NOTICE OF PENDING ACTION

Accessory Dwelling Unit, Coastal

Any interested party may submit comments on the proposed project prior to the deadline. Comments may be submitted to the project planner by email, telephone or mail. The project plans may be viewed by contacting the project planner (see reverse). A public comment period of at least 15 working days from application date is provided to allow comments to be considered prior to the local decision. Interested parties may request to be notified when a decision is made. The applicant, owner or any aggrieved person may appeal the project decision by submitting a written request at the Planning Department Zoning Counter within 14 calendar days following the decision date and paying an appeal fee. Additional information regarding the appeal process or fees may be obtained by phoning (831) 454-2130.

«APN»

«OWNER»
«STREET»
«CITY», «ZIP»

COUNTY OF SANTA CRUZ
PLANNING DEPARTMENT
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060
(831) 454-2580

NOTICE OF PENDING ACTION: COASTAL DEVELOPMENT PERMIT FOR AN ACCESSORY DWELLING UNIT

The Planning Department has received the following application for development within the Coastal Zone. The identified planner may be contacted for specific information on this application.

APPLICATON #: B-237568 APN: 027-231-36
APPLICATION INTAKE DATE: 11/21/2023
PROJECT ADDRESS: 1235 Scholl Lane, Santa Cruz, 95062

Proposal to convert an existing 484 square foot Accessory Dwelling Unit. Requires a Coastal Development Permit with public notice. Property located at 1235 Scholl Lane.

OWNER: Trung Huu Bui and Than Anh Ky
APPLICANT: Trung Huu Bui
SUPERVISORIAL DISTRICT: 3

PLANNER: Jerry Busch
EMAIL: Jerry.Busch@santacruzcountyca.gov

PHONE: (831) 454-3234
MAILING ADDRESS: 701 Ocean Street, Room 400, Santa Cruz, CA 95060

Public comments must be received by 5:00 p.m., December 20, 2023. A decision will be made on or shortly after December 21, 2023. Appeals of the decision will be accepted until 5:00 p.m. two weeks after the decision date. Planner will provide notification of decision to any requesting party. Information regarding the appeal process, including required fees, may be obtained by phoning (831) 454-2130. For more information on the proposed project, please contact planner.

BUI RESIDENCE - ACCESSORY DWELLING UNIT

1235 SCHOLL LN, SANTA CRUZ, CALIFORNIA, 95062

BUILDING PERMIT

HA NGUYEN + DESIGNS

501 Broadway #1081
Millbrae
California 94030
415.754.3066

CONSULTANTS

GENERAL NOTES

1. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL WORK PROVIDED BY ANY AND ALL SUBCONTRACTOR'S. GENERAL NOTES THAT REFER TO "CONTRACTOR" INCLUDE ALL WORK PROVIDED BY SUBCONTRACTORS. CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL GRADES, DIMENSIONS, AND CONDITIONS IN FIELD PRIOR TO THE START OF PROJECT AND AT APPROPRIATE TIMES DURING THE COURSE OF CONSTRUCTION BEFORE RELATED PROJECT PHASES.
2. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY WHEN ANY CONDITION IS DISCOVERED THAT WOULD PREVENT PROPER EXECUTION OF THE CONTRACT DOCUMENTS INCLUDING ANY CONFLICTS BETWEEN THE SITE CONDITIONS AND THE CONTRACT DOCUMENTS, AND ANY CONFLICTS OR AMBIGUITIES WITHIN THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE TIMELY COORDINATION AND SEQUENCING OF VARIOUS ARCHITECTS, ENGINEERS, LOCAL AUTHORITIES, MANUFACTURERS, SUPPLIERS, AND INSTALLERS REQUIREMENTS AND FOR THE TIMELY REVIEW OF REQUIRED EQUIPMENT AND MATERIALS FOR INSTALLATION PRIOR TO BEGINNING CONSTRUCTION OR SEQUENCING SUBSEQUENT CONSTRUCTION.
4. EACH SUBCONTRACTOR IS CONSIDERED A SPECIALIST IN HIS/HER RESPECTIVE FIELD AND SHALL, PRIOR TO THE SUBMISSION OF HIS/HER BID AND THE PERFORMANCE OF WORK, NOTIFY THE CONTRACTOR OF ANY WORK CALLED OUT IN THE CONSTRUCTION DOCUMENTS WHICH CANNOT BE EXECUTED AS INDICATED OR CANNOT BE FULLY GUARANTEED. THE CONTRACTOR WILL THEN NOTIFY THE OWNER AND ARCHITECT PRIOR TO ACCEPTANCE OF CONTRACTOR'S BID.
5. THE CONTRACTOR SHALL, AS A PART OF THE CONTRACT, SECURE AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS REQUIRED FOR THE CONSTRUCTION WORK.
6. UNLESS SPECIFICALLY NOTED OTHERWISE IN THE DRAWINGS, ALL WORK AND MATERIALS CALLED FOR ARE TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR AS A PART OF THE CONTRACT FOR CONSTRUCTION.
7. ALL WORK SHALL BE PERFORMED IN A PROFESSIONAL AND WORKMAN-LIKE MANNER IN KEEPING WITH THE HIGHEST STANDARDS OF THE CONSTRUCTION INDUSTRYBY WORKMEN EXPERIENCED AND LICENSED IN THEIR RESPECTIVE TRADES. ALL SUBCONTRACTORS SHALL COORDINATE THEIR WORK AND SCHEDULING WITH THE WORK OF OTHER SUBCONTRACTORS AND/OR THE GENERAL CONTRACTOR, AND SHALL BE RESPONSIBLE FOR HIS/HER OWN MATERIALS, TOOLS AND LABOR, REMOVE HIS TOOLS AND SURPLUS MATERIALS, AS WELL AS ANY DEBRIS RESULTING FROM THIS WORK FROM THE SITE.
8. ALL CONSTRUCTION SHALL BE IN STRICT COMPLIANCE WITH ALL PROVISIONS OF APPLICABLE CODES (UBC, UPC, UMC, NEC, ETC.). CODE COMPLIANCE SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. IN THE CASE OF CONFLICT WITH THE DRAWINGS AND APPLICABLE CODES, OR OF CONFLICT WITHIN THE DRAWINGS, THE MOST STRINGENT REQM'TS SHALL APPLY.
9. SPECIFICATIONS ARE HANDLED SEPARATELY IN THE FORM OF A MANUAL AND COVER ALL PERTINENT SECTIONS RELATED TO THE SCOPE OF THE WORK HEREIN. IN THE EVEN OF A CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS, THE SPECS SHALL PREVAIL.
10. CONTRACTOR IS TO INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. IN THE EVENT THAT MANUFACTURERS SPECIFICATIONS CONFLICT WITH THE DRAWINGS THEN MANUFACTURERS SPECIFICATIONS WILL PREVAIL.
11. EXISTING SITE CONDITIONS MUST BE VERIFIED BY CONTRACTOR. THE CONTRACTOR MUST BRING DISCOVERED INACCURACIES TO THE OWNER'S AND ARCHITECT'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
12. THE CONTRACTOR SHALL PROVIDE ANY AND ALL TEMPORARY BRACING AND SHORING REQUIRED TO SUPPORT ALL LOADS TO WHICH THE EXISTING BUILDING AND BUILDING COMPONENTS AS WELL AS NEW CONSTRUCTION, SOILS, UTILITIES, ETC. MAY BE SUBJECT TO DURING CONSTRUCTION.
13. CONTRACTOR IS TO PROVIDE SAMPLES OF REQUESTED SUBMITTALS AND OF ALL PROPOSED MATERIAL SUBSTITUTIONS TO THE ARCHITECT FOR REVIEW. THE ARCHITECT WILL REQUIRE FIVE WORKING DAYS FOR REVIEW OF ALL SUBMITTALS INCLUDING SHOP DRAWINGS. SHOP DRAWINGS AND MATERIALS TO THE ARCHITECT WILL HAVE BEEN REVIEWED AND APPROVED BY THE CONTRACTOR. BY SUBMITTING SHOP DRAWINGS AND SUBMITTALS TO THE ARCHITECT, THE CONTRACTOR REPRESENTS THAT THE CONTRACTOR HAS DETERMINED AND VERIFIED MATERIAL, FIELD MEASUREMENTS, AND FIELD CONSTRUCTION RELATED THERETO, AND HAS CHECKED AND COORDINATED THE INFORMATION CONTAINED WITHIN SUCH SUBMITTALS WITH THE REQUIREMENTS OF THE WORK AND OF THE CONTRACT DOCUMENTS. THE ARCHITECT'S REVIEW OF SUBMITTALS AND SHOP DRAWINGS IS FOR CONFIRMATION OF DESIGN INTENT ONLY.
14. PROVIDE ALL SUBMITTALS REQUESTED FOR ARCHITECT'S REVIEW INCLUDING MATERIAL SAMPLES, IN FIELD PAINT-OUTS AND CABINET AND OTHER REQUESTED SHOP DRAWINGS.
15. CONTRACTOR SHALL NOT DUMP ANY PLASTER, PAINT, OR SOLID WASTES ON THE SITE OR THROUGH THE SITE WASTE DISPOSAL SYSTEM. CONTRACTOR WILL PROVIDE ALL DEMOLITION AND PROGRESSIVE CLEAN-UPS.
16. THE CONTRACTOR SHALL CONDUCT THE FINAL CLEANING OF ALL AREAS AFFECTED BY THIS WORK. HE SHALL VISUALLY INSPECT ALL EXTERIOR AND INTERIOR SURFACES AND REMOVE ALL DIRT, WASTE, STAINS, PAINT DROPPINGS, CLEAN AND POLISH ALL GLASS EITHER INSTALLED OR AFFECTED BY THIS WORK.
17. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEEDENCE OVER SCALE DRAWINGS. LARGE SCALE DRAWINGS TAKE PRECEEDENCE OVER SMALLER SCALE DWGS, TYP.
18. GREAT CARE HAS BEEN TAKEN TO ENSURE KEY ELEMENTS ALIGN AND ARE PLACED ON CENTER (AS NOTED). CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY ARCHITECT SHOULD ANY DISCREPANCIES OCCUR TO MAINTAIN DESIGN INTENTIONS.
19. ALL DIMENSIONS ARE TO FACE OF FINISH, U.O.N.
20. WINDOW AND DOOR LOCATIONS ARE TYPICALLY GIVEN TO THE CENTERLINE. CO-ORDINATE WITH WINDOW AND DOOR MANUFACTURER FOR R.O. DIMENSIONS.
21. ALL QUESTIONS, DISCREPANCIES, AND CLARIFICATIONS BROUGHT TO THE ARCHITECT'S AND OWNER'S ATTENTION WILL BE SENT BY THE CONTRACTOR OR CONTRACTOR'S SUPERINTENDENT.
22. THESE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE PREPARED BY THE ARCHITECT EXCLUSIVELY AND COPYRIGHT OF THE ARCHITECT ALONE, AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT BETWEEN THE ARCHITECT AND PROJECT OWNER.
23. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 50 PERCENT OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH SECTION 5.408.1.1, 5.408.1.2 OR 5.408.1.3 OF CALGREEN; OR MEET A LOCAL CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT ORDINANCE, WHICHEVER IS MORE STRINGENT.
24. DOCUMENTATION OF THE ABOVE SHALL BE PROVIDED TO THE ENFORCING AGENCY WHICH DEMONSTRATES COMPLIANCE WITH SECTIONS 5.408.1.1.THRU 5.408.1.3. THE WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE ACCESSIBLE DURING CONSTRUCTION FOR EXAMINATION BY THE ENFORCING AGENCY.

ABBREVIATIONS

&	AND	IN.	INCH
L	ANGLE	INTM.	INTERMEDIATE
@	AT	INSUL.	INSULATION
CL	CENTER LINE	INT.	INTERIOR
CP	CENTER POINT		
#	POUND OR NUMBER	LAM.	LAMINATE
d	PENNY	LT.	LIGHT
ACOUS.	ACOUSTIC	M.B.	MACHINE BOLT
ADJ.	ADJUSTABLE	MAX.	MAXIMUM
APPROX.	APPROXIMATE	MECH.	MECHANICAL
A.F.F.	ABOVE FINISH FLOOR	MEM.	MEMBRANE
ALT.	ALTERNATE	MFR.	MANUFACTURER
ALUM.	ALUMINUM	MIN.	MINIMUM
A.B.	ANCHOR BOLT	MISC.	MISCELLANEOUS
		M.O.	MASONRY OPENING
BD.	BOARD	MTD.	MOUNTED
BITUM.	BITUMINOUS	MTL.	METAL
BLDG.	BUILDING	MUL.	MULLION
BLK.	BLOCK		
BLK'G.	BLOCKING	N	NORTH
B.O.	BOTTOM OF	N.I.C.	NOT IN CONTRACT
		NO.	NUMBER
CLG.	CEILING	N.T.S.	NOT TO SCALE
C.T.	CERAMIC TILE		
CLK'G.	CAULKING	O.C.	ON CENTER
CLR.	CLEAR	O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED
CONC.	CONCRETE		
CONN.	CONNECTION	P. LAM.	PLASTIC LAMINATE
CONST.	CONSTRUCTION	PLYWD.	PLYWOOD
CONT.	CONTINUOUS	PREP.	PREPARE
CTSK.	COUNTERSUNK	P.T.	PRESSURE-TREATED
CMU	CONCRETE MASONRY UNIT	PTD.	PAINTED
		PTN.	PARTITION
D	DEPTH		
DBL.	DOUBLE	Q.T.	QUARRY TILE
DEC	DECORATIVE	R.	RISER
DET./DTL.	DETAIL	RAD.	RADIUS
D.F.	DOUGLAS FIR	REFR.	REFRIGERATOR
DIA.	DIAMETER	REINF.	REINFORCED
DIM.	DIMENSION	REQ'D	REQUIRED
DN.	DOWN	RESIL.	RESILIENT
DWG.	DRAWING	RM.	ROOM
		R.O.	ROUGH OPENING
EA.	EACH	RWD.	REDWOOD
ELEC.	ELECTRICAL	RWL.	RAINWATER LEADER
ELEV.	ELEVATION		
E.P.	ELECTRICAL PANEL	SQ. FT.	SQUARE FEET
EQ.	EQUAL	SHT.	SHEET
(E)	EXISTING	SQ. IN.	SQUARE INCH
EXT.	EXTERIOR	SIM.	SIMILAR
		S.K.D.	SEE FOOD SERVICE DWGS
F.A.	FINISH FLOOR	SPEC.	SPECIFICATIONS
FIN.	FINISH	SQ.	SQUARE
FLR.	FLOOR	S.S.	STAINLESS STEEL
F.O.F.	FACE OF FINISH	STD.	STANDARD
F.O.S.	FACE OF STUD	STL.	STEEL
FT.	FOOT	STOR.	STORAGE
FTG.	FOOTING	S.S.D.	SEE STRUCTURAL DWGS
FURR.	FURRING		
F.O.M.	FACE OF MASONRY	TEL.	TELEPHONE
F.D.	FLOOR DRAIN	T&G	TONGUE AND GROOVE
		T.	TREAD
GA.	GAUGE	THK.	THICK
G.C.	GENERAL CONTRACTOR	TYP.	TYPICAL
GL.	GLASS	T.O.	TOP OF
GSM	GALVANIZED SHEET METAL	T.O.C.	TOP OF CONCRETE
GWB	GYPSUM WALL BOARD	T.O.S.	TOP OF SLAB
GYP. BD.	GYPSUM BOARD	T.S.	TUBE STEEL
H	HEIGHT	U.O.N.	UNLESS OTHERWISE NOTED
H.B.	HOSE BIB		
H.C.	HOLLOW CORE	VERT.	VERTICAL
HDWD.	HARDWOOD	V.I.F.	VERIFY IN FIELD
HDWRE.	HARDWARE	V.G.	VERTICAL GRAIN
H.M.	HOLLOW METAL		
HORIZ.	HORIZONTAL	W	WIDTH
HR.	HOUR	W/	WITH
		WD.	WOOD
		W/O	WITHOUT
		W.P.	WATERPROOF
		W.R.	WATTER RESISTANT

SYMBOL LEGEND

- ±0" — PLAN ELEVATION/CONTROL POINT
- ±0" — FLOOR ELEVATION OR DIMENSION POINT
- 1 — REVISION NUMBER
- REVISION
- 2 — WINDOW SYMBOL
- 3 — DOOR SYMBOL
- A — WALL CONSTRUCTION TYPE
- P-1 / 8'-0" A.F.F. — CEILING FIN., SEE FIN. SPECS; REFLECTED CEILING PLAN KEY; CEILING HEIGHT ABOVE FIN. FLR.
- 1 / A-201 — ELEVATION/SECTION NUMBER, SHEET NUMBER
- 2 / A-401 / 4 / 3 — INTERIOR ELEVATION
- 4 / A-301 — ENLARGED DETAIL NUMBER, SHEET NUMBER
- 1 — GRID LINE

PROJECT DIRECTORY

OWNER:

TRUNG BUI AND THANH KY
1235 SCHOLL LN
SANTA CRUZ, CALIFORNIA 95062

CONTACT: TRUNG BUI

T: (408) 250-1424
E: BHTRUNG@GMAIL.COM

DESIGNER:

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501 BROADWAY #1081
MILLBRAE, CA 94030

CONTACT: HA NGUYEN

T: (415) 754-3066
HA@HNDESIGNS.CO

CIVIL ENGINEER:

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1816 ENCLAVE PLACE
CONCORD, CA 94519

CONTACT: LEI ZHENG
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E: ENGINEER.LEI@GMAIL.COM

STRUCTURAL ENGINEER:

M.A. ENGINEERING
10137 ALCOSTA BLVD
SAN RAMON, CA 94583

CONTACT: MIKE COMAROTO
T: (650) 759-8621
E: MCOMAROTO@COMAROTO.COM

ENERGY CONSULTANT & GREEN-POINT RATER:

MILES HANCOCK
P.O. BOX 2202
REDWOOD CITY, CA 94064

CONTACT: MILES HANCOCK
T: (650) 804-9063
E: ENERGY@PACBELL.NET

PROJECT INFORMATION

PROJECT DESCRIPTION:

CONVERT AN EXISTING DETACHED GARAGE TO AN ACCESSORY DWELLING UNIT (ADU).

PROPOSED ADU IS DESIGNED TO RESPECT THE CHARACTER OF THE EXISTING HOME WHICH TO CONTRIBUTES TO SURROUNDING NEIGHBORHOOD WHILE ACCOMMODATING THE NEEDS OF A CONTEMPORARY FAMILY HOME.

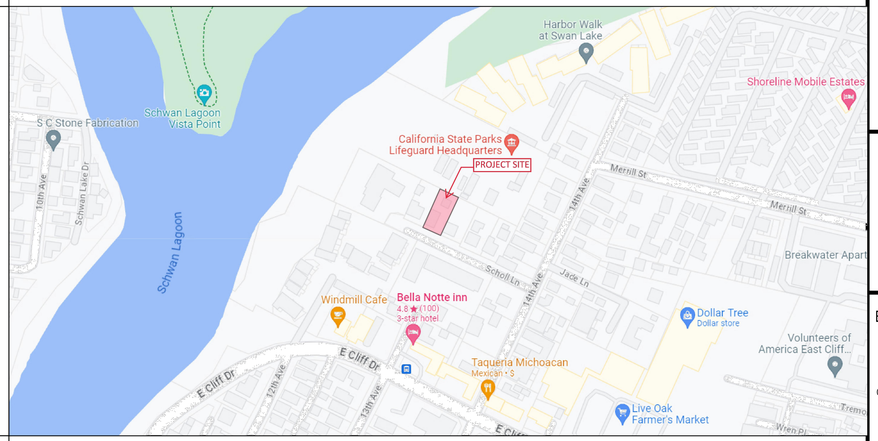
RESIDENTIAL DATA INFORMATION:

SITE ADDRESS:	1235 SCHOLL LN SANTA CRUZ, CALIFORNIA 95062
APN :	027231136
ZONING CLASSIFICATION:	R1-4 RESIDENCE DISTRICT
LOT SIZE (SQ. FT.):	8,276.4±
OCCUPANCY:	R-3
CONSTRUCTION TYPE:	V-B
STORIES:	ONE
FIRE SUPPRESSION:	NO
FLOOD ZONE:	FEMA ZONE X
GARAGE:	THREE (3) UNCOVERED SPACES

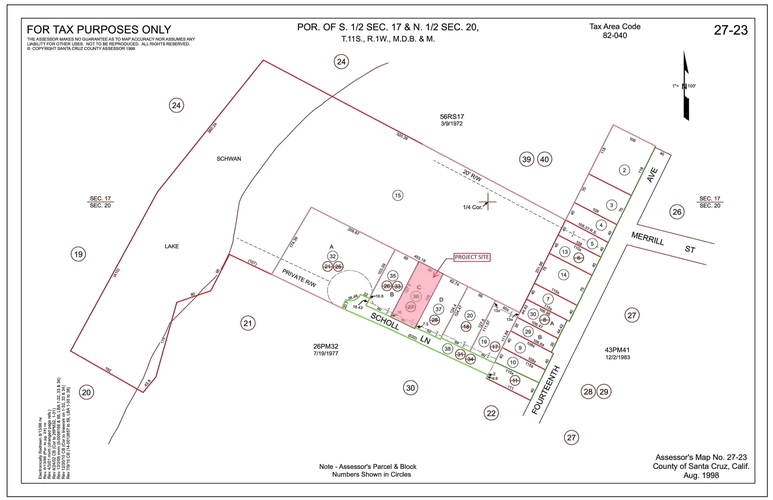
FLOOR AREA RATIO:

(E) HOUSE:	976.00 SF
(E) GARAGE TO CONVERT TO ADU:	484.00 SF
TOTAL=	1,460.00 SF (18%)

VICINITY MAP



PARCEL MAP



APPLICABLE CODES

2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA FIRE CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
SANTA CRUZ COUNTY MUNICIPAL CODE

NOTES:
1. THESE DRAWINGS ARE TO CONFORM TO THE REQUIREMENTS OF THE CODE EDITIONS CITED ABOVE. ANY WORK PERFORMED IN ASSOCIATION WITH THESE DRAWINGS MUST ALSO COMPLY WITH ANY THESE CODE EDITIONS.
2. IN THE EVENT OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

SHEET INDEX

BUI RESIDENCE - ACCESSORY DWELLING UNIT

1235 SCHOLL LN
SANTA CRUZ, CALIFORNIA 95062

OWNER

TRUNG BUI AND THANK KY
1235 Scholl Ln
Santa Cruz, California 95062

MARK	DATE	DESCRIPTION
	11.06.23	BUILDING PERMIT SUBMITTAL

PROJECT NO:	2312
CAD DWG FILE:	2312-G-000 COVER SHEET.DWG
DRAWN BY:	-
CHK'D BY:	-
COPYRIGHT:	

SHEET TITLE

COVER SHEET

G-000

SHEET - OF -

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE ADDITIONS 1000 FT2 OR LESS

CF1R-ADD-01-E

CERTIFICATE OF COMPLIANCE

Project Name:	1235 Scholl	**Enforcement Agency:**	City of Santa Cruz
Dwelling Address:	1235 Scholl Lane	**Permit Number:**	
City and Zip Code	Santa Cruz, 95062	**Permit Application Date:**	

A. General Information

01	Project Name	1235 Scholl	02	Date Prepared	2023-10-17
03	Project Location	1235 Scholl Lane	04	Building Front Orientation (deg)	205
05	CA City	Santa Cruz	06	Number of Dwelling Units with Additions	1
07	Zip Code	95062	08	Fuel Type	Natural gas
09	Climate Zone	3	10	Total Conditioned Floor Area (ft^2) (Addition)	484
11	Building Type	Single family	12	Slab Area (ft^2)	484
13	Project Scope	ADU Addition 400 ft^2 to 700 ft^2 Fenestration Kitchen Remodel Opaque Exterior Doors Space cooling system Space heating system Water heating	14	Fenestration Exceptions	Installing less than or equal to 16 ft^2 skylight

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE ADDITIONS 1000 FT2 OR LESS

CF1R-ADD-01-E

B. Building Insulation Details - Framed Walls/ Framed Floors (Section 150.2(a))

01	02	03	04	05	06		07	08	09	10	11
					Proposed					Required	
Tag/ID	Assembly Type	Frame Type	Frame Depth (inches)	Frame Spacing (inches)	Cavity R-value	Continuous Insulation R-value	U-Factor	Appendix JA4 Reference: Table	Appendix JA4 Reference: Cell	U-Factor from Table 150.1-A	Comments
Walls	Wall	Wood	2x4	@ 16 in. O. C.	15	0	0.095	4.3.1	4A	0	
Ceiling	Ceiling	Wood	2x4	@ 24 in. O. C.	30	0	0.031	4.2.1	20A	0	

Note:
- Where insulation is installed above the roofing membrane, or above the layer used to seal the roof from water penetration, the insulation shall have a maximum water absorption of 0.3 percent by volume when tested according to American Society for Testing and Materials (ASTM) Standard C272.
- Extensions of existing wood-framed walls may retain the dimensions of the existing walls and shall install cavity insulation of R-15 in a 2x4 framing and R-21 in a 2x6 framing.

C. Building Insulation Details - Non-framed (Section 150.1(c1)

This section does not apply to this project.

D. Building Insulation Details - Mass Walls (Section 150.1(c)1Bii)

This section does not apply to this project.

E. Slab On Grade/Concrete Raised Floor Insulation (Table 150.1-A)

This section does not apply to this project.

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE ADDITIONS 1000 FT2 OR LESS

CF1R-ADD-01-E

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

01	02
Radiant Barrier installed below the roof deck and on all gable end walls	Comments
n/a	Existing roof

A radiant barrier is required (for Climate Zones 2-15)
- Radiant barriers shall meet specific eligibility and installation criteria to receive energy 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 (ft^2 of vent area for each 300 square feet ft^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.

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

01	02	03	04	05	06	07	08	09	10	11	12	13
						Proposed				Required		
Tag/ID	Exception	Roof Pitch	Method of Compliance	Product Type	CRRC Product ID Number	Initial Solar Reflectance	Aged Solar Reflectance	Thermal Emittance	SRI (optional)	Aged Solar Reflectance	Thermal Emittance	SRI (optional)
Roof 1	No exceptions		Not in applicable climate zone	Asphalt shingles	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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 construction with a weight of 25 pounds per square foot (lb/ft^2) are also exempt.
- Liquid field applied coatings must comply with installation criteria from Section 110.8(j)4

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE ADDITIONS 1000 FT2 OR LESS

CF1R-ADD-01-E

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

01	02	03	04	05	06	07	08	09	10
	Maximum Allowed Fenestration Area For All Orientations ft^2 The Greater		Maximum Allowed West-Facing Fenestration Area Only ft^2 The Greater						
Addition Type ft^2	Maximum Calculated based on Allowed %	Maximum Calculated Allowed ft^2	Maximum Calculated based on Allowed %	Maximum Calculated Allowed ft^2	Maximum Allowed U-factor (Windows)	Maximum Allowed U-factor (Skylights)	Maximum Allowed SHGC (Windows)	Maximum Allowed SHGC (Skylights)	Comments
ADU Addition 400 ft^2 to 700 ft^2	121	120	n/a	n/a	0.3	0.30	n/a	0.23	

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 (ft^2) glass in door, it is assumed to meet the minimum required U-factor (0.30) and SHGC (0.23).
If meeting Exception 1 to 150.1(c)3A, installing less than or equal to 3 square feet (ft^2) tubular skylight, 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.

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Tag/ID	Fenestration Type	Frame Type	Dynamic Glazing	Orientation N, S, W, E	Number of Panes	Proposed Fenestration Area ft^2	Proposed West Facing Fenestration Area ft^2	Proposed U-factor	Proposed U-factor Source	Proposed SHGC	Proposed SHGC Source	Exterior Shading Device	Combined SHGC from CF1R-ENV-03
6040 Window	Operable window	Non-metal	None	South	Double pane	24	n/a	0.3	NFRC	0.65	NFRC	None	n/a
3030 Window	Operable window	Non-metal	None	West	Double pane	n/a	9	0.3	NFRC	0.65	NFRC	None	n/a
8068 Door	Operable window	Non-metal	None	West	Double pane	n/a	53.33	0.3	NFRC	0.65	NFRC	None	n/a
6040 Window	Operable window	Non-metal	None	North	Double pane	24	n/a	0.3	NFRC	0.65	NFRC	None	n/a
Skylight	Skylight	Non-metal	None	East	Double pane	9.74	n/a	0.3	NFRC	0.23	NFRC	None	n/a
15	Total Proposed Fenestration Area											120.07	

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE ADDITIONS 1000 FT2 OR LESS

CF1R-ADD-01-E

16	Maximum Allowed Fenestration Area	121
17	Compliance Statement: Design complies with the total allowed fenestration area	
18	Total Propose West-Facing Fenestration Area	62.33
19	Maximum Allowed West Facing Fenestration Area	n/a
20	Compliance Statement: Design complies with the total allowed west-facing fenestration area	
21	Proposed Fenestration U-factor (Windows)	0.3
22	Required Fenestration U-factor (Windows)	0.3
23	Compliance Statement: Design complies with the total allowed fenestration area	
24	Proposed Fenestration SHGC (Windows)	0.65
25	Required Fenestration SHGC (Windows)	n/a
26	Compliance Statement: Design complies with the maximum allowed fenestration SHGC	
27	Proposed Fenestration U-factor (Skylights)	0.3
28	Required Fenestration U-factor (Skylights)	0.30
29	Compliance Statement: Design complies with the maximum allowed fenestration U-value	
30	Proposed Fenestration SHGC (Skylights)	0.23
31	Required Fenestration SHGC (Skylights)	0.23
32	Compliance Statement: Design complies with the maximum allowed fenestration SHGC	

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

01	02	03	04	05	06	07
Tag/ID	Area	Proposed U-factor	Proposed U-factor Source	Required Maximum U-factor	Weighted average (Yes/No)	Comments
3068 Door	20.0	0.2	NFRC	0.2	Yes	

Notes:
- Any door with 25% or more glass is counted as a fenestration product in tables H and I.
- 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.

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE ADDITIONS 1000 FT2 OR LESS

CF1R-ADD-01-E

K. Space Conditioning (SC) Systems - Heating/ Cooling (Section 150.2(b) or (Section 150.1(c)7)

01	02	03
Dwelling Unit Name	Dwelling Unit Total CFA = Sum of Existing + Addition (ft^2)	Comments
1235 Scholl	484	

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.

01	02	03	04	05	06	07	08	09
Water Heating System ID or Name	Water Heating System Type	System Option (from	# of Water Heaters/Compressors in System	Water Heater Type	Fuel Type	Rated Input	Tank Location	Distribution Type
WHS 1	Domestic Hot Water (DHW)	3	1	Consumer Instantaneous	Natural Gas	199000	n/a	Standard Distribution System

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 communications 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 rating of 200,000 Btu per hour or less and no storage tank; or
4. For additions 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

M. Indoor Air Quality (IAQ) Fan Information

01	02	03
Fan Name	IAQ Type	Comments

CALIFORNIA ENERGY COMMISSION

PRESCRIPTIVE ADDITIONS 1000 FT2 OR LESS

CF1R-ADD-01-E

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Miles H Hancock	Documentation Author Signature:
Company: Miles Hancock	Signature Date: 2023-10-17 06:47:17
Address: P.O. Box 2202	CEA/ HERS Certification Identification (if applicable): R19-14-30012
City/State/Zip: Redwood City CA 94064	Phone: 650-804-9063

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, and I will take the necessary steps to accomplish this requirement.
6. 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, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: Ha Nguyen	Responsible Designer Signature:
Company : Ha Nguyen + Designs	Date Signed: 2023-10-17 08:44:05
Address: 501 Broadway #1081	License: N/A
City/State/Zip: Millbrae CA 94030	Phone: 415-754-3066

Easy to Verify at CalCERTS.com

Digitally signed by CalCERTS. 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.

CALIFORNIA ENERGY COMMISSION

ALTERATIONS TO SPACE CONDITIONING SYSTEMS (FORMERLY CF-1R-ALT-HVAC)

CF1R-ALT-02-E

CERTIFICATE OF COMPLIANCE

Project Name:	1235 Scholl	**Enforcement Agency:**	City of Santa Cruz
Dwelling Address:	1235 Scholl Lane	**Permit Number:**	
City and Zip Code	Santa Cruz, 95062	**Permit Application Date:**	

A. General Information
CF1R-ALT-02 is applicable to multiple space conditioning systems contained within a single dwelling unit.

01	Project Name	1235 Scholl	02	Date Prepared	2023-10-17
03	Project Location	1235 Scholl Lane	04	Building Type	Single family
05	CA City	Santa Cruz	06	Dwelling Unit Name	1235 Scholl
07	Zip Code	95062	08	Dwelling Unit Conditioned Floor Area (ft^2)	484
09	Climate Zone	3	10	Number of Space Conditioning (SC) Systems in this Dwelling Unit:	1

B. Space Conditioning (SC) System Information

01	02	03	04	05	06	07	08	09	10
SC System ID or Name	SC System Location or Area Served	CFA served by this SC System (ft^2)	Is the SC system a ducted system?	Installing a refrigerant containing component?	Installing new SC system components?	Installing more than 25 feet of ducts?	Installing entirely new duct system?	Installing entirely new SC system?	Alteration Type
System 1	Location 1	484	No	Yes	Yes	No	No	Yes	Entirely new or complete replacement space conditioning system

CALIFORNIA ENERGY COMMISSION

ALTERATIONS TO SPACE CONDITIONING SYSTEMS (FORMERLY CF-1R-ALT-HVAC)

CF1R-ALT-02-E

C. Extension of Existing Duct System, Greater Than 25 Feet (Section150.2(b)1Diib)

This section does not apply to this project.

D. Altered Space Conditioning System (Sections 150.2(b)1E and F)

This section does not apply to this project.

E. Entirely New or Complete Replacement Duct System, with or without Equipment Changeout (Sections 150.2(b)1Diia and 150.2(b)1E, F)

This section does not apply to this project.

F. Entirely New or Complete Replacement Space Conditioning System (Section 150.2(b)1C)

01	02	03	04	05	06	07	08	09	010	11	12	13
System ID/ Name	SC System Description of Area Served	Heating System Type	Altered Heating Component	Heating Efficiency Type	Heating Minimum Efficiency Value	Cooling System Type	Altered Cooling Component	Cooling Efficiency Type	Cooling Minimum Efficiency Value SEER/SEER2	Cooling Minimum Efficiency Value EER/EER2/CEER	Required Thermostat Type	New Duct R-Value
System 1	Location 1	Ductless mini-split HP	All new heating components	HSPF	8	Ductless mini-split HP	All new cooling components	EERSEER	14	10	Setback Thermostat	n/a

Required Documentation:
CF2R-MCH-01-E - Space Conditioning Systems
- Duct insulation requirement for the new portions of supply-air and return-air ducts or plenums: R6 (CZ 3, 5-7) and R8 (CZ 1, 2, 4, 8-16)
CF2R and CF3R-MCH-20-H Duct Leakage Test required
- Leakage rate compliance: less than or equal to 5 percent.
CF2R and CF3R-MCH-22 Fan Efficacy
CF2R and CF3R-MCH-23 Airflow Rate Verification
- Compliance: Fan Efficacy less than or equal to 0.58 W/cfm for non-gas furnaces and 0.45 W/cfm for gas furnaces and System Airflow greater than or equal to 350 cfm per ton.
- Alternative Compliance: CF2R and CF3R-MCH-28 Return Duct Design verification is an alternative to MCH-22 and MCH-23 verification.
CF2R and CF3R-MCH-25-H Refrigerant Charge verification required when refrigerant containing components are installed or altered (applicable in CZ 2, 8-15).
Exceptions:
Heating-only systems are exempt from the 0.58 W per cfm and 350 cfm per ton requirements.
Note: An "entirely new or replacement duct system" means at least 75% of the duct system is new duct material, and up to 25% may consist of reused parts from the dwelling unit's existing duct system (e.g., registers, grilles, boots, air handler, coil, plenums, duct material) if the reused parts are accessible and can be sealed to prevent leakage

REVISIONS	BY

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BUI RESIDENCE
1235 SCHOLL LANE
SANTA CRUZ, CA 95062

DRAWN	
CHECKED	M.H.
DATE	10-18-2023
SCALE	
JOB NO.	
SHEET	T24A
OF	SHEET

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 prescriptive section for more information.
(later)

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 labeled 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 § 1108(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 U0.184. 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(i)	**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)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. *
§ 110.2(g)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(a)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. *
§ 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(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:

§ 110.6(j)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 are 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. *

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. Each dual 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) 1Giii4iv. 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) 1Gii; 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 vented 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

§ 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 all 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:

5/6/22

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 race way 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(l)	**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 240 V 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

CALIFORNIA ENERGY COMMISSION

ALTERATIONS TO SPACE CONDITIONING SYSTEMS (FORMERLY CF-1R-ALT-HVAC)

CF1R-ALT-02-E
(Page 3 of 3)

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Miles H Hancock	Documentation Author Signature: Miles Hancock
Company: Miles Hancock	Signature Date: 2023-10-17 06:47:17
Address: P.O. Box 2202	CEA/ HERS Certification Identification (if applicable): R19-14-30012
City/State/Zip: Redwood City CA 94064	Phone: 650-804-9063

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, and I will take the necessary steps to accomplish this requirement.
6. 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, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: Ha Nguyen	Responsible Designer Signature: Ha Nguyen
Company : Ha Nguyen + Designs	Date Signed: 2023-10-17 08:44:05
Address: 501 Broadway #1081	License: N/A
City/State/Zip: Millbrae CA 94030	Phone: 415-754-3066

Easy to Verify at CalCERTS.com

Digitally signed by CalCERTS. 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.

Registration Number: 223-D016600150A-A02001A | Registration Date/Time: 2023-10-17 08:44:05 | HERS Provider: CalCERTS

CA Building Energy Efficiency Standards - 2022 Residential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Report Generated: 2023-10-17 08:44:08

REVISIONS	BY

Miles Hancock
TITLE 24 ANALYSIS
297 Alta Vista Drive
South San Francisco, CA 94080
energy.miles@gmail.com
Miles Hancock
Certified Energy Analyst

BUI RESIDENCE
1235 SCHOLL LANE
SANTA CRUZ, CA 95062

DRAWN	
CHECKED	M.H.
DATE	10-18-2023
SCALE	
JOB NO.	
SHEET	T24B
OF	SHEET

SITE PLAN NOTES

1. DEMOLITION CONTRACTOR SHALL RELOCATE REUSABLE MATERIALS TO DESIGNATED SALVAGE AREA, NON-USABLE MATERIALS SHALL BE PLACED APPROPRIATELY IN REFUSE BIN AND SHALL BE COVERED AT NIGHT AND DURING RELATIVE HIGH WINDS, RAIN, ETC...REFUSE BIN SHALL BE COVERED DURING TRANSFER TO AND FROM DUMP SITE. CONTRACTOR TO BE LIABLE FOR REFUSE SPILLING. ALL DEBRIS TO BE HAULED AWAY AND CLEAN-UP SHALL BE COMPLETED TO BROOM FINISH. EXISTING MATERIALS AND/OR STRUCTURE TO REMAIN SHALL BE PROTECTED FROM DUST, PAINT CHIPPING, ETC.... BY USE OF PLASTIC OR WHATEVER IS REQUIRED FOR PROPER PROTECTION. EXISTING STRUCTURES SHALL HAVE BRACING AND SHORING AS REQUIRED TO PROTECT THE EXISTING STRUCTURE. PROVIDE DE-WATERING FACILITIES FOR CONSTRUCTION AS REQUIRED. COORDINATE AS-BUILT INFORMATION, STRUCTURAL, ETC. TO DESIGNER/ENGINEER AS REQUIRED.

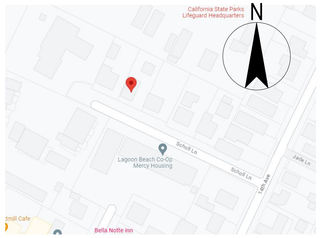
2. THE DISCHARGE OF POLLUTANTS TO ANY STORM DRAINAGE SYSTEM IS PROHIBITED, NO SOID WASTE, PETROLEUM BYPRODUCTS, SOIL PARTICULATE, CONSTRUCTION WASTE MATERIALS, OR WASTEWATER GENERATED ON CONSTRUCTION SITES OR BY CONSTRUCTION ACTIVITIES SHALL BE PLACED, CONVEYED OR DISCHARGED INTO THE STREET, GUTTER OR STORM DRAIN SYSTEM.

3. THE CONSTRUCTION SHALL NOT RESTRICT A FIVE-FOOTCLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULLBOXES,TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, PPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.

4. WHEN UTILITIES METER ALTERATION / RELOCATION OCCUR, INSTALLATION PROCEDURES SHALL BE VERIFIED AND APPROVED BY THE BUILDING INSPECTOR PRIOR TO INSTALLATION.

5.THIS IS NOT A SURVEYED PLAN AND ONLY SHOWS DIMENSIONS GIVEN BY HOMEOWNER. PROPERTY MEASUREMENTS SHOULD BE CONFIRMED WITH A LICENSED LAND SURVEYOR IF REQUIRED.

VICINITY MAP



GENERAL NOTES

1. THE CONSTRUCTION SHALL NOT RESTRICT A FIVE-FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL-BOXES, TRANSFORMERS, VAULTS, PUMPS,VALVES, METERS, ETC) OR TO THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES-WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/ OR ADDITIONAL EXPENSES.
2. AN APPROVED SEISMIC GAS SHUTOFF VALVE WILL BE INSTALLED ON THE FUEL GAS LINE ON THE DOWN STREAM SIDE OF THE UTILITY METER AND BE RIGIDLY CONNECTED TO THE EXTERIOR OF THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING.
3. PROVIDE LOW CONSUMPTION WATER CLOSETS FOR ALL NEW CONSTRUCTION. EXISTING SHOWER HEADS AND TOILETS MUST BE ADAPTED FOR LOW WATER CONSUMPTION.
4. PROVIDE 72" HIGH NON-ABSORBENT WALL ADJACENT TO SHOWER AND APPROVED SHATTER-RESISTANT MATERIALS FOR SHOWER ENCLOSURE.
5. ALL CONSTRUCTION WASTE AND DEBRIS MUST BE CONTAINERIZED AT ALL TIMES
6. FINAL APPROVAL REQUIRED BY THE PUBLIC WORKS DEPARTMENT FOR STREET IMPROVEMENTS, CURB CORES, CURBGUTTERS, ETC. SEPARATE PUBLIC WORKS PERMIT REQUIRED FOR DRIVEWAYS, APPROACH TO DRIVEWAY, SEWER LATERALS AND ANY WORK IN RIGHT OF WAY.
7. ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND AMENDMENTS.
8. A SURVEY SHALL BE PROVIDED BY A LICENSED SURVEYOR ON STRUCTURES WHICH DEFINE PROPERTY LINES, SET BACKS, DESIGNATED PARKLAND OR STREET RIGHT-OF-WAY.
9. DUST CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
10. WATER HEATER MUST BE STRAPPED TO WALL.
11. PROVIDE ULTRA FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION. EXISTING SHOWER HEADS AND TOILETS MUST BE ADAPTED FOR WATER CONSUMPTION.
12. LAG BOLTS: PROVIDE LEAD HOLE 40%-70% OF THREADED SHANK DIA. AND FULL DIA. FOR SMOOTH SHANK PORTION. 91 NDS
13. BLOCKING: ROOF RAFTERS AND CEILING JOINTS SHALL BE SUPPORTED LATERALLY TO PREVENT ROTATION & LATERAL DISPLACEMENT IN ACCORDANCE w/ THE PROVISIONS OF CH.8 & CH.6
14. CONTRACTOR AND/OR OWNER SHALL VERIFY CONSTRUCTION SITE TO CONFIRM THAT THERE IS NO TRACEOF DEMOLISHED SWIMMING POOL WITHIN 5 FT FROM PROPOSED PERIMETER OF THE CONSTRUCTION SITE. OTHERWISE, THEY NEED TO SUBMIT SOIL COMPACTION REPORT FROM LICENSED SOIL ENGINEER TO BUILDING INSPECTOR PRIOR TO FOUNDATION INSPECTION.
15. SHEARWALLS, LATHING & PLASTER IN MATERIALS SHALL CONFORM TO THE STANDARD LISTED IN CH.6 & CH.7 CRC
16. ALL BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED. "ENGINEER" MUST INCLUDE IN STRUCTURAL OBSERVATION NOTES.
17. PROVIDE RAIN GUTTERS AND CONVEY RAIN WATER TO THE STREET.
18. CONCRETE 3000PSI
19. PARALLEL BEAM E.2.0 PSI.
20. UFER GROUND IS REQUIRED AT NEW ELECTRICAL SERVICE.
21. UNDERGROUND UTILITIES REQUIRED ON SITE PLAN AND SHOW FOR ELECTRICAL, CABLE TV. AND TELEPHONE
22. ARC FAULT CIRCUIT INTERRUPTION PROTECTION IS REQUIRED FOR ALL BRANCH CIRCUITS PER 2022 CEC210.12 SHALL BE AFCI PROTECTED
23. BATHROOMS, KITCHEN, GARAGE & OUTSIDE OUTLETS WILL BE GFCI PROTECTED RECEPTACLE OUTLETS.
24. WATER SAVING WATER CLOSET w/1.28 GALLONS PER FLUSH.
25. PROVIDE MECHANICAL VENTILATION FOR BATHROOMS AND LAUNDRY ROOMS WITHOUT OPENABLE WINDOW.
26. GLAZING WHICH IS LESS THAN 60 INCHES FROM A FLOOR AND WITHIN A 24" ARC OF A DOORWAY'S VERTICAL EDGE MUST COMPLY WITH CH.3 CRC
27. LANDINGS AT DOOR. LANDINGS SHALL HAVE A WIDTH NOT LESS THAN THE WIDTH OF THE STAIRWAY OR THE DOOR, WHICHEVER IS GREATER.
28. EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH A NATURAL LIGHT IN ACCORDANCE WITH CRC R303.1(2022) OR SHALL BE PROVIDE AN AVERAGE ILLUMINATION OF 6 FEET-CANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30" ABOVE THE FLOOR LEVEL.
29. THE CONTRACTOR SHALL EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS. SURVEY THE PROPERTY AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND SCOPE OF WORK. ALL COST SUBMITTED SHALL BE BASED ON A THROUGH KNOWLEDGE OF ALL WORK AND MATERIALS REQUIRED. ANY DISCREPANCY AND/OR UNCERTAINTY AS TO WHAT MATERIALS OR PRODUCT IS TO BE USED SHOULD BE VERIFIED WITH THE OWNER OR ENGINEER OF RECORD.
30. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE.
31. IN THE EVENT A DISCREPANCY IS FOUND IN THE CONTRACT DOCUMENTS, THE OWNER AND THE DESIGNER/ENGINEERS SHALL BE NOTIFIED, IN WRITING, IMMEDIATELY.
32. FIRE SPRINKLER SYSTEM SHALL BE APPROVED BY OCFA AND AN APPROVED PLANS SHALL BE INCLUDED IN THE CONSTRUCTION PACKAGE PRIOR TO BUILDING PERMIT ISSUANCE.
33. VERIFY WITH AQMD FOR ASBESTOS REMOVAL PROCEDURE AND SUBMIT ASBESTOS REPORT TO BUILDING DIVISION PRIOR TO DEMOLITION PERMIT ISSUANCE.
34. TRUSS PACKAGE WITH AN APPROVED STAMP FROM THE ENGINEER OF RECORD SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO BUILDING PERMIT ISSUANCE.
35. LINE AND GRADE CERTIFICATE SHALL BE SUBMITTED TO THE BUILDING INSPECTOR PRIOR TO FOUNDATION INSPECTION.
36. SOIL COMPACTION REPORT IS REQUIRED FOR ALL NEW SFD HOUSE OR ADU AT THE TIME OF FOUNDATION INSPECTION.
37. WHEN SOLAR PANEL IS REQUIRED, SOLAR PLANS SHALL BE REVIEWED AND APPROVED BY BUILDING DIVISION PRIOR TO ROOF SHEATHING INSPECTION.

PROJECT DATA

JURISDICTION HAVING AUTHORITY:	COUNTY OF SANTA CRUZ, CA 95062
LEGAL DESCRIPTION:	TRACK 27-23, LOT 36
ASSESSORS PARCEL NO. APN:	02723136
CONSTRUCTION TYPE:	V-B
ZONING:	R-1-4 RESIDENTIAL
OCCUPANCY GROUP:	R3/U1
SPRINKLERS:	NO
NUMBER OF STORIES:	1 STORY, (ALLOWABLE : 2 STORY)
BUILDING MAX HEIGHT:	12 FT, (ALLOWABLE : 28)
REQUIRED SETBACKS:	
FRONT:	15 FT
REAR:	15 FT
SIDE:	5 FT
LOT SIZE :	8,205 SF (ACRES)
EXISTING:	
(E) MAIN HOUSE LIVING AREA	1,159 SF
(E) GARAGE AREA	484 SF
EXISTING TOTAL:	**1,159 SF**
NEW CONSTRUCTION:	
(N) DETACHED ADU AREA :	484 SF
NEW TOTAL:	**484 SF**
MAXIMUM LOT COVERAGE:	40%
OVERALL LOT COVERAGE:	1,159 SF + 484 SF = 1643 SF 1,643/ 8,205 SF = 20% OK
MAXIMUM FLOOR RATIO (FAR) :	**50%**
OVERALL FAR :	(1,159+484)/8,205=20%, **OK**

SHEET INDEX

SCOPE OF WORK

-Convertion of a garage into an ADU

PROJECT INFORMATION

OWNER: Trung Bui
PHONE: 408-250-1424
EMAIL: bhtrung@gmail.com

DESIGNER: LEI ZHENG
COMPANY: CECILIA HOME
PHONE: (510) 909-1933
EMAIL: ENGINEER.LEI@GMAIL.COM

PROFESSIONAL ENGINEER: LEI ZHENG
COMPANY: CECILIA HOME
PHONE: (510) 909-1933
EMAIL: ENGINEER.LEI@GMAIL.COM

LEGEND

EXISTING CONSTRUCTION TO BE DEMOLISHED

EXISTING CONSTRUCTION TO BE REMAINED

SYMBOL LEGEND

DRAINAGE DIRECTION AND SLOPE

PROPERTY LINE CORNER POINTS AND ELEVATION DATUM

KEYNOTE CALLOUTS

EXISTING TO BE REMAINED AND NEW CONSTRUCTION

EXISTING TO BE DEMOLISHED

APPLICABLE CODE

LEGAL JURISDICTION : COUNTY OF SANTA CRUZ, CA

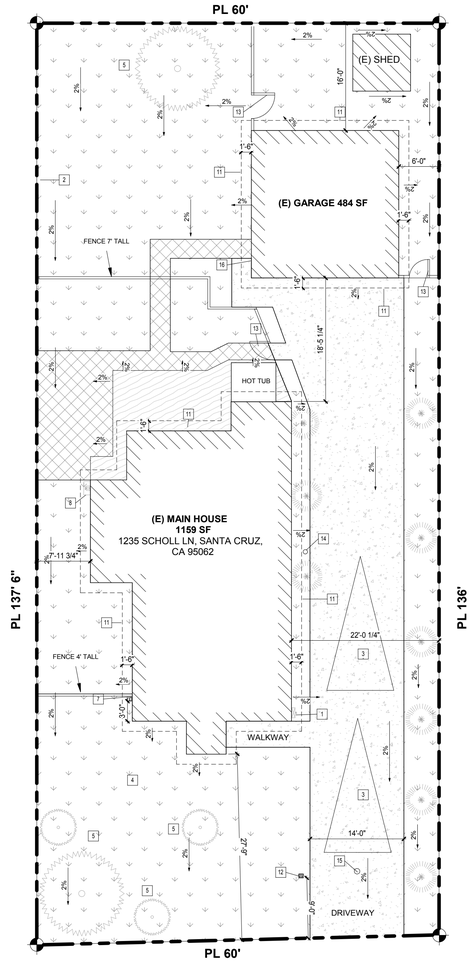
THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CODES:
2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA GREEN BUILDING STANDARDS
REGULATION OF THE STATE AND LOCAL FIRE MARSHALS & CITY ORDINANCE
COUNTY OF SANTA CRUZ MUNICIPAL CODE.

SITE PLAN KEYNOTES

1	(N) MAIN 2-METER ELEC. PANEL 200AMP	1.1	(N) ADU SUB ELEC. PANEL 100AMP
2	PERIMETER FENCE / BLOCK WALL		
3	DRIVEWAY, ON DRIVEWAY PARKING 10'X20' PER SPACE (WHERE OCCUR.)		
4	LANDSCAPE		
5	(E) TREE		
6	(E) A/C UNIT	14	CLEAN OUT
7	(E) GAS METER 3/4" PIPE	15	SEWER LINE POINT OF CONNECTION 4" PIPE
8	(E) WATER HEATER	16	GAS LINE POINT OF CONNECTION
9	(N) WATER HEATER		
10	(N) A/C UNIT		
11	ROOF LINE ABOVE		
12	(E) WATER METER 5/8"x3/4" PIPE		
13	GATE		

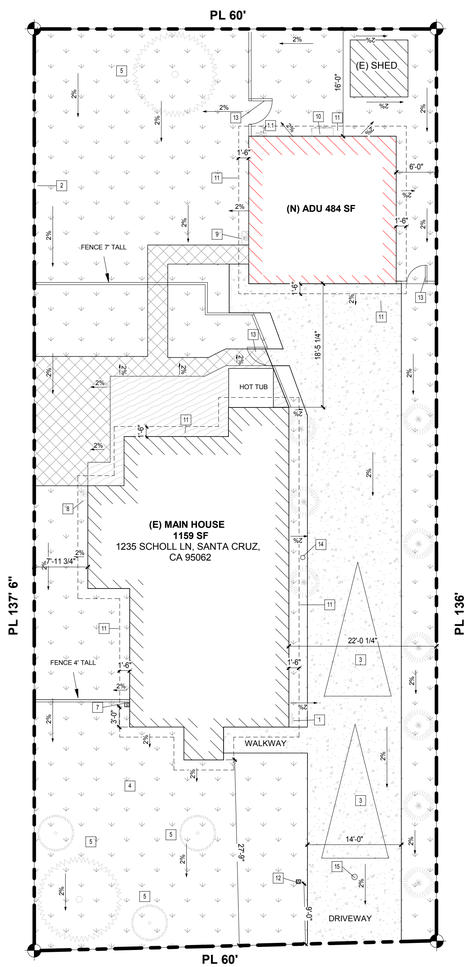
SPECIAL NOTES

THE DESIGN OF THE ACCESSORY DWELLING UNIT SHALL BE ARCHITECTURALLY COMPATIBLE WITH THE MAIN DWELLING UNIT, WITH ALL DESIGN. THE DESIGN, COLOR, MATERIAL AND TEXTURE OF THE ROOF SHALL BE SUBSTANTIALLY THE SAME AS THE MAIN DWELLING UNIT.



0 5'-4" 10'-8" 21'-4"

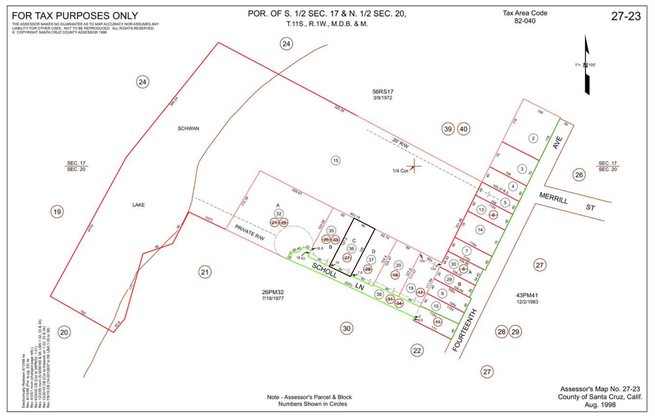
SCALE: 3/32" = 1'-0"



(N) SITE PLAN

3/32" = 1'-0"

PARCEL MAP



CECILIA HOME
WWW.CECILIA123.COM
CHIEF ENGINEER:LEI ZHENG (MASON)
PHONE: (510)909-1933
EMAIL: ENGINEER.LEI@GMAIL.COM

DURING CONSTRUCTION IF ANY DIFFICULTY OCCUR, PLEASE CONTACT ENGINEER IMMEDIATELY .IF CONTRACTOR DEVIATE FROM THE DRAWING WITHOUT PRIOR APPROVAL FROM ENGINEER, THE CONTRACTOR WILL TAKE ALL THE LIABILITY DUE TO DEVIATION.

1235 Scholl Ln, Santa Cruz, CA 95062

REV.	DESCRIPTION	DATE
0	APPLY FOR PERMITS	11/08/2023

Jurisdiction:

Licensor:

REGISTERED PROFESSIONAL ENGINEER LEI ZHENG No. 87690 Exp. 6/30/24 CIVIL STATE OF CALIFORNIA

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

A.00

NOTES - PROPOSED

GENERAL NOTES:

1. FIELD VERIFY ALL DIMENSIONS & SITE CONDITIONS PRIOR TO COMMENCING WORK.
2. REMODELING OF PRE-1978 STRUCTURES WITHOUT USING LEAD SAFE WORK PRACTICES ARE A VIOLATION OF CALIFORNIA HEALTH AND SAFETY CODE SECTION 105256. CONTRACTORS, REMODELERS, AND PAINTERS ARE REQUIRED TO USE "LEAD SAFE" WORK PRACTICES, PURSUANT TO TITLE 17, CALIFORNIA CODE OF REGULATIONS SECTION 36050.
3. EXISTING CONDITION: CONTRACTOR TO VERIFY CONDITION PRIOR TO STARTING PROJECT AND NOTIFY DESIGNER OF RECORD (DOR) IF EIXSTING IS DIFFERENT FROM THE ASSUMED CONDITION IN THE DRAWINGS. DOR SHALL BE ALLOWED SUFFICINET TIME TO MODIFY DRAWINGS/DESIGN FOR RE-SUBMITTAL.

ARCHITECTURAL NOTES:

1. SHOWER WALLS TO BE PROTECTED UP TO 72"H MINIMUM.
2. EMERGENCY EGRESS WINDOW REQUIREMENTS:
   a. 20" WIDE MIN.; 24" TALL MIN.
   b. 5.7 SQ. FT. CLEAR OPENING
   c. 44" MAX. FROM THE FINISH FLOOR TO THE WINDOW OPENING.
3. PROVIDE 36 INCH MINIMUM DEEP LANDING OUTSIDE ALL EXTERIOR DOORS (NOT MORE THAN 7.75 INCHES LOWER THAN THE THRESHOLD FOR IN-SWINGING DOORS AND SLIDING DOORS, AND NOT MORE THAN 1.5 INCH LOWER THAN THRESHOLD FOR OUT-SWINGING DOORS)

MECHANICAL NOTES:

1. THE DRYER DUCT SHALL BE A MINIMUM OF 36" TO OPENINGS INTO THE BUILDING.
2. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST DUCTS.
3. ALL NEW APPLIANCE IN THE GARAGE WILL HAVE HEATING ELEMENTS A MINIMUM OF 18 " AFF.

ELECTRICAL NOTES:

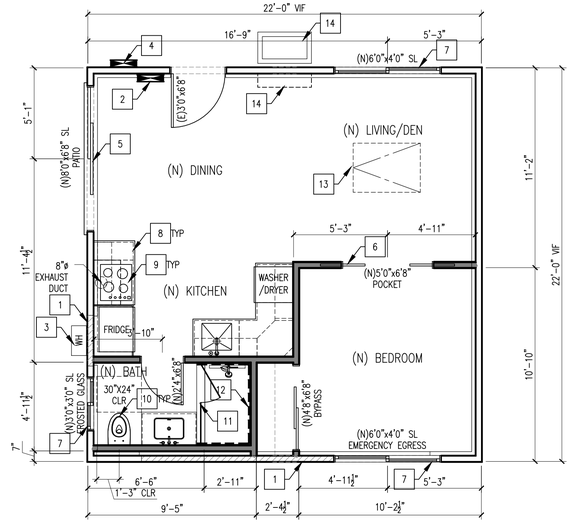
1. PROVIDE AFCI PROTECTION FOR ALL ROOMS AS REQUIRED BY ARTICLE 210. 12 2022 CEC.
2. PROVIDE SMOKE & CARBON MONOXIDE ALARMS COMPLIANCE WITH SECTION R314.3.2 ABOUT SMOKE ALARM MAINTENANCE AND REPLACEMENT.
3. ALL SMOKE & CARBON MONOXIDE ALARMS ARE TO BE AC/DC AND INTERCONNECTED.
4. PROVIDE SMOKE AND CARBON MONOXIDE ALARMS AT THE FIRST-FLOOR LEVEL ON THE PLANS AS REQUIRED BY SECT IO NS R314 & R3L5 CRC.
5. PROVIDE SMOKE AND CARBON MONOXIDE ALARMS AT THE SECOND-FLOOR LEVEL ON THE PLANS AS REQUIRED BY SECTIONS R314 & R3L 5 CRC.
6. ALL CAN LIGHTS SHALL BE IC/AT RATED.
7. LIGHTING LOCATED IN A TUB/SHOWER LOCATION SHALL BE WATERPROOF PER ARTICLE 410.10 (A) & (B) CEC.
8. PROVIDE VACANCY SENSORS ON ONE LIGHT IN THE FOLLOWING ROOMS: UTILITY ROOMS PER 150.0 (K)2J CEC.
9. PROVIDE MINIMUM SEPARATE ELECTRICAL CIRCUITS FOR:
   a) (2) SMALL APPLIANCE CIRCUITS FOR THE KITCHEN 20AMP
   b) GARBAGE DISPOSAL
   c) DISHWASHER
   d) 20AMP LAUNDRY CIRCUIT
   e) DRYER 30AMP MINIMUM 220V

PLUMBING NOTES:

1. PROVIDE CLEANOUTS PER SECTIONS 707 & 719 CPC.
2. PROVIDE A CLEANOUT WITHIN 2' OF THE BUILDING FOUNDATION ON THE EXTERIOR OF THE BUILDING.
3. ALL CLEANOUTS EXTENDED TO THE EXTERIOR WHEN LOCATED MORE THAN 20' FROM THE CRAWL HOLE.
4. PROVIDE A COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVES FOR ALL TUB/SHOWERS AND BATHTUBS & WHIRLPOOL TUBS PER SECTIONS 408.3 AND 409 CPC.
5. PROVIDE ISLAND SINK VENTING TO COMPLY WITH SECTION 909 CPC.
6. ALL PROPOSED HOSE BIBS TO HAVE NON-REMOVABLE BACKFLOW DEVICE.
7. PLUMBING CONTRACTOR WILL PROVIDE A SINGLE LINE DIAGRAM AT TIME OF INSPECTION AND ANY INSTALLATION PRIOR TO PLAN CHECK AND APPROVAL IS AT CONTRACTOR'S RISK.
8. DISHWASHER HOT WATER LINE AND THE HOT/COLD WATER LINES FOR THE CLOTHES WASHER WHERE QUICK-ACTING VALVES ARE INSTALLED SHALL BE PROVIDED WITH WATER HAMMER ARRESTER(S). WATER HAMMER ARRESTERS SHALL BE APPROVED MECHANICAL DEVICES THAT COMPLY WITH ASSE 1010 OR PDI-WH 201 AND SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO QUICK-ACTING VALVES PER 2022 CPC 609.10.
9. HOT WATER PIPING INSULATION REQUIRED: 3/4 INCH OR LARGER. 2022 CEC §150.0 (J) 2 A I, II, III
10. EXISTING LOT'S SEWER LATERAL PIPE MUST BE FIELD VERIFIED TO HAVE SUFFICIENT SIZE TO ALLOW ADDITION OF (N) PLUMBING FIXTURES. AT MIN., A 4"-DIAMETER PIPE CAN SERVE 4 OR MORE WATER CLOSETS.
11. EXISTING PLUMBING FIXTURES IN RESIDENCE THAT DO NOT MEET CURRENT WATER FLOW RATES MUST BE UPGRADED TO MEET WATER-CONSERVING FIXTURE REQUIREMENTS (CGBC 4.303.1)

CIVIL/SITE PLAN NOTES:

1. A MINIMUM 2% LOT DRAINAGE AWAY FROM THE BUILDING.
2. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM BUILDING AT A SLOPE OF NOT LESS THAN 6" (5 PERCENT SLOPE) IN THE FIRST 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IMPERVIOUS SURFACES WITHIN 10 FEET OF BUILDING SHALL BE SLOPED A MINIMUM OF 2 PERCENT AWAY FROM BUILDING.

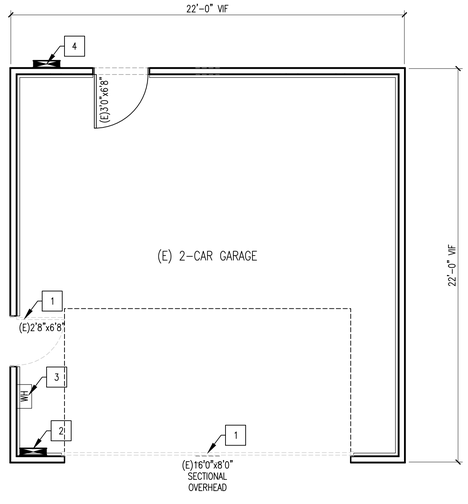


2 ADU FLOOR PLAN – PROPOSED
1/4" = 1'-0"

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

PLUMBING FIXTURE SCHEDULE

NEW KITCHEN				
KITCHEN SINK (INSTALL W/ GARBAGE DISPOSER)	KRAUS	STANDART PRO 22-INCH DROP-IN TOP MOUNT 16 GAUGE STAINLESS STEEL SINGLE BOWL SINK, #KHT301-22L	1	
KITCHEN FAUCET, SINGLE HOLE, DECK MOUNT	HANSGROHE	CENTO KITCHEN FAUCET, STAINLESS STEEL 1.75 GPM	1	KITCHEN FAUCET SHALL HAVE AN AVERAGE CONSUMPTION OF NOT MORE THAN 1.8 GPM AT 60 PSI. 2022 CPC 420.2, CGC 4.303.1.4.4.
GARBAGE DISPOSER	INSINK-ERATOR	GARBAGE DISPOSAL WITH POWER CORD, BADGER 5, STANDARD SERIES, 1/2 HP CONTINUOUS FEED, BLACK	1	
NEW BATHROOM				
BATHROOM VANITY, SINGLE	OVE DECORS	PARKWAY 36" BATH VANITY W/ QUARTZ TOP	1	
LAVATORY FAUCET, 1-HOLE, DECK-MOUNT	HANSGROHE	LOGIS 1.2 GPM SINGLE HOLE FAUCET WITH ECORIGHT, COMFORTZONE, AND AIR POWER TECHNOLOGIES - DRAIN ASSEMBLY INCLUDED, BRUSHED NICKEL, #71070821	1	LAVATORY FAUCET SHALL HAVE AN AVERAGE CONSUMPTION OF NOT MORE THAN 1.2 GPM AT 60 PSI. 2022 CPC 407.2, 2022 CGC 4. 303.1.4.1
WATER CLOSET, FLOOR MOUNT	TOTO	AQUIA IV ONE-PIECE TOILET - 1.0 GPF & 0.8 GPF, ELONGATED BOWL - #MS646124CUMFG#01	1	WATER CLOSET SHALL HAVE AN AVERAGE CONSUMPTION OF NOT MORE THAN 1.28 GALLONS OF WATER PER FLUSH. 2022 CPC 411.2, 2022 CGC 4. 303.1.1.
SHOWER SET - A COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVES	HANSGROHE	THERMOSTATIC SHOWER SYSTEM WITH VOLUME CONTROL & DIVERTER TRIM, 24" WALL BAR, SHOWER ARM, SHOWER HEAD & MULTI FUNCTION HAND SHOWER, BRUSHED NICKEL	1	SHOWERHEAD SHALL HAVE AN AVERAGE CONSUMPTION OF NOT MORE THAN 1.8 GPM AT 80 PSI. 2022 CPC 408.2.1, CGC 4.303.1.3



1 GARAGE FLOOR PLAN – EXISTING AND DEMOLITION
1/4" = 1'-0"

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

NOTES - EXISTING & DEMOLITION

GENERAL NOTES:

1. FIELD VERIFY ALL DIMENSIONS & SITE CONDITIONS PRIOR TO COMMENCING WORK.

DEMOLITION NOTES:

1. ANY MISCELLANEOUS CONSTRUCTION BEHIND DEMOLISH STRUCTURES OR SURFACES WHICH COULD AFFECT (N) CONSTRUCTION TO BE BOUGHT TO THE ATTENTION OF THE DESIGNER.
2. CONTRACTOR TO PROTECT ALL (E) TO REMAIN WALLS, WINDOWS, FLOORS, STRUCTURES, AND CEILING FROM DAMAGE DURING CONSTRUCTION AND SHALL RESTORE THEM TO ORIGINAL CONDITION IF REQUIRED.
3. WINDOWS AND DOORS TO BE REMOVED, REPAIRED AND REINSTALLED OR STORED FOR POTENTIAL SALVAGE OR REUSE; COORDINATE SCOPE OF WORK WITH FLOOR PLANS AND ELEVATIONS.
4. BUILDING MATERIAL AND FIXTURES TO BE STORED FOR POTENTIAL SALVAGE OR REUSE INCLUDE BUT ARE NOT LIMITED TO BE BRICK PAVERS, ROOF TILES, DECORATIVE ENTRY DOOR TILES, DOOR HARDWARE, TRIM AND CASING, PLUMBING FIXTURES AND APPLIANCES.
5. DEMOLITION IS NOT LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE COMPLETE SCOPE OF DEMOLITION WORK TO COMPLETE THE PROJECT. REFER TO ALL DRAWINGS FOR FURTHER DEMOLITION WORK AND COORDINATED EXTENT.
6. PROVIDE TEMPORARY SUPPORT AS REQUIRED.
7. ROOF TILES, ROOF PAPERS, AND FELTS TO BE REMOVED TYPICAL TO EXPOSE ROOF DECKING WHERE NOTED.
8. INTERIOR PLASTER, TILE AND DRYWALL FINISHES TO BE REMOVED TYPICAL TO EXPOSE WOOD STUD FRAMING WHERE NOTED.
9. ALL (E) PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEM TO BE REMOVED UON; MAKE READY FOR INSTALLATION OF (N) PLUMBING PIPES AND FIXTURES, (N) ELECTRICAL WIRING, FIXTURES AND OUTLETS, AND (N) MECHANICAL EQUIPMENT, DUCTS AND REGISTERS.
10. PROVIDE TEMPORARY SHORING PRIOR TO REMOVAL OF BEARING WALL.

KEYNOTES

1. (E) DOOR TO REMOVE
2. (E) ELECTRIC PANEL TO RELOCATE
3. (E) TANKLESS WATER HEATER TO REMOVE
4. (E) SOLAR DC CONTROLLER AND DISCONNECT

LEGEND

- (E) WALL
- (N) WALL
- (N) WALL INFILL

TRUE NORTH

KEYNOTES

1. (N) WALL INFILL
2. (N) ELECTRIC PANEL
3. (N) TANKLESS WATER HEATER
4. (E) SOLAR DC CONTROLLER AND DISCONNECT
5. (N) PATIO DOOR WITH LOCK
6. (N) SOLID-CORE INTERIOR DOOR
7. (N) DOUBLE-PANE VINYL WINDOW
8. (N) KITCHEN CABINET
9. (N) KITCHEN APPLIANCE
10. (N) PLUMBING FIXTURE, SEE PLUMBING SCHEDULE
11. (N) TEMP. GLASS SHOWER DOOR & PARTITION
12. SHOWER WALLS TO BE PROTECTED (TITLED) UP TO CEILING
13. (N) VENTED SKYLIGHT ABOVE, VELUX #VCE 3046
14. (N) DUCTLESS MINI-SPLIT SYSTEM HEAT PUMP SYSTEM

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OWNER

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MARK	DATE	DESCRIPTION
	11.06.23	BUILDING PERMIT SUBMITTAL

PROJECT NO: 2312
CAD DWG FILE: 2312-A-101 FLOOR PLAN - EXISTING AND PROPOSED.DWG
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FLOOR PLAN - EXISTING AND PROPOSED

A-101

SHEET - OF -

NOTES

ROOFING SYSTEM:

TYPICAL FOR ALL ROOF PLANES WITH PITCHES 2:12 & GREATER

CLASS 'A' ROOFING SYSTEM, CERTAINTEED LANDMARK, MOIRE BLACK, O/ ROOFING UNDERLAYMENT, BY MANUFACTURER, O/ PLYWOOD ROOF SHEATHING, SEE STRUCTURAL DWGS.

PROVIDE MIN 24 GA METAL FLASHING, (GSM UNLESS OTHERWISE REQD *), O/ SELF-ADHERED FLASHING, BY MANUFACTURER, AT ALL RDIGES, HIPS, VALLEYS, PITCH TRANSITIONS, RAKES, AND EAVES. PROVIDED HEMMED DRIP EDGES AT RAKES, GUTTER-LESS EAVES, ALL OTHER APPLICABLE FLASHING LEGS.

* COORDINATE ALL MATERIALS WITH FLASHING & GUTTER/RAIN WATER LEADERS MATERIAL. DO NOT USE DISSIMILAR METALS. PROTECT AGAINST GALVANIC ACTION.

SUBMIT PROPOSED ROOFING SYSTEM COMPONENT LIST & DATA FOR DESIGNER REVIEW & OWNER APPROVAL PRIOR TO ORDERING. INSTALL PER ALL CODE & MANUFACTURER REQUIREMENTS. COORDINATE COMPATIBILITY OF ALL MATERIALS & SYSTEMS.

ROOF VENT CALCULATIONS:

PROVIDE (E) ROOF VENTING: 484 SQ. FT. AREA DIVIDED BY 300 EQUALS 1.6 SQ. FT. OF VENTS REQUIRED

HIGH VENTING MINIMUM 50% REQUIRED: 0.80 SQ FT.

TWO (E) LOW-PROFILE ROOF VENT, 32" X 23", 0.5 SQ. FT. NET FREE VENT AREA PER UNIT

0.5 SQ. FT. X 2 = 1 SQ. FT. OF HIGH VENTING PROVIDED.

LOW VENTING MINIMUM 50% REQUIRED: 0.80 SQ FT.

TWO (E) GABLE LOUVER VENT, 16" X 24", 0.73 SQ. FT. NET FREE VENT AREA PER UNIT

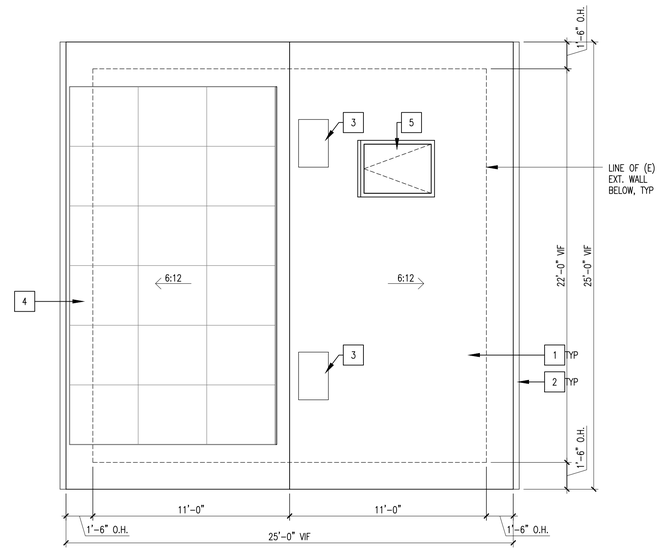
0.73 SQ. FT. X 2 = 1.46 SQ. FT. OF LOW VENTING PROVIDED.

GENERAL NOTES:

FIELD VERIFY ALL DIMENSIONS & SITE CONDITIONS PRIOR TO COMMENCING WORK.

ROOF PLAN NOTES:

1. SYMBOLS SHOWN ON LEGENDS ARE FOR GENERAL USE & MAY NOT NECESSARY APPEARING ON PLANS.
2. THESE NOTES SUPPLEMENT THOSE FOUND ELSEWHERE IN THESE DOCUMENTS; ALL RECMTS SHALL REMAIN IN FULL FORCE REGARDLESS OF WHERE THEY APPEAR. SEE OTHER SHEETS FOR ADDITIONAL INFORMATION & REQUIREMENTS.
3. SUBMIT ANY PROPOSED CHANGE OR DEVIATION FROM THESE NOTES AS A SUBSTITUTION REQUEST OR REQUEST FOR INFORMATION.
4. SKYLIGHT/SUN TUNNEL, ADD ALTERNATIVE AT OWNER OPTION: SKYLIGHTS SHALL FULLY COMPLY WITH CRC & TITLE 24 ENERGY REPORT FOR REQD U-VALUE, SHGC, ETC. PROVIDE VELUX SKYLIGHT W/ ALL FLASHING & ACCESSORIES BY VELUX WHERE POSSIBLE, COORD W/ ROOF MATL & PROFILE, INSTALL PER ALL MFR INSTRUCTIONS & TO MAINTAIN ALL WARRANTIES. IAPMO-ES EVALUATION REPORT ER-0199.
5. PROVIDE A MINIMUM OF TWO-LAYERS OF 15# FELT UNDER ALL ROOFING MATERIALS WHEN THE ROOF SLOPE IS LESS THAN 5:12.
6. PROVIDE A 1" CLEARANCE FROM THE ROOF INSULATION TO THE BOTTOM OF THE ROOF SHEATHING.
7. ALL NEW ROOF DRAINAGE WILL BE DIRECTED TO LANDSCAPED AREAS TO THE EXTENT FEASIBLE AND NOT ONTO ADJACENT PROPERTIES.
8. MECHANICAL VENTS ARE TO TERMINATE A MINIMUM OF 3' FROM OPENING INTO BUILDING.
9. THE OPERABLE SKYLIGHT SHALL BE PROTECTED BY A NON-COMBUSTIBLE MESH SCREEN WHERE THE DIMENSIONS OF THE OPENINGS IN THE SCREEN SHALL NOT EXCEED 1/8 INCHES PER R337.8.2.2.
10. VENTS AT THE ROOF TO BE A MINIMUM OF 3 FEET ABOVE OR 10 FEET HORIZONTALLY AWAY FROM OPERABLE SKYLIGHTS PER CPC 906.2.

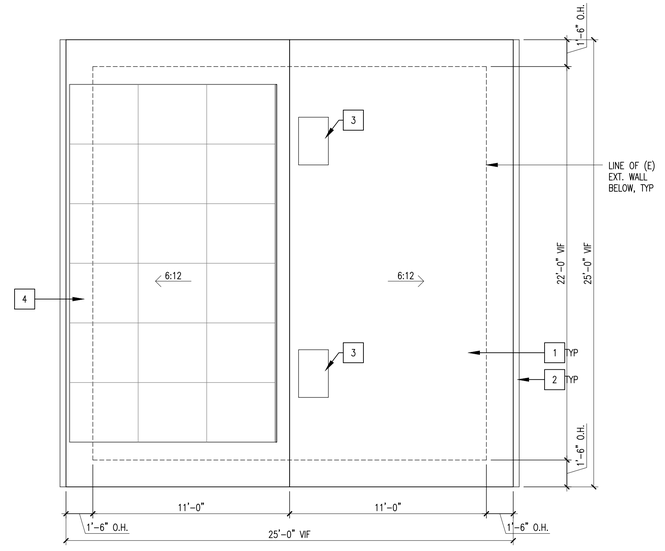


2 ROOF PLAN – PROPOSED
1/4" = 1'-0"

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

KEYNOTES - (N) ROOF

1. (E) SHINGLE ROOF, BLACK
2. (E) FASCIA GUTTER, PAINTED WHITE
3. (E) LOW-PROFILE ROOF VENT
4. (E) PHOTOVOLTAIC PANEL
5. (N) VENTED SKYLIGHT



1 ROOF PLAN – EXISTING
1/4" = 1'-0"

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

KEYNOTES - (E) ROOF

1. (E) SHINGLE ROOF, BLACK
2. (E) FASCIA GUTTER, PAINTED WHITE
3. (E) LOW-PROFILE ROOF VENT
4. (E) PHOTOVOLTAIC PANEL

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OWNER

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MARK	DATE	DESCRIPTION
	11.06.23	BUILDING PERMIT SUBMITTAL

PROJECT NO:	2312
CAD DWG FILE:	2312-A-102 ROOF PLAN – EXISTING AND PROPOSED.DWG
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SHEET TITLE

ROOF PLAN - EXISTING AND PROPOSED

A-102

SHEET – OF –

ELECTRICAL NOTES

1. ELECTRICAL, LIGHTING & MECHANICAL DEVICES SHOWN ON THE DRAWINGS INDICATES ARCHITECTURAL DESIGN INTENT ONLY. ELECTRICAL AND MECHANICAL SUBCONTRACTOR TO MEET WITH OWNER FOR FINAL APPROVAL AND/OR REVISIONS.
2. ITEMS TO BE VERIFIED WITH OWNER:
   - 2.1. PHONE & T.V. JACK LOCATIONS PRIOR TO INSTALLATION. VERIFY TYPE OF CABLING AND NUMBER OF LINES.
   - 2.2. ALL ELECTRICAL FIXTURES AND APPLIANCES INCLUDING MAKE AND MODEL NUMBERS.
   - 2.3. COMPLETE & OPERATING CENTRAL VACUUM SYSTEM WITH DEDICATED ELECTRICAL CIRCUIT.
   - 2.4. ROUGH WIRING, CONDUITS AND STUBB-OUTS FOR FURNITURE, LANDSCAPING LIGHTING, SPA OR ENTRY GATE. PROVIDE SEPARATE ELECTRICAL CIRCUITS.
   - 2.5. LOW VOLTAGE SWITCHING REQUIREMENTS.
   - 2.6. MOTION ACTIVATED EXTERIOR & SECURITY LIGHTING.
   - 2.7. SPECIAL REQUIREMENTS FOR ACCESS TO THE INTERNET.
3. ELECTRICAL LIGHTING:
   - 3.1. LIGHTS IN CLOSETS SHALL BE INSTALLED PER 2022 CEC 410.16.
   - 3.2. ALL RECESSED FIXTURES IN CEILINGS THAT ARE TO BE INSULATED MUST BE IC TYPE FIXTURE PER 2022 CEC 410.116(A).
   - 3.3. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY AN OCCUPANT OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY. IF AN OCCUPANT SENSOR IS INSTALLED, IT SHALL BE INITIALLY CONFIGURED TO MANUAL-ON OPERATION USING THE MANUAL CONTROL REQUIRED UNDER SECTION 150.0(K)2C, 2022 BUILDING ENERGY EFFICIENCY STANDARDS.
4. ELECTRICAL OUTLETS:
   - 4.1. ALL OUTLETS SHALL BE MOUNTED AT 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
   - 4.2. PROVIDE WATERPROOF OUTLET COVERS ON ALL OUTSIDE RECEPTACLES PER 2022 CEC 410-57(B) AND CBC 210.50(E).
   - 4.3. PROVIDE GROUND-FAULT CIRCUIT-INTERRUPTER (GFIC) OUTLETS IN ALL KITCHENS, WET BARS, BATHROOMS, LAUNDRIES, UTILITY ROOMS, GARAGES, EXTERIOR LOCATIONS, CRAWL SPACES, UNFINISHED BASEMENTS PER 2022 CEC 210.8(A).
   - 4.4. PROVIDE ARC-FAULT CIRCUIT-INTERRUPTER (AFIC) OUTLETS IN ALL FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, LIBRARIES, DENS, BEDROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS AND SIMILAR ROOMS OR AREAS PER 2022 CEC 210.12(B).
   - 4.5. OUTLETS ALONG HOUSE/GARAGE COMMON WALLS SHALL BE MOUNTED IN THE GARAGE AT 18" ABOVE FINISH SLAB AND SEPARATED BY MINIMUM ONE STUD BAY WITH OUTLETS ON THE OPPOSITE SITE.
   - 4.6. COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER SHALL PROTECT ALL RECEPTACLES IN ALL BEDROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS SUNROOMS, RECREATION ROOMS, CLOSETS, KITCHENS, LAUNDRY AREAS, HALLWAYS OR SIMILAR ROOMS OR AREAS WITH BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE-PHASE, 15 AND 20-AMPERE RECEPTACLE OUTLETS, AND BE READILY ACCESSIBLE PER 2022 CEC 210.12
5. SMOKE ALARMS:
   - 5.1. ALARM SHALL COMPLY WITH CRC R314.
   - 5.2. PROVIDE ALARMS WITHIN EACH SLEEPING ROOMS AND CENTRALLY LOCATED IN CORRIDOR OR AREA IN THE IMMEDIATE VICINITY TO BEDROOMS PER CRC R314.3.
   - 5.3. ALARM TO BE WIRED TO THE HOUSE PRIMARY WIRING AND SHALL HAVE BATTERY BACKUP PER CRC R314.4.
   - 5.4. WHERE MORE THAN ONE ALARM IS REQUIRED, THEY SHALL BE INTERCONNECTED SUCH THAT ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS PER CRC R314.5
6. CARBON MONOXIDE ALARMS:
   - 6.1. ALARMS SHALL COMPLY WITH CRC R314.
   - 6.2. PROVIDE ALARMS IN DWELLING UNITS AND SLEEPING UNITS WITHIN WHICH FUEL BURNING APPLIANCES ARE INSTALLED; AND IN DWELLING UNITS WITH ATTACHED GARAGES PER CRC R315.3.
   - 6.3. ALARMS TO BE WIRED TO THE HOUSE PRIMARY WIRING AND SHALL HAVE BATTERY BACKUP PER CRC R315.2.4.
   - 6.4. WHERE MORE THAN ONE ALARM IS REQUIRED, THEY SHALL BE INTERCONNECTED SUCH THAT ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS PER CRC R315.1.3.
7. KITCHENS, BATHS AND LAUNDRIES:
   - 7.1. ALL GENERAL-PURPOSE LIGHTING IN KITCHENS AND BATHS TO HAVE AN EFFICIENCY RATING OF COMPLYING WITH ALL CALIFORNIA ENERGY CODE 150(K).
   - 7.2. ALL KITCHEN AND BATH LIGHTING FIXTURES SHALL COMPLY WITH CEC ARTICLE 410 AND CALIFORNIA ENERGY CODE (SUB CHAPTER 7 & 8) REQUIREMENTS FOR TYPE, SIZE AND LOCATIONS.
   - 7.3. LIGHTS OVER SHOWERS AND TUBS MUST BE LABELED "SUITABLE FOR DAMP LOCATIONS" PER 2022 CEC 410.10(A) AND BE LOCATED PER 2022 CEC 410.10(D).
   - 7.4. PROVIDE SEPARATE 20 AMP CIRCUIT MINIMUM ONE (1) FOR LAUNDRY APPLIANCES PER 2022 CEC 210.11(C)(3) & 210.52(F).
   - 7.5. PROVIDE MINIMUM OF TWO (2) BRANCH CIRCUITS FOR SMALL APPLIANCES AND LOCATE PER 2022 CEC 210.11(C)(1) & 210.52(B).
   - 7.6. PROVIDE SEPARATE 20 AMP CIRCUIT MINIMUM ONE (1) FOR BATHROOMS PER 2022 CEC 210.11(C)(3).
   - 7.7. AT LEAST ONE (1) RECEPTACLE SHALL BE INSTALLED IN BATHROOMS WITHIN 3 FEET OF THE OUTSIDE EDGE OF EACH BASIN PER 2022 CEC 210.52(D).
   - 7.8. TWO 20-AMP GFCI PROTECTED CIRCUITS WILL BE PROVIDED IN THE KITCHEN COUNTER AND ISLAND OUTLETS PER 2022 CEC 210.52 (B), (1), (2) (3) (C).
   - 7.9. THE COUNTER RECEPTACLES AT THE ISLAND WILL NOT BE LOCATED BELOW THE COUNTER WHERE IT EXTENDS MORE THAN SIX INCHES PAST THE CABINETS PER 2022 CEC 210-52(C) (5).
   - 7.10. DEDICATED CIRCUITS FOR THE DISHWASHER, GARBAGE DISPOSAL, AND MICROWAVE PER 2022 CEC 210.23 A (1), (2)
   - 7.11. ALL 15A AND 20A 125V RECEPTACLES SUPPLYING DISHWASHERS & GARBAGE DISPOSALS MUST BE READILY ACCESSIBLE AND GFCI PROTECTED PER 2022 CEC 210.8 (D).
   - 7.12. APPLIANCE RECEPTACLES FOR SPECIFIC APPLIANCES SHELL BE LOCATED WITHIN 6 FEET OF THE APPLIANCE PER 2022 CEC 210.50(C).
8. AT LEAST ONE (1) WALL SWITCH CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED ON THE EXTERIOR SIDE OF OUTDOOR ENTRANCES OR EXITS, HALLWAYS, STAIRS, GARAGES, SPACES CONTAINING EQUIPMENT REQUIRING SERVICE (ATTIC & UNDERFLOOR SPACES) AND UTILITY ROOMS PER 2022 CEC 210.70(2).
9. AT LEAST ONE (1) WALL SWITCH CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED IN EVERY HABITABLE ROOM AND BATHROOM PER 2022 CEC 210.70(A)(1).
10. PROVIDE FUSED DISCONNECT AT ALL EXTERIOR MOUNTED AIR-CONDITIONING CONDENSING UNITS PER 2022 CEC 440.52(B), 440.53 & 440.54.
11. ELECTRICAL GROUNDING AND BONDING SHALL COMPLY WITH CEC ARTICLE 250.
12. SPAS, HOT TUBS AND HYDROMASSAGE BATHTUBS SHALL COMPLY WITH CEC 680-40:
    - 12.1. PROVIDE CLEARLY LABELED EMERGENCY SHUTOFF OR CONTROL READILY AVAILABLE TO THE USERS & NOT LESS THAN 5 FEET AWAY, ADJACENT TO, AND WITHIN SIGHT OF THE SPA OR HOT TUB PER 2022 CEC 680.41.
    - 12.2. AT LEAST ONE 125 VOLT, 15 OR 20 AMP RECEPTACLE NOT LESS THAN 6 FEET AND NOT EXCEEDING 10 FEET FROM THE INSIDE WALL OF THE SPA OR HOT TUB AND BE PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER PER 2022 CEC 680.43(A).
    - 12.3. LUMINAIRES, LIGHTING OUTLETS & CEILING SUSPENDED FANS LOCATED OVER THE SPA OR HOT TUB OR WITHIN 5 FEET FROM THE INSIDE WALL OF THE SPA OR HOT TUB SHALL COMPLY WITH THE CLEARANCES SPECIFIED IN CEC 680.43(B)(1)(A), 680.43(B)(1)(B) AND 680.43(B)(1)(C).
    - 12.4. BONDING AND GROUNDING SHALL COMPLY WITH CEC 680.42(B), 680.43(D) & (E).
    - 12.5. HYDROMASSAGE BATHTUBS AND THEIR ASSOCIATED ELECTRICAL COMPONENTS SHALL BE SUPPLIED BY A CIRCUIT PROTECTED BY A GROUND FAULT CIRCUIT INTERRUPTER PER 2022 CEC 680.44.
    - 12.6. WALL SWITCHES SHALL BE LOCATED AT LEAST 5 FEET FROM WATER SOURCE PER 2022 CEC 680.43(C).

ELECTRICAL SYMBOLS

RECESSED INTERIOR CAN LIGHT – LED	UNDER CABINET LIGHT – LINEAR LED	TV CABLE JACK
RECESSED INTERIOR CAN LIGHT, DAMP LOCATION – LED	LIGHT SWITCH, SINGLE POLE	DOOR BELL
WALL MOUNT BATH VANITY SCONCE – LED BULB	LIGHT SWITCH, DIMMER	THERMOSTAT
WALL MOUNT EXTERIOR SCONCE – LED BULB	LIGHT SWITCH, 3-POLE, DIMMER	SMOKE/CO2 DETECTOR/ALARM
CEILING MOUNT INTERIOR PENDANT – LED BULB(S)	LIGHT SWITCH, 4-POLE, DIMMER	ELECTRIC MAIN PANEL
CEILING MOUNT EXTERIOR PENDANT, DAMP LOCATION – LED BULB(S)	DUPLEX OUTLETS	GAS BIB
CEILING MOUNT INTERIOR CHANDELIER – LED BULB(S)	QUADRUPLE OUTLETS	HOT WATER BIB
BATH EXHAUST FAN	220V DUPLEX OUTLETS	COLD WATER BIB
STEP LIGHT – LED	CAT8 ETHERNET JACK	HOSE BIB

LIGHTING FIXTURE SCHEDULE

SYMBOL LEGEND	TYPE	LOCATION	DESCRIPTION	MFG.	NAME / CATALOG NO.	LAMP	WATTS/ VOLTS	QTY.	REMARKS
◎	A	KITCHEN, DINING, FAMILY, MASTER BEDROOM, BATHROOMS	RL 4 IN. WHITE INTEGRATED LED RECESSED CEILING LIGHT FIXTURE RETROFIT BAFFLE TRIM WITH 90 CRI, 3000K. DIMMER	HALO	RL460WH930-H995ICAT	LED	8W/120V	16	IC/AT RATED. HIGH-EFFICACY LIGHT FIXTURE TO COMPLY W/ 2022 CEC SECTION 150.0(K)1A, TABLE 150-A
◎	B1	DINING	CEILING MOUNT INTERIOR PENDANT – LED BULB(S)	TBD	TBD	–	100W/120V	1	HIGH-EFFICACY LIGHT FIXTURE TO COMPLY W/ 2022 CEC SECTION 150.0(K)1A, TABLE 150-A
⊲	D1	BATHROOMS	BATHROOM WALL SCONCE. LED. DIMMER	TBD	TBD	LED	25W/120V	1	HIGH-EFFICACY LIGHT FIXTURE TO COMPLY W/ 2022 CEC SECTION 150.0(K)1A, TABLE 150-A
⊲	D2	SKYLIGHT WELLS	INTEGRATED LED 2700K, LUNA STEP LIGHT 12V HORIZONTAL	HINKLEY LIGHTING	1550BSW	LED	3.8W 120V	2	HIGH-EFFICACY LIGHT FIXTURE TO COMPLY W/ 2022 CEC SECTION 150.0(K)1A, TABLE 150-A
⊘	E	BATHROOMS	WHISPERGREEN MULTI-FLOW CEILING MOUNTED FAN, WHITE	PANASONIC	FV-0511VQC1	–	120V	1	ENERGY STAR COMPLIANT, W/ HUMIDITY CONTROLS ADJUSTING FROM 50%– 80%.
⊙	G	EXTERIOR WALLS	EXTERIOR WALL SCONCE	TBD	TBD	LED	–	2	HIGH-EFFICACY LIGHT FIXTURE TO COMPLY W/ 2022 CEC SECTION 150.0(K)1A, TABLE 150-A. MOTION CONTROL SENSOR AND PHOTO CONTROL DEVICE SHALL BE PROVIDED PER SECTION 150.0(K)3
▬▬	H	KITCHEN (UNDER CABINET), CLOSET	RIBBON FLEX HOME LED TAPE LIGHT KIT, 16 FT, AC DIMMABLE W/ REMOTE TRANSFORMER, DIFFUSER CHANNEL MOUNT	ARMACOST LIGHTING	421502 960050	LED	2W/LF 120V	13 LF	HIGH-EFFICACY LIGHT FIXTURE TO COMPLY W/ 2022 CEC SECTION 150.0(K)1A, TABLE 150-A
O_{SD}		BEDROOMS, HALLWAY	NEST PROTECT WIRED SMOKE AND CARBON MONOXIDE DETECTOR	GOOGLE	S3003LWES			3	HARDWIRED

GENERAL NOTES

1. FIELD VERIFY ALL DIMENSIONS & SITE CONDITIONS PRIOR TO COMMENCING WORK.
2. CONSTRUCTION JOINTS AND CONSTRUCTION VOID AROUND WIRES, PIPES, HVAC DUCTS, PENETRATIONS AT 1H-RATED WALL ASSEMBLY SHALL BE PROPERLY SEALED WITH FIRE-RATED CAULK/SEALANT.
3. ALL DIMENSIONS TO CENTERLINE OF FIXTURE, UNO.
4. ALLOW EXTRA WIRE FOR ALL CEILING MOUNTED FIXTURES SO THAT FIELD ADJUSTMENTS CAN BE MADE WHEN FURNITURE AND MILLWORK IS INSTALLED.
5. ALL FIXTURES SHALL BE UL LISTED.
6. PROVIDE DIMMER ON ALL LIGHT FIXTURES W/EXCEPTION OF STORAGE, MECHANICAL ROOM.
7. THE CONTRACTOR SHALL COORDINATE WITH WORK OF ALL TRADES TO MAINTAIN SCHEDULED CEILING HEIGHTS AND REQUIRED CLEARANCES FOR ALL FIXTURES, DUCTS, SUSPENSION SYSTECS, PIPING, ETC.
8. ALL CEILING SUSPENSION SYSTEMS SHALL INCLUDE ANY AND ALL SEISMIC BRACING, COMPRESSION STRUTS, AND SAFETY REINFORCEMENT CONSISTENT WITH LOCAL, STATE AND FEDERAL STANDARDS MANDATED BY BUT NOT LIMITED TO THOSE REGULATORS LISTED IN THE GENERAL NOTES.
9. FINISHED CEILINGS SHALL BE LEVEL WITH A TOLERANCE OF 1/8 INCH IN 12 FEET 0 INCHES.
10. SPRINKLER HEADS, LIGHT FIXTURES, AND OTHER CEILING ELEMENTS SHALL BE LOCATED IN CENTER OF CEILING, SOFFIT, BAY, INDIVIDUAL CEILING TILE OR CEILING GRID, UNO..
11. SPRINKLER HEADS, LIGHT FIXTURES, AND OTHER CEILING ELEMENTS WHICH CONFLICT WITH CEILING GRID LOCATIONS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR RESOLUTION.
12. REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE MOUNTING AND SUSPENSION DETAILS, AS MAY BE APPLICABLE.
13. LIGHT SWITCHES AND COVER PLATES SHALL BE WHITE FINISH UNO.
14. MULTIPLE LIGHT SWITCHES SHALL HAVE SINGLE COVER PLATES WHERE POSSIBLE.
15. PROVIDE CEILING ACCESS AS INDICATED AND/OR AS REQUIRED FOR EQUIPMENT MAINTENANCE. VERIFY MANUFACTURER'S RECOMMENDATIONS. ACCESS LOCATIONS OTHER THAN AS SHOWN ON THE DRAWINGS SHALL BE AS REVIEWED AND APPROVED BY THE ARCHITECT PRIOR TO EXECUTION.
16. ALL SPRINKLER HEADS TO BE SEMI-RECESSED AT ALL SUSPENDED ACOUSTAL CEILINGS. ALL SPRINKLER HEADS TO BE CONCEALED AT ALL GYPSUM CEILINGS AND SOFFITS.

LEGEND

(E) WALL

(N) WALL

1 LIGHTING AND RECEPTACLE PLAN – PROPOSED
1/4" = 1'-0"

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

HA NGUYEN + DESIGNS
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Millbrae
California 94030
415.754.3066

CONSULTANTS

BUI RESIDENCE - ACCESSORY DWELLING UNIT

1235 SCHOLL LN
SANTA CRUZ, CALIFORNIA 95062

OWNER
TRUNG BUI AND THANK KY
1235 Scholl Ln
Santa Cruz, California 95062

MARK	DATE	DESCRIPTION
	11.06.23	BUILDING PERMIT SUBMITTAL

PROJECT NO:	2312
CAD DWG FILE:	2312-A-103 LIGHTING AND RECEPTACLE PLAN - PROPOSED.DWG
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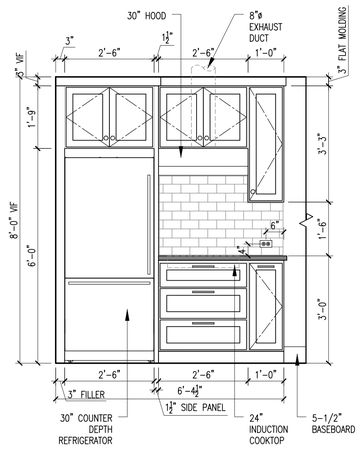
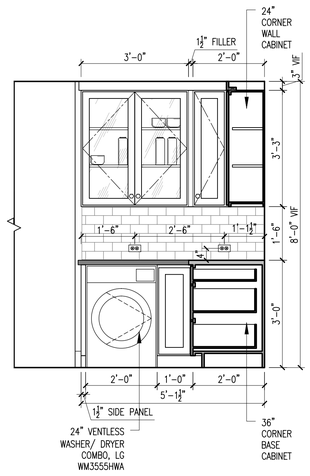
SHEET TITLE
LIGHTING AND RECEPTACLE PLAN - PROPOSED

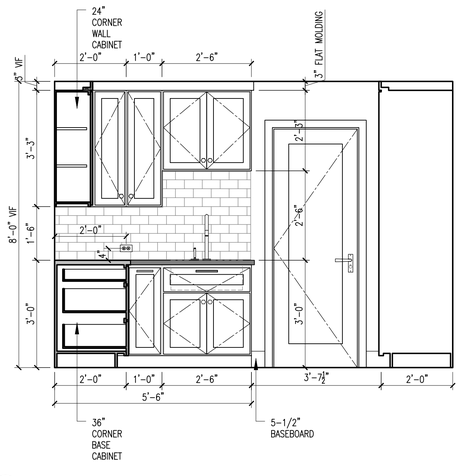
A-103
SHEET – OF –



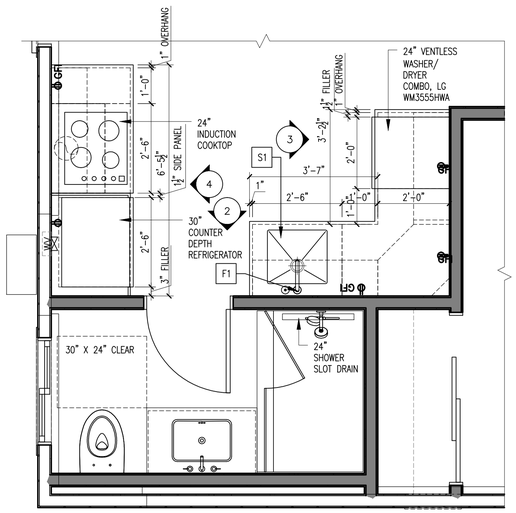
4 KITCHEN WALL ELEVATION 03
1/2" = 1'-0"



3 KITCHEN WALL ELEVATION 02
1/2" = 1'-0"



2 KITCHEN WALL ELEVATION 01
1/2" = 1'-0"



1 KITCHEN ENLARGED PLAN
1/2" = 1'-0"

PLUMBING FIXTURE SCHEDULE

NEW KITCHEN

S1	KITCHEN SINK (INSTALL W/ GARBAGE DISPOSER)	KRAUS	STANDART PRO 22-INCH DROP-IN TOP MOUNT 16 GAUGE STAINLESS STEEL SINGLE BOWL SINK, #KHT301-22L	1	
F1	KITCHEN FAUCET, SINGLE HOLE, DECK MOUNT	HANSGROHE	CENTO KITCHEN FAUCET, STAINLESS STEEL 1.75 GPM	1	KITCHEN FAUCET SHALL HAVE AN AVERAGE CONSUMPTION OF NOT MORE THAN 1.8 GPM AT 60 PSI. 2022 CPC 420.2, CGC 4.303.1.4.4.
GB	GARBAGE DISPOSER	INSINK-ERATOR	GARBAGE DISPOSAL WITH POWER CORD, BADGER 5, STANDARD SERIES, 1/2 HP CONTINUOUS FEED, BLACK	1	

LEGEND

(E) WALL

(N) WALL

NOTES

1. FIELD VERIFY ALL DIMENSIONS & SITE CONDITIONS PRIOR TO COMMENCING WORK
2. ALL DIMENSIONS ARE TO FINISHED SURFACE UNLESS OTHERWISE NOTED

0 1' 2' 4'

SCALE: 1/2" = 1'-0"

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ENLARGED KITCHEN PLAN AND WALL ELEVATIONS

A-104

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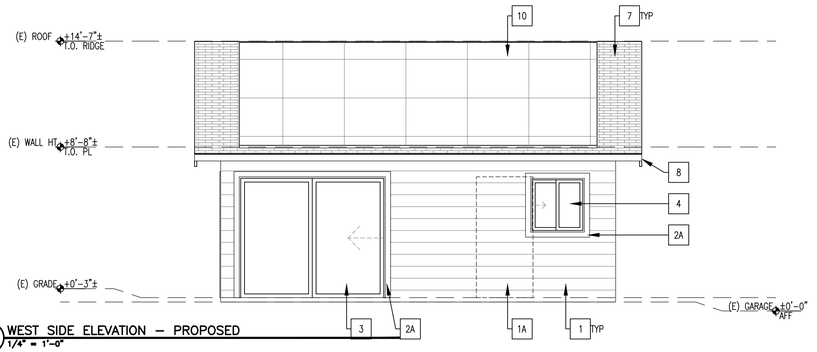
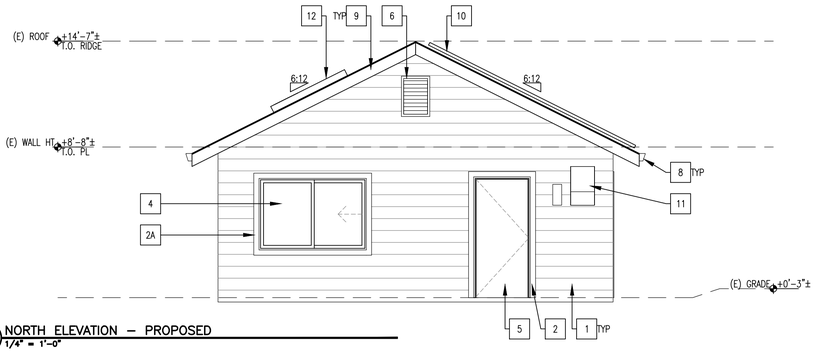
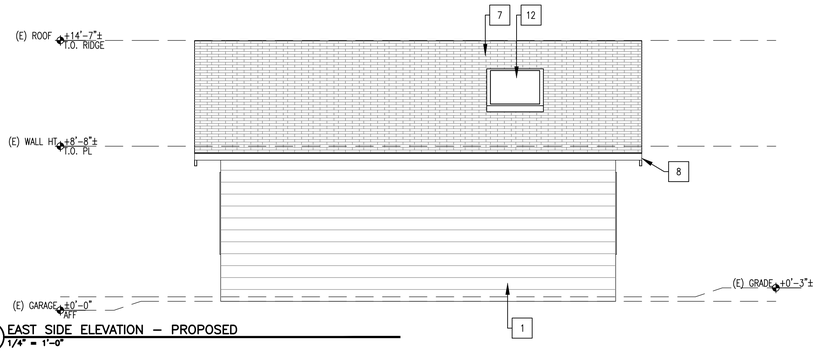


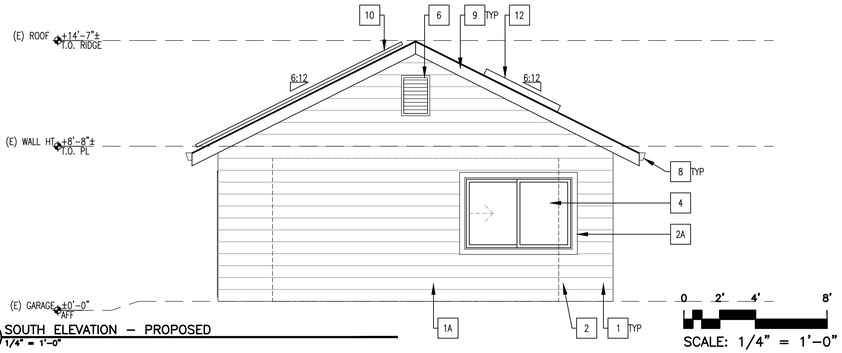
8 WEST SIDE ELEVATION – PROPOSED
1/4" = 1'-0"



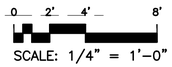
6 NORTH ELEVATION – PROPOSED
1/4" = 1'-0"



7 EAST SIDE ELEVATION – PROPOSED
1/4" = 1'-0"

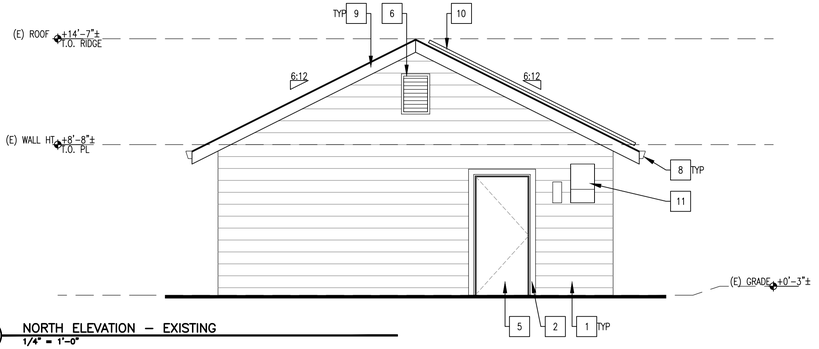


5 SOUTH ELEVATION – PROPOSED
1/4" = 1'-0"

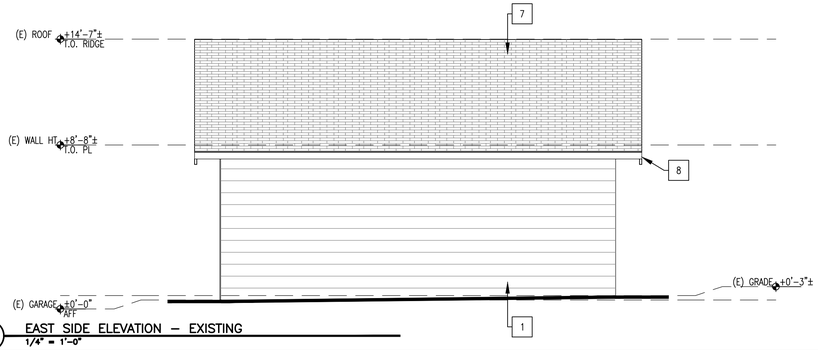


SCALE: 1/4" = 1'-0"

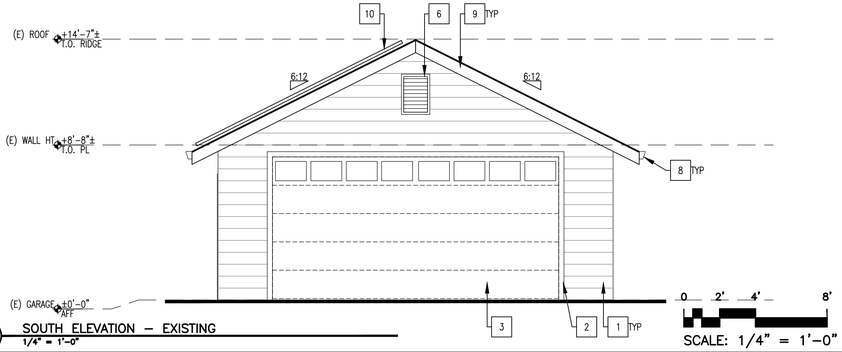
4 WEST SIDE ELEVATION – EXISTING
1/4" = 1'-0"



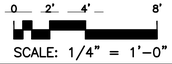
2 NORTH ELEVATION – EXISTING
1/4" = 1'-0"



3 EAST SIDE ELEVATION – EXISTING
1/4" = 1'-0"



1 SOUTH ELEVATION – EXISTING
1/4" = 1'-0"



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

NOTES - (N) ELEV.

EXTERIOR COVERING

R703.1 GENERAL

EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN SECTION R703.4.

R703.1.1 WATER RESISTANCE

THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR CLADDING AS REQUIRED BY SECTION R703.2 AND A MEANS OF DRAINING TO THE EXTERIOR WATER THAT PENETRATES THE EXTERIOR CLADDING.

THE EXTERIOR WALL ENVELOPE DESIGN SHALL BE CONSIDERED TO RESIST WIND-DRIVEN RAIN WHERE THE RESULTS OF TESTING INDICATE THAT WATER DID NOT PENETRATE CONTROL JOINTS IN THE EXTERIOR WALL ENVELOPE, JOINTS AT THE PERIMETER OF OPENINGS PENETRATION OR INTERSECTIONS OF TERMINATIONS WITH DISSIMILAR MATERIALS.

R703.2 WATER-RESISTIVE BARRIER

NOT FEWER THAN ONE LAYER OF WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS WITH FLASHING AS INDICATED IN SECTION R703.4, IN SUCH A MANNER AS TO PROVIDE A CONTINUOUS WATER-RESISTIVE BARRIER BEHIND THE EXTERIOR WALL VENEER. THE WATER-RESISTIVE BARRIER MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION R703.1. WATER-RESISTIVE BARRIER MATERIALS SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. NO. 15 FELT COMPLYING WITH ASTM D226, TYPE 1.
2. ASTM E2556, TYPE 1 OR 2.
3. ASTM E331 IN ACCORDANCE WITH SECTION R703.1.1.
4. OTHER APPROVED MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

NO.15 ASPHALT FELT AND WATER-RESISTIVE BARRIERS COMPLYING WITH ASTM E2556 SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES (51 MM), AND WHERE JOINTS OCCUR, SHALL BE LAPPED NOT LESS THAN 6 INCHES (152 MM).

R703.5.3 HORIZONTAL WOOD SIDING

HORIZONTAL LAP SIDING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE THERE ARE NO RECOMMENDATIONS THE SIDING SHALL BE LAPPED NOT LESS THAN 1 INCH (25 MM), OR 1/2 INCH (12.7 MM) IF RABBETED, AND SHALL HAVE THE ENDS CAULKED, COVERED WITH A BATTEN OR SEALED AND INSTALLED OVER A STRIP OF FLASHING.

KEYNOTES - (N) ELEV.

1. (E) HORZ. WOOD SIDING, PAINTED BLUE
1A. (N) HORZ. WOOD SIDING TO MATCH (E)
2. (E) WOOD CASING, PAINTED BLUE
2A. (N) WOOD CASING TO MATCH (E)
3. (N) DBL.-PANE PATIO DOOR, WHITE VINYL
4. (N) DBL.-PANE WINDOW, WHITE VINYL
5. (E) SOLID SWING DOOR, PAINTED WHITE
6. (E) ATTIC VENT LOUVER, PAINTED WHITE
7. (E) ASPHALT SHINGLE ROOF, BLACK
8. (E) FASCIA GUTTER, PAINTED WHITE
9. (E) WOOD BARGEBOARD, PAINTED WHITE
10. (E) PHOTOVOLTAIC PANEL
11. (E) PHOTOVOLTAIC PANEL DC CONTROLLER AND DISCONNECT
12. (N) VENTED SKYLIGHT

NOTES - (E) ELEV.

GENERAL NOTES:

1. FIELD VERIFY ALL DIMENSIONS & SITE CONDITIONS PRIOR TO COMMENCING WORK.

DEMOLITION NOTES:

1. ANY MISCELLANEOUS CONSTRUCTION BEHIND DEMOLISH STRUCTURES OR SURFACES WHICH COULD AFFECT (N) CONSTRUCTION TO BE BOUGHT TO THE ATTENTION OF THE DESIGNER.
2. CONTRACTOR TO PROTECT ALL (E) TO REMAIN WALLS, WINDOWS, FLOORS, STRUCTURES, AND CEILING FROM DAMAGE DURING CONSTRUCTION AND SHALL RESTORE THEM TO ORIGINAL CONDITION IF REQUIRED.
3. WINDOWS AND DOORS TO BE REMOVED, REPAIRED AND REINSTALLED OR STORED FOR POTENTIAL SALVAGE OR REUSE; COORDINATE SCOPE OF WORK WITH FLOOR PLANS AND ELEVATIONS.
4. BUILDING MATERIAL AND FIXTURES TO BE STORED FOR POTENTIAL SALVAGE OR REUSE INCLUDE BUT ARE NOT LIMITED TO BE BRICK PAVERS, ROOF TILES, DECORATIVE ENTRY DOOR TILES, DOOR HARDWARE, TRIM AND CASING, PLUMBING FIXTURES AND APPLIANCES.
5. DEMOLITION IS NOT LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE COMPLETE SCOPE OF DEMOLITION WORK TO COMPLETE THE PROJECT. REFER TO ALL DRAWINGS FOR FURTHER DEMOLITION WORK AND COORDINATED EXTENT.
6. PROVIDE TEMPORARY SUPPORT AS REQUIRED.
7. ROOF TILES, ROOF PAPERS, AND FELTS TO BE REMOVED TYPICAL TO EXPOSE ROOF DECKING WHERE NOTED.
8. INTERIOR PLASTER, TILE AND DRYWALL FINISHES TO BE REMOVED TYPICAL TO EXPOSE WOOD STUD FRAMING WHERE NOTED.
9. ALL (E) PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEM TO BE REMOVED UON; MAKE READY FOR INSTALLATION OF (N) PLUMBING PIPES AND FIXTURES, (N) ELECTRICAL WIRING, FIXTURES AND OUTLETS, AND (N) MECHANICAL EQUIPMENT, DUCTS AND REGISTERS.
10. PROVIDE TEMPORARY SHORING PRIOR TO REMOVAL OF BEARING WALL.

KEYNOTES - (E) ELEV.

1. (E) HORZ. WOOD SIDING, PAINTED BLUE
2. (E) WOOD CASING, PAINTED BLUE
3. (E) OVERHEAD GARAGE DOOR TO REMOVE
4. (E) HALF-LITE PATIO DOOR TO REMOVE
5. (E) SOLID SWING DOOR, PAINTED WHITE
6. (E) ATTIC VENT LOUVER, PAINTED WHITE
7. (E) ASPHALT SHINGLE ROOF, BLACK
8. (E) FASCIA GUTTER, PAINTED WHITE
9. (E) WOOD BARGEBOARD, PAINTED WHITE
10. (E) PHOTOVOLTAIC PANEL
11. (E) PHOTOVOLTAIC PANEL DC CONTROLLER AND DISCONNECT

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OWNER

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1235 Scholl Ln
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MARK	DATE	DESCRIPTION
	11.06.23	BUILDING PERMIT SUBMITTAL

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BUILDING ELEVATIONS - EXISTING AND PROPOSED

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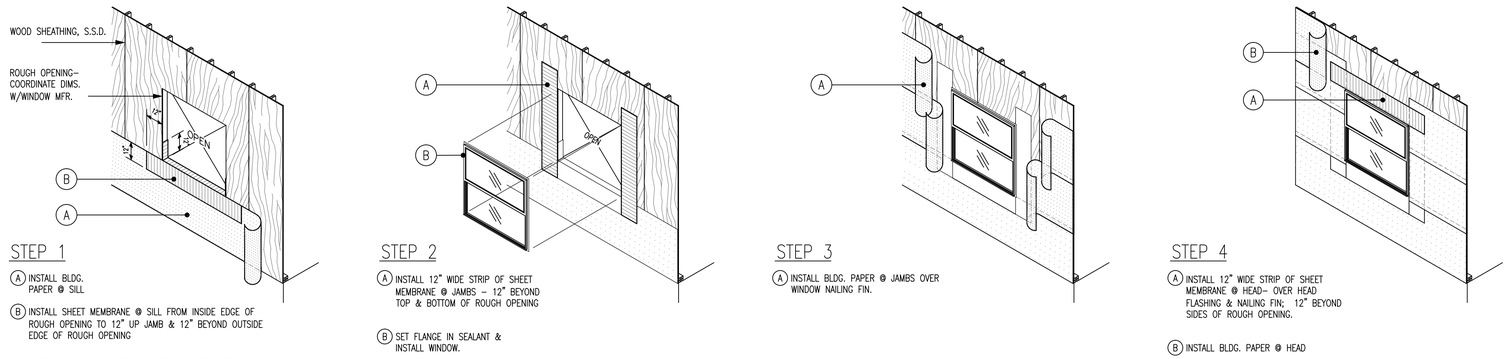
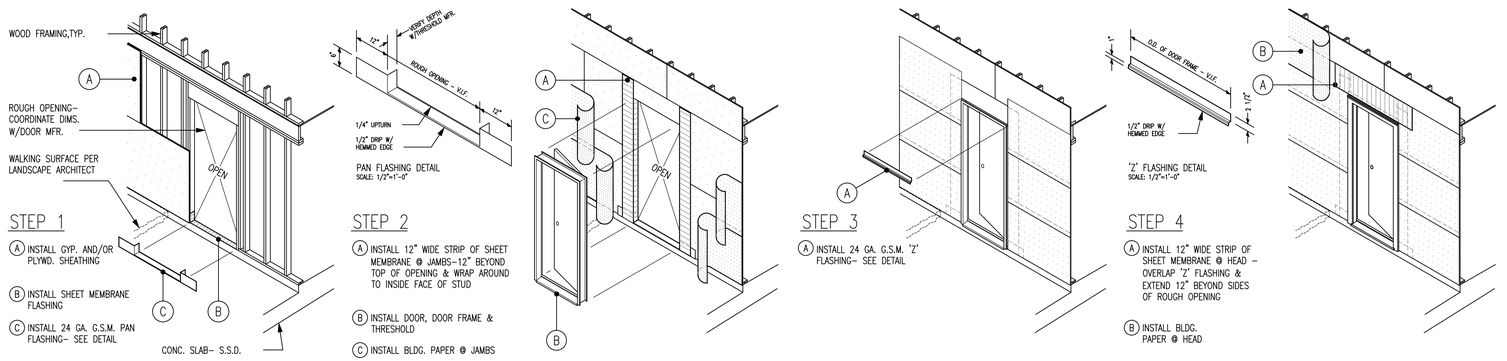


2 WINDOW FLASHING INSTALLATION SEQUENCE
N.T.S.



1 EXTERIOR DOOR FLASHING INSTALLATION SEQUENCE
N.T.S.

MARK	DATE	DESCRIPTION
	11.06.23	BUILDING PERMIT SUBMITTAL

PROJECT NO:	2312
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DETAILS

A-501

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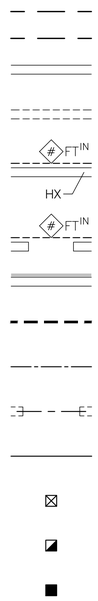
NAILING SCHEDULE (CBC TABLE 2304.10.1)		
	CONNECTION	NAILING
1	JOIST TO SILL OR GIRDER, TOENAIL	3-8d
2	BRIDGING TO JOISTS, TOE NAIL EACH END	2-8d
6	SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANELS	16d AT 16" O.C. 3-16d PER 16"
7	TOP PLATE TO STUD, END NAIL	2-16d
8	STUD TO SOLE PLATE	4-8d (TOENAIL) 2-16d (END NAIL) 2-20d TO 3X
9	DOUBLE STUDS, FACE NAIL	16d AT 24" O.C.
10	DOUBLED TOP PLATES, FACE NAIL DOUBLE TOP PLATES, LAP SPLICE (EXCEPT SHEAR WALLS)	16d AT 16" O.C. 8-16d
11	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12	RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" O.C.
13	TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
15	CEILING JOISTS TO PLATE, TOE NAIL	3-8d
16	CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17	CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18	CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
19	RAFTER TO PLATE, TOENAIL	3-8d
23	BUILT-UP CORNER STUDS	16d AT 24" O.C.
24	BUILT-UP GIRDER AND BEAMS	20d AT 32" O.C. AT TOP AND BOTT STAGGERED ON OPPOSITE SIDES
	BULT-UP GIRDER AND BEAM ENDS AND SPLICE, FACE NAIL	3-10d
25	2" PLANKS AT EACH BEARING	16d
26	COLLAR TIE TO RAFTER, FACE NAIL	3-10d
27	JACK RAFTER TO HIP, TOENAIL FACE NAIL	3-10d 2-16d
28	ROOF RAFTER TO 2X RIDGE BEAM, TOENAIL END NAIL	2-16d
29	JOIST TO BAND JOIST, FACE NAIL	3-16d

MATERIAL LEGEND



CONCRETE FOUNDATION

WALL ABOVE

WALL BELOW

WOOD SHEAR WALL,
MIN OUT-OUT LENGTH

TIEDOWN

PERFORATED WOOD
SHEAR WALL WITH
STRAPS

SHEAR WALL BELOW

STRAP

WOOD BEAM, FLUSH U.O.N.

HEADER OR DROPPED
BEAM

RAFTER OR JOIST

WOOD POST ABOVE OR
DBL STUD, UON

WOOD POST BELOW OR
DBL STUD, UON

WOOD POST ABV & BLW
OR DBL STUD, UON

ABBREVIATIONS

HDG	HOT DIPPED GALVANIZED	AB	ANCHOR BOLT
HDR	HEADER	ABV	ABOVE
HGR	HANGER	ADH	ADHESIVE
HK	HOOK	ALT	ALTERNATE
HORIZ	HORIZONTAL	@	AT_ON CENTER
HSS	HOLLOW STRUCTURAL STEEL	BLW	BELOW
INFO	INFORMATION	BLK	BLOCK
INT	INTERIOR	BLKG	BLOCKING
JST	JOIST	BM	BEAM
LVL	LAMINATED VENEER LUMBER	B.O.	BOTTOM OF
MAX	MAXIMUM	BOTT	BOTTOM
MIN	MINIMUM	C.I.P.	CAST IN PLACE
(N)	NEW	CL	CENTERLINE
N.I.C.	NOT IN CONTRACT	CLG	CEILING
NS	NEAR SIDE	CLR	CLEAR
N.T.S.	NOT TO SCALE	COL	COLUMN
O/	OVER	CONC	CONCRETE
OH	OPPOSITE HAND	CONN	CONNECTION
OPP	OPPOSITE	CONSTR	CONSTRUCTION
OPNG	OPENING	CONT	CONTINUOUS
PDF	POWER DRIVEN FASTENER	CP	COMPLETE PENETRATION
PERP	PERPENDICULAR	CTR	CENTER
PERIM	PERIMETER	DBL	DOUBLE
PL, ℙ	PLATE	DET	DETAIL
PLWD	PLYWOOD	DF	DOUGLAS FIR
PSL	PARALLEL STRAND LUMBER	DIA	DIAMETER
PT	PRESSURE TREATED	DIM	DIMENSION
REINF	REINFORCING	(E)	EXISTING
REQ'D	REQUIRED	EA	EACH
RET	RETAINING	EF	EACH FACE
RO	ROUGH OPENING	EL	ELEVATION
S.A.D.	SEE ARCHITECTURAL DRAWINGS	EMBED	EMBEDMENT
SHTG	SHEATHING	EN	EDGE NAIL
SIM	SIMILAR	EW	EACH WAY
S.O.G.	SLAB ON GRADE	EXT	EXTERIOR
SQ	SQUARE	FNDN	FOUNDATION
STD	STANDARD	FIN FLR, F.F.	FINISHED FLOOR
T & B	TOP AND BOTTOM	FLR	FLOOR
T & G	TONGUE AND GROOVE	F.O.	FACE OF
TN	TOE NAIL	FRMG	FRAMING
T.O.	TOP OF	FS	FAR SIDE
TYP	TYPICAL	FTG	FOOTING
U.O.N.	UNLESS OTHERWISE NOTED	GA, ga	GAGE
VERT	VERTICAL	GALV	GALVINIZED
WP	WATER PROOFING	GR	GRADE
W/	WITH	GL	GLULAM

SHEET INDEX

TOTAL SHEETS 7

SCOPE

THE SCOPE OF WORK INCLUDES:

1. CONVERT AN APPROXIMATELY 480 SF DETACHED GARAGE (SEE BP 131712) TO AN ADU.

-NEW FOUNDATION IS SHALLOW MATCHING EXISTING SYSTEM

COORDINATION

DETAILS SHOWN ARE TYPICAL, SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS. QUESTIONS OF IDENTIFICATION OF APPLICABLE DETAIL OR STRUCTURAL MEMBER SHALL BE BROUGHT TO THE ARCHITECT FOR RESOLUTION BEFORE PROCEEDING WITH WORK. CONTRACTOR SHALL COMPARE STRUCTURAL DRAWINGS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AS TO LAYOUT, DETAILS, DIMENSIONS AND ELEVATIONS. ALL QUESTIONS, DISCREPANCIES AND CONFLICTS SHALL BE REPORTED TO THE ARCHITECT FOR ADJUSTMENT BEFORE PROCEEDING WITH WORK.

CONTRACTOR MEANS AND METHODS

M.A. ENGINEERING SHALL NOT SUPERVISE, DIRECT OR HAVE ANY CONTROL OVER THE CONTRACTOR'S WORK NOR HAVE ANY RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES SELECTED BY THE CONTRACTOR NOR FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR PROGRAMS IN CONNECTION WITH THE WORK. THESE RIGHTS AND RESPONSIBILITIES ARE SOLELY THOSE OF THE CONTRACTOR.

UNLESS OTHERWISE APPROVED BY THE ARCHITECT, THE CONTRACTOR SHALL INSTALL DOORS, WINDOWS, PARTITIONS AND FINISHES AFTER THE MAJORITY OF THE DEAD LOADS HAVE BEEN INSTALLED (I.E. STRUCTURAL FRAMING, ROOFING, HEAVY FINISHES, ETC.) IN ORDER TO LIMIT DAMAGE TO FINISHES, WINDOWS, DOORS AND PARTITIONS DUE TO DEAD LOAD DEFLECTIONS.

EXISTING CONDITIONS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DETERMINE ALL EXISTING CONDITIONS THAT MAY AFFECT ITS WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER UPON DISCOVERY OF ANY DISCREPANCIES, AMBIGUITIES OR ERRORS AND THE DISCOVERY OF EXISTING CONDITIONS NOT NOTED ON DRAWINGS, INCLUDING THOSE WHICH MAY BE HAZARDOUS TO HUMAN HEALTH. HAZARDS MAY INCLUDE BUT ARE NOT LIMITED TO TOXIC MATERIALS AND DECAYED OR BROKEN FRAMING MEMBERS.

CUTTING AND PATCHING

DO NOT CUT EXISTING OR NEW STRUCTURAL ELEMENTS EXCEPT AS SHOWN ON THE DRAWINGS UNLESS APPROVED BY THE ENGINEER. IN GENERAL USE HAND OR SMALL POWER TOOLS DESIGNED FOR SAWING AND GRINDING, NOT HAMMERING AND CHOPPING. CUT HOLES AND SLOTS NEATLY TO MINIMUM SIZE REQUIRED AND WITH MINIMUM DISTURBANCE TO ADJACENT SURFACES.

RESTORE WORK WHICH HAS BEEN CUT, REMOVED OR DAMAGED BY ADJACENT WORK. REFINISH ENTIRE SURFACES AS NECESSARY TO PROVIDE AN EVEN FINISH TO MATCH ADJACENT FINISHES.

CONSTRUCTION PHASE SITE VISITS

M.A. ENGINEERING WILL PROVIDE CONSTRUCTION SITE VISITS AND OBSERVE THE PROGRESS AND QUALITY OF STRUCTURAL PORTIONS OF THE WORK. THESE VISITS AND OBSERVATIONS ARE NOT INTENDED TO BE AN EXHAUSTIVE CHECK OR DETAILED INSPECTION OF THE CONTRACTOR'S WORK, BUT RATHER TO ALLOW M.A. ENGINEERING TO BECOME GENERALLY FAMILIAR WITH THE WORK IN PROGRESS AND TO DETERMINE, IN GENERAL, IF THE WORK IS PROCEEDING IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

THE GENERAL CONTRACTOR SHALL TAKE THE APPROPRIATE ACTION TO CORRECT PORTIONS OF THE WORK INDICATED AS BEING NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.

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COVER PAGE

S0.1

ROOF SHEATHING

ROOF SHEATHING SHALL BE 7/16" APA RATED SHEATHING, EXPOSURE 1, SPAN RATING 24/16. LAY FACE GRAIN ACROSS RAFTERS, STAGGER SHEETS. PROVIDE 1/8" SPACING AT PANEL ENDS AND EDGES. NAIL SHEET EDGES WITH 10d@6", INTERMEDIATE MEMBERS 10d@12". SEE STRUCTURAL DRAWINGS FOR OTHER DETAILED OR NOTED SHEATHING NAILING. NO UNBLOCKED PANELS LESS THAN 12" WIDE SHALL BE USED.

FLOOR SHEATHING

FLOOR SHEATHING SHALL BE 23/32" APA RATED STURD-1-FLOOR, EXPOSURE 1, SPAN RATING 48/24. LAY FACE GRAIN ACROSS JOISTS, STAGGER SHEETS. PROVIDE 1/8" SPACING AT PANEL ENDS AND EDGES. ATTACH SHEATHING TO JOISTS AND BLOCKING WITH ADHESIVE IN ACCORDANCE WITH APA GLUED FLOOR SYSTEM. NAIL SHEET EDGES 10d@6", INTERMEDIATE JOISTS 10d@12". SEE STRUCTURAL DRAWINGS FOR OTHER DETAILED OR NOTED FLOOR NAILING.

WALL SHEATHING

WALL SHEATHING AT SHEAR WALLS, INDICATED ON DRAWINGS WITH APPROPRIATE SYMBOLS, SHALL CONFORM TO THE SHEAR WALL SCHEDULE. AT EXTERIOR WALLS THAT ARE NOT SHEAR WALLS, SHEATHING SHALL BE 15/32", APA RATED EXPOSURE 1, NAIL SHEET EDGES WITH 10d@6", AND INTERMEDIATE STUDS WITH 10d@12".

CONCRETE ANCHORS

INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALTERNATES MAY BE SUBMITTED FOR CONSIDERATION IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

UNLESS NOTED OTHERWISE, BOLTS, ANCHOR RODS OR THREADED RODS SHALL BE AS SPECIFIED IN STRUCTURAL STEEL. REINFORCING BARS SHALL BE A-615, GRADE 60.

SCREW ANCHORS IN CONCRETE OR GROUTED MASONRY

SIMPSON STRONG-TIE TITEN HD SCREW ANCHORS CONFORMING TO ICC-ES REPORT ESR-2713.

ADHESIVE ANCHORS (DOWELS) IN CONCRETE

PER ACI 318-2014 (SECTION 17.1.2) ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION. FOR INSTALLATIONS SOONER THAN 21 DAYS CONSULT ADHESIVE MANUFACTURER.

SIMPSON STRONG-TIE SET-XP ADHESIVE ANCHOR SYSTEM CONFORMING TO ICC REPORT ESR-2508.

SPECIAL INSPECTION AND TESTING

IN ACCORDANCE WITH CBC 2022, CHAPTER 17 THE OWNER OR OWNER'S AGENT SHALL ENGAGE A SPECIAL INSPECTOR TO PROVIDE SPECIAL INSPECTIONS. UNLESS OTHERWISE SPECIFICALLY INDICATED, M.A. ENGINEERING SHALL NOT PROVIDE SPECIAL INSPECTION. CONTRACTOR SHALL REVIEW THE SPECIAL INSPECTION REQUIREMENTS SHOWN ON THE CONTRACT DOCUMENTS AND/ OR ON COMPLETED FORMS ISSUED BY THE BUILDING DEPARTMENT HAVING JURISDICTION OVER THE WORK AND SHALL NOTIFY TESTING AGENCIES AT LEAST 24 HOURS IN ADVANCE OF TIME WHEN WORK THAT REQUIRES TESTING OR INSPECTING WILL BE PERFORMED.

1. SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1701 OF CBC REQUIRED FOR BUT NOT LIMITED TO:

   A. ADHESIVE ANCHORS SET IN CONCRETE - CONCRETE

STRUCTURAL OBSERVATION

THE OWNER SHALL EMPLOY THE ENGINEER RESPONSIBLE FOR THE STRUCTURAL DESIGN TO PERFORM STRUCTURAL OBSERVATION AS DEFINED IN CBC SECTION 1704.6. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR AND THE BUILDING OFFICIAL THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED. STRUCTURAL OBSERVATION SHALL BE PERFORMED FOR THE FOLLOWING CONSTRUCTION STAGES:

A. PRIOR TO CONCRETE POUR(S)
B. PRIOR TO COVER OF:
   1) WALL FRAMING SYSTEMS
   2) FLOOR FRAMING SYSTEMS
   3) ROOF FRAMING SYSTEMS

MISCELLANEOUS STEEL

COMMON BOLTS SHALL CONFORM TO ASTM A307 USE UNLESS OTHERWISE SPECIFIED.
ANCHOR RODS SHALL CONFORM TO ASTM F1554 GR. 36.
THREADED ROD SHALL CONFORM TO ASTM A36.

ROUGH CARPENTRY

MOISTURE CONTENT AND PROTECTION

MOISTURE CONTENT SHALL MEET THE FOLLOWING LIMITS: "DRY" FOR VERTICAL FRAMING (19% MAXIMUM). FINISHES SHALL NOT BE INSTALLED OVER DIMENSIONAL LUMBER FRAMING UNTIL MOISTURE CONTENT IS BELOW 12% MAXIMUM.

MATERIALS SHALL BE PROPERLY STORED ON THE JOB SITE. MATERIALS SHALL BE STORED OFF OF THE GROUND, AND PROTECTED FROM EXPOSURE TO THE ELEMENTS.

PRESERVATIVE TREATMENT

FRAMING MEMBERS EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE, BUT NOT IN CONTACT WITH THE GROUND SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD U1 & T1, USE CATEGORY UC3B. FIELD CUTS AND HOLES SHALL BE FIELD TREATED IN ACCORDANCE WITH THE AWPA M-4.

DIMENSION LUMBER AND TIMBER

DIMENSIONAL LUMBER AND TIMBER SHALL CONFORM TO THE FOLLOWING WCLIB MINIMUM GRADES AND SHALL BE DOUGLAS FIR, UNLESS OTHERWISE NOTED.

JOISTS (2"-4", 5" AND WIDER)	NO. 2
HEADERS (4" THICK, 5" AND WIDER)	NO. 1
BEAMS (6" THICK, 10" AND WIDER)	NO. 1
POSTS (6" THICK, 6"-8" WIDE)	NO. 1
POSTS (4X4)	NO. 1
MUD SILLS (3X)	NO. 1, PRESSURE TREATED (DO NOT USE HEM-FIR)
STUDS (2X, 3X)	STUD
TOP AND BOTTOM PLATES	STUD

NO SUBSTITUTIONS SHALL BE MADE WITHOUT PRIOR APPROVAL.

PARALLAM PSL LUMBER (PSL)

PARALLAM PSL HEADERS AND BEAMS SHALL BE 2.2E, CONFORMING TO ICC-ES RESEARCH REPORT NO. ESR-1387, OR EQUAL AND SHALL HAVE DESIGN VALUES EQUAL TO OR EXCEEDING THE FOLLOWING:

BENDING (Fb):	2900 PSI
COMPRESSION PARALLEL TO THE GRAIN (Fc PARALLEL):	2900 PSI
MODULUS OF ELASTICITY (E):	2,200,000 PSI
HORIZONTAL SHEAR:	290 PSI

MICROLLAM LVL LUMBER (LVL)

MICROLAM LVL HEADERS AND BEAMS SHALL BE 2.0E, CONFORMING TO ICC-ES RESEARCH REPORT NO. ESR-1387, OR EQUAL AND SHALL HAVE DESIGN VALUES EQUAL TO OR EXCEEDING THE FOLLOWING:

BENDING (Fb):	2600 PSI
COMPRESSION PARALLEL TO THE GRAIN (Fc PARALLEL):	2510 PSI
MODULUS OF ELASTICITY (E):	2,000,000 PSI
HORIZONTAL SHEAR:	285 PSI

FASTENERS

FOR SCHEDULE OF MINIMUM NAILING SEE CALIFORNIA BUILDING CODE TABLE 2304.10.1. NAILING SHALL BE WITH COMMON WIRE NAILS UNLESS NOTED OTHERWISE. CONTRACTOR SHALL SUBMIT FOR APPROVAL A DESCRIPTION OF NAIL GAGE, LENGTH, HEAD TYPE AND COATING (IF ANY). BOLTS AND LAG SCREWS BEARING ON WOOD SHALL HAVE WASHERS.

METAL FRAMING ANCHORS SHALL BE MANUFACTURED BY SIMPSON COMPANY OR EQUAL. JOIST HANGERS SHALL BE "U" SERIES U.N.O. ON DRAWINGS. BOLTS IN CONNECTIONS SHALL BE RETIGHTENED JUST PRIOR TO CLOSING OF THE WALL AND/OR FLOOR.

FASTENERS FOR INTERIOR APPLICATIONS PENETRATING PRESSURE-TREATED LUMBER SHALL BE HOT DIPPED ZINC-COATING GALVANIZED WITH A MINIMUM G185 (1.85 OZ/ SF) COATING OR STAINLESS STEEL. FASTENERS EXPOSED TO WEATHER INCLUDING EXTERIOR APPLICATIONS OF PRESSURE-TREATED LUMBER, SHALL USE STAINLESS STEEL FASTENERS. FASTENERS EXPOSED TO WEATHER FOR ARCHITECTURAL FEATURES MAY ALSO BE SILICON BRONZE OR COPPER.

SILLS OR PLATES SHALL BE BOLTED TO CONCRETE WITH 5/8" DIAMETER BOLTS WITH 3X3X1/4" WASHERS, EMBEDDED 7" MINIMUM AT 4'-0" MAXIMUM ON CENTER, UON.

CODE AND STANDARDS

DESIGN IS BASED ON THE CALIFORNIA BUILDING CODE, 2022 EDITION. CONSTRUCTION SHALL CONFORM WITH APPLICABLE SECTIONS OF THIS CODE.

REFERENCE STANDARDS SHALL BE THE EDITION NOTED IN THE CODE, UNLESS OTHERWISE INDICATED.

OCCUPANCY CATEGORY II

LIVE LOADS

DESIGN LIVE LOADS PER CBC TABLE 1607.1 AND AS FOLLOWS. LIVE LOADS MAY BE REDUCED IN ACCORDANCE WITH CBC SECTION 1607.10.

ROOF LIVE	20 PSF (REDUCIBLE)
FLOOR LIVE	40 PSF (REDUCIBLE)

EARTHQUAKE DESIGN DATA

SEISMIC FORCE-RESISTING SYSTEM:	
Ie	1.0
Ss	1.666
S1	0.637
SITE CLASS	D (DEFAULT)
Sds	1.333 (REDUCIBLE BY ASCE 7-16 12.8.1.3)
SEISMIC DESIGN CATEGORY	D
Cs	0.1538 (SDS = 1.0 USED FOR BASE SHEAR CALCULATION)
R	6.5
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
REDUNDANCY FACTOR	1
BASE SHEAR:	2 K

WIND DESIGN DATA

BASIC WIND SPEED, V	92 MPH
Iw	1.0
EXPOSURE	B
ANALYSIS PROC. MWFRS	ENCLOSED SIMPLE DIAPHRAGM LOW-RISE BUILDINGS

FOUNDATIONS

FOUNDATION DESIGN IS BASED ON MINIMUM ALLOWABLE SOIL-BEARING VALUES PER CBC 2022. SPREAD FOOTINGS BEAR ON UNDISTURBED SOIL, ENGINEERED FILL, OR ROCK. FOOTING DESIGN IS BASED ON A MAXIMUM ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF DEAD PLUS LIVE, AND 2000 PSF TOTAL LOADS, INCLUDING WIND OR SEISMIC.

EXCEPT WHERE OTHERWISE SHOWN, EXCAVATIONS SHALL BE MADE AS NEAR AS POSSIBLE TO THE NEAT LINES REQUIRED BY THE SITE AND SHAPE OF THE STRUCTURE. ALL FOUNDATIONS SHALL BE POURED WITH OUT THE USE OF SIDE-FORMS WHEREVER POSSIBLE. IF THE TRENCHES CAN NOT FULLY STAND, FULLY FORM SIDES TO DIMENSIONS SHOWN.

DO NOT ALLOW WATER TO STAND IN TRENCHES. IF BOTTOMS OF TRENCHES BECOMES SOFTENED DUE TO RAIN OR OTHER WATER BEFORE CONCRETE IS CAST, EXCAVATE SOFTENED MATERIAL AND REPLACE WITH PROPERLY COMPACTED BACKFILL OR CONCRETE.

SLABS ON GRADE SHALL BE SUPPORTED ON NATURAL GRADE OR COMPACTED STRUCTURAL FILL ACCORDING TO THE RECOMMENDATIONS OF THE SOILS REPORT.

WATERPROOFING

WHERE STRUCTURAL DETAILS INDICATE ANY WATERPROOFING OR VENTILATION ITEMS, THEY ARE SCHEMATIC ONLY AND FOR THE PURPOSE OF ASSISTING IN SHOWING A COMPLETE STRUCTURAL DETAIL. REFER ONLY TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR THE COMPLETE DESCRIPTION OF ALL REQUIRED WATERPROOFING AND VENTILATION SYSTEMS.

CONCRETE

CONCRETE SHALL BE NORMAL WEIGHT AND SHALL BE REINFORCED UNLESS OTHERWISE NOTED. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-16, SPECIFICATIONS FOR STRUCTURAL CONCRETE. CONCRETE SHALL ATTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTH (F'c) OF 2500 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.

REINFORCING STEEL

REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60.

REINFORCING BARS NOTED OR SHOWN AS CONTINUOUS SHALL RUN IN AS LONG LENGTHS AS PRACTICAL. IN SLAB AND BEAMS LOCATE TOP BAR SPLICES MIDWAY BETWEEN SUPPORTS, BOTTOM BAR SPLICES AT SUPPORTS. SPLICE LOCATIONS SHALL BE SUBMITTED FOR REVIEW. THE FOLLOWING SPLICE LENGTHS APPLY UNLESS OTHERWISE DETAILED OR NOTED IN THE STRUCTURAL DRAWINGS.

WELDING OF REINFORCEMENT BARS SHALL COMPLY WITH AWS D1.4 STRUCTURAL WELDING CODE-REINFORCING STEEL. USE GRADE A706 UNLESS SHOWN OTHERWISE.

UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"
CONCRETE EXPOSED TO EARTH OR WEATHER:	2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
SLABS AND WALLS:	1"
BEAMS AND COLUMNS:	1½"

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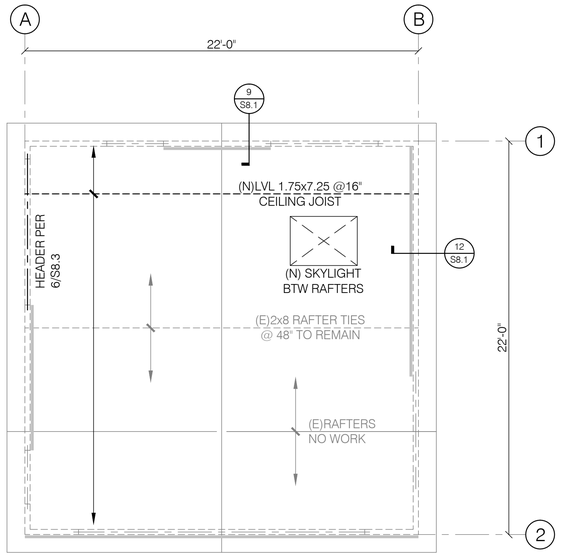
GENERAL NOTES

S0.2

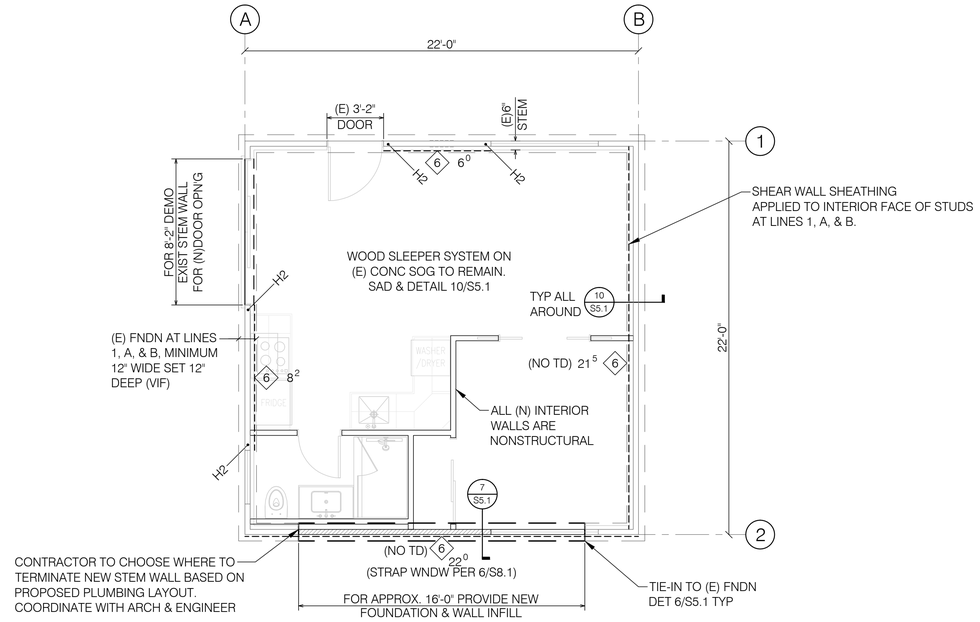
FOUNDATION PLAN NOTES:

1. SEE SHEET S0.1-S0.2 FOR STRUCTURAL NOTES.
   SEE SHEET S0.1 FOR SYMBOL LEGEND.
   SEE SHEET S5.1 FOR TYPICAL CONCRETE DETAILS.
   SEE SHEET S5.1 FOR FOUNDATION SCHED & DETAILS.
   SEE SHEET S8.1 FOR SHEAR WALL SCHEDULE.
   SEE SHEET S8.2 FOR TIEDOWN DETAILS.
2. TOP OF FOOTING SHALL BE AS INDICATED ON DETAILS.
3. SAD FOR DIMENSIONS, SLOPES, AND PADS NOTED ON PLAN.
4. CONTRACTOR TO FIELD-VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
5. DIMENSIONS AND GRIDS TO FACE OR CENTERLINE OF STUDS UON.



ROOF FRAMING PLAN

1/4" = 1'-0"



GROUND FLOOR FOUNDATION PLAN

1/4" = 1'-0"

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FRAMING PLANS

S2.1

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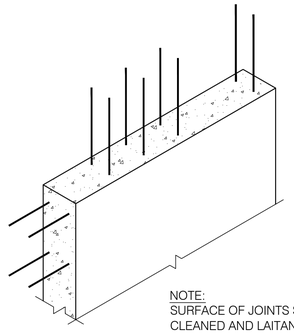
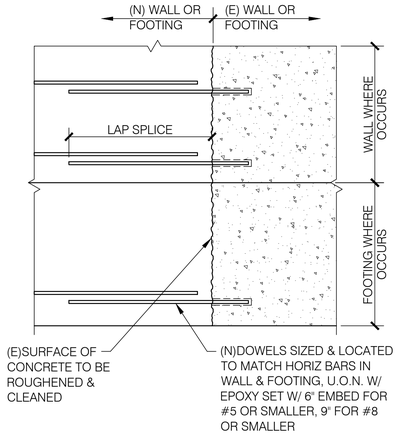
TYPICAL CONCRETE DETAILS

S5.1



NOTE:
SURFACE OF JOINTS SHALL BE CLEANED AND LAITANCE REMOVED. ROUGHEN SURFACE TO FULL AMPLITUDE OF ¼". IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, WET JOINT AND REMOVE STANDING WATER.

9 / S5.1 ROUGHENED CONSTRUCTION JOINT — N.T.S.

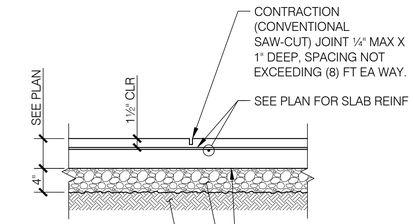


6 / S5.1 DOWELING TO EXISTING CONCRETE AT WALL OR FOOTING — 1"=1'-0"

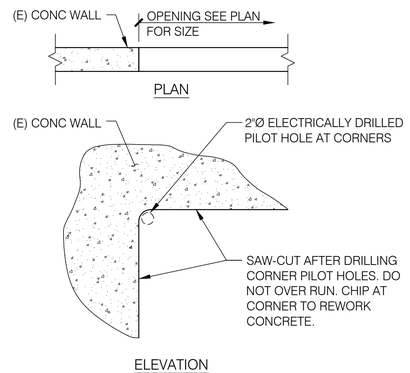
CLASS B TENSION LAP SPLICE LENGTH (IN)*								
F'C	2500 PSI		3000 PSI		4000 PSI		5000 PSI	
BAR SIZE	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	31	24	28	22	25	19	22	17
#4	41	32	37	29	33	25	29	23
#5	51	39	47	36	41	31	36	28
#6	61	47	56	43	49	37	44	34
#7	89	69	81	63	71	54	63	49
#8	102	78	93	72	81	62	72	56
#9	115	88	105	81	91	70	81	63

*SEE GENERAL NOTES AND (2/-) FOR ADDITIONAL INFORMATION

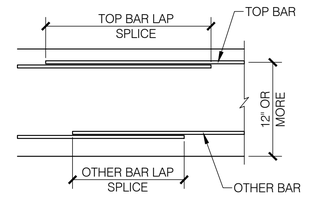
3 / TYP REINFORCEMENT LAP SPLICE LENGTH — 1"=1'-0"



8 / S5.1 TYPICAL INTERIOR SLAB ON GROUND — 1"=1'-0"



5 / S5.1 CUTTING OPENING IN EXISTING CONCRETE WALL — 1"=1'-0"



2 / S5.1 TYP REINFORCEMENT LAP SPLICE AND HOOK EMBED — 1"=1'-0"

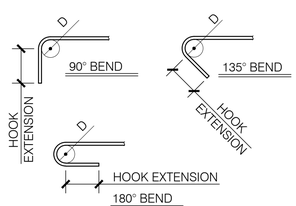
HOOK EXTENSIONS				
BAR SIZE	STANDARD		STIRRUP & TIE HOOKS	
	90°	180°	90°	135°
#3	4.5"	2.5"	2.25"	2.25"
#4	6"	2.5"	3"	3"
#5	7.5"	2.5"	3.75"	3.75"
#6	9"	3"	9"	4.5"
#7	10.5"	3.5"	10.5"	5.25"
#8	12"	4"	12"	6"
#9	13.5"	4.5"	-	-
#10	15"	5"	-	-
#11	16.5"	5.5"	-	-

STD HOOK EMBED LENGTH (Ldh)				
F'C	2500 PSI	3000 PSI	4000 PSI	5000 PSI
BAR SIZE	EMBED (IN)	EMBED (IN)	EMBED (IN)	EMBED (IN)
#3	9	9	8	7
#4	12	11	10	9
#5	15	14	12	11
#6	18	17	15	13
#7	21	20	17	15
#8	24	22	19	17
#9	27	25	22	20

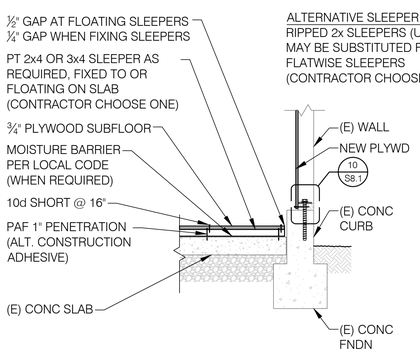
STANDARD HOOK BEND DIAMETER
#3 THROUGH #8: D=6d
#9, #10, #11: D=8d

STIRRUP & TIE BEND DIAMETER
#3 THROUGH #5: D=4d
#6 THROUGH #8: D=6d

NOTE:
d=BAR DIAMETER
D=INSIDE DIAMETER OF BEND

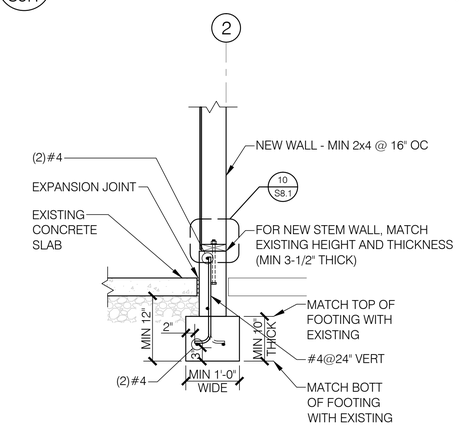


1 / STANDARD REINFORCING HOOKS EXTENSION, BEND DIA. & EMBEDMENT — NTS



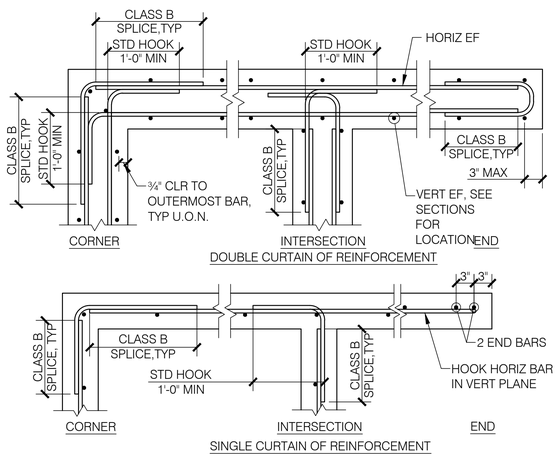
NOTE: THE OVER BUILT WOOD FRAMEWORK SHOWN FOR THE FINISH FLOOR IS FOR PLANNING PURPOSES ONLY, ACTUAL IMPLEMENTATION WILL VARY DEPENDING ON FIELD AND LOCAL CODE REQUIREMENTS. COORDINATE THIS DETAIL WITH THE OWNER AND ARCHITECT/ DESIGNER AS REQUIRED.

10 / TYPICAL PERIMETER DETAIL SLEEPERS ON CONCRETE SLAB — 3/4"=1'-0"



NOTE: THE FOOTING MAY BE POURED NEAT TO EARTH EITHER FACE OF STEM AT CONTRACTOR'S OPTION.

7 / TYPICAL SHALLOW FOOTING RECESSED FROM EXISTING WALL LINE — 3/4"=1'-0"



4 / S5.1 TYP REINFORCEMENT AT INTERSECTING CONCRETE MEMBERS — NTS

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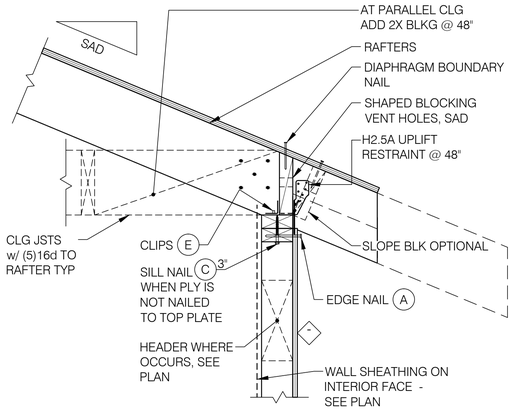
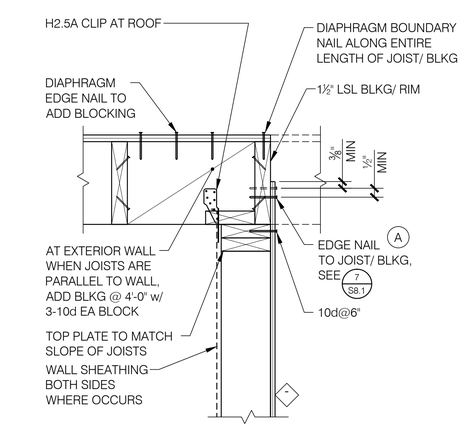
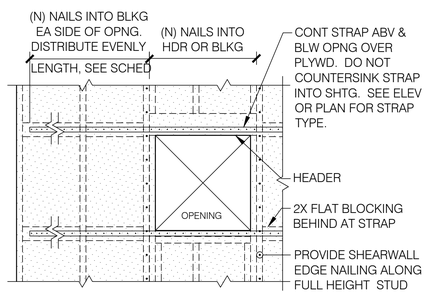


12 S8.1 SHEAR WALL TOP
SLOPED RAFTER, VERT BLOCK
1½"=1'-0"

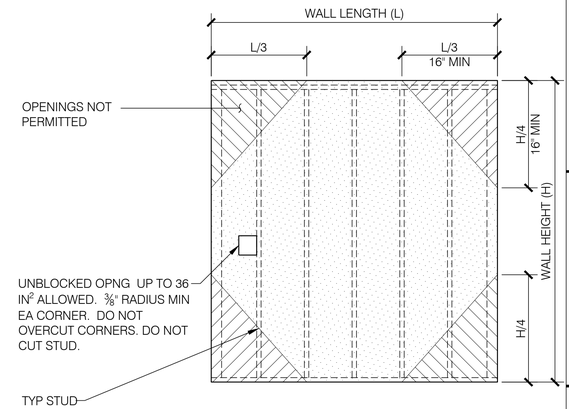


9 S8.1 SHEAR WALL TOP (GABLE END)
PLWD NAILED TO JST/BLKG
1½"=1'-0"

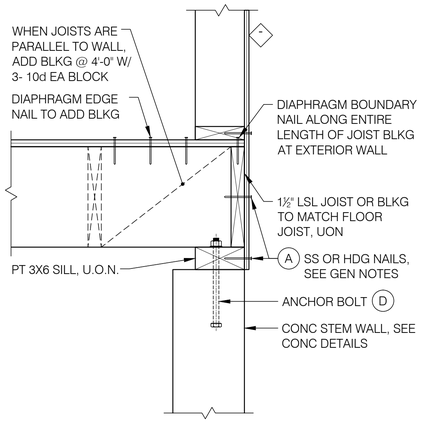
STRAP SCHEDULE		
STRAP	NO. OF NAILS (N)	MIN LENGTH EA SIDE OF OPNG
CS14	15-10d COMMON	15"



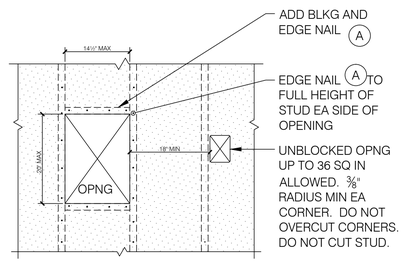
6 S8.1 SHEARWALL STRAPS
AROUND OPENING
1"=1'-0"



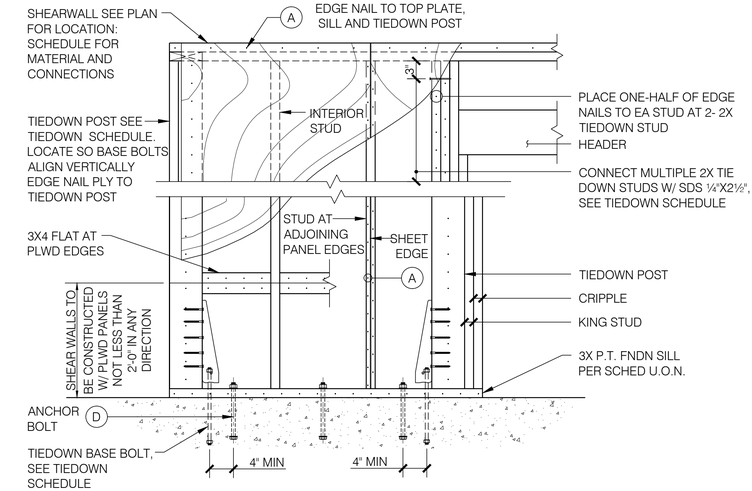
3 S8.1 SHEAR WALL TYPICAL
UNBLOCKED OPENING
½"=1'-0"



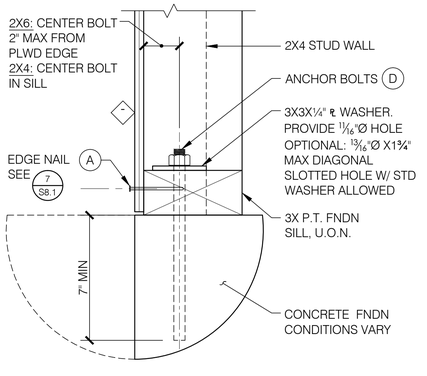
11 S8.1 SHEAR WALL - RAISED FLOOR ABOVE
CONCRETE STEM PLYWOOD
1½"=1'-0"



8 S8.1 SHEAR WALL OPENING
¾"=1'-0"

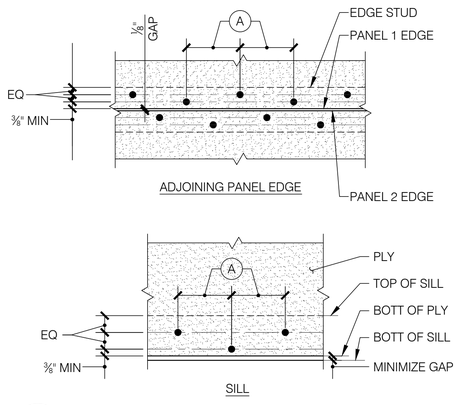


5 S8.1 SHEARWALL SCHEMATIC
ELEVATION
1"=1'-0"



10 S8.1 SHEAR WALL - BOLTED
SILL TO CONCRETE
3"=1'-0"

FOR BALANCE OF INFO, SEE
SHEARWALL SCHEDULE, TYP



7 S8.1 SHEAR WALL
BOUNDARY NAILING
3"=1'-0"

FOOTNOTES

1. (2)2x STUDS MAY BE SUBSTITUTED FOR 3X STUD AT ADJOINING PANEL EDGES FOR SINGLE-SIDED SHEAR WALLS ONLY. FASTEN 2-2X STUDS TOGETHER WITH 2 ROWS 16d@4" STAGGER NAILS.
2. FOUNDATION SILLS SHALL BE PRESSURE TREATED DF-L OR NON-PRESSURE TREATED WITH BITUTHENE MEMBRANE BETWEEN SILL & CONCRETE.
3. PROVIDE FLAT BLOCKING AT UNSUPPORTED EDGES, 2X4 FOR ONE ROW, 2x6 FOR TWO ROWS. COMMON OR GALVANIZED BOX NAILS MAY BE USED.
4. COMMON, BOX OR SINKER NAILS. STAGGER NAILS.
5. SIMPSON COMPANY OR APPROVED EQUIVALENT. STAGGER SCREWS.
6. MINIMUM TWO BOLTS PER PIECE OF SILL. PROVIDE 3"X3"X¼" PL WASHER WITH ½"Ø HOLE BETWEEN SILL PLATE AND NUT. SEE DETAIL 3/S8.3. SUBSTITUTE TITEN HD ½"Ø AT EXISTING CONCRETE.
7. SIMPSON COMPANY OR APPROVED EQUIVALENT.
8. SHEAR WALL IS SHEATHED WITH PLYWOOD ON EACH FACE . ALL NAILING REQUIREMENTS APPLY TO EACH SIDE. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS.
9. SHEAR WALLS TO BE CONSTRUCTED WITH PANELS NOT LESS THAN 2'-0" IN ANY DIRECTION.

NAIL NOTES

USE HOT DIP GALVANIZED OR STAINLESS STEEL WHEN PENETRATING PRESSURE-TREATED WOOD. DO NOT DRIVE NAILS THROUGH FACE LAYER OF PLYWOOD. DO NOT SPLIT LUMBER. ANY STRUCTURAL LUMBER SPLIT DUE TO NAILING SHALL BE REPLACED. IF REQUIRED, PRE-DRILL NAIL HOLES TO AVOID SPLITTING.

WOOD SHEAR WALL SCHEDULE - ANSI 2018 SDPWS SEISMIC											
SYMBOL	ASD/(LRFD) SHEAR CAPACITY FOR SEISMIC (PLF)	SHEATHING MATERIAL (PLF)	MIN STUD AT ADJOINING PANEL EDGES (1)	FOUNDATION SILL (2)	SILL AT UPPER FLOOR	EDGE NAILS (3) A	2X BLOCK OR TRANSFER STUD (4) B	3X BLOCK OR TRANSFER STUD (5) B	FLOOR SILL (5) C	ANCHOR BOLT (6) D	CLIPS (7) E
6	340 (680)	15/32" STRUCT 1 SHEATHING	2X	2X	2X	10d@6"	16d@6"	SDS¼"X4½" @12"	SDS¼"X6" 2@16"	⅝"Ø@32"	A34@16" OR LTP4@16"

4 S8.1 SHEAR WALL SCHEDULE

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ISSUE	DATE
PERMIT	10/17/2023

WOOD SHEAR WALL DETAILS

S8.1

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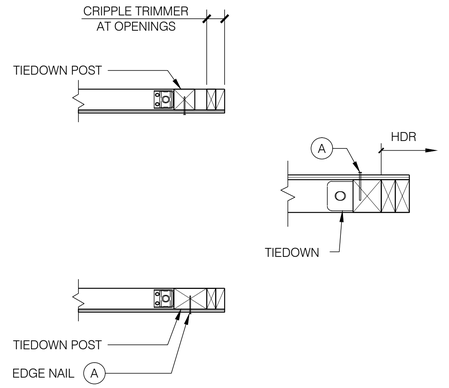
SANTA CRUZ, CA

ISSUE	DATE
PERMIT	10/17/2023

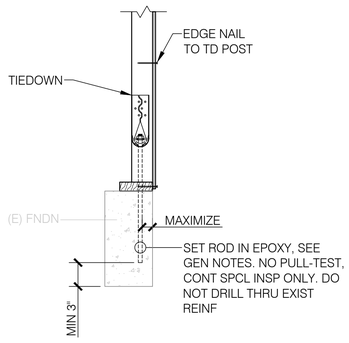
WOOD LATERAL DETAILS

S8.2



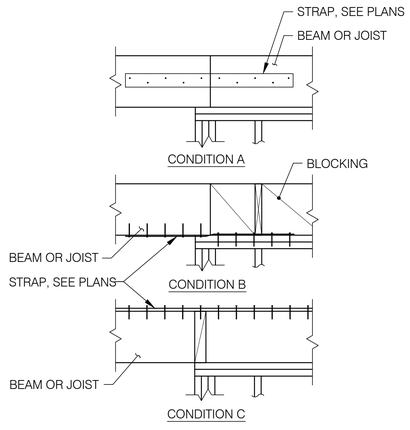
3 S8.2 TIEDOWN LOCATED IN WALL PLAN

1"=1'-0"



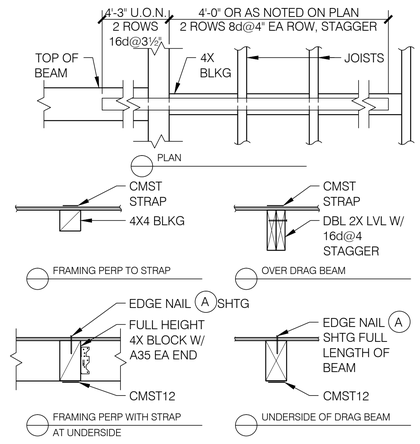
8 S8.2 TIEDOWN AT EXISTING FOUNDATION WOOD FLOOR

1"=1'-0"



5 S8.2 TIE STRAPS

3/4"=1'-0"



2 S8.2 COLLECTOR STRAP

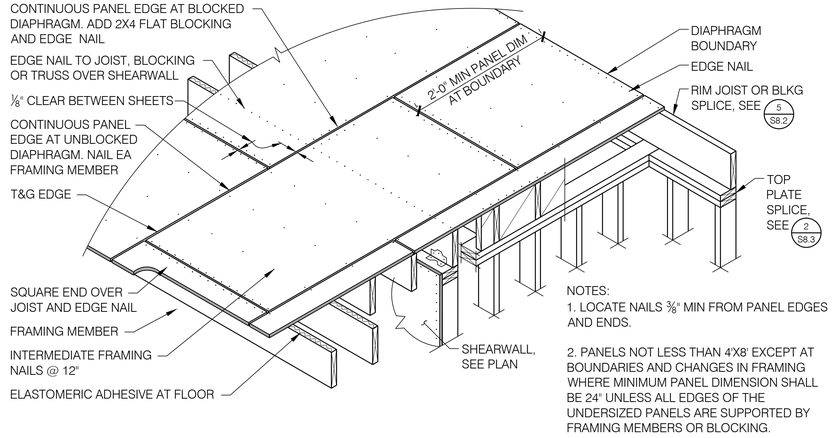
1"=1'-0"

TIEDOWN LOADING & POST SCHEDULE										
SYMBOL	ASD TENSION LOAD (KIPS) SIMPSON C-2009	TIEDOWN ASSEMBLY (1)	SSTB/ SB ANCHOR BOLT (1)		ALL-THREAD ANCHOR BOLT		SPLICE 2- 2X TIEDOWN POSTS		TIEDOWN POST 4" OR 6" THICK WALLS (3)(4)	SQUARE WASHER ON WOOD (5)
			ANCHOR	MINIMUM EMBEDMENT	DIAMETER (2)	DRILL EXPOXY MIN EMBEDMENT (6)	BOX OR SINKER NAILS	SDS ¼"X2½"		
H2	3.1	HDU2-SDS2.5	SSTB24 OR SB⅝X24	20" 18"	⅝"	10"	16d@4"	5 TOTAL EQUAL SPACE	2-2X OR 4X NO. 1	½"X3"X3"

FOOTNOTES
(1) SIMPSON CO. OR APPROVED EQUIVALENT.
(2) ASTM A36
(3) DOUGLAS FIR LARCH, GRADE AS NOTED.
(4) POST SIZED TO RESIST COMBINED AXIAL AND BENDING STRESS DUE TO ECCENTRICITY BETWEEN BOLT AND POST CENTER LINE.
(5) BASE BOLT WASHER BEARING ON WOOD BEAM (WHERE APPLICABLE).
(6) SEE GENERAL NOTES FOR ADHESIVE REQUIREMENTS.

10 S8.2 TIEDOWN LOADING & POST SCHEDULE

1"=1'-0"

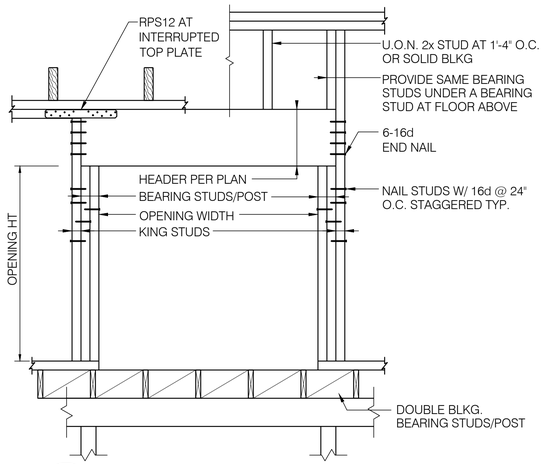


NOTES:
1. LOCATE NAILS ⅜" MIN FROM PANEL EDGES AND ENDS.

2. PANELS NOT LESS THAN 4'X8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING WHERE MINIMUM PANEL DIMENSION SHALL BE 24" UNLESS ALL EDGES OF THE UNDERSIZED PANELS ARE SUPPORTED BY FRAMING MEMBERS OR BLOCKING.

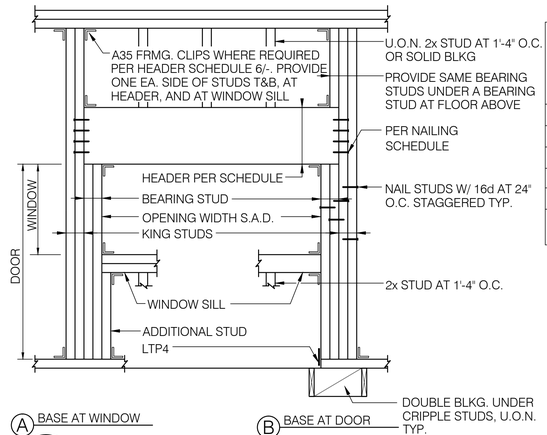
4 S8.2 DIAPHRAGM SHEATHING
CASE 1 & 3 RE: 2018 NDS SPECIAL DESIGN PROVISIONS FOR WIND & SEISMIC

NTS



12 S8.3 TYPICAL CEILING FRAMING AT BEAM

NTS



9 S8.3 TYPICAL FRAMING AT DOOR/WINDOW OPENINGS

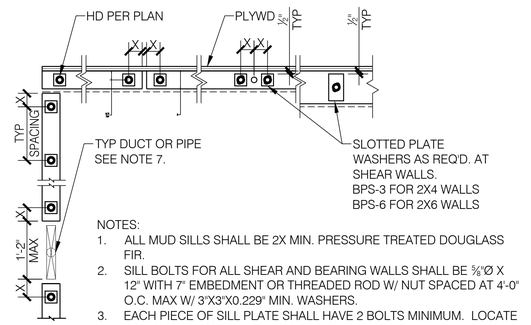
NTS

MAX. OPENING WIDTH	EXTERIOR WALL					INTERIOR WALL			
	BEARING STUD	KING STUD	MIN. HEADER SIZE(1)	WINDOW SILL	FRAMING CLIPS	BEARING STUD	KING STUD	MIN. HEADER SIZE	WINDOW SILL
4'-0"	2x4	2x4	4x6	2x4	NONE	2x4	2x4	4x6	2x4
6'-0"	2x4	2x4	4x6	2x4	NONE	2x4	2x4	4x8	2x4
8'-0"	2-2x4	2-2x4	4x8	2-2x4	A35	2x4	2x4	4x10	2-2x4
10'-0"	2-2x4	2-2x4	4x10	2-2x4	A35	2x4	2x4	4x12	2-2x4
12'-0"	2-2x4	2-2x4	4x12	4x4	A35	2-2x4	2x4	4x12	4x6
16'-0"	2-2x4	2-2x4	3 1/2 x11 7/8 PSL	4x8	A35	-	-	-	-

NOTES:
1. UNLESS OTHERWISE NOTED ON PLANS
2. USE CBC TABLE 2304.10.1 FOR OTHER NAILING REQUIREMENTS NOT NOTED.
3. FOR ADDITIONAL FRAMING INFO. SEE DET. 9/-
4. 4X FRAMING MAY BE SUBSTITUTED FOR 2-2X AT CONTRACTORS OPTION. MATCH DEPTH SHOWN IN SCHEDULE.
4. USE 4x AT 2x4 WALLS

6 S8.3 DOOR/WINDOW FRAMING SCHEDULE

NTS



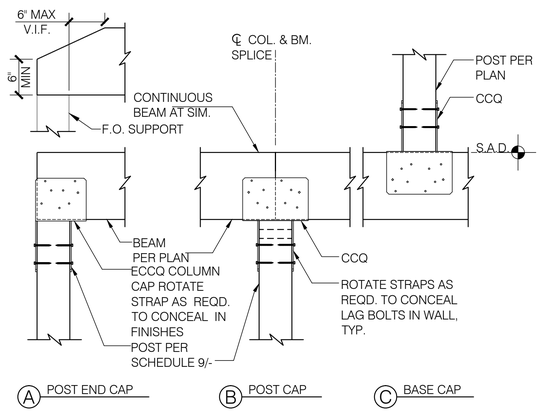
NOTES:
1. ALL MUD SILLS SHALL BE 2X MIN. PRESSURE TREATED DOUGLASS FIR.
2. SILL BOLTS FOR ALL SHEAR AND BEARING WALLS SHALL BE ⅝"Ø X 12" WITH 7" EMBEDMENT OR THREADED ROD W/ NUT SPACED AT 4'-0" O.C. MAX W/ 3"X3"X0.229" MIN. WASHERS.
3. EACH PIECE OF SILL PLATE SHALL HAVE 2 BOLTS MINIMUM. LOCATE BOLTS CLEAR OF STUDS AND POSTS.
4. FOR MISALIGNED ANCHORS AT SHEAR WALLS PROVIDE SLOTTED PLATE WASHERS WITH STANDARD CUT WASHER AND NUT OVER SLOTTED PLATE WASHER.
5. "X" DIMENSION SHALL BE 4" MIN. AND 1'-0" MAX.
6. ALL ANCHOR BOLTS AND NAILS THAT ARE IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED.
7. DUCT OR PIPE PENETRATIONS LARGER THAN D/3 SHALL BE LIMITED TO 1 BAY PER 10'-0" OF WALL.

3 S8.3 SILL AND ANCHOR BOLT REQUIREMENTS

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

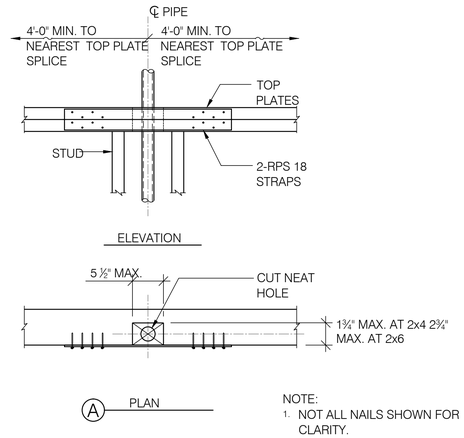
11 S8.3 NOT USED

1"=1'-0"



8 S8.3 TYP BEAM TO POST CONNECTION

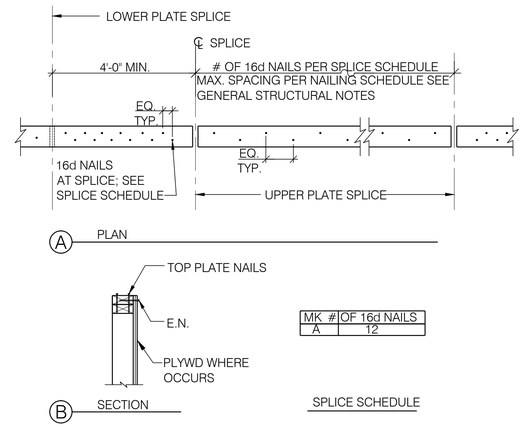
1"=1'-0"



NOTE:
1. NOT ALL NAILS SHOWN FOR CLARITY.

5 S8.3 STRENGTHENING PENETRATION AT BEARING WALL

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

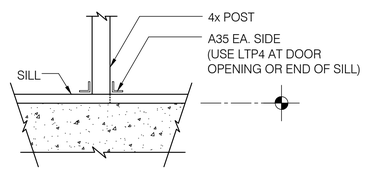


2 S8.3 DOUBLE TOP PLATE SPLICE

1"=1'-0"

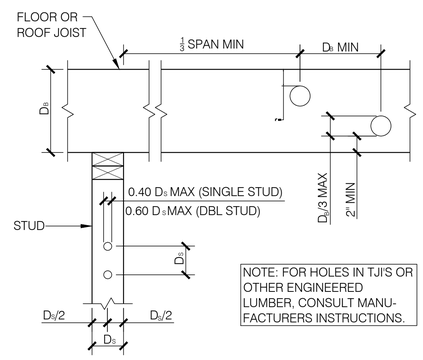
10 S8.3 NOT USED

1"=1'-0"



7 S8.3 POST BASE CONNECTION

1"=1'-0"

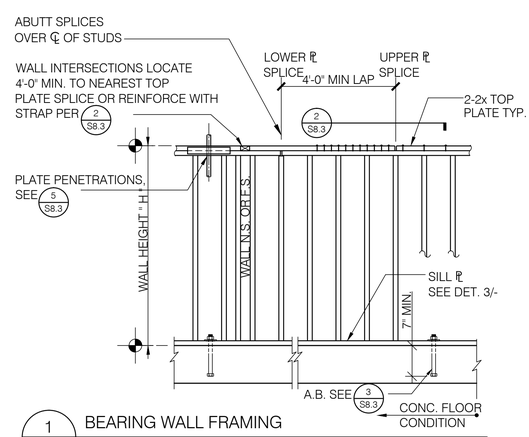


4 S8.3 HOLES IN SAWN LUMBER

REF: 2016 CBC 2308.8, .9, .10

NTS

NOTES:
1. USE CBC TABLE 2304.10.1 FOR OTHER NAILING REQUIREMENTS NOT NOTED.



1 S8.3 BEARING WALL FRAMING SECTION

1"=1'-0"

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REGISTERED PROFESSIONAL ENGINEER MICHAEL A. COMANDO S 6672 STRUCTURAL STATE OF CALIFORNIA

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ISSUE	DATE
PERMIT	10/17/2023

TYPICAL WOOD DETAILS

S8.3