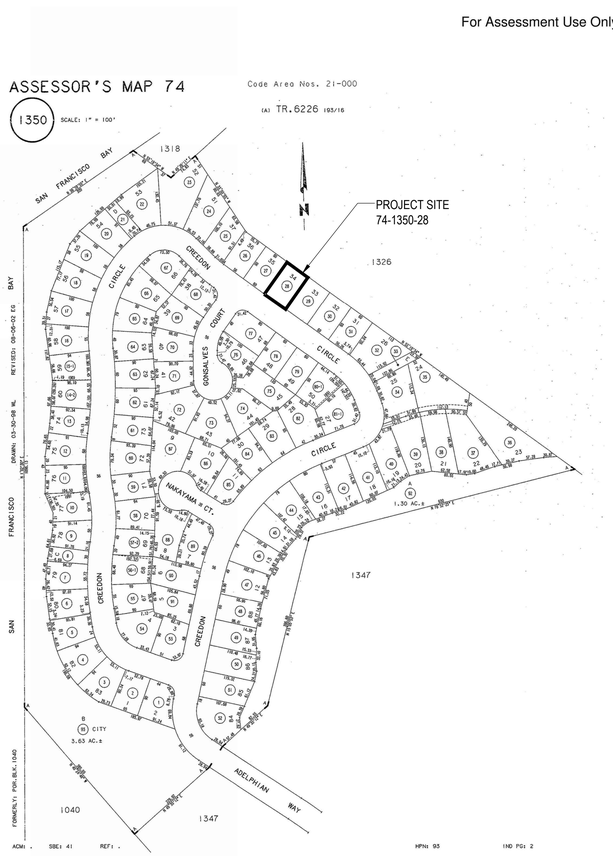
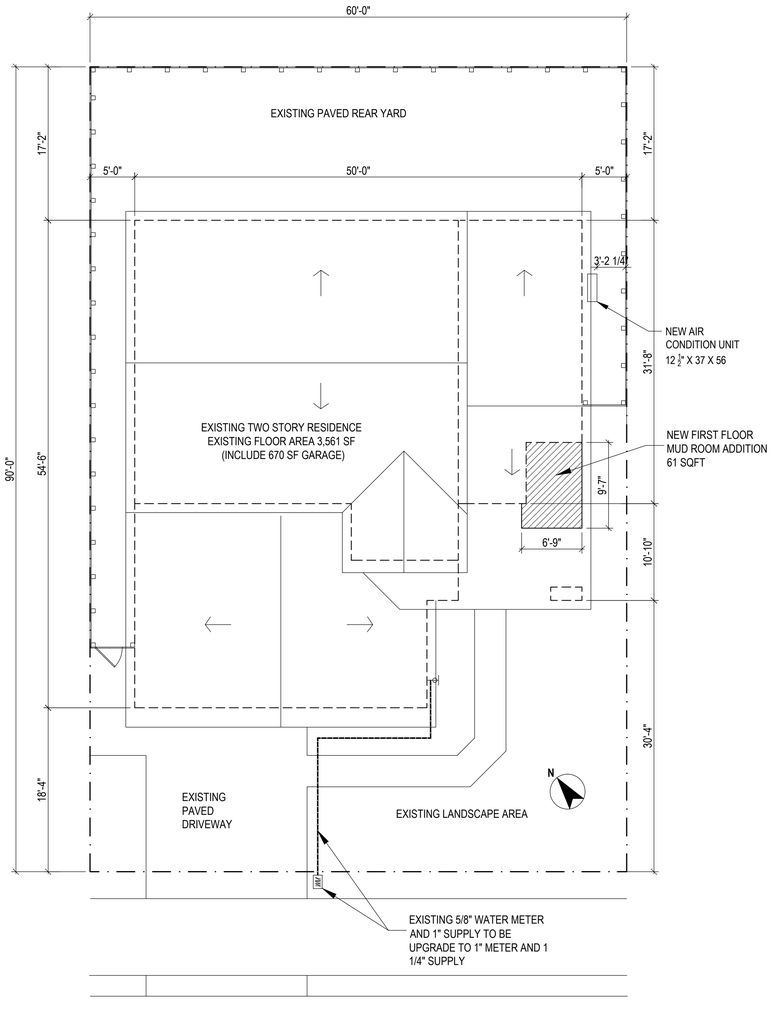
For Assessment Use Only





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

SCOPE OF WORK

1. PROPOSE FIRST FLOOR ADDITION OF 61 SQUARE FEET MUD ROOM
2. CONVERT SECOND FLOOR SHARE BATHROOM TO TWO NEW FULL BATH. AREA OF REMODEL IS 117 SQUARE FEET.
3. INSTALL NEW AIR CONDITIONING UNIT

APPLICABLE CODES

ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LAWS, CODES AND REGULATORY AGENCIES HAVING JURISDICTION, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

2022 CALIFORNIA BUILDING CODE
2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA FIRE CODE
2022 CAL GREEN
ALAMEDA ZONING CODE
ALAMEDA MUNICIPAL CODE

DRAWING LIST

ZONING AND BUILDING DATA

ZONING DATA

PARCEL # 74-1350-28
ZONING: R1-PD
OF UNIT ON SITE: 1
LOT SIZE: 5400 SF
MAX. LOT COVERAGE: 55%
MIN. FRONT SETBACK : 15 FEET
MIN. SIDE SETBACK: 5 FEET

MAIN BUILDING

OCCUPANCY CLASSIFICATION: R-3
CONSTRUCTION CLASSIFICATION: V-B
FIRE SPRINKLERS: N
NUMBER OF STORIES: TWO
HEIGHT OF BUILDING: 28'-2"

AREA TABULATION

PROPOSED 1ST FLOOR ADDITION: 61 SF

EXISTING 1ST FL CONDITIONED AREA: 1,610 SF
NEW 1ST FL CONDITIONED AREA: 1,671 SF
2ND FL CONDITIONED AREA : 1,221 SF (NO CHANGE)

UNCONDITIONED SPACE: 687 SF GARAGE

EXISTING TOTAL FLOOR AREA: 3,545 SF (GARAGE INCLUDED)
NEW TOTAL FLOOR AREA: 3,606 SF

COVERED PARKING PROVIDED: 2

LOT COVERAGE: 2,358 SF / 5,400 SF = 43.7%

PARCEL # 74-1350-28

PROJECT # 22-04

PROPERTY OWNER

SERENA WONG
339 CREEDON CIR
ALAMEDA, CA 94577
510-367-7000

ARCHITECT
HUANG CHEN

7 CAPTAIN DRIVE, C413
EMERYVILLE, CA 94608
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HYC.BUILD@GMAIL.COM

RESIDENTIAL ADDITION AND BATHROOM REMODEL
339 CREEDON CIR
ALAMEDA, CA 94502

DESCRIPTION	REV.
BUILDING PERMIT 2025-07-14	

STAMP

LICENSED ARCHITECT
HUANGYUAN CHEN
C36492
3-31-27
RENEWAL DATE
STATE OF CALIFORNIA

PROJECT INFO AND SITE PLAN

G-0

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Alameda, CA 94501

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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
Window	Window	Front Wall	Front	225			1	30	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 2	Window	Left Wall	Left	315			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 3	Window	Left Wall	Left	315			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 4	Window	Left Wall	Left	315			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window - SGD	Window	Rear Wall	Back	45			1	104	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
French Door	Window	Rear Wall	Back	45			1	48	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 5	Window	Rear Wall	Back	45			1	25	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 6	Window	Rear Wall	Back	45			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 7	Window	Rear Wall	Back	45			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 8	Window	Right Wall	Right	135			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 9	Window	Right Wall	Right	135			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No

ENERGY USE INTENSITY

	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Margin (kBtu/ft^2 - yr)	Margin Percentage
Gross EUI[1]	24.6	24.46	0.14	0.57
Net EUI[2]	24.6	24.46	0.14	0.57

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.

- Ducts with high level of insulation

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

- Minimum Airflow
- Fan Efficacy Watts/CFM
- Duct leakage testing

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft^2)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Creedon Circle Addition	2892	1	5	2	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft^2)	Avg. Ceiling Height	Water Heating System 1	Status
Existing Living Area	Conditioned	HVAC System1	2831	8	DHW Sys 1	Existing Unchanged

GENERAL INFORMATION

01	Project Name	Creedon Circle Addition			
02	Run Title	Title 24 Analysis			
03	Project Location	339 Creedon Circle			
04	City	Alameda	05	Standards Version	2022
06	Zip code	94502	07	Software Version	EnergyPro 9.4
08	Climate Zone	3	09	Front Orientation (deg/ Cardinal)	225
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	5
14	Addition Cond. Floor Area (ft^2)	61	15	Number of Stories	2
16	Existing Cond. Floor Area (ft^2)	2831	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft^2)	2892	19	Glazing Percentage (%)	19.50%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Natural gas	23	No Dwelling Unit:	No

COMPLIANCE RESULTS

01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD CF1R-PRF-01-E
Project Name: Creedon Circle Addition **Calculation Date/Time:** 2025-07-11T12:24:03-07:00 **(Page 6 of 14)**
Calculation Description: Title 24 Analysis **Input File Name:** Creedon Circle Addition (339).ribd22x

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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
Window	Window	Front Wall	Front	225			1	30	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 2	Window	Left Wall	Left	315			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 3	Window	Left Wall	Left	315			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 4	Window	Left Wall	Left	315			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window - SGD	Window	Rear Wall	Back	45			1	104	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
French Door	Window	Rear Wall	Back	45			1	48	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 5	Window	Rear Wall	Back	45			1	25	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 6	Window	Rear Wall	Back	45			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 7	Window	Rear Wall	Back	45			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 8	Window	Right Wall	Right	135			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 9	Window	Right Wall	Right	135			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No

Registration Number: 425-P010214082A-000-000-0000000-0000 Registration Date/Time: 07/11/2025 13:29 HERS Provider: CHEERS
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CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-07-11 12:24:23
Schema Version: rev 20220901

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft^2)	Avg. Ceiling Height	Water Heating System 1	Status
New Living Area	Conditioned	HVAC System1	61	8	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Front Wall	Existing Living Area	R-11 Wall	225	Front	232	64	90	none	Existing	No
Left Wall	Existing Living Area	R-11 Wall	315	Left	128	60	90	none	Existing	No
Rear Wall	Existing Living Area	R-11 Wall	45	Back	400	225	90	none	Existing	No
Right Wall	Existing Living Area	R-11 Wall	135	Right	440	60	90	none	Existing	No
Front Wall 2	Existing Living Area	R-11 Wall	225	Front	288	42	90	none	Existing	No
Left Wall 2	Existing Living Area	R-11 Wall	315	Left	312	50	90	none	Existing	No
Rear Wall 2	Existing Living Area	R-11 Wall	45	Back	288	64	90	none	Existing	No
Right Wall 2	Existing Living Area	R-11 Wall	135	Right	312	9	90	none	Existing	No
Front Wall 3	New Living Area	R-15 Wall	225	Front	56	24	90	Extension	New	n/a
Left Wall 3	New Living Area	R-15 Wall	315	Left	24	0	90	Extension	New	n/a
Right Wall 3	New Living Area	R-15 Wall	135	Right	80	0	90	Extension	New	n/a
Interior Surface	Existing Living Area>>__Garage__	R-11 Wall1	n/a	n/a	450	0	n/a		Existing	No

Registration Number: 425-P010214082A-000-000-0000000-0000 Registration Date/Time: 07/11/2025 13:29 HERS Provider: CHEERS
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Schema Version: rev 20220901

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Margin (EDR1)	Margin (EDR2)
Space Heating	0	39.52	0	38.95	0	0.57
Space Cooling	0	5.45	0	5.84	0	-0.39
IAQ Ventilation	0	0	0	0	0	0
Water Heating	0	25.76	0	25.76	0	0
Self Utilization/Flexibility Credit				0		0
Efficiency Compliance Total	**0**	**70.73**	**0**	**70.55**	**0**	**0.18**
Photovoltaics		0		0		
Battery				0		
Flexibility						
Indoor Lighting	0	7.2	0	7.2		
Appl. & Cooking	0	22.24	0	22.25		
Plug Loads	0	26.81	0	26.81		
Outdoor Lighting	0	1.75	0	1.75		
TOTAL COMPLIANCE	**0**	**128.73**	**0**	**128.56**		

Registration Number: 425-P010214082A-000-000-0000000-0000 Registration Date/Time: 07/11/2025 13:29 HERS Provider: CHEERS
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CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-07-11 12:24:23
Schema Version: rev 20220901

PARCEL # 74-1350-28

PROJECT # 22-04

PROPERTY OWNER
SERENA WONG
339 CREEDON CIR
ALAMEDA, CA 94577
510-367-7000

ARCHITECT
HUANG CHEN
7 CAPTAIN DRIVE, C413
EMERYVILLE, CA 94608
415-944-9698
HYC.BUILD@GMAIL.COM

RESIDENTIAL ADDITION AND BATHROOM REMODEL
339 CREEDON CIR
ALAMEDA, CA 94502

DESCRIPTION	REV.
BUILDING PERMIT 2025-07-14	

STAMP

LICENSED ARCHITECT HUANGYUAN CHEN C39492 3-31-27 RENEWAL DATE STATE OF CALIFORNIA

TITLE 24

G-10

ROOM LOAD SUMMARY

Project Name	Date
Creedon Circle Addition	*7/11/2025*
System Name	Floor Area
HVAC System	*2,892*

ROOM LOAD SUMMARY

			ROOM COOLING PEAK			COIL COOLING PEAK			COIL HTG. PEAK	
Zone Name	Room Name	Mult.	CFM	Sensible	Latent	CFM	Sensible	Latent	CFM	Sensible
Existing Living Area	*Existing 1st Floor*	*1*	*1,338*	*27,596*	*621*	*1,338*	*27,596*	*621*	*488*	*19,109*
	Existing 2nd Floor	*1*	*800*	*16,511*	*471*	*800*	*16,511*	*471*	*304*	*11,905*
New Living Area	*1st Floor Addition*	*1*	*43*	*880*	*24*	*43*	*880*	*24*	*35*	*1,360*
PAGE TOTAL			*2,181*	*44,988*	*1,115*	*827*	*32,374*			
TOTAL *			*2,181*	*44,988*	*1,115*	*827*	*32,374*			

* Total includes ventilation load for zonal systems.

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD **CF1R-PRF-01-E**

Project Name: Creedon Circle Addition **Calculation Date/Time:** 2025-07-11T12:24:03-07:00 **(Page 13 of 14)**

Calculation Description: Title 24 Analysis **Input File Name:** Creedon Circle Addition (339).ribd22x

HERS RATER VERIFICATION OF EXISTING CONDITIONS

OVERHANGS AND FINS - VERIFIED AND ALTERED

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD **CF1R-PRF-01-E**

Project Name: Creedon Circle Addition **Calculation Date/Time:** 2025-07-11T12:24:03-07:00 **(Page 14 of 14)**

Calculation Description: Title 24 Analysis **Input File Name:** Creedon Circle Addition (339).ribd22x

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Timothy Carstairs	*Timothy Carstairs*
Company:	Signature Date:
Carstairs Energy Inc.	07/11/2025
Address:	CEA/ HERS Certification Identification (If applicable):
2238 Bayview Heights Dr STE E	CEA 2022
City/State/Zip:	Phone:
Los Osos, CA 93402	8059049048

CABEC — California Association of Building Energy Consultants — CERTIFIED ENERGY ANALYST

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:	Responsible Designer Signature:
Huang Chen	Huang Chen
Company:	Date Signed:
Huang Yuan Chen	07/11/2025
Address:	License:
7 Captain Dr Unit 413	C36492
City/State/Zip:	Phone:
Emeryville, CA 94608	5104796051

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

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Permit Center
Alameda, CA 94501

PARCEL # 74-1350-28

PROJECT # 22-04

PROPERTY OWNER

SERENA WONG
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HUANG CHEN

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RESIDENTIAL ADDITION AND BATHROOM REMODEL
339 CREEDON CIR
ALAMEDA, CA 94502

PLAN CHECK
2025-05-01

DESCRIPTION	REV.
BUILDING PERMIT 2025-07-14	

STAMP

LICENSED ARCHITECT
HUANGYUAN CHEN
C36492
3-31-27
RENEWAL DATE
STATE OF CALIFORNIA

TITLE 24

G-11

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

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)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 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). *

5/6/22

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.

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(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. *

, Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment' d as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no ation covering chilled water piping and refrigerant suction piping located outside the conditioned space must d by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and or sleeve.

r Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and s, based on the distance between this designated space and the water heater location; and a condensate drain no an the base of the water heater

Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and on (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO ency that is approved by the executive director.

illed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.

air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC ndards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) n. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be e, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. stic and either mesh or tape must be used to seal openings greater than ¼", If mastic or tape is used. Building pport platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or e used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in be compressed. *

uct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, ures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive tape is used in combination with mastic and draw bands.

d Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, other requirements specified for duct construction.

an systems that exchange air between the conditioned space and outdoors must have backdraft or automatic

ampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, mpers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.

ion. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic nsulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.

ox Duct. Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and

and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in ence Residential Appendix RA3.1.

conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 ters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. rop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter se gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE RESIDENTIAL ALTERATIONS

CF1R-ALT-01-E
(Page 4 of 5)

25	Proposed Fenestration U-factor (Skylights)	n/a
26	Required Fenestration U-factor (Skylights)	0.55
27	Compliance Statement	n/a
28	Proposed Fenestration SHGC (Skylights)	n/a
29	Required Fenestration SHGC (Skylights)	0.30
30	Compliance Statement	n/a

I. Space Conditioning (SC) Systems - Heating/Cooling (Section 150.2(b).

This section does not apply to this project.

J. Water Heating Systems (Section 150.2(b)1H)

This section does not apply to this project.

Registration Number: 223-A010021977A-000-000-0000000-0000
Registration Date/Time: 2023-02-23 10:42:52
HERS Provider: CalCERTS
CA Building Energy Efficiency Standards - 2022 Residential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Report Generated: 2023-02-23 10:42:52

PARCEL # 74-1350-28

PROJECT # 22-04

PROPERTY OWNER
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RESIDENTIAL ADDITION AND BATHROOM REMODEL
339 CREEDON CIR
ALAMEDA, CA 94502

DESCRIPTION	REV.
BUILDING PERMIT 2025-07-14	

STAMP

LICENSED ARCHITECT
HUANGYUAN CHEN
C36492
3-31-27
RENEWAL DATE
STATE OF CALIFORNIA

MANDATORY MEASURES

G-15

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	Status	Verified Existing Condition	Existing HVAC System
HVAC System1	Heating and cooling system other	Heating Component 1	1	Cooling Component 1	1	HVAC Fan 1	Air Distribution System 1	Altered	No	

HVAC - HEATING UNIT TYPES

01	02	03	04	05
Name	System Type	Number of Units	Heating Efficiency	Heating Unit Brand
Heating Component 1	Central gas furnace	1	AFUE - 80	n/a

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08	09
Name	System Type	Number of Units	Efficiency Metric	Efficiency EER/EER2/CEER	Efficiency SEER/SEER2	Zonally Controlled	Mulit-speed Compressor	HERS Verification
Cooling Component 1	Central split AC	1	EER/SEER	11.7	14	Not Zonal	Single Speed	Cooling Component 1-hers-cool

HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEERSEER2	Verified Refrigerant Charge
Cooling Component 1-hers-cool	Required	350	Not Required	Not Required	Not Required

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 Roof No Attic	Cathedral Ceilings	Wood Framed Ceiling	2x4 @ 16 in. O. C.	R-0	None / None	0.484	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
R-11 Wall1	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-11	None / None	0.099	Inside Finish: Gypsum Board Cavity / Frame: R-11 / 2x4 Other Side Finish: Gypsum Board
R-0 Wall1	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.277	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Other Side Finish: Gypsum Board
Attic RoofExisting Living Area	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
Attic RoofNew Living Area	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-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

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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
Window 10	Window	Right Wall	Right	135			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 11	Window	Front Wall 2	Front	225			1	24	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 12	Window	Front Wall 2	Front	225			1	18	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 13	Window	Left Wall 2	Left	315			1	20	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 14	Window	Left Wall 2	Left	315			1	15	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 15	Window	Left Wall 2	Left	315			1	15	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 16	Window	Rear Wall 2	Back	45			1	36	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 17	Window	Rear Wall 2	Back	45			1	6	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 18	Window	Rear Wall 2	Back	45			1	16	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 19	Window	Rear Wall 2	Back	45			1	6	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 20	Window	Right Wall 2	Right	135			1	9	0.71	Table 110.6-A	0.73	Table 110.6-B	Bug Screen	Existing	No
Window 1	Window	Front Wall 3	Front	225			1	24	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

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		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts >= 25 ft
			Supply	Return	Supply	Return	Supply	Return							
Air Distribution System 1	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist	New	n/a		n/a

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.45	HVAC Fan 1-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.45

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

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
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	Existing Water Heating System
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	15
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	Verified Existing Condition
DHW Heater 1	Gas	Small Storage	1	50	EF	0.57	Btu/Hr	75000	0	80	n/a		Existing	No

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

OPAQUE DOORS

01	02	03	04	05	06
Name	Side of Building	Area (ft^2)	U-factor	Status	Verified Existing Condition
Door	Front Wall	34	0.5	Existing	No

SLAB FLOORS

01	02	03	04	05	06	07	08	09	10
Name	Zone	Area (ft^2)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated	Status	Verified Existing Condition
Slab	Existing Living Area	1610	150	none	0	80%	No	Existing	No
Slab 2	New Living Area	61	20	none	0	80%	No	New	n/a
Slab 3	__Garage__	687	120	none	0	0%	No	Existing	No

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-11 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-11	None / None	0.11	Inside Finish: Gypsum Board Cavity / Frame: R-11 / 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

PARCEL # 74-1350-28

PROJECT # 22-04

PROPERTY OWNER

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RESIDENTIAL ADDITION AND BATHROOM REMODEL
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DESCRIPTION	REV.
BUILDING PERMIT 2025-07-14	

STAMP

LICENSED ARCHITECT
HUANG YUAN CHEN
C36492
3-31-27
RENEWAL DATE
STATE OF CALIFORNIA

TITLE 24

G-11

RECEIVED
Sep 16 2025
Permit Center
Alameda, CA 94501

GENERAL ELECTRICAL NOTES

1. NEW LIGHTING OR RECEPTACLES ADDED MUST NOT OVERLOAD EXISTING CIRCUIT.
2. ALL KITCHEN, BATHROOM, LANDRY ROOM, GARAGE AND EXTERIOR RECEPTACLES SHALL BE GFCI PER CEC 210.8
3. ALL NEW BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15 AMP AND 20 AMP OUTLETS IN DWELLING UNIT INCLUDING RECEPTACLES, SWITCHES, LIGHTING AND HARD-WIRED SMOKE DETECTOR SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER PER CEC 210.12(A).
4. ALL NEW 125 VOLT, 15 AND 20 AMP RECEPTACLES IN DWELLING UNIT SHALL BE TAMPER-RESISTANT PER CEC 406.12
5. A DEDICATED 20 AMP CIRCUIT TO SERVE THE REQUIRED BATHROOM OUTLETS. THIS CIRCUIT CANNOT SUPPLY ANY OTHER RECEPTACLES, LIGHTS AND FANS ETC. PER CEC 210.11.C3.
6. PROVIDE A MIN. OF 1-20 AMP LAUNDRY BRANCH CIRCUIT PER CEC 210.11.C.2
7. FAN/LIGHT IN WET OR DAMP LOCATIONS SHALL BE LABELED "SUITABLE FOR WET OR DAMP LOCATIONS. (PER CEC 410.10(A))
8. ALL LIGHT LUMINARIES INSTALLED SHALL BE HIGH EFFICACY.
9. RECESSED LIGHTING FIXTURES SHALL BE RATED AS AIR-TIGHT(AT) AND WHEN INSTALLED IN AN INSULATED CEILING SHALL HAVE AN APPROVED ZERO CLEARANCE INSULATION COVER (IC)
10. ALL LIGHTING SHALL BE SWITCHED SEPARATELY FROM EXHAUST FAN.
11. OUTLET RECEPTACLES 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. RECEPTACLE OUTLETS SHALL, INSOFAR AS PRACTICABLE, BE SPACED EQUAL DISTANCES APART.
12. BATHROOMS - (1) GFI WALL RECEPTACLE OUTLET SHALL BE INSTALLED WITHIN 30" OF THE OUTSIDE EDGE OF EACH BASIN. ONE 20 AMP. DEDICATED CIRCUIT IS REQUIRED. THE BATHROOM LIGHTING SHALL NOT BE ON THE SAME ELECTRICAL CIRCUITS.HYDROMASSAGE BATHTUBS ARE REQUIRED TO BE GFI PROTECTED AND THE DISCONNECT MUST BE WITHIN SIGHT OF THE MOTOR. THE MOTOR MUST BE ACCESSIBLE. LIGHT FIXTURES LOCATED IN WET LOCATIONS MUST BE LISTED FOR WET LOCATION AND REQUIRE WATER RESISTANT TRIMS.
13. CONDUCTOR WIRES WITH AN INSULATED NEUTRAL AND A FOUR PRONG OUTLET ARE REQUIRED FOR DRYERS AND COOKING UNITS PER 2022 CEC.
14. PROVIDE SURGE PROTECTOR AT A/V AND ALL COMPUTER LOCATIONS. V.W.O.
15. GROUNDING CONDUCTORS ARE REQUIRED IN ALL PIPES AND CONDUITS.
16. PER 2022 CEC, AT LEAST (1) WALL SWITCH-CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED IN EVERY HABITABLE ROOM; IN BATHROOMS, HALLWAYS, STAIRWAYS, ATTACHED GARAGES & DETACHED GARAGES W/ELECTRICAL POWER & OUTDOOR ENTRANCES OR EXITS.
17. ELECTRICAL OPENINGS (SWITCHES, RECEPTACLES, ETC.) ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE MAINTAINED AT LEAST 24 IN. APART.
18. ALL WIRING FOR ELECTRICAL OUTLETS, CONTROL DEVICES, OR OTHER ELECTRICAL DEVICES SHALL BE CERTIFIED U.L. APPROVED AND SHALL BE INSTALLED IN CONDUIT OR OTHER WIRING METHODS APPROVED BY THE CITY BUILDING OFFICIALS.
19. NO LIGHT FIXTURES IN CLOTHES CLOSETS SHALL BE CLOSER THAN 12" TO COMBUSTIBLE STORAGE ITEMS PER 2022 CEC.
20. ELECTRICAL CONTRACTOR SHALL DETERMINE AND ADD NEW MAIN AS REQUIRED FOR THE PLANNED DEMAND AND ALLOW FOR FUTURE CURRENT CAPACITY INCREASE. ELECTRICAL SUB PANEL TO BE SIZED TO PROVIDE UNUSED (OPEN/SPARE) BREAKERS.
21. CONTRACTOR TO COORDINATE POWER REQUIREMENTS FOR ALL FIXTURES AND EQUIPMENT.
22. SMOKE ALARMS TO BE HARDWIRED AND INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL THE ALARMS IN THE INDIVIDUAL UNIT PER CRC R314
23. CARBON MONOXIDE ALARMS TO BE HARDWIRED WITH BATTERY BACKUP PER CRC R315
24. ELECTRICAL RECEPTACLE OUTLETS, SWITCHES AND CONTROLS (INCLUDING CONTROLS FOR HEATING, VENTILATION AND AIR CONDITIONING) INTENDED TO BE USED BY OCCUPANTS SHALL BE LOCATED NO MORE THAN 48 INCHES (1219.2 MM) MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES (381 MM) MEASURED FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR. PER CRC R327.1.2

GENERAL MECHANICAL NOTES

1. ROOMS CONTAINING TUBS, SHOWERS OR SIMILAR BATHING FIXTURE SHALL BE MECHANICALLY VENTILATED WITH AN ENERGY STAR CERTIFIED EXHAUST FAN AND CONTROLLED BY A HUMIDITY SENSOR PER CAL GREEN 4.506.1, FAN SHALL PROVIDE MINIMUM OF 1CFM PER 1 SQUARE FEET AND NO LESS THAN 50 CFM.
2. BACK DRAFT DAMPERS ARE REQUIRED ON VENTILATION SYSTEMS EXHAUSTING TO THE EXTERIOR EXCEPT FANS REQUIRED TO OPERATE CONTINUOUSLY. ALL EXHAUST MUST BE A MINIMUM OF 3 FEET FROM WINDOWS AND DOORS.
3. 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 INTAKE AND DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED.BY TAPE, PLASTIC, SHEET METAL OR OTHER METHODS REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS ENTERING THE SYSTEM.
4. HABITABLE SPACE SHALL BE PROVIDED WITH A HEATING SYSTEM CAPABLE OF MAINTAINING A MIN. INDOOR TEMPERATURE OF 68° F AT A POINT 3 FEET ABOVE THE FLOOR AND 2 FEET FROM EXTERIOR WALLS IN ALL NEW HABITABLE ROOMS AT THE DESIGN TEMPERATURE. (31°F) CRC R303.9.
5. PROVIDE 4" DIA. SMOOTH METAL DRYER VENT W/ BACKDRAFT DAMPER TO EXTERIOR AS SHOWN ON PLAN. VENT RUN SHALL COMPLY W/ MNFR.'S SPECS AND CMC 504 & 905. LENGTH OF RUN MAY EXCEED 14'-0" IF PERMITTED BY DRYER MANUFACTURE'S INSTALLATION INSTRUCTIONS AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
6. DUCT SYSTEM SHALL BE SIZED, DESIGNED AND EQUIPMENT IS SELECTED ACCORDING TO APPLICABLE ANSI / ACCA MANUEL.
7. APPLY CLOSE CELL SPRAY FOAM AT DUCT PENETRATION ON ROOF DECK. EG. BATH EXHAUST DUCT AND VENT STACK.
8. ALL WORK SHALL COMPLY WITH THE CALIFORNIA MECHANICAL CODE (CMC) AND CALIFORNIA PLUMBING CODE (CPC) AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.
9. DUCTS MUST BE INSULATED WITH R-4.2 OR HIGHER. DUCTS SHALL BE CONSTRUCTED, INSTALLED AND INSULATED PER 2022 CMC.
10. PROVIDE COMBUSTION AIR SUPPLY TO GAS FIRED APPLIANCES BY COMBUSTION AIR DUCTS THROUGH ROOF AND CRAWL SPACES PER 2022 CMC. VERIFY DUCT SIZE WITH MANUFACTURERS SPECIFICATIONS.
11. PROVIDE MIN. 100 SQ. IN. EACH UPPER AND LOWER COMBUSTION AIR CLEAR OPENINGS FOR WATER HEATERS, BOILERS, FURNACES, AND OTHER GAS BURNING APPLIANCES. LOCATE OPENINGS WITHIN 12" FROM FLOOR AND WITHIN 12" FROM CEILING.
12. PROVIDE EXHAUST VENT TO THE OUTSIDE FROM ALL GAS BURNING APPLIANCES.
13. APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE. SUPPORTS FOR APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO SUSTAIN VERTICAL AND HORIZONTAL LOADS AS REQUIRED BY 2022 CMC. WATER HEATERS TO BE SECURED WITH A MINIMUM OF 2 STRAPS, ONE EACH TO BE LOCATED IN THE UPPER AND LOWER THIRD OF THE UNIT PER 2022 CPC SEC. 508.2.
14. PER 2022 CBC, EXHAUST FANS IN KITCHEN, LAUNDRY AND BATHROOMS MUST CONNECT DIRECTLY TO THE OUTSIDE AND PROVIDE A MINIMUM OF 5 AIR CHANGES PER HOUR. EXHAUST FAN VENTS MUST TERMINATE A MINIMUM OF 3 FEET FROM ANY OPENINGS INTO THE BUILDING AND BE PROVIDED WITH BACKDRAFT DAMPERS.
15. (N) HOT WATER HEATERS AND RE-CIRCULATION PUMP TO BE INSTALLED PER MANUFACTURE SPECIFICATIONS, AND VERIFIED DURING FIELD INSPECTION.
16. APPLIANCES ON SLAB SHALL BE MIN. 3" ABOVE GRADE.
17. INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE FIELD INSPECTOR AT TIME OF INSPECTION PER THE 2022 CMC.

INTERIOR FINISH NOTES

1. ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS PER CAL GREEN 4.504.2.1
2. PAINTS, STAINS AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC LIMITS PER CAL GREEN 4.504.2.2
3. AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH MIR LIMIT PER CAL GREEN 4.504.2.3
4. CARPET INSTALLED IN THE BUILDING SHALL MEET ONE OF THE TESTING AND PRODUCT REQUIREMENTS PER CAL GREEN 4.504.3
5. WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80% OF FLOOR AREA SHALL COMPLY WITH ONE OF THE COMPLIANT REQUIREMENTS LISTED UNDER CAL GREEN 4.504.4
6. PARTICLE BOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS PER CAL GREEN 4.504.5
7. DOCUMENTATION SHALL BE PROVIDED TO VERIFY THAT INTERIOR FINISH MATERIAL ARE COMPLY WITH VOC AND FORMALDEHYDE LIMIT
8. GLAZING IN LOCATIONS SUBJECT TO HUMAN IMPACT SHALL BE OF TEMPERED / SHATTER PROOF SAFETY GLASS. USE SAFETY GLAZING AT DOORS, GLAZING ADJACENT TO DOORS WITHIN 24" OF THE VERTICAL EDGES OF THE DOOR, GLAZING LESS THAN 18" ABOVE FLOOR LEVEL, GLAZING IN DOORS AND ENCLOSURES OF TUBS AND SHOWERS, AND GLAZING IN WARDROBE DOORS PER CBC SEC. 2406.4. WINDOWS WITHIN 60 INCHES FROM TUB OR SHOWER FLOOR REQUIRE SAFETY GLAZING.
9. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AT THE REQUEST OF THE ENFORCING AGENCY.

PLUMBING NOTES

1. NEW PLUMBING FIXTURE SHALL COMPLY WITH 2022 CAL GREEN MANDATORY MEASURE FOR RESIDENTIAL.
   a. 1.28 GALLON/FLUSH AT WATER CLOSET,
   b. 1.2 GPM AT SHOWER HEAD @ 80PSI (PER 2022 CALGREEN)
   c. 1.2 GPM AT LAVATORY FAUCET @ 60 PSI. PER CAL GREEN 4.303.1. 1.28
2. THE EXISTING PLUMBING FIXTURES TO BE COMPLIANT WITH WATER-CONSERVING PLUMBING FIXTURE REQUIREMENTS OF CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN) SECTION 301.1.1 AND SENATE BILL SB 407 (2016) / CALIFORNIA CIVIL CODE SECTIONS 1101.1 THROUGH 1101.8.
3. PROVIDE BACKFLOW PREVENTION VALVE ON MAIN SEWAGE CONNECTION.
4. PROVIDE BACKFLOW PREVENTION VALVE ON ALL POTABLE WATER.
5. ALL SHOWERS AND TUBS TO HAVE ANTI-SCALDING VALVES (2022 CPC AND SECTION 408.3).
   a. SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL PRESSURE BALANCE OR THERMOSTATIC MIXING CONTROL VALVES.
   b. THE MAXIMUM MIXED WATER SETTING SHALL BE 120 DEGREES FAHRENHEIT.
   c. WATER HEATER THERMOSTAT SHALL NOT BE CONSIDERED AS SUITABLE FOR MEETING THIS REQUIREMENT.
6. SHOWER WASTE PIPE MUST BE A MINIMUM OF 2" DIAMETER.
7. SHOWER PANS: MINIMUM SIZE 1,024 SQ. IN. AND CAPABLE OF ENCOMPASSING 30" DIAMETER CIRCLE. ACCESS TO SHOWER SHALL BE MIN. 22" CLEAR IN WIDTH.
8. PLASTIC LINERS AND UNDERLAYMENT MUST BE SLOPED A MINIMUM OF 1/4" AND NOT MORE THAN 1/2" TO THE DRAIN AND BE WRAPPED UP THE WALL A MINIMUM OF 3" ABOVE THE CURB. A WATER TEST IS REQUIRED TO VERIFY THE PAN DOES NOT LEAK AND TO VERIFY THE WEEP HOLES ARE DRAINING CORRECTLY.
9. DENSHIELD, CEMENT BOARD OR EQ. TO BE INSTALLED ON WALLS AT ALL WET LOCATIONS IN BATHROOMS. CORROSION RESISTANT FASTENERS MUST BE USED. PROVIDE SMOOTH, HARD, NONABSORBENT SURFACE IN BATHROOM EXTEND TO 72" HEIGHT ABOVE THE DRAIN INLET. OR (1) PIECE FIBERGLASS SHOWERS ENCLOSURE
10. GLAZING USED AT SHOWER AND TUB ENCLOSURE AND DOOR SHALL BE TEMPERED.
11. ALL NEW PLUMBING PIPING IS REQUIRED TO BE TESTED WITH 10' HEAD OF WATER ABOVE THE HIGHEST FIXTURE OR AN AIR TEST OF 5 LBS.
12. TOILETS REQUIRE A NET CLEAR AREA OF 30" MEASURED FROM THE CENTER OF THE TOILET AND 24" MINIMUM CLEAR IN THE FRONT.
13. TOILETS AND ALL PLUMBING FIXTURES MUST BE SEALED AT ALL WALL AND FLOOR PENETRATIONS.
14. ALL PLUMBING VENTS TO BE LOCATED MIN. 10 FEET FROM OPERABLE WINDOWS.

GENERAL CONSTRUCTION NOTES

1. ALL WORKS SHALL COMPLY WITH CURRENT CODE, REGULATIONS AND ORDINANCES.
2. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. NO WORK SHALL BE STARTED UNTIL ALL QUESTIONS AND DISCREPANCIES ARE RESOLVED.
3. CONTRACTOR SHALL EXAMINE ALL RELEVANT PLANS, SPECIFICATIONS AND OTHER CONSTRUCTION DOCUMENTS PRIOR TO COMMENCEMENT OF WORK. ANY OMISSIONS OR DISCREPANCIES IN ANY PART OF THE CONSTRUCTION DOCUMENTS SHALL BE REPORTED TO OWNER PRIOR TO COMMENCEMENT OF WORK. SCALE SHALL NOT BE USED FOR DETERMINING EXACT DIMENSIONS.
4. WORK SHALL BE DONE IN ACCORDANCE WITH PLANS APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION. OWNER SHALL BE INFORMED IMMEDIATELY SHALL ANY CHANGE IS NECESSARY. FAILURE TO DO SO SHALL PUT ENTIRE RESPONSIBILITY ONTO THE CONTRACTOR.
5. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY OF PEOPLE AND PROPERTY ON THE PROJECT SITE. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CAL OSHA REQUIREMENTS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AT HIS/HER OWN EXPENSE ANY DAMAGE TO ANY PUBLIC OR PRIVATE PROPERTY THAT IS CAUSED BY HIS/HER WORK.
7. ALL MATERIALS, FIXTURES, EQUIPMENT SHALL BE NEW AND UNUSED. NO SUBSTITUTION SHALL BE MAKE WITHOUT OWNER'S AUTHORIZATION. ITEMS WHICH ARE NOT SPECIFIED BY TYPE OR MANUFACTURES SHALL BE OF AVERAGE QUALITY UNLESS APPROVED BY OWNER.
8. BUILDING MATERIAL W/ VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WOOD FRAMING SHALL NOT BE ENCLOSED IF FRAMING MEMBER EXCEED 19% MOISTURE CONTENT. VERIFIED MOISTURE CONTENT PER METHODS PRESCRIBED IN CAL GREEN 4.505.3
9. ANNULAR SPACE AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE CLOSED W/ CEMENT MORTAR OR CONCRETE MASONRY TO PREVENT PASSAGE OF RODENTS.
10. RECYCLE AND/OR SALVAGE FOR REUSE A MIN. OF 65% OF NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE W/ CALGREEN 4.408.3 THUR CITY'S FRANCHISED HAULER, SPECIALTY SOLID WASTE & RECYCLING
11. AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER.
12. CONTRACTOR SHALL INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE CODES.
13. CONTRACTOR SHALL PROTECT EXISTING VEGETATION AND ADJACENT SITE IMPROVEMENTS FROM DAMAGE DURING THE COURSE OF THE WORK.
14. CONTRACTOR SHALL BRACE STRUCTURE AS REQUIRED DURING CONSTRUCTION.
15. CONTRACTOR SHALL PROVIDE STRICT CONTROL OF JOB CLEANUP TO REMOVE DUST AND DEBRIS FROM CONSTRUCTION AREA.

GENERAL ARCHITECTURAL NOTES

1. PROVIDE SEISMIC ANCHORAGE OF ALL APPLIANCES, BOILERS AND WATER HEATERS
2. VERIFY CLEARANCES FOR BOILERS, WATER HEATERS, AND APPLIANCES PER MANUFACTURERS' SPECIFICATIONS AND INSTALL ACCORDINGLY.
7. INSTALL SOLID BLOCKING AS REQUIRED FOR FINISH HARDWARE, CABINETS, TRIM, PLUMBING ACCESSORIES, AND FIXTURES.
8. PRE-PRIME KNOTS IN LUMBER WITH ZINSSER'S "BIN" PRIMER SEALER OR APPROVED EQUAL.
9. ALL PORTIONS OF WOOD EXPOSED TO WEATHER TO BE OF NATURAL RESISTANCE TO DECAY OR TREATED WOOD.
10. ALL CUT OR NOTCHED TREATED WOOD SHALL BE SEALED WITH COPPER GREEN WOOD PRESERVATIVE SEALER.
11. ALL EXTERIOR SHEATING TO BE 1/2" THK. PLYWOOD UNLESS OTHERWISE NOTED IN STRUCTURAL DRAWINGS.

PARCEL # 74-1350-28

PROJECT # 22-04

PROPERTY OWNER

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RESIDENTIAL ADDITION AND BATHROOM REMODEL
339 CREEDON CIR
ALAMEDA, CA 94502

DESCRIPTION	REV.
BUILDING PERMIT 2025-07-14	

STAMP

LICENSED ARCHITECT
HUANG YUAN PENG
C36432
3-31-27
RENEWAL DATE
STATE OF CALIFORNIA

GENERAL NOTES

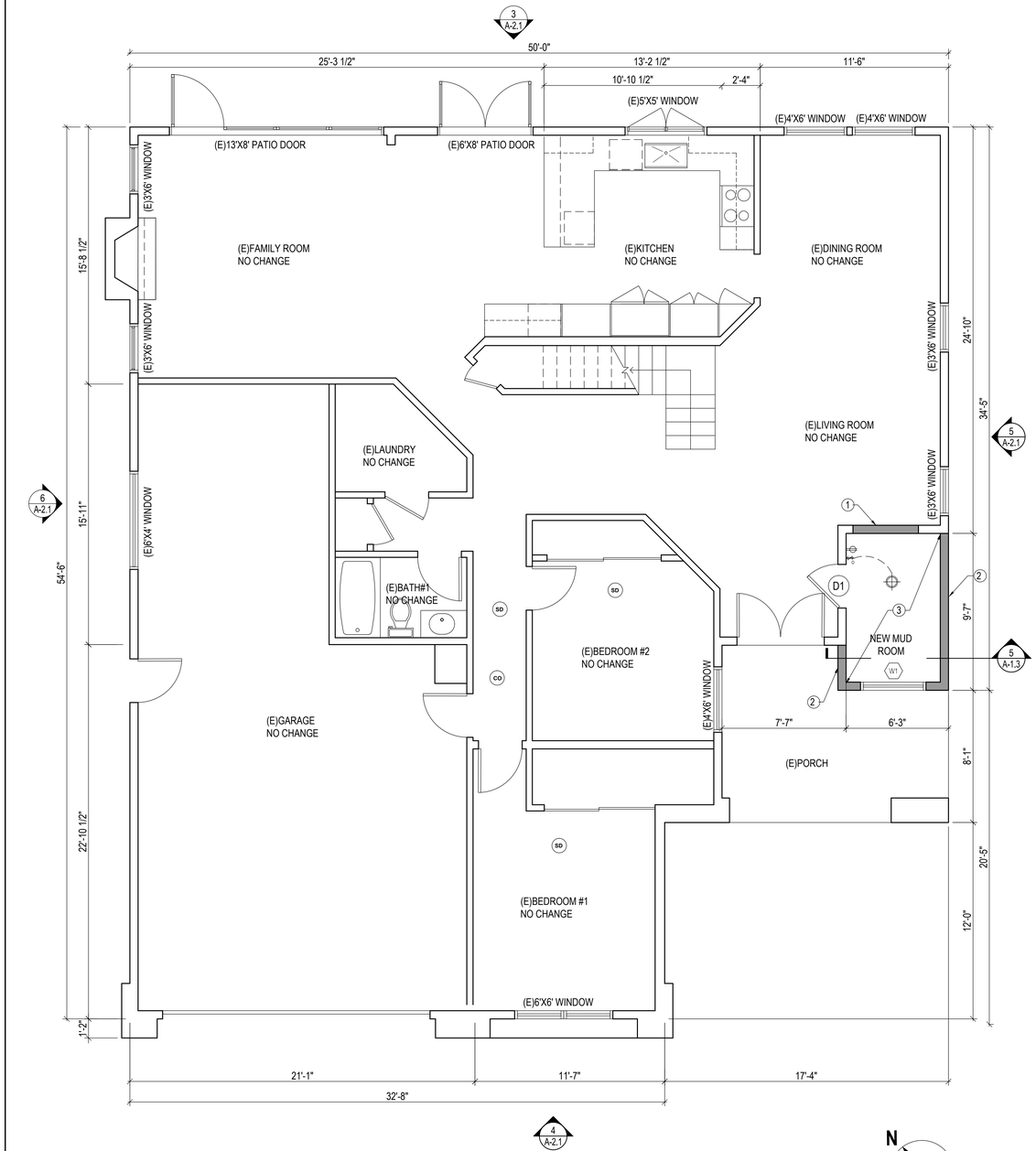
A-1.0

LEGEND

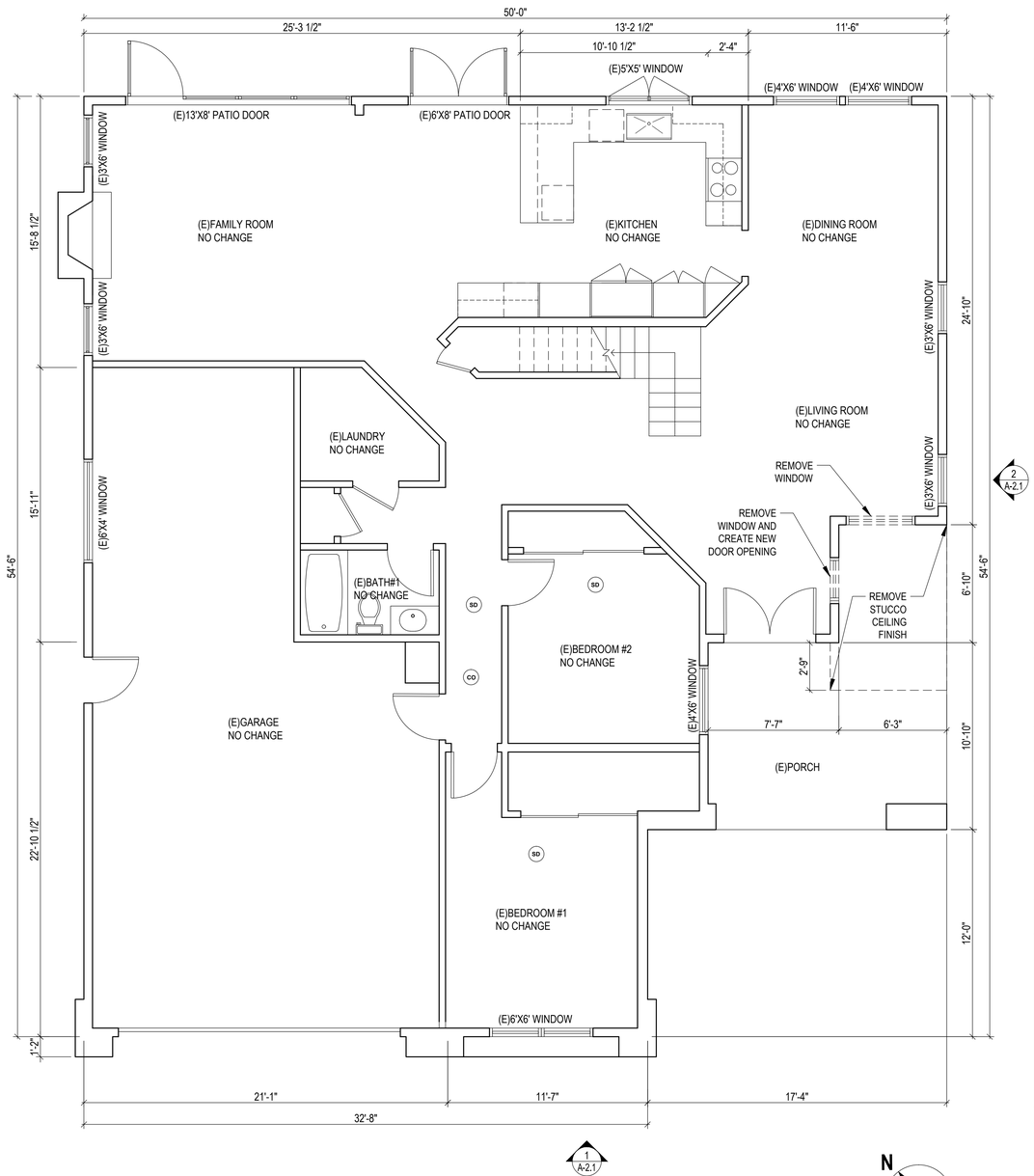
- SD — SMOKE DETECTOR (EXISTING INSTALLATION, HARD WIRED)
- CO — CARBON MONOXIDE (EXISTING INSTALLATION, BATTERY OPERATED)
- SWITCH W/ VACANCY SENSOR
- SURFACE MOUNT CEILING FIXTURE
- RECEPTACLE
- NEW WALL
- EXISTING WALL
- DEMO

FLOOR PLAN SHEET NOTES

1. INFILL INTERIOR WALL SHALL BE 2X4 STUD AT 16" O.C. AND COVERED BY 1/2" GYPSUM BOARD, U.O.N. FINISH WITH LATEX PAINT
2. NEW EXTERIOR WALL SHALL BE 2X4 STUD AT 16" O.C. WITH 1/2" GYPSUM BOARD ON THE INTERIOR SIDE AND FINISH WITH LATEX PAINT. INSTALL 3/8" PLYWOOD SHEATHING ON THE EXTERIOR SIDE, FINISH WITH THREE COAT STUCCO MATCH EXISTING STUCCO IN COLOR. R-15 FIBERGLASS CAVITY INSULATION
3. R-30 FIBERGLASS INSULATION AT ATTIC. 1/2" GYP. BOARD FINISH AT CEILING, FINISHED WITH LATEX PAINT.
4. SEE DETAIL XXXX FOR FLOOR FRAMING AND FINISH



PROPOSED LEVEL 1 FLOOR PLAN 5
1/4" = 1'-0"



EXISTING LEVEL 1 PLAN AND DEMO PLAN 1
1/4" = 1'-0"

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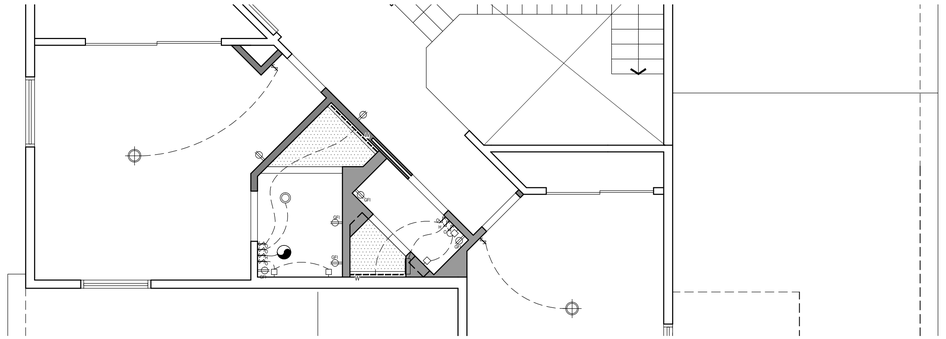
LEVEL 1 FLOOR PLAN AND DEMO PLAN

A-1.1



PROPOSED LEVEL 2 RCP & ELECTRICAL PLAN
1/4" = 1'-0"
7

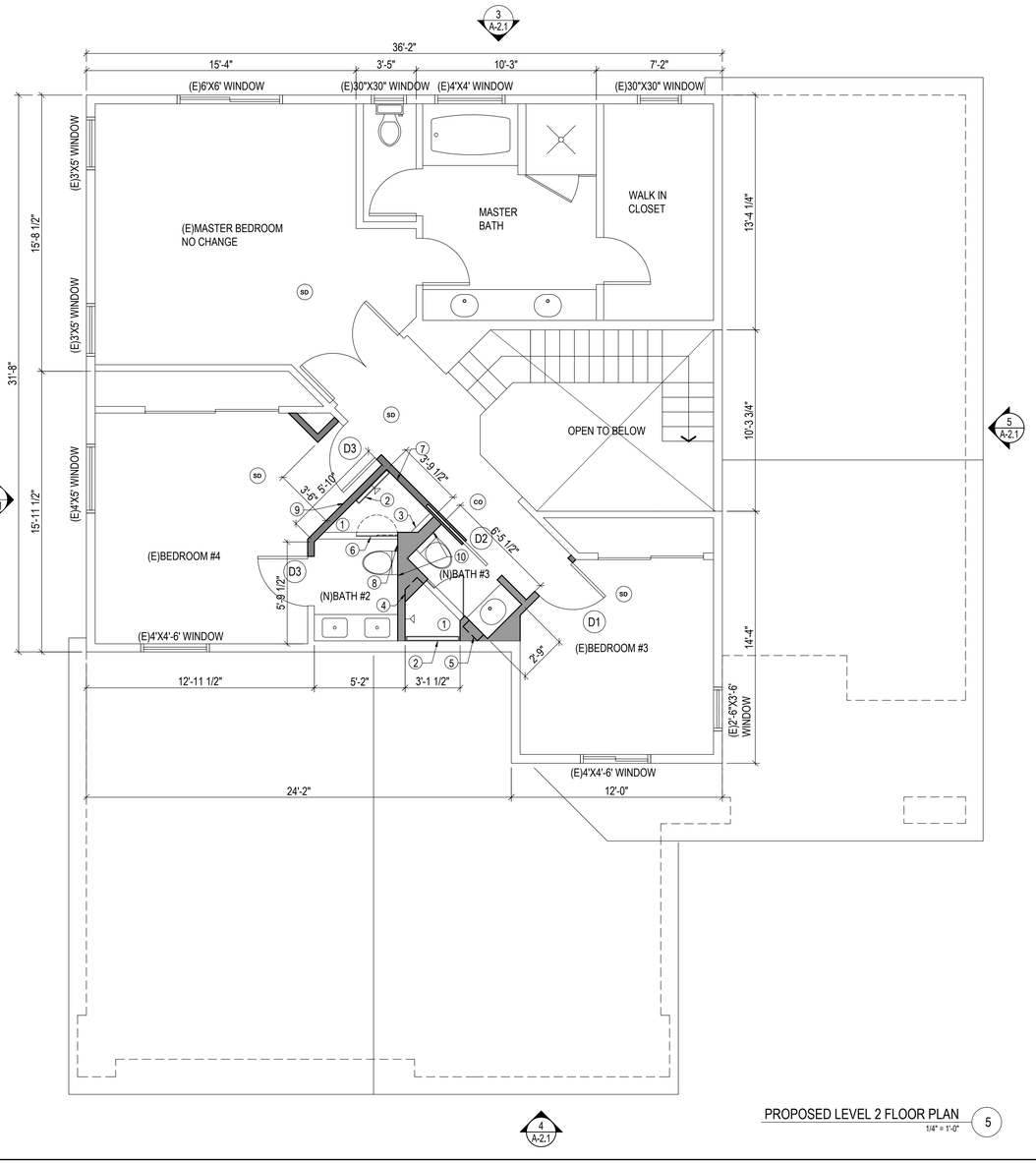
LEGEND

- NEW WALL
- EXISTING WALL
- DEMO
- SURFACE MOUNT CEILING FIXTURE
- WALL SCONCE
- RECESSED FIXTURE DAMP LOCATION RATED
- WET LOCATION RATED LINEAR LIGHTING
- DROP SOFFIT
- GFI GROUND FLOOR CIRCUIT INTERRUPTER PROTECTED RECEPTACLE
- RECEPTACLE
- $ SWITCH
- $M SWITCH W/ MOISTURE SENSOR
- $D DIMMER SWITCH
- $O SWITCH W/ VACANCY SENSOR
- SD SMOKE DETECTOR (EXISTING INSTALLATION, HARD WIRED)
- CO CARBON MONOXIDE (EXISTING INSTALLATION, BATTERY OPERATED)
- WALL MOUNTED BATHROOM FAN
- EXISTING CEILING MOUNTED BATHROOM FAN

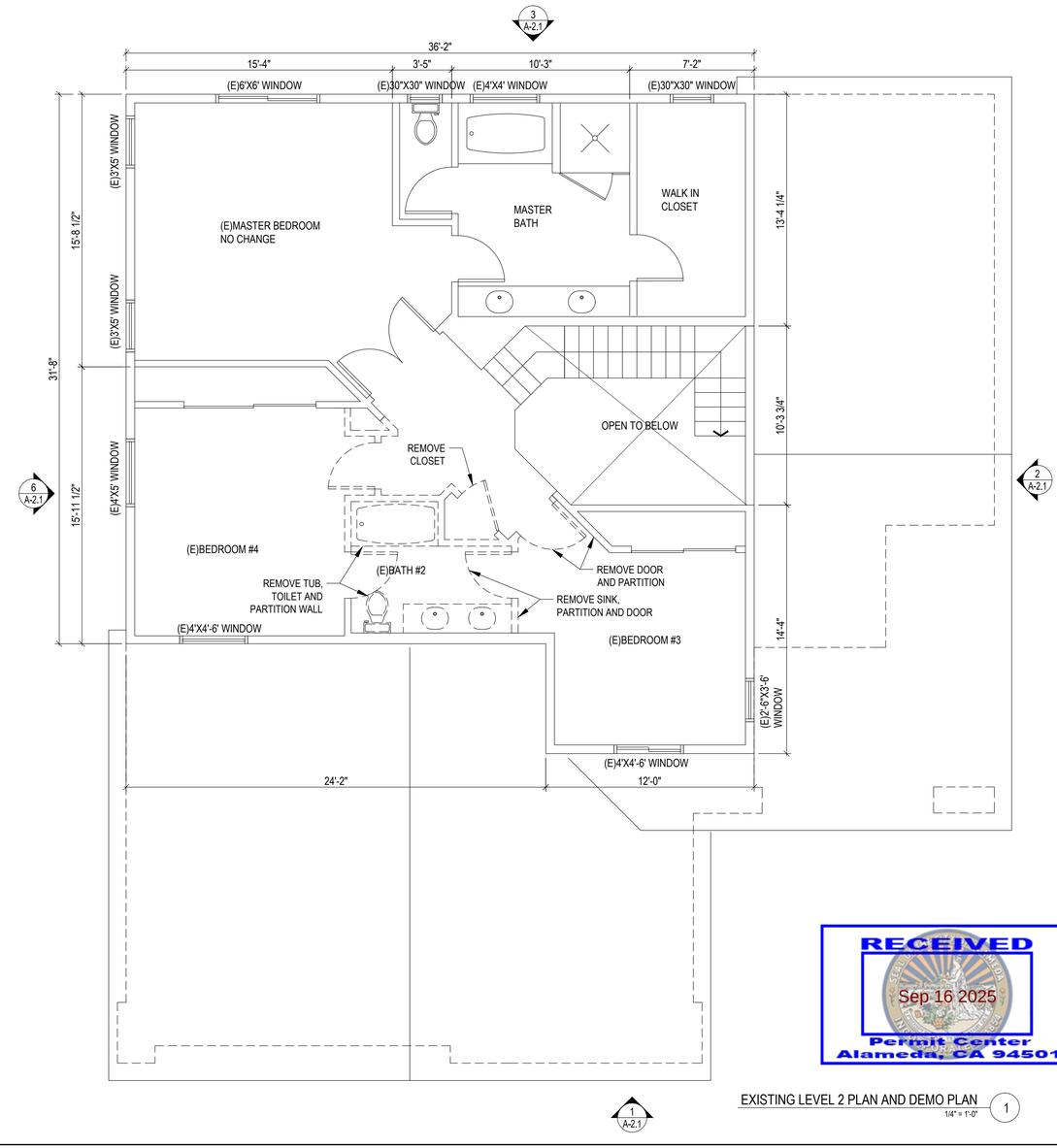
*SUBSTITUTION OF HIGH EFFICIENCY LIGHTING AT EXTERIOR WITH LOW EFFICIENCY LIGHTING IS NOT PERMITTED UNLESS CONTROLLED BY MOTION SENSOR. SUBSTITUTION OF LED LIGHTING WITH FLORESCENT LIGHTING OR VICE VERSA IS ACCEPTABLE

FLOOR PLAN SHEET NOTES

1. SEE PLUMBING NOTE #5 - #9 ON A-0 FOR FINISH NOTES RELATED TO SHOWER
2. LINEAR SHOWER DRAIN
3. BUILT IN TILED LEDGE
4. TILED RECESSED SHOWER NICHE
5. RECESSED NICHE STORAGE
6. TEMPERED GLASS SHOWER SCREEN WITH FOLDABLE PANEL
7. PROVIDE 2X8 BLOCKING AT 36" A.F.F. AT ALL THREE SIDES OF SHOWER AS GRAB BAR REINFORCEMENT PER CRC 327.1.1
8. PROVIDE 2X8 BLOCKING AT 36" A.F.F. AT WALL AND FLOOR AS REINFORCEMENT FOR FUTURE FLOOR MOUNT OR FOLD AWAY GRAB BAR PER CRC 327.1.1
9. INTERIOR WALL PARTITION TO BE 2X4 STUD AT 16" O.C. U.O.N. PROVIDE 1/2" CEMENT BACKER BOARD AT SHOWER LOCATION
10. PROVIDE 4X6 FRAMING FOR WALL MOUNT TOILET WALL CARRIER



PROPOSED LEVEL 2 FLOOR PLAN
1/4" = 1'-0"
5



EXISTING LEVEL 2 PLAN AND DEMO PLAN
1/4" = 1'-0"
1

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Alameda, CA 94501

PARCEL # 74-1350-28

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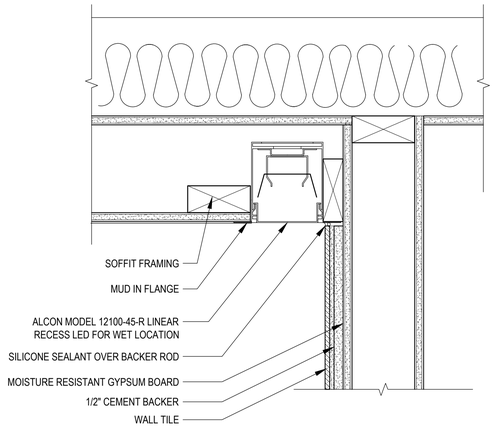
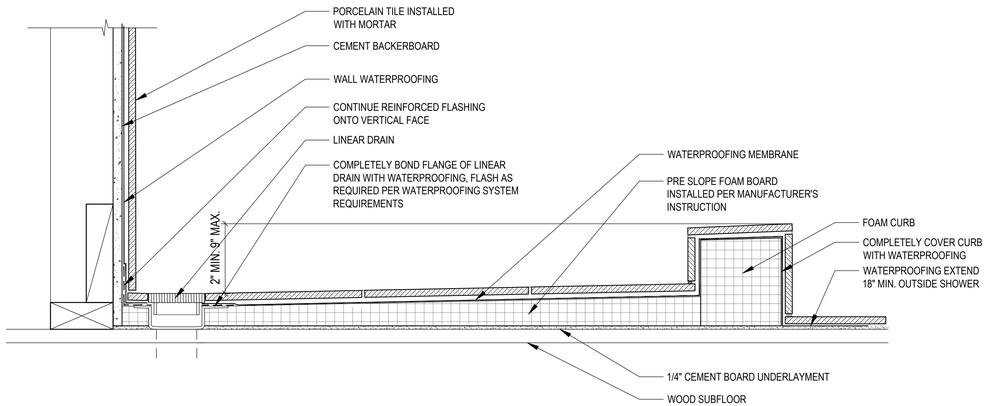
LEVEL 2 FLOOR PLAN AND DEMO PLAN

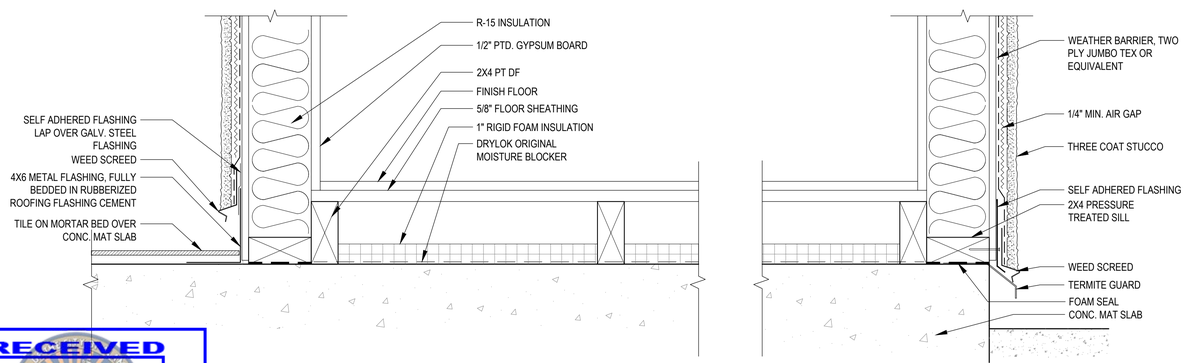
A-1.2



SHOWER RECESSED LIGHTING 7
3" = 1'-0"



TYP. SHOWER PAN DETAILS 6
3" = 1'-0"

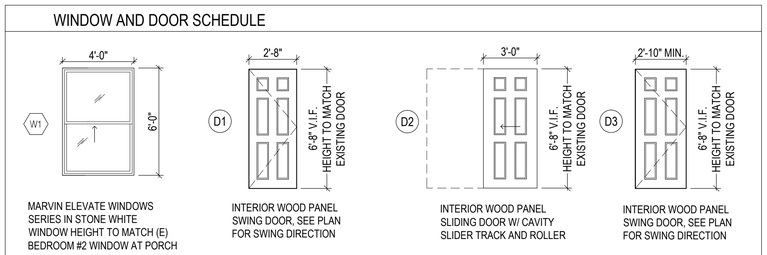


SECTION AT MUDROOM FLOOR 5
3" = 1'-0"

PLUMBING FIXTURE UNIT COUNT

TYPE	COLD WATER SUPPLY		
	# OF FIXTURE	WSFU PER UNIT	TOTAL WSFU
TOILET	4	2.5	10.0
LAVATORY	6	1.0	6.0
SHOWER	3	2.0	6.0
TUB/SHOWER	2	4.0	8.0
KITCHEN FAUCET	2	1.5	3.0
DISH WASHER	1	1.5	1.5
CLOTH WASHER	1	4.0	4.0
HOSE BIB	2	2.5	5.0
COMBINED WSFU			43.5
SUPPLY PRESSURE		60 PSI	
MAXIMUM LENGTH		112 FEET	
MIN. WATER METER SIZE REQUIRED PER TABLE **610.4 IN CALIFORNIA PLUMBING CODE**		1"	
MIN. WATER SUPPLY SIZE REQUIRED PER TABLE **610.4 IN CALIFORNIA PLUMBING CODE**		1 1/4"	

WINDOW AND DOOR SCHEDULE



MARVIN ELEVATE WINDOWS
SERIES IN STONE WHITE
WINDOW HEIGHT TO MATCH (E)
BEDROOM #2 WINDOW AT PORCH

INTERIOR WOOD PANEL
SWING DOOR, SEE PLAN
FOR SWING DIRECTION

INTERIOR WOOD PANEL
SLIDING DOOR W/ CAVITY
SLIDER TRACK AND ROLLER

INTERIOR WOOD PANEL
SWING DOOR, SEE PLAN
FOR SWING DIRECTION

NOTE:
1. ALL WINDOW FRAME TO BE WHITE COLOR
2. ALL NEW WINDOWS SHOULD USE DOUBLE GLAZE
3. SEE TITLE 24 REPORT FOR MIN. U-FACTOR AND SHGC REQUIRED FOR NEW WINDOW.
4. NFRC LABEL WHICH STATS THE REQUIRED U-VALUE & SGHC FOR ALL FENESTRATION PRODUCTS SHALL NOT BE REMOVED PRIOR TO INSPECTION OR REMOVED BY A BUILDING INSPECTOR, AND SHALL REFLECT THE VALUES LISTED IN THE ENERGY REPORT.
5. GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BI-FOLD DOORS SHALL BE TEMPERED. PROVIDE A MANUFACTURER'S DESIGNATION SPECIFYING WHO APPLIED THE DESIGNATION, THE TYPE OF GLASS AND THE SAFETY GLAZING STANDARD WITH WHICH IT COMPLIES, AND THAT IS VISIBLE IN THE FINAL INSTALLATION. THE DESIGNATION SHALL BE ACID ETCHED, SANDBLASTED, CERAMICFIRED, LASER ETCHED, EMBOSSED, OR BE OF A TYPE THAT ONCE APPLIED CANNOT BE REMOVED WITHOUT BEING DESTROYED. A LABEL SHALL BE PERMITTED IN LIEU OF THE MANUFACTURER'S DESIGNATION.

BATHROOM FAN SCHEDULE

ROOM	AREA(SQF)	CEILING HEIGHT(FT)	REQUIRE CFM	CFM PROVIDED	PRODUCT
NEW BATH #2	43	9'-0"	50 CFM	50 CFM MIN.	CONTRACTOR TO VERIFY EXISTING FAN CAPACITY MEETS REQUIREMENT
NEW BATH #3	27	9'-0"	50 CFM	80 CFM	DELTA BREEZ GBR80 OR EQUIVALENT

PLUMBING FIXTURE SCHEDULE

#	LOCATION	TYPE	MODEL	MANUFACTURE	FINISH	NOTES
P-1	NEW BATHROOM	TOILET	CWT426CMFG + WT172M	TOTO	WHITE	1.28 GA./FLUSH
P-2	NEW BATHROOM	SHOWER HEAD	ALBION 15855LF	DELTA	POLISH CHROME	1.75 GPM @ 80 PSI
P-3	NEW BATHROOM	LAVATORY FAUCET	ALBION T142855-I	DELTA	POLISH CHROME	1.2 GMP @ 60 PSI

FIXTURE SUBSTITUTION BY CONTRACTOR OR OWNER SHALL COMPLY WITH 2022 CAL GREEN MANDATORY MEASURE FOR RESIDENTIAL. 1.28 GALLON/FLUSH AT WATER CLOSET, 1.8 GPM AT SHOWER HEAD @ 80PSI, 1.2 GPM AT LAVATORY FAUCET @ 60 PSI. PER CAL GREEN 4.303.1. 1.28

PARCEL # 74-1350-28

PROJECT # 22-04

PROPERTY OWNER

SERENA WONG
339 CREEDON CIR
ALAMEDA, CA 94577
510-367-7000

ARCHITECT
HUANG CHEN

7 CAPTAIN DRIVE, C413
EMERYVILLE, CA 94608
415-944-9698
HYC.BUILD@GMAIL.COM

RESIDENTIAL ADDITION AND BATHROOM REMODEL
339 CREEDON CIR
ALAMEDA, CA 94502

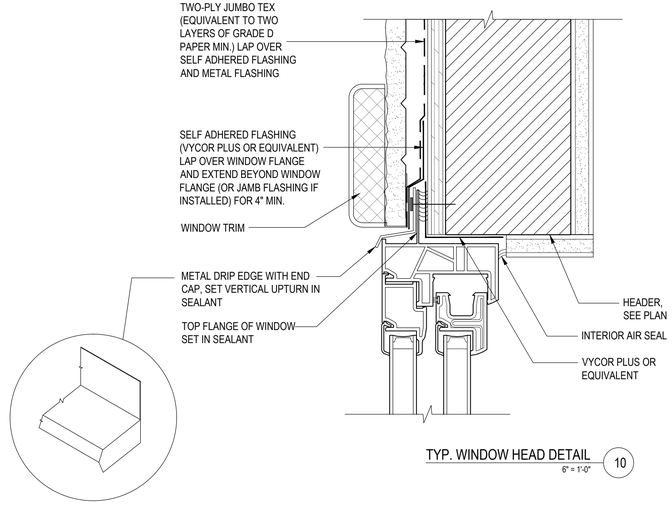
DESCRIPTION	REV.
BUILDING PERMIT 2025-07-14	

STAMP

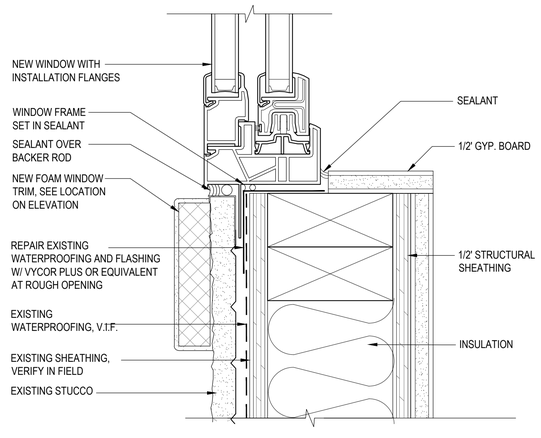
LICENSED ARCHITECT
HUANG YUAN CHEN
C36492
3-31-27
RENEWAL DATE
STATE OF CALIFORNIA

MISCELLANEOUS SCHEDULES & BUILDING DETAILS

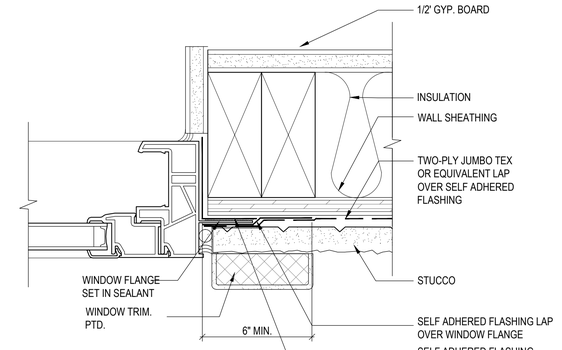
A-1.3



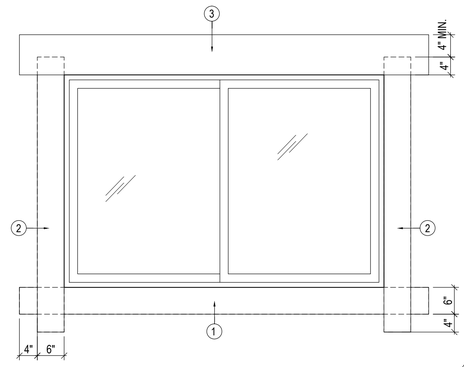
TYP. WINDOW HEAD DETAIL 10
6" = 1'-0"



TYP. WINDOW SILL DETAIL 9
6" = 1'-0"



TYP. WINDOW JAMB DETAIL 5
6" = 1'-0"



FLASHING INSTALLATION SEQUENCE: 1 — 2 — 3

1. SILL FLASHING EXTENDED INTO ROUGH OPENING. FOLD CORNER INTO SIDE DAM.
2. JAMB FLASHING EXTENDED ABOVE TOP OF ROUGH OPENING, LAP OVER SILL FLASHING
3. HEAD FLASHING LAP OVER TOP OF JAMB FLASHING AND EXTEND BEYOND THE EDGE OF JAMB FLASHING
4. APPLY A BED OF SEALANT ON TOP OF SILL, INSTALL WINDOW AND CAULK ALL EDGES
5. SILL FLASHING AND JAMB FLASHING SHOULD LAP OVER WEATHER BARRIER. WEATHER BARRIER SHOULD LAP OVER HEAD FLASHING

WINDOW FLASHING DETAIL 6
1/4" = 1'-0"

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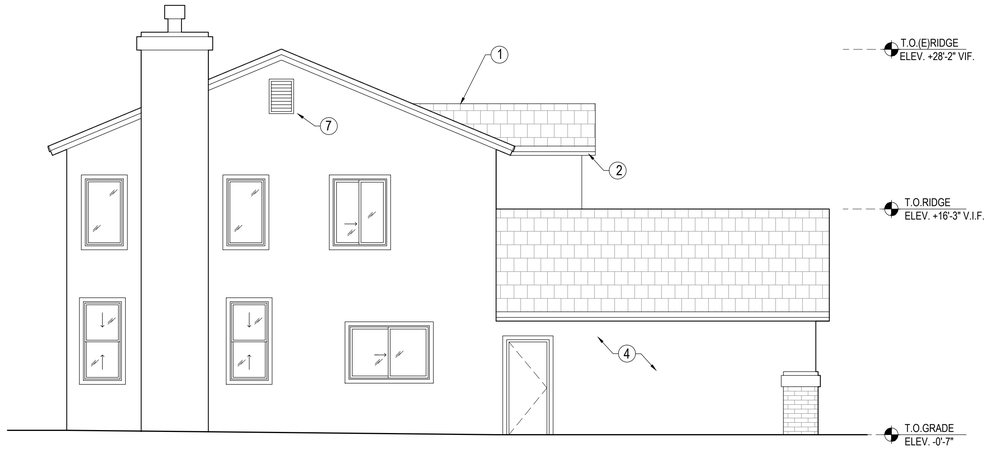
BUILDING DETAILS

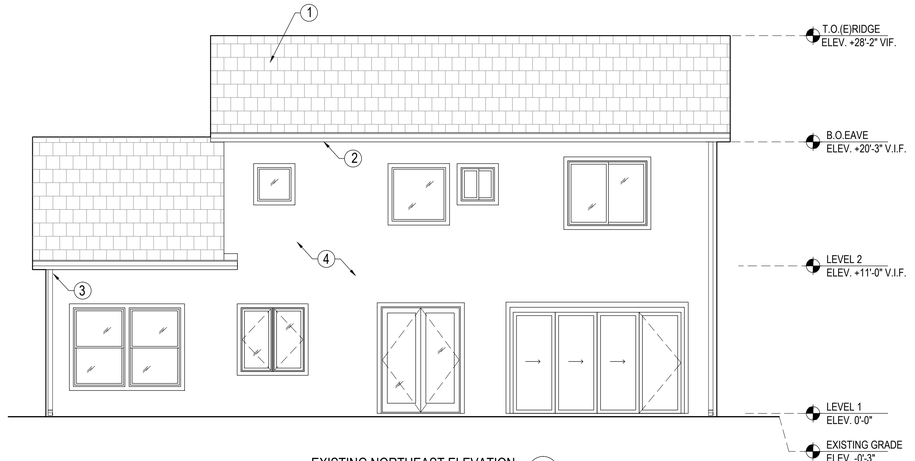
A-1.4

ELEVATION NOTES

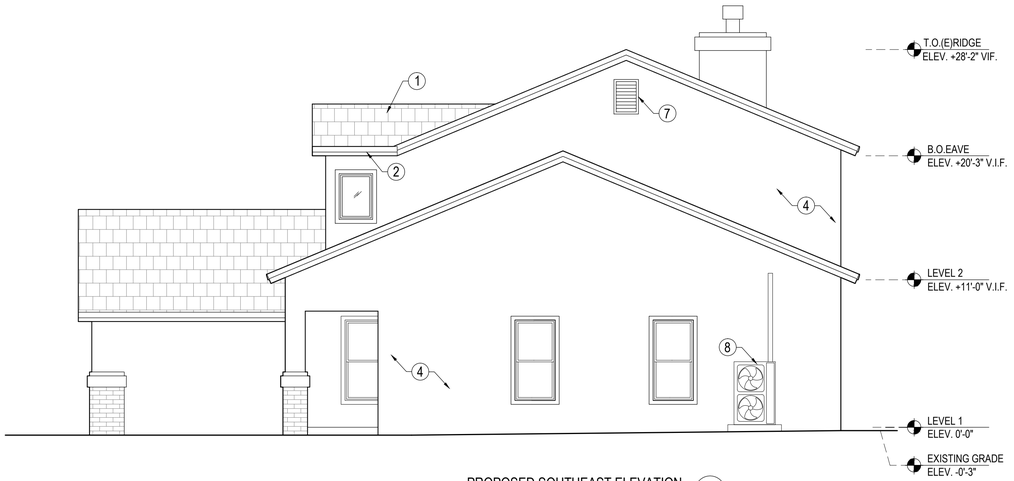
1. EXISTING CLAY TILE ROOF, NO CHANGE
2. EXISTING GUTTER
3. EXISTING DOWNSPOUT
4. STUCCO FINISH TO MATCH EXISTING
5. NEW WINDOW, COLOR AND STYLE TO MATCH EXISTING
6. BATHROOM EXHAUST
7. EXISTING GABLE VENT
8. NEW AIR CONDITIONER UNIT



PROPOSED NORTHWEST ELEVATION 6
3/16" = 1'-0"



EXISTING NORTHEAST ELEVATION 3
3/16" = 1'-0"



PROPOSED SOUTHEAST ELEVATION 5
3/16" = 1'-0"

EXISTING SOUTHEAST ELEVATION 2
3/16" = 1'-0"

PROPOSED SOUTHWEST ELEVATION 4
3/16" = 1'-0"

EXISTING SOUTHWEST ELEVATION 1
3/16" = 1'-0"

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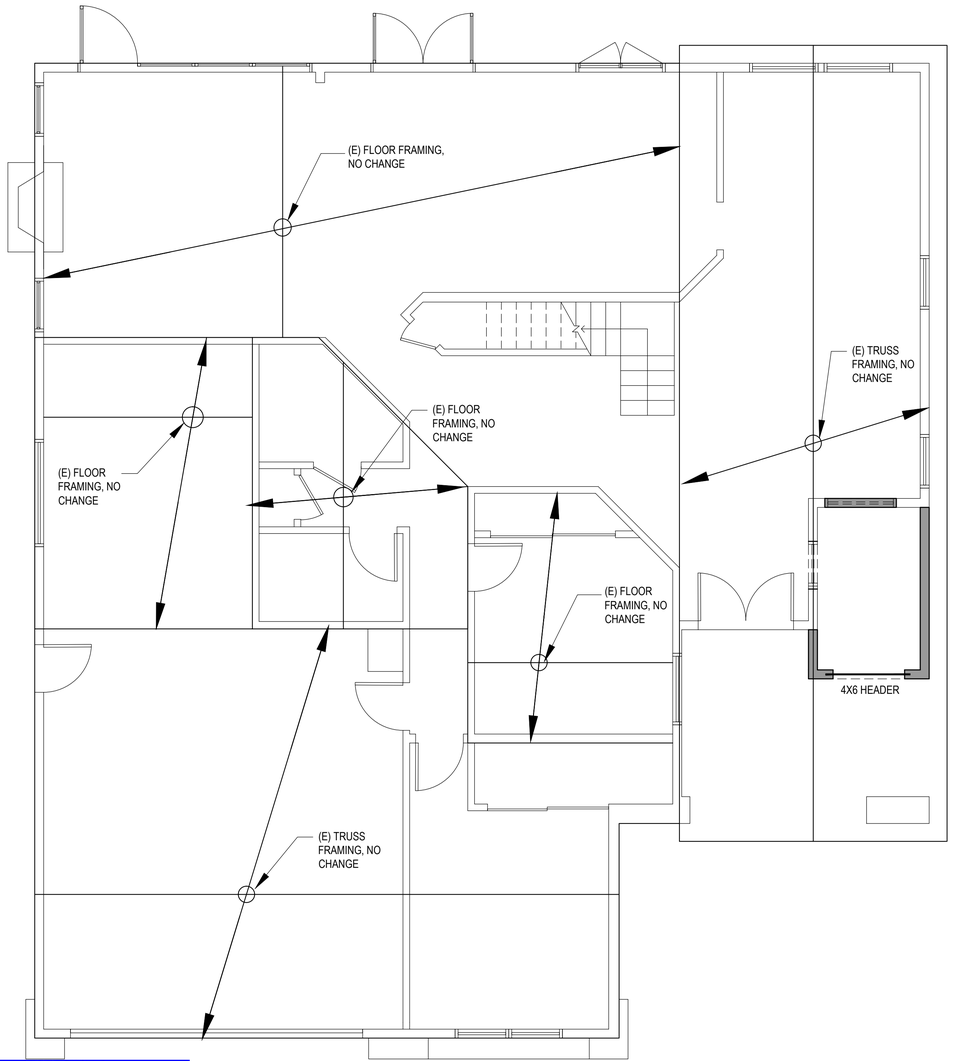
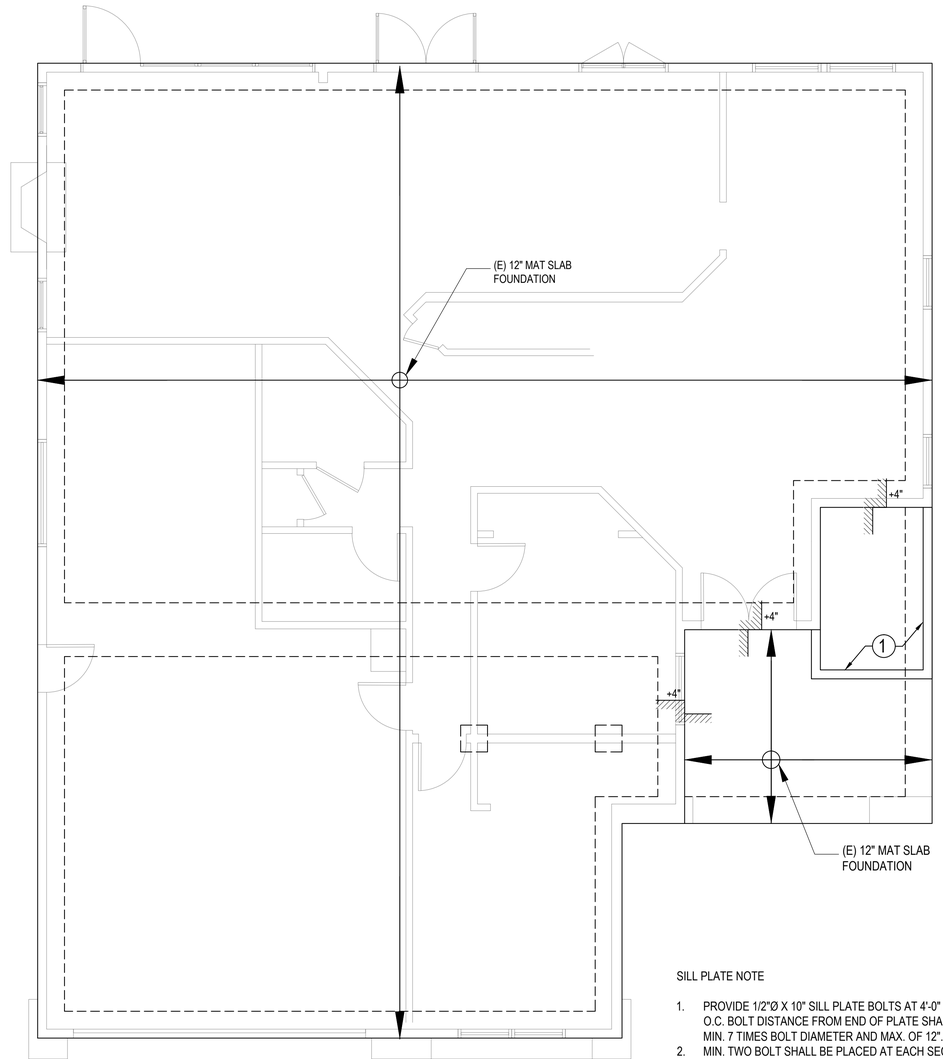
BUILDING ELEVATIONS

A-2.0



FRAMING PLAN 5
1/4" = 1'-0"



SILL PLATE NOTE

1. PROVIDE 1/2"Ø X 10" SILL PLATE BOLTS AT 4'-0" MAX. O.C. BOLT DISTANCE FROM END OF PLATE SHALL BE MIN. 7 TIMES BOLT DIAMETER AND MAX. OF 12".
2. MIN. TWO BOLT SHALL BE PLACED AT EACH SECTION
3. SILL BOLT SHALL BE GALVANIZED STEEL
4. SILL BOLT TO BE INSTALLED WITH EPOXY, SIMPSON STRONG TIE SET -3G OR EQUIVALENT,
5. SILL PLATE TO BE 2X4 PRESSURE TREATED WOOD

FOUNDATION PLAN 1
1/4" = 1'-0"

RECEIVED
Sep 16 2025
Permit Center
Alameda, CA 94501

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STRUCTURAL PLANS

S-1.1