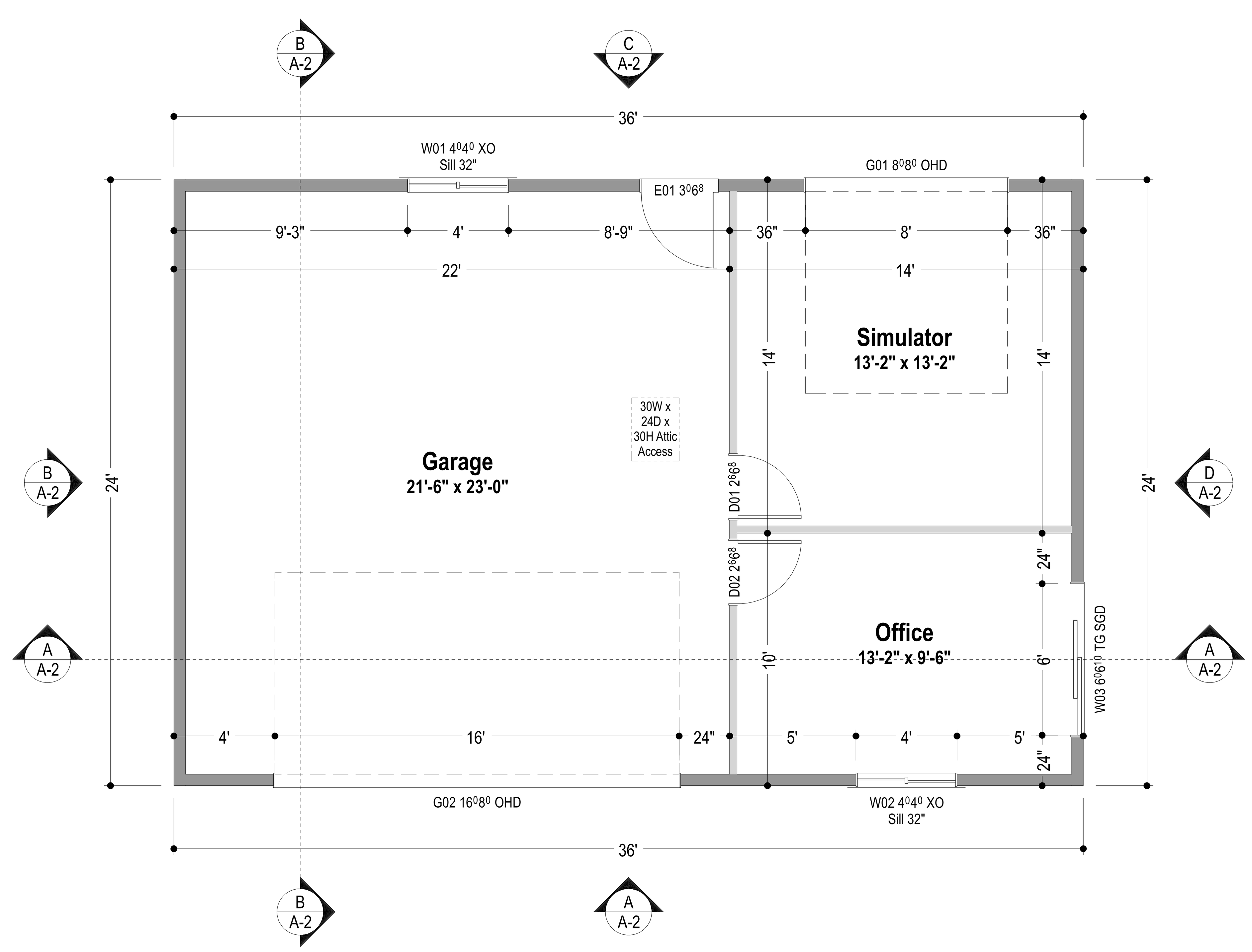
Foundation Plan - EHD-1008641-G
Scale: 1/4 in = 1 ft



1st Floor Plan - EHD-1008641-G
Scale: 1/4 in = 1 ft

2021 WA State Energy Code Information - Table R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

All Climate Zones	U-Factor (A)
Fenestration U-Factor (B)	0.30
Skylight U-Factor	0.50
Ceiling U-Factor	0.024
Above Grade Wall U-Factor (See Note Below)	0.056
Floor U-Factor	0.029
Slab on Grade F-Factor	0.54
Below Grade (2' Depth)	
Wall U-Factor	0.042
Slab F-Factor	0.59
Below Grade (3.5' Depth)	
Wall U-Factor	0.040
Slab F-Factor	0.56
Below Grade (7' Depth)	
Wall U-Factor	0.035
Slab F-Factor	0.50

For SI: 1 foot = 304.8 mm, ci = continuous insulation, int = intermediate framing.

A) U-factors or F-factors shall be obtained from measurement, calculation or an approved source, or as specified in Section R402.1.5.

B) A maximum U-factor of 0.32 shall apply to vertical fenestration products installed in buildings located above 4000 feet in elevation above sea level, or in wind-borne debris regions where protection of openings is required under Section R301.2.1.2 of the International Residential Code.

*Above Grade Walls - R402 Building thermal envelope shall meet the requirements of this chapter. This section allows the ability to exclude ext continuous insulation through a prescriptive design.
- Footnote (a.) for Table R402.1.2 states that U-factors or F-factors shall be obtained from **measurement**, **calculations**, or an **approved source**, or as specified in **Section R402.1.5.**
- R402.1.5 states if the proposed building thermal envelope UA is less than or equal to the target UA, the building shall be considered in compliance with Table R402.1.2.
- R402.1.5 directs you to R402.1.6. R406.1.6 directs you to **Appendix A** of the Commercial energy code.
- Appendix A of the Commercial energy code Table A103.3.1(5) identifies a 2x6 single wood stud wall with an R-21 batt, constructed with either an "intermediate or advanced" framing both having a UA rating less then .056 which is compliant with table R402.1.2.
- **A103.2.2 Intermediate.** Studs framed on 16" centers with double top plate and single bottom plate. Corners use two studs or other means of fully insulating corners, and each opening is framed by two studs. Headers shall be insulated with R-10 insulation. Interior partition wall/exterior wall intersections are fully insulated in the exterior wall.

Fuel Normalization Credits for the 2021 WSEC

Option	Description	Credit (R2)

Energy Credits for the 2021 WSEC

Option	Description	Credit (R2)

Project is adding less than 150 Sq Ft of Conditioned Space.

No Additional Credits Required.

Legal Description

Section 25 Township 21 Range 02 Quarter 33 BERNHARDY: BERNHARDY L 1 & 2 B 1213

Applicable Codes

2021 International Building Code (IBC)
2021 International Residential Code (IRC)
2021 IRC WAC Amendments
2021 Washington State Energy Code (WSEC)

Hebrews 3:4 (NIV) - For every house is built by someone, but God is the builder of everything.

Project Information

Design Criteria

Ground Snow Load:	25 LBS
Roof Snow/Live Load:	25 LBS
Floor Live Load:	40 LBS
Deck Live Load:	60 LBS
Wind Speed (ASD):	85 MPH
Wind Speed (ULT):	110 MPH
Exposure:	B
Seismic Design Cat:	D
Frost Depth:	1'-0"

Drafting Manager:

Jared Baehmer
Elevation Home Designs LLC
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Puyallup, WA 98373
866.657.4371

Engineer of Record:

Ercin Sahin, P.E.
Structural Works, PLLC
253.533.0835
es@structuralworks.net

Square Foot Totals

Total Conditioned Area	
Garage	532 ft²
Office	141 ft²
Simulator	192 ft²
Total Unconditioned Area	865 ft²
Total Structure Area	865 ft²

Sheet Index

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Alyssa Gildea
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Tacoma, WA 98407
Parcel # - 2465000640

*** Plans are designed for ARCH D (24" x 36") Size Paper Only UNO – Do Not Scale ***

Project Cover Sheet

Elevation Home Designs
Job # : 25-0068

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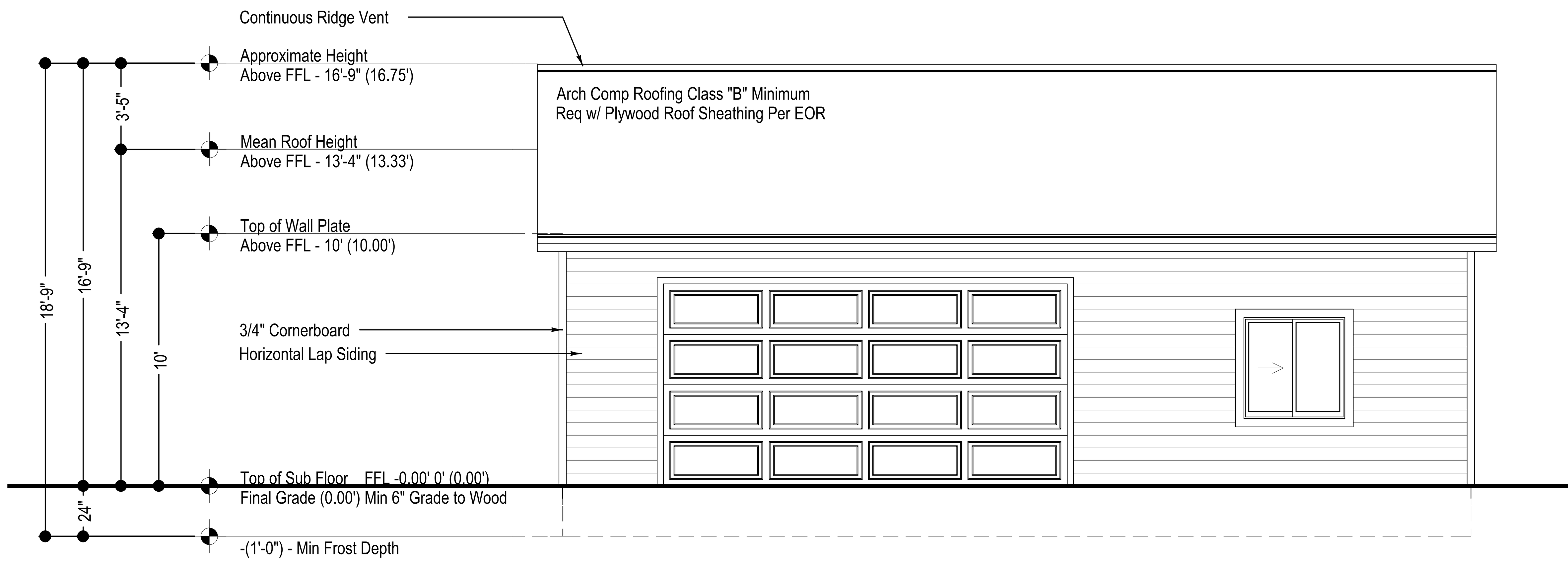
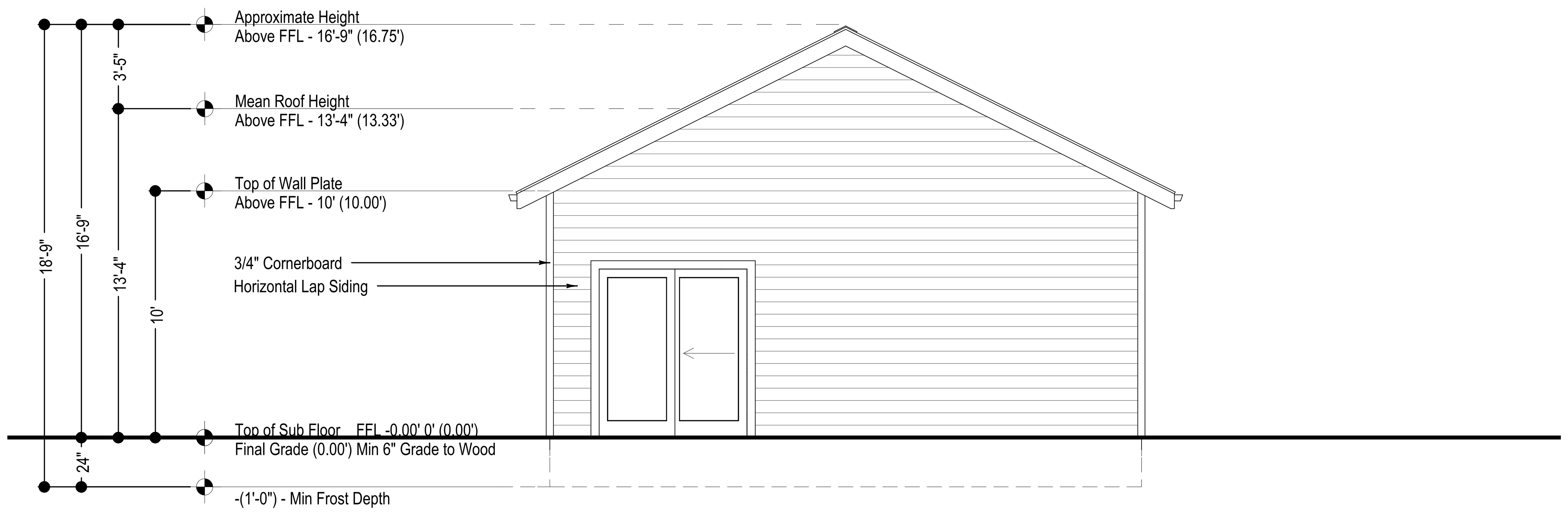
Address Must be Located on House Where it is Easily Seen from the Main Access Road.



Elevation A - EHD-1008641-G
Scale: 1/4 in = 1 ft



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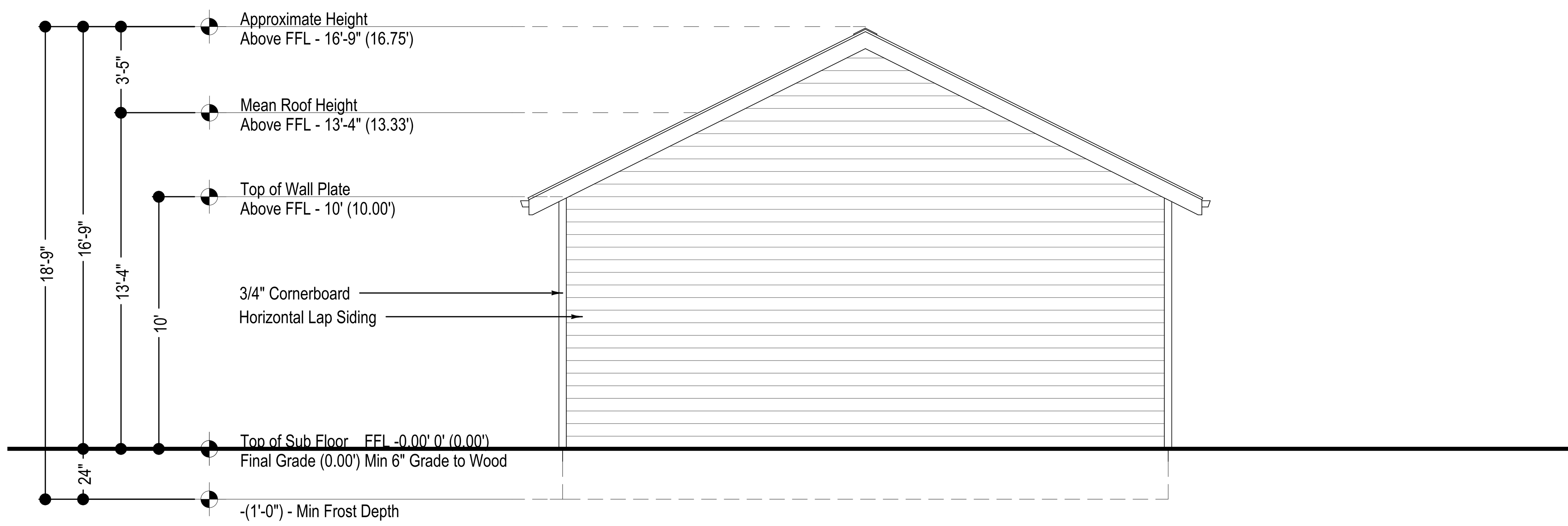

Elevation B - EHD-1008641-G
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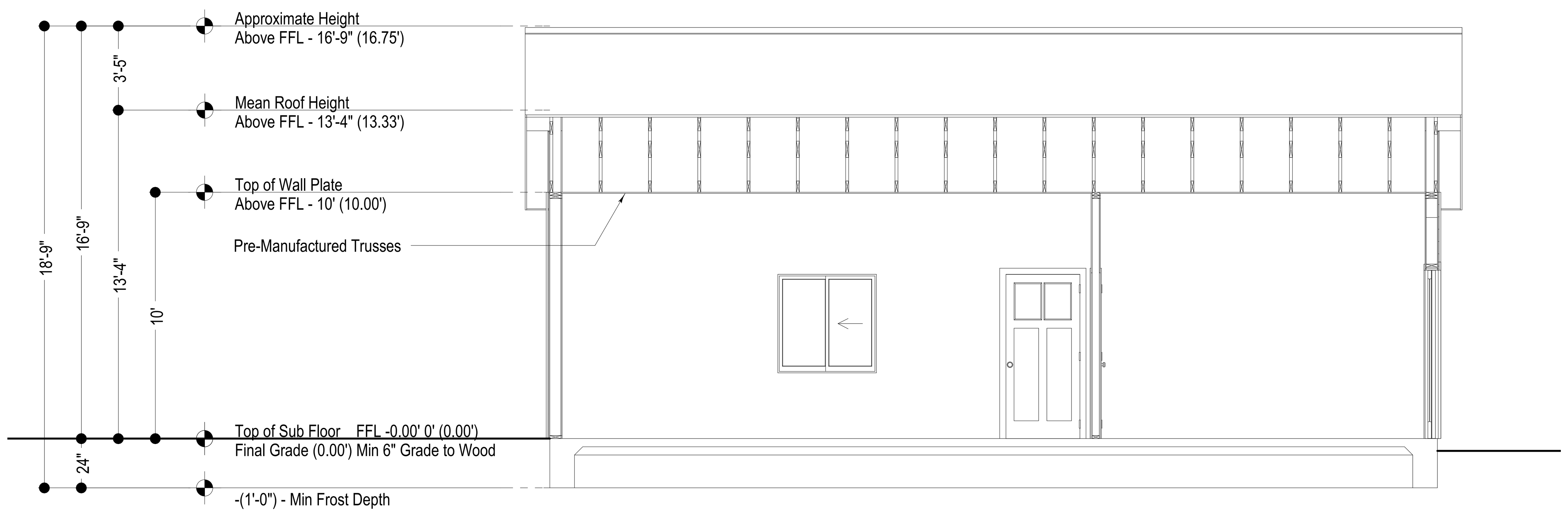
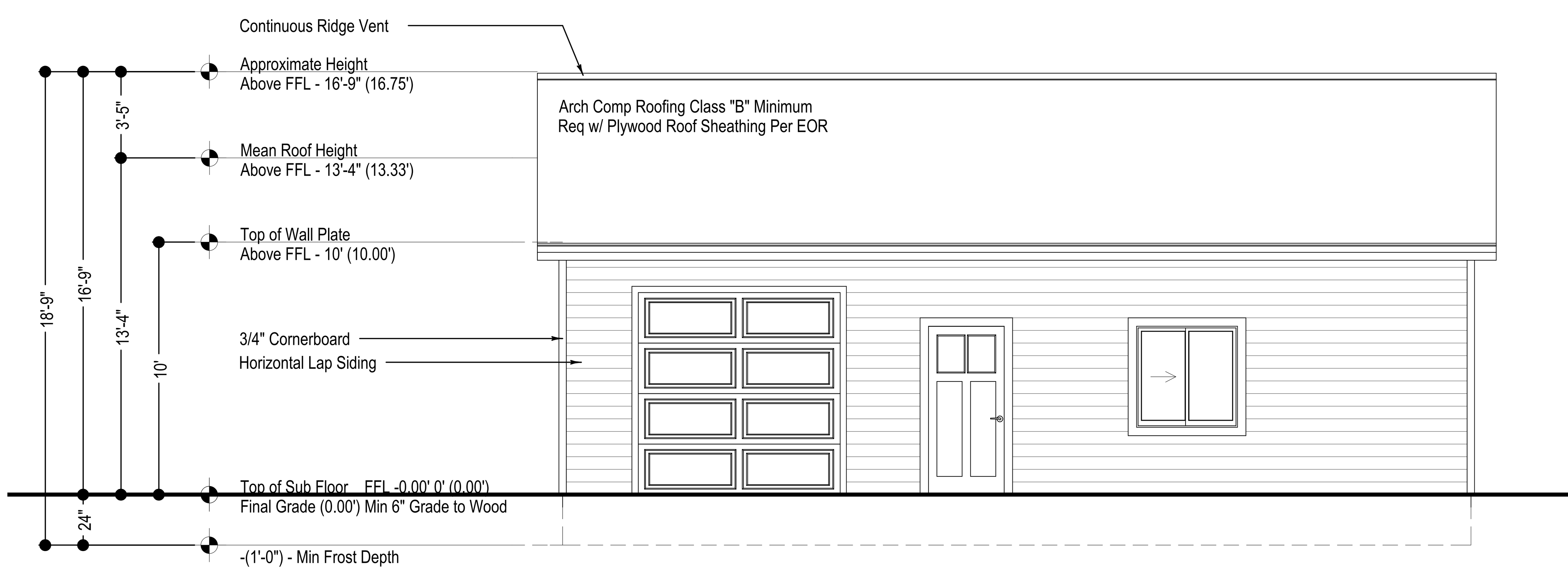
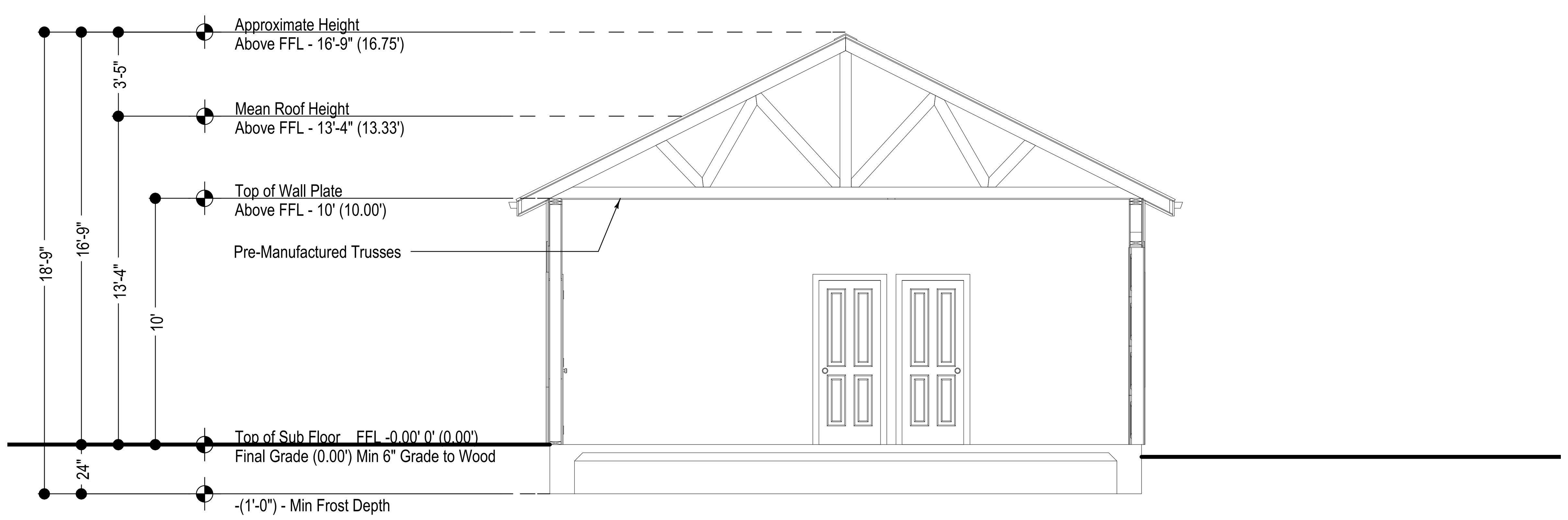


Cross Section A - EHD-1008641-G
Scale: 1/4 in = 1 ft



Elevation C - EHD-1008641-G
Scale: 1/4 in = 1 ft



Cross Section B - EHD-1008641-G
Scale: 1/4 in = 1 ft

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Elevations

Elevation Home Designs
Job # : 25-0068

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GENERAL NOTES

ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATIONS, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK. THE GENERAL CONTRACTOR SHALL VERIFY AND COORDINATE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION. THE STRUCTURE HAS BEEN DESIGNED TO RESIST CODE SPECIFIED VERTICAL AND LATERAL FORCES AFTER THE CONSTRUCTION OF ALL STRUCTURAL ELEMENTS HAS BEEN COMPLETED. STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO JOB SITE SAFETY; ERECTION MEANS, METHODS, AND SEQUENCES; TEMPORARY SHORING, FORMWORK, BRACING; USE OF EQUIPMENT AND CONSTRUCTION PROCEDURES. CONSTRUCTION OBSERVATION BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE WITH DESIGN ASPECTS ONLY AND IS NOT INTENDED IN ANY WAY TO REVIEW THE CONTRACTOR'S CONSTRUCTION PROCEDURES.

STANDARDS
ALL METHODS, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2021 INTERNATIONAL RESIDENTIAL CODE (IRC) AS AMENDED AND ADOPTED BY THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION.

APPLICABLE STRUCTURAL PROVISIONS:

- 2021 INTERNATIONAL BUILDING CODE (IBC)

DESIGN CRITERIA

VERTICAL LOADS

AREA	DESIGN DEAD LOAD	LIVE LOAD
ROOF	15 PSF	25 PSF (SNOW)
OTHER ROOMS FLOORS	15 PSF	40 PSF (2)
STAIRS	ACTUAL	100 PSF (OR 300# PER TREAD)
DECKS	ACTUAL	60 PSF

(1) LIVE LOAD REDUCTION NOT PERMITTED EXCEPT AS NOTED IN IBC SECTION 1607.10.
(2) 30 PSF FOR SLEEPING AREAS

SNOW: (MINIMUM ROOF SNOW LOAD = 25 PSF)

Pg = 25 PSF = GROUND SNOW LOAD
Pf = 0.7CeCt IsPg = FLAT ROOF SNOW LOAD
Ps = CsPf = 25 PSF = SLOPED ROOF SNOW LOAD
Is = 1.0 Ce = 1.0, Ct = 1.0, Cs = VARIES

LATERAL FORCES

THE BUILDING MEETS THE CRITERIA TO USE THE "EQUIVALENT LATERAL FORCE PROCEDURE" PER ASCE 7-16.

WIND:

IBC

- EXPOSURE CATEGORY = B
- BASIC WIND SPEED, (3 SEC. GUST), V_{ULT} = 110 MPH
- WIND IMPORTANCE FACTOR, Iw = 1.0
- OCCUPANCY BUILDING CATEGORY PER TABLE 1-1 = II
- INTERNAL PRESSURE COEFFICIENT (ENCLOSED) = ± 0.18
- TOPOGRAPHIC FACTOR KZT = 1.38

SEISMIC:

SEISMIC IMPORTANCE FACTOR! e = 1.0
RISK CATEGORY OF BUILDING PER TABLE 1.5-1 = II
SPECTRAL RESPONSE ACCELERATIONS Ss = 1.391 & S1 = 0.481
SITE CLASS PER TABLE 20.3-1 = D
DESIGN SPECTRAL RESPONSE ACCELERATIONS Sds = 1.113
SEISMIC DESIGN CATEGORY = D
ANALYSIS PROCEDURE USED = SIMPLIFIED LATERAL FORCE ANALYSIS
RESPONSE MODIFICATION FACTOR PER TABLE 12.2-1, R = 6.5

FOUNDATION DESIGN CRITERIA

SOIL BEARING PRESSURE: 1500 PSF (ASSUMED)*

ACTIVE PRESSURE - RESTRAINED: 55 PCF +14H SEISMIC SURCHARGE (ASSUMED)
ACTIVE PRESSURE - UNRESTRAINED: 35 PCF +6H SEISMIC SURCHARGE (ASSUMED)
PASSIVE RESISTANCE: 200 PCF (INCLUDES F.O.S. ≥ 1.5) (ASSUMED)
COEFFICIENT OF FRICTION: .35 (INCLUDES F.O.S. ≥ 1.5) (ASSUMED)

ALL FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH OR "STRUCTURAL BACKFILL". NATIVE EARTH BEARING SHALL BE SURFACE COMPACTED. AREAS OVER-EXCAVATED SHALL BE BACKFILLED WITH LEAN CONCRETE (F'c= 2000 PSI) OR "STRUCTURAL BACKFILL". AREAS DESIGNATED "STRUCTURAL BACKFILL" SHALL BE FILLED WITH APPROVED WELL-GRADED BANKRUN MATERIAL. MAXIMUM SIZE OF ROCK 4". FROZEN SOIL, ORGANIC MATERIAL AND DELETERIOUS MATTER NOT ALLOWED. COMPACT TO AT LEAST 95% OF ITS MAXIMUM DENSITY AS DETERMINED BY ASTM D1557. PROVIDE DRAINAGE AND DEWATERING AROUND ALL WORK TO AVOID WATER-SOFTENED FOOTINGS.

FREE DRAINING BACKFILL MATERIAL FOR RETAINING & BASEMENT WALLS

A CLEAN, FREE DRAINING, WELL GRADED GRANULAR MATERIAL CONFORMING TO ASTM D2487 GW OR SW WHOSE MAXIMUM PARTICLE SIZE DOES NOT EXCEED 3/4" AND WHOSE FINES CONTENT (MATERIAL PASSING THE NO. 200 SIEVE) DOES NOT EXCEED 5%,

$$\text{WITH A MAXIMUM DUST RATIO } \frac{\text{\% PASSING U.S. NO. 200 SIEVE}}{\text{\% PASSING U.S. NO. 40 SIEVE}} = 2/3 \text{ MAX.}$$

CONCRETE

CONCRETE: MODERATE WEATHERING POTENTIAL SHALL BE MADE WITH PORTLAND CEMENT SHALL BE MADE WITH PORTLAND CEMENT ASTM C-150 TYPE II OR TYPE I, COARSE AND FINE AGGREGATE ASTM C-33, WATER CLEAN AND POTABLE AND SHALL BE READY MIXED PER ASTM C-94. NO ALUMINUM (CONDUIT, MISCELLANEOUS ITEMS, ETC.) SHALL BE EMBEDDED IN ANY CONCRETE. COORDINATE FORMWORK AND FINISH TYPES ACCEPTABLE TO THE OWNER.

ITEM	DESIGN f'c (PSI) (AT 28 DAYS U.N.O.)	MAX. W/C RATIO	MIN. FLYASH OR SLAG (PCY)	AGGREGATE GRADING ASTM AASHTO	NOTES
SLAB ON GRADE	2500	0.45	100	57 OR 67	1
FOUNDATIONS - UNO	2500	0.50	--	57 OR 67	
STEM WALLS	2500	0.45	100	57 OR 67	

CONCRETE MIX NOTES:

1. FIBROUS CONCRETE REINFORCEMENT SHALL BE "FIBERMESH" MANUFACTURED BY PROPEX CONCRETE SYSTEMS OR PRE-APPROVED EQUAL. DOSAGE SHALL FOLLOW MANUFACTURER'S RECOMMENDATION BUT NOT LESS THAN 1.5 LB/CU. YD.
2. PROVIDE 3000 PSI AT 28 DAYS MINIMUM FOR DURABILITY AT BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS, PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER AND FOR ALL GARAGE FLOOR SLABS. CONCRETE SHALL BE AIR ENTRAINED CONFORMING TO ASTM C-260. TOTAL AIR CONTENT (PERCENT BY VOLUME OF CONCRETE) SHALL NOT BE LESS THAN 5% OR MORE THAN 7%.

PLACE CONCRETE: PER ACI 304 AND CONFORM TO ACI 305 AND 306 FOR HOT AND COLD WEATHER PLACEMENT AND CURING PROTECTION. USE INTERIOR MECHANICAL VIBRATORS WITH 7000 RPM MINIMUM FREQUENCY. DO NOT OVER-VIBRATE. CONCRETE SHALL BE POURED MONOLITHICALLY BETWEEN CONSTRUCTION OR EXPANSION JOINTS. PROTECT ALL FRESHLY PLACED CONCRETE FROM PREMATURE DRYING, EXCESSIVE HOT OR COLD TEMPERATURE FOR SEVEN DAYS AFTER POURING.

GROUT

NON-SHRINK GROUT: GROUT SHALL CONFORM TO CRD-C621. F'c = 5000 PSI IN 28 DAYS. FILL OR PACK ENTIRE SPACE UNDER PLATES OR SHAPES. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PREPARATION, INSTALLATION, AND CURING.

REINFORCING STEEL

REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. DETAIL, FABRICATE AND PLACE PER ACI 315 AND ACI 378. LAP SPLICES SHALL BE 48 BAR DIAMETERS UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS AT ALL HORIZONTAL BARS IN FOOTINGS AND WALLS. WELDED WIRE REINFORCEMENT SHALL CONFORM TO A185. LAP ONE FULL MESH ON SIDES AND ENDS BUT NOT LESS THAN 8 INCHES. PLACE AT MID-DEPTH OF SLAB OR AS SHOWN.

POST-INSTALLED ANCHORS

POST-INSTALLED ANCHORS: SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH REBAR. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. INSTALLER SHALL BE QUALIFIED AND TRAINED BY THE MANUFACTURER. HOLES SHALL BE HAMMER DRILLED ONLY (ROTARY DRILLED ONLY AT UNREINFORCED MASONRY - NO HAMMER TOOLS).

SUBSTITUTION REQUESTS, FOR PRODUCTS OTHER THAN THOSE SPECIFIED BELOW, SHALL BE SUBMITTED FOR APPROVAL A MINIMUM OF 2 WEEKS PRIOR TO BID, ALONG WITH CALCULATIONS THAT ARE PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER (LICENSED IN THE STATE IN WHICH THE PROJECT OCCURS) DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE BUILDING CODE.

CONCRETE ANCHORS:

- ADHESIVE ANCHORS: HILTI HIT-HY 200 (ICC-ESR-3187)
  - *CONCRETE SHALL BE A MINIMUM OF 21 DAYS OLD AT TIME OF INSTALLATION.
  - *CONCRETE SHALL BE IN THE TEMPERATURE RANGE AS REQUIRED BY THE CONCRETE MANUFACTURER.
  - *HOLE SHALL BY HAMMER-DRILLED ONLY.
  - *HOLE SHALL BE DRY AT TIME OF INSTALLATION.
  - *INSTALLER OF HORIZONTAL OR UPWARDLY INCLINED (ANY POSITION EXCEPT DIRECTLY DOWNWARD) ANCHORS SHALL ALSO BE CERTIFIED BY THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM.
- EXPANSION ANCHORS: KWIKBOLT TZ (ICC ESR-1917) BY HILTI, INC. OR STRONG-BOLT 2 (ICC ESR-3037) BY SIMPSON STRONG TIE, INC.
- SCREW ANCHORS: KWIK HUS-EZ (ICC ESR-3027) BY HILTI, INC. OR TITEN HD (ICC ESR-2713) BY SIMPSON STRONG TIE, INC.

STRUCTURAL STEEL

DETAILING, FABRICATION AND ERECTION

ALL WORKMANSHIP SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.

MATERIAL PROPERTIES

WIDE FLANGE SECTIONS: ASTM A992 (Fy = 50 KSI)

OTHER SHAPES AND PLATES: ASTM A36 (Fy = 36 KSI) TYP. U.N.O.; ASTM A572 (Fy = 50 KSI) WHERE INDICATED

HOLLOW STRUCTURAL SECTIONS: RECTANGULAR & SQUARE - ASTM A500 GRADE B (Fy = 46 KSI) ROUND - ASTM A500 GRADE B (Fy = 42 KSI)

STRUCTURAL STEEL PIPES: ASTM A53, GRADE B, TYPE E OR S (Fy = 35 KSI)

MACHINE BOLTS (M.B.): ASTM A307, GRADE A

ANCHOR BOLTS (A.B.): ASTM F1554, GRADE 55, UNLESS OTHERWISE NOTED, ASTM F1554, GRADE 105 WHERE INDICATED.

WELDING

STRUCTURAL STEEL: WELD IN ACCORDANCE WITH "STRUCTURAL WELDING CODE" AWS D1.1.

CERTIFICATION : ALL WELDING SHALL BE PERFORMED BY WABO/AWS CERTIFIED WELDERS. WELDERS SHALL BE PREQUALIFIED FOR EACH POSITION AND WELD TYPE WHICH THE WELDER WILL BE PERFORMING.

ELECTRODES: USE E70 ELECTRODES.

GENERAL REQUIREMENTS

ADHESIVE ANCHOR RODS: ASTM F1554, GRADE 36 UNLESS NOTED OTHERWISE.

FINISH : STRUCTURAL STEEL SHALL BE PRIMER PAINTED, UNLESS NOTED OTHERWISE. WHERE STRUCTURAL STEEL IS NOTED TO BE GALVANIZED, IT SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123, A384, AND A385.

ERCIN SAHIN
STATE OF WASHINGTON
50294
REGISTERED PROFESSIONAL ENGINEER
10/06/2025

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Parcel # - 2465000640

GENERAL NOTES

Elevation Home Designs
Job # : 24-XXXX
Printed On:
10/02/2025
Layout Sheet #
1 of 6
Sheet:
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CARPENTRY:

NAILS: CONNECTION DESIGNS ARE BASED ON "COMMON WIRE" NAILS WITH THE FOLLOWING PROPERTIES:

PENNYWEIGHT	DIAMETER (INCHES)	LENGTH (INCHES)	TRACKER** COLOR CODED NAILS
8d	0.131	2-1/2	BLUE
10d	0.148	3	PURPLE
16d	0.162	3-1/2	ORANGE
20d	0.192	4	-

FOR DIAPHRAGM OR SHEAR WALL NAILING THE FOLLOWING FASTENER TYPES MAY BE USED AT EQUIVALENT SPACING TO THAT SPECIFIED ON PLANS:

FASTENER TYPE	DIAMETER (INCHES)	LENGTH (INCHES)	EQUIVALENT SPACING (INCHES)			TRACKER** COLOR CODED NAILS
8d COMMON WIRE	0.131	2-1/2	6	4	3	BLUE
8d "DIPPED GALV. BOX"	0.131	2-1/2	6	4	3	-
8d "SHINY BOX"	0.113	2-1/2	4-1/2	3	2-1/2	YELLOW
12 GA. STAPLES	0.1055	1-7/8*	6	5-1/2	4	-
14 GA. STAPLES	0.080	1-1/2*	6	4	3	-
15 GA STAPLES	0.072	1-1/2*	5	3	2-1/2	-
10d COMMON WIRE	0.148	3	6	4	3	PURPLE
10d "HOT DIPPED GALV. BOX"	0.148	3	6	4	3	-
10d "SHINY BOX"	0.128	3	4-1/2	3	2-1/4	WHITE

*BASED ON 15/32" PLYWOOD OR OSB.
**REFERENCE TO COLOR CODED NAILS PER TRACKERS SYSTEM.

WOOD SHEATHING (STRUCTURAL): SHEATHING SHALL BE PLYWOOD OR ORIENTED STRAND BOARD. PLYWOOD SHEATHING SHALL BE 5-PLY MINIMUM WHERE INDICATED AS 3/4" OR THICKER. WOOD SHEATHING SHALL BE "STRUCTURAL I" CONFORMING TO PS1-09 AND/OR PS2-10. ALL PANELS SHALL BEAR THE STAMP OF AN APPROVED GRADING AGENCY. SPAN RATING SHALL BE PROVIDED AS FOLLOWS: ROOF FRAMING AT 32"O.C. (48/24); ROOF FRAMING AT 24"O.C. (32/16); WALLS (32/16); FLOORS (48/24) ALL WOOD SHEATHED WALLS SHALL BE BLOCKED AT ALL PANEL EDGES UNLESS NOTED OTHERWISE.

GLUE-LAMINATED MEMBERS: CONFORM TO ANSI/AITC A190.1. MEMBERS SHALL BE COMBINATION 24F-V4 DOUGLAS FIR (DF) FOR SIMPLE SPANS AND 24F-V8 DF FOR CANTILEVERED SPANS (Fb=2400 PSI, Fv=265 PSI, E= 1.8X10^6 PSI) AND DF COMBINATION 2 FOR COLUMNS. ARCHITECTURAL APPEARANCE GRADE WHERE EXPOSED TO VIEW; INDUSTRIAL APPEARANCE GRADE WHERE NOT EXPOSED TO VIEW. ALL MEMBER TO HAVE EXTERIOR GLUE AND HAVE AITC OR APA-EWS STAMP. CAMBER AS SHOWN ON STRUCTURAL DRAWINGS.

FRAMING LUMBER: STANDARDS. EACH PIECE SHALL BEAR THE GRADE TRADEMARK OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB), WESTERN WOOD PRODUCTS ASSOCIATION (WWPA), OR OTHER AGENCY ACCREDITED BY THE AMERICAN LUMBER STANDARD COMMITTEE (ALSC) TO GRADE UNDER ALSC CERTIFIED GRADING RULES.

SPECIES AND GRADE (BASE DESIGN VALUE)

1. 6x BEAMS AND HEADERS. "DOUG FIR-LARCH" NO. 1 (Fb=1350 PSI, Fv=170 PSI)
2. 2x TO 4x JOISTS, PURLINS AND HEADERS. "DOUG FIR-LARCH" NO. 2 (Fb=900 PSI, Fv=180 PSI) OR "HEM-FIR" NO. 1 (Fb=975 PSI, Fv=150 PSI)
3. 6x POSTS AND COLUMNS. "DOUG FIR-LARCH" NO. 1 (Fc=1000 PSI)
4. EXTERIOR STUDS, INTERIOR BEARING WALLS AND 4x COLUMNS. "DOUG FIR-LARCH" NO. 2 (Fb= 900 PSI, Fc= 1350 PSI) OR "HEM-FIR" NO. 1 (Fb=975 PSI, Fc=1350 PSI).
5. INTERIOR NON-BEARING STUD WALLS. "DOUG FIR-LARCH" NO. 2 (Fb=900 PSI. Fc=1350 PSI) OR "HEM-FIR" NO. 1 (Fb=975 PSI, Fc=1350 PSI)

STRUCTURAL COMPOSITE LUMBER (SCL): SHALL BE MANUFACTURED BY WEYERHOUSER, OR PRE-APPROVED EQUAL IN ACCORDANCE WITH APPROVED SHOP AND INSTALLATION DRAWINGS CONFORMING TO A CURRENT ICC EVALUATION REPORT.

MIINIMUM DESIGN VALUES:

1. 2x LVL: Fb = 1700 PSI, Fv = 285 PSI, E = 1300 KSI
2. 1-3/4" LVL: Fb = 2600 PSI, Fv = 285 PSI, E = 1800 KSI
3. 3-1/2" LVL: Fb = 2900 PSI, Fv = 285 PSI, E = 2000 KSI
4. 5-1/4" LVL: Fb = 2900 PSI, Fv = 285 PSI, E = 2000 KSI
5. RIMBOARD:APA/EWS PERFORMANCE RATED RIM (PRR-401) 1-1/4" MINIMUM THICKNESS

PRESERVATIVE TREATED WOOD REQUIREMENTS:

TREATMENTS OTHER THAN THOSE LISTED BELOW ARE NOT PERMITTED.

		APPLICATION	SPECIFIED MATERIAL	PRESERVATIVE TREATMENT (1)	CONNECTORS & FASTENERS (2)(3)
EXPOSURE	DRY	FOUNDATION SILL PLATES, TOP PLATES & LEDGERS ON CONCRETE OR MASONRY WALLS (4)	2x, 4x, 6x (FIR), OR GLULAM (SP)	SBX	GALV (G60)
				ACQ, CBA, CA	GALV (G185)
	WET	FRAMING, DECKING, POSTS & LEDGERS	2x, & 4x (FIR)	ACQ, CBA, CA	GALV (G185)
			2x, & 4x (CEDAR)	NONE	GALV (G90)
		BEAMS & COLUMNS	6x (FIR), OR GLULAM (SP)	ACQ, CBA, CA	GALV (G185)
			6x OR GLULAM (CEDAR)	NONE	GALV (G90)

1. CCA: CHROMATED COPPER ARSENATE NOT PERMITTED
   SBX: DOT SODIUM BORATE
   ACQ: ALKALINE COPPER QUAT
   CBA & CA: COPPER AZOLE

FIR: DOUG-FIR OR HEM-FIR
SP: SOUTHERN PINE

2. CONNECTORS: JOIST HANGERS, STRAPS, FRAMING CONNECTORS, COLUMN CAPS AND BASES, ETC. FASTENERS: MACHINE BOLTS, ANCHOR BOLTS AND LAG SCREWS WITH ASSOCIATED PLATE WASHERS AND NUTS. NAILS, SPIKES, WOOD SCREWS, ETC.

3. G60, G90 & G185 PER ASTM A653 FOR COLD-FORMED STEEL CONNECTORS. BATCH/POST HOT-DIP GALVANIZED PER ASTM A123 FOR CONNECTORS. HOT-DIP GALVANIZED PER ASTM A153 FOR FASTENERS OR MECHANICALLY GALVANIZED FASTENERS PER ASTM B695, CLASS 55 OR GREATER.

GENERAL REQUIREMENTS: PROVIDE MINIMUM NAILING PER IBC TABLE 2304.10.1 OR MORE, AS OTHERWISE SHOWN. STAGGER ALL NAILING TO PREVENT SPLITTING OF WOOD MEMBERS. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED WITH THE EXCEPTION OF INTERIOR CONCRETE TOPPINGS ON WOOD FLOOR SYSTEMS. HOLES AND CUTS IN 3x OR 4x PLATES SHOULD BE TREATED WITH A 9% SOLUTION OF COPPER NAPHTHENATE. BOLT HOLES IN WOOD MEMBERS SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. PROVIDE CUT WASHERS WHERE BOLT HEADS, NUTS AND LAG SCREW HEADS BEAR ON WOOD. PROVIDE A MINIMUM 3"x3"x0.229" PLATE WASHER ON ALL ANCHOR BOLTS WHICH CONNECT MUD SILLS TO FOUNDATION. DO NOT NOTCH OR DRILL STRUCTURAL MEMBERS, EXCEPT AS ALLOWED BY IBC SECTIONS 2308.4.2.4, 2308.5.9, 2308.5.10 AND 2308.7.4 OR AS RESTRICTED BY PLANS OR DETAILS, OR AS APPROVED PRIOR TO INSTALLATION. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

FASTENING SCHEDULE FOR WOOD STRUCTURAL MEMBERS (UNLESS NOTED OTHERWISE ON PLANS)		
ITEM	TYPE.	CONNECTION
RAFTER OR TRUSS TO TOP PLATE	TOENAIL & CONNECTOR	(3) 16d H2.5 @ 48" O.C.
CEILING JOIST TO TOP PLATE	TOENAIL	(3) 8d
CEILING JOIST TO PARALLEL RAFTER	FACE NAIL	(3) 16d
CEILING JOIST: LAP OVER PARTITION	FACE NAIL	(3) 16d
COLLAR TIE	FACE NAIL	(3) 16d
BLOCKING TO RAFTER	TOENAIL	(3) 8d
RIM BOARD TO RAFTER	END NAIL	(2) 16d
TOP PLATE TO TOP PLATE	FACE NAIL	(2) 16d @ 12" O.C.
TOP PLATE AT INTERSECTIONS	FACE NAIL	(4) 16d
TOP PLATE LAP	FACE NAIL	(8) 16d
STUD TO STUD	FACE NAIL	(2) 16d @ 24" O.C.
HEADER TO HEADER	FACE NAIL	16d @ 16" O.C. EA. EDGE
TOP OR BOTTOM PLATE TO STUD	END NAIL	(2) 16d
STUD TO SOLE PLATE	TOE NAIL END NAIL	(4) 8d (2) 16d
BOTTOM PLATE TO FLOOR JOIST AT BRACED PANEL	TOE NAIL FACE NAIL	16d @ 16" O.C. (3) 16d @ 16" O.C.
JOISTS TO TOP PLATE, SILL OR GIRDER	TOE NAIL	(4) 8d
BRIDGING TO JOIST	TOE NAIL	(2) 8d
BLOCKING TO JOISTS	TOE NAIL	(3) 8d
BLOCKING TO TOP PLATE	TOE NAIL	(3) 8d
RIM JOIST TO JOIST	FACE NAIL	(3) 16d
RIM JOIST TO SILL OR TOP PLATE	CONNECTOR	A35 @ 24" O.C.
CONTINUOUS HEADER TO STUD	CONNECTOR	A35
BUILT-CORNER STUDS	FACE NAIL	16d @ 24" O.C.
BUILT-UP BEAMS (PER LAYER)	FACE NAIL	16d @ 16" O.C. EA. EDGE
RAFTERS TO RIDGE BOARD	TOE NAIL FACE NAIL	(4) 16d (3) 16d
RAFTERS TO HIP	TOE NAIL FACE NAIL	(4) 16d (3) 16d

FRAMING CONNECTORS: SHALL HAVE ICC APPROVAL AND BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, SAN LEANDRO, CA., OR PRE-APPROVED EQUAL. PROVIDE MAXIMUM SIZE AND QUANTITY OF NAILS OR BOLTS PER MANUFACTURER, EXCEPT AS NOTED OTHERWISE. PROVIDE LEAD HOLES AS REQUIRED TO PREVENT SPLITTING OF WOOD MEMBERS. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

LAG SCREWS: SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1. LAG SCREWS SHALL BE OF A DIAMETER INDICATED ON DRAWINGS WITH A MINIMUM OF 8x DIA. EMBEDMENT IN SUPPORTING MEMBER UNLESS NOTED OTHERWISE. CLEARANCE HOLE FOR THE SHANK SHALL BE THE SAME DIAMETER AS THE SHANK AND THE SAME DEPTH OF PENETRATION AS THE UNTHREADED PORTION OF THE SHANK. THE LEAD HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER EQUAL TO 60 TO 75 PERCENT OF THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION. THE THREADED PORTION OF THE SCREW SHALL BE INSERTED IN ITS LEAD HOLE BY TURNING WITH A WRENCH. SOAP OR OTHER LUBRICANT SHALL BE USED ON THE SCREWS OR IN THE LEAD HOLE TO FACILITATE INSERTION AND PREVENT DAMAGE TO THE SCREW. LAG SCREWS SHALL NOT BE DRIVEN WITH A HAMMER. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

METAL-PLATE-CONNECTED WOOD TRUSSES: SHALL BE MANUFACTURED AND INSTALLED WITHIN THE JURISDICTION REQUIREMENTS, AND DESIGNED AND DETAILED IN ACCORDANCE WITH ANSI/TP-1, INCLUDING BRACING AND WIND UPLIFT. PROVIDE 2x6 TOP CHORDS, AND 2x4 BOTTOM CHORDS AND WEBS, UNLESS COORDINATED AND APPROVED. TRUSSES SHALL BE DESIGNED TO CARRY THE LOADS LISTED IN THE DESIGN CRITERIA AND ANY ADDITIONAL LOADS INDICATED ON THE FRAMING PLANS AND DETAILS. TRUSSES INDICATED ON PLANS ARE FOR TYPICAL UNIFORMLY LOADED CONDITIONS. MANUFACTURER SHALL PROVIDE ADDITIONAL OR SPECIAL TRUSSES AS REQUIRED TO SUPPORT SPECIAL LOADING CONDITIONS AS INDICATED ON DRAWINGS. PROVIDE INSTALLATION FRAMING PLANS AND DRAWINGS.

PROVIDE CERTIFICATE OF CONFORMANCE FROM AN INDEPENDENT TESTING LABORATORY OR A LICENSED PROFESSIONAL ENGINEER CERTIFYING THAT THEY HAVE INSPECTED THE FINISHED TRUSSES AND THAT ALL TRUSSES ARE CONSTRUCTED IN CONFORMANCE WITH THE TRUSS DESIGN DRAWINGS.

I-JOISTS: SHALL BE APA EWS PERFORMANCE RATED I-JOISTS (PRI) OR PRE-APPROVED EQUAL. I-JOISTS SHALL BE MANUFACTURED IN CONFORMANCE WITH APA PRI-400 CONFORMING TO APPROVED SHOP AND INSTALLATION DRAWINGS.

ERCIN SAHIN
STATE OF WASHINGTON
50294
REGISTERED PROFESSIONAL ENGINEER
10/06/2025

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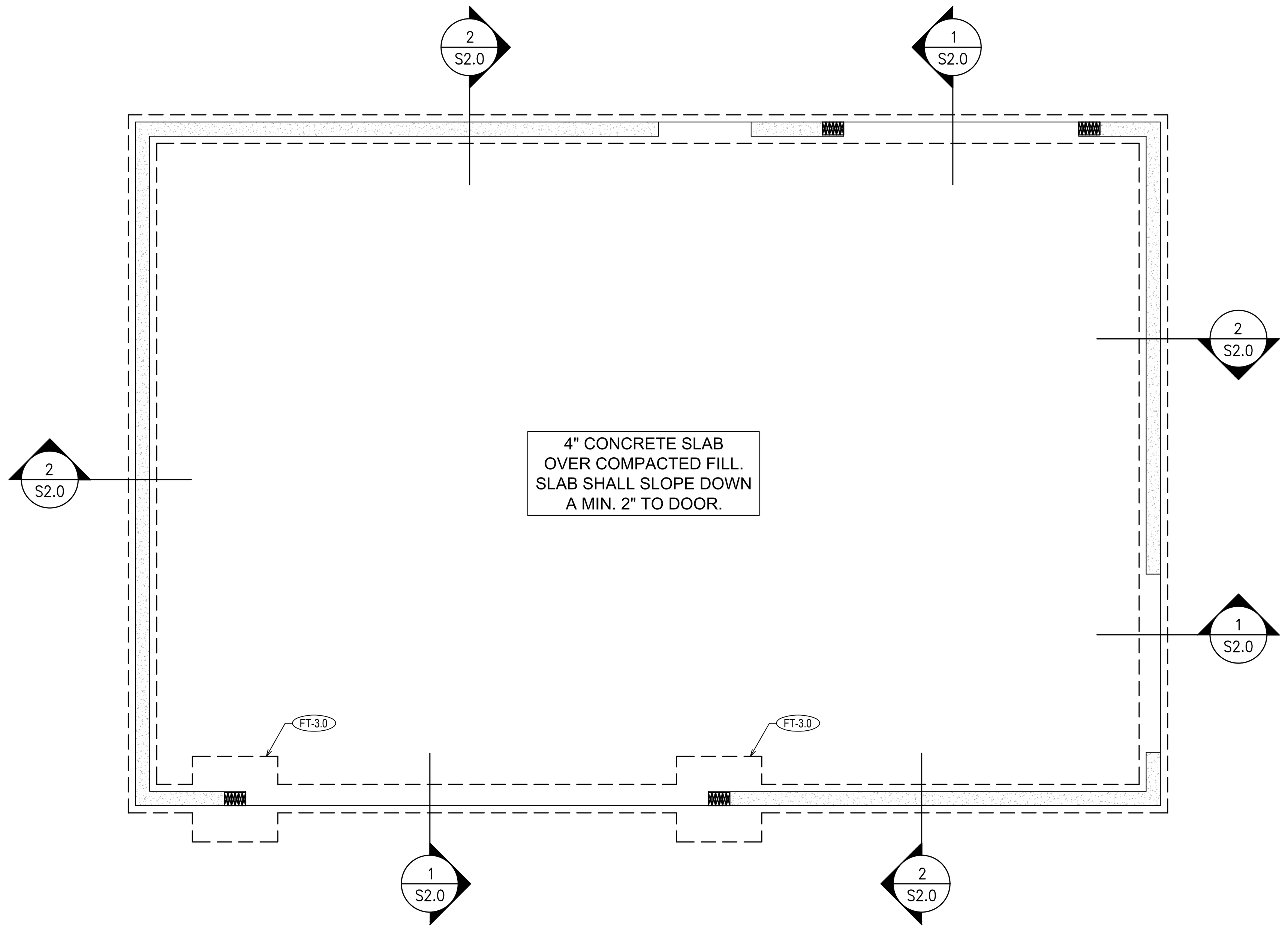
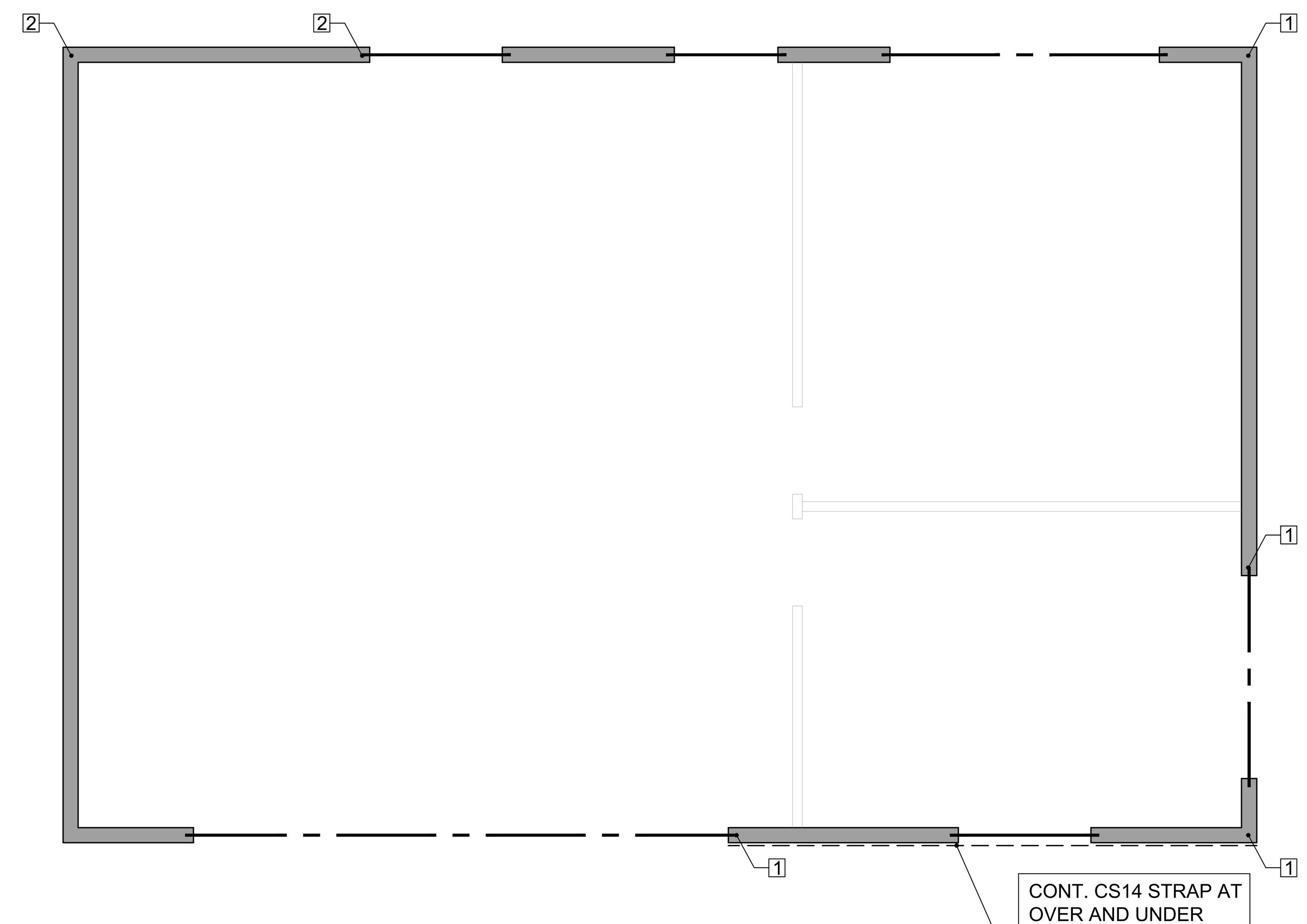
GENERAL NOTES

Elevation Home Designs
Job # : 24-XXXX
Printed On:
10/02/2025



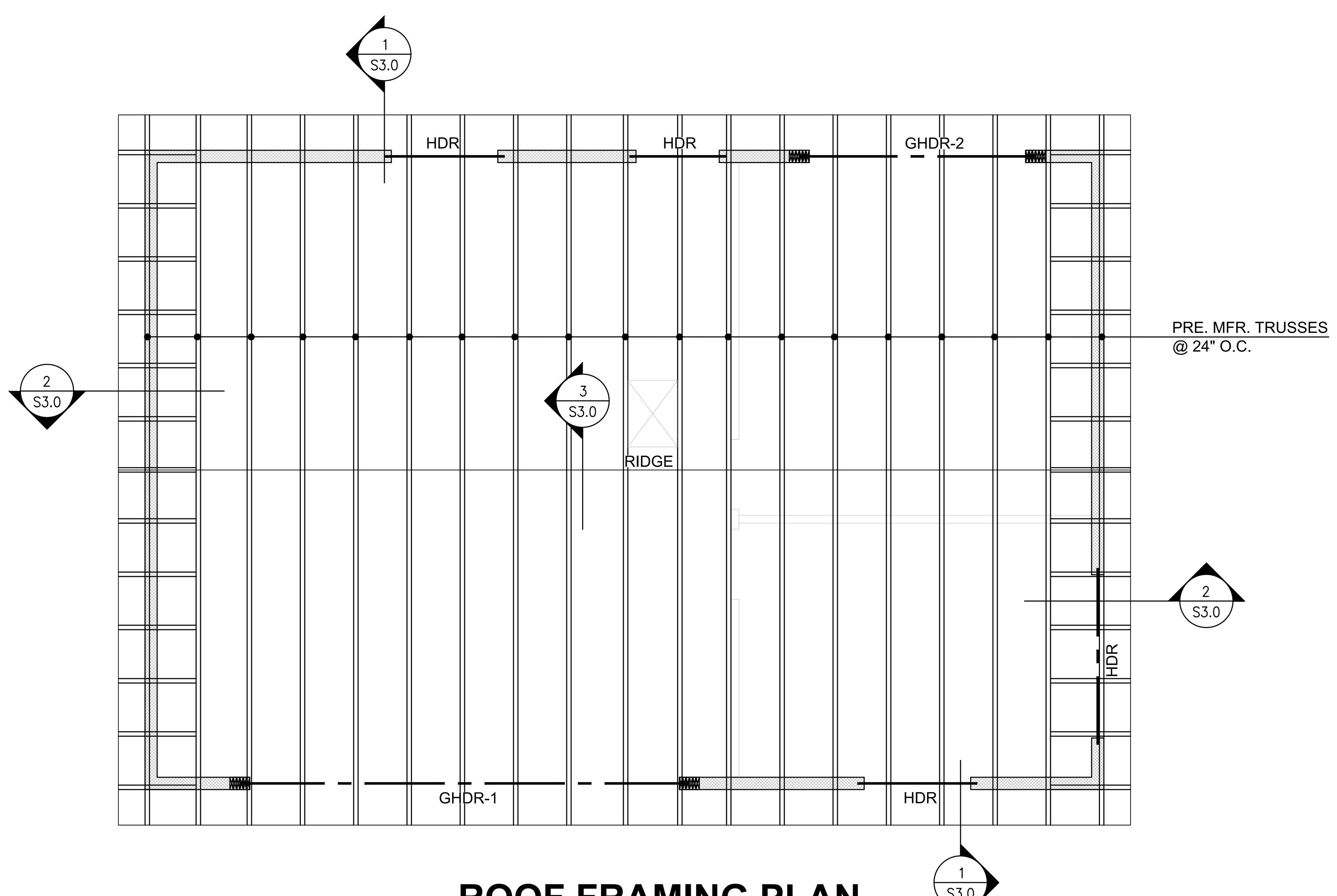
FOUNDATION PLAN

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



MAIN FLOOR SHEARWALL AND HOLDOWN LAYOUT

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



ROOF FRAMING PLAN

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

HOLDOWN LEGEND

1-HDU2 HOLDOWN W/ SSTB20 ANCHOR OR STHD 14
2-HDU5 HOLDOWN W/ SSTB24 ANCHOR

SWXX → REFER TO SHEARWALL SCHEDULE ON PAGE 4.0

SW1 → ALL EXTERIOR WALLS SHALL BE SW1 UNLESS NOTED OTHERWISE

WALL LEGEND

SHEARWALL

INTERIOR WALL (SHEATHING IS NOT REQ'D)

ROOF FRAMING NOTES:

1. DO NOT SCALE DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. ROOF FRAMING SHALL BE PRE-MANUFACTURED ROOF TRUSSES AT 24" O.C. TRUSS DESIGN IS TO BE PROVIDED BY MANUFACTURER.
3. HEADERS OVER DOORS AND WINDOW OPENINGS SHALL BE MINIMUM 4X10 U.N.O.
4. PROVIDE (2) STUDS MINIMUM AT EACH END OF ALL BEAMS U.N.O. ON PLANS. BEAR BEAM FULLY ON BUILT UP COLUMN AND PROVIDE POSITIVE CONNECTION BY EITHER A35 OR LTP4 CLIPS ON EACH SIDE OF BEAM
5. REFER TO GENERAL STRUCTURAL NOTE PAGE ON S0.0 FOR ADDITIONAL REQUIREMENTS
6. PANELS SHALL NOT BE LESS THAN 4' X 8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING WHERE MINIMUM PANEL DIMENSION SHALL BE 24".

ROOF BEAM SCHEDULE

GHDR-1: 5-1/2" x 15" 24F-V4 DF GLULAM

GHDR-2: 6 x 12 DF-L NO.2

HDR: 4 x 8 DF-L NO.2 (UP TO 4'); 4 x 10 DF-L NO.2 (UP TO 6'); 4 x 12 DF-L NO.2 (UP TO 8')

ROOF SHEATHING SCHEDULE

SNOW LOAD (UP TO)	NOMINAL THICKNESS	SPAN RATING	EDGE NAILING	FIELD NAILING
40LBS	7/16"	24/16	8d @ 6" O.C.	8d @ 12" O.C.
70LBS	15/32",1/2"	32/16	10d @ 6" O.C.	10d @ 12" O.C.
130LBS	19/32",5/8"	40/20	10d @ 6" O.C.	10d @ 12" O.C.
175LBS	23/32",3/4"	48/24	12d @ 6" O.C.	12d @ 12" O.C.

- LONG DIMENSIONS PERPENDICULAR TO ROOF JOIST WITH EDGE SUPPORT R503.2.1.1(1).
- NAIL SHEATHING AT ALL FRAMED PANEL EDGES AND TO ALL INTERMEDIATE FRAMING AS SHOWN ABOVE U.N.O.

POST & TRIMMER & WALL SCHEDULE

(x3) 2x TRIMMERS + (x3) 2x KING STUDS.

(x2) 2x TRIMMERS + (x2) 2x KING STUDS.

POST BELOW

POST FROM ABOVE

- ALL TRIMMERS AND KING STUDS SHALL CONFORM PER DETAIL 6/S3.0 UNLESS NOTED OTHERWISE.

6x6 POST

4x4 POST

4x6 POST

LOAD BEARING WALL

PARTITION WALL

ADDITIONAL NOTES

- PLEASE SUBMIT TRUSS MANUFACTURER'S TRUSS LAYOUT FOR OUR APPROVAL PRIOR TO CONSTRUCTION.

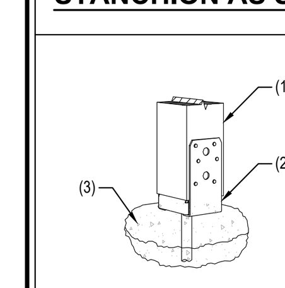
FOUNDATION NOTES:

1. DO NOT SCALE DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
2. BOTTOM OF EXTERIOR FOOTINGS SHALL BE MINIMUM 12" BELOW GRADE.
3. 4" CONCRETE SLAB OVER 6MIL VAPOR BARRIER ON 6" PF GRAVEL OR CRUSHED ROCK OVER FIRM UNDISTURBED SOIL OR ENGINEERED COMPACTED BACK-FILL. REINFORCE WITH 6 x 6 W1.4 x W1.4 WWF.
4. ALL WOOD IN CONTACT WITH CONCRETE SHOULD BE PRESSURE TREATED WOOD.
5. REFER TO GENERAL STRUCTURAL NOTES PAGE ON S0.0 FOR ADDITIONAL REQUIREMENTS.

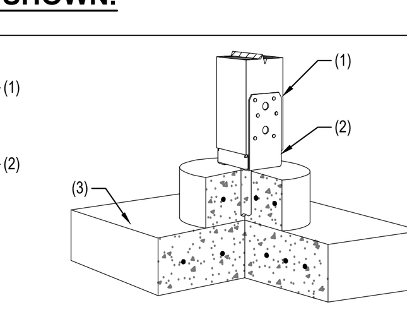
FOOTING SCHEDULES

TYPE	DIMENSIONS & REINFORCEMENT					MAX CAPACITY (LBS)	
	LENGTH & WIDTH	DEPTH	ROUND OPTION	LONG. & TRANS.			
				NO.	SIZE	SQ	RND
FT-1.5	18"	10"	18" Ø	3	#4	2750	2200
FT-2.0	24"	10"	24" Ø	4	#4	4750	3750
FT-2.5	30"	10"	30" Ø	5	#4	7500	6000
FT-3.0	36"	12"	36" Ø	5	#4	10500	8500
FT-3.5	42"	12"	-	6	#4	15000	-
FT-4.0	48"	12"	-	8	#4	18500	-
FT-5.0	60"	12"	-	8	#4	30000	-

IMPORTANT NOTE:
EXTERIOR FOOTINGS W/ FROST DEPTH UP TO 12" , USE 12" THICK FOOTING. FROST DEPTH GREATER THAN 12", PLEASE USE STANCHION AS SHOWN.



TYPICAL ABU POST BASE



TYPICAL ABU POST BASE CONNECTION W/ STANCHION

NOTES:

1. POST PER PLAN
2. SIMPSON ABU POST BASE PER PLAN
3. FOOTING PER PLAN

FT-X.X → TYPICAL FOOTING CALL OUT

ADDITIONAL NOTES

1. POSTS SHOWN ON THE FOUNDATION PLAN ARE THOSE DIRECTLY CONNECTED TO THE FOUNDATION WITH A HOLDOWN OR POST BASE CONNECTOR.
2. ALL FOOTINGS, FOUNDATIONS, EXCAVATIONS, GRADING, AND FILL SHALL COMPLY TO THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL MEASUREMENTS AGAINST THE ARCHITECTURAL PLAN SET. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE EOR AND DESIGNER BEFORE FORMING AND/OR POURING CONCRETE.
4. ALL FOOTINGS CAPACITIES ARE SHOWN ABOVE BASED ON 1500 PSF SOIL BEARING PRESSURE.

10/06/2025

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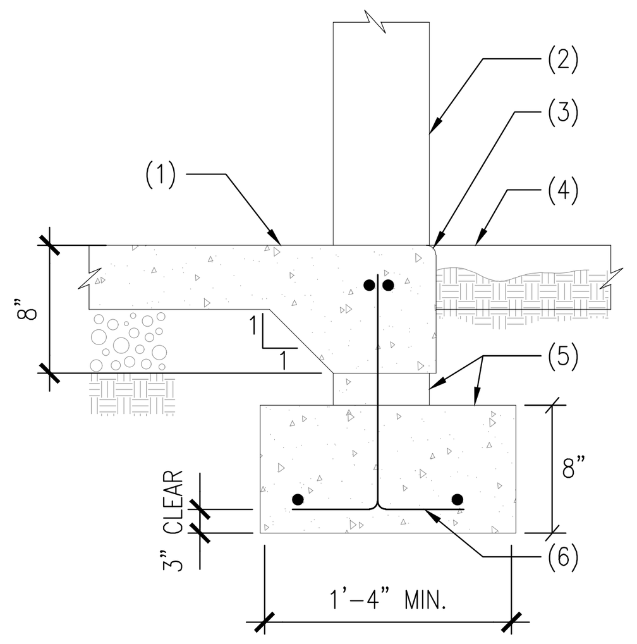
STRCTRL PLANS

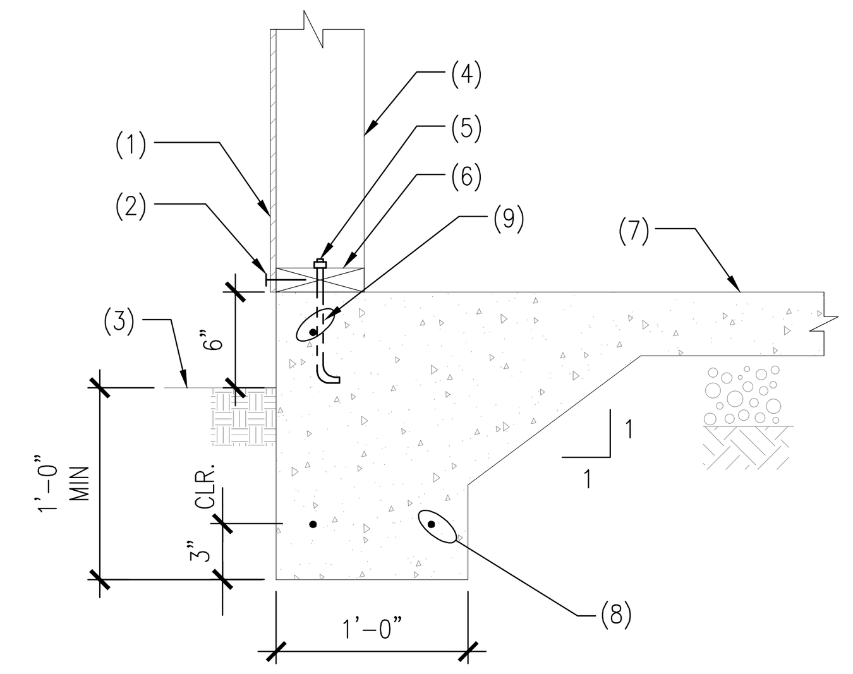
Elevation Home Designs
Job # : 24-XXXX
Printed On:
10/02/2025
Layout Sheet #
3 of 6

Sheet:
S1.0



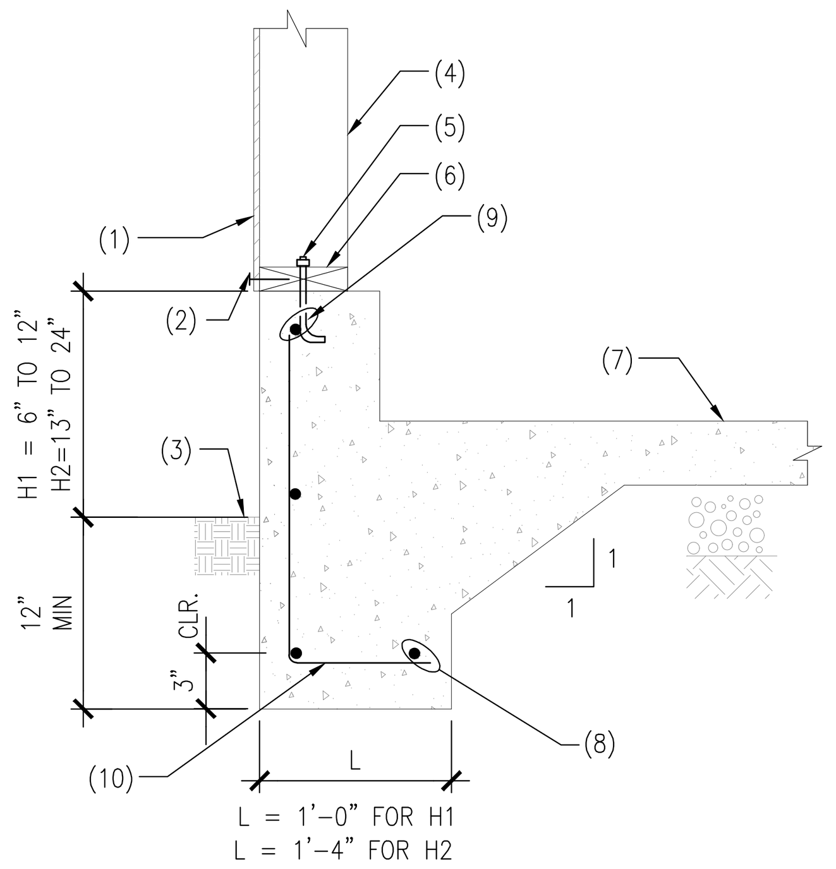
NOTES:
1. CONCRETE SLAB ON GRADE
2. STUD WALL BEYOND
3. TOOLED EDGE
4. FINISH GRADE OR CONCRETE SLAB AS OCCURS
5. 8" CONCRETE STEM WALL (MINIMUM) AND FOOTING WITH REINFORCING CONTINUOUS FROM BEYOND
6. #4 HOOKED DOWELS AT 18" O.C., ALTERNATE BENDS

1 WOOD STUD WALL FOOTING AT OPENING
SCALE: N.T.S.



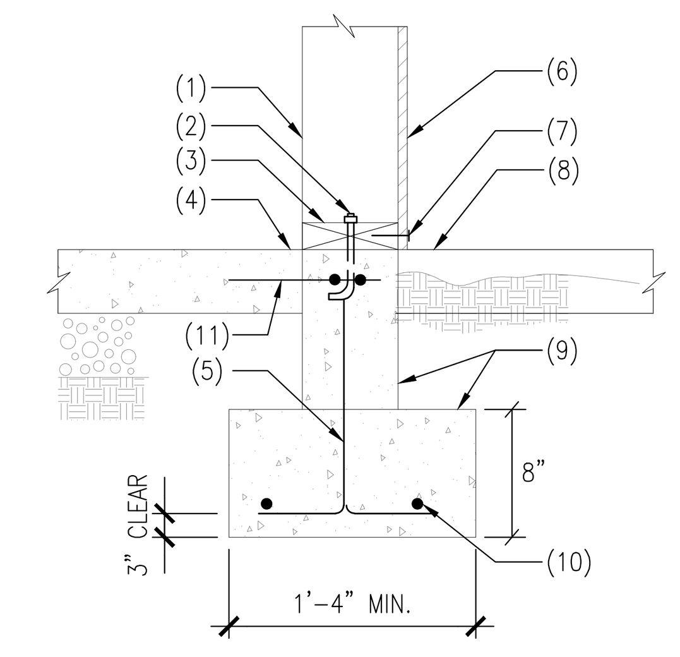
NOTES:
1. PLYWOOD SHEATHING
2. EDGE NAILING
3. FINISH GRADE
4. WOOD STUD WALL
5. 5/8" DIAMETER ANCHOR BOLTS @ 48" O.C. MAXIMUM UNO. EMBED 7"
6. MINIMUM 2x TREATED BASE PLATE
7. CONCRETE SLAB
8. 2 – #4 BARS CONT.
9. 1 – #4 BARS CONT.

2 CONCRETE SLAB FOUNDATION
SCALE: N.T.S.



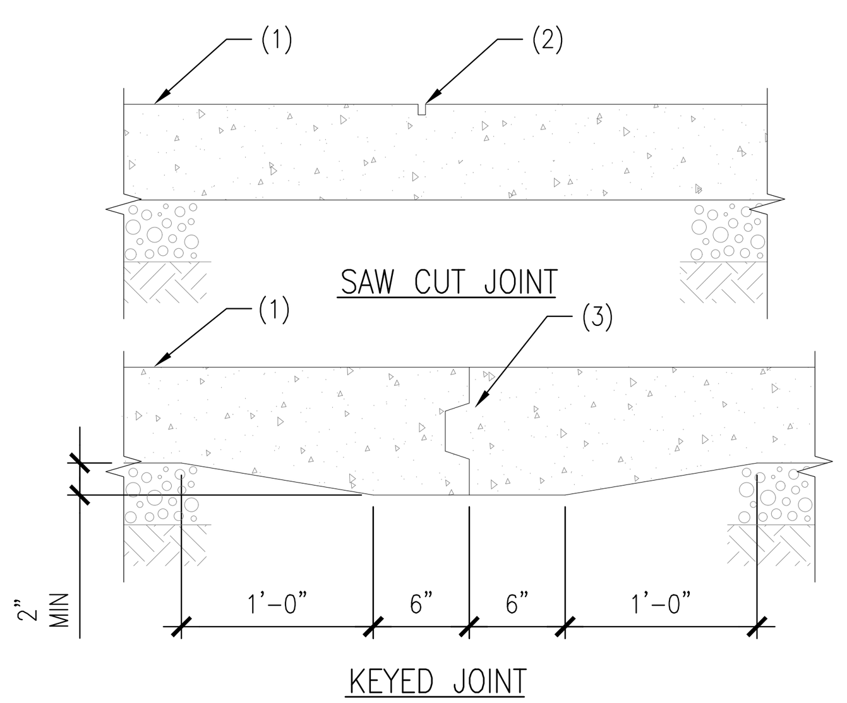
NOTES:
1. PLYWOOD SHEATHING
2. EDGE NAILING
3. FINISH GRADE
4. WOOD STUD WALL
5. 5/8" DIAMETER ANCHOR BOLTS @ 48" O.C. MAXIMUM UNO. EMBED 7"
6. MINIMUM 2x TREATED BASE PLATE
7. 4" CONCRETE SLAB
8. 2 – #4 BARS CONT.
9. (1) #4 BAR CONTINUOUS (AT TOP) PROVIDE #4 BARS AT 12" O.C. HORIZONTAL
11. #4 HOOKED DOWELS AT 18" O.C.

3 CONCRETE SLAB FOUNDATION (ALTERNATE)
SCALE: N.T.S.



NOTES:
1. WOOD STUD WALL
2. 5/8" DIAMETER ANCHOR BOLTS PER SHEARWALL SCHEDULE, EMBEDMENT PER GSN
3. TREATED BASE PLATE PER SHEARWALL SCHEDULE
4. CONCRETE SLAB ON GRADE
5. #4 HOOKED DOWELS AT 18" O.C., ALTERNATE BENDS
6. SHEATHING AND ATTACHMENT PER SHEARWALL SCHEDULE
7. EDGE NAILNG
8. FINISH GRADE OR CONCRETE SLAB AS OCCURS
9. 8" CONCRETE STEM WALL (MINIMUM) AND FOOTING
10. (2) #4 BARS CONTINUOUS
11. #4 BARS CONTINUOUS (AT TOP) – PROVIDE #4 BARS AT 10" O.C., (HORIZONTAL), FOR WALLS TALLER THAN 12"

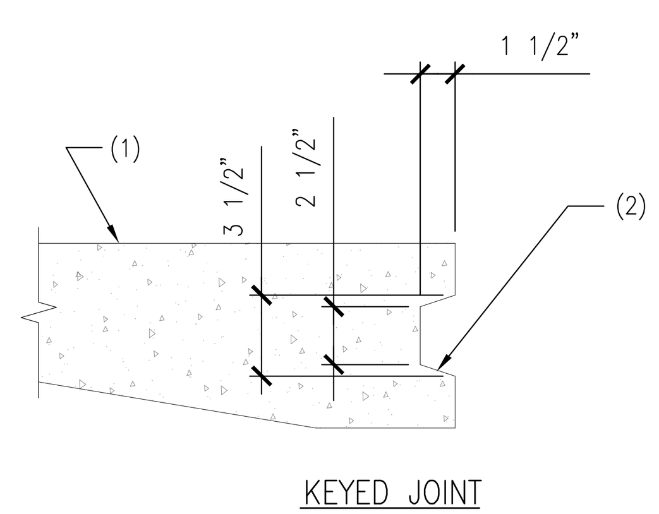
4 WOOD STUD WALL FOOTING (ALTERNATE)
SCALE: N.T.S.



NOTES:
1. CONCRETE SLAB ON GRADE
2. SAWCUT – 1/8" WIDE x 1/4 SLAB THICKNESS IN DEPTH – CUT SHALL BE MADE SOON ENOUGH TO PREVENT SHRINKAGE CRACKING, BUT NOT TO CAUSE SPALLING OF THE CONCRETE WHILE SAWING – WORK MUST BE ACCOMPLISHED WITHIN (24) HOURS OF CONCRETE PLACEMENT
3. CONTINUOUS KEY – SEE TYPICAL DETAIL

NOTES:
A. KEYED JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING PLACEMENT UNLESS SPECIFICALLY NOTED ON THE PLANS

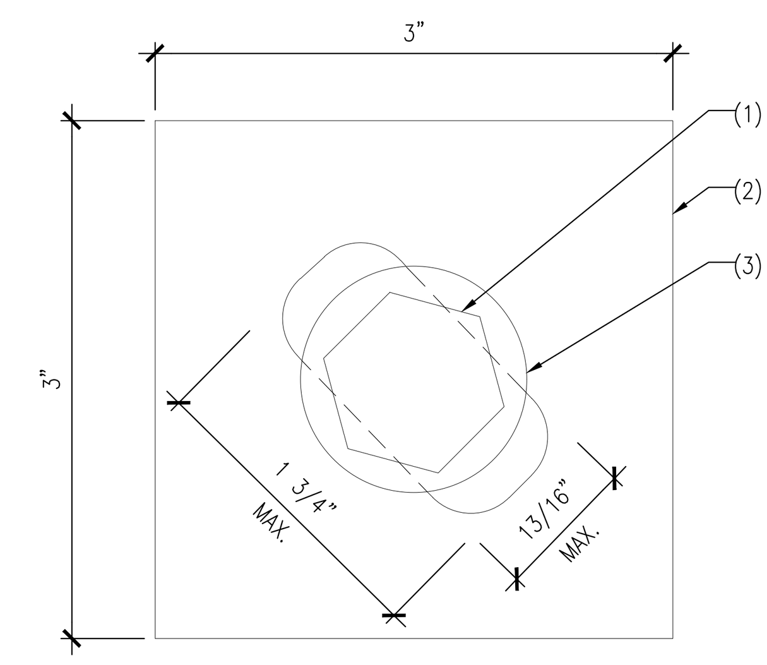
5 CONTROL JOINTS (C.J.) IN CONCRETE SLAB ON GRADE
SCALE: N.T.S.



NOTES:
1. CONCRETE SLAB
2. KEYED JOINT – REMOVE FORM MATERIAL PRIOR TO PLACING ADJACENT CONCRETE

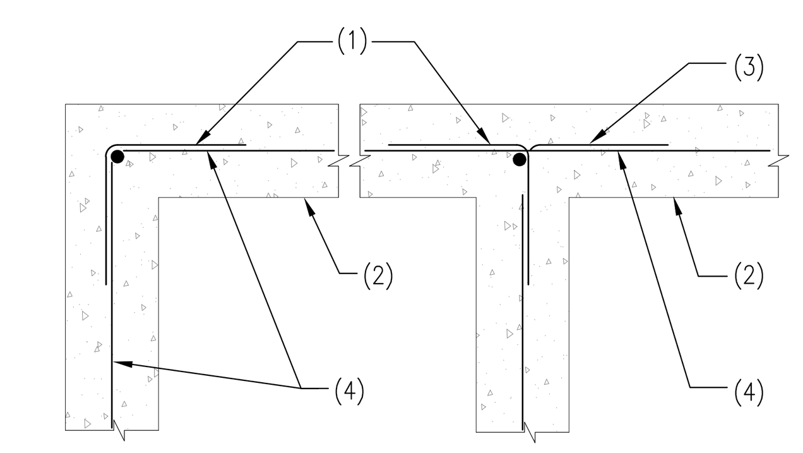
NOTES:
A. ALL DIMENSIONS ARE ±1/2"

6 TYPICAL KEY IN CONCRETE
SCALE: N.T.S.



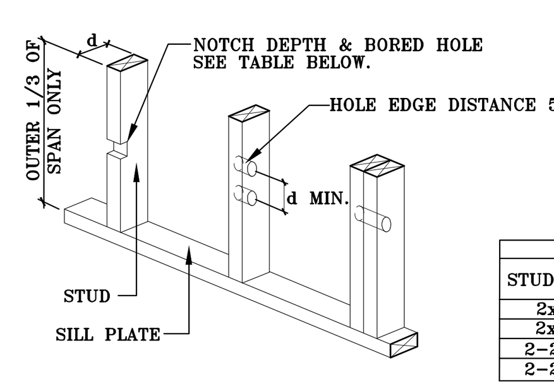
NOTES:
1. ANCHOR BOLT PER SHEAR WALL SCHEDULE
2. SLOTTED PLATE WASHER
3. STANDARD CUT WASHER

7 SILL PLATE ANCHOR BOLT SLOTTED PLATE WASHER
SCALE: N.T.S.



NOTES:
1. CORNER BARS SAME SIZE AND SPACING AS HORIZONTAL REINFORCING LAP PER GSN (24" MINIMUM)
2. CONCRETE STEM WALL OR FOOTING
3. ALTERNATE BENDS
4. REINFORCING PER PLANS AND/OR DETAILS

8 PLAN-CORNER REINFORCING IN CONCRETE FOOTING STEM/WALL
SCALE: N.T.S.

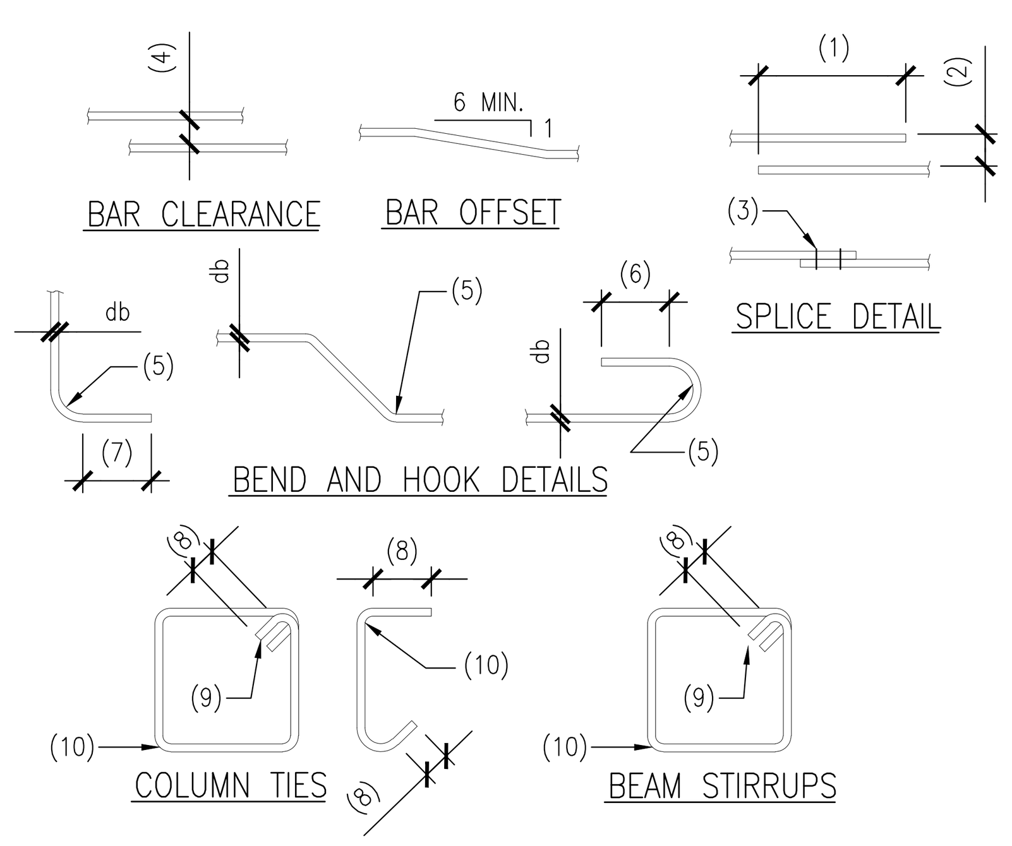


NOTE:
BORED HOLES NOT PERMITTED IN MORE THAN TWO CONSECUTIVE DOUBLE STUDS

BORED HOLES		
STUD SIZE	EXT. & BRN'G. WALLS	NON-BRN'G. WALLS
2x4	1 7/16"	2 1/8"
2x6	2 3/16"	3 5/16"
2-2x4	2 1/8"	2 1/8"
2-2x6	3 5/16"	3 5/16"

NOTCH DEPTH		
STUD SIZE	EXT. & BRN'G. WALLS	NON-BRN'G. WALLS
2x4	7/8"	1 7/16"
2x6	1 3/8"	2 3/16"

9 STUD NOTCHING/BORING LIMITS
SCALE: N.T.S.

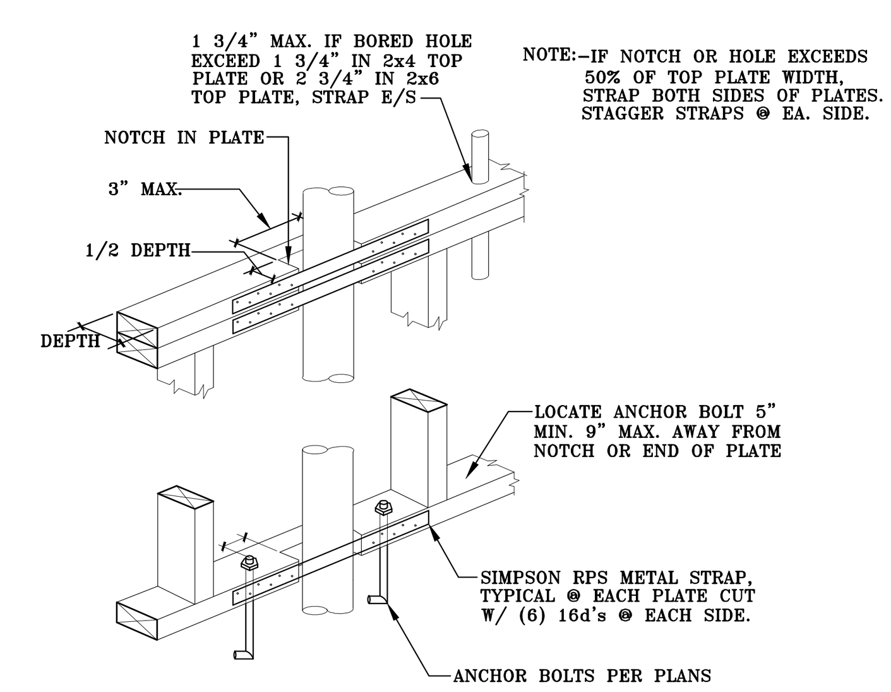


NOTES:
1. LAP PER TYPICAL SCHEDULE
2. MAXIMUM 1/5 LAP BUT NOT MORE THAN 6"
3. WIRE TIES
4. 1db (1" MINIMUM)
5. INSIDE BEND RADIUS:
#3 TO #8 BARS = 3db
#9 TO #11 BARS = 4db
#14, #18 BARS = 5db
6. 4db (2 1/2" MINIMUM)
7. 12db
8. 6db (4" MINIMUM)
9. 135° BEND
10. BEND AROUND:
1 1/2" PIN FOR #3 BARS
2" PIN FOR #4 BARS
2 1/2" PIN FOR #5 BARS

	CLASS "B" LAP SPLICE LENGTH (IN INCHES)							
	f'c=2,500 PSI		f'c=3,000 PSI		f'c=4,000 PSI		f'c=5,000 PSI	
	REG	TOP	REG	TOP	REG	TOP	REG	TOP
#3	16	22	16	20	16	18	16	16
#4	32	42	30	38	26	34	24	30
#5	40	52	36	48	32	42	28	36

NOTES:
A. TOP BARS ARE ANY HORIZONTAL BARS PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.
B. UNLESS NOTED OTHERWISE, LAP SPLICES IN CONCRETE BEAMS, SLABS, WALLS, AND FOOTINGS SHALL BE CLASS "B" TENSION LAP SPLICES.
C. CONTACT STRUCTURAL ENGINEER IF CENTER–TO–CENTER SPACING OF REINFORCEMENT IS LESS THAN (3) BAR DIAMETERS (<3db).
D. LAP SPLICES BASED UPON THE FOLLOWING STEEL PROPERTIES:
#3 fy = 40 KSI
#4 AND LARGER fy = 60 KSI

10 TYPICAL CONCRETE REINFORCING BARS LAP SPLICE SCHEDULE FOR REINFORCING IN CONCRETE
SCALE: N.T.S.



11 PIPES THRU PLATES
SCALE: N.T.S.

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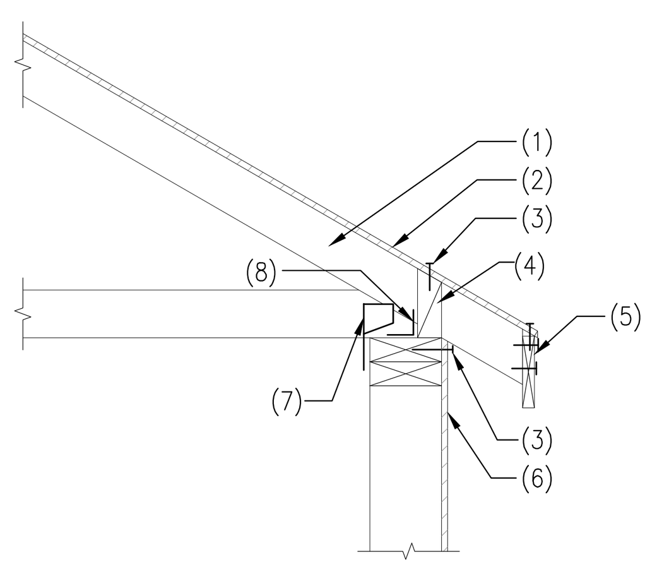
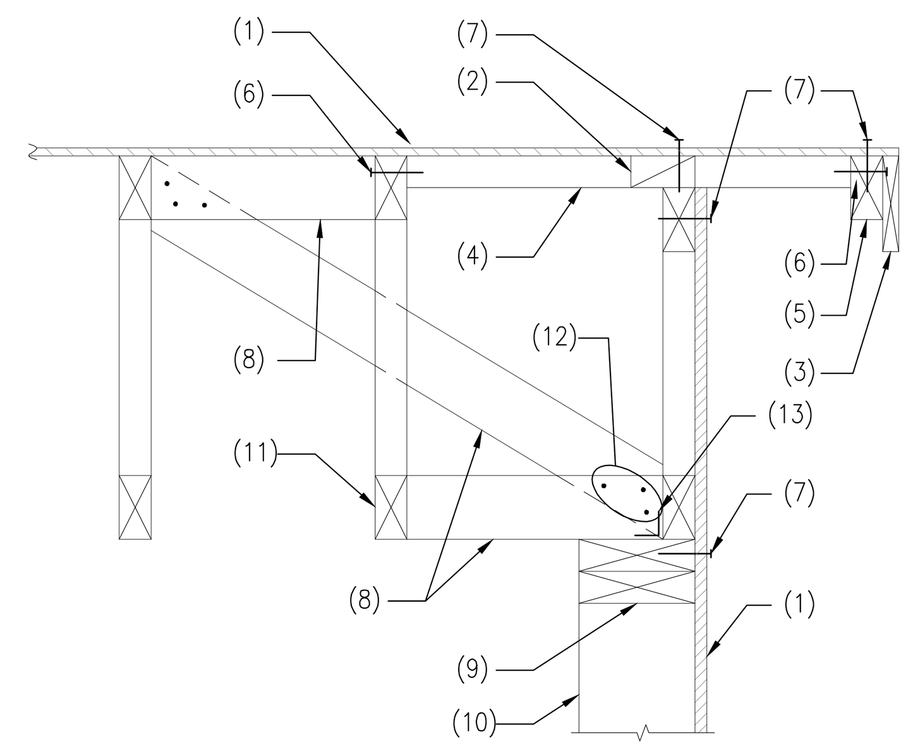
FNDTN AND FRAMING DETAILS

Elevation Home Designs
Job # : 24-XXXX
Printed On:
10/02/2025
Layout Sheet #
4 of 6
Sheet:
S2.0



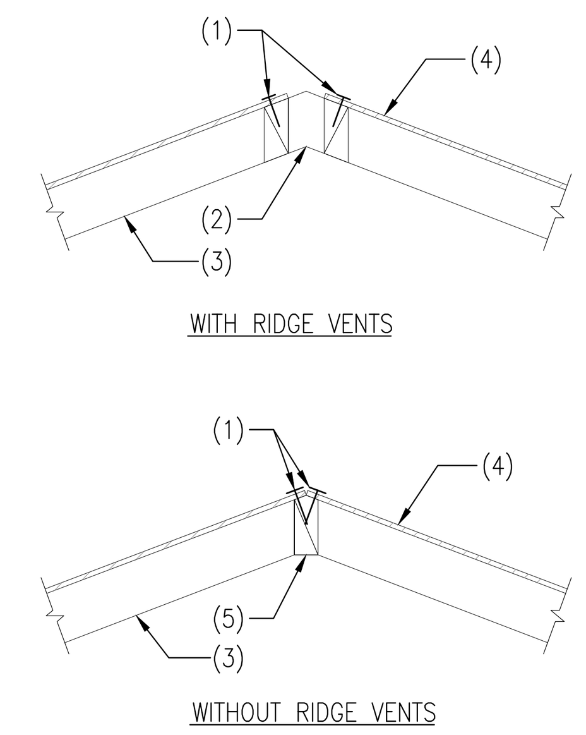
NOTES:
1. WOOD TRUSS PER PLAN
2. PLYWOOD SHEATHING
3. EDGE NAILING
4. 2x BLOCKING WITH (3) 16d NAILS PER BLOCK
5. WOOD FASCIA WITH (2) 10d NAILS PER TRUSS MANUFACTURER
6. SHEATHING AND ATTACHMENT PER SHEARWALL SCHEDULE
7. SIMPSON H1 AT EACH TRUSS – USE SIMPSON H2.5 EACH SIDE OF GIRDER TRUSS
8. SIMPSON A35 CLIP PER SHEARWALL SCHEDULE

1 WOOD TRUSS AT WOOD STUD WALL
SCALE: N.T.S.



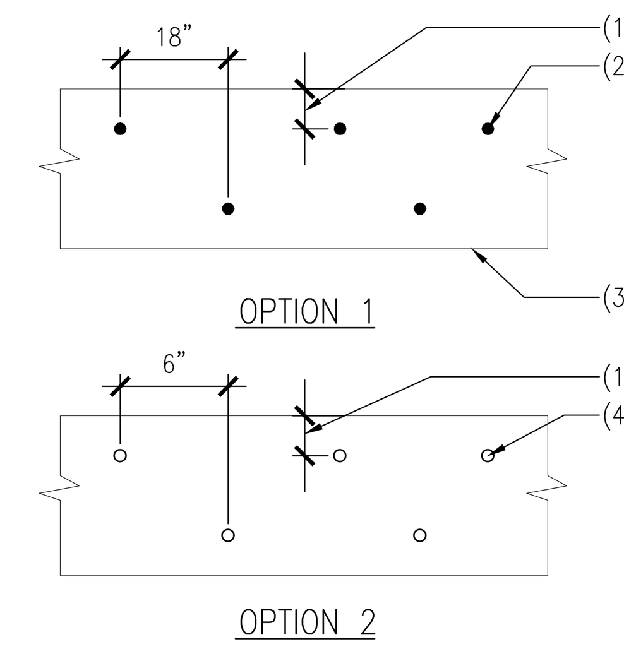
NOTES:
1. PLYWOOD SHEATHING
2. 2x BLOCKING
3. ARCHITECTURAL FASCIA
4. 2x4 OUTRIGGERS AT 24" O.C.
5. 2x STRUCTURAL FASCIA
6. (2) 10d EACH OUTRIGGER
7. EDGE NAILING
8. 2x4 BRACE AT 48" O.C.
9. 2x DOUBLE TOP PLATE
10. WOOD STUD WALL
11. PRE–MFR'D WOOD TRUSS
12. (3) 10d EACH END
13. SIMPSON A35 CLIPS PER SHEARWALL SCHEDULE

2 GABLE END TRUSS AT WOOD STUD WALL
SCALE: N.T.S.



NOTES:
1. EDGE NAILING
2. RIDGE VENTS
3. WOOD TRUSS PER PLAN
4. PLYWOOD SHEATHING
5. 2x SOLID BLOCKING

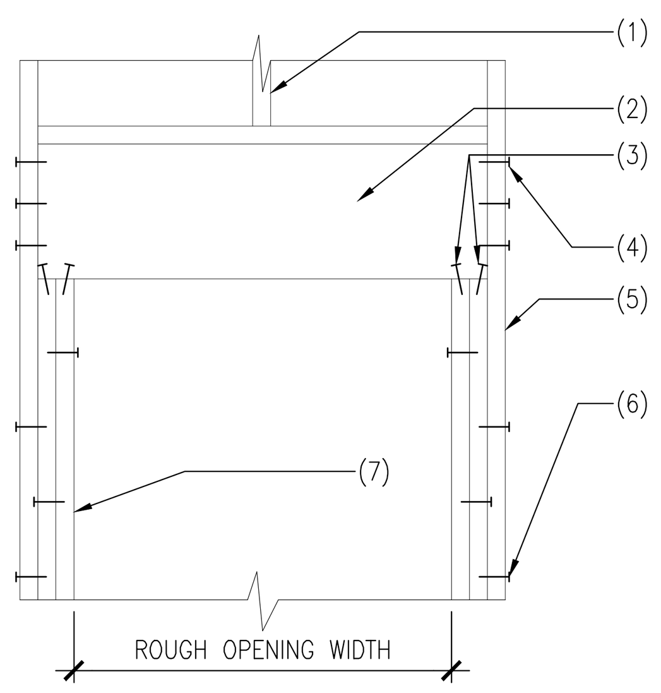
3 TRUSS RIDGE
SCALE: N.T.S.



NOTES:
1. 1/4 DEPTH OF MEMBER, TYPICAL
2. 1/2" DIAMETER BOLTS AT 18" O.C. MINIMUM, STAGGERED
3. (2) 2x12 AND LARGER USE 1/2" DIAMETER BOLTS AT 12" O.C.
4. 16d NAIL AT 6" O.C. MINIMUM, STAGGERED

NOTES:
A. ATTACHMENT (BOLTS OR NAILS) CONTINUOUS FOR LENGTH OF MEMBER.

4 BUILT-UP WOOD MEMBER
SCALE: N.T.S.



NOTES:
1. WOOD STUD WALL
2. WOOD HEADER PER PLAN
3. (2) 16d TOENAILS – EACH SIDE, EACH END
4. (3) 16d NAILS AS SHOWN
5. RUN VERTICAL STUDS UP PAST HEADER AS SHOWN
6. (2) 16d NAILS AT 12" O.C.
7. DOUBLE STUDS UNDER HEADER BEARINGS FOR OPENING WIDTHS GREATER THAN 5'–0"

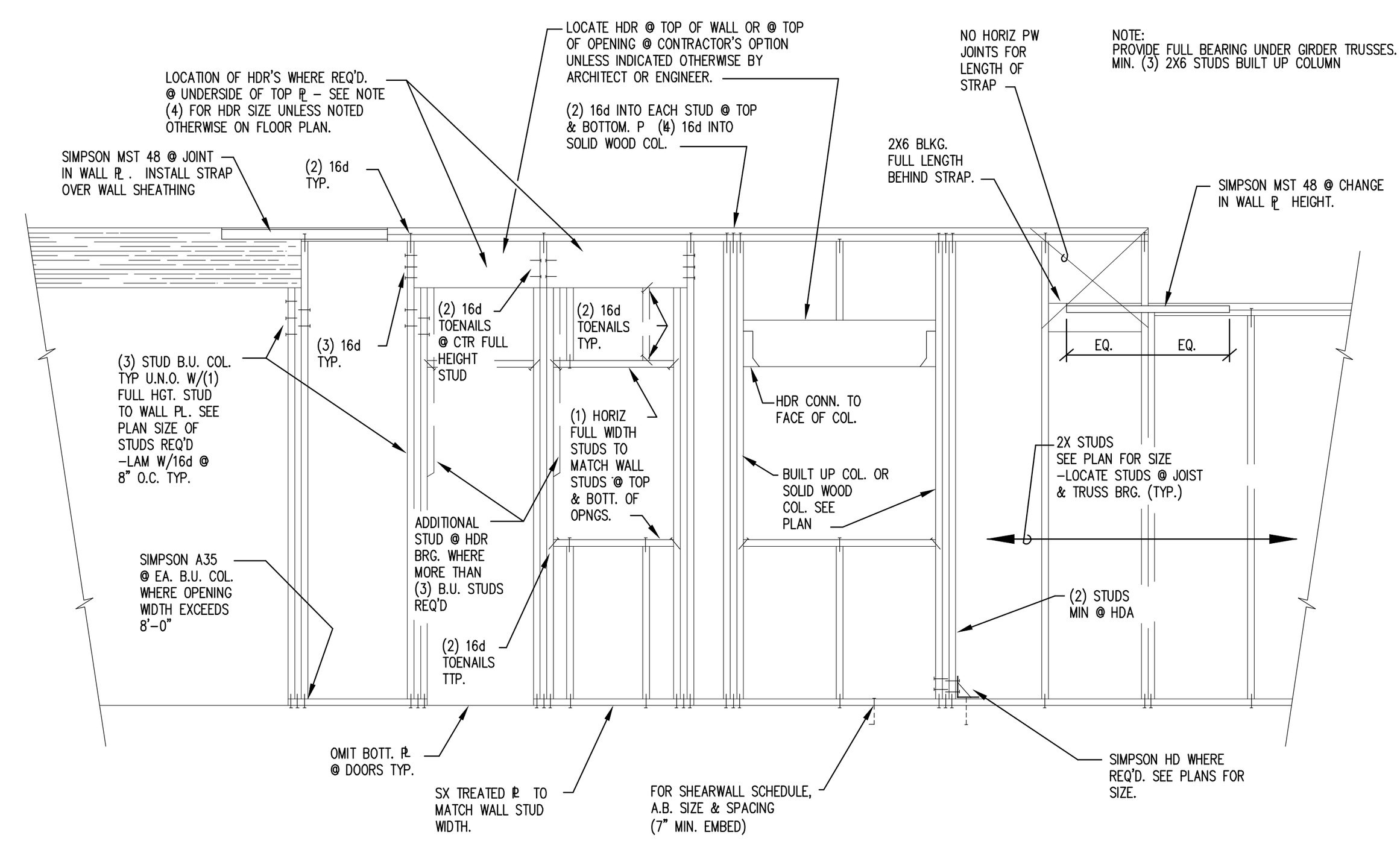
5 WOOD HEADER (DROPPED)
SCALE: N.T.S.

HEADER AND BEAM SCHEDULE FOR LOAD BEARING WALLS

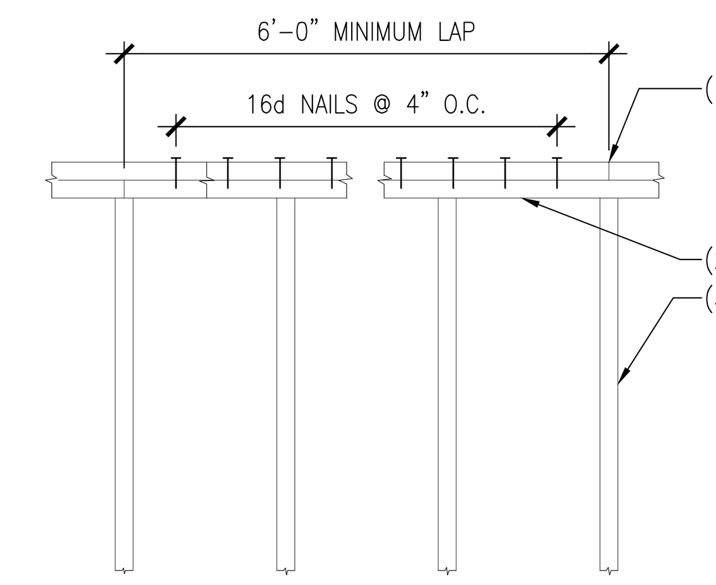
OPENING SIZE	HEADER SIZE	TRIMMERS REQ'D		KING STUDS REQ'D	
		2X4	2X6	2X4	2X6
UP TO 3'–6"	SEE PLAN	1	1	1	1
3'–6"> TO 5'–0"	SEE PLAN	2	1	2	2
5'–0"> TO 8'–0"	SEE PLAN	2	1	2	2
8'–0"> TO 10'–6"	SEE PLAN	3	2	3	3
10'–6"> TO 16'–0"	SEE PLAN	4	3	3	3

NOTES:
– UNLESS NOTED OTHERWISE, ALL BEAM AND HEADER SUPPORTS SHALL CONFORM TO THIS SCHEDULE
– ALL BUILT–UP SUPPORTS WILL MATCH OR EXCEED WIDTH OF SUPPORTED BEAM
– ALL HEADERS ARE TO BE 4X10 DF–L NO.2 UNLESS NOTED OTHERWISE

6 HEADER AND BEAM SCHEDULE FOR LOAD BEARING WALLS
SCALE: N.T.S.



7 TYPICAL EXTERIOR + INTERIOR BEARING WALL FRAMING ELEVATION
SCALE: N.T.S.



NOTES:
1. TOP PLATE SPLICE OVER STUD ONLY.
2. DOUBLE TOP PLATE.
3. WOOD STUDS.

8 TYPICAL SPLICE OF TOP PLATES
SCALE: N.T.S.

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ROOF FRAMING DETAILS

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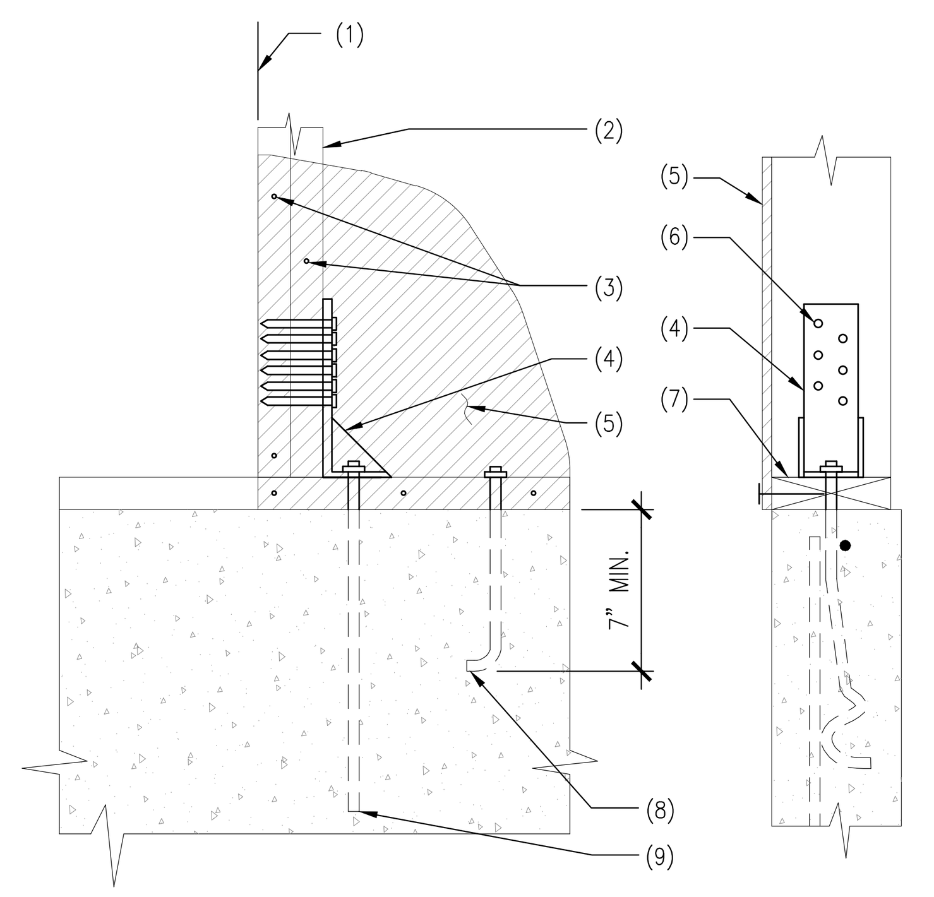


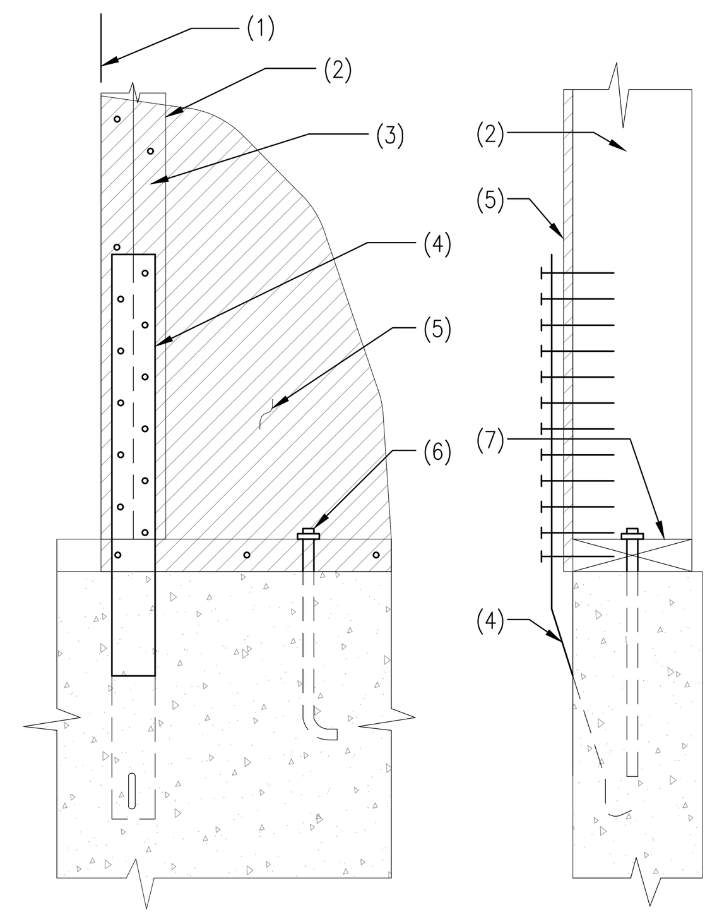
NOTES:

1. EDGE OF SHEAR PANEL
2. CONTINUOUS DOUBLE STUDS AT SHEARWALL EDGES – NAIL STUDS TOGETHER WITH 10d NAILS AT 12" O.C.
3. EDGE NAILING – ALSO NAIL TO TOP PLATES SAME AS EDGE OF SHEARWALL NAILING
4. HOLDOWN REQUIRED BOTH EDGES OF SHEARWALL
5. SHEATHING AND ATTACHMENT PER SHEARWALL SCHEDULE
6. SELF TAPPING LAG SCREWS
7. TREATED BASE PLATE PER SHEARWALL SCHEDULE
8. ANCHOR BOLTS PER SHEARWALL SCHEDULE
9. SIMPSON SSTB ANCHOR BOLT

HOLDOWN	FASTENERS	ANCHOR DIA.
HDU2	(6) SDS 1/4x2 1/2	5/8" DIA.
HDU4	(10) SDS 1/4x2 1/2	5/8" DIA.
HDU5	(14) SDS 1/4x2 1/2	5/8" DIA.
HDU8	(20) SDS 1/4x2 1/2	7/8" DIA.
HDQ8	(20) SDS 1/4x3	7/8" DIA.
HD10A	(4) MACHINE BOLTS	7/8" DIA.

1 SHEARWALL DETAIL WITH SIMPSON HDU-HDQ HOLDOWN

SCALE: N.T.S.

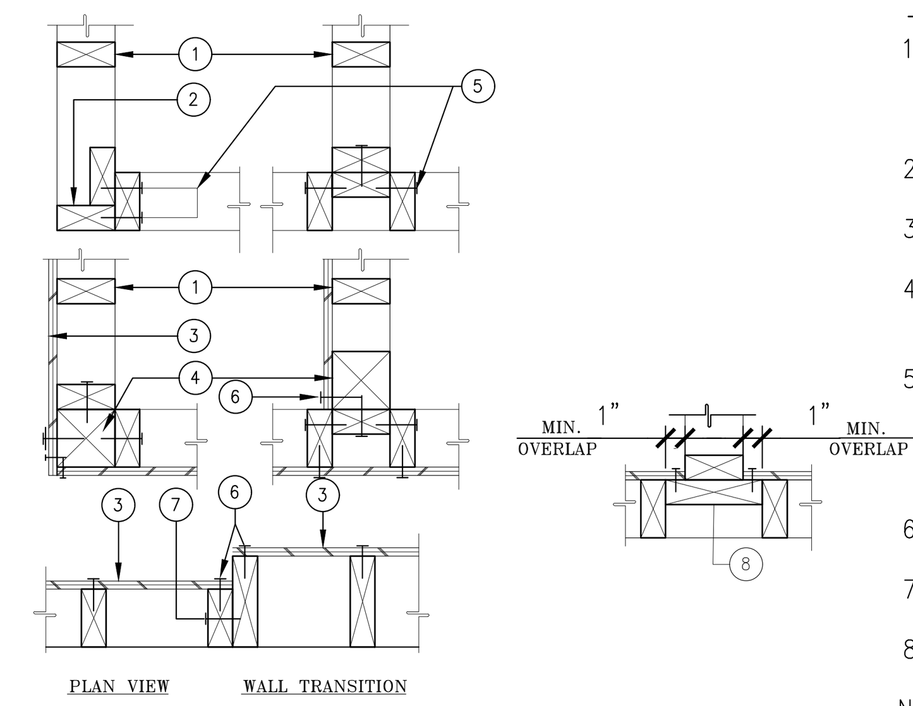


NOTES:

1. EDGE OF SHEARWALL
2. DOUBLE STUDS AT SHEARWALL EDGES – ATTACH STUDS TO ADJACENT STUD WITH 10d NAILS AT 12" O.C.
3. EDGE NAILING – ALSO NAIL TO TOP PLATE SAME AS EDGE OF SHEARWALL NAILING
4. HOLDOWN REQUIRED BOTH EDGES OF SHEARWALL
5. SHEATHING AND ATTACHMENT PER SHEARWALL SCHEDULE
6. ANCHOR BOLTS PER SHEARWALL SCHEDULE
7. TREATED BASE PLATE PER SHEARWALL SCHEDULE

2 SHEARWALL DETAIL WITH SIMPSON STRAP TIE HOLDOWN

SCALE: N.T.S.



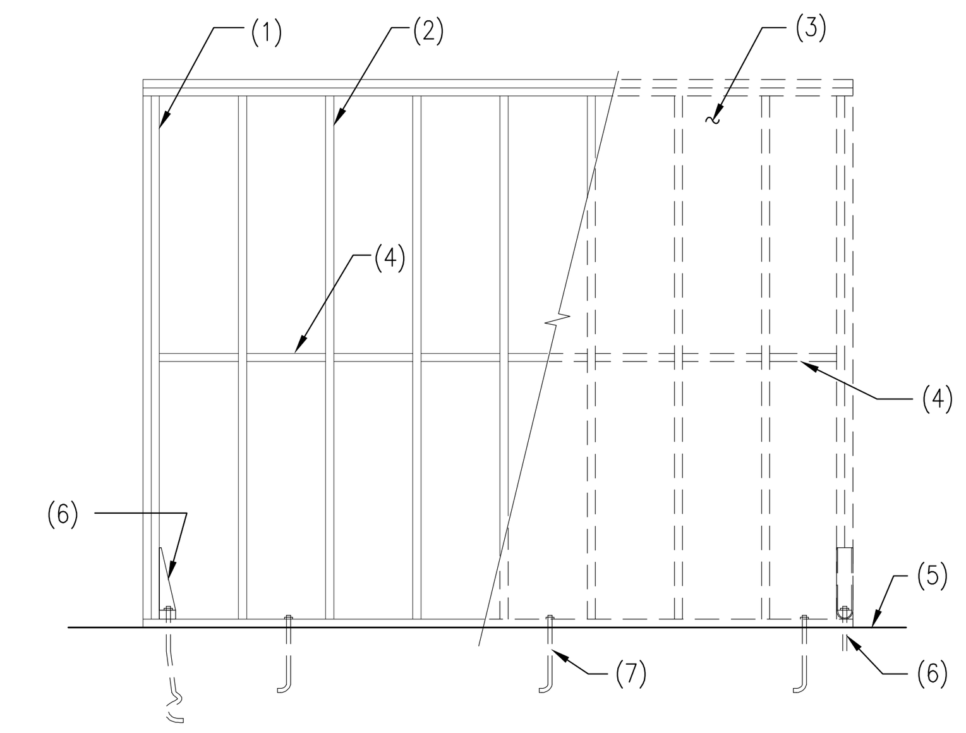
NOTES:

1. TYPICAL 2X STUDS AT 16" O.C. U.N.O. W/ (2) 16d END NAILS OR (4) 8d TOE NAILS EACH END TO TOP & SILL PLATES.
2. CORNER STUDS OR POST PER PLAN.
3. PLYWOOD SHEAR PANEL PER PLAN.
4. POST AT END OF SHEAR PANEL PER PLAN.
5. NAIL CORNER & MULTI–STUDS TOGETHER W/ 16d'S @ 16" O.C. STAGGERED @ SHEAR WALLS & 24" O.C. @ NON–SHEAR WALLS.
6. EDGE NAILING
7. 16d's @ 4" O.C. STAGGERED
8. 2x STUD @ SHEAR BREAK.

NOTE: NAILS SPACED @ 2" O.C. SHOULD BE STAGGERED MIN. 1/8".

3 SHEARWALL INTERSECTION FRAMING

SCALE: N.T.S.

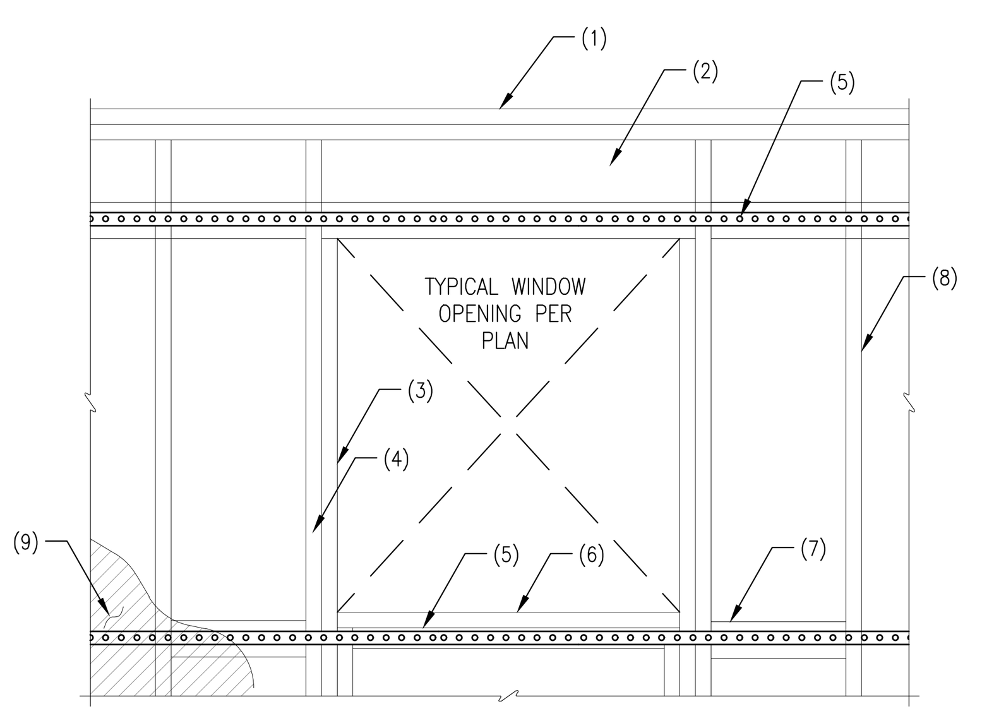


NOTES:

1. (2) STUDS, U.N.O. AT EACH END OF PANEL NAILED AS BUILT–UP POST, TYPICAL
2. WOOD STUDS
3. SHEATHING MATERIAL
4. BLOCKING REQUIRED AT SHEATHING PANEL JOINTS
5. FINISHED FLOOR
6. HOLD DOWNS AS OCCURS
7. ANCHOR BOLTS

4 ONE-STORY SHEAR WALL ELEVATION

SCALE: N.T.S.



NOTES:

1. DOUBLE TOP PLATE
2. HEADER PER PLAN
3. TRIMMER
4. KING STUD
5. CONT. STRAP PER PLAN. INSTALLED OVER SHEATHING
6. 2X SILL PLATE
7. 3X BLOCKING
8. WALL STUD
9. SHEATHING AND ATTACHMENT PER SHEARWALL SCHEDULE
10. WALL ENDS SHALL HAVE MIN. (2) STUDS

** NAIL WALL SHEATHING TO BLOCKS AND AROUND ALL 4 SIDES OF OPENING AS SHEAR WALL EDGE NAILING

5 WINDOW STRAPPING DETAIL (SHEAR WALL FORCE TRANSFER DETAIL)

SCALE: N.T.S.

SHEAR WALL SCHEDULE

WALL MARK	SHEATHING	SIDES	PANEL EDGE NAILING	FIELD NAILING	FRAMING AT ADJACENT PANEL EDGES	BASE PLATE ATTACHMENT	ANCHOR BOLT SPACING	FOUNDATION SILL PLATE/FLOOR BASE PLATE	BLOCKING/RIM JOIST ATTACHMENT
SW1	7/16" OSB	ONE	8d NAILS AT 6" O.C.	12" O.C.	2x	16d NAILS AT 6" O.C.	5/8" DIAMETER BOLTS AT 48" O.C.	2x	SIMPSON A35 CLIPS AT 18" O.C.

SHEAR WALL SCHEDULE NOTES:

FRAMING STUDS SHALL BE DOUGLAS–FIR #2 SPACED AT 16" O.C. MAXIMUM. THICKNESS OF STUDS SHALL BE 2x UNLESS OTHERWISE NOTED IN SCHEDULE.

SHEATHING PANELS MAY BE PLACED VERTICAL OR HORIZONTAL. BLOCK ALL HORIZONTAL EDGES WITH 2x OR 3x BLOCKING TO MATCH STUD WIDTH UNLESS NOTED OTHERWISE.

ALL EXTERIOR WALLS NOT DESIGNATED AS SHEARWALLS SHALL RECEIVE APA RATED SHEATHING, FULLY BLOCKED WITH MINIMUM EDGE ATTACHMENT OF 8d NAILS @ 6" O.C., 12" O.C. FIELD.

NAILING APPLIES TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING.

MINIMUM ANCHOR BOLT SPACING OF 48" O.C. UNLESS OTHERWISE NOTED IN SCHEDULE. 10" MIN LENGTH, 7" MIN EMBEDMENT, WITHIN 12" OF EACH END OF MUDSILL, 2 MIN. EACH PIECE, 3X3X1/4" STEEL PLATE WASHERS MINIMUM OF 2 ANCHORS PER WALL. A DIAGONAL SLOT IN THE PLATE WASHER MAY BE USED WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT NOT TO EXCEED 1–3/4", PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. DO NOT RECESS BOLTS.

TABLES BASED ON 12d NAILS (3 1/4" LONG x 0.113" COMMON OR 3 1/4" x 0.113" GALVANIZED BOX).

BLOCKING/RIM JOIST ATTACHMENT NEED NOT BE USED WHERE THE SHEATHING IS DIRECTLY ATTACHED WITH EDGE NAILING TO THE DOUBLE TOP PLATES AT UPPER STORY SHEARWALLS AND TO THE BASE/SILL PLATE BELOW AT LOWER STORY SHEARWALLS.

WHERE 3x BASE/SILL ARE SPECIFIED, 20d COMMON NAILS SHALL BE USED FOR THE BASE PLATE ATTACHMENT IN LIEU OF THE ORIGINALLY SPECIFIED 16d COMMON NAILS.

6 SHEARWALL SCHEDULE

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SW SCH. & HOLDOWN DETAILS

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