

AB.	Anchor Bolt	Incl.	Include, (ing), (ed)	
ABV.	Above	INSUL.	Insulation	
A/C	Air Conditioner	INT.	Interior	
ADJ.	Adjustable	JST.	Joist	
A.D.	Area Drain	JT.	Joint	
AFF	Above Finish Floor	L.	Length	
AFG	Above Finish Grade	LAM.	Laminate	
AGGR.	Aggregate	LAV.	Lavatory	
AL. (ALUM.)	Aluminum	L.P.	Low Point	
APPROX.	Approximate	LT.	Light	
ARCH.	Architectural			
A.S.L.	Above Sea Level			
BD.	Board	MAX.	Maximum	
BLDG.	Building	MECH.	Mechanical	
BLK.	Block	MEMB.	Membrane	
BLKG.	Blocking	MEZZ.	Mezzanine	
BLW	Below	MFR.	Manufacturer	
BM	Beam	MIN.	Minimum	
B.O.	Bottom Of	MISC.	Miscellaneous	
BOT	Bottom	MTL.	Metal	
B.TWN.	Between	MUL.	Mullion	
B.U.	Built-up	(N)	New	
CAB.	Cabinet	NOM.	Nominal	
CEM.	Cement	NO. or #	Number	
C.H.	Ceiling Height	N.T.S.	Not to Scale	
C.J.	Control Joint	O.A.	Overall	
CLG.	Ceiling	OBS.	Obscure	
CLST	Closet	O/C	On Center	
CLR.	Clear	O.D.	Outside Diameter	
CNTR.	Counter	OFF.	Office	
CO	Clean Out	OPC.	Opening	
COL.	Column	OPP.	Opposite	
CONC.	Concrete	PERP.	Perpendicular	
CONN.	Connection	PL.	Plate	
CONST.	Construction	P.L.	Property Line	
CONT.	Continuous	P.L.	Plaster	
CORR.	Corridor	PLAS.	Plywood	
CPT.	Carpet	PLYWD.	Panel	
CTR.	Center	PNL.	Pair	
DBL.	Double	PR.	Pre-cast	
DEPT.	Department	PRCST.	Pressure Treated	
DET.	Detail	PT.	Painted	
DIA.	Diameter	PTD.		
DIM.	Dimension	QTY.	Quantity	
DN.	Down	RAD.	Radius	
D.O.	Door Opening	R.D.	Roof Drain	
DR.	Door	RDWD.	Redwood	
DS.	Downspout	REF.	Reference	
D.S.P.	Dry Standpipe	REINF.	Reinforced, Reinforcing	
EA.	Each	REQ.	Required	
E.J.	Expansion Joint	REV.	Revision(s), Revised	
EL. (ELEV.)	Elevation	RGTR.	Register	
ELEC	Electric/al	RM.	Room	
EMER.	Emergency	EQ.	Equal	
ENCL.	Enclosure	EQPT.	Equipment	
F.P.	Electrical Panel	EXP.	Expansion	
EQ.	Equal	EXPO.	Exposed	
EQPT.	Equipment	EXG. or (E)	Existing	
EXP.	Expansion	EXT.	Exterior	
F.A.	Fire Alarm	S.C.	Solid Core Schedule	
FAU	Forced Air Unit	SCHED.	Storm Drain Section	
F.B.	Flat Bar	SD.	Square Feet	
F.D.	Floor Drain	SECT.	Square Feet	
F.F.	Finish Floor	S.F.	Sheet	
F.F.E.	Finish Floor	SHR.	Sheet	
FH	Elevation	SHT.	Similar	
FIN.	Fire Hydrant	SIM.	Specification	
FIXT.	Finish (ed)	SPEC.	Square	
FLASH.	Fixture	SQ.	Stainless Steel	
FLR.	Flashing	SST.	Standard Storage	
FND.	Floor	STD.	Steel	
F.O.C.	Foundation	TEL.	Structural	
Face of Concrete		T&G	Suspended	
Face of Stud		THK.	Symmetrical	
F.P.R.F.	Fireproof	T.O.		
FRMG.	Framing	T.O.C.	Top of Curb	
FTG.	Footing	T.V.	Television	
FURR.	Furring	TYP.	Typical	
GA.	Gauge	UNF.	Unfinished	
GALV.	Galvanized	U.O.N.	Unless Otherwise Noted	
GL.	Glass	VERT.	Vertical	
G.L.B.	Glue Laminated Beam	V.I.F.	Verify in Field	
GR.	Grade	VTO	Vent to Outside	
G.S.M.	Galv. Sht. Metal			
G.Y.P.	Gypsum Board			
H.B.	Hose Bib	W/	With	
HDW.	Hardware	W.	Width, Wide	
HDR.	Header	W.C.	Water Closet	
HT.	Height	WD.	Wood	
H.M.	Hollow Metal	WH.	Water Heater	
HORIZ.	Horizontal	W/O	Without	
I.D.	Inside Diameter	W.P.	Waterproof(ing)	
		WT.	Weight	

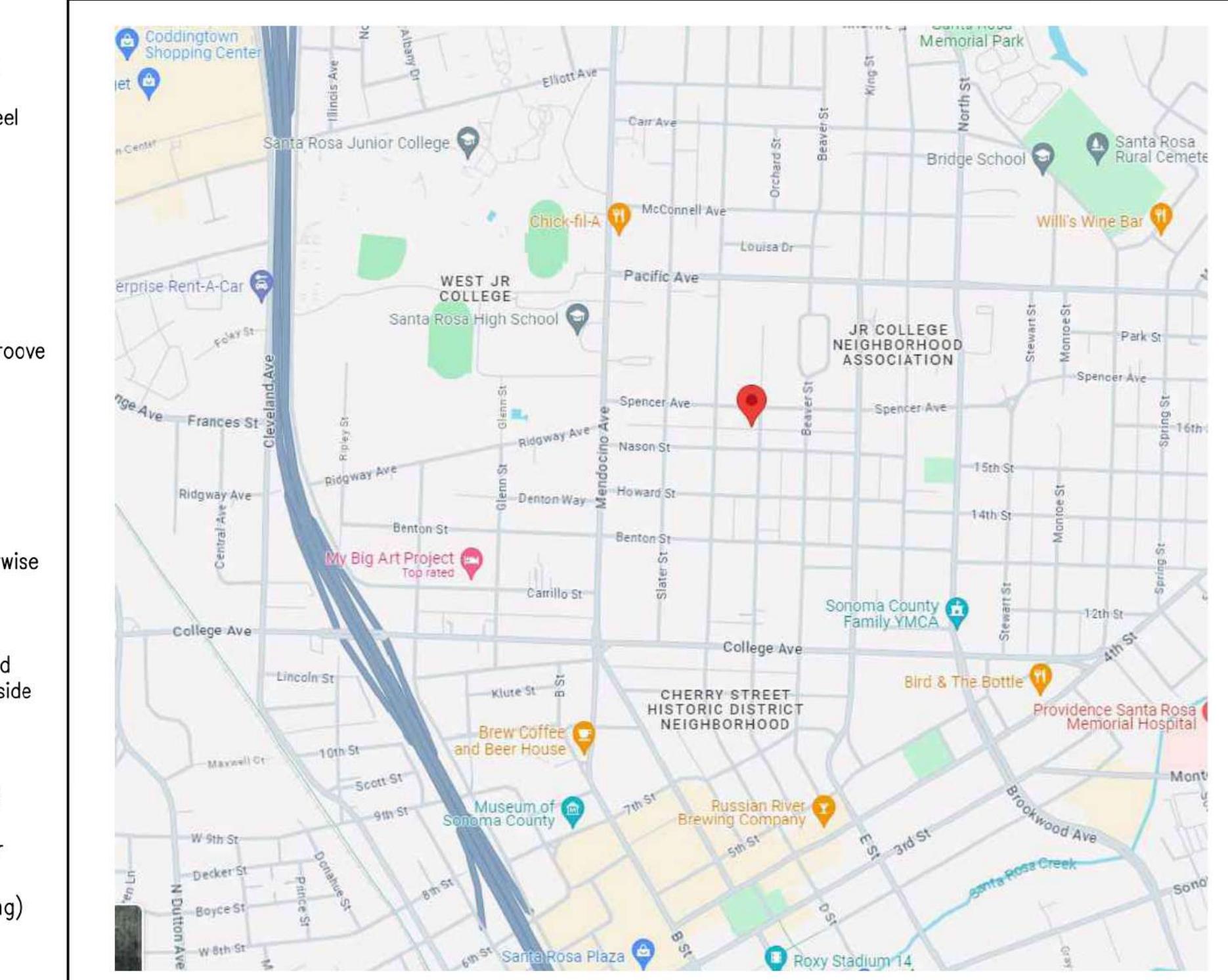
#### ARCHITECTURAL ABBREVIATIONS

#### VICINITY MAP

- ALL WORK SHALL CONFORM TO APPLICABLE CODES AND STANDARDS. GOVERNING AUTHORITIES AND CODES TAKE PRECEDENCE OVER DRAWINGS AND SPECIFICATIONS. REPORT DISCREPANCIES IMMEDIATELY.
- ALL CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED AND AS REQUIRED BY THE CURRENT EDITION OF THE BUILDING CODE. REFER TO "APPLICABLE CODES AND STANDARDS" IN THIS SHEET.
- WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS, WRITTEN DIMENSIONS ARE APPROXIMATE AND MUST BE VERIFIED. CONTRACTOR TO VERIFY AND BE RESPONSIBLE FOR ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO AND DURING ALL PHASES OF WORK.
- THE CONTRACTOR SHALL THOROUGHLY REVIEW PLANS AND EXISTING SITE CONDITIONS AND NOTIFY ALL CAL CONSTRUCTION SERVICES INC. OF ANY DISCREPANCIES, ERRORS OR OMISSIONS PRIOR TO CONSTRUCTION. IF CONTRACTOR PROCEEDS WITH THE DISCREPANCY WITHOUT INSTRUCTIONS FROM ALL CAL CONSTRUCTION SERVICES INC., THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGES TO THE SATISFACTION OF HOGAN LAND SERVICES OR THE OWNER.
- NO CHANGES, MODIFICATIONS OR DEVIATIONS SHALL BE MADE FROM THE DRAWINGS OR SPECIFICATIONS WITHOUT FIRST SECURING WRITTEN PERMISSION FROM ALL CAL CONSTRUCTION SERVICES INC. OR THE OWNER.
- ALL CAL CONSTRUCTION SERVICES INC. IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE OWNER AND/OR TENANT.
- IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE NOTES OR SPECIFICATIONS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR.
- PRIOR TO CONSTRUCTION VERIFY ALL EXISTING CONDITIONS.
- NEITHER ALL CAL CONSTRUCTION SERVICES INC. NOR THE ENGINEERS, NOR THE OWNERS SHALL BE RESPONSIBLE FOR: CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OF THE CONTRACTOR, SAFETY PRECAUTIONS AND PROGRAMS OF THE CONTRACTOR, THE ACTS OR OMISSIONS OF CONTRACTOR, OR THE FAILURE OF CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- INSTALL ALL MATERIALS AND PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND APPLICABLE ICC REPORTS.
- CONTRACTOR SHALL REMOVE PROMPTLY AND LEGALLY ALL ACCUMULATED DEBRIS, PROTECT ALL EXPOSED PORTIONS OF WORK FROM ELEMENTS, AVOID OVER-LOADING STRUCTURE, AND SECURELY STORE ALL ITEMS TO BE USED FOR CONSTRUCTION. COMBUSTIBLE DEBRIS, RUBBISH, AND WASTE MATERIAL SHALL BE REMOVED FROM THE BUILDING DAILY. BURNING OF WASTE MATERIAL IS NOT PERMITTED. ALL AREAS SHALL BE LEFT IN A BROOM - CLEAN CONDITION ON A DAILY BASIS.
- A MINIMUM OF 65% OF THE NON-HAZARDOUS CONSTRUCTION AND DEMOLITION WASTE MUST BE RECYCLED AND/OR SALVAGED FOR REUSE IN ACCORDANCE WITH A LOCAL WASTE MANAGEMENT COMPANY. MAINTAIN DOCUMENTATION TO DEMONSTRATE COMPLIANCE AS REQUIRED BY THE ENFORCING AGENCY.
- WHERE MATERIALS, EQUIPMENT, APPARATUS, OR OTHER PRODUCTS ARE SPECIFIED BY MANUFACTURER, BRAND NAME, TYPE, OR CATALOG NUMBER SUCH DESIGNATION IS TO ESTABLISH STANDARDS OF DESIRED QUALITY AND STYLE AND SHALL BE THE BASIS OF THE BID. MATERIAL SO SPECIFIED SHALL BE FURNISHED UNDER THE CONTRACT UNLESS A CHANGE IS AUTHORIZED IN WRITING. ACCEPTANCE OR REJECTION OF THE PROPOSED SUBSTITUTIONS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IF REQUESTED BY THE OWNER, THE CONTRACTOR SHALL SUBMIT FOR INSPECTION SAMPLES OF BOTH THE SPECIFIED AND PROPOSED SUBSTITUTE TERMS.
- CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO START EXCAVATION. ALL EXISTING UTILITIES AND CITY SERVICE ARE TO BE MAINTAINED, KEPT IN SERVICE, AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. ANY EXISTING UTILITIES TO BE ABANDONED SHALL BE PROPERLY DISCONNECTED, PLUGGED OR CAPPED AS REQUIRED BY CODE OR SOUND CONSTRUCTION PRACTICE.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONARY MEASURES TO PROTECT THE PUBLIC AND ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION.
- ELECTRICAL CALCULATIONS AND WIRE SIZING SHALL BE PROVIDED BY A LICENSED ELECTRICAL CONTRACTOR. CONTRACTOR SHALL VERIFY LOCATION, FIXTURE TYPES AND EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
- WHEN FIRE SPRINKLER SYSTEM IS REQUIRED IT SHALL BE INSTALLED IN ACCORDANCE WITH NFPA AND LOCAL REGULATIONS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE GOVERNING JURISDICTION FOR PERMIT.
- LOCAL BUILDING DIVISION STANDARD APPROVED PLANS SHALL BE KEPT AT THE SITE AND SHALL NOT BE USED BY WORKERS. ALL CONSTRUCTION SETS SHALL BE KEPT UP TO DATE, AND REFLECT THE SAME INFORMATION.
- AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER AT THE COMPLETION OF THE PROJECT.
- WHEN SPECIAL INSPECTION IS REQUIRED, THE SPECIAL INSPECTION REPORT MUST BE COMPLETED BY ALL OF THE FOLLOWING PRIOR TO THE APPROVAL OF THE BUILDING PERMIT APPLICATION:

  - THE PROPERTY OWNER;
  - THE REGISTERED DESIGN PROFESSIONAL HAVING RESPONSIBLE CHARGE;
  - THE SPECIAL INSPECTOR RECOGNIZED BY THE BUILDING DIVISION; AND
  - THE CONTRACTOR WHOM THE BUILDING PERMIT IS ISSUED TO.

#### PROJECT GENERAL NOTES



CONSTRUCT TWO STORY ACCESSORY DWELLING UNIT (ADU) AT EXISTING GARAGE LOCATION.

**DESIGNER INFORMATION**  
ALL CAL CONSTRUCTION SERVICES  
PO BOX 2403  
SANTA ROSA, CA 95405  
SHAWN BROWN / LIC#884185  
707-495-5969  
415-533-6554

**STRUCTURAL ENGINEER**  
STRUCTURAL DESIGN GROUP  
2455 BENNETT VALLEY RD, STE B119  
SANTA ROSA, CA 95404  
PHONE: (707) 284-3641  
PRINCIPAL: BRIAN HARTLEY

**TITLE 24 CONSULTANT**  
ENERGY CONSULT LLC  
411 N. HARBOR BLVD. STE. # 205  
SAN PEDRO [LA], CALIFORNIA, 90731  
PRINCIPAL: IGOR PICCHO  
424-247-7658 / ENERGY@TITLE24EZ.COM

**GEOTECHNICAL ENGINEER**  
BRUNSWICK ASSOCIATES INC.  
5468 SKYLANE BLVD – SUITE 201  
SANTA ROSA, CA 95403  
PHONE: 707-528-6108  
PRINCIPAL: KEITH COLORADO  
REPORT NUMBER: 13749.01  
DATED: 12/30/24

**OWNER INFORMATION**  
OLIVIA RIVAS  
1017 ORCHARD STREET  
SANTA ROSA, CA 95403

#### PROJECT DESCRIPTION

#### PROPERTY INFORMATION

ALL CODES REFERENCED ARE TO BE USED AS AMENDED BY THE STATE OF CALIFORNIA AND LOCAL JURISDICTION. (ALL CODES MAY NOT APPLY TO EVERY PROJECT)

ADDRESS : 1017 ORCHARD, SANTA ROSA, CA  
APN# 180-600-024  
PROPERTY LOCATION: LAT. LONG. 38.450184, -122.713592  
OCCUPANCY: R-3  
ZONING: RR-1  
BUILDING TYPE: V-b, NON-SPRINKLERED

**LAND COVERAGE:**  
(E) HOUSE FOOTPRINT: 967 Sq. Ft.  
(E) DETACHED GARAGE: 196 Sq. Ft.  
(N) ADU ADDITION: 540 Sq. Ft.  
TOTAL (E) COVERAGE: 1,163 Sq. Ft.  
TOTAL (N) COVERAGE: 1,247 Sq. Ft.

Lot Acres Total: 0.09 Acres  
Lot Sq Ft Total: 3800 Sq Ft  
Percentage of Allowed Lot Coverage: 40%  
Allowed Lot Coverage: 1,985 Sq. Ft.  
Proposed Lot Coverage: 33%

#### PROJECT DATA

#### APPLICABLE CODES

#### SHEET INDEX

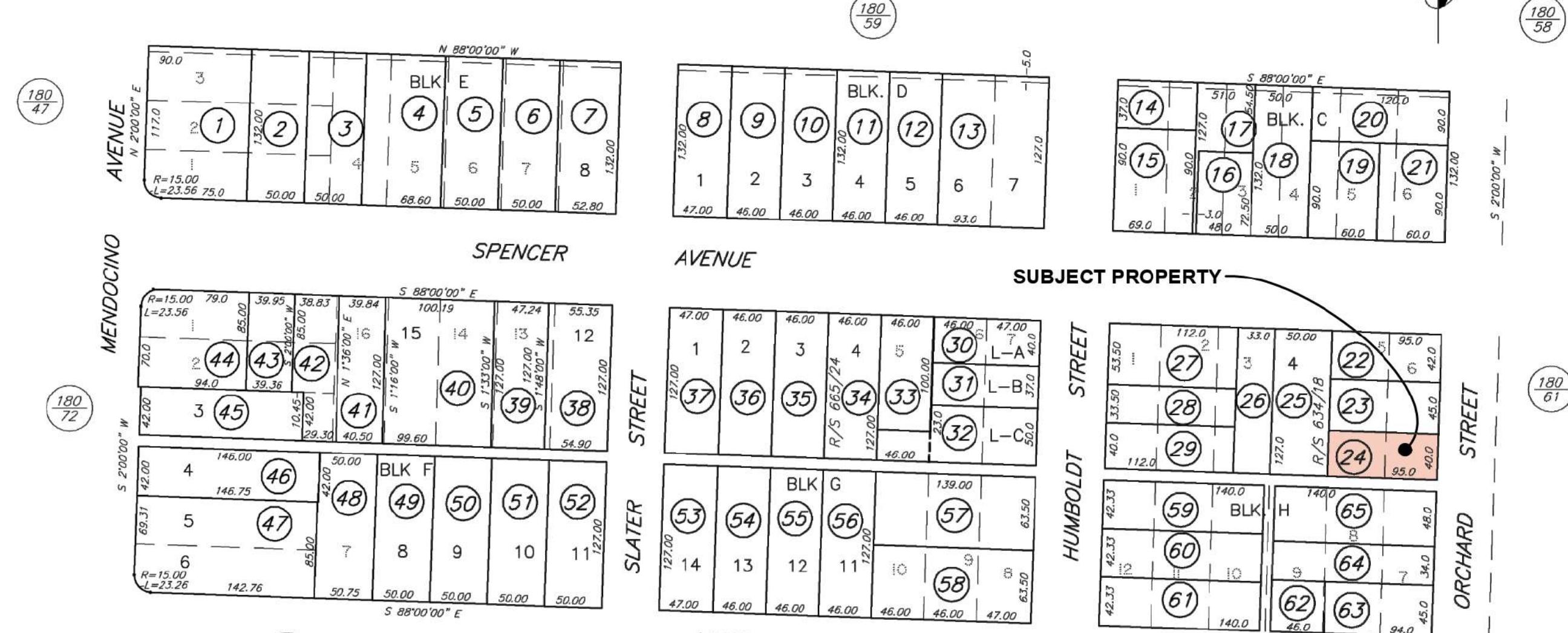
#### COUNTY ASSESSOR'S PARCEL MAP

Ptn of MERRIAM'S ADDITION  
REC. 08-17- 1887 IN BK. 01, MAPS, PGs. 28  
W.H. & J.E. POOL SUBDIVISION  
REC. 04-24- 1905 IN BK. 18, MAPS, PGs. 01

TAX RATE AREA  
4-001

180-60

SCALE: 1"=100'



#### PARCEL MAP

#### NOTES

NOTE: This map was prepared for Assessment purposes only and is not intended for survey or title purposes. It is not to be used for any other purpose than as a general reference for property location. It is not to be used for any other purpose than as a general reference for property location. It is not to be used for any other purpose than as a general reference for property location.

NOTE: Assessor's parcels do not necessarily constitute legal lots. To verify legal parcel status, check with the appropriate city or county community development or planning division.

Assessor's Map Bk. 180, Pg. 60  
Sonoma County, Calif. (ACAD)  
KEY 4-30-14 KB  
REvised 07-16-07-6E-LF  
02-14-03-R/S-RM  
04-07-05-R/S-RM

ACCESSORY DWELLING UNIT (ADU)  
1017 ORCHARD STREET  
SANTA ROSA, CALIFORNIA  
A.P.N. # 180 - 600 - 024

PLANS DRAWN BY: JF  
DATE DRAWN: 02/10/2025

SHEET TITLE:  
COVER SHEET

SHEET NUMBER:  
A0.0

1 OF 18



ACCESSORY DWELLING UNIT (ADU)  
1017 ORCHARD STREET  
SANTA ROSA, CALIFORNIA  
A.P.N. # 180 - 600 - 024

1017 ORCHARD STREET  
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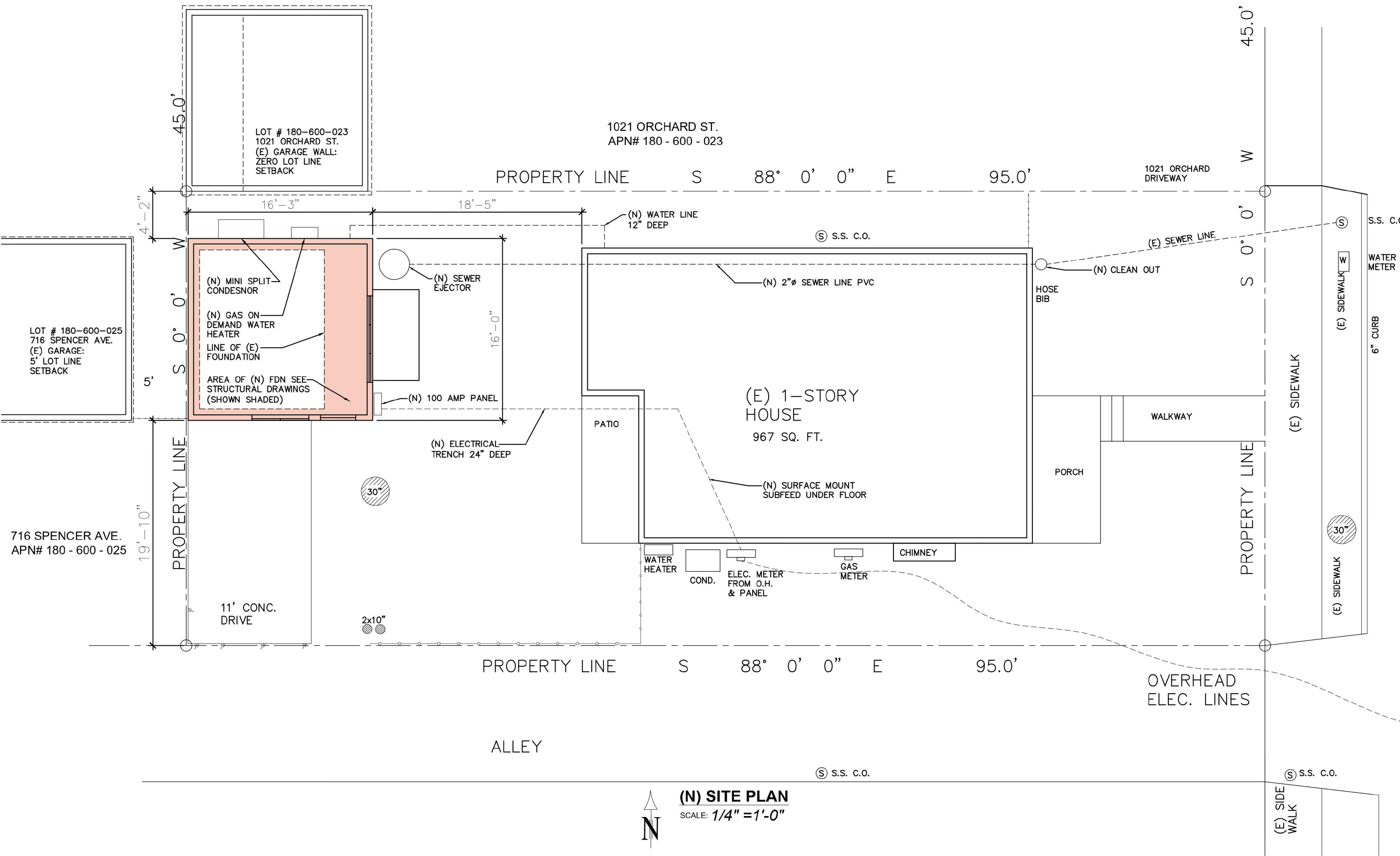
PLANS DRAWN BY: JF  
DATE DRAWN: 02/10/2025

SHEET TITLE:  
**(N) SITE  
ADU SITE PLAN**

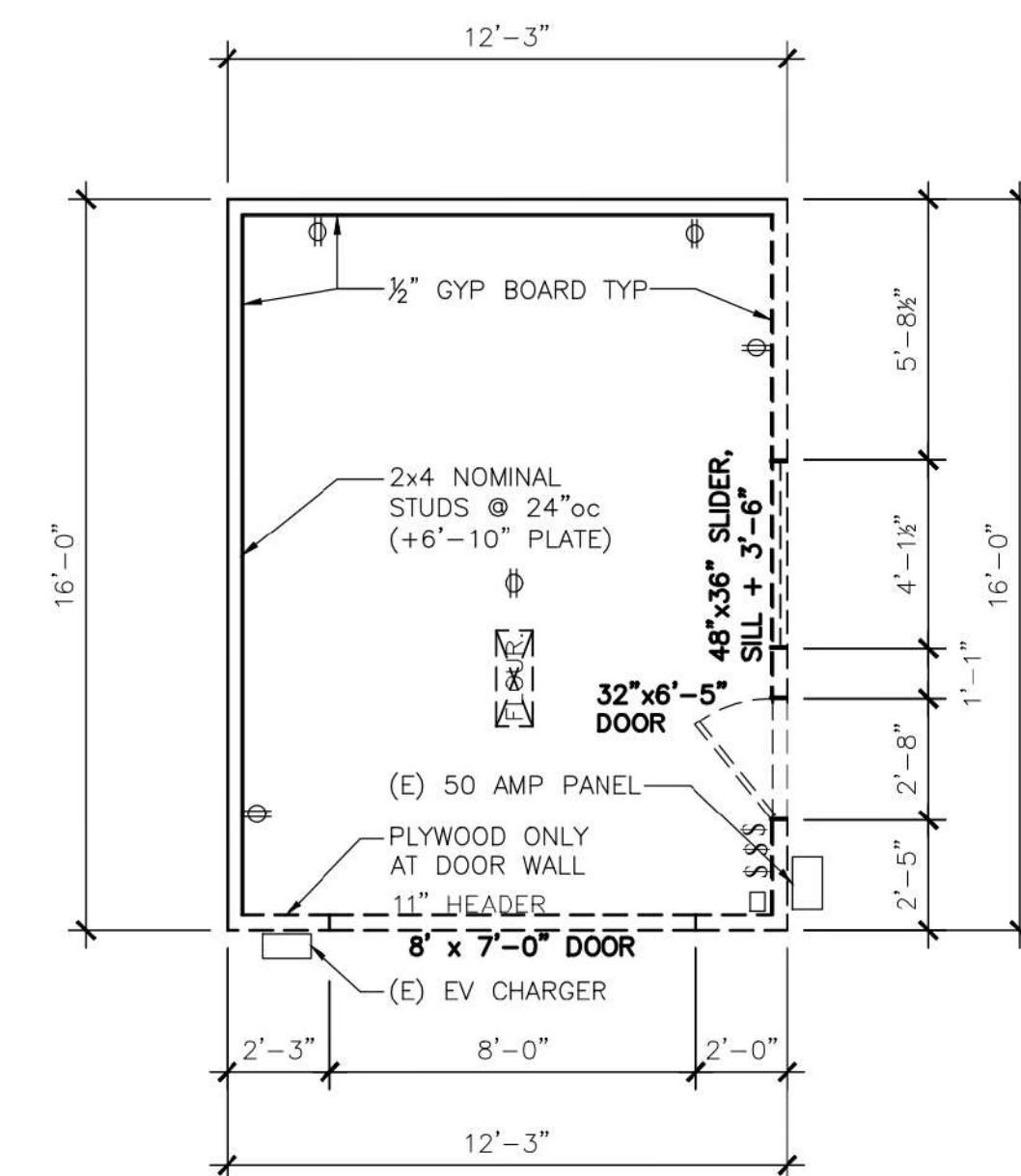
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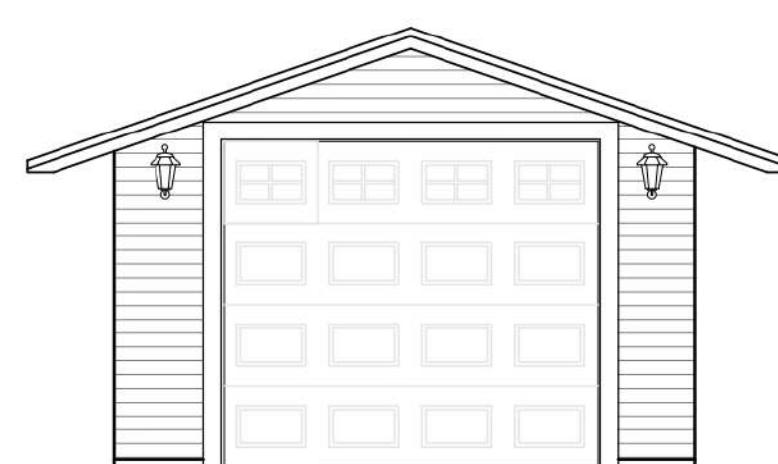
OF 18



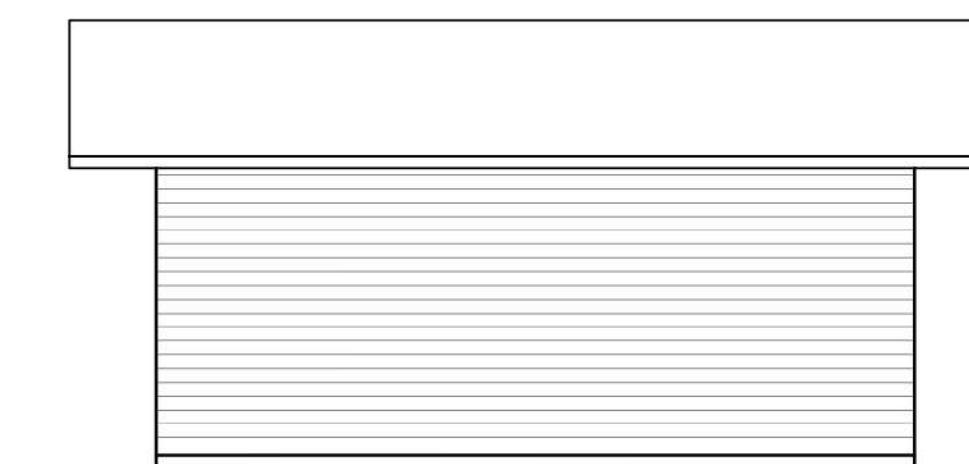
**ACCESSORY DWELLING UNIT (ADU)**  
1017 ORCHARD STREET  
SANTA ROSA, CALIFORNIA  
A.P.N. # 180 - 600 - 024



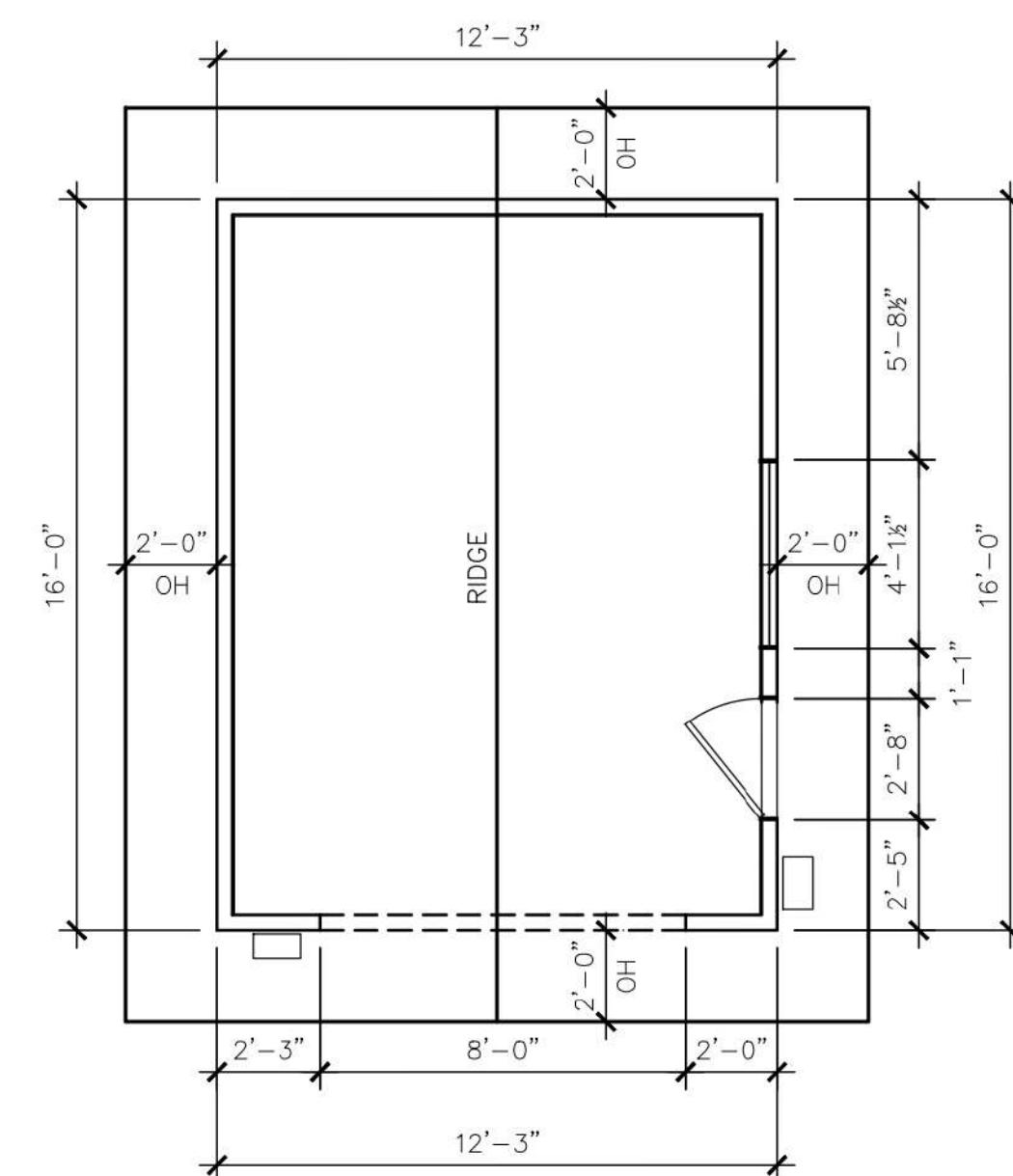
**(E) FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



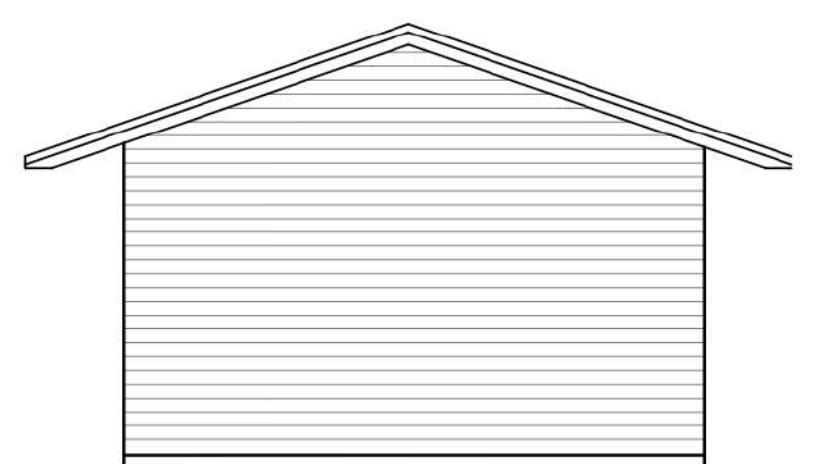
**(E) SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"



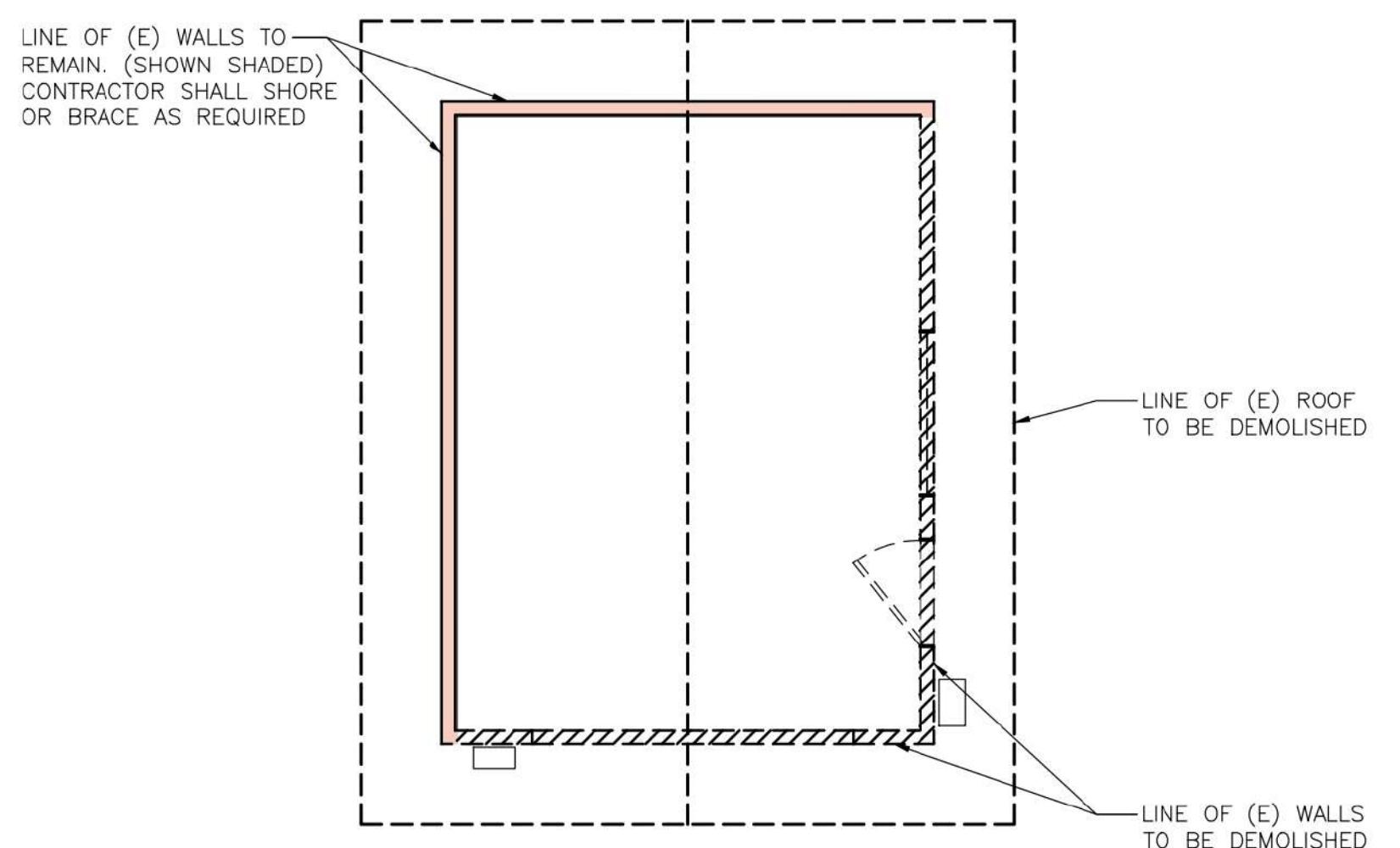
**(E) WEST ELEVATION**  
SCALE: 1/4" = 1'-0"



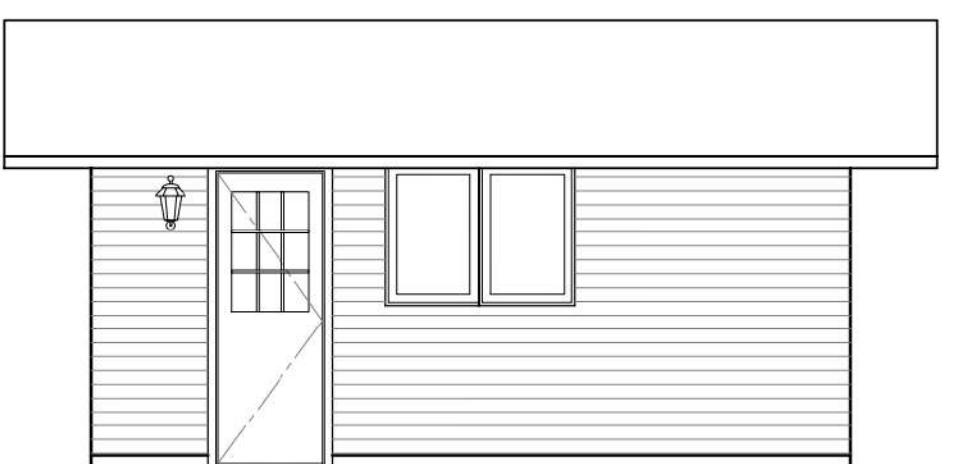
**(E) ROOF PLAN**  
SCALE: 1/4" = 1'-0"



**(E) NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"



**DEMO PLAN**  
SCALE: 1/4" = 1'-0"

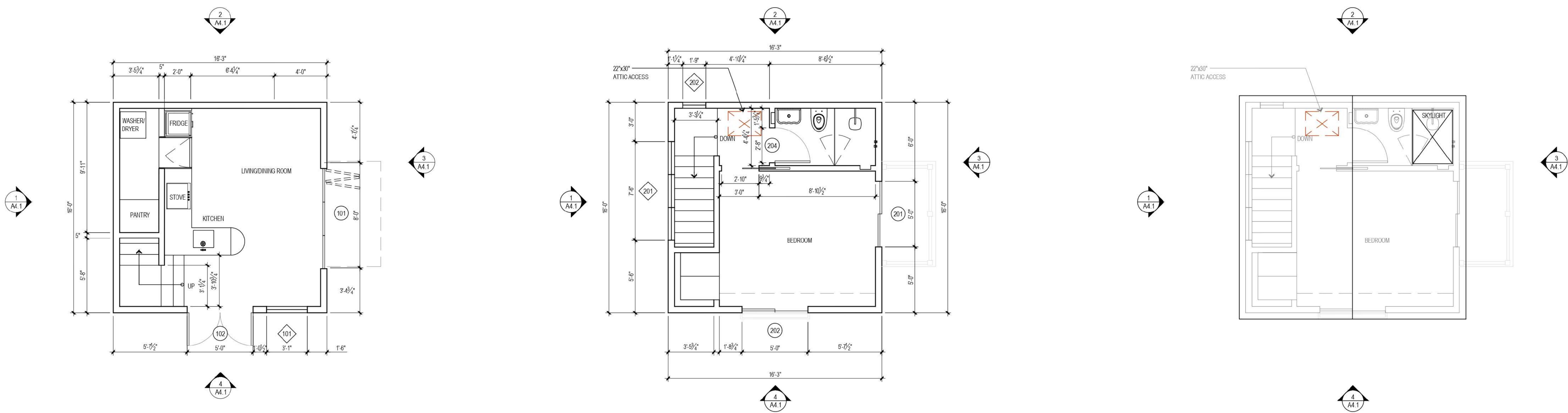


**(E) EAST ELEVATION**  
SCALE: 1/4" = 1'-0"

PLANS DRAWN BY: JF  
DATE DRAWN: 02/10/2025

SHEET TITLE:  
**(E) BUILDING PLANS & ELEVATIONS**

SHEET NUMBER:  
**A3.0**



(N) 1st FLOOR PLAN

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



(N) 2nd FLOOR PLAN

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



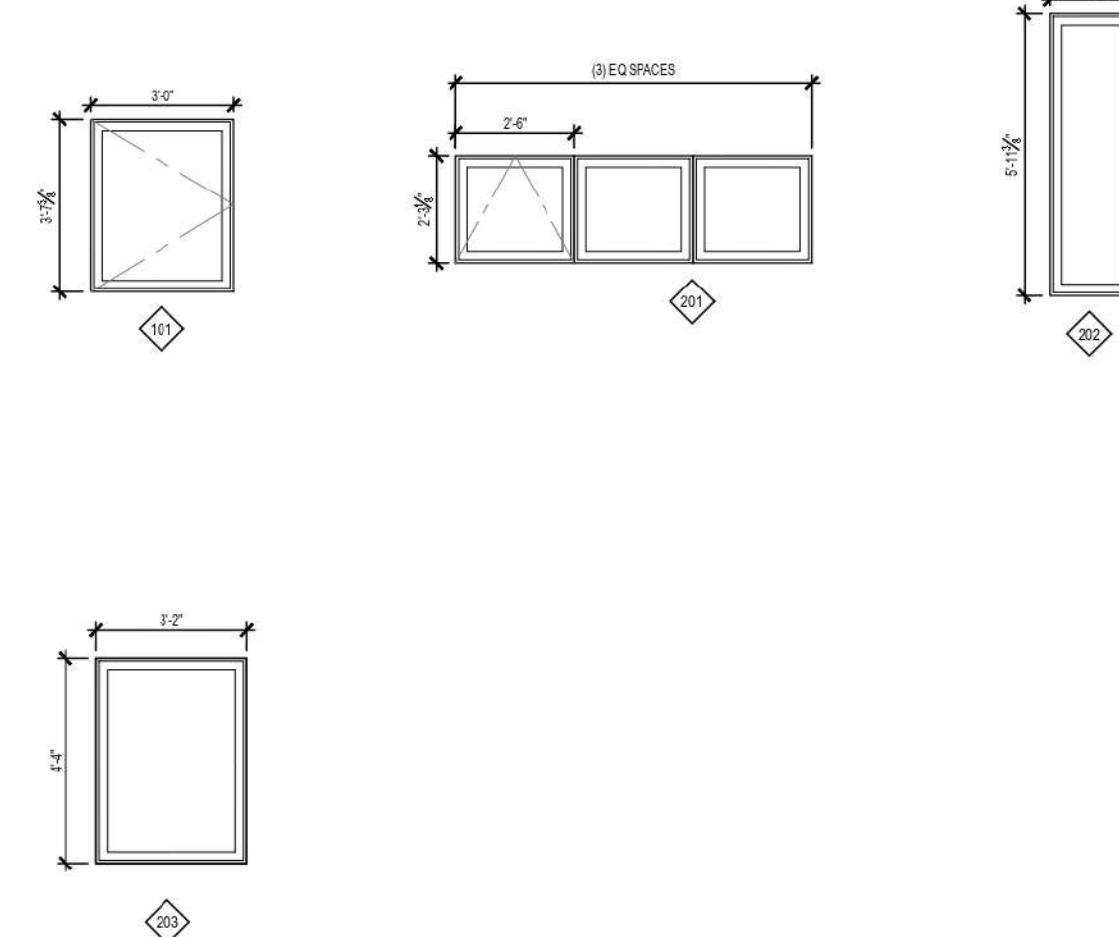
(N) ROOF PLAN

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



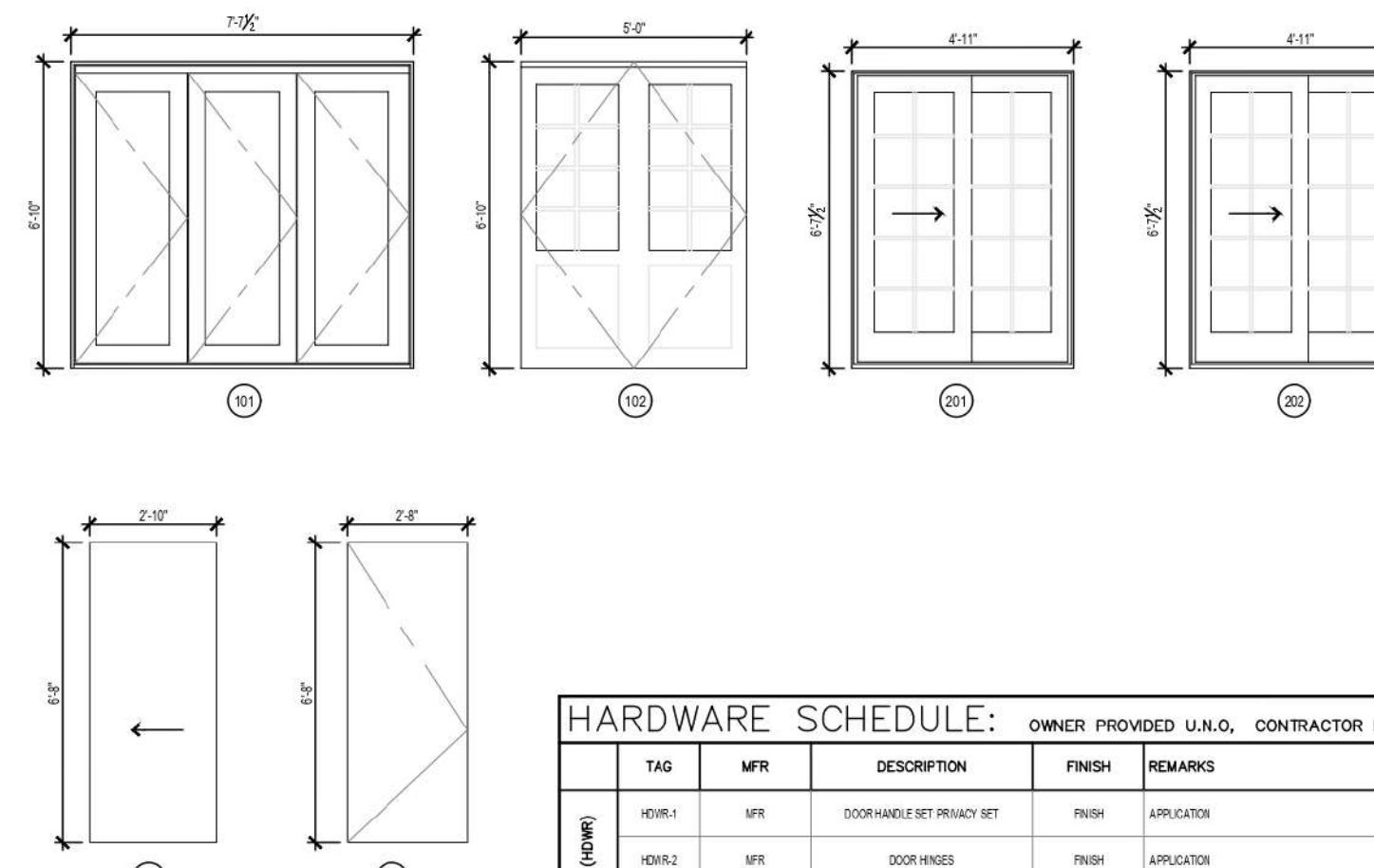
WINDOW SCHEDULE

LEVEL	TAG	MAT	MANUF.	MODEL #	STYLE	FINISH SIZE		HDWR GROUP	FINISH		REMARKS
						WDTH	HEIGHT		EXT.	INT.	
LEVEL 1	101	ALUMINUM EXTERIOR WOOD INTERIOR PAINTED BLACK	MARVIN ULTIMATE OR SIMILAR		ULTIMATE EAVES	3'-0"	3'-7 1/8"				
	202	ALUMINUM EXTERIOR WOOD INTERIOR PAINTED BLACK	MARVIN ULTIMATE OR SIMILAR		AWNING AND FIXED	2'-6" PER WINDOW	2'-3 1/8"				
	201	ALUMINUM EXTERIOR WOOD INTERIOR PAINTED BLACK	MARVIN ULTIMATE OR SIMILAR		AWNING NARROW FRAME	1'-4 1/2"	5'-11 3/8"				



DOOR SCHEDULE

LEVEL	TAG	MAT	MANUF.	MODEL #	STYLE	FRAME SIZE			HDWR GROUP	REMARKS
						WDTH	HEIGHT	THICKNESS		
LEVEL 1	101	ALUMINUM EXTERIOR WOOD INTERIOR PAINTED BLACK	MARVIN ULTIMATE OR SIMILAR		FRENCH	7'-7 1/2"	6'-10"			KITCHEN/PATIO
	102	TBD	TBD	DEADBOLT, LEVER	FRENCH	5'-0"	6'-10"			ENTRY MATCH PATIO DOOR HEIGHT IF POSSIBLE
	201	ALUMINUM EXTERIOR WOOD INTERIOR PAINTED BLACK	MARVIN ULTIMATE OR SIMILAR		SLIDER	4'-11"	6'-7 1/2"			BEDROOM OUT SWING TO BALCONY
	202	ALUMINUM EXTERIOR WOOD INTERIOR PAINTED BLACK	MARVIN ULTIMATE OR SIMILAR		SLIDER	4'-11"	6'-7 1/2"			BEDROOM IN SWING
	203	WOOD	TBD	PRIVACY LEVER	SLAB POCKET					BEDROOM
	204	WOOD	TBD	PRIVACY RECESSED PULL	SWING					BATH



HARDWARE SCHEDULE: OWNER PROVIDED U.N.O., CONTRACTOR INSTALLED

HARDWARE (ITEM#)	TAG	MFR	DESCRIPTION	FINISH	REMARKS	
					APPLICATOR	APPLICATOR
HDR1		MFR	DOOR HANDLE SET PRIVACY SET	FINISH		
HDR2		MFR	DOOR HINGES	FINISH		
HDR3		MFR	ROBITAIL DOOR LATCH	FINISH		
HDR4		MFR	FRAMELESS SHOWER DOOR HANDLE	FINISH		

NOTES:  
1. EXTERIOR WINDOWS AND DOORS ARE VIEWED FROM THE OUTSIDE  
2. DOOR TO PANTRY IS PART OF THE CABINETRY

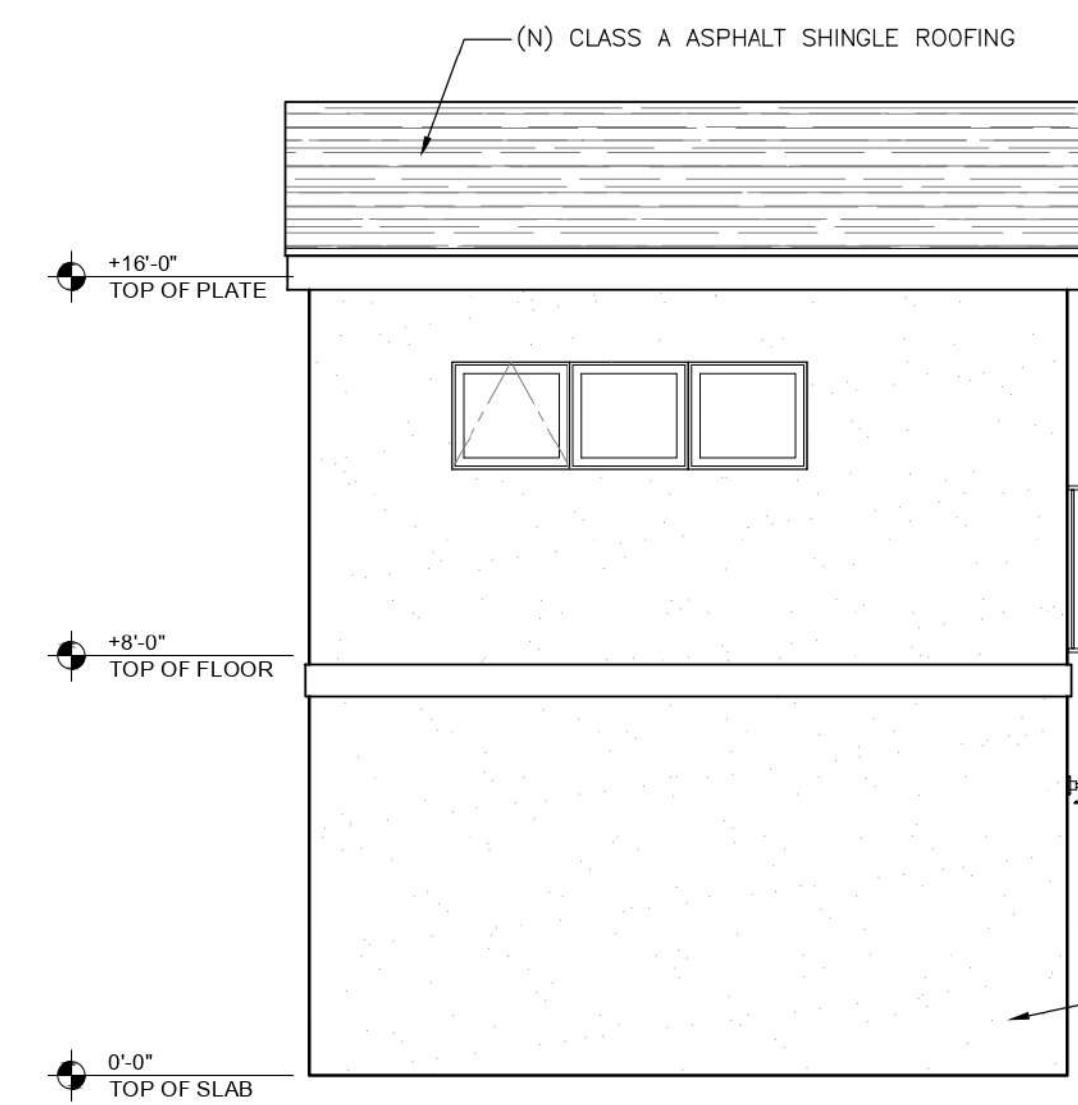
ACCESSORY DWELLING UNIT (ADU)  
1017 ORCHARD STREET  
SANTA ROSA, CALIFORNIA  
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PLANS DRAWN BY: JF  
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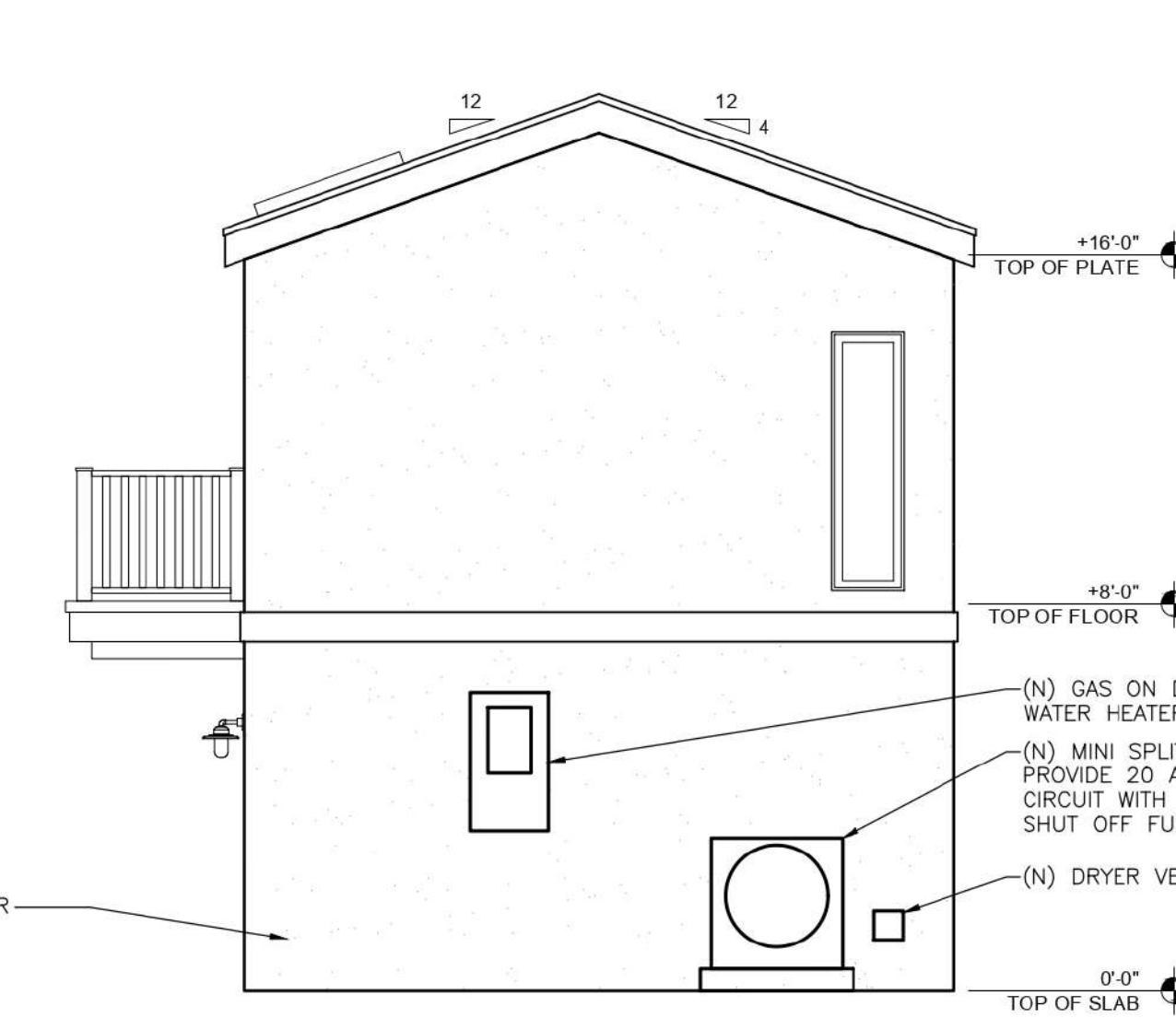
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(N) FLOOR PLANS  
DOOR & WINDOW  
SCHEDULES

SHEET NUMBER:

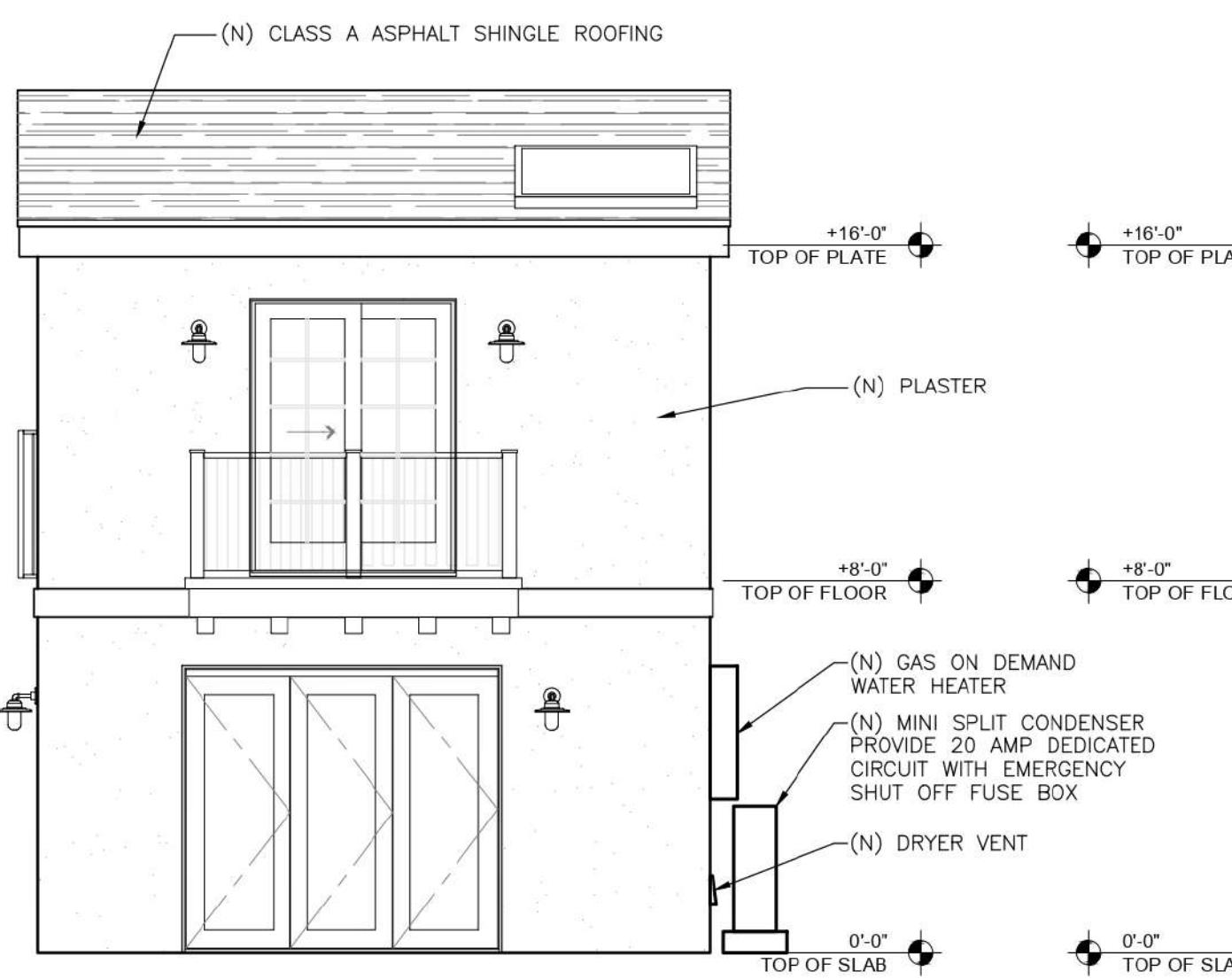
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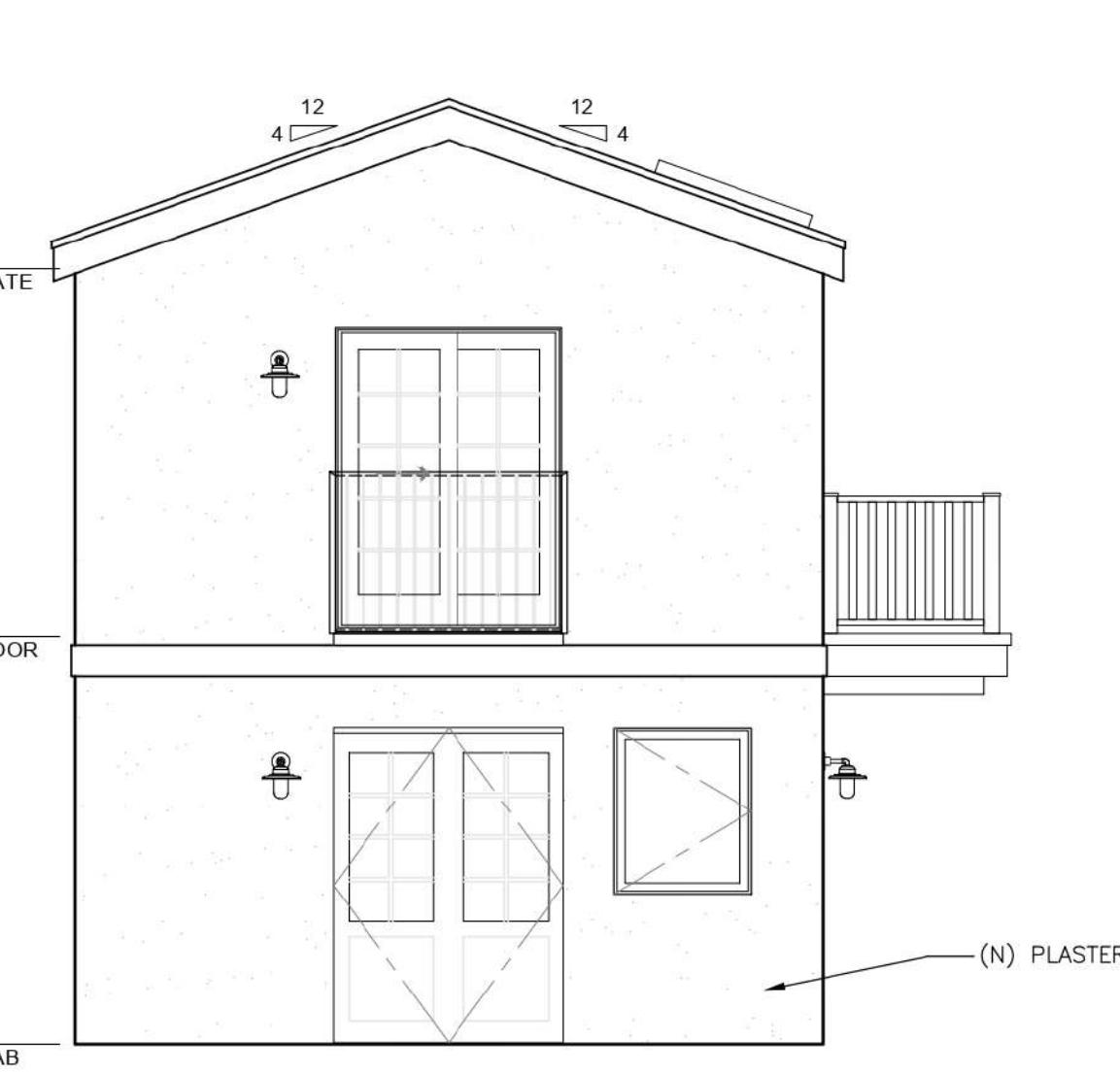
1 EAST ELEVATION  
1/4"=1'-0"



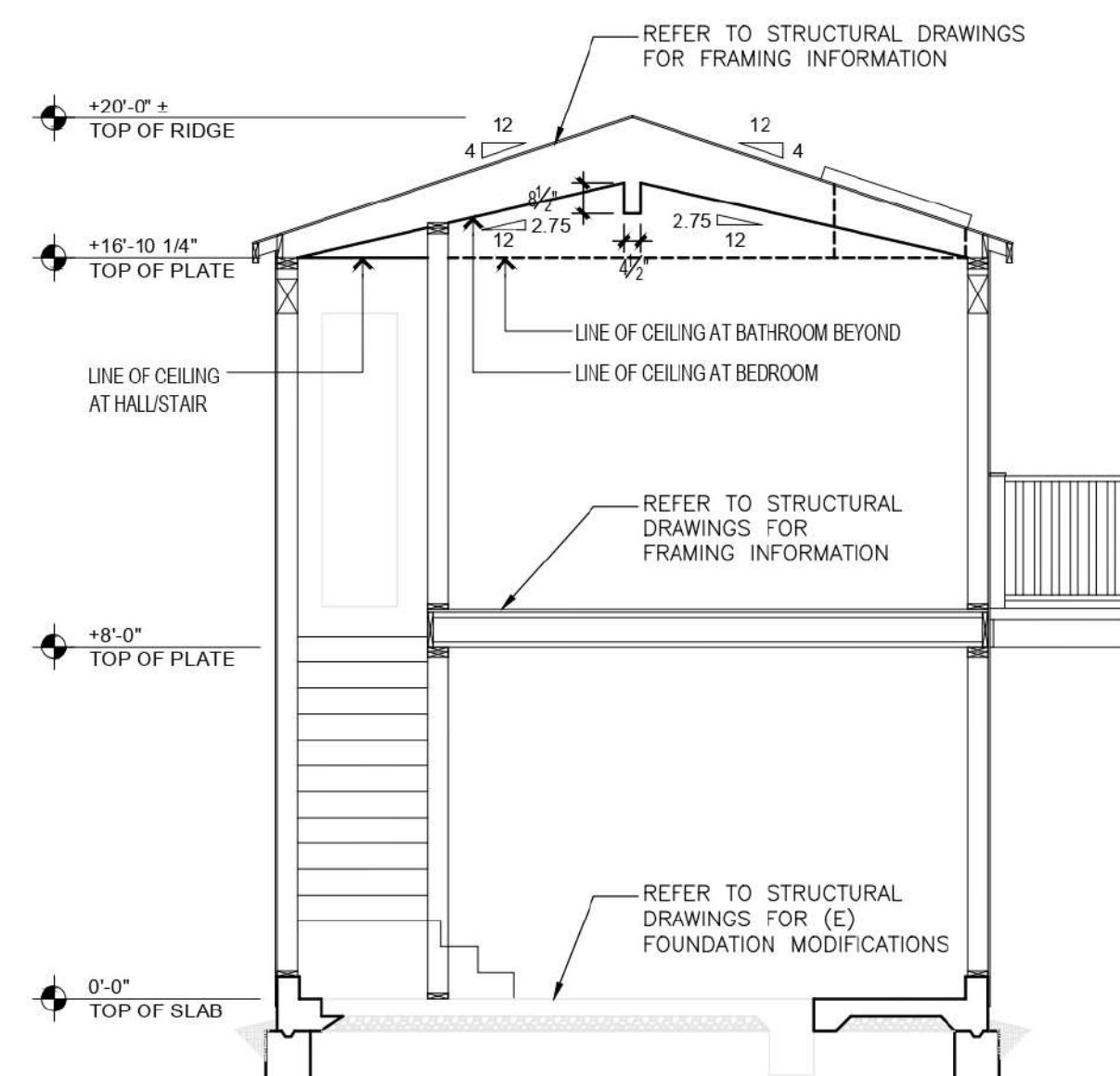
2 NORTH ELEVATION  
1/4"=1'-0"



3 WEST ELEVATION  
1/4"=1'-0"



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



5 SECTION  
1/4"=1'-0"

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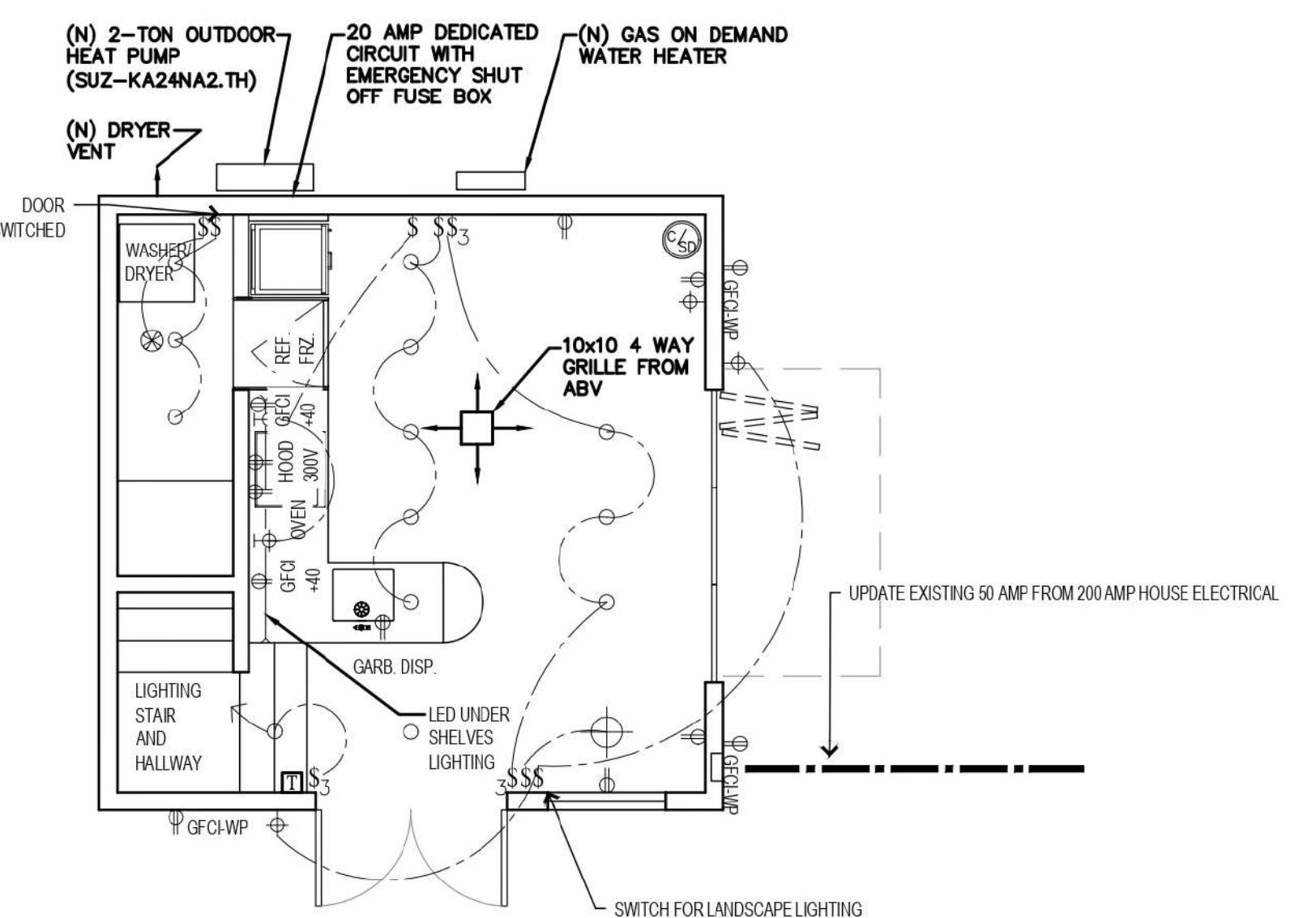
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EXTERIOR  
ELEVATIONS &  
SECTION

SHEET NUMBER:

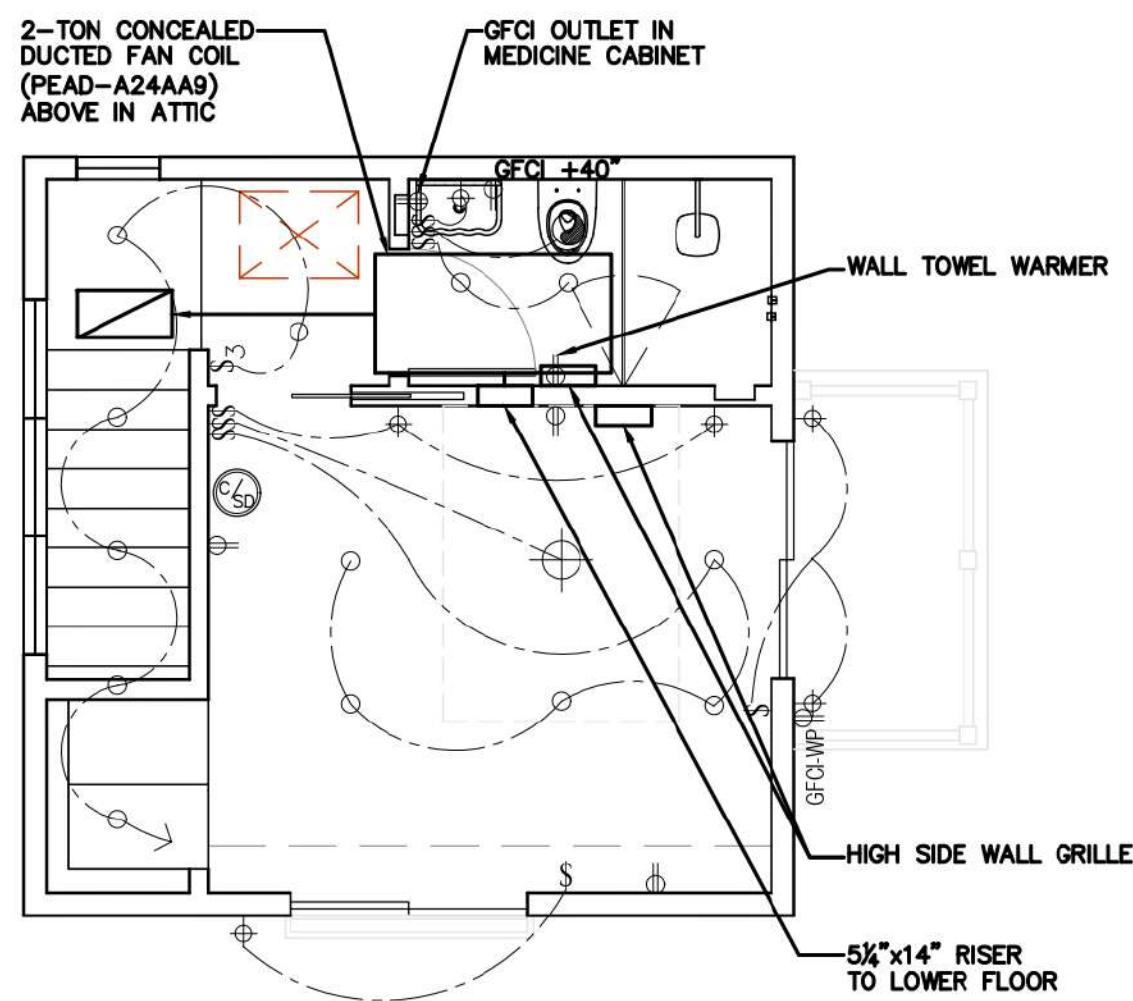
A4.1

ELECTRICAL & TITLE 24 ENERGY NOTES:

- ALL INSTALLED LUMINAIRES TO BE HIGH-EFFICIENCY PER TABLE 150.0-A(k)(1)(A)CenC.
- ALL CIRCUITS TO BE AFCI PROTECTED EXCEPT BATHROOM GFCI CIRCUITS.
- DEDICATED CIRCUITS TO ALL KITCHEN APPLIANCES, GFCI RECEPTACLE FOR DISHWASHERS.
- A MINIMUM OF TWO 20 AMP DEDICATED CIRCUITS SHALL BE PROVIDED FOR SMALL APPLIANCES.
- WALL SPACE ALONG THE KITCHEN COUNTERTOP SHALL BE PROVIDED WITH RECEPTACLES SUCH THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24", MEASURED HORIZONTALLY, FROM A RECEPTACLE OUTLET IN THAT SPACE.
- FOR BATHROOM: RECEPTACLE OUTLETS SHALL BE SUPPLIED BY DEDICATED 20 AMP BRANCH CIRCUIT PER CEC 210.11(C)(3).
- BATHROOMS FANS TO HAVE HUMIDISTAT SENSOR OR FAN WITH SENSOR BUILT IN; 50 CFM.
- ALL BEDROOMS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS SHALL BE PROTECTED BY LISTED AFCI BREAKERS.
- FOR LAUNDRY/UTILITY ROOM: LAUNDRY RECEPTACLE OUTLET TO BE SUPPLIED BY 20 AMP BRANCH CIRCUIT.
- ALL RECEPTACLES LESS THAN 5.5' FROM F.F. UNLESS DEDICATED TO SPECIFIC APPLIANCE. ALL RECEPTACLES MUST BE TAMPER RESISTANT.
- BATHROOM LIGHTING TO BE CONTROLLED BY VACANCY SENSOR; UTILITY ROOMS, LAUNDRY ROOMS, GARAGES SHALL HAVE AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES CONTROLLED BY VACANCY SENSOR.
- WHERE LUMINAIRES USING JAB INTERCHANGEABLE ARE USED, DIMMERS OR VACANCY SENSORS ARE REQUIRED.
- EXTERIOR LIGHTING TO BE PHOTO SENSOR OR LED, EXTERIOR OUTLETS TO BE GFCI WEATHER PROTECTED COVERS.
- LIGHTS SHALL ILLUMINATE ALL STAIRWAYS.
- REQUIRED SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION.
- THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
- CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION.
- WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED, THE ALARM SHALL BE INTERCONNECTED SO THAT ACTIVATION OF ONE ALARM ACTIVATES ALL OF THE ALARMS IN THE INDIVIDUAL UNIT.
- EACH KITCHEN SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1
- EXHAUST FANS SHALL BE SWITCHED SEPARATELY FROM THE LIGHTING SYSTEM.
- ILLUMINATED ADDRESSES SHALL BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. ADDRESS NUMBERS FOR ONE AND TWO- FAMILY DWELLINGS SHALL BE A MINIMUM OF 4 INCHES (101.6MM) HIGH, WITH A MINIMUM STROKE WIDTH OF 0.5 INCHES (12.7 MM), AND OF CONTRASTING COLOR TO THEIR BACKGROUND (R319 CRC).
- ALL DUCTS PENETRATING FLOORS, WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE UNCONDITIONED SPACE SHALL BE CONSTRUCTED OF A MINIMUM 26 GAUGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE UNCONDITIONED SPACE. [R302.5.2]
- WALLS AT TUBS AND SHOWERS: MATERIALS USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS SHALL BE GLASS MAT GYPSUM PANEL, FIBER-REINFORCED GYPSUM PANELS, NON-ASBESTOS FIBER-CEMENT BACKER BOARD, OR NON-ASBESTOS FIBER-CEMENT REINFORCED CEMENTITIOUS BACKER UNITS INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. [R702.4.2]
- ALL EXHAUST DUCTING FROM DRYER SHALL BE EQUIPPED WITH A LISTED BACK DRAFT DAMPER AT OUTSIDE TERMINATION." [CMC 504.1.1]
- AIR EXHAUST AND INTAKE OPENINGS THAT TERMINATE OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SCREENS, LOUVERS, OR GRILLES HAVING AN OPENING SIZE ON NOT LESS THAN  $\frac{1}{4}$ " AND NOT MORE THAN  $\frac{1}{2}$ ". OPENINGS SHALL BE PROTECTED AGAINST LOCAL WEATHER CONDITIONS. [R303.6]
- GARAGE DOOR AUTOMATIC OPENER SHALL HAVE BATTERY BACK-UP AND GFCI OUTLET.
- ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, DENS, BEDROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. CEC 210.12(A)
- AT LEAST ONE 20-AMPERE BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY BATHROOM RECEPTACLE OUTLET(S). SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. [CEC 210.11(C)(3)]
- ELECTRICAL SERVICE PANEL WITH OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING AS "EV CAPABLE". THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "EV CAPABLE". [CALGREEN 4.106.4.1]
- AIR FILTERS ARE MERV13 WITH A 2" NOMINAL DEPTH. [CENC 120.1(C)1A TO C]. 1" FILTERS ARE ALLOWED, BUT REQUIRE A CALCULATION TO DEMONSTRATE THAT THE FILTER FACE VELOCITY IS LESS THAN 150 FEET PER MINUTE.



1 M.E.P. PLAN - 1st FLOOR  
1/4"=1'-0"



2 M.E.P. PLAN - 2nd FLOOR  
1/4"=1'-0"

MEP SYMBOL LEGEND	
\$	SWITCH
\$D	DIMMER SWITCH
\$S	3 WAY SWITCH
\$H	HUMIDISTAT SWITCH
\$V	VACANCY SENSOR
(T)	THERMOSTAT
(C)	CABLE TV - COAXIAL
(D)	DATA - MODEM
*	SHOWER DRAIN
G	GAS LINE
W	WATER LINE
HB	HOSE BIB WATER
MINI	MINI-SPLIT HVAC REGISTER
	THERMOSTAT LOCATION
LED	SURFACE MOUNT FIXTURE
LED	LED RECESSED LED 4"
LED	RECESSED INSULATED CLOSET LED 4"
LED	WALL MOUNT/SCONCE LED
LED	PENDANT LIGHT
LED	PHOTO SENSOR
LED	WATER PROOF RECESSED LED 4"
SD	SMOKE DETECTOR
(SMOKE)	CARBON MONOXIDE DETECTOR/ SMOKE DETECTOR COMBO
R	RECEPTACLE 110V
GFCI	GFCI RECEPTACLE
WP	WEATHER PROOF
AFCI	AFCI RECEPTACLE
F	FAN LIGHT COMBO
O	FAN ONLY

FLOOR PLAN NOTES:

- SHOWERS AND TUBS WITH SHOWERS SHALL BE FINISHED WITH A HARD NON-ABSORBENT SURFACE OVER A MOISTURE RESISTANT UNDERLAYMENT UP TO 6'-0" ABOVE THE DRAIN INLET. (CRC 307.2/CPC 408.7)
- PROVIDE CEMENT, FIBER-CEMENT OR GLASS-MAT GYPSUM BACKING BOARD FOR TILES AT BATH AND SHOWER.(CRC 702.4.2)
- SHOWER COMPARTMENT, REGARDLESS OF SHAPE, SHALL HAVE A MINIMUM FINISHED INTERIOR OF 1024 SQUARE INCHES.
- PROVIDE CURTAIN ROD OR APPROVED ENCLOSURE MATERIAL. SHOWER DOORS SHALL SWING OUTWARDS AND MAINTAIN SHALL BE TEMPERED GLAZING OR OTHER APPROVED SHATTER-PROOF MATERIAL SPECIFICALLY FOR THE USE. (CRC 308.4.1 & CPC 408.5)
- KITCHEN EXHAUST FAN TO BE DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM.

FIXTURE TYPE FLOW RATE TABLE:

SHOWERHEAD FLOW  
PER SHOWER 1.8 GPM @ 80 PSI

MULTIPLE SHOWERHEADS  
EITHER ONLY ONE AT A TIME  
OR TOTAL 1.8 GPM @ 80 PSI

LAVATORY FAUCETS 1.2 GPM @ 60 PSI

KITCHEN FAUCETS 1.5 GPM @ 60 PSI

WATER CLOSETS  
EFFECTIVE FLUSH 1.28 GALLONS/FLUSH

PLANS DRAWN BY: JF  
DATE DRAWN: 02/10/2025

SHEET TITLE:  
M.E.P. PLANS &  
NOTES

SHEET NUMBER:

A5.0

PLUMBING NOTES:

- WATER CLOSET TO NOT HAVE MORE THAN 1.28 GALLONS PER FLUSH.
- SHOWER HEADS TO HAVE A FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE.
- FAUCETS TO HAVE A FLOW RATE OF NOT MORE THAN 1.2 GALLONS PER MINUTE FOR LAVATORIES.
- KITCHEN FAUCETS TO HAVE A FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE.
- LUMINAIRES LOCATED ABOVE A BATHTUB OR SHOWER SHALL BE LISTED FOR WET LOCATIONS.
- BATHROOMS THAT CONTAIN A BATHTUB, SHOWER OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. THE DUCTING SHALL BE SIZED ACCORDING TO ASHRAE STANDARD 62.2 TABLE 7.1.
- SHOWER DOOR SHALL OPEN SO AS TO MAINTAIN A 22" UNOBSTRUCTED OPENING FOR EGRESS, WITH 22" LANDING ON BOTH SIDES OF OPENING.
- SHOWER STALL TO BE 1024 SQ. INCHES MIN. AND CAPABLE OF ENCOMPASSING A 30" DIAMETER CIRCLE.
- SHOWER TUB COMBOS SHALL HAVE INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE AND THE THERMOSTATIC MIXING VALVE TYPE.
- TOILET NOTES: SIDE CLEARANCES SHALL BE MIN. 15", FRONT CLEARANCE SHALL BE MIN. 24".

PENETRATION NOTES:

- PENETRATIONS OR OPENINGS IN CONSTRUCTION ASSEMBLIES FOR PIPING, ELECTRICAL DEVICES, RECESSED CABINETS, BATHRUBS, SOFFITS, OR HEATING.
- VENTILATION ND EXHAUST DUCTS SHALL BE SEALED, LINED, INSULATED, OR OTHERWISE TREATED TO MAINTAIN THE REQUIRED RATINGS. 1207.2 CBC

FLOOR PLAN NOTES:

- \* F.A.U. IN CRAWL SPACE;
- \* HALL & BATH CEILINGS  
@ +10' HEIGHT
- \* 8' DOORS-TYP.
- \* 6'8" DOORS: CLOSETS, STUDY, BED #2, BATH #2, MASTER CLOSET, MASTER TOILET ROOM



**ACCESSORY DWELLING UNIT (ADU)**  
**1017 ORCHARD STREET**  
**SANTA ROSA, CALIFORNIA**  
**A.P.N. # 180 - 600 - 024**

**CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD**

Project Name: 1017 Orchard ADU  
Calculation Date/Time: 2025-02-05T14:38:32-06:00  
Calculation Description: Title 24 Analysis

**CF1R-PRF-01-E**  
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Input File Name: 1017\_Orchard\_ADU\_v30.rbd22

GENERAL INFORMATION							
01	Project Name	1017 Orchard ADU	05	Standards Version	2022		
02	Run Title	Title 24 Analysis	06	Software Version	CBEC-Res 2022.3.0		
03	Project Location	1017 Orchard St	07	Front Orientation (deg / Cardinal)	180		
04	City	Santa Rosa, CA	08	Number of Dwelling Units	1		
05	Zip code	95404	09	Number of Bedrooms	1		
10	Climate Zone	2	11	Number of Stories	2		
12	Building Type	Single family	13	Fenestration Average U-factor	0.31		
14	Project Scope	Newly Constructed Addition	15	Glassing Percentage (%)	36.55%		
16	Addition Cond. Floor Area (ft²)	520	17	Total Cond. Floor Area (ft²)	520		
18	Existing Cond. Floor Area (ft²)	0	19	ADU Conditioned Floor Area	520		
20	Total Cond. Floor Area (ft²)	520	21	ADU Bedroom Count	1		
22	Fuel Type	Natural gas	23	No Dwelling Unit	No		

ADDITION ALONE - Project Analysis Parameters							
01	02	03	04	05	06		
Existing Area (excl. new addition) (ft²)	Addition Area (excl. existing) (ft²)	Total Area (ft²)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms		
0	520	520	0	1	1		

ADDITION ALONE - ACCESSORY DWELLING UNIT (ADU) PROJECT ANALYSIS PARAMETERS							
01	02	03	04	05	06	07	08
Zone Name	Existing Area (excl. new addition) (ft²)	ADU Area (excl. existing) (ft²)	Total Area (ft²)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms	Attached vs. Detached
ADU 1st floor	0	520	520	0	1	1	Detached

Registration Number: 425-P010042317A-000-000-00000-0000  
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Schema Version: rev 20220901

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ENERGY USE INTENSITY							
	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Compliance Margin (kBtu/ft² - yr)		Margin Percentage		
Gross EUI <sup>1</sup>	40.69	39.45	1.24		3.05		
Net EUI <sup>2</sup>	40.69	39.45	1.24		3.05		
Notes: 1. Gross EUI is Energy Use Total (not including PV) / Total Building Area. 2. Net EUI is Energy Use Total (including PV) / Total Building Area.							
<b>REQUIRED SPECIAL FEATURES</b> The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.							
• Exposed slab floor in conditioned zone • Variable capacity heat pump compliance option (verification details from VCP Staff report, Appendix B, and RA3)							
<b>HERS FEATURE SUMMARY</b> The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building table below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry							
• Quality insulation installation (QI) • Indoor air quality ventilation • Kitchen range hood • Verified Refrigerant Charge • Airflow in habitable rooms (SC3.1.4.1.7) • Verified heat pump rated heating capacity • Wall-mounted thermostat in zones greater than 150 ft² (SC3.4.5) • Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)							
ZONE INFORMATION							
01	02	03	04	05	06	07	
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status	
ADU 1st floor	Conditioned	HVAC new	260	8	DHW new	New	
ADU 2nd floor	Conditioned	HVAC new	260	8.9	DHW new	New	

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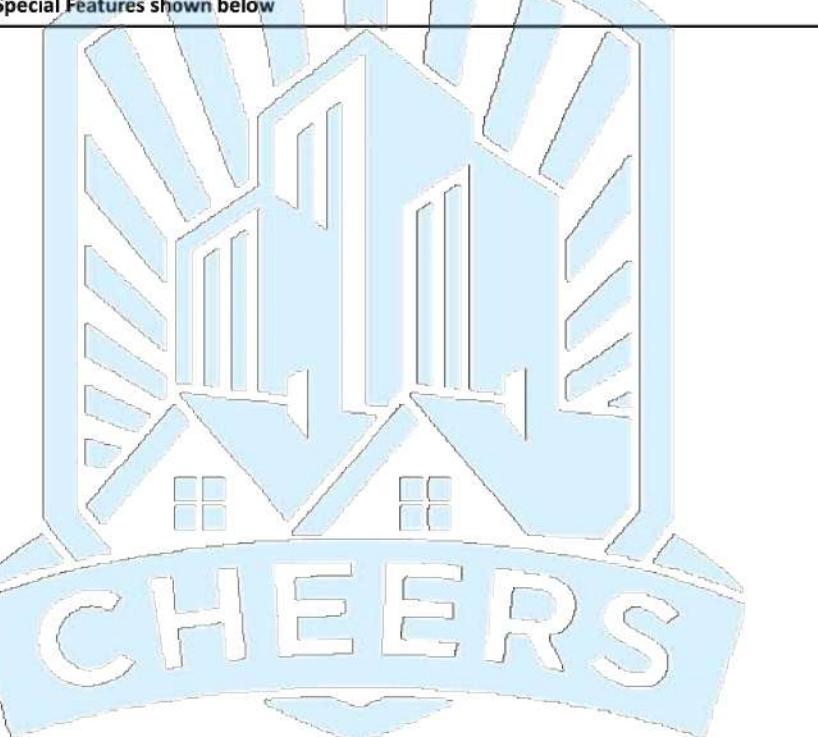
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**CF1R-PRF-01-E**  
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Input File Name: 1017\_Orchard\_ADU\_v30.rbd22

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



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Input File Name: 1017\_Orchard\_ADU\_v30.rbd22

ENERGY USE SUMMARY							
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft² - yr)	Standard Design TDV Energy (EDR2) (kTDV/ft² - yr)	Proposed Design Source Energy (EDR1) (kBtu/ft² - yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft² - yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)	
Space Heating	0	17.22	0	0	19.67	0	-2.45
Space Cooling	0	24.62	0	0	29.71	0	-5.09
IAQ Ventilation	0	4.87	0	0	4.87	0	0
Water Heating	0	59.01	0	0	50.84	0	8.17
Self Utilization/Flexibility Credit							
Efficiency Compliance Total	0	105.72	0	0	105.09	0	0.63
Photovoltaics					0		
Battery					0		
Flexibility					0		
Indoor Lighting	0	11.44	0	0	11.44	0	
Appl. & Cooking	0	58.36	0	0	58.57	0	
Plug Loads	0	72.2	0	0	72.2	0	
Outdoor Lighting	0	2.05	0	0	2.05	0	
TOTAL COMPLIANCE	0	249.77	0	0	249.35	0	

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DESIGNER: SHAWN BROWN  
02 / 19 / 2024

**ACCESSORY DWELLING UNIT (ADU)**  
**1017 ORCHARD STREET**  
**SANTA ROSA, CALIFORNIA**  
**A.P.N. # 180 - 600 - 024**

**CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD**

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OPAQUE SURFACE CONSTRUCTIONS									
01	02	03	04	05	06	07	08	09	09
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers		
Wall new	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R-13	None / None	0.088	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Sheathing / Insulation: Wood Siding/sheathing/decking Exterior Finish: Wood Siding/sheathing/decking		
Skylight area new	Cathedral Ceilings	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O.C.	R-22	None / None	0.052	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-22 / 2x4 Top Chrd Inside Finish: Gypsum Board		
Roof new	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O.C.	R-0	None / None	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4 Top Chrd		
Ceiling attic new	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O.C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board		
Floor Int R0	Interior Floors	Wood Framed Floor	2x6 @ 16 in. O.C.	R-0	None / None	0.199	Floor Surface: Exposed Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x6 Ceiling Below Finish: Gypsum Board		

BUILDING ENVELOPE - HERS VERIFICATION				
01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFMS0	CFMS0
Required	Not Required	N/A	n/a	n/a

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Input File Name: 1017\_Orchard\_ADU\_v30.rbd22

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

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

Documentation Author Name:

Igor Pichko

Company:

Energy Consult LLC

Address:

1252 W 22nd St Unit #2

City/State/Zip:

San Pedro, CA 90731

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

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

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

Responsible Designer Name:

Shawn Brown

Company:

All Cal Construction Services

Address:

PO Box 2403

City/State/Zip:

Santa Rosa, CA 95405

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

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WATER HEATING SYSTEMS									
01	02	03	04	05	06	07	08	09	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)	
DHW new	Domestic Hot Water (DHW)	Standard	Tankless	1	n/a	None	n/a	Tankless (1)	

WATER HEATERS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location
Tankless	Gas	Consumer Instantaneous	1	0	UEF	0.95	Btu/Hr	300000	0	n/a	n/a	

WATER HEATING - HER'S VERIFICATION									
01	02	03	04	05	06	07	08	09	09
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery			
DHW new	Not Required	Not Required	Not Required	None	Not Required	Not Required			

SPACE CONDITIONING SYSTEMS								
01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
HVAC new	Heat pump heating cooling	HP	1	HP	1	n/a	n/a</	



## 2022 Single-Family Residential Mandatory Requirements Summary

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

(04/2022)

**Building Envelope:**

§ 110.6(a):	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/S.2/A44-02-2011.*
§ 110.6(b):	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.7:	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-a, 110.6-b, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.*
§ 110.8(a):	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be sealed, gasketed, or weather stripped.
§ 110.8(b):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (B/HGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and labeled per § 10-113 when the installation of a cool roof is specified on the CTR.
§ 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.
§ 110.8(k):	Roof Deck, Ceiling and Reflected Roof Insulation. Roof decks in newly constructed attics in climate zones 4 and 8-16-area-weighted average U-factor not exceeding UL-184. Ceiling and reflected roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Reflected 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 subject 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 8.*
§ 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: leave a vapor barrier underneath the insulation material alone without sealings, 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):	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 conditioned space under the crawl space for buildings complying with the exception to § 150.0(g).*
§ 150.0(g):	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(h):	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.*
§ 150.0(i):	Fireplaces, Decorative Gas Appliances, and Gas Log:
§ 110.5(e):	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(f):	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the fireplace.
§ 150.0(g):	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 readily accessible, operable, and tight-fitting damper or combustion air control device.
§ 150.0(h):	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
§ 150.0(i):	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(e):	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-off temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.
§ 110.3(c):	Insulation. Unheated service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c):	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

§ 150.0(k)10:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JAB.*
§ 150.0(k)11:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JAB elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)11:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-4 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 specification of the control panel for § 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 controls that turn the light on and off and are 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 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, 140.8, and 141.0.
§ 150.0(k):	Solar Readiness:

§ 110.10(a):	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 residence has been deemed complete and approved by the enforcement agency, which do not have a previously installed system, must comply with the requirements of § 110.10(a).*
§ 110.10(b):	Residential Solar Zone. The total combined footprint of the total area as defined in Table 110.10(b) must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet.*
§ 110.10(b):	Azimuth. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-30° of true north.
§ 110.10(b):	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):	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 from the vertical centerline of the obstruction.
§ 110.10(b):	Structural Design Loads for 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):	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e):	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 "Future Solar Electric."

Electric and Energy Storage Ready.

5/6/22



## 2022 Single-Family Residential Mandatory Requirements Summary

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

(04/2022)

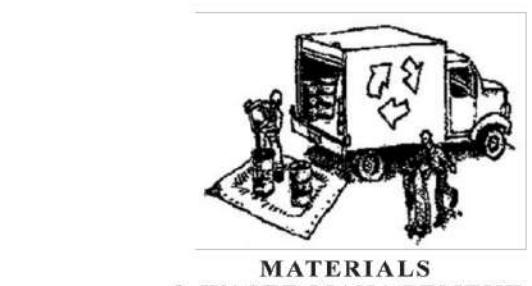
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§ 150.0(h):	Flue Damper. Masonry or factory-built fireplaces must have a flue dam



# CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)

Construction Projects Are Required to Implement the Stormwater Best Management Practices (BMPs) on this Page, as they Apply to Your Project, All Year Long.



MATERIALS & WASTE MANAGEMENT

- Non-Hazardous Materials
- Bern and securely cover stockpiles of sand, dirt, or other construction materials with tarps when rain is forecast or if work is temporarily being used. For best results, this should be done at the end of the work day throughout construction when feasible.
- Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

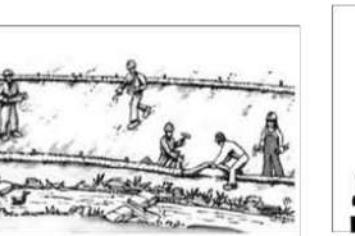
- Label all hazardous materials and hazardous wastes (such as paint, solvents, thinners, etc.) for oil, water, and/or freeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- Follow manufacturer's application instructions for hazardous materials and be careful not to use them outside when applying chemicals outdoors when rain is forecast within 24 hours.
- Arrange for appropriate disposal of all hazardous wastes.

- Construction Entrances and Perimeters
- Establish and maintain effective erosion controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.



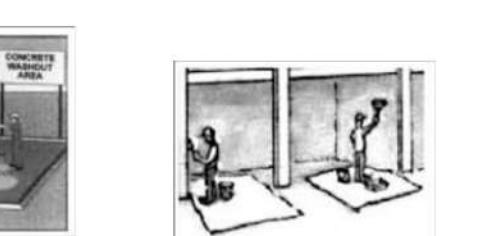
EQUIPMENT MANAGEMENT & SPILL CONTROL

- Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never leave down streets to clean up tracking.
- Waste Management
  - The California Green Building Code requires all permitted residential and non-residential construction, demolition and addition projects to recycle or salvage a minimum of 65% of nonhazardous construction materials from the project.
  - Cover waste disposal containers securely with tarp at the end of every work day and during wet weather.
  - Clean or replace portable toilets, and inspect them frequently for leaks and spills. Incorporate secondary containment and locate them away from storm drain inlets.
  - Dispose of paint cans, thinners, solvents, glues, and cleaning fluids as hazardous waste (the Monterey Regional Waste Management District offers a Household Hazardous Waste Facility that accepts these items).
- Follow manufacturer's application instructions for hazardous materials and be careful not to use them outside when applying chemicals outdoors when rain is forecast within 24 hours.
- Arrange for appropriate disposal of all hazardous wastes.



EARTHWORK & CONTAMINATED SOILS

- Avoid paving and seal coating in wet weather, or when rain is forecast further fresh pavement will have time to cure.
- Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- Seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- Sediment Control
  - Cleaning must be done onsite, clean with water only in a bermed area that will not allow surface fluids to run into gutters, streams, storm drains, or surface waters.
  - Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
  - Inlet protection is the last line of spill defense. Drains/ inlets that receive storm water must be covered or otherwise protected from receiving sediment/dirt/mud, other debris, or illicit discharges, and include gutter controls and filtration where applicable in a manner not impeding traffic or safety.
- Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil (see the Monterey Regional Waste Management District's Contaminated Soil Acceptance Criteria).
- Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: Dial 911.



PAVING/ASPHALT WORK & CONCRETE, GROUT & MORTAR APPLICATION

- Avoid paving and seal coating in wet weather, or when rain is forecast further fresh pavement will have time to cure.
- Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, or asphalt.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- Do not use water to wash down fresh asphalt or concrete pavements.
- Paint the asphalt/concrete removal
  - Completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
  - Protect storm drain inlets with appropriate BMPs, such as gravel bags, inlet filters, berms, etc.
- Protect soil from infiltration by installing and maintaining sediment controls, such as fiber rolls, silt fences, and sediment basins.
- Keep excavated soil on the site where it will not collect into the street.
- Transfer excavated materials to dump trucks on the site, not in the street.
- If any of the following conditions are observed, test for contamination and contact the Monterey County Environmental Health Department, Regional Water Quality Control Board, and local municipal inspector:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells.
  - Buried barrels, debris, or trash.



DEWATERING

- Effectively manage all run-off, all runoff within the site, and all runoff that discharges from the site.
- Divert run-on water from offsite away from all disturbed areas or discharge directly to a stream or water body for conveyance.
- When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap, and/or disposal in sanitary sewer may be required.

Painting cleanup

- Store concrete, grout and mortar under cover, on pallets and away from drainage areas. These materials must never reach a storm drain.

- Wash paint equipment/ tools offsite or in a contained area, so there is no discharge into the underlying soil or surrounding areas. Let concrete harden and dispose of as garbage.

- Do not use water to wash down exposed aggregate concrete and remove it for appropriate disposal ifsite.

- For oil-based paints, paint out bushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of residue and unusable thinner/solvents as hazardous waste.

- In areas of known contamination, testing is required prior to reuse or disposal of paint residue. Consult with the Engineer and municipal staff to determine whether testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

- Paint chips and dust from non-hazardous dry stripping and paint booths must be swept up or collected in plastic drop cloths and disposed of as trash.

- Stack erodible landscape material on pallets. Cover or store these materials when they are not actively being used or applied.

- Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

\* Adapted with permission from the San Mateo Countywide Water Pollution Prevention Program

**STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO \$10,000 PER DAY!**

## 10 Steps to Stormwater Pollution Prevention on Small Residential Construction Sites

Stormwater management on small residential construction sites need not be complicated.

**1 Protect Any Areas Reserved for Vegetation or Infiltration and Preserve Existing Trees**

If you will be installing infiltration-based features such as rain gardens or bioswales, make sure these areas are designated as off limits to avoid compaction.

Save time and money by preserving existing mature trees during construction. Preserving mature trees minimizes the amount of soil that needs to be stabilized once construction is complete, and minimizes the amount of runoff during and after construction activity.

**2 Stockpile Your Soil**

EPA's CGP requires operators to preserve native topsoil on site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient.

**3 Protect Construction Materials from Run-On and Runoff**

At the end of every workday and during precipitation events, provide cover for materials that could leach pollutants.

**4 Designate Waste Disposal Areas**

Clearly identify separate waste disposal areas on site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff.

**5 Install Perimeter Controls on Downhill Lot Line**

Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.

**6 Install Inlet Controls**

Sediment control logs, gravel barriers, and sand or rock bags are options for effective inlet controls. Make sure to remove accumulated sediment whenever it has reached halfway up the control.

**7 Install a Concrete/Stucco Washout Basin**

Design a leak-proof basin lined with plastic for washing out used concrete and stucco containers. Never wash excess stucco or concrete residue down a storm drain or into a stream!

**8 Maintain a Stabilized Exit Pad**

Minimize sediment track-out from vehicles exiting your site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track-out occurs, remove deposited sediment by the end of the same work day.

**9 Post Your NOI and Keep an Up-to-Date Copy of Your SWPPP on Site**

Post a sign or other notice of your permit coverage, including your NPDES tracking number and site contact information. Also, keep a copy of your complete and up-to-date SWPPP on site and easily accessible, including site maps showing where each BMP is or will be installed.

**10 Site Stabilization**

Immediately stabilize exposed portions of the site whenever construction work will stop for 14 or more days, even if work is only temporarily stopped. Remember, final stabilization is required prior to terminating permit coverage.

ACCESSORY DWELLING UNIT (ADU)  
1017 ORCHARD STREET  
SANTA ROSA, CALIFORNIA  
A.P.N. # 180 - 600 - 024

PLANS DRAWN BY: JF  
DATE DRAWN: 02/10/2025

SHEET TITLE:  
B.M.P.'s &  
STORM WATER

SHEET NUMBER:

A7.0

12 OF 18



# RIVAS RESIDENCE

1017 ORCHARD STREET  
SANTA ROSA, CA 95404

<p>14 TYPICAL STEPPED FOOTING</p>	<p>9 TYPICAL HOLDOWN</p>	<p>5 HOLE IN DIAPHRAGM</p>	<p>1 TYPICAL STUDWALL &amp; HEADER FRAMING</p>
<p>15 CONSTRUCTION JOINT (SLAB ON GRADE)</p>	<p>10 TYPICAL REINFORCING DETAILS</p>	<p>6 PLYWOOD NAILING DETAIL</p>	<p>6A PLAN VIEW OF CLOSE SPACED NAILS</p>
<p>16 CONTROL JOINT (SLAB ON GRADE)</p>	<p>17 CONDUIT &amp; PIPE AT SLAB</p>	<p>7 MINIMUM NAILING SCHEDULE</p>	<p>2 HOLES &amp; NOTCHES IN WOOD</p>
<p>18 WASHER SCHEDULE</p>	<p>11 TYPICAL PIPE THRU FOOTING DETAIL</p>	<p>7 MINIMUM NAILING SCHEDULE</p>	<p>3 TYPICAL BEAM IN &amp; THRU STUD WALL</p>
<p>19 NON-BEARING STUD WALL FOOTING</p>	<p>13 CONCRETE REINFORCING</p>	<p>12 FLOOR TO FLOOR HOLDOWN</p>	<p>4 TYPICAL PLAN VIEW OF STUD WALL</p>

Job # 24096

PLANS DRAWN BY: SDG  
DATE: 12-23-2024 Progress Set  
2-18-2025 Permit Submittal

SHEET TITLE: STANDARD DETAILS  
SHEET NUMBER: S1.0

13 OF 18

**Structural  
Design  
Group**

2455 Bennett Valley Rd  
Suite B119  
Santa Rosa, CA 95404  
(707) 284-3641



**RIVAS RESIDENCE**

1017 ORCHARD STREET  
SANTA ROSA, CA 95404

PLANS DRAWN BY: SDG  
DATE: 12-23-2024 Progress Set  
2-18-2025 Permit Submittal

SHEET TITLE:  
**GENERAL  
NOTES AND  
SPECIFICATIONS**

SHEET NUMBER:  
**S1.1**  
14 18

**A GENERAL NOTES**

- Design Criteria: 2022 California Building Code  
Floor LL= 40 psf  
Roof LL = 20 psf (Reducible)
- Ultimate Basic Wind Speed = 95 mph (Risk Category II)  
Nominal Basic Wind Speed = 75 mph (Risk Category II)
- Nominal Components & Cladding Wind Pressure = 14.6 psf walls (Zone 4), 17.5 psf Roofs (Zone 1)
- Analysis Procedure = Directional Procedure per ASCE 7 Section 27.4

Risk Category = II  
Site Class = F  
Soil Group = Category E  
Basic Seismic Force Resisting System = Light framed shear walls  
Analysis Procedure = Equivalent Lateral Force  
 $S_x = 2.308$ ,  $S_y = 0.845$ ,  $S_{xy} = 1.594$ ,  $S_d = 1.04$   
 $C_o = 0.237$ ,  $R = 1.0$ ,  $V_{max} = 0.237W$

- Refer to sheet "S1.0" for standard details of construction. Refer to the project specifications for materials and methods.
- Building dimensions shown are for general reference only. See Architectural drawings (GAD) for all actual building dimensions. Any discrepancies are to be brought to the attention of the Architect/Engineer so clarification can be made prior to commencing work. All dimensions related to existing conditions shall be verified by the contractor and submitted in writing to the Architect/Engineer for review prior to construction.
- Drawings shall NOT be scaled. All dimensions and fit shall be determined and verified by the contractor prior to commencing work.
- Details not fully or specifically shown shall be of same nature as other similar conditions.
- Refer to Architectural drawing for sidewalk stiles and dimensions.
- Elevations on plans and details "A" are to heights above finished ground floor elevation reference O'-O'.

Contractor to verify the weights as installed of mechanical units and their actual location of installation prior to installation and shall report results to the Architect/Engineer.

Shoring and bracing design, materials and installation shall be provided by the General Contractor, and shall be adequate for all loads. Leave in place as long as may be required for safety and until final structural construction is completed.

Special inspections for the following items are required per California Building Code, Section 1705, the specifications and the T&I List (if it applies).

- Post-installed Anchors and Rebar.
- shear walls w/ nailing of 4"oc or closer
- C

**Structural Observation**

- Structural observation per CBC Section 1704 shall be performed by SDE. Items to be reviewed are:

- Shear walls / holdowns
- Collector straps.

Contractor shall coordinate all required site reviews with his schedule and shall not cover up any work until it has been reviewed. Contractor shall provide at least four working days notice to SDE prior to all reviews.

Structural observation is limited to the periodic visual observation of the structural system for general conformance to the approved plans and specifications at applicable construction stages, and at completion of the structural system. Structural observation does not include or waive the responsibility for inspections required by the Building Department or special inspections required by the CBC.

Job site visits by the Engineer are solely for the purpose of determining if the work of the Contractor is proceeding in accordance with the structural contract documents. This limited site observation should not be construed as exhaustive or continuous to check the quality or quantity of the work, but rather periodic in an effort to identify defects or deficiencies in the work of the Contractor.

**FOUNDATION NOTES**

- All soils work shall be done in accordance with the specifications, the requirements of the Geotechnical Report noted below and Chapter 18 of the 2022 CBC. Foundation design procedures are based on 10' of fill over 10' of native soil, undrained, native soils or engineered fill at an exceeding depths shown on the drawing. Increase depth as required by geotechnical engineer. All footing excavations shall be as neat as practical. Over-excavations in depth shall be filled with concrete, and in width may be filled with lean concrete or compacted approved backfill. All loose soils shall be removed from excavations prior to placement of reinforcing or concrete. Geotechnical report by:

Bruining Associates Inc.  
1017-529-6106  
PROJECT #191420  
Dated: February 14, 2025

- Use 5/8" diameter x 12" (16" at surface) Hot Dip Galvanized anchor bolts (AB) at 48"oc where not otherwise noted and use 2x material. 2x exterior nail spacing for additional requirements. Anchor bolts are to be tied in place prior to placement of concrete. All anchor bolts require hot dip galvanized 1/4" x 3" square plate washer at foundation sill plates. Locate anchor bolts such that the edge of plate washers are within 1/2" from plywood sheathing.

3. Typical Slab: 5" concrete reinforced with #14 @ 14"oc at mid-depth over 15 mil Stago-Wrap vapor barrier and 4" minimum free draining compacted crushed rock on undisturbed subgrade. Vapor barrier may be omitted at exterior slabs.

- Provide control joint per plan and S1.0 (15'-0"oc max. UNO). If slab is to be constructed with multiple pours, provide construction joints between alternate strips per S1.0. Allow 24 hours min. between pour of alternate strips and closing strip. Insert construction joints at face of stud of wall where possible. Submit joint layout plan for review prior to placement.

5. SW refers to shear walls. See Shear Wall Schedule C and notes for specific requirements, and the plan for location.

7. Do not undercut existing foundations. Notify Engineer for review and possible revisions, if existing foundation conditions are not as shown.

**C SHEAR WALL SCHEDULE NOTES**

- EN = Plywood edge nailing. Block all unsupported edges with 2x material UNO. Block edges with 3x material and use 3x studs at panel joints where nailing is 4"oc or less. See S1.0 for stagger.
- Field nailing to be 12"oc UNO.
- All plywood nails to be common wire. All nails into pressure treated material shall be hot dip galvanized. See S1.0 Note #6 and specifications for other nail requirements.
- All exterior walls not designated as SW are to be sheathed with 5/32" ply (32/16) Exposure 1 and nailed with 2x 6"oc edges and 12"oc field.
- Shear wall lengths, where noted, are minimum. Do not locate hold-downs from these dimensions. SAD for actual wall lengths.
- H DU refers to Simpson Strong Tie Co. hold-downs. Install per HDU2 - HDU5 to be DBL 2x minimum. Provide 6x for HDU8 and larger. Post width to match stud wall width. See plans for other requirements.
- Edge nail wall ply to studs or posts with hold-downs.
- Portions of interior wall surfaces adjacent to specified shear walls shall be sheathed for the full uninterrupted length per Note #4 or with gypsum board of the same thickness to provide an even wall surface for finish materials.
- Where panels are applied on both faces of a wall and nail spacing is less than 6"oc on either side, panel joints shall be offset to fall on different framing members or framing shall be 3x or thicker and nails on each side shall be staggered.
- Use Hot Dip Galvanized Anchor bolts with hot dip galvanized 1/4" x 3" square plate washers at foundation sill plates. See S1.0 Note #2 for additional requirements.

**SHEAR WALL SCHEDULE**

SW	SHEATHING	NAILING (EN)	MUDSILL TO FDN (A)	SILL PLATE TO WD FRMS (B,C)	RIM CLIP (P) SPACING (D)	REMARKS (E)
6	15/32" (32/16) EXP 1	8d @ 6"oc	%1/2" @ 48"oc	16d @ 6"oc	24"oc	-
4	15/32" (32/16) EXP 1	8d @ 4"oc	%1/2" @ 32"oc	16d @ 4"oc	16"oc	- 3x min at all ply edge splices
3	15/32" (32/16) EXP 1	8d @ 3"oc	%1/2" @ 32"oc	SDS @ 12"oc	12"oc	
2	15/32" (32/16) STR 1	8d @ 2"oc	%1/2" @ 24"oc	SDS @ 8"oc	8"oc	- 3x min at all ply edge splices - 3x min for sill plates in contact with concrete

**SHEAR WALL SCHEDULE NOTES**

- See note #10 above for additional anchor bolt requirements.
- SDS denotes 1/4" diameter x 6" Simpson SDS eccentric. Note that other 1/4" diameter screws may not be suitable at a 1:1 ratio. SDS require 2x LSL rim blocking below (4x solid-sawn framing).
- Rim clip to rim blocking spacing shall be determined by the shear wall below.
- 3x sill plates are only required where applied in contact with concrete. Provide 2x sole plates above wood framing.

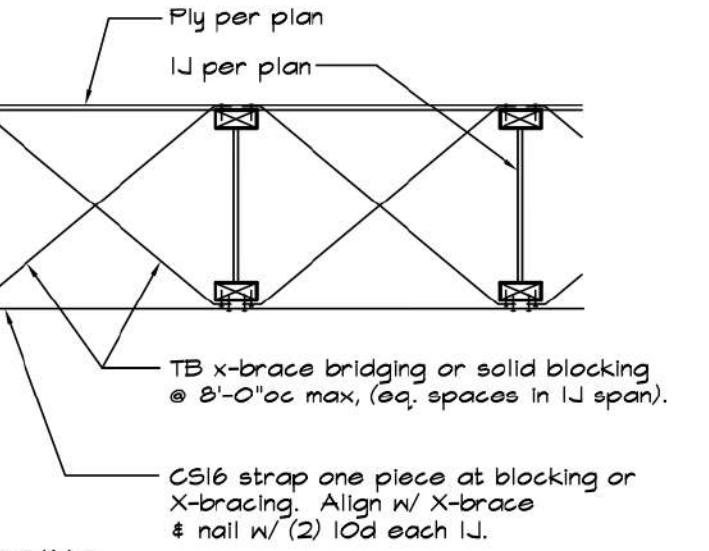
**WOOD FRAMING NOTES**

- Headers, beams, posts, and etc., are per S1.0 and S1.0 where not noted on plan and details.
- All beams and joists shall be seat cut for full uniform bearing at supports, beam seats and column caps.
- The General Contractor shall measure glue-lam beam sizes and cambers as delivered to the job site and shall report his findings to the Engineer prior to erection. No camber shown means no camber to be provided. S1.0 indicates camber (STD = 3500' radius).
- Typical Floor Sheathing: 3/4" T&G Ply (48/24) Exposure 1 with 16d @ 6"oc edges (EN) and 12"oc UNO field. Lay perpendicular to end glue to framing members. Block edges with 2x4 laid flat where so noted on the plans and details.
- Typical Roof Sheathing: 1/2" Ply (32/16) Exposure 1 with 16d @ 6"oc edges (EN) UNO on plans and 12"oc field. All unsupported plywood edges to be blocked with 2x4 laid flat UNO on the plan. No panels less than 24" wide shall be used. Ply clips at unblocked edges at pitched roof only.
- All nails to be of common wire with full round heads. When nails to be used for rough framing are specified, cement coated sinker nails may be substituted for led common nails UNO. All nail to pressure treated material shall be hot dip galvanized. Nail length to be sufficient to meet CBC penetration requirements. Nail must not be overdriven. All nailing not noted or detailed otherwise per CBC Table 2304.10.2 or sheet "S1.0".
- Splice double top plates per S1.0 UNO on plans and details.
- Stud walls are per schedule.

STUD SCHEDULE	
EXTERIOR STUD	MAX HEIGHT
2x6@16" oc	15'-0"
15/4"-5/4" LSL @16" oc (15SF) OR DBL 2x8@16" oc	17'-0"
INTERIOR STUD	MAX HEIGHT
2x4@16" oc	15'-0"

- For roof drainage, top of framing between noted points is a straight line.
- All mechanical supply and return openings to be between framing UNO.
- Denotes wood post.
- Joists and rafters are per plan, with 1/4" hangers (skewed as required) at flush beams UNO. Hanger size to be correct full size for joist size (i.e. U210 for 2x10). Solid block 2x12 joists at 8'-0"oc maximum. Hangers for panelized roof construction are per plan.
- Round holes in steel plates to be 1/16" oversize. Slotted holes in steel plates shall be 1/16" wider than the bolt diameter and have a length of 2 times the bolt diameter. The direction of the slotted length is indicated on the detail (VSH or HSH). Install bolt at the center line of the hole. Bolt holes in wood shall be round and 1/32" oversize. Cut off bolt threaded end flush with nut when required by finishes and 1" maximum from nut otherwise.
- All bolted or nailed strap connections shall have an equal number of bolts or nails each side of the splice joint. The first bolt or nail from each side of the spliced or strapped member shall be equidistant from the splice. Straps using 16d nails on 2x material to be installed on the 1-1/2" edge of the member.
- The Contractor shall verify that the moisture content of all framing lumber and plywood meet the requirements of the specifications at the time of installation and at close-in. The Contractor shall provide allowance for differential shrinkage between floors, etc.

**E JOIST SCHEDULE, HOLE DETAIL, AND BRIDGING**



**BRIDGING**

See note #6

TYPE	MANUFACTURER	DESIGNATION	HANGER
TRUJOIST MACMILLAN	41/2 TJ 230	PER MFR	

- IJ = Built up I shaped joist of wood or Micro-Lam® flanges and plywood or OSB web. See project specifications for other information.
- IJs shall be installed per manufacturer's specs. Web stiffeners shall be installed per IJ and joist hanger manufacturer's requirements.

- Manufacturer to provide full depth blocking per plan and details. Blocking may be from solid 'LSL'. Rim joists to be 'LSL' of same depth as joists & 15/8" min thickness.
- Submit product description & ICC ESR or IAPMO reports for joists & hangers for review by Engineer.
- Substitute framing systems or joists can be submitted for review. The contractor shall pay the cost for investigating & evaluating the substitution, and for any revisions to our drawings or specs caused by this substitution.
- Provide bridging @ 8'-0"oc (max) for spans greater than 17'-0", see detail.
- IJ hangers are per Simpson Strong-Tie current catalog. Provide stiff block at hangers per manufacturer.
- Bearing wall locations are as noted on the plans. See architectural drawings for dimensions.

**F STRUCTURAL SPECIFICATIONS**

**Concrete Construction**

- Concrete shall be hard rock concrete (5 sack cement per cu yd min.) and meet the following minimum ultimate compressive strengths at 28 days:
 

Location	Min. Strength 28 Days PSI	Aggregate Size-inches	Slump Inches	Tolerance	Max. W/C Ratio
Slab on Grade	3,000 *	1" x #4	3 1/2"	+1/2	0.46
Foundation	3,000 *	1" x #4	3 1/2"	+1/2	-
- \*Design based on 2500psi

- Concrete mix design and testing shall meet the requirements of Section 1403, 1704 and 1705 of the 2022 CBC Chapter 16 and 28 of ACI 318, and these specifications. Cement to be in accordance with ASTM C150 type II.

- Reinforcing steel shall conform to ASTM A-615, Grade 60 and Grade 40 for all ties. Steel shall be kept clean and free of rust. Submit shop drawings for review prior to installation.

- Slabs, beams, walls and other concrete shall be kept continuously wet for 48 hours, after placement, and shall be kept damp for 7 days after placement. Slabs shall have cure/sealer applied immediately after finishing if other finishes are not affected. When cure sealer can not be applied, slab shall be kept continuously wet or covered with curing paper. Cure shall be of a type that will not be detrimental to sealers to be applied later.

- Anchor bolts - F1554 GR36.

- Epoxy: Simpson SET-36 or Deltaweld Pure 110+.

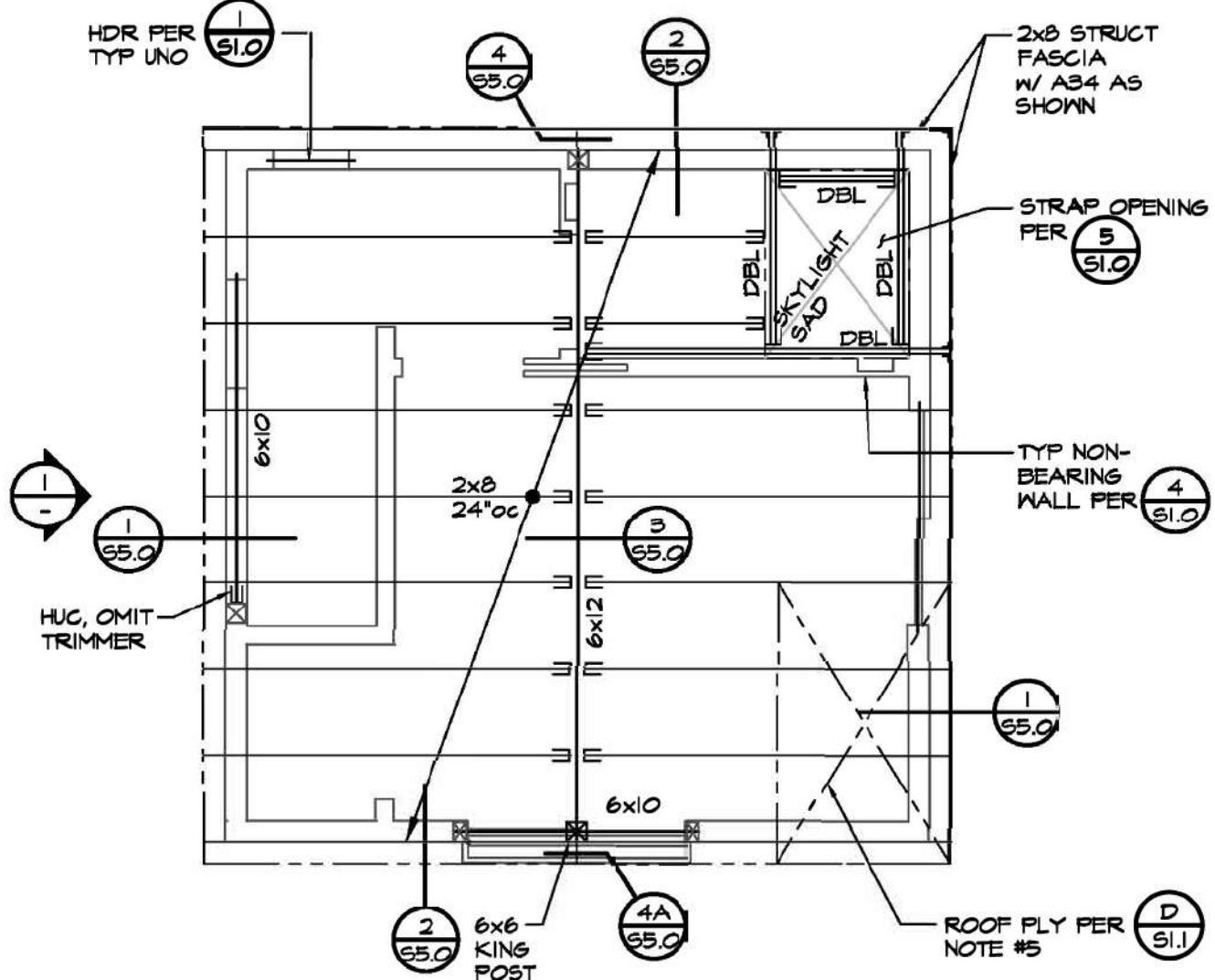
**Wood Construction (Carpentry)**

- Minimum grades of sawn lumber (unless noted otherwise): posts and beams 4x and larger, DF #1; joists, rafters, plates and 2x6 studs, DF #2; 2x4 studs, construction grade. Beams and posts to be free of heart (FOPC).
- It shall be the responsibility of the Contractor to assure that the maximum moisture content of wood at the time of installation shall be not more than 19%; at loading shall be not more than 16%; at Close-in shall be not more than 15%.
- Nails to be of common wire where nailing is specified on the drawings. Cement coated sinker nails may be substituted for led common nails. Nails used in exterior applications to PT framing or galvanized hardware to be galvanized. Pre-drill nail holes where wood is split.
- Metal framing clips, hangers, etc. are by Simpson Strong Tie, 5456 W. Las Positas Blvd. Pleasanton, CA 94568 using current catalog. Nailing shall be in accordance with the manufacturer's instructions with a nail provided for each punched hole. Where multiple nail sizes are shown for a connector in the Simpson Catalog, use largest nail size, UNO. Metal connectors in contact with pressure treated lumber shall have Z-max protection (6185). Z-Max products are not-drip galvanized fasteners.
- Bolts shall be unfinished machine bolts per ASTM-B307. Length of bolts shall be such that the bolt projection is not less than 1/16" nor more than 1/2" past end of nut. Bolt holes in wood shall be 1/32" larger than bolt sizes (UNO). Provide washers under head and nut where bolt heads would bear on wood. Nuts shall be tightened when placed and retightened before closing in of walls or other construction. Do not crush wood when tightening.
- Wood against CMU or concrete shall be pressure treated douglas fir (PTDF).
- Decking material to be PTDF or redwood, SAD.



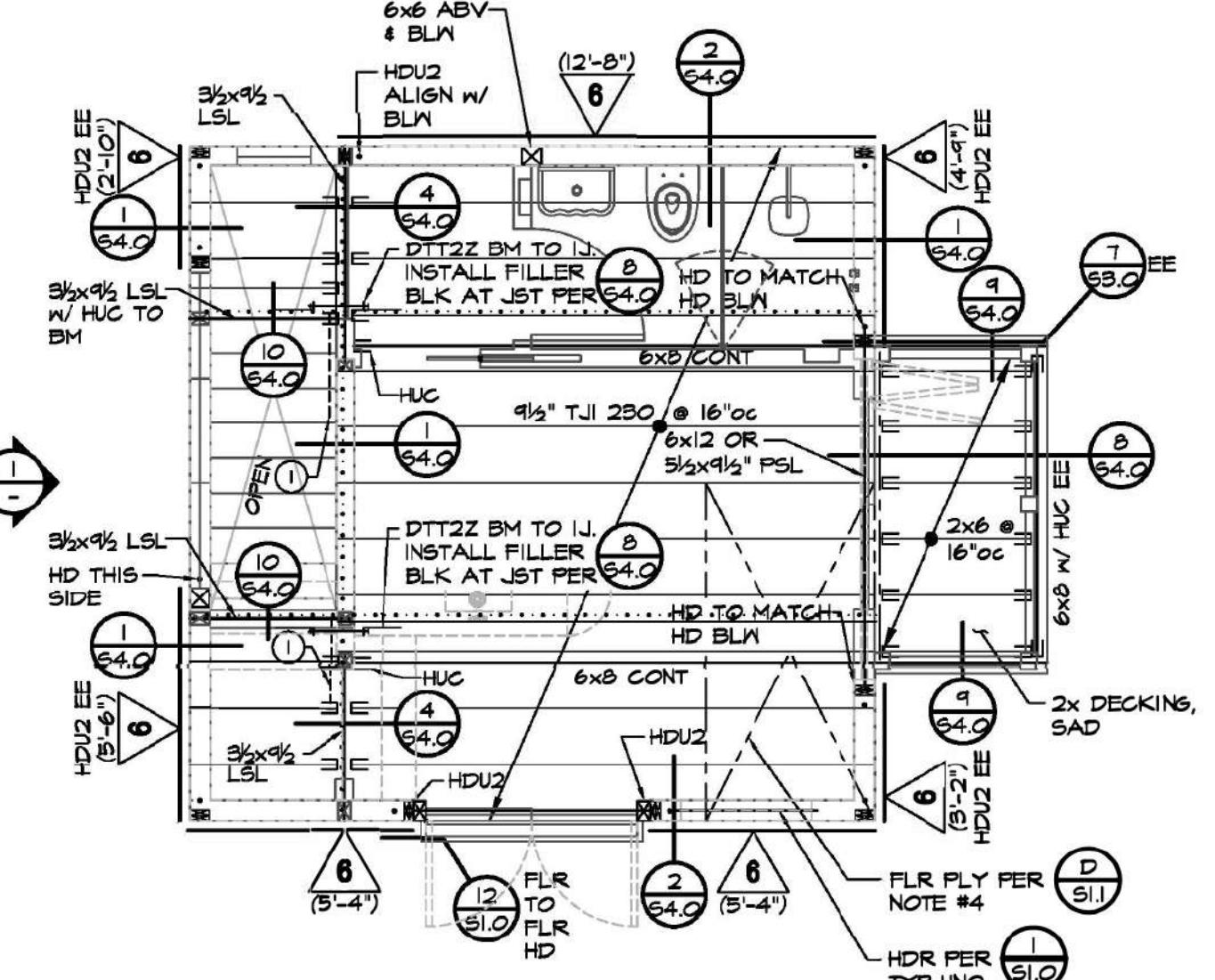
## RIVAS RESIDENCE

1017 ORCHARD STREET  
SANTA ROSA, CA 95404



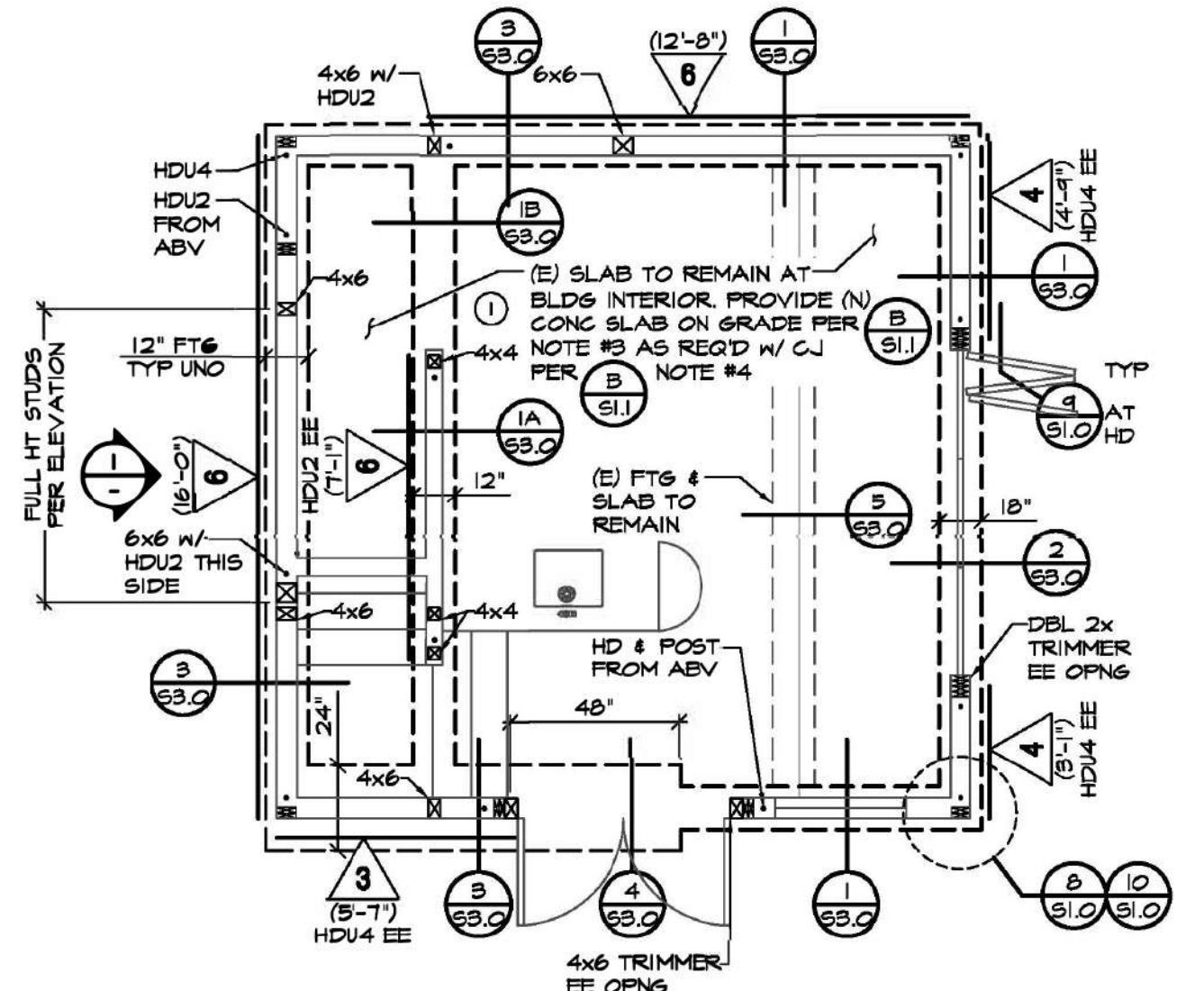
ROOF FRAMING PLAN

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



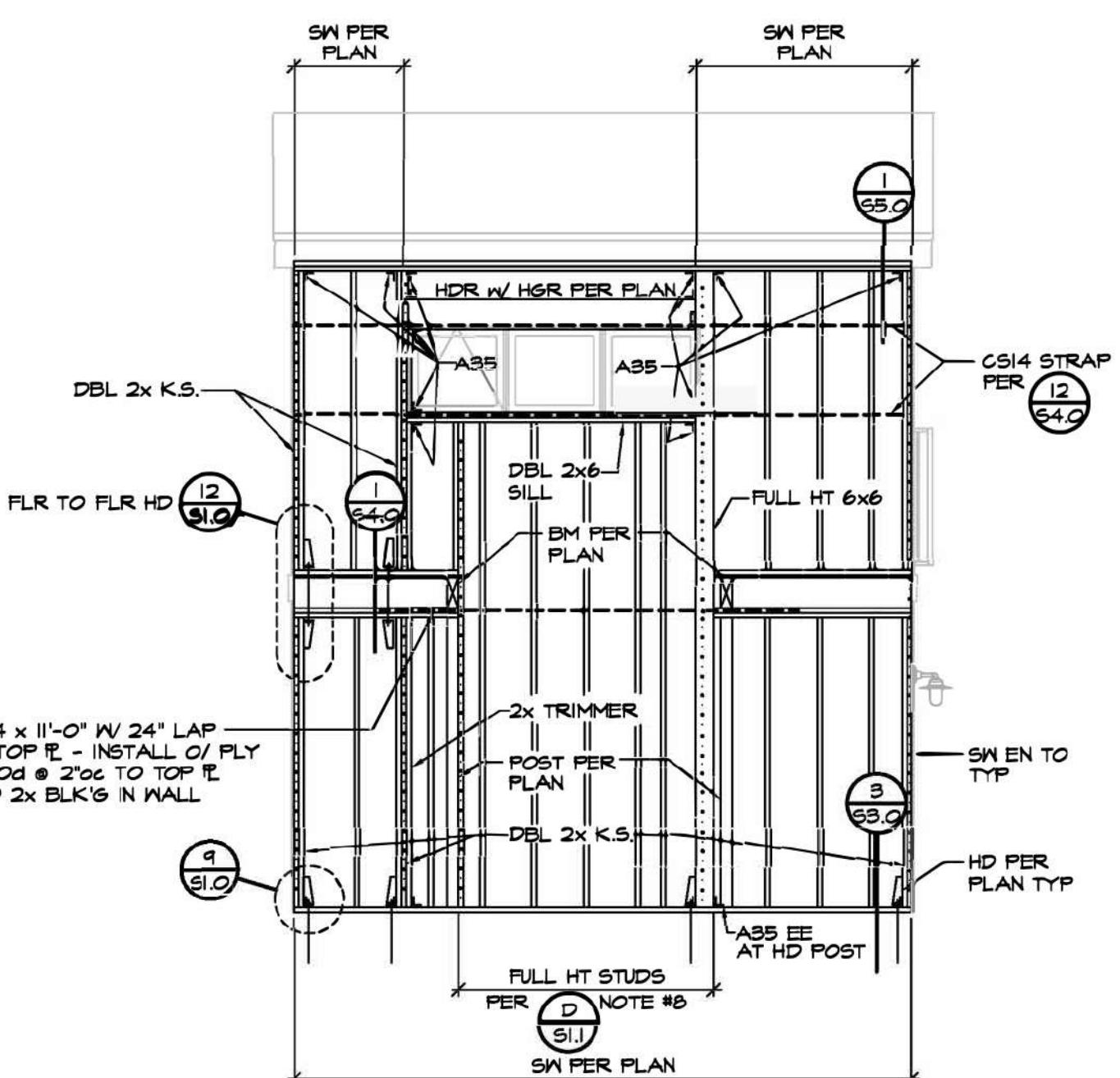
SECOND FLOOR FRAMING PLAN

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



FOUNDATION PLAN

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



FRAMING ELEVATION

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

NOTES:

1. SEE S.I.O. FOR STANDARD DETAILS.
2. SEE S.I.O. FOR GENERAL NOTES & SPECIFICATIONS.
3. SEE S.I.O. NOTE #6 FOR STUD WALL FRAMING.
4. SEE S.I.O. NOTE #7 FOR NON-BEARING WALL ATTACHMENT.
5. SEE S.I.O. & S.I.O. FOR SHEAR WALL HOLDOWN TO FDNs.
6. ALL PLUMBING & CONDUIT THRU FDNs SHALL BE PER S.I.O.
7. WHERE ONLY FRAMING WIDTH ARE NOTED, FRAMING DEPTH SHALL MATCH THE ADJACENT FRAMING, UNO.
8. AT SILL P. / SOLE P. NOTCH LOCATIONS PROVIDE SIMPSON RPS STRAP. NOTIFY ENGINEER AT NOTCH LOCATIONS GREATER THAN 12' IN LENGTH.
9. SHORING & BRACING DESIGN, MATERIALS & INSTALLATION SHALL BE PROVIDED BY THE GENERAL CONTRACTOR, & SHALL BE ADAPTED FOR ALL LOADS. LEAVE IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY & UNIT FINAL STRUCTURAL CONSTRUCTION IS COMPLETED.

LEGEND:

- △ : DENOTES SHEAR WALL PER S.I.O. WITH MIN LENGTH & HOLDOWNS AT EACH END OF SHEAR WALL.  
(X-X) HDU EE : DENOTES MIN LENGTH OF SW.
- △ : DENOTES STRAPPED SHEAR WALL PER S.I.O. WITH MIN LENGTH & HOLDOWNS AT EACH END OF SHEAR WALL.  
(X-X) HDU EE : DENOTES MIN LENGTH OF SW.
- : DENOTES EDGE NAILING (EN) TO FRAMING MEMBER.
- : DENOTES HOOD POST. MATCH WALL, UNO
- : MSTRBO BM TO P. NAIL DOWN TO P. UP TO BM.

SHEET TITLE:  
**FOUNDATION &  
ROOF FAMING  
PLAN**

SHEET NUMBER:

**S2.0**



## RIVAS RESIDENCE

1017 ORCHARD STREET  
SANTA ROSA, CA 95404

Job # 24096

PLANS DRAWN BY: SDG  
DATE : 12-23-2024 Progress Set  
2-18-2025 Permit Submittal

SHEET TITLE:  
**FOUNDATION DETAILS**

SHEET NUMBER:

**S3.0**

16 OF 18

10	-	7	-	4	-	1   1A   1B   -	<p>2x SILL W (2) 16d AT EACH BLK 2x STUD WALL FLR PLY PARALLEL 2x SILL W (2) 16d AT EACH JST 2x STUD WALL FLR PLY PERPENDICULAR FLR IJ</p>
11	-	8	-	5	-	2   -	<p>#4 x 30" EPOXY SET REMOVE (E) CURB &amp; WALL (E) SLAB (E) FTG ROUGHEN CJ TO 1/8" AMPLITUDE (E) Curb beyond</p>
12	-	9	-	6	-	3   3A   -	<p>DO NOT DISTURB SOIL BELOW (E) FTG (E) FTG REINF (N) SLAB PER PLAN REINF EA WAY #4 x 30" DOWEL @ 24" OC EPOXY TO (E) CONC 4" INTO (E) SLAB (E) SLAB PAD GRADE THICKENED SLAB EDGE #4 CONT.</p>



## RIVAS RESIDENCE

1017 ORCHARD STREET  
SANTA ROSA, CA 95404

Job # 24096

PLANS DRAWN BY: SDG  
DATE : 12-23-2024 Progress Set  
2-18-2025 Permit Submittal

SHEET TITLE:  
**DETAILS**

SHEET NUMBER:

**S4.0**

<p>WALL ABV AS OCCURS EN FLR PLY PER PLAN LSL BLKG @ 45°oc BM PER PLAN JST PER PLAN SEE 1 OTHERWISE</p>	<p>SHIM BLK FLR PLY PER PLAN JOIST PER PLAN BYND DECK JST BYND DECKING - SAD CONTINUOUS 6x BM PROVIDE SQUASH BLK BM WHERE REQUIRED HDR PER PLAN AS OCCURS SW PLY PER PLAN SEE 1 OTHERWISE</p>	<p>STUD WALL 16d @ 6°oc TO BM FLR PLY PER PLAN BM OR CONT RIM PER PLAN EN PARALLEL JSTS &amp; BLKG 4A</p>	<p>SW OR EXT PLY PER PLAN &amp; NOTE #4 16d @ 6°oc UNO BY SW SCHED ON PROVIDE SILL P. NAILING PER SW SCHED AT INTERIOR PLY LOC OR WHERE EXTERIOR PLY IS NOT CONT. TO RIM 16d @ 6°oc TO BM 16" LSL RIM USE 3½" LSL RIM WHERE SDS SILL P. ANCHORAGE IS REQ'D BY CLIPS PER SW SCHED AT INTERIOR PLY LOC OR WHERE EXTERIOR PLYWOOD IS NOT CONT. TO RIM/ TOP P. CLIPS TO MATCH SPACING REQUIREMENTS FOR SW BELOW HDR AS OCCURS PER PLAN STUDS PER PLAN NOTES SEE 1 OTHERWISE</p>	
<p>10 -</p>	<p>7 -</p>	<p>4 4A -</p>	<p>1 -</p>	
<p>11 -</p>	<p>8 -</p>	<p>5 -</p>	<p>2 -</p>	
<p>FOR DOUBLE SIDED SHEAR WALLS EACH SIDE OF WALL MUST BE STRAPPED PER BLW</p> <p>STUDS PER PLAN EN DBL TOP P. PER 1 FRAMING PER PLAN HDR PER PLAN UNO ON PLAN DBL STUD OR POST PER PLAN AT HD DBL ROW EN FULL HEIGHT WINDOW CONT COIL STRAP X WALL LENGTH (MIN CS14) UNO ON PLAN W/ 10d @ WALL EN &amp; 5x4 FLAT BLKS UNDER, ABV &amp; BLW WINDOWS HD FF AS OCCURS ON PLAN EN FRAMING OR FDN PER PLAN</p>	<p>GUARD RAIL BY OTHERS DECKING, SAD 2x SB @ 45°oc JST PER PLAN CONT BM PER PLAN</p>			
<p>12 STRAPPED SHEAR WALL</p>	<p>9 -</p>	<p>6 -</p>	<p>3 -</p>	<p>17 OF 18</p>



## RIVAS RESIDENCE

1017 ORCHARD STREET  
SANTA ROSA, CA 95404

Job # 24096

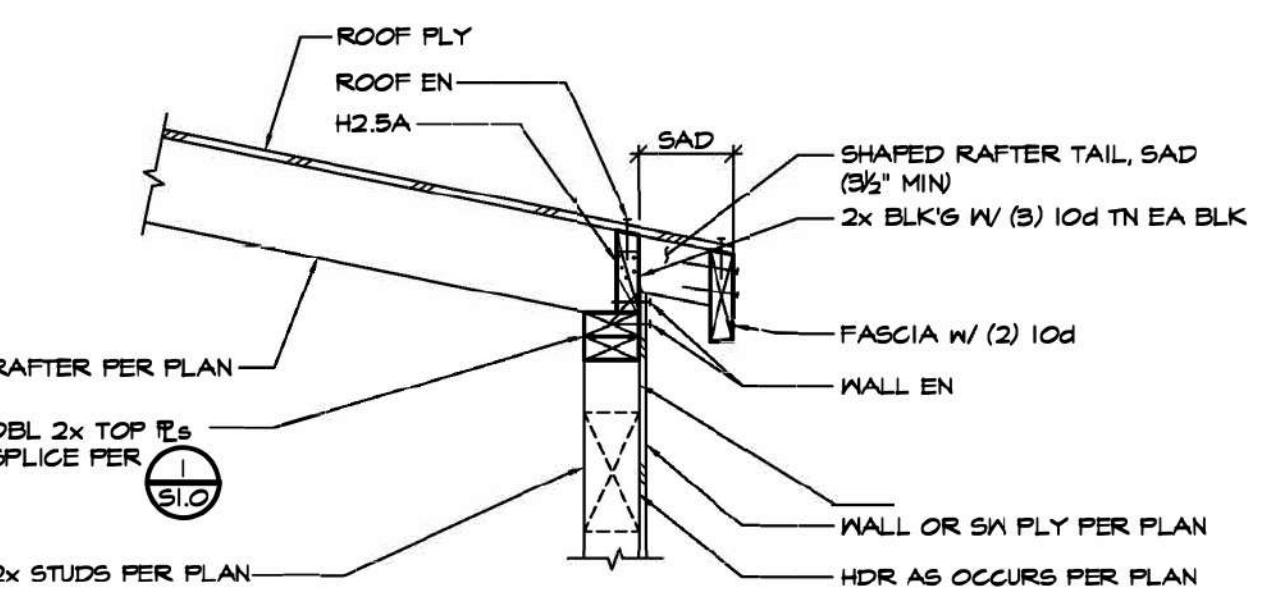
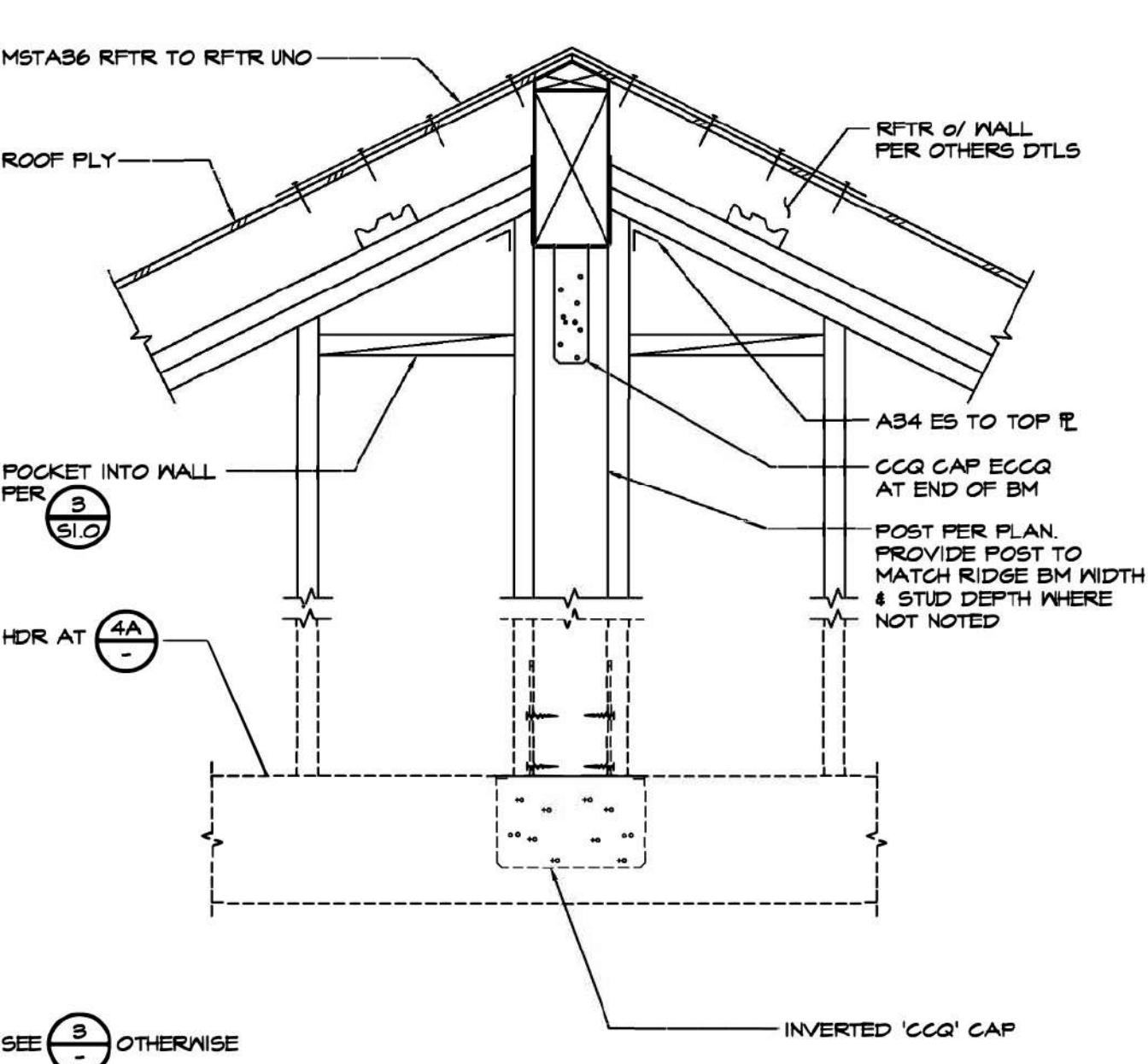
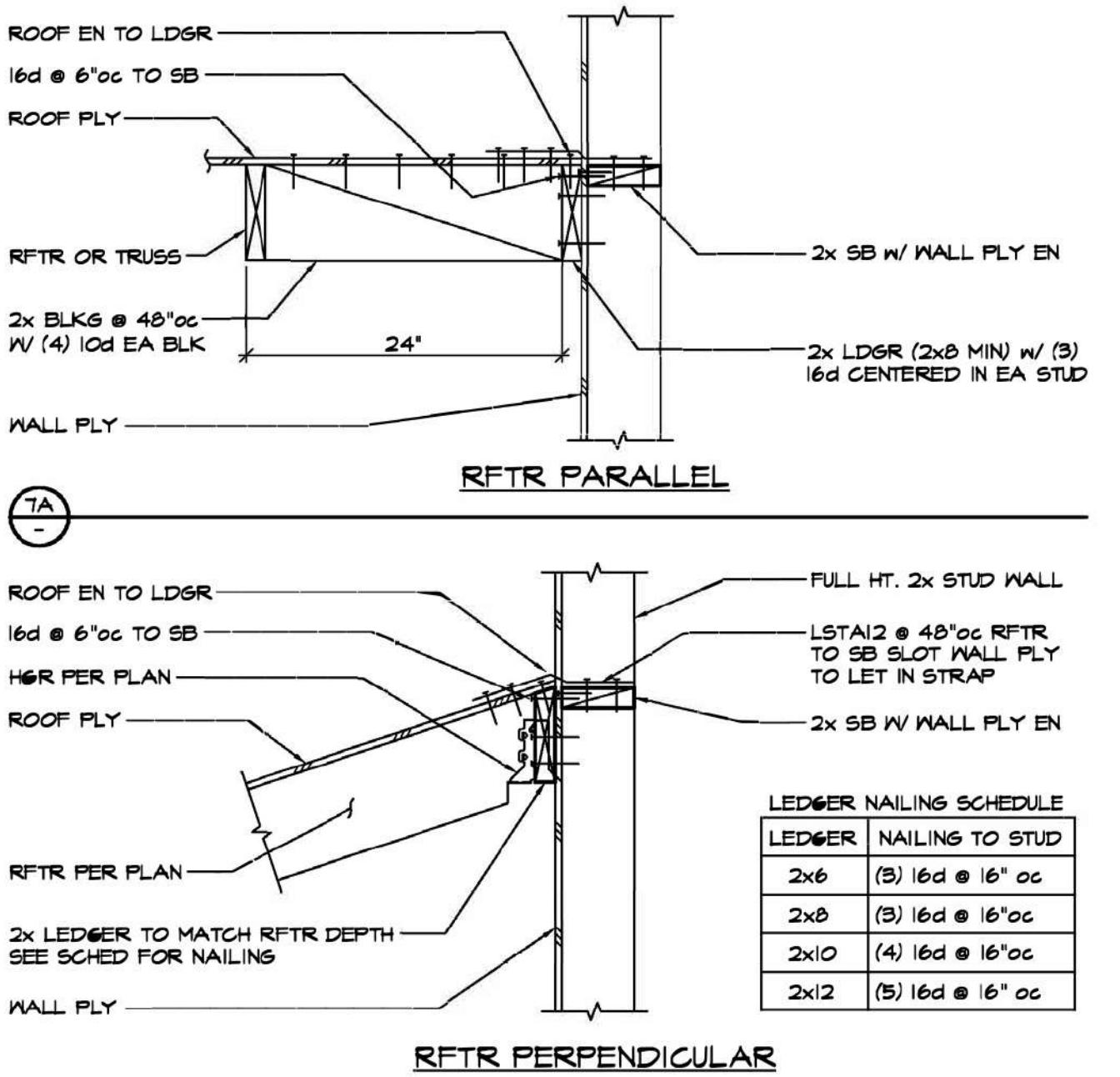
PLANS DRAWN BY: SDG  
DATE : 12-23-2024 Progress Set  
2-18-2025 Permit Submittal

SHEET TITLE:  
**DETAILS**

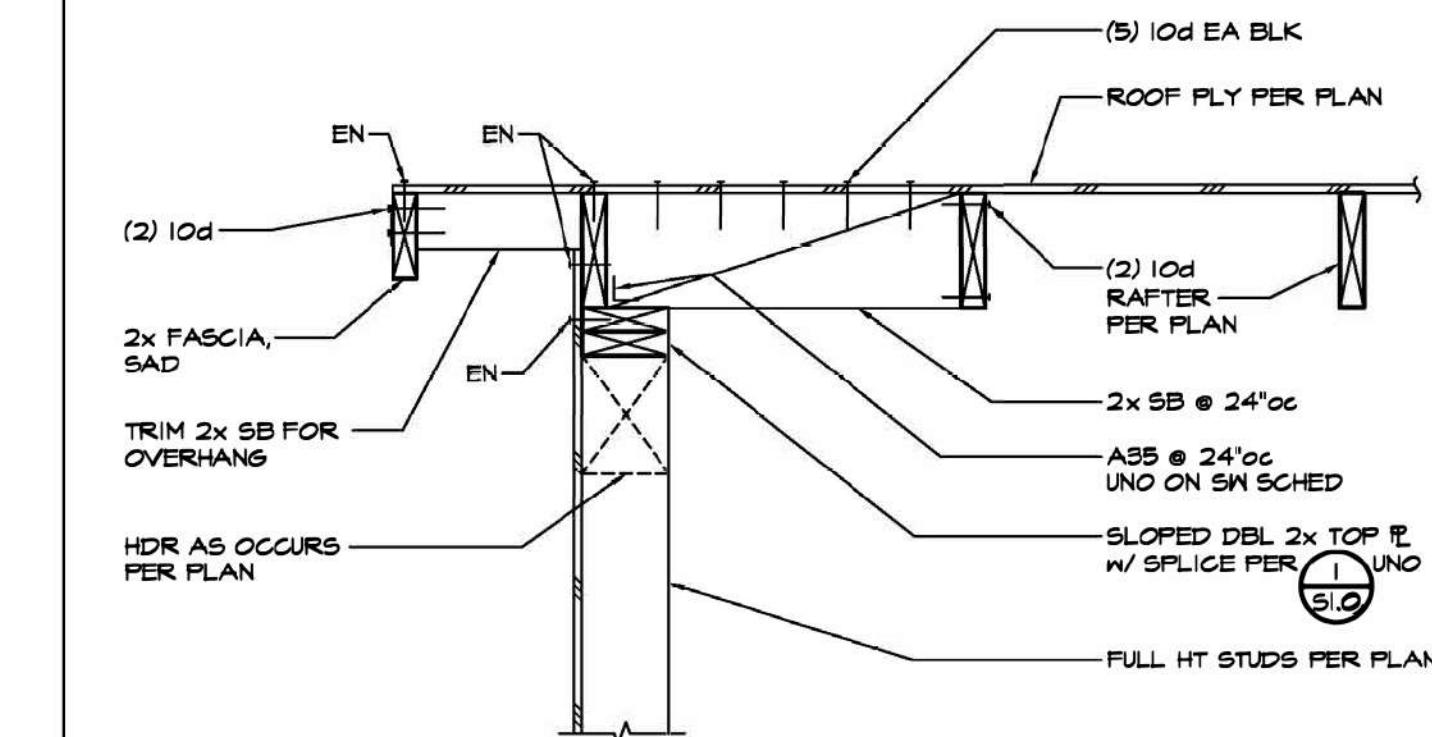
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**S5.0**

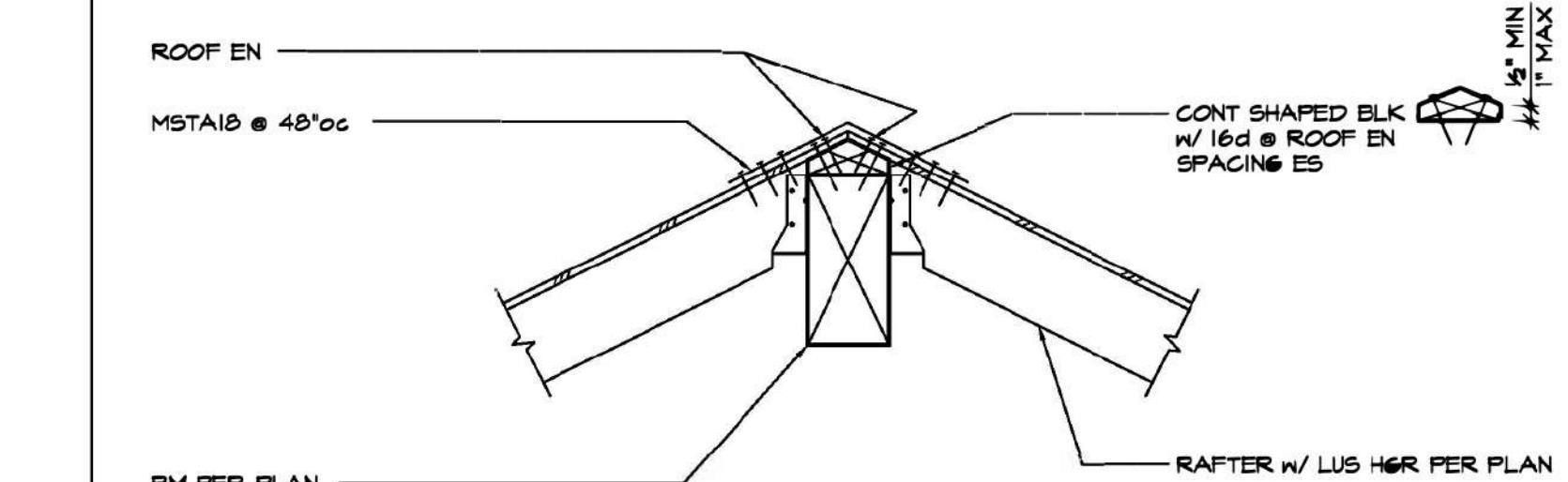
18 OF 18



10	-	7	7A	-	4	4A	-	1	-
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11	-	8	-	5	5A	-	2	-
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12	-	9	-	6	-	3	-
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