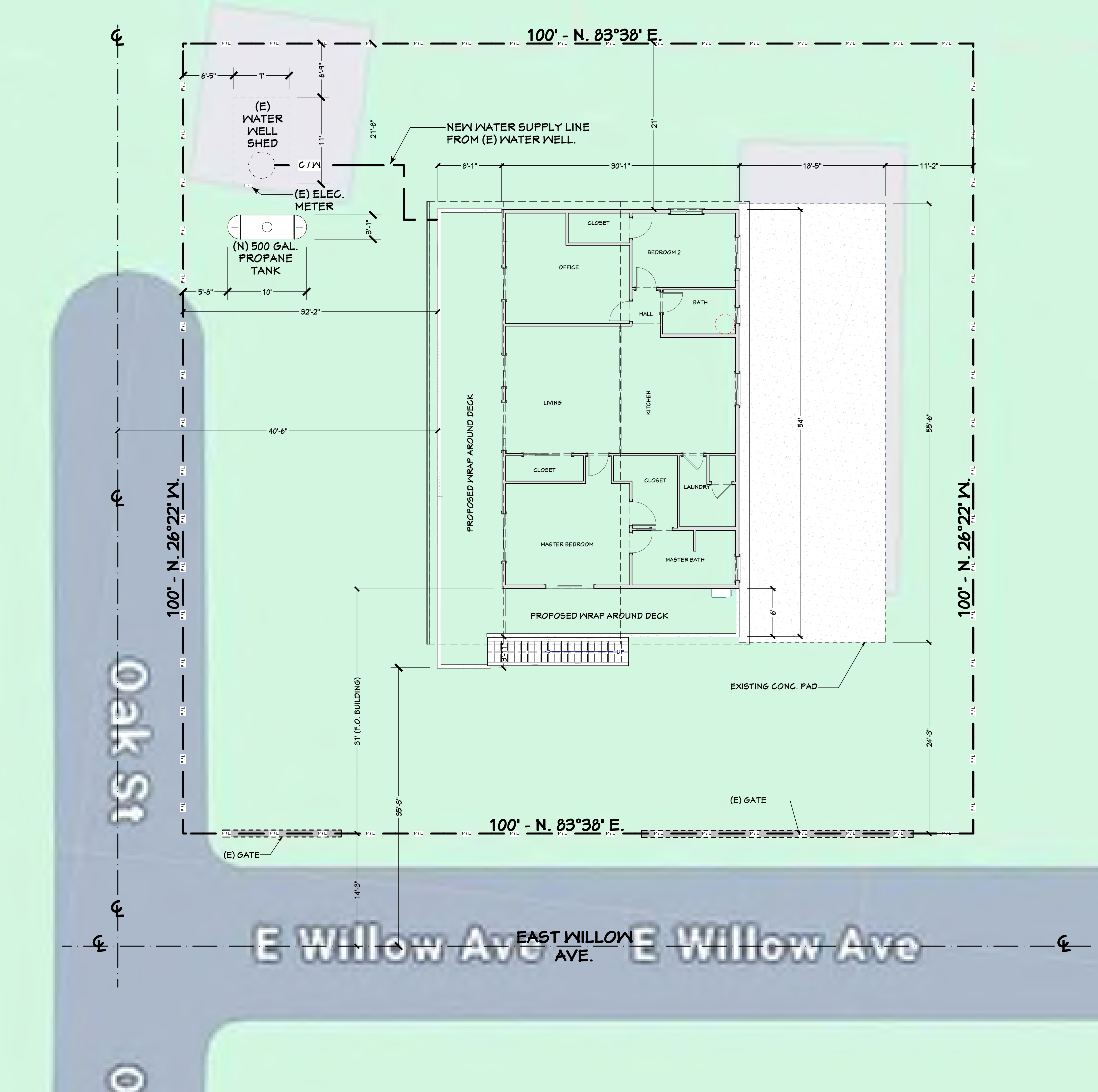




PARCEL NUMBER 167313003	
3D VIEWS ARE NOT TO SCALE AND MAY NOT REFLECT EXACTLY WHAT IS AVAILABLE FOR THE PROJECT. RENDER VIEWS ARE REPRESENTATIONS OF WHAT THE VIEW COULD LOOK LIKE, NOT WHAT IT WILL LOOK LIKE. 2D VIEWS ALWAYS SUPERCEDE 3D VIEWS	
DESIGNER NAME <i>Bobby W. Whittington</i> BOBBY WHITTINGTON	
CAD Management Systems, L.P. Drafting Service	EMAIL: MAXTORDVD@GMAIL.COM PHONE: 925-550-6337
PLANS PREPARED FOR:	JUAN D. FRANCO (925) 324-2724
	SITE ADDRESS: 769 E Willow Ave, Manteca, CA 95337
SHEET TITLE TITLE SHEET	
SUBMITTAL DATES	
REVISION TABLE	
DATE	DESCRIPTION
DRAWN BY: BOB WHITTINGTON	
DATE: 6/11/2025	
SCALE:	
SHEET	
A 1	



DRAWING INDEX

LABEL	TITLE
A1	TITLE SHEET
A2	COVER PAGE
A3	1ST & 2ND FLR. PLANS
A4	ROOF & SEPTIC PLANS
A5	BUILDING SECTIONS
A6	EXTERIOR ELEVATIONS
A7	ELEVATION CERTIFICATE
A8	TITLE 24
A9	TITLE 24
E1	ELECTRICAL PLAN
P1	PLUMBING PLAN

NOTE: FOR STRUCTURAL SHEETS SEE SHEETS S0.1 THRU S0.5

PROJECT SCOPE & LOT USAGE

APPLICABLE CODES

ALL CONSTRUCTION SHALL BE GOVERNED BY APPLICABLE CODES AND ORDINANCES OF THE COUNTY OF SAN JOAQUIN AND CITY OF MANTECA. ALL CONSTRUCTION SHALL CONFORM TO THE 2022 CALIFORNIA RESIDENTIAL CODE 2022, 2022 CALIFORNIA MECHANICAL CODE, 2022 CALIFORNIA PLUMBING CODE AND THE 202 CALIFORNIA ELECTRICAL CODE AND TITLE 24

SCOPE OF WORK:

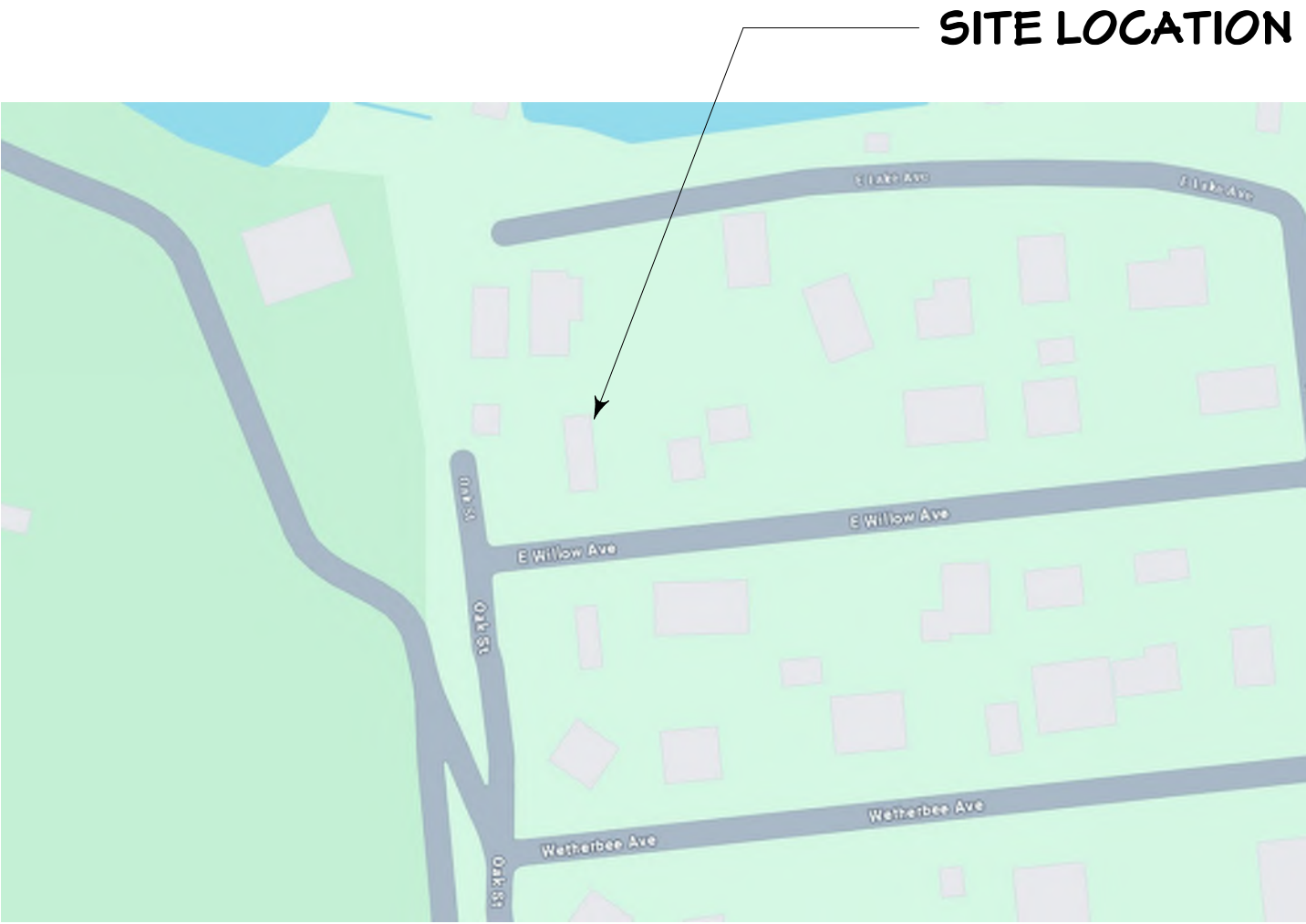
- NEW MAIN RESIDENCE TO BE CONSTRUCTED.
- NEW WATER SUPPLY LINE FROM (E) WELL TO PROPOSED RESIDENCE
- (N) 500 GALLON PROPANE TANK TO BE INSTALLED
- (N) SEPTIC SYSTEM TO BE CONSTRUCTED
- (N) CONCRETE WALKWAYS AROUND.

AREA & LOT USAGE NUMBERS:

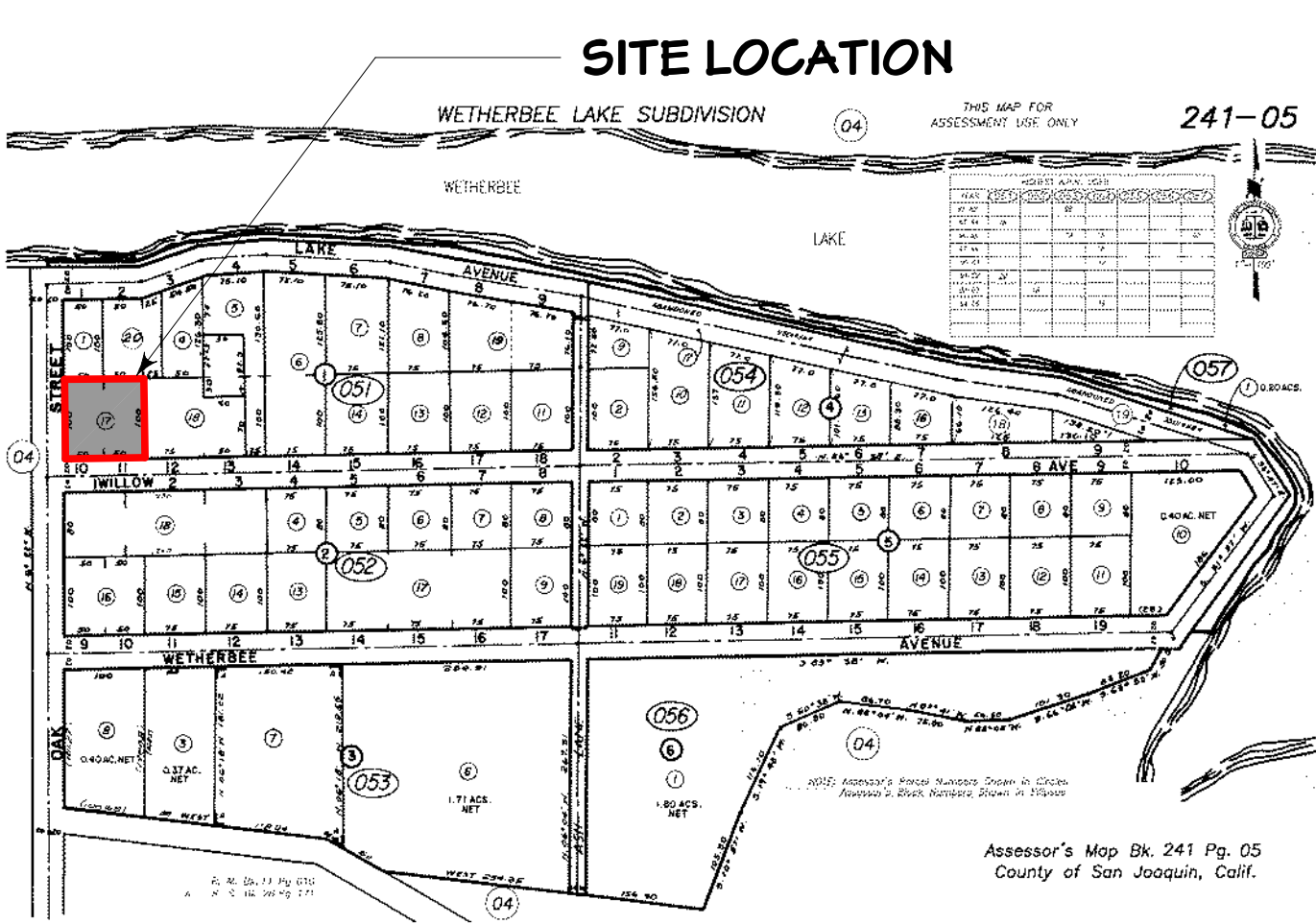
EXISTING CONDITIONS:

- EXISTING LOT: 10,000 SQ. FT.
- EXISTING HOME LIVING AREA: N/A
- PROPOSED HOME SQ. FT.: 1,450 SQ. FT.
- LOT COVERAGE RATIO: 0.145

VICINITY MAP



ASSESSOR MAP



PARCEL NUMBER

167313003

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DESIGNER NAME

Bobby W. Whittington

BOBBY WHITTINGTON

CAD Management Systems, L.P.

Drafting Service

EMAIL: MAXTORDVD@GMAIL.COM
PHONE: 925-550-6337

PLANS PREPARED FOR:

JUAN D. FRANCO
(925) 324-2724

SITE ADDRESS:

169 E Willow Ave,
Manteca, CA 95337

SHEET TITLE

COVER PAGE

SUBMITTAL DATES

REVISION TABLE

DATE	DESCRIPTION

DRAWN BY:
BOB WHITTINGTON

DATE:

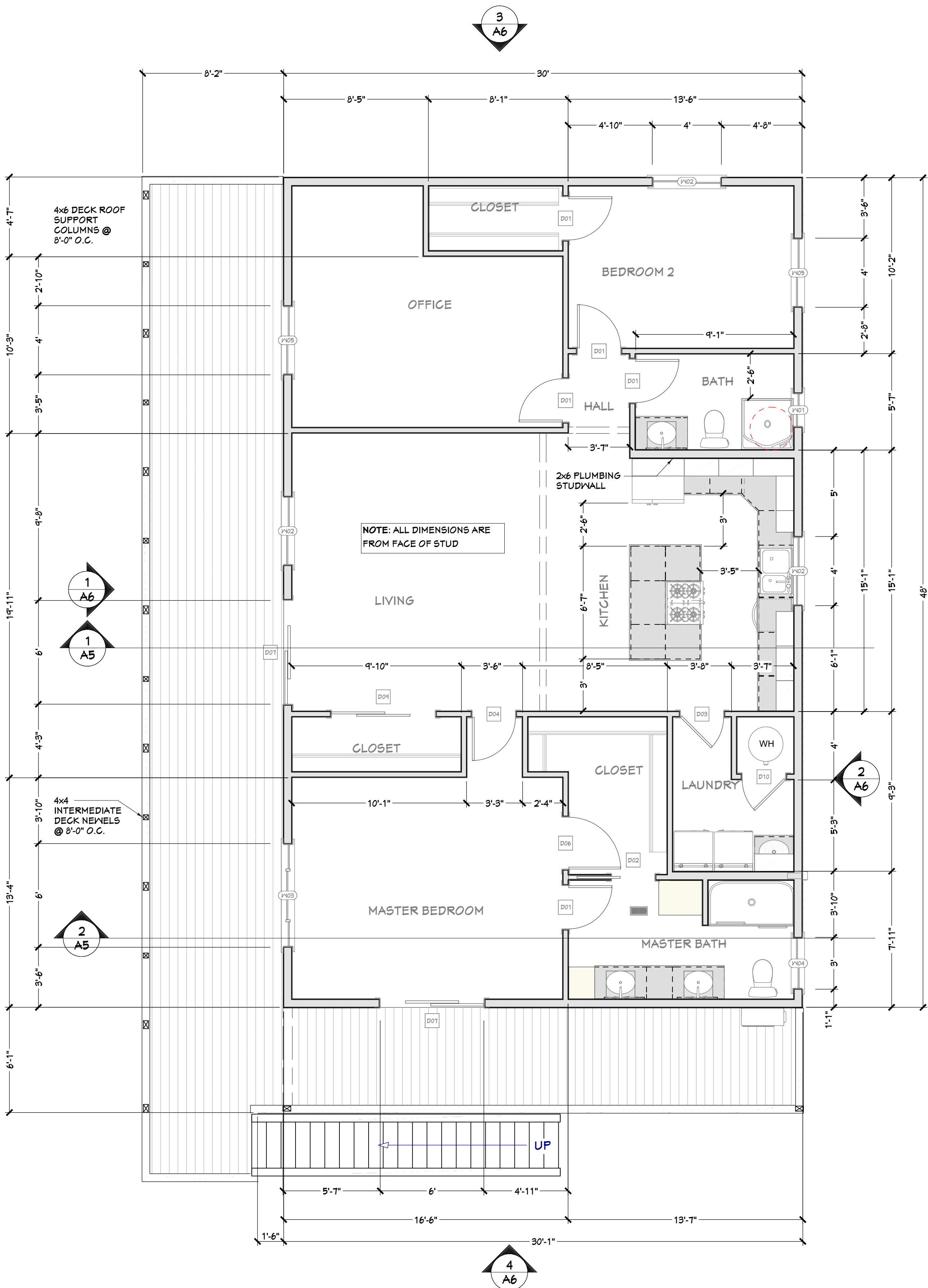
6/11/2025

SCALE:

SHEET

A 2

2nd LEVEL - FLOOR PLAN SCALE: 1/4" = 1'-0"

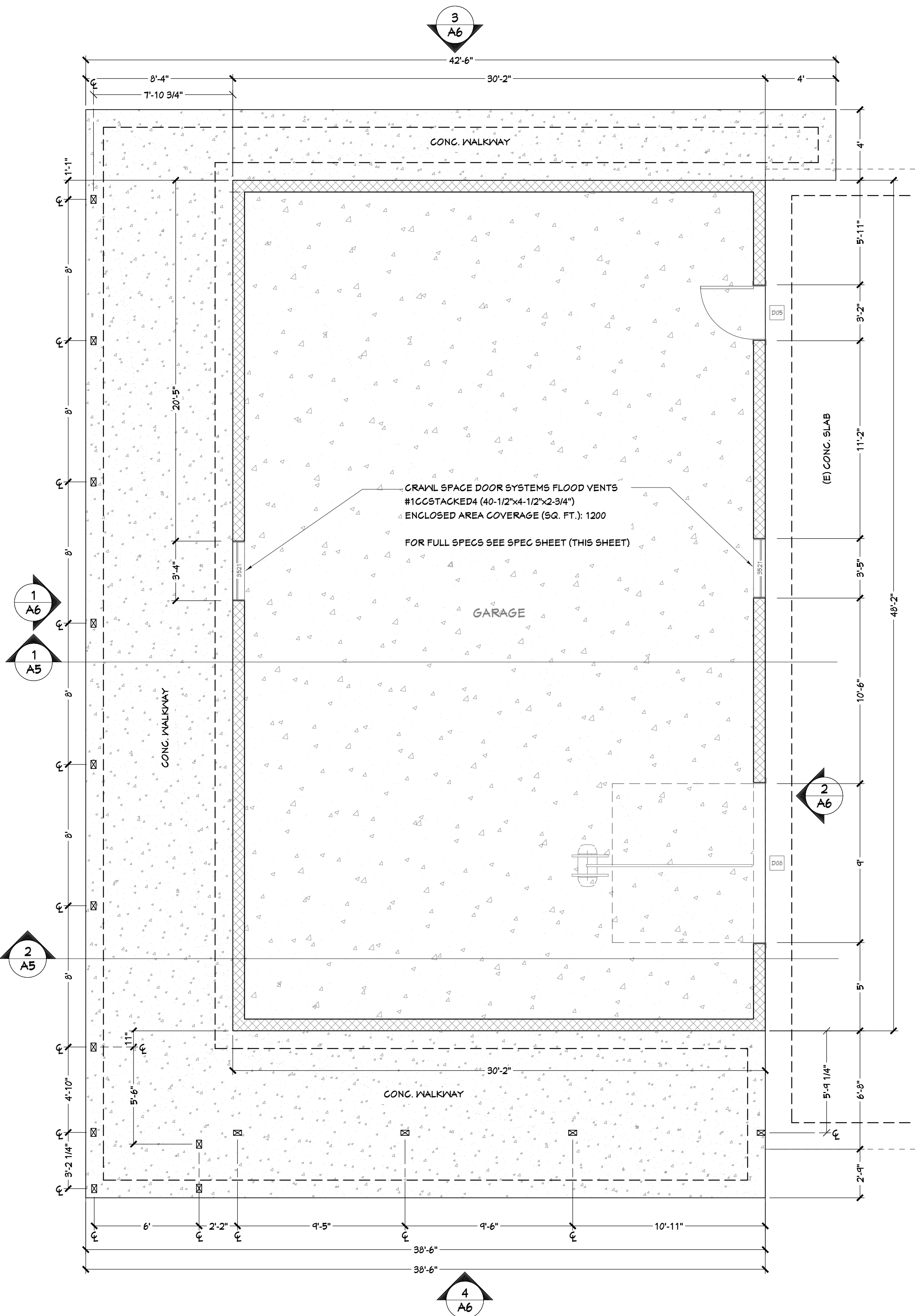


DOOR SCHEDULE				
QTY	NUMBER	FLOOR	SIZE	DESCRIPTION
5	D01	2	2668 L IN	HINGED-DOOR P04
1	D02	2	2668 R	POCKET-DOOR P04
1	D03	2	2668 R IN	HINGED-DOOR LV03
1	D04	2	2668 R IN	HINGED-DOOR P04
1	D05	1	3068 R EX	EXT. HINGED-DOOR E21
1	D06	2	3068 R IN	HINGED-DOOR P04
2	D07	2	6068 L EX	EXT. SLIDER-GLASS PANEL LOCKABLE SLIDER
1	D08	1	9090	GARAGE-GARAGE DOOR CHD05
1	D09	2	6068 L IN	SLIDER-DOOR P04
1	D10	2	2668 L IN	HINGED-DOOR LV03

WINDOW SCHEDULE					
NUMBER	LABEL	QTY	FLOOR	SIZE	R/O
W01	2020LS	1	2	2020LS 25"x25"	YES
W02	4030LS	3	2	4030LS 44"x37"	YES
W03	6040TS	1	2	6040TS 73"x44"	YES
W04	3016RS	1	2	3016RS 37"x11"	YES
W05	4030LS	2	2	4030LS 44"x37"	YES

WALL SCHEDULE	
2D SYMBOL	WALL TYPE
[Symbol]	24" CONCRETE STEM WALL
[Symbol]	8" CMU (BLOCK) STEM WALL
[Symbol]	INTERIOR RAILING
[Symbol]	INTERIOR-4
[Symbol]	INTERIOR-6
[Symbol]	SIDING-6
[Symbol]	SIDING-6, ATTICX

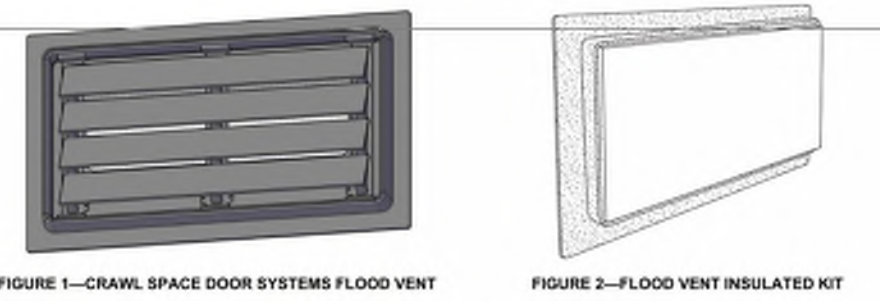
1st LEVEL - FLOOR PLAN SCALE: 1/4" = 1'-0"



SCHEDULE / SPECS

ESR-3851
7.0 IDENTIFICATION
7.1 The Crawl Space Door Systems flood vents recognized in this report must be identified by a label bearing the manufacturer's name (Crawl Space Door Systems), the model number, and the evaluation report number (ESR-3851).
7.2 The report holder's contact information is the following:
CRAWL SPACE DOOR SYSTEMS, INC.
3649 SEA GULL BLUFF DRIVE
VIRGINIA BEACH, VIRGINIA 23455
(757) 363-0605
www.crawlspacedoors.com

TABLE 1--CRAWL SPACE DOOR SYSTEMS FLOOD VENTS			
MODEL	OVERALL VENT SIZE (Width x Height x Depth) (IN)	ROUGH OPENING SIZE (Width x Height) (IN)	ENCLOSED AREA COVERAGE (SQ. FT.)
CSBARS16	16" x 16" x 1 1/2"	16" x 8 1/2"	305
ICONSULATED	16" x 16" x 1 1/2"	16" x 8	300
ICOSTACKED22	22" x 22" x 2 1/2"	24" x 24"	616
ICOSTACKED24	24" x 24" x 2 1/2"	26" x 26"	676



PARCEL NUMBER
167313003

DESIGNER NAME
Bobby W. Whittington

CAD Management Systems, L.P.
Drafting Service

PLANS PREPARED FOR:
JUAN D. FRANCO
(925) 324-2724

SITE ADDRESS:
164 E Willow Ave,
Manteca, CA 95337

SHEET TITLE
1ST & 2ND FLR. PLANS

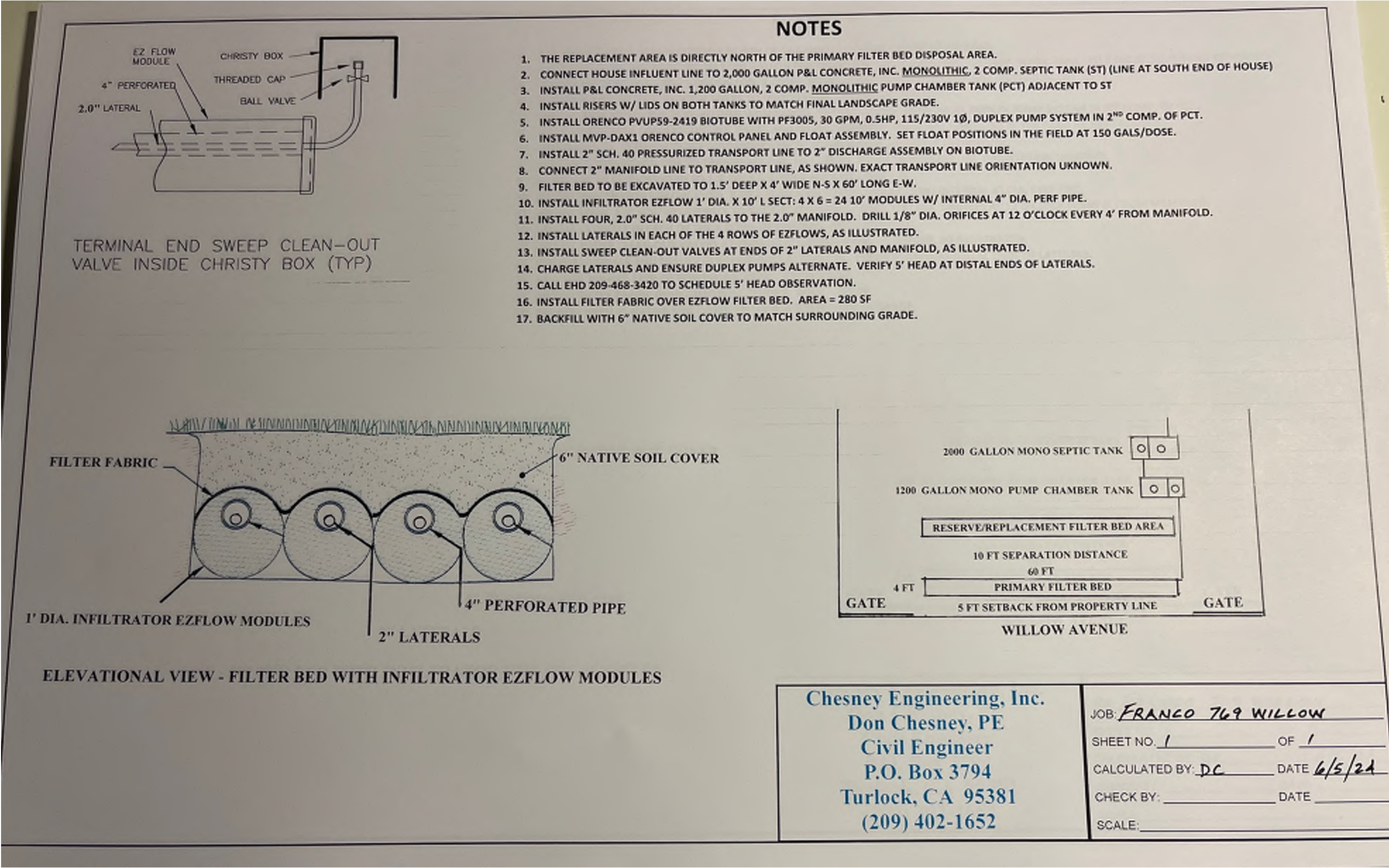
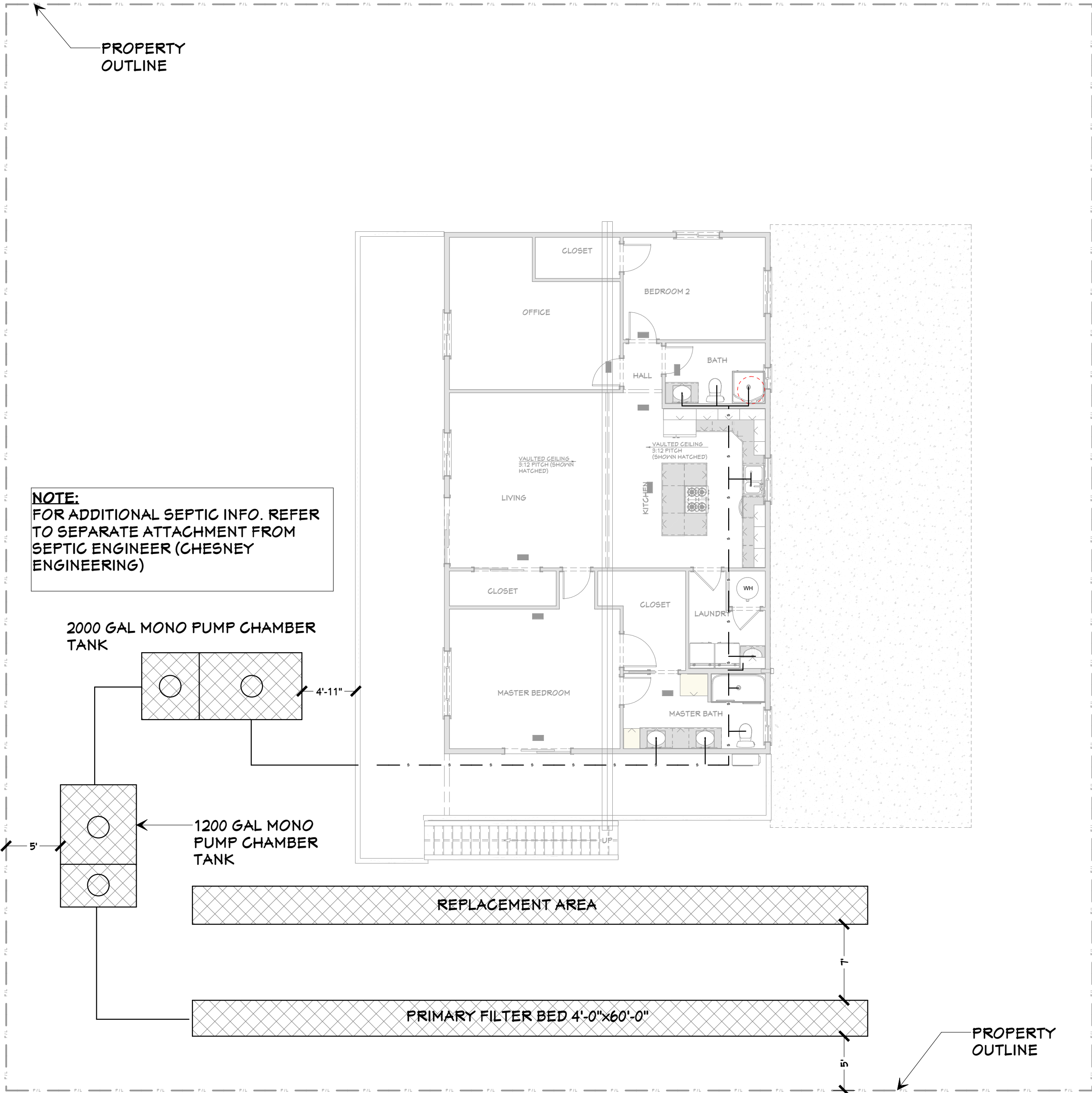
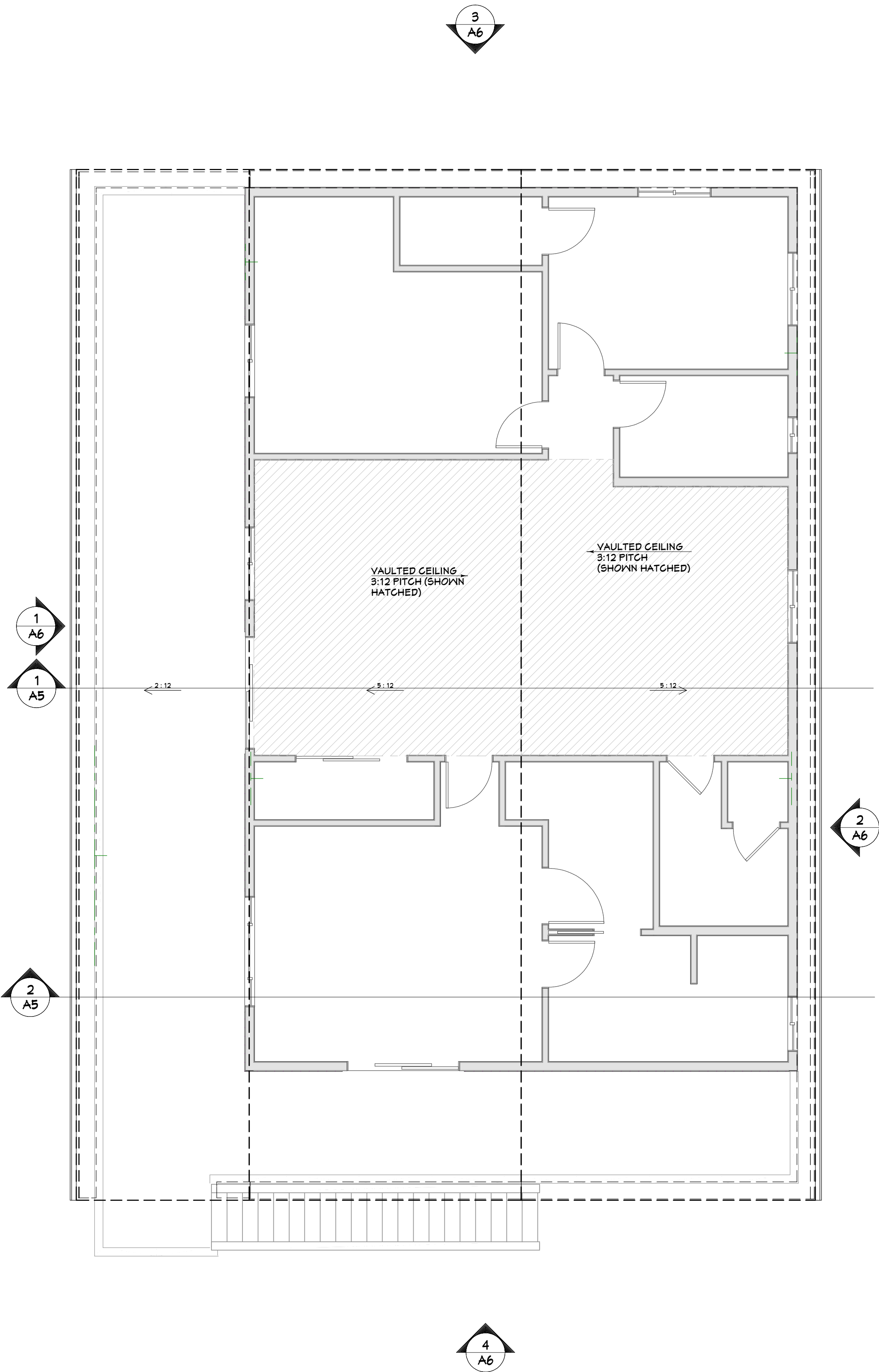
SUBMITTAL DATES
REVISION TABLE
DATE DESCRIPTION

DRAWN BY:
BOB WHITTINGTON

DATE:
6/11/2025

SCALE:

SHEET
A 3



PARCEL NUMBER
167313003

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DESIGNER NAME

Bobby W. Whittington
BOBBY WHITTINGTON

CAD Management Systems, L.P.
Drafting Service

EMAIL: MAXTORDVD@GMAIL.COM
PHONE: 925-550-6337

PLANS PREPARED FOR:

JUAN D. FRANCO
(925) 324-2724

SITE ADDRESS:

169 E Willow Ave,
Menlo Park, CA 94025

SHEET TITLE

ROOF & SEPTIC PLANS

SUBMITTAL DATES

REVISION TABLE

DATE	DESCRIPTION

DRAWN BY:

BOB WHITTINGTON

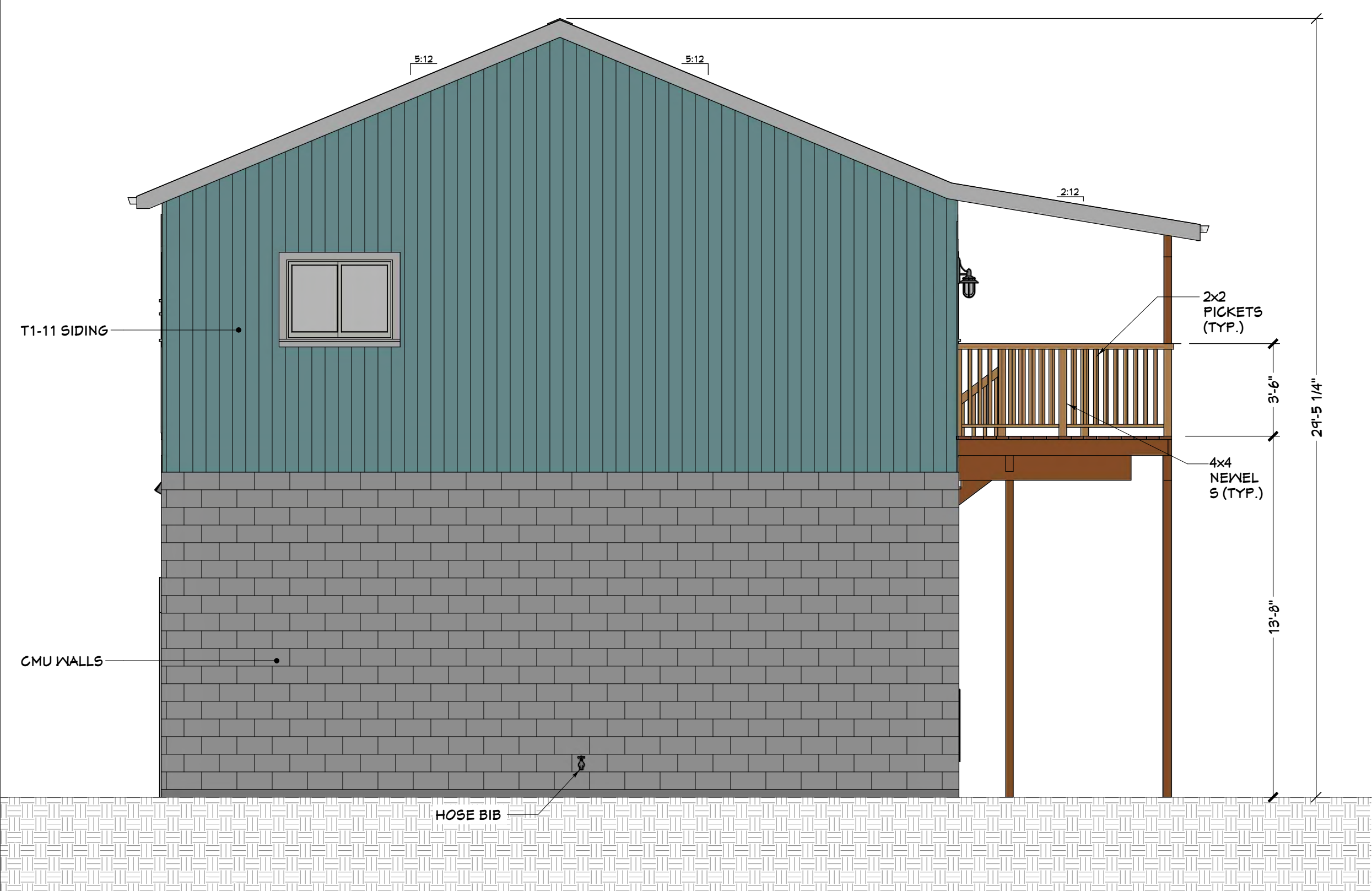
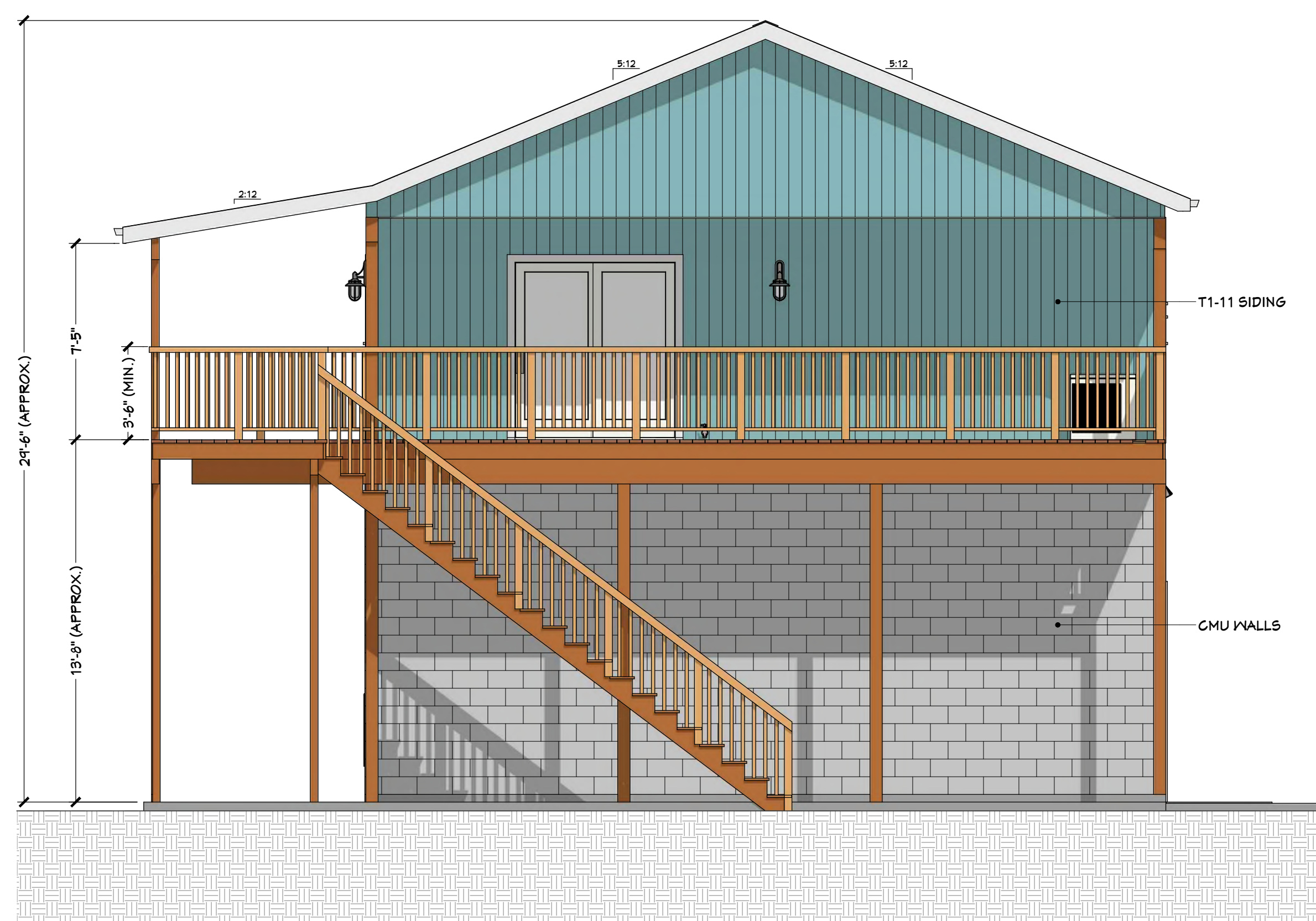
DATE:

6/11/2025

SCALE:

SHEET

A 4



PARCEL NUMBER

167313003

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2D VIEWS ALWAYS SUPERCEDE 3D VIEWS

DESIGNER NAME

Bobby W. Whittle

BOBBY WHITTINGTON

CAD Management Systems, L.P.

Drafting Service

EMAIL: MAXTORDVD@GMAIL.COM

MAXTORDVD@GMAIL.
PHONE: 925-550-6337

PLANS PREPARED FOR:

JUAN D. FRANCO
(925) 329-2729

SITE ADDRESS:

769 E Willow Ave,
Manteca, CA 95337

SHEET TITLE

SHEET III

EXTERIOR ELEVATIONS

	SUBMITTAL DATES
--	-----------------

REVISION TABLE	
DATE	DESCRIPTION

REVISION TABLE	
DATE	DESCRIPTION

DRAWN BY:
BOB WHITTINGTON

DATE: _____

6/11/2025

SCALE:

SHEET

A6

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 769 E. Willow Ave.	FOR INSURANCE COMPANY USE
City: Manteca	Policy Number:
State: CA	Company NAIC Number:
SECTION H -- BUILDING'S FIRST FLOOR HEIGHT INFORMATION FOR ALL ZONES (SURVEY NOT REQUIRED) (FOR INSURANCE PURPOSES ONLY)	
The property owner, owner's authorized representative, or local floodplain management official may complete Section H for all flood zones to determine the building's first floor height for insurance purposes. Sections A, B, and I must also be completed. Enter heights to the nearest tenth of a foot (nearest tenth of a meter in Puerto Rico). <i>Reference the Foundation Type Diagrams (at the end of Section H instructions) and the appropriate Building Diagrams (at the end of Section I instructions) to complete this section.</i>	
H1. Provide the height of the top of the floor (as indicated in Foundation Type Diagrams) above the Lowest Adjacent Grade (LAG):	
a) For Building Diagrams 1A, 1B, 3, and 5-9. Top of bottom floor (include above-grade floors only for buildings with subgrade crawlspaces or enclosure floors) is: _____ _____ feet _____ meters ☐ above the LAG	
b) For Building Diagrams 2A, 2B, 4, and 6-8. Top of next higher floor (i.e., the floor above basement, crawlspace, or enclosure floor) is: _____ _____ feet _____ meters ☐ above the LAG	
H2. Is all Machinery and Equipment servicing the building (as listed in item H2 instructions) elevated to or above the floor indicated by the H2 arrow (shown in the Foundation Type Diagrams at end of Section H instructions) for the appropriate Building Diagram? ☐ Yes ☐ No	
SECTION I -- PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION	
The property owner or owner's authorized representative who completes Sections A, B, and H must sign here. <i>The statements in Sections A, B, and H are correct to the best of my knowledge. Note: If the local floodplain management official completed Section H, they should indicate in item G2.b and sign Section G.</i>	
☐ Check here if attachments are provided (including required photos) and describe each attachment in the Comments area.	
Property Owner or Owner's Authorized Representative Name: _____	
Address: _____	State: _____ ZIP Code: _____
City: _____	State: _____ ZIP Code: _____
Signature: _____	Date: _____
Telephone: _____	Ext.: _____ Email: _____
Comments: _____	

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-10		FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 769 E. Willow Ave.		Policy Number:
City: Manteca	State: CA ZIP Code: 95337	Company NAIC Number:
SECTION E – BUILDING MEASUREMENT INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO, ZONE AR/AO, AND ZONE A (WITHOUT BFE)		
For Zones AO, AR/AO, and A (without BFE), complete Items E1–E5. For Items E1–E4, use natural grade, if available. If the Certificate is intended to support a Letter of Map Change request, complete Sections A, B, and C. Check the measurement used. In Puerto Rico only enter meters.		
Building measurements are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction		
*A new Elevation Certificate will be required when construction of the building is complete.		
E1. Provide measurements (C.2.a in applicable Building Diagram) for the following and check the appropriate boxes to show whether the measurement is above or below the natural HAG and the LAG.		
a) Top of bottom floor (including basement, crawlspace, or enclosure) is:	_____	☐ feet ☐ meters ☐ above or ☐ below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is:	_____	☐ feet ☐ meters ☐ above or ☐ below the LAG.
E2. For Building Diagrams 6–9 with permanent flood openings specified in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (C.2.b in applicable Building Diagram) of the building is:		
_____		☐ feet ☐ meters ☐ above or ☐ below the HAG.
E3. Attached garage (top of slab) is:		
_____		☐ feet ☐ meters ☐ above or ☐ below the HAG.
E4. Top of platform of machinery and/or equipment servicing the building is:		
_____		☐ feet ☐ meters ☐ above or ☐ below the HAG.
E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's flood management ordinance? ☐ Yes ☐ No ☐ Unknown The local official must certify this information in Section G.		
SECTION F – PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION		
The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without BFE) or Zone AO must sign here. <i>The statements in Sections A, B, and E are correct to the best of my knowledge</i>		
☐ Check here if attachments and describe in the Comments area.		
Property Owner or Owner's Authorized Representative Name: _____		
Address: _____		
City: _____		State: _____ ZIP Code: _____
Signature: _____ Date: _____		
Telephone: _____ Ext.: _____ Email: _____		
Comments: _____		

CMB Control No. 1600-0008
 Expiration Date: 06/30/2028

**FEDERAL DEPARTMENT OF HOMELAND SECURITY
 National Flood Insurance Program**

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION	FOR INSURANCE COMPANY USE
A1. Building Owner's Name: <u>Juan Daniel Franco</u>	Policy Number: _____
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: <u>769 E. Willow Ave.</u>	Company NAIC Number: _____
City: <u>Manteca</u> State: <u>CA</u>	ZIP Code: <u>95337</u>

A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number:
APN: 241-05-117

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): Residential

A5. Latitude/Longitude: Lat. 37.7730768876 Long. -121.29812224 Flood Zone: MS 1927 ☐ NAD 1927 ☒ NAD 1983 ☐ WGS 84

A6. Attach at least two and when possible four clear photographs (one for each side) of the building (see Form pages 7 and 8).

A7. Building Diagram Number: 1A

A8. For a building with a crawlspace or enclosure(s):

- a. Square footage of crawlspace or enclosure(s): 1,452.00 sq. ft.
- b. Is there at least one permanent flood opening on two different sides of each enclosed area? ☒ Yes ☐ No ☐ N/A
- c. Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade:
 Non-engineered flood openings: _____ Engineered flood openings: _____
- d. Total net open area of non-engineered flood openings in A8.c: 1,536.00 sq. in.
- e. Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): 1,536.00 sq. ft.
- f. Sum of A8.d and A8.e rated area (if applicable – see Instructions): 1,536.00 sq. ft.

A9. For a building with an attached garage:

- a. Square footage of attached garage: 0.00 sq. ft.
- b. Is there at least one permanent flood opening on two different sides of the attached garage? ☐ Yes ☐ No ☒ N/A
- c. Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade:
 Non-engineered flood openings: _____ Engineered flood openings: _____
- d. Total net open area of non-engineered flood openings in A9.c: _____ sq. in.
- e. Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): _____ sq. ft.
- f. Sum of A9.d and A9.e rated area (if applicable – see Instructions): _____ sq. ft.

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1.a. NFIP Community Name: <u>San Joaquin County</u>	B1.b. NFIP Community Identification Number: <u>060299</u>
B2. County Name: <u>San Joaquin County</u>	B3. State: <u>CA</u>
B4. Map/Panel No.: <u>06077C0620</u>	B5. Suffix: <u>F</u>
B6. FIRM Index Date: <u>10/20/2016</u>	B7. FIRM Panel Effective/Revised Date: <u>10/15/2009</u>
B8. Flood Zone(s): <u>AE</u>	B9. Base Flood Elevation(s) (FE) (Zone AE, use Base Flood Depth): <u>2'</u>

B10. Indicate the source of the BFE data or Base Flood Depth entered in item B9:
☐ FIS ☒ FIRM ☐ Community Determined ☐ Other: _____

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source: _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No
 Designation Date: _____ CBRS ☐ OPA ☐

B13. Is the building located seaward of the Limit of Moderate Wave Action (LMWA)? ☐ Yes ☒ No

PARCEL NUMBER 167313003	
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DESIGNER NAME  BOBBY WHITTINGTON	
CAD Management Systems, L.P. Drafting Service EMAIL: MAXTORDVD@GMAIL.COM PHONE: 925-550-6337	
PLANS PREPARED FOR:	
JUAN D. FRANCO (425) 329-2729	
SITE ADDRESS:	
769 E Willow Ave, Maricopa, CA 95371	
SHEET TITLE ELEVATION CERTIFICATE	
SUBMITTAL DATES	
REVISION TABLE	
DATE	DESCRIPTION
DRAWN BY: BOB WHITTINGTON	
DATE: 6/11/2025	
SCALE:	
SHEET	
A 7	

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19 BUILDING PHOTOGRAPHS See Instructions for Item A6.	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 769 E. Willow Ave.	FOR INSURANCE COMPANY USE Policy Number: _____ Company NAIC Number: _____
City: <u>Manteca</u> State: <u>CA</u> ZIP Code: <u>95337</u>	
Instructions: Insert below at least two and when possible four photographs showing each side of the building (for example, may only be able to take front and back pictures of townhouses/rowhouses). Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." Photographs must show the foundation. When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.	
Photo One	
Photo One Caption:	Clear Photo One
Photo Two	
Photo Two Caption:	Clear Photo Two

ELEVATION CERTIFICATE IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19			
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 769 E. Willow Ave.			FOR INSURANCE COMPANY USE
City: Manteca State: CA ZIP Code: 95337			Policy Number:
			Company NAIC Number:
SECTION G – COMMUNITY INFORMATION (RECOMMENDED FOR COMMUNITY OFFICIAL COMPLETION)			
The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Section A, B, C, E, G, or H of this Elevation Certificate. Complete the applicable item(s) and sign below when.			
G1.	☐	The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by state law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)	
G2.a.	☐	A local official completed Section E for a building located in Zone A (without a BFE), Zone AO, or Zone AR/AO, or when Item E5 is completed for a building located in Zone AO.	
G2.b.	☐	A local official completed Section H for insurance purposes.	
G3.	☐	In the Comments area of Section G, the local official describes specific corrections to the information in Sections A, B, E and H.	
G4.	☐ The following information (Items G5–G11) is provided for community floodplain management purposes.		
G5.	Permit Number: _____ G6. Date Permit Issued: _____		
G7.	Date Certificate of Compliance/Occupancy Issued: _____		
G8.	This permit has been issued for: ☐ New Construction ☐ Substantial Improvement		
G9.a.	Elevation of as-built lowest floor (including basement) of the building: _____ feet _____ meters Datum: _____		
G9.b.	Elevation of bottom of as-built lowest horizontal structural member: _____ feet _____ meters Datum: _____		
G10.a.	BFE (or depth in Zone AO) of flooding at the building site: _____ feet _____ meters Datum: _____		
G10.b.	Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural member: _____ feet _____ meters Datum: _____		
G11.	Variance issued? ☐ Yes ☐ No If yes, attach documentation and describe in the Comments area.		
The local official who provides information in Section G must sign here. <i>I have completed the information in Section G and certify that it is correct to the best of my knowledge. If applicable, I have also provided specific corrections in the Comments area of this section.</i>			
Local Official's Name: _____ Title: _____			
NFIP Official Name: _____			
Telephone: _____ Ext.: _____ Email: _____			
Address: _____			
City: _____ State: _____ ZIP Code: _____			
Signature: _____ Date: _____			
Comments (including type of equipment and location, per C2.e.; description of any attachments; and corrections to specific information in Sections A, B, D, E, or H): _____			

ELEVATION CERTIFICATE
IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 769 E. Willow Ave.	FOR INSURANCE COMPANY USE
City: <u>Manitaca</u> State: <u>CA</u> ZIP Code: <u>95337</u>	Policy Number: _____ Company NAIC Number: _____

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☒ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
 *A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AE, A99. Complete items C2-a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters.
 Benchmark Utilized: HS0518 Vertical Datum: 27.25

Indicate elevation datum used for the elevations in items (a) through (h) below.
☐ NGVD 1929 ☐ NAVD 1988 ☐ Other: _____

Datum used for building elevations must be the same as that used for the BFE. Conversion factor used? ☐ Yes ☒ No
 If Yes, describe the source of the conversion factor in the Section D Comments area.

Check the measurement used:

a) Top of bottom floor (including basement, crawlspace, or enclosure floor):	<u>19.37</u>	☒ feet	☐ meters
b) Top of the next higher floor (see Instructions):	<u>31.37</u>	☐ feet	☐ meters
c) Bottom of the lowest horizontal structural member (see Instructions):	<u>30.20</u>	☐ feet	☐ meters
d) Attached garage (top of slab):	_____	☐ feet	☐ meters
e) Lowest elevation of Machinery and Equipment (M&E) servicing the building (describe type of M&E and location in Section D Comments area):	<u>29.00</u>	☒ feet	☐ meters
f) Lowest Adjacent Grade (LAG) next to building: ☒ Natural ☐ Finished	<u>19.04</u>	☐ feet	☐ meters
g) Highest Adjacent Grade (HAG) next to building: ☒ Natural ☐ Finished	<u>19.12</u>	☐ feet	☐ meters
h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:	<u>19.12</u>	☐ feet	☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by state law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S.C. Code, Section 1001.*

Where latitude and longitude in Section A provided by a licensed land surveyor? ☐ Yes ☒ No

☐ Check here if attachments and describe in the Comments area.

Certifier's Name: Donald Rodgers License Number: C89530

Title: Civil Engineer

Company Name: N/A

Address: 7513 Woodside Dr.

City: Stockton State: CA ZIP Code: 95207

Signature: **Donald Rodgers** Digitally signed by Donald Rodgers
 Date: 2024.07.17 15:59:12 -0700 Date: 05/17/2024

Telephone: 209-612-0211 Ext.: _____ Email: donaldrdgers@earthlink.net @yahoo.com



Place Seal Here

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments):
 All electrical and machinery shall be placed at a minimum of one foot above the BFE of Z8. Building materials within the BFE shall be in compliance with the FEMA "Flood Damage-Resistant Materials Requirements". Flood vents shall be placed no higher than 1 ft above grade.

FEMA Form FDF-206-FY-22-152 (formerly 086-3-03) (10/22)

Page 3 of 3

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD														CF1R-PRF-01-E	
Project Name: Franco Residence														Calculation Date/Time: 2024-11-16T17:22:58-08:00	
Calculation Description: Title 24 Analysis														Input File Name: EP931-R-769 E Willow Ave.rbd22x	
OVERHANGS AND FINIS															
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
Window	Overhang					Left Fin				Right Fin					
	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Top Up	Dist L	Bot Up	Depth	Top Up	Dist R	Bot Up		
	W03	10	2	8	8	0	0	0	0	0	0	0	0	0	
	D07 2	10	2	8	8	0	0	0	0	0	0	0	0	0	
	W02 3	10	2	8	8	0	0	0	0	0	0	0	0	0	
W05 2	10	2	8	8	0	0	0	0	0	0	0	0	0		
SLAB FLOORS															
01	02	03	04	05	06	07	08								
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted fraction	Heated								
Slab-on-Grade	__Garage__	1450	156	none	0	0%	No								
OPAQUE SURFACE CONSTRUCTIONS															
01	02	03	04	05	06	07	08								
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers								
Garage Wall	Exterior Walls	Concrete / ICF / Brick	None	n/a	None / None	0.505	Inside Finish: Gypsum Board Mass Layer: 6 in. Concrete Exterior Finish: 3 Coat Stucco								
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.066	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: Wood Siding/sheathing/decking								
Registration Number: 424-P010287867A-000-000-0000000-0000 NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information contained by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance															
Registration Date/Time: 11/20/2024 11:25 Report Version: 2022.0.000 Schema Version: rev 20220901															
HERS Provider: CHEERS Report Generated: 2024-11-16 17:23:53															

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD										CF1R-PRF-01-E	
Project Name: Franco Residence										Calculation Date/Time: 2024-11-16T17:22:58-08:00	
Calculation Description: Title 24 Analysis										Input File Name: EP931-R-769 E Willow Ave.rbd22x	
OPAQUE SURFACE CONSTRUCTIONS											
01	02	03	04	05	06	07	08				
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers				
Attic Roof/House	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-4	None / 0	0.184	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-4 / 2x4				
R-30+R4 Attic Roof	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	Interior Floors	Wood Framed Floor	2x10 @ 16 in. O. C.	R-19	None / None	0.045	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x10 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		CFM50			CFM50				
Not Required	Not Required			n/a			n/a				
WATER HEATING SYSTEMS											
01	02	03	04	05	06	07	08	09			
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (ft)			
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)			
Registration Number: 424-P010287867A-000-000-0000000-0000 NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information updated by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance											
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Calculation Description: Title 24 Analysis										Input File Name: EP931-R-769 E Willow Ave.rbd22x				
WATER HEATERS - NEEA HEAT PUMP														
01	02	03	04	05	06	07	08							
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source							
DHW Heater 1	1	65	Rheem	PROPH65 T2 RH37530 (65 gal, J413)	TankZone	__Garage__	__Garage__							
WATER HEATING - HERS VERIFICATION														
01	02	03	04	05	06	07								
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery								
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required								
SPACE CONDITIONING SYSTEMS														
01	02	03	04	05	06	07	08	09						
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type						
Ducted Heat Pump1	Heat pump heating/cooling	Heat Pump System 1	1	Heat Pump System 1	1	HVAC Fan 1	Air Distribution System 1	Setback						
HVAC - HEAT PUMPS														
01	02	03	04	05	06	07	08	09	10	11	12	13		
Name	System Type	Number of Units	Heating Efficiency Type	HSPF/HS PF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SE ER2	EER/EE R2/CEER	Zonally Controlled	Compressor Type	HERS Verification		
Heat Pump System 1	Central split HP	1	HSPF2	8.2	24000	15600	EER2SEER2	14	11.7	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump		
Registration Number: 424-P010287867A-000-000-0000000-0000														
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Project Name: Franco Residence												Calculation Date/Time: 2024-11-16T17:22:58-08:00	
Calculation Description: Title 24 Analysis												Input File Name: EP931-R-769 E Willow Ave.rbd22x	
ENERGY USE INTENSITY													
		Standard Design (kBtu/ft² - yr)		Proposed Design (kBtu/ft² - yr)		Compliance Margin (kBtu/ft² - yr)		Margin Percentage					
Gross EUH¹		19.2		16.64		2.56		13.33					
Net EUH²		10.1		7.53		2.57		25.45					
Notes													
1. Gross EUH is Energy Use Total (not including PV) / Total Building Area.													
2. Net EUH is Energy Use Total (including PV) / Total Building Area.													
REQUIRED PV SYSTEMS													
01	02	03	04	05	06	07	08	09	10	11	12		
DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: [x in 12]	Inverter Eff. (%)	Annual Solar Access (%)		
2.48 <td>NA</td> <td>Standard (14-17%)</td> <td>Fixed</td> <td>none</td> <td>true</td> <td>150-270</td> <td>n/a</td> <td>n/a</td> <td><=7.12</td> <td>96</td> <td>98</td>	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7.12	96	98		
REQUIRED SPECIAL FEATURES													
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.													
• Insulation below roof deck													
• Window overhangs and/or fins													
• Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed													
HERS FEATURE SUMMARY													
The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry													
• Indoor air quality ventilation													
• Kitchen range hood													
• Minimum Airflow													
• Fan Efficacy Watts/CFM													
• Verified HSPF2													
• Verified heat pump rated heating capacity													
• Duct leakage testing													
Registration Number: 424-P010287867A-000-000-0000000-0000						Registration Date/Time: 11/20/2024 11:25				HERS Provider: CHEERS			
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CA Building Energy Efficiency Standards - 2022 Residential Compliance						Report Version: 2022.0000				Report Generated: 2024-11-16 17:23:53			
						Schema Version: rev 20220901							

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Franco Residence
Calculation Description: Title 24 Analysis

CF1R-PRF-01-E
(Page 9 of 12)

WATER HEATERS - NEEA HEAT PUMP								
01	02	03	04	05	06	07	08	
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source	
DHW Heater 1	1	65	Rheem	PROPH65 T2 RH37530 (65 gal, 1A13)	TankZone	__Garage__	__Garage__	

WATER HEATING - HERS VERIFICATION

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

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
Ducted Heat Pump1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	HVAC Fan 1	Air Distribution System 1	Setback

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Number of Units	Heating Efficiency Type	HSPF/HSPF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SEER2	EER/EER2/CEER	Zonally Controlled	Compressor Type	HERS Verification
Heat Pump System 1	Central split HP	1	HSPF2	8.2	24000	15600	EER2SEER2	14	11.7	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

Registration Number: 424-PO10287867A-000-000-0000000-0000
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Franco Residence
Calculation Description: Title 24 Analysis

CF1R-PRF-01-E
(Page 10 of 12)

HVAC HEAT PUMPS - HERS VERIFICATION											
01	02	03	04	05	06	07	08	09			
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17			
Heat Pump System 1-hers-htpump	Required	350	Not Required	Not Required	No	Yes	Yes	Yes			

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Duct Ins. R-value Supply	Duct Location Return	Surface Area Supply	Return	Bypass Duct	Duct Leakage	HERS Verification		
Air Distribution System 1	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist

HVAC DISTRIBUTION - HERS VERIFICATION

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

HVAC - FAN SYSTEMS

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

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Franco Residence
Calculation Description: Title 24 Analysis

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

INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
Sfam IAQVentRpt	64	0.35	Exhaust	No	n/a / n/a	No	Yes	

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Franco Residence
Calculation Description: Title 24 Analysis

CF1R-PRF-01-E
(Page 12 of 12)

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Travis Wade
Signature Date: 11/19/2024
Company: Wade Energy
Address: 1942 Linda Drive
City/State/Zip: Pleasant Hill, CA 94523
Phone: 925-383-5490

Documentation Author Signature: Travis Wade
Signature Date: 11/19/2024
Company: Wade Energy
Address: 1942 Linda Drive
City/State/Zip: Pleasant Hill, CA 94523
Phone: 925-383-5490

CABEC
CERTIFIED ENERGY ANALYST

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.

2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.

3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name: Bobby Whittington
Signature Date: 11/20/2024
Company: CAD Management Systems
Address: 1421 Legend Ln
City/State/Zip: Brentwood, CA 94513

Responsible Designer Signature: Bobby Whittington
Signature Date: 11/20/2024
Company: CAD Management Systems
Address: 1421 Legend Ln
City/State/Zip: Brentwood, CA 94513
Phone: 9255506337

Registration Number: 424-PO10287867A-000-000-0000000-0000
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Report Generated: 2024-11-16 17:23:53

CHEERS REGISTRY
PROJECT STATUS REPORT

PROJECT SUMMARY

Project Name: Franco Residence
Address: 769 E Willow Ave
City, State, Zip: Manteca, CA 95337
Building Department: Manteca, City of
Permit Number:
Building Energy Code: 2022 Standards

HERS VERIFIABLE MEASURES

INCOMPLETE

ENERGY CODE COMPLIANCE

INCOMPLETE

CHEERS REGISTRY
PROJECT STATUS REPORT

DATE DOCUMENT TITLE REGISTRATION NUMBER STATUS

11/20/2024 CF1R-PRF-01-E Performance Compliance 424-PO10287867A-000-000-0000000-0000

CHEERS REGISTRY
PROJECT STATUS REPORT

DATE DOCUMENT TITLE REGISTRATION NUMBER STATUS

CF2R-ELC-01-E Electric Ready

CF2R-ENV-01-E Fenestration

CF2R-ENV-03-E Insulation Installation

CF2R-LTG-01-E Lighting

CF2R-MCH-01a-E HVAC, Ducts and Fans

CF2R-MCH-32-H Local Mechanical Exhaust

CF2R-PLB-02-E Single Family Hot Water

CF2R-PVB-01-E Photovoltaic Systems

CHEERS

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PARCEL NUMBER
167313003

3D VIEWS ARE NOT TO SCALE AND MAY NOT REFLECT EXACTLY WHAT IS AVAILABLE FOR THE PROJECT. RENDER VIEWS ARE REPRESENTATIONS OF WHAT THE VIEW COULD LOOK LIKE, NOT WHAT IT WILL LOOK LIKE.
2D VIEWS ALWAYS SUPERCEDE 3D VIEWS

DESIGNER NAME

Bobby W. Whittington

BOBBY WHITTINGTON

CAD Management Systems, L.P.
Drafting Service

EMAIL: MAXTORDVD@GMAIL.COM
PHONE: 925-550-6337

PLANS PREPARED FOR:

JUAN D. FRANCO
(925) 324-2724

SITE ADDRESS:

169 E Willow Ave,
Manteca, CA 95337

SHEET TITLE

TITLE 24

SUBMITTAL DATES

REVISION TABLE

DATE DESCRIPTION

DRAWN BY:

BOB WHITTINGTON

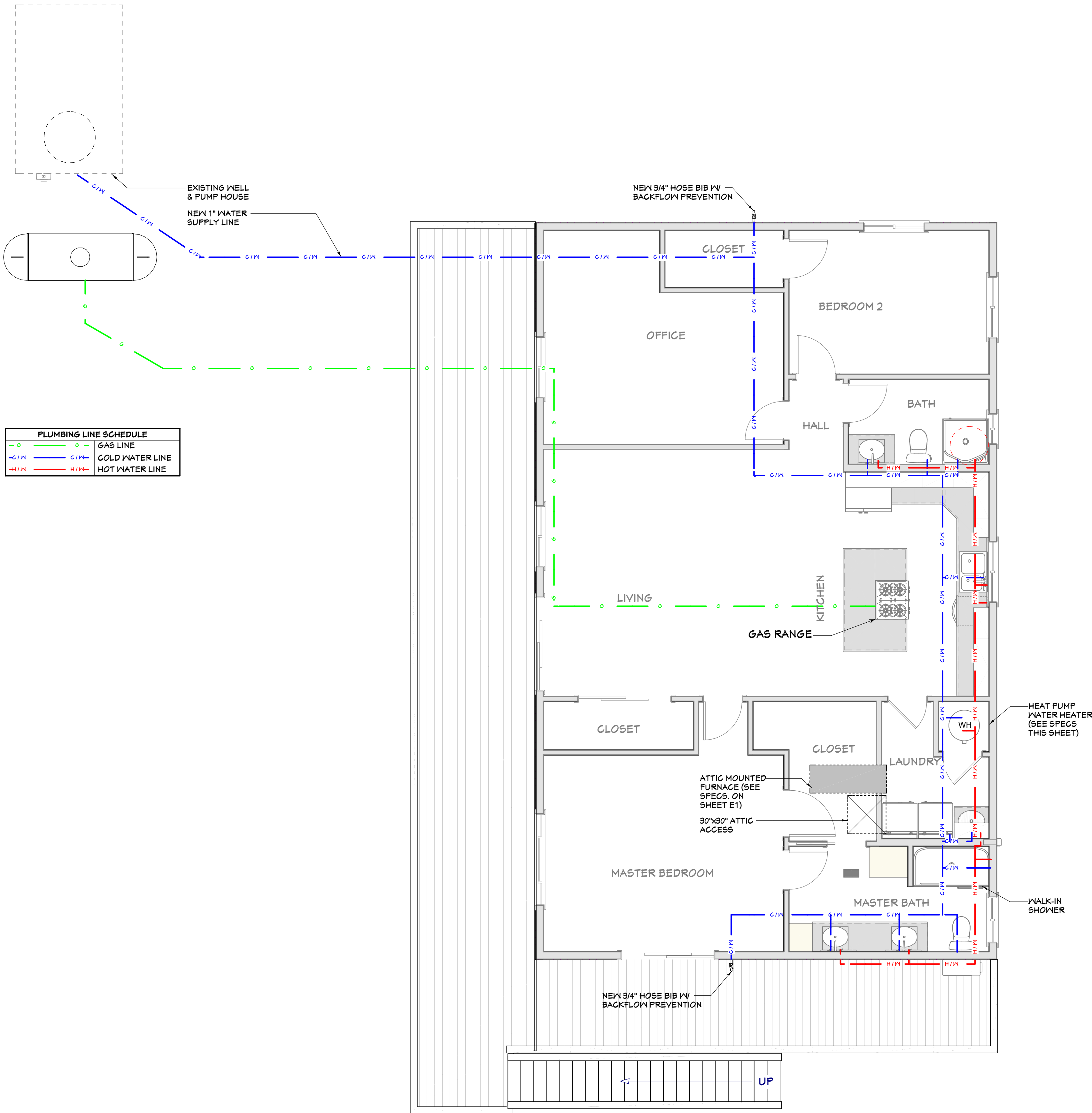
DATE:

6/11/2025

SCALE:

SHEET

A 9



PLUMBING LINE SCHEDULE			
— G —	— G —	— G —	GAS LINE
— C/W —	— C/W —	— C/W —	COLD WATER LINE
— H/W —	— H/W —	— H/W —	HOT WATER LINE

PROTERRA 65 GAL. 10-YEAR HYBRID HIGH EFFICIENCY SMART TANK ELECTRIC WATER HEATER WITH LEAK DETECTION & AUTO SHUTOFF



Product Details			
Specifications			
Gasomatic H 65 in, R 24.25 in, D 24.25 in			
Dimensions			
Kilowatt	4.5	Product Depth (in)	24.25 in
Product Height (in)	65 in	Product Width (in)	24.25 in
Tank Valve Size (in)	3/8 in	Water Connection Size (in)	3/4 in
Details			
Amperage (A)	18.75 A	Application Type	Residential
Efficiency Level	Super High	Electricity Phase	Single Phase
Finish Family	Gray	First Hour of Delivery (gallons/hr)	75
Heaviness Size	6	Water/Cooling	Indoor
Maximum Temperature (°F)	120°F	Minimum Heat Pump Temperature (°F)	40°F
Maximum Temperature (°F)	120°F	Nonhot Tank Capacity (gallons)	65 gal
Number of Elements	2	Pack Size	1
Power Options	Flareless	Product Weight (lb)	225 lb
Rated Tank Capacity (gallons)	65 gal	Remote Access	Remote Access
Required Volt Connection	240 volt	Requires Hub?	No Hub Required
Returnable	60 Day	Smart Home	Smart Home Enabled
Smart Home Protocol	Wi-Fi	Tank Lining Material	Glass
Tank Warranty	10 Year	Uniform Energy Factor	4.25
Water Control Hub Required	No Voice Control	Water Connection Location	Side
Water Heater Features	Element Response Ready, Overheat Protection, Temperature Pressure Relief Valve	Water Heater Profile	Tall
Water Heater Type	Hybrid	Wattage (watts)	4500 W
Works With	Alexa		
Warranty / Certifications			
Certifications and Listings	UL Listed	Labor Warranty	1 Year
Part Warranty	10 Year		

PARCEL NUMBER

167313003

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2D VIEWS ALWAYS SUPERCEDE 3D VIEWS

DESIGNER NAME

Bobby W. Whittington

BOBBY WHITTINGTON

CAD Management Systems, L.P.

Drafting Service

EMAIL: MAXTORDVD@GMAIL.COM

PHONE: 925-550-6337

PLANS PREPARED FOR:

JUAN D. FRANCO

(925) 324-2724

SITE ADDRESS:

164 E Willow Ave,

Manteca, CA 95331

SHEET TITLE

PLUMBING PLAN

SUBMITTAL DATES

REVISION TABLE

DATE

DESCRIPTION

DRAWN BY:

BOB WHITTINGTON

DATE:

6/11/2025

SCALE:

SHEET

P1

STRUCTURAL NOTES

1. GENERAL: THE INTENT OF THESE DRAWINGS IS TO SHOW ALL ITEMS NECESSARY TO COMPLETE THE STRUCTURE. TYPICAL DETAILS AND NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS. ALL WORK AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE BUILDING CODES, REGULATIONS AND SAFETY REQUIREMENTS. FOR ITEMS, METHODS AND/OR MATERIALS NOT SHOWN, THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE (CBC) SHALL GOVERN.

2. DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING, DURING THE BIDDING PERIOD, OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS, OR OF ANY VARIATIONS NEEDED IN ORDER TO CONFORM TO CODES, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ENGINEER WILL SEND WRITTEN INSTRUCTIONS TO ALL CONCERNED. ANY SUCH DISCREPANCY, OMISSION, OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND WORK SHALL BE PERFORMED IN A MANNER AS DIRECTED BY THE ENGINEER.

3. JOB SAFETY: THE ENGINEER IS NOT RESPONSIBLE FOR THE FABRICATION, ERECTION AND/OR RELATIVE JOB SAFETY. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED SAFETY ORDERS.

4. SHORINGS: IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORINGS, BRACINGS AND FORMWORK, ETC., AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING THE CONSTRUCTION OF THIS BUILDING.

5. OTHER TRADES: SEE ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPE, VENT, DUCT AND OTHER OPENINGS AND DETAILS NOT SHOWN ON THESE STRUCTURAL DRAWINGS. ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED WITH THE ARCHITECTURAL DRAWINGS.

6. BRACING: CONTRACTOR TO DO ALL TEMPORARY BRACINGS AS REQUIRED TO HOLD THE VARIOUS ELEMENTS IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.

7. WELDING: ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED FOR THE WELDS TO BE MADE. SEE SPECIFICATIONS ON THIS SHEET FOR WELDING PROCESS TO BE USED. WELDING REINFORCING BARS FOR COLUMNS AND SHEARWALLS SHALL HAVE CONTINUOUS INSPECTION.

8. SIDEWALK PROTECTION: PEDESTRIAN TRAFFIC SHALL BE PROTECTED AS SPECIFIED IN THE C.B.C.

9. INSPECTIONS: ANY INSPECTIONS, SPECIAL OR OTHERWISE, THAT ARE REQUIRED BY THE BUILDING CODES, BUILDING DEPARTMENT, OR THESE PLANS SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY. JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE OFFICIAL INSPECTION.

10. SHOP DRAWINGS: SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.

11. SHOP DRAWING CHECKS: THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH SHOP DRAWINGS A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT. OUR REVIEW OF SHOP DRAWINGS IS ONLY FOR GENERAL COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. OUR REVIEW DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT, NOR DOES IT IMPLY THAT THEY SUPERSEDE THE STRUCTURAL DRAWINGS.

12. SITE OBSERVATIONS: THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS (MIN) PRIOR TO THE TIME OF THE SITE OBSERVATION REQUIRED BY THE CBC OR ANY OTHERS THAT ARE DEEMED NECESSARY.

13. SUBCONTRACTOR COORDINATION: GENERAL CONTRACTOR ACKNOWLEDGES HIS RESPONSIBILITY FOR INTER-COORDINATION OF ALL THE WORK OF ALL SUBCONTRACTORS. S.A.D. SPECS. FOR REQUIRED COORDINATION.

GENERAL FRAMING NOTES

1. WALLS SHOWN ARE ABOVE SLAB AND FOOTINGS AT FOUNDATION AND SLAB PLAN. WALLS SHOWN ARE BELOW FRAMING LEVEL AT FLOOR AND ROOF FRAMING PLANS.

2. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

3. SEE ARCHITECTURAL DRAWINGS FOR WALLS AND DIMENSIONS NOT SHOWN OR NOTED.

4. SEE ARCHITECTURAL DRAWINGS FOR WALKS, RAMPS, PATIOS, ETC., NOT SHOWN OR NOTED.

5. VERIFY PLATE AND FRAMING ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

6. SEE ARCHITECTURAL DRAWINGS FOR ROOF SLOPES, ELEVATION AND DRAINAGE.

7. TYPICAL HEADERS SHALL BE AS NOTED IN THE "HEADER SCHEDULE" U.N.O. ON THE PLANS.

8. FOR ADDITIONAL CRITERIA, SEE "SHEARWALL NOTES" AND "CARPENTRY NOTES" ON THIS SHEET.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, SUCH SHORING AND TEMPORARY BRACING, ETC.

10. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE CITY TO ENSURE ALL FRAMING OBSERVATIONS (IF REQUIRED) AND SPECIAL INSPECTIONS ARE COMPLETED IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT JURISDICTION AND THEIR REQUIREMENTS.

11. THE STRUCTURAL PLANS SHOWN HEREIN PERTAIN TO THE STRUCTURAL DESIGN REQUIREMENTS OF THE LATEST VERSION OF THE C.B.C., ALL OTHER TRADES (PLUMBING, ELECTRICAL, ETC.) ARE THE RESPONSIBILITY OF THEIR RESPECTIVE DESIGNS AND GOVERNING CODES.

12. BUILT-UP POSTS (MULTIPLE 2x STUDS) MAY BE USED IN LIEU OF SPECIFIED POSTS, PROVIDED THEY ARE INTERNALED WITH 16d STAGGERED AT 8" O.C.

13. FRAMING LUMBER SHALL CONFORM TO GRADING RULES OF THE NWFA.

14. PROVIDE A MINIMUM OF 2" BEARINGS AT SUPPORTS FOR ALL FRAMING MEMBERS.

15. FULL DEPTH BLOCKING OR CONTINUOUS RIM JOIST SHALL BE PROVIDED AT ALL FRAMING SUPPORTS.

16. PROVIDE 6" MIN. OF OVERLAP CENTERED ON SUPPORT BELOW FOR ALL LAPPED JOISTS.

17. INSTALL ALL FRAMING MEMBERS WITH CROWN UP AND ANY FRAMING MEMBERS WITH KNOTS SHALL BE ORIENTED WITH KNOT SIDE UP.

18. WHERE CANTILEVERED JOISTS ARE NOTCHED AND/OR RIPPED, CARE SHALL BE MAINTAINED TO PREVENT OVERCUTTING, REPLACE ANY JOIST CUT IN EXCESS OF DEPTHS REQUIRED.

SHEARWALL NOTES

1. ALL SHEARWALLS AS LABELED ON THE PLANS SHALL HAVE SHEATHING RUN FULL LENGTH (FROM HOLDOWN POST TO HOLDOWN POST) AND FULL WIDTH (FROM TOP PLATE TO BOTTOM PLATE) AND PANEL EDGES SHALL TO BE BLOCKED AND EDGE NAILED PER SCHEDULE.

2. INSTALL HOLDOWN POSTS AT THE ENDS OF ALL SHEARWALLS AS INDICATED IN THE HOLDOWN SCHEDULE WITH FULL HEIGHT EDGE NAILING FROM SHEATHING TO POST.

3. HOLDOWNS SHOWN OCCUR AT THE BASE OF THE SHEARWALLS, AS INDICATED ON THE PLANS, AND SHALL EXTEND TO EITHER ALIGNED FRAMING BELOW OR DIRECTLY TO THE FOUNDATION.

4. MINIMUM PLYWOOD PANEL WIDTHS SHALL BE 24" WIDE, PER NDS REQUIREMENTS.

5. SHEARWALL EDGE NAILING, ANCHOR BOLTING, SILL PLATE SIZE, METAL FRAMING CLIPS AND FRAMING MEMBERS AT ADJOINING PANEL EDGES SHALL BE GOVERNED BY THE SHEARWALL SCHEDULE.

CARPENTRY NOTES

1. GENERAL: ALL FRAMING LUMBER SHALL BE DOUGLAS FIR-LARCH PER THE SPECIFICATIONS BELOW U.N.O. ON THE PLANS.

2. STUD SCHEDULE: (GOVERNED BY L/240 DEFLECTION CRITERIA)

EXTERIOR WALL CONDITION:
2x4 STUDS: STUDS < 4'-0" CONSTRUCTION GRADE OR BETTER, SPACED AT 16" O.C. (MAX)
STUDS < 10'-0" NO. 2 AND BETTER, SPACED AT 16" O.C. (MAX)
STUDS < 12'-6" (2) STUDS NO. 2 AND BETTER, SPACED AT 12" O.C. (MAX)

2x6 STUDS: STUDS < 15'-0" NO. 2 AND BETTER, SPACED AT 16" O.C. (MAX)
STUDS < 17'-6" NO. 2 AND BETTER, SPACED AT 12" O.C. (MAX)
STUDS < 22'-0" (2) STUDS NO. 2 AND BETTER, SPACED AT 12" O.C. (MAX)

INTERIOR WALL CONDITION:
2x4 STUDS: STUDS < 12'-6" NO. 2 AND BETTER, SPACED AT 16" O.C. (MAX)
STUDS < 15'-0" NO. 2 AND BETTER, SPACED AT 12" O.C. (MAX)

2x6 STUDS: STUDS < 21'-0" NO. 1 AND BETTER, SPACED AT 16" O.C. (MAX)
STUDS < 24'-0" NO. 1 AND BETTER, SPACED AT 12" O.C. (MAX)

STUDS AT EXTERIOR WALLS & BEARING WALLS MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25% OF STUD WIDTH. STUDS AT NON-BEARING WALLS MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEED 40% OF THE STUD WIDTH.

FINGER JOINTED STUDS AT NON-BEARING WALLS ARE AN ACCEPTABLE ALTERNATIVE, BUT MUST STAMPED WITH GRADE AND APPROVED ICC AGENCY.

3. POSTS: 4x CONCEALED NO. 2 AND BETTER
4x EXPOSED NO. 1 APPEARANCE GRADE AND BETTER
6x NO. 1 AND BETTER

4. BEAMS: 4x CONCEALED NO. 2 AND BETTER
4x EXPOSED NO. 1 APPEARANCE GRADE AND BETTER
6x CONCEALED NO. 1 AND BETTER
6x EXPOSED NO. 1 APPEARANCE GRADE AND BETTER

5. RAFTERS & JOISTS: NO. 2 AND BETTER, U.N.O. ON THE PLANS

6. PLATES & BLOCKS: NO. 2 - TOP PLATES SHALL BE DOUBLED ON ALL STUD WALLS. LAP 4'-0" MINIMUM AT TOP PLATE SPLICES, WITH (12) 16d NAILS EACH SIDE OF SPLICE, U.N.O. STAGGER SPLICES IN UPPER AND LOWER PLATES BY 4'-0" MINIMUM.

7. PLYWOOD:

ROOF PLYWOOD 15/32" (32/16) CDX GRADE OR EQUIVALENT RATED STRUCT. I O.S.B. SHEATHING
FLOOR PLYWOOD 23/32" (48/24) CDX GRADE OR EQUIVALENT RATED O.S.B. SHEATHING
SHEARWALL PLYWOOD 3/8" APA RATED CDX (OR BETTER) OR 15/32" (24/0) SHEATHING (U.N.O IN SHEARWALL SCHEDULE AS STRUCT I GRADE). SEE THE SHEARWALL SCHEDULE ON SHEET SO-2 FOR TYPE AND THICKNESS USED.

STRUCTURAL PLYWOOD SHALL BE GRADED PER APA PSI-83 AND INTERIOR TYPE SHEATHING C-D GRADE WITH EXTERIOR GLUE (CDX). EQUIVALENT RATED ORIENTED STRAND BOARD (O.S.B.) PANEL MAY ALTERNATIVELY BE USED EXCEPT BELOW TILE MORTAR. ROOF AND FLOOR PLYWOOD SHALL BE LAID WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, STAGGER JOINTS. PROVIDE 2'-0" MINIMUM PANEL WIDTHS OR BLOCK AND NAIL.

8. SILL PLATES: STANDARD AND BETTER, PRESSURE TREATED

9. GLUED FLOOR: APA PERFORMANCE SPECIFICATION AF6-01 GLUE

10. HANGERS AND CONNECTIONS: ALL HARDWARE SHALL BE PROVIDED BY SIMPSON STRONG-TIE WITH ATTACHMENT PER CATALOG CRITERIA. ALTERNATIVE SYSTEMS (APPROVED EQUAL) MAY BE USED, PROVIDED THE SYSTEM IS SENT TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION, AND WITH THE OWNERS APPROVAL.

11. FASTENERS/NAILING: ALL NAILS SHALL BE COMMON TYPE. SEE "FASTENING SCHEDULE" ON SHEET SO-2, U.N.O. ON THE PLANS. IF POWER DRIVEN NAILS ARE TO BE USED, SUBMIT WIRE GAUGE, LENGTH AND HEAD DIAMETER FOR REVIEW, IF NOT EQUAL TO COMMON WIRE SPECS. FLOOR PLYWOOD TO BE ATTACHED WITH SCREWDRIVING-SHANK NAILS AND FULLY ADHERED TO SUPPORTING MEMBERS IN CONTACT ADHESIVE PRIOR TO NAILING. ALL FASTENERS/NAILS/HARDWARE ATTACHMENT TO EXPOSED PRESSURE-PRESERVATIVE TREATED WOOD SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL (600S OR BETTER), STAINLESS STEEL, SILICON BRONZE OR COPPER (PER CBC SECTION 2304.10.6). PROVIDE 3'x3'x0.224" METAL WASHERS AT FASTENERS FOR WOOD FOUNDATIONS SILL PLATE (PER CBC SECTION 2306.3.1).

12. PRESSURE TREATED/NATURAL DECAY RESISTANT REQUIREMENTS: WOOD STRUCTURAL MEMBERS USED IN EXPOSED DECKS, BALCONIES, PORCHES OR SUPPORTING MOISTURE PERMEABLE FLOOR OR ROOF SHALL BE PRESSURE TREATED OR MATERIALS OF NATURAL RESISTANCE TO DECAY PER CBC SEC 2304.12.2.3 & 2304.12.2.4. ALL JOISTS WITHIN 18" AND GIRDERS WITHIN 12" OF GRADE, LUMBER IN CONTACT WITH CONCRETE, OR LUMBER EXPOSED TO THE ELEMENTS SHALL BE PRESSURE TREATED OR NATURAL DECAY RESISTANT LUMBER PER CBC SEC. 2304.12.1.1.

13. MOISTURE CONTENT OF LUMBER:

SAWN LUMBER THE MOISTURE CONTENT OF SAWN LUMBER SHALL NOT EXCEED 19% AT TIME OF INSTALLATION.
GLULAM LUMBER THE MOISTURE CONTENT OF GLULAM LUMBER SHALL NOT EXCEED 16% AT TIME OF INSTALLATION.

THE CONTRACTOR AND/OR SPECIAL INSPECTION AGENCY WILL CONTACT THE E.O.R FOR DESIGN REVIEW WHEN THE MOISTURE CONTENT OF SAWN OR GLULAM LUMBER EXCEEDS THE VALUES THAT ARE LISTED ABOVE FOR ANY EXTENDED PERIOD OF TIME.

STRUCTURAL SPECIFICATIONS

STRUCTURAL COMPOSITE LUMBER

ALL STRUCTURAL COMPOSITE LUMBER (SCL) ON THESE PLANS, SUCH AS BEAMS, COLUMNS & STUDS SHALL HAVE THE MIN ALLOWABLE DESIGN VALUES AS LISTED BELOW:

MEMBER	E (psi)	G (psi)	Fb (psi)	Fc _⊥ (psi)	Fc (psi)	Fv (psi)
PARALLAM (PSL) LUMBER						
BEAM	2.0 x 10 ⁶	125,000	2,400	750	2,400	240
COLUMN	1.8 x 10 ⁶	N/A	2,400	N/A	2,500	N/A
TIMBERSTRAND (LSL) LUMBER						
BEAM	1.55 x 10 ⁶	46,875	2,325	800	2,050	310
COLUMN	1.3 x 10 ⁶	81,250	1,700	680	1,400	400
STUD	1.6 x 10 ⁶	N/A	2,425	N/A	2,150	N/A
RIM	1.3 x 10 ⁶	N/A	1,700	680	1,400	400
MICROLAM (LVL) LUMBER						
BEAM	1.4 x 10 ⁶	118,750	2,600	750	2,510	285

- ALL BLOCKING AND NAILING SHALL CONFORM WITH MANUFACTURER'S RECOMMENDATIONS.
- EQUIVALENT PRODUCTS MAY BE SUBMITTED PROVIDING ICC REPORT, MUST BE SUBMITTED TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO INSTALLATION.
- WHEN NET-SERVICE CONDITIONS EXIST, USE NOMINIALIZED PSL PRODUCTS FOR PSL BEAMS & COLUMNS AND STRANDGUARD LSL PRODUCTS FOR LSL COLUMNS & STUDS.

GLUE LAMINATED LUMBER

ALL GLUE LAMINATED BEAMS (GLB) SHALL HAVE THE MIN ALLOWABLE DESIGN VALUES AS LISTED BELOW:

SERIES	E (psi)	Fb (psi)	Fc (psi)	Fv (psi)
24F-V4	1.8 x 10 ⁶	2,400	650	265
24F-V8	1.7 x 10 ⁶	2,400	650	265

- GLULAMS SHALL CONFORM TO ANSI/AITC STANDARD A 1901 AND ASTM D 3737. CONTRACTOR SHALL PROVIDE AITC CERTIFICATIONS FOR ALL GLBS TO BUILDING INSPECTOR PRIOR TO INSTALLATION.
- GLULAMS SHALL BE FRAMED OF INDUSTRIAL GRADE IF CONCEALED AND ARCHITECTURAL GRADE IF EXPOSED AND SHALL HAVE 3500' OR 1600' RADIUS CAMBER RESPECTIVELY, U.N.O.
- GLULAMS (V8-SERIES) THAT ARE CONTINUOUS OVER A SUPPORT SHALL HAVE TENSION LAMINATIONS ON TOP OF BEAM. MARK TOP AND ORIENTATION OF ALL GLULAMS.

CONCRETE NOTES

1. SPECIAL INSPECTION OF CONCRETE WORK IS REQUIRED WHERE NOTED BELOW. WHEN REQUIRED, SPECIAL INSPECTION SHALL INCLUDE THE INSPECTION OF THE PLACEMENT OF REINFORCEMENT, AND THE INSPECTION OF THE CONCRETE PLACEMENT OPERATIONS, PER C.B.C. SECTION 1701.

2. CONCRETE CYLINDER TESTS: TESTING BY AN APPROVED LABORATORY; SHALL SUBMIT FOUR (4) TEST CYLINDERS FROM EACH CLASS OF CONCRETE USED IN EACH DAY'S OPERATIONS, BUT AT LEAST ONE (1) SAMPLE FROM EACH 100 CUBIC YARDS OF CONCRETE.

3. SPLICES OF CONTINUOUS REINFORCEMENT SHALL HAVE A MINIMUM LAP OF 48 BAR DIAMETERS, BUT NOT LESS THAN 2'-0", UNLESS NOTED OTHERWISE. ALL REINFORCING STEEL SHALL BE SECURELY WIRE AND PROPERLY SUPPORTED ABOVE GROUND, AND AWAY FROM FORMS. REINFORCING BAR FABRICATION, LAPS AND PLACEMENT SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE.

4. CONCRETE REQUIREMENTS: BASED ON NORMAL WEIGHT CONCRETE (UNIT WEIGHT OF 145 TO 150 pcf).

	MINIMUM COMPRESSIVE STRENGTH (psi) (AT 28 DAYS)	SUMP (1/2" 1/2")	AIR ENTRAIN.	MAX. WATER TO CEMENT RATIO:	MAX. AGGREG. SIZE	SPECIAL INSP. REQUIRED
FOOTINGS, GRADE BEAMS AND PIERS:	3000	4"	N/A	0.35	3/4"	NO*
INT. SLAB ON GRADE AND CURBS:	3000	4"	N/A	0.35	3/4"	NO*
EXT. SLAB ON GRADE AND CURBS:	3000	4"	2% TO 4%	0.35	3/4"	NO*

* DESIGN STRENGTH IS 2500 PSI, HIGHER STRENGTH HAS BEEN SPECIFIED FOR QUALITY CONTROL WHICH DOESN'T REQUIRE SPECIAL INSPECTION

A. THE CONCRETE SHALL HAVE HARD ROCK AGGREGATE PER ASTM C-33.

B. ALL CONCRETE SHALL HAVE A MINIMUM OF 5 SACKS OF CEMENT (94 lb) PER CUBIC YARD, PORTLAND TYPE II OR V, ASTM C-150.

C. TRANSIT MIX SHALL BE PER ASTM C-94.

D. ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.

E. SUBMIT MIX DESIGNS TO THE ENGINEER AT LEAST TWO DAYS PRIOR TO THE PLACING OF CONCRETE.

CONCRETE SHALL CONFORM TO ASTM C44, AND SHALL BE PLACED WITHIN 90 MINUTES AFTER ADDITION OF WATER TO CEMENT.

6. REINFORCING SHALL BE NEW STOCK, DEFORMED BARS, CONFORMING TO ASTM A-615 AS FOLLOWS (U.N.O.):

NO. 4 AND SMALLER: GRADE 40
NO. 5 AND LARGER: GRADE 60

A. ALL BARS TO BE WELDED SHALL MEET THE REQUIREMENTS OF ASTM A706.

B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, FLAT SHEETS ONLY. LAP FABRIC 6" MINIMUM.

C. REINFORCEMENT PLACEMENT SHALL CONFORM TO

REINFORCEMENT COVER: MINIMUM CLEAR COVERAGE OF REINFORCEMENT SHALL BE AS FOLLOWS BELOW

A. SLABS ON GRADE: 1-1/2" U.N.O.

B. CONCRETE CAST AGAINST EARTH, EXCEPT SLABS ON GRADE: 3"

C. CONCRETE CAST IN FORMS, BUT EXPOSED TO EARTH OR WEATHER: NO. 5 REINFORCING AND SMALLER: 1-1/2" NO. 6 REINFORCING AND LARGER: 2"

D. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND: SLABS, WALLS AND JOISTS: 3/4" BEAMS AND COLUMNS: 1-1/2"

UNFORMED CONCRETE SURFACE CURING:

A. CURE FOR ONE TO SEVEN DAYS BY MAINTAINING TEMPERATURE ABOVE 50 DEGREES FAHRENHEIT, AND IN A MOIST CONDITION.

B. APPLY MEMBRANE-FORMING CURING COMPOUND TO DAMP CONCRETE IMMEDIATELY AFTER COMPLETION OF THE MOIST-CURING PERIOD.

THE CONTRACTOR SHALL INFORM THE ENGINEER AT LEAST THREE DAYS PRIOR TO POURING ANY STRUCTURAL CONCRETE TO ENSURE PROPER OBSERVATION OF REINFORCEMENT AND EMBEDDED HARDWARE AS DEEMED NECESSARY BY THE CODE OR ENGINEERS REQUIREMENTS IN THE CONTRACT.

FOOTING AND GRADE BEAM CONSTRUCTION JOINTS SHALL BE INSTALLED PER DETAIL

CRACK CONTROL JOINTS SHALL BE PLACED IN CONCRETE SLABS ON GRADE AT A SPACING OF 12'-0" MAX. O.C. EACH MAY (U.N.O. ON PLAN) PER DETAIL

SLAB ON GRADE CONSTRUCTION JOINTS SHALL CONFORM TO DETAIL

LOCATION OF SLAB ON GRADE CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

ROOF TRUSS CRITERIA

MANUFACTURED TRUSSES SHALL BE DESIGNED FOR THE GRAVITY LOADS AS INDICATED BELOW, LATERAL FORCES AS INDICATED ON THE PLANS AND FABRICATED WITH ICC APPROVED PLATE FASTENERS. LUMBER USED IN TRUSSES SHALL PREFERABLY BE DOUGLAS FIR. OTHER WOOD SPECIES MAY BE SUBSTITUTED, PROVIDED THE DESIGN VALUES BE SUBMITTED TO THE EOR PRIOR TO FABRICATION. (SUBSTITUTION MAY EXPERIENCE DIMENSIONAL INSTABILITIES (i.e. WARPING, BENDING, ETC.) AS WELL AS CONNECTION CAPACITY REDUCTION). THE TRUSS MANUFACTURER SHALL SPECIFY AND ADEQUATELY DETAIL ALL STRONG-BACKS, CROSSES, BRIDGING, AND/OR BRACING WHICH SHALL BE REQUIRED TO ERCE ALL TRUSSES, AND ALL HANGERS NECESSARY TO SUPPORT THE TRUSSES. A REGISTERED ENGINEER, LICENSED IN CALIFORNIA SHALL DESIGN THE TRUSSES.

TWO COPIES OF THE FOLLOWING MATERIALS SHALL BE SUBMITTED TO THE ARCHITECT/OWNER & ENGINEER OF RECORD FOR REVIEW AT LEAST TWO (2) WEEKS PRIOR TO FABRICATION OF THE TRUSSES: (1) TRUSS LAYOUT DRAWINGS, (2) TRUSS HANGER AND SEISMIC/HURRICANE TIE SPECIFICATIONS, AND (3) TRUSS CALCULATIONS AND DETAILS SHOWING AXIAL AND BENDING STRESSES, JOINT DESIGNS THAT CLEARLY INDICATE THE DESIGNS CONFORM TO THE 2022 CBC, AND HORIZONTAL & VERTICAL DEFLECTION NOTED BELOW. THESE TRUSS DRAWINGS/CALCULATIONS SHALL BE STAMPED AND NET-SIGNED BY A CALIFORNIA LICENSED ENGINEER. A LETTER OF REVIEW OR A SHOP DRAWING REVIEW STAMP SHALL BE AFFIXED TO THESE TRUSS DRAWINGS/CALCULATIONS BY THE ENGINEER OF RECORD DEEMING THAT THEY ARE IN GENERAL CONFORMANCE WITH THE PROJECT STRUCTURAL PLANS, AS WELL AS THE ARCHITECT CONFORMATION OF DIMENSIONS. THESE REVIEWED TRUSS PLANS AND CALCULATIONS SHALL ACCOMPANY THE FINAL SUBMITTAL TO THE BUILDING OFFICIAL FOR REVIEW PRIOR TO FABRICATION/ERECTION.

APPROVED TRUSS DRAWINGS SHALL BE AVAILABLE AT THE PROJECT JOB SITE FOR REVIEW BY BUILDING INSPECTOR AND EOR.

ROOF TRUSS DESIGN LOADS/CRITERIA:		COMMENT
TOP CHORD DL -	1 PSF	
BOTTOM CHORD DL -	1 PSF	
TOP CHORD LL -	20 PSF	1.
BOTTOM CHORD LL -	10 PSF	2.
BOTTOM CHORD LL (WITH STORAGE) -	20 PSF	3.
MAXIMUM TOTAL (DL+LL) LOAD DEFLECTION -	SPAN/240	4. & 5.
LIVE LOAD (LL) DEFLECTION -	SPAN/360	

1. THIS LOAD IS REDUCIBLE PER CBC CODE CRITERIA WHERE APPLICABLE.
2. THIS LOAD DOES NOT ACT CONCURRENTLY WITH OTHER LIVE LOADS.
3. THIS LOAD DOES ACT CONCURRENTLY WITH OTHER LIVE LOADS.
4. DEFLECTION SHALL NOT EXCEED 3/4" FOR CREEP FACTORS OF 15 OR LESS, OR 1" FOR CREEP FACTORS UP TO 2.
5. DIFFERENTIAL DEFLECTION (BETWEEN TWO CONSECUTIVE TRUSSES) SHALL NOT EXCEED 0.30"

STRUCTURAL DESIGN CRITERIA

THE FOLLOWING CRITERIA COVER THE STRUCTURAL DESIGN OF THE BUILDING:

APPLICABLE BUILDING CODE: DESIGN IS GOVERNED BY THE 2022 C.B.C
SOILS ENGINEER / REPORT NO. / DATE: RECOMMENDATIONS FROM CBC CHAPTER 18

VERTICAL DESIGN LOADS (PSF):	DEAD	LIVE
ROOF LOAD -	7	20
CEILING LOAD -	1	
FLOOR LOAD -	15	40
DECK LOAD -	12	60
WALL (INT.) -	7	
WALL (EXT. WOOD) -	9	
WALL (EXT. CMU) -	70	

LATERAL DESIGN INFORMATION:

LATERAL DESIGN LOADS/CRITERIA:	
WIND DESIGN SPEED (MPH) -	45
WIND EXPOSURE CATEGORY -	C
SEISMIC IMPORTANCE FACTOR -	II
OCCUPANCY CATEGORY -	D
SOIL DESIGN CATEGORY -	D
SEISMIC DESIGN CATEGORY -	D
SEISMIC COEFFICIENT C _s -	0.104
SEISMIC BASE SHEAR (klps) -	17.122
SEISMIC RESPONSE FACTOR R -	6.5 & 5.0
SPECTRAL ACCELERATION S _a -	0.206
SPECTRAL ACCELERATION S ₁ -	0.226
SPECTRAL COEFFICIENT S _{ds} -	0.704
SPECTRAL COEFFICIENT S _{d1} -	0.424

FOUNDATION: SPREAD FOOTING
ALLOWABLE SOIL PRESSURE - 1500 PSF
MINIMUM FOOTING WIDTH - 15 INCHES
MINIMUM FOOTING DEPTH - 16 INCHES

ANALYSIS METHOD - EQUIV. LATERAL FORCE PROCEDURE
LATERAL SYSTEM - WOOD SHEATHING/SHEARWALLS & CMU SHEARWALLS

SHOP DRAWINGS

PRIOR TO THE INSPECTION BY THE CITY, SUBMIT THE FOLLOWING SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION:

- MISCELLANEOUS STEEL.
- HAIRDRAILS / GUARDRAILS
- ROOF TRUSSES
- STRUCTURAL STEEL

UPON COMPLETION OF THE REVIEW, THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH A LETTER STATING THAT THE SHOP DRAWINGS ARE IN GENERAL CONFORMANCE WITH THE STRUCTURAL DOCUMENTS ONLY, WHICH DOES NOT INCLUDE DIMENSIONAL VERIFICATIONS. SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERCEDED BY THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE CERTAIN THAT THE SHOP DRAWINGS AND CONSTRUCTION ARE IN CONFORMANCE WITH THE LATEST STRUCTURAL DRAWINGS. OUR REVIEW DOES NOT GUARANTEE THAT THE SHOP DRAWINGS ARE IN COMPLIANCE WITH THE LATEST DRAWINGS.

DEFERRED SUBMITTALS

PRIOR TO THE INSPECTION BY THE CITY, SUBMIT THE FOLLOWING SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION:

- STAIRS AND RAILINGS, INCLUDING ENGINEERING
- BALCONY GUARDRAILS, INCLUDING ENGINEERING
- ROOF TRUSSES, INCLUDING ENGINEERING

UPON COMPLETION OF THE REVIEW, THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH A LETTER STATING THAT THE SHOP DRAWINGS ARE IN GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN ONLY, WHICH DOES NOT INCLUDE DIMENSIONAL VERIFICATIONS. THE CONTRACTOR SHALL FORWARD ALL DEFERRED SUBMITTAL ITEMS TO THE BUILDING OFFICIAL FOR APPROVAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SPECIAL INSPECTIONS

PER CBC SECTION 1701, SPECIAL INSPECTIONS REQUIRED:

- EPOXY ANCHORS INSTALLED IN CONCRETE (EXCEPT FOOTING TO FOOTING DOWEL CONNECTIONS AND SLAB DOWELS)
- MECHANICAL ANCHORS AND ANCHOR BOLTS POST INSTALLED IN CONCRETE
- PERIODIC INSPECTIONS TO VERIFY THE COMPRESSIVE STRENGTH AND SLUMP OF MASONRY
- PERIODIC INSPECTIONS TO VERIFY PROPORTIONS OF SITE-PREPARED MORTAR, CONSTRUCTION OF MORTAR JOINTS, AND LOCATION OF REINFORCEMENT INSTALLED

SELECTION OF THE SPECIAL INSPECTOR AND COORDINATION OF REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE OWNER AND CONTRACTOR, AND MUST BE APPROVED BY THE BUILDING OFFICIAL.

EPOXY ANCHORAGE

EPOXY-GROUTED ANCHOR BOLTS: INSTALL ASTM A307 THREADED ROD, OR DEFORMED REINFORCING ROD (ASTM A615, GRADE 60) PER THE DRAWINGS. EPOXY ANCHOR SYSTEMS (OR APPROVED EQUAL) SHALL BE:

- SIMPSON SET-36 (ICC REPORT ESR 4057) - FOLLOW MFR'S INSTALLATION PROCEDURE

INSTALLATION OF EPOXY-GROUTED ANCHORS REQUIRES FULL-TIME SPECIAL INSPECTION BY AN INDEPENDENT TESTING AGENCY, AS APPROVED BY THE LOCAL BUILDING DEPT. ITEMS THAT ARE EXEMPT FROM SPECIAL INSPECTION INCLUDE SLAB-TO-SLAB DOWELS/TIES AND FOOTING-TO-FOOTING DOWELS/TIES.

INSTALL AND CLEAN OUT DRILLED HOLES PER MANUFACTURER'S RECOMMENDATIONS. AS A MINIMUM, BRUSH OUT DRILLED HOLES WITH A WIRE BRUSH, FOLLOWED BY BLOWING OUT HOLES (OF DUST) WITH COMPRESSED AIR. REPEAT THIS PROCEDURE A MINIMUM OF TWO TIMES.

CONSTRUCTION OBSERVATION

OBSERVATION OF CONSTRUCTION IS REQUIRED BY THE ENGINEER OF RECORD FOR THIS PROJECT. THE OBSERVATION OF STRUCTURAL ITEMS LISTED BELOW SHALL BE DONE PRIOR TO CONCEALMENT AND SHALL BE SCHEDULED WITH THE ENGINEER ACCORDINGLY. SUCH ITEMS INCLUDE:

- FOUNDATION REINFORCEMENT AND ANCHORAGE
- LATERAL FORCE TRANSFERRING ELEMENTS, INCLUDING FLOOR AND ROOF ANCHORS

WHILE THE CONSTRUCTION OBSERVATION SERVES AS A VISUAL INSPECTION FOR GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN, IT DOES NOT RELIEVE THE CONTRACTOR OF ADHERING TO THE APPROVED CONSTRUCTION DOCUMENTS.

BY: _____

DATE: _____

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

PROJECT:

FRANCO RESIDENCE
769 East Willow Ave
Monte Carlo, CA

SEAL:

REGISTERED PROFESSIONAL ENGINEER
RON M. TEAL
C 91421
EXPIRES 03/30/2026
State of California

ENGINEERING, INC.
42527 212-078-1111 • P R E C E T
C 91421
EXPIRES 03/30/2026
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DRW BY: _____

R.G.T. ISSUE DATE: 02-16-25

REV BY: _____

SCALE: NONE

DES BY: _____

R.M.T. PROJECT: _____

REV BY: _____

R.M.T. FILE: _____

SHEET TITLE:

STRUCTURAL
NOTES &
CRITERIA

SHEET:

50.1

SCHEDULES AND ABBREVIATIONS

SHEARWALL SCHEDULE ^[6]											
ALL NAILS NOTED SHALL BE COMMON NAILS ^[3]											
SHEARWALL TYPE:	PLYWOOD THICKNESS:	EDGE NAILING ^[4] / FIELD NAILING:	FLOOR SOLE CONNECTION		RIM/FLOOR BLKG TO TOP PLATES OR FDN SILL PLATE CONNECTION		ADJOINING PANEL MEMBER	FOUNDATION SILL / FLOOR SOLE PLATE		5/8" DIA. ANCHOR BOLT SPACING	ALLOWABLE SHEAR #/FT
			16d NAILING:	SDS25600 SCREWS:	A35 CLIPS:	LTP4 CLIPS:		SILL ^[5]	SOLE:		
SW-A	3/8"	8d @ 6' / 12' O.C.	6' O.C.	24" O.C.	24" O.C.	24" O.C.	2x	2x	2x	48" OC	260
SW-B	3/8"	8d @ 4' / 12' O.C.	4' O.C.	16" O.C.	20" O.C.	18" O.C.	2x	2x	2x	42" OC	340
SW-C	3/8"	8d @ 3' / 12' O.C.	3' O.C.	12" O.C.	16" O.C.	12" O.C.	3x OR GREATER ^[2]	3x	2x	36" OC	480
SW-D	3/8"	8d @ 2' / 12' O.C.	N/A	10" O.C.	12" O.C.	10" O.C.	3x OR GREATER	3x	2x	28" OC	600
SW-E	3/8" ^[1]	8d @ 2' / 12' O.C.	N/A	8" O.C.	10" O.C.	8" O.C.	3x OR GREATER	3x	3x	24" OC	730
SW-F	15/32" ^[1]	10d @ 2' / 12' O.C.	N/A	6" O.C.	8" O.C.	8" O.C.	3x OR GREATER	3x	3x	24" OC	870
SW-G ^[7]	15/32" EACH FACE ^[1]	10d @ 4' / 12' O.C.	N/A	6" O.C.	6" O.C.	6" O.C.	3x OR GREATER	3x	3x	18" OC	1020
SW-H ^[7]	15/32" EACH FACE ^[1]	10d @ 3' / 12' O.C.	N/A	4" O.C.	6" O.C.	N/A	3x OR GREATER	3x	3x	16" OC	1320

1. SHEATHING FOR THIS WALL SHALL BE STRUCT. I GRADE OR BETTER
2-2x MAY BE USED PROVIDED THEY ARE INTERNAILED W/ 10d EDGE NAILING
3. FASTENERS IN CONTACT WITH PRESSURE TREATED MATERIAL SHALL BE HOT DIPPED GALVANIZED
4. STAGGER ALL EDGE NAILING SPACED LESS THAN 4" O.C. TO PREVENT SPLITTING
5. WHEN SHEATHING IS LAPPED AND EDGE NAILED TO RIM/BLKG, 2x SILL PLATES ARE ACCEPTABLE.
6. 3"x3"x0.224" GALVANIZED PLATE WASHERS ARE REQUIRED AT ALL ANCHOR BOLTS
7. FOR DOUBLE SIDED SHEARWALLS WITH EDGE NAILING LESS THAN 6" O.C.:
- OFFSET ADJOINING VERTICAL PANEL SEAMS SO AS NOT TO FALL ON SAME MEMBER AS OPPOSITE WALL
- PROVIDE FULL WIDTH RIM/BLKG BENEATH SHEARWALL
- PROVIDE 3x TOP PLATES

ABBREVIATIONS					
#	AND	E.S.	EACH SIDE	OC	ON CENTER
@	AT	ESR	EVALUATION SERVICE REPORT	OPNG	OPENING
#	NUMBER / POUND	E.V.	EACH WAY	PL.	PLATE
A.B.	ANCHOR BOLT	EXP	EXPANSION	PAR/PRLL	PARALLEL
ABV	ABOVE	EXT	EXTERIOR	PART	PARTITION
ACI	AMERICAN CONCRETE INSTITUTE	EXTD	EXTEND	PERP	PERPENDICULAR
ADDL	ADDITIONAL	FIN	FINISH/FINISHING	PLF	POUNDS/LINEAR FOOT
ADJ	ADJACENT	FJ	FLOOR JOIST	PLY	PLYWOOD
ALT	ALTERNATE	FLR	FLOOR	PGB	PIER GRADE & BEAM
APA	AMERICAN PLYWOOD ASSOCIATION	FN	FIELD NAILING	PSF	POUNDS/SQUARE FOOT
ARCH	ARCHITECTURAL, ARCHITECT	FND	FOUNDATION	PSL	PARALLEL STRAND LUMBER
ASSEM	ASSEMBLY	FRMG	FRAMING	PT	PRESSURE TREATED
BLDG	BUILDING	FT	FOOT (FEET)/FLOOR TRUSS	P.T. SLAB	POST TENSIONED SLAB
BLKG	BLOCKING	FTG	FOOTING	REC	RECOMMENDED, RECOMMENDATION
BLM	BELOW	GA	GAUGE	REINF	REINFORCEMENT
BM	BEAM	GAL/GALV	GALVANIZED	REQD	REQUIRED
B.N.	BLOCK NAILING	GB	GRADE BEAM	RF	ROOF
BRG	BEARING	GBT	GABLE END TRUSS	RR	ROOF RAFTER
BTM	BOTTOM	GLB	GLUED-LAMINATED BEAM	RT	ROOF TRUSS
BTWN	BETWEEN	GT	GIRDER TRUSS	RN	RETAINING WALL
C.L.	CENTER LINE	HD	HOLDOWN	SAD	SEE ARCHITECTURAL DRAWINGS
CANT	CANTILEVER	HDR	HEADER	SCHED	SCHEDULE
CBC	CALIFORNIA BUILDING CODE	HF	HARDY FRAME	SDS	STRONG-DRIVE SCREW
CTR	CENTER	HGR	HANGER	SHTG	SHEATHING
CHAN	CHANNEL	HORIZ	HORIZONTAL	SIM	SIMILAR
CJ	CEILING JOIST	HT	HEIGHT	SIMP	SIMPSON
CLG	CEILING	H.T.	HIP TRUSS	SNW	SIMPSON WOOD STRONG WALL
COL	COLUMN	IBC	INTERNATIONAL BUILDING CODE	SSW	SIMPSON STEEL STRONG WALL
COLL	COLLECTOR	ICC	INTERNATIONAL CODE COUNCIL	SLD	SOLID
COLL/JT	COLLECTOR JACK TRUSS	ID	INSIDE DIAMETER	SMRF	SPECIAL MOMENT RESISTING FRAME
COLL/GT	COLLECTOR GIRDER TRUSS	INFO	INFORMATION	SOG	SLAB ON GRADE
CONC	CONCRETE	INT	INTERIOR, INTERSECTION	SPEC	SPECIFICATION(S)
COND	CONDITION	INV	INVERTED	SQ	SQUARE
CONN	CONNECTION	JST	JOIST	STD	STANDARD
CONT	CONTINUOUS	JT	JACK TRUSS	STL	STEEL
CNR	CORNER	KP	KING POST	STRUCT	STRUCTURAL
DBL	DOUBLE	KS	KING STUD	SUPP	SUPPLEMENTAL
DEL	DELETE	LB	LAG BOLT	SW	SHEAR WALL
DET / DTL	DETAIL	LEN	LENGTH	T4B	TOP & BOTTOM
DF	DOUGLAS FIR	LGS	LIGHT GAUGE STEEL	TC	TOP CHORD
DIA / %	DIAMETER	LL	LIVE LOAD	THK	THICK
DIAPH	DIAPHRAGM	LOC	LOCATION(S)	THRU	THROUGH
DIM	DIMENSION	LPI	LOUISIANA-PACIFIC JOIST "I"	TJI	TRUSS JOIST "I"
DJ	DECK JOIST	LSL	LAMINATED STRAND LUMBER	T.P.	TOP PLATE
DL	DEAD LOAD	LVL	LAMINATED VENEER LUMBER	TYP	TYPICAL
DWG	DRAWING(S)	MANUF	MANUFACTURED / MANUFACTURER	UON	UNLESS OTHERWISE NOTED
DRP BM	DROPPED BEAM	MAX	MAXIMUM	VERT	VERTICAL
(E)	EXISTING	MB	MACHINE BOLT	VIF	VERIFY IN FIELD
EA	EACH	MC	MOISTURE CONTENT	VT	VALLEY TRUSS
ELEV	ELEVATION	MIN	MINIMUM	W	WITH
EMB	EMBEDMENT	MULT	MULTIPLE	W/O	WITHOUT
E.N.	EDGE NAILING	(N)	NEW	WD	WOOD
EOR	ENGINEER OF RECORD	NDG	NATIONAL DESIGN SPECIFICATION	WP	WORKING POINT
EQ	EQUAL	NTS	NOT TO SCALE	WT	WEIGHT
EQUIP	EQUIPMENT	O/	OVER	WWR	WELDED WIRE REINFORCEMENT

HANGER SCHEDULE	
(WOOD TO WOOD CONNECTIONS)	
FRAMING MEMBER	HANGER TYPE (MINIMUM - U.N.O.)
1" OR 6x LAM	H6US H6R
5.25" MEMBER	HUS H6R
9.5" MEMBER	HUS H6R
1.75" MEMBER	HUS H6R
1-JOIST	IUS H6R
2x MEMBER	LUS H6R
3x MEMBER	LUS H6R
2-2x/4x MEMBER	HUS H6R
3-2x/6x MEMBER	HUS H6R
1. HANGERS LISTED SHALL BE BY SIMPSON, OR APPROVED EQUAL. INSTALL PER MFR'S SPECIFICATIONS.	
2. THESE HANGERS SHALL BE INSTALLED AT THEIR RESPECTIVE CONDITIONS, U.N.O. ON THE PLANS.	

FASTENING SCHEDULE (CBC TABLE 2304.10.2)		
DESCRIPTION	NUMBER & TYPE OF FASTENER	SPACING & LOCATION
ROOF		
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	(3) 8d COMMON OR (3) 10d BOX OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
	(2) 8d COMMON OR (2) 3" x 0.131" NAILS OR (2) 3" 14 GAGE STAPLES	EACH END, TOENAIL
	(2) 16d COMMON OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON AT 6" OC OR 3" x 0.131" NAILS AT 6" OC OR 3" 14 GAGE STAPLES AT 6" OC	FACE NAIL
2. CEILING JOIST TO TOP PLATE	(3) 8d COMMON OR (3) 10d BOX OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST, TOENAIL
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)	(3) 16d COMMON OR (4) 10d BOX OR (4) 3" x 0.131" NAILS OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	PER CBC TABLE 2308.7.3.1	FACE NAIL
5. COLLAR TIE TO RAFTER	(3) 10d COMMON OR (4) 10d BOX OR (4) 3" x 0.131" NAILS OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE	(3) 10d COMMON OR (3) 16d BOX OR (4) 10d BOX OR (4) 3" x 0.131" NAILS OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	(2) TOENAILS ON ONE SIDE AND (1) TOENAIL ON OPPOSITE SIDE OF RAFTER OR TRUSS [C]
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS, OR ROOF RAFTER TO 2" RIDGE BEAM	(2) 16d COMMON OR (3) 16d BOX OR (3) 10d BOX OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
	(3) 10d COMMON OR (4) 16d BOX OR (4) 10d BOX OR (4) 3" x 0.131" NAILS OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
WALL		
8. STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON	24" OC FAC NAIL
	10d BOX OR 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	16" OC FACE NAIL
9. STUD TO STUD AND BUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON OR	16" OC FACE NAIL
	16d BOX OR 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	12" OC FACE NAIL
10. BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON OR	16" OC EACH EDGE, FACE NAIL
	16d BOX	12" OC EACH EDGE, FACE NAIL
11. CONTINUOUS HEADER TO STUD	(4) 8d COMMON OR (4) 10d BOX OR (5) 8d BOX	TOENAIL
12. TOP PLATE TO TOP PLATE	16d COMMON OR	16" OC FACE NAIL
	10d BOX OR 3" x 0.131" NAILS OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" OC FACE NAIL
13. TOP PLATE TO TOP PLATE, AT END JOINTS	(8) 16d COMMON OR (2) 16d BOX OR (2) 10d BOX OR (2) 3" x 0.131" NAILS OR (2) 3" 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
	16d COMMON OR	16" OC FACE NAIL
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d BOX OR 3" x 0.131" NAILS OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" OC FACE NAIL
	16d COMMON OR (3) 16d BOX OR (4) 3" x 0.131" NAILS OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	16" OC FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	(3) 16d COMMON OR (4) 8d COMMON OR (4) 10d BOX OR (4) 3" x 0.131" NAILS OR (4) 8d BOX OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
	(2) 16d COMMON OR (3) 16d BOX OR (3) 10d BOX OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	(2) 16d COMMON OR (3) 10d BOX OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
18. 1" BRACE TO EACH STUD & PLATE	(3) 8d BOX OR (2) 8d COMMON OR (2) 10d BOX OR (2) 3" x 0.131" NAILS	FACE NAIL
	(3) 8d BOX OR (2) 8d COMMON OR (2) 10d BOX (2) 1-3/4" 16 GAGE STAPLES, 1" CROWN	FACE NAIL
20. 1" x 8" & WIDER SHEATHING TO EACH BEARING	(3) 8d COMMON OR (3) 10d BOX	FACE NAIL
FLOOR		
21. JOIST TO SILL, TOP PLATE OR GIRDER	(3) 8d COMMON OR (3) 10d BOX OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
22. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON OR 10d BOX OR 3" x 0.131" NAILS OR 3" 14 GAGE STAPLES, 7/16" CROWN	6" OC, TOENAIL
23. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	(2) 8d COMMON OR (2) 10d BOX	FACE NAIL
24. 2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d COMMON	FACE NAIL
25. 2" PLANKS (PLAN & BEAM - FLOOR & ROOF)	(2) 16d COMMON	EACH BEARING, FACE NAIL

FASTENING SCHEDULE (CONTINUED)				
DESCRIPTION		NUMBER & TYPE OF FASTENER	SPACING & LOCATION	
FLOOR (CONTINUED)				
26.	BUILT-UP GIRDERS & BEAMS, 2" LUMBER LAYERS	20d COMMON	32" OC, FACE NAIL AT TOP & BTM STAGGERED ON OPPOSITE SIDES	
		10d BOX OR 3" x 0.131" NAILS OR 3" 14 GAGE STAPLES, 7/16" CROWN	24" OC, FACE NAIL AT TOP & BTM STAGGERED ON OPPOSITE SIDES	
		AND: (2) 20d COMMON OR (3) 10d BOX OR (3) 3" x 0.131" NAILS OR (3) 3" 14 GAGE STAPLES, 7/16" CROWN	ENDS AND AT EACH SPLICE, FACE NAIL	
27.	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	(3) 16d COMMON OR (4) 10d BOX OR (4) 3" x 0.131" NAILS OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST OR RAFTER, FACE NAIL	
28.	JOIST TO BAND JOIST OR RIM JOIST	(3) 16d COMMON OR (4) 10d BOX OR (4) 3" x 0.131" NAILS OR (4) 3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL	
29.	BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	(2) 8d COMMON OR (2) 10d BOX OR (2) 3" x 0.131" NAILS OR (2) 3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL	
WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING & PARTICLEBOARD WALL SHEATHING TO FRAMING [A]				
			EDGES (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
30.	3/8" TO 1/2"	6d COMMON OR DEFORMED (2" x 0.113") (SUBFLOOR & WALL)	6	12
		8d COMMON OR DEFORMED (2-1/2" x 0.131") (ROOF) OR RSRS-01 (2-3/8" x 0.113") NAIL (ROOF) [D]	6 [E]	12 [E]
		2-3/8" x 0.113" NAIL (SUBFLOOR & WALL)	6	12
		1-3/4" 16 GAGE STAPLE, 7/16" CROWN (SUBFLOOR & WALL)	4	8
		2-3/8" x 0.113" NAIL (ROOF)	4	8
31.	1/4" TO 3/4"	1-3/4" 16 GAGE STAPLE, 7/16" CROWN (ROOF)	3	6
		8d COMMON (2-1/2" x 0.131") OR 6d DEFORMED (2" x 0.113") (SUBFLOOR & WALL)	6	12
		8d COMMON OR DEFORMED (2-1/2" x 0.131") (ROOF) OR RSRS-01 (2-3/8" x 0.113") NAIL (ROOF) [D]	6	12
		2-3/8" x 0.113" NAIL OR 2" 16 GAGE STAPLE, 7/16" CROWN	4	8
		10d COMMON (3" x 0.148") OR 8d DEFORMED (2-1/2" x 0.131")	6	12
OTHER EXTERIOR WALL SHEATHING				
33.	1/2" FIBERBOARD SHEATHING [B]	1-1/2" GALVANIZED ROOFING NAIL (7/16" HEAD DIAMETER) OR 1-1/4" 16 GAGE STAPLE WITH 7/16" OR 1" CROWN	3	6
34.	25/32" FIBERBOARD SHEATHING [B]	1-3/4" GALVANIZED ROOFING NAIL (7/16" HEAD DIAMETER) OR 1-1/2" 16 GAGE STAPLE WITH 7/16" OR 1" CROWN	3	6
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING				
35.	3/4" AND LESS	8d COMMON (2-1/2" x 0.131") OR 6d DEFORMED (2" x 0.113")	6	12
36.	7/8" TO 1"	8d COMMON (2-1/2" x 0.131") OR 8d DEFORMED (2-1/2" x 0.131")	6	12
37.	1-1/8" TO 1-1/4"	10d COMMON (3" x 0.148") OR 8d DEFORMED (2-1/2" x 0.131")	6	12
PANEL SIDING TO FRAMING				
38.	1/2" OR LESS	6d CORROSION RESISTANT SIDING (1-7/8" x 0.106") OR 6d CORROSION RESISTANT CASING (2" x 0.094")	6	12
39.	5/8"	8d CORROSION RESISTANT SIDING (2-3/8" x 0.128") OR 8d CORROSION RESISTANT CASING (2-1/2" x 0.113")	6	12
INTERIOR PANELING				
40.	1/4"	4d CASING (1-1/2" x 0.080") OR 4d FINISH (1-1/2" x 0.072")	6	12
41.	3/8"	6d CASING (2" x 0.094") OR 6d FINISH (PANEL SUPPORTS AT 24 INCHES)	6	12
SCHEDULE NOTES:				

- SCHEDULE NOTES:
[A] - NAILS SPACED AT 6" AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48" OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEARWALLS, REFER TO THE SHEARWALL SCHEDULE ON SHEET 50.2 AND TYPICAL PLYWOOD NOTES ON RESPECTIVE FRAMING SHEETS.
[B] - SPACING SHALL BE 6" OC (EDGES) AND 12" OC (FIELD) FOR NON-STRUCTURAL APPLICATIONS. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IN THE LONG DIRECTION OF PANEL).
[C] - WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.
[D] - RSRS-01 IS A ROOF SHEATHING RING SHANK NAIL MEETING SPECIFICATIONS IN ASTM F1667.
[E] - FASTENING AT INTERMEDIATE SUPPORTS IS DESIGNED PER THE AWC NDS.
[F] - FASTENING IS PERMITTED AS THE ULTIMATE DESIGN WIND SPEED IS 110 MPH OR LESS.

BY:					
DATE:					
REVISIONS	NO	1	2	3	4

PROJECT:	FRANCO RESIDENCE 769 East Willow Ave Montecito, CA
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SEAL:	
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INITIAL SUBMITTAL / PERMIT SET	DRY BY: 02-16-25 R.E.T. SCALE: NONE R.M.T. PROJ. FILE: NONE R.M.T. REV. BY: NONE
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SHEET TITLE:	STRUCTURAL NOTES & CRITERIA
SHEET:	50.2

STRUCTURAL STEEL NOTES

1. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING:

A. WIDE FLANGE COLUMNS:

ASTM A572 OR A992, F_y = 50 ksi

B. OTHER STRUCTURAL STEEL:

ASTM A36, F_y = 36 ksi

C. BOLTS, (STEEL TO STEEL) EXCEPT H.S.B.:

ASTM A307

D. BOLTS, (STEEL TO WOOD):

ASTM A307, U.N.O. USE CUT WASHERS (IF CONCEALED) AND MALLEABLE IRON WASHERS (IF EXPOSED).

E. HIGH-STRENGTH BOLTS (H.S.B.):

ASTM A325-SC

F. ANCHOR BOLTS:

ASTM A307

G. THREADED RODS:

ASTM A307 / ASTM A36

H. PIPE COLUMNS:

ASTM A53, TYPE E OR S, GRADE B.

I. STRUCTURAL TUBE COLUMNS:

ASTM A500, GRADE B.

J. OTHER SHAPES AND PLATES:

ASTM A36 (F_y = 36 ksi)

2. ALL MACHINE BOLTS, ANCHOR BOLTS, THREADED RODS, ETC., SHALL HAVE CUT THREADS, NOT ROLLED THREADS.

3. FABRICATION AND ERECTION SHALL BE DONE PER THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS".

4. ALL WELDING IS TO BE DONE PER THE AMERICAN WELDING SOCIETY "STRUCTURAL WELDING CODE - STEEL (ANSI/AWS D1.1)", WITH ALL CERTIFIED WELDERS, UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS, THE FABRICATION AND ERECTION REQUIREMENTS MAY DICTATE FIELD AND/OR SHOP WELDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE METHOD OF WELDING TO FULFILL THESE REQUIREMENTS. ALL ASSOCIATED COSTS INCLUDING TESTING AND INSPECTION SHALL BE INCLUDED IN THE CONTRACT PRICE.

5. ALL WELDS SHALL BE TESTED AND INSPECTED IN ACCORDANCE WITH: THE SPECIFICATIONS; THE LATEST UNIFORM BUILDING CODE, AND AWS D11. THE WELDING INSPECTOR SHALL CHECK THE MATERIAL, EQUIPMENT, FIT UP AND PROCEDURES, AS WELL AS THE WELDS. THE INSPECTOR SHALL USE ALL MEANS NECESSARY TO DETERMINE THE QUALITY OF THE WELDS, INCLUDING THE USE OF GAMMA RAY, MAGNAFLUX, THERMANING, SONICS, OR ANY OTHER AID TO VISUALLY INSPECT AND TO ASCERTAIN THE ADEQUACY OF THE WELDING. FOR NON-DESTRUCTIVE TESTING, PROVIDE A MINIMUM OF U.T. AT ALL C.P. AND P.P. WELDS.

6. STEEL FRAMING, EXCEPT THOSE PORTIONS TO BE EMBEDDED IN CONCRETE, FIELD WELDED, OR CONNECTIONS WITH HIGH-STRENGTH, SLIP CRITICAL BOLTS SHALL BE SHOP-PAINTED PER THE SPECIFICATIONS. PROVIDE AS A MINIMUM, ONE COAT OF RED-OXIDE PRIMER WITH 2 MIL THICKNESS. DO NOT PAINT ANY STEEL THAT RECEIVES SPRAY APPLIED FIREPROOFING.

7. FIELD PAINT ALL EXPOSED, UNPAINTED STEEL SURFACES AFTER INSTALLATION, PER THE SPECIFICATIONS.

8. SUBMIT CERTIFICATION OF COMPLIANCE FOR ALL STEEL MATERIALS.

9. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

MASONRY NOTES

MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE BUILDING CODE (C.B.C.) AND THE LATEST EDITION OF THE ACI-318, UNLESS NOTED OTHERWISE. DESIGN STRENGTH AND SPECIAL INSPECTION OF MASONRY IS AS FOLLOWS:

	DESIGN STRENGTH F _m (psi)	C.M.U. (psi)	GROUT (psi)	MORTAR (psi)	SPECIAL INSP. REQUIRED
MASONRY WALLS:	1500	1900	2000	1900	YES
RETAINING WALLS:	1500	1900	2000	1900	YES

A. BLOCK:

GRADE "N" LOAD BEARING ASTM C 90 MEDIUM OR LIGHT WEIGHT BLOCKS

B. REINFORCEMENT:

DEFORMED STEEL BAR CONFORMING TO astm A-615 GRADE 40 OR GRADE 60

C. MORTAR:

TYPE "S" CONFORMING TO ASTM C 270

D. GROUT:

TYPE "S" CONFORMING TO ASTM C 476

1. SPECIAL INSPECTION OF MASONRY WORK IS REQUIRED WHERE NOTED IN "SPECIAL INSPECTIONS" ON SHEET SO.1. WHEN REQUIRED, SPECIAL INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE PROGRAM REQUIREMENTS OF THE TMS 402/ACI 580/ASCE 5 AND TMS 602/ACI 580/ASCE 6. INCLUDE CERTIFICATES FOR MATERIALS USED IN MASONRY CONSTRUCTION INDICATING COMPLIANCE WITH THE CONTRACT DOCUMENTS.

A. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.

I. VERIFICATIONS OF PROPORTIONS OF MATERIALS IN MORTAR AND GROUT AS DELIVERED TO THE SITE.

II. VERIFICATION OF MASONRY COMPRESSIVE STRENGTH PRIOR TO CONSTRUCTION.

III. VERIFICATION OF MASONRY COMPRESSIVE STRENGTH EVERY 5000 SQUARE FEET DURING CONSTRUCTION.

B. FROM THE BEGINNINGS OF MASONRY CONSTRUCTION AND CONTINUOUSLY DURING CONSTRUCTION OF MASONRY, VERIFY THE FOLLOWING ARE IN COMPLIANCE:

I. PROPORTIONS OF SITE-MIXED MORTAR, GROUT AND PRE-STRESSING GROUT FOR BONDED TENDONS.

II. GRADE AND SIZE OF REINFORCEMENT, AND PR-STRESSING TENDONS AND ANCHORAGES.

III. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS.

IV. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRE-STRESSING TENDONS AND ANCHORAGES.

V. GROUT SPACE PRIOR TO GROUTING.

VI. PLACEMENT OF GROUT AND PRE-STRESSING GROUT FOR BONDED TENDONS.

C. VERIFY COMPLIANCE WITH THE REQUIRED INSPECTION PREVISIONS OF THE CONTRACT DOCUMENTS AND THE APPROVED SUBMITTAL DOCUMENTS.

2. LAY MASONRY IN RUNNING BOND EXCEPT AS DESIGNATED OTHERWISE ON DRAWINGS. PROVIDE MASONRY BONDS AT ALL CORNERS AND INTERSECTIONS.

3. ALIGNMENT OF VERTICAL CELLS: ALL MASONRY SHALL BE BUILT TO PRESERVE THE UNOBSTRUCTED VERTICAL CONTINUITY OF THE CELLS TO BE FILLED. THE VERTICAL ALIGNMENT SHALL BE SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED VERTICAL FLUE SUFFICIENT FOR GROUT PLACEMENT AND CONSOLIDATION.

4. ALL REINFORCING SHALL CONFORM TO THE REQUIREMENTS AS NOTED IN THE "CONCRETE NOTES". MASONRY REINFORCEMENT LAP LENGTHS SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE ON THE PLANS:

A. SPLICES OF CONTINUOUS REINFORCEMENT SHALL HAVE A MINIMUM LAP PER DETAILS UNLESS NOTED OTHERWISE. ALL REINFORCING STEEL SHALL BE SECURELY WIREBONDED AND PROPERLY SUPPORTED ABOVE GROUND, AND AWAY FROM FACE OF BLOCK. REINF. BAR FABRICATION, LAPS AND PLACEMENT SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINF. STEEL INSTITUTE.

1

SD1

2

SD1

AND

3

SD1

5. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 46 BAR DIAMETERS.

6. DOWELS: ALL VERTICAL WALL REINFORCEMENT SHALL HAVE DOWELS EQUAL IN SIZE, AND AT THE SAME SPACING (UNLESS NOTED OTHERWISE), EMBEDDED INTO THE CONCRETE FOOTING.

7. MIX ALL CEMENTITIOUS MATERIALS AND AGGREGATES BETWEEN 3 AND 5 MIN. IN A MECHANICAL BATCH MIXER WITH SUFFICIENT AMOUNT OF WATER TO PRODUCE A WORKABLE CONSISTENCY. DISCARD ALL MORTAR WHICH HAS BEGUN TO STIFFEN OR IS NOT USED WITHIN 2.5 HR AFTER INITIAL MIXING.

8. DO NOT USE ADD MIXTURES UNLESS ACCEPTABLE. LIFTS SHALL NOT EXCEED 5'-0" IN HEIGHT. ALL GROUT SHALL BE THOROUGHLY CONSOLIDATED AND RECONSOLIDATED USING A MECHANICAL MASONRY VIBRATOR WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER. HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE POUR OF GROUT 1-1/2" MINIMUM BELOW THE TOP OF THE UPPERMOST UNIT.

9. ALL RETAINING WALLS WHICH ARE PART OF THE BUILDING STRUCTURE SHALL HAVE APPROVED WATERPROOFING INSTALLED ON EARTH SIDE WITH PROTECTION BOARD BEFORE BACKFILLING. PROVIDE BACK OF WALL DRAIN OR WEEP HOLES TO APPROPRIATE DISCHARGE.

10. MASONRY FIREPLACES SHALL BE CONSTRUCTED AND REINFORCED PER CODE, AND ACCORDING TO THE RECOMMENDATIONS OF THE MASONRY INSTITUTE OF AMERICA USING THE "UNIT STRENGTH METHOD" PER CBC SECTION 2105.2.2.1. ALL MASONRY SHALL BE INSTALLED PER GOVERNING C.B.C. AND C.R.C. PROVIDE CERT. OF ALL BLOCK UNITS.

11. ALL MASONRY VENEER SHALL BE INSTALLED PER GOVERNING C.B.C. REQUIREMENTS. VENEER SHALL NOT EXCEED 5" IN THICKNESS. WALL TIES SHALL BE CORROSION RESISTANT, 22 GAGE, 3/4" WIDE SHEET METAL. TIES SHALL BE SPACED AT 24" O.C. HORIZONTAL AND VERTICAL MAXIMUM. TIES SHALL HAVE A LIP OR HOOK ON THE EXTENDED LEG THAT WILL ENGAGE OR ENCLOSE A HORIZONTAL JOINT REINFORCEMENT WIRE. HORIZONTAL REINFORCEMENT WIRE SHALL BE 0.148" DIA. (AS A MINIMUM).

12. VENEER APPLIED OVER STUD CONSTRUCTION SHALL BE APPLIED OVER WALL SHEATHING AND APPROVED WATERPROOF BARRIER (S.D.) WITH 1" AIR SPACE SLUSH FILLED WITH MORTAR OR WITH SPOT MORTAR BEDDING AT ALL TIES.

PROJECT:

FRANCO RESIDENCE

769 East Willow Ave

Montecito, CA

SEAL:

REGISTERED PROFESSIONAL ENGINEER

RON M. TEAL

C-91421

EXP-06/30/2026

TEAL

State of California

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REV BY: R.M.T.

DES BY: R.M.T.

ISSUE DATE: 02-16-25

SCALE: NONE

PROJECT: R.M.T.

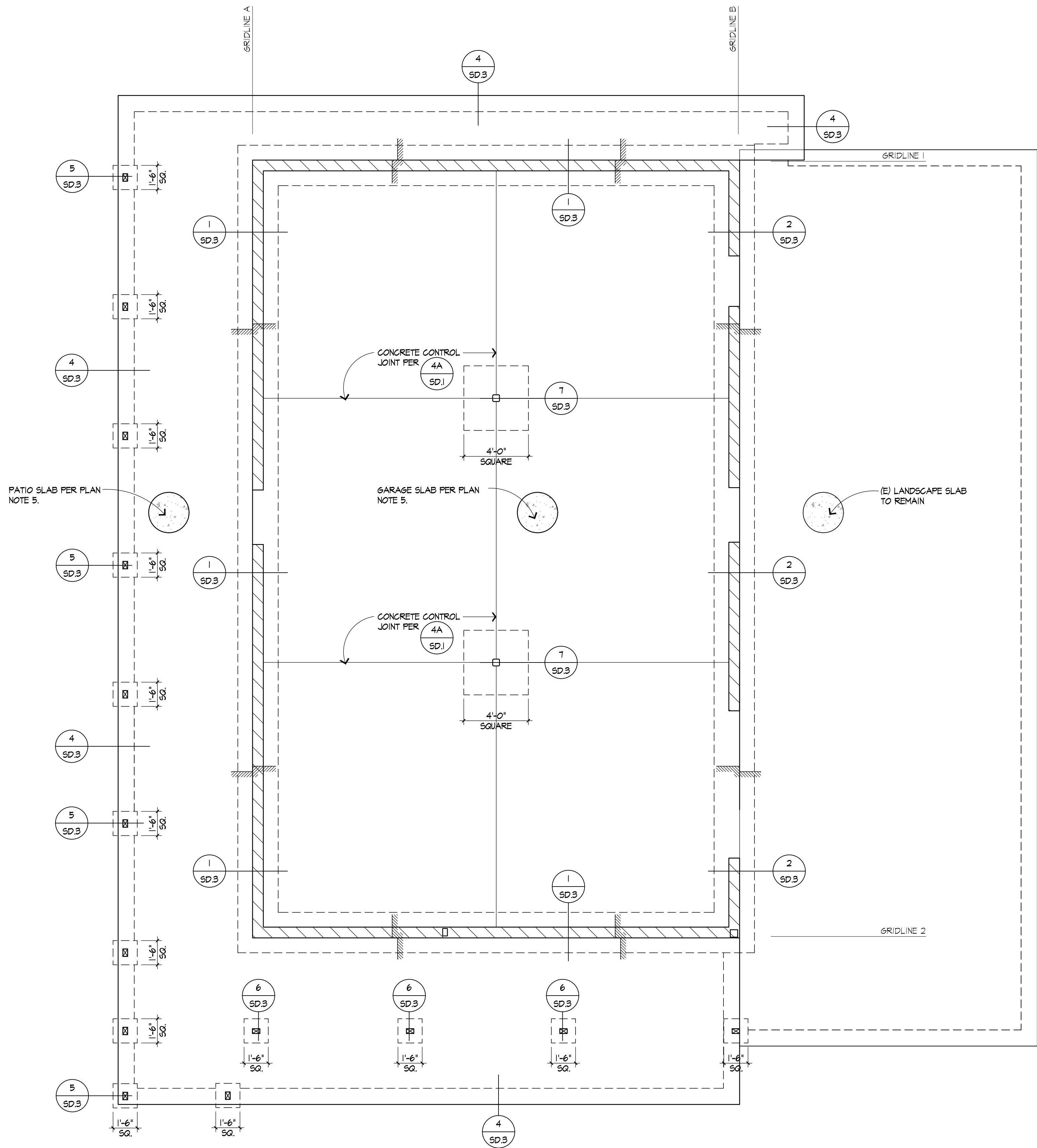
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STRUCTURAL NOTES & CRITERIA

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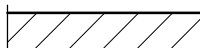
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FOUNDATION PLAN

FOUNDATION NOTES

1. WALLS SHOWN AS SOLID ARE ABOVE FRAMING. SEE SHEET SO.1 FOR STUD FRAMING REQUIREMENTS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
3. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
4. **GENERAL FOUNDATION NOTES:**
 - A. PREPARE ALL SLAB AND FOOTING SUBGRADES IN ACCORDANCE WITH CBC CHAPTER 18 REQUIREMENTS AND GEOTECHNICAL REPORT (IF PROVIDED)
 - B. ALL SLAB BOTTOM REINFORCEMENT SHALL BE 2" CLEAR ABOVE BOTTOM OF CONCRETE.
 - C. MAINTAIN TYPICAL SLAB DEPTH AT ALL SLOPED AND STEPPED CONDITIONS AS SHOWN IN THE DETAILS.
 - D. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR BELOW-SLAB AND EMBEDDED ITEMS. COORDINATE PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS.
 - E. A POSITIVE GRADIENT SHALL BE PROVIDED AWAY FROM THE FOUNDATION IN ORDER TO PROVIDE RAPID REMOVAL OF SURFACE WATER AWAY FROM THE STRUCTURE. NO PONDING OF WATER SHALL BE ALLOWED ON THE PAD OR ADJACENT TO THE FOUNDATION. DOWNSPOUTS ARE TO DISCHARGE DIRECTLY INTO ONSITE DRAINAGE SYSTEM.
 - F. TIE BEAMS (IF SHOWN) SHALL BE 12" SQUARE AND REINFORCED WITH (2) #4 BARS TOP AND BTM. EXTEND REINFORCEMENT CONTINUOUS THROUGH OR TO FAR FACE OF INTERSECTING FOOTINGS.
5. **CONCRETE SLAB:**
TYPICAL SLAB-ON-GRADE SHALL BE 5" MIN. THICK CONCRETE SLAB, REINFORCED WITH #4 AT 18" O.C. EACH WAY, CHAISED AT SLAB CENTERLINE, OVER 2" SAND, OPTIONAL 10 MIL VAPOR BARRIER, OVER 4" DRAIN ROCK. FOR SLAB LAYOUT, SEE DETAIL 3/SD.3
6. **CMU WALL FRAMING:**
CMU WALL FRAMING SHALL CONFORM TO THE NOTES ON SHEET SO.3, AND DETAIL A/SD.3 UNO.
7. **SHADING & SYMBOLS LEGEND:**

-  INDICATES CMU WALL PER DETAILS KEYED
-  INDICATES LATERAL GRIDLINE CORRESPONDING TO CALCULATIONS - FOR PLAN CHECKER
-  INDICATES MINOR SLAB STEP PER DETAILS KEYED

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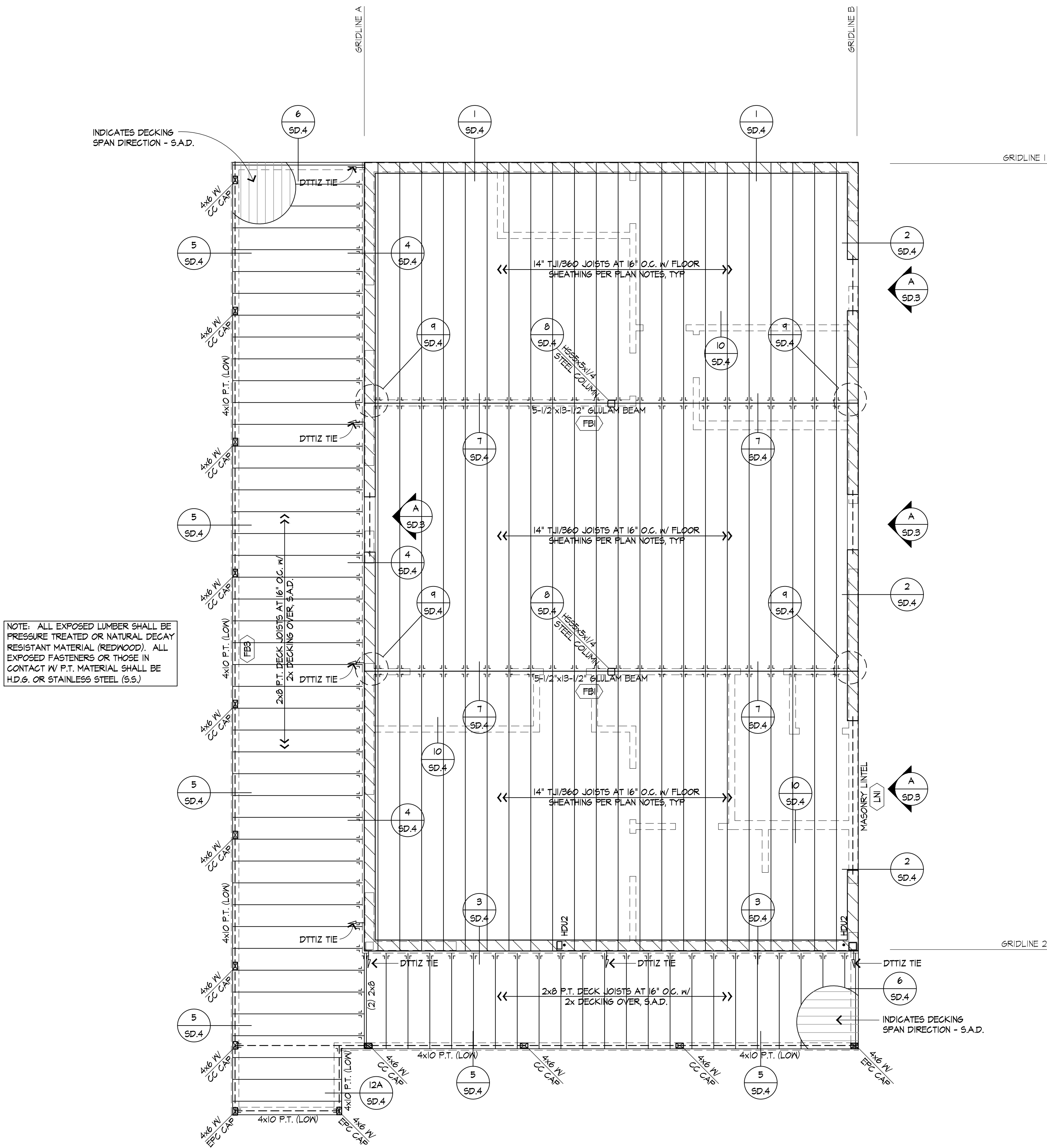
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SHEET TITLE:

FOUNDATION PLAN

SHEET:

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FLOOR FRAMING PLAN

FLOOR FRAMING NOTES

1. WALLS SHOWN AS SOLID ARE BELOW FLOOR FRAMING. SEE SHEET SO.1 FOR STUD FRAMING REQUIREMENTS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
3. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
4. **FLOOR FRAMING AND SHEATHING:**
 - A. TJI FLOOR JOIST FRAMING SHALL BE AS INDICATED ON THE PLANS AND INSTALLED PER MFR'S RECOMMENDATIONS. INSTALL SOLID BLDG. BETWEEN JOISTS AT SUPPORT LOCATIONS AND AT MID SPAN OF MEMBERS 10'-0" OR LONGER. DOUBLE UP JOISTS AT PARALLEL WALLS AND AT ALL FLOOR OPENINGS. AT FLUSH FRAME CONDITIONS, INSTALL HANGERS PER THE HANGER SCHEDULE ON SHEET SO.2.
 - B. FLOOR SHEATHING SHALL BE 23/32" (48/24) CDX GRADE OR EQUIVALENT RATED O.S.B. SHEATHING, NAILED W/ 10d AT 6" AND 12" OC (EDGE AND FIELD), U.N.O. ON THE PLANS. GLUE AND NAIL ALL FLOOR SHEATHING PANELS, AND STAGGER JOINTS. NAIL SHEATHING PRIOR TO GLUE DRYING.
5. **STUD FRAMING:**

STUD WALL FRAMING SHALL CONFORM TO THE STUD SCHEDULE ON SHEET SO.1, U.N.O.
6. **DRAW/COLLECTOR MEMBERS:**

PROVIDE FLOOR EDGE NAILING FROM SHEATHING TO JOIST FOR ALL MEMBERS LABELED AS DRAW/COLLECTORS FOR THE LENGTH OF THE JOIST.
7. **SHEARWALLS:**

THE LENGTH OF SHEARWALL IS SHOWN ABOVE OR BELOW THE SHEARWALL DESIGNATION ON THE PLANS, WHICH IS THE MINIMUM DESIGN LENGTH PER SUPPORTING CALCULATIONS. REFER TO SO.2 FOR SHEARWALL SCHEDULE.
8. **HOLDDOWNS:**

HOLDDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO FRAMING BELOW. INSTALL HOLDDOWNS AND HARDWARE AS SHOWN IN DETAIL 8/SD.3. INSTALL HOLDOWN POST SIZES AS INDICATED IN THE HOLDOWN SCHEDULE ON SHEET SO.2.
9. **HEADERS:**

HEADERS SHOWN SHALL BE SIZED PER THE HEADER SCHEDULE IN DETAIL 15/SD.1, U.N.O. ON THE PLANS.
10. **HANGERS:**

HANGERS SHOWN SHALL BE SIZED PER THE HANGER SCHEDULE ON SHEET SO.2, U.N.O. ON THE PLANS.
11. **TOP PLATE SPLICES:**

TOP PLATE SPLICES OF WALLS SHALL CONFORM TO DETAIL 17/SD.1. AT TOP PLATE TRANSITIONS FROM 2x4 TO 2x6 SHALL HAVE A C54 x 3'-0" STRAP INSTALLED ACROSS PLATE BREAK.
12. **SHADING & SYMBOLS LEGEND:**

	INDICATES CMU WALL PER DETAILS KEYED
	INDICATES BALLOON FRAMED STUDS PER SO.1 STUD SCHEDULE
	GRIDLINE INDICATES LATERAL GRIDLINE CORRESPONDING TO CALCULATIONS - FOR PLAN CHECKER
	FBI INDICATES FLOOR BEAM LABEL CORRESPONDING TO CALCULATIONS - FOR PLAN CHECKER

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FRANCO RESIDENCE
769 East Willow Ave
Montecla, CA



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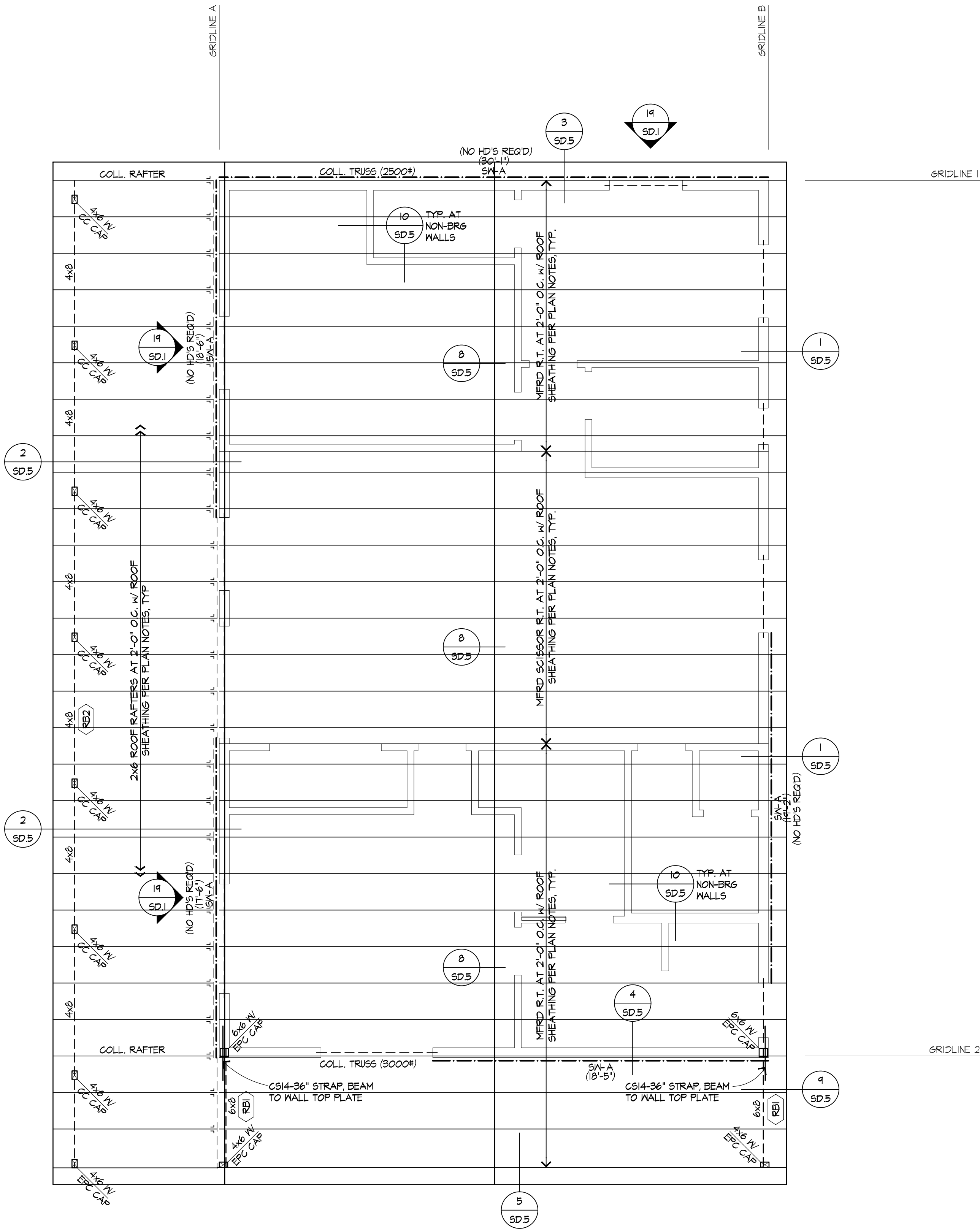
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FLOOR FRAMING PLAN

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52

NOTE: ALL EXPOSED LUMBER SHALL BE PRESSURE TREATED OR NATURAL DECAY RESISTANT MATERIAL (REDWOOD). ALL EXPOSED FASTENERS OR THOSE IN CONTACT W/ P.T. MATERIAL SHALL BE HD.G. OR STAINLESS STEEL (S.S.)



ROOF FRAMING PLAN

ROOF FRAMING NOTES

- WALLS SHOWN AS SOLID ARE BELOW ROOF FRAMING. SEE SHEET SO.1 FOR STUD FRAMING REQUIREMENTS AND SCHEDULES.
- SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
- DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
- ROOF FRAMING AND SHEATHING:**
 - ROOF FRAMING SHALL BE AS INDICATED ON THE PLANS AND AS FOLLOWS FOR CONDITIONS INDICATED:

RAFTERS: SIZED AS INDICATED ON THE PLANS. INSTALL FULL DEPTH SOLID BLKG. BETWEEN MEMBERS AT SUPPORT LOCATIONS AND AT MID SPAN OF MEMBERS 10'-0" OR LONGER. AT DOUBLE MEMBERS, INTERNAL WITH (2) 16d NAILS AT 12" OC FULL LENGTH.

TRUSSES: MANUFACTURED ROOF TRUSSES AS INDICATED ON THE PLANS. TRUSSES SHALL BE DESIGNED AS INDICATED IN "ROOF TRUSS CRITERIA" LISTED ON SHEET SO.2. INSTALL SOLID BLKG OR FULL DEPTH BLKG PANELS BETWEEN MEMBERS AT SUPPORT LOCATIONS. INSTALL TRUSSES PER MFRS APPROVED SHOP DRAWINGS
 - ROOF SHEATHING SHALL BE 15/32" (32/16) CDX GRADE OR EQUIVALENT RATED O.S.B. SHEATHING, NAILED W/ 8d AT 6" AND 12" OC (EDGE AND FIELD), U.N.O. ON THE PLANS. STAGGER ALL JOINTS.
- STUD FRAMING:**

STUD WALL FRAMING SHALL CONFORM TO THE STUD SCHEDULE ON SHEET SO.1, U.N.O.
- DRAG/COLLECTOR MEMBERS:**

PROVIDE ROOF EDGE NAILING FROM SHEATHING TO RAFTER/TRUSS FOR ALL MEMBERS LABELED AS DRAG/COLLECTORS FOR THE LENGTH OF THE MEMBER. ATTACH ENDS OF COLLECTOR TO TOP PLATE BELOW PER DETAIL 1/SD.5
- SHEARWALLS:**

THE LENGTH OF SHEARWALL IS SHOWN ABOVE OR BELOW THE SHEARWALL DESIGNATION ON THE PLANS, WHICH IS THE MINIMUM DESIGN LENGTH PER SUPPORTING CALCULATIONS. REFER TO SO.2 FOR SHEARWALL SCHEDULE.
- HOLDDOWNS:**

HOLDDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO FRAMING BELOW. INSTALL HOLDOWN POST SIZES AS INDICATED IN THE HOLDOWN SCHEDULE ON SHEET SD.2.
- HEADERS:**

HEADERS SHOWN SHALL BE SIZED PER THE HEADER SCHEDULE IN DETAIL 15/SD.1, U.N.O. ON THE PLANS.
- HANGERS:**

HANGERS SHOWN SHALL BE SIZED PER THE HANGER SCHEDULE ON SHEET SO.2, U.N.O. ON THE PLANS.
- TOP PLATE SPLICES:**

TOP PLATE SPLICES OF WALLS SHALL CONFORM TO DETAIL 17/SD.1. AT TOP PLATE TRANSITIONS FROM 2x4 TO 2x6 SHALL HAVE A CS14 x 3'-0" STRAP INSTALLED ACROSS PLATE BREAK.
- SHADING & SYMBOLS LEGEND:**

GRIDLINE INDICATES LATERAL GRIDLINE CORRESPONDING TO CALCULATIONS - FOR PLAN CHECKER

RB INDICATES ROOF BEAM LABEL CORRESPONDING TO CALCULATIONS - FOR PLAN CHECKER

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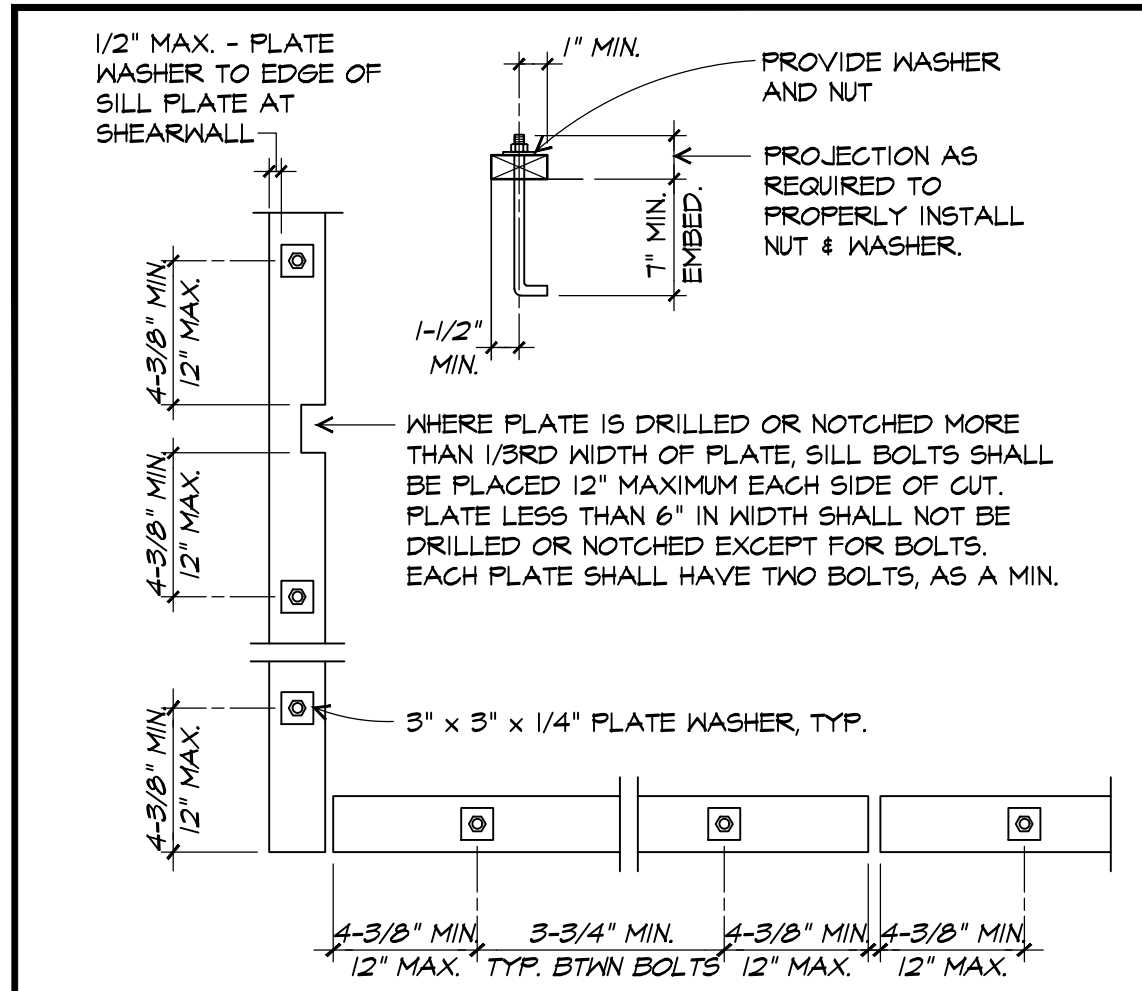
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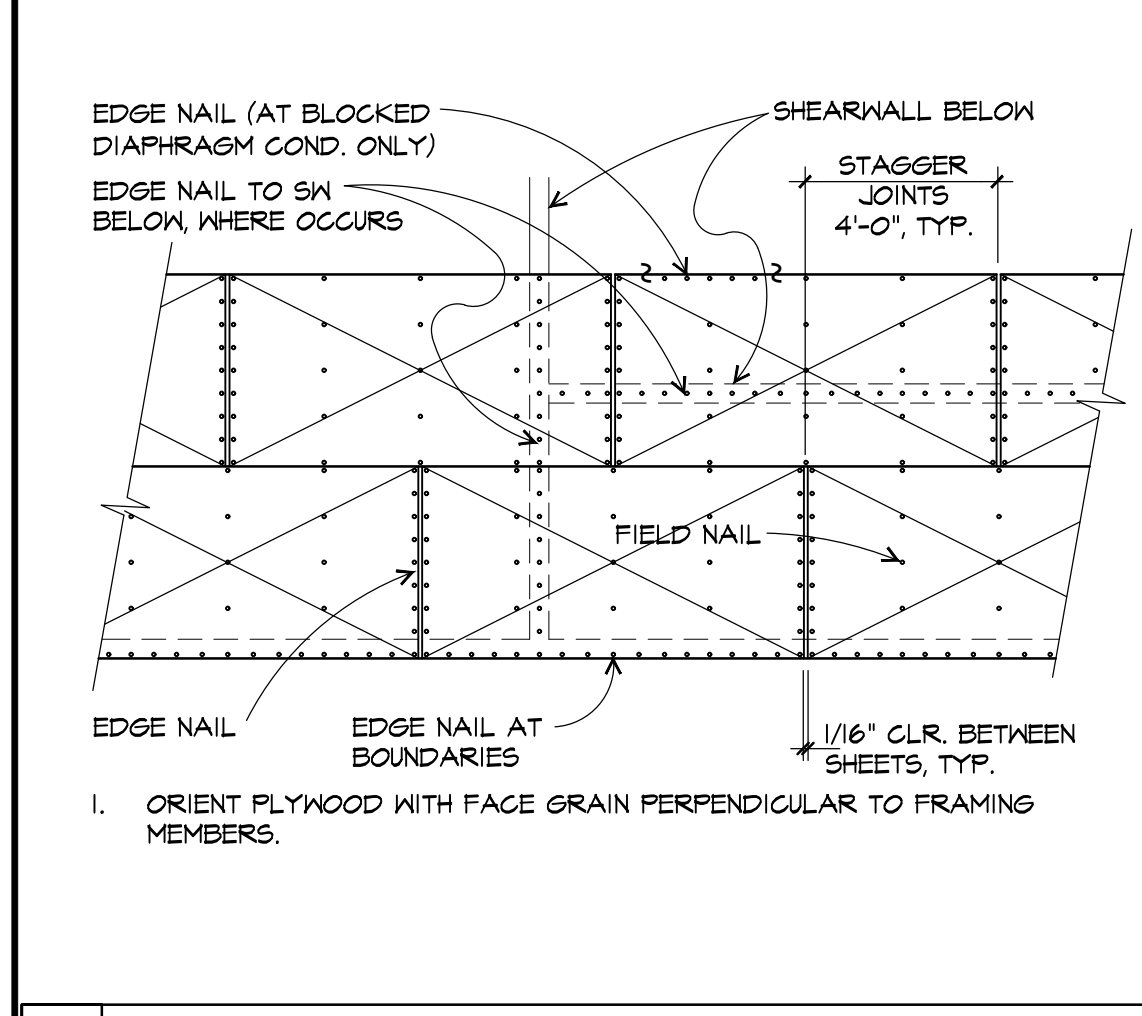
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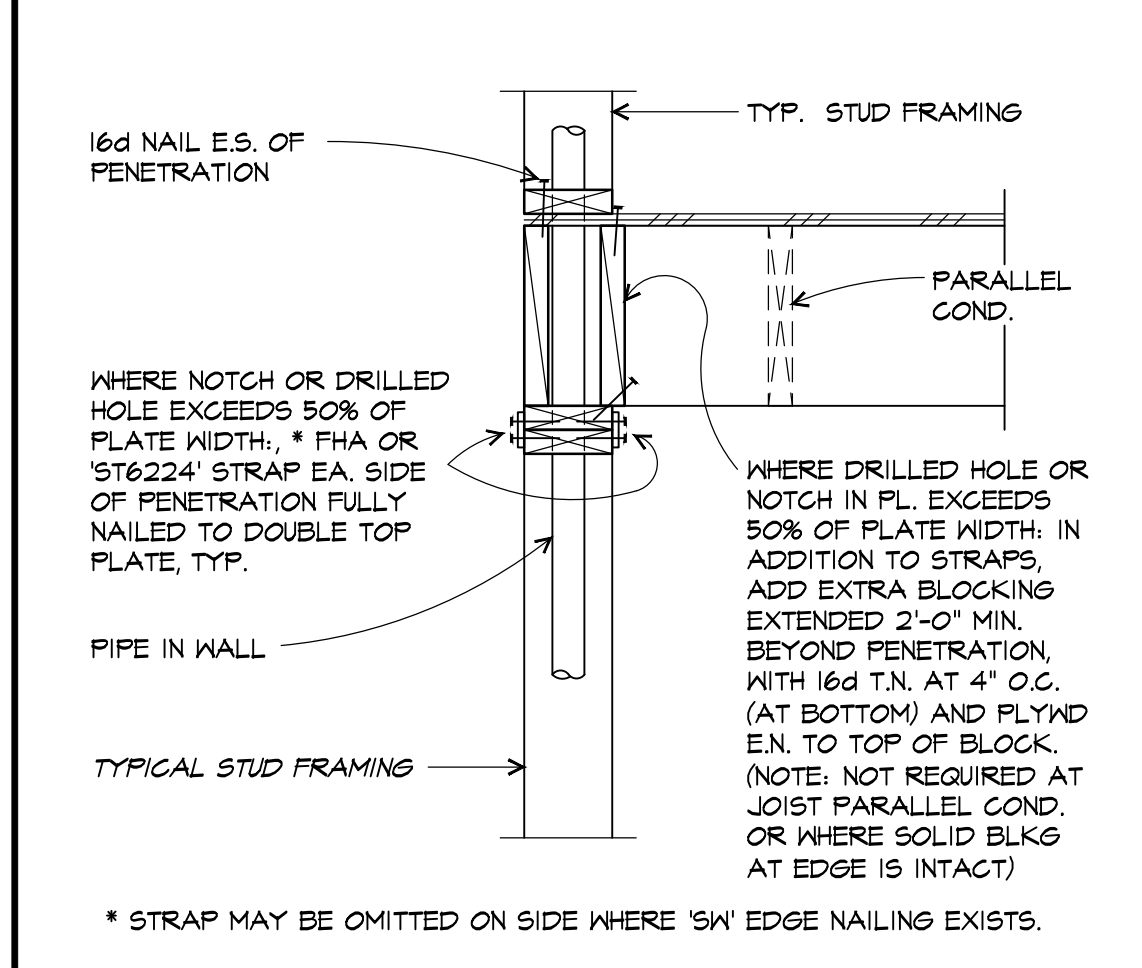
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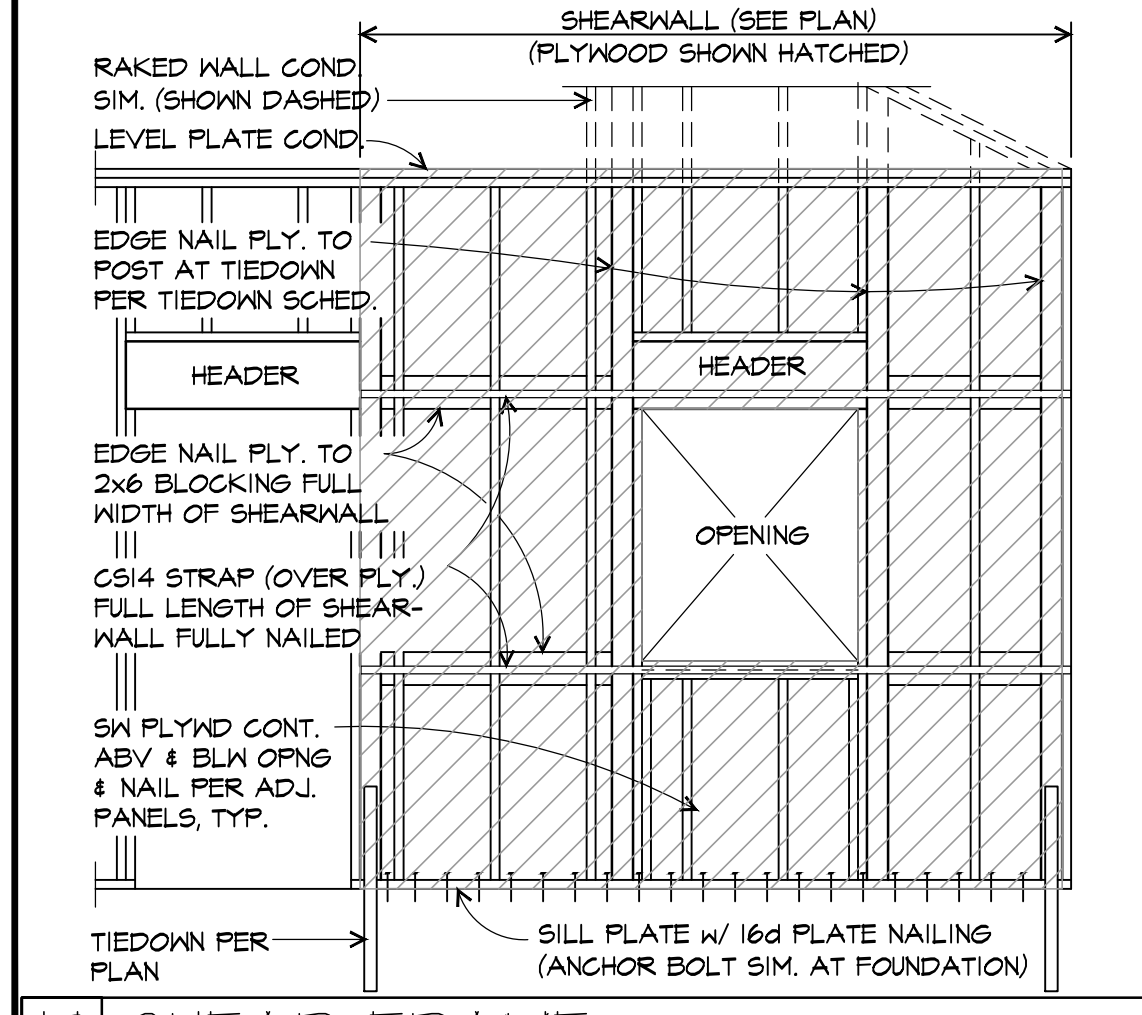
5 ANCHOR BOLT LAYOUT



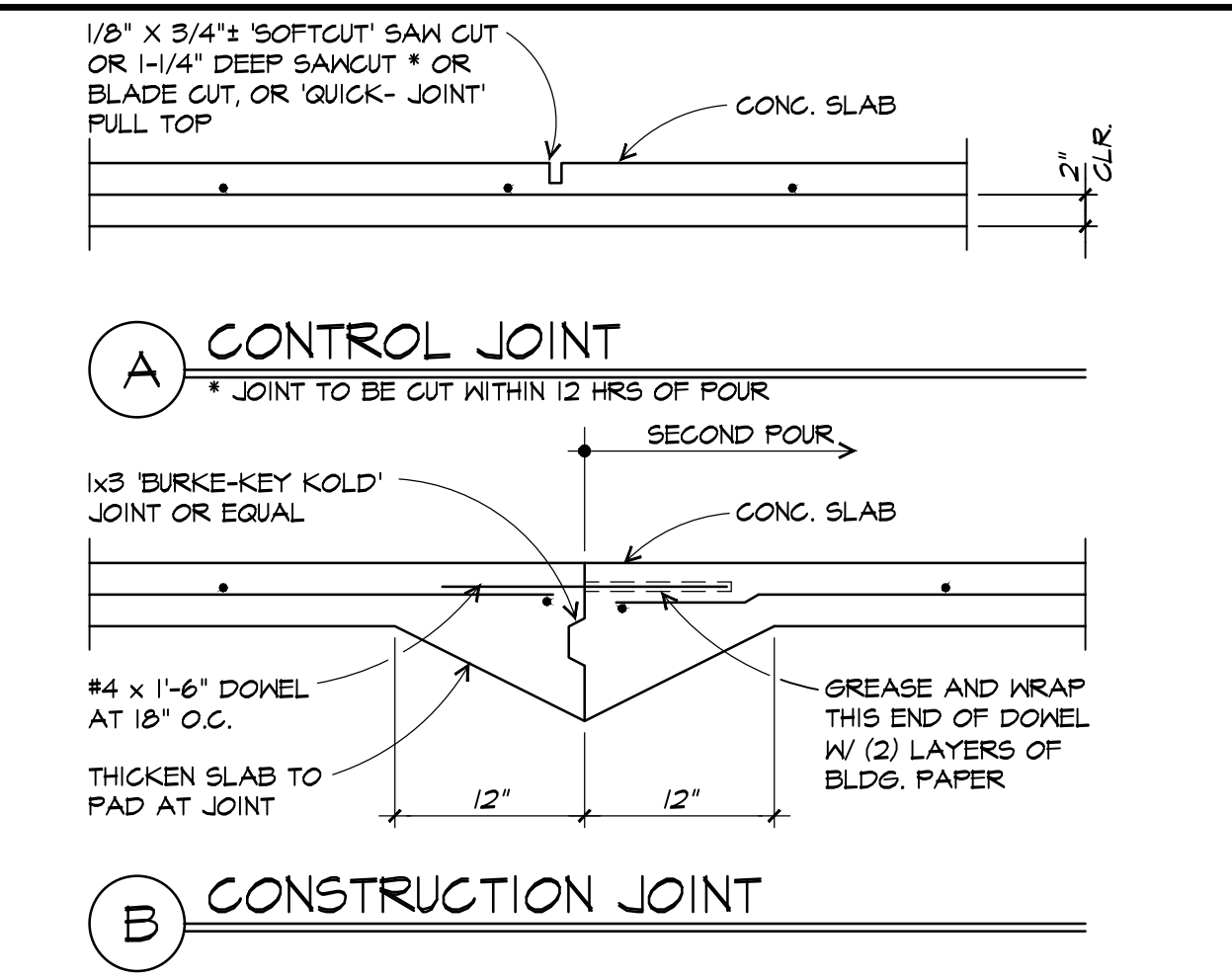
9 TYPICAL SHEATHING LAYOUT



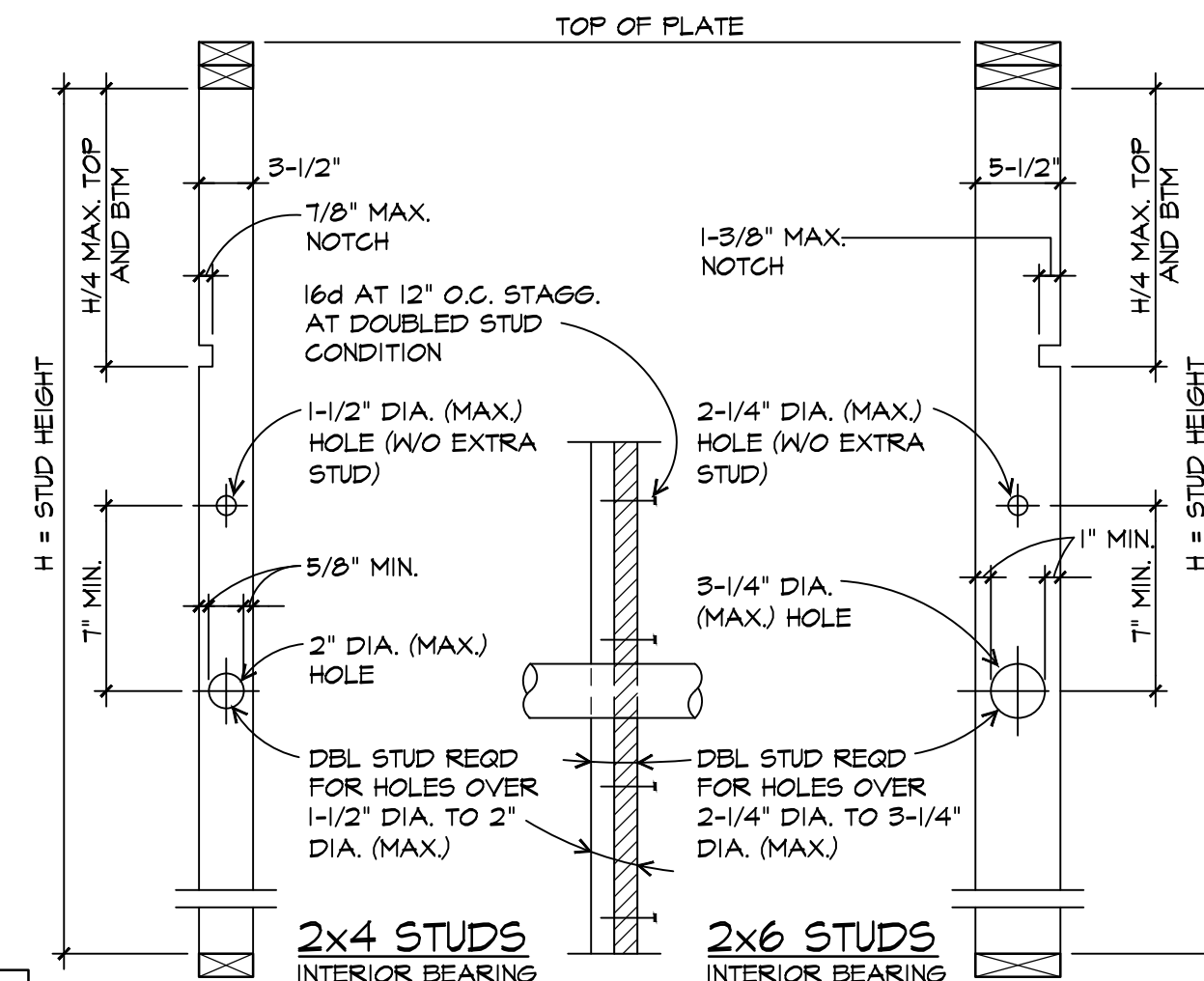
14 PLUMBING THRU TOP PLATE



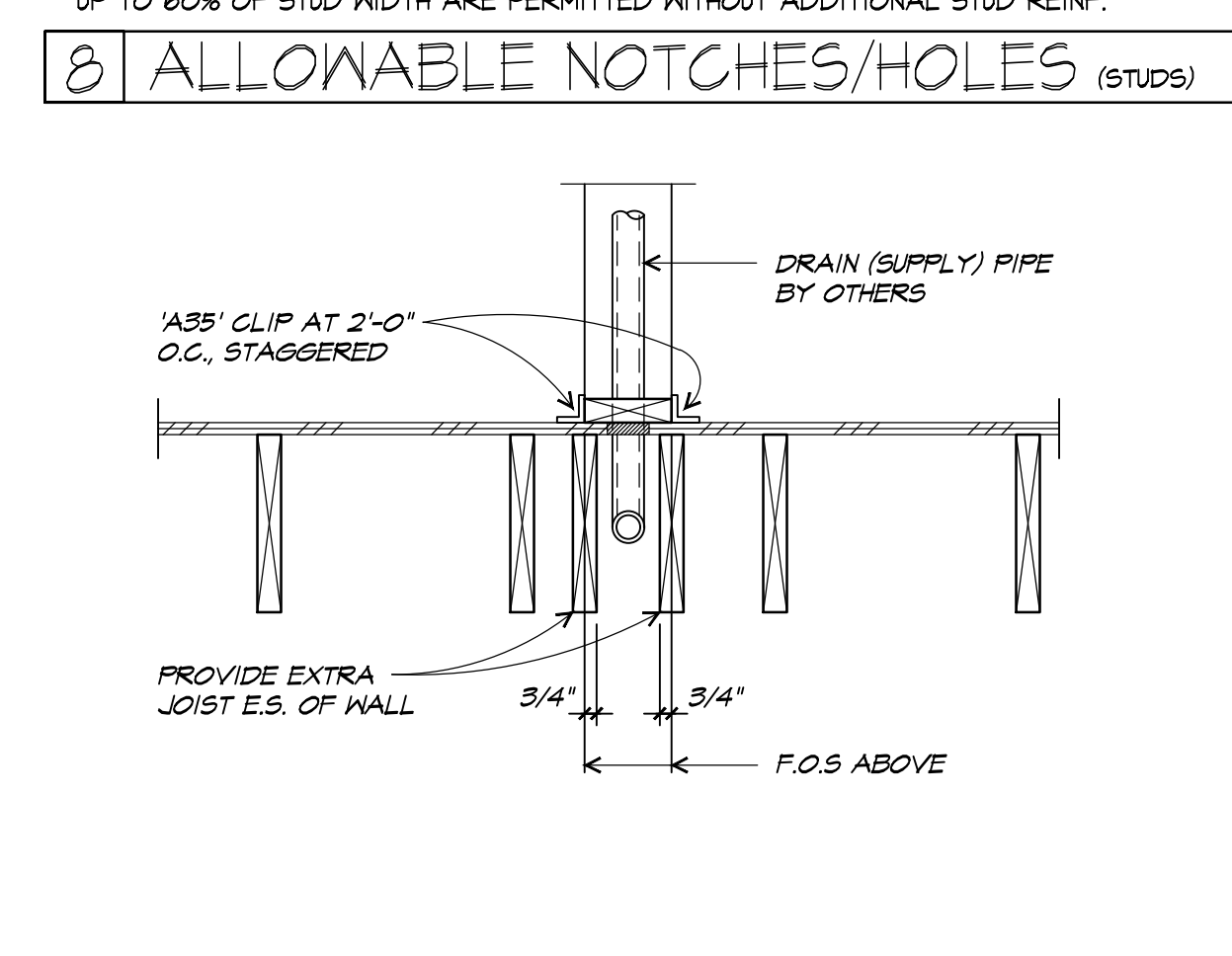
19 SHEAR FRAME



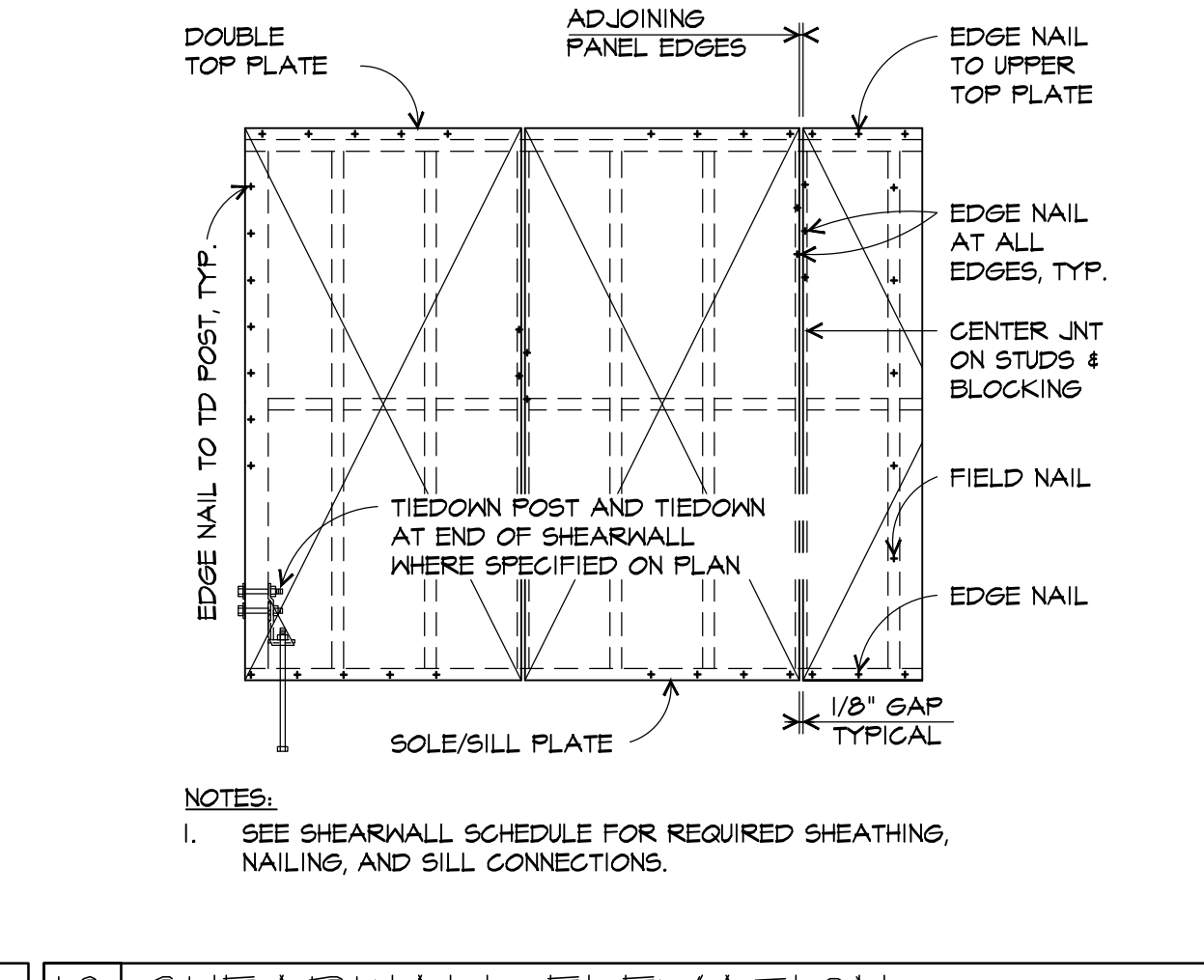
4 CRACK CONTROL JOINTS



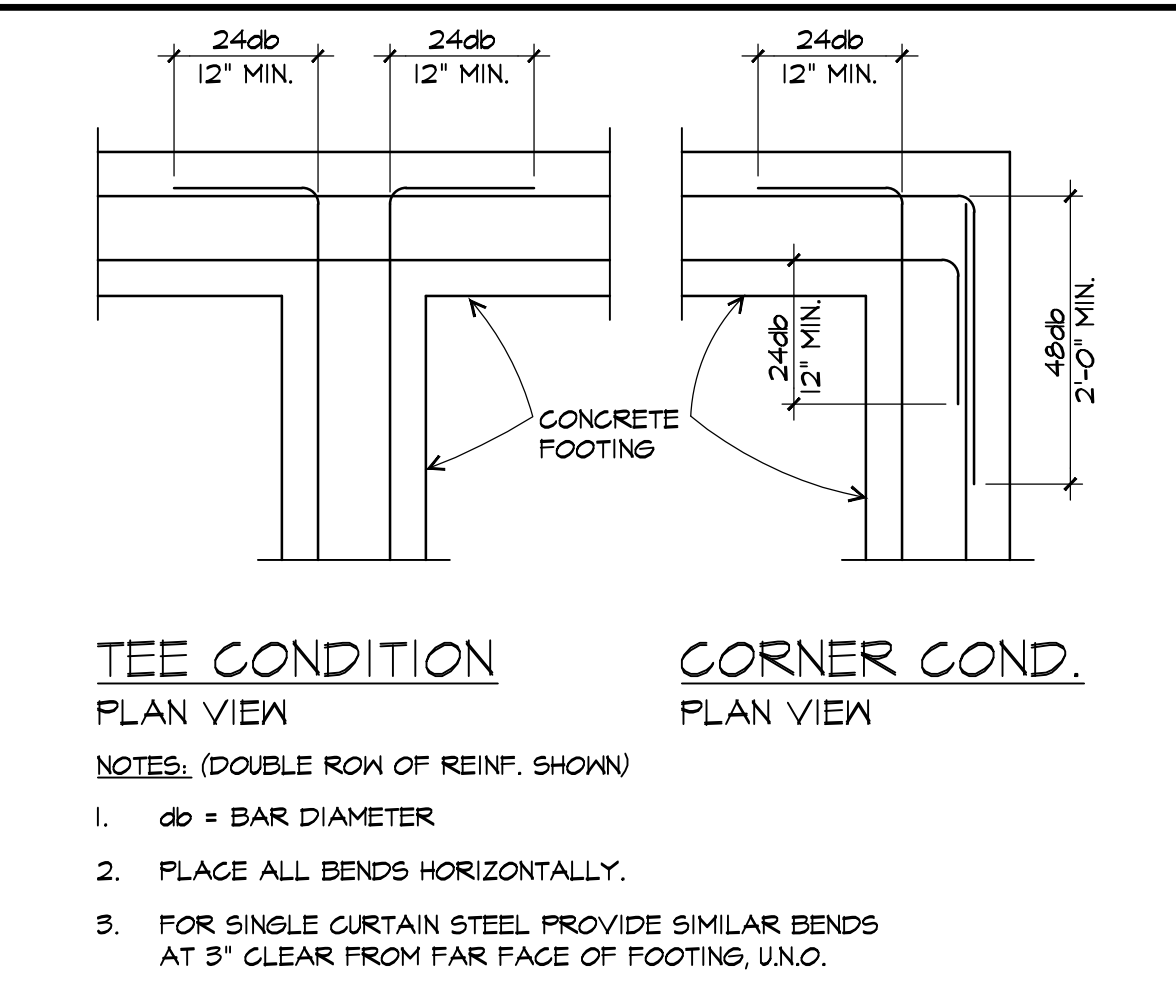
8 ALLOWABLE NOTCHES/HOLES (STUDS)



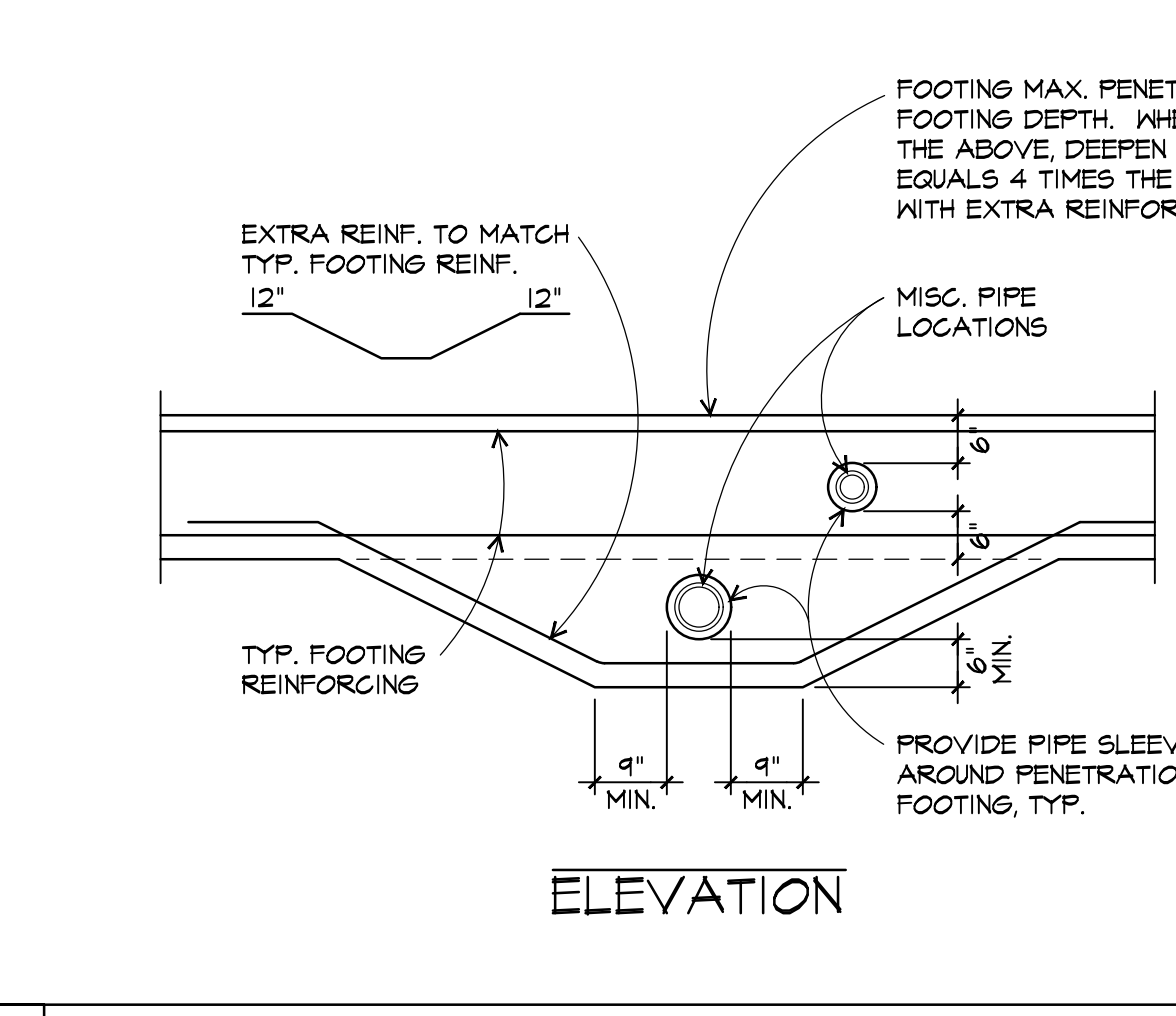
13 INTERIOR PLUMBING WALL



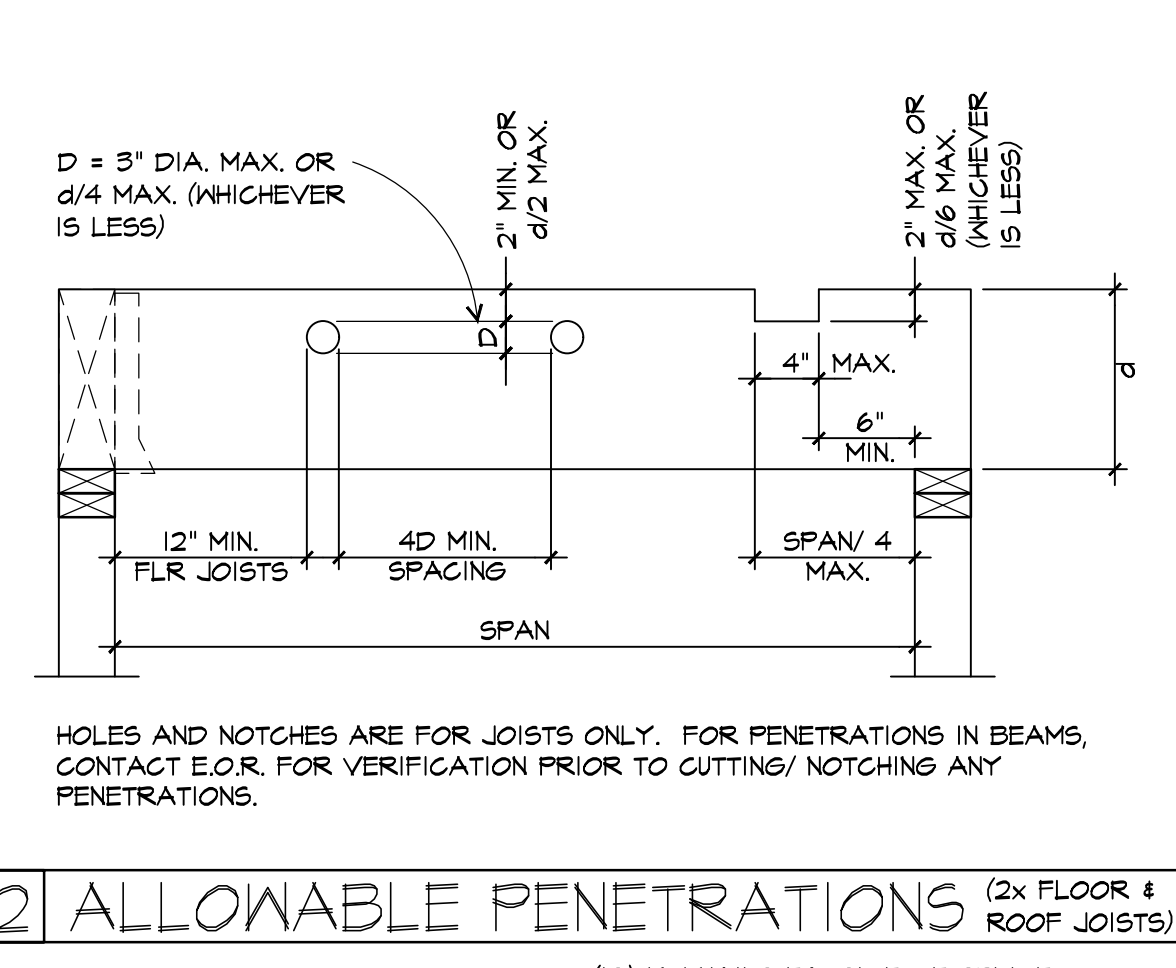
18 SHEARWALL ELEVATION



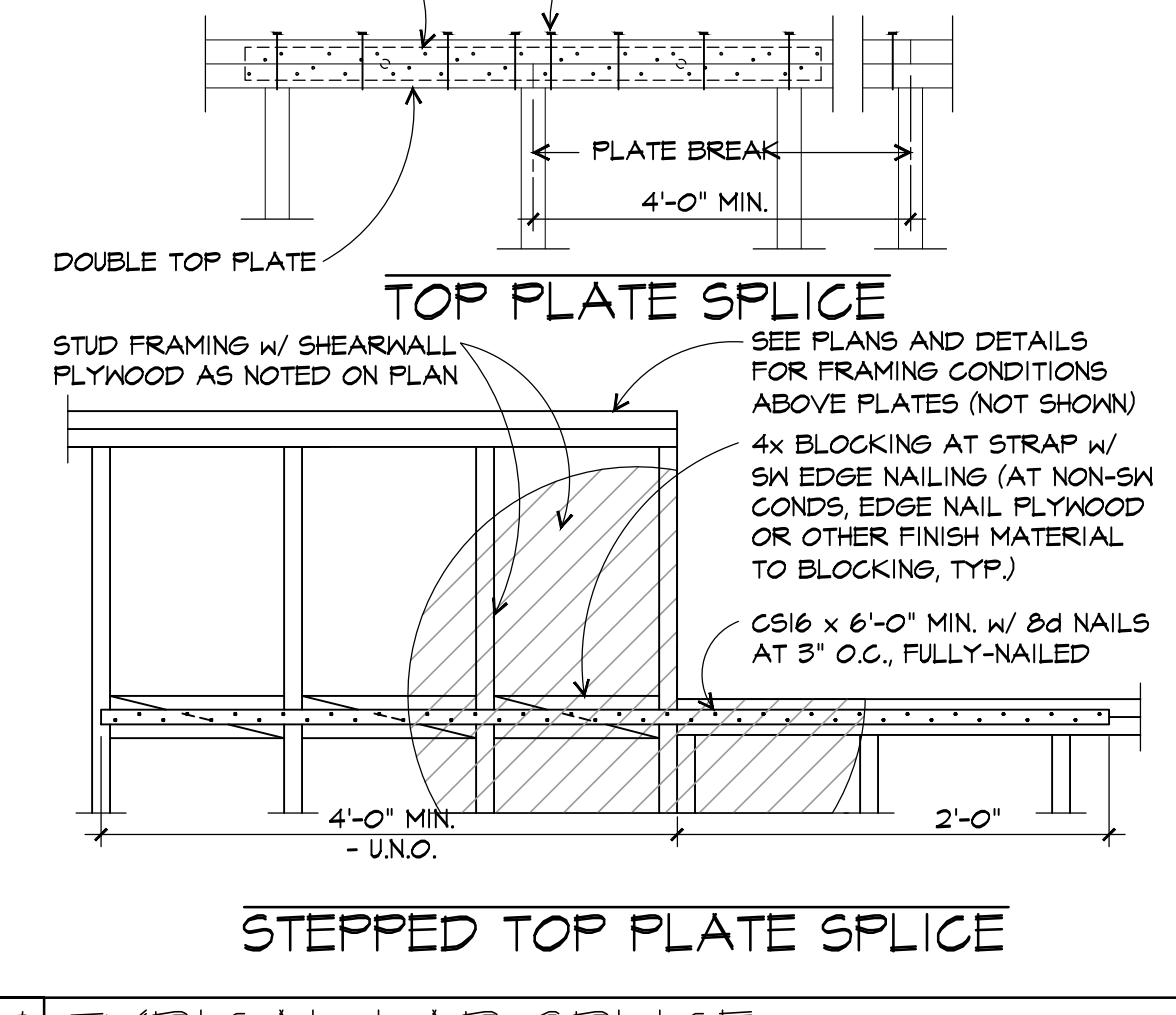
3 TYP. REINF. LAPS



7 PIPE PENETRATIONS IN FTGS



12 ALLOWABLE PENETRATIONS (2x FLOOR & ROOF JOISTS)

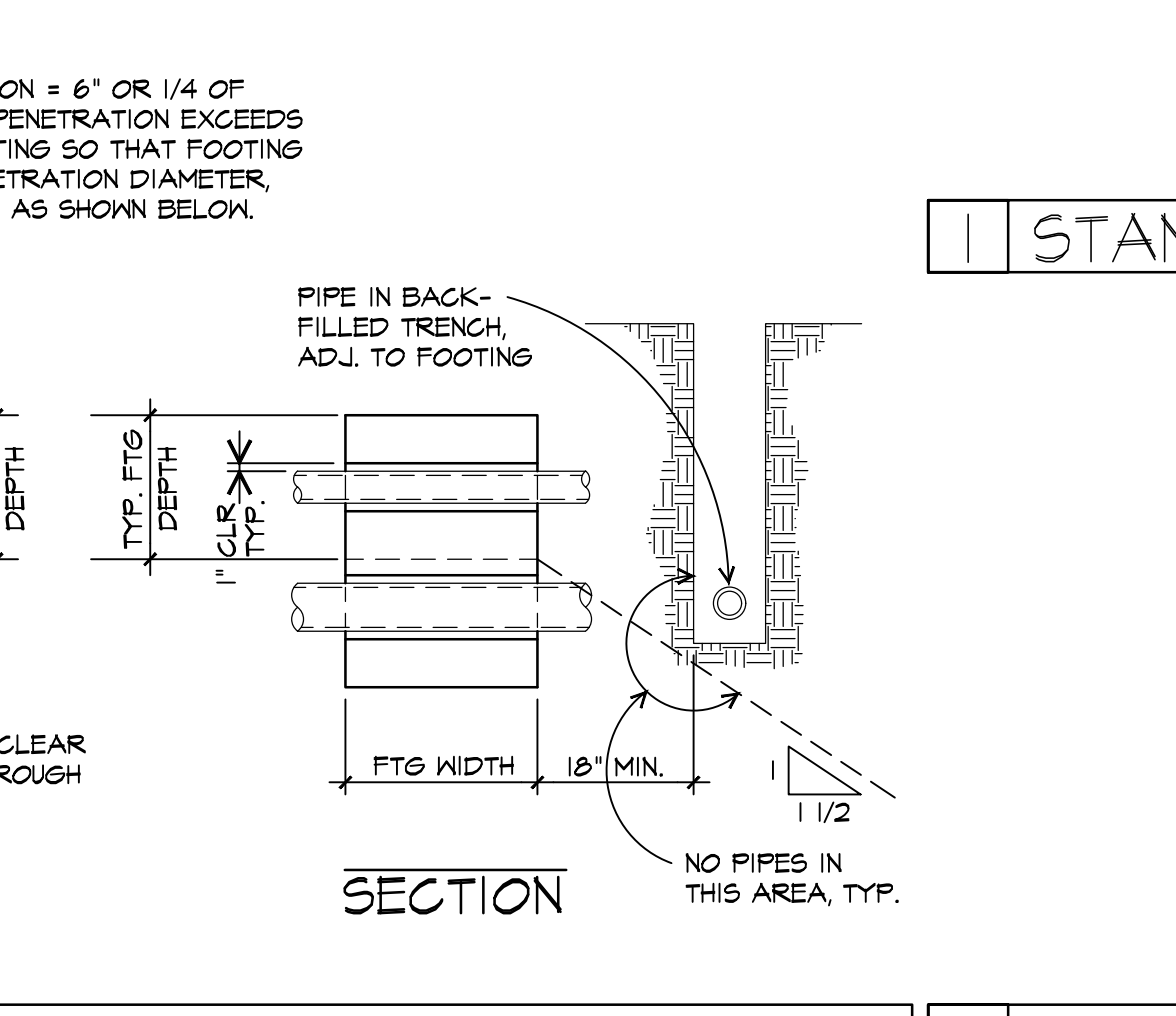


17 TYPICAL LAP SPLICE

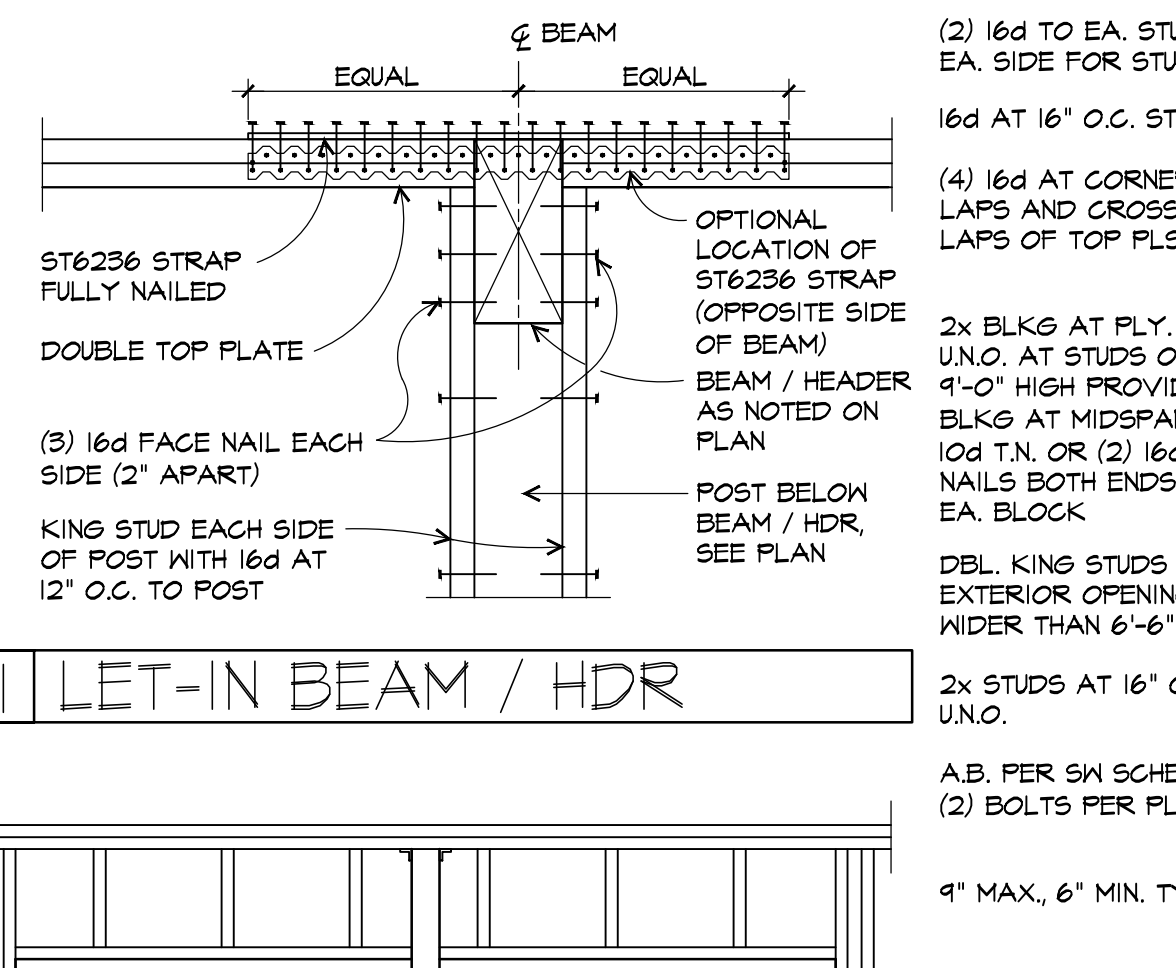
BAR SIZE	SPLICE LENGTH
#3	2'-0"
#4	2'-0"
#5	2'-5"
#6	2'-4"
#7	3'-5"
#8	4'-1"
#9	5'-4"
#10	7'-4"

NOTES:
1. SPLICE LENGTHS ARE TYPICAL UNLESS OTHERWISE SHOWN OR NOTED ON PLANS AND DETAILS.
2. SPLICES SHALL BE STAGGERED WHERE POSSIBLE AND BARS SHALL BE LAPPED ONLY WHERE INDICATED ON DRAWINGS OR AS SPECIFICALLY PERMITTED BY THE STRUCTURAL ENGINEER.
3. VERTICAL WALL REINFORCING SHALL LAP A MINIMUM OF 40 DIAMETER AT HORIZONTAL CONSTRUCTION JOINTS.

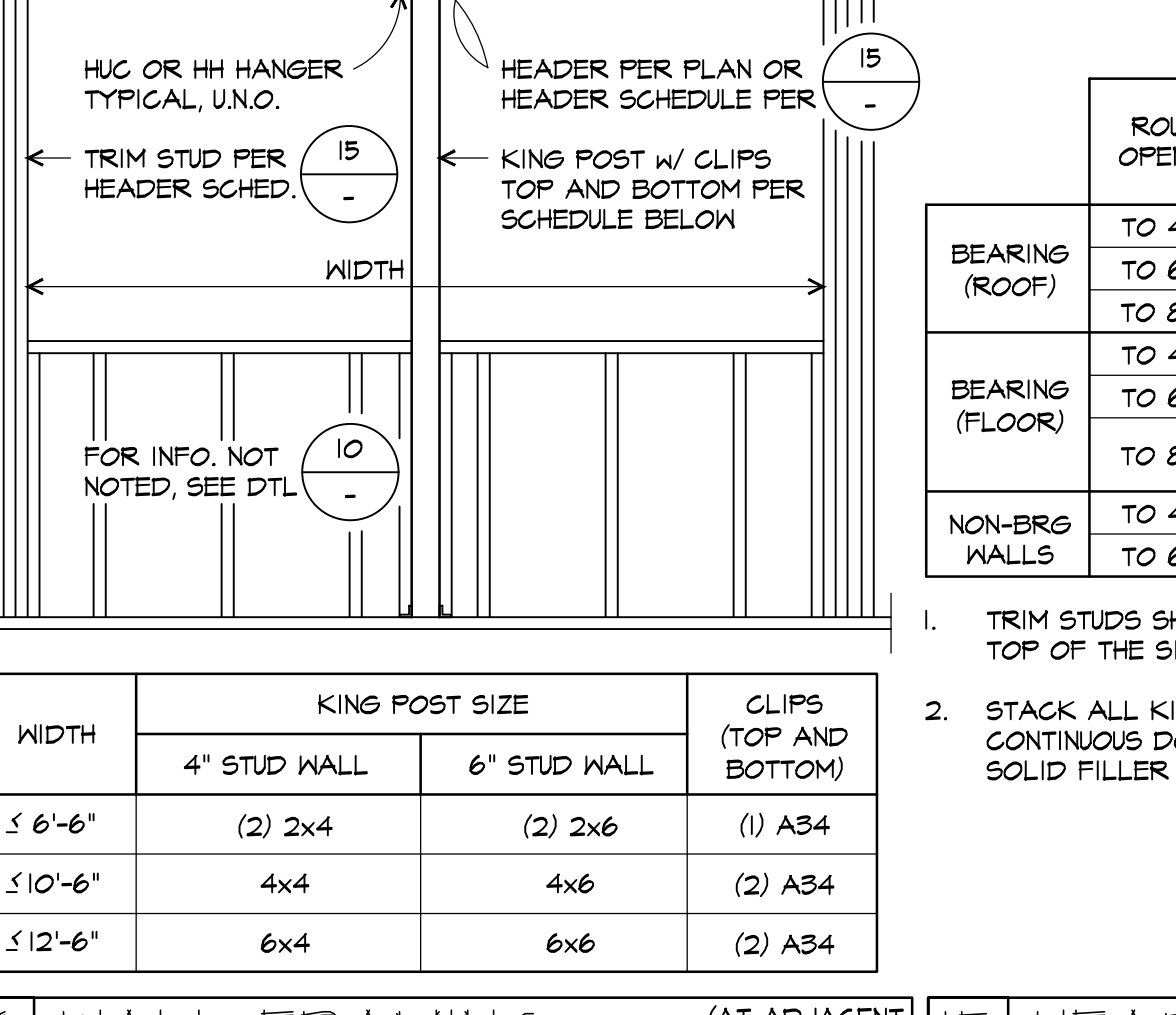
2 TYP. REINF. SPLICES



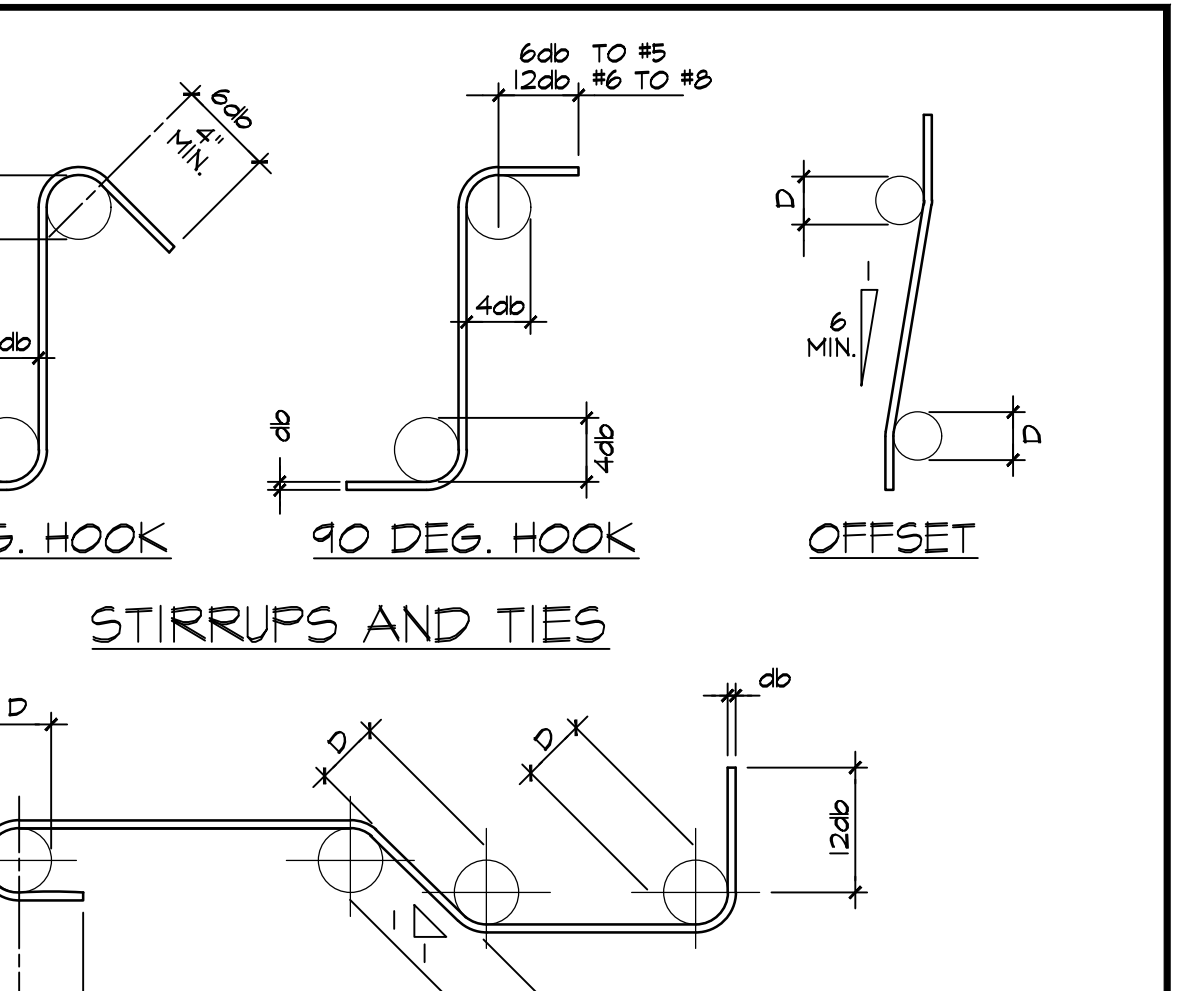
11 STANDARD BAR BENDS



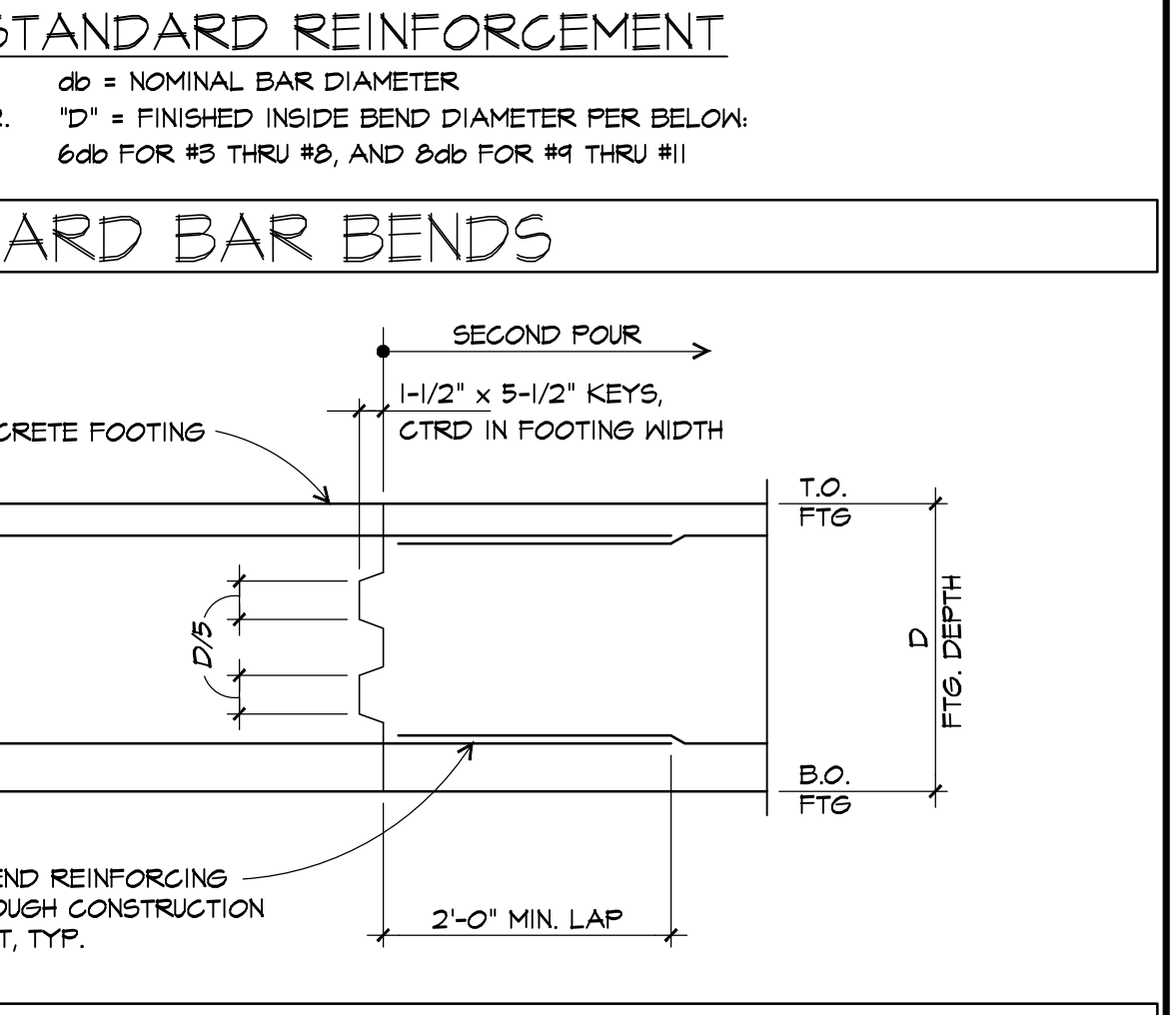
11 LET-IN BEAM / HDR



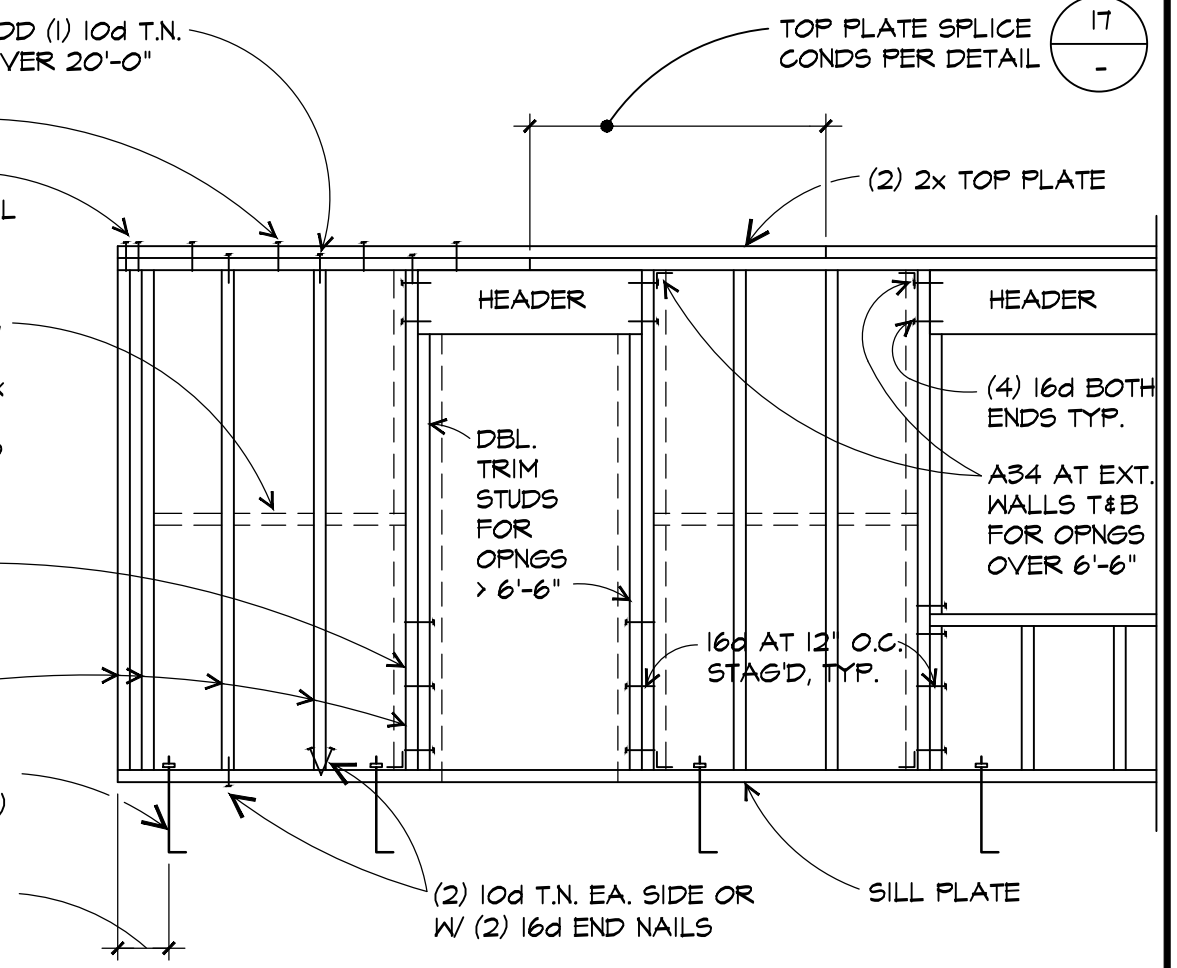
16 WALL FRAMING (AT ADJACENT WINDOWS)



STIRRUPS AND TIES



11 STANDARD BAR BENDS



6 CONSTRUCTION JOINT

HEADER SIZE (MINIMUM), U.N.O.		No. OF KING KING STUDS EACH END	No. OF TRIM STUDS EACH END
4" WALL	6" WALL		
4x8	6x8	ONE	ONE
4x10	6x8	ONE	ONE
4x12	6x10	TWO	TWO
4x12	6x10	ONE	ONE
4x12	6x10	ONE	ONE
3-1/2 x 11-7/8 LVL	6x12	TWO	TWO
4x4	(2) 2x6	N/A	ONE
4x6	(2) 2x6	N/A	ONE

KING STUD(S),
PER SCHED.

HEADER

(1) TRIM STUD

(2) TRIM STUD PER
ABOVE

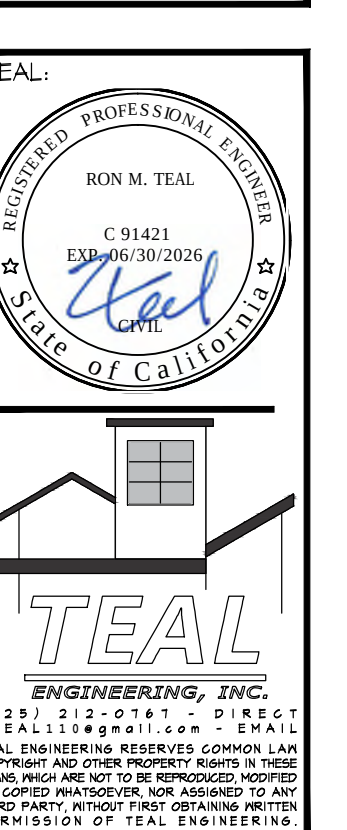
BE CONTINUOUS FROM BOTTOM OF HEADER TO THE
-ATE BELOW.

ND TRIM STUDS FROM LEVEL AT WHICH THEY OCCUR
TO SILL PLATE AT FOUNDATION LEVEL. PROVIDE
IST SPACE.

10 SW / BRG. WALL CONSTRUCTION

NO.	REVISIONS	DATE	BY

PROJECT:
FRANCO RESIDENCE
769 East Willow Ave
Monte Carlo, CA



INITIAL SUBMITTAL / PERMIT SET			
DRW. BY:	R.G.T.	ISSUE DATE:	02-18-25
REV. BY:	SCALE:	R.M.T. PROJECT:	1" = 1'-0"
DES. BY:	R.M.T.	REV. BY:	

SHEET TITLE:
STRUCTURAL STANDARD DETAILS

SHEET:
SD.1

HOLDOWN PER PLAN W/ CORRESPONDING HOLDOWN POST PER SCHEDULE

18" MAX. T.O. HOLDOWN BEARING PLATE

P.T. MUDSILL PER SM SCHED.

T.O. FOOTING

FOOTING DEPTH AT HOLDOWN PER SCHEDULE

1-1/2" MAX. OFFSET

CENTERLINE OF BRACKET A.B. HOLE

ALL-THREAD EXTENSION (MATCHING A.B. DIA. BELOW) W/ "CWN" COUPLER AS REQ'D. SLOPE A.B. 5 DEGREES MAX.

ANCHOR BOLT PER PLAN AND HOLDOWN SCHEDULE. ANCHOR BOLT NUT SHOULD BE FINGER-TIGHT PLUS 1/3 TO 1/2 TURN WITH HAND WRENCH. DO NOT OVER-TIGHTEN NUT. IMPACT WRENCHES SHALL NOT BE USED.

SM SHEATHING PER PLAN AND SCHED. (SHOWN HATCHED)

SM FIELD N.G. PER TYPE LISTED IN SM SCHED.

SM EN TO HOLDOWN POST PER TYPE LISTED IN SM SCHED.

HOLDOWN PER PLAN W/ CORRESPONDING HOLDOWN POST PER SCHEDULE

SM EN TO MUDSILL PER TYPE LISTED IN SM SCHED.

LOCATE A.B. 6" FROM END OF SHEARWALL. TYP.

TYP. A.B. W/ PLATE WASHER PER DETAIL 5/SD.1

CONCRETE FTG, TYP.

SPACE ADDTL A.B. AS REQUIRED PER SM SCHED.

SIMPSON HARDWARE	SIMPSON ANCHOR	ANCHOR BOLT DIAMETER [B]	EMBEDMENT LENGTH / DEPTH (le) / (de)	STEMWALL WIDTH (MIN)	SQUARE FOOTING LENGTH x WIDTH (2F x 2F)	POST SIZE	CONNECTION TO POST	LOAD CAPACITY
HDU2	SBTB20	5/8"	17"	6"	-	4x4 4x6	(6) SDS25212	2,960 Kips
HDU4	SB5/8x24	5/8"	18"	8"	-	4x4 4x6	(10) SDS25212	4,565 Kips
HDU5	SB5/8x24	5/8"	18"	8"	-	4x4 4x6	(14) SDS25212	5,645 Kips
HDU6	SB1/8x24	7/8"	18"	8"	-	4x6 6x6	(20) SDS25212	7,850 Kips
HDU11	PAB8	1"	10-1/2"	8"	32"x32"	4x8 6x6	(30) SDS25212	11,175 Kips
HD12 [1]	PAB4	1-1/8"	12"	8"	36"x36"	4x8 6x6	(4) 1" DIA M.B.	15,435 Kips
HD19 [1]	PAB10	1-1/4"	14"	8"	42"x42"	4x8 [2] 6x6 [2]	(5) 1" DIA M.B.	19,070 Kips

FOOTNOTES WHERE REFERENCED ABOVE:
1. FOR BOLTED CONNECTIONS (HD12 & HD19) INSTALL MACHINE BOLTS (A307 GRADE) TO POST WITH NUT ON OPPOSITE SIDE OF HOLDOWN. LAG OR CARRIAGE BOLTS ARE NOT PERMITTED. STANDARD CUT WASHERS ARE REQUIRED BETWEEN WOOD POST AND STUD BOLTS AND UNDER ANCHOR NUT.
2. POST SHALL BE NO. 1 GRADE OR BETTER.
3. RE-TIGHTEN ALL ANCHOR BOLTS BEFORE THEY ARE CONCEALED.

13/4" MIN.

CONCRETE STEMWALL

3" CLR.

TYP. FTG. WIDTH

SSTB ASSEMBLY (EDGE & CENTER COND.)

13/4" MIN.

CONCRETE STEMWALL

3" CLR.

TYP. FTG. WIDTH

SB ASSEMBLY (EDGE & CENTER COND.)

CENTERED CONDITION SHOWN DASHED

13/4" MIN.

CONCRETE STEMWALL

3" CLR.

TYP. FTG. WIDTH

PAB ASSEMBLY (EDGE & CENTER COND.)

1" CLR.

2" F.W.

FOOTING WIDTH

1" CLR.

TYP. FTG. BEYOND

3 HOLDOWN RAISED OFF MUDSILL

2 HOLDOWN HARDWARE INSTALL

1 HOLDOWN ANCHOR SCHEDULE - RAISED FLOOR

SM SHEATHING PER PLAN AND SCHED.

SM EN, SHTG TO POST PER SHEARWALL TYPE AND SCHEDULE

2x STUDS AT 16" OC, TYP.

P.T. MUDSILL

HOLDOWN POST PER SCHEDULE

SM SHEATHING PER PLAN AND SCHED.

2x STUDS AT 16" OC, TYP.

P.T. MUDSILL

PLAN VIEW

"Z" BAR SCHEDULE

D	"Z" BAR REINF.
≤ 15"	(2) #4
15" TO < 21"	(2) #5
≥ 21"	(2) #5

12" MIN. TYP.

TYP. FOOTING REINFORCING

"Z" BARS PER SCHED. ABOVE

24 x BAR DIA. TYP.

2x H (MIN.)

HOLDOWN POST PER SCHEDULE

HOLDOWN PER PLAN

FOR INFORMATION NOT NOTED, SEE DETAIL 1/SD.3

JOIST PER PLAN (PARALLEL COND. SIM. SHOWN DASHED)

SQUASH BLOCK TO MATCH HOLDOWN POST ABOVE

CRIPPLE POST TO MATCH HOLDOWN POST ABOVE

#4 x 4'-0" BAR CENTERED AT A.B. (OR TYP. #4 UPPER STEM REINF.)

CONCRETE FOOTING BELOW

13/4" (MIN)

FINISH GRADE

ANCHOR BOLT PER PLAN (SEE HOLDOWN SCHED)

HOLDOWN AT CRIPPLE WALL CONDITION

HOLDOWN POST PER SCHEDULE

HOLDOWN PER PLAN

FOR INFORMATION NOT NOTED, SEE DETAIL 1/SD.3

JOIST PER PLAN (PARALLEL COND. SIM. SHOWN DASHED)

SQUASH BLOCK TO MATCH HOLDOWN POST ABOVE

#4 x 4'-0" BAR CENTERED AT A.B. (OR TYP. #4 UPPER STEM REINF.)

INTERIOR GRADE

ALL-THREAD EXTENSION (MATCHING A.B. DIA. BELOW) W/ "CWN" COUPLER AS REQ'D.

ANCHOR BOLT PER PLAN (SEE HOLDOWN SCHED)

DEEPEN / WIDEN FTG AS REQ'D FOR HD EMBED. PER SCHEDULE & ASSEMBLY

CONCRETE FOOTING BELOW

HOLDOWN AT INTERIOR CONDITION

HOLDOWN POST PER SCHEDULE

HOLDOWN PER PLAN

FOR INFORMATION NOT NOTED, SEE DETAIL 1/SD.3

JOIST PER PLAN (PARALLEL COND. SIM. SHOWN DASHED)

SQUASH BLOCK TO MATCH HOLDOWN POST ABOVE

#4 x 4'-0" BAR CENTERED AT A.B. (OR TYP. #4 UPPER STEM REINF.)

INTERIOR GRADE

ALL-THREAD EXTENSION (MATCHING A.B. DIA. BELOW) W/ "CWN" COUPLER AS REQ'D.

ANCHOR BOLT PER PLAN (SEE HOLDOWN SCHED)

DEEPEN / WIDEN FTG AS REQ'D FOR HD EMBED. PER SCHEDULE & ASSEMBLY

CONCRETE FOOTING BELOW

HOLDOWN AT EXTERIOR CONDITION

6 SHARED HOLDOWN AT CORNER

5 STEPPED FOOTING

4 TYP. HOLDOWNS AT FOOTING CONDITIONS

INITIAL SUBMITTAL / PERMIT SET

DRW. BY: R.G.T. ISSUE DATE: 02-18-25

REV. BY: R.M.T. SCALE: 1" = 1'-0"

DES. BY: R.M.T. PROJECT: R.M.T. FILE:

NO.	REVISIONS	DATE	BY

PROJECT:

FRANCO RESIDENCE

769 East Willow Ave

Monteca, CA

SEAL:

REGISTERED PROFESSIONAL ENGINEER

RON M. TEAL

C-91421

EXP. 06/30/2026

TEAL

State of California

TEAL ENGINEERING, INC.

1425 J. 212-0718 • 916-611-1111

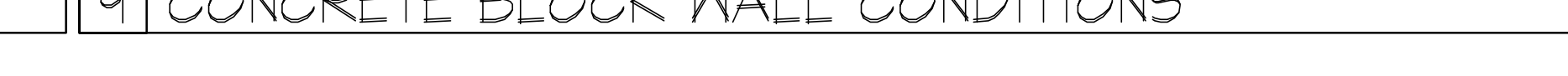
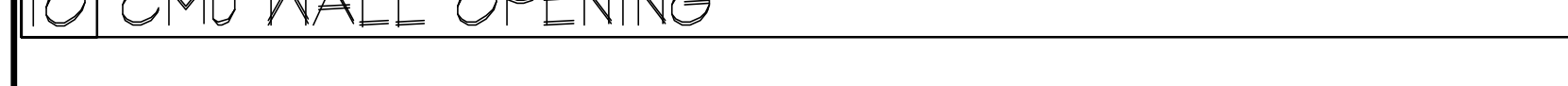
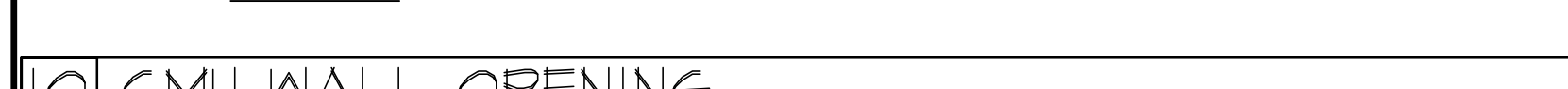
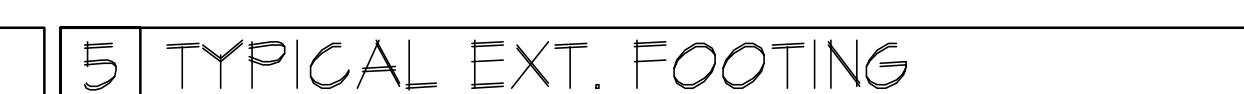
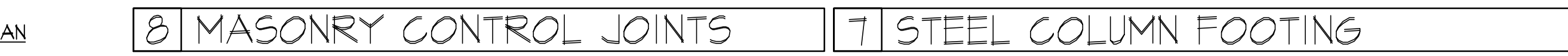
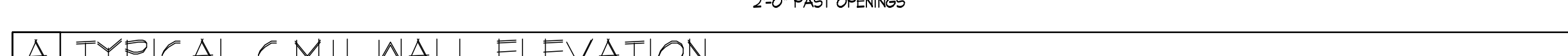
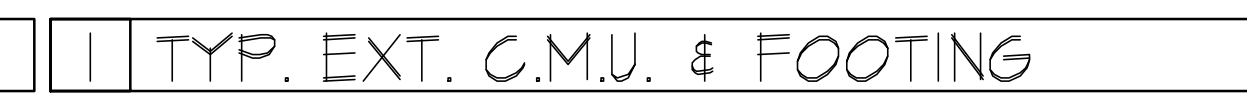
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SHEET TITLE:

HOLDOWN DETAILS

SHEET:

SD.2



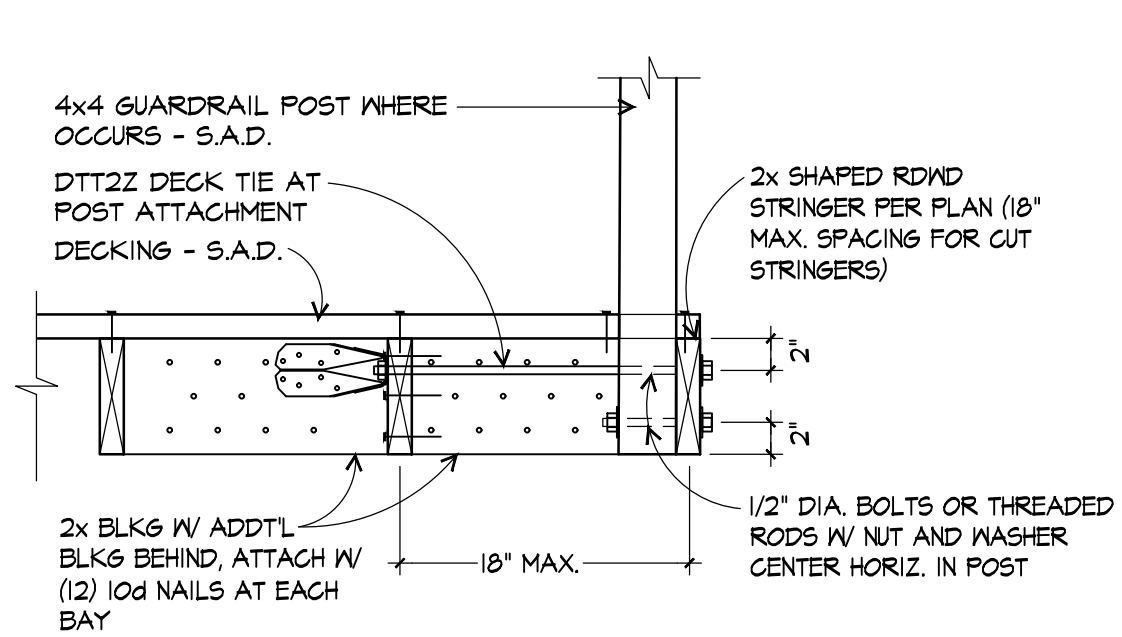
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FRANCO RESIDENCE

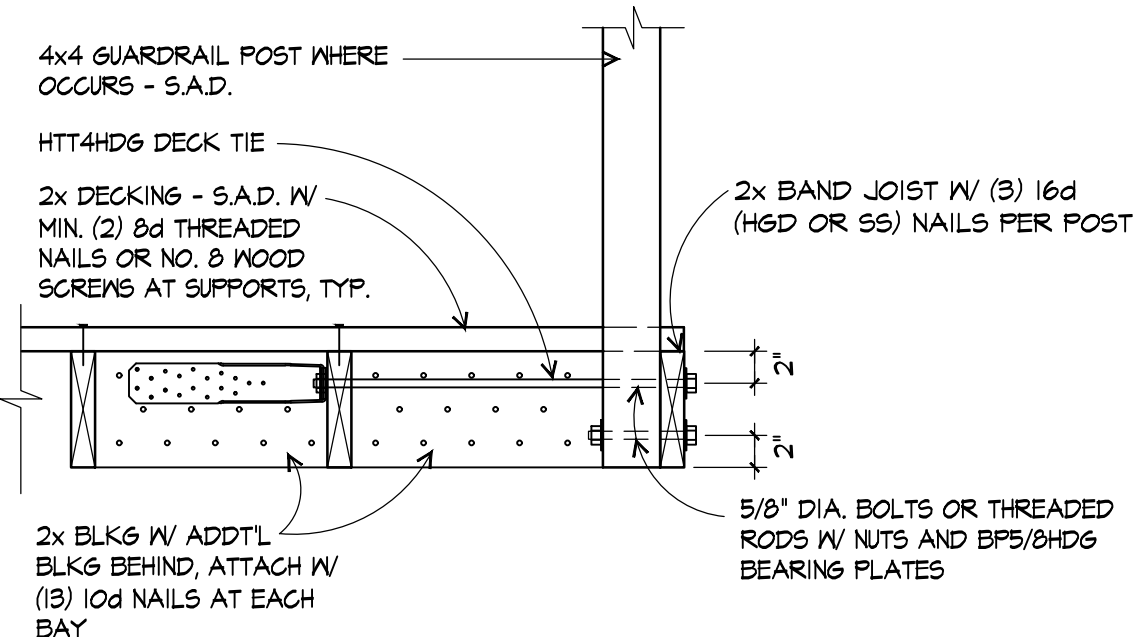
769 East Willow Ave
Menifee, CA

INITIAL SUBMITTAL / PERMIT SET	R.G.T.	ISSUE DATE:	02-18-25
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	S.S. BY:	R.M.T. FILE:	
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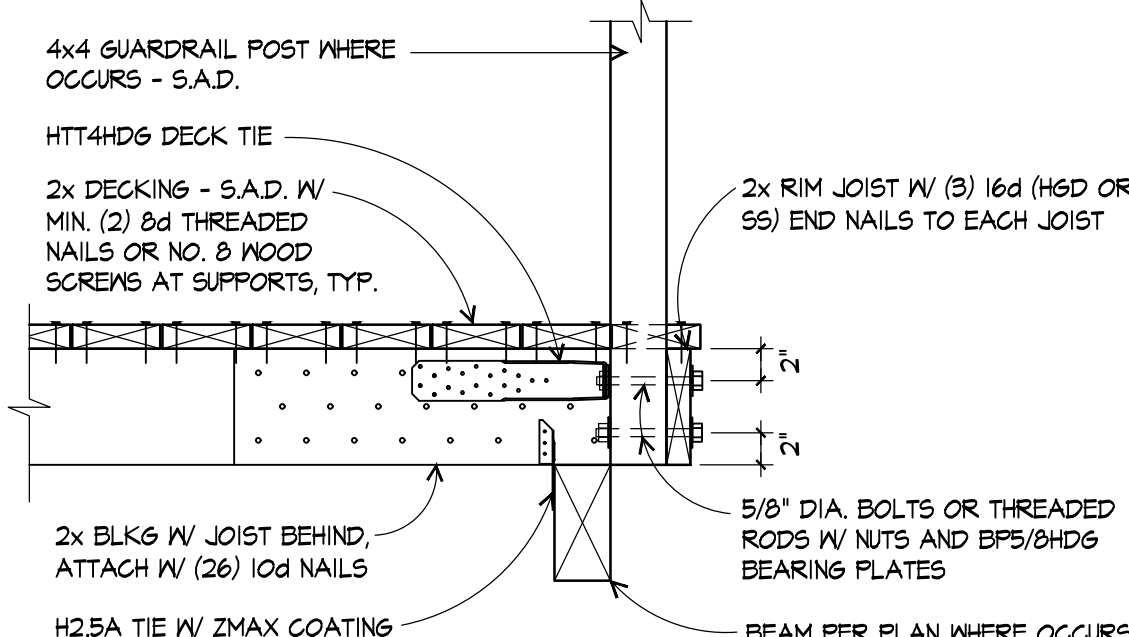
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FOUNDATION DETAILS				
SHEET:				
SD.3				



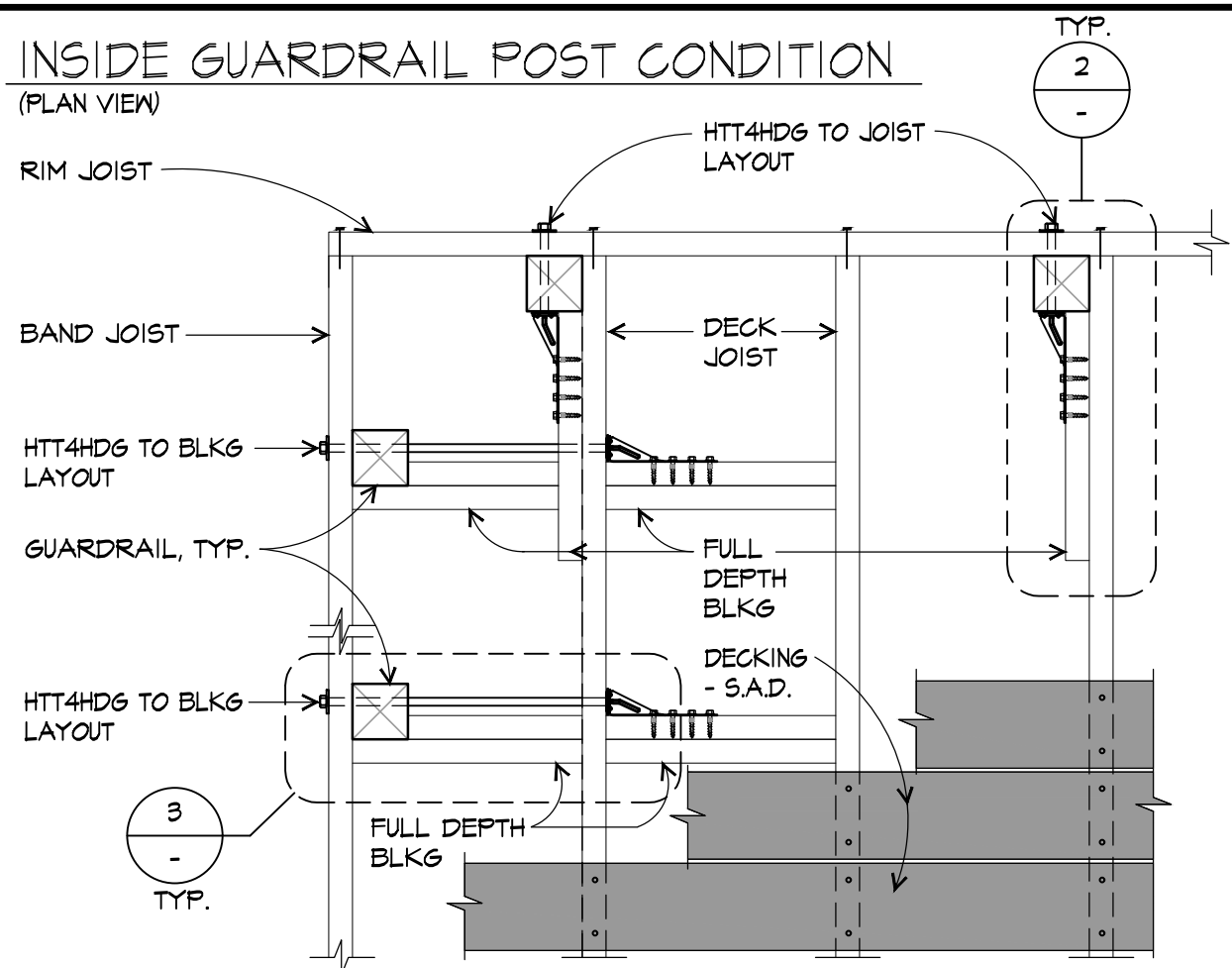
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ALL EXPOSED LUMBER SHALL BE PRESSURE TREATED OR NATURAL DECAY RESISTANT MATERIAL (REDWOOD). ALL EXPOSED FASTENERS OR THOSE IN CONTACT W/ P.T. MATERIAL SHALL BE H.D.G. OR STAINLESS STEEL (S.S.)



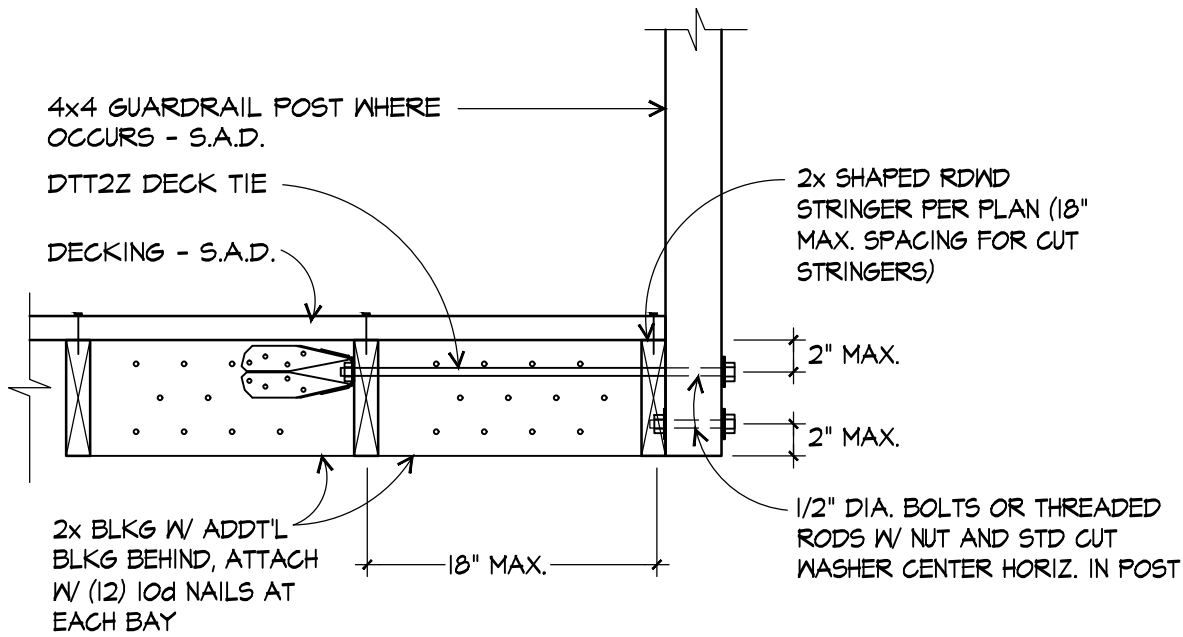
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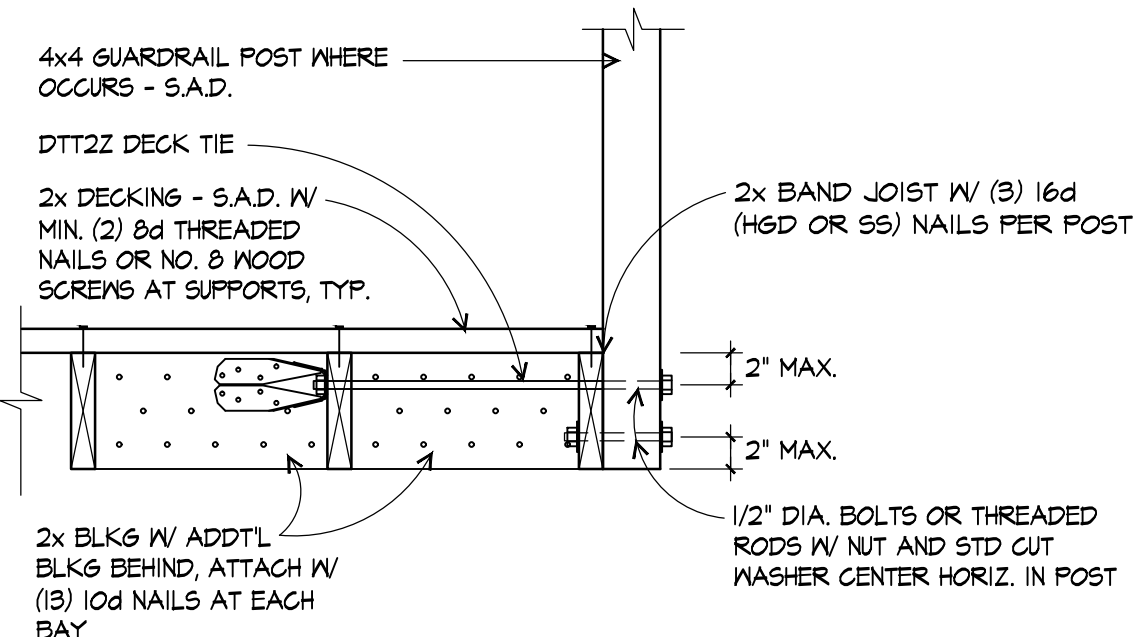
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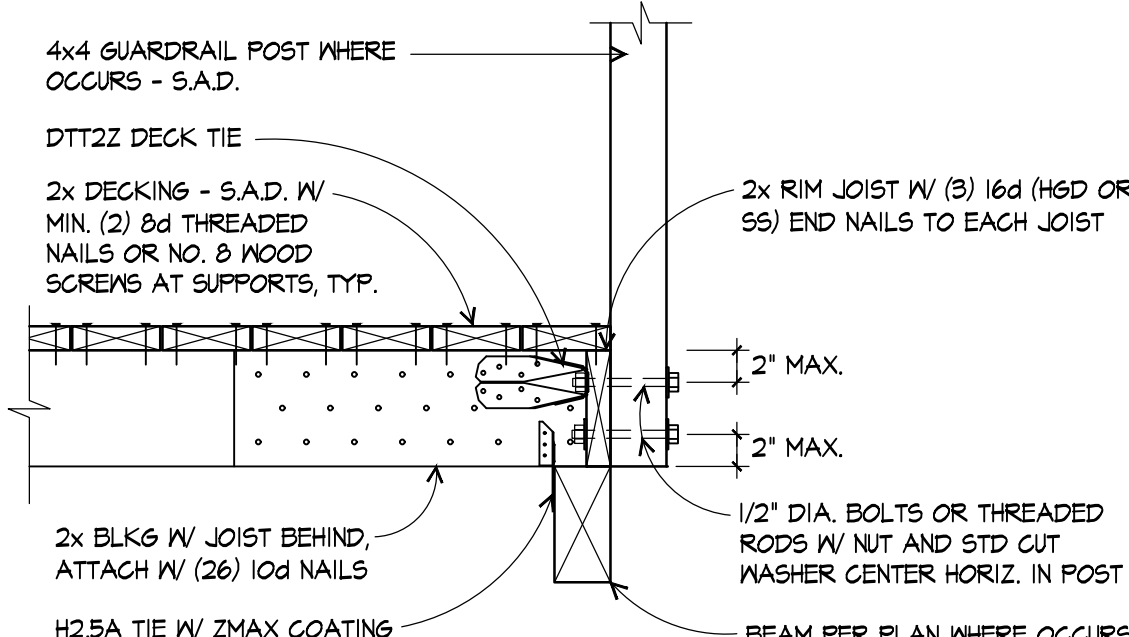
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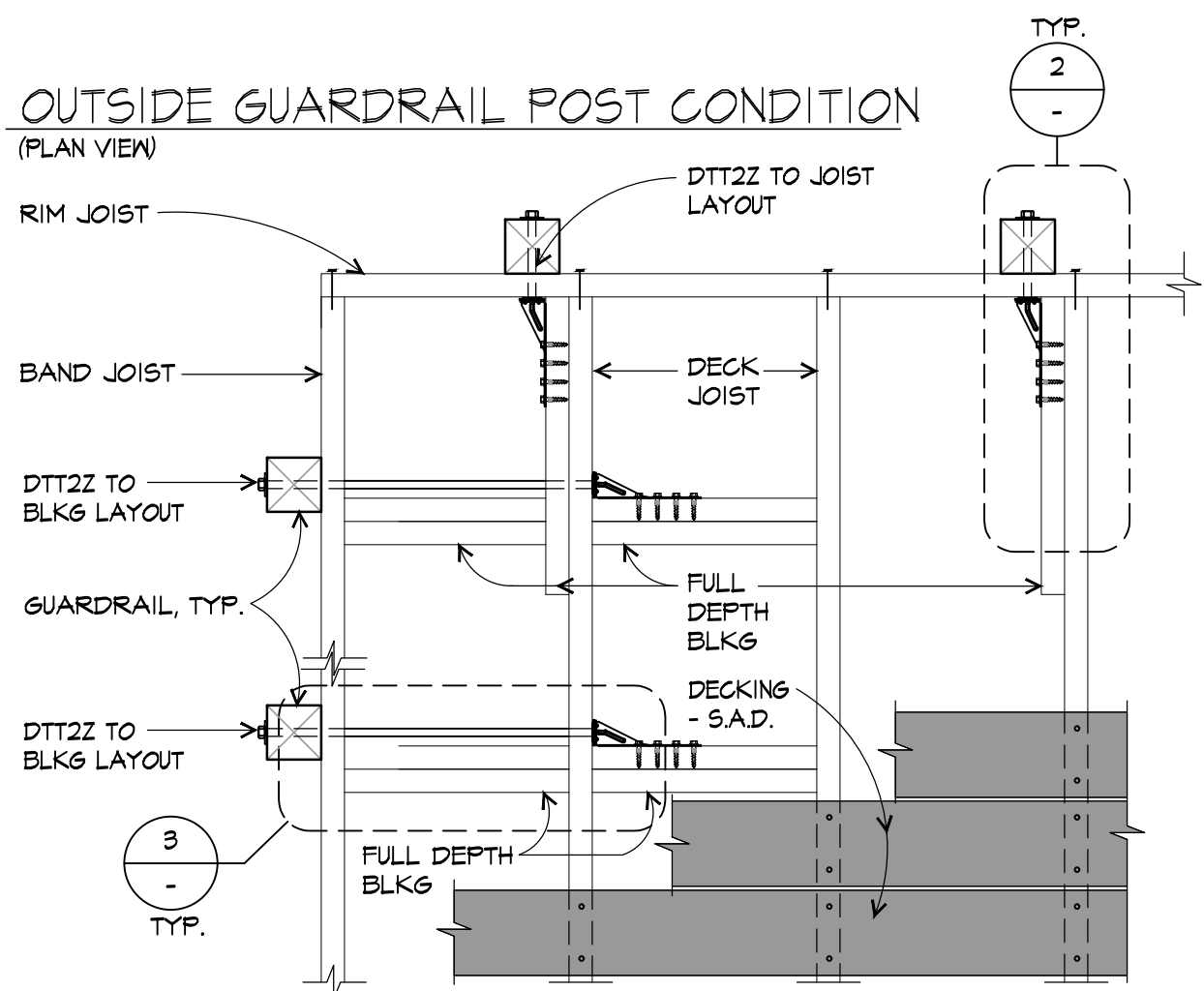
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GUARDRAIL POST TO BLOCKING
ALL EXPOSED LUMBER SHALL BE PRESSURE TREATED OR NATURAL DECAY RESISTANT MATERIAL (REDWOOD). ALL EXPOSED FASTENERS OR THOSE IN CONTACT W/ P.T. MATERIAL SHALL BE H.D.G. OR STAINLESS STEEL (S.S.)



GUARDRAIL POST TO JOIST
ALL EXPOSED LUMBER SHALL BE PRESSURE TREATED OR NATURAL DECAY RESISTANT MATERIAL (REDWOOD). ALL EXPOSED FASTENERS OR THOSE IN CONTACT W/ P.T. MATERIAL SHALL BE H.D.G. OR STAINLESS STEEL (S.S.)



1 | GUARDRAIL ATTACHMENT

4 | ATTACHMENT DETAIL

3 | ATTACHMENT DETAIL

2 | ATTACHMENT DETAIL

1 | GUARDRAIL ATTACHMENT

4 | ATTACHMENT DETAIL

3 | ATTACHMENT DETAIL

2 | ATTACHMENT DETAIL

1 | GUARDRAIL ATTACHMENT

NO.	REVISIONS	DATE	BY
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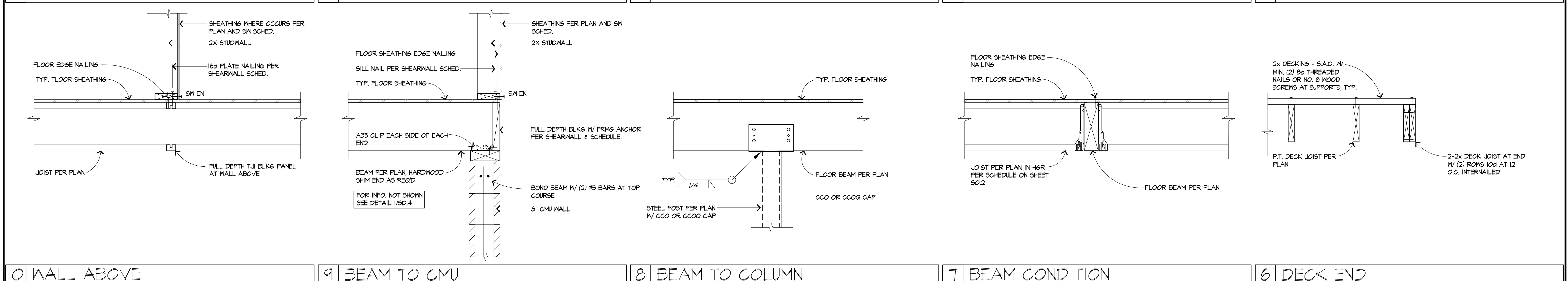
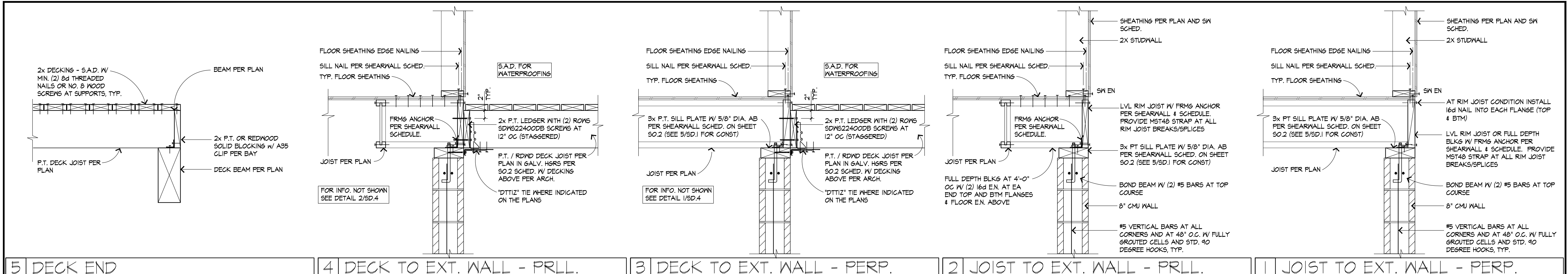
PROJECT:
FRANCO RESIDENCE
769 East Willow Ave
Montecito, CA



INITIAL SUBMITTAL / PERMIT SET	DATE	SCALE	PROJECT	FILE
DRN BY:	02-18-25	1" = 1'-0"		
REV BY:				
DES BY:				
REV BY:				

SHEET TITLE:
FRAMING DETAILS

SHEET:
SD.3A

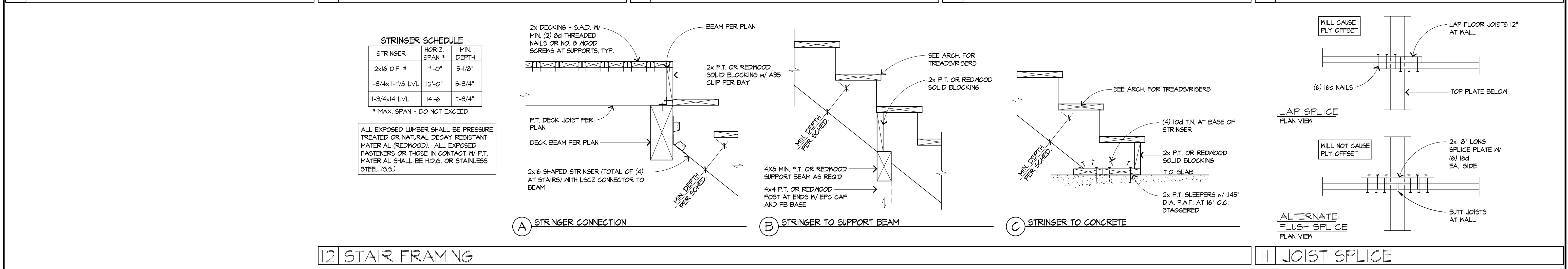


STRINGER SCHEDULE

STRINGER	HORIZ. SPAN *	MIN. DEPTH
2x16 D.F. #1	7'-0"	5-1/8"
1-3/4x11-T/B LVL	12'-0"	5-3/4"
1-3/4x14 LVL	14'-6"	7-3/4"

* MAX. SPAN - DO NOT EXCEED

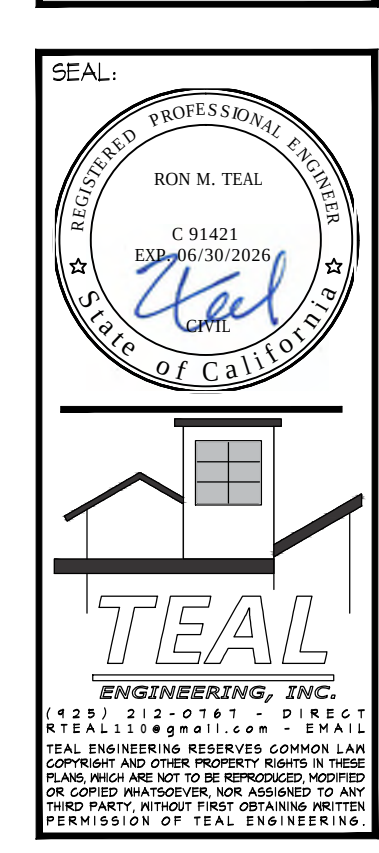
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NO.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			

PROJECT:

FRANCO RESIDENCE
769 East Willow Ave
Montecito, CA



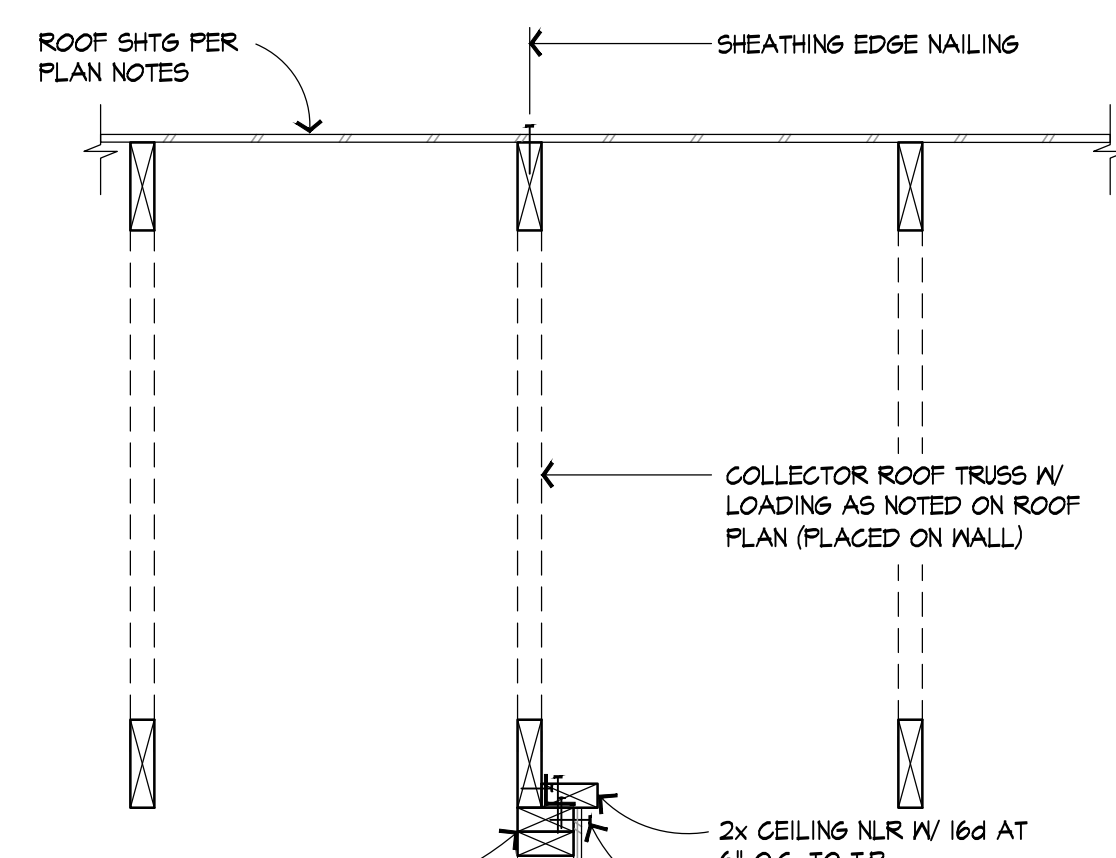
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DRW. BY:	R.G.T.
REV. BY:	02-18-25
DES. BY:	SCALE: 1" = 1'-0"
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REV. BY:	R.M.T. FILE:

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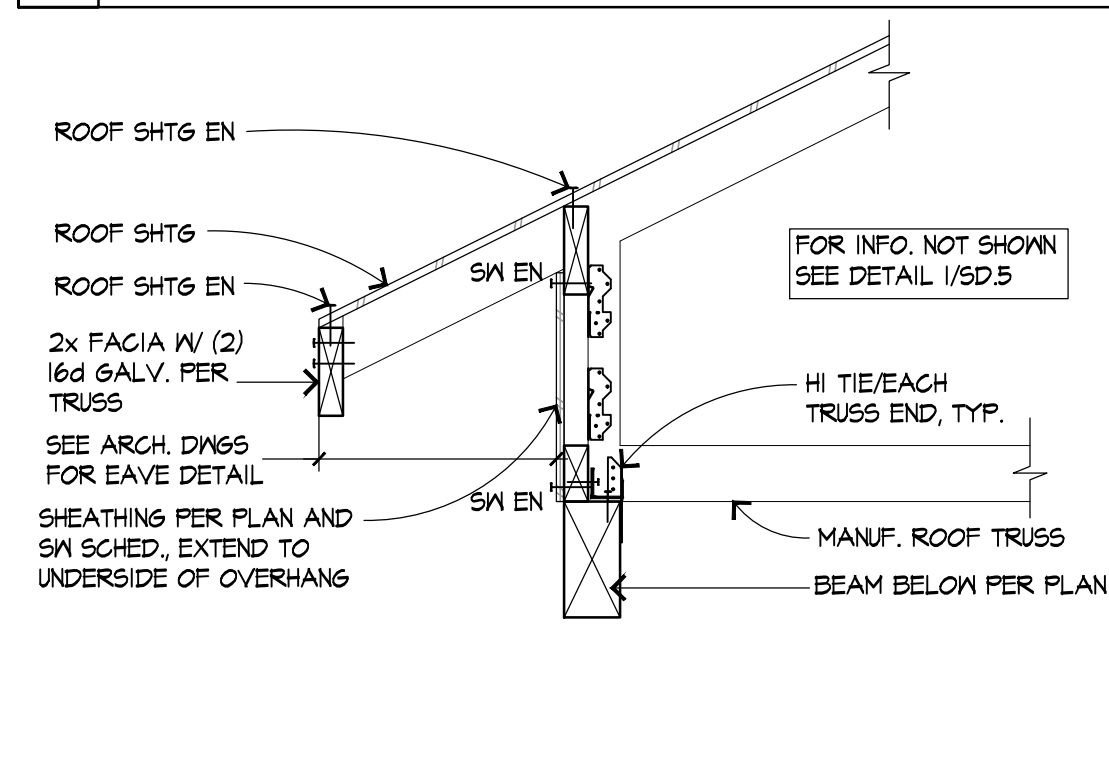
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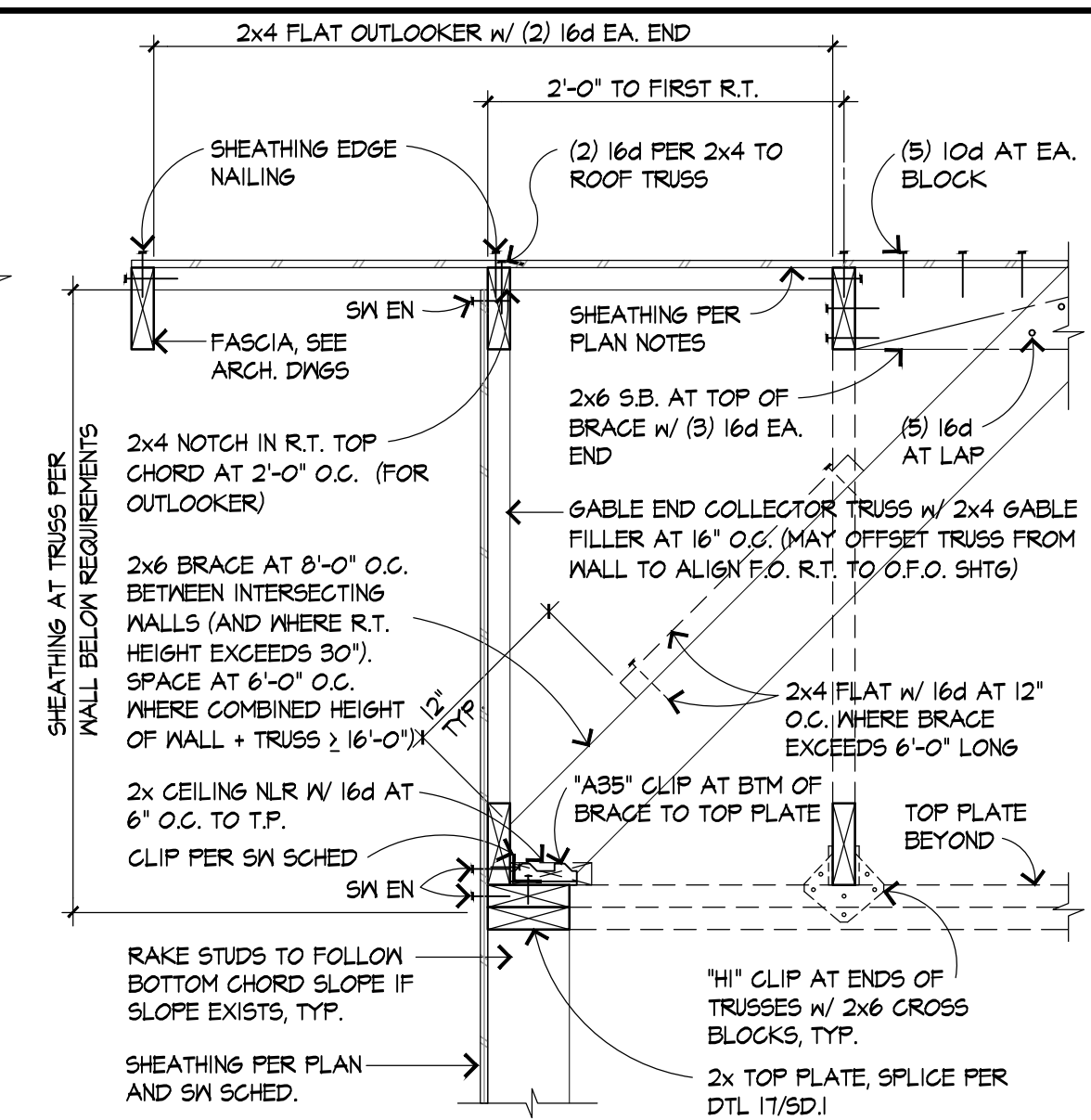
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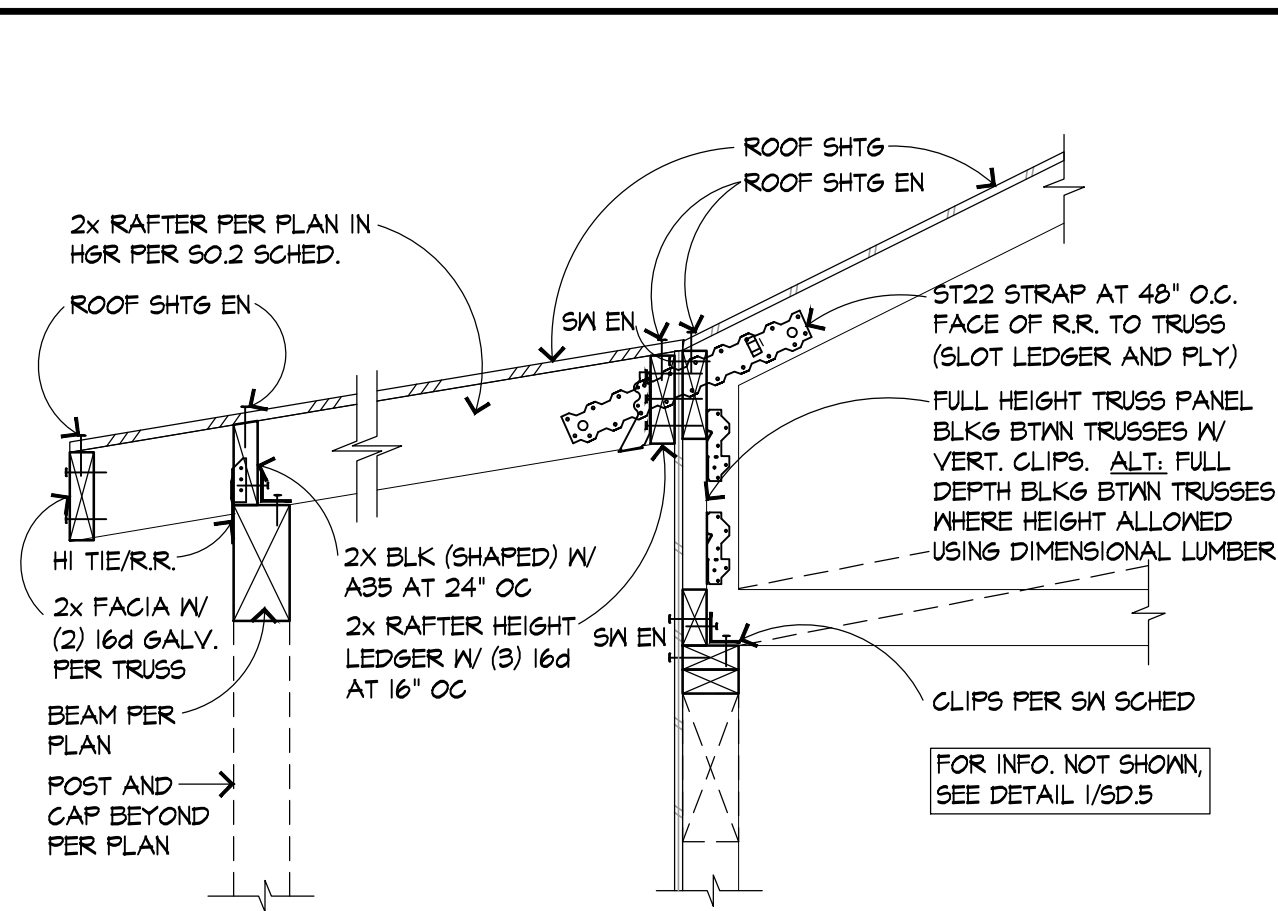
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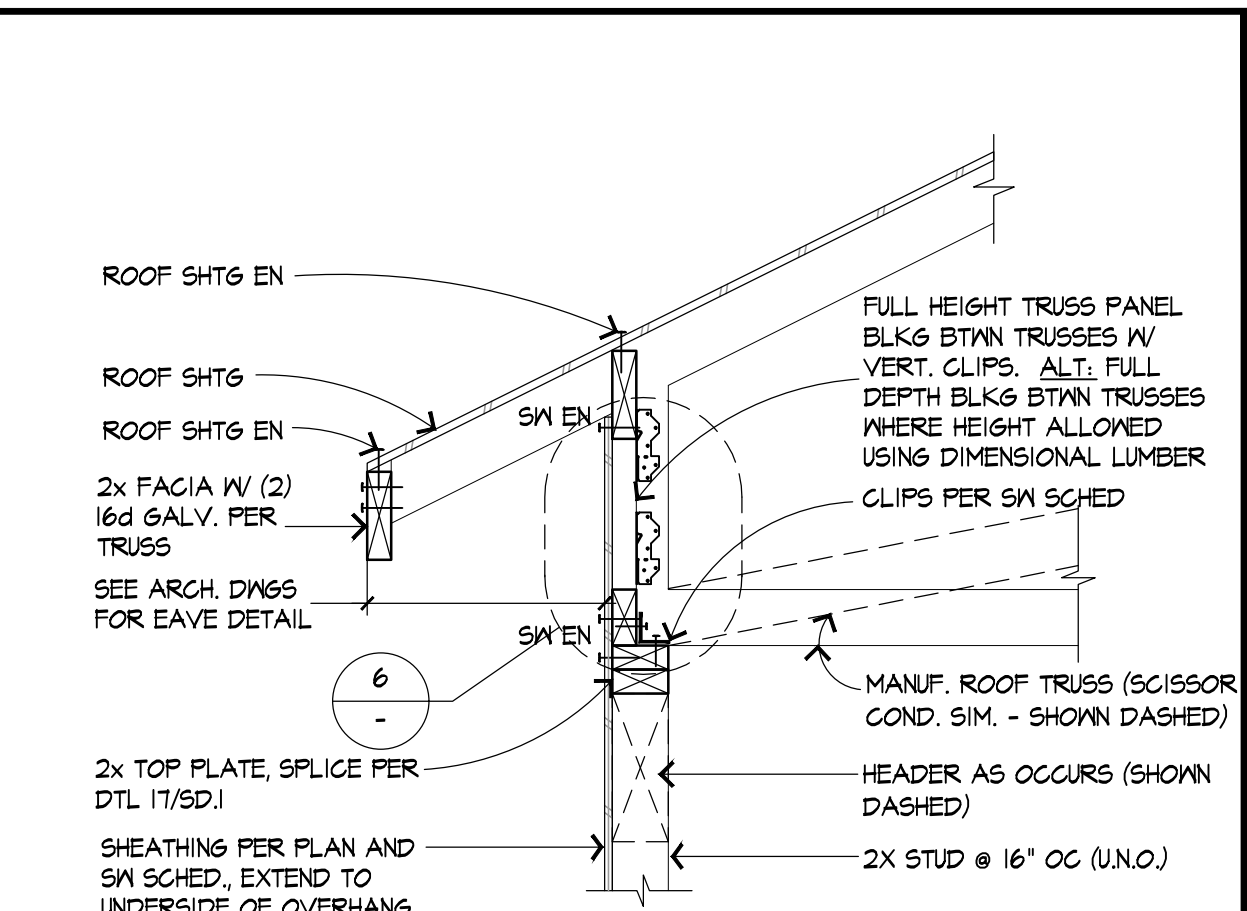
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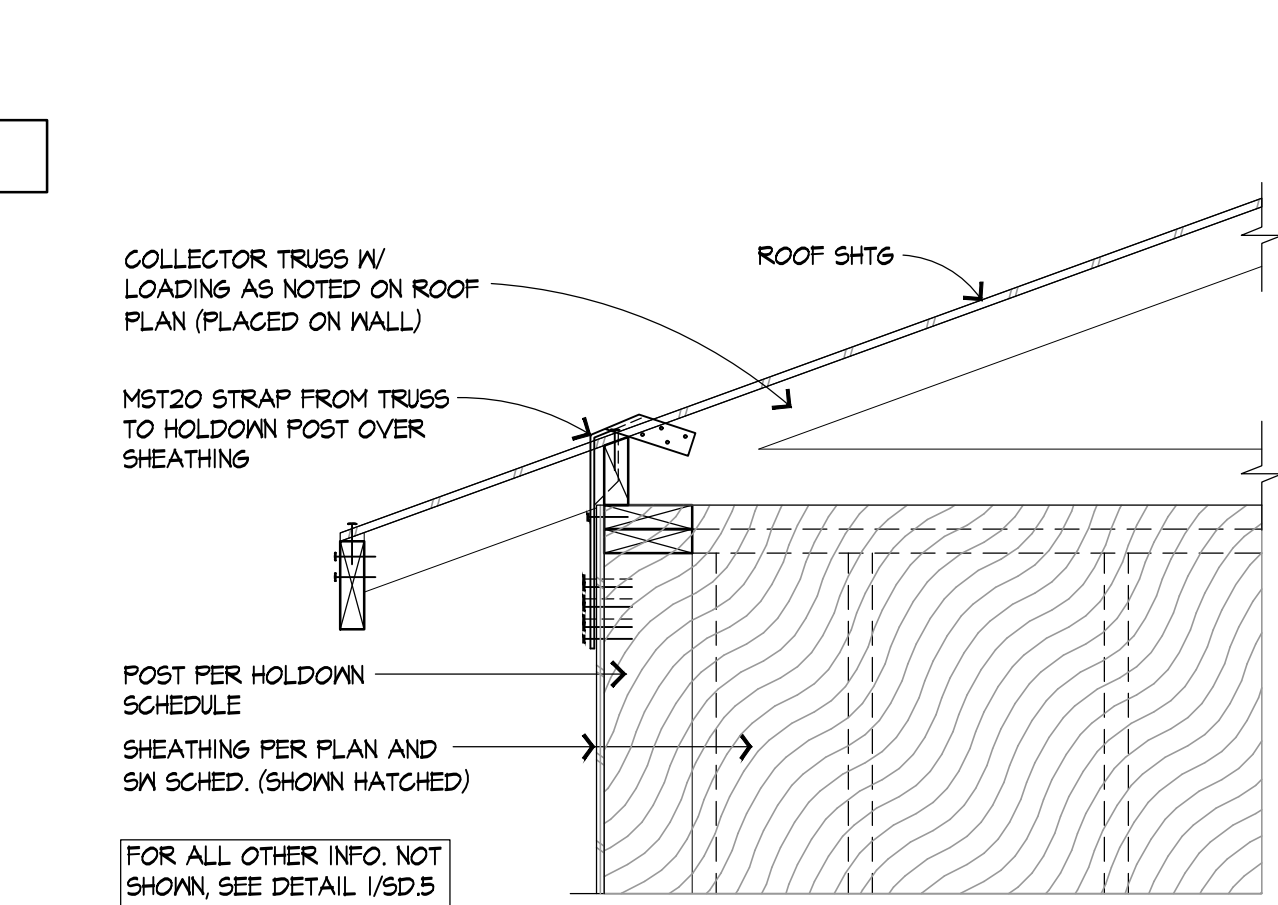
3	TRUSS TO EXT. WALL - PRL.
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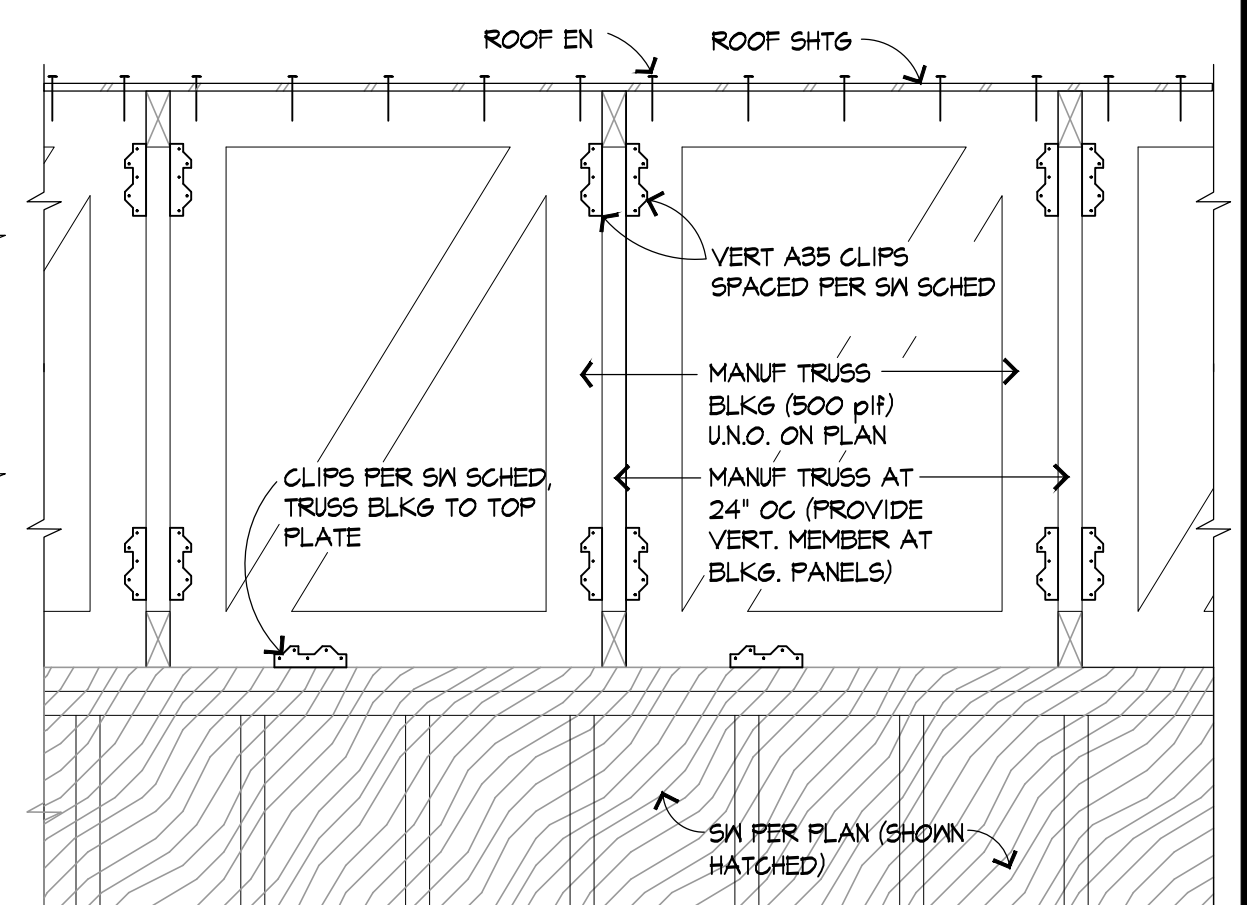
2	HEELED TRUSS TO EXT. WALL
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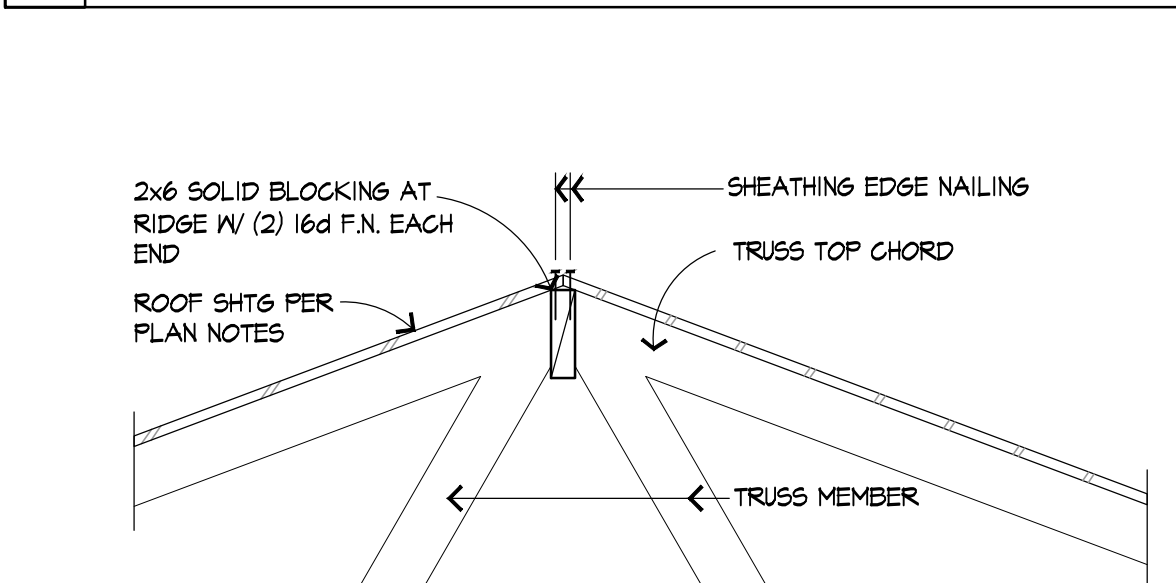
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7	COLLECTOR ANCHORAGE
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6	TRUSS BLKG. PANELS
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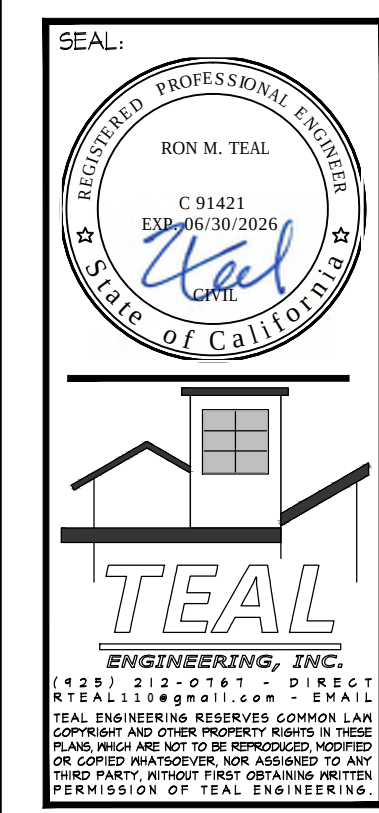
8 RIDGE CONDITION

[illegible]

PROJECT:

FRANCO RESIDENCE

769 East Willow Ave
Nanteco, CA



DRN BY:	R.G.T.	ISSUE DATE:	02-18-25
REV BY:		SCALE:	"1" = 1'-0"
DES BY:		R.M.T. PROJECT:	
REV BY:		R.M.T. FILE:	

SHEET TITLE:

ROOF FRAMING
DETAILS

SHEET:
SD.5