DESIGN CRITERIA

A. GENERAL	
BUILDING CODE	2022 IBC
RISK CATEGORY	II
B. SOIL PARAMETERS	
SOIL ENGINEER	N/A
REPORT NUMBER	N/A
DATE	N/A
ALLOWABLE SOIL BEARING PRESSURE	1500 psf
ALLOWABLE PASSIVE PRESSURE	-
C. WIND DESIGN PARAMETERS	
EXPOSURE CATEGORY	C
DESIGN SPEED	96 mph
D. SEISMIC DESIGN PARAMETERS	
SEISMIC DESIGN CATEGORY	D
SEISMIC IMPORTANCE FACTOR, Ie	1
SITE CLASS	D-DEFAULT
SHORT PERIOD SPECTRAL ACCELERATION, Ss	0.942
1ST PERIOD SPECTRAL ACCELERATION, S1	0.335
SHORT PERIOD ACCELERATION PARAMETER, SDS	0.754
1 SECOND ACCELERATION PARAMETER, SD1	0.439
RESPONSE MODIFICATION FACTOR, R	6.5
SEISMIC RESPONSE COEFFIECIENT, Cs	0.116
DESIGN BASE SHEAR V = 0.7CsW	0.081W

E. GRAVITY DESIGN PARAMETERS (psf)

LOAD	ROOF
DEAD	20
ROOF LIVE	20

GENERAL NOTES

1. REFERENCE TO CODES, RULES, REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST PRINTED EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
2. STRUCTURAL INFORMATION SHOWN ON FRAMING PLANS IS FOR THE MAIN STRUCTURAL ELEMENTS. NON-STRUCTURAL ELEMENTS SHALL BE CONSTRUCTED PER APPROVED CODE REQUIREMENTS.
3. DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE OF SAME NATURE AS THOSE SHOWN FOR SIMILAR CONDITIONS. REFER TO THE TYPICAL DETAIL SHEETS FOR TYPICAL DETAILS OF CONSTRUCTION. TYPICAL DETAILS APPLY TO ALL CONSTRUCTION UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE. WHERE CONDITIONS REQUIRE MODIFICATIONS OF A TYPICAL DETAIL, THE CONTRACTOR SHALL SUBMIT MODIFIED DETAIL FOR APPROVAL BY THE EOR TO FABRICATION AND INSTALLATION.
4. DO NOT USE SCALED DIMENSIONS, USE WRITTEN DIMENSIONS. WHERE NO DIMENSION IS PROVIDE, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK. FIELD MEASURE EXISTING DIMENSIONS NOT NOTED.
5. OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BEFORE BEGINNING WORK. SPECIAL CARE SHALL BE TAKEN TO PROJECT UTILITIES THAT ARE TO REMAIN IN SERVICE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS.
8. DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO SHORING AND TEMPORARY BRACING. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO INSURE SAFETY OF ALL PERSONS AND STRUCTURES AT SITE AND ADJACENT TO THE SITE. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT, ENGINEER OR CONSTRUCTION MANAGER SHALL NOT RELIEVE THE CONTRACTOR OF SUCH RESPONSIBILITY.
9. SPECIFICATIONS RELATED TO WATERPROOFING, INCLUDING BUT NOT LIMITED TO MEMBRANES, WATERSTOPS, SEALANTS, FLASHING, VAPOR BARRIER, ARE AS SPECIFIED BY ARCHITECT/WATER PROOFING CONSULTANT.
10. CONSTRUCTION MATERIALS SHALL BE DISTRIBUTED WHEN PLACED ON THE STRUCTURE SUCH THAT LOADS DO NOT EXCEED DESIGN LIVE LOADS OR RESULT IN AN UNBALANCED CONDITION.

CONCRETE NOTES

1. CONCRETE IS REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED. WHERE REINFORCING IS NOT SPECIFICALLY SHOWN OR WHERE DETAILS ARE NOT GIVEN, PROVIDE REINFORCING SIMILAR TO THAT SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE.
2. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF ACI318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AND THE LATEST EDITION OF ACI117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS".
3. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE MIN 2500 PSI, U.N.O.
4. NO MORE THAN ONE GRADE OF CONCRETE SHALL BE ON THE JOB SITE AT ANY ONE TIME.
5. CONCRETE MIXES SHALL BE PREPARED WITH TYPE II/V PORTLAND CEMENT CONFORMING TO ASTM C150.
6. CONCRETE MIX DESIGNS CONTAINING FLY ASH MAY BE USED WHERE CONCRETE IS NOT VISUALLY EXPOSED. FLY ASH SHALL CONFORM WITH ASTM C618 AND MAY REPLACE UP TO 20% PORLAND CEMENT BY VOLUME.
7. CONCRETE MIX PROPORTIONING SHALL MEET STATISTICAL STRENGTH REQUIREMENTS OF ACI 301 AND ACI 214R. MIX DESIGNS SHOWING COMPLIANCE WITH STRENGTH REQUIREMENTS TO BE SUBMITTED TO E.O.R FOR REVIEW.
8. NORMAL WEIGHT CONCRETE AGGREGATES SHALL CONFORM TO ASTM C33. LIGHT WEIGHT CONCRETE AGGREGATES SHALL CONFORM TO ASTM C330.
9. CONCRETE STRENGTH TEST REPORTS SHALL BE IN COMPLIANCE WITH ACI 318 AND SHALL BE SUBMITTED TO E.O.R.
10. WATER USED IN MIXING CONCRETE SHALL CONFORM WITH ASTM C1602.
11. THOROUGHLY CLEAN AND ROUGHEN ALL HARDENED CONCRETE AND MASONRY SURFACES TO RECEIVE NEW CONCRETE. INTERFACE SHALL BE ROUGHENED TO A FULL AMPLITUDE OF 1/4", U.O.N.

REIFORCING STEEL NOTES

1. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 FOR ALL SIZES.
2. ALL REINFORCING TO BE ACCURATELY AND SECURELY LOCATED PRIOR TO POURING CONCRETE.
3. ALL HORIZONTAL REINFORCEMENT TO HAVE MATCHING DOWELS AT CORNERS OF WALLS. ALL VERTICAL REINFORCEMENT TO HAVE MATCHING DOWELS TO FOOTING, U.O.N.
4. COVERAGE SHALL BE: 3" CLEAR FOR CONCRETE CAST AGAINST EARTH, 2" CLEAR FOR CONCRETE EXPOSED TO MOISTURE BUT NOT CAST AGAINST EARTH, AND 1 1/2" FOR ALL OTHER CONDITIONS. (U.N.O)

FOUNDATION NOTES

1. SEE NOTE #3 UNDER REINFORCED CONCRETE FOR CONCRETE STRENGTH.
2. THE CBC CHAPTER 18 SHALL BE FOLLOWED AND SHALL BE CONSIDERED MINIMUM REQUIREMENTS UNLESS MORE STRINGENT REQUIREMENTS ARE PRESENTED IN THE SPECIFICATIONS OR ON THE DRAWINGS.
3. IF NO GEOTECHNICAL REPORT PROVIDED, IT IS LICENSED GENERAL CONTRACTOR OR OWNER BUILDER RESPONSIBILITY TO CHECK THE STRUCTURE WILL BE LOCATED ENTIRELY ON UNDISTURBED - NON EXPANSIVE NATIVE SOIL. IF THEY SUSPECTED FILL, EXPANSIVE SOIL OR ANY GEOLOGIC INSTABILITY MUST REACH TO GEOTECHNICAL ENGINEER AND EOR TO ADJUST THE DESIGN ACCORDINGLY.
4. CONCRETE SHALL BE TO THE STRENGTH AND SLUMP AS SPECIFIED PER STRUCTURAL DESIGN, AND CONSIST OF PORTLAND CEMENT ASTM C-150 TYPE V AND BUILDING CODE SECTION 1904 (ACI 318 SECTION 19.3.2.1) WHEN EXPOSED TO SULFATE CONTAINING SOLUTIONS. AGGREGATES SHALL BE PER ASTM C-33. WATER TO BE CLEAN AND POTABLE.
5. ADMIXTURES IN CONCRETE MIX. CONTAINING CALCIUM CHLORIDES SHALL NOT BE USED.
6. PLACEMENT SHALL BE IN ONE CONTINUOUS OPERATION UNLESS OTHERWISE SPECIFIED. SLAB SURFACE SHALL BE CURED WITH 'HUNTS' COMPOUND OR EQUAL OR CURED WITH OTHER METHODS IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AT CONTRACTOR'S OPTION.
7. CONTRACTOR SHALL DAMPEN SLAB UNDERLAYMENT OF SAND/MEMBRANE JUST PRIOR TO CONCRETE PLACEMENT TO ASSIST UNIFORM CONCRETE CURING. SLABS MUST NOT BE POURED DURING OR IMMEDIATELY AFTER RAINSTORMS. THE SPECIFIED SAND OVER VISQUEEN SHOULD NOT BE SATURATED AT THE TIME OF THE CONCRETE POUR. ANY FREE WATER TRAPPED IN THE SAND LAYER MUST BE REMOVED PRIOR TO THE CONCRETE POUR.
8. THE BOTTOMS OF FOOTING EXCAVATIONS SHALL BE LEVEL, CLEAN AND FREE OF LOOSE MATERIAL OR WATER WHEN CONCRETE IS PLACED. OVER EXCAVATION SHALL BE FILLED WITH CONCRETE OR PROPERLY COMPACTED FILL THAT HAS BEEN . BACKFILL SHALL NOT BE PLACED UNTIL SUPPORTING FOUNDATIONS, WALLS AND SLAB HAVE ATTAINED SUFFICIENT STRENGTH TO SUPPORT LATERAL SOIL PRESSURE.
9. FOOTINGS SHALL BEAR ON NATIVE SOIL.
10. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED WITH NON-EXPANSIVE SOIL BUT NOT BEHIND RETAINING WALLS BEFORE CONCRETE OR MASONRY ATTAINS ITS FULL DESIGN STRENGTH.
11. REQUIREMENTS FOR PRE-SATURATION OF SUBGRADE SOILS AND DAYLIGHT SETBACK OF EXTERIOR FOOTINGS FROM ANY DESCENDING SLOPE SHALL COMPLY
12. FINISH GRADE AROUND THE PERIMETER OF SLAB SHALL BE CONSTRUCTED SUCH THAT RAIN AND IRRIGATION WATER IS DRAINED AWAY FROM THE SLAB.
13. ALL SITE AND PAD PREPARATION, SUCH AS BUT NOT LIMITED TO SHADING, COMPACTING OF THE FILL, PRE-SATURATION, AND CONCRETE SLAB BASE PREPARATION.
14. FOUNDATION DRAWINGS PREPARED BY E.O.R. REFLECT THE STRUCTURAL REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, DEPRESSIONS, SLOPE, SHELVES, PATIOS, STOOPS AND PORCHES NOT SHOWN IN FOUNDATION DRAWINGS. ACCURACY OF THE DIMENSIONS AND FINAL FIT OF THE BUILDING SHALL BE REVIEWED BY THE ARCHITECT AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
15. WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SHALL BE ROUGHENED TO A MINIMUM 1/4" AMPLITUDE.
16. WAITING PERIOD FOR CONCRETE SLABS-ON-GRADE PRIOR TO START OF CONSTRUCTION IS AS FOLLOWS:
    a. DO NOT WALK ON SLAB UNTIL 24 HOURS AFTER CONCRETE HAS BEEN POURED.
    b. BEGIN WALL FRAMING 4-5 DAYS AFTER CONCRETE POURED.
    c. BEGIN ROOF/FLOOR FRAMING 7-10 DAYS AFTER CONCRETE POURED.
    d. DO NOT LOAD ROOF PRIOR TO 14 DAYS AFTER CONCRETE POURED.
15. NO PIPES OR CONDUITS SHALL EXTEND UNDER ISOLATED COLUMN FOOTING OR UNDER CONTINUOUS WALL FOOTINGS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER AND THE BUILDING OFFICIAL.
16. ALUMINUM CONDUIT, ALUMINUM SLEEVES AND ALUMINUM EMBEDS ARE NOT PERMITTED IN CONCRETE.
17. ALL GRADE BEAMS SHALL BE POURED MONOLITHICALLY FOR THEIR ENTIRE LENGTH.
18. ALL CONDUITS SHALL BE PLACED WITHIN THE MIDDLE ONE-THIRD OF THE SLAB THICKNESS. THE MAXIMUM SIZE OF CONDUITS SHALL BE 1 1/4" DIAMETER AND SHALL BE SPACED NO CLOSER (TO EACH OTHER OR REINFORCING STEEL) THAN 4 INCHES UNLESS PRIOR APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
19. PROVIDE MIN. (1) #4 REINFORCING FOR ELECTRICAL GROUND, LOCATION TO BE VERIFIED WITH THE ELECTRICAL CONTRACTOR.
20. ALL HOLDOWNS AND POST ANCHORS SHALL BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.

STRUCTURAL STEEL NOTES

1. ALL STRUCTURAL STEEL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS SPECIFIED IN BUILDING CODE, CHAPTER 22 & REFERENCE.
2. STEEL SHALL BE PRIMED WITH A RUST RESISTANCE PRIMER & SHOULD CONFORM TO ASTM A36 (FY=36 ksi) AS A MINIMUM, UNLESS OTHERWISE NOTED. ALL W SHAPES TO BE ASTM A992. (FY=50 ksi)
3. STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B (FY=35 ksi).
4. ROUND HSS TUBING SHALL CONFORM TO ASTM A500 GRADE B (FY=42 ksi)
5. RECTANGULAR AND SQUARE HSS TUBING SHALL CONFORM TO ASTM A500, GRADE B (FY=46 ksi).
6. HP SECTIONS SHALL CONFORM TO ASTM A572, GRADE 50 (FY=50 ksi).
7. ALL STRUCTURAL WELDING PROCEDURES AND MATERIALS SHALL CONFORM TO BUILDING CODE, SECTION 2204.1. ALL WELDING SHALL BE BY THE SHIELD METAL ARC WELDING PROCESS OR THE SUBMERGED ARC WELDING PROCESS USING E70XX-LOW HYDROGEN ELECTRODES, UNLESS OTHERWISE NOTED.
8. ALL BOLTS FOR CONNECTIONS OF STEEL MEMBERS SHALL CONFORM TO BUILDING CODE, SECTION 2204.2 & ASTM A325N, UNLESS OTHERWISE NOTED. HOLES FOR BOLTS SHOULD BE DRILLED OR PUNCHED & SHALL BE 1/16" LARGER THAN BOLT DIAMETER.
9. PREFABRICATED STEEL MOMENT FRAMES PER MANUFACTURER. STEEL MOMENT FRAME MANUFACTURER SHALL SUBMIT SHOP DRAWING, DESIGN CALCULATIONS, AND APPROVED MOMENT FRAME TEST REPORT (ICC, IAMPO, OR TEST PER APPENDIX S OF AISC SEISMIC PROVISION) TO E.O.R. FOR REVIEW.
10. ALL SHOP WELDING AND FABRICATION MUST BE DONE IN A SHOP APPROVED BY A SPECIAL INSPECTION AGENCY WHICH IS APPROVED BY THE BUILDING OFFICIAL. ALL FIELD WELDING MUST BE PERFORMED BY A CERTIFIED WELDER AND A SPECIAL INSPECTOR SHALL CONTINUOUSLY INSPECT ALL STRUCTURAL FIELD WELDING. BOTH SHALL BE APPROVED BY THE BUILDING OFFICIAL.
11. GROUT UNDER BASE PLATES SHALL BE NON-SHRINK TYPE AND SHALL HAVE COMPRESSIVE STRENGTH EQUAL TO OR GREATER THAN THE CONCRETE OR MASONRY SUPPORTING IT.

WOOD SPECIFICATIONS & NOTES

1. SAWN FRAMING LUMBER - DOUGLAS FIR-LARCH U.N.O:
   - BEAMS/ POST/ RAFTERS & ALL OTHER STRUCTURAL FRAMING: 2x, 4x MEMBERS: NO. 2
     6x, 8x MEMBERS: NO. 1
   - STUDS: USE STUD GRADE IF HEIGHT UP TO 9'-0" AND NO. 2 IF TALLER THAN 9'-0".
   - PLATES AND BLOCKING: NO. 2
   - ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY TO BE PRESSURE PRESERVATIVE TREATED.
   - ALL FRAMING LUMBER SHALL HAVE 19% MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION AND FABRICATION.

5. TYPICAL STUD WALL TABLE:

STUD SIZE	BEARING WALLS 10ft MAX.				NON-BEARING WALLS	
	MAXIMUM SPACING WHEN SUPPORTING					
	ROOF	ONE FLOOR & ROOF	TWO FLOOR & ROOF	ONE FLOOR ONLY	STUD HEIGHT	MAX. SPACING
	(inches)	(inches)	(inches)	(inches)	(feet)	(inches)
2x4	24	16	NOT ALLOWED	24	14	24
3x4	24	24	16	24	14	24
2x6	24	24	16	24	20	24
2-2x4	-	-	16	-	-	-
2-2x6	-	-	24	-	-	-

BEARING WALLS EXCEEDING 10'-0" MUST BE DESIGNED CASE BY CASE.

6. TYPICAL CEILING JOISTS WITH DEAD LOAD DL = 6.0 psf, LIVE LOAD LL = 10.0 psf:

2x4		2x6		2x8	
SPACING	MAX. SPAN	SPACING	MAX. SPAN	SPACING	MAX. SPAN
12"	9'-10"	12"	16'-0"	12"	20'-5"
16"	8'-10"	16"	14'-5"	16"	18'-4"
24"	7'-7"	24"	12'-6"	24"	15'-9"

7. I-JOISTS SHALL BE MANUFACTURED BY WEYERHAEUSER OR EQUIVALENT APPROVED ICC MANUFACTURED PRODUCT.
8. FRAMING CONTRACTOR SHOULD NOTIFY E.O.R. IN WRITING IF THE ROOFING WEIGHT EXCEEDS 10 psf PRIOR TO CONSTRUCTION.
9. STUD WALLS PERPENDICULAR TO A CONCRETE OR MASONRY WALL SHALL BE BOLTED TO THE CONCRETE OR MASONRY WALL WITH 5/8" DIAMETER X 8" A307 BOLTS AT TOP, MID-HEIGHT AND BOTTOM.
10. INSTALL WINDOWS AND DOORS IN STUD WALLS AFTER DEAD LOADS ARE APPLIED, AND PROVIDE A 1/2" SHIM SPACE AT THE HEAD CONDITION.
11. ALL POSTS SHALL BE FULL HEIGHT FROM FOUNDATION TO ROOF. WHERE POSTS ARE DISCONTINOUS AT JOIST SPACE AND/OR FROM TOP OF BEAMS/HEADERS TO LOWER TOP PLATE, BLOCK THIS SPACE WITH STUD POST.
12. BLOCKING AND BRIDGING - PROVIDE AS FOLLOWS:
    - 2x SOLID BLOCKING BETWEEN JOISTS AND RAFTERS OVER SUPPORT.
    - 2x SOLID BLOCKING BETWEEN JOISTS AND RAFTER NOT OVER 8'-0" ON CENTER NOR MORE THAN 8'-0" FROM SUPPORT.
    - OMIT BLOCKING BETWEEN CEILING JOISTS AND RAFTERS 2x8 AND SMALLER.
13. ALL VERTICAL PIPES THROUGH PLATES AND/OR SOLID RIM BEAMS MUST BE DRILLED CLEAN CUT W/ 1/16" TOLERANCE. DO NOT NOTCH OR CUT PLATES.
14. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND WRENCH TURNED JUST PRIOR TO COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS ON THE POST ON THE OPPOSITE SIDE OF THE ANCHORAGE DEVICE. PLATE SIZE SHALL BE A MINIMUM OF 0.299 INCH BY 3 INCHES BY 3 INCHES.(2305.5)

DEFERRED SUBMITTALS

1. ELEMENTS OF STRUCTURE THAT ARE MARKED "BY OTHERS" SHALL BE EXCLUDED FROM THIS SCOPE OF WORK.
2. GENERAL CONTRACTOR SHALL FIRST SUBMIT SEPARATE DRAWINGS FOR THE ABOVE ELEMENTS TO THE EOR FOR THEIR REVIEW AND IF APPROVED, THEN SUBMIT TO THE BUILDING OFFICIALS FOR THEIR REVIEW AND APPROVAL.
3. CITY APPROVAL SHALL BE OBTAINED PRIOR TO INSTALLATION OF ELEMENT SUBJECTED TO DEFERRED APPROVAL.

SHOP DRAWINGS NOTES

1. SUFFICIENT COPIES OF SHOP DRAWINGS FOR ANY MEMBER OR PRODUCT DESIGNED BY ENTITY OTHER THAN E.O.R. SHALL BE SUBMITTED TO E.O.R. PRIOR TO FABRICATION FOR REVIEW. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF REINFORCEMENT FOR CONCRETE MASONRY WALLS, CONCRETE COMPONENTS WITH COMPRESSIVE STRENGTH MORE THAN 2500 PSI AND STRUCTURAL STEEL TO E.O.R. TO REVIEW AND OBTAIN APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BE ORIGINAL DRAWINGS PREPARED FOR THE PROJECT SPECIFIC INFORMATION, DRAWN ACCURATELY TO SCALE. DIRECT COPIES AND MODIFIED REPRODUCTIONS OF THE CONTRACT DOCUMENTS WILL NOT BE ACCEPTED. ALLOW SUFFICIENT TIME FROM THE RECEIPT OF COMPLETE SUBMITTAL FOR REVIEW AND PROCESSING BY E.O.R..
2. REVIEW OF SHOP DRAWINGS BY E.O.R. DOES NOT RELIEVE THE ENGINEER RESPONSIBLE FOR THE DESIGN OR THE CONTRACTOR FROM COMPLIANCE WITH BUILDING CODE.
3. E.O.R.S REVIEW OF THE SHOP DRAWINGS CONSISTS OF CHECKING GENERAL CONFORMANCE WITH STRUCTURAL DRAWINGS. DESIGN ACCURACY OF SUCH PRODUCT, DIMENSIONS AND QUANTITY OF THE PRODUCT IS NOT REVIEWED BY E.O.R..

NAILING & HARDWARE NOTES

1. CONNECTORS FOR WOOD CONSTRUCTION NOTED ON PLANS AND DETAILS SHALL BE SIMPSON COMPANY STRONG-TIE CONNECTORS OR APPROVED EQUAL.
2. ALL JOIST HANGERS SHALL BE SIMPSON U HANGER, ALL BEAM HANGERS SHALL BE SIMPSON HU HANGERS U.N.O. ON PLAN OR DETAIL. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.
3. ALL MACHINE BOLTS SHALL CONFORM TO ASTM A307.
4. TYPICALLY SILLS ON CONCRETE FOOTING SHALL BE ANCHORED WITH 5/8" DIAMETER X 12" MIN. LENGTH MACHINE BOLTS WITH 7" EMBEDMENT AT 72" O.C.. LOCATE BOLTS 6" MIN. AND 12" MAX. FROM EACH END OF EACH STICK. THERE SHALL BE AT LEAST 2 BOLTS IN EACH STICK.
5. AT SHEAR WALLS, ANCHOR BOLT SPACING NOT OVER 48" O.C. SEE SHEAR WALL SCHEDULE FOR SPECIFIC SPACING OF ANCHOR BOLTS WHICH MAY BE NOTED AS LESS THAN 48" O.C., ANCHOR BOLTS SHALL BE INSTALLED WITH PLATE WASHERS OF MIN. 3" SQ. x 0.229" THICK BETWEEN SILL PLATE AND NUT. EDGE(S) OF PLATE WASHERS SHALL BE 1/2" MAX. FROM
6. AT NON SHEAR WALL, ROUND WASHERS SHALL BE USED ON ALL BOLTS AND SHOULD CONFORM WITH ANSI/ASME B 18.22.1. USE MIN. 1 3/8" Ø x 7/64" THICK WASHER FOR 1/2" Ø BOLT, 1 3/4" Ø x 9/64" THICK WASHER FOR 5/8" Ø BOLT AND 2 1/2" Ø x 11/64" THICK WASHER FOR 1" Ø BOLT. U.N.O.
7. AT INTERIOR NON-SHEAR WALLS, USE SIMPSON PHNW SERIES 0.145 Ø PINS WITH A PENETRATION OF 1 1/4" INTO SLAB AT 16" O.C. TO BE INSTALLED IN ACCORDANCE WITH ICC ESR-2138.
8. WHERE NOTCHES FOR PIPES, ETC. , EXCEED 1/3 THE WIDTH OF THE SILL, PLACE A BOLT WITHIN 6" OF EACH SIDE OF NOTCH. TIEDOWN BOLTS SHALL NOT BE CONSIDERED AS SILL BOLTS.
9. BOLT HOLES IN WOOD AND STEEL SHALL BE THE DIAMETER OF THE BOLT PLUS 1/16"
10. FASTENERS PENETRATING PRESSURE-PRESERVATIVE TREATED AND FIRE-RETARDANT TREATED WOOD SHALL BE HOT DEPPED GALVANIZED PER ASTM A153, CLASS D.
11. ALL NAILS SHALL BE SINKER NAILS AND STAGGERED U.N.O., EXCEPT AS SHOWN IN NAILING SCHEDULE.
12. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX.
13. LAG SCREWS PER ANSI/ASME STANDARD B18.2.1 PROVIDE LEAD HOLE SAME DIAMETER AND DEPTH AS SHANK AND THEN DRILL HOLE 60%-70% OF SHANK DIAMETER FOR THREADED PORTIONS.

NAILING SCHEDULE TABLE R602.3 (1)

CONNECTION		NAILING	LOCATION
1. JOIST TO SILL OR GIRDER		3-8D	TOENAIL
2. BRIDGING TO JOIST		2-8D	TOENAIL EA. END
3. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST		2-8D	FACE NAIL
4. WIDER THAN 1" x 6" SUBFLOOR TO EACH JOIST		3-8D	FACE NAIL
5. 2" SUBFLOOR TO JOIST OR GIRDER		2-16D	BLIND AND FACE NAIL
6. SOLE PLATE TO JOIST OR BLOCKING		16D (BOX) AT 16" O.C.	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL		(3) 16D (BOX) AT 16"	BRACED WALL PANELS
7. TOP PLATE TO STUD		2-16D	BLIND AND FACE NAIL
8. STUD TO SOLE PLATE	2x4 STUD	4-8D	TOENAIL
	2x6 STUD	2-16D 6-8D	END NAIL TOENAIL
	2x8 STUD	4-16D 8-8D	END NAIL TOENAIL
		6-16D	END NAIL
9. DOUBLE STUDS		16D (BOX) AT 24" O.C.	FACE NAIL
10. DOUBLED TOP PLATES		16D (BOX) AT 16" O.C.	TYPICAL FACE NAIL
DOUBLE TOP PLATES		8-16D	LAP SPLICE
11. BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE		3-8D	TOENAIL
12. RIM JOIST TO TOP PLATE		8D AT 6" O.C.	TOENAIL
13. TOP PLATES, LAPS AND INTERSECTIONS		2-16D	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES		16D	16" O.C. ALONG EDGE
15. CEILING JOISTS TO PLATE		3-8D	TOENAIL
16. CONTINUOUS HEADER TO STUD		4-8D	TOENAIL
17. CEILING JOISTS, LAPS OVER PARTITIONS		3-16D	FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS		3-16D	FACE NAIL
19. RAFTER TO PLATE		3-8D	TOENAIL
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE		2-8D	FACE NAIL
21. 1" x 8" SHEATHING TO EACH BEARING		3-8D	FACE NAIL
22. WIDER THAN 1" x 8" SHEATHING TO EACH BEARING		3-8D	FACE NAIL
23. BUILT-UP CORNER STUDS		16D	24" O.C. 16" O.C.
24. BUILT-UP GIRDER AND BEAMS		20D AT 32" O.C. 2-20D	FACE NAIL AT TOP & BOTTOM STAGGERED ON OPPOSITE SIDES FACE NAIL AT ENDS & ATEACH SPLICE
25. 2" PLANKS		16D	AT EACH BEARING
26. COLLAR TIE TO RAFTER		3-10D	FACE NAIL
27. JACK RAFTER TO HIP		3-10D 2-16D	TOENAIL FACE NAIL
28. ROOF RAFTER TO 2-BY RIDGE BEAM		2-16D 2-16D	TOENAIL FACE NAIL
29. JOIST TO BAND JOIST		3-16D	FACE NAIL
30. LEDGER STRIP		3-16D	FACE NAIL

NOTES: 1. COMMON NAILS SHALL BE USED (U.N.O.)
2. JOIST CAN BE EITHER SAWN LUMBER OR I-JOIST PER PLAN

SPECIAL INSPECTION:

1. SPECIAL INSPECTION SHALL BE PROVIDED PER CBC SECTION 1704 & 1707, SEE INSPECTION SCHEDULE BELOW, ONLY CHECKED ITEMS ARE REQUIRED.
2. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
3. SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVED FABRICATORS MUST SUBMIT A CERTIFICATE OF COMPLIANCE FOR OFFSITE FABRICATIONS SUCH AS STRUCTURAL STEEL, PRECAST CONCRETE, GLUED LAMINATED TIMBER, ETC.
4. ALL INSPECTIONS SHALL BE PERFORMED BY INDEPENDENT SPECIAL INSPECTORS. JOB SITE VISITS BY THE STRUCTURAL ENGINEER OR BUILDING OFFICIAL DO NOT CONSTITUTE AND ARE NOT A SUBSTITUTE FOR INSPECTIONS BY A SPECIAL INSPECTOR.
5. ALL INSPECTION REPORTS SHALL BE SUBMITTED TO BUILDING OFFICIAL AND E.O.R. THE FINAL REPORTS BY THE SPECIAL INSPECTORS MUST CERTIFY THAT THE ENTIRE STRUCTURAL SYSTEM COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS.
6. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT THESE INSPECTIONS ARE PERFORMED.
7. WORK REQUIRING SPECIAL INSPECTION SHALL BE INSPECTED BY THE SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS PERFORMED AND AT THE COMPLETION OF WORK. CONTINUOUS INSPECTION CONSISTS OF FULL TIME INSPECTION; PERIODIC INSPECTION CONSISTS OF PART TIME OR INTERMITTENT INSPECTION.
8. STRUCTURAL WOOD, PERIODIC SPECIAL INSPECTION IS REQUIRED FOR WOOD SHEARWALLS, SHEAR PANELS, AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS OF THE SEISMIC FORCE RESISTING SYSTEM, INCLUDING WOOD SHEARWALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES, SHEAR PANELS, AND HOLDOWNS, EXCEPTION: SPECIAL INSPECTION IS NOT REQUIRED FOR WOOD SHEARWALLS, SHEAR PANELS AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING AND OTHER FASTENING TO OTHER COMPONENTS OF THE SEISMIC FORCE RESISTING SYSTEM, WHERE THE FASTENER SPACING OF THE SHEATHING IS MORE THAN 4 INCHES ON CENTER. INSPECTIONS SHALL BE PERFORMED BEFOR COVERING.
9. THE FOLLOWING SPECIAL INSPECTIONS ARE IN ADDITION TO INSPECTIONS BY THE BUILDING OFFICIAL. THIS LIST IS NOT INTENDED TO BE ALL INCLUSIVE.

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SEAL

REGISTERED PROFESSIONAL ENGINEER
PHILIP C. LUKE
S 3276
Exp. 03/31/27
STRUCTURAL
STATE OF CALIFORNIA

PROJECT NAME:

4631 Dunn Ln Angels Camp, Ca 95222

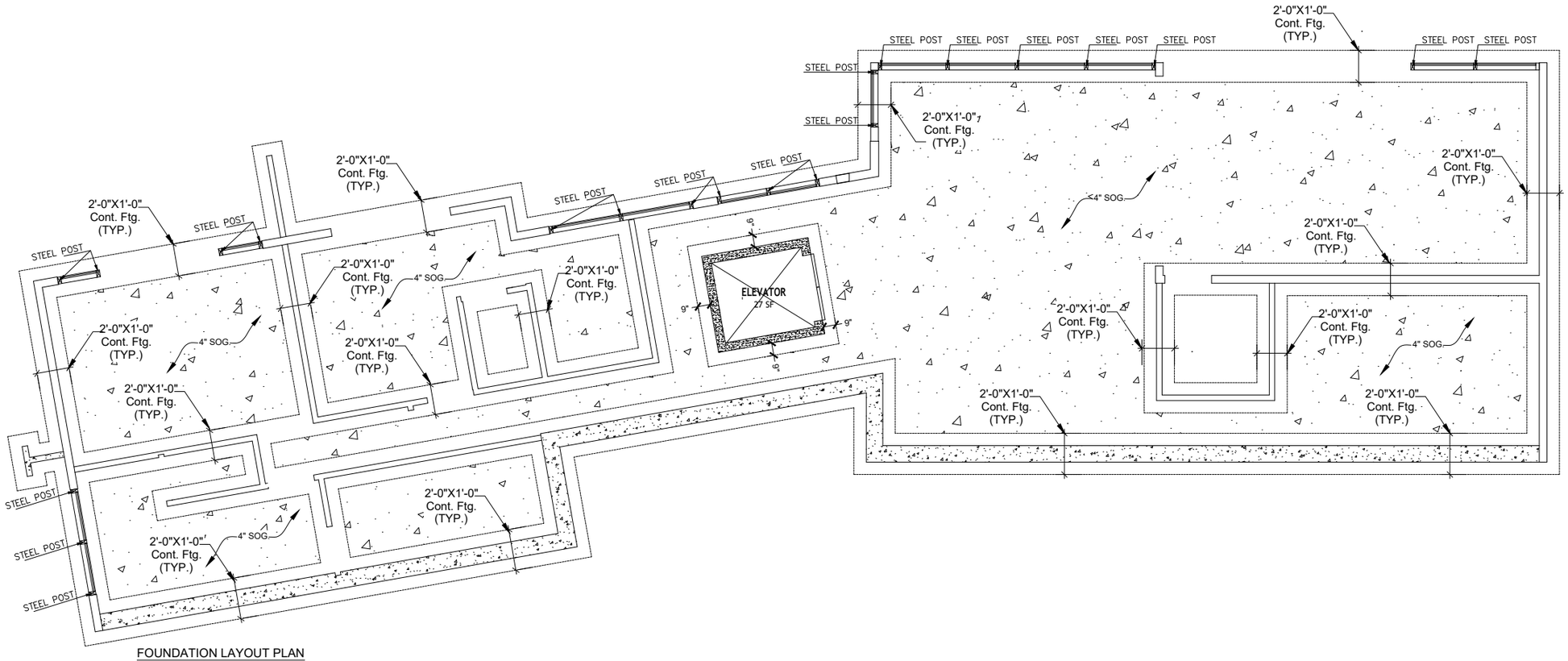
SHEET TITLE:

General Notes

DATE
16-05-2025

SCALE
0 1' 2' 4' 8"
(BAR 1" WHEN TO SCALE)
OR AS NOTED IN DETAIL

REVISIONS



FOUNDATION LAYOUT PLAN
SCALE: 3/16" = 1'-0"

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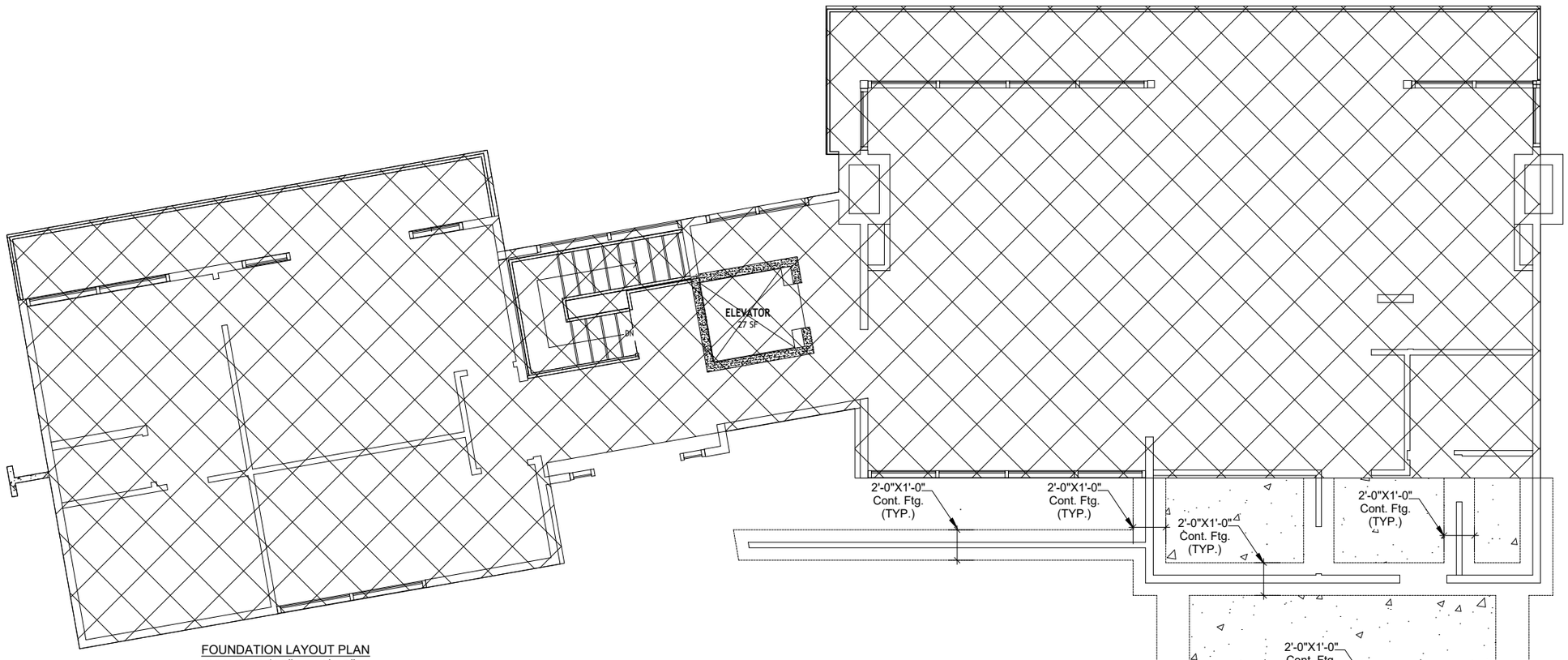
SHEET NUMBER
S-02



FOUNDATION LAYOUT PLAN
SCALE: 3/16" = 1'-0"

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SHEAR WALL PLAN

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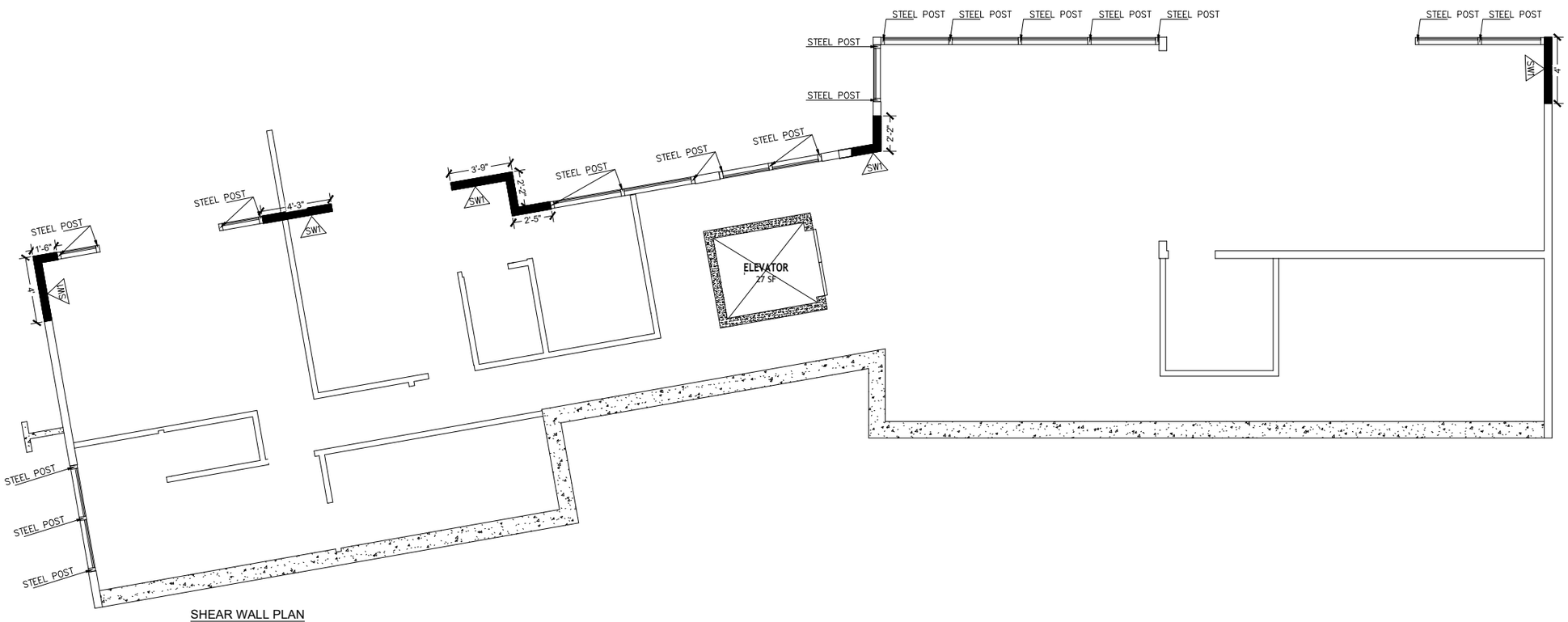
2
3

SHEET NUMBER
S-03



SHEAR WALL PLAN
SCALE: 3/16" = 1'-0"

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SHEET NUMBER
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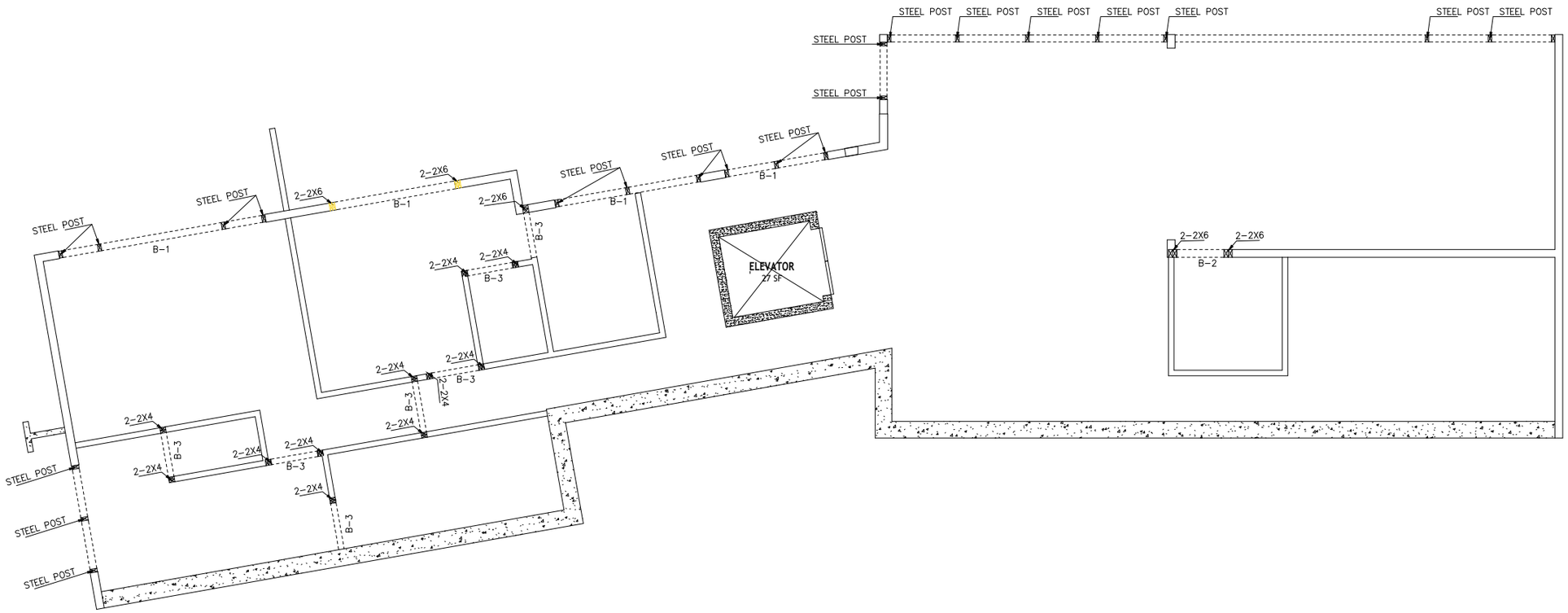

BEAMS/HEADER LAYOUT PLAN
SCALE: 3/16" = 1'-0"

Beams/Header Schedule				
Reference	Span	Type	Nailing	Jack Stud Required
B-1	6'-0"	2-2"X10"	2r-3 1/4 Common Nails at 16" OC	1
B-2	3'-0"	2-2"X6"	2r-3 1/4 Common Nails at 12" OC	1
B-3	4'-0"	2-2"X4"	2r-3 1/4 Common Nails at 16" OC	1
Note: Beams/Header with 2" Wide: Fb=2800 psi, Fv=285 psi & E=2.06E6 psi				

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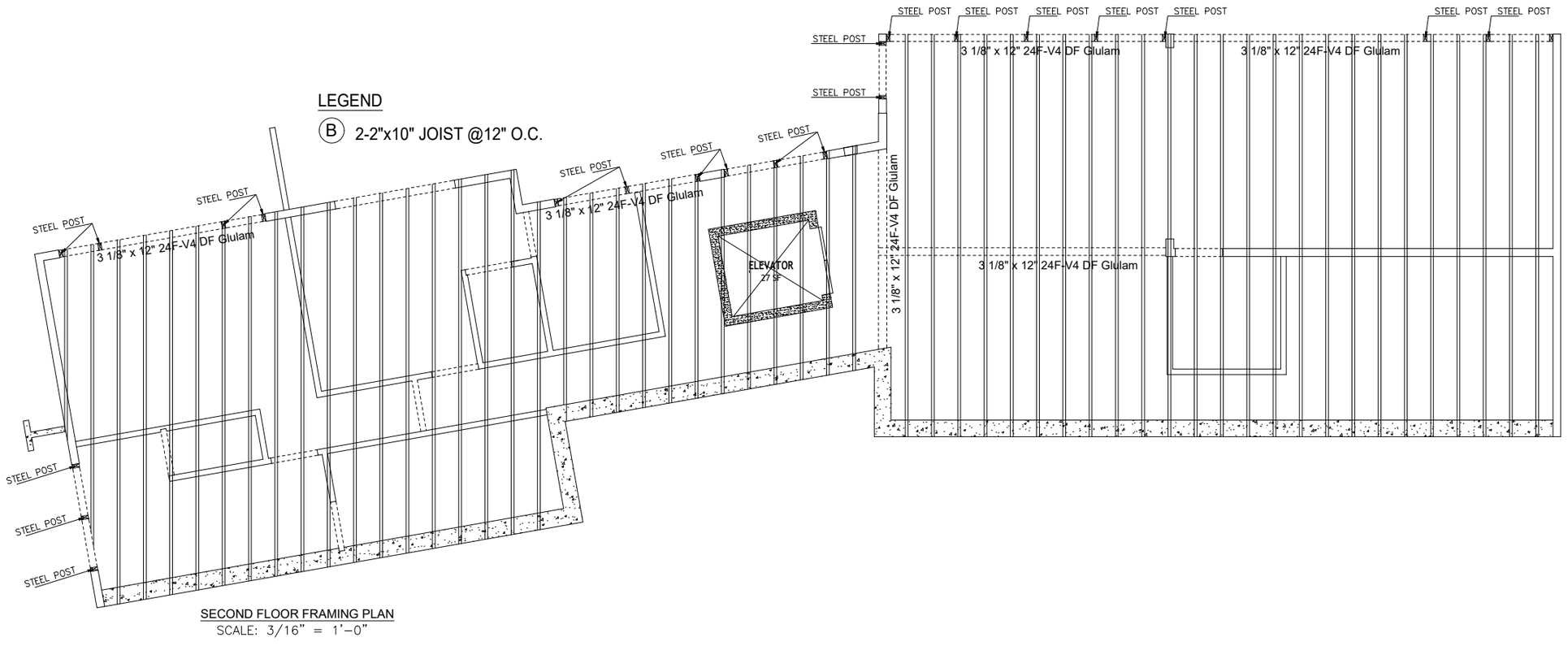
SHEET NUMBER
S-04

LEGEND

(B) 2-2"x10" JOIST @12" O.C.



SECOND FLOOR FRAMING PLAN
SCALE: 3/16" = 1'-0"

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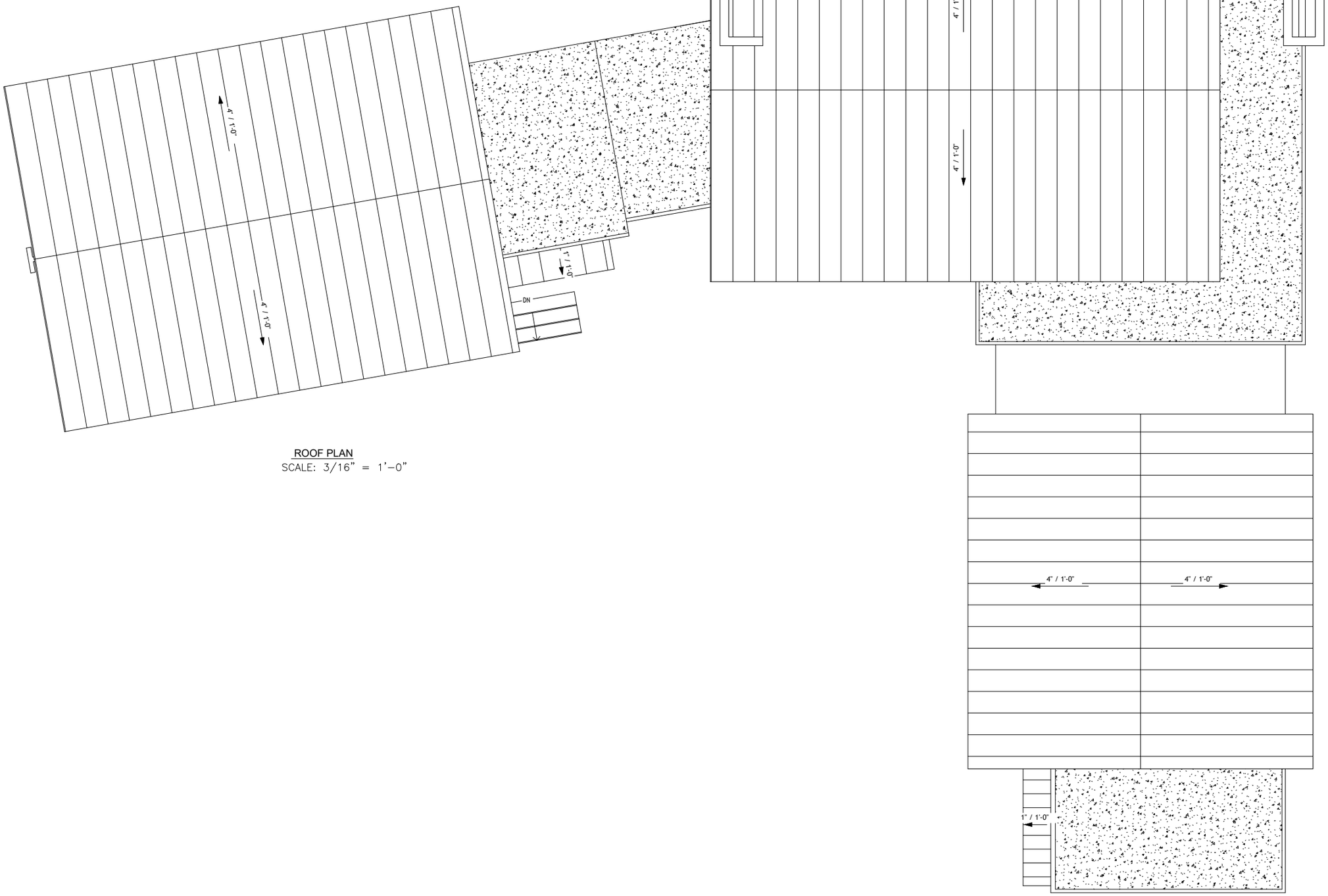

ROOF PLAN
SCALE: 3/16" = 1'-0"

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ROOF PLAN

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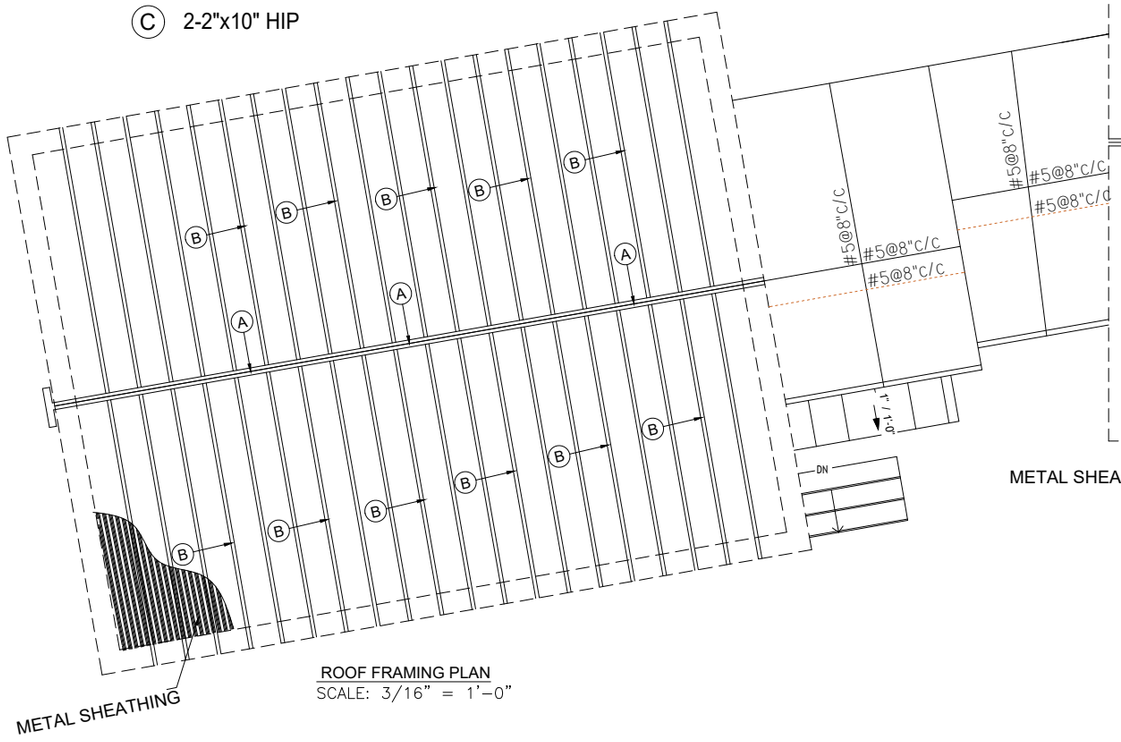
SHEET NUMBER
S-06

LEGEND

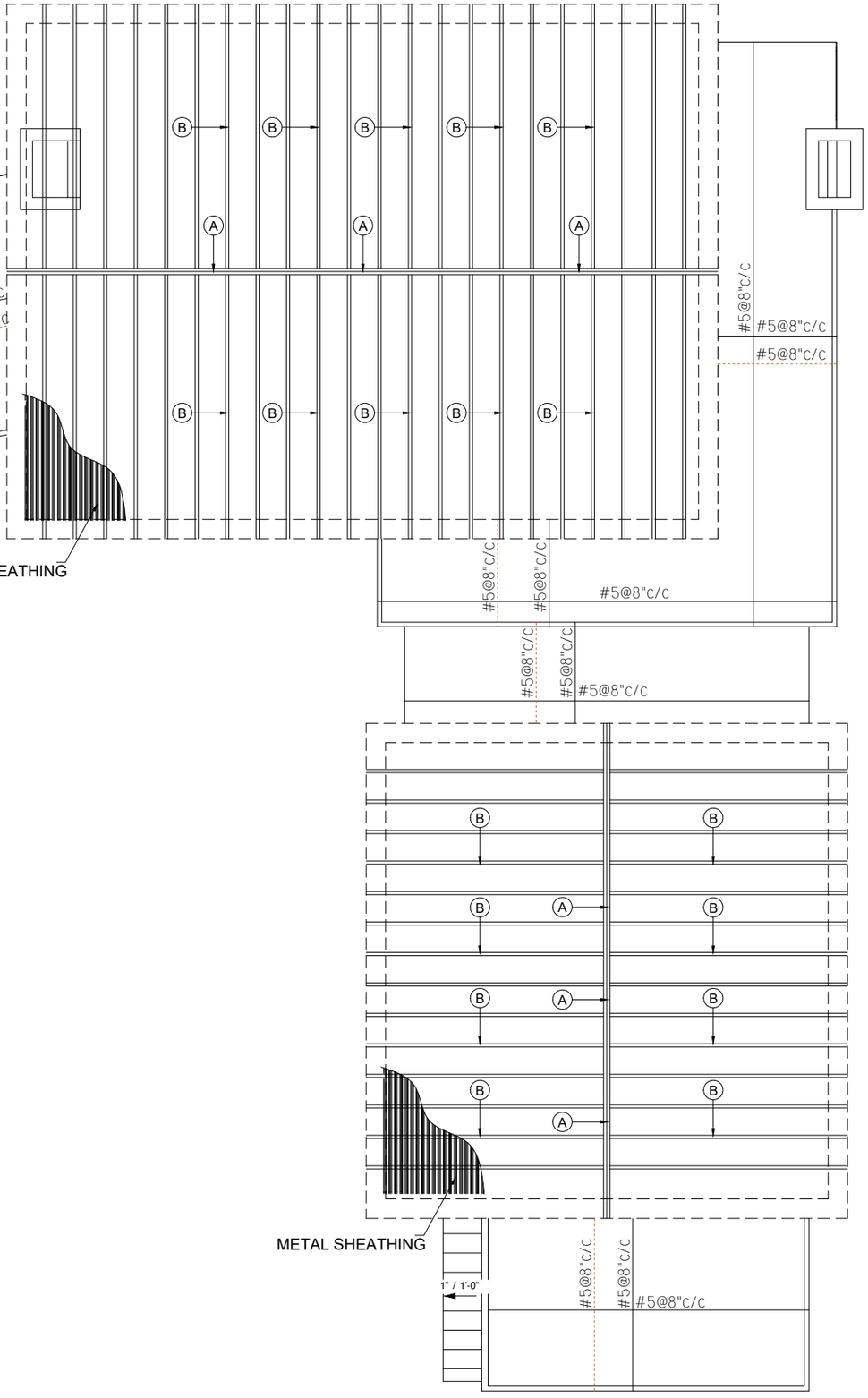
(A) 2-2"x10" RIDGE

(B) 2"x12" RAFTER @16" O.C.

(C) 2-2"x10" HIP



ROOF FRAMING PLAN
SCALE: 3/16" = 1'-0"



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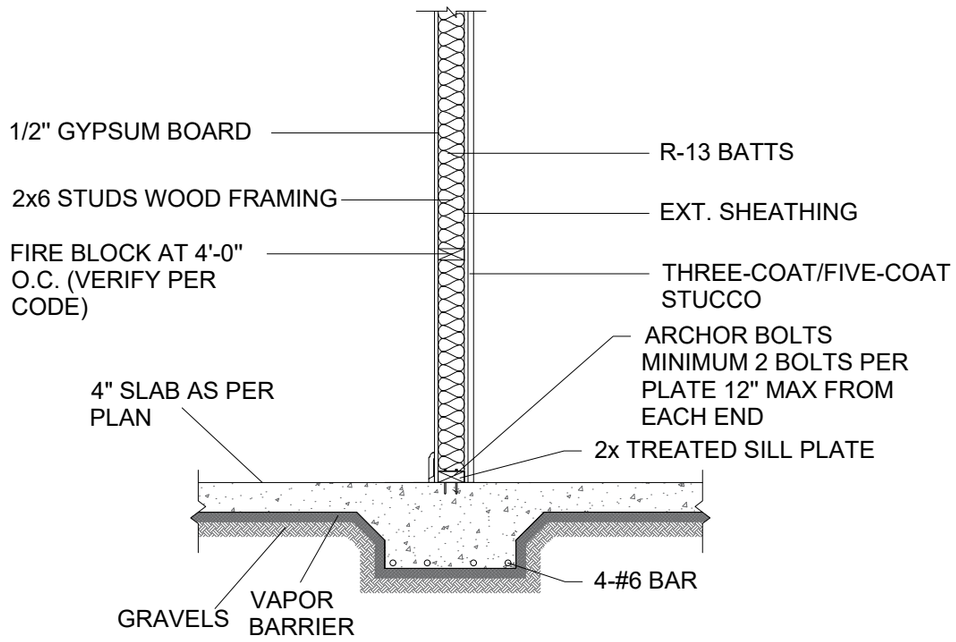
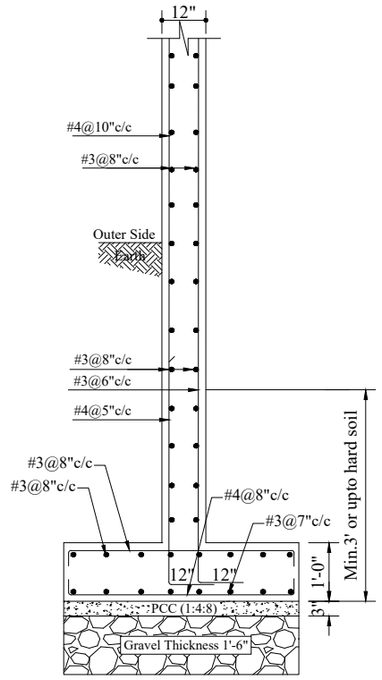
2 ·
3

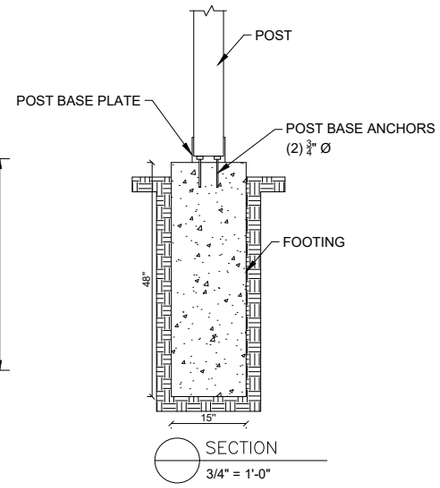
SHEET NUMBER
S-07



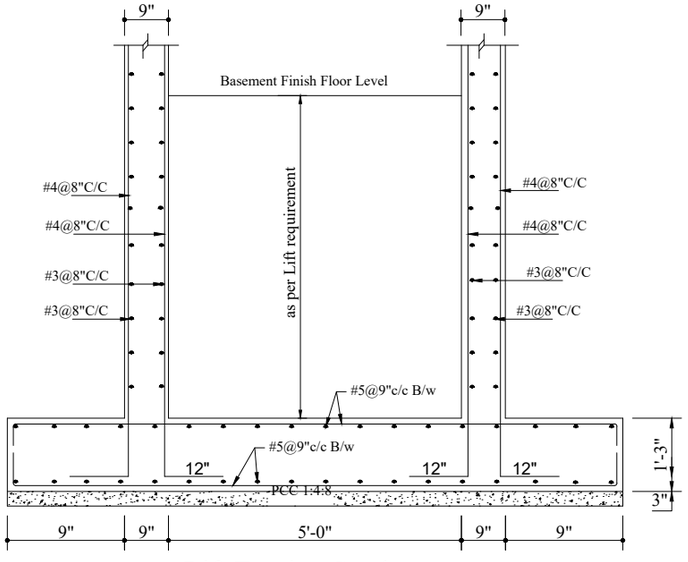
SECTION



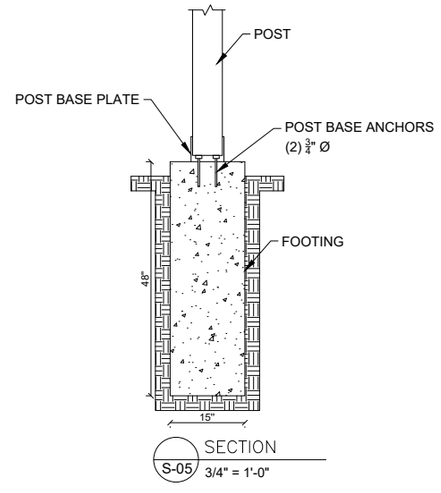
Retaining & Wall Section -1



SECTION
3/4" = 1'-0"



Lift Footing Section



SECTION
S-05 3/4" = 1'-0"

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PROJECT NAME:

4631 Dunn Ln Angels Camp, Ca 95222

SHEET TITLE:

SECTION DETAIL

DATE
16-05-2025

SCALE
0 1' 2' 4' 8'
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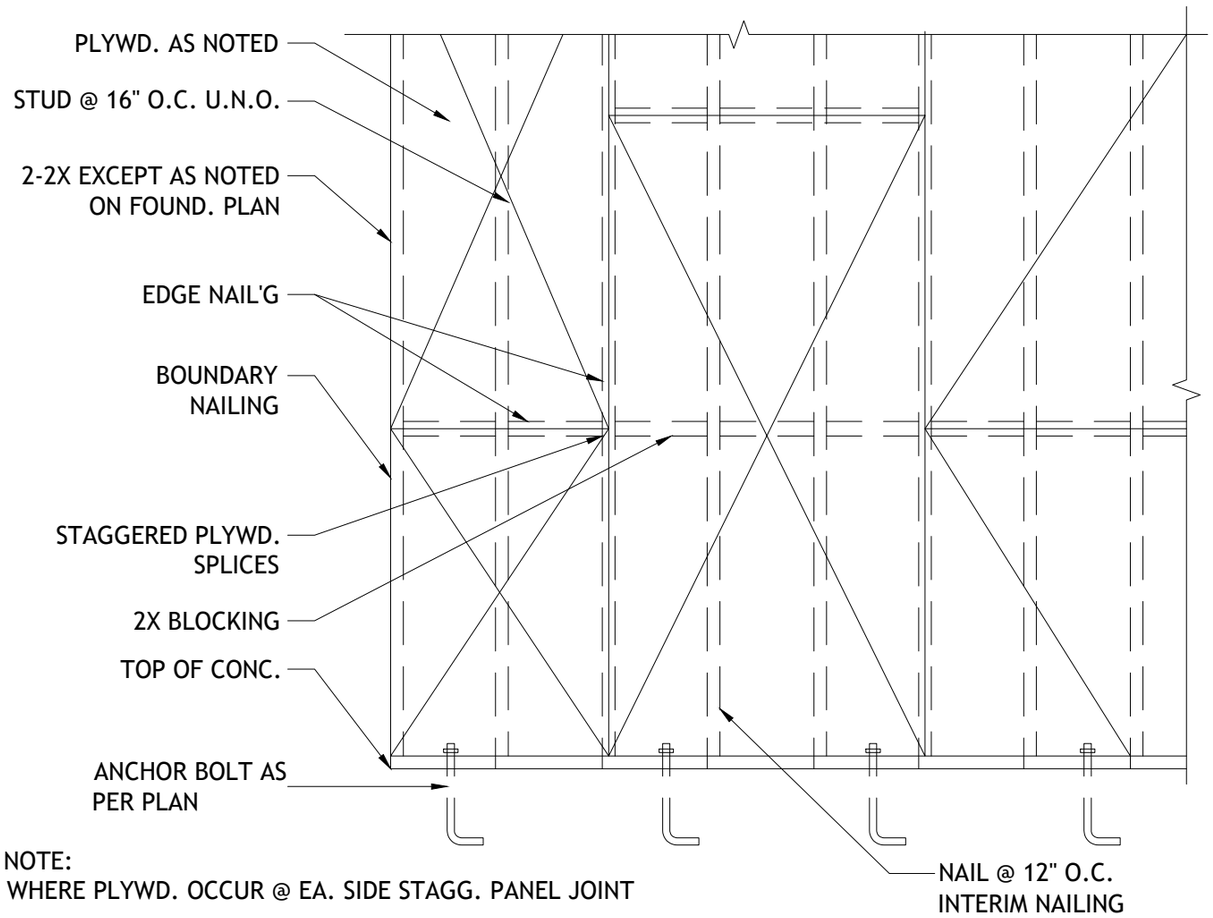
REVISIONS
1 · 16-05-2025
2 ·
3 ·

SHEET NUMBER
S-08



NOTE:
WHERE PLYWD. OCCUR @ EA. SIDE STAGG. PANEL JOINT

SHEAR WALL SCHEDULE

1. Shear panel shall conform to DOC PS1 or PS2 standards. All shear panels shall have continuous sheathing material from top plate to sill plate.

2. All shear panel joint shall be staggered in all cases. 3x or wider member shall be provided at adjoining panel edges with staggering nailing.

3. Nailing at sill plate shall be staggered whenever is possible.

4. Wall studs shall be spaced at 16" O.C. maximum U.N.O.

5. Periodical special inspection is required when edge nailing is or closer than 4" O.C.

6. Framing clips (A35 or LTP4) shall be spaced at 6" O.C. at manufactured shear walls by Simpson Strong-tie or Hardy Frame U.N.O.

7. When panels are called out on both sides of stud wall, use 3x sill plate, and use half of the spacing at sill plate.

SHEAR WALL NAILING SCHEDULE

SHEAR WALL LABEL	APA RATED SHEATHING	NAIL SIZE & SPACE	STUD BLOCKING & ADJOINING EDGES	2x BOTTOM PLATE TO RIM BELOW	DBL TOP PLATE TO RIM JOIST	ANCHOR BOLT TO CONCRETE BELOW	CAPACITY
SW1	7/16" OSB ONE SIDE	8d @ 6" O.C	2 X STUD	16d @ 6" O.C	(2) 16d @ 6" O.C	5/8" @ 48" O.C 1/2" @ 36" O.C	260/365

SHEARE WALL NOTES

1. INSTALL PANELS VERTICALLY
2. WHERE SHEATHING IS APPLIED ON BOTH SIDES OF WALL, PANEL EDGE JOINTS ON 2x FRAMING SHALL BE STAGGERED SO JOINTS ON THE OPPOSITE SIDES ARE NOT LOCATED ON THE SAME STUDS.
3. BLOCKING IS REQUIRED AT ALL PANEL EDGES.
4. PROVIDE SHEAR WALL SHEATHING AND NAILING FOR THE ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY EXTERIOR OF THE BUILDING, CORRIDORS, WINDOWS, OR DOORWAYS OR AS DESIGNATED ON THE PLANS. SEE PLANS FOR HOLDOWN REQUIREMENTS.
5. SHEATHING EDGE NAILING |S REQUIRED AT ALL HOLDOUN POSTS.
6. INTERMEDIATE FRAMING TO BE WITH 2x MINIMUM MEMBERS. FIELD NAILING IS I2" O.C. UNLESS NOTED OTHERWISE.
7. BASED ON O13I" x I-72" LONG NAILS USED TO ATTACH FRAMING CLIPS DIRECTLY TO FRAMING. USE 0131" x 2-1/2" LONG NAILS WHEN NAILING THROUGH SHEATHING.
8. DBL STUDS MAY BE USED IN LIEU OF 3x MATERIAL
9. WHERE PLATE ATTACHMENTS SPECIFY (2) ROWS OF NAILS, PROVIDE DOUBLE JOIST, RIM OR EQUAL. ATTACH PER DETAILS.
10. ANCHOR BOLTS SHALL BE PROVIDED W/ STEEL PLATE WASHERS J4" x3" x 3", EMBED ANCHORS A MINIMUM OF 1" INTO THE CONCRETE.
11. PRESSURE TREATED MATERIALS CAN CAUSE EXCESSIVE CORROSION IN THE FASTENERS. PROVIDE HOT-DIPPED GALVANIZED (ELECTRO PLATING NOT PERMITTED) NAILS AND CONNECTOR PLATES (FRAMING ANGLES, ETC.) FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED FRAMING MEMBERS.
12. AS AN OPTION TO FRAMING CLIPS SHEATHING IS TO EXTEND FROM MUDSILL TO TOP OF DOUBLE TOP PLATE FOR SINGLE STORY, AND FROM MUDSILL TO MIDDLE OF STRUCTURAL RIM FOR TWO (+) STORY STRUCTURES. SEE SHEAR NAILING BUILDING SECTION DETAIL.
13. 15"/32" PLYWOOD SHEATHING MAY BE USED IN PLACE OF THE),' OSB SHEATHING PROVIDED THAT ALL STUD SPACING IS I6"Or, MAX.
14. SUB SHEARWALL REQUIRES 4-1/2" PLATE WASHER
15. SHEARWALL DESIGNATED WITH AN ASTERISK (+) MAY BE SHEATHED WITH PERFORMANCE CATEGORY 1/Ié SMART PANEL TI-II OR 5/Ié HARDIE PANEL
16. SIMPSON MASAP (STANDARD INSTALLATION) MAY BE SUBSTITUTED FOR ANCHOR BOLT. USE 1/2" AB SPACING

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SHEAR WALL DETAIL

DATE
16-05-2025

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1 · 16-05-2025
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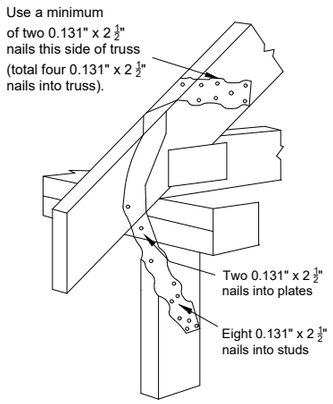
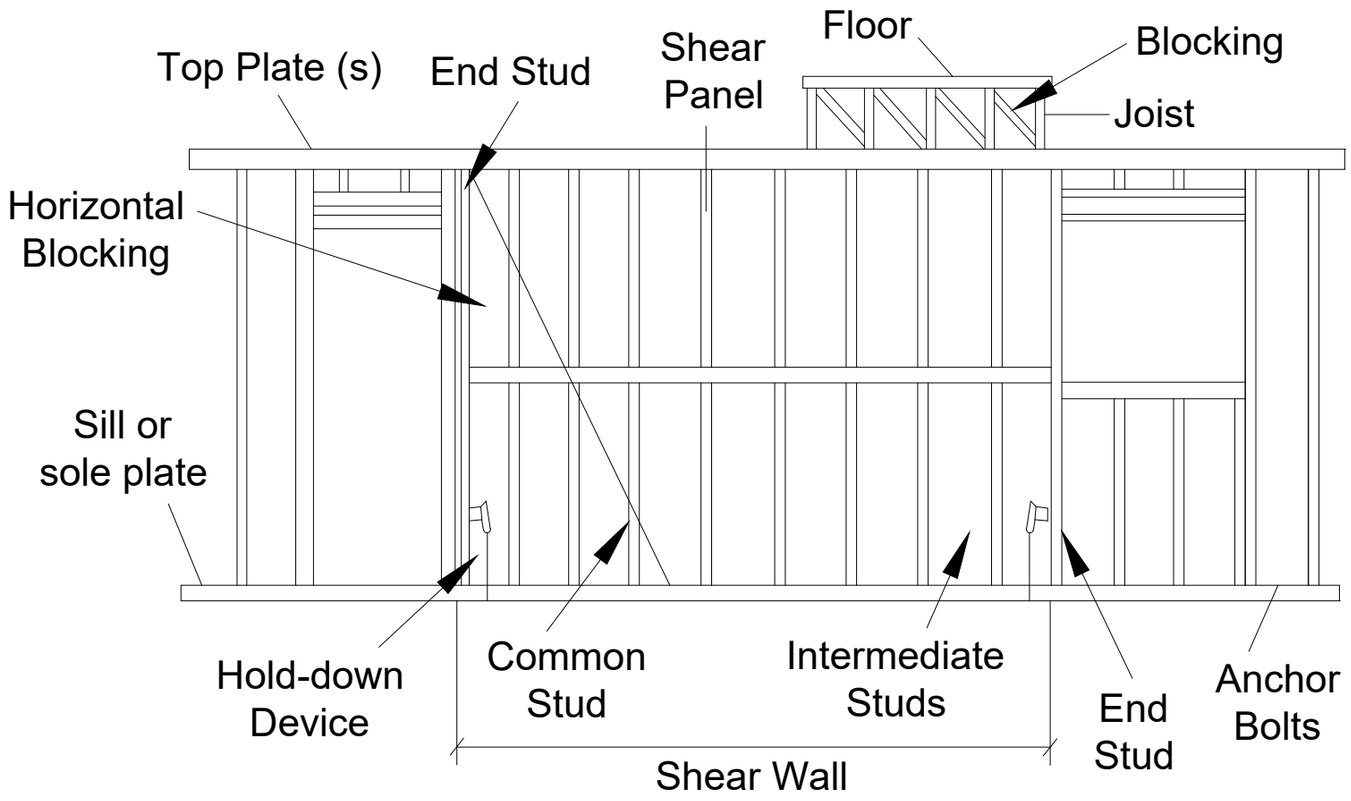
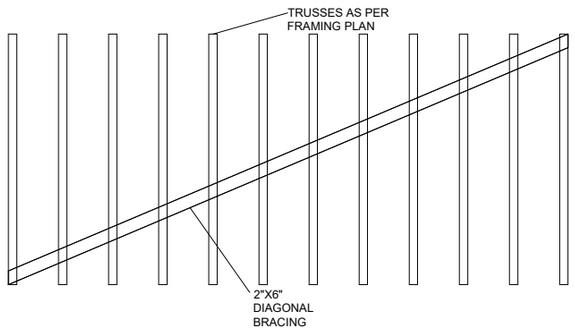
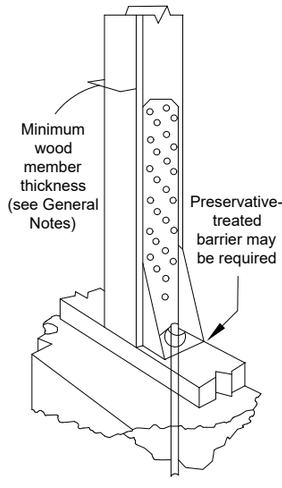
SHEET NUMBER
S-09



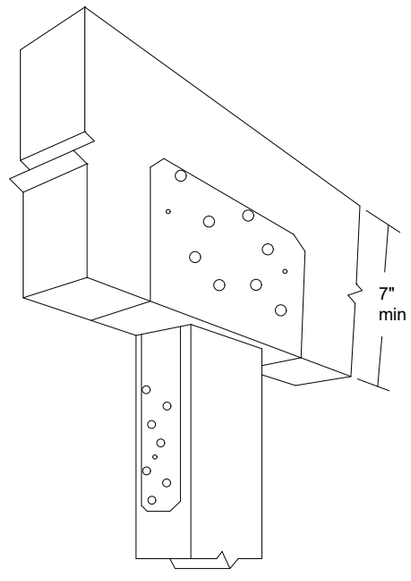
H7Z Installation



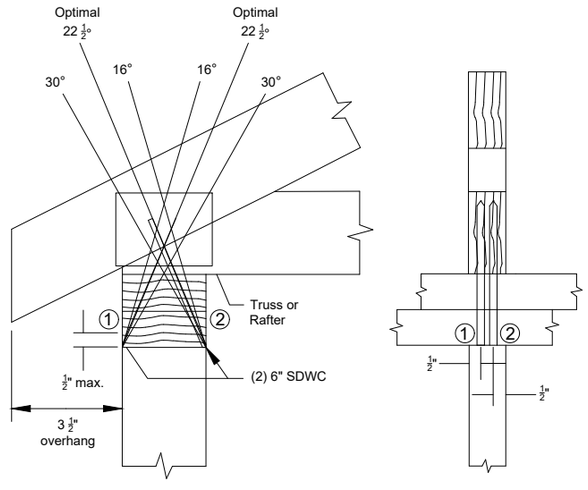




Vertical HTT5 Installation
(HTT4 similar)



Typical CCQ46SDS2.5



Install Through Top Plate into Truss/Rafter

Both screws installed at a 16° - 30° angle,
offset ½" from the opposite edges of truss/rafter.
Use metal installation guide included in screw kits
for optimal 22.5° installation.

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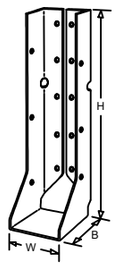
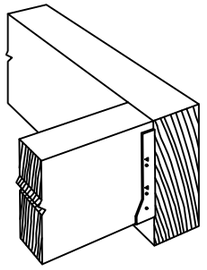


LUC



Typical HUC Installation
(LUC Similar)

Installation:

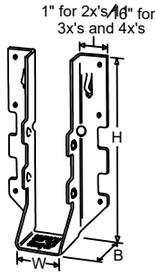
- For HUC installations, models have triangle round and triangle holes (fastener quantities listed fill both holes).
- For installations into single 2x headers or ledgers, use the specified full length fasteners into the joist and the following fasteners into the header for reduced loads in accordance with www.strongtie.com:
- 10dx1½ nails for installations with Nails
- SD #9x1½ for LUC26Z and LUC210Z installations with SD Screws

Model No.	Dimensions (in.)			Fasteners			
				Nails		SD Screws	
	W	H	B	Header	Joist	Header	Joist
LUC26Z	1 9/16	4 3/4	1 3/4	6-10d	4-10dx1½	6-SD #9x2½	4-SD #9x1½
LUC210Z	1 9/16	7 3/4	1 3/4	10-10d	6-10dx1½	10-SD #9x2½	6-SD #9x1½
HUC26-2Z	3 1/8	5 3/8	2 1/2	12-16d	6-10d	-	-
HUC28-2Z	3 1/8	7	2 1/2	14-16d	6-10d	-	-
HUC210-2Z	3 1/8	8 13/16	2 1/2	18-16d	10-10d	-	-

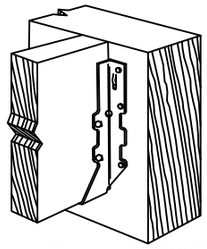
indicates connector is available in stainless steel. Replace Z in model number with SS when ordering.
2. Refer to current Wood Construction Connectors catalog for additional information.

LUC, HUC Joist Hangers by SIMPOSON STRONG TIE

NTS



LUS



Typical LUS28Z Installation

Installation:

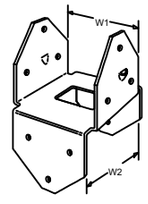
- LUS hangers install with double shear nailing.
- For installations into single 2x headers or ledgers, use the specified full length fasteners into the joist and the following fasteners into the header for reduced loads in accordance with www.strongtie.com:
- 10dx1½ nails for installations with Nails
- SD #9x1½ for LUS28Z and LUS210Z installations with SD Screws
- SD #10x1½ for LUS26-2Z and LUS210-2Z installations with SD Screws

Model No.	Dimensions (in.)			Fasteners			
				Nails		SD Screws	
	W	H	B Header Joist			Header	Joist
LUS26Z			1 3/4	4-10d	4-10d	-	-
LUS28Z	1 9/16	6 5/8	1 3/4	6-10d	4-10d	6-SD #9x2½	4-SD #9x2½
LUS210Z	1 9/16	7 13/16	1 3/4	8-10d	4-10d	8-SD #9x2½	4-SD #9x2½
LUS26-2Z	3 1/8	4 7/8	2	4-16d	4-16d	4-SD #10x2½	4-SD #10x2½
LUS210-2Z	3 1/8	9	2	8-16d	6-16d	8-SD #10x2½	6-SD #10x2½

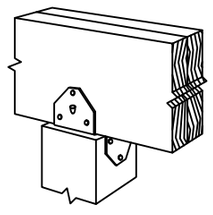
indicates connector is available in stainless steel. Replace Z in model number with SS when ordering.
2. Refer to current Wood Construction Connectors catalog for additional information.

LUS Joist Hangers by SIMPOSON STRONG TIE

NTS



BCS
(BC Similar)



Typical BCS Installation
(BC Similar)

Installation:

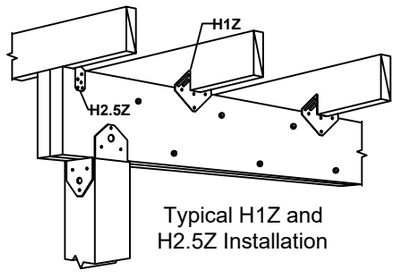
- BCS: Install dome nails on beam; drive nails at an angle through the beam into the post below.
- BC: Do not install bolts into pilot holes.

Model No.	Dimensions (in.)						Fasteners			
	W1	W2	L1	L2	H1	H2			Nails	SD Screws
									Beam Flange / Post Flange	Beam Flange / Post Flange
BC4Z	3 9/16	3 9/16	2 7/8	2 7/8	3	3	6-16d	6-16d	6-SD #10x1½	6-SD #10x1½
BC6Z	5 1/2	5 1/2	4 3/8	4 3/8	3 3/8	3 3/8	12-16d	12-16d	-	-
BCS2-2/4Z	3 1/8	3 9/16	2 7/8	2 7/8	2 15/16	2 15/16	8-10d	6-10d	8-SD #9x2½	6-SD #9x2½
BCS2-3/6Z	4 5/8	5 9/16	4 3/8	2 7/8	3 5/16	2 15/16	12-16d	6-16d	-	-

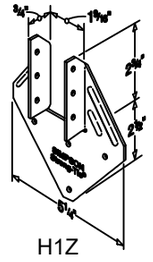
indicates connector is available in stainless steel. Replace Z in model number with SS when ordering.
2. Refer to current Wood Construction Connectors catalog for additional information.

BC, BCS Post Caps by SIMPOSON STRONG TIE

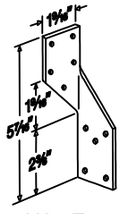
NTS



Typical H1Z and
H2.5Z Installation



H1Z

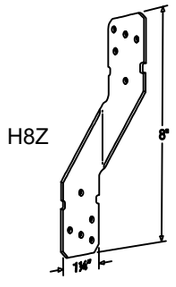


H2.5Z

Installation:

- Use all specified fasteners.

Model No.	Fasteners			
	Nails		SD Screws	
	To Joist	To Beam	To Joist	To Beam
H1Z	6-8dx1½	4-8dx1½	6-SD #9x1½	4-SD #9x1½
H2.5Z	5-8dx1½	5-8dx1½	5-SD #9x1½	5-SD #9x1½
H8Z	5-10dx1½	5-10dx1½	5-SD #9x1½	5-SD #9x1½



1. indicates connector is available in stainless steel. Replace Z in model number with SS when ordering.
2. Refer to current Wood Construction Connectors catalog for additional information.

H1Z by SIMPOSON STRONG TIE

NTS

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SEAL

REGISTERED PROFESSIONAL ENGINEER
PHILIP C. LUKE
S 3276
Exp. 03/31/27
STRUCTURAL
STATE OF CALIFORNIA

PROJECT NAME:

4631 Dunn Ln Angels Camp, Ca 95222

SHEET TITLE:

TYPICAL DETAILS

DATE
16-05-2025

SCALE
0 1' 2' 4' 8"
(BAR 1" WHEN TO SCALE)
OR AS NOTED IN DETAIL

REVISIONS
1 16-05-2025
2
3

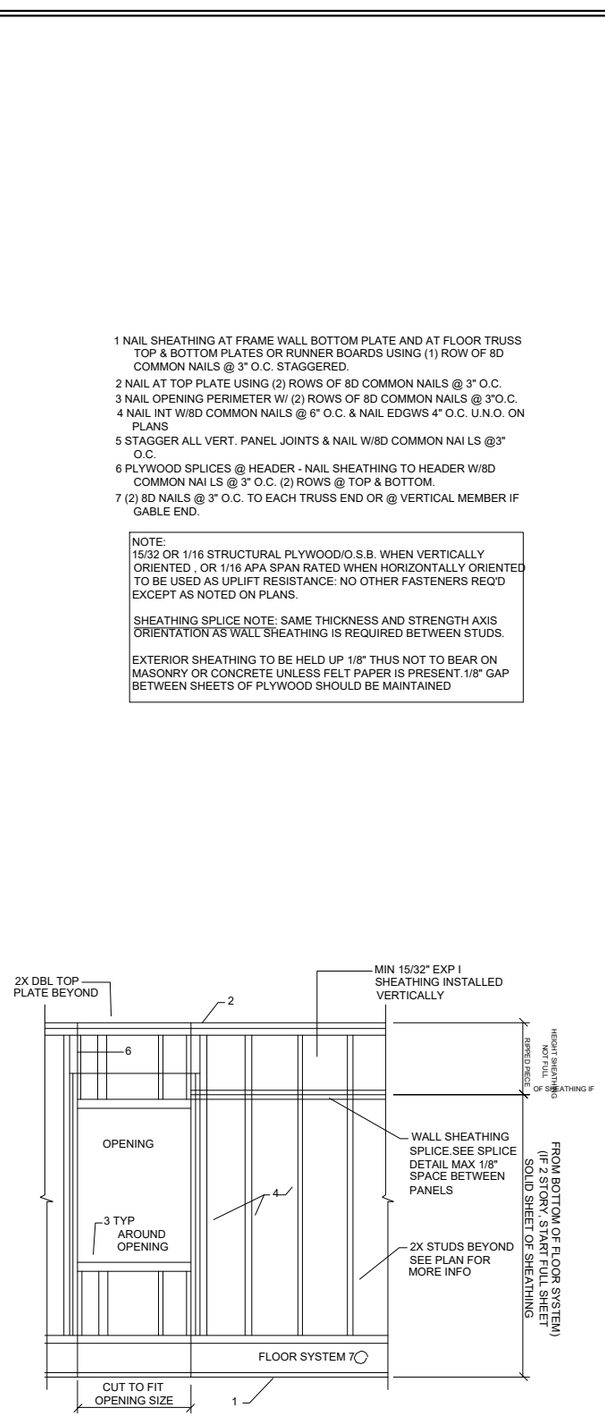
SHEET NUMBER
S-11

1 NAIL SHEATHING AT FRAME WALL BOTTOM PLATE AND AT FLOOR TRUSS TOP & BOTTOM PLATES OR RUNNER BOARDS USING (1) ROW OF 8D COMMON NAILS @ 3" O.C. STAGGERED.
2 NAIL AT TOP PLATE USING (2) ROWS OF 8D COMMON NAILS @ 3" O.C.
3 NAIL OPENING PERIMETER W/ (2) ROWS OF 8D COMMON NAILS @ 3"O.C.
4 NAIL INT W/8D COMMON NAILS @ 6" O.C. & NAIL EDGWS 4" O.C. U.N.O. ON PLANS
5 STAGGER ALL VERT. PANEL JOINTS & NAIL W/8D COMMON NAI LS @3" O.C.
6 PLYWOOD SPLICES @ HEADER - NAIL SHEATHING TO HEADER W/8D COMMON NAI LS @ 3" O.C. (2) ROWS @ TOP & BOTTOM.
7 (2) 8D NAILS @ 3" O.C. TO EACH TRUSS END OR @ VERTICAL MEMBER IF GABLE END.

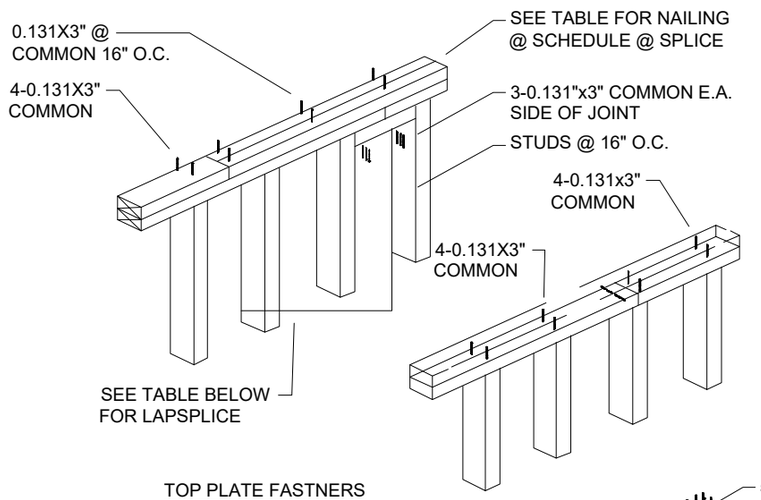
NOTE:
15/32 OR 1/16 STRUCTURAL PLYWOOD/O.S.B. WHEN VERTICALLY ORIENTED , OR 1/16 APA SPAN RATED WHEN HORIZONTALLY ORIENTED TO BE USED AS UPLIFT RESISTANCE: NO OTHER FASTENERS REQ'D EXCEPT AS NOTED ON PLANS.

SHEATHING SPLICE NOTE: SAME THICKNESS AND STRENGTH AXIS ORIENTATION AS WALL SHEATHING IS REQUIRED BETWEEN STUDS.

EXTERIOR SHEATHING TO BE HELD UP 1/8" THUS NOT TO BEAR ON MASONRY OR CONCRETE UNLESS FELT PAPER IS PRESENT.1/8" GAP BETWEEN SHEETS OF PLYWOOD SHOULD BE MAINTAINED



EXTERIOR WALL SHEATHING NAILING SCHEDULE - FOR SHEATHING TRANSFER

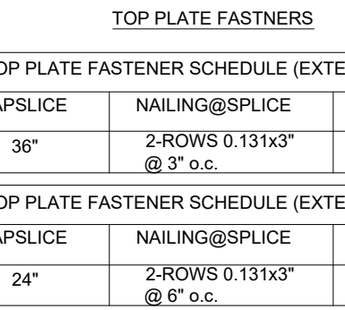


TOP PLATE FASTNERS

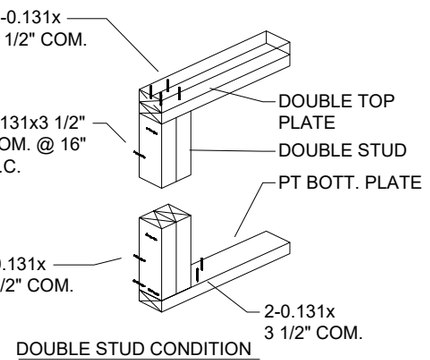
TOP PLATE FASTENER SCHEDULE (EXTERIOR WALL)		
LAPSLICE	NAILING@SPLICE	ALL OVER NAILING
36"	2-ROWS 0.131x3" @ 3" o.c.	0.131X3"@ 8" o/c

TOP PLATE FASTENER SCHEDULE (EXTERIOR WALL)		
LAPSLICE	NAILING@SPLICE	ALL OVER NAILING
24"	2-ROWS 0.131x3" @ 6" o.c.	0.131X3"@ 8" o/c

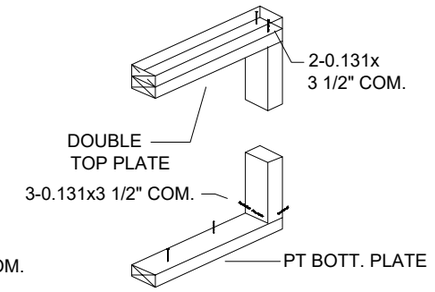
IN LOCATIONS WHERE A PIPE PENETRATED THE TOP PLATE OF A BEARING WALL USE THE FOLLOWING PLATE:
-PSPN58Z IN LOCATION WHERE A LAP SPLICE IS OVER 16" AWAY.
-PSPN516Z IN LOCATION WHERE A LAP SPLICE IS WITHIN 16"



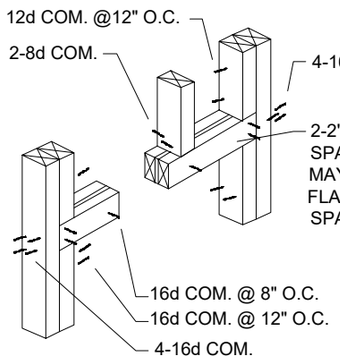
4 STUD CORNER



DOUBLE STUD CONDITION

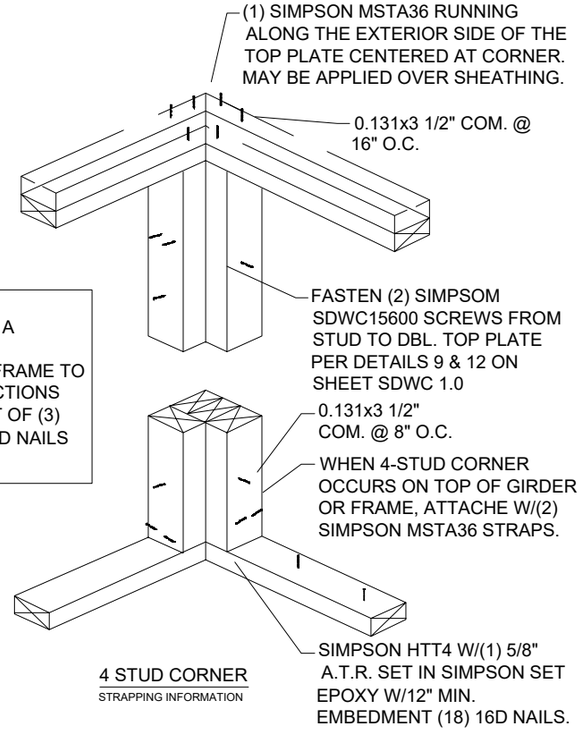


SINGLE STUD CONDITION



UNLESS NOTED OTHERWISE AT A MINIMUM ALL UNSPECIFIED FRAME TO FRAME CONNECTIONS SHALL CONSIST OF (3) 0.131"x3-1/2" END NAILS OR TOENAILS.

A SIMPSON MSTCM 60 MAY BE SUBSTITUDE FOR AN HTT4 WHERE LOCATION ALIGNS WITH A FILLED CELL.



4 STUD CORNER
STRAPPING INFORMATION

GENERAL WOOD ATTACHMENT DETAILS

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SEAL

REGISTERED PROFESSIONAL ENGINEER PHILIP C. LUKE S 3276 Exp. 03/31/27 STRUCTURAL STATE OF CALIFORNIA

PROJECT NAME:

4631 Dunn Ln Angels Camp, Ca 95222

SHEET TITLE:

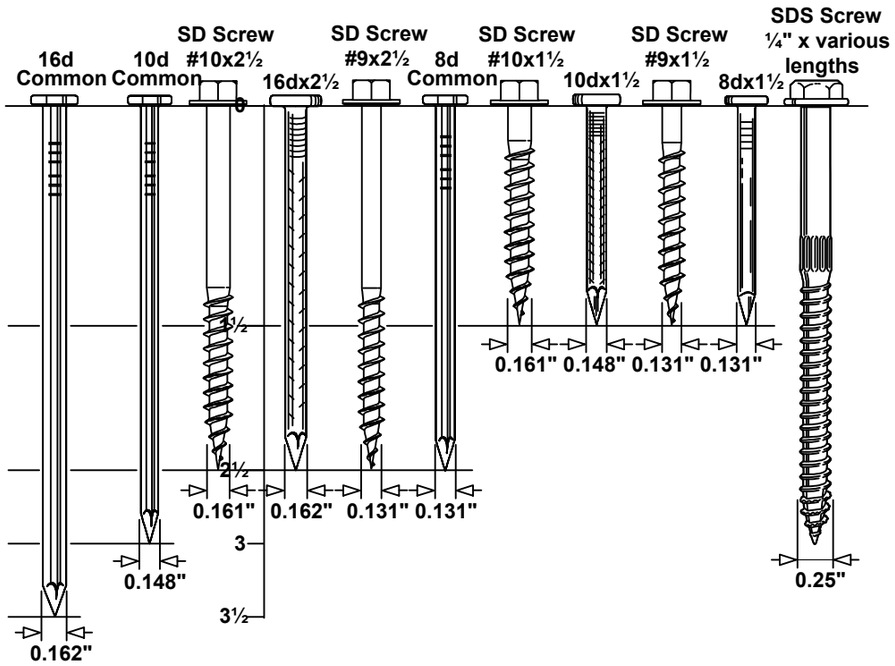
TYPICAL DETAIL

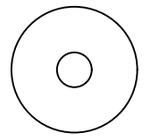
DATE
16-05-2025

SCALE
0 1' 2' 4' 8' (BAR 1" WHEN TO SCALE)
OR AS NOTED IN DETAIL

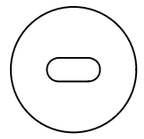
REVISIONS
1 - 16-05-2025
2 -
3 -

SHEET NUMBER
S-12

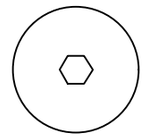




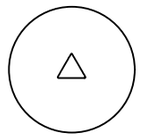
Round Holes
Purpose: to fasten a connector.
Fill requirements: always fill, unless noted otherwise.



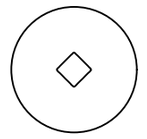
Obound Holes
Purpose: to make fastening a connector in a tight location easier.
Fill requirements: always fill.



Hexagonal Holes
Purpose: to fasten a connector to concrete or masonry.
Fill requirements: always fill when fastening a connector to concrete or masonry.

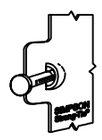


Triangular Holes
Purpose: to increase a connector's strength or to achieve Max strength.
Fill requirements: when the designer specifies Max nailing.

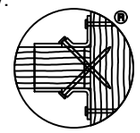


Diamond Holes
Purpose: to temporarily fasten a connector to make installing easier.
Fill requirements: none.

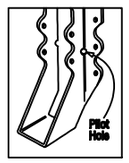
Speed Prongs
Used to temporarily position and secure the connector for easier and faster installation.



Dome Nailing
This feature guides the nail into the joist and header at a 45° angle.



Double Shear Nailing
The nail is installed in the joist and header, distributing the load through two points on each joist nail for greater strength.



Pilot Holes
Tooling holes for manufacturing purposes. No fasteners required.

Fastening Identification

Fastener Notes:

1. The specified quantity, type and size of fastener must be installed in the correct holes on the connector to achieve published loads. Incorrect fastener selection or installation can compromise connector performance and could lead to failure.
2. Nail diameter assumes no coating. See technical bulletin T-NAILGUIDE for more information.
3. The Simpson Strong-Drive® SD structural-connector screw is the only screw approved for use with our connectors.
4. NAIL reference in tables: 16d = 16d common, 10d = 10d common

Fasteners by SIMPOSON STRONG TIE

NTS

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REGISTERED PROFESSIONAL ENGINEER
PHILIP C. LUKIC
S 3276
Exp. 03/31/27
STRUCTURAL
STATE OF CALIFORNIA

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OR AS NOTED IN DETAIL

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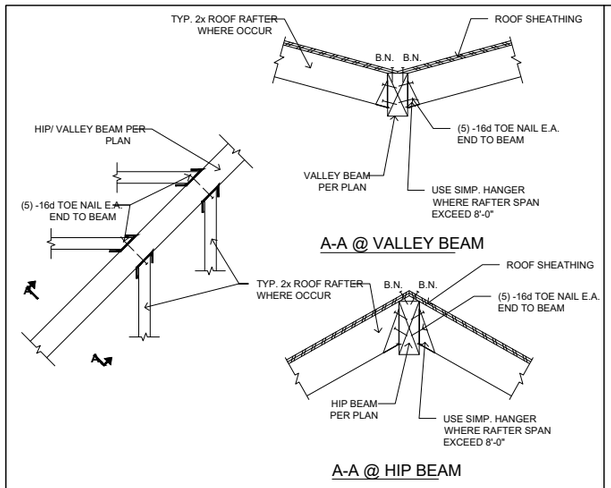
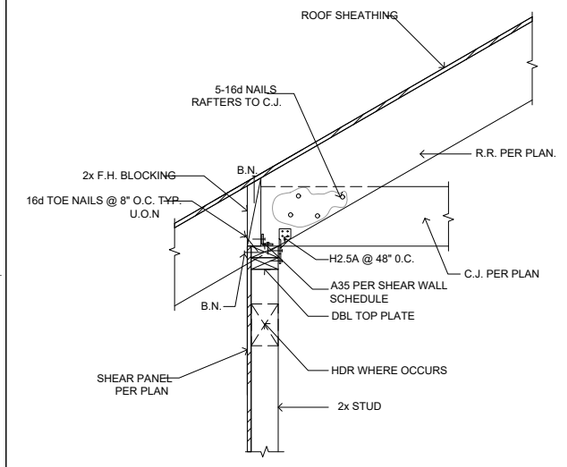
1 · 16-05-2025
2 ·
3 ·

SHEET NUMBER
S-13

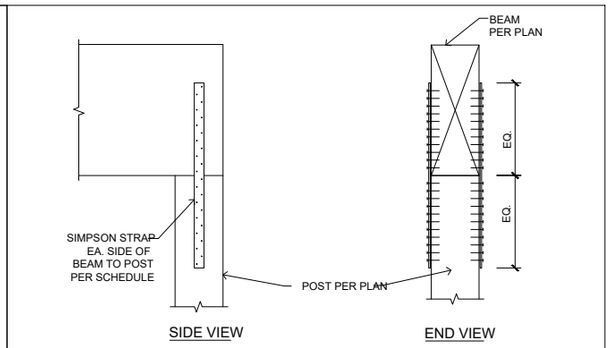


6 ROOF RAFTER TO HIP/ VALLEY BEAM

NSERTION SCALE: 1/16



3 SHEAR TRANSFER

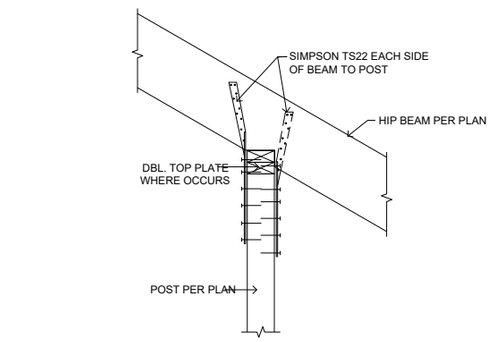


- REFER TO SIMPSON SPEC. FOR STRAP NAILING
- NAIL TO ALL STRAP HOLES

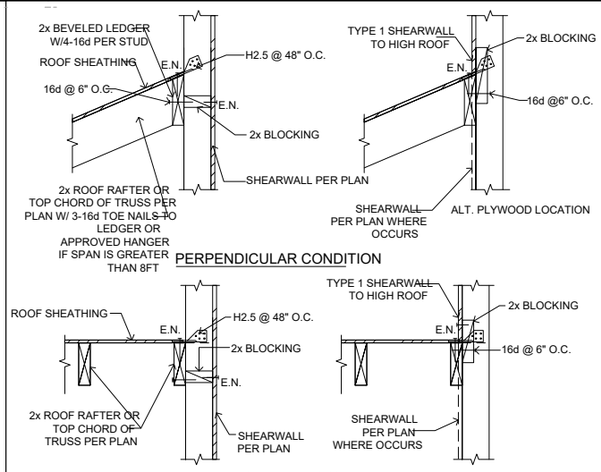
STRAP SCHEDULE

MARK	STRAP EACH SIDE	OVERALL LENGTH	CAPACITY (LB)
A	MSTA12	12"	940
B	(1) CS16	26"	3410
C	(2) CS16	26"	6820
D	(1) CMSTC16	40"	9380
E	(2) CMSTC16	40"	18760

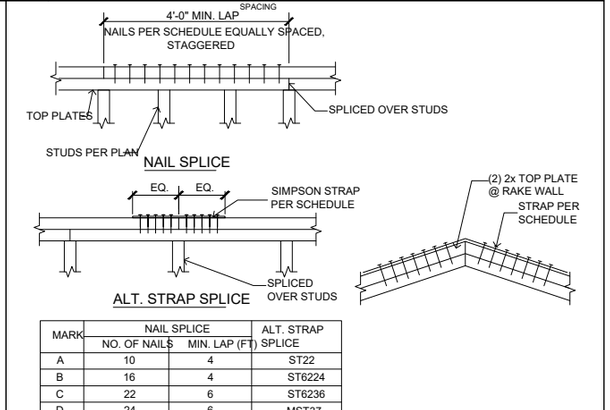
1 POST & BEAM CONNECTION



07 CONNECTION DETAIL



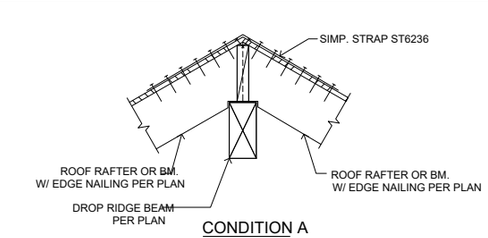
4 ROOF TO WALL



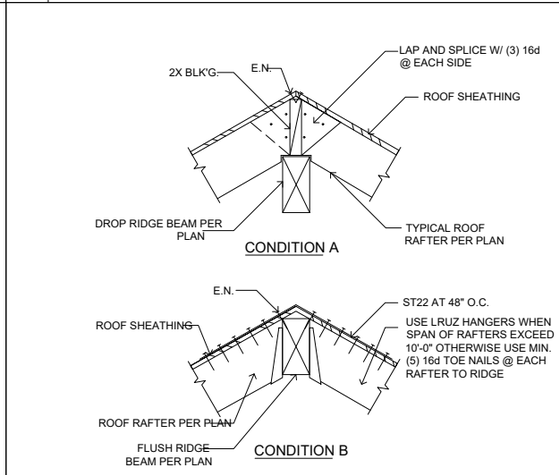
MARK	NAIL SPLICE NO. OF NAILS	NAIL SPLICE MIN. LAP (FT)	ALT. STRAP SPLICE
A	10	4	ST22
B	16	4	ST6224
C	22	6	ST6236
D	24	6	MST37
E	32	8	MST48
F	36	8	MST60
G	42	8	CMST12-72"

ALL NAILS ARE 16d SINKER OR 10d COMMON

2 TYPICAL SPLICE TOP PLATE



08 DRAG DETAIL



5 CONNECTION DETAIL

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SEAL

REGISTERED PROFESSIONAL ENGINEER PHILIP C. LUKE S 3276 Exp. 03/31/27 STRUCTURAL STATE OF CALIFORNIA

PROJECT NAME:

4631 Dunn Ln Angels Camp, Ca 95222

SHEET TITLE:

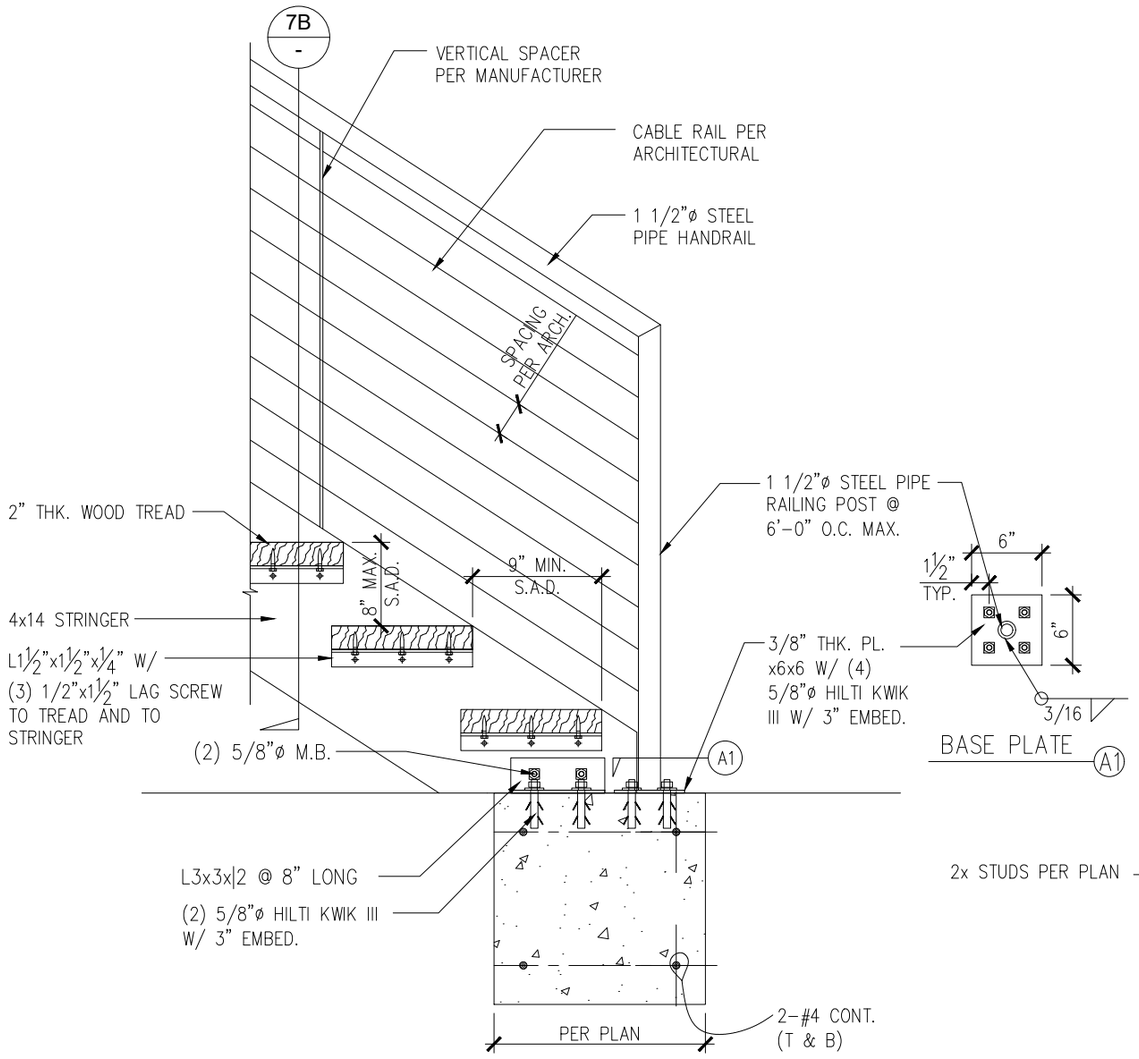
TYPICAL DETAIL

DATE
16-05-2025

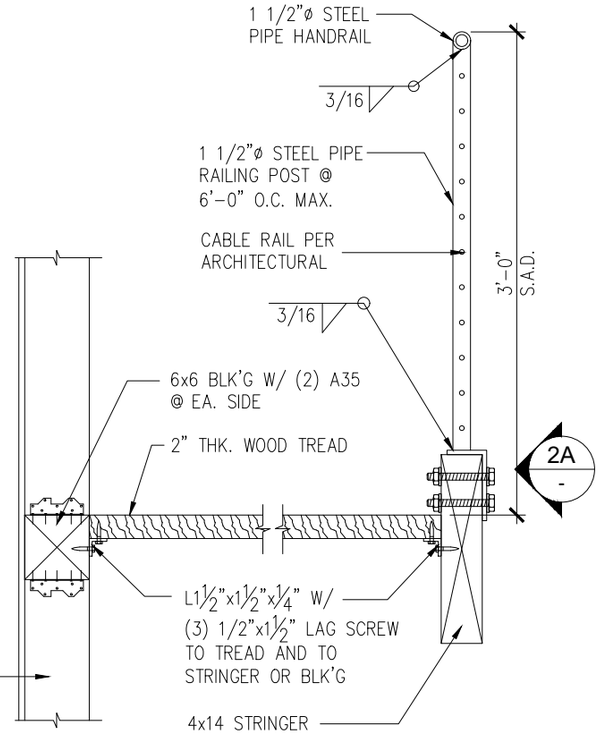
SCALE
0 1' 2' 4' 8" (BAR 1" WHEN TO SCALE)
OR AS NOTED IN DETAIL

REVISIONS
1 16-05-2025
2
3

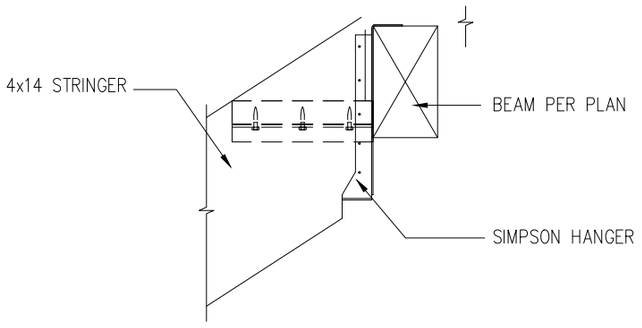
SHEET NUMBER
S-14



STAIR BASE DETAIL A



STAIR DETAIL



WOOD STRINGER TO BEAM C

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SEAL

REGISTERED PROFESSIONAL ENGINEER
PHILIP C. LUKE
S 3276
Exp. 03/31/27
STRUCTURAL
STATE OF CALIFORNIA

PROJECT NAME:

4631 Dunn Ln Angels Camp, Ca 95222

SHEET TITLE:

STAIR DETAIL

DATE
16-05-2025

SCALE
0 1' 2' 4' 8" (BAR 1" WHEN TO SCALE)
OR AS NOTED IN DETAIL

REVISIONS
1 - 16-05-2025
2 -
3

SHEET NUMBER
S-15