ALL WORK LISTED, SHOWN OR IMPLIED ON ANY CONSTRUCTION DOCUMENT SHALL BE SUPPLIED AND INSTALLED BY THE GENERAL CONTRACTOR EXCEPT WHERE NOTED OTHERWISE. THE GENERAL CONTRACTOR SHALL CLOSELY COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS OR VENDORS TO ASSURE THAT ALL SCHEDULES ARE MET AND THAT ALL WORK IS DONE IN CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS.
14. THE GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUESTED FOR FABRICATED ITEMS TO THE DESIGN PROFESSIONAL FOR APPROVAL PRIOR TO INSTALLATION.
15. GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL CONFINE OPERATIONS TO AREAS AND TIMES OF OPERATION PERMITTED PERMITTED BY LAW, ORDINANCES, PERMITS AND THE CONTRACT DOCUMENTS AND SHALL NOT UNREASONABLY ENCUMBER THE SITE WITH ANY MATERIAL AND/OR EQUIPMENT.

Joseph Residence ADU

OWNER:
Niv Joseph & Alyssa Hoehn
3849 De La Cruz Blvd
Santa Clara, CA 95040

CONTACT:
nivjoseph@gmail.com
alhoen@ucdavis.edu

PROJECT DESCRIPTION:
Construct 366 sq. ft. attached ADU addition at rear of home.
New construction to be V-B.

SHEET INDEX:

SHEET NO.	DESCRIPTION
A 0.0	TITLE SHEET
	NOTES
	VICINITY MAP
	SITE PLAN
A 1.0	EXISTING/DEMO PLAN
	PROPOSED FLOOR PLAN
A 2.0	ELECTRICAL PLAN
A 3.0	PROPOSED ELEVATIONS
A 4.0	FOUNDATION PLAN
	BRACED WALL PLAN
	FOUNDATION DETAILS
A 5.0	ROOF FRAMING PLAN
	SECTIONS
	DETAILS
CG-1	CALGREEN REQUIREMENTS
CG-2	CALGREEN CHECKLIST
T24-1	TITLE 24
T24-2	TITLE 24

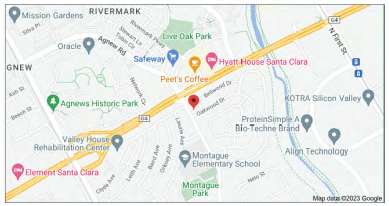
Property Data

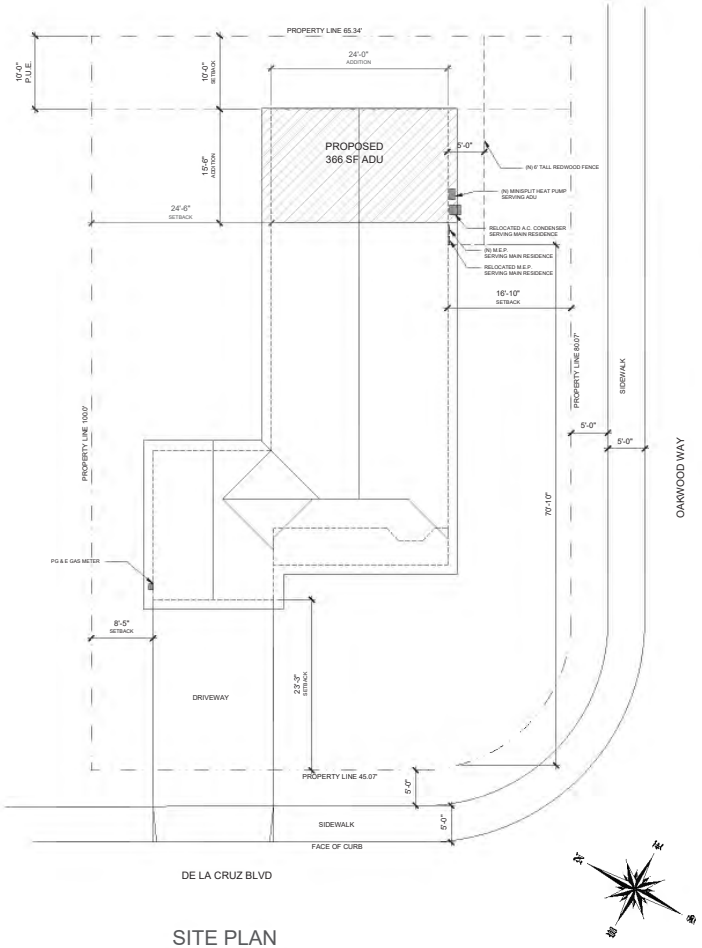
Address:		APN:			
3849 De La Cruz, Santa Clara, CA 95054		101-25-006			
Zoning: R-1-6L	Lot Area: 5,442 SQ. FT.	Occupancy: R-3		Construction Type: V-B	
	Lot Width: 65.3 FT.	Lot Depth: 100.0 FT.		Non-sprinklered	
Development Standards					
Standard	Existing	Proposed		Required	
Setbacks:					
	First floor / Second floor	First floor / Second floor		First floor / Second floor	
Front	23.25 FT / N/A	23.25 FT / N/A		20 FT / N/A	
Rear	25.5 FT / N/A	10.0 FT / N/A		20 FT / N/A	
Side (Left)	8.4 FT / N/A	8.4 FT / N/A		5 FT / N/A	
Side (Right)	16.9 FT / N/A	16.9 FT / N/A		15 FT / N/A	
Lot Coverage	1,352.2 SF	1,691.2 SF		MAX. 2,400 SF	
FAR	22%	26%		MAX. 40%	
Square Footage:					
Main Residence Living Area	998.4 SF	998.4 SF			
Garage	326.8 SF	326.8 SF			
Addition		366 SF			
Accessory Buildings	NONE	NONE		NONE	

CODE COMPLIANCE:

2022 CBC. CRC, CMC, CPC, CFC, AND CEC, CALIFORNIA ENERGY CODE, AND CALGREEN BUILDING STANDARDS CODE AS AMENDED BY THE STATE OF CALIFORNIA AND LOCAL JURISDICTIONS ARE APPLICABLE TO THIS PROJECT.

VICINITY MAP





SITE PLAN
SCALE: 1/8"=1'

REVISION	DATE

Contractor:

JOSEPH RESIDENCE ADU
3849 DE LA CRUZ BLVD, SANTA CLARA, CA 95054

TITLE SHEET
SITE PLAN

James Watson Residential Drafting and Design
1185 Alice Drive, Santa Clara, CA 95050
408-898-0446 James.constructionbuilder.com

PROJECT

DATE 2/24/23

SHEET A 0.0

General Notes:

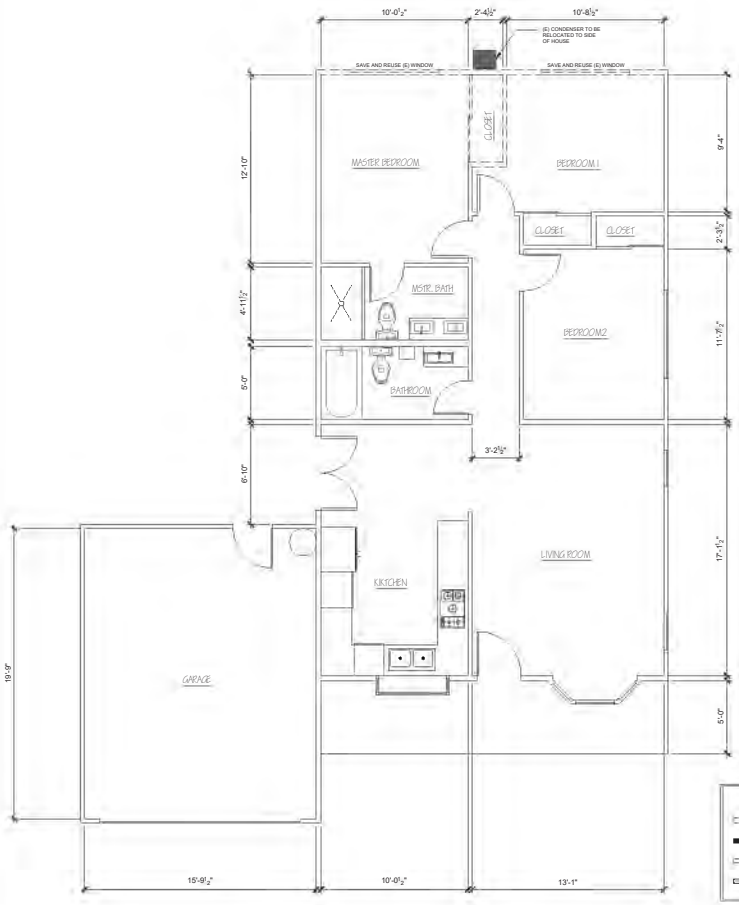
- The General Contractor shall be responsible for determining location of all utilities prior to excavation and/or demolition.
- The General Contractor shall notify design professionals of any discrepancies encountered on the drawings. Such discrepancies shall be resolved to the satisfaction of the design professionals prior to the commencement of affected work.
- General contractor shall carefully coordinate demolition and removal with notes and dimensions indicating the extent and nature of new construction shown elsewhere in these plans.
- General contractor is responsible for securely shoring in place all overhead structures prior to the removal of any existing support structures.
- The General Contractor shall field inspect the job site prior to commencement of work and shall adhere to all rules governing construction, safety, building access, and the use of facilities as set by the building owner, and local ordinances.

Floor Plan Notes:

1. Smoke alarms shall be operational and be located in all sleeping rooms, outside each separate sleeping area in the immediate vicinity of the bedrooms, and at each story, including basements.
2. Safety glazing (tempered) required in the following locations: Any portion of a wall enclosing a shower or bathtub enclosure where the bottom exposed edge of the glazing is less than 60" above a standing surface. Door enclosures for hot tubs, whirlpools, saunas, bathtubs and showers .
3. Each bathroom shall be mechanically ventilated. Fans shall be ENERGY STAR compliant and terminate outside the building (3 feet from operable windows). Unless functioning as a whole house system, fans must be controlled by a humidity control capable of a relative humidity range of <50% to a maximum of 80%. Control may be adjusted manually or automatic.
4. A ducted kitchen exhaust hood is required. Only a metal, smooth interior surface duct on vent hood or down draft exhaust vent is permissible. Aluminum flex duct not approved. Provide back draft damper.
5. Interior step to be max. 7 3/4" below top of threshold. Rise and run to be max. 7 3/4" step height, min. 11" step depth.
6. The existing vapor/moisture barrier consists of Polycoat 5000 with Westcoat Epoxy top coat. Seal cut-outs in slab with matching or equivalent. Verify compatibly before applying any adhesives or coatings which may compromise the performance of this required moisture/vapor barrier.

Plumbing Notes:

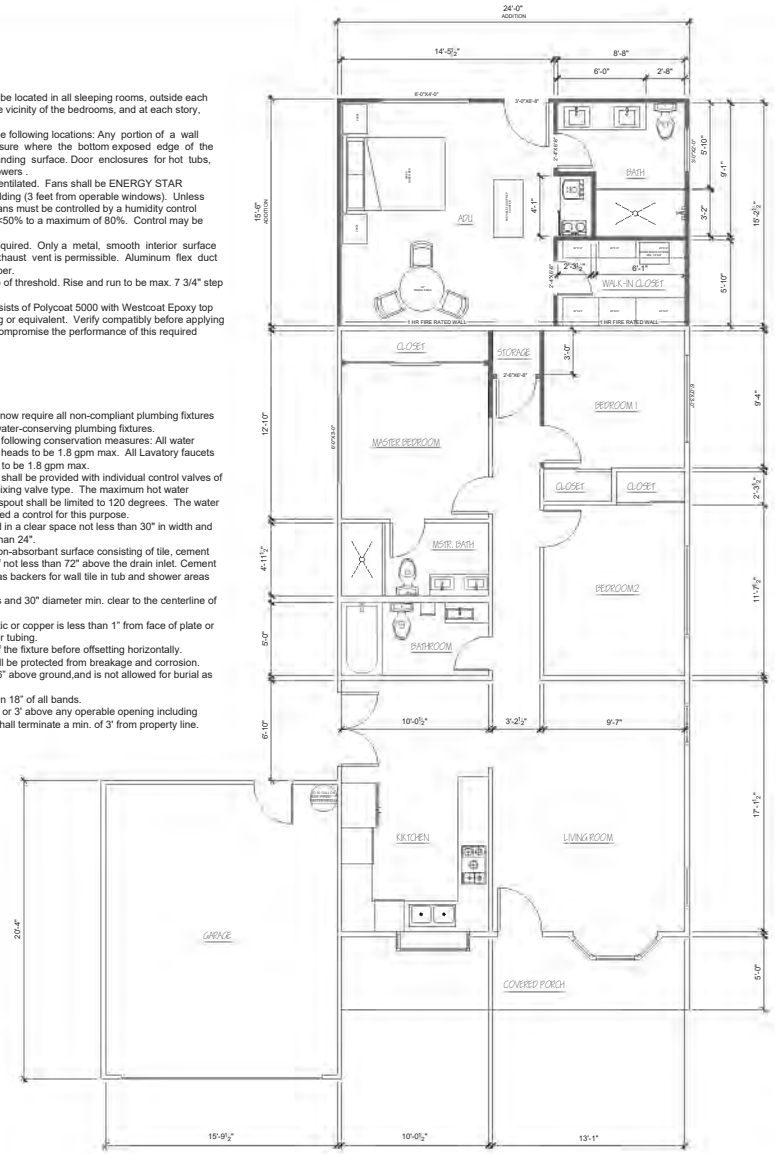
1. Additions, alterations or improvements now require all non-compliant plumbing fixtures within the residence be replaced with water-conserving plumbing fixtures.
2. Plumbing fixtures shall comply with the following conservation measures: All water closets to be 1.28 gpf max. All shower heads to be 1.8 gpm max. All Lavatory faucets to be 1.2 gpm max. All kitchen faucets to be 1.8 gpm max.
3. Showers and tub/shower combinations shall be provided with individual control valves of the pressure balance or thermostatic mixing valve type. The maximum hot water temperature discharging from the filler spout shall be limited to 120 degrees. The water heater thermostat shall not be considered a control for this purpose.
4. Each water closet stool shall be located in a clear space not less than 30" in width and have a clear space in front of not less than 24".
5. Shower walls shall be finished with a non-absorbant surface consisting of tile, cement plaster or approved equal to a height of not less than 72" above the drain inlet. Cement board or cement plaster shall be used as backers for wall tile in tub and shower areas and wall panels in shower areas.
6. Min. shower size to be 1,024 sq. inches and 30" diameter min. clear to the centerline of the curb.
7. Nail plates shall be installed when plastic or copper is less than 1" from face of plate or stud, and min. 1 1/2" beyond the pipe or tubing.
8. Vents shall be 6" above the flood rim of the fixture before offsetting horizontally.
9. All pipes passing through concrete shall be protected from breakage and corrosion. (Galvanized steel must be kept a min. 6" above ground,and is not allowed for burial as DWV.)
10. Cast iron DWV shall be supported within 18" of all bands.
11. Plumbing vents shall be 10' away from, or 3' above any operable opening including skylights, air intake, or vent shaft and shall terminate a min. of 3' from property line.



EXISTING/ DEMO PLAN
SCALE: 1/4" = 1'

WALL LEGEND:

	=	EXISTING 2 X 4 STUDWALL TO REMAIN
	=	NEW 2 X 4 STUDWALL
	=	EXISTING 2 X 4 STUDWALL TO BE REMOVED
	=	LOCATION OF ALTERED STUDWALL



PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'

REVISION	DATE

Contractor:

JOSEPH RESIDENCE ADU
3849 DE LA CRUZ BLVD, SANTA CLARA, CA 95054

DEMO PLAN
PROPOSED FLOOR PLAN

James Watson Residential Drafting and Design
1185 Alue Drive, Santa Clara, CA 95050
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PROJECT

DATE 2/24/23

SHEET A 1.0

ELECTRICAL LEGEND	
	SWITCH
	DIMMER SWITCH
	3-WAY SWITCH/3-WAY WITH DIMMER
	VACANCY SENSOR SWITCH
	DUPLEX RECEPTACLE
	220 VOLT RECEPTACLE
	GROUND FAULT INTERRUPTER
	SPLIT RECEPTACLE
	LED RECESSED CAN LIGHT
	RECESSED CAN LIGHT RATED FOR WET LOCATIONS
	LED UNDER CABINET LIGHTING
	CABINET LIGHT
	WALL SCONCE LIGHT FIXTURE
	PENDANT LIGHT FIXTURE
	SURFACE MOUNTED CEILING FIXTURE
	EXT.GRADE HIGH EFFICACY WALL SCONCE WITH MOTION SENSOR AND PHOTO CONTROL OR TIME CLOCK PROGRAMMED TO TURN OFF THE LIGHTING DURING DAYLIGHT HOURS
	EXHAUST FAN
	COMBINATION EXHAUST FAN LIGHT FIXTURE
	SMOKE DETECTOR/CARBON MONOXIDE DETECTOR
	ELECTRIC METER BASE
	ELECTRIC PANEL

Bathroom Exhaust Fan Requirements:

Min. CFM:	50
Duct Type:	Flex
Duct Size:	4"
Max. Duct Length:	56 ft.
Max. Sones:	3

Kitchen Exhaust Fan Requirements:

Min. CFM:	100
Duct Type:	Smooth
Duct Size:	7"
Max. Duct Length:	No Limit
Max. Sones:	3

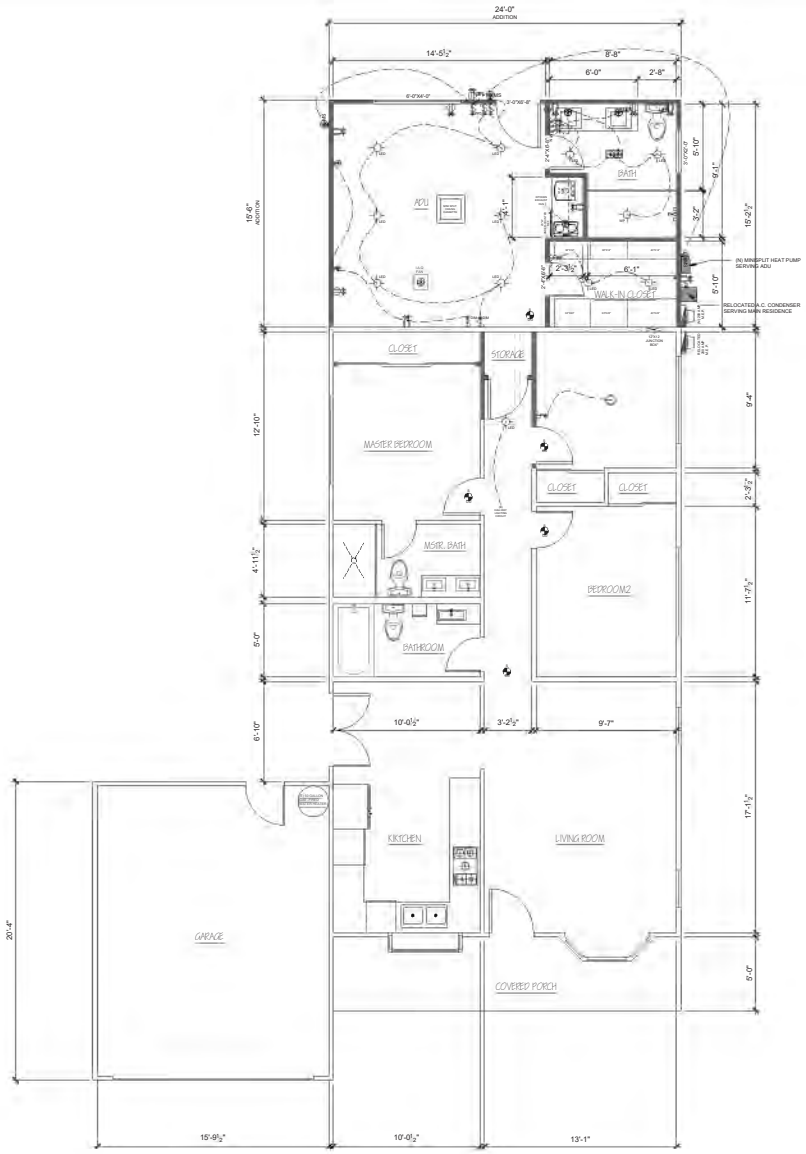
I.A.Q. Fan Requirements:

CFM:	45
Duct Type:	Smooth
Duct Size:	4"
Max. Duct Length:	70'
Max. Sones:	1

The exhaust fan is intended to operate continuously to ensure indoor air quality. The fan may be controlled by a standard on/off switch, but a label must be provided at the switch that reads: "This fan is to be left on to ensure indoor air quality."

Electrical Notes:

1. Provide bonding to the water piping, gas and metal building systems (min. #4 for 200 amp service).
2. New circuits require AFCI protection for the entire branch circuit if they supply any outlets in the following locations: 15 and 20 amp kitchen circuits, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas. New wiring for hard-wired smoke and CO alarms also require AFCI circuit breaker.
3. All general purpose and countertop receptacles must be tamper-resistant.
4. Provide hard-wired smoke alarms alarms in all bedrooms, outside each sleeping area in the immediate vicinity of bedrooms, and on each story. Smoke detectors in JADU and Main Residence shall be interconnected.
5. Smoke alarms shall be installed on the ceiling or wall between 4" and 12" of the ceiling. Carbon monoxide alarms shall be installed on the ceiling or wall above the door header.
6. Individual (dedicated) circuits are required for refirgerator,garbage disposals, microwaves, compactors, and dishwashers.
7. Receptacles shall be located so appliances are no further than 24" from any plug (48"maximum distance between receptacles). Counter top surfaces wider than 12" require receptacles.Receptacles shall be no higher than 18" above the counter surface.
8. All light fixtures shall be high efficacy. All interior switches shall be dimmer or vacancy sensor type.
9. Provide one dedicated 20 amp circuit to serve the required bathroom outlets only and one dedicated 20 amp circuit to serve the laundry outlets (no other outlets, fans, lighting, etc. allowed on this circuit).
10. At least one light in each bathroom and laundry room shall be controlled by a vacancy sensor (a manual-on, automatic-off occupancy sensor).
11. Light fixtures located in wet location shall be listed for wet location and require water resistant trims.
12. Bathroom exhaust fans must be controlled by a humidistat and must also be switched separate from lighting, with the exception that lighting integral to an exhaust fan can be on the same switch if the fan is controlled by a humidistat that continues its operation after the light is off.
13. Receptacles for ranges and clothes dryers shall be a 3-pole w/ground type. 4-wire grounding type flexible cords are required for connection of ranges and clothes dryers. The bonding jumper shall not be connected between the neutral terminal and the frame of the appliance.
14. Provide air-tight IC rated recessed light fixtures in insulated ceilings.
15. Receptacle outlets shall be installed so that no point along the floor line in any wall space is more than 6' measured horizontally from an outlet in that space, including any wall space 2' or more in width.
16. Standard electrical wall receptacles are to be mounted vertically at +12" and light switches at 3'-6" above finished floor U.N.O.
17. Installation instructions for all listed equipment shall be provided to the field inspector at the time of inspection.
18. Outdoor lighting permanently mounted to a dwelling or other buildings on the same parcel shall be high efficacy and be controlled by a manual on off switch with a motion sensor and photocontrol, or a time switch and photocontrol, or a time clock programmed to turn off the lighting during daylight hours.



ELECTRICAL PLAN
SCALE: 1/4" = 1'

REVISION	DATE

Contractor:

JOSEPH RESIDENCE ADU
3849 DE LA CRUZ BLVD, SANTA CLARA, CA 95054

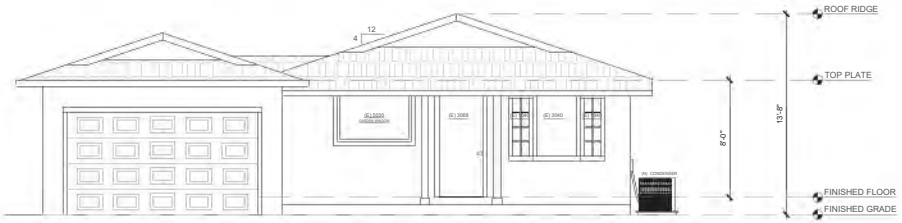
ELECTRICAL PLAN

James Watson Residential Drafting and Design
1165 Aue Drive, Santa Clara, CA 95050
408-969-0446, jamesconstruction@yahoo.com

PROJECT

DATE 2/24/23

SHEET A 2.0



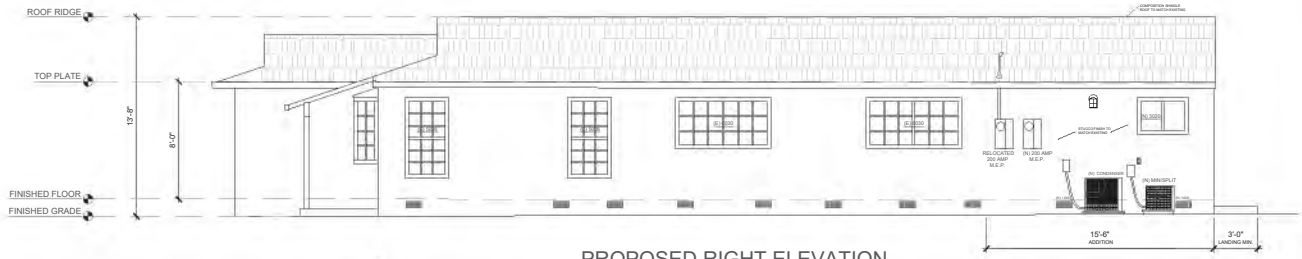
PROPOSED FRONT ELEVATION

*Not less than 40 percent and not more than 50 percent of the required ventilating area shall be provided by ventilators located in the upper portion of the attic or rafter space.

Ventilation openings in walls shall resist the intrusion of flame and embers into the structure or shall be screened with a corrosion resistant noncombustible wire mesh, opening shall be a minimum of 1/16" not to exceed 1/8" openings. These vents must be state approved. CRC R337.6.2

ADU ATTIC VENTILATION CALCULATIONS	
372 S.F. (ROOF-ATTIC AREA / 300) = 1.24 S.F. OF VENT OPENING REQUIRED*	
TYPE	OPENING
UPPER VENT: 15.5 L.F. RIDGE VENT @ 12.5 SQ. IN. PER L.F.	= 1.3 S.F.
LOWER VENT: 6 -15X5.5 SOFFIT VENT @ 43 SQ. IN. EA.	= 1.7 S.F.
TOTAL :	= 3.0 S.F.

SUB-FLOOR VENT CALCULATIONS
372 S.F. (SUBFLOOR AREA / 150) = 2.48S.F. OF VENT OPENING REQUIRED 8 (N) 14"X8" (.58 S.F. EA.) VENTS PER PLAN = 4.6 S.F.



PROPOSED RIGHT ELEVATION

PROPOSED REAR ELEVATION

ELEVATION NOTES:

1. New addition roofing to be composition shingle to match existing.
2. New stucco work: weather resistive barriers shall include two layers of grade "D" paper and shall be applied horizontally with the upper layer lapped over the lower layer no less than 2" vertically and 6" horizontally.
3. Lath fasteners shall be spaced no less than 6" vertically and 16" horizontally. Staples shall be spaced 8" O.C. when used with self-furring lath only.
4. Metal lath shall be lapped not less than 1/2" at sides and 1" at the ends. Wire lath shall be lapped not less than one mesh at sides and ends, but not less than 1". Overlap around corners 12".
5. All exterior penetrations shall be made water-tight.

PROPOSED LEFT ELEVATION

REVISION	DATE

Contractor:

JOSEPH RESIDENCE ADU
3849 DE LA CRUZ BLVD, SANTA CLARA, CA 95054

ELEVATIONS

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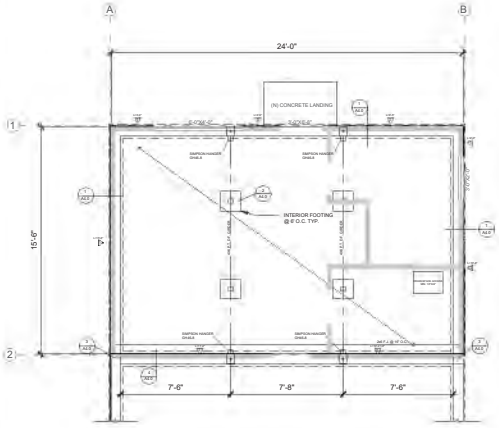
PROJECT

DATE 2/24/23

SHEET A 3.0



FOUNDATION/BRACED WALL PLAN
SCALE: 1/4" = 1'

FOUNDATION CONSTRUCTION NOTES:

1. Concrete shall be consolidated by suitable means during placement and shall be worked around embedded items and reinforcement and into corners of forms.
2. Forms shall be made of wood, steel, aluminum, plastic, a composite of cement and foam insulation, a composite of cement and wood chips, or other approved material suitable for supporting and containing concrete. Forms shall provide sufficient strength to contain concrete during the concrete placement operation.
3. Anchor bolts shall have a 4" minimum and a 12" maximum clearance to the end of the sill plate.
4. Anchor bolts shall not be spaced more than 48" on center with a minimum of (2) bolts for each piece of sill plate. Sill plate washer size shall be a minimum of 0.229"x3"x3"
5. Vertical and horizontal reinforcement shall be the longest lengths practical. Where splices are necessary in reinforcement, the length of lap splice shall be in accordance with CRC Table R608.5.4.(1)
6. Wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8" from the exposed ground shall be naturally durable wood or pressure treated.
7. Fasteners for pressure treated wood and fire-retardant-treated wood shall be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper.
8. Access shall be provided to all under-floor spaces and shall be a minimum of 18"x24".
9. The minimum net area of under-floor ventilation openings shall not be less than 1 square foot of each 150 square feet of under-floor area with one ventilation opening within 3 feet of each corner of the building. Openings for under floor ventilation shall be not less than 1-1/2 square feet for each 25 linear feet of exterior wall.
10. Floor joists, ceiling joists,and roof rafters shall be laterally supported at ends and at each support with solid blocking, except when the ends are nailed to a header, rim joist,or by other approved methods.

FOUNDATION DESIGN CRITERIA:

DEAD LOAD	= 10 PSF
LIVE LOAD	= 40 PSF
ROOF LIVE LOAD	=20 PSF
SOIL BEARING PRESSURE	=1500 PSF
LUMBER:	DOUG FIR #2 GRADE
COMPRESSIVE STRENGTH OF CONCRETE	= 2500 PSI
REINFORCEMENT BARS:	40 GRADE MIN.

SUB-FLOOR VENT CALCULATIONS

372 S.F. (SUBFLOOR AREA / 150) = 2.48S.F. OF VENT OPENING REQUIRED
8 14"X6" (.58 S.F. EA.) VENTS PER PLAN = 4.6 S.F.

SHEAR WALL SCHEDULE

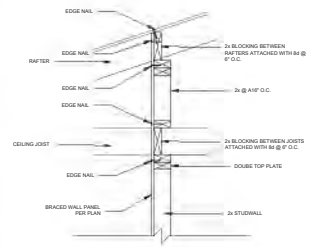
MARK	BRACED WALL PANEL	MATERIAL	NAILING	FRAMING CONNECTION
1	CS-WSP	3/8" PLYWD. CDX	8d COMMON: 6" O.C. EDGE 12" O.C. FIELD	SOLID BLOCKING BETWEEN RAFTERS. NAIL W/8d @ 6" O.C.

LEGEND:

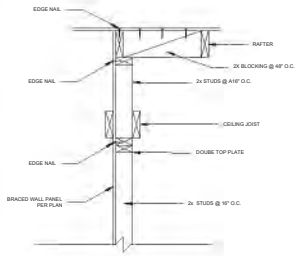
BRACED WALL PANEL LOCATION

A — BRACED WALL LINE

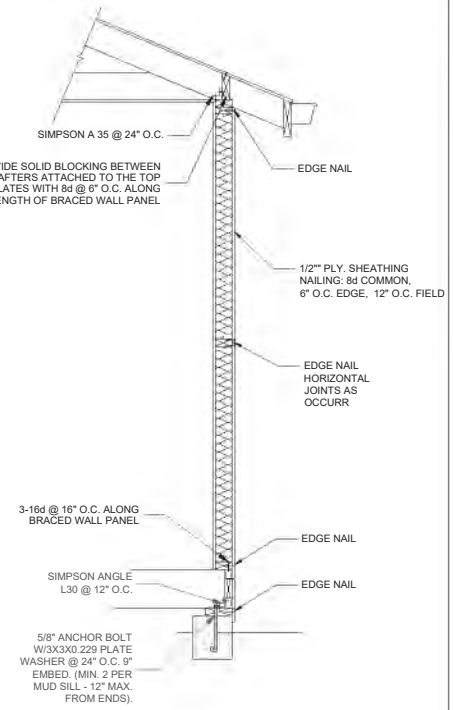
1 — BRACED WALL PANEL TYPE



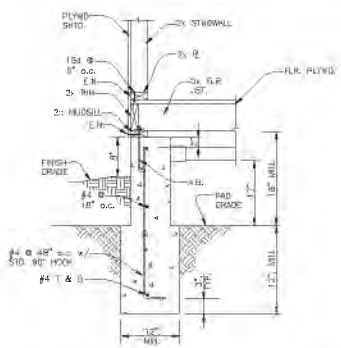
FULL HEIGHT INT. SHEARWALL PERPENDICULAR TO RAFTERS
N.T.S



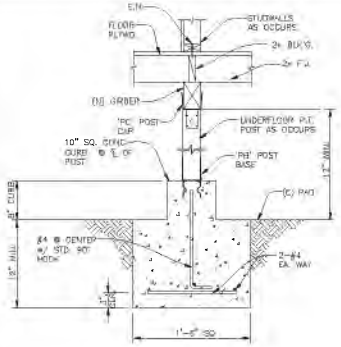
FULL HEIGHT INT. SHEARWALL PARALLEL TO RAFTERS
N.T.S



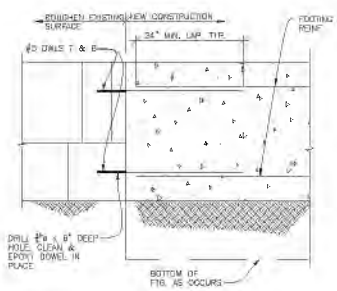
TYP. BRACED WALL PANEL/WSP
N.T.S



1 DETAIL
A4.0



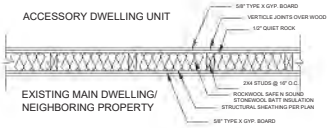
2 DETAIL
A4.0



3 DETAIL
A4.0

1 HR. FIRE WALL NOTES:

1. 1 HR. fire wall to consist of 5/8" type X UL classified gypsum board applied vertically, full height to underside of roof sheathing. Fasten to studs, top and bottom plates @ O.C. with type S screws.
2. No access between attic of (E) residence and ADU through firewall is allowed.
3. Wallboard joints covered with tape and joint compound, fastener heads covered with joint compound.
4. Fasteners shall not be spaced less than 3/8" from edges and ends of wall board
5. Fireblocking shall be provided in the following locations:
   - Vertically at the ceiling and floor levels
   - Horizontally at intervals not exceeding 10'(including concealed and furred wall spaces)
   - At interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, and cove ceilings
   - Fireblocking at openings around vents, pipes, ducts, cables and wires at ceiling and floor level, shall consist of an approved material to resist the free passage of flame and products of combustion (such as Touch 'n Seal Gun Foam II or fitted fire blocking caulk).



4 1 HR. FIRE RATED WALL
A4.0
N.T.S.

REVISION	DATE

Contractor:

JOSEPH RESIDENCE ADU
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FOUNDATION PLAN, BRACED WALL PLAN, DETAILS

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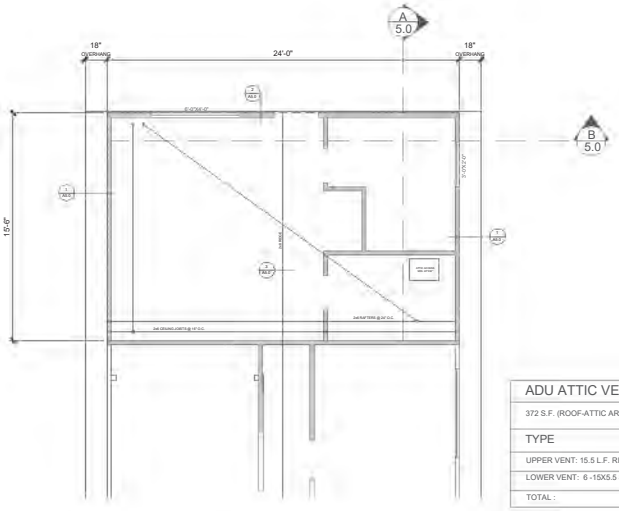
PROJECT

DATE 2/24/23

SHEET A 4.0

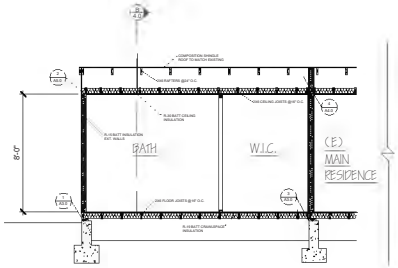


ROOF FRAMING PLAN
SCALE: 1/4" = 1'

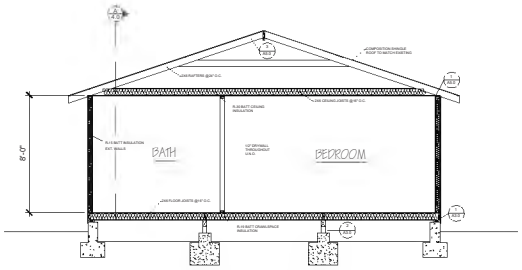
ADU ATTIC VENTILATION CALCULATIONS	
372 S.F. (ROOF-ATTIC AREA / 300) = 1.24 S.F. OF VENT OPENING REQUIRED*	
TYPE	OPENING
UPPER VENT: 15.5 L.F. RIDGE VENT @ 12.5 SQ. IN. PER L.F.	= 1.3 S.F.
LOWER VENT: 6 -15X5.5 SOFFIT VENT @ 43 SQ. IN. EA.	= 1.7 S.F.
TOTAL :	= 3.0 S.F.

*Not less than 40 percent and not more than 50 percent of the required ventilating area shall be provided by ventilators located in the upper portion of the attic or rafter space.

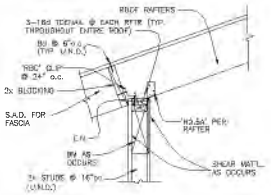
Ventilation openings in walls shall resist the intrusion of flame and embers into the structure or shall be screened with a corrosion resistant noncombustible wire mesh, opening shall be a minimum of 1/16" not to exceed 1/8" openings. These vents must be state approved. CRC R337.6.2



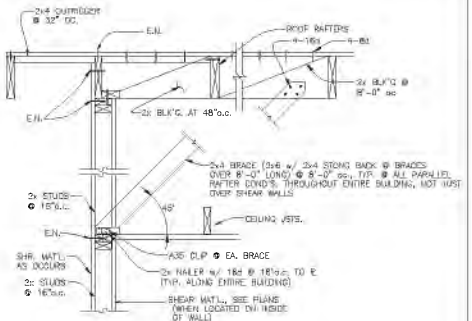
SECTION A
SCALE: 1/4" = 1'



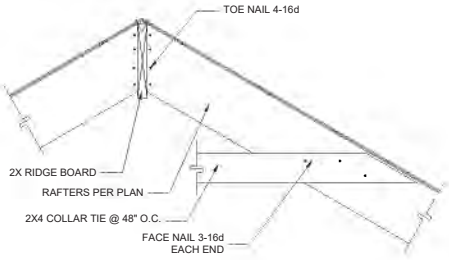
SECTION B
SCALE: 1/4" = 1'



1 A5.0 DETAIL



2 A5.0 DETAIL



3 A5.0 ROOF RIDGE AND COLLAR TIE
N.T.S.

REVISION	DATE

Contractor:

JOSEPH RESIDENCE ADU
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ROOF FRAMING PLAN, SECTIONS, DETAILS

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408-898-0446 James@constructionbuilder.com

PROJECT

DATE 2/24/23

SHEET A 5.0

Cal Green Mandatory Measures:

1. **Projects which disturb less than one acre of soil** and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.
   1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
   2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
   3. Compliance with a lawfully enacted storm water man-agement ordinance.
2. **Water conserving plumbing fixtures and fittings.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
   4.303.1.1 Water closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush.Tank-type water closets shall be certified to the perfor-mance criteria of the U.S. EPA Water Sense Specification for Tank type Toilets.
   Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.
   4.303.1.2 Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.
   4.303.1.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA Water Sense Specification for Showerheads.
   4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one shower head, the combined flow rate of all shower-heads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80psi, or the shower shall be designed to allow only one shower outlet to be i n operation at a time.Note: A hand-held shower shall be considered a shower head.
   4.303.1.4.1 Residential lavatory faucets. The maxi-mum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.
   4.303.1.4.4 Kitchen faucets. The maximum flow rateof kitchen faucets shall not exceed 1.8 gallons per min-ute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2gallons per minute at 60 psi, and must default to a max-imum flow rate of 1.8 gallons per minute at 60 psi
   Note: Where complying faucets are unavailable, aera-tors or other means may be used to achieve reduction.
   4.303.2 Standards for plumbing fixtures and fittings.Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.
3. **Outdoor potable water use in landscape areas**. After December 1, 2015, new residential developments with an aggregate landscape area equal to or greater than 500square feet shall comply with one of the following options:
   1. A local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO),whichever is more stringent; or
   2. Projects with aggregate landscape areas less than 2,500square feet may comply with the MWELO's Appendix D Prescriptive Compliance Option.
4. **Rodent proofing.** Annular spaces around pipes, elec-tric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, con-crete masonry or a similar method acceptable to the enforcing agency.
5. **Construction waste management**. Recycle and/orsalvage for reuse a minimum of 65 percent of the non hazard-ous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.
   Exceptions:
   1. Excavated soil and land-clearing debris
   2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the job site.
   3. The enforcing agency may make exceptions to the requirements of this section when isolated jobs sites are located in areas beyond the haul boundaries of the diversion facility
6. **Construction waste management plan**. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.
   1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
   2. Specify if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
   3. Identify diversion facilities where the construction and demolition waste material will be taken.
   4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
   5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.
7. **Waste management company**. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1
   Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.
8. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 pounds per square foot of the building area shall meet the minimum 65 percent construction waste reduction requirement in Section 4.408.1
9. Waste stream reduction alternative. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65-percent construction waste reduction requirement in Section 4.408.1
10. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Sec-tion 4.408.4
11. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building.
   1. Directions to the owner or occupant that the manual shall remain with the building throughout the lifecycle of the structure.
   2. Operation and maintenance instructions for the following:
      a. Equipment and appliances, including water-savingdevices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
      b. Roof and yard drainage, including gutters and down-spouts.
      c. Space conditioning systems, including condensers and air filters.
      d. Landscape irrigation systems.
      e. Water reuse systems.
   3. Information from local utility, water and waste recov-ery providers on methods to further reduce resource consumption, including recycle programs and loca-tions.
   4. Public transportation and/or carpool options available in the area.
   5. Educational material on the positive impacts of an interior relative humidity between 30–60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
   6. Information about water-conserving landscape and irrigation design and controllers which conserve water. 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
   8. Information on required routine maintenance mea-sures, including, but not limited to, caulking, painting,grading around the building, etc.
   9. Information about state solar energy and incentive programs available.
12. **Any installed gas fireplace shall be a direct vent sealed-combustion type.** Any installed woods stove or pellet stove shall comply with U.S. EPA New Source Perfor-mance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Wood stoves, pellet stoves and fire places shall also comply with applicable local ordinances.
13. **Covering of duct openings and protection of mechanical equipment during construction.** At the time of rough installation, during storage on the construction site and until final start up of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris, which may enter the system.
14. **Finish material pollutant control.** Finish materials shall comply with this section.
   Adhesives, sealants and caulks. Adhesives ,sealants and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:
   1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylenedichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.
   2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.
15. **Paints and coatings.** Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Non-flat or Non-flat-high Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Con-trol Measure, and the corresponding Flat, Non flat or Non-flat-high Gloss VOC limit in Table 4.504.3 shall apply.
16. **Aerosol paints and coatings.** Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1)and (f)(1) of California Code of Regulations, Title 17,commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management Dis-trict additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.
17. **Verification.** Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:
   1. Manufacturer's product specification.
   2. Field verification of on-site product containers.
18. **Carpet systems**. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:
   1. Carpet and Rug Institute's Green Label Plus Program.
   2. California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, Febru-ary 2010 (also known as Specification 01350.)
   3. NSF/ANSI 140 at the Gold level.4. Scientific Certifications Systems Indoor Advantage™
19. **Carpet cushion.** All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.
20. **Carpet adhesive.** All carpet adhesive shall meet the requirements of Table 4.504.1
21. **Resilient flooring systems.** Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall comply with one or more of the following:
   1. Products compliant with the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, "Version 1.1, February 2010 (also known as Specifica-tion 01350), certified as a CHPS Low-Emitting Mate-rial in the Collaborative for High Performance Schools(CHPS) High Performance Products Database.
   2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools pro-gram).
   3. Certification under the Resilient Floor Covering Insti-tute (RFCI) Floor Score program.
   4. Meet the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1,February 2010 (also known as Specification 01350).
22. **Composite wood products.** Hardwood plywood,particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified inARB's Air Toxics Control Measure for Composite Wood (17CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5.
   Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:
   1. Product certifications and specifications.
   2. Chain of custody certifications.
   3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17,Section 93120, et seq.).
   4. Exterior grade products marked as meeting the PS-1or PS-2 standards of the Engineered Wood Associa-tion, the Australian AS/NZS 2269, European 6363S, and Canadian CSA O121, CSA O151, CSAO153 and CSA O325 standards.
   5. Other methods acceptable to the enforcing agency.
23. **Concrete slab foundations.** Concrete slab foundations required to have a vapor retarder by the California Building Code, Chapter 19 or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.
   Capillary break. A capillary break shall be installed in compliance with at least one of the following:
   1. A 4-inch-thick (101.6 mm) base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor retarder in direct contact with concrete and concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute,ACI 302.2R-06.
   2. Other equivalent methods approved by the enforcing agency.
   3. A slab design specified by a licensed design professional.
24. **Moisture content of building materials.** Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19-percent moisture content.Moisture content shall be verified in compliance with the following:
   1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
   2. Moisture readings shall be taken at a point 2 feet (610mm) to 4 feet (1219 mm) from the grade stamped end of each piece to be verified.
   3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.
   4. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.
25. **Bathroom exhaust fans**. Each bathroom shall be mechanically ventilated and shall comply with the following:
   1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
   2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
      a. Humidity controls shall be capable of adjustment between a relative humidity range of ≤ 50 percent to a maximum of 80 percent. A humidity control may utilize manual or automatic means of adjustment.
      b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in).
      Notes:
      1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower, or tub/shower combination.
      2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.
26. **Heating and air-conditioning system design.** Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods:
   1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J—2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
   2. Duct systems are sized according to ANSI/ACCA 1Manual D—2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
   3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S—2014 (Residential Equipment Selection) or other equivalent design software or methods.
   Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.

REVISION	DATE

Contractor:

JOSEPH RESIDENCE ADU
3849 DE LA CRUZ BLVD, SANTA CLARA, CA 95054

CALGREEN REQUIREMENTS

James
Watson
Residential Drafting and Design
1183 Alice Drive, Santa Clara, CA 95050
408-858-0646 Jameswconstruction@yahoo.com

PROJECT

DATE 2/24/23

SHEET CG 1

City of Santa Clara
The Center of What's Possible

Building Division: 408-615-2440
Email: Building@santaclaraca.gov
Permit Center: 408-615-2420
Email: PermitCenter@santaclaraca.gov
Automated Inspection Scheduling System: 408-615-2400

2022 CALIFORNIA GREEN BUILDING STANDARD CODE (CGC) RESIDENTIAL CHECKLIST

New residential buildings shall be designed to include the green building mandatory measures specified in this checklist. This checklist shall also be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to the specific area of the addition or alteration.

BUILDING PERMIT NO.: BLD2
ADDRESS: 1183 Alice Drive

Feature or Measure	MANDATORY MEASURES SPECIFIED (Please check boxes below) Yes
SITE DEVELOPMENT (CGC 4.106)	
Storm water drainage and retention during construction. A plan shall be developed and shall be implemented to manage storm water drainage during construction per CGC 4.106.2.	✓
Grading and paving. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings per CGC 4.106.3.	✓
Electric vehicle (EV) charging for new one- and two- family dwellings and town-houses with attached private garages and/or parking spaces not assigned to a dwelling unit, and ADU/JADU without additional parking but with electrical panel upgrades or new panels. Provide capability for electric vehicle charging with minimum required Level 1 EV Ready, Level 2 EV Ready, Low Power Level 2 EV Ready as specified in CGC 4.106.4.1 as amended by City of Santa Clara Reach Code Ordinance No.2056 (CSC 2023 Reach Code) section 15.38.040. *Identification*: The raceway termination location shall be permanently and visibly marked as "Level 2 EV-READY" per CGC 4.106.4.1.1 as amended by CSC 2023 Reach Code section 15.38.040.	✓
Electric vehicle (EV) charging for new multifamily dwellings, affordable housing, hotels, motels, and new residential parking facilities. Provide electric vehicle infrastructure and capability for electric vehicle charging with minimum required Level 2 EV Charger, Level 1 EV Ready, Level 2 EV Ready, Low Power Level 2 EV Ready, EV Capable as specified in CSC 2023 Reach Code section 15.38.040 and *2022 California Green Code* section 4.106.4.2, whichever is more stringent.	☐
110v Electrical Outlet at Bicycle Parking: All multifamily residential developments shall include secured bicycle parking with 110v electrical outlets per CSC 2023 Reach Code section 15.38.040.	☐
Location: EVCS shall be located adjacent to an accessible parking space, and/or on an accessible route, per CGC 4.106.4.2.2.1.1.	☐
Dimension: Each EV ready space or EVCS shall be minimum 18 ft long and 9 ft wide. One in every 25 charging spaces, but not less than one, shall have an 8 ft wide access aisle. A 5 ft wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet. Surface slope for this EV space and the aisle shall not exceed 2.083% slope in any direction, per CGC 4.106.4.2.2.1.2.	☐
Accessibility: EV Ready and EVCS spaces shall comply with the accessibility provision for EV Charging stations in *California Building Code* Chapter 11A (section 1109A) and Chapter 11B, per CGC 4.106.4.2.2.1.3.	☐
EV Ready Space Signage: EV ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Marking) or its successor(s), per CGC 4.106.4.2.5.	☐
Automatic load management system (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, per CGC 4.106.4.2.2 as amended by CSC 2023 Reach Code section 15.38.040.	☐

BLD Permit No.:______________

Feature or Measure	Yes
Electric vehicle (EV) charging for additions or alterations of parking facilities serving existing multifamily buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, minimum 10% of total added/altered parking spaces shall be electrical vehicle charging spaces capable of supporting future Level 2 electric vehicle supply equipment (EVSE) per CGC 4.106.4.3.	☐
ENERGY EFFICIENCY (CGC 4.201)	
California Energy Code. The building's construction shall meet or exceed the requirements of the 2022 *California Building Energy Efficiency Standards* per CGC 4.201.1.	✓
WATER EFFICIENCY AND CONSERVATION	
INDOOR WATER USE (CGC 4.303)	
Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets, showerheads, pre-rinse spray valves) shall comply with the prescriptive requirements of Section 4.303.1.1 through 4.303.1.4.5.	✓
Water closets: The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (CGC 4.303.1.1).	✓
Urinals: The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush, and all other urinals shall not exceed 0.5 gallons per flush (CGC 4.303.1.2).	☐
Showerheads. The flow rate for single showerhead and multiple showerheads serving one shower shall not exceed 1.8 gallons per minute at 80 psi and shall be certified to the performance criteria of the U.S. EPA WaterSense Specification (CGC 4.303.1.3).	✓
Residential lavatory faucets. The flow rate shall not be more than 1.2 gallons per minute at 60 psi, and not less than 0.8 gallons per minute at 20 psi (CGC 4.303.1.4.1).	✓
Lavatory faucets in common and public use areas. The flow rate shall not exceed 0.5 gallons per minute at 60 psi (CGC 4.303.1.4.2).	☐
Metering Faucets. The flow rate shall not deliver more than 0.2 gallons per cycle (CGC 4.303.1.4.3).	☐
Kitchen Faucets. The flow rate shall not exceed 1.8 gallons per minute at 60 psi (CGC 4.303.1.4.4).	✓
Pre-rinse Spray Valves. When installed, shall meet the requirements of Title 20 of the *California Code of Regulations*, and shall be equipped with an integral automatic shutoff (CGC 4.303.1.4.5).	☐
Submeters for multifamily buildings and dwelling units in mixed-use residential/commercial buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code* per CBC 4.303.2.	☐
Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* per CGC 4.303.3.	✓
OUTDOOR WATER USE (CGC 4.304)	
Outdoor potable water use in landscape areas. Residential developments shall comply with the City's Water Service and Use Rules and Regulations, Item No. 24, as adopted by Santa Clara City Code Section 13.15.180, or the California Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent, per CGC 4.304.1.	✓
ENHANCED DURABILITY AND REDUCED MAINTENANCE (CGC 4.406)	
Rodent proofing. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be rodent proofed by closing such openings with cement mortar, concrete masonry, or similar method acceptable to the City per CGC 4.406.1.	✓
CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING (CGC 4.408)	
Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of nonhazardous construction and demolition waste in accordance with Section 4.408.2, 4.408.3, or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance (CGC 4.408.1).	✓
BUILDING MAINTENANCE AND OPERATION (CGC 4.410)	
An operation and maintenance manual shall be provided to the building occupant or owner per CGC 4.410.1.	✓

BLD Permit No.:______________

Feature or Measure	Yes
Recycling by occupants. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible areas that serve all buildings on the site and are identified for depositing, storage and collection of nonhazardous materials for recycling per CGC 4.410.2.	☐
ENVIRONMENTAL QUALITY (CGC 4.503)	
Gas fireplace. Any installed gas fireplaces shall be a direct-vent sealed-combustion type per CGC 4.503.1.	☐
Woodstoves. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance standards (NSPS) emission limits as applicable and shall have a permanent label indicating they are certified to meet the emission limits per CGC 4.503.1. Woodstoves and pellet stoves shall also comply with Santa Clara City Code Chapter 15.65.	☐
POLLUTANT CONTROL (CGC 4.504)	
Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal, or other methods acceptable to the City to reduce the amount of water, dust or debris, which may enter the system per CGC 4.504.1.	✓
Adhesives, sealants and caulks shall meet the VOC or other toxic compound limits per CGC 4.504.2.1.	✓
Paints, stains and other coatings shall comply with VOC limits per CGC 4.504.2.2.	✓
Aerosol paints and coatings shall meet the product-weighted MIR limits for ROC and other requirements per CGC 4.504.2.3.	✓
Verification. Documentation shall be provided, at the request of the Building Division, to verify that compliant VOC-limit finish materials have been used per CGC 4.504.2.4.	✓
Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of CGC 4.504.3.	✓
Resilient flooring systems. Where resilient flooring is installed, at least 80% of the floor area receiving resilient flooring shall comply with the requirements of CGC 4.504.4.	✓
Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall comply with low formaldehyde emissions standards and requirements per CGC 4.504.5.	✓
INTERIOR MOISTURE CONTROL (CGC 4.505)	
Concrete slab foundations. Vapor retarder and capillary break shall be installed if a slab-on-grade foundation system is used. The use of a 4" thick base of ½" or larger clean aggregate under a 10-mil vapor retarder with joints lapped not less than 6" shall be provided per CGC 4.505.2, CRC R506.2.2, CRC R506.2.3 and CBC Section 1805.	✓
Moisture content of building material. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Moisture content shall be checked prior to finish material being applied per CGC 4.505.3.	✓
INDOOR AIR QUALITY AND EXHAUST (CGC 4.506)	
Bathroom exhaust fans. Each bathroom shall be mechanically ventilated using ENERGY STAR compliant fans ducted to the exterior and equipped with humidity controls system per CGC 4.506.1.	✓
ENVIRONMENTAL COMFORT (CGC 4.507)	
Heating and air-conditioning system shall be sized, designed and have their equipment selected using the following methods per CGC 4.507.2: 1. Heat Loss/Heat Gain values in accordance with ANSI/ACCA 2 Manual J-2010, ASHRAE handbook or equivalent. 2. Duct systems are sized according to ANSI/ACCA 1 Manual D-2016, ASHRAE handbook or equivalent. 3. Select heating and cooling equipment in accordance with ANSI/ACCA 3 Manual S-2014 or equivalent.	✓
INSTALLER AND SPECIAL INSPECTOR QUALIFICATION (CGC 702)	
Installer training. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a recognized training or certification program per CGC 702.1.	✓
Special inspection. Special inspectors employed by the City must be qualified and able to demonstrate competence in the discipline they are inspecting per CGC 702.2.	✓

BLD Permit No.:______________

Feature or Measure	Yes
VERIFICATION (CGC 703)	
Documentation. Upon request, verification of compliance with this code may include construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the building department which will show substantial conformance per CGC 703.1.	✓

Responsible Designer's Declaration Statement	Contractor Declaration Statement
I hereby certify that this project has been designed to meet the requirements of the 2022 California Green Building Standards Code.	I hereby certify, as the builder or installer under the permit listed herein, that this project will be constructed to meet the requirements of the California Green Building Standards Code.
Name: James Watson	Name:
Signature:	Signature:
Date: 2/15/23	Date:
Company: Residential Drafting & Design	License:
Address: 1183 Alice Drive	Address:
City: Santa Clara State: CA Zip: 95050	City: State: Zip:

REVISION	DATE

Contractor:
Plateau Building Group, Inc.
523 Irving Ave
San Jose, CA 95128
Lic# 915940

JOSEPH RESIDENCE ADU
3849 DE LA CRUZ BLVD, SANTA CLARA, CA 95054

CALGREEN CHECKLIST

James Watson
Residential Drafting and Design
1183 Alice Drive, Santa Clara, CA 95050
408-858-0646 Jameswconstruction@yahoo.com

PROJECT

DATE 2/24/23

SHEET CG 2

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01E (Page 1 of 12)

Calculation Date/Time: 2023-03-17T14:12:43-07:00
Input File Name: 0230160 Joseph Residence & ADU.ribd22x

...dence & ADU			
...lysis			
...Cruz Blvd			
	05	Standards Version	2022
	07	Software Version	EnergyPro 9.1
	09	Front Orientation (deg/ Cardinal)	240
...y	11	Number of Dwelling Units	1
...d/or Alteration	13	Number of Bedrooms	4
	15	Number of Stories	1
	17	Fenestration Average U-factor	0.3
	19	Glazing Percentage (%)	17.00%

...e field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
...Features shown below

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01E (Page 2 of 12)

Project Name: Joseph Residence & ADU — Calculation Date/Time: 2023-03-17T14:12:43-07:00
Calculation Description: Title 24 Analysis — Input File Name: 0230160 Joseph Residence & ADU.ribd22x

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0	31.94	0	32.32	0	-0.38
Space Cooling	0	71.11	0	70.5	0	0.61
IAQ Ventilation	0	1.58	0	1.58	0	0
Water Heating	0	74.49	0	74.49	0	0
Self Utilization/Flexibility Credit						
Efficiency Compliance Total	0	178.12	0	178.89	0	0.23
Photovoltaics				0		
Battery				0		
Flexibility						
Indoor Lighting	0	7.61	0	7.61		
Appl. & Cooking	0	37.82	0	37.8		
Plug Loads	0	48.61	0	48.61		
Outdoor Lighting	0	1.75	0	1.75		
TOTAL COMPLIANCE	0	274.01	0	274.66		

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01E (Page 3 of 12)

ENERGY USE INTENSITY

	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Compliance Margin (kBtu/ft² - yr)	Margin Percentage
Gross EUI[1]	47.02	47.08	-0.06	-0.13
Net EUI[2]	47.02	47.08	-0.06	-0.13

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- New ductwork added is less than 25 ft. in length
- Variable capacity heat pump compliance option (verification details from VCHP Staff report, Appendix B, and RA3)

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry.

- Indoor air quality ventilation
- Kitchen range hood
- Verified Refrigerant Charge
- Airflow in habitable rooms (SC3.1.4.1.7)
- Verified heat pump rated heating capacity
- Wall-mounted thermostat in zones greater than 150 ft2 (SC3.4.5)
- Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)
- Duct Sealing required if a duct system component, plenum, or air handling unit is altered

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Joseph Residence & ADU	1364.4	1	4	2	0	1

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — (Page 4 of 12)

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
Main House	Conditioned	HVAC System1	998.4	8	DHW Sys 1	Existing Unch...
ADU	Conditioned	HVAC System2	366	8	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
Front Wall	Main House	R-0 Wall	240	Front	192	50	90	none	Existing
Left Wall	Main House	R-0 Wall	330	Left	348	51.3	90	none	Existing
Right Wall	Main House	R-0 Wall	150	Right	[illegible]	[illegible]	90	none	Existing
Left Wall 2	ADU	R-15 Wall	[illegible]	Left	[illegible]	[illegible]	90	Extension	New
Rear Wall	ADU	R-15 Wall	[illegible]	Back	[illegible]	[illegible]	90	none	New
Right Wall 2	ADU	R-15 Wall	150	Right	124	6	90	Extension	New
Interior Surface	ADU>>Main House	R-13 Wall	n/a	n/a	192	17.6	n/a		New
Roof	Main House	R-19 Roof Attic	n/a	n/a	998.4	n/a	n/a		Existing
Roof 2	ADU	R-30 Roof Attic	n/a	n/a	366	n/a	n/a		New
Raised Floor	Main House	R-0 Floor Crawlspace	n/a	n/a	998.4	n/a	n/a		Existing
Raised Floor 2	ADU	R-19 Floor Crawlspace	n/a	n/a	366	n/a	n/a		New

ATTIC

01	02	03	04	05	06	07	08	09
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status
Attic Main House	Attic RoofMain House	Ventilated	4	0.1	0.85	No	No	Existing

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01E (Page 6 of 12)

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
Window 6	Window	Rear Wall	Back	60			1	24	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
Window 7	Window	Right Wall 2	Right	150			1	6	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

OPAQUE DOORS

01	02	03	04	05	06
Name	Side of Building	Area (ft²)	U-factor	Status	Verified Existing Condition
Door 4	Interior Surface	17.6	0.5	New	n/a

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-0 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.361	Inside Finish: Gypsum Board; Cavity / Frame: no insul. / 2x4; Exterior Finish: 3 Coat Stucco
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.095	Inside Finish: Gypsum Board; Cavity / Frame: R-15 / 2x4; Exterior Finish: 3 Coat Stucco
R-13 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.082	Inside Finish: Gypsum Board; Cavity / Frame: R-13 / 2x4; Other Side Finish: Gypsum Board
Attic RoofMain House	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle); Roof Deck: Wood Siding/sheathing/decking; Cavity / Frame: no insul. / 2x4

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01E (Page 7 of 12)

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Attic RoofADU	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle); Roof Deck: Wood Siding/sheathing/decking; Cavity / Frame: no insul. / 2x4
R-0 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-0	None / None	0.22	Floor Surface: Carpeted; Floor Deck: Wood Siding/sheathing/decking; Cavity / Frame: no insul. / 2x6
R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.049	Floor Surface: Carpeted; Floor Deck: Wood Siding/sheathing/decking; Cavity / Frame: R-19 / 2x6
R-19 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O.C.	R-19	None / None	0.049	Over Ceiling Joists: R-9.9 insul.; Cavity / Frame: R-9.1 / 2x4; Inside Finish: Gypsum Board
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul.; Cavity / Frame: R-9.1 / 2x4; Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — (Page 8 of 12)

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)	Status	Verified Existing Condition
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)	Existing	No

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location	Status
DHW Heater 1	Gas	Small Storage	1	50	EF	0.6	Btu/Hr	75000	0	80	n/a		Existing

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition
HVAC System1	Heating and cooling system other	Heating Component 1	1	Cooling Component 1	1	HVAC Fan 1	Air Distribution System 1	n/a	Existing	No

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01E (Page 10 of 12)

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 2-hers-htpump	Not Required	0	Not Required	Not Required	Yes	No	Yes	Yes

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09	10
Name	Certified Low-Static VCHP System	Airflow to Habitable Rooms	Ductless Units in Conditioned Space	Wall Mount Thermostat	Air Filter Sizing & Pressure Drop Rating	Low Leakage Ducts in Conditioned Space	Minimum Airflow per RA3.3 and SC3.3.3.4.1	Certified non-continuous Fan	Indoor Fan not Running Continuously
Heat Pump System 2	Not required	Required	Required	Required	Not required	Not required	Not required	Not required	Not required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Design Type	Duct Ins. R-value Supply	Duct Ins. R-value Return	Duct Location Supply	Duct Location Return	Surface Area Supply	Surface Area Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution System	New Ducts 25 ft
Air Distribution System 1	Unconditioned attic	Non-Verified	R-4.2	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distribution System 1-hers-dist	Existing + New	No		No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.58	HVAC Fan 1-hers-fan

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — CF1R-PRF-01E (Page 11 of 12)

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Not Required	0

INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam ADU IAQVentRpt	20	0.35	Exhaust	No	n/a	No	Yes	

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — (Page 12 of 12)

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Adam Bailey	Documentation Author Signature: *Adam Bailey*
Company: FRI Energy Consultants, LLC.	Signature Date: 2023-03-17 14:19:31
Address: 21 N. Harrison Ave.	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Campbell, CA 95008	Phone: 408-866-1620

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations...
3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name: Adam Bailey	Responsible Designer Signature: *Adam Bailey*
Company: FRI Energy Consultants, LLC.	Date Signed: 2023-03-17 14:19:31
Address: 21 N. Harrison Ave.	License: N/A
City/State/Zip: Campbell, CA 95008	Phone: 408-866-1620

Digitally signed by CalCERTS. This digital signature is provided in order to secure the content of the registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

Easy to Verify at CalCERTS...

2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.
(04/2022)

Building Envelope:

§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped. *
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Roof Deck, Ceiling and Rafter Roof Insulation.** Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. *
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45, or area-weighted average U-factor of all fenestration must not exceed 0.45. *

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-§ 110.3:	**Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission. *
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

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2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters. *
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(j)2:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location, and a condensate drain no more than 2" higher than the base of the water heater.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

Ducts and Fans:

§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼", if mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses.** Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-iii.
§ 150.0(o)1G:	**Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Giii,enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.** The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves. *

Lighting:

§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(l). *

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls.** In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers.** Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	**Independent controls.** Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110.10(b)1A:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment. *
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(s)	**Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	**Heat Pump Space Heater Ready.** Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u)	**Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Clothes Dryer Ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.

5/6/22

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name: Joseph Residence & ADU — Date: 3/17/2023
System Name: HVAC System — Floor Area: 998

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	40,000
Total Output (Btuh)	40,000
Output (Btuh/sqft)	40.1
Cooling System	
Output per System	36,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	36.1
Total Output (sqft/Ton)	332.8
Air System	
CFM per System	0
Airflow (cfm)	0
Airflow (cfm/sqft)	0.00
Airflow (cfm/Ton)	0.0
Outside Air (%)	0.0%
Outside Air (cfm/sqft)	0.00
Note: values above given at ARI conditions	

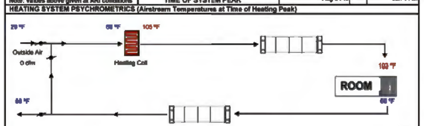
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	1,561	30,248	343	614	23,121
Return Vented Lighting		0			
Return Air Ducts		1,372			1,284
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		0			0
Supply Air Ducts		1,372			1,284
TOTAL SYSTEM LOAD		32,992	343		25,689

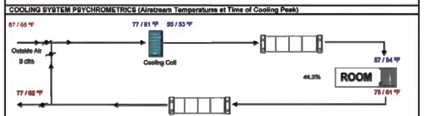
HVAC EQUIPMENT SELECTION

Furnace - A/C	34,314	0		40,000
Total Adjusted System Output (Adjusted for Peak Design conditions)	34,314	0		40,000
TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name: Joseph Residence & ADU — Date: 3/17/2023
System Name: HVAC System — Floor Area: 366

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	12,000
Total Output (Btuh)	12,000
Output (Btuh/sqft)	32.6
Cooling System	
Output per System	12,000
Total Output (Btuh)	12,000
Total Output (Tons)	1.0
Total Output (Btuh/sqft)	32.8
Total Output (sqft/Ton)	366.0
Air System	
CFM per System	0
Airflow (cfm)	0
Airflow (cfm/sqft)	0.00
Airflow (cfm/Ton)	0.0
Outside Air (%)	0.0%
Outside Air (cfm/sqft)	0.00
Note: values above given at ARI conditions	

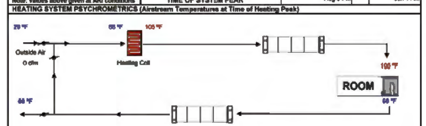
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	196	4,210	126	100	3,989
Return Vented Lighting		0			
Return Air Ducts		0			0
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		0			0
Supply Air Ducts		0			0
TOTAL SYSTEM LOAD		4,210	126		3,989

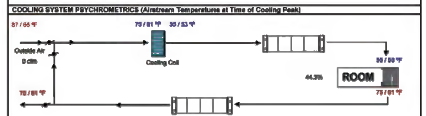
HVAC EQUIPMENT SELECTION

Ductless Heat Pump	11,320	0		8,117
Total Adjusted System Output (Adjusted for Peak Design conditions)	11,320	0		8,117
TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



FRI Energy Consultants, LLC
21 N. Harrison Avenue, Suite 210
Campbell, Ca. 95008
Phone: 408-866-1620 Fax: 408-866-6832

JOSEPH RESIDENCE & ADU
3849 DE LA CRUZ BLVD
SANTA CLARA, CA 95054

T24-2

Attachment 2: Project Data

3849 De La Cruz

Lot Size: 6442 sq. ft.			
	Existing Floor Area (sq. ft.)	**Proposed New Construction (sq. ft.)**	**Proposed Floor Area (sq. ft.)**
First Floor	n/a	n/a	n/a
Second Floor	n/a	n/a	n/a
Garage	n/a	n/a	n/a
ADU	None	366	366
Gross Floor Area	1352	366	1691
Lot Coverage	1352/6442=22%	+366 sqft	1691/6442=26%
Flood Zone	X		

23-555 **Agenda Date: 5/10/2023**

REPORT TO DEVELOPMENT REVIEW HEARING

SUBJECT

Action on a 982 square-foot second story addition, 238 squarefoot first floor addition, and 1,030 square feet remodel. (CEQA: Class 1 Categorical Exemption 15301(e)(1), Existing Facilities)

File No.(s): **PLN23-00109**
Location: **74 Woodhams Road,** a 6,264 square foot lot located at the northwest corner of Woodhams Street and McKinley Drive, approximately 512 feet north of Stevens Creek Boulevard; APN: 296-12-031; property is zoned Single-Family Residential (R1-6L)
Applicant: Leo Chuang, Studio Aioli
Owner: Yusuke and Winnie Chan Yamakita
Request: **Architectural Review** for the 982 square feet second story addition, 238 square feet first floor addition, and 1,030 square feet remodel resulting in a 2,893 square-foot residence

Project Data

The Project Data Table is included as Attachment 2.

Points for Consideration

- The existing residence is one-story with 3 bedrooms, 2 bathrooms, kitchen, living space, and an attached two-car garage.
- The proposal involves a 982 square foot second story addition, 238 square foot first floor addition, and 1,030 square feet remodel of the existing residence resulting in a 2,893 square-foot two-story residence with 4 bedrooms, 3 bathrooms, kitchen, living space, and an attached 2-car garage.
- The proposed second story provides a 5-foot front step back.
- The proposed second story does not provide a rear or side stepback, but the extended eaves in the rear and interior side create the appearance of a stepback.
- The space above the living room is a double-height space; however, it is designed so that the first floor does not appear as two-stories tall from the exterior.
- Windows on the interior side façade are frosted to maintain privacy.
- The proposed project complies with the R1-6L development standards; is generally consistent with the Single-Family Residential Design Guidelines; and is compatible with neighboring homes along the streetscape.
- A neighborhood notice was distributed within a 300-foot radius of the subject site for this project review.
- There are no active code enforcement cases for this property.

Findings

1) *That any off-street parking area, screening strips and other facilities and improvements necessary to secure the purpose and intent of this title and the general plan of the City are a part of the proposed development, in that;*
    - The proposal provides the required two covered parking spaces within the existing 418 square foot two car garage.
    - The required parking spaces are not located in the required front yard or side yard landscaped areas.
2) *That the design and location of the proposed development is such that it is in keeping with the character of the neighborhood and is such as not to be detrimental to the harmonious development contemplated by this title and the general plan of the City, in that;*
    - The proposed two-story residence resulting in four bedrooms and three bathrooms would not create traffic congestion or hazards.
    - Public streets are adequate in size and design to serve the proposed single-family residence, and the use will not create a substantive increase in traffic.
3) *That the design and location of the proposed development is such that it is in keeping with the character of the neighborhood and is such as not to be detrimental to the harmonious development contemplated by this title and the general plan of the City, in that;*
    - The proposed development is a two-story residence that is consistent with the scale and design similar to that of the existing surrounding neighborhood which consists of both one- and two-story residences with tract style and contemporary architecture.
    - The project complies with the R1-6L development standards for new construction.
    - The proposed second story addition does not provide a minimum three to five feet step-back in the side and rear elevation of the residence, which is inconsistent with the City's Single-Family Design Guidelines. However, the project extends the eaves of the first floor to create the appearance of a 3-foot step-back and the second story is stepped back from the front façade of the garage.
4) *That the granting of such approval will not, under the circumstances of the particular case, materially affect adversely the health, comfort or general welfare of persons residing or working in the neighborhood of said development, and will not be materially detrimental to the public welfare or injuries to property or improvements in said neighborhood, in that;*
    - The project is subject to the California Building Code and City Code requirements, which serve to regulate new construction to protect public health, safety, and general welfare.
5) *That the proposed development, as set forth in the plans and drawings, are consistent with the set of more detailed policies and criteria for architectural review as approved and updated from time to time by the City Council, which set shall be maintained in the planning division office. The policies and criteria so approved shall be fully effective and operative to the extent as if written into and made a part of this title, in that;*
    - The proposal project is generally consistent with the City's Residential Design Guidelines and compatible scale and character with the housing types that are typical in the neighborhood.
    - The proposed second story addition does not provide an upper story step-back in the side and rear, which is inconsistent with the City's Single-Family Design Guidelines. However, the project extends the eaves of the first floor to create the appearance of a 3 -foot step-back and the second story is stepped back from the front façade of the garage

Conditions of Approval

1) Permit Expiration. This Architectural Permit shall automatically be revoked and terminated if not used within two years of original grant or within the period of any authorized extensions thereof. The date of granting of this Permit is the date this Permit is approved by the Development Review Officer.
2) Prior to the issuance of Building Permit, the development of the site and all associate improvements shall conform to the approved plans with File No. **PLN23-00109**, on file with the Community Development Department, Planning Division.
3) The garage shall be maintained free and clear for vehicle parking use at all times. It shall not be used only for storage.
4) Landscaping installation shall meet City water conservation criteria in a manner acceptable to the Director of Community Development.
5) Maintain the front yard landscaping between the house and sidewalk. New landscape areas of 500 square feet or more or rehabilitated landscape areas of 2,500 square feet or more shall conform to the California Department of Water Resources Water Efficient Landscape Ordinance.
6) Developer/Owner is responsible for collection and pick-up of all trash and debris on-site and adjacent public right-of-way.
7) Construction activity shall be limited to the hours of 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. Saturdays for projects within 300 feet of a residential use and shall not be allowed on recognized State and Federal holidays.
8) Incorporate Best Management Practices (BMPs) into construction plans and incorporate post construction water runoff measures into project plans in accordance with the City's Urban Runoff Pollution Prevention Program standards prior to the issuance of permits.

ENVIRONMENTAL REVIEW

Categorical Exemption per CEQA 15301(e)(1), Existing Facilities in that the project is limited to a small addition to the existing single-family residence.

PUBLIC CONTACT

On April 27, 2023, a notice of public hearing of this item was posted 300 feet of the project site and mailed to property owners within 300 feet of the project site. Public comments received on this item are attached to this report.

RECOMMENDATION

Approve the 982 square feet second story addition, 238 square feet first floor addition, and 1,030 square feet remodel of the existing residence at 74 Woodhams Road, subject to conditions.

Prepared by: Meha Patel, Assistant Planner, Community Development
Approved by: Lesley Xavier, Planning Manager, Community Development

ATTACHMENTS

1. Development Plans
2. Project Data

ABBREVIATIONS

Abbreviation	Meaning
A	
AB	ANCHOR BOLT
ABV	ABOVE
A/C	AIR CONDITIONING
AC	ASPHALTIC CONCRETE
ACOUST	ACOUSTICAL
ADA	AMERICANS WITH DISABILITIES ACT
ADH	ADHESIVE
ADJ	ADJACENT
ADJUST	ADJUSTABLE
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
AGGR	AGGREGATE
AISC	AMERICAN INST. OF STEEL CONST.
ALUM	ALUMINUM
ALT	ALTERNATE
ANC	ANCHOR
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECT
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING MAT.
AWG	AMERICAN WIRE GAUGE
B	
B. CAB	BASE CABINET
BD	BOARD
BEL	BELOW
BFF	BELOW FINISH FLOOR
BITUM	BITUMINOUS
B.L.	BUILDING LINE
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLT	BOLT
BM	BEAM
B.M.	BENCH MARK
BOT	BOTTOM
BRG	BEARING
BRK	BRICK
BS	BOTH SIDES
BSMT	BASEMENT
BUR	BUILT-UP BITUMINOUS ROOF
BW	BOTH WAYS
C	
CAB	CABINET
C.B.	CATCH BASIN
C.C.	CENTER-TO-CENTER
CER	CERAMIC
CEM	CEMENT
CF	CUBIC FEET
C.G.	CORNER GUARD
CHAM	CHAMFER
C.I.	CAST IRON
C.I.P. CONC	CAST IN PLACE CONCRETE
C.J.	CONTROL JOINT
CL.	CENTERLINE
CLF.	CHAIN LINK FENCE
CLG	CEILING
CLG. JST.	CEILING JOIST
CLKG	CAULKING
CLR	CLEAR
C.M.U.	CONCRETE MASONRY UNIT
C.O.	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRUGATED
COTG	CLEANOUT TO GRADE
CSMT	CASEMENT
CS	COUNTERSINK
CTR	CENTER
CTSK	COUNTERSUNK SCREW
CW	COLD WATER
CY	CUBIC YARD
D	
DP	DAMPPROOFING
DET	DETAIL
D.F.	DRINKING FOUNTAIN
DIAG	DIAGONAL
DIA	DIAMETER
DIM	DIMENSION
DW	DISHWASHER
DISP	DISPOSAL
DIV	DIVIDER
DR	DOOR
DO, DBL	DOUBLE
DBS	DOUBLE STRENGTH
DN, D	DOWN
DS	DOWNSPOUT
DR	DRAIN
D.I.	DRAIN INLET
D.I.P.	DUCTILE IRON PIPE
DWG, DRWG	DRAWING
E	
EA.	EACH
E.	EAST
EDF	ELECTRIC DRINKING FOUNTAIN
EIFS	EXTERIOR INSULATION FINISH SYSTEM
E.J.	EXPANSION JOINT
ELECT, ELEC	ELECTRICAL
ELEV, EL	ELEVATION
EMPL	EMPLOYEE
ENCLOS	ENCLOSURE
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EQ	EQUAL
EQUIP	EQUIPMENT
EXH	EXHAUST
EXIST. (E)	EXISTING
EXT	EXTERIOR
EW	EACH WAY
F	
F.D.C.	FIRE DEPARTMENT CONNECTION
F.F.	FINISH FLOOR
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUD
FT.	FEET
FIN	FINISH
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CAB.
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
F.H.C.	FIRE HOSE CABINET
FPRF	FIREPROOF
FIXT.	FIXTURE
F.L.	FLOW LINE
FLG	FLASHING
FLR	FLOOR
F.D.	FLOOR DRAIN
FLUOR	FLUORESCENT
FTG.	FOOTING
FDN	FOUNDATION
FM	FACTORY MUTUAL
FR.	FRAME
FRP	FIBER REINFORCED PLASTIC
F.S.	FINISH SURFACE
F.SK.	FLOOR SINK
FURN.	FURNACE
FUR	FURRING
FUT.	FUTURE
G	
GALV.	GALVANIZED
G.I.	GALVANIZED IRON
GAR	GARAGE
G.	GAS LINE
GA	GAUGE
G.C.	GENERAL CONTRACTOR
GL	GLASS
G.B.	GRAB BAR
GR	GRADE
GFRP	GLASS FIBER REINF. PLASTIC
GND	GROUND
GYP BD	GYPSUM BOARD
H	
HDWD	HARDWOOD
HDR	HEADER
HVAC	HEATING/VENTILATING/ AIR CONDITIONING
HGT	HEIGHT
H.C.	HOLLOW CORE
H.M.	HOLLOW METAL
HOR	HORIZONTAL
H.B.	HOSE BIBB
H.W.	HOT WATER
HP	HORSEPOWER
I	
IN	INCH
INCL	INCLUDING
INFO	INFORMATION
IN	INLET
I.D.	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIOR
INTER	INTERMEDIATE
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS
INV	INVERT
I/PS	IRON-PIPE SIZE
J	
JAN	JANITOR
JT	JOINT
JF	JOINT FILLER
JST	JOIST
K	
KPL	KICK PLATE
KIT	KITCHEN
KO	KNOCKOUT
L	
LAB	LABORATORY
LAM	LAMINATED
LDG, LAND	LANDING
LAV	LAVATORY
LGTH, L	LENGTH
LT	LIGHT
LT. WT.	LIGHT WEIGHT
LKR	LOCKER
LVR	LOUVER
M	
MH	MANHOLE
MFR, MFG	MANUFACTURE
MAS	MASONRY
M.O.	MASONRY OPENING
MTL, MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
M	MEN
MET	METAL
MEZZ.	MEZZANINE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MDG, MLD	MOULDING
MUL	MULLION
MWK	MILLWORK
N	
NEC	NATIONAL ELECTRIC CODE
NOM	NOMINAL
N.	NORTH
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
NO, #	NUMBER
NRC	NOISE REDUCTION COEFFICIENT
O	
OFF	OFFICE
O.C.	ON CENTER
OPNG, OPG	OPENING
OPP	OPPOSITE
O.D.	OUTSIDE DIAMETER
O.D.	OVERFLOW DRAIN
O.A.	OVERALL
O.H.	OVERHEAD
O.F.O.I.	OWNER FURNISHED OWNER INSTALLED
O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED
P	
PTD	PAINTED
PG	PAGE
PR	PAIR
PNL	PANEL
PERP	PERPENDICULAR
PLAST	PLASTER
PLAS	PLASTIC
PLAS. LAM.	PLASTIC LAMINATED
PLMB	PLUMBING
PLWD	PLYWOOD
PT	POINT
POC	POINT OF CONNECTION
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PL.	PROPERTY LINE
PAS	PUBLIC ADDRESS SYSTEM
PVC	POLYVINYL CHLORIDE
PC	PRECAST
Q	
Q.T.	QUARRY TILE
R	
RAD, R.	RADIUS
RR	RAILROAD
RW, REDWD	REDWOOD
REF, REFRIG	REFRIGERATOR
RCP	REINFORCED CONCRETE PIPE
RE	REGISTER
REQD	REQUIRED
REINF	REINFORCING
R.A.	RETURN AIR
RVS	REVERSE (SIDE)
REV	REVISION
R.O.W., R/W	RIGHT OF WAY
R.	RISER, RISERS
R.D.	ROOF DRAIN
RFG	ROOFING
RM	ROOM
RD	ROUND
RO	ROUGH OPENING
S	
SCHED	SCHEDULE
SCR	SCREW
SECT	SECTION
S/S	SERVICE SINK
S	SEWER LINE
SHTG	SHEATHING
SHT	SHEET
SH	SHELF
SHR	SHOWER
S.D.	SIDEWALK DRAIN
SIM	SIMILAR
SL	SLOPE
S.C.	SOLID CORE
STC	SOUND TRANSMISSION COEFFECIENT
S.	SOUTH
SPEC	SPECIFICATION
SPL	SPECIAL
SQ.	SQUARE
SS	STAINLESS STEEL
STL	STEEL
STOR	STORAGE
SD	STORM DRAIN
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SF	SQUARE FEET
T	
TELE	TELEPHONE
T	TEMPERED
TEMP	TEMPORARY
TER	TERAZZO
THK	THICK
T&G	TOUNGUE AND GROOVE
T.O.F.	TOP OF FOOTING
T.O.C.	TOP OF CURB
T.O.P.	TOP OF PARAPET
T.O.S.	TOP OF STEEL OR WOOD SHEATHING
T.O.W.	TOP OF WALL
T.O.M.	TOP OF MASONRY
T.B.	TOWEL BAR
T, TR	TREAD
TS	TUBE STEEL
TYP	TYPICAL
U	
U.B.C.	UNIFORM BUILDING CODE
U.F.C.	UNIFORM FIRE CODE
U.M.C.	UNIFORM MECHANICAL CODE
U.P.C.	UNIFORM PLUMBING CODE
U.L.	UNDERWRITERS LABORATORIES
U.O.N.	UNLESS OTHERWISE NOTED
UNF	UNFINISHED
UR	URINAL
V	
VB	VAPOR BARRIER
VEN	VENEER
VERT	VERTICAL
VG	VERTICAL GRAIN
VEST, V	VESTIBULE
VCT	VINYL COMPOSITION TILE
W	
WSCT	WAINSCOT
W.F.	WALL FOOTING
W.C.	WATER CLOSET
W.	WATER LINE
W.P.S.	WATERPROOF SYSTEM
W	WEST
WH. CH.	WHEEL CHAIR
WF	WIDE FLANGE
WDW	WINDOW
W/	WITH
W/O	WITHOUT
W.	WEST
WD	WOOD
W.P.	WORKING POINT
W.I.	WROUGHT IRON
WHSE	WAREHOUSE
WS	WATER STOP
Y	
YD	YARD
SYMBOLS	
ø	DIAMETER
¢	PENNY
℄	CENTERLINE
℘	PROPERTY LINE, PLATE
∟	ANGLE
[	CHANNEL
@	AT
&	AND
=	EQUAL

PROJECT INFORMATION

1,030 SQ. FT. REMODEL AND 1,220 SQ. FT. ADDITION TO SINGLE-FAMILY RESIDENCE

LOCATION:	74 WOODHAMS RD
APN:	296-12-031
LEGAL DESCRIPTION:	-
LOT AREA:	6,264 SQ.FT.
ZONE:	R1-6L
CONSTRUCTION TYPE:	V-B, NON-SPRINKLERED
OCCUPANCY:	R-3 / U

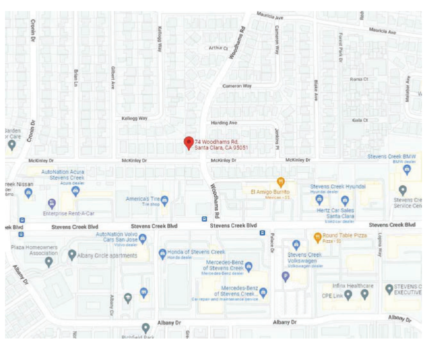
CODES

1. THE GOVERNING CODES FOR THIS PROJECT ARE THE 2022 CALIFORNIA RESIDENTIAL (CRC), ELECTRICAL (CEC), MECHANICAL (CMC), PLUMBING (CPC), FIRE (CFC) CODES, ENERGY CODE (ENS) AND GREEN CODE (CGBC).
2. THE STRUCTURAL DESIGN OF THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE (CBC) AND ENGINEERING PRINCIPLES.
3. ALL WORK SHALL CONFORM TO ALL REQUIREMENTS OF STATE OF CALIFORNIA TITLE 24 REGARDLESS OF THE INFORMATION INDICATED ON THESE PLANS. IT IS THE RESPONSIBILITY OF THE INDIVIDUAL SUPERVISING THE CONSTRUCTION TO ENSURE THAT THE WORK IS DONE IN ACCORDANCE WITH CODE REQUIREMENTS PRIOR TO REQUESTING INSPECTION.

SYMBOLS

Symbol labels	Meaning
SECTION NO. / SHEET NO.	BUILDING SECTION REFERENCE
SECTION NO. / SHEET NO.	WALL SECTION REFERENCE
SECTION NO. / SHEET NO.	DETAIL REFERENCE
SECTION NO. / SHEET NO.	DETAIL REFERENCE
SECTION NO. / SHEET NO.	INTERIOR ELEVATION REFERENCE
DOOR NO.	DOOR REFERENCE
WINDOW NO.	WINDOW REFERENCE
REVISION NO.	REVISION REFERENCE
EQUIPMENT NO.	EQUIPMENT REFERENCE
KEYNOTES NO.	KEYNOTES
ROOM NAME	ROOM REFERENCE
ELEVATION	DATUM POINT
	CENTER OR FLOOR LINE
	HIDDEN, FUTURE, OR EXISTING CONSTRUCTION TO BE REMOVED
	PROPERTY LINE
NEW GRADE SPOT ELEVATION / EXISTING GRADE SPOT ELEVATION / XX.XX / (XX.XX)	SPOT ELEVATION
	BREAK LINE

VICINITY MAP



N.T.S.

N

PROJECT CONTACTS

OWNER:	WINNIE CHAN YAMAKITA YUSUKE YAMAKITA 74 WOODHAMS ROAD SANTA CLARA, CA, 95051
DESIGNER:	LEO CHUANG 912 SUMMIT PLACE MONTEREY PARK, CA, 91754 626.927.7070

CALCULATIONS

LOT AREA:	6,264 SQ. FT.
ALLOWABLE LOT COVERAGE:	40% = 2,505 SQ. FT.
EXISTING FLOOR AREA:	1,673 SQ. FT.
EXISTING GARAGE:	418 SQ. FT.
PROPOSED FLOOR AREA:	
EXISTING RESIDENCE:	1,673 SQ. FT.
FIRST FLOOR ADDITION:	238 SQ. FT.
SECOND FLOOR ADDITION:	982 SQ. FT.
(N) TOTAL FLOOR AREA:	2,893 SQ. FT.
LOT COVERAGE:	
TOTAL LOT COVERAGE:	2,398 SQ. FT.
PERCENTAGE OF LOT COVERAGE:	38.3%

RENDERING

SHEET INDEX

ARCHITECTURAL

A0.0	TITLE SHEET
A1.1	EXISTING SITE PLAN
A1.2	PROPOSED SITE PLAN
A2.1	EXISTING FLOOR PLAN
A2.2	PROPOSED FIRST FLOOR PLAN
A2.3	PROPOSED SECOND FLOOR PLAN
A4.1	EXISTING ROOF PLAN
A4.2	PROPOSED ROOF PLAN
A6.1	EXISTING ELEVATIONS
A6.2	PROPOSED ELEVATIONS
A6.3	PROPOSED ELEVATIONS
A8.1	DOOR AND WINDOW SCHEDULES

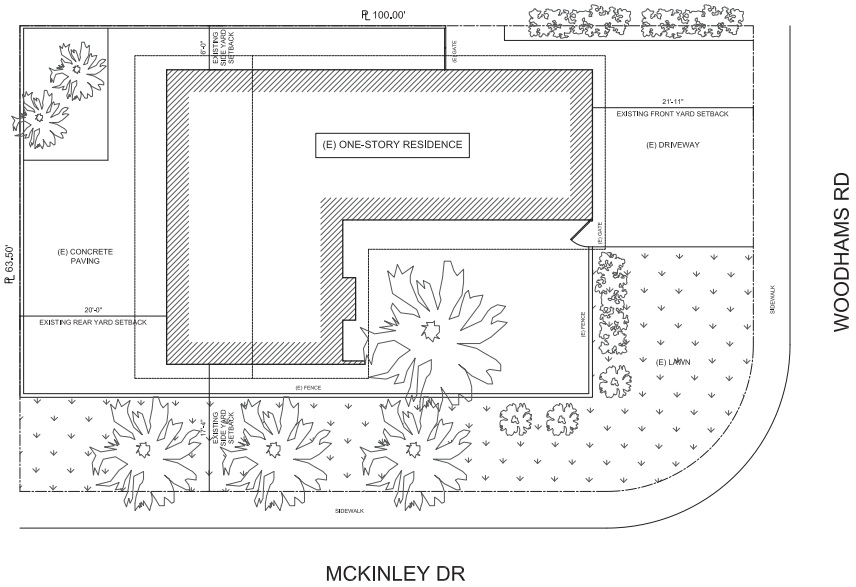
REVISIONS	BY

TITLE SHEET

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

Sheet
A0.0



N

EXISTING SITE PLAN

SCALE: 1/8"= 1'-0"

0' 4' 12' 28'

REVISIONS	BY

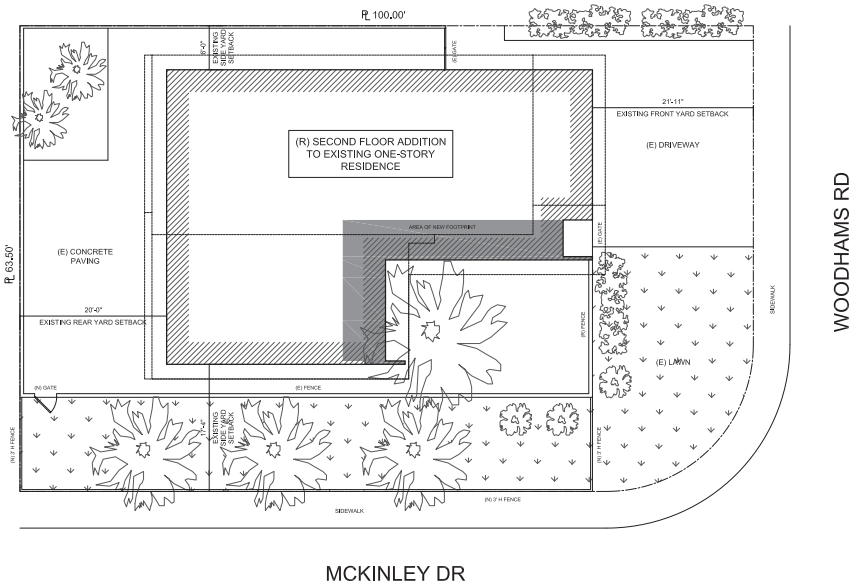
EXISTING SITE PLAN

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

Sheet

A1.1



N

PROPOSED SITE PLAN

SCALE: 1/8"= 1'-0"

0' 4' 12' 28'

REVISIONS	BY

PROPOSED SITE PLAN

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

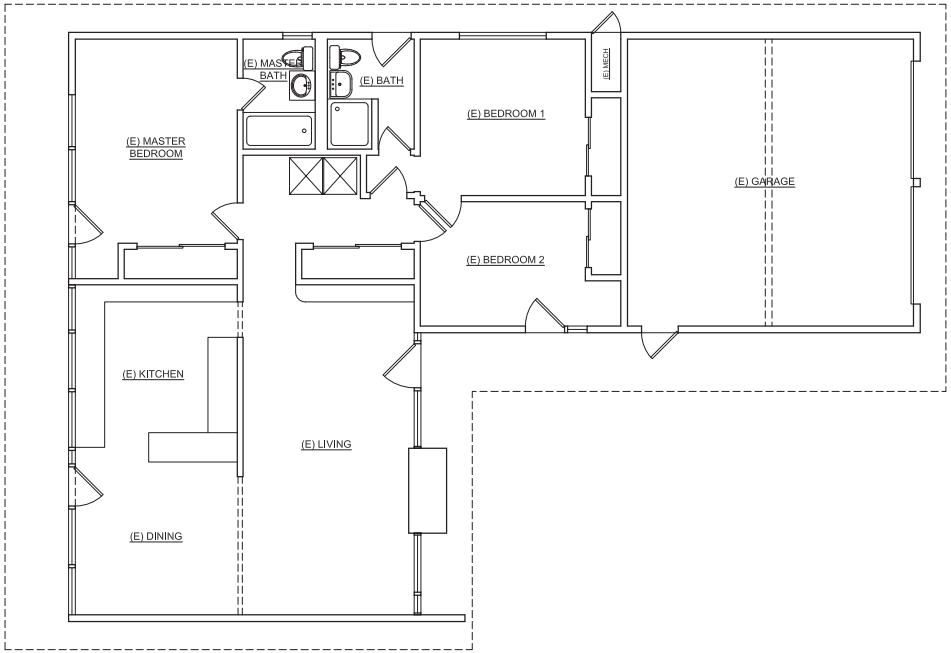
Date

Sheet

A1.2

EXISTING WALL

PROPOSED NEW WALL



N

EXISTING FLOOR PLAN

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

REVISIONS	BY

EXISTING FLOOR PLAN

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

Sheet

A2.1

NOTES

1. WALL COVERINGS IN SHOWERS AND TUBS WITH SHOWERHEADS SHALL BE CEMENT PLASTER OR TILE, EQUAL OR HIGHER THAN 70" ABOVE DRAIN. ENCLOSURES MUST BE OF APPROVED SAFETY GLAZING AND DOORS (22" MIN WIDTH) MUST SWING OUTOF SHOWERS. WINDOWS IN ENCLOSURE WALLS SHALL BE LABELED SAFETY GLAZING WHEN LESS THAN 60" ABOVE THE DRAIN. CBC SEC. 1210.3, CPC SEC. 411.7.

1A. REINFORCED GYPSUM BACKERS SHALL BE USED AS A BASE FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL AND CEILING PENALS IN SHOWER AREAS. (R702.4.2 CRC)

2. PROVIDE AN EXHAUST FAN 50 CFM MIN. IN ALL BATHROOMS. SEE ELECTRICAL PLANS (E2.1, E2.2) FOR EXHAUST SYSTEM LOCATIONS. EXHAUST OUTLET MUST BE MINIMUM 3' FROM ANY OPENINGS INTO BUILDING AND PROPERTY LINE. CMC SEC. 402.2.1, 403.7, CMC TABLE 4-4, CBC SEC. 1203.4.2.1.

3. SMOKE/CARBON MONOXIDE ALARMS SHALL BE HARD-WIRED WITH A BATTERY BACKUP AND INTERCONNECTED SO THAT THE ACTIVATION OF ONE ALARM SHALL ACTIVATE ALL OTHER ALARMS IN THE DWELLING UNIT. RETROFIT SMOKE ALARMS MAY BE BATTERY OPERATED. (PER CRC SECTION 314 AND SECTION 315)

4. ALL DOORS PROVIDING ACCESS FROM HOUSE TO POOL AREA SHALL BE EQUIPPED WITH EXIST ALARMS OPERABLE UPON OPENING OF THE DOOR.

5. ALL GLAZING IN HAZARDOUS LOCATIONS MUST BE IDENTIFIED BY A LABEL (PERMANENT IF TEMPERED) AS SAFETY GLAZING. HAZARDOUS LOCATIONS ARE IDENTIFIED AS FOLLOWS:
   - A. GLAZING IN ALL DOORS
   - B. GLAZING IN DOORS, WALLS (WITH THE EXPOSED EDGE OF GLAZING LESS THAN 60" ABOVE DRAIN INLET) AND ENCLOSURES FOR BATHTUBS, SHOWERS, WHIRLPOOLS, SPAS, ETC.
   - C. GLAZING WITHIN A 24" ARC OF A DOOR EDGE.
   - D. GLAZING PANELS OVER 9 SQUARE FEET HAVING THE LOWEST EDGE LESS THAN 18" ABOVE THE FINISH FLOOR AND HAVING A TOP EDGE GREATER THAN 36" ABOVE THE FLOOR, AND WITH 36" HORIZONTALLY OF A WALKING SURFACE.
   - E. GLAZING IN GUARDRAILS.
   - F. GLAZING IN WALL/FENCES USED AS POOL BARRIER FOR INDOOR AND OUTDOOR SWIMMING POOL.
   - G. GLAZING WITHIN 36" HORIZONTALLY FROM THE WALKING SURFACE STAIRWAYS WITH BOTTOM EDGE LESS THAN 60" ABOVE WALKING SURFACE.

6. THE LARGEST RISE OR RUN IN A FLIGHT OF STAIRS MAY NOT EXCEED THE SMALLEST BY MORE THAN 3/8". PROTECTIVE GUARD ON OPEN SIDE OF STAIRS OVER 30" ABOVE THE FLOOR OR ADJACENT GRADE MAY SERVE AS HANDRAIL. GUARD AND HANDRAILS ASSEMBLY MAY BE 34"-38" HIGH ONLY AT OPEN SIDE OF STAIRS. HANDRAIL (REQUIRE FOR 4 OR MORE RISERS) AT 34"-38" ABOVE TREAD NOSING. 1 1/2" CLEARANCE TO WALL. 1 1/4" TO 2" IN CROSS SECTION. WITH ENDS RETURN TO WALL OR FLOOR OR TERMINATE AT NEWEL OR SAFETY POST.

7. GUARDRAILS ARE REQUIRED AT FLOOR AND ROOF OPENINGS, LANDINGS, BALCONIES, AND AT OPEN SIDES OF STAIRS OVER 30" IN HEIGHT. OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENT PATTERN SUCH THAT A 4.375" SPHERE CANNOT PASS THROUGH.

8. EGRESS WINDOWS
BEDROOM EGRESS WINDOWS HAVE A MINIMUM CLEAR OPENING AREA OF 5.7 SF. ABOVE THE GRADE-FLOOR, A MINIMUM NET HEIGHT OF 24" AND MINIMUM NET WIDTH OF 20", AND A SILL HEIGHT NOT MORE THAN 44" MAXINUM ABOVE FINISH FLOOR.

9. FIRE BLOCKING IS REQUIRED IN CONCEALED SPACES 10' O.C. HORIZONTALLY AND VERTICALLY IN THE CEILING AND FLOOR LEVELS, CONNECTIONS BETWEEN HORIZONTAL AND VERTICAL SPACES, CONCEALED SPACES BETWEEN STAIR AND LANDING, OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES, WIRES, CHIMNEYS AND FIREPLACES.

10. HEAT DETECTORS SHALL BE INSTALLED PER SMCC25.12.14 IN THE FOLLOWING LOCATIONS: IN THE ATTIC, KITCHEN, BASEMENT AND ATTACHED GARAGE.

11. LANDING SHALL NOT HAVE A WIDTH NOT LESS THAN THE WIDTH OF DOOR AND LENGTH IN THE DIRECTION OF TRAVEL OF NOT LESS THAN 36". WILL BE PROVIDED ON EACH SIDE OF DOORS. THE ELEVATION OF LANDINGS SHALL NOT EXCEED 1.5" LOWER THAN THE TOP OF THE THRESHOLD OF THE DOORWAY (7.75INCH IF THE DOOR DOES NOT SWING OVER THE LANDING OR STEPS.

12. BATHROOMS, WATER CLOSETS OR SIMILAR ROOMS SHALL BE PROVIDED WITH GLAZED AREA IN WINDOWS OF NOT LESS THAN 3 SQ. FT, ONE HALF SHALL BE OPENABLE. (R303.3). EXCEPTION; THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A LOCAL EXHAUST SYSTEM ARE PROVIDED. THE MINIMUM LOCAL EXHAUST RATES SHALL BE 50 CUBIC F PM FOR INTERMEITTENT VENTILATION OR 20 CFM FOR CONTINUOUS VENTILATION IN ACCORDANCE WITH THE CMC, CHAPTER 4. EXHAUST IR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS.

13. FIREPLACES SHALL HAVE: (A)CLOSABLE METAL OR GLASS COVERING OVER THE ENTIRE OPENING OF THE FIREBOX. (B) COMBUSTION AIR INTAKE FROM OUTSIDE OF THE BUILDING DIRECTLY INTO FIREBOX OF AT LEAST 6 SQ. IN. AND HAS AN ACCESSIBLE, OPERABLE AND TIGHT FITTING DAMPER OR COMBUSTION AIR CONTROL DEVICE. (C) A FLUE DAMPER WITH A READILY ACCESSIBLE CONTROL.

14. CONTINUOUS BURNING PILOT LIGHTS AND THE USE OF INDOOR AIR FOR COOLING A FIREBOX JACKET, WHEN THAT INDOOR AIR IS VENTED TO THE OUTSIDE OF THE BUILDING, ARE PROHIBITED.

15. WALLS AND CEILING FINISHES SHALL HAVE A FLAME SPREAD CLASSIFICATION OF NO GREATER THAN 200, AND A SMOKE DEVELOPED INDEX OF NOT GREATER THAN 450 (CRC R302.9)

16. THRESHOLDS OVER 0.25" SHALL BE BEVELED 1:2

PLUMBING NOTES:

1. ALL PLUMBING MATERIALS USED IN THE WATER SUPPLY SYSTEM, EXCEPT FOR VALVES AND SIMILAR DEVICES SHALL BE OF BRASS, COPPER, CAST IRON OR OTHER APPROVED MATERIAL.

2. NO VENT SHALL TERMINATE IN A LOCATION THAT IS VISIBLE FROM THE PARKWAY ACROSS THE STREET FROM THE SUBJECT PROPERTY. OFF-SET VENTING SHALL COMPLY WITH CPC 516 OR 706.

3. NO SOIL, WASTE OR OTHER PIPE OR CONDUIT, OTHER THAN DOWNSPOUTS SHALL BE INSTALLED OR PERMITTED ON THE OUTSIDE OF THE BUILDING.

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5. PIPING MATERIALS:
   - WASTE: PVC DWV
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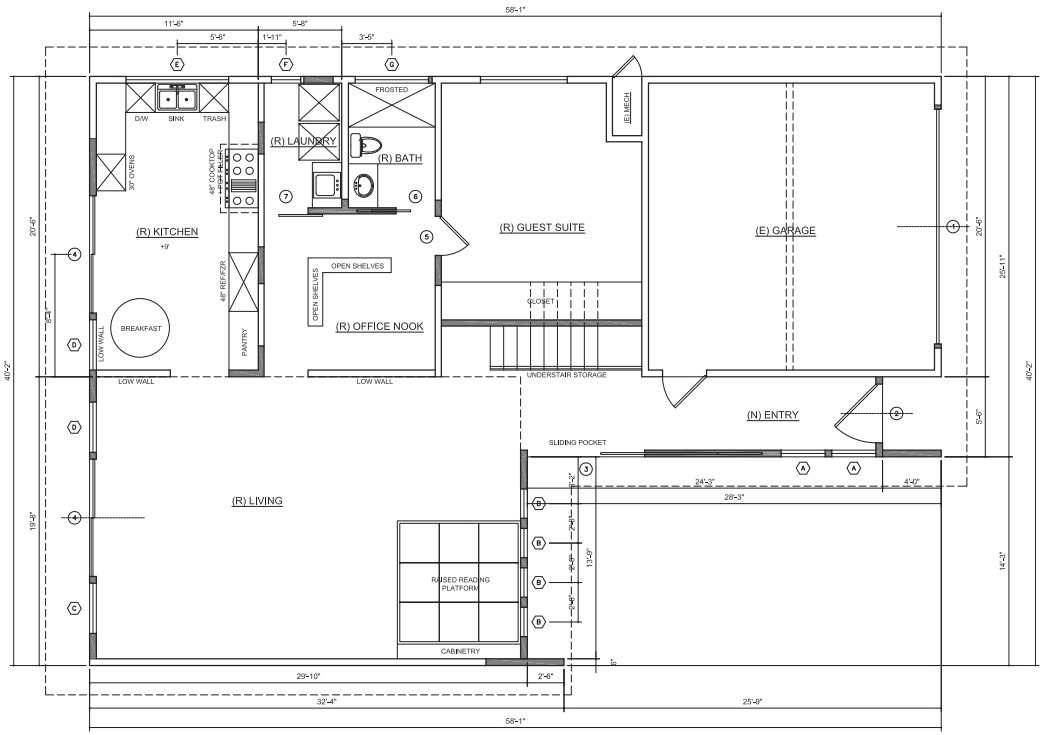
   - GAS: BLACK STEEL

EXISTING WALL

PROPOSED NEW WALL



PROPOSED FIRST FLOOR PLAN

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

N

REVISIONS	BY

PROPOSED FIRST FLOOR PLAN

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

Sheet

A2.2

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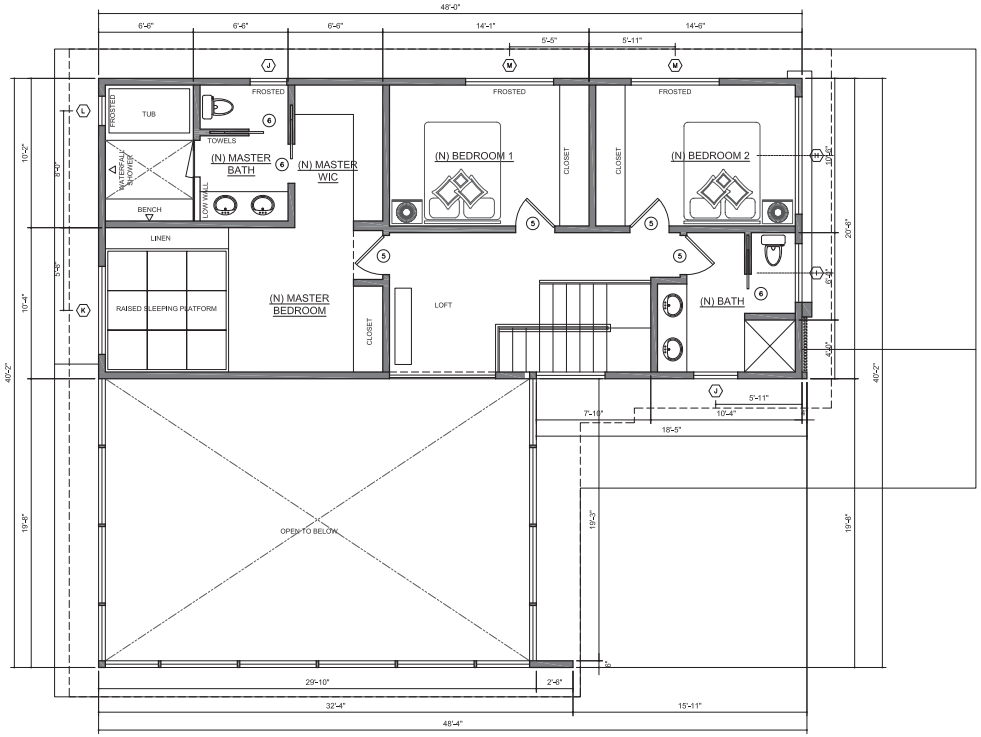
- GAS: BLACK STEEL

EXISTING WALL

PROPOSED NEW WALL



N

PROPOSED SECOND FLOOR PLAN

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

REVISIONS	BY

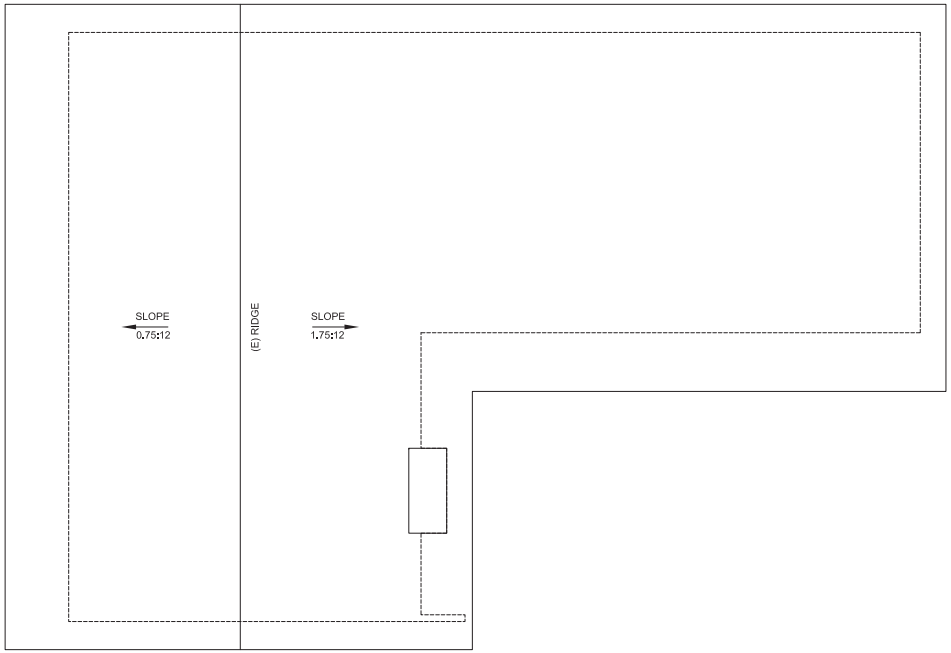
PROPOSED SECOND FLOOR PLAN

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

Sheet

A2.3



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EXISTING ROOF PLAN

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

REVISIONS	BY

EXISTING ROOF PLAN

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

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A4.1

ROOFING MATERIALS:

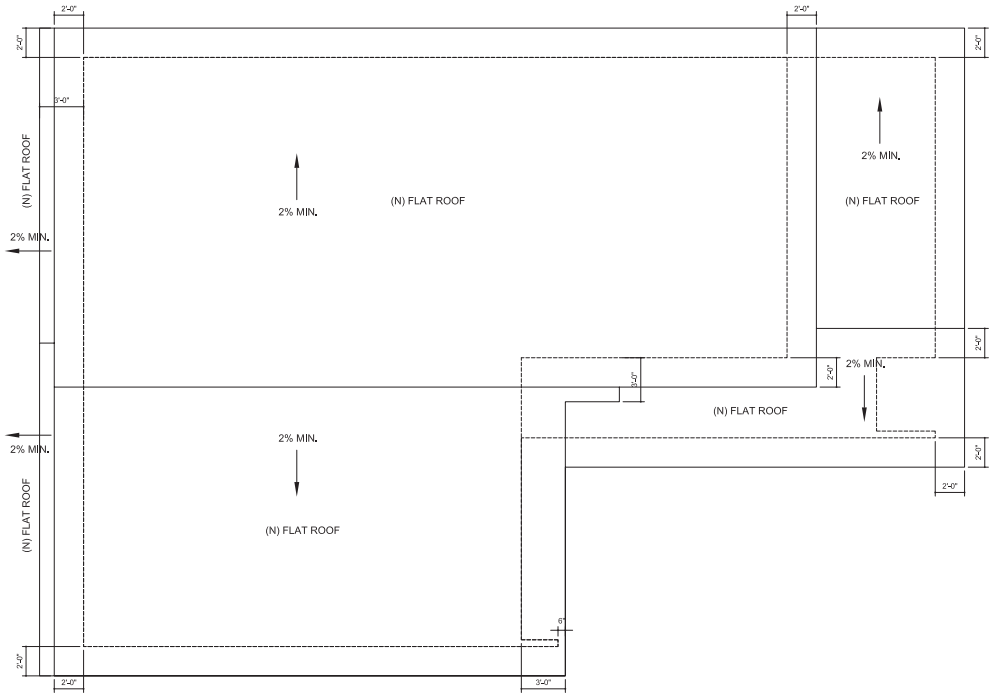
SOPREMA ROOFING AND WATERPROOFING SYSTEM
SOPRASTAR SANDED
CLASS A ROOF COVERING
BUILT-UP ROOF

SPECIFICATION REQUIREMENTS TO MEET
ASTM D 6222, ASTM E 108, UL 790.

*NOTE - ROOF GUTTERS/DRAINS SHALL BE PROVIDED WITH A MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER/DRAIN. (RESIDENTIAL CODE R337.5.4 AND BUILDING CODE 705A.4)

NOTES:

1. ENCLOSED ATTICS AND ENCLOSED RAFTER SPACE FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF $\frac{1}{16}$ INCH MINIMUM AND $\frac{1}{4}$ INCH MAXIMUM. VENTILATION OPENINGS HAVING A LEAST DIMENSION LARGER THAN $\frac{1}{4}$ INCH SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, PERFORATED VINYL OR SIMILAR MATERIAL WITH OPENINGS HAVING A LEAST DIMENSION OF $\frac{1}{16}$ INCH MINIMUM AND $\frac{1}{4}$ INCH MAXIMUM (CRC R806.1).
2. THE MINIMUM NET FREE VENTILATING AREA SHALL BE $\frac{1}{150}$ OF THE AREA OF THE VENTED SPACE (CRC R806.2).
3. VENTILATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. INSTALLATION OF VENTILATORS IN ROOF SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R903. INSTALLATION OF VENTILATORS IN WALL SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R703.1 (CRC R806.4).
4. ROOF ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE TO THE PROVISIONS OF CHAPTER 9 OF THE RESIDENTIAL CODE AND SHALL BE AN ICC-ES OR UL LISTED CLASS 'A' FIRE-RESISTIVE ROOF ASSEMBLY COMPLYING WITH ASTM E108 OR UL 790.
5. VENTS SHALL RESIST THE INTRUSION OF FLAME AND EMBERS THROUGH THE VENTILATION OPENINGS. VENT OPENINGS SHALL BE PROTECTED BY CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH A MINIMUM $\frac{1}{4}$" OPENINGS AND SHALL NOT EXCEED $\frac{1}{8}$". VENTS SHALL NOT BE INSTALLED IN EAVES OR CORNICES. (PER CBC 706A.2 AND CRC R327.6.1)
6. A MIN. OF 1" AIR SPACE SHALL BE PROVIDED BETWEEN INSULATION AND ROOF SHEATHING
7. CLASS I OR II VAPOR BARRIER SHALL BE INSTALLED ON THE WARM-IN-WINTER SIDE OF THE CEILING IN ACCORDANCE TO THE PROVISIONS OF CHAPTER 8 SECTION R806.2 OF THE RESIDENTIAL CODE
8. PROVIDE VAPOR RETARDER AT ROOF JOISTS.



N

PROPOSED ROOF PLAN

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

REVISIONS	BY

PROPOSED ROOF PLAN

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

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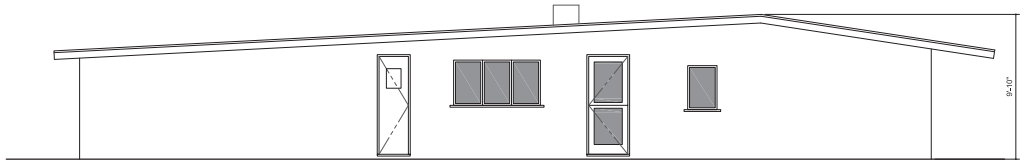
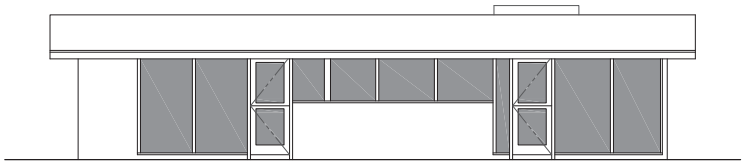
A4.2

EXISTING EAST ELEVATION



EXISTING NORTH ELEVATION



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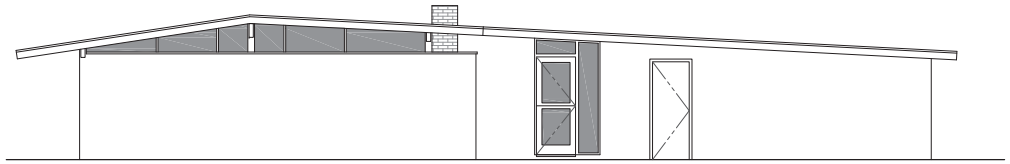


EXISTING SOUTH ELEVATION

EXISTING ELEVATIONS

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

REVISIONS	BY

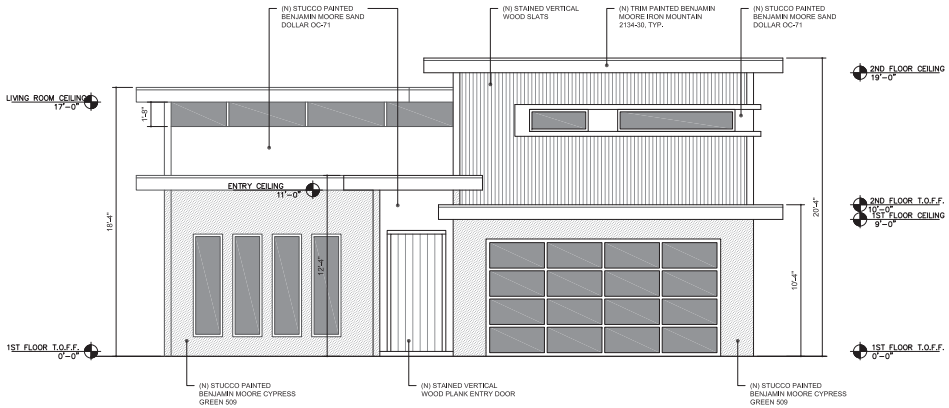
EXISTING ELEVATIONS

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

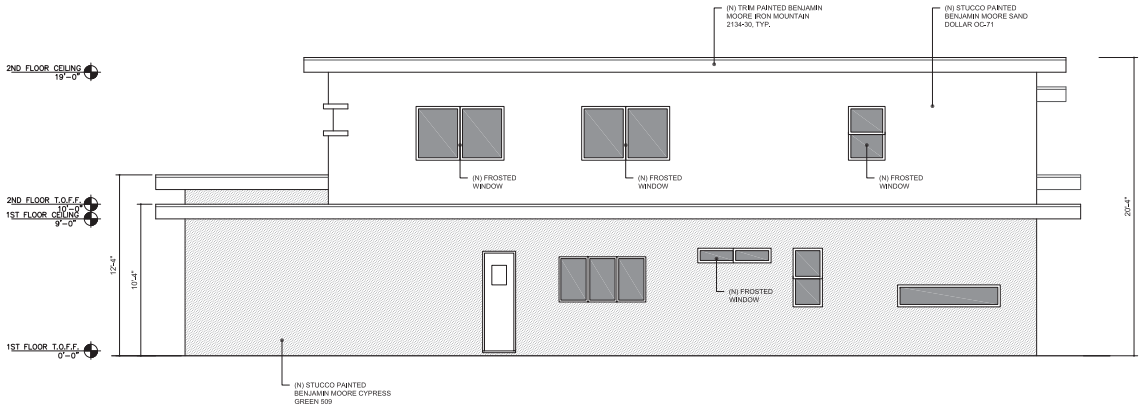
Date

Sheet

A6.1



PROPOSED EAST ELEVATION



PROPOSED NORTH ELEVATION

PROPOSED ELEVATIONS

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

REVISIONS	BY

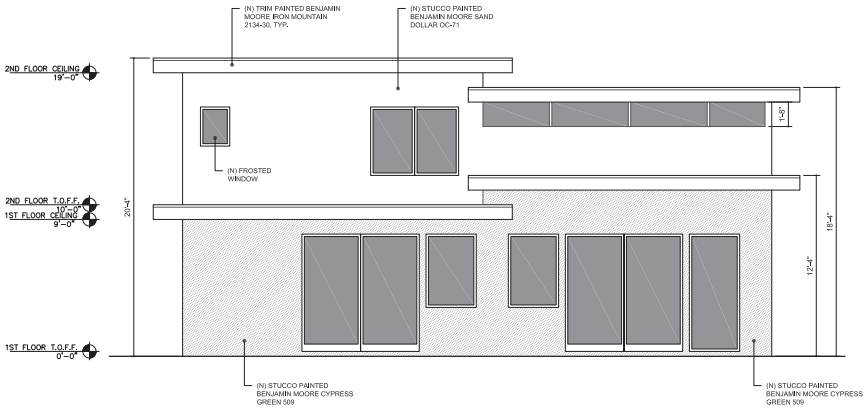
PROPOSED ELEVATIONS

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

Sheet

A6.2



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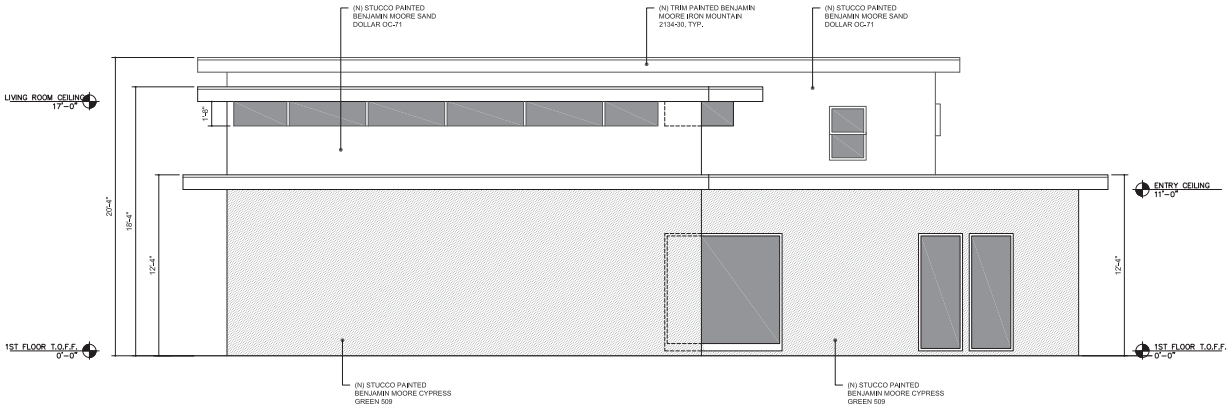

PROPOSED SOUTH ELEVATION

PROPOSED ELEVATIONS

SCALE: 1/4"= 1'-0"

0' 2' 6' 14'

REVISIONS	BY

PROPOSED ELEVATIONS

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

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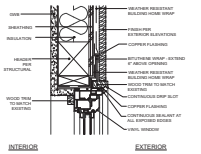
A6.3

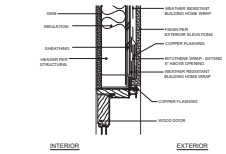
NOTES

ALL GLAZING IN HAZARDOUS LOCATIONS MUST BE IDENTIFIED BY A LABEL (PERMANENT IF TEMPERED) AS SAFETY GLAZING. HAZARDOUS LOCATIONS ARE IDENTIFIED AS FOLLOWS:

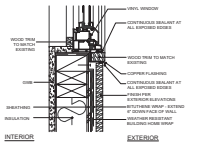
A. GLAZING IN ALL DOORS
B. GLAZING IN DOORS, WALLS (WITH THE EXPOSED EDGE OF GLAZING LESS THAN 60" ABOVE DRAIN INLET) AND ENCLOSURES FOR BATHTUBS, SHOWERS, WHIRLPOOLS, SPAS, ETC.
C. GLAZING WITHIN A 24" ARC OF A DOOR EDGE.
D. GLAZING PANELS OVER 9 SQUARE FEET HAVING THE LOWEST EDGE LESS THAN 18" ABOVE THE FINISH FLOOR AND HAVING A TOP EDGE GREATER THAN 36" ABOVE THE FLOOR, AND WITH 36" HORIZONTALLY OF A WALKING SURFACE.
E. GLAZING IN GUARDRAILS.
F. GLAZING IN WALL/FENCES USED AS POOL BARRIER FOR INDOOR AND OUTDOOR SWIMMING POOL.
G. GLAZING WITHIN 36" HORIZONTALLY FROM THE WALKING SURFACE STAIRWAYS WITH BOTTOM EDGE LESS THAN 60" ABOVE WALKING SURFACE.



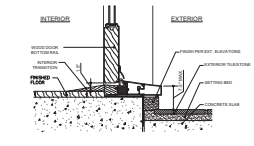
1 / A8.2 WINDOW HEAD



1 / A8.1 DOOR HEAD



2 / A8.2 WINDOW SILL



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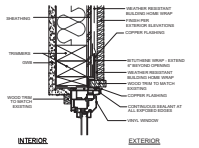
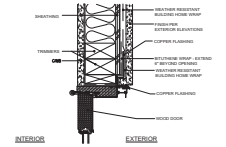
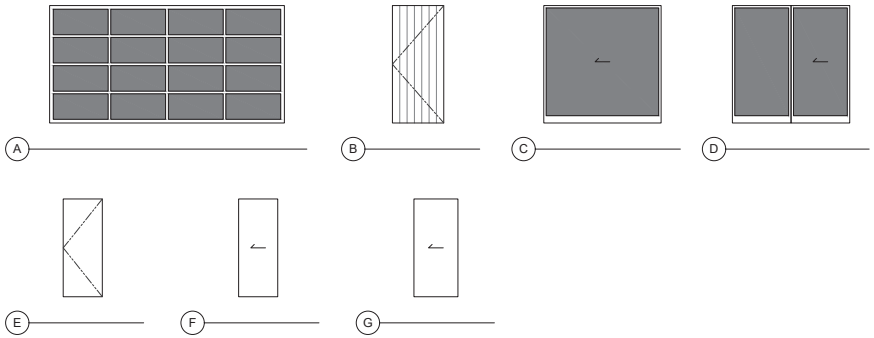


3 / A8.2 WINDOW JAMB



3 / A8.1 DOOR JAMB

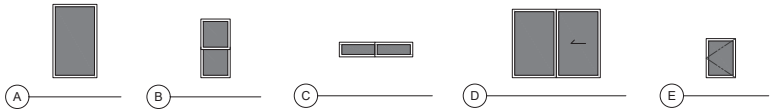


DOOR TYPES

DOOR SCHEDULE

- ALL NEW GLAZING SHALL COMPLY WITH STANDARDS OF THE U.S. CONSUMER PRODUCT SAFETY COMMISSION. MANUFACTURERS TO SUPPLY CERTIFICATE OF COMPLIANCE TO THE OWNER.

	SIZE			STYLE		MATERIAL		FINISH		NOTES + BRAND:
	WIDTH	HEIGHT	THICKNESS	TYPE	LITES	FRAME BODY	GLASS	INTERIOR	EXTERIOR	
1	16'-0"	8'-0"	1 3/4"	OVERHEAD 'A'	16	ALUMINUM	CLEAR/TEMPERED	BRONZE	BRONZE	GARAGE DOOR
2	3'-6"	8'-0"	1 3/4"	SWINGING 'B'	0	WOOD	-	STAINED	STAINED	EXTERIOR DOOR
3	8'-0"	8'-0"	1 3/4"	POCKET 'C'	1	ALUMINUM	CLEAR/TEMPERED	BRONZE	BRONZE	EXTERIOR DOOR
4	8'-0"	8'-0"	1 3/4"	SLIDING 'D'	2	ALUMINUM	CLEAR/TEMPERED	BRONZE	BRONZE	EXTERIOR DOOR
5	2'-8"	6'-8"	1 3/4"	SWINGING 'E'	0	WOOD	-	PAINTED	PAINTED	INTERIOR DOOR
6	2'-8"	6'-8"	1 3/4"	POCKET 'F'	0	WOOD	-	PAINTED	PAINTED	INTERIOR DOOR
7	3'-0"	6'-8"	1 3/4"	SLIDING 'E'	0	WOOD	-	PAINTED	PAINTED	INTERIOR DOOR



WINDOW TYPES

WINDOW SCHEDULE:

NOTES:
-ALL NEW GLAZING SHALL COMPLY WITH STANDARDS OF THE U.S. CONSUMER PRODUCT SAFETY COMMISSION. MANUFACTURERS TO SUPPLY CERTIFICATE OF COMPLIANCE TO THE OWNER.
-THE LOAD RESISTANCE OF GLASS UNDER UNIFORM LOAD SHALL BE DETERMINED IN ACCORDANCE WITH ASTME 1300.
-THE NFRC TEMPORARY LABEL DISPLAYED ON WINDOWS MUST REMAIN ON THE UNIT UNTIL FINAL INSPECTION HAS BEEN COMPLETED.

	SIZE		STYLE				MATERIALS		FINISH		ACCESSORIES	U-FACTOR	SHGC	NOTES + BRAND:
	WIDTH	HEIGHT	TYPE	OPERATION	SASH	LITES	FRAMES / SASH	GLASS	INTERIOR	EXTERIOR	SCREEN			
A	3'-0"	8'-0"	'A'	FIXED	1	1	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E / TEMPERED	BRONZE	BRONZE	NO	0.28	0.20	
B	2'-0"	7'-0"	'A'	FIXED	1	1	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E / TEMPERED	BRONZE	BRONZE	NO	0.28	0.20	
C	3'-5"	8'-0"	'A'	FIXED	1	1	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E / TEMPERED	BRONZE	BRONZE	NO	0.28	0.20	
D	3'-5"	5'-0"	'A'	FIXED	1	1	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E / TEMPERED	BRONZE	BRONZE	NO	0.28	0.20	
E	7'-0"	1'-6"	'A'	FIXED	1	1	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E / TEMPERED	BRONZE	BRONZE	NO	0.28	0.20	
F	2'-0"	4'-0"	'B'	SINGLE-HUNG	2	2	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E	BRONZE	BRONZE	YES	0.28	0.20	
G	5'-0"	1'-0"	'C'	SLIDING	2	2	ALUMINUM	FROSTED/ DUAL PANE/LOW-E	BRONZE	BRONZE	YES	0.28	0.20	
H	8'-0"	1'-6"	'A'	FIXED	1	1	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E	BRONZE	BRONZE	NO	0.28	0.20	
I	4'-0"	1'-6"	'A'	FIXED	1	1	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E	BRONZE	BRONZE	NO	0.28	0.20	
J	2'-6"	3'-8"	'B'	SINGLE-HUNG	2	2	ALUMINUM	FROSTED/ DUAL PANE/LOW-E	BRONZE	BRONZE	YES	0.28	0.20	
K	6'-0"	4'-8"	'D'	SLIDING	2	2	ALUMINUM	CLEAR/ DUAL PANE/ LOW-E / TEMPERED	BRONZE	BRONZE	YES	0.28	0.20	
L	2'-0"	2'-8"	'E'	CASEMENT	1	1	ALUMINUM	FROSTED/ DUAL PANE/LOW-E/TEMPERED	BRONZE	BRONZE	YES	0.28	0.20	
M	6'-0"	3'-8"	'D'	SLIDING	2	2	ALUMINUM	FROSTED/ DUAL PANE/LOW-E	BRONZE	BRONZE	YES	0.28	0.20	

DOOR AND WINDOW SCHEDULES

REVISIONS	BY

DOOR AND WINDOW SCHEDULES

YAMAKITA RESIDENCE
74 WOODHAMS ROAD
Santa Clara, CA, 95051

Date

Sheet
A8.1

Attachment 2: Project Data

74 Woodhams Road

Lot Size: 6,264 sq. ft.			
	Existing Floor Area (sq. ft.)	**Addition (sq. ft.)**	**Proposed Floor Area (sq. ft.)**
First Floor	1,673	238	1,911
Second Floor	-	982	982
Garage	418	-	418
Gross Floor Area	2,091		3,311
Lot Coverage	2,091/6,264 = 33%		2,329/6,264= 37%
F.A.R.	2,091/6,264 = .33		3,311/6,264=.53
% of 2nd floor to 1st floor	-		982/2,329= 42%
Bedrooms/ Baths	3/2		4/3
Flood Zone	X		

23-560 **Agenda Date: 5/10/2023**

REPORT TO DEVELOPMENT REVIEW HEARING

SUBJECT

Action on a 594 square foot first floor addition and a 271 square-foot second floor addition to an existing two-story residence resulting in 3,274 square-foot two-story residence at 462 Muriel Court (CEQA: Categorical Exemption,15301 (e)(1), Existing Facilities)

File No.: **PLN22-00474**
Location: **462 Muriel Court,** a 10,248 square-foot lot located on the south side of Muriel Court, west of Luther Drive; APN: 294-31-024; the property is zoned Single-Family Residential (R1-6L).
Applicant: Michael Dern
Owner: Sam and Julie Bushell
Request: **Architectural Review** of a 594 square-foot first floor addition, and a 271 square-foot second floor addition to an existing 2,409 square-foot 5-bedroom, 3-bathroom two-story residence, resulting in a 3,274 square-foot 5-bedroom, 4.5-bathroom two-story residence with a 395 square-foot attached two-car garage.

Project Data

The Project Data Table is included as Attachment 2.

Points for Consideration

- The existing residence is a 2,409 square-foot 5-bedroom, 3-bathroom two-story residence.
- The project includes a 594 square-foot first floor addition and a 271 square-foot second floor addition to the existing two-story residence, resulting in a 3,274 square-foot two-story residence with 5-bedrooms and 4.5-bathrooms.
- The proposed addition to the residence will consist of new composition shake roofing and lap siding to match the existing residence.
- The second story addition provides the minimum step backs outlined in the Single-Family Residential Design Guidelines with a front step back of more than 10 feet, a rear step back of 3 feet, and a side stepback of more than 20 feet from the first story wall. The existing second story is flush with the first story wall on the left side.
- There are no active City code enforcement cases for this property.
- A neighborhood notice was distributed within a 300-foot radius of the subject site for this project review.

Findings

1. *That any off-street parking area, screening strips and other facilitates and improvements necessary to secure the purpose and intent of this title and the general plan of the City area a part of the proposed development, in that;*
   - The development provides the required two car covered parking spaces within the existing

garage.
- The required parking spaces are not located in the required front yard or side yard landscaped areas.
- The development provides the minimum required driveway length of twenty feet between the parking and any street right-of-way line.

2. *That the design and location of the proposed development and its relation to neighboring developments and traffic is such that it will not impair the desirability of investment or occupation in the neighborhood, will not unreasonably interfere with the use and enjoyment of neighboring developments, and will not create traffic congestion or hazard, in that;*
   - The proposed residence resulting in 5-bedrooms and 4.5-bathrooms would not create traffic congestion or hazards.
   - The project includes a condition to maintain the garage clear and unobstructed for parking of two vehicles.
   - Public streets are adequate in size and design to serve the proposed single-family residence, and the use will not create an increase in traffic.

3. *That the design and location of the proposed development is such that it is in keeping with the character of the neighborhood and is such as not to be detrimental to the harmonious development contemplated by this title and the general plan of the City, in that;*
   - The proposed development is a two-story residence that is consistent with the scale and design and similar to that of the surrounding neighborhood which consists of a mix of one- and two-story residences.

4. *That the granting of such approval will not, under the circumstances of the particular case, materially affect adversely the health, comfort or general welfare of persons residing or working in the neighborhood of said development, and will not be materially detrimental to the public welfare or injuries to property or improvements in said neighborhood, in that;*
   - The project is subject to the California Building Code and City Code requirements, which serve to regulate new construction to protect public health, safety and general welfare.

5. *That the proposed development, as set forth in the plans and drawings, are consistent with the set of more detailed policies and criteria for architectural review as approved and updated from time to time by the City Council, which set shall be maintained in the planning division office, in that;*
   - The residence will consist of lap siding and composition shake roofing.
   - The proposed project is compatible in scale and character of the residential structures present in the neighborhood.

<u>Conditions of Approval</u>

1) Permit Expiration. This Architectural Permit shall automatically be revoked and terminated if not used within two years of original grant or within the period of any authorized extensions thereof. The date of granting of this Permit is the date this Permit is approved by the Development Review Officer.
2) Prior to the issuance of a Building Permit, the development of the site and all associated improvements shall conform to the approved plans with File No. **PLN22-00474**, on file with the Community Development Department, Planning Division.
3) Developer/Owner is responsible for collection and pick-up of all trash and debris on-site and

adjacent public right-of-way.

4) Construction activity shall be limited to the hours of 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. Saturdays for projects within 300 feet of a residential use and shall not be allowed on recognized State and Federal holidays.
5) Incorporate Best Management Practices (BMPs) into construction plans and incorporate post construction water runoff measures into project plans in accordance with the City's Urban Runoff Pollution Prevention Program standards prior to the issuance of permits, including the disconnection of roof downspouts to drain over landscaped yards on site.
6) The garage shall always be maintained clear and free for parking of two vehicles. It shall not be used only for storage.

ENVIRONMENTAL REVIEW

Categorical Exemption per CEQA 15301 (e)(1), Existing Facilities in that the project is limited to the construction of one single-family residence.

PUBLIC CONTACT

On April 27, 2023, a notice of public hearing of this item was posted 300 feet of the project site and mailed to property owners within 300 feet of the project site. As of the writing of this report, planning staff has not received public comments for this application.

RECOMMENDATION

Use of a Categorical Exemption per CEQA 15301 (e)(1), Existing Facilities and **Approve** the 594 square foot first floor addition, and 271 second floor addition to an existing two-story residence resulting in a 3,274 square foot 5-bedroom, 4.5-bathroom two-story residence at 462 Muriel Court, subject to conditions.

Prepared by: Tiffany Vien, Associate Planner, Community Development Department
Approved by: Lesley Xavier, Planning Manager, Community Development Department

ATTACHMENTS

1. Development Plan
2. Project Data Table

BUSHELL RESIDENCE

462 MURIEL COURT
SANTA CLARA, CA 95051

DERN
architecture + development

ARCHITECT
DERN ARCHITECTURE + DEVELOPMENT, PC
110 CASA GRANDE
LOS GATOS, CA 95032
MICHAEL DERN, AIA PRINCIPAL
(415) 307-1283

CLIENT
SAM AND JULIE BUSHELL
462 MURIEL COURT
SANTA CLARA, CA 95051

ABBREVIATIONS

A.B.	ANCHOR BOLT
ABV.	ABOVE
A/C	AIR CONDITIONING
ACOUS.	ACOUSTICAL
ADJ.	ADJACENT
ADJ.	ADJUSTABLE
AL.	ALUMINUM
ALT.	ALTERNATE
AMP.	AMPERAGE
AVG.	AVERAGE
BD.	BOARD
BLDG.	BUILDING
BLKG.	BLOCKING
BLT-IN	BUILT-IN
BM.	BEAM
B.N.	BOUNDARY NAILING
BRG.	BEARING
B.S.	BAR SINK
CABT.	CABINET
CALC.	CALCULATION
CMBR.	CAMBER
C.H.C.	CEILING HEIGHT CHANGE
C.I.	CAST IRON
C.J.	CEILING JOIST
C.L.	CENTER LINE
CLG.	CEILING
CLR.	CLEAR
CNTR.	COUNTER
CNTRTP.	COUNTER TOP
C.O.	CASED OPENING
CONC.	CONCRETE
CONT.	CONTINUOUS
CPT.	CARPET
C.R.	CURTAIN ROD
CSMT.WDW.	CASEMENT WINDOW
C.T.	CERAMIC TILE
CULT.	CULTURED
D.	DRYER
DBL.	DOUBLE
D.F.	DOUGLAS FIR
DIA. OR Ø	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DISP.	DISPOSAL
DP.	DEEP
DR.	DOOR
DRP.	DROP
D.S.	DOWNSPOUT
DTL.	DETAIL
D.W.	DISHWASHER
DWG.	DRAWING
DWR.	DRAWER
EA.	EACH
ELECT.	ELECTRICAL
ELEV.	ELEVATION
E.N.	EDGE NAILING
EQ.	EQUAL
EXH.	EXHAUST
EXT.	EXTERIOR
E.W.	EACH WAY
FAU	FORCED AIR UNIT
F.G.	FINISH GRADE
F.G.	FIXED GLASS
F.G.	FUEL GAS
FIN.	FINISH
FIN.FLR.	FINISH FLOOR
F.J.	FLOOR JOIST
FL.	FLUSH
FLUOR.	FLUORESCENT
F.M.C.	FLOOR MATERIAL CHANGE
F.N.	FIELD NAILING
FND.	FOUNDATION
F.O.C.	FACE OF CURB
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUDS
FR.DR.	FRENCH DOOR
FTG.	FOOTING

GA.	GAUGE
GALV.	GALVANIZED
G.B.	GYPSUM BOARD
G.D.	GARBAGE DISPOSAL
G.D.O.	GARAGE DOOR OPERATOR
G.F.I.	GROUND-FAULT CIRCUIT-INTERRUPTER
G.I.	GALVANIZED IRON
GL.	GLASS
GRD.	GRADE
GRND.	GROUND
GYP.	GYPSUM
G.L.B.	GLUED-LAMINATED BEAM
G.T.	GIRDER TRUSS
H.C.	HOLLOW CORE
H.D.	HOLD DOWN ANCHOR
HDR.	HEADER
HGT.	HEIGHT
HNGR.	HANGER
INSUL.	INSULATION
INT.	INTERIOR
LAV.	LAVATORY
LAM.	LAMINATED
L.F.	LINEAL FEET/FOOT
L.L.	LOG LIGHTER
LUM.	LUMINOUS
LVR.	LOUVER
MAR.	MARBLE
MAS.	MASONRY
MAX.	MAXIMUM
M.B.	MACHINE BOLT
M.C.	MEDICINE CABINET
MFR.	MANUFACTURER
MIN.	MINIMUM
MIR.	MIRROR
M-L	MICRO LAM
M.O.	MASONRY OPENING
MTD.	MOUNTED
MTL.	METAL
N.G.	NATURAL GRADE
N.I.C.	NOT IN CONTRACT
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O/	OVER
O.A.	OVERALL
OBS.	OBSCURE
O.C.	OR O/C ON CENTER
O.H.	OVERHEAD
OPG.	OPENING
OSA	OUTSIDE AIR
O.S.B.	ORIENTED STRAND BOARD
P.B.	PUSH BUTTON
P.C.	PORTLAND CEMENT
P.C.	PULL CHAIN
PCE.	PIECE
PH.	PHONE
PLT.	PLATE
PLAS.	PLASTER
PLYWD.	PLYWOOD
PR.	PAIR
PSF	POUNDS/SQUARE FOOT
PSI	POUNDS/SQUARE INCH
P+L	PARALLAM
P.T.D.F.	PRESSURE TREATED DOUGLAS FIR
PVC	POLY VINYL CHLORIDE

R.	RISER
RAD.	RADIAL/RADIUS
R.A.G.	RETURN AIR GRILLE
RECPT.	RECEPTACLE
REF	REFERENCE
REFER.	REFRIGERATOR
REINF.	REINFORCING
RE:S	RE-SAWN
REQ'D	REQUIRED
REV.	REVERSE
REV.	REVISION/REVISE
R.J.	ROOF JOIST
RO-IN	ROUGH-IN
R.O.	ROUGH OPENING
RO:S	ROUGH SAWN
R.R.	ROOF RAFTER
RWD.	REDWOOD
S.	SINK
S.C.	SOLID CORE
SCH.	SCHEDULE
SCRND.	SCREENED
SEC.	SECOND
SECT.	SECTION
SEL.	SELECT
SEL.STR.	SELECT STRUCTURAL
SER.	SERVICE
S.H.	SINGLE HUNG
SHT.	SHEET
SHTHG.	SHEATHING
SHWR.	SHOWER
SL.	SLIDING
SPL.	SPLASH
SPN.	SILL PLATE NAILING
S & P	SHELF & POLE
S.S.	SERVICE SINK
STD.	STANDARD
S.V.	SHEET VINYL
STRUCT.	STRUCTURAL
SW.	SWITCH
T	TREAD
T & B	TOP & BOTTOM
T.C.	TRASH COMPACTOR
TEMP.GL.	TEMPERED GLASS
T & G	TONGUE & GROOVE
TJI	TRUSS JOIST
T.O.C.	TOP OF CURB
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF SLAB
T.O.W.	TOP OF WALL
T.V.	TELEVISION
UNFIN.	UNFINISHED
U	URINAL
U.N.O.	UNLESS NOTED OTHERWISE
VAN.	VANITY
VEN.	VENEER
VERT.	VERTICAL
V.G.	VERTICAL GRAIN
V.B.	VAPOR BARRIER
V.P.	VAPORPROOF
W	WASHER
W/	WITH
W.C.	WATER CLOSET
WD.	WOOD
WDW.	WINDOW
W.H.	WATER HEATER
W/O	WITHOUT
W.P.	WEATHER PROOF
W/R	WARDROBE
WT.	WEIGHT

JOB SITE CONDITIONS

SAFETY, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY PRECAUTIONS OR SAFETY PROGRAMS USED TO PROVIDE A SAFE WORKING ENVIRONMENT ON THE JOB SITE.

CONSTRUCTION EXECUTION, EACH CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION, AND EQUIPMENT NECESSARY TO PERFORM ALL WORK UNDER HIS TRADE IN FULL ACCORDANCE WITH THE WORKING DRAWINGS, SPECIFICATIONS AND CONTRACTS.

JOB SITE CONDITIONS, EACH CONTRACTOR SHALL CLEAN UP AND REMOVE ALL DEBRIS RESULTING FROM HIS WORK PRIOR TO SUBMITTING REQUEST FOR PROGRESS PAYMENT. IN NO CASE WILL FINAL PAYMENT BE DISPERSED TO EITHER THE PRIME CONTRACTOR OR ANY SUB-CONTRACTOR UNTIL ALL DEBRIS AND EQUIPMENT OWNED BY SAID CONTRACTOR'S, HAS BEEN REMOVED FROM THIS PROJECT SITE OR UNTIL OWNER APPROVAL HAS BE GRANTED.

THE RESPONSIBLE PARTY, EITHER THE PROJECT OWNER OR THIS SIGNED DESIGNER, SHALL BE NOTIFIED OF ERRORS OR OMISSIONS FOR CORRECTIONS BEFORE PROCEEDING WITH THE WORK.

STORAGE, MATERIALS STORED ON SITE SHALL BE PROTECTED FROM DAMAGE BY MOISTURE, WIND, SUN, ABUSE OR ANY OTHER HARMFUL AFFECTS.

CHANGES, ANY MINOR OR REQUIRED CHANGES OR MODIFICATIONS TO THIS PLAN DO NOT REDUCE OR VOID THE COPYRIGHTS COVERING THIS SET OF PLANS IN ANY WAY. MODIFICATIONS TO THIS PLAN, FOR ANY REASON, SHOULD BE ATTEMPTED BY AND ARCHITECT OR ENGINEER ONLY. DESIGNER ACCEPTS NO RESPONSIBILITY FOR THE QUALITY AND COMPLETENESS OF ANY CHANGES ATTEMPTED.

MATERIALS, ALL MATERIALS, SUPPLIES AND EQUIPMENT SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PER APPLICABLE CODES AND REQUIREMENTS. THE DESIGNER SHALL HAVE NO CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSON PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

PROJECT GENERAL NOTES

REGULATORY REQUIREMENTS:
1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL REQUIREMENTS OF ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, LAWS AND REGULATIONS GOVERNING CONSTRUCTION, BUILDING ACCESS, AND THE USE OF FACILITIES. THIS INCLUDES THE 2022 CALIFORNIA BUILDING CODE & ALL CODES, ORDINANCES AND LAWS ADOPTED BY THE CITY OF SANTA CLARA, CA.
2. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" AIA DOCUMENT A201 2007 EDITION, GOVERNS THIS WORK U.O.N.
3. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL CONTRACT DOCUMENTS AND FIELD CONDITIONS AND SHALL BASE HIS BID ON EXISTING CONDITIONS. SUBMIT WRITTEN EXCEPTIONS OR OBJECTIONS, WITH ANALYSIS AND RECOMMENDATIONS TO THE OWNER PRIOR TO SUBMITTING BID COSTS.
4. ALL MECHANICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2022 CALIFORNIA MECHANICAL CODE OR OVERRIDING LOCAL MECHANICAL CODES.
5. ALL PLUMBING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2022 CALIFORNIA PLUMBING CODE OR OVERRIDING LOCAL PLUMBING CODES.
6. ALL ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2022 CALIFORNIA ELECTRICAL CODE OR OVERRIDING LOCAL ELECTRICAL CODES.
7. ALL SHEET METAL WORK AND FLASHING SHALL CONFORM TO S.M.A.C.N.A. STANDARDS.
8. CITY AMENDMENTS: CITY OF SANTA CLARA CODE
9. ALL BUILDING STANDARD CONSTRUCTION, MATERIALS AND PRODUCTS SHALL CONFORM TO THE MOST CURRENT STANDARDS AND DETAILS AS OUTLINED IN THE SPECIFICATIONS, EXCEPT AS EXPLICITLY SUPERSEDED HEREIN.

SUBSTITUTIONS:
1. REQUEST FOR SUBSTITUTION WILL BE RECEIVED FROM THE GENERAL CONTRACTOR ONLY.
2. PRODUCTS IN THE CONSTRUCTION DOCUMENTS IDENTIFIED BY NAME, BRAND OR MODEL OF A MANUFACTURER'S ARTICLE SHALL BE PROVIDED UNLESS A WRITTEN REQUEST FOR SUBSTITUTION IS ACCEPTED BY THE ARCHITECT. IN THE EVENT THAT THE CONTRACTOR MAKES A SUBSTITUTION WITHOUT PRIOR APPROVAL FROM THE ARCHITECT, THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THE SUBSTITUTION AND REPLACE IT PER SPECIFICATIONS WITHOUT ANY ADJUSTMENT TO THE CONTRACT AMOUNT OR TIME.
3. THE PRODUCTS DESCRIBED IN THE CONSTRUCTION DOCUMENTS ESTABLISH A STANDARD OF REQUIRED FUNCTION, DIMENSION, APPEARANCE AND QUALITY TO BE MET BY ANY PROPOSED SUBSTITUTION. THE BURDEN OF PROOF OF THE MERIT OF THE PROPOSED SUBSTITUTION IS UPON THE PROPOSER. THE OWNER'S DECISION OF THE APPROVAL OR DISAPPROVAL SHALL BE FINAL.
4. THE REQUEST SHALL INCLUDE ANY CHANGE REQUIRED IN OTHER ELEMENTS OF THE WORK DUE TO THE SUBSTITUTION.

SUBMITTALS:
1. SCHEDULE SUBMITTALS TO EXPEDITE PROJECT, AS TO CAUSE NO DELAY IN THE WORK OR IN THE WORK OF THE OWNER OR ANY SEPARATE CONTRACTOR. SUBMITTALS NOT SPECIFICALLY REQUESTED SHALL BE RETURNED WITHOUT REVIEW.
2. SHOP DRAWINGS SHALL BE DRAWN AT A SCALE SUFFICIENT FOR CLARITY AND COORDINATION AND SHALL SHOW NECESSARY WORKING AND ERECTION DIMENSIONS.
3. CIRCLE ALL DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS AND PROVIDE A BRIEF WRITTEN EXPLANATION TO CLARIFY AND SUPPORT REASONS FOR PROPOSED DEVIATION.
4. THE CONTRACTOR SHALL PROVIDE THE OWNER A PROJECT SCHEDULE OUTLINING THE WORK TO OCCUR, AND THE MATERIALS BEING ORDERED ON A WEEKLY BASIS PRIOR TO BEGINNING THE PROJECT.
5. CONTRACTOR SHALL ALLOW 5 DAYS FOR ARCHITECT AND OWNER TO REVIEW SUBMITTALS.
6. ALL SUBMITTALS SHALL HAVE CONTRACTORS STAMP INDICATING SUBMITTAL HAS BEEN REVIEWED AND APPROVED BY GENERAL CONTRACTOR PRIOR TO BEING SEND TO ARCHITECT AND OWNER FOR REVIEW.
7. SUBMITTALS SENT FOR ARCHITECT AND OWNER REVIEW THAT DO NOT HAVE THE STAMP OF THE GENERAL CONTRACTOR WILL BE RETURNED WITHOUT REVIEW.

PROTECTIONS:
1. BY ACCEPTING THESE DRAWINGS THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE SAFETY CONDITIONS FOR ALL PERSONS AND PROPERTY, CONTINUOUSLY DURING CONSTRUCTION OF THIS PROJECT, AND NOT LIMITED TO NORMAL WORKING HOURS.
2. THE CONTRACTOR SHALL PROTECT NEW AND EXISTING WORK, EQUIPMENT, MATERIALS AND FINISHES. DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE GENERAL CONTRACTOR.
3. THE CONTRACTOR SHALL AT ALL TIMES DURING THE COURSE OF THE CONTRACT KEEP THE BUILDING, THE OWNER'S PREMISES AND THE ADJOINING PREMISES, INCLUDING STREETS AND OTHER AREAS ASSIGNED TO, OR USED BY THE CONTRACTOR, FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH CAUSED BY HIS EMPLOYEES, SUBCONTRACTORS OR THEIR WORK.
4. CONTRACTOR SHALL VERIFY LOCATION OF TRANSFORMERS AND UNDERGROUND UTILITIES WITH APPLICABLE UTILITY COMPANIES.
5. CONTRACTOR SHALL PROTECT FROM DAMAGE AND KEEP CLEAN ALL COMMON AREAS OF THE PROJECT.

PERFORMANCE REQUIREMENTS:
1. DO NOT SCALE DRAWINGS.
2. ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED AND CHECKED BY THE GENERAL CONTRACTOR AND THE SUBCONTRACTORS PRIOR TO BEGINNING WORK AND PRIOR TO ORDERING ANY MATERIALS. ANY ERRORS, OMISSIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE GENERAL CONTRACTOR. SHOULD THERE BE ANY DISCREPANCIES, ERRORS OR OMISSIONS IN THESE DRAWINGS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND WAIT TO RECEIVE WRITTEN INSTRUCTIONS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
3. THESE DRAWINGS AND SPECIFICATIONS ARE DIVIDED INTO SECTIONS FOR CONVENIENCE ONLY. CONTRACTORS, SUBCONTRACTORS, AND MATERIAL SUPPLIERS SHALL REFER TO ALL RELEVANT SECTIONS IN BIDDING AND PERFORMING THEIR WORK, AND SHALL BE RESPONSIBLE FOR ALL ASPECTS OF THEIR WORK REGARDLESS OF WHERE THE INFORMATION OCCURS ON THE DRAWINGS.
4. SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATION OF THEIR WORK WITH THE WORK OF OTHERS. SUBCONTRACTORS SHALL VERIFY THAT ANY WORK RELATED TO THEM, WHICH MUST BE PROVIDED BY OTHERS, HAS BEEN COMPLETED AND IS ADEQUATE PRIOR TO COMMENCING THEIR WORK.
5. PROVIDE STRUCTURAL BACKING FOR ALL WALL MOUNTED EQUIPMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, COORDINATION, AND EXECUTION OF CONSTRUCTION MEANS, METHODS AND PROCEDURES.
7. PATCH AND REPAIR ALL DISTURBED AREAS TO MATCH ADJACENT SYSTEMS, MATERIALS, AND FINISHES, UNLESS OTHERWISE NOTED.
8. INSTALL ALL MATERIALS AND EQUIPMENT AS PER MANUFACTURERS WRITTEN RECOMMENDATIONS.
9. ALL INTERIOR DIMENSIONS SHOWN IN FLOOR PLANS ARE FACE OF FINISH, U.O.N.
10 ALL EXTERIOR DIMENSIONS ARE SHOW FACE OF FRAMING, U.O.N.
11. DETAILS SHOWN ARE TYPICAL, SIMILAR DETAILS APPLY IN SIMILAR CONDITIONS.
12. ALL GLAZING SUBJECT TO HUMAN IMPACT SHALL BE 1/4" TEMPERED GLASS UNLESS OTHERWISE NOTED.
13. CONTRACTOR SHALL FURNISH AND INSTALL ALL DOORS COMPLETE WITH ALL HARDWARE AS REQUIRED BY CODE AND/OR SPECIFIC INSTALLATION.
14. FIRE EXTINGUISHERS SHALL BE LOCATED ACCORDING TO CODE REQUIREMENTS AND MEET ALL APPLICABLE CODES.
15. WHERE NEW WALLS ALIGN WITH EXISTING WALLS, RESULTANT WALL SURFACES SHALL FORM A SMOOTH AND CONTINUOUS PLANE.
16. AT THE COMPLETION OF THE WORK THE CONTRACTOR SHALL REMOVE FROM THE BUILDING AND THE PREMISES ALL SURPLUS MATERIALS AND DEBRIS, AND CLEAN ALL NEW WORK TO THE OWNERS SATISFACTION, INCLUDING BUT NOT LIMITED TO CLEANING INTERIOR GLASS, CLEANING ALL MILLWORK, INSIDE AND OUTSIDE OF CABINETRY, AND CLEANING AND WAXING ALL FLOORING.
17. ALL BUILDING MATERIALS SHALL BE THE MOST NONTOXIC AND THE LOWEST POLLUTING AVAILABLE. THE BUILDING SHALL BE VENTILATED DURING CONSTRUCTION AND THOROUGHLY AIRED OUT BEFORE OCCUPANCY.
18. NAIL UP ALL J-BOXES FOR REVIEW PRIOR TO WIRING. VERIFY ALL LOCATIONS OF POWER OUTLETS, PHONE JACKS, TV, LIGHT FIXTURES AND SWITCHES W/ OWNER PRIOR TO WIRING.
19. CONTRACTOR SHALL PROVIDE SAMPLES OF ALL MATERIALS (INCLUDING BUT NOT LIMITED TO: TILE, TILE TRIM, PAINT, ROOFING, SIDING, WOOD TRIM, WOOD BASE, COUNTERTOPS AND HARDWARE)TO THE OWNER FOR APPROVAL PRIOR TO ORDERING MATERIALS.
20. THE CONTRACTOR SHALL VERIFY WITH THE OWNER MINIMALLY THREE WEEKS PRIOR TO COVER-UP OF THE SPECIAL WIRING REQUIREMENTS SUCH AS ALARMS AND STEREO SYSTEMS.
22. ALL ELECTRICAL, HVAC, AND PLUMBING SHALL BE DESIGN BUILD BASED ON INFORMATION PROVIDED BY THE CONSTRUCTION DOCUMENTS.
22. A MINIMUM OF 60 PERCENT OF THE CONSTRUCTION WASTE GENERATED AT THE SITE IS DIVERTED TO RECYCLE OR SALVAGE.
23. AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER. DEFINITIONS: "TYPICAL" MEANS IDENTICAL FOR ALL SIMILAR CONDITIONS. U.O.N. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE CONDITIONS NOTED. "ALIGN" MEANS TO ACCURATELY LOCATE FINISHES IN THE SAME PLANE.
24. BUILDING ADDRESS: TO BE POSTED IN A CONSPICUOUS PLACE AND LIGHTED EXTERNALLY. NUMBERS SHALL BE OF CONTRASTING COLOR TO BACKGROUND COLOR.

PROJECT DATA

LOCAL JURISDICTION:	CITY OF SANTA CLARA, CA
ASSESSOR'S PARCEL NUMBER:	294-31-024
PROJECT ADDRESS:	462 MURIEL COURT SANTA CLARA, CA 95051
ZONING:	R1-6L - SINGLE FAMILY
OCCUPANCY GROUP:	R-1 SINGLE FAMILY RESIDENTIAL
CONSTRUCTION TYPE:	TYPE V-B (NON-SPRINKLERED)
NO. OF STORIES:	EXISTING : 2-STORY PROPOSED: 2-STORY
AREA:	

LOT SIZE / AREA: 10,248 SF

EXISTIING		PROPOSED	
(E) FIRST FLOOR	1,635 SF	FIRST FLOOR	2,229 SF
(E) SECOND FLOOR	774 SF	SECOND FLOOR	1,045 SF
(E) 2-CAR GARAGE	458 SF	2-CAR GARAGE	458 SF
	2,867 SF		3,732 SF

FAR EXISTING HOUSE: 28% FAR PROPOSED HOUSE: 36.4%

CODE REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF THE FOLLOWING 2022 CALIFORNIA BUILDING STANDARDS CODE, CCR TITLE 24:

APPLICABLE BUILDING CODES:

2022 CALIFORNIA BUILDING CODE (CBC)
2022 CALIFORNIA MECHANICAL CODE (CMC)
2022 CALIFORNIA PLUMBING CODE (CPC)
2022 CALIFORNIA ELECTRICAL CODE (CEC)
202 CALIFORNIA ENERGY CODE
2022 CALIFORNIA FIRE CODE
2022 CALIFORNIA GREEN BUILDING CODE
2022 CALIFORNIA STANDARDS CODE
2022 CALIFORNIA RESIDENTIAL CODE

CITY AMENDMENTS: CITY OF SANTA CLARA CODE

SCOPE OF WORK

ADDITION TO AND REMODEL THE EXISTING HOUSE AT THE FIRST FLOOR AND SECOND FLOOR LEVELS.

REFERENCE MAP

PROJECT SITE

SHEET INDEX

SHEET NUMBER	SHEET NAME	DEVELOPMENT REVIEW 4/14/2023
ARCHITECTURAL		
A0.1	PROJECT DATA AND INFORMATION	X
A0.2	CAL GREEN REQUIREMENTS	X
A0.3	CALGREEN REQUIREMENTS	X
A0.4	MF-1R MANDATORY RESIDENTIAL	X
A1.1	EXISTING SITE PLAN	X
A1.2	PROPOSED SITE PLAN	X
A1.3	EXISTING AREA VS. PROPOSED AREA	X
A2.1	EXISTING FIRST FLOOR	X
A2.2	PROPOSED FIRST FLOOR	X
A2.3	EXISTING SECOND FLOOR	X
A2.4	PROPOSED SECOND FLOOR	X
A3.2	PROPOSED ROOF PLAN	X
A4.1	EXISTING EXTERIOR ELEVATIONS	X
A4.2	EXISTING EXTERIOR ELEVATIONS	X
A4.3	PROPOSED EXTERIOR ELEVATIONS	X
A4.4	PROPOSED EXTERIOR ELEVATIONS	X

GENERAL NOTES LEGEND

KEY NOTE REFERENCE
DETAIL REFERENCE
DETAIL NUMBER
SHEET NUMBER
REVISION
SECTION REFERENCE
SECTION NUMBER
SHEET NUMBER
CENTERLINE
INTERIOR ELEVATION REFERENCE
SHEET NUMBER
ELEVATION NUMBER
EXISTING FULL HEIGHT WALL
KITCHEN 200 SF
ROOM NAME AND SQUARE FOOTAGE
PROPOSED FULL HEIGHT WALL
DETAIL OR PLAN ENLARGEMENT
DETAIL NUMBER
SHEET NUMBER
COLUMN LINES

LICENSED ARCHITECT
MICHAEL JOSEPH DERN
C26779
03/31/2023
RENEWAL DATE
STATE OF CALIFORNIA

BUSHELL RESIDENCE
462 MURIEL COURT
SANTA CLARA, CA 95051

REVISION

No.	Description	Date

DA+D PROJECT NUMBER
2003

DATE
4/14/2023

ISSUE
DEVELOPMENT REVIEW

SHEET TITLE
PROJECT DATA AND INFORMATION

SHEET NO.
A0.1

© DERN A+D

AIA California

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y | N/A | RESPON. PARTY

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

Exceptions:

1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of *CAL*Green, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS

4.102.1 DEFINITIONS

The following terms are defined in Chapter 2 *(and are included here for reference)*

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT

■ □ GC — **4.106.1 GENERAL.** Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

■ □ GC — **4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION.** Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

■ □ GC — **4.106.3 GRADING AND PAVING.** Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

□ ■ — **4.106.4 Electric vehicle (EV) charging for new construction.** New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 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:

1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.
   1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

□ ■ — **4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.** For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the *California Electrical Code*.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

□ ■ — **4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.**
When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

□ ■ — **4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms.**
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exceptions:

1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.

2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

Notes:

a.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

□ ■ — **4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms.**
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, tem 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

Notes:

a.Construction documents shall show locations of future EV spaces.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).
Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.

4.106.4.2.2.1.1 Location.
EVCS shall comply with at least one of the following options:

1.The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.

2.The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions.
The charging spaces shall be designed to comply with the following:

1.The minimum length of each EV space shall be 18 feet (5486 mm).

2.The minimum width of each EV space shall be 9 feet (2743 mm).

3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).

a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.2.1.3 Accessible EV spaces.
In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.

4.106.4.2.3 EV space requirements.
1.Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code.

4.106.4.2.4 Identification.
The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

4.106.4.2.5 Electric Vehicle Ready Space Signage.
Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

□ ■ — **4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings.**
When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

Notes:

1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

2.There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE

■ □ GC — **4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.1.4.5 Pre-rinse spray valves.
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations),Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]

□ ■ — **4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.**
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code*.

■ □ GC — **4.303.3 Standards for plumbing fixtures and fittings.** Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

4.304 OUTDOOR WATER USE

■ □ GC — **4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code Regulations,* Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

■ □ GC — **4.406.1 RODENT PROOFING.** Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

■ □ GC — **4.408.1 CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

■ □ GC — **4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN.** Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

■ □ GC — **4.408.3 WASTE MANAGEMENT COMPANY.** Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

■ □ GC — **4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR].** Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

■ □ GC — **4.408.5 DOCUMENTATION.** Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION

■ □ GC — **4.410.1 OPERATION AND MAINTENANCE MANUAL.** At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard dranage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utiity, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspections verifications required by the enforcing agency or this code.
11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
12. Information and/or drawings identifying the location of grab bar reinforcements.

■ □ GC — **4.410.2 RECYCLING BY OCCUPANTS.** Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

4.501.1 Scope

The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

5.102.1 DEFINITIONS

The following terms are defined in Chapter 2 (and are included here for reference)

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

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REVISION

No.	Description	Date

DA+D PROJECT NUMBER
2003

DATE
4/14/2023

ISSUE
DEVELOPMENT REVIEW

SHEET TITLE
CAL GREEN REQUIREMENTS

SHEET NO.
A0.2

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AIA California

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

2

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR,INSPECTOR ETC.)

Y | N/A | RESPON. PARTY

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O³/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503 FIREPLACES

□ ■ **4.503.1 GENERAL.** Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

■ □ GC **4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION.** At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system

■ □ GC **4.504.2 FINISH MATERIAL POLLUTANT CONTROL.** Finish materials shall comply with this section.

■ □ GC **4.504.2.1 Adhesives, Sealants and Caulks.** Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and tricloroethylene), except for aerosol products, as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with section 94507.

■ □ GC **4.504.2.2 Paints and Coatings.** Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

■ □ GC **4.504.2.3 Aerosol Paints and Coatings.** Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

■ □ GC **4.504.2.4 Verification.** Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

(Less Water and Less Exempt Compounds in Grams per Liter)

ARCHITECTURAL APPLICATIONS	VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

(Less Water and Less Exempt Compounds in Grams per Liter)

SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

■ □ GC **4.504.3 CARPET SYSTEMS.** All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

■ □ GC **4.504.3.1 Carpet cushion.** All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, 'Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

■ □ GC **4.504.3.2 Carpet adhesive.** All carpet adhesive shall meet the requirements of Table 4.504.1.

■ □ GC **4.504.4 RESILIENT FLOORING SYSTEMS.** Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

hhttps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

■ □ GC **4.504.5 COMPOSITE WOOD PRODUCTS.** Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

■ □ GC **4.504.5.1 Documentation.** Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Austraian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the *California Building Standards Code*.

■ □ GC **4.505.2 CONCRETE SLAB FOUNDATIONS.** Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

■ □ GC **4.505.2.1 Capillary break.** A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

■ □ GC **4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS.** Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documenation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST

■ □ GC **4.506.1 Bathroom exhaust fans.** Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compiant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
   a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code*.

4.507 ENVIRONMENTAL COMFORT

■ □ GC **4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN.** Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

■ □ GC **702.1 INSTALLER TRAINING.** HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

■ □ GC **702.2 SPECIAL INSPECTION [HCD].** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

■ □ GC **703.1 DOCUMENTATION.** Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURSIDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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No.	Description	Date

DA+D PROJECT NUMBER
2003

DATE
4/14/2023

ISSUE
DEVELOPMENT REVIEW

SHEET TITLE
CALGREEN REQUIREMENTS

SHEET NO.
A0.3

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2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.
(04/2022)

Building Envelope:

§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped. *
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Roof Deck, Ceiling and Rafter Roof Insulation.** Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. *
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45. *

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device. *
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-§ 110.3:	**Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission. *
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating. *
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters. *
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(j)2:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location and a condensate drain no more than 2" higher than the base of the water heater
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

Ducts and Fans:

§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼", If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses .** Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-iii.
§ 150.0(o)1G:	**Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Giii, enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Gii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.** The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves. *

Lighting:

§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k). *

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls.** In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers.** Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	**Independent controls.** Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110.10(b)1A:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment. *
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(s)	**Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, *or* a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	**Heat Pump Space Heater Ready.** Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u)	**Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Clothes Dryer Ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.

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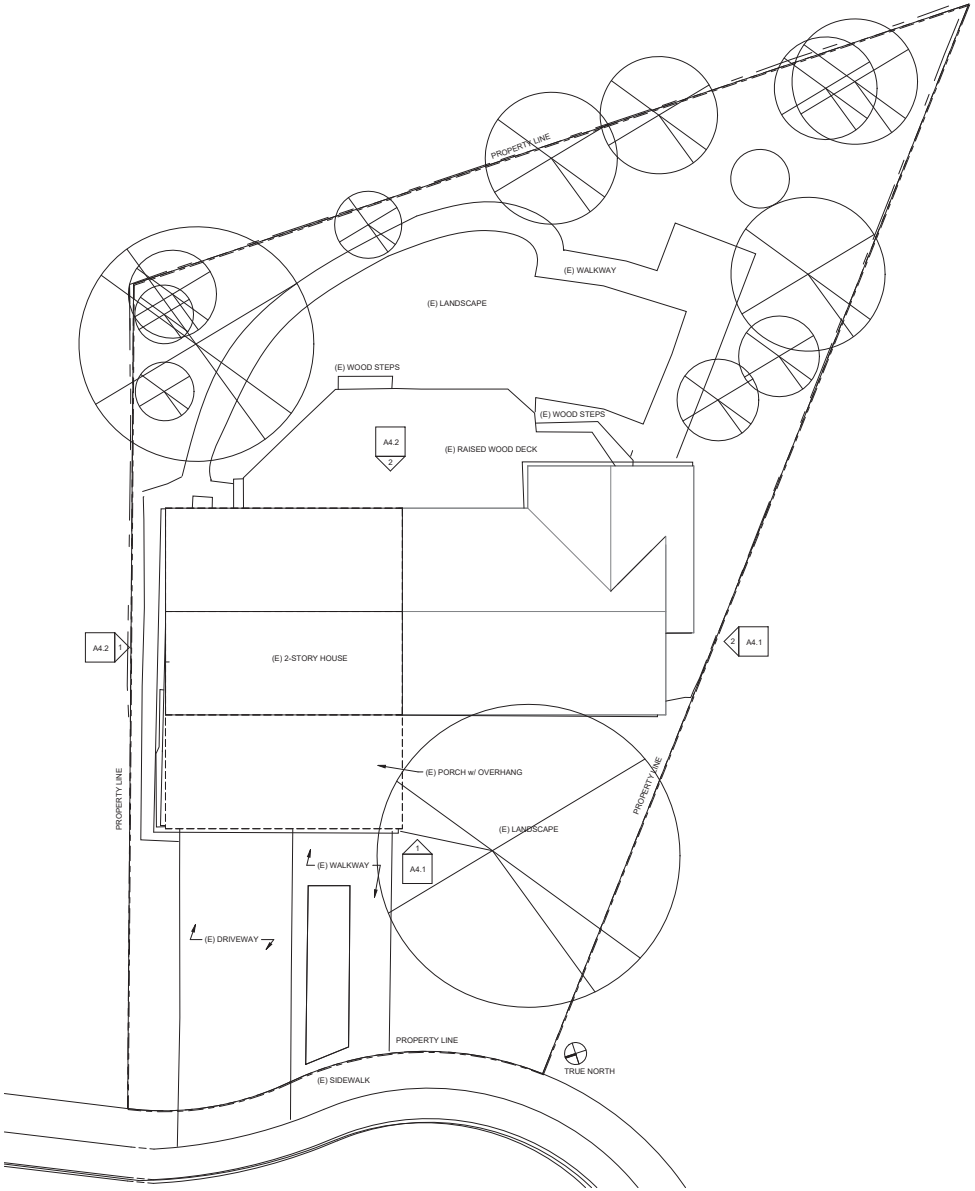

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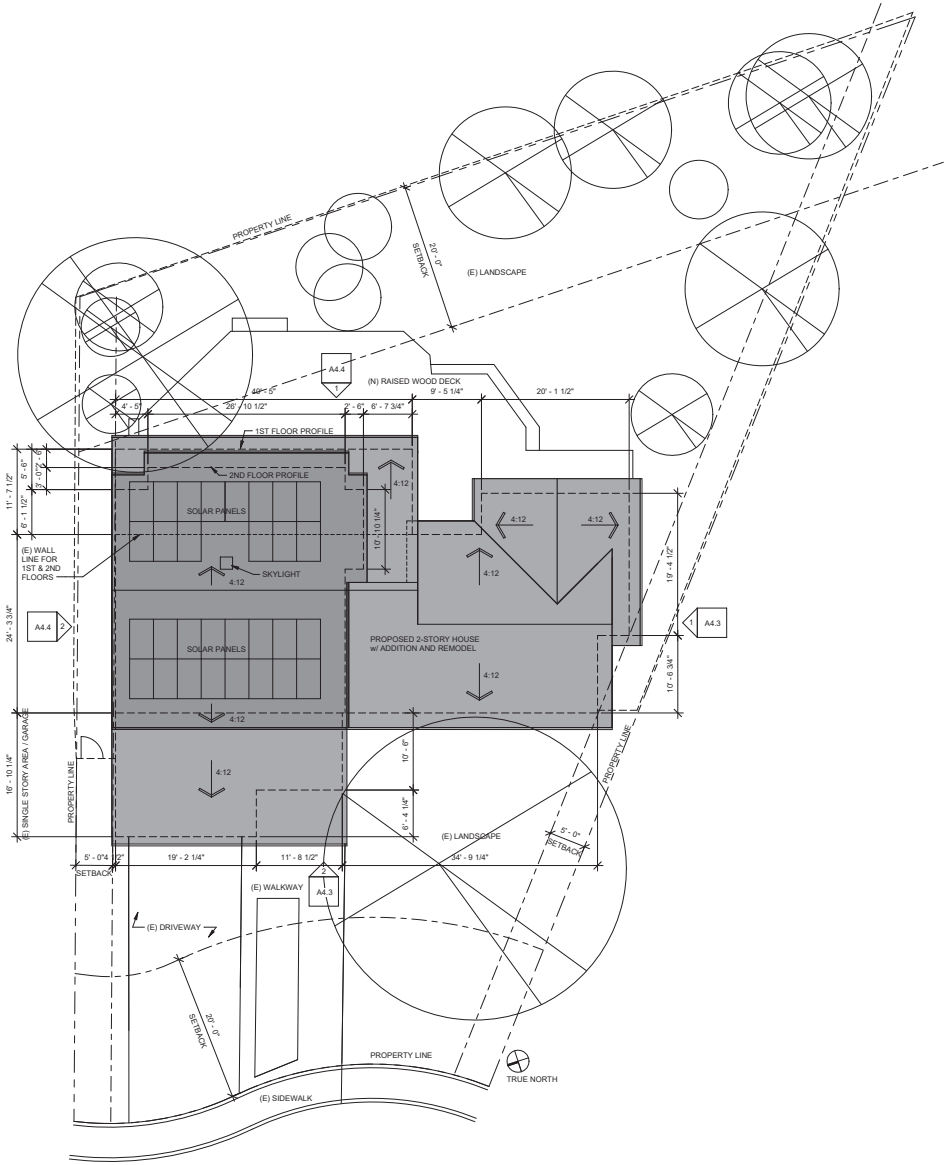

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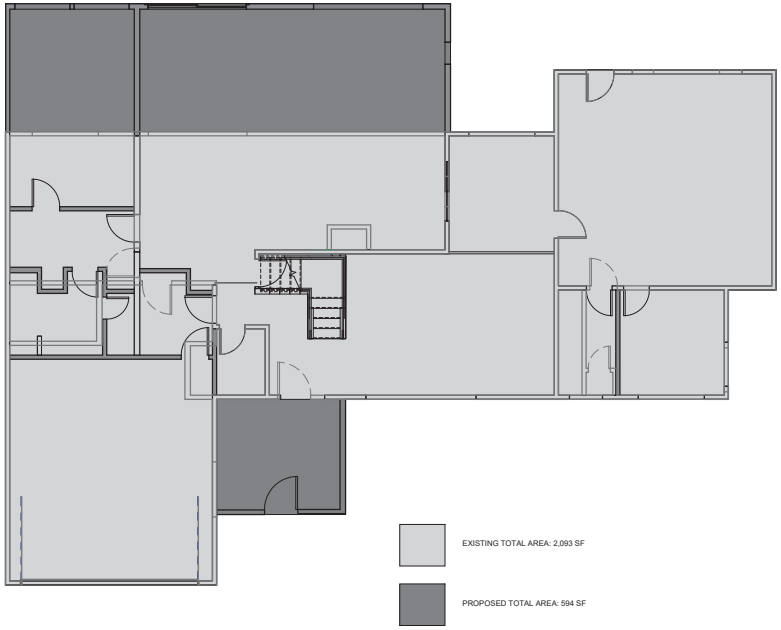
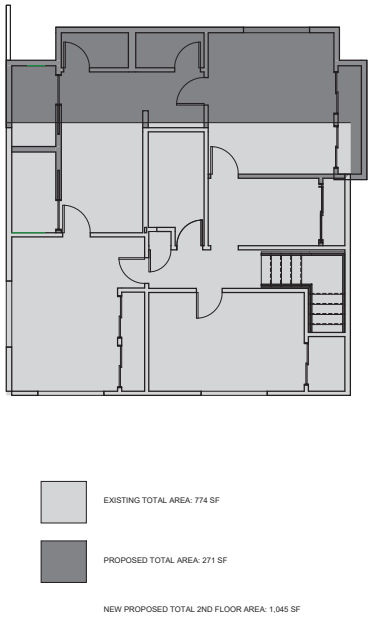


EXISTING VS. PROPOSED AREA - LEVEL 1
1 3/16" = 1'-0"



EXISTING VS. PROPOSED AREA - LEVEL 2
2 3/16" = 1'-0"

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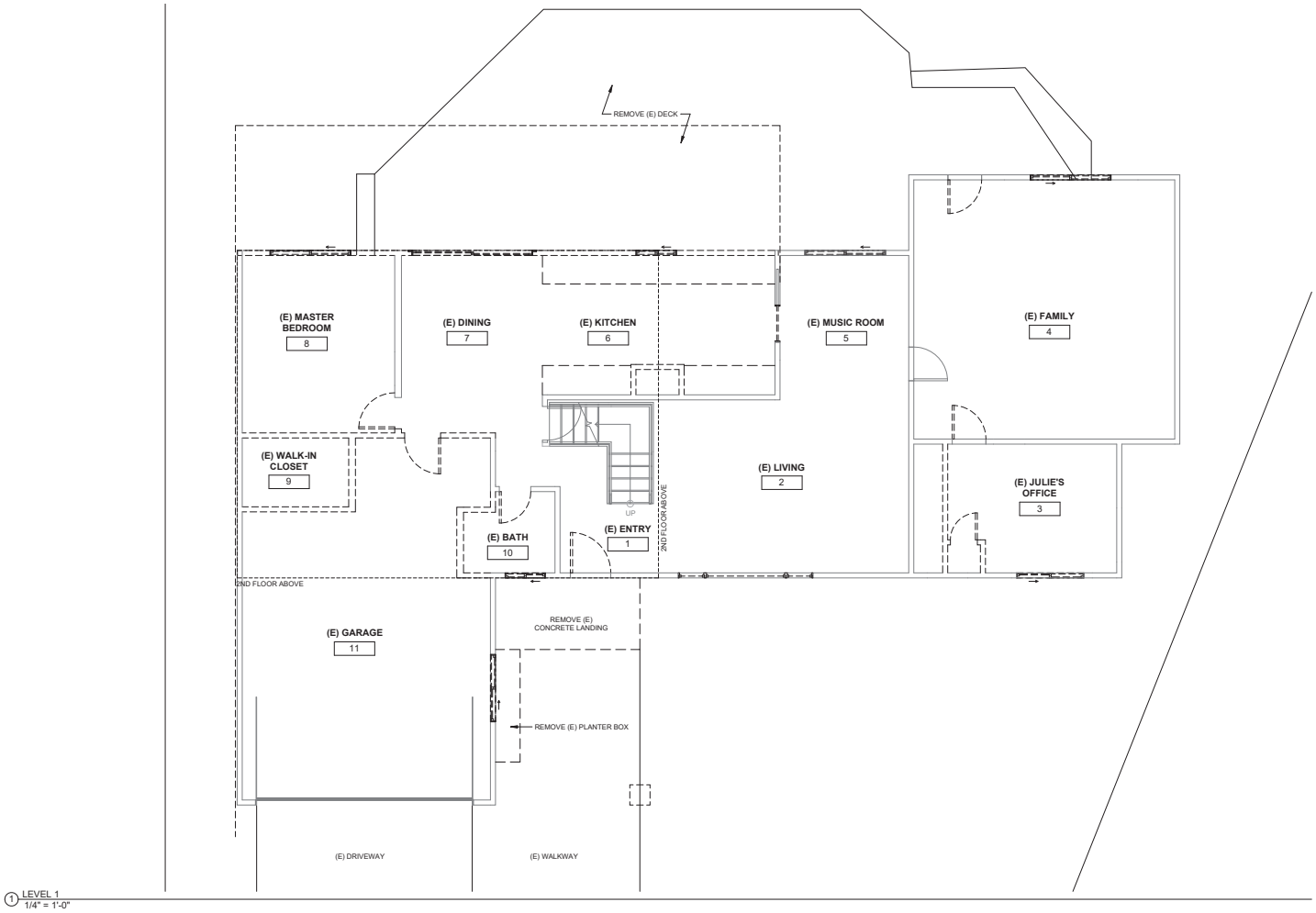

1 LEVEL 1
1/4" = 1'-0"

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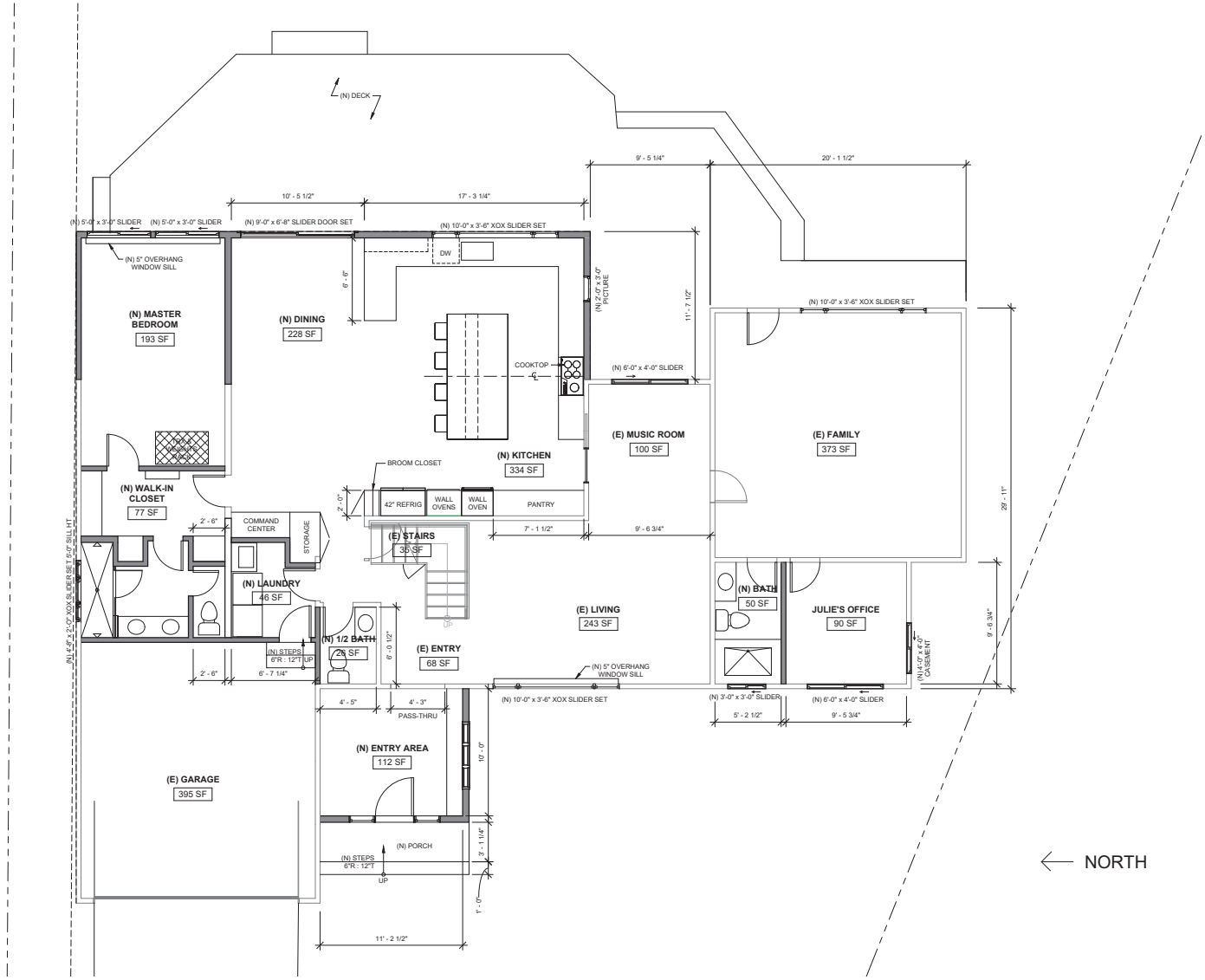

1 LEVEL 1 - PROPOSED
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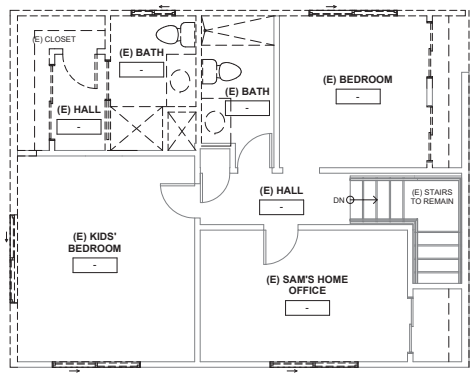

1 LEVEL 2 - EXISTING
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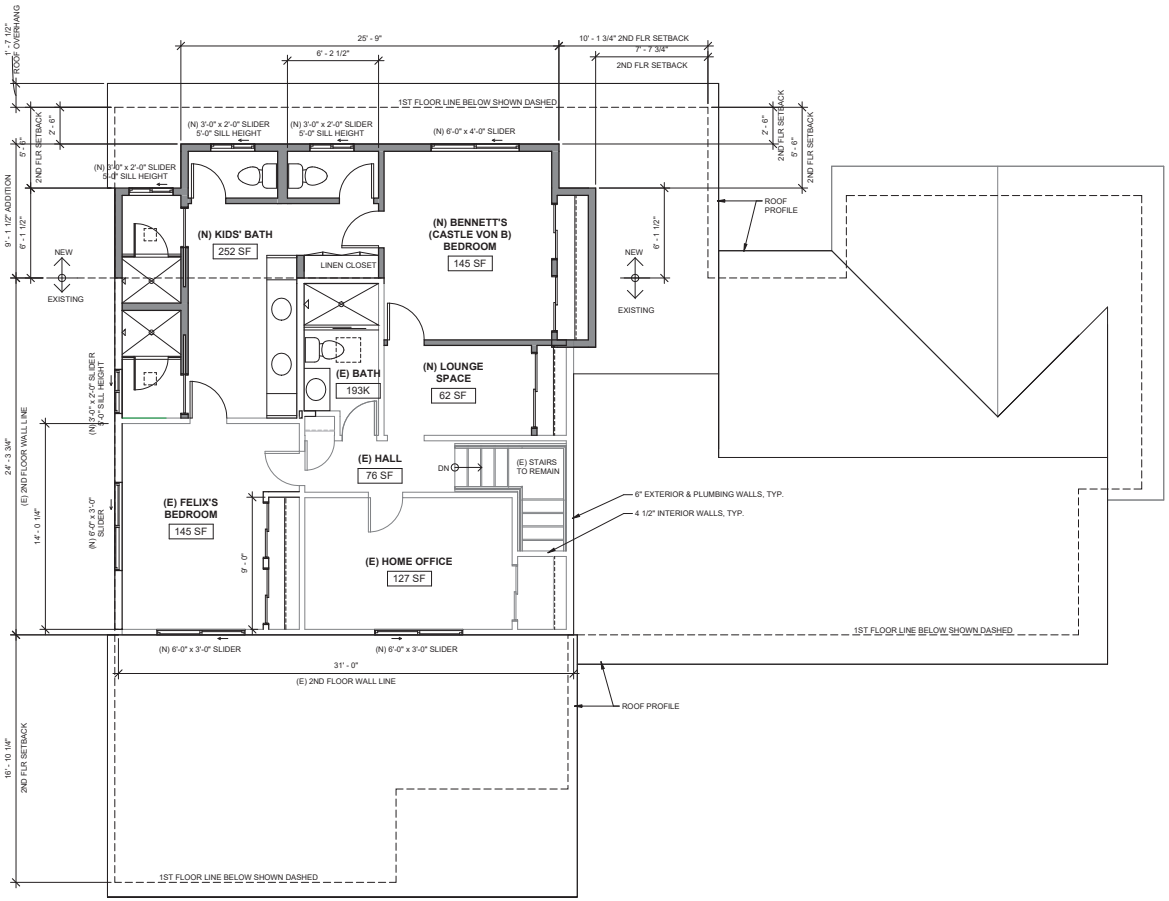

1 LEVEL 2
1/4" = 1'-0"

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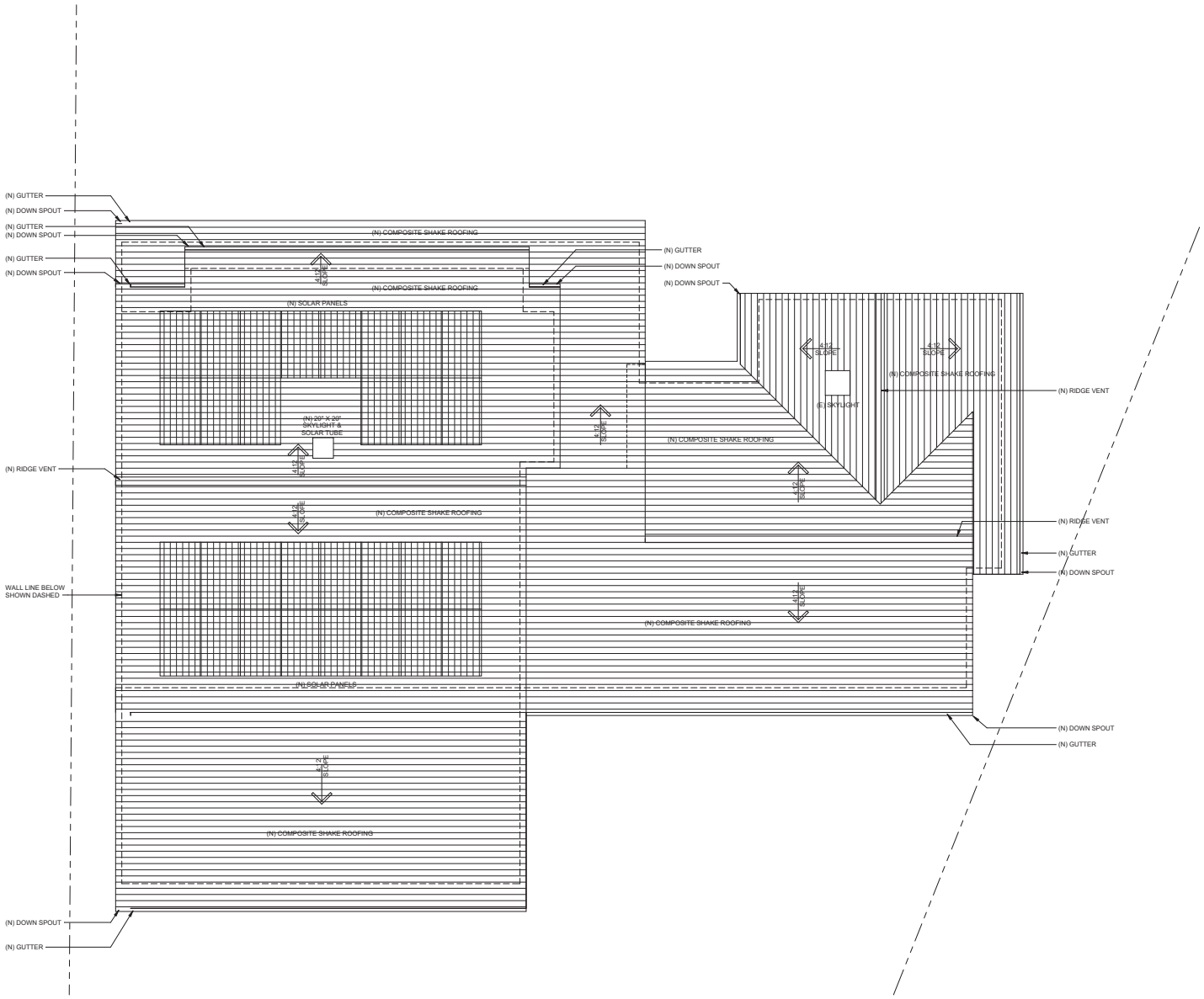

1 PROPOSED ROOF PLAN
1/4" = 1'-0"

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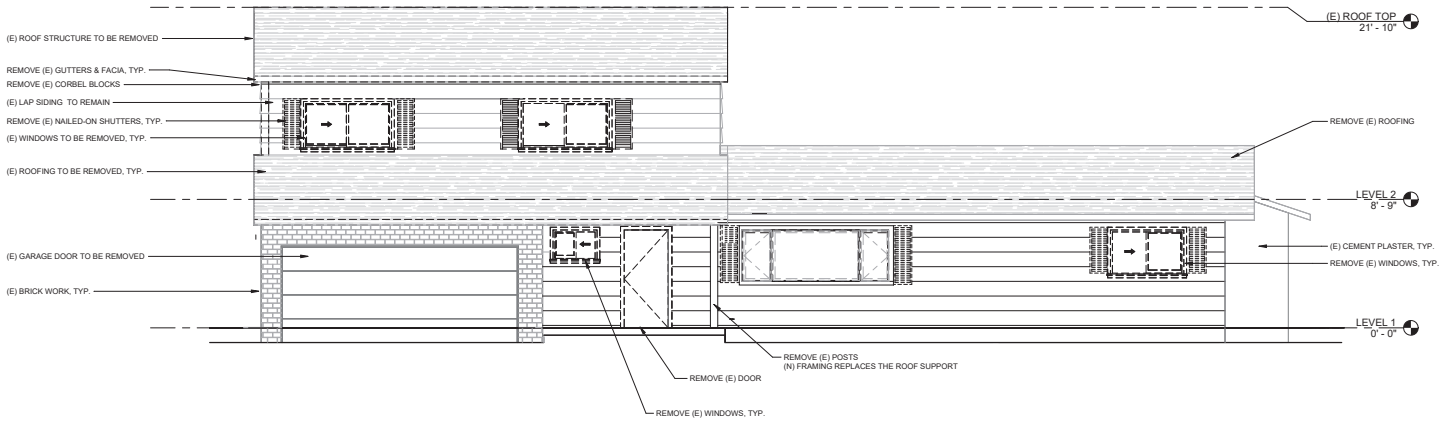
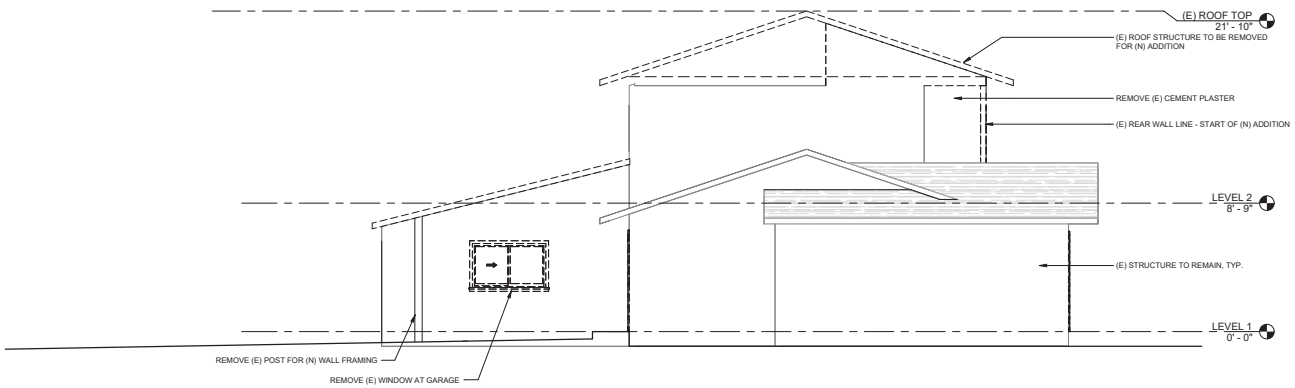


1 EXISTING WEST EXTERIOR ELEVATION
1/4" = 1'-0"



2 EXISTING SOUTH EXTERIOR ELEVATION
1/4" = 1'-0"

DERN
architecture + development

ARCHITECT
DERN ARCHITECTURE + DEVELOPMENT, PC
110 CASA GRANDE
LOS GATOS, CA 95032
MICHAEL DERN, AIA PRINCIPAL
(415) 307-1283

CLIENT
SAM AND JULIE BUSHELL
462 MURIEL COURT
SANTA CLARA, CA 95051

LICENSED ARCHITECT
MICHAEL JOSEPH DERN
C-20170
3/31/2023
RENEWAL DATE
STATE OF CALIFORNIA

BUSHELL RESIDENCE

462 MURIEL COURT
SANTA CLARA, CA 95051

REVISION

No.	Description	Date

D+A PROJECT NUMBER
2003

DATE
4/14/2023

ISSUE
DEVELOPMENT REVIEW

SHEET TITLE
EXISTING EXTERIOR ELEVATIONS

SHEET NO.
A4.1

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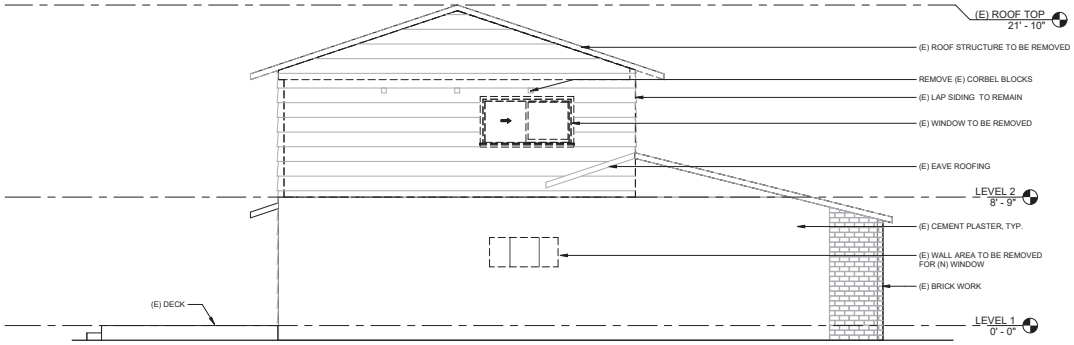
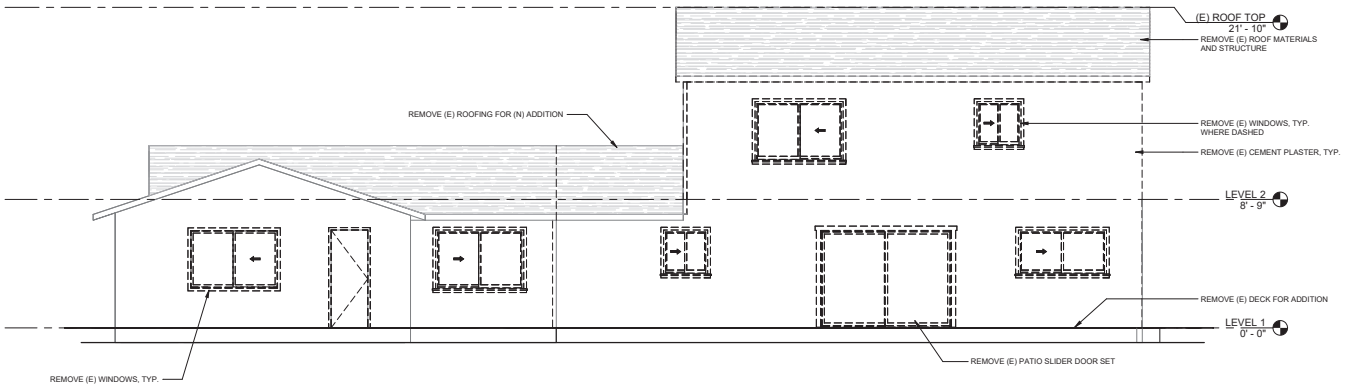


1 EXISTING NORTH EXTERIOR ELEVATION
1/4" = 1'-0"



2 EXISTING EAST EXTERIOR ELEVATION
1/4" = 1'-0"

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architecture + development

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110 CASA GRANDE
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462 MURIEL COURT
SANTA CLARA, CA 95051

LICENSED ARCHITECT
MICHAEL JOSEPH DERN
C-28170
3/31/2023
RENEWAL DATE
STATE OF CALIFORNIA

BUSHELL RESIDENCE

462 MURIEL COURT
SANTA CLARA, CA 95051

REVISION

No.	Description	Date

DA+D PROJECT NUMBER
2003

DATE
4/14/2023

ISSUE
DEVELOPMENT REVIEW

SHEET TITLE
EXISTING EXTERIOR ELEVATIONS

SHEET NO.
A4.2

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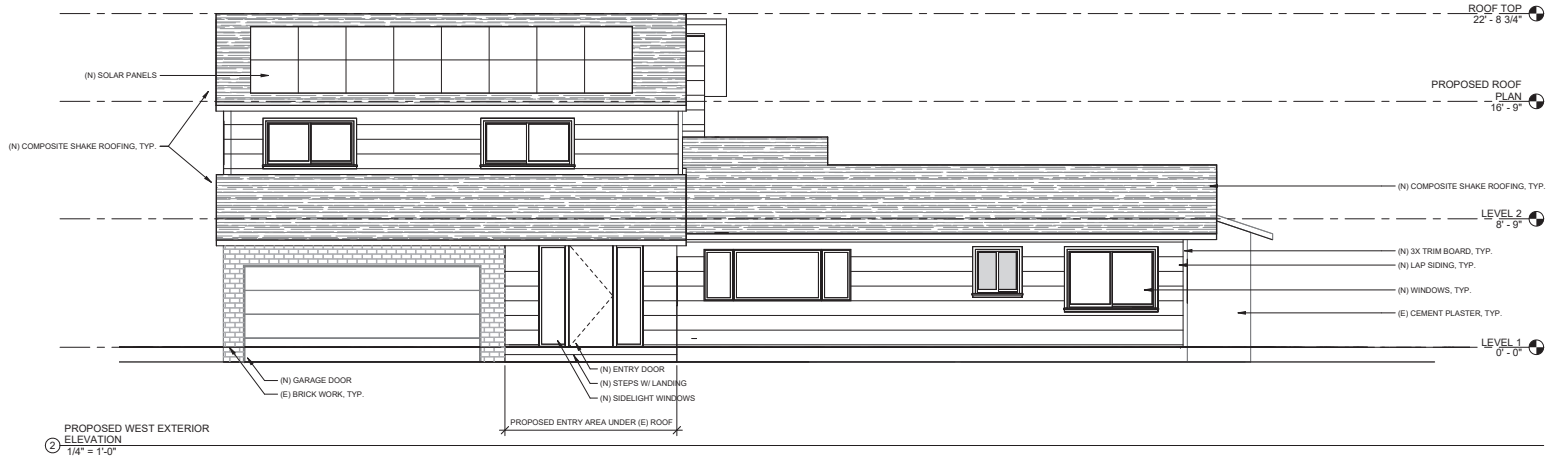
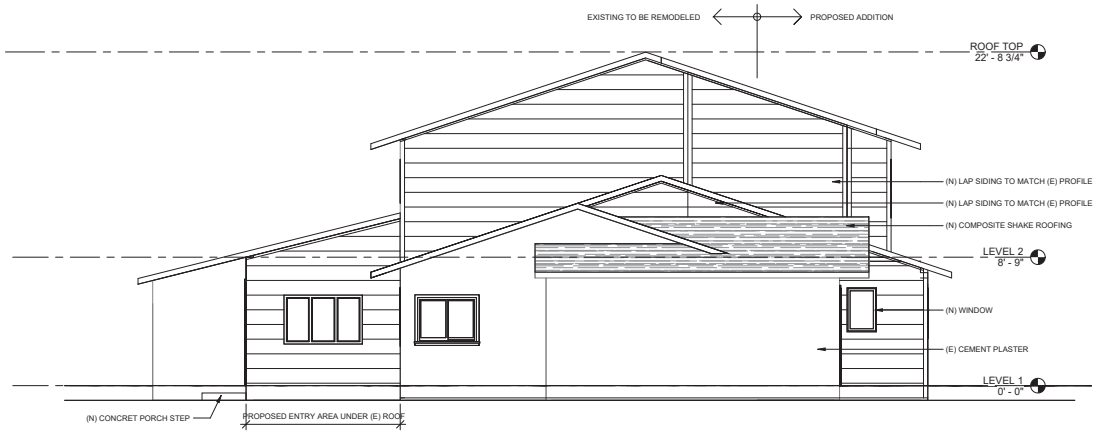


2 PROPOSED WEST EXTERIOR ELEVATION
1/4" = 1'-0"



1 PROPOSED SOUTH EXTERIOR ELEVATION
1/4" = 1'-0"

DERN
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ARCHITECT
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110 CASA GRANDE
LOS GATOS, CA 95032
MICHAEL DERN, AIA PRINCIPAL
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CLIENT
SAM AND JULIE BUSHELL
462 MURIEL COURT
SANTA CLARA, CA 95051

LICENSED ARCHITECT
MICHAEL JOSEPH DERN
C-20170
3/31/2023
RENEWAL DATE
STATE OF CALIFORNIA

BUSHELL RESIDENCE

462 MURIEL COURT
SANTA CLARA, CA 95051

REVISION

No.	Description	Date

DA+D PROJECT NUMBER
2003

DATE
4/14/2023

ISSUE
DEVELOPMENT REVIEW

SHEET TITLE
PROPOSED EXTERIOR ELEVATIONS

SHEET NO.
A4.3

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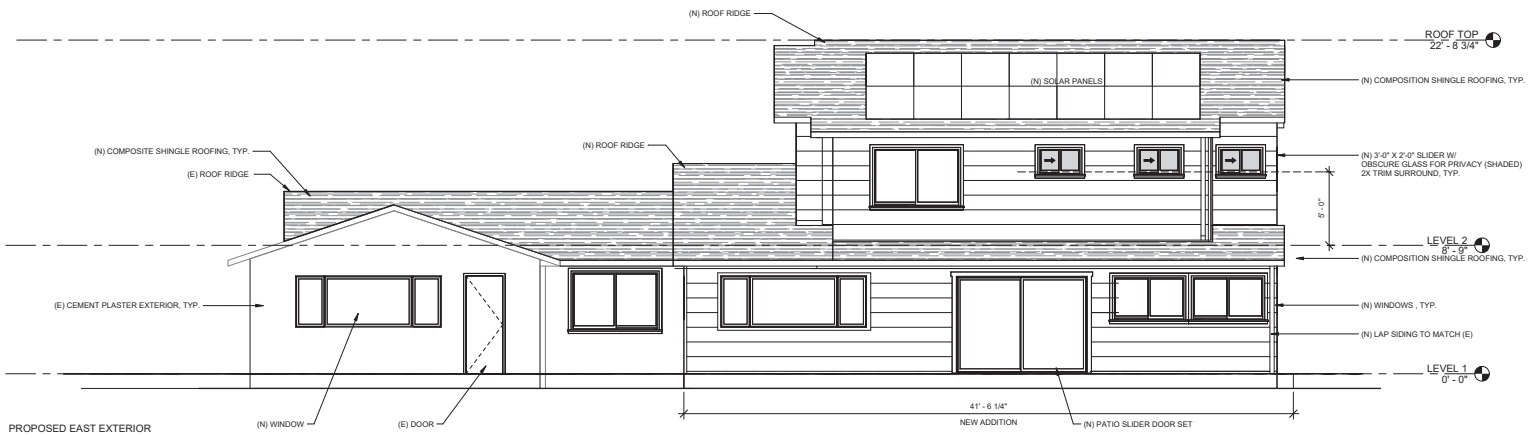
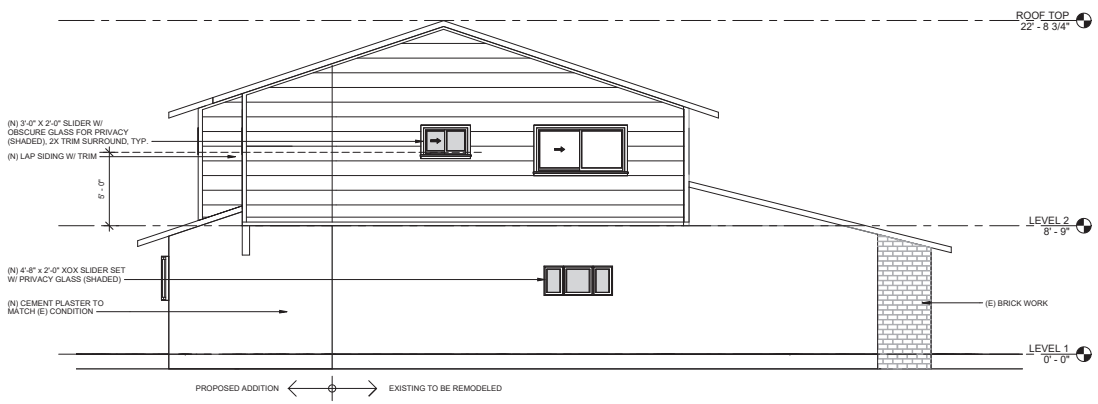


1 PROPOSED EAST EXTERIOR ELEVATION
1/4" = 1'-0"



2 PROPOSED NORTH EXTERIOR ELEVATION
1/4" = 1'-0"

DERN
architecture + development

ARCHITECT
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110 CASA GRANDE
LOS GATOS, CA 95032
MICHAEL DERN, AIA PRINCIPAL
(415) 307-1283

CLIENT
SAM AND JULIE BUSHELL
462 MURIEL COURT
SANTA CLARA, CA 95051

LICENSED ARCHITECT
MICHAEL JOSEPH DERN
C-20170
3/31/2023
RENEWAL DATE
STATE OF CALIFORNIA

BUSHELL RESIDENCE

462 MURIEL COURT
SANTA CLARA, CA 95051

REVISION

No.	Description	Date

DA+D PROJECT NUMBER
2003

DATE
4/14/2023

ISSUE
DEVELOPMENT REVIEW

SHEET TITLE
PROPOSED EXTERIOR ELEVATIONS

SHEET NO.
A4.4

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Attachment 2: Project Data

462 Muriel Court

Lot Size: 10,248 sq. ft.			
	Existing Floor Area (sq. ft.)	**Proposed Addition (sq. ft.)**	**Proposed Floor Area (sq. ft.)**
First Floor	1,635	1,457	2,229
Second Floor	774	930	1,045
Garage	458	433	395
Gross Floor Area	2,867	n/a	3,669
Lot Coverage	2,093/10,248 = 20%		2,624/10,248 = 26%
F.A.R.	2,867/10,248 = 0.28		3,669/10,248 = 0.36
% of 2nd floor to 1st floor	774/2,093 = 37%		1,045/2,624 = 40%
Bedrooms/Baths	5/3	n/a	5/4.5
Flood Zone	X		X

23-529 **Agenda Date: 5/10/2023**

REPORT TO DEVELOPMENT REVIEW HEARING

SUBJECT

Action on a proposed 822 square-foot first and second floor addition to an existing one-story single-family residence located at 3876 Baldwin Drive. (CEQA: Exempt Section 15301-Existing Facilities)

File No.(s): **PLN23-00062**
Location: **3876 Baldwin Drive**, a 6,766 square foot lot located on the south side of Baldwin Drive, between Dawson Drive and Mackenzie Drive. The site is zoned R-1-6L Single-Family; APN: 316-13-00062.
Applicant: Alexander Angkawijaya, AA Home Design & Build LLC
Owner: Thirumalaikumar Sankaralingam and Sathya ThirumalaiKumar
Request: **Architectural Review** to allow for the construction of an 822 square foot first and second floor addition, new garage and front porch, and interior remodel of an existing one story three-bedroom two-bathroom 1,502 square foot single-family residence with an attached garage, resulting in a two story four-bedroom three and a half bathroom, 2,805 square foot single-family residence with a new 427 square foot attached garage and a 50 square foot front porch.
The project will require a Zoning Administrator Modification for the proposed 17-foot front setback for the porch, where 20 feet is required.

Project Data

The Project Data Table is included as Attachment 1.

Points for consideration

- The proposed project is located in a neighborhood with one and two-story single-family residences throughout the immediate neighborhood.
- The project site adjoins one-story single-family homes to the east, west, south and across the street from Baldwin Drive to the north.
- The project proposes a 50 square foot front porch that encroaches 3 feet into the front yard setback resulting in a reduced setback of 17 feet, where 20 feet is required. This would require a Zoning Administrator Modification.
- Staff recommends redesign of the project to reduce the entry porch roof height by at least one foot to be in conformance with Section 4e - Entry Features of the Single-Family Residential Design Guidelines. This section recommends entry features be in scale, proportion, and character to the architectural style of the home.
- There are no active City code enforcement cases for this property.
- A neighborhood notice was distributed within a 300-foot radius of the subject site for this project review.

Findings supporting the Staff Recommendation

1. That any off-street parking area, screening strips and other facilitates and improvements

necessary to secure the purpose and intent of this title and the general plan of the City area a part of the proposed development, in that;

- The development provides the required two covered parking spaces.
- The required parking spaces are not located in the required front yard or side yard landscaped areas.
- The development provides the minimum required driveway length per the Planned Development approval.

2. *That the design and location of the proposed development and its relation to neighboring developments and traffic is such that it will not impair the desirability of investment or occupation in the neighborhood, will not unreasonably interfere with the use and enjoyment of neighboring developments, and will not create traffic congestion or hazard, in that;*
    - The project proposes a first-floor addition to the rear and a second-floor addition in a manner that is compatible with the adjacent properties and the neighborhood. The proposed second-floor addition is set back 5 feet from the first floor to the front and a 3-feet, 6-inches on the sides and rear to reduce the second-floor massing. This exceeds the requirement in the design guidelines.
    - The proposed front porch entryway is too tall and not compatible with the scale and character of the neighborhood. Staff recommends it to be lowered by at least a foot to align with the first floor roof facia.
    - Public streets are adequate in size and design to serve the proposed single-family residence, and the use will not create an increase in traffic.
    - Proposed lot coverage is within the maximum 40% lot coverage permissible in the R1-6L zoning district.

3. *That the design and location of the proposed development is such that it is in keeping with the character of the neighborhood and is such as not to be detrimental to the harmonious development contemplated by this title and the general plan of the City, in that;*
    - The proposed project is compatible with adjacent residential properties and generally consistent with the City's Single-Family Residential Design Guidelines, in that the project maintains the existing one and two-story character by providing required step backs on the second floor in a manner that promotes compatibility with the existing neighborhood character.
    - The proposed front porch entry way is not in conformance with the Single-Family Residential Design Guidelines.

4. *That the granting of such approval will not, under the circumstances of the particular case, materially affect adversely the health, comfort or general welfare of persons residing or working in the neighborhood of said development, and will not be materially detrimental to the public welfare or injuries to property or improvements in said neighborhood, in that;*
    - The project is subject to the California Building Code and City Code requirements, which serve to regulate new construction to protect public health safety and general welfare.

5. *That the proposed development, as set forth in the plans and drawings, are consistent with the set of more detailed policies and criteria for architectural review as approved and updated from time to time by the City Council, which set shall be maintained in the planning division office, in that;*

- The proposed addition will be clad in stucco with some stone veneer and horizontal siding on the second floor on the front elevation and a new composite shingle roof to match the neighborhood.

CONDITIONS OF APPROVAL

1) Prior to the issuance of a Building Permit, the development of the site and all associated improvements shall conform to the approved plans with File No. **PLN23-00062**, on file with the Community Development Department, Planning Division.
2) The developer is responsible for the collection and pick-up of all trash and debris on-site and adjacent public right-of-way.
3) Construction activity shall be limited to the hours of 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. Saturdays for projects within 300 feet of residential use and shall not be allowed on recognized State and Federal holidays.
4) Incorporate Best Management Practices (BMPs) into construction plans and incorporate post-construction water runoff measures into project plans in accordance with the City's Urban Runoff Pollution Prevention Program standards prior to the issuance of permits, including the disconnection of roof downspouts to drain over landscaped yards on site.
5) Landscaping installation shall meet City water conservation criteria in a manner acceptable to the Director of Community Development.

ENVIRONMENTAL REVIEW

The proposed project is categorically exempt from the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15301-Existing Facilities, in that the project is limited to a small addition to the existing single-family residence.

FISCAL IMPACT

There is no impact to the City for processing the requested application other than administrative staff time and expense typically covered by processing fees paid by the applicant.

PUBLIC CONTACT

On April 27, 2023, a notice of public hearing of this item was posted in three conspicuous places within 300 feet of the project site and mailed to property owners within 300 feet of the project site. The planning staff has not received any public comments for this application at the time of preparation of this report.

RECOMMENDATION

Redesign the proposed project to lower the front porch entry feature by at least a foot in conformance with the Single-Family Residential Design Guidelines and resubmit for architectural approval, subject to conditions of approval.

Prepared by: Nimisha Agrawal, Associate Planner, Community Development
Approved by: Lesley Xavier, Planning Manager, Community Development

ATTACHMENTS

1. Project Data Table
2. Development Plans

3386 Baldwin Drive PLN23-00062
DRH May 10, 2023

Attachment 1: Project Data Table

Lot Size: 6,766 sq. ft.			
	Existing Floor Area (sq. ft.)	**Proposed Addition (sq. ft.)**	**Proposed Floor Area (sq. ft.)**
First Floor	1,502	242	2,225
Second Floor	-	580	580
Garage	481 (converted to living area)	427	427
Porch	-	50 sq. ft. entry porch	50
First floor to Second Floor Ratio	N/A		21.8%
Gross Floor Area	2,171		3,281
Lot Coverage	1,983/6,766= 29.3%	-	2,705/6,766 = 39.9%
F.A.R.	1,983/6,766= .29		3,282/6,766= .49
Bedrooms/Baths	3 Bedrooms 2 Bathrooms	1 Bedroom 1 ½ bathrooms	4 Bedrooms 3 1/2 Bathrooms
Flood Zone	X		X

SANKARALINGAM RESIDENCE

3876 BALDWIN DR.
SANTA CLARA, CA 95051

GENERAL NOTES

1. ALL CONSTRUCTION WORK AND ITS FINISHED PRODUCT SHALL CONFORM TO THE LATEST EDITION OF CODES ADOPTED BY LOCAL GOVERNING AGENCIES. THESE SHALL INCLUDE (BUT NOT LIMITED TO) THE APPLICABLE CODES, LAWS, AND REGULATIONS LISTED UNDER 'CODE INFORMATION' ON THIS SHEET, AS WELL AS ALL HEALTH AND SAFETY CODES AND ORDINANCES ADOPTED BY THE LOCAL GOVERNING AGENCIES.
2. THE ISSUANCE OF A BUILDING PERMIT SHALL NOT NOT BE CONSTRUED AS A GUARANTEE THAT ALL CODE REQUIREMENTS ARE REFLECTED IN THE DOCUMENTS. NO GUARANTEE OF CONSTRUCTION QUALITY IS IMPLIED OR INTENDED BY THIS ARCHITECTURAL DOCUMENTS. THE GENERAL CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR ALL CONSTRUCTION PROCESS.
3. BUILDER SET DEFINITION: THESE PLANS ARE A "BUILDER SET", IT CONTAINS INFORMATION FOR BUILDING PERMIT AND GENERAL CONSTRUCTION PURPOSES ONLY. THEY ARE NOT EXHAUSTIVELY DETAILED NOR ARE FULLY SPECIFIED. THIS HAVE BEEN PRODUCED FOR THE USE OF A KNOWLEDGEABLE AND EXPERIENCED CONTRACTOR, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, SELECT, SOLVE, AND INSTALL ALL MATERIALS & EQUIPMENT CORRECTLY.
4. BY EXECUTING CONTRACTS, PRIOR TO COMMENCING ANY WORK OR ORDERING ANY MATERIAL, CONTRACTOR REPRESENT THAT THEY HAVE :
   4.1. VERIFIED EXISTING JOB SITE CONDITIONS AND SURROUNDINGS, LOCATIONS OF ALL UTILITY LINES, CONDUITS, SURFACE OR SUBSURFACE STRUCTURES, ETC. AND OF ANY NATURE THAT MAY BE AFFECTED BY THE WORK AND MADE DUE ALLOWANCES FOR DIFFICULTIES.
   4.2. CONTRACTOR TO VERIFY ALL MEASUREMENTS SHOWN ON THESE DRAWINGS WHICH SUPERCEDES SCALE OF DRAWINGS.
5. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT, ENGINEER OR OWNER OF ANY DISCREPANCIES THEY DISCOVER WITHIN THE DRAWINGS AND EXISTING FIELD CONDITION PRIOR TO CONTINUE THE WORK. IF CONTRACTOR CHOOSE TO CONTINUE WITHOUT ARCHITECT/ENGINEER CLARIFICATION/ INSTRUCTION, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CHANGES.
6. THE CONTRACTOR SHALL HOLD HARMLESS, INDEMNIFY AND DEFEND THE ARCHITECT AND HIS/HER CONSULTANTS FROM ANY ACTION INITIATED BY THE OWNER OR ANY SUBSEQUENT OWNERS FOR CONSTRUCTION DEFICIENCIES, MODIFICATIONS OR SUCH CONDITIONS WHICH MAY BE BEYOND THE CONTROL OF THE ARCHITECT AND ITS ASSOCIATES CONSULTANT.
7. CONTRACTOR SHALL ACCEPT AND MAINTAIN THE EXISTING SITE, SURROUNDING.CONDITION. AND PROTECT NEW AND EXISTING WORK, EQUIPMENT, MATERIALS. DAMAGES CAUSED BY CONTRACTOR NEGLECTNESS, SHALL BE REPAIRED, REPLACE AS GOOD CONDITON AS BEFORE, AT THE EXPENSE OF THE CONTRACTOR.
8. THE ARCHITECT SHALL NOT BE OBSERVING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY, SECURITY, QIALITY CONTROL AND CONSTRUCTION STANDARDS FOR THIS PROJECT.
9. DEMOLITION SHALL BE DONE IN A SAFE, ORDERLY MANNER WITHOUT DAMAGING TO OTHER PARTS OF THE PREMISES OR ADJACENT PROPERTIES. ALL DEMOLISHED/REMOVED ITEMS SHALL BE DISPOSED OFF BY THE CONTRACTOR PER CITY/ COUNTY CONSTRUCTION & DEMOLITION WASTE MANAGEMENT ORDINANCE, AND VERIFY WITH THE OWNER ON ITEMS TO BE SAVED AND STORED. ALL REMOVED ITEMS TO BE SAVED FOR REUSE SHALL BE HANDLED WITH CARE.

PROJECT DATA

A.P.N. NO	:	316-13-069
ZONING	:	R1-6 L
OCCUPANCY GROUP	:	R3-U
TYPE OF CONSTRUCTION	:	V-B
LOT AREA	:	6,766 S.F.
AFES SPRINKLER PROVIDED	:	NOT PROVIDED
MAX LOT COVERAGE	:	40% x 6,766 = 2,706.4 SF
NEW LOT COVERAGE	:	(1,502 + 481 + 242 + 477) / 6,766 SF x 100%
	:	39.93%

A. HABITABLE AREA:

(E) 1st FLOOR AREA	:	1,502 S.F.
(E) GARAGE AREA TO BE CONVERTED INTO LIVING AREA	:	481 S.F.
(N) 1st FLOOR ADDITION	:	242 S.F.
(N) 2nd FLOOR ADDITION	:	580 S.F.
TOTAL AREA	:	2,805 S.F.

B. NON-HABITABLE AREA:

(N) GARAGE	:	427 S.F.
(N) PORCH	:	50 S.F.
TOTAL AREA	:	477 S.F.

SCOPE OF WORK:

- NEW 2nd FLOOR ADDITION TO THE EXISTING 1 STORY SINGLE FAMILY HOUSE.
- CONVERT (E) GARAGE INTO NEW LIVING AREA.
- RELOCATE AND RECONFIGURE EXISITNG KITCHEN & BATHROOMS.
- ADD NEW 2 CAR GARAGE.
- ADD NEW FRONT PORCH.
- RELOCATE AND UPGRADE ELECTRICAL MAIN PANEL.

APPLIED CODES

2022 CALIFORNIA BUILDING CODE
2022 CALIFORNIA RESIDENTIAL CODE (CRC)
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
2022 CALIFORNIA FIRE CODE

CITY OF SANTA CLARA MUNICIPAL CODE

ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE FOLLOWING HOURS :

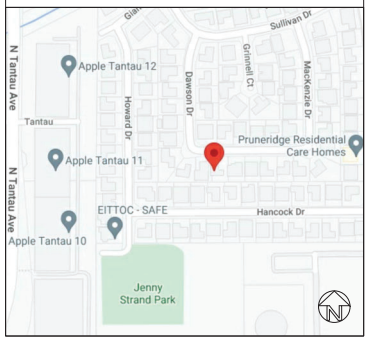
MON - FRI	:	7.00 AM - 6.00 PM
WEEKENDS & HOLIDAYS	:	9.00 AM - 6.00 PM

ALL CONTRACTORS, SUBCONTRACTORS, AND VENDORS SHALL BE LICENSED TO DO BUSINESS IN THE CITY OF SANTA CLARA

SHEET INDEX

A 1	COVER SHEET, SITE PLAN + NOTES
A 2	EXISTING FLOOR + ROOF PLANS
A 3	PROPOSED 1st FLOOR PLAN
A 4	PROPOSED 2nd FLOOR PLAN
A 5	PROPOSED ROOF PLAN
A 6	SECTIONS
A 7	ELEVATIONS
A 8	ELEVATIONS
A 9	ELEVATIONS
A 10	ELEVATIONS

VICINITY MAP



PROJECT TEAM

DESIGNER:
ALEXANDER ANGKAWIJAYA
AA HOME DESIGN & BUILD LLC
372 PARAISO DR., DANVILLE, CA 94526
408-431-2952
AA.HOMEDESIGNBUILD@GMAIL.COM

STRUCTURE ENGINEER:
DAN L. CHEN S.E.
47849 MASTERS CT, FREMONT CA 94539
510-579-8230
DAN_CHEN@COMCAST.NET

TITLE 24/ MECHANICAL DESIGN:
CARSTAIRS ENERGY
P.O. BOX 4736
SAN LUIS OBISPO, CA 93403
805-904-9048
TITLE24@YAHOO.COM

ANY ALTERATIONS, ADDITIONS OR IMPROVEMENT SHALL REQUIRE ALL NON-COMPLIANT PLUMBING FIXTURES TO BE REPLACED WITH WATER-CONSERVING PLUMBING FIXTURES. NON-COMPLIANT FIXTURES SHALL BE REPLACED PRIOR TO FINAL PERMIT APPROVAL OR ISSUANCE OF CERTIFICATE OF OCCUPANCY BY THE CITY (SB 407)

LEGEND

- EXISTING 1st FL. AREA
- NEW ADDITION ON 1st FL.
- EXISTING 2nd FL. AREA
- ELECTRICAL METER / GAS METER / TELEPHONE

CALGREEN 2014 MEASURES

CG 4.106.2
CONTRACTOR TO IMPLEMENT STORMWATER DRAINAGE DURING CONSTRUCTION

CG 4.106.3
FINISH GRADE TO SLOPE 5% WITHIN 3' AWAY FROM FOUNDATION

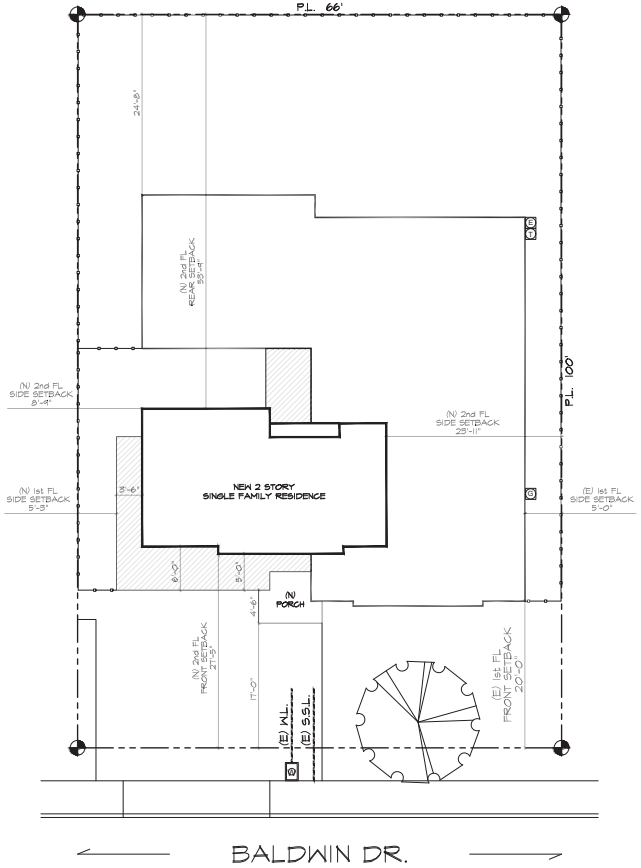
EXISTING FINISH GROUND SURFACES AND LOT GRADING TO REMAIN AS IS

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

PROPOSED SITE PLAN
SCALE 1/8"=1'-0"



owner
Thirumalaikumar Sankaralingam

SINGLE FAMILY HOUSE

3876 BALDWIN DR., SANTA CLARA, CA 95051

PROJECT

ADDITION

AA HOME DESIGN & BUILD LLC
DESIGN SERVICES
ALEXANDER ANGKAWIJAYA
T: 408.431.2952
AA.HomeDesignBuild@gmail.com

SHEET TITLE

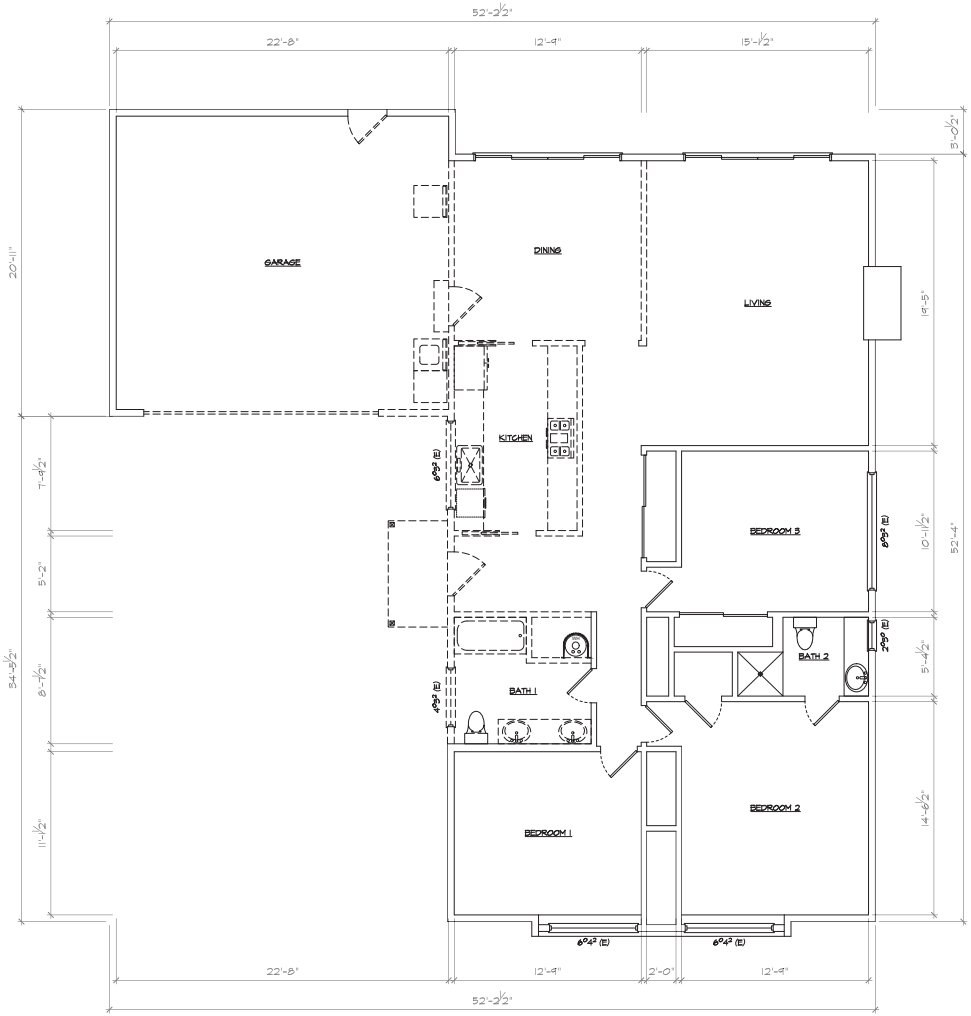
COVER SHEET, SITE PLAN + NOTES

REVISION

1
2
3
4

DATE	06.06.22
DRAWN	AA
SCALE	AS SHOWN
SHEET	A-1

OF 10 SHEETS



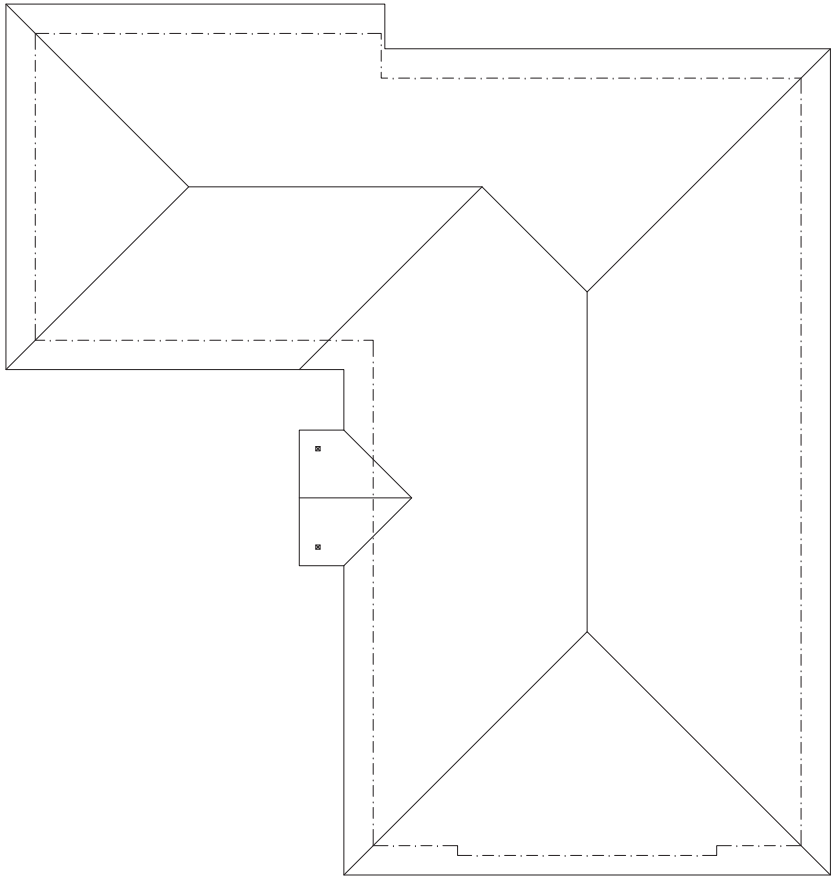
EXISTING FLOOR PLAN

SCALE 1/4" = 1'-0"

LEGEND:

(E) WALL & WINDOW TO REMAIN

(E) WALL & WINDOW TO TO BE REMOVED



EXISTING ROOF PLAN

SCALE 1/4" = 1'-0"

owner

Thirumalaikumar Sankaralingam

SINGLE FAMILY HOUSE

3876 BALDWIN DR., SANTA CLARA, CA 95051

PROJECT

ADDITION

AA HOME DESIGN & BUILD LLC

DESIGN SERVICES

ALEXANDER ANGKAWIJAYA
T: 408.431.2952
AA.HomeDesignBuild@gmail.com

SHEET TITLE

EXISTING FLOOR + ROOF PLANS

REVISION

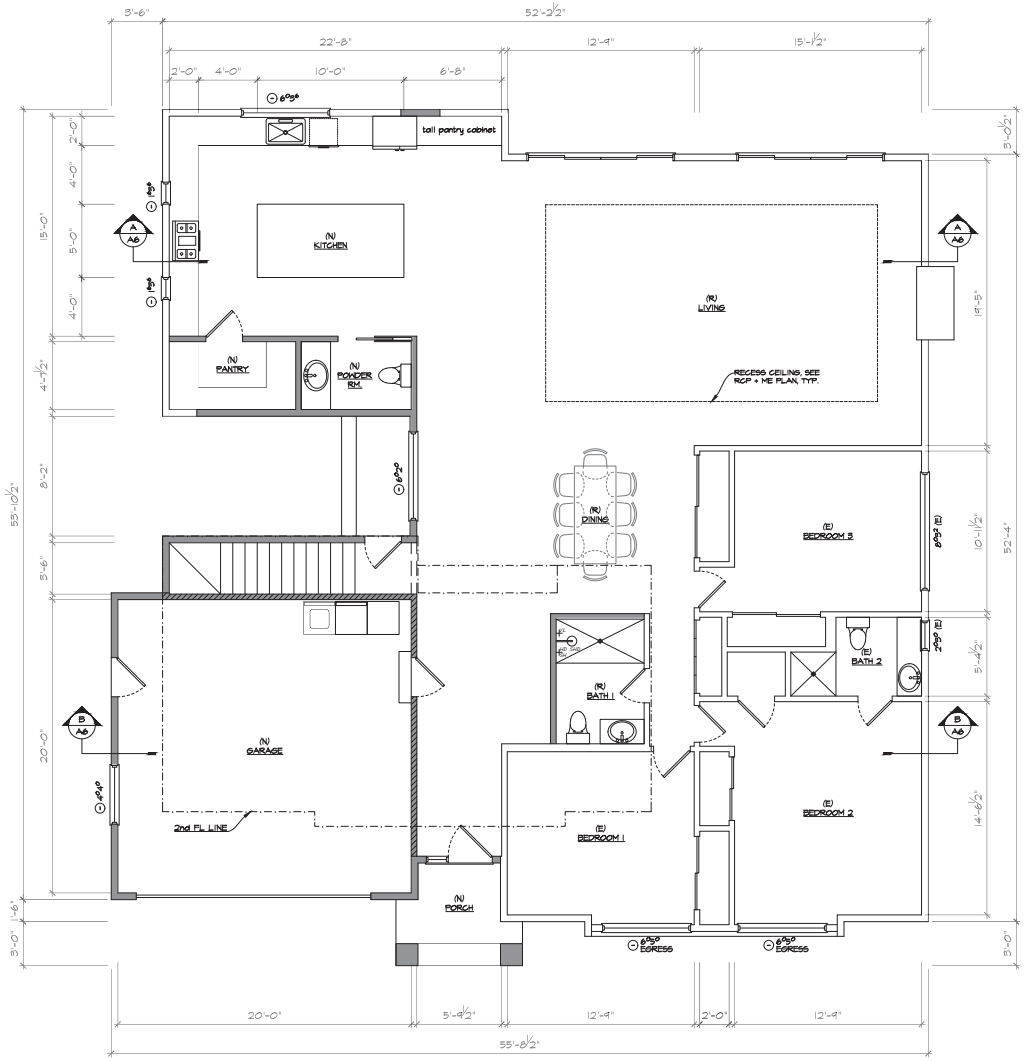
1
2
3
4

DATE	06.06.22
DRAWN	AA
SCALE	AS SHOWN

SHEET

A-2

OF 10 SHEETS



PORPOSED 1st FLOOR PLAN

SCALE 1/4" = 1'-0"

LEGEND & NOTES :

NEW WALL	EXISITING WALL
1 HR. FIRE RESISTIVE WALL, ⅝" TYPE 'X' GYP. BD. & GARAGE SIDE	ABBREVIATIONS: SH D : SHOWER HEAD VL : VALVE (E) : EXISITING (N) : NEW
(A) 2020 DOOR + WINDOW CALL-OUT	

owner

Thirumalaikumar Sankaralingam

SINGLE FAMILY HOUSE

3876 BALDWIN DR., SANTA CLARA, CA 95051

PROJECT

ADDITION

AA HOME DESIGN & BUILD LLC

DESIGN SERVICES

ALEXANDER ANGKAWIJAYA
T: 408.431.2952
AA.HomeDesignBuild@gmail.com

SHEET TITLE

PROPOSED 1st FLOOR PLAN

REVISION

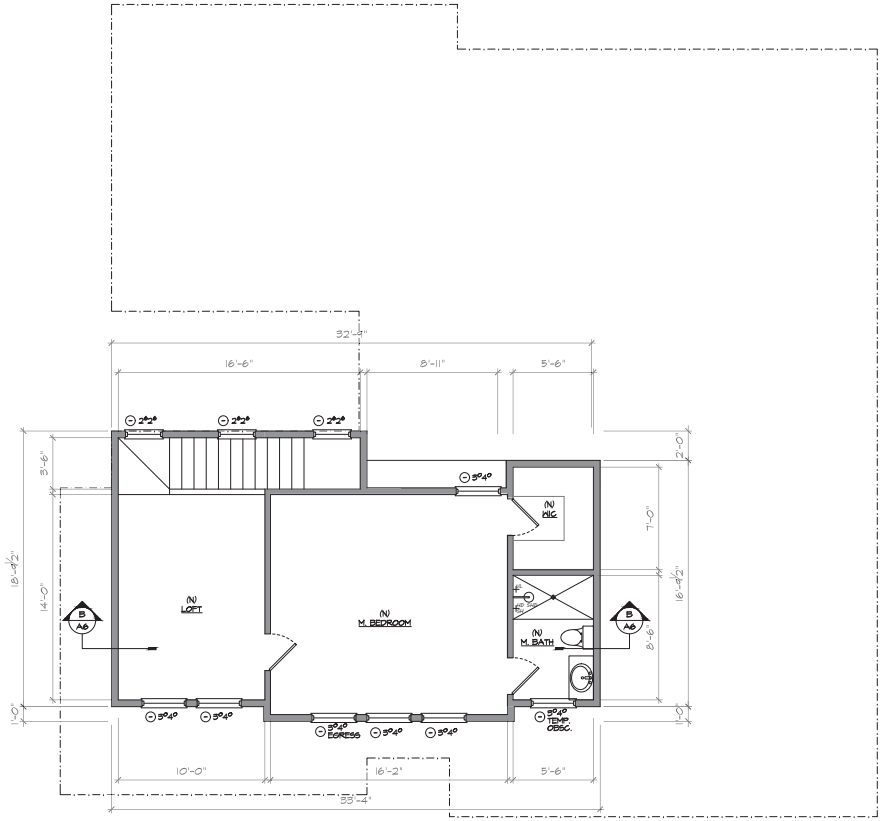
1
2
3
4

DATE	06.06.22
DRAWN	AA
SCALE	AS SHOWN

SHEET

A-3

OF 10 SHEETS



PORPOSED 2nd FLOOR PLAN

SCALE 1/4" = 1'-0"

owner

Thirumalaikumar Sankaralingam

SINGLE FAMILY HOUSE

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SHEET TITLE

PROPOSED 2nd FLOOR PLAN

REVISION

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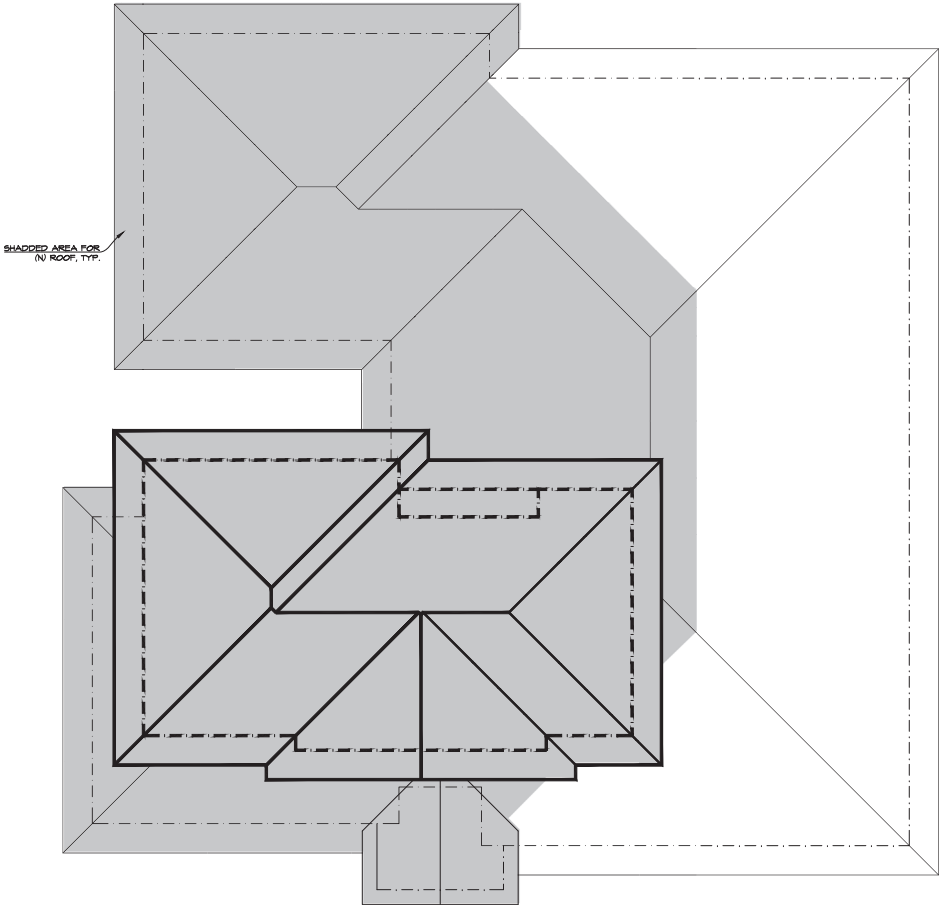
DATE	06.06.22
DRAWN	AA
SCALE	AS SHOWN

SHEET

A-4

OF 10 SHEETS



PORPOSED ROOF PLAN

SCALE 1/4" = 1'-0"

ALL NEW ROOF DRAINAGE WILL BE DIRECTED TO LANDSCAPED AREAS TO THE EXTENT FEASIBLE

LEGEND & NOTES :

D.S. 4X12X8 — DOWN SPOUT

SPLASH BLOCK & COBBLESTONES TYP. FOR ALL DOWN SPOUTS TO REDUCE VELOCITY OF ROOF WATERS TO PREVENT EROSION LANDSCAPE AREAS.

RAINWATER LEADERS FROM ROOF GUTTERS SHALL NOT BE PIPED DIRECTLY TO THE STORM DRAIN. THEY SHALL BE CONNECTED TO AN EARTHEN SWALES AND AREA DRAIN(S) CONNECTED TO THE STORM DRAIN SYSTEM, OR A COMPARABLE METHOD TO EFFECTIVELY REDUCE THE ENTRY OF POLLUTANTS INTO STORM WATER RUNOFF

ROOF NOTES:

FRAMING : CONVENTIONAL ROOF FRAMING
ROOF PITCH : 4/12
ROOFING : COMP. SHINGLES O/ 30# FELT
DECKING : OSB ROOF SHEETING (SEE SHEAR SCHEDULE)
FASCIA : 2x8 WOOD FASCIA BOARD TYP AT EAVES, PAINTED
GUTTER & DS: ALUMINUM
SOFFITS : CLOSED WOOD SOFFIT W/ GALV. METAL SCREENED VENT

CONCRETE TILE ROOFING MATERIALS INSTALLED ON ROOFS WITH 2.5:12 TO 4:12 ROOF SLOPES ARE REQUIRED TO HAVE DOUBLE UNDERLAYMENT APPLICATION. (CRC R905.3.3.1)

owner
Thirumalaikumar Sankaralingam

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3876 BALDWIN DR.,
SANTA CLARA, CA
95051

PROJECT

ADDITION

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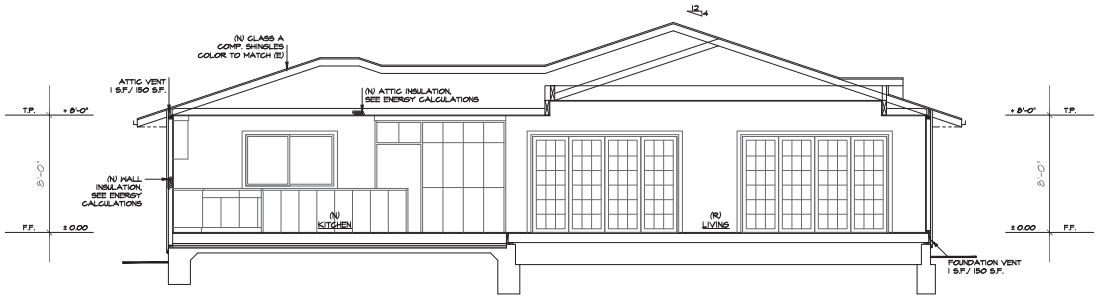
AA.HomeDesignBuild@gmail.com

SHEET TITLE

PROPOSED ROOF PLAN

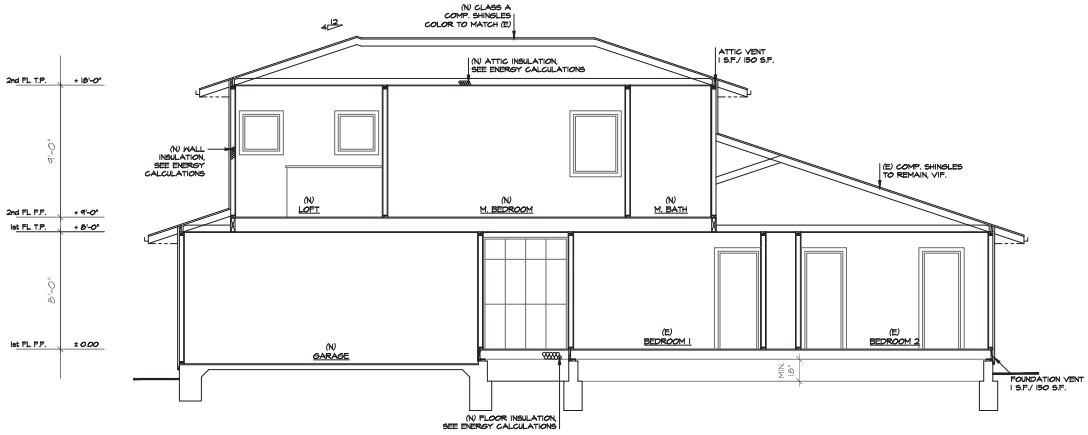
REVISION
1
2
3
4

DATE 06.06.22
DRAWN AA
SCALE AS SHOWN
SHEET
A-5
OF 10 SHEETS



SECTION A-A

SCALE 1/4" = 1'-0"



SECTION B-B

SCALE 1/4" = 1'-0"

owner

Thirumalaikumar
Sankaralingam

SINGLE
FAMILY
HOUSE

3876 BALDWIN DR.,
SANTA CLARA, CA
95051

PROJECT

ADDITION

AA HOME
DESIGN &
BUILD LLC

DESIGN
SERVICES

ALEXANDER
ANGKAWIJAYA
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@gmail.com

SHEET TITLE

SECTIONS

REVISION

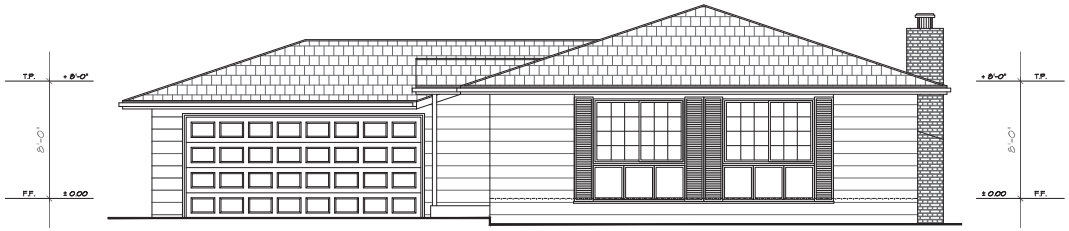
1
2
3
4

DATE	06.06.22
DRAWN	AA
SCALE	AS SHOWN

SHEET

A-6

OF 10 SHEETS



EXISTING FRONT ELEVATION

SCALE 1/4" = 1'-0"

NOTES :

IF NOT EXISTING, CONTRACTOR MUST INSTALL ADDRESS NUMBERS MEETING THE FOLLOWING STANDARDS:

- ADDRESS NUMBERS SHALL BE INTERNALLY OR EXTERNALLY LIT DURING NON DAYLIGHT HOURS. LIGHTING MUST BE ON ALL THE TIME (TYPICAL OF LOW VOLTAGE UNITS) OR IF LIT ONLY DURING NON DAYLIGHT HOURS, SWITCHING SHALL BE CONTROLLED BY A TIME CLOCK OR A PHOTO SENSOR. BATTERY OR PHOTO CELL POWERED UNITS CANNOT BE USED FOR REQUIRED ADDRESSING.
- ADDRESS NUMBERS SHALL BE AT LEAST FOUR INCHES HIGH AND INSTALLED ON A CONTRASTING BACKGROUND.
- ADDRESS NUMBERS SHALL READ FROM LEFT TO RIGHT. VERTICALLY POSITIONED NUMBERS CANNOT BE USED
- ADDRESS NUMBERS SHALL BE PLACED IN SUCH A LOCATION THAT EMERGENCY CREWS CAN READ THE ADDRESS FROM THE STREET FRONTING THE DWELLING.

PROPOSED FRONT ELEVATION

SCALE 1/4" = 1'-0"

EXTERIOR ELEVATION AND SITE NOTES

1. EXTERIOR WALL: STUCCO O/ 2 LAYERS TYPE D' PAPER O/ PLYWOOD SHEATHING. EXTERIOR STUCCO IS 3-COAT, 7/8 INCH MINIMUM THICK, HAS 26 GA. GALVANIZED WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 ½ INCHES SHALL BE PROVIDED AT FOUNDATION PLATE LINE AT LEAST 4" ABOVE GRADE (OR 2 INCHES ABOVE CONCRETE OR PAVING) AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING (NATURAL COLOR & SMOOTH TEXTURE)
2. ROOFING: CLASS A COMP. SHINGLES (COLOR TO MATCH EXISTING)
3. WINDOWS: MILGARD VINYL DUAL PANE WHITE OR SIM. (SEE SCHEDULE)
4. WINDOW TRIM: STUCCO FOAM 2X (COLOR TO MATCH EXISTING)
5. GUTTER: ALUMINUM FASCIA (COLOR TO MATCH EXISTING)
6. FASCIA BOARD: PAINTED (COLOR TO MATCH EXISTING)
7. WALL TO ROOF FLASHING: GALV. METAL PAINTED TO MATCH EXISTING

owner

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SHEET TITLE

ELEVATIONS

REVISION

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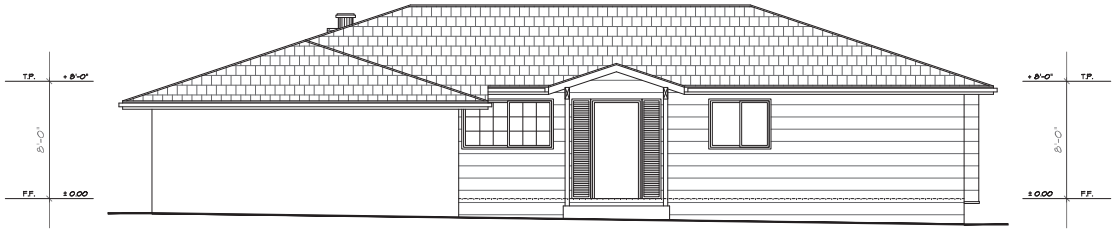
4

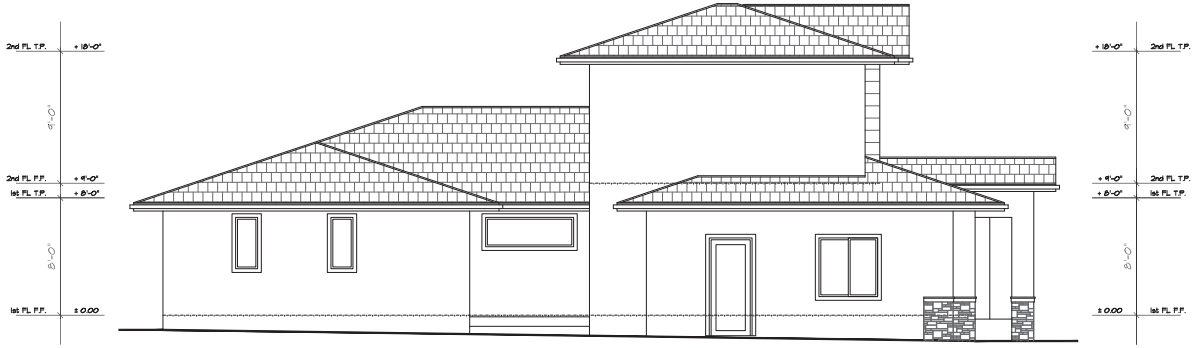
DATE	06.06.22
DRAWN	AA
SCALE	AS SHOWN
SHEET	A-7

OF 10 SHEETS



EXISTING LEFT ELEVATION

SCALE 1/4" = 1'-0"



PROPOSED LEFT ELEVATION

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EXTERIOR ELEVATION AND SITE NOTES

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1
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3
4

DATE	06.06.22
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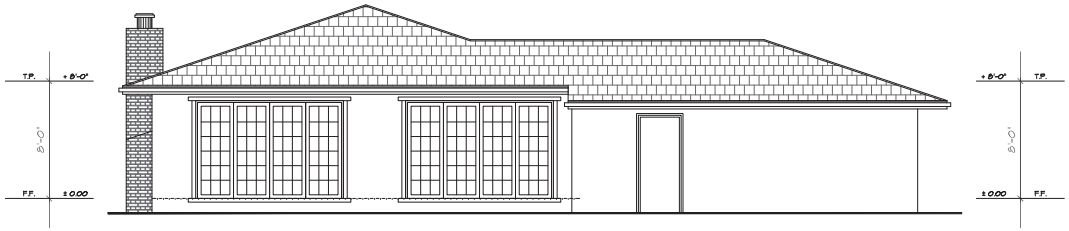
SHEET	

A-8

OF 10 SHEETS



EXISTING REAR ELEVATION

SCALE 1/4" = 1'-0"

PROPOSED REAR ELEVATION

SCALE 1/4" = 1'-0"

EXTERIOR ELEVATION AND SITE NOTES

1. EXTERIOR WALL: STUCCO O/ 2 LAYERS TYPE D' PAPER O/ PLYWOOD SHEATHING. EXTERIOR STUCCO IS 3-COAT, 7/8 INCH MINIMUM THICK, HAS 26 GA. GALVANIZED WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 ½ INCHES SHALL BE PROVIDED AT FOUNDATION PLATE LINE AT LEAST 4" ABOVE GRADE (OR 2 INCHES ABOVE CONCRETE OR PAVING) AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING (NATURAL COLOR & SMOOTH TEXTURE)
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SHEET TITLE

ELEVATIONS

REVISION

1
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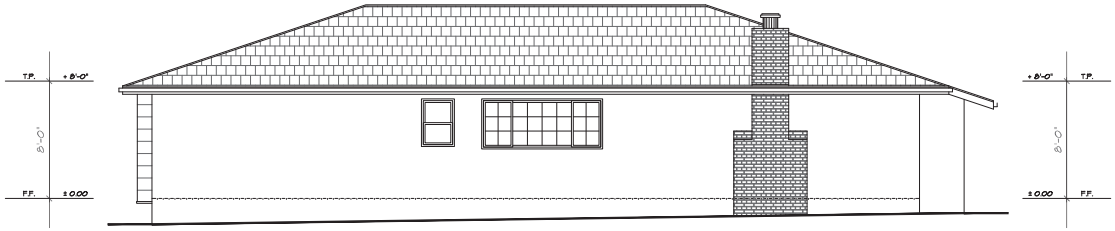
DATE 06.06.22
DRAWN AA
SCALE AS SHOWN
SHEET

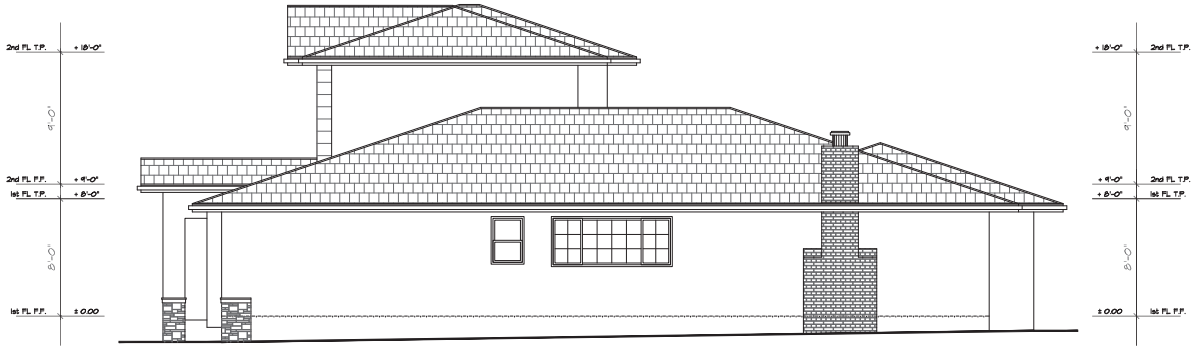
A-9

OF 10 SHEETS



EXISTING RIGHT ELEVATION

SCALE 1/4" = 1'-0"



PROPOSED RIGHT ELEVATION

SCALE 1/4" = 1'-0"

EXTERIOR ELEVATION AND SITE NOTES

1. EXTERIOR WALL: STUCCO O/ 2 LAYERS TYPE D' PAPER O/ PLYWOOD SHEATHING. EXTERIOR STUCCO IS 3-COAT, 7/8 INCH MINIMUM THICK, HAS 26 GA. GALVANIZED WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 ½ INCHES SHALL BE PROVIDED AT FOUNDATION PLATE LINE AT LEAST 4" ABOVE GRADE (OR 2 INCHES ABOVE CONCRETE OR PAVING) AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING (NATURAL COLOR & SMOOTH TEXTURE)
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SHEET TITLE

ELEVATIONS

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DATE	06.06.22
DRAWN	AA
SCALE	AS SHOWN

SHEET

A-10

OF 10 SHEETS

23-546 **Agenda Date: 5/10/2023**

REPORT TO DEVELOPMENT REVIEW HEARING

SUBJECT

Action on a 466 square-foot front addition that would expand a single-family residence resulting in five bedrooms. (CEQA: Exempt, Section 15301(e) (1) Existing Structures)

File No.(s): PLN23-00171
Location: 2841 Pruneridge Ave an 8,840 square-foot lot located on the north side of Pruneridge Avenue, approximately 300 feet East of Kiely Boulevard, APN: 293-28-015; property is zoned Single Family Residential (R1-6L).
Applicant: Vinay Saini
Owner: Norman And Andrea Puck Trustee
Request: **Architectural Review** to construct 466 square-foot addition including a fifth bedroom at the front of the existing two-story residence to include a bathroom, bedroom, study, and laundry closet

Project Data

The Project Data Table is included as Attachment 2.

Points for Consideration

- The project includes a 466 square-foot front addition to the single-family residence including a bathroom, bedroom, study, and laundry closet.
- The proposed addition would result in a total of five bedrooms in the single-family residence.
- Window orientation is consistent with the City's Single-Family Residential Design Guidelines in that egress windows on the second floor are oriented to the front, rear, and corner side elevations. There are no second-floor windows on the interior side elevation.
- The proposed project complies with the R1-6L zoning districts development standards for new construction; is generally consistent with the Single-Family Residential Design Guidelines; and is generally compatible with neighboring homes along the streetscape.
- A neighborhood notice was distributed to properties within a 300-foot radius of the subject site for this project review.
- There are no active code enforcement cases for this property.
- The front entryway roofing is about 24-inches taller than the closest first floor eave and 48-inches taller than the garage eave. The Residential Design Guidelines recommend that to reduce an inappropriate visual mass, the eave line of the entryway feature should match or be within two feet of the first story eave line.

Findings

1) *That any off-street parking area, screening strips and other facilitates and improvements necessary to secure the purpose and intent of this title and the general plan of the City area a*

part of the proposed development, in that;

- Additional off-street parking is not required for the addition of a fifth bedroom; the single -family residence currently includes a two-car garage.
- The proposed addition would not remove any off-street parking on the property.

2) *That the design and location of the proposed development and its relation to neighboring developments and traffic is such that it will not impair the desirability of investment or occupation in the neighborhood, will not unreasonably interfere with the use and enjoyment of neighboring developments, and will not create traffic congestion or hazard, in that;*
    - The proposed addition would not create traffic congestion or hazards.
    - Public streets are adequate in size and design to serve the proposed addition, and the use will not create a substantive increase in traffic.

3) *That the design and location of the proposed development is such that it is in keeping with the character of the neighborhood and is such as not to be detrimental to the harmonious development contemplated by this title and the general plan of the City, in that;*
    - The proposed addition is to be located outside of the required setbacks for a single-family residence. Furthermore, the addition is proposed to have a similar design and characteristics as other dwelling units in the surrounding neighborhood.

4) *That the granting of such approval will not, under the circumstances of the particular case, materially affect adversely the health, comfort or general welfare of persons residing or working in the neighborhood of said development, and will not be materially detrimental to the public welfare or injuries to property or improvements in said neighborhood, in that;*
    - The project is subject to the California Building Code and City Code requirements, which serve to regulate new construction to protect public health, safety and general welfare.

5) *That the proposed development, as set forth in the plans and drawings, are consistent with the set of more detailed policies and criteria for architectural review as approved and updated from time to time by the City Council, which set shall be maintained in the planning division office. The policies and criteria so approved shall be fully effective and operative to the same extent as if written into and made a part of this title, in that;*
    - The project proposes a residential design that is compatible in scale and character with the housing types that are typical in the neighborhood.
    - The proposed project complies with the R1-6L zoning districts development standards.

<u>Conditions of Approval</u>

1) Permit Expiration. This Architectural Permit shall automatically be revoked and terminated if not used within two years of original grant or within the period of any authorized extensions thereof. The date of granting of this Permit is the date this Permit is approved by the Development Review Officer.
2) The garage shall be maintained clear and free for vehicle parking use at all times. It shall not be used only for storage.
3) Prior to the issuance of a Building Permit, the development of the site and all associated

improvements shall conform to the approved plans with File No. **PLN23-00171**, on file with the Community Development Department, Planning Division.

4) Landscaping installation shall meet City water conservation criteria in a manner acceptable to the Director of Community Development.
5) Maintain the front yard landscaping between the house and sidewalk. New landscape areas of 500 square feet or more or rehabilitated landscape areas of 2,500 square feet or more shall conform to the California Department of Water Resources Water Efficient Landscape Ordinance.
6) Developer/Owner is responsible for collection and pick-up of all trash and debris on-site and adjacent public right-of-way.
7) Construction activity shall be limited to the hours of 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. Saturdays for projects within 300 feet of a residential use and shall not be allowed on recognized State and Federal holidays.
8) Incorporate Best Management Practices (BMPs) into construction plans and incorporate post construction water runoff measures into project plans in accordance with the City's Urban Runoff Pollution Prevention Program standards prior to the issuance of permits.

ENVIRONMENTAL REVIEW

The proposed project is categorically exempt from the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15301(e) (1) Existing Structures, in that the project is a small accessory dwelling addition to the existing single-family residence.

PUBLIC CONTACT

On April 27, 2023, a notice of public hearing of this item was posted within 300 feet of the project site and mailed to property owners within 300 feet of the project site. Planning Staff has not received public comments for this application.

RECOMMENDATION

Redesign the front porch of the proposed addition consistent with the Single-Family Design Guidelines.

Prepared by: Daniel Sobczak, Assistant Planner, Community Development Department
Approved by: Lesley Xavier, Planning Manager, Community Development Department

ATTACHMENTS

1. Development Plans
2. Project Data

SAINI RESIDENCE

ABBREVIATIONS

REV-DEC-01-2015.01 --- REV-AUG-30-2019.01

±	APPROXIMATELY
@	AT
1-S	ONE STORY
2-S	TWO STORY
AA	ATTIC ACCESS
AB	ANCHOR BOLT
AC	AIR CONDITIONING
AC	ASPHALT
AC	ASPHALTIC CONCRETE
ADD	ADDITION
ADJ	ADJUSTABLE
ALLOW	ALLOWABLE
ALT	ALTERNATE
ANOD	ANODIZED
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATE(LY)
AUTO	AUTO OPENER
AWN	AWNING
BAR	RE-INFORCEMENT BAR
BC	BOOKCASE
BD	BOARD
B.DEPT	BUILDING DEPARTMENT
BI	BUILT-IN
BLDG	BUILDING
BLK	BLOCK
BM	BEAM
B/O	BY OTHERS
B.O.	BOTTOM OF
B.O.	BLDG OFFICIAL
BOOKS	BOOKCASE
BOT	BOTTOM
BR	BROOM
BRG	BEARING
BSL	BLDG SETBACK LINE
BTR	BETTER
BWP	BRACED WALL PANEL
C	CARPET
C	CHIME, DOOR
CA	CRAWL ACCESS
CAB	CABINET
CALCS	CALCULATIONS
CAL	CALIFORNIA
CANT	CANTILEVER
CAR	COLD AIR RETURN
CB	CONCRETE BLOCK
CB	CUTTING BOARD
CBC	CALIF. BUILDING CODE
CEIL	CEILING
CHIM	CHIMNEY
CJ	CEILING JOIST
CJ	CONTROL JOINT
CL	CENTERLINE
CL	CLOSET
CLR	CLEAR
CMT	CASEMENT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECT
CONN	CONNECTION
CONT	CONTINUOUS
CT	COLLAR TIE
CT	COOKTOP
CTR	COUNTER
CY	CUBIC YARDS
d	PENNY (NAIL SIZE)
D	DIMMER SWITCH
D	DRYER
DB	DOORBELL
DBL	DOUBLE
DEG	DEGREES
DEPT	DEPARTMENT
DET	DETAIL
DF	DOUGLAS FIR-LARCH
DF-L	DOUGLAS FIR-LARCH
DG	DBL GLAZING
DH	DOUBLE HUNG
DIAM	DIAMETER
DIM	DIMENSION
DKG	DECKING
DN	DOWN
DS	DOWNSPOUT
DSS	DENSE SELECT STRUCTURAL
DW	DISHWASHER
DWR	DRAWER
(E)	EXISTING
EA	EXPOSED AGGREGATE
EF	EXHAUST FAN
EG	EXIST GRADE
EJ	EXPANSION JOINT
E.L.	END LENGTH
ELEC	ELECTRIC
ELEV	ELEVATION
ELEV	ELEVATOR
EM	ELECTRIC METER
EMBED	EMBEDMENT
EN	EDGE NAILING
E.PAN	ELECTRIC PANEL
EQ	EQUAL, EQUALS
EQUIP	EQUIPMENT
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXP	EXPOSED
EXT	EXTERIOR
F	FAN
F	FLUORESCENT
F	FURNACE
FAB	FABRICATED
FAR	FLOOR AREA RATIO
F+LT	FAN & LIGHT
FAU	FORCED AIR UNIT
FB	FLOOR BEAM
FDN	FOUNDATION
FF	FACE FRAME
FF	FINISH FLOOR
FG	FINISH GRADE
FG	FIXED GLASS
FG	FOUNDATION GRADE
FJ	FLOOR JOIST
FIN	FINISH
FIX	FIXTURE
FL	FLOOR
FL	FLOOR LINE
FL	FLUORESCENT
FLASH	FLASHING
FN	FIELD NAILING
FO	FACE OF
FOB	FACE OF BLOCK
FOC	FACE OF CONCRETE
FOC	FACE OF CURB
FOS	FACE OF STUD
FOW	FACE OF WALL
FP	FIREPLACE
FR	FRENCH DOOR

FT	FOOT
FTG	FOOTING
FUR	FURNACE
FURN	FURNACE
FUT	FUTURE
G	GIRDER
G	GRANITE
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GB	GLASS BLOCK
GB	GYPSUM (WALL)BOARD
GBM	GRADE BEAM
GD	GARBAGE DISPOSAL
GFI	GROUND FAULT INTERRUPTER
GH	GREENHOUSE
GI	GALV IRON
GL	GLAZING
GLB	GLULAM BEAM
GM	GAS METER
GR	GUARDRAIL
GSM	GALV SHEET METAL
GWH	GAS WALL HEATER
GYP BD	GYPSUM WALLBOARD
H	HEAT
H	HEAT LAMP
H	HIP
HB	HOSE BIBB
HC	HOLLOW CORE
HD	HEAVY DUTY
HD	HOLD-DOWN
H-D	HOLD-DOWN
HDR	HEADER
HDWR	HARDWARE
HEAT	HEAT OUTLET
HGR	HANGER
HOP	HOPPER
HOA	HOME OWNER'S ASSOCIATION
HORIZ	HORIZONTAL
HR	HANDRAIL
HT	HEIGHT
HVAC	HEATING VENTILLATING & AIR CONDITIONING
HW	HARDWOOD
IB	IRONING BOARD
IN	INCH
I.N.	INTERNAIL
INSP	INSPECTION
INSUL	INSULATION
INT	INTERIOR
JAL	JALOUSIE
KD	KILN DRIED
KP	KING POST
LB	LAG BOLT
LC	LAUNDRY CHUTE
L	LINEN
LIN	LINEN
LL	LOWER LEVEL
LOC	LOCATION
LS	LAG SCREW
LS	LAZY SUSAN
LS	LIGHT SOFFIT
LT	LIGHT
M	MARBLE
M	MASTER
MANUF	MANUFACTURER
MAT	MATERIAL(S)
MAT'L	MATERIAL(S)
MAX	MAXIMUM
MB	MACHINE BOLT
MC	MEDICINE CABINET
MECH	MECHANICAL
MET	METAL
MET	METER
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MIR	MIRROR
ML	MAIN LEVEL
ML	MIDDLE LEVEL
MLB	MICROLAM BEAM
MRC	MIN RELATIVE COMPACTION
MSB	MIN SETBACK
MTD	MOUNTED
MTL	METAL
MW	MICROWAVE
(N)	NEW
N	NORTH
NA	NOT APPLICABLE
N/A	NOT APPLICABLE
NAT	NATURAL
NG	NATURAL GRADE
NIC	NOT IN CONTRACT
NISF	NOT INCLUDED IN SQUARE FOOTAGE
NTS	NOT TO SCALE
O/	OVER
O/	OVERHANG
OBS	OBSCURE
OC	ON CENTER
OP	OPERABLE
OPT	OPTION
ORD	ORDINANCE
OSB	ORIENTED STRAND BD
OV	OVEN(S)
OVS	OVENS
(P)	PROPOSED
P	PANTRY
P	POST (P-1)
PAN	PANTRY
PD	POCKET DOOR-SLIDER
PDL	PULL DOWN LADDER
PH	PHONE
PKG	PACKAGE
P/L	PROPERTY LINE
PL	PLATE
PL	PLATE LINE
PL	PROPERTY LINE
PLANT	PLANTING
PLB	PARALLAM BEAM
PLP	PARALLAM POST
P/O	PER OWNER
PS	PLANT SHELF
PSE	PUBLIC SEWER EASEMENT
PSF	POUNDS PER SQ FT
PT	POINT
PT	PRESSURE TREATED
PR	PAIR
PUE	PUBLIC UTILITY EASEMENT
PUR	PURLIN
PWD	PLYWOOD

(R)	REMOVE
R	RECESSED
R	REFRIGERATOR
R	RIDGE
RB	RADIANT BARRIER
RE-BAR	RE-INFORCEMENT BAR
REF	REFRIGERATOR
REFER	REFRIGERATOR
REG	REGISTER
REQ	REQUIRED
REQ'D	REQUIRED
RET	RETAINING
RET	RETURN
REV	REVISED/REVISION
RJ	ROOF JOIST
(RL)	RELOCATE
R.O.	ROUGH OPENING
ROW	RIGHT-OF-WAY
RR	ROOF RAFTER
RS	ROUGH SAWN
RU	ROLL-UP
RW	RETAINING WALL
RWD	REDWOOD
S	SINK
S	SUSAN, LAZY
S	SOFTENER(WATER)
S	SOUTH
S	STUCCO
S.A.	SEE ALSO
S.A.	SPARK ARRESTOR
SB	SETBACK LINE
SB	SPLASH BLOCK
SB	STRONG BACK
SC	SOLID CORE
SCHED	SCHEDULE
SD	SIDING
SD	SMOKE DETECTOR
SEC	SECTION
SEE	SEE ALSO
SEL	SELECT
SF	SQUARE FEET/FOOT
SF	SUBFLOOR
SG	SGL GLAZING
SGD	SLIDING GLASS DOOR
SGL	SINGLE
SH	SHELVES
SH	SINGLE HUNG
SHT	SHEET
SHOW	SHOWER
SIM	SIMILAR
SL	SKYLIGHT
SL	SLIDER
SM	SHEET METAL
SMS	SHEET METAL SCREW
S.N.	SILL NAILING
S&P	SHELF & POLE
SPECS	SPECIFICATIONS
SQ	SQUARE
SQIN	SQUARE INCHES
SQFT	SQUARE FEET/FOOT
SS	SELECT STRUCTURAL
SS	STAINLESS STEEL
ST	SKY/"SUN" TUNNEL
STAG	STAGGER
STAND	STANDARD
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUC	STRUCTURAL
SW	SIDEWALK
SWALK	SIDEWALK
T	TEMPERED
T	THERMOSTAT
T	TILE (CERAMIC)
T&B	TOP & BOTTOM
TB	TOWEL BAR
TC	TRASH COMPACTOR
TEMP	TEMPERED
T&G	TONGUE AND GROOVE
THK	THICK, THICKNESS
TL	TRACK LT
TME	TO MATCH (E)
TMP	TEMPERED
T.O.	TOP OF
TOC	TOP OF CONC
TOSF	TOP OF SUBFLOOR
TOT	TOTAL
TOW	TOP OF WALL
TR	TRIMMER
T-S	TUB & SHOWER
TS	TIE STRAP
TSF	TOP OF SUBFLOOR
TV	TELEVISION
TYP	TYPICAL
U/	UNDER
UBC	UNIFORM BUILDING CODE
UL	UPPER LEVEL
UNS	UNDISTURBED NATURAL SOIL
UON	UNLESS OTHERWISE NOTED
(V)	VERIFY
V	VANITY
V	VALLEY
V	VINYL
V	VOLT
VAC	VACUUM
VENT	VENTILATION
VERT	VERTICAL
VG	VERTICAL GRAIN
V/O	VERIFY WITH OWNER
W	WASHER
W	WATER HEATER
W	WEST
W/	WITH
WC	WATER CLOSET
WCE	WIRE CLEARANCE EASEMENT
WD	WOOD
WH	WATER HEATER
WI	WROUGHT IRON
WIN	WINDOW
W.O.	WHERE OCCURS
WOL	[illegible] SERVICE LEVEL-2
WP	WATERPROOF
WP	WEATHERPROOF
WR	WATER RESISTANT
WS	WALL STRAP
WS	WATER SOFTENER
WS	WOOD SCREW
WS	WOOD STOVE
WST	WATER STORAGE TANK
WWM	ELECTRICALLY WELDED WIRE MESH

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INFORMATION

EYCO DESIGN - AVAILABILITY

IT MAY REQUIRE FIVE(5) TO TEN(10) OR MORE BUSINESS DAYS MINIMUM BEFORE EYCO DESIGN CAN MAKE AN INITIAL RESPONSE TO ANY QUESTION, PLEASE PLAN AHEAD ACCORDINGLY.

THE CLIENT, OWNER, BUILDER, AND ALL SUBCONTRACTORS SHOULD FULLY REVIEW ALL DRAWINGS AND THOROUGHLY ATTEMPT TO DETERMINE THE ANSWER TO ANY AND ALL QUESTIONS BEFORE CONTACTING EYCO DESIGN, THANK YOU.

EYCO DESIGN - CONSULTATION FEES

CONSULTING QUESTIONS DIRECTED TO EYCO DESIGN MAY, AS DETERMINED BY EYCO DESIGN, REQUIRE EXTRA FEES AND RETAINERS WHICH SHALL BE PAID IN ADVANCE OF ANY AND ALL CONSULTATION QUESTION RESPONSES.

PROJECT SCHEDULING & PLANNING

IN A TIMELY MANNER, BOTH BEFORE AND CONTINUOUSLY DURING CONSTRUCTION, THE BUILDER SHALL FULLY REVIEW THE DRAWINGS AND ALLOW PLENTY OF TIME FOR THE BUILDER TO FULLY DETERMINE ALL POSSIBLE CONSTRUCTION REQUIREMENTS AND TO PLAN AHEAD ACCORDINGLY.

NOT AS-BUILT DRAWINGS

THIS SET OF DRAWINGS IS FOR PROPOSED CONSTRUCTION ONLY. THESE DRAWINGS ARE NOT AS-BUILT DRAWINGS.

DISCLAIMERS

1) DISCLAIMERS APPLY TO THE SITE PLAN AND THE LOT.
2) DISCLAIMERS APPLY TO ALL EXISTING STRUCTURES.
3) DISCLAIMERS APPLY TO ALL NEW STRUCTURES.
4) EXISTING AREAS AND DIMENSIONS ARE BASED ON DATA PROVIDED BY OTHERS.
5) AREAS AND DIMENSIONS SHALL BE USED ONLY FOR THIS ONE CURRENT PROJECT.
6) AREAS AND DIMENSIONS SHALL NOT BE USED FOR ANY REAL ESTATE BUYING OR SELLING PURPOSES.
7) ALL PERSONS AND/OR ENTITIES NOT SPECIFICALLY AUTHORIZED BY EYCO DESIGN FOR A SPECIFIC PURPOSE IN WRITING SHALL INDEPENDENTLY FROM THESE PLANS FILED VERIFY ALL AREAS AND ALL DIMENSIONS.

BUILDING PERMIT

A BUILDING PERMIT MUST BE OBTAINED FROM THE LOCAL GOVERNMENT PRIOR TO ANY CONSTRUCTION.

NOTES

NOTES - WITH ARROWS

ARROWS NEXT TO NOTES ARE INTENDED TO DRAW ATTENTION; HOWEVER, ALL OTHER NOTES ALSO APPLY.

NOTES - WITH N/A

N/A NEXT TO A NOTE INDICATES THE NOTE MAY NOT APPLY.

NOTES - ALL APPLY

ALL "GENERAL" AND "CONSTRUCTION" NOTES APPLY TO THIS ENTIRE SET OF DRAWINGS.

NOTES - LINED OUT

NOTES WITH LINE(S) THAT STRIKE THROUGH THE TEXT OF THE NOTE INDICATE THAT THE NOTE IS DELETED.

COPIES

EYCO DESIGN HEREBY GRANTS PERMISSION FOR EYCO DESIGN'S CLIENT OR CLIENT'S AGENT TO MAKE PAPER COPIES OF THESE DRAWINGS FOR NORMAL CONSTRUCTION PURPOSES, FOR THIS ONE PROJECT ONLY.

PLAN SET

CODES (REV-07-14-2014) (REV-01-21-2017)

DIVISION OF THE STATE ARCHITECT

DEPT OF HOUSING & COMMUNITY DEV
DIVISON OF CODES AND STANDARDS
STATE HOUSING LAW

2019 CCR CALIF CODE OF REGULATIONS
2019 T24 CALIF BUILDING STDS CODE

2019 CALIF RESIDENTIAL CODE - CRC
>
>(HCD 1 = DWELLING)

2022 CA BUILDING CODE CBC
2022 CA ELEC CODE CEC
2022 CA MECH CODE CMC
2022 CA PLUMB CODE CPC
2022 CA FIRE CODE CFC
2022 CA ENERGY CODE TITLE 24,PART 6
2022 CA GREEN BLDG STDS CODE,CALGREEN

COMPLY WITH ALL LOCAL, STATE, FEDERAL LAWS, & BUILDING OFFICIAL DIRECTIVES

CODES - EXCERPTS

SEE CODES FOR EXACT REQUIREMENTS.

MINIMUM REQUIREMENTS

ALL DRAWINGS, NOTES, AND SPECS ARE MIN REQUIREMENTS. CODE OR OTHER REQUIREMENTS MAY BE HIGHER.

DEFINITIONS

FUTURE: MEANS NOT ON THIS PERMIT
OPTION: MEANS OWNER OPTION (UON)

MANUFACTURER

ALL MANUFACTURERS' SPECIFICATIONS AND RECOMMENDATIONS SHALL BE FOLLOWED

CONSTRUCTION - STRENGTH

ALL FOUNDATION, FRAMING, CONNECTIONS, AND ALL OTHER BUILDING COMPONENTS AND SYSTEMS SHALL BE FASTENED, CONNECTED, AND CONSTRUCTED TO ADEQUATELY RESIST ALL FORCES, INCLUDING, BUT NOT LIMITED TO, STATIC, SEISMIC, AND WIND LOADS.

CONSTRUCTION - QUALITY

PROVIDE ALL MATERIALS, COMPONENTS, SYSTEMS, DOORS, WINDOWS, CABINETS, FIXTURES, APPLIANCES, EQUIPMENT, TRIM, FINISHES, AND ALL OTHER ITEMS PER OWNER AND AS APPROPRIATE FOR THE SIZE, LOCATION, STYLE, AND CURRENT & FUTURE MARKET VALUE OF THE PROPERTY.

GENERAL

PROJECT DRAWINGS ARE FOR THIS ONE SPECIFIC PROJECT ONLY.

DRAWINGS WHENEVER THE WORD "DRAWINGS" IS USED IT SHALL ALSO INCLUDE WITHIN ITS MEANING "SPECIFICATIONS" WHENEVER APPLICABLE.

BUILDER WHENEVER THESE DRAWINGS REFER TO THE "BUILDER" OR THE "CONTRACTOR" OR THE "GENERAL CONTRACTOR" THE SAME SHALL ALSO APPLY TO THE SUBCONTRACTOR WHERE APPLICABLE.

VERIFICATION PRIOR TO BIDDING, ORDERING, AND COMMENCEMENT OF WORK, BUILDER SHALL VISIT THE PROPERTY AND VERIFY THAT ALL EXISTING CONDITIONS FULLY CONFORM TO THESE DRAWINGS.

INTERPRETATION PRIOR TO BIDDING, ORDERING, AND COMMENCEMENT OF WORK, BUILDER SHALL VERIFY THAT BUILDER'S INTERPRETATION OF THESE DRAWINGS IS COMPLETE, CORRECT, AND ACCURATE.

CORRECTNESS PRIOR TO BIDDING, ORDERING, AND COMMENCEMENT OF WORK, BUILDER SHALL VERIFY THAT THESE DRAWINGS ARE COMPLETE, CORRECT, AND ACCURATE. PRIOR TO BIDDING, ORDERING, AND COMMENCEMENT OF WORK, BUILDER SHALL REPORT ALL DISCREPANCIES, AMBIGUITIES, DEFICIENCIES, ERRORS, AND OMISSIONS.

DIMENSIONS BUILDER SHALL BE FULLY RESPONSIBLE FOR ALL DIMENSIONS AND VERIFICATION. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS, IN CASE OF DISCREPANCY, BUILDER SHALL VERIFY CORRECTNESS OF BUILDER'S INTERPRETATION BEFORE PROCEEDING.

MEASUREMENT FIELD MEASUREMENTS SHALL BE USED TO THE MAXIMUM EXTENT POSSIBLE TO PROVIDE ACCURACY AND MATCH-UP WITH ACTUAL JOB CONDITIONS. THE USE OF FIELD MEASUREMENTS SHALL NOT REMOVE THE REQUIREMENT THAT THE PROJECT SHALL CONFORM TO THE DRAWINGS.

UNIT THIS SET OF DRAWINGS IS AN INTEGRAL UNIT. ALL SHEETS SHALL BE INTERPRETED WITH RESPECT TO THE SET OF DRAWINGS AS A WHOLE. ALL REQUIREMENTS WHETHER GENERAL OR SPECIFIC SHALL BE INTERPRETED IN CONJUNCTION WITH ALL OTHER INFORMATION IN THE SET OF DRAWINGS.

INTENT BUILDER SHALL EXECUTE THE CONSTRUCTION WORK SO AS TO ACHIEVE BOTH THE LETTER AND INTENT OF THESE DRAWINGS.

CURRENT BUILDER SHALL CONSTANTLY VERIFY THAT BUILDER IS USING THE MOST UP-TO-DATE SET OF DRAWINGS, INCLUDING ANY ADDENDUMS OR CHANGES ISSUED SEPARATELY.

WORKMANSHIP BUILDER SHALL EXECUTE THE CONSTRUCTION WORK IN A SUBSTANTIAL AND WORKMAN-LIKE MANNER.

SAFETY BUILDER SHALL SAFELY SHORE ALL CONSTRUCTION THROUGHOUT ALL CONSTRUCTION PHASES. BUILDER SHALL BE FULLY RESPONSIBLE FOR ALL SAFETY RELATED ITEMS.

SIGNATURE SIGNATURES BY EYCO APPLY ONLY TO ITEMS AUTHORIZED BY EYCO.

AUTHORIZATION ONLY UNALTERED DRAWINGS AUTHORIZED AND ISSUED BY EYCO IN WRITTEN OR GRAPHIC FORMAT ARE VALID, ALL OTHER DOCUMENTS ARE VOID.

RECORD DRAWINGS ONLY DRAWINGS HELD BY EYCO ARE THE RECORD OF AUTHORIZATION.

CHANGES DEVIATIONS FROM THE DRAWINGS ARE NOT AUTHORIZED BY EYCO, UNLESS SUCH DEVIATIONS ARE INCORPORATED INTO THE DRAWINGS AND ISSUED BY EYCO IN WRITTEN OR GRAPHIC FORMAT.

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REVISIONS

SEE INDEX

REV #	DATE	COMMENTS

CALIF RESIDENTIAL CODE

1) COMPLY WITH CRC FOR ALL NON-STRUCTURAL ITEMS
2) COMPLY WITH CRC FOR ALL STRUCTURAL ITEMS (UON)

GREEN REGULATIONS

1) COMPLY WITH ALL GREEN LAWS
2) COMPLY WITH ALL GREEN REGULATIONS
3) COMPLY WITH CALGREEN 2022
4) SEE GREEN INFO AT SHEETS: AT END OF SET

PROJECT DATA

CLIENT: SAINI
OWNER: SAINI
PROJECT ADDRESS: 2841 PRUNERIDGE AVE
SANTA CLARA, CA 95050

PROJECT: SINGLE FAMILY RESIDENCE DETACHED
PROJECT: NEW___ ADDITION X REMODEL___
SCOPE-BLDG-DEPT:
- ADD 1 BEDROOM
- ADD 1 BATHROOM
- ADD 1 COAT CLOSET
- ADD 1 FOYER
- ADD 1 LAUNDRY CLOSET
- ADD 1 STUDY

SCOPE: STORIES: ONE___ TWO X TYPE: VB
CODE GROUP(S): R-3 U

AREA (SF)*	TOTAL	NET	(E)	(N)	REMOVE	CONVERT
HOUSE	2636		2170	466		
GARAGE	497		497			
PORCH	18			18		
TOTAL	3151 SF					
LOT	8840 SF					
F.A.R. SF	SF					
F.A.R. %	%					
COVERAGE SF	3151 SF					
COVERAGE %	35.7 %					

* SF = SQUARE FEET (ALL AREAS ARE APPROX)
(BASED ON DATA PROVIDED BY OTHERS)
F.A.R. % = FLOOR AREA RATIO ITEMS / LOT AREA
COVERAGE % = COVERAGE ITEMS / LOT AREA

SUBMITTAL

PLEASE ACCEPT FOR PLAN CHECK, OR RETAIN 1-SET FOR REFERENCE

BY DEPTARMENT HEADS FOR PHONE QUESTIONS FROM EYCO

CHECKER - IF QUESTIONS

PLEASE CONFER WITH SUPERVISING PLAN CHECKER

CHECKER - RED-LINED PERMIT SETS OK

GOVERNMENT AND GOVERNMENT CONTRACT PLAN CHECKERS ARE HEREBY GRANTED PERMISSION BY EYCO DESIGN TO RED-LINE THESE PLANS AND ISSUE PERMIT SET(S). SUCH RED-LINES SHALL BE LIMITED TO APPROPRIATE CODE RELATED "CORRECTIONS," STRENGTH AND/OR QUALITY SHALL NOT BE REDUCED BELOW WHAT IS ALREADY SHOWN.

CHECKER - EMAIL PREFERRED

EMAILED COMMENTS PREFERRED IN PLACE OF RED-LINES.

CHECKER - PLEASE CHECK WITH CARE

ONLY NON RUSH PROCESS APPROVED BY EYCO DESIGN.

FINAL DRAWINGS
FULL SET APPROVED
ANY AND ALL CHANGES REQUESTED BY CLIENT(S) WILL REQUIRE ADDITIONAL FEES AND RETAINER.

____

(SIGNED COPY ON FILE AT EYCO)

NON-STRUCTURAL SET

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RESIDENCE
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SANTA CLARA, CALIFORNIA

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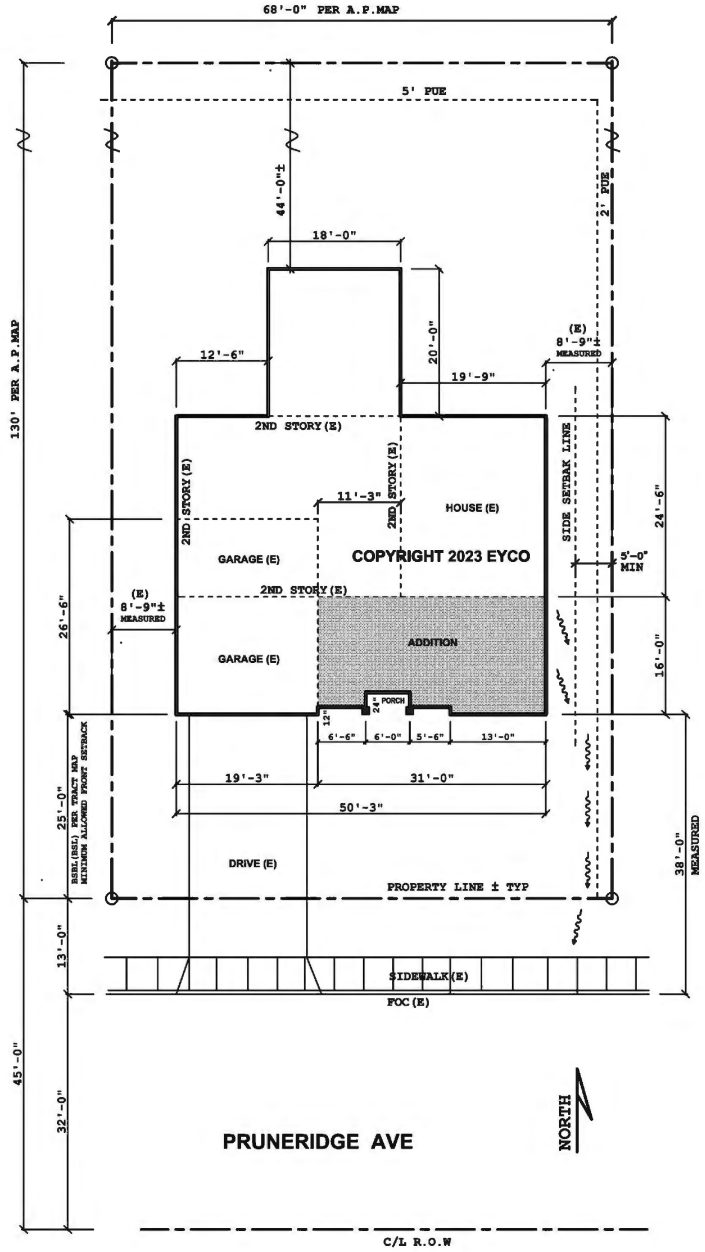
Date MAR-29-2023
Job SAINI
Sheet 2
Of 11 Sheets



SITE PLAN - ACCURACY
1) IN EYCO DESIGN'S OPINION THE SITE PLAN HAS MORE THAN ENOUGH INFORMATION, ACCURACY, & CLARITY FOR PLAN CHECK PURPOSES FOR THE PROPOSED PROJECT
2) PLAN CHECKER PLEASE SEE SENIOR PLAN CHECKER AND/OR DEPARTMENT HEAD, IF QUESTIONS

SITE PLAN - NOT A SURVEY
1) THE SITE PLAN IS NOT A SURVEY.
2) FOR PERMIT PURPOSES THE OWNER MAY WISH TO HIRE A SURVEYOR.
3) FOR CONSTRUCTION PURPOSES THE BUILDER MAY HIRE A SURVEYOR.

SITE DRAINAGE - SWALE
1) 2% MIN SWALE (TYP)
2) GRADE WITHIN 10 FEET OF BUILDING SHALL SLOPE 5% MIN AWAY, UNLESS DRAINS OR SWALES ARE PROVIDED.
3) IMPERVIOUS SURFACES WITHIN 10 FT OF BUILDING SHALL SLOPE 2% MIN AWAY FROM THE BUILDING.
4) PROVIDE PER CRC R401.3

DRAINAGE
ALL WATER SHALL BE POSITIVELY DIRECTED AWAY FROM ALL FOUNDATIONS AT ALL TIMES & SUCH DRAINAGE SHALL BE CONTINUOUSLY & ADEQUATELY MAINTAINED BOTH DURING AND AFTER CONSTRUCTION.

UTILITIES
LOCATE/RELOCATE: INSTALL PER CODES, BUILDING DEPARTMENT, AND UTILITY COMPANIES
VERIFY SIZE: METERS & PANELS
UNDERGROUND: IF REQUIRED

DIMENSIONS, AREAS, DATA
1) BASED ON DATA PROVIDED BY OTHERS

SITE PLAN

1/8" = 1'-0"±
WHEN PROPERLY PRINTED

REVISIONS

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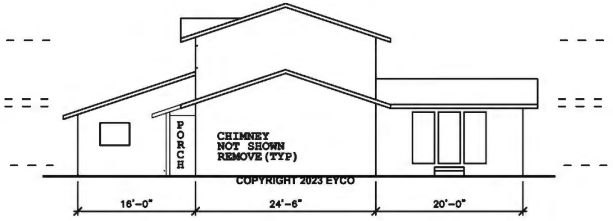
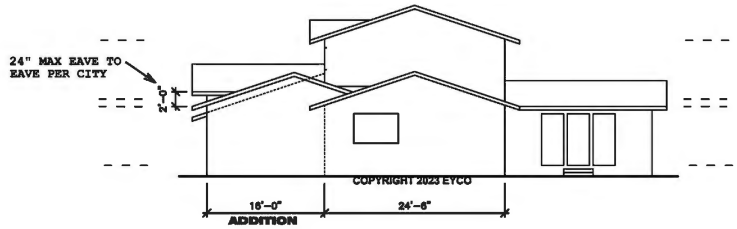


(E) RIGHT ELEVATION (Δ1)

SCALE: 1/8" = 1'-0"±



(N) RIGHT ELEVATION (Δ1)

SCALE: 1/8" = 1'-0"±

ELEVATIONS
1) ALL ROOFS COMPOSITION SHINGLES
2) GARAGE 2FT WING WALLS BRICK VENEER
   FRONT WALLS HORIZONTAL "WOOD" SIDING
   MAIN SIDES AND REAR WALLS STUCCO
3) MAIN ROOFS SLOPE 4:12 +/-
   DORMERS AND NEW PORCH ROOF SLOPE 8:12 +/-

ROOF - GENERAL
1) EAVES, FACIAS, GUTTERS: (N)(TME)

ROOF
1) MAIN SLOPE 4:12
   PORCH SLOPE 8:12
2) ASPHALT SHINGLES (TME)
3) COLOR LIGHT GRAY (E)

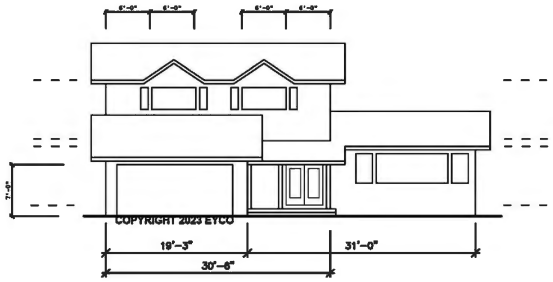
WALLS
1) WOOD SIDING/STUCCO SEE PLANS
2) COLOR GRAY
3) REMOVE ALL SHUTTERS

WINDOWS
1) MATERIAL: (N) VINYL
2) COLOR: BLACK
3) GRIDS: P/O(V)

TRIM
1) FASCIA GUTTERS STYLE TME COLOR BLACK
2) WINDOW TRIM STYLE TME COLOR BLACK
3) DOOR TRIM STYLE TME COLOR BLACK

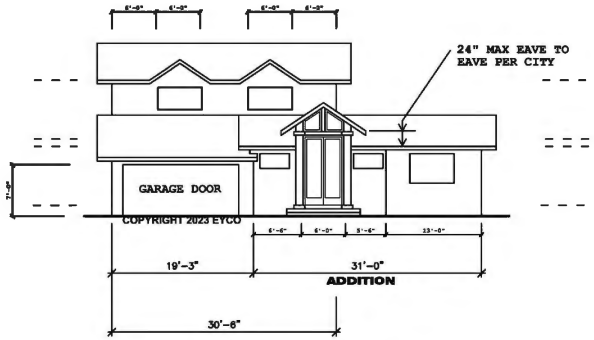
ELEVATIONS (Δ1)

1/8" = 1'-0"±



(E) FRONT ELEVATION (Δ1)

SCALE: 1/8" = 1'-0"±



(N) FRONT ELEVATION (Δ1)

SCALE: 1/8" = 1'-0"±

REVISIONS

Δ1	APR-05-2023	R

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Date MAR-29-2023
Job SAINI
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ELECTRICAL

SMOKE DETECTORS & CARBON MONOXIDE ALARMS [03-17]
POWER: HARD-WIRED & BATTERY BACKUP
CONNECT: INTERCONNECT ALL SMOKE ALARMS
INTERCONNECT ALL CO ALARMS
LOCATION: BEDROOM, AREA OUTSIDE BEDROOM
EACH STORY & BASEMENT
LOCATION: HIGHEST CEILING POINT
TOP 24" OF SKYLIGHT WELL
RATING: ICC APPROVED
CODE: CRC R314.6, CRC R315.5

G.F.I.
WHERE: ALL RECEPTACLES AT:
-BATHROOMS
-KITCHEN COUNTERS & ISLANDS
-GARAGE
-EXTERIOR
CODE: NEC 210-8

BEDROOMS
AFCI: PROVIDE ARC FAULT CIRCUIT INTERRUPTERS AT OUTLETS
CODE: PROVIDE PER NEC & CEC

BATHROOMS
CIRCUIT: MIN (1) 20 AMP DEDICATED CIRCUITS FOR EACH BATHROOM FOR RECEPTACLES ONLY
CODE: NEC 210-52(d)
LIGHTS: TUB OR SHOWER PER NEC "WET LOCATIONS"
TUB: HYDRO MASSAGE TUB PROVIDE ACCESS DOOR & G.F.I.
CODE: NEC 680

KITCHEN
CIRCUIT: MIN (2) 20 AMP DEDICATED CIRCUITS FOR COUNTERS FOR RECEPTACLES ONLY
CODE: NEC 210-52(b)
CIRCUIT: MIN (2) 20 AMP DEDICATED CIRCUITS FOR SMALL APPLIANCES ONLY
CODE: NEC 210-52(b)
CIRCUIT: PER NEC 220-4(b), 210-52(b)

EXTERIOR
TYPE: FIXTURES & OUTLETS
TYPE: WEATHERPROOF AND G.F.I.
CODE: NEC 410-49, 410-57

RECESSED FIXTURES
TYPE: IC (INSULATION COVER)
ZERO CLEARANCE APPROVED

CLOSET CLEARANCES
MIN FROM COMBUSTIBLES/SHELVES:
1) INCANDESCENT: 12" & ENCLOSED BULB
2) FLUORESCENT: 6"
3) RECESSED: 6"
4) CODE: NEC 410-8

ELECTRIC PANELS
MAIN: _____ (CODE) _____ AMP
SUB: _____ (CODE) _____ AMP

FURNACE OUTLETS
EACH FURNACE ON DEDICATED CIRCUIT

ELECTRICAL - TAMPER
NEW OUTLETS SHALL BE TAMPER-RESISTANT PER CEC 406.11 & CEC 210.52

ELECTRICAL - ARC FAULT
PROVIDE ARC-FAULT, GROUND-FAULT, DEDICATED CIRCUITS, SMALL APPLIANCE LOADS, AND MOTOR LOAD PROTECTION PER ARTICLES 210-8; 210-10; 210-11; 210-12, & 210-23. CEC TITLE 24, PART 3.

APPLIANCES
PROVIDE ELECTRICAL TO ALL APPLIANCES

MECHANICAL

VENTILATE
ROOMS: BATHROOMS & LAUNDRY
WINDOW: OPENABLE AREA = .05 X FLOOR AREA (1.5 SQFT MIN.) OR FAN
FAN: 5 AIR CHANGES PER HOUR

DRYER VENT
PER UMC 1503(a-c) & LENGTH:
-14'&(2)90 DEG. ELBOWS MAX.
(DEDUCT 2' FOR EACH ELBOW >2) OR
-LENGTH & ELBOWS AS PERMITTED BY MANUFACTURER & BUILDING OFFICIAL
-OUTLET 3' MIN. TO DOORS & WINDOWS
CODE: UMC 504.3.1, 504.3.2
UMC 908.1, 908.2

FURNACE AIR
AIR: COMBUSTION TOP & BOT VENTS
200 SQIN MIN EACH
CODE: CMC & UMC TABLE 7-A

PLUMBING

WATER CLOSET
FRONT: 24" MIN. CLEAR
SIDES: 15" MIN. CLEAR TO C.L.
LOW FLUSH: 1.28 GAL. PER FLUSH MAX.
CODE: CPC 402.5

SHOWER SIZE
AREA: 1024 SQUARE INCHES MIN.
CIRCLE: 30" DIAMETER MIN
CLEAR TO CENTERLINE OF CURB
DOOR: 22" WIDE CLEAR OPENING MIN.
DOOR MUST SWING OUT
DOOR MAY SWING BOTH OUT AND IN
CODE: CPC 408.5, 408.6

SHOWER/TUB WALL
FLOOR TO CEILING W/ TILE (VERIFY)
OVER 3/4" MORTAR O/ KRAFT PAPER
OVER 1/2" GREENBOARD

HOSE BIBS
BACKFLOW PREVENTER: PER UPC 1003(n)

WATER HEATER
IF GARAGE: PLATFORM 18" ABOVE FLOOR
STRAPS: PER STATE ARCHITECT
VALVE: PRESSURE RELIEF TO EXT.
AIR: COMBUSTION PER CMC & UMC
ACCESS: 24" MIN DOOR, ACCESS
CODE: UPC 511.0, 1310(e)

APPLIANCES GAS PER OWNER(V)

FLOOR

WINDOWS & EMERGENCY EXITS
BEDROOM EMERGENCY EXIT WINDOWS
-NET CLEAR HEIGHT: 24" MIN
-NET CLEAR WIDTH: 20" MIN
-NET CLEAR OPENING: 5.7 SF MIN
-SILL/FRAME HEIGHT: 44" MAX > FF
OPERABLE: 50% OF AREA (TYP) (UON) (V)
TYPE: CASEMENT, SLIDING
DOUBLE HUNG, ETC
PER CODE & PER OWNER
FIXED: ARC, TRAPEZOID
HEADER: +6'-8" NOMINAL (UON)
MUNTINS: GRIDS AT ALL WINDOWS AT FRONT OF HOUSE (V)
ENERGY: SEE TITLE-24 ENERGY SHEET

TEMPERED GLAZING
1) INGRESS & EGRESS DOORS
2) SWINGING DOORS, SLIDING DOORS, FIXED DOORS, STORM DOORS
3) EXCEPTION: CLOSET DOORS
4) SHOWER/TUB/SAUNA ENCLOSURES, WINDOWS IF <60" ABOVE DRAIN
5) WITHIN 24" ARC OF EITHER SIDE OF CLOSED DOOR IF GLAZING ADJACENT & BOT <60" ABOVE F.F.OR EXT WALKWAY CRC PROTECTIVE BAR DORS NOT ALTER TEMPERED REQUIREMENTS
6) IF BOT <18" ABOVE F.F. AND IF TOP >36" ABOVE F.F. AND >9SF CRC EXCEPTION PROTECTIVE BAR OR
7) CODE: SEE CRC "EXCEPTIONS"

LANDINGS
WHERE: EXTERIOR DOORS & WHERE SHOWN
MAX: 7.75" BELOW TOP OF THRESSHOLD
SWING: NOT OVER LANDING
IF DROP >1" BELOW FF
LENGTH: 36" MIN IN TRAVEL DIRECTION
WIDTH: 36" MIN
6" > DOOR EDGES & ≥ STEPS

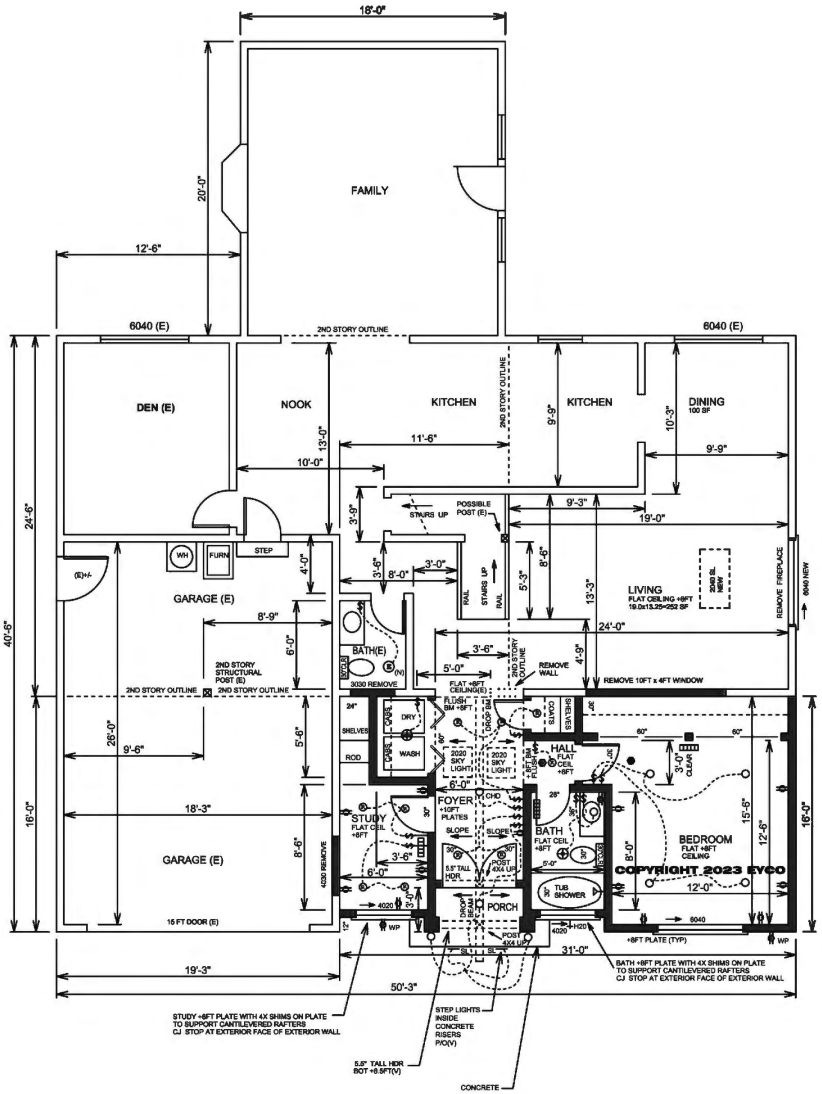
STEPS/STAIRS
1) RISER: 7.75" MAX
2) TREAD: 11" MIN
3) WIDTH: 36" MIN
4) CODE: CRC R311.7

FIRE WALL

LOCATION: HOUSE TO GARAGE SEPARATION
DOORS: 1 3/8" S.C. TIGHT, CLOSER, AND SELF LATCHING
MATERIAL: 1/2" GYPSUM BOARD
5/8" TYPE "X" IF ROOM ABOVE
APPLY: IF NO HABITABLE ROOM ABOVE:
1/2" TO GARAGE SIDE OF WALL
RUN G.B. TO HIGHEST ROOF
APPLY: IF HABITABLE ROOM ABOVE:
5/8" TYPE "X" AT CEILING
1/2" AT SUPPORTS
AIR DUCT: MIN 0.019" SHEET STEEL & ZERO OPENINGS INTO GARAGE
CODE: CRC R302.5, R302.6

LOCAL EXHAUST VENTILATION FOR BATHROOM

- Bathroom Fan Flow (cfm) = 50 CFM
- Duct Type = FLEX DUCT
- Duct Size (in) = 4" DIAMETER
- This exhaust fan is required to be rated for sound at a maximum of 3 sones.



NOTES TO ENGINEER
1) PRELIMINARY PLANS HAVE NOT YET BEEN APPROVED BY CITY.
2) ENGINEER SHALL OBTAIN HIS OWN AS-BUILT DATA.
3) ENGINEER SHALL PRODUCE HIS OWN DRAWINGS, DETAILS, AND CALCULATIONS.
4) EXISTING HOUSE FOUNDATION APPEARS TO BE STANDARD RAISED WOOD FLOOR WITH T-FOOTINGS.
5) ENGINEER PROVIDE STEEL POST AT GARAGE CENTER AS OWNER OPTION P/O(V).
6) REDFIN REALTY AT GOOGLE HAS PICTURES.

WALL LEGEND
NEW
EXISTING
EXISTING REMOVE

ELECTRICAL
1) ALL LIGHTS DIMMABLE P/O(V)

ELECTRICAL
1) HIGH EFFICACY LIGHTS, AT ALL (N) LIGHTS PER 2016 TITLE-24 ENERGY CODE
2) VERIFY ALL ELECTRICAL & LIGHTING STYLES AND LOCATIONS WITH OWNER
3) L.E.D. LIGHTS WHERE FEASIBLE P/O(V)

$ SWITCH
DUPLEX OUTLET STANDARD
DUPLEX OUTLET GFI
SMOKE DETECTOR CRC R314
CARBON MONOXIDE CRC R315
USE COMBINED UNIT(S)
F FLUORESCENT
FLUOR+FAN+HEAT 3-SWITCHES
FLUOR+FAN 2-SWITCHES
EXHAUST FAN
RECESSED CAN LIGHT

MECHANICAL
HEAT/AIR OUTLET

CEILINGS - NEW
1) ALL CEILINGS SHALL BE FLAT

ROOM SIZES
1) ALL ARE APPROXIMATE (TYPICAL)

DIMENSIONS - EXISTING
1) BASED ON DATA PROVIDED BY OTHERS

FLOOR PLAN

SCALE: 1/4" = 1'-0"±
WHEN PROPERLY PRINTED

REVISIONS

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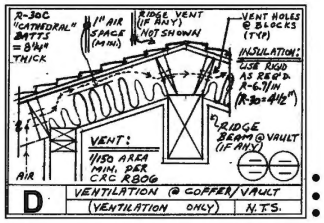

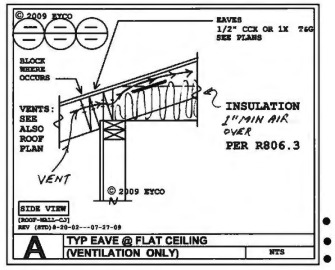

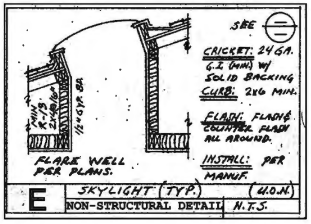

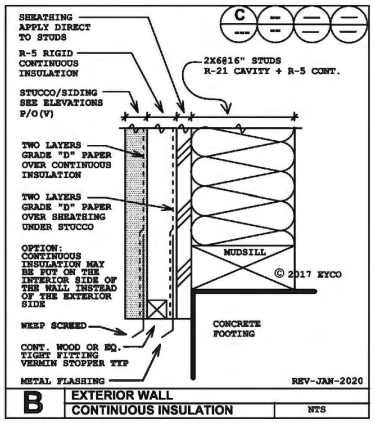

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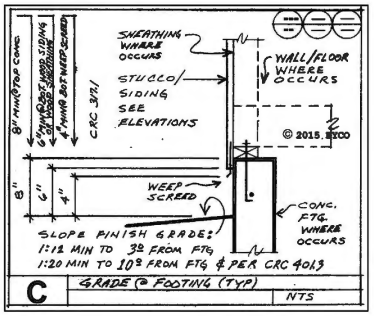

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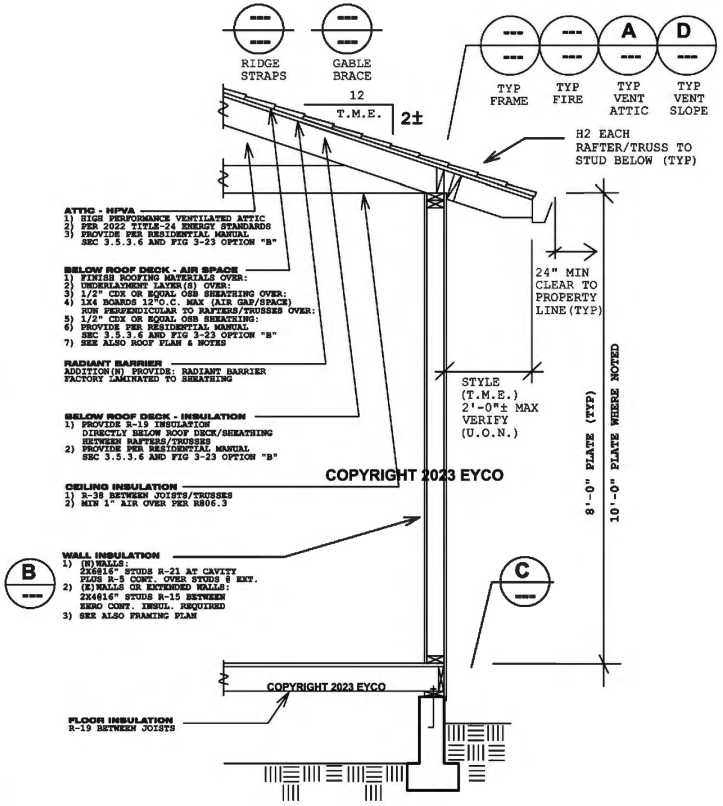

TYP SECTION **A-A**

SCALE: 1/2" = 1'-0"± WHEN PROPERLY PRINTED

RADIANT BARRIER (RB)
SEE TITLE-24 ENERGY SHEET(S)
1) PROVIDE PER 2022 TITLE-24 ENERGY REQUIREMENTS AND STANDARDS
2) PROVIDE PER CALIFORNIA ENERGY COMMISSION RESIDENTIAL MANUAL SECTION 3.4.4
3) PROVIDE AT ROOF & GABLE WALLS
4) OVER NEW CONDITIONED FLOOR AREAS
5) FACTORY LAMINATED TO SHEATHING
6) VENT: 1:150 MIN NET, 1/4" MESH
7) VENT: 40% MIN UPPER/HIGH VENTS
50% MAX UPPER/HIGH VENTS
8) VENT: PER CRC & MANUFACTURER
9) VENT: RYERSON VENTS MAY BE NEEDED ESPECIALLY AT SLOPED CEILINGS WITH ENCLOSED RAFTER SPACES, VENT EACH SEPARATE SPACE
10) CODE: CRC R806
11) REV: APR-22-2021, MAR-23-2023

ROOF
1) USE LAMINATED RADIANT BARRIER
2) SEE ROOF PLAN
3) SEE ROOF FRAMING PLAN

FRAMING
1) SEE ALSO NOTES AT FRAMING PLANS

CEILING
1) FLUSH: MAKE FINISH FLUSH WITH (E)
2) FRAMING ≤16": 1/2" GYP. BD.
3) FRAMING ≤24": 1/2" SAG RESISTANT TYPE
4) FRAMING ≤24": 5/8" GYP. BD.

WALLS - EXTERIOR
EXTERIOR: MEANS OUTSIDE WALL THAT FORMS THE ENVELOPE OF THE STRUCTURE
FINISH: EXTERIOR SIDE - SEE ELEVATIONS
FINISH: INTERIOR SIDE - SEE PLANS
STUDS: 2X4@16" MIN, 2x6@16" IF NOTED
WOOD: WOOD SIDING
TYPE 15 FELT (1) LAYER
STUCCO: WHERE ZERO CONT. INSULATION OCCURS:
7/8" STUCCO (3) LAYERS OVER
GRADE "D" PAPER (2) LAYERS OVER SHEATHING
WEEP SCREED BELOW TOP OF FOUNDATION, 4" MIN. TO GRADE
26 GUAGE CORROSION RESISTENT PER CRC R703.7.2.1
STUCCO: WHERE CONT. INSULATION OCCURS
7/8" STUCCO (3) LAYERS OVER
GRADE "D" PAPER (2) LAYERS OVER
CONTINUOUS INSULATION OVER
GRADE "D" PAPER (2) LAYERS OVER SHEATHING
WEEP SCREED BELOW TOP OF FOUNDATION, 4" MIN. TO GRADE
26 GUAGE CORROSION RESISTENT PER CRC R703.7.2.1
SHEATH: 3/8" CDX 8d @6"x12" (MIN)
MUDSILL: 2X4(MIN) DF-L #1 P.T.
ANCHORS: 5/8" DIAM. A.B. @48"
INSULATE: SEE TITLE-24 ENERGY SHEETS
SEE SECTION A-A
SEE FRAMING PLAN
CODE: CRC

WALLS - FIRE WALL
SEE: "FIRE WALLS" SEE PLANS
FINISH: 1/2" GYP BD AT GARAGE SIDE OF COMMON GARAGE-HOUSE WALLS
STUDS: 2x4 @ 16" (UON)
CODE: CRC

WALLS - INTERIOR - IF ANY
INTERIOR: MEANS NON-EXTERIOR WALL
STUDS: 2x4 @ 16"
BLOCKS: FIRE BLOCKS AT STUD SPACES 10' MAX VERTICAL SPACING
SHEATH: SEE FRAMING PLANS
FINISH: BOTH SIDES 1/2" GYP BD UNLESS "FIRE WALL"
FIRE WALL: SEE PLANS
CODE: CRC

FLOORS
1) SEE FRAMING & FOUNDATION PLANS

FOUNDATION
1) SEE FOUNDATION PLAN

ENERGY - MATERIALS
1) SEE ALSO TITLE-24 ENERGY SHEETS

REVISIONS

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Date MAR-29-2023
Job SAINI
Sheet 6 Of Sheets

REV-08-09-2012.01

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2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.
(04/2022)

Building Envelope:

§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4-3 for exterior doors. They must be caulked and/or weather-stripped.
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Roof Deck, Ceiling and Rafter Roof Insulation.** Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perms per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45. *

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(a):	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e):	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing Systems:

§ 110.0-§ 110.3:	**Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas; fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters. *
§ 150.0(b)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(b)2.
§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(g)1:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(g)2:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(h)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5 x 2.5 x 2.5' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater.
§ 150.0(j)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

Ducts and Fans:

§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼". If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed andcontrolled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses .** Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1C-iii.
§ 150.0(o)1G:	**Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Giii.enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.** The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.

Lighting:

§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, under-cabinet lighting, garage door openers, navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or two-speed control.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls.** In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers.** Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	**Independent controls.** Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control; or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110.10(b)1A:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

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2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(s):	**Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	**Heat Pump Space Heater Ready.** Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Clothes Dryer Ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.

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COMPLY WITH ALL MANDATORY MEASURES.

COMPLY WITH ALL TITLE-24 ENERGY REQUIREMENTS.

CALIFONIA ENERY COMMISSION HOTLINE 800-772-3300.

ENERGY FORMS AND COMPLIANCE MANUALS ARE READILY AVAILABLE ONLINE.

REVISIONS

USE CONSTITUTES APPROVAL
ANY USE AND/OR ANY SUBMITTAL OF ANY DRAWINGS AND/OR SPECIFICATIONS SHALL CONSTITUTE ITS APPROVAL BY EACH CLIENT OF ALL DRAWINGS AND ALL SPECIFICATIONS.

SAINI RESIDENCE
2841 PRUNERIDGE AVE.
SANTA CLARA, CALIFORNIA

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Date MAR-29-2023
Job SAINI
Sheet 7
Of Sheets

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PRESCRIPTIVE RESIDENTIAL ADDITIONS THAT DO NOT REQUIRE HERS FIELD VERIFICATION

CALIFORNIA ENERGY COMMISSION

CEC- CF1R-ADD-02-E

CERTIFICATE OF COMPLIANCE

This compliance document is only applicable to additions less than or equal to 1,000 square feet (ft2)and do not require HERS field verification for compliance. When HERS verification is required, a CF1R-ADD-01 shall first be registered with a HERS Provider Data Registry.

Alterations to Space Conditioning Systems that are exempt from HERS verification requirements may use the CF1R-ADD-02 and CF2R-ADD-02 compliance documents. Possible exemptions from duct leakage testing include: less than 25 feet (ft) of ducts were added or replaced; or the existing duct system was insulated with asbestos; or the existing duct system was previously tested and passed by a HERS Rater. If space conditioning systems are altered and are not exempt from HERS verification, then a CF1R-ADD-01 and CF1R-ALT-02 must be completed and registered with a HERS Provider Data Registry.

Additions or alterations that utilize closed cell Spray Polyurethane Foam (ccSPF) with a density of 1.5 to less than 2.5 pounds per cubic foot having an R-value greater than 5.8 per inch, or open cell Spray Polyurethane Foam (ocSPF) with a density of 0.4 to less than 1.5 pounds per cubic foot having an R-value of 3.6 per inch, shall complete and register a CF1R ADD-01 with a HERS Provider Data Registry.

If more than one person has responsibility for installation of the items on this certificate, each person shall prepare and sign a certificate applicable to the portion of construction for which they are responsible. Alternatively, the person with chief responsibility for construction shall prepare and sign this certificate for the entire construction. All applicable Mandatory Measures shall be met. Temporary labels shall not be removed before verification by the building inspector.

Project Details

Field Name	Data Entry	Field Name	Data Entry
Project Name:	SAINI RESIDENCE ADDITION	Enforcement Agency:	
Dwelling Address:	2841 PRUNERIDGE AVENUE	Permit Number:	
City and Zip Code:	SANTA CLARA 95051	Date Permit Issued:	

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January 2022

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PRESCRIPTIVE RESIDENTIAL ADDITIONS THAT DO NOT REQUIRE HERS FIELD VERIFICATION

CALIFORNIA ENERGY COMMISSION

CEC- CF1R-ADD-02-E

A. GENERAL INFORMATION

Field	Field Name	Data Entry	
01	Project Name:	SAINI RESIDENCE ADDITION	
02	Date Prepared:		
03	Project Location:	2841 PRUNERIDGE AVENUE	
04	Building Front Orientation (deg):	SOUTH	
05	CA City:	SANTA CLARA	
06	Number of Dwelling Units with Additions:	1	
07	Zip Code:	95051	
08	Fuel Type:	GAS	
09	Climate Zone:	4 4	<
10	Total Conditioned Floor Area (ft²) (Addition):	466 466	<
11	Building Type:	SINGLE FAMILY	
12	Slab Area (ft²):	0	
13	Project Scope:	>400SF-700SF	
14	Exceptions to Fenestration U-factor and SHGC 150.1(c)3A:	<16SF SKYLIGHTS	

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B. Opaque Surface Details – Framed (Section 150.2(a) and 150.1(c)1)

Field	Field Name	DATA 1	DATA 2	DATA 3	DATA 4	DATA 5	DATA 6	<<<
01	Tag/ID							
02	Assembly Type	ROOF	CEIL	WALLS	WALLS	FLOOR		
03	Frame Type	WOOD	WOOD	WOOD	WOOD	WOOD		
04	Frame Depth (inches)	5.5"	5.5"	5.5"	3.5"	5.5"		
05	Frame Spacing (inches)	24"	24"	16"	16"	16"		
06a	Proposed Cavity R-value	R-19	R-38	R-21	R-15	R-19		
06b	Proposed Continuous Insulation R-value	R-0	R-0	R-5	R-0	R-0		
07	Proposed U-Factor			.048	N/A			
08	Proposed *Joint Appendix JA4 Reference* Table							
09	Proposed *Joint Appendix JA4 Reference* Cell							
10	Required U-Factor from Table 150.1-A			.048	N/A			
11	Comments			(N)2X6	(E)2X4 ALIGN			

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C. Opaque Surface Details – Nonframed Walls (Section 150.1(c)1)

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Tag/ID			
02	Assembly Type	NONE		
03	Assembly Materials			
04	Thickness (inches)			
05	Proposed Core Insulation R-value			
06	Proposed Continuous Insulation R-value			
07	Proposed U-Factor			
08	Proposed *Joint Appendix JA4 Reference* Table			
09	Proposed *Joint Appendix JA4 Reference* Cell			
10	Required U-Factor from Table 150.1-A			
11	Comments			

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D. Opaque Surface Details – Mass Walls (Section 150.1(c)1Bii)

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Tag/ID			
02	Above Grade/Below Grade	NONE		
03	Mass Type			
04	Mass Thickness			
05	Proposed *Joint Appendix JA4 Reference* Table			
06	Proposed *Joint Appendix JA4 Reference* Cell			
07	Proposed *Interior* Furring Strip Thickness			
08	Proposed *Interior* Insulation R-value			
09	Proposed *Exterior* Furring Strip Thickness			
10	Proposed *Exterior* Insulation R-value			
11	Proposed *Joint Appendix JA4 Reference* Table			
12	Proposed *Joint Appendix JA4 Reference* Cell			
13	Proposed Total Assembly U-factor			
14	Required Interior R-value			
15	Required Exterior R-value			
16	Required Total Assembly U-factor			

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E. Slab Insulation (Table 150.1-A or Table 150.1-B)

Note: Heated slab floors require mandatory slab insulation (see Table 110.8-A).

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Floor Type	NO SLABS		
02	Proposed Insulation R-value			
03	Proposed Insulation U-factor			
04	Required Insulation R-value			
05	Required Insulation U-factor			
06	Comments			

F. Radiant Barrier (Section 150.1(c)2)

A radiant barrier is required (for Climate Zones 2-15)

- Radiant barriers shall meet specific eligibility and installation criteria to receive credit for compliance with the Building Energy Efficiency Standards for low-rise residential buildings. Refer to Reference Appendices, Residential Appendix, RA4.2.1
- The emittance of the radiant barrier shall be less than or equal to 0.05 as tested in accordance with American Society for Testing and Materials (ASTM) C1371 or ASTM E408.

For Prescriptive Compliance the attic shall be ventilated to provide a minimum free ventilation area of not less than 1 square foot (N^2) of vent area for each 300 square feet (N^2) of attic floor area with a minimum of 40 percent to no more than 50 percent upper vents. Ridge vents or gable end vents are recommended to achieve the best performance. The material should be cut to allow for full airflow to the venting.

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Radiant Barrier installed below the roof deck and on all gable end walls	PROVIDE		
02	Comments			

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G. Roofing Products (Cool Roof) (Section 150.1(c)11)

Notes:

- Exception 1: Any roof area covered by building integrated photovoltaic (PV) panels and solar thermal panels are exempt from the above Cool Roof requirements.
- Exception 2: Roof constructions with weight of 25 pounds per square foot (lb/ft²) are also exempt.
- Liquid field applied coatings must comply with installation criteria from Section 110.8(i)4.

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Exception	4:12, CE=4		
02	Roof Pitch	4:12		
03	Method of Compliance			
04	Product Type			
05	CRRC Product ID Number			
06	Proposed Initial Solar Reflectance			
07	Proposed Aged Solar Reflectance			
08	Proposed Thermal Emittance			
09	Proposed SRI (Optional)			
10	Required Aged Solar Reflectance			
11	Required Thermal Emittance			
12	Required SRI (Optional)			

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SEE NEXT SHEET

1) COMPLY WITH ALL STATE AND LOCAL TITLE-24 ENERGY REGULATIONS
2) COMPLY WITH ALL MANDATORY MEASURES

2022 ENERGY FORMS, MANUALS, AND STANDARDS ARE READILY AVAILABLE ONLINE AT:
https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency

REVISIONS

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ANY USE AND/OR ANY SUBMITTAL OF ANY DRAWING AND/OR SPECIFICATION SHALL CONSTITUTE FULL APPROVAL BY EACH CLIENT OF ALL DRAWINGS AND ALL SPECIFICATIONS.

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APPROVED:

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Date MAR-29-2023

Job SAINI

Sheet 8 Of Sheets

REV-09-09-2012.01—REV-04-22-2015.01—DEC-07-2015.01

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PRESCRIPTIVE RESIDENTIAL ADDITIONS THAT DO NOT REQUIRE HERS FIELD VERIFICATION

CALIFORNIA ENERGY COMMISSION

CEC- CF1R-ADD-02-E

H. Fenestration/Glazing Allowed Areas and Efficiencies (Section 150.2(a)1)

Table H-1

Field	Field Name	Data Entry 1
01	Addition Type ft²	>400-700SF

Table H-2: Maximum Allowed Fenestration Area for All Orientations ft² – The Greater of:

Field	Field Name	Data Entry
02	Maximum Calculated based on Allowed %	25%
03	Maximum Calculated Allowed ft²	120SF

Table H-3: Maximum Allowed West-Facing Fenestration Area Only ft² – The Greater of:

Field	Field Name	Data Entry
04	Maximum Calculated based on Allowed %	0%
05	Maximum Calculated Allowed ft²	60SF

Table H-4

Field	Field Name	Data Entry 1
06	Maximum Allowed U-factor (Windows)	.30
07	Maximum Allowed U-factor (Skylights)	.30
08	Maximum Allowed SHGC (Windows)	.23
09	Maximum Allowed SHGC (Skylights)	.23
10	Comments	

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January 2022

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CEC- CF1R-ADD-02-E

I. Fenestration Proposed Areas and Efficiencies

Note: If meeting Exception 1 to 150.1(c)3A, installing less than or equal to 3 square feet (ft²) glass in door, or less than or equal to 3 square feet (ft²) tubular skylight, it is assumed to meet the minimum required U-factor (0.30) & SHGC (0.23).

If meeting Exception 2 to 150.1(c)3A, installing less than or equal to 16 square feet (ft²) of new skylights, it is assumed to meet the minimum required U-factor (0.55) & SHGC (0.30).

Doors with greater than or equal to 25 percent glazing area are considered glazed doors and are treated as fenestration products.

Table I-1

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Tag/ID			
02	Fenestration Type	GLAZING		
03	Frame Type	VINYL		
04	Dynamic Glazing	NO		
05	Orientation N, S, W, E	ALL		
06	Number of Panes	2		
07	Proposed Fenestration Area (ft²) (N, S, E)	68SF		
08	Proposed West Facing Fenestration Area (ft²)	4SF		
09	Proposed U-factor	.30		
10	Proposed U-factor Source	NFRC		
11	Proposed SHGC	.23		
12	Proposed SHGC Source	NFRC		
13	Exterior Shading Device			
14	Combined SHGC from CF1R-ENV-03			

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REGISTERED - CAN BE USED FOR SUBMISSION TO BUILDING DEPARTMENTS PRIOR TO MARCH 31, 2023

CEC- CF1R-ADD-02-E

Table I-2

Field	Field Name	Data Entry
15	Total Proposed Fenestration Area	72SF
16	Maximum Allowed Fenestration Area	120SF
17	Compliance Statement: Total Proposed Fenestration Area ≤ Maximum Allowed Fenestration Area	☒Yes ◯No
18	Total Proposed West-Facing Fenestration Area	4SF
19	Maximum Allowed West-Facing Fenestration Area	60SF
20	Compliance Statement: Total Proposed West-Facing Fenestration Area ≤ Maximum Allowed West-Facing Fenestration Area	☒Yes ◯No
21	Proposed Fenestration U-factor (Windows)	.30
22	Required Fenestration U-factor (Windows)	.30
23	Compliance Statement: Proposed Fenestration U-factor ≤ Required Fenestration U-factor	☒Yes ◯No
24	Proposed Fenestration SHGC (Windows)	.23
25	Required Fenestration SHGC (Windows)	.23
26	Compliance Statement: Proposed Fenestration SHGC ≤ Required Fenestration SHGC	☒Yes ◯No
27	Proposed Fenestration U-factor (Skylights)	.30
28	Required Fenestration U-factor (Skylights)	.30
29	Compliance Statement: Proposed Fenestration U-factor ≤ Required Fenestration U-factor	☒Yes ◯No
30	Proposed Fenestration SHGC (Skylights)	.23
31	Required Fenestration SHGC (Skylights)	.23
32	Compliance Statement: Proposed Fenestration SHGC ≤ Required Fenestration SHGC	☒Yes ◯No

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J. Opaque Swinging Doors to Exterior (Section 150.1(c)5)

Notes:

- Any door with 25 percent or more glass is considered a glazed door and is counted as a fenestration product in Tables H and L
- Do not include fire-rated doors between garage or unconditioned space, and conditioned space.
- If using weighted average to achieve required maximum U-factor, attach CF1R-ENV-02-E.

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Tag/ID			
02	Area	N/A		
03	Proposed U-factor			
04	Proposed U-factor Source			
05	Required Maximum U-factor			
06	Weighted Average (Yes/No)	◯Yes ◯No	◯Yes ◯No	◯Yes ◯No
07	Comments			

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CEC- CF1R-ADD-02-E

K. Space Conditioning (SC) Systems – Heating/Cooling (Section 150.2(b))

Alterations to space conditioning systems shall be exempt from HERS verification requirements as prerequisite for use of the CF1R-ADD-02 and CF2R-ADD-02 compliance documents. If new space conditioning systems are installed or existing systems are altered and are not exempt from HERS verification, then a CF1R-ADD-01 and CF1R-ALT-02 shall be completed and registered with a HERS Provider Data Registry. In each row below for each dwelling unit in the building, check the box that indicates the exemption from HERS verification compliance:

◯ a: space conditioning system was not altered;
☒ b: less than 25 feet (ft) of ducts were added or replaced;
◯ c: (exempt from duct leakage testing) if: the existing duct system was insulated with asbestos;
◯ d: (exempt from duct leakage testing) if: the existing duct system was previously tested and passed by a HERS Rater.

01	02	03
SC System Identification or Name	SC System Location or Area Served	Exemption from HERS Verification
EXISTING GAS FURNACE	(E) + (N)	◯a ☒b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d
		◯a ◯b ◯c ◯d

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L. Water Heating Systems (Section 150.2(a)1D)

List water heaters and boilers for both domestic hot water (DHW) heaters and hydronic space heating.

Options:

1. A single heat pump water heater. The storage tank shall not be located outdoors and shall be placed on an incompressible, rigid insulated surface with a minimum thermal resistance of R-10. The water heater shall be installed with a communication interface that meets either the requirements of Section 110.12(a) or has an ANSI/CTA-2045-B communication port; or
2. A single heat pump water heater that meets the requirements of NEEA Advanced Water Heater Specification Tier 3 or higher; or
3. A gas or propane instantaneous water heater with an input of 200,000 Btu per hour or less and no storage tank; or
4. For addition that are 500 square feet or less, an instantaneous electric water heater with point of use distribution as specified in the Reference Appendices, Residential Appendix, RA4.4.5

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Water Heating System ID or Name	EXISTING		
02	Water Heating System Type	DHW		
03	System Option (from §150.2(a)1D)			
04	# of Water Heaters/ Compressors in System	1		
05	Water Heater Type	STORAGE TANK		
06	Fuel Type	GAS		
07	Rated Input			
08	Tank Location	GARAGE		
09	Distribution Type			

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CEC- CF1R-ADD-02-E

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: WILLIAM	Documentation Author Signature:
Company: EYCO DESIGN	Signature Date: SEE
Address: 325 UNION AVE #323	CEA/ HERS Certification Identification (if applicable): N/A
City/State/Zip: CAMPBELL, CA 95008	Phone:

Responsible Person's Declaration Statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections.

I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: WILLIAM	Responsible Designer Signature:
Company: EYCO DESIGN	Date Signed: SEE
Address: 325 UNION AVE #323	License: N/A
City/State/Zip: CAMPBELL, CA 95008	Phone:

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300

CA Building Energy Efficiency Standards - 2022 Residential Compliance

January 2022

1) COMPLY WITH ALL STATE AND LOCAL TITLE-24 ENERGY REGULATIONS
2) COMPLY WITH ALL MANDATORY MEASURES

2022 ENERGY FORMS, MANUALS, AND STANDARDS ARE READILY AVAILABLE ONLINE AT:
https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency

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AIA California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie. ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

The mandatory provision of Section 4.108.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.108.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.
Exceptions:
1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS
4.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT
4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

[Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html]

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 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:
1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.
   1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the *California Electrical Code*.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.
When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1Multifamily development projects with less than 20 dwelling units: and hotels and motels with less than 20 sleeping units or guest rooms.
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exceptions:

1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.

2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

Notes:

a.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit where more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms.
The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

Notes:

a.Construction documents shall show locations of future EV spaces.

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit where more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

4.106.4.2.3.1 Electric vehicle charging stations (EVCS).
Electric vehicle charging stations required by Section 4.106.4.2.2. Item 3. shall comply with Section 4.108.4.2.2.1.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.

4.106.4.2.3.1.1 Location.
EVCS shall comply with at least one of the following options:

1.The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.

2.The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.108.4.2.3.1.1 and Section 4.108.4.2.3.1.2, Item 3.

4.106.4.2.3.1.2 Electric vehicle charging stations (EVCS) dimensions.
The charging spaces shall be designed to comply with the following:

1.The minimum length of each EV space shall be 18 feet (5486 mm).

2.The minimum width of each EV space shall be 9 feet (2743 mm).

3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).

a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3.1.3 Accessible EV spaces.
In addition to the requirements in Sections 4.108.4.2.2.1.1 and 4.108.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.

4.106.4.2.3 EV space requirements.
1.Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code.

4.106.4.2.4 Identification.
The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

4.106.4.2.5 Electric Vehicle Ready Space Signage.
Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings.
When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

Notes:

1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

2.There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL
4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION
4.303 INDOOR WATER USE
4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.1.4.5 Pre-rinse spray valves.
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations),Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2	
STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019	
PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

Title 20 Section 1605.3 (h)(4)(A): Commercial pre-rinse spray values manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code*.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1. AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE	
FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

4.304 OUTDOOR WATER USE
4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code Regulations,* Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE
4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING
4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4..

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.bsc.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Most construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION
4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspections verifications required by the enforcing agency or this code.
11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
12. Information and/or drawings identifying the location of grab bar reinforcements.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are exclusively to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL
4.501.1 Scope
The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS
4.502.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

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Date MAR-29-2023
Job SAINI
Sheet 10
Of Sheets

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2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie. ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O³g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503 FIREPLACES
4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL
4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not contain of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of Regulations, Title 17, commencing with Section 94522; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

(Less Water and Less Exempt Compounds in Grams per Liter)	
ARCHITECTURAL APPLICATIONS	VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.
2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

(Less Water and Less Exempt Compounds in Grams per Liter)	
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[1,2]

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS	
COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[3]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS
2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.
3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION	
PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.
2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)
4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers." Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR §93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European EN 13986 standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL
4.505.1 General. Buildings shall meet or exceed the provisions of the California Building Standards Code.

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter.Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST
4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
   a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.

4.507 ENVIRONMENTAL COMFORT
4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS
702 QUALIFICATIONS
702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including duct and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION (HCD). When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS
703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

DISCLAIMER:THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

REVISIONS

USE CONSTITUTES APPROVAL
ANY USE AND/OR ANY SUBMITTAL OF ANY DRAWING AND/OR SPECIFICATION SHALL CONSTITUTE FINAL APPROVAL BY EACH CLIENT OF ALL DRAWINGS AND ALL SPECIFICATIONS.

SAINI
RESIDENCE
2841 PRUNERIDGE AVE
SANTA CLARA, CALIFORNIA

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APPROVED:

APPROVED:

EYCO DESIGN:
EYCO
DESIGN (408) 879-0100
CUSTOM HOMES & ADDITIONS FAX (408) 369-8100
Website: www.eycodesign.com
Email: eyco@eycodesign.com
325 UNION AVENUE # 323, CAMPBELL, CA 95008

Date MAR-29-2023
Job SAINI
Sheet 11
Of Sheets

REV-08-08-2012.01—07-14-2014

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Attachment 2: Project Data

2841 Pruneridge Avenue

Lot Size: 8840 sq. ft.			
	Existing Floor Area (sq. ft.)	**Proposed New Construction (sq. ft.)**	**Proposed Floor Area (sq. ft.)**
First Floor	2170	466	2636
Second Floor	n/a	n/a	n/a
Garage	497	n/a	497
ADU	n/a	n/a	n/a
Gross Floor Area	2685	466	3151
Lot Coverage	2685/8840=30%	+466 sqft	3151/6200=35%
Bedrooms/Baths	4-bedroom		5-bedroom
Flood Zone	X		

23-589 **Agenda Date: 5/10/2023**

REPORT TO DEVELOPMENT REVIEW HEARING

SUBJECT

Action on the conversion of a garage to a fourth bedroom and the construction of a new two-story garage with attic space at an existing single-family residence at 4628 Demaret Avenue. (CEQA: Exempt, Section 15301 (e)(3) New Construction or Conversion of small structures). Continued from April 19, 2023 Development Review Hearing:

File No.(s): PLN23-00077
Location: 4628 Demaret Drive, a 6,200 square foot lot located on the west side of Demaret Avenue, approximately 140 feet north of Eisenhower Drive, APN: 097-17-095; property is zoned Single Family Residential (R1-6L).
Applicant: Karen Lok
Owner: Anna Huang
Request: **Architectural Review** of the conversion of a garage to a fourth bedroom and the construction of a new two-story tall garage with attic space at an existing single-family residence.

Project Data

The Project Data Table is included as Attachment 2.

Points for Consideration

- The project includes the conversion of a two-car garage to a fourth bedroom, and the construction of a new two-story, two-car garage with usable attic storage space totaling 2,135 square feet of building coverage.
- The subject lot is 6,200 square feet in size, where standard lots per the Zoning Ordinance are 6,000 square feet in size.
- The proposed project complies with the R1-6L zoning districts development standards for new construction.
- The proposal is not generally consistent with the Single-Family Residential Design Guidelines; and is not generally compatible with neighboring homes along the streetscape.
- The City's Single-Family Residential Design Guidelines provide the following:
    - Roof forms for additions should match that of the existing roof form.
    - Front and side walls of the second floor should be set back from the first floor to minimize mass and bulk. Second-floor areas should be set back at least five feet from the front wall of the first floor, and three to five feet from the side and rear walls of the first floor.
    - Unless two-story high walls are common in the neighborhood, maintain a roof segment between the first and second-floor walls for at least 50% of the building perimeter. Generally, these roof forms should be carried around building corners to provide visual

continuity between adjacent house facades. In predominantly one-story neighborhoods, avoid two-story walls without intervening roof eaves on front elevations.

- The existing structure has a hip-roof and the proposed second story addition is a gable roof with large dormers on the front and rear.
- The proposed second story addition does not provide any set back from the first floor wall on the front or side elevations.
- The neighborhood contains a mix of one- and two-story residences; however, two-story high single walls are not common in the surrounding neighborhood.
- A neighborhood notice was distributed to properties within a 300-foot radius of the subject site for this project review.

Findings

1) *That any off-street parking area, screening strips and other facilitates and improvements necessary to secure the purpose and intent of this title and the general plan of the City area a part of the proposed development, in that;*
    - The proposal provides the required two covered parking spaces with a proposed two car garage.
    - The required parking spaces are not located in the required front yard or side yard landscaped areas.
    - The proposed project provides areas surfaced with all-weather materials for parking of vehicles.

2) *That the design and location of the proposed development and its relation to neighboring developments and traffic is such that it will not impair the desirability of investment or occupation in the neighborhood, will not unreasonably interfere with the use and enjoyment of neighboring developments, and will not create traffic congestion or hazard, in that;*
    - The proposed conversion and new construction would not create traffic congestion or hazards.
    - Public streets are adequate in size and design to serve the single-family residence, and the use will not create a substantive increase in traffic.

3) *That the design and location of the proposed development is such that it is in keeping with the character of the neighborhood and is such as not to be detrimental to the harmonious development contemplated by this title and the general plan of the City, in that;*
    - The proposed addition is to be located outside of the required setbacks and will conform to all zoning requirements.
    - The neighborhood mostly consists of one-story residences, however, there are some two-story garage additions on adjacent streets, but two-story high walls are not common in the neighborhood

4) *That the granting of such approval will not, under the circumstances of the particular case, materially affect adversely the health, comfort or general welfare of persons residing or working in the neighborhood of said development, and will not be materially detrimental to the public welfare or injuries to property or improvements in said neighborhood, in that;*
    - The project is subject to the California Building Code and City Code requirements, which serve to regulate new construction to protect public health, safety and general

welfare.

5) *That the proposed development, as set forth in the plans and drawings, are consistent with the set of more detailed policies and criteria for architectural review as approved and updated from time to time by the City Council, which set shall be maintained in the planning division office. The policies and criteria so approved shall be fully effective and operative to the same extent as if written into and made a part of this title, in that;*
    - The project proposes a residential design that is not compatible in scale and character with the housing types that are typical in the neighborhood as the proposed design of the single-family residence has two story walls on the front and side elevations with no setbacks will have similar massing and height to the adjacent properties.
    - The proposed residence is not consistent with the City's Single-Family Residential Design Guidelines.
    - The proposed project complies with the R1-6L zoning districts development standards for new construction.

Conditions of Approval

1) Permit Expiration. This Architectural Permit shall automatically be revoked and terminated if not used within two years of original grant or within the period of any authorized extensions thereof. The date of granting of this Permit is the date this Permit is approved by the Development Review Officer.
2) The garage shall always be maintained clear and free for vehicle parking use. It shall not be used only for storage.
3) Prior to the issuance of a Building Permit, the development of the site and all associated improvements shall conform to the approved plans with File No. **PLN23-00077**, on file with the Community Development Department, Planning Division.
4) Landscaping installation shall meet City water conservation criteria in a manner acceptable to the Director of Community Development.
5) Maintain the front yard landscaping between the house and sidewalk. New landscape areas of 500 square feet or more or rehabilitated landscape areas of 2,500 square feet or more shall conform to the California Department of Water Resources Water Efficient Landscape Ordinance.
6) Developer/Owner is responsible for collection and pick-up of all trash and debris on-site and adjacent public right-of-way.
7) Construction activity shall be limited to the hours of 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 6:00 p.m. Saturdays for projects within 300 feet of a residential use and shall not be allowed on recognized State and Federal holidays.
8) Incorporate Best Management Practices (BMPs) into construction plans and incorporate post construction water runoff measures into project plans in accordance with the City's Urban Runoff Pollution Prevention Program standards prior to the issuance of permits.

ENVIRONMENTAL REVIEW

The proposed project is categorically exempt from the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15301 (e)(2) Replacement or Reconstruction, in that the project is limited to reconstructing a similar single-family residence on a previously built out single-family zoned parcel.

PUBLIC CONTACT

On April 6, 2023, a notice of public hearing of this item was posted within 300 feet of the project site and mailed to property owners within 300 feet of the project site. Planning Staff has not received public comments for this application. This application was continued From 4/19/2023 Development Review Hearing to allow the applicant to be present for the meeting.

RECOMMENDATION

Redesign the second story of the proposed addition consistent with the Single-Family Design Guidelines.

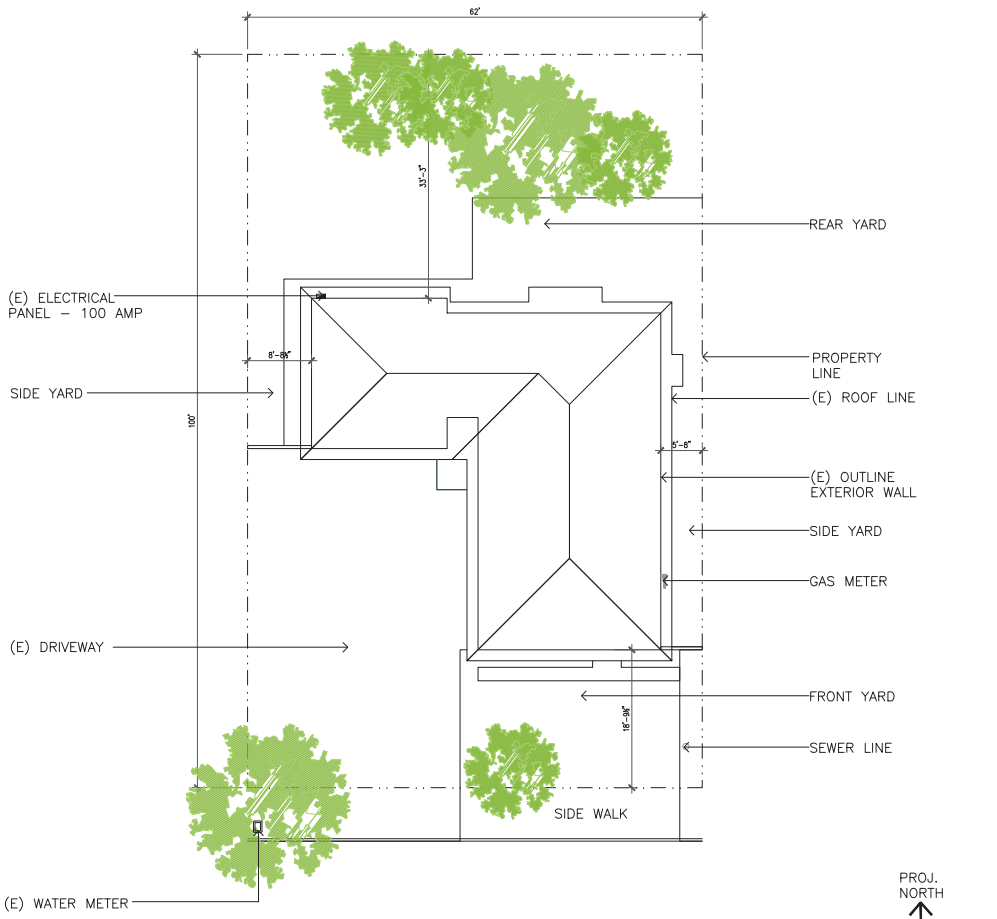
Prepared by: Daniel Sobczak, Assistant Planner, Community Development Department
Approved by: Lesley Xavier, Planning Manager, Community Development Department

ATTACHMENTS

1. Development Plans
2. Project Data
3. Staff Presentation from April 19, 2023 DRH Meeting

RESIDENCE ADDITION

4628 DEMARET DR., SANTA CLARA, CA 95054



1 **EXISTING SITE PLAN**
1/8" - 1'- 0"

GENERAL NOTES

1. THESE PLANS AND DESCRIPTIONS OF MATERIALS SHALL GOVERN THE EXTENT OF THE WORK TO BE DONE. ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND FEILD CONDITIONS MUST BE CALLED TO THE ATTENTION OF DESIGNERS AND STRUCTURAL ENGINEER. ANY DISCREPANCY NOT REPORT TO DESIGNER AND ENGINEERS WILL ABSOLVE THEM OF ANY RESPONSIBILITY.

2. GENERAL CONTRACTOR TO VERIFY BEARING AND NON–BEARING STATUS OF EXISTING CONSTRUCTION TO BE DEMOLISHED BEFORE PROCESSING WITH WORK.

3. GENERAL CONTRACTOR TO VERIFY AND PROVIDE TEMPORARY SHORING AS REQUIRES DURING DEMOLITION OF ANY PART OF THE WALL, FLOOR AND CEILING.

4. GENERAL CONTRACTOR REQUIRES TO INSPECT AND EVALUATE ON EXISTING CONDITION AND PROVIDE SHORING ON EXISTING STRUCTURE PRIOR DEMOLITION TO BEGIN.

5. PROVIDE 2X BLOCKING WHERE WALL HUNG FIXTURE OCCURS.

6. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS MUST FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO THE SUBMITTAL OF BID PROPOSALS AND CONSTRUCTION.

7. GENERAL CONTRACTOR IS FULLY RESPONSIBLE FOR THE SATISFACTION COMPLETION OF ALL WORK IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.

SHEET INDEX

A0 COVER SHEET & EXISTING SITE PLAN
A1 PROPOSED SITE PLAN & EXISTING/ DEMO. FLOORPLAN
A2 PROPOSED FLOORPLAN
A3 EXISTING & PROPOSED ROOFPLANS
A4 EXISTING & PROPOSED EXTERIOR ELEVATIONS (FRONT & LEFT)
A4.1 EXISTING & PROPOSED EXTERIOR ELEVATIONS (REAR & RIGHT)

PROJECT DATA

OWNER NAME: ANNA HUANG
CONTACT NUMBER: (408) 207–5786
RESIDENCE AT
4628 DEMARET DR., SANTA CLARA, CA 95054

ONE–STORY, SINGLE FAMILY RESIDENCE
CONSTRUCTION TYPE : V–B
OCCUPANCY CLASS : R–3, U
APN: 097–17–095
BUILT YEAR : 1960

SQUARE FOOTAGE

DESCRIPTION	EXISTING	ADDITION	TOTALS
LOT AS ASSESSOR'S PARCEL MAP			5,200 S.F.
FLOOR AREA	1,167 S.F.	+418 S.F.	1,635 S.F.
ATTACHED GARAGE	379 S.F.	+121 S.F.	500 S.F.

1

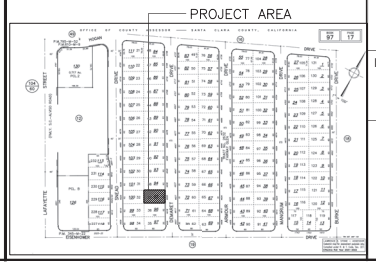
APPLICABLE CODE

_2019 CALIFORNIA BUILDING CODE
_2019 CALIFORNIA RESIDENTIAL CODE
_2019 CALIFORNIA ELECTRICAL CODE
_2019 CALIFORNIA MECHANICAL CODE
_2019 CALIFORNIA PLUMBING CODE
_2016 CALIFORNIA ENERGY CODE
_2019 CALIFORNIA GREEN BUILDING STANDARD CODE
_2019 CALIFORNIA EXISTING BUILDING CODE

SCOPE OF WORK

_CONVERT (E) GARAGE TO BE STUDIO,BEDROOM & WALK–IN CLOSET W/. RAISED FLOOR
_(N) ADDITION FOR THE MAIN ENTRANCE AND GARAGE
_NEW SKYLIGHT AND REMOVE (E) WINDOW IN BEDROOM
_REMOVE WALL BETWEEN TWO BEDROOMS
_(N) SINK, WASHER & DRYER IN GARAGE
_(E) WATER HEATER RELOCATION

VICINITY MAP :



REVISION	DATE
1 PLAN CHECK RESPONSE	01/11

DESIGNER

Interiors de Shine

DESIGNER : KAREN LOK
ADDRESS: 1769 HILLSDALE AVE #24975, SAN JOSE, CA 95154
CONTACT: (415) 465-9406
EMAIL: KINTDESIGN@HOTMAIL.COM

Karen Lok

PROJECT 4628 DEMARET DR., SANTA CLARA, CA 95054

PLAN COVER SHEET & EXISTING SITE PLAN

DATE JAN 11, 2023

SCALE AS SHOWN

DRAWN BY KL

A0

LEGEND	
═══	EXISTING WALL, DOOR, WINDOW & FIXTURE TO BE REMAINED
- - - - -	DEMOLISH WALL, DOOR, WINDOW & FIXTURE AS INDICATED
(E)	EXISTING

REVISION	DATE
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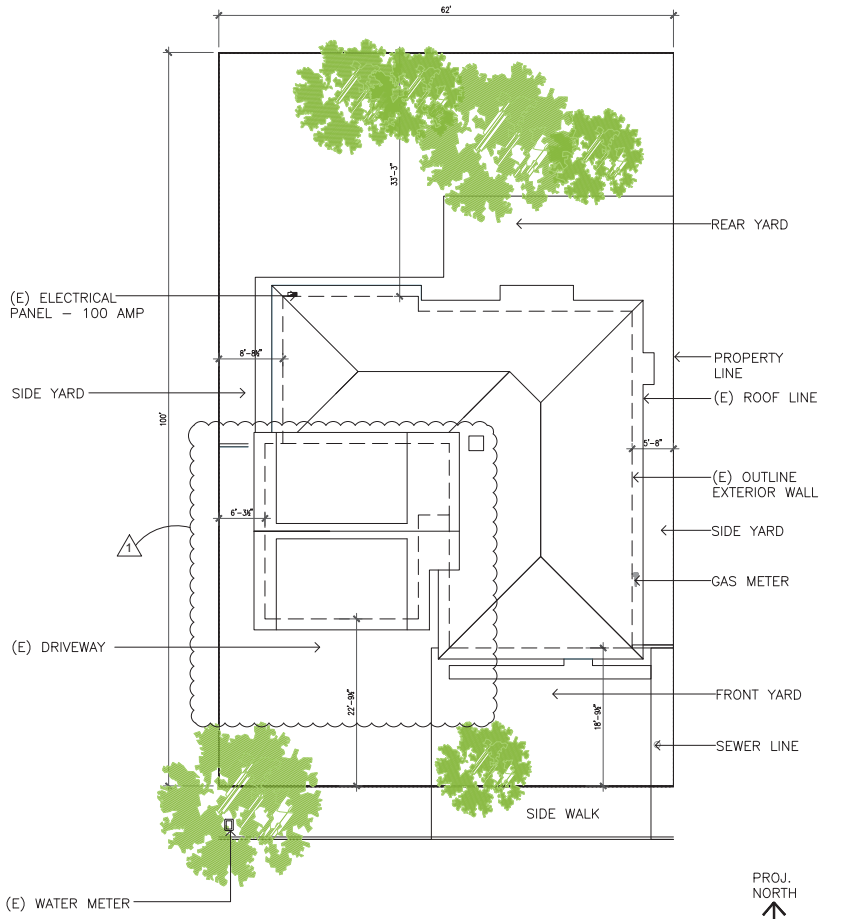
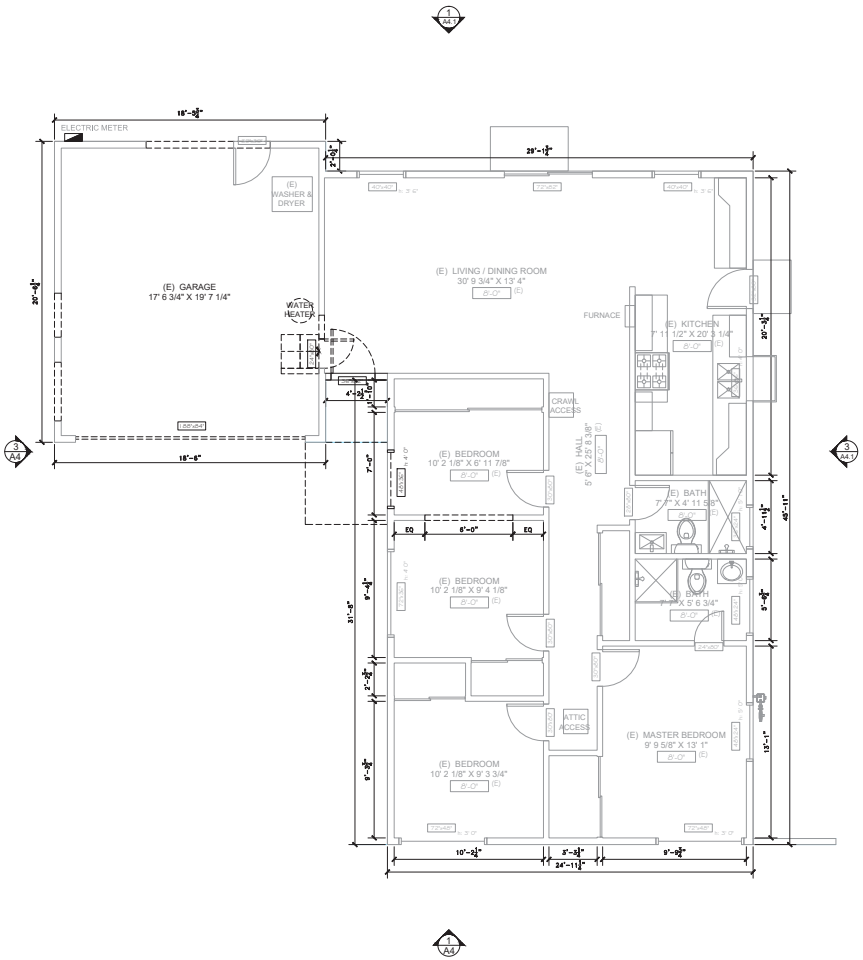


1 **PROPOSED SITE PLAN**
1/8" - 1'- 0"



2 **EXISTING/ DEMO. FLOORPLAN**
1/4" - 1'- 0"

PROJECT
4628 DEMARET DR.,
SANTA CLARA, CA 95054

PLAN
PROPOSED SITE PLAN & EXISTING/ DEMO. FLOORPLAN

DATE
JAN 11, 2023

SCALE
AS SHOWN

DRAWN BY
KL

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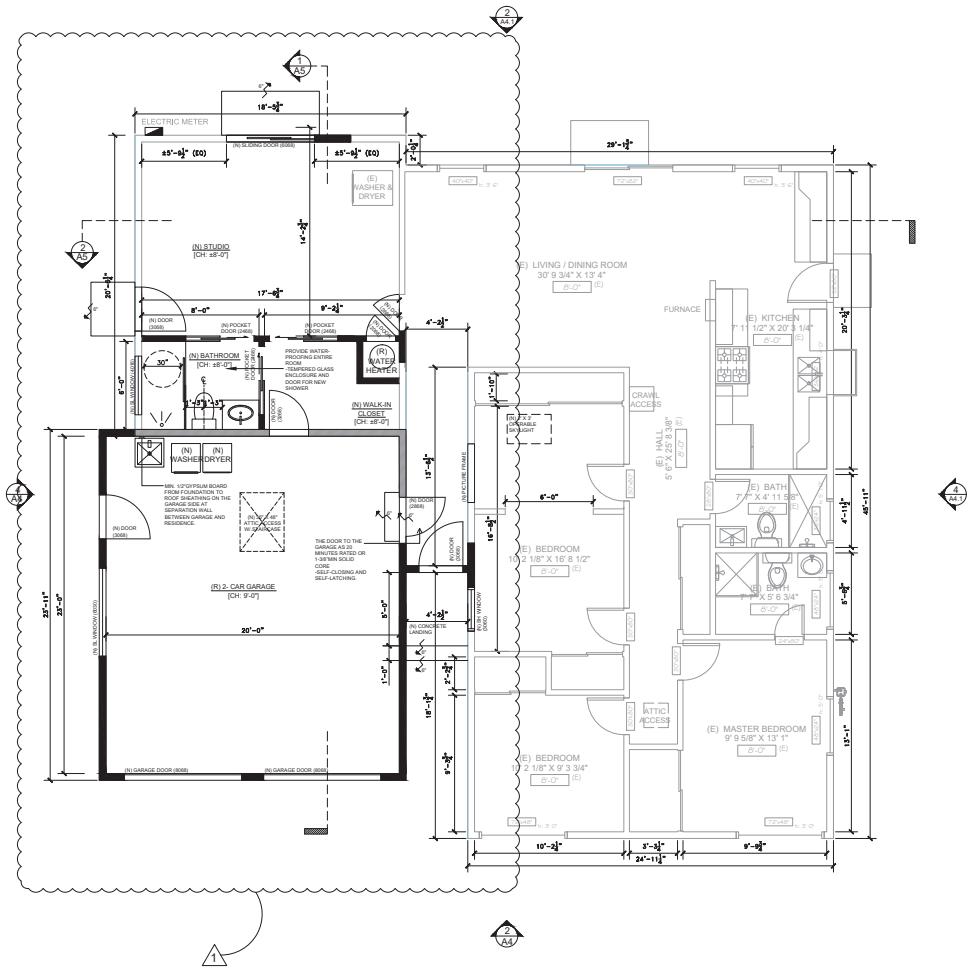

1 **PROPOSED FLOORPLAN**
1/4" - 1'- 0"

GENERAL NOTE - BATHROOM

1. ALL RECEPTACLE OUTLETS IN BATHROOMS SHALL BE TAMPER RESISTANT [CEC 406.12A]

2. SAFETY GLASS (TEMPERED OR LAMINATED) IS REQUIRED FOR ALL GLASS SHOWER DOORS AND PARTITIONS AND FOR WINDOWS IN WALLS FACING THE TUB OR SHOWER AND LOCATED LESS THAN 60 INCHES ABOVE THE STANDING SURFACE OF THE TUB/SHOWER AND WITHIN 60" HORIZONTALLY [CRC R308.4.1&5]

3. ALL PIPING ¾ INCH OR MORE DIAMETER AND ALL HOT WATER PIPES FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES MUST BE INSULATED WITH MIN. 1" THICK INSULATION [CNC 150.0(j)2].

4. THE MAXIMUM WATER TEMPERATURE TO A SHOWER OR TUB/SHOWER COMBINATION IS 120°F. THE WATER HEATER THERMOSTAT CANNOT BE USED AS THE CONTROL FOR THIS TEMPERATURE. VALVES SHALL PROVIDE SCALD AND THERMAL SHOCK PROTECTION, AND BE PRESSURE-BALANCED, THERMOSTATIC, OR COMBINATION PRESSURE-BALANCED/ THERMOSTATIC MIXING IN ACCORDANCE WITH ASSE 1016 OR ASME A112.18.1/CSA B125.1. [CPC 408.3].

5. WATER-RESISTANT GYPSUM BOARD (PURPLE BOARD) CAN BE USED AS TILE BACKER BOARD IN AREAS THAT ARE NOT SUBJECT TO DIRECT EXPOSURE TO WATER OR HIGH HUMIDITY [CRC R702.3.7.1]. EXAMPLES WOULD BE A WALL BEHIND A TOILET OR ABOVE A VANITY COUNTERTOP. PURPLE BOARD CANNOT BE USED IN SHOWER FOR DIRECT APPLICATION OF TILE. IT CAN BE USED IN SHOWER BEHIND A WATER-RESISTIVE MEMBRANE WITH MORTAR BED AND LATH. OTHER ACCEPTABLE MATERIALS FOR APPLICATION OF TILE IN SHOWERS INCLUDE CEMENT BOARD, FIER-CEMENT OR GLASS MAT GYPSUM BACKERS [CRC R702.4.2].

LEGEND

═══	EXISTING WALL, DOOR, WINDOW & FIXTURE TO BE REMAINED
- - - - -	DEMOLISH WALL, DOOR, WINDOW & FIXTURE AS INDICATED
▬▬▬	NEW WALL
(E)	EXISTING
(N)	NEW
(R)	REMODEL/ RELOCATION

WATER EFFICIENT PLUMBING FIXTURES

WATER CLOSET (TOILET)
1.28 GALLONS/ FLUSH

SHOWERHEAD
1.8 GALLONS/ MINUTE AT 80 PSI

FAUCET – BATHROOM
1.2 GALLONS/ MINUTE AT 60 PSI

FAUCET – KITCHEN
1.8 GALLONS/ MINUTE AT 60 PSI (AVERAGE)

GENERAL NOTE - KITCHEN

1. A MINIMUM OF TWO 20-AMP SMALL APPLIANCE BRANCH CIRCUITS ARE REQUIRED TO SERVE COUNTERTOP AND WALL RECEPTACLES IN THE KITCHEN, PANTRY AND DINING ROOM [CEC 210.11A].

2. INDIVIDUAL [DEDICATED] CIRCUITS AREA REQUIRED FOR GARBAGE DISPOSALS, MIRCOWAVES, COMPACTORS, AND DISHWASHERS. [CEC210.19A1b]

3. AFCI PROTECTION IS REQUIRED FOR ALL 120V 15&20AMP KITCHEN CIRCUITS. [CEC210.12A]

4. GFCI PROTECTION CAN BE PROVIDED BY USING A GFCI CIRCUIT BREAKER.
5. ALL GENERAL PURPOSE AND COUNTERTOP RECEPTACLES MUST BE TAMPER-RESISTANT. [CEC 406.12A]

6. THE RECEPTACLE OUTLET AT A RANGE HOOD SHALL BE A SINGLE TYPE, NOT A DUPLEX RECEPTACLE THAT WOULD ACCEPT TWO PLUGS [CEC 422. 16B4]

7. DISHWASHER SHALL BE CONNECTED WITH AN APPROVED DRAINAGE AIR GAP DEVICES LOCATED ABOVE THE FLOOD LEVEL RIM OF THE SINK [CP 807.3]

8. ALL PIPING ¾ INCH OR MORE DIAMETER AND ALL HOT WATER PIPES FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES MUST BE INSULATED WITH MIN. 1" THICK INSULATION [CNC 150.0(j)2].

9. A MECHANICAL PERMIT IS REQUIRED TO REPLACE A KITCHEN EXHAUST HOOD THAT INCLUDES AN OUTSIDE AIR VENT. THE VENT MUST TERMINATE ON THE BUILDING EXTERIOR AT LEAST 3 FT. FROM OTHER OPENINGS INTO THE BUILDING [CMC502.2.1]. FLEXIBLE (CORRUGATED) DUCTING IS NOT ALLOWED FOR EXHAUST HOODS [CMC 504.3].

REVISION	DATE
1 PLAN CHECK RESPONSE	01/11

DESIGNER

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CONTACT: (415) 465-9406

EMAIL: KINTDESIGN@HOTMAIL.COM

Karen Lok

PROJECT
4628 DEMARET DR.,
SANTA CLARA, CA 95054

PLAN
PROPOSED FLOORPLAN

DATE
JAN 11, 2023

SCALE
AS SHOWN

DRAWN BY
KL

A2

MECHANICAL

CONTRACTOR SHALL CONFIRM ALL HEATING, VENTILATION AND AIR CONDITIONER SYSTEMS IN ACCORDANCE WITH THE APPLICABLE

EDITION OF THE C.M.C AND TITLE 24, ALL SHEET METAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT SMACNA STANDARDS. CONTRACTOR SHALL SUBMIT ALL RQUIRED DRAWINGS, CALCULATIONS AND INFORMATION TO THE APPROPRIATE GOVERNING AUTHORITIES FOR REVISION AND APPROVAL.

NOTE: ALL DUCTS (SEND & RETURN) SHALL BE CLOSED SYSTEMS WITHOUT THE USE OF BUILDING CAVITIES MECHANICAL FASTENERS. PROVIDE WEATHERSTRIP OR SEAL AT THE ATTIC

REVISION	DATE
1 PLAN CHECK RESPONSE	01/11

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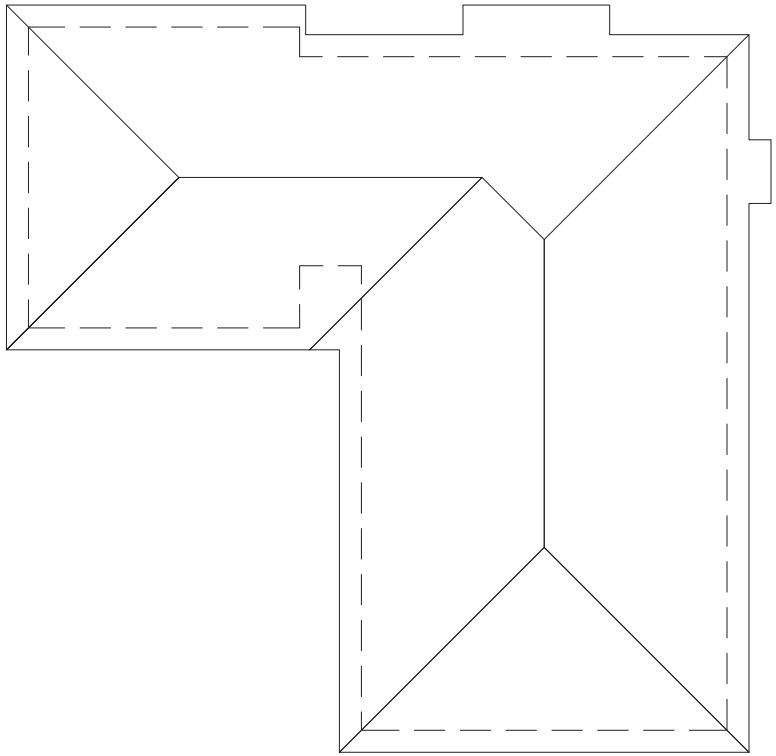
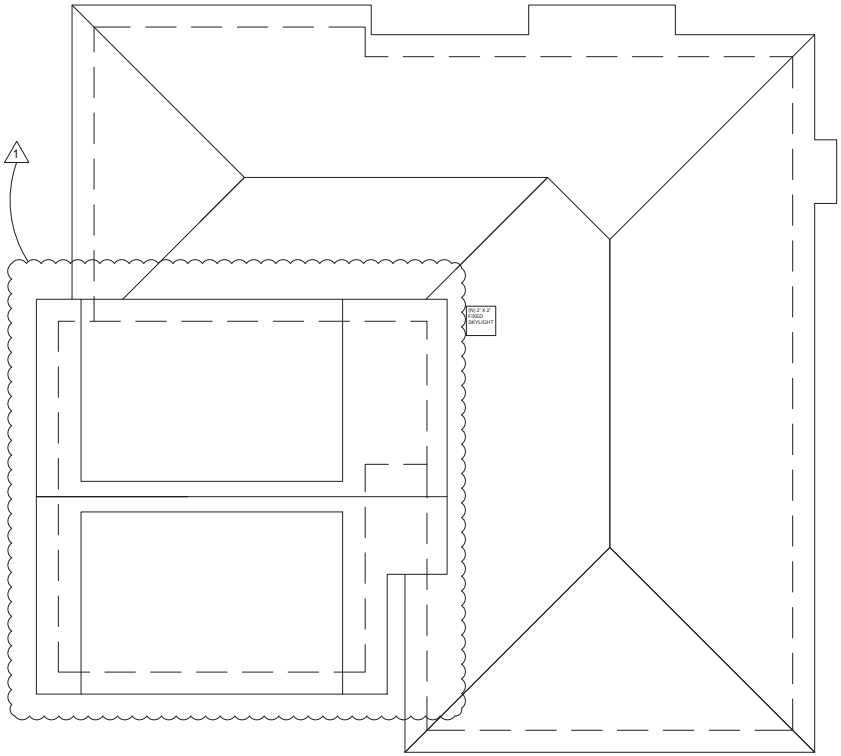


1 **EXISTING ROOFPLAN**
1/4" - 1'- 0"



2 **PROPOSED ROOFPLAN**
1/4" - 1'- 0"

PROJECT
4628 DEMARET DR.,
SANTA CLARA, CA 95054

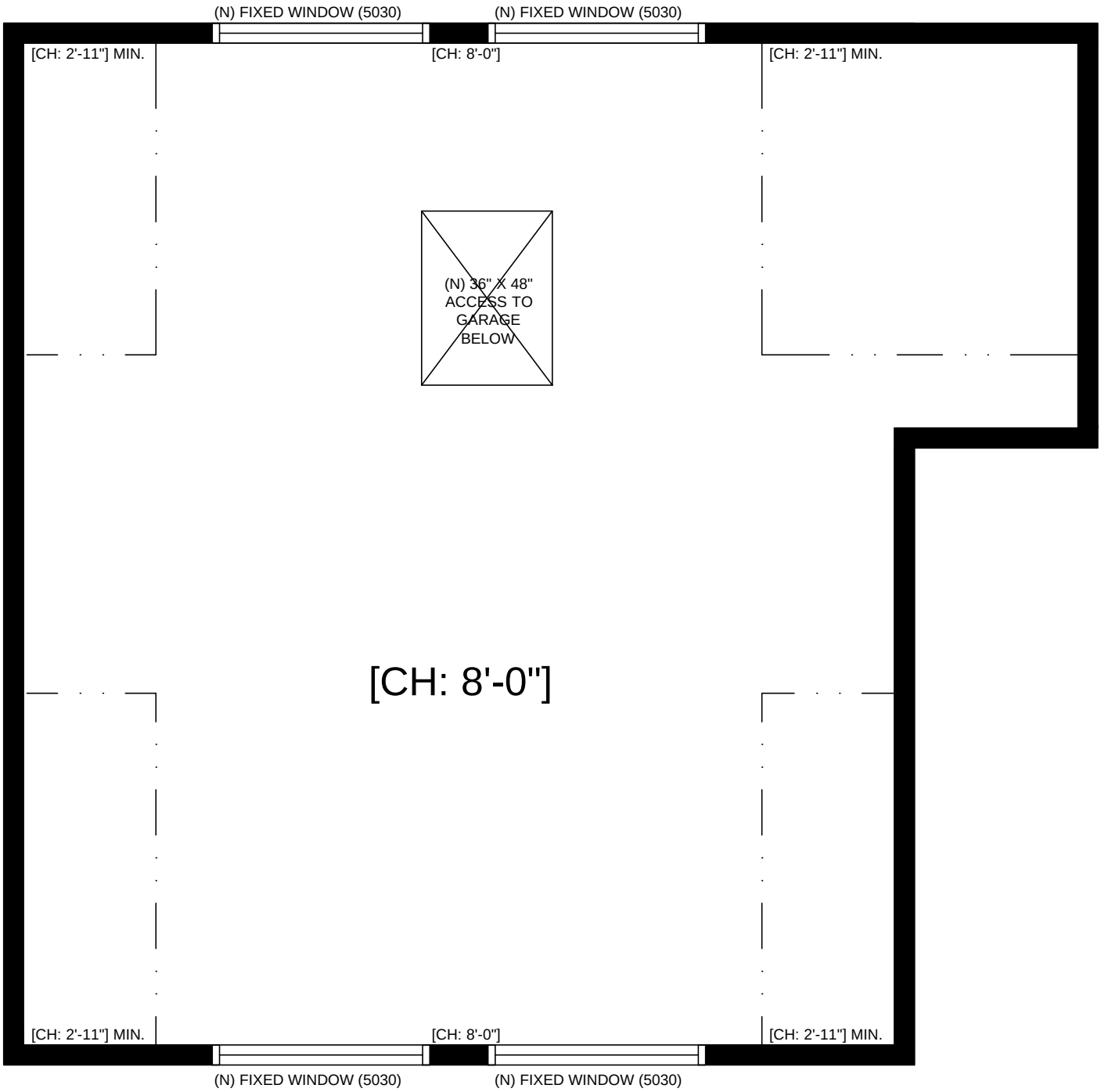
PLAN
EXISTING & PROPOSED ROOFPLANS

DATE
JAN 11, 2023

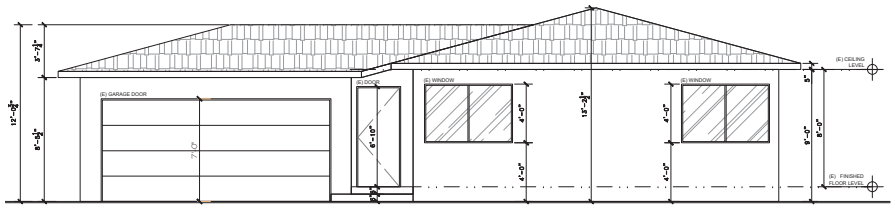
SCALE
AS SHOWN

DRAWN BY
KL

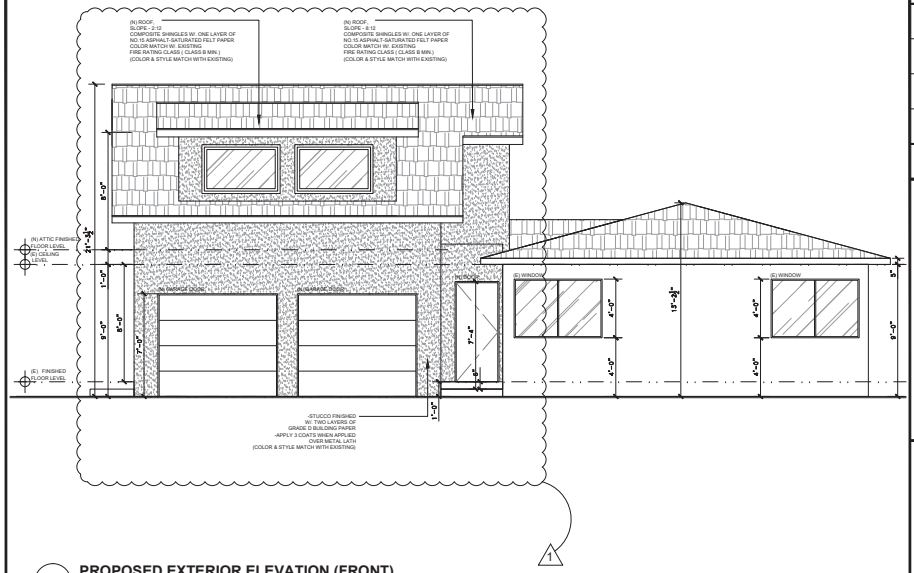
A3



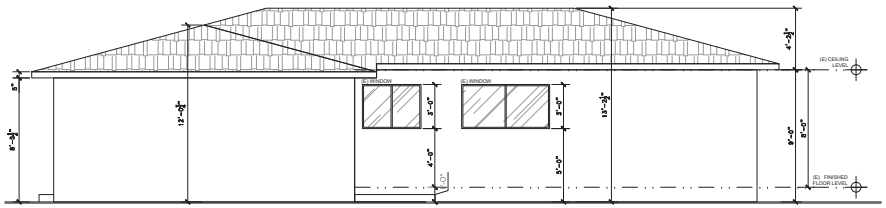
ATTIC AREA FLOORPLAN



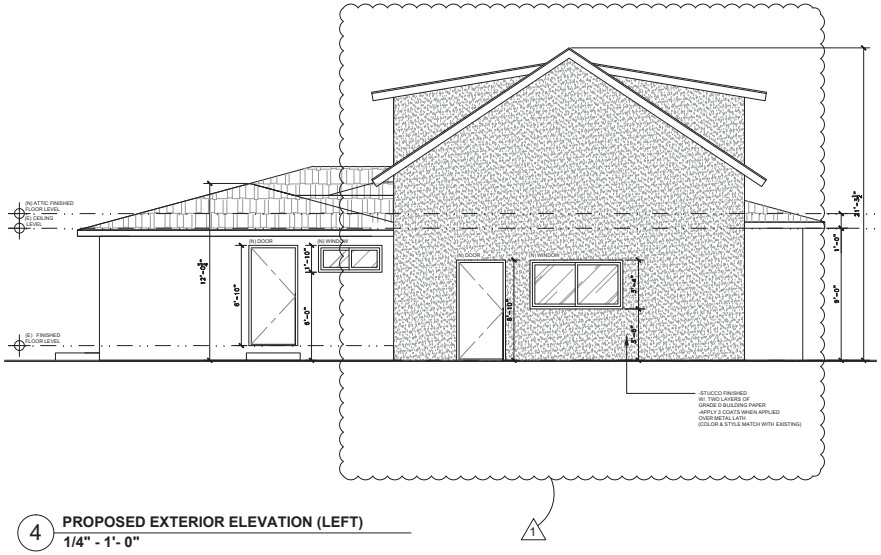
1 **EXISTING EXTERIOR ELEVATION (FRONT)**
1/4" - 1'- 0"



2 **PROPOSED EXTERIOR ELEVATION (FRONT)**
1/4" - 1'- 0"



3 **EXISTING EXTERIOR ELEVATION (LEFT)**
1/4" - 1'- 0"



4 **PROPOSED EXTERIOR ELEVATION (LEFT)**
1/4" - 1'- 0"

REVISION	DATE
1 PLAN CHECK RESPONSE	01/11

DESIGNER

Interiors de Shine

DESIGNER : KAREN LOK

ADDRESS: 1769 HILLSDALE AVE
#24975, SAN JOSE, CA 95154

CONTACT: (415) 465-9406

EMAIL: KINTDESIGN@HOTMAIL.COM

Karen Lok

PROJECT
4628 DEMARET DR.,
SANTA CLARA, CA 95054

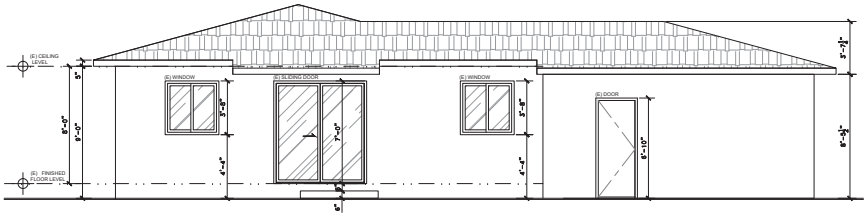
PLAN
EXISTING & PROPOSED
EXTERIOR ELEVATIONS
(FRONT & LEFT)

DATE
JAN 11, 2023

SCALE
AS SHOWN

DRAWN BY
KL

A4



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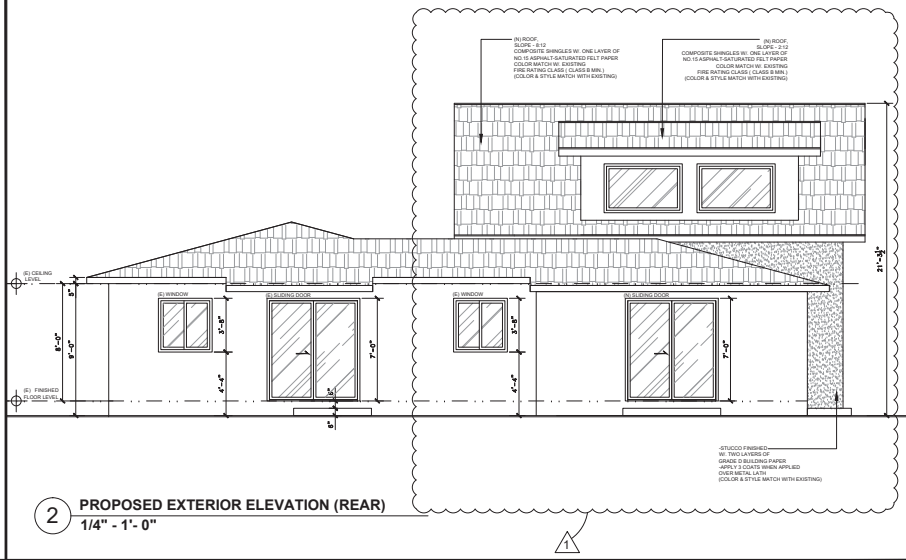
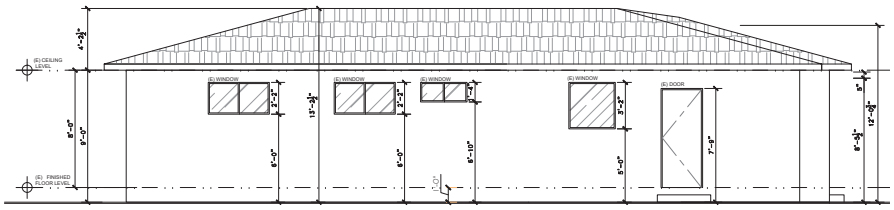
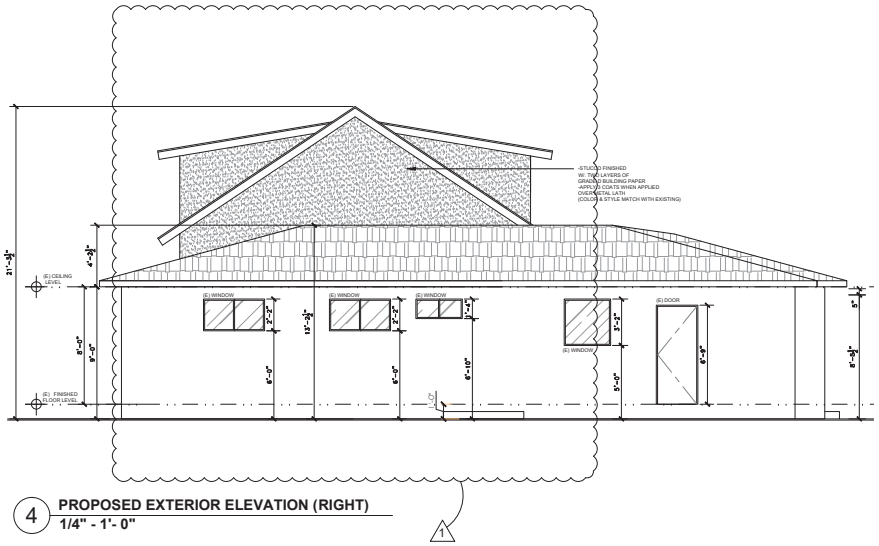


2 **PROPOSED EXTERIOR ELEVATION (REAR)**
1/4" - 1'- 0"



3 **EXISTING EXTERIOR ELEVATION (RIGHT)**
1/4" - 1'- 0"



4 **PROPOSED EXTERIOR ELEVATION (RIGHT)**
1/4" - 1'- 0"

REVISION	DATE
1 PLAN CHECK RESPONSE	01/11

DESIGNER

Interiors de Shine

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PROJECT
4628 DEMARET DR.,
SANTA CLARA, CA 95054

PLAN
EXISTING & PROPOSED EXTERIOR ELEVATIONS (REAR & RIGHT)

DATE
JAN 11, 2023

SCALE
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KL

A4.1

Attachment 2: Project Data

4628 Demaret Drive

Lot Size: 6200 sq. ft.			
	Existing Floor Area (sq. ft.)	**Proposed New Construction (sq. ft.)**	**Proposed Floor Area (sq. ft.)**
First Floor	1167	418	1635
Second Floor	n/a	n/a	n/a
Garage	379	121	500
ADU	n/a	n/a	n/a
Gross Floor Area	1546	539	2085
Lot Coverage	1546/6200=24%	+539 sqft	2085/6200=33%
Bedrooms/Baths	3-bedroom, 3 bathrooms	Add 1 bedroom, 1 bathroom	4-bedroom, 4-bathrooms
Flood Zone	X		

City of Santa Clara

Development Review Hearing

4628 Demaret Drive

PLN23-00077

4628 Demaret Drive

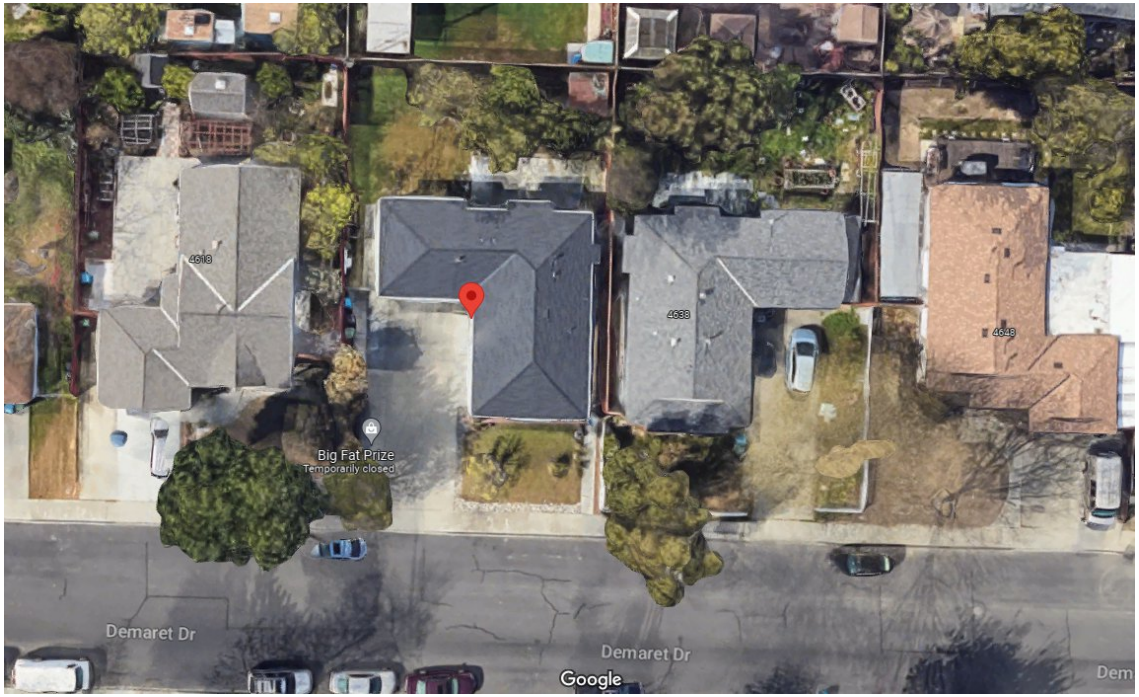
Request

- **Architectural Review** of the conversion of a garage to a studio bedroom and the construction of a new two-story tall garage with attic space at an existing single-family residence.

Project Site

- 6,200 square-foot lot
- APN: 097-17-095
- General Plan Designation:

  Very Low Density Residential
- Zoning: R1-6L



Project Data and Site Plan

4628 Demaret Drive

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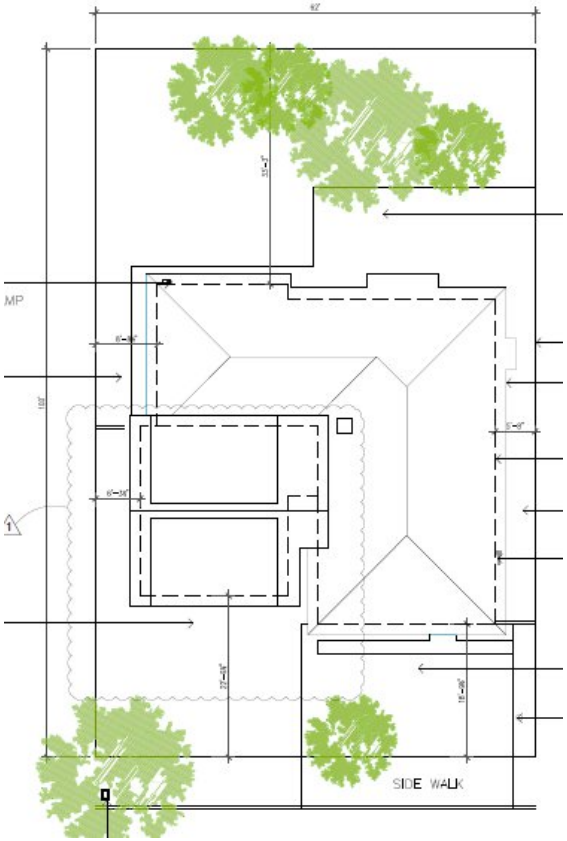
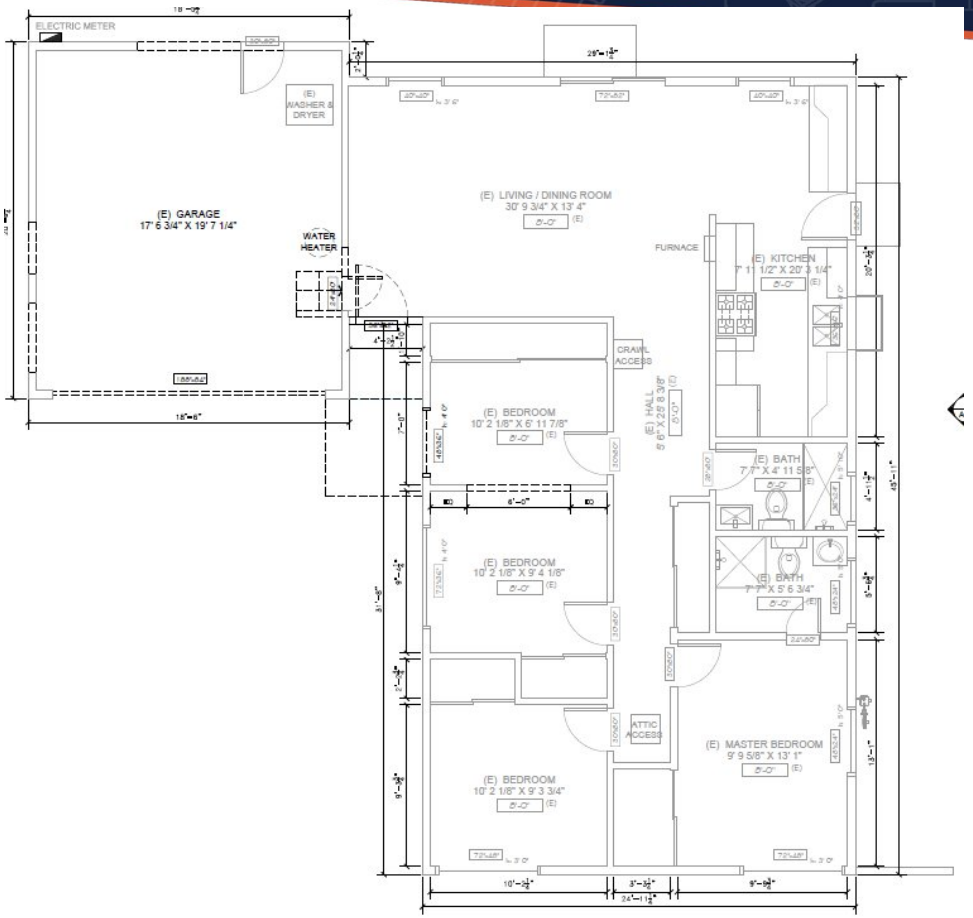


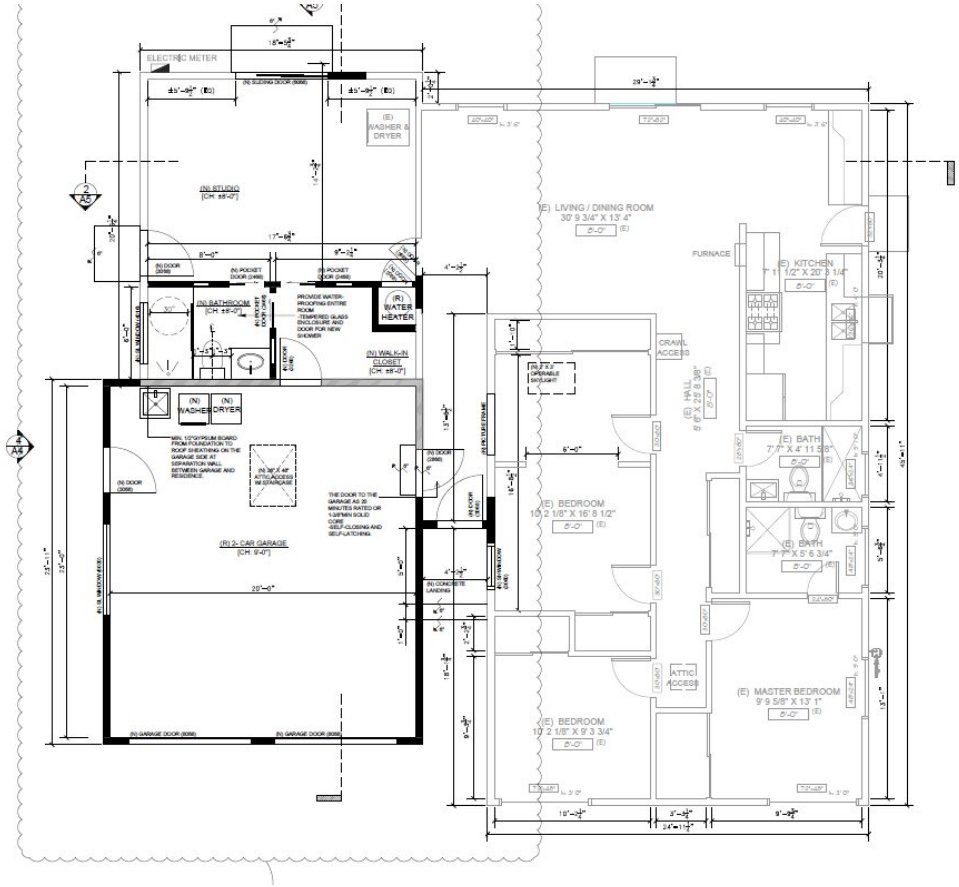
Existing Floor Plan

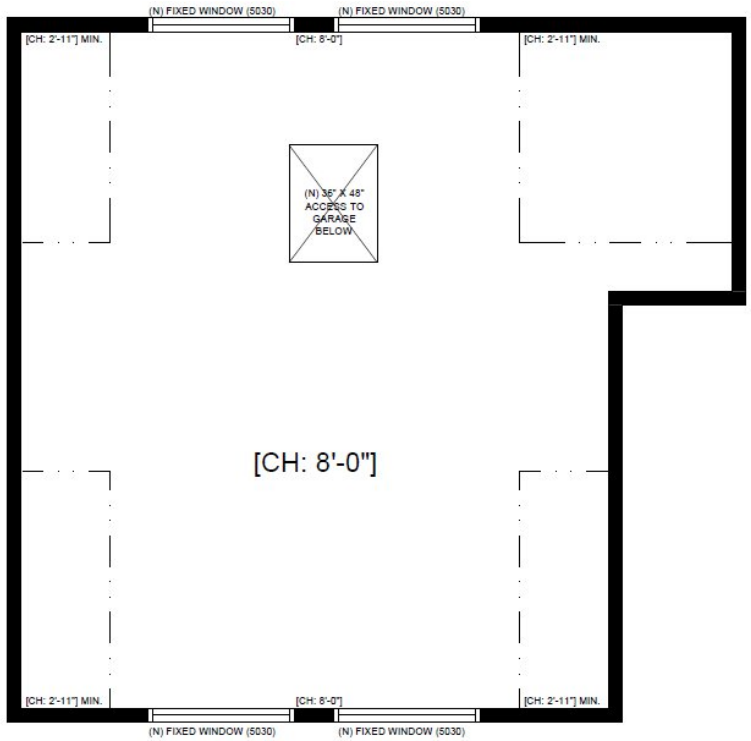
Current Site Plan includes:

- Garage
- Four bedrooms
- Small shed in rear



Proposed Floor Plan

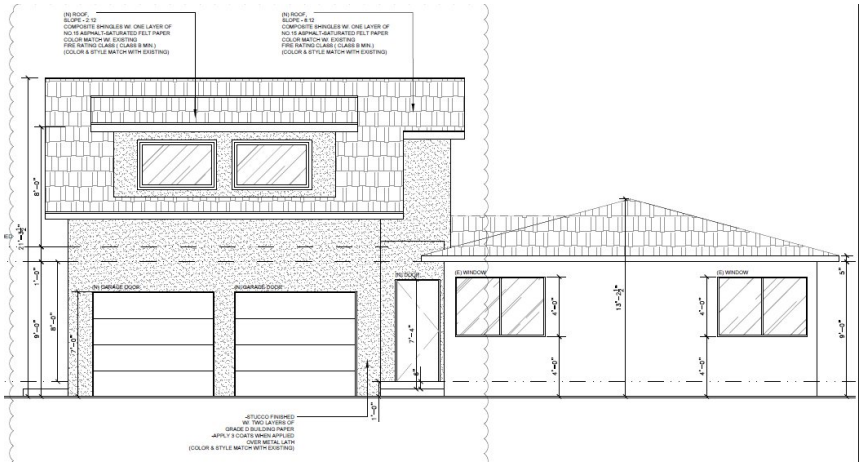




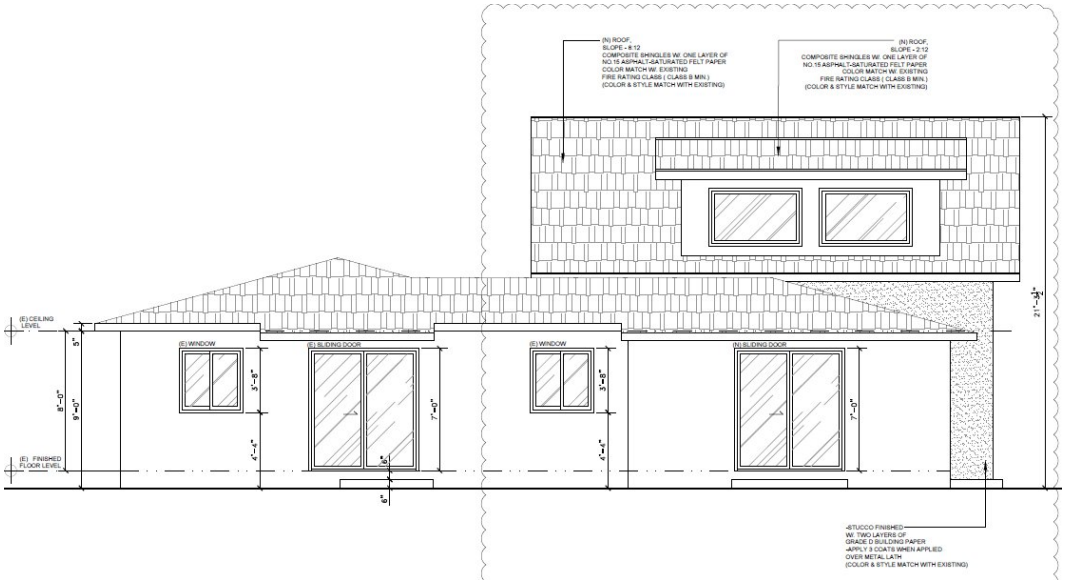
ATTIC AREA FLOORPLAN

Proposed Elevations

Front

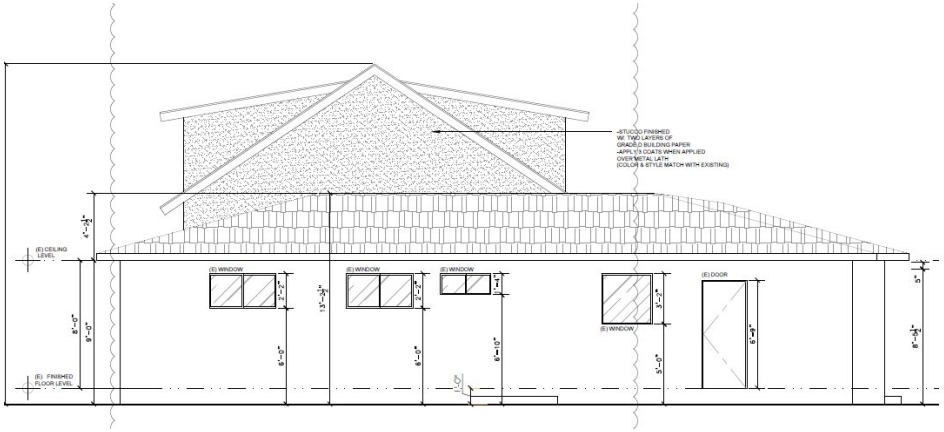


Rear

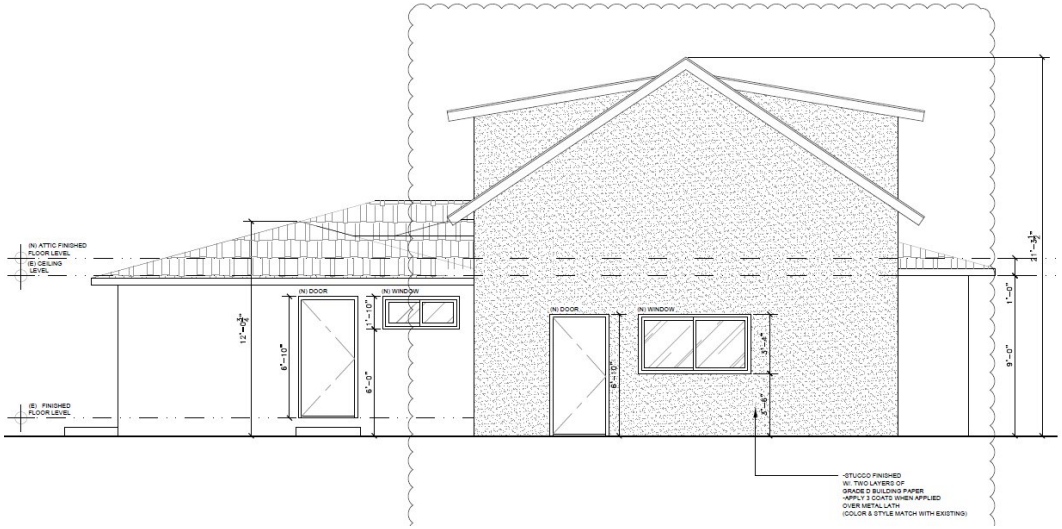


Proposed Elevations

Right



Left



2467 Park Avenue

Recommendation

- **Redesign** the second story of the proposed addition consistent with the Single-Family Design Guidelines.

City of Santa Clara

Development Review Hearing

4628 Demaret Drive

PLN23-00077