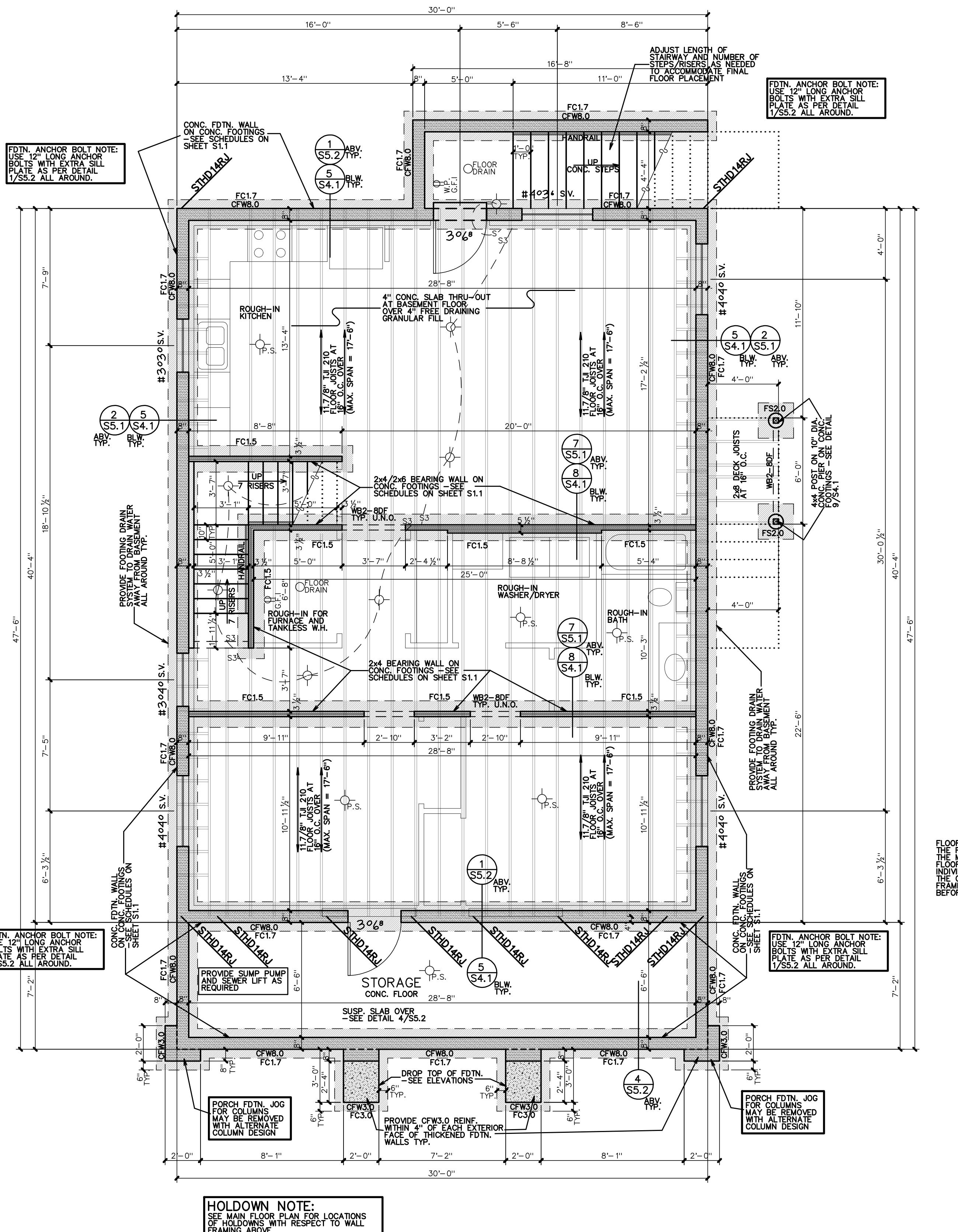


NOTES TO PLAN:

- SEE GENERAL STRUCTURAL NOTES, SCHEDULES, AND DETAILS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS. THIS PLAN IS TO BE USED IN CONJUNCTION WITH THESE OTHER SUPPORTING SHEETS. THE OWNER AND CONTRACTOR SHALL THOROUGHLY REVIEW AND BECOME FAMILIAR WITH THESE DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION.
- FOOTINGS: SEE THE GENERAL STRUCTURAL NOTES. THE CONCRETE FOOTING SCHEDULE AND THE DETAILS ON SHEETS S4.1 AND S4.2 FOR ADDITIONAL INFORMATION. FOOTINGS SUPPORTING EXTERIOR FOUNDATION WALLS SHALL BE FC1.2 FOOTING UNLESS NOTED OTHERWISE. FOOTINGS SUPPORTING INTERIOR WOOD BEARING WALLS SHALL BE A FC1.5 FOOTING UNLESS NOTED OTHERWISE. FOOTINGS SUPPORTING EXTERIOR CONCRETE WALLS SHALL BE FC1.5 FOOTING UNLESS NOTED OTHERWISE. SEE DETAILS 4/S4.1 AND 4/S4.2 FOR FOOTING STEPS, CORNERS, AND INTERSECTIONS.
- FOUNDATION WALLS: SEE THE GENERAL STRUCTURAL NOTES. THE CONCRETE FOUNDATION WALL SCHEDULE AND THE DETAILS ON SHEETS S4.1 AND S4.2 FOR ADDITIONAL INFORMATION. REINFORCING SHALL BE BASED ON THE FOUNDATION WALL HEIGHT AS INDICATED IN THE SCHEDULE. PLACE THE DESIGN FOR FOUNDATION WALLS WITHIN HEIGHTS (HEIGHT BETWEEN LOW AND HIGH GRADE) GREATER THAN THAT SHOWN IN THE SCHEDULE. SEE DETAILS 4/S4.1 FOR FOUNDATION WALLS AND 4/S4.2 FOR FOUNDATION WALLS. FOUNDATION WALLS SHALL NOT BE BACKFILLED UNTIL THE FLOORS ARE PROPERLY INSTALLED TO PROVIDE ADEQUATE BRACING. SOL USED FOR BACKFILL SHALL CONFORM TO THAT SPECIFIED IN THE CONCRETE FOUNDATION WALL SCHEDULE.
- ANCHOR BOLTS: SEE THE GENERAL STRUCTURAL NOTES AND SHEAR WALL SCHEDULE ON SHEET S1.1 FOR FOUNDATION ANCHOR WALL REQUIREMENTS.
- HOOLDOWNS: SEE THE METAL HOOLDOWN SCHEDULE ON SHEET S1.1 AND DETAILS 5/S5.1 AND 5/S5.2 FOR ADDITIONAL INFORMATION. PROVIDE HOOLDOWNS AS NOTED ON THESE DRAWINGS. USE AN ALTERNATE HOOLDOWN IF THE DESIGNER CHANGES THE JOIST. FOR MISSED OR MISPLACED HOOLDOWNS USE AN ALTERNATE HOOLDOWN STRAP AS NOTED IN THE COMMENTS COLUMN OF THE METAL HOOLDOWN SCHEDULE.
- RETAINING WALLS: SEE DETAILS 4/S4.1 AND 4/S4.2 FOR RETAINING WALL CONSTRUCTION. RETAINING WALLS ARE TO BE DESIGNED AND INSTALLED BY THE DESIGNER FOR RETAINING WALLS EXCEDING THE HEIGHT SHOWN IN THE DETAILS OR AREAS WHERE VEHICLE LOADING WILL BE WITHIN FOUR FEET OF THE WALL.
- DECK FOOTINGS: PLASTIC CONCRETE SPOT FOOTING FORMS WITH EQUIVALENT TO GREATER FOOTING FOOTPRINT AND REINFORCING MAY BE USED IN PLACE OF TRADITIONALLY FORMED FOOTINGS.
- CONCRETE PORCH SLABS: PROVIDE REINFORCING FOR SELF SUSPENDED CONCRETE PORCH SLABS AS SHOWN IN DETAIL 4/S5.2.
- CONCRETE SLABS OVER BACKFILL: PROVIDE REBAR DOWELS FROM CONCRETE SLABS TO ADJACENT CONCRETE FOUNDATION WALLS OVER BACKFILL AREAS AS SHOWN IN DETAIL 4/S5.2.
- CONCRETE SLAB CONTROL JOINTS: SLABS ON GRADE SHALL HAVE CONTROL OR CONSTRUCTION JOINTS PROVIDED AT A SPACING NOT TO EXCEED 30 TIMES THE SLAB THICKNESS IN ANY DIRECTION. INSTALL JOINTS SO THE LENGTH TO WIDTH RATIO BETWEEN THE JOINTS IS NOT MORE THAN 1.25. TO INSTALL CONTROL JOINTS, USE A 1/4" THICK PLUMERIA SAW BLADE. THE DEPTH OF 1/4" THE THICKNESS OF THE SLAB. ALL DISCONTINUOUS CONTROL OR CONSTRUCTION JOINTS SHALL BE REINFORCED WITH (2) #4 x 48" REBAR. SEE DETAILS.
- WALLS: 2X4 WALLS ARE SHOWN WITH A 3 1/2" THICKNESS AND 2X6 WALLS ARE SHOWN WITH A 3 1/4" THICKNESS. ALL BEARING, SHEAR, AND BRACED WALLS SHALL HAVE STUDS PLACED AT 16" O.C. MAXIMUM, UNLESS NOTED OTHERWISE.
- SHED WALLS: SEE THE SHEAR WALL SCHEDULE FOR ADDITIONAL INFORMATION. THE EXTERIOR SHEAR WALLS SHALL BE ATTACHED TO THE CONCRETE FOUNDATION WALLS. OTHERWISE, SHEAR WALLS SHALL BE ATTACHED AT THE TOP AND BOTTOM BY ONE OF THE METHODS SHOWN IN THE DETAILS. THE SAME SHALL APPLY TO THE INTERIOR SHEAR WALLS. WALLS NOTED AS "BRACED" SHALL BE A SWI SHEAR WALL TYPE.
- BEARING AND EXTERIOR WALLS: ALL BEARING AND EXTERIOR WALLS SHALL CONSIST OF FULL HEIGHT STUD FRAMING AND BE ATTACHED AT THE TOP AND BOTTOM BY ONE OF THE METHODS SHOWN ON THE PLANS.
- WOOD BEAMS AND HEADERS: UNLESS SPECIFICALLY CALLED OUT ON THE PLANS, ALL BEAMS AND HEADERS ARE TO BE DESIGNED AND INSTALLED BY THE DESIGNER. FOR ADDITIONAL INFORMATION, CONTACT THE DESIGNER FOR WOOD BEAMS OR HEADERS NOT DESIGNATED ON PLANS THAT HAVE A SPAN GREATER THAN 5'-2". SEE THE WOOD BEAM AND HEADER SCHEDULE FOR SPANS UP TO 5'-2" THAT ARE NOTED OTHERWISE ON THE PLANS.
- FLOOR FRAMING: ALL FLOOR JOISTS SHALL BE SUPPORTED AT BEARING POINTS BY ONE OF THE METHODS SHOWN IN THE DETAILS ON SHEETS S5.1 THRU S5.2. U.N.O. FLOOR JOISTS THAT RUN PARALLEL TO EXTERIOR BEARING, AND/OR SHEAR WALLS SHALL HAVE SOLID BLOCKING PROVIDED BY ONE OF THE METHODS SHOWN IN THE DETAILS. WHERE POSSIBLE, ALL FLOOR FRAMING SHALL BE CONTINUOUS OVER INTERMEDIATE BEARING SUPPORTS.
- FLOOR FRAMING PERFORMANCE: THE FLOOR FRAMING SYSTEM DESIGNATED IN THESE DRAWINGS EXCEED THE MINIMUM CODE REQUIREMENTS AND REPRESENT A STANDARD FOR FLOOR FRAMING. THE DESIGNER IS RESPONSIBLE FOR THE INDIVIDUAL'S PERCEPTION OF AN ACCEPTABLE FLOOR PERFORMANCE. THE DESIGNER IS RESPONSIBLE FOR VERIFYING THE DESIGNED FLOOR FRAMING SYSTEM IS ACCEPTABLE TO THE OWNER'S EXPECTATIONS BEFORE BEGINNING FLOOR CONSTRUCTION.
- WOOD POSTS: ALL WOOD POSTS SHALL HAVE APPROPRIATE METAL POST CAPS AND BE SECURED TO THE FLOOR JOIST AS SHOWN. POSTS INSTALLED ON CONCRETE PIER OR FOOTINGS SHALL HAVE AT LEAST 1" STANDOFF BASE. WHERE POSTS ARE INSTALLED ON CONCRETE PIER OR FOOTINGS SEE DETAILS 9/S4.1, 10/S4.1, AND 8/S4.2 FOR ADDITIONAL INFORMATION.
- METAL CONNECTORS: PROVIDE METAL CONNECTORS AS NOTED ON THE DRAWINGS. SEE THE METAL CONNECTOR SCHEDULE ON SHEET S1.1 FOR ADDITIONAL INFORMATION.
- DECK FLOORS: ALL DECK FLOORS SHALL BE HORIZONTALLY TIED TO INTERIOR FLOORS TO RESIST SEISMIC FORCES. SEE DETAIL 6/S5.2.
- tie upper floor walls to lower floor walls with simpson mst48 strap 6/s5.2.
- truss fabrication: if trusses are unable to be designed to work with the layout as shown in the drawings (including attic bonus rooms, vaulted ceilings, raised ceilings, etc), notify the designer and contractor for resolution before proceeding with fabrication of trusses.
- truss, rafter, and roof framing: all trusses and rafters shall be designed to work with the layout as shown in the drawings. notify the designer and contractor for resolution before proceeding with fabrication of trusses.
- truss drag struts: trusses noted as drag struts shall be designed for a 200 psf min. in-plane seismic load applied at the truss top chord unless noted otherwise.



UNFINISHED BASEMENT / FOUNDATION PLAN

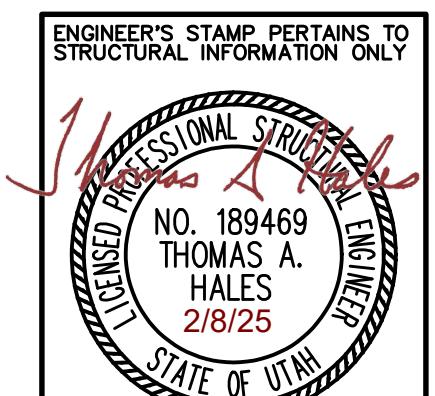
SCALE: 1/4" = 1'-0"

DESIGN LOADS	
ROOF:	LIVE - 30 psf DEAD - 12 psf
FLOOR:	LIVE - 40 psf DEAD - 12 psf
DECK:	LIVE - 60 psf DEAD - 12 psf

GROUND SNOW LOAD - 43 psf
ULTIMATE DESIGN WIND SPEED, V_{ult} - 115 mph
NOMINAL DESIGN WIND SPEED, V_{sd} - 90 mph
SEISMIC DESIGN CATEGORY "D"
SITE CLASS: G-1
SOIL BEARING PRESSURE - 1500 psf
CONTRACTOR/OWNER SHALL VERIFY ACCURACY OF SNOW LOADS WITH BUILDINGS OFFICIAL (NO GYP CRET OR LIGHTWEIGHT CONC. HAS BEEN INCLUDED IN THE DESIGN).

NOTICE AND WARNING	
THESE DRAWINGS & DESIGNS ARE THE PROPERTY OF LOMOND VIEW DESIGNS, LLC AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT WRITTEN CONSENT.	THESE DRAWINGS & DESIGNS MAY BE USED FOR THE CONSTRUCTION OF A SINGLE BUILDING LOCATED AS FOLLOWS:
LOT # 4 SUBDIVISION: 866 CAHOON CIRCLE CITY: OGDEN STATE: UTAH ADDRESS: 304 WEST PLEASANT VIEW DR. PHONE: (801) 782-0484 FAX: (801) 782-8631 WWW.LOMONDVIEW.COM	LOT # 4 SUBDIVISION: 866 CAHOON CIRCLE CITY: OGDEN STATE: UTAH ADDRESS: 304 WEST PLEASANT VIEW DR. PHONE: (801) 782-0484 FAX: (801) 782-8631 WWW.LOMONDVIEW.COM
ANY OTHER USE OF THESE DRAWINGS & DESIGNS IS STRICTLY FORBIDDEN AND VIOLATORS WILL BE PROSECUTED.	DATE: 2/8/2025

CONTRACTOR & OWNER SHALL VERIFY ALL DIMENSIONS, AREAS, AND CONDITIONS, READ ALL NOTES AND BECOME THOROUGHLY FAMILIAR WITH THE DRAWINGS, AND ALL ASSOCIATED COSTS, PRIOR TO CONSTRUCTION.



S2.2
BASEMENT / FOUNDATION PLAN
SHEET: 1-2-2020/2-1-702 TWO-STORY
DATE: 2/8/2025
DRAWN: CHG TO 1725140505, #14009
TYPE: CHG
JOB NO: 24088
PLOT DATE/TIME: 2/8/2025 11:40 PM

OGDEN CITY
LOT 4, SUBDIVISION
866 CAHOON CIRCLE
OGDEN CITY, UTAH

FOR:
304 WEST PLEASANT VIEW DR.
OGDEN, UTAH 84414
PHONE: (801) 782-0484
FAX: (801) 782-8631
WWW.LOMONDVIEW.COM

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NOTES TO PLAN:

1. SEE GENERAL STRUCTURAL NOTES, SCHEDULES, AND DETAILS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS. THIS PLAN IS TO BE WORKED ALONG WITH THESE OTHER SUPPORTING SHEETS. THE OWNER AND CONTRACTOR SHALL THOROUGHLY REVIEW AND BECOME FAMILIAR WITH THESE DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION.

2. FOOTINGS: SEE THE GENERAL STRUCTURAL NOTES. THE CONCRETE FOOTING DETAILS ARE ON SHEETS S4.1 AND S4.2 FOR ADDITIONAL INFORMATION. FOOTINGS SUPPORTING CONCRETE FOUNDATION WALLS SHALL BE A FC2.0 FOOTING UNLESS NOTED OTHERWISE. FOOTINGS SUPPORTING INTERIOR WALL BEARING WALLS SHALL BE A FC2.0 FOOTING. SEE S4.1 FOR FOOTING SUPPORTING COV. PATIO DECK POST. SHALL BE A FC2.0 FOOTING UNLESS NOTED OTHERWISE. SEE DETAILS 3/S4.1 AND 4/S4.1 FOR FOOTING STEPS, CORNERS, AND INTERSECTIONS.

3. FOUNDATION WALLS: SEE THE GENERAL STRUCTURAL NOTES. THE CONCRETE FOUNDATION WALLS SCHEDULE, AND THE DETAILS ON SHEETS S4.1 AND S4.2 FOR ADDITIONAL INFORMATION. BEARING WALLS SHALL BE BACKFILLED ON THE INSIDE. A FC2.0 FOUNDATION WALL WITH HEIGHT AS DESIGNATED IN THE SCHEDULE. CONTACT THE DESIGNER FOR FOUNDATION WALLS WITH HEIGHTS (HEIGHT BETWEEN LOW AND HIGH GRADE) OTHER THAN SHOWN. FOUNDATION WALLS SHALL NOT BE BACKFILLED ON THE INSIDE. FOUNDATION WALL CORNERS AND INTERSECTIONS. FOUNDATION WALLS SHALL NOT BE BACKFILLED UNTIL THE FLOORS ARE PROPERLY INSTALLED TO PROVIDE APPROPRIATE BRACING. SOIL TESTS FOR FOUNDATION SHALL BE FORWARDED TO THE CONCRETE FOUNDATION WALL SCHEDULE.

4. ANCHOR BOLTS: SEE THE GENERAL STRUCTURAL NOTES AND SHEAR WALL SCHEDULE ON SHEET S4.1 FOR FOUNDATION ANCHOR BOX REQUIREMENTS.

5. HOLDOWNS: SEE THE METAL HOLDOWN SCHEDULE ON SHEET S1.1 AND DETAILS FOR THE METAL HOLDDOWN. USE THE METAL HOLDDOWN AS NOTED ON THE DRAWINGS. USE RIM JOIST VERSION OF STRAP WHEN LOCATED AT RIM JOIST. FOR MISSED OR MISPLACED HOLDOWNS USE AN ALTERNATE HOLDOWN SCHEDULE.

6. RETAINING WALLS: SEE DETAILS 1/S4.1 AND 2/S4.1 FOR RETAINING WALL CONSTRUCTION INFORMATION. FOR WALLS RETAINING LANDSCAPE AREAS ONLY, CONTACT THE DESIGNER FOR RETAINING WALLS EXCEEDING THE HEIGHT SHOWN IN THE DETAILS OR AREAS WHERE VEHICLE LOADING MIL BE WITHIN FOUR FEET OF TOP OF WALL.

7. DECK FOOTINGS: PLASTIC CONCRETE SPOT FOOTING FORMS WITH EQUIVALENT OR TRADITIONALLY FORMED FOOTINGS.

8. CONCRETE PORCH SLABS: PROVIDE REINFORCING FOR SELF SUSPENDED CONCRETE PORCH SLABS AS SHOWN IN DETAIL 4/S4.2.

9. CONCRETE SLABS OVER BACKFILL: PROVIDE REBAR, DOWELS, FROM CONCRETE SLABS TO ADJACENT CONCRETE FOUNDATION WALLS OVER BACKFILL AREAS AS SHOWN IN DETAIL 3/S4.2.

10. CONCRETE SLAB CONTROL JOINTS: SLABS ON GRADE SHALL HAVE CONTROL OR CONSTRUCTION JOINTS PROVIDED AT A SPACING NOT TO EXCEED 30 TIMES THE SLAB THICKNESS IN ANY DIRECTION. INSTALL JOINTS ON THE LENGTH TO WIDTH RATIO OF 1:10. SLABS ARE TO BE MORE THAN 12' IN LENGTH. CONTROL JOINTS WITHIN 24 HOURS OF CONCRETE PLACEMENT BY SAW CUTTING TO A DEPTH OF 1/4 THE THICKNESS OF THE SLAB. ALL DISCONTINUOUS CONTROL OR CONSTRUCTION JOINTS SHALL BE REINFORCED WITH (2) #4 x 48" REBAR.

11. WALLS: 2x4 WALLS ARE SHOWN WITH A 3 1/2" THICKNESS, AND 2x6 WALLS ARE SHOWN WITH A 5 1/2" THICKNESS. ALL BEARING, SPANNED, AND BRACED WALLS SHALL HAVE STUDS PLACED AT 16" O.C. MAXIMUM, UNLESS NOTED OTHERWISE.

12. SHEAR WALLS: SEE THE SHEAR WALL SCHEDULE FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS SHALL BE A SW2 TYPE SHEAR WALL UNLESS NOTED OTHERWISE. TO HELP RESIST SEISMIC/MIND FORCES, ALL SHEAR WALLS SHALL BE BRACED. BRACED SHEAR WALLS OPENINGS SHALL HAVE A HEADER PROVIDED BY ONE OF THE METHODS SHOWN IN THE DETAILS ON SHEETS S4.1 THRU S4.3. UNBRACED SHEAR WALLS OPENINGS SHALL HAVE A HEADER PROVIDED AS NOTED ON THE PLANS.

13. BEARING AND EXTERIOR WALLS: ALL BEARING AND EXTERIOR WALLS SHALL CONSIST OF FULL HEIGHT STUD FRAMING AND BE ATTACHED AT THE TOP AND BOTTOM BY ONE OF THE METHODS SHOWN IN THE DETAILS ON SHEETS S4.1 THRU S4.3. BEARING WALL OPENINGS SHALL HAVE A HEADER PROVIDED AS NOTED ON THE PLANS.

14. WOOD BEAMS AND HEADERS: UNLESS SPECIFICALLY CALLED OUT ON THE DRAWINGS, SEE THE WOOD BEAM/HEADER SCHEDULE FOR SIZES AND ADDITIONAL INFORMATION. CONTACT THE DESIGNER FOR WOOD BEAMS OR HEADERS NOTED ON PLANS. BEAMS THAT HAVE A SPAN GREATER THAN 5'-2" SEE THE WOOD BEAM SCHEDULE FOR SPANS UP TO 5'-2" THAT ARE NOT NOTED OTHERWISE ON THE PLANS.

15. FLOOR FRAMING: ALL FLOOR JOISTS SHALL BE SUPPORTED AT BEARING POINTS BY ONE OF THE METHODS SHOWN IN THE DETAILS ON SHEETS S4.1 THRU S4.2. FLOOR JOISTS THAT RUN PARALLEL TO EXTERIOR, BEARING, AND/OR SPANNED WOOD BEAMS SHOULD BE SUPPORTED BY ONE OF THE METHODS SHOWN IN DETAILS 2, 3, 4, 5, 6, 8, OR 9/S4.1, WHERE POSSIBLE, ALL FLOOR FRAMING SHALL BE CONTINUOUS OVER INTERMEDIATE BEARING SUPPORTS.

16. FLOOR FRAMING PERFORMANCE: THE FLOOR FRAMING SYSTEM DESIGNATED IN THE DRAWINGS EXCEPT MINIMUM CODE REQUIREMENTS, REPRESENT A STANDARD FLOOR FRAMING. HOWEVER, DUE TO VARIATIONS IN AN INDIVIDUAL'S PERCEPTION OF AN ACCEPTABLE FLOOR PERFORMANCE, THE OWNER/CONTRACTOR SHALL VERIFY THAT THE DESIGNATED FLOOR FRAMING SYSTEM MEETS THE OWNER'S EXPECTATIONS BEFORE BEGINNING FLOOR CONSTRUCTION.

17. WOOD POSTS: ALL WOOD POSTS SHALL HAVE APPROPRIATE METAL POST CAPS AND BASE CONNECTORS INSTALLED GOOD FOR AT LEAST 500 POUNDS UPLIFT. WOOD POSTS INSTALLED ON CONCRETE SHALL HAVE AT LEAST A 1" STANDOFF BASE. WOOD POSTS ARE INSTALLED ON CONCRETE PIERS OR FOOTINGS SEE DETAILS 9/S4.1, 10/S4.1, AND 9/S4.2 FOR ADDITIONAL INFORMATION.

18. METAL CONNECTORS: PROVIDE METAL CONNECTORS AS NOTED ON THE DRAWINGS. SEE THE METAL CONNECTOR SCHEDULE ON SHEET S1.1 FOR ADDITIONAL INFORMATION.

19. DECK FLOORS: ALL DECK FLOORS SHALL BE HORIZONTALLY TIED TO INTERIOR FLOORS TO RESIST SEISMIC FORCES. SEE DETAIL 11/S4.1

20. TIE UPPER FLOOR WALLS TO LOWER FLOOR WALLS WITH SIMPSON M5124 STRAP WHERE NOTED ON PLANS. SEE METAL CONNECTOR SCHEDULE AND DETAIL 6/S4.2.

21. TRUSS FABRICATION: IF TRUSSES ARE UNABLE TO BE DESIGNED TO WORK WITH THE LAYOUT AS SHOWN IN THE DRAWINGS (INCLUDING ATTIC BONUS ROOMS, RAISED CEILINGS, RAISED CEILINGS, ETC.), NOTIFY THE DESIGNER AND CONTRACTOR FOR RESOLUTION BEFORE PROCEEDING WITH FABRICATION OF TRUSSES.

22. TRUSS RAFTER, AND ROOF FRAMING: ALL TRUSSES AND RAFTERS SHALL BE SUPPORTED AT BEARING POINTS BY ONE OF THE METHODS SHOWN IN THE DETAILS ON SHEETS S6.1 THRU S6.3. UNO. AT ROOF OVERBUILD AREA, PROVIDE OVERBUILD TRUSS OR STICK FRAME AS SHOWN IN DETAIL 6/S6.2.

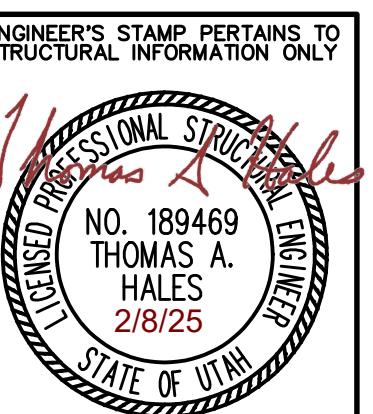
23. TRUSS DRAG STRUTS: TRUSSES NOTED AS DRAG STRUTS SHALL BE DESIGNED FOR A 200 PLF MIN. IN-PLANE HORIZONTAL SEISMIC LOAD APPLIED AT THE TRUSS TOP CHORD UNLESS NOTED OTHERWISE.

MAIN FLOOR PLAN

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

MAIN FLOOR AREA = 1200 SQ. FT.
UPPER FLOOR AREA = 702 SQ. FT.
TOTAL AREA = 1902 SQ. FT.

COV. PORCH AREA = 232 SQ. FT.



DESIGN LOADS

ROOF:
DEAD - 30 psf
LIVE - 40 psf
SEISMIC - 12 psf

FLOOR:
DEAD - 12 psf
LIVE - 40 psf
SEISMIC - 12 psf

DECK:
DEAD - 12 psf
LIVE - 60 psf
SEISMIC - 12 psf

GROUND SNOW LOAD - 43 psf
ULTIMATE DESIGN WIND SPEED, V_{ult} - 115 mph
NOMINAL DESIGN WIND SPEED, V_{sd} - 90 mph
SEISMIC DESIGN CATEGORY 'D'

SITE CLASS:
SOIL BEARING PRESSURE - 1500 psf

CONTRACTOR/OWNER SHALL VERIFY ACCURACY OF SNOW LOADS WITH BUILDINGS OFFICIAL (NO GYP CEMENT OR LIGHTWEIGHT CONC. HAS BEEN INCLUDED IN THE DESIGN).

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THESE DRAWINGS & DESIGNS MAY BE USED FOR THE CONSTRUCTION OF A SINGLE BUILDING LOCATED AS FOLLOWS:

LOT #: 4
SUBDIVISION: 866 CAHOON CIRCLE
CITY: OGDEN STATE: UTAH

ANY OTHER USE OF THESE DRAWINGS & DESIGNS IS STRICTLY FORBIDDEN AND VIOLATORS WILL BE PROSECUTED.

DATE: 2/8/2025

MAIN FLOOR PLAN

DATE: 2/8/2025

DRAWN: CWH

TYPE: CHG TO 1725140505, #14009

JOB NO: 24088

FOR: 304 WEST PLEASANT VIEW DR.
OGDEN, UTAH 84414
PHONE: (801) 792-0484
FAX: (801) 782-8631
WWW.LOMONDVIEW.COM

PLAN NO:

MAIN FLOOR PLAN

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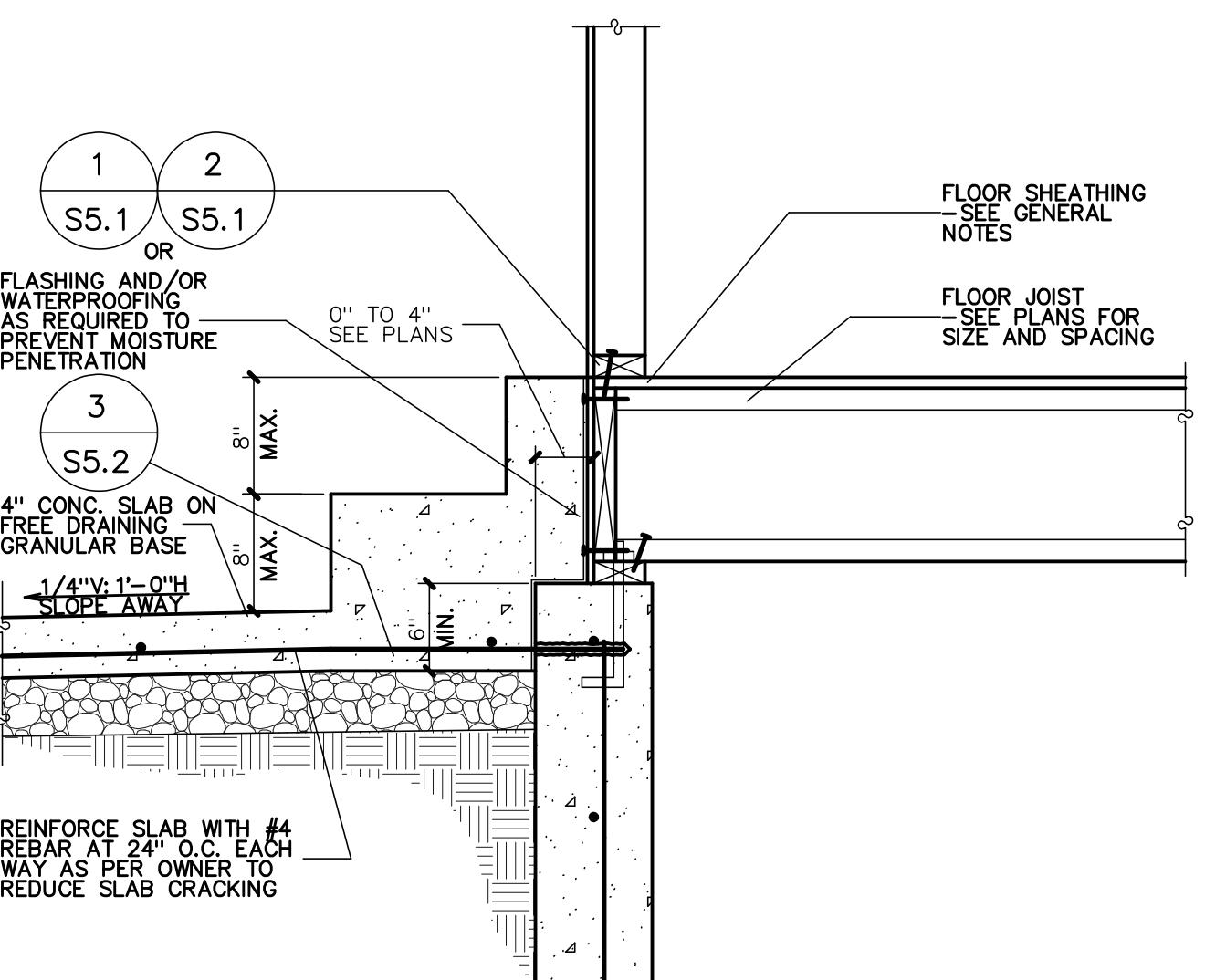
PLAN NO:

MAIN FLOOR PLAN

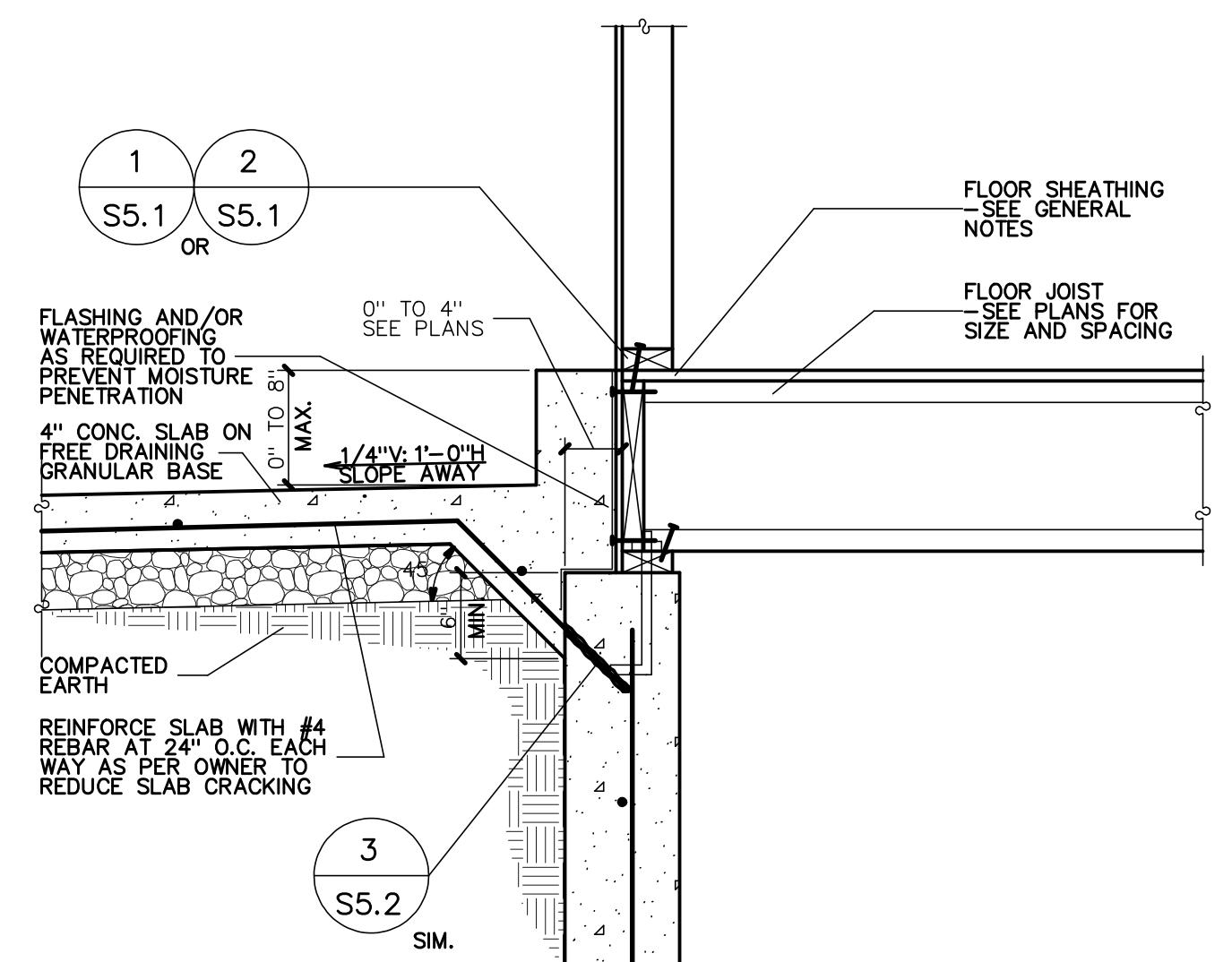
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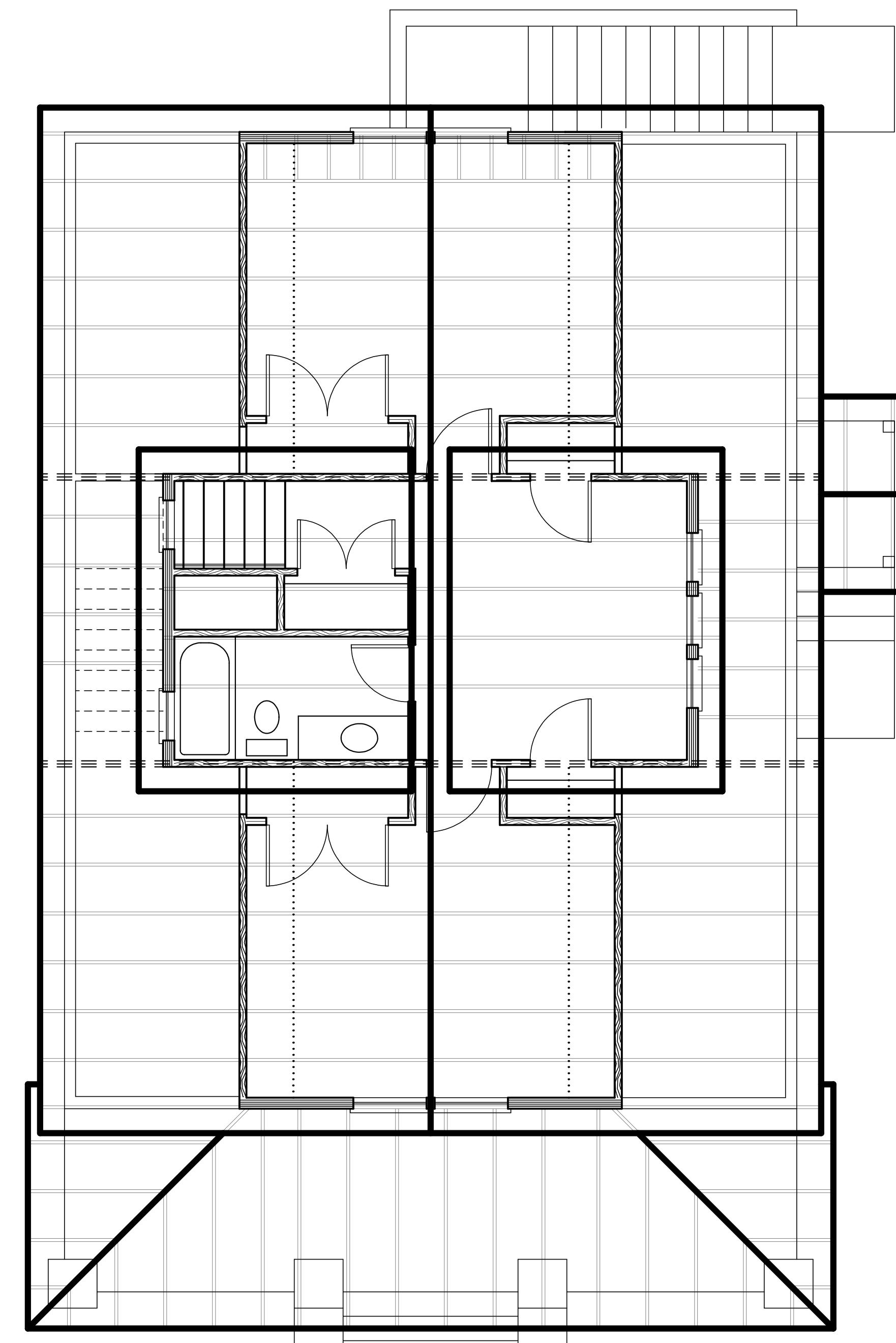
TYPE: CHG TO 172



RAISED PATIO SLAB FOR STAIRS DETAIL
NO SCALE



RAISED PATIO SLAB DETAIL
NO SCALE



ROOF LAYOUT

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

NOTE TO TRUSS COMPANY:
IF TRUSSES ARE UNABLE TO BE DESIGNED
TO WORK AS SHOWN IN DRAWINGS (INCLUDING
ATTIC BONUS ROOMS, VAULTED AND RAISED
CEILINGS, ETC.) NOTIFY DESIGNER AND
CONTRACTOR FOR RESOLUTION BEFORE
PROCEEDING WITH FABRICATION OF TRUSSES.
ALSO REVIEW GENERAL NOTES AND ALL OTHER
APPLICABLE NOTES AND DETAILS BEFORE
PROCEEDING WITH FABRICATION OF TRUSSES.

GENERAL NOTES

I. ROOF NOTES

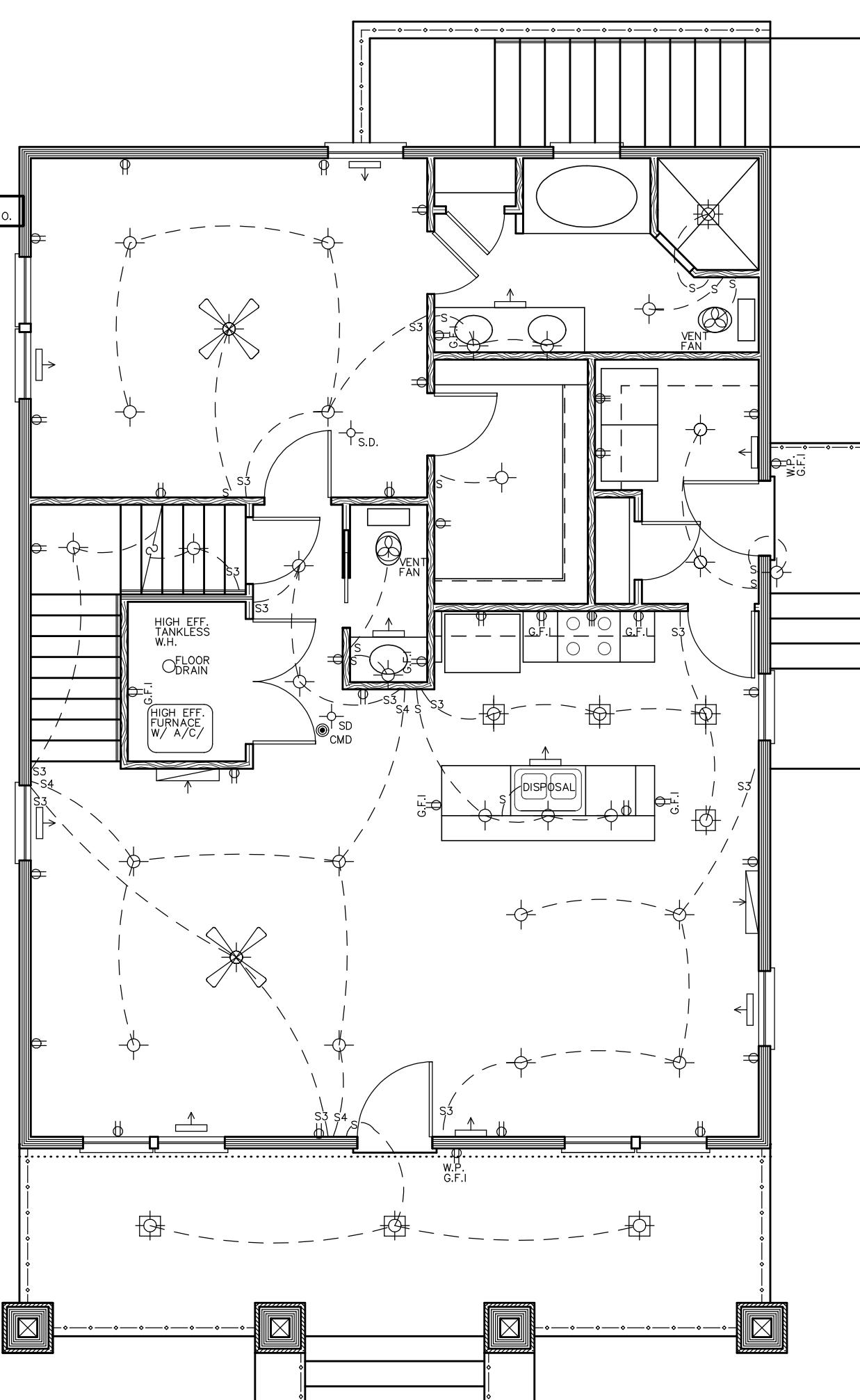
1. PROVIDE ICE AND WATER SHIELD ON ROOF FROM ALL EAVE EDGES TO 24" INSIDE THE EXTERIOR WALL. ROOFS WITH SLOPES LESS THAN 4/12 SHALL HAVE ICE AND WATER SHIELD INSTALLED ON ENTIRE ROOF PLANE.
2. PROVIDE INSULATION DEPTH MARKERS EVERY 300 SQ. FT. OF ATTIC SPACE
3. PROVIDE ATTIC VENTILATION AND ATTIC ACCESS AS PER LOCAL CODE
4. ATTIC VENTILATION: TOTAL SQ. FT. $\frac{300 \times 144}{144} =$ TOTAL SQ. IN.
- PROVIDE 50% ATTIC VENTS AND 50% SOFFIT VENTS
- BAFFLE TRUSS CAVITIES AT EXTERIOR WALLS

II. ELECTRICAL NOTES

1. THE ELECTRICAL PLAN SHOWN ONLY REPRESENTS A BASIC ELECTRICAL LAYOUT. ALL ELECTRICAL SHALL BE COORDINATED WITH THE OWNER AND SHALL MEET THE APPLICABLE ELECTRICAL CODES.
2. SMOKE DETECTORS SHALL BE INSTALLED IN EACH SLEEPING ROOM, OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, NEXT TO A FURNACE AND WATER HEATER, AND ON EACH ADDITIONAL STORY OF THE DWELLING AS PER LOCAL ELECTRICAL CODES.
3. CARBON MONOXIDE DETECTORS (CMD) SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES AS PER LOCAL CODE.
4. ARC-FAULT CIRCUIT INTERRUPTERS SHALL BE INSTALLED IN ALL BEDROOMS AS PER LOCAL ELECTRICAL CODES.
5. GROUND-FAULT CIRCUIT INTERRUPTERS SHALL BE INSTALLED IN ALL OUTDOOR OUTLETS AND OUTLET CIRCUITS IN KITCHENS, BATHROOMS, GARAGES, AND WHERE OUTLETS ARE CLOSE TO A WATER SOURCE AS PER LOCAL ELECTRICAL CODES.

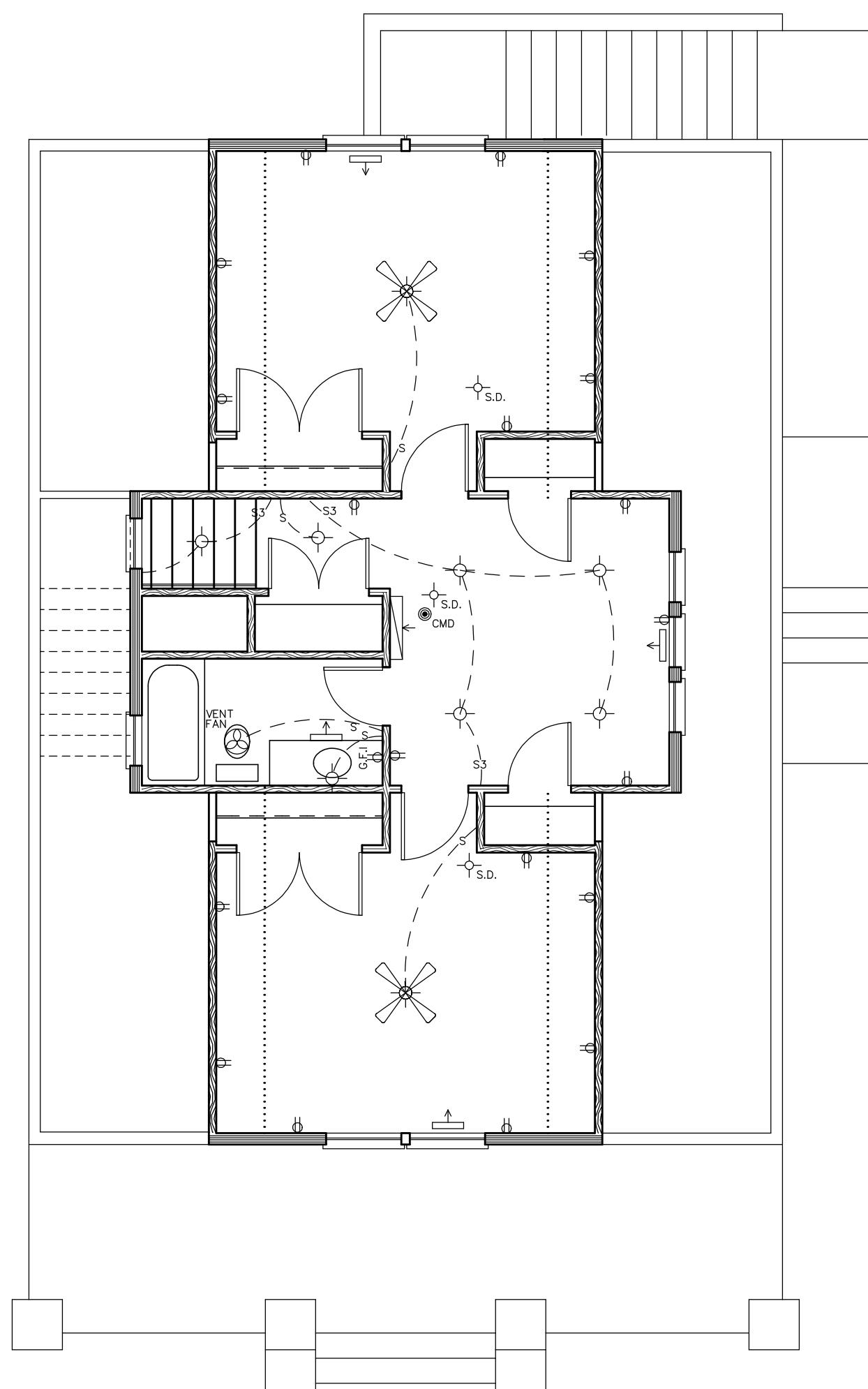
III. MISCELLANEOUS NOTES

1. ADDITIONS: CONTRACTOR SHALL COORDINATE AND ADJUST FOUNDATION AND OTHER WALL HEIGHTS AS NEEDED TO ALLOW FLOOR LEVELS TO BE FLUSH BETWEEN NEW AND EXISTING FLOORS. ALSO, TIE HVAC SYSTEM INTO EXISTING HVAC SYSTEM, OR PROVIDE NEW AS PER LOCAL CODES.
2. POISON SOIL FOR TERMITE CONTROL AS PER LOCAL CODE REQUIREMENTS
3. PROVIDE 5/8" TYPE 'X' FIRE RATED GYPSUM BOARD AT AREAS AS REQUIRED BY LOCAL FIRE CODE.
4. WINDOW FRAMING: ALL OPENABLE WINDOWS THAT HAVE A WINDOW SILL LOCATED MORE THAN 72" ABOVE THE EXTERIOR FINISHED GRADE OR SURFACE BELOW SHALL BE PLACED SO THAT THE WINDOW SILL IS AT LEAST 24" ABOVE THE INTERIOR FINISHED FLOOR OR SHALL HAVE A WINDOW GUARD PROVIDED AS PER CODE. ALL WINDOWS USED FOR EGRESS SHALL HAVE A MAXIMUM SILL HEIGHT OF 44" ABOVE FINISHED FLOOR.
5. PROVIDE R-13 INSULATION MINIMUM IN 2x4 EXTERIOR WALLS, AND R-19 INSULATION MINIMUM IN 2x6 EXTERIOR WALLS. PROVIDE R-38 INSULATION MINIMUM AT ALL INTERIOR TRUSS ATTIC SPACES AND RAFTER FRAMING.
6. CRAWL SPACE VENTS: PROVIDE CRAWL SPACE VENTS AS PER LOCAL CODE REQUIREMENTS FOR ALL CRAWL SPACE AREAS.

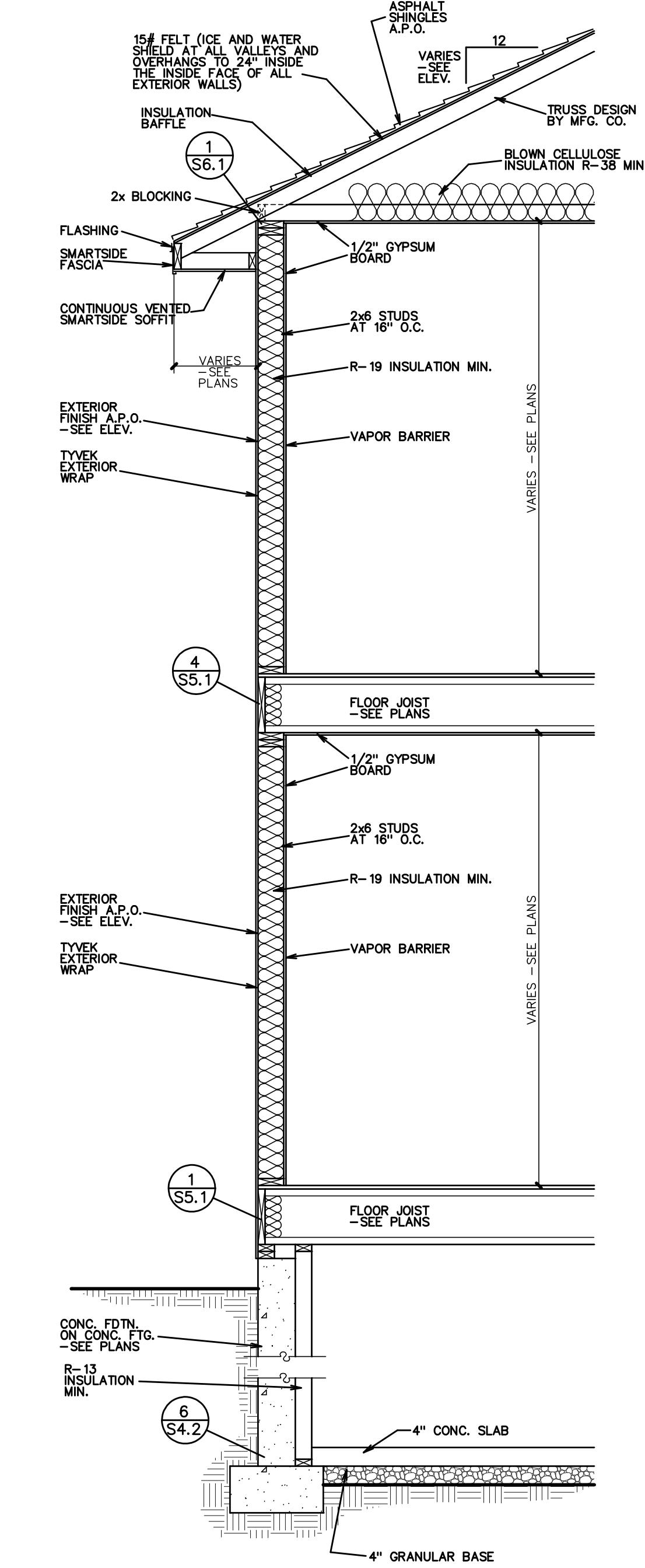
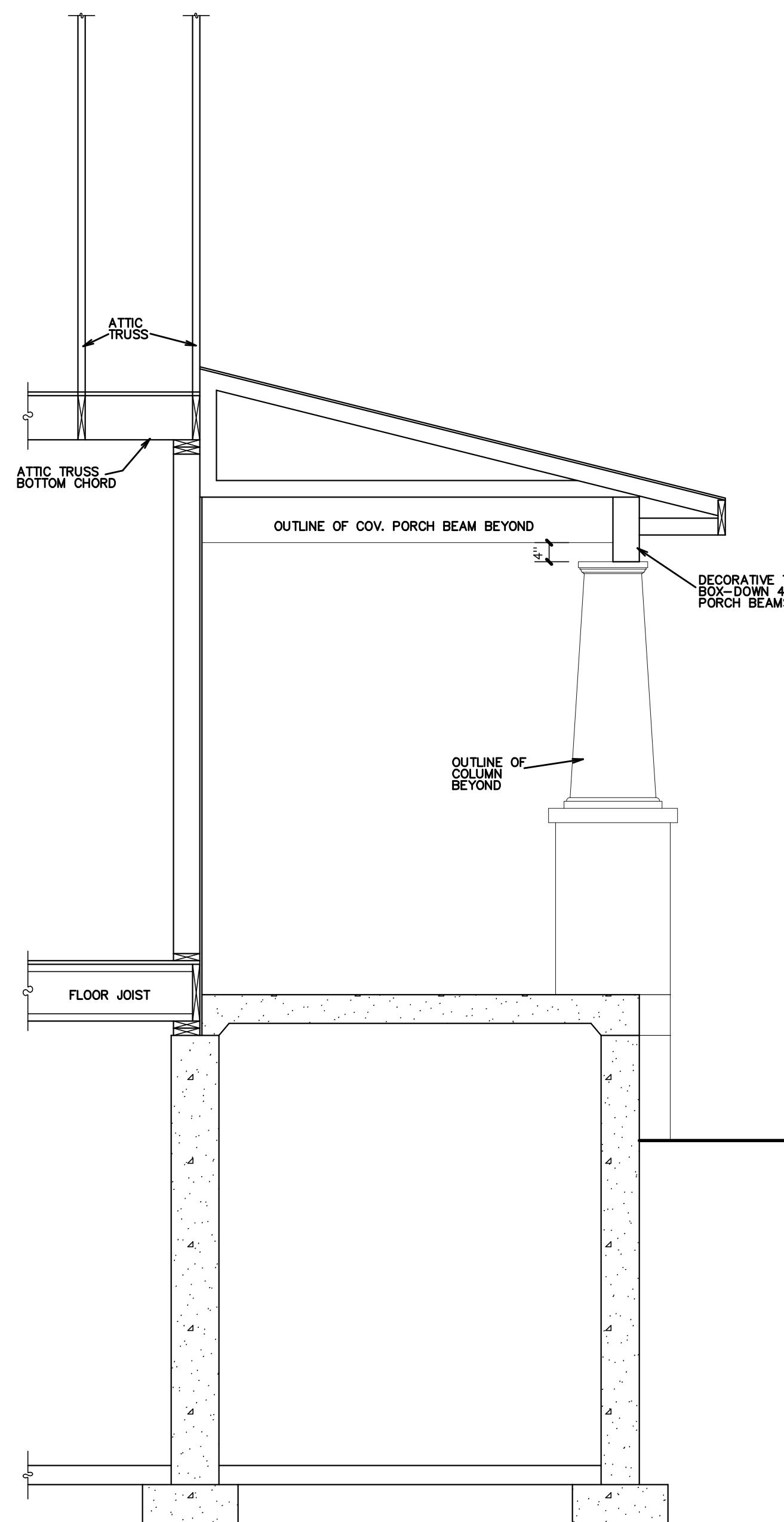
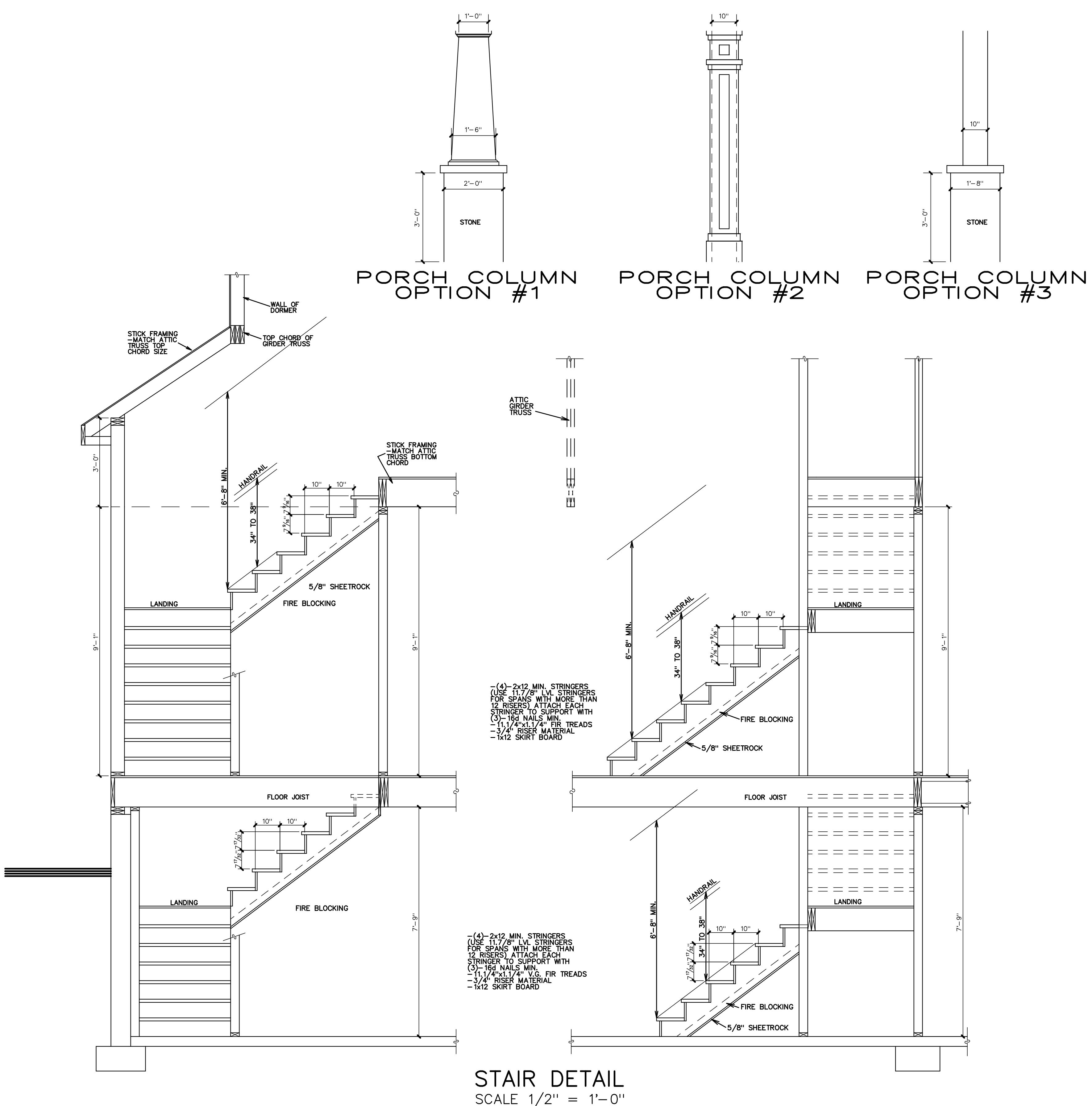


MAIN FLOOR ELEC./H.V.A.C. LAYOUT

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



UPPER FLOOR ELEC/H.V.A.C. LAYOUT
SCALE: 3/16"=1'-0"



SHEET TITLE: SECTIONS AND STAIR DETAILS

SHEET NUMBER: S3.2

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OGDEN CITY

FOR:

LOT 4, SUBDIVISION CIRCLE
886 CAHOON CIRCLE
OGDEN CITY, UTAH

PLAN:

(801) 782-0484
(801) 782-8631

WWW.LOMONDVIEW.COM



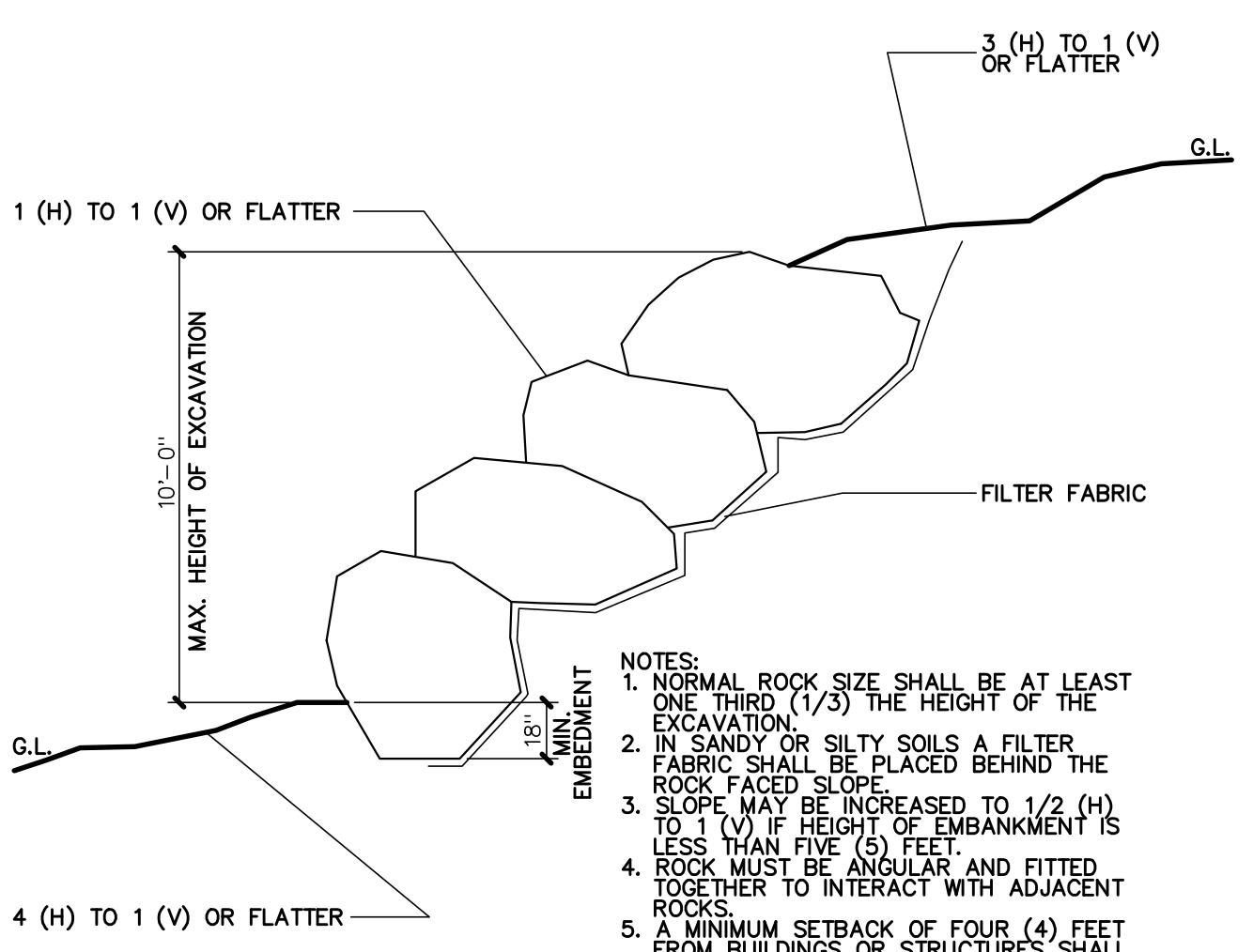
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DATE: 2/8/2025
JOB NO.: 24088
TYPE: CHG TO 1725140505, #14009
PLAN NO: 1-2-200/2-1-702 TWO-STORY

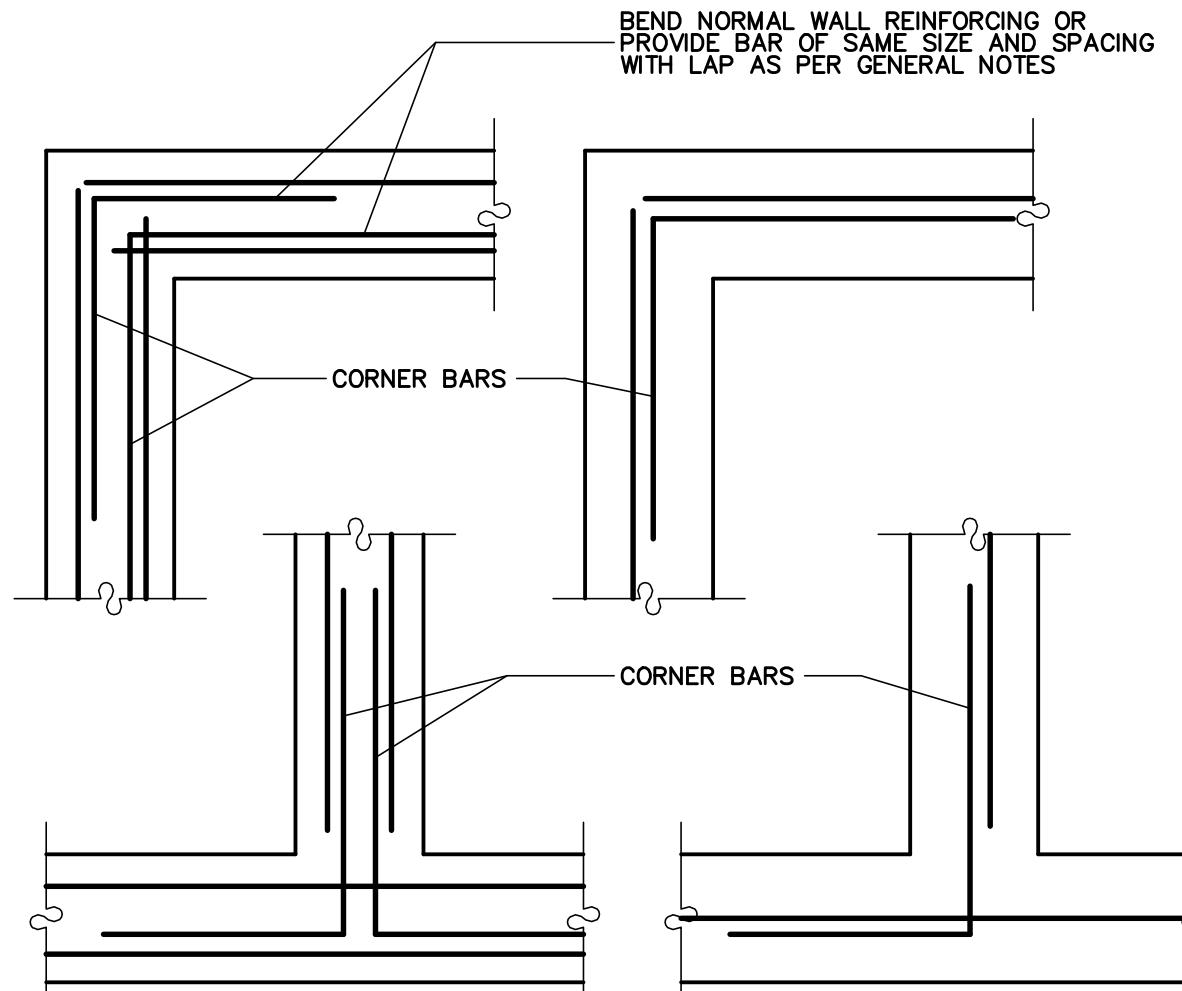
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CONTRACTOR & OWNER SHALL VERIFY ALL DIMENSIONS, AREAS, AND CONDITIONS, READ ALL NOTES AND BECOME THOROUGHLY FAMILIAR WITH THE DRAWINGS, AND ALL ASSOCIATED COSTS, PRIOR TO CONSTRUCTION.



ROCK RETAINING WALL UP TO 10'-0" HEIGHT 1
NO SCALE S4.1

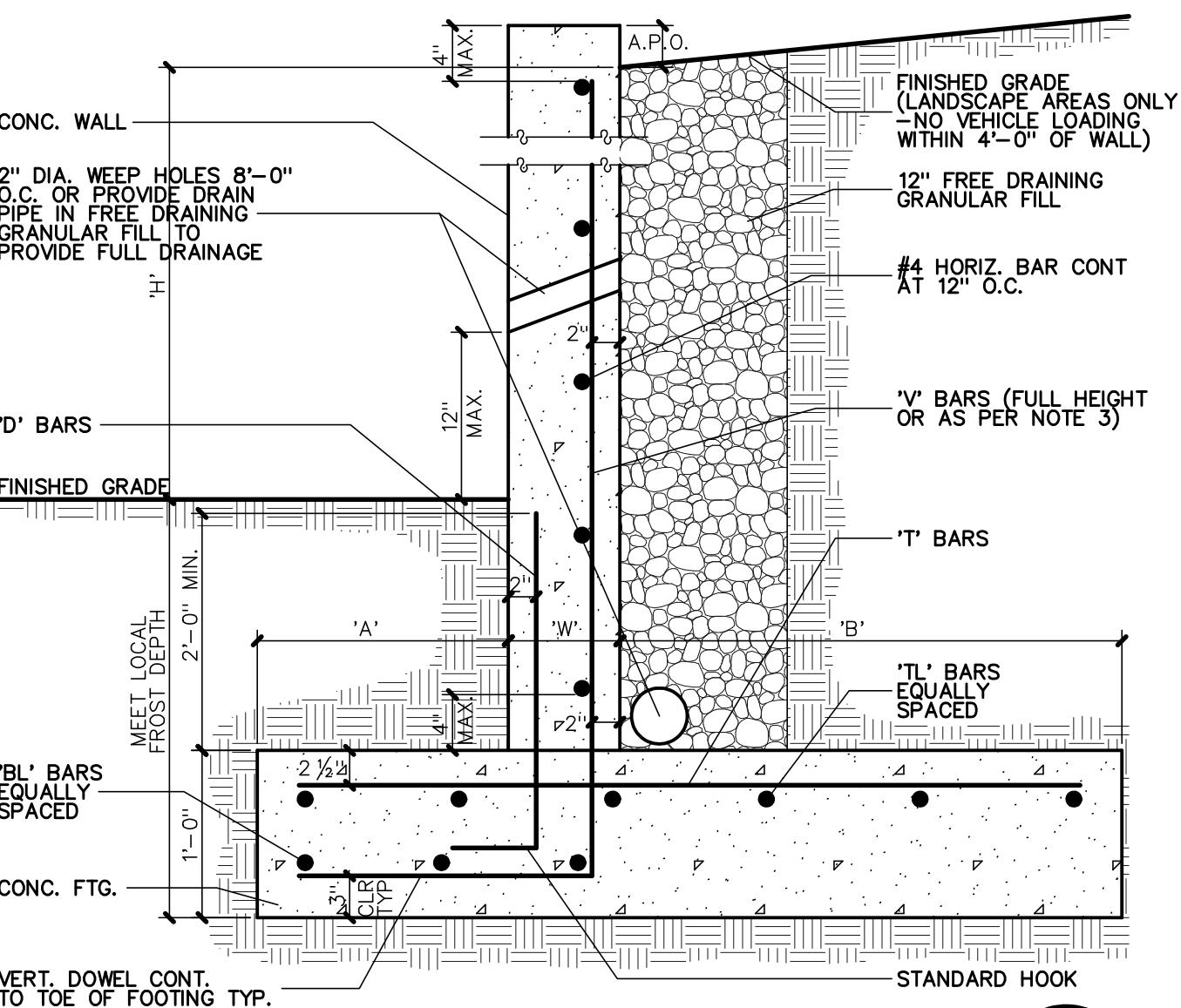
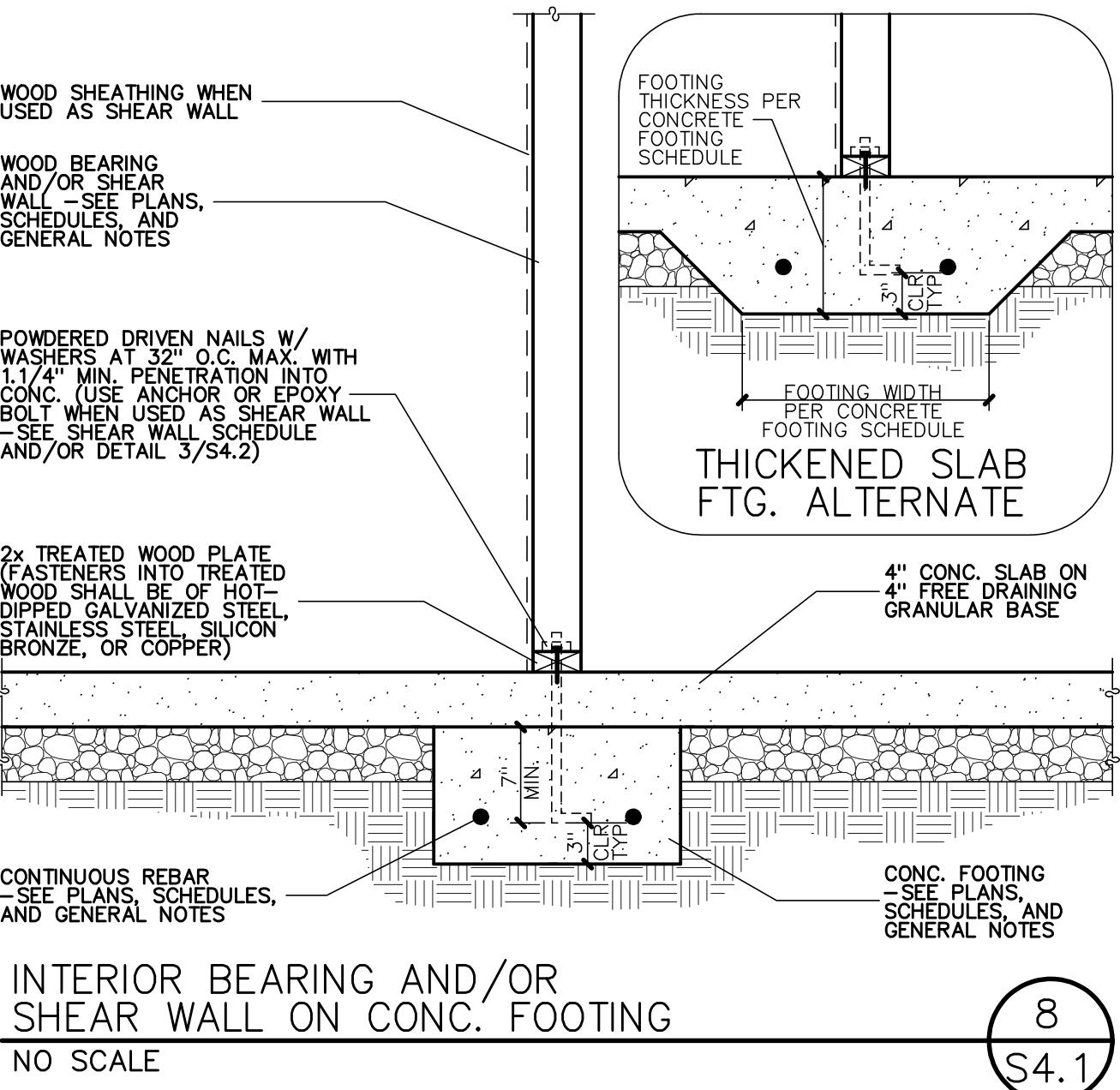


CONC. FOUNDATION WALL/FOOTING
CORNERS AND INTERSECTION

NO SCALE

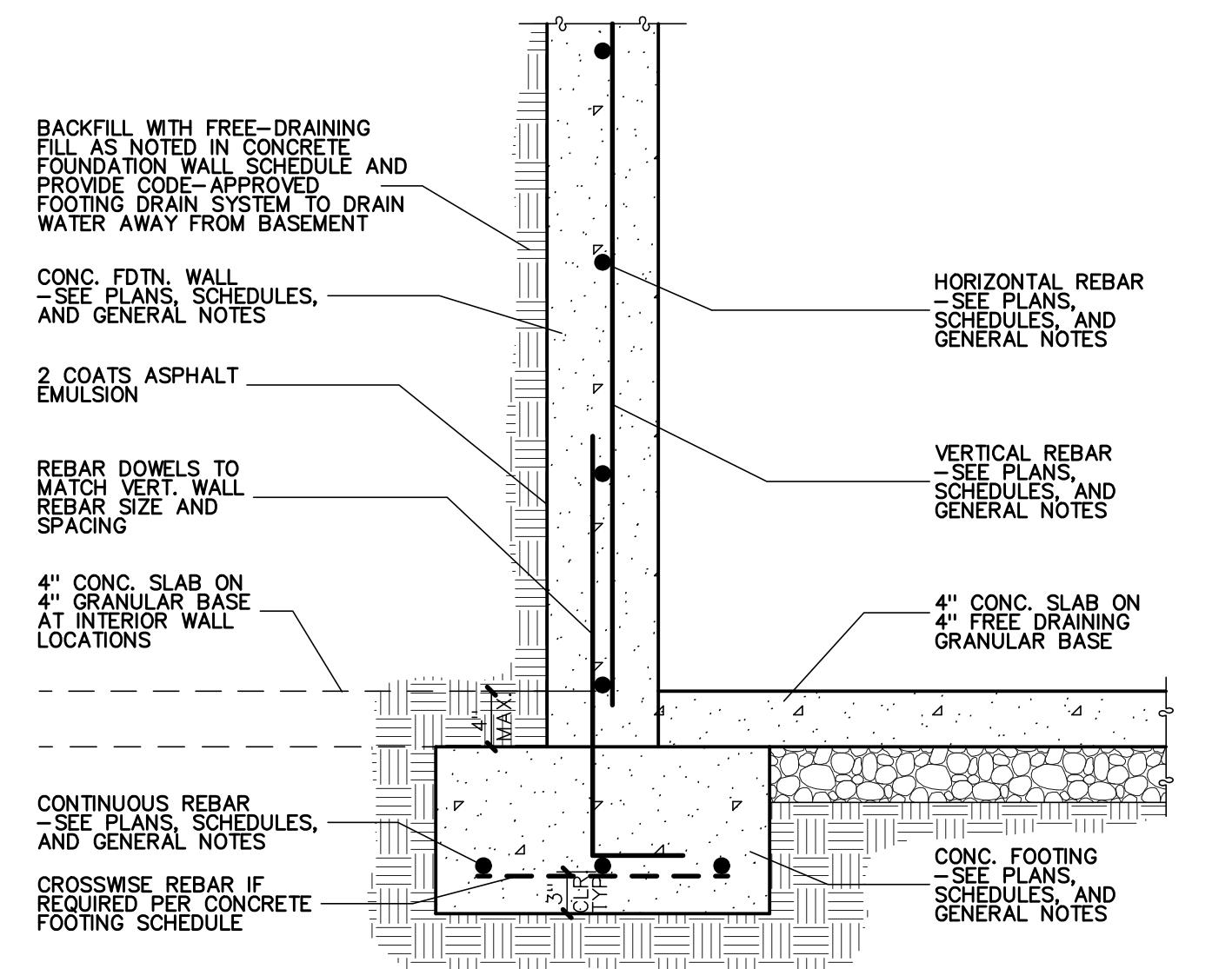
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S4.1

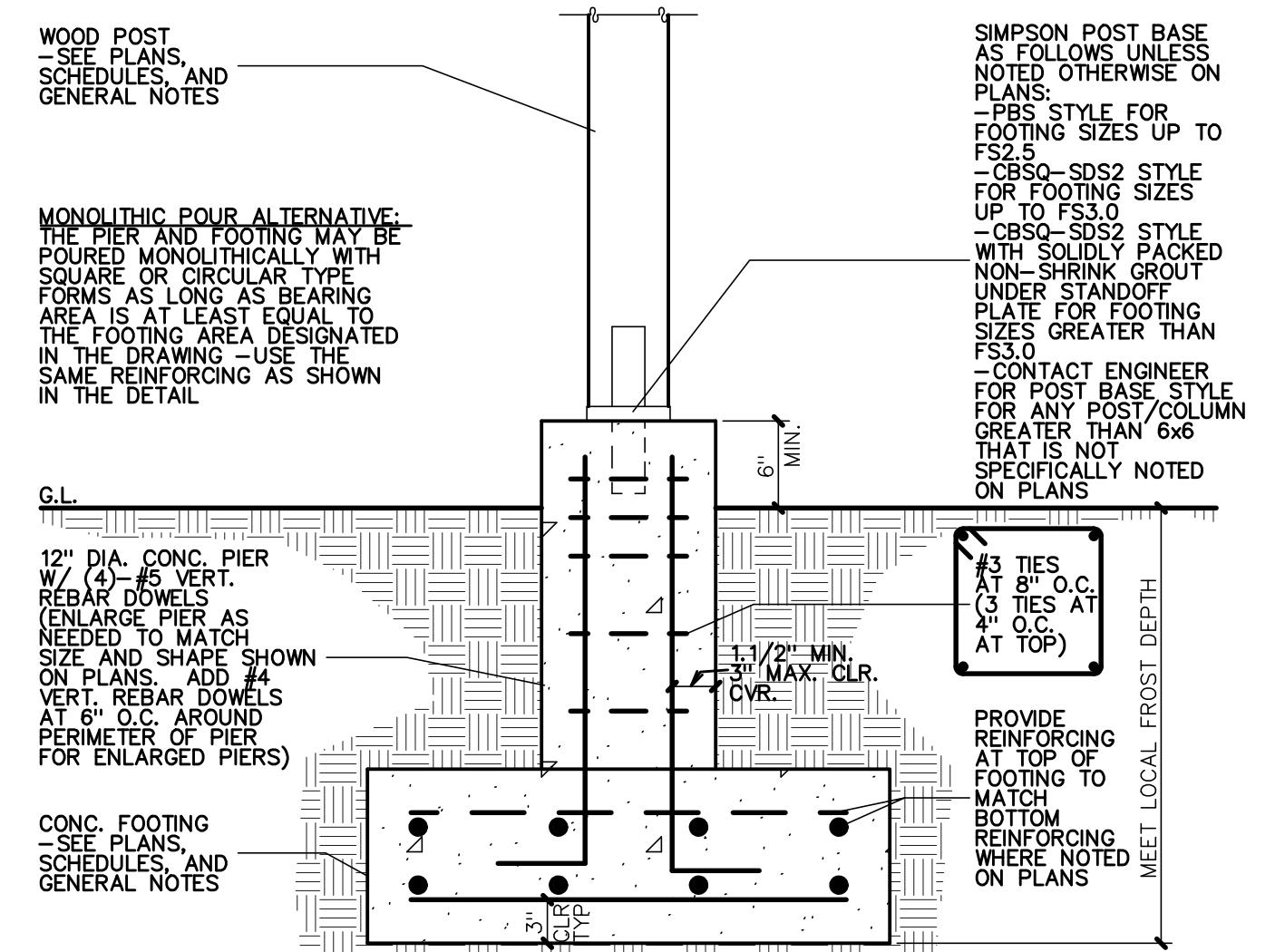


CONCRETE RETAINING WALL

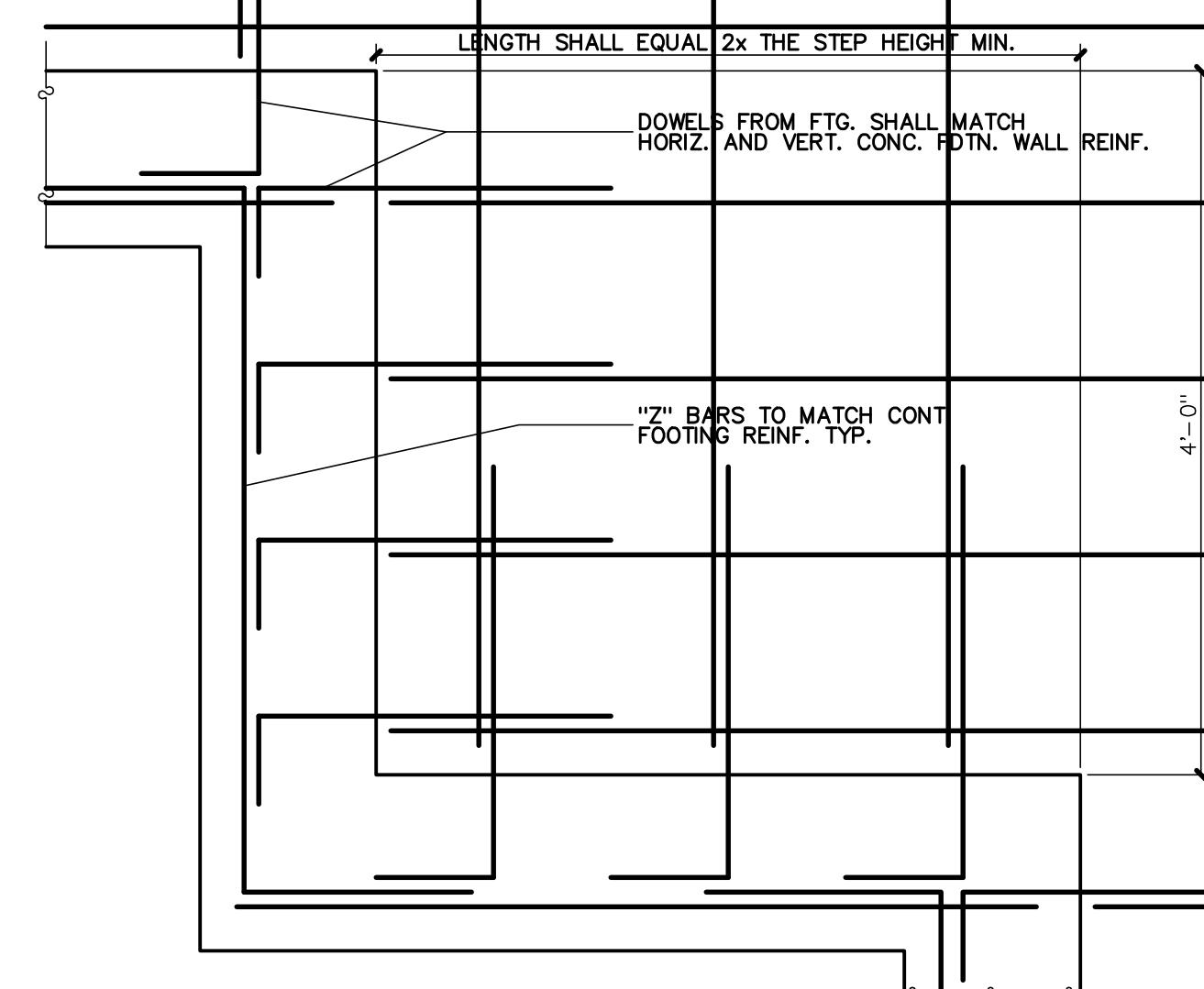
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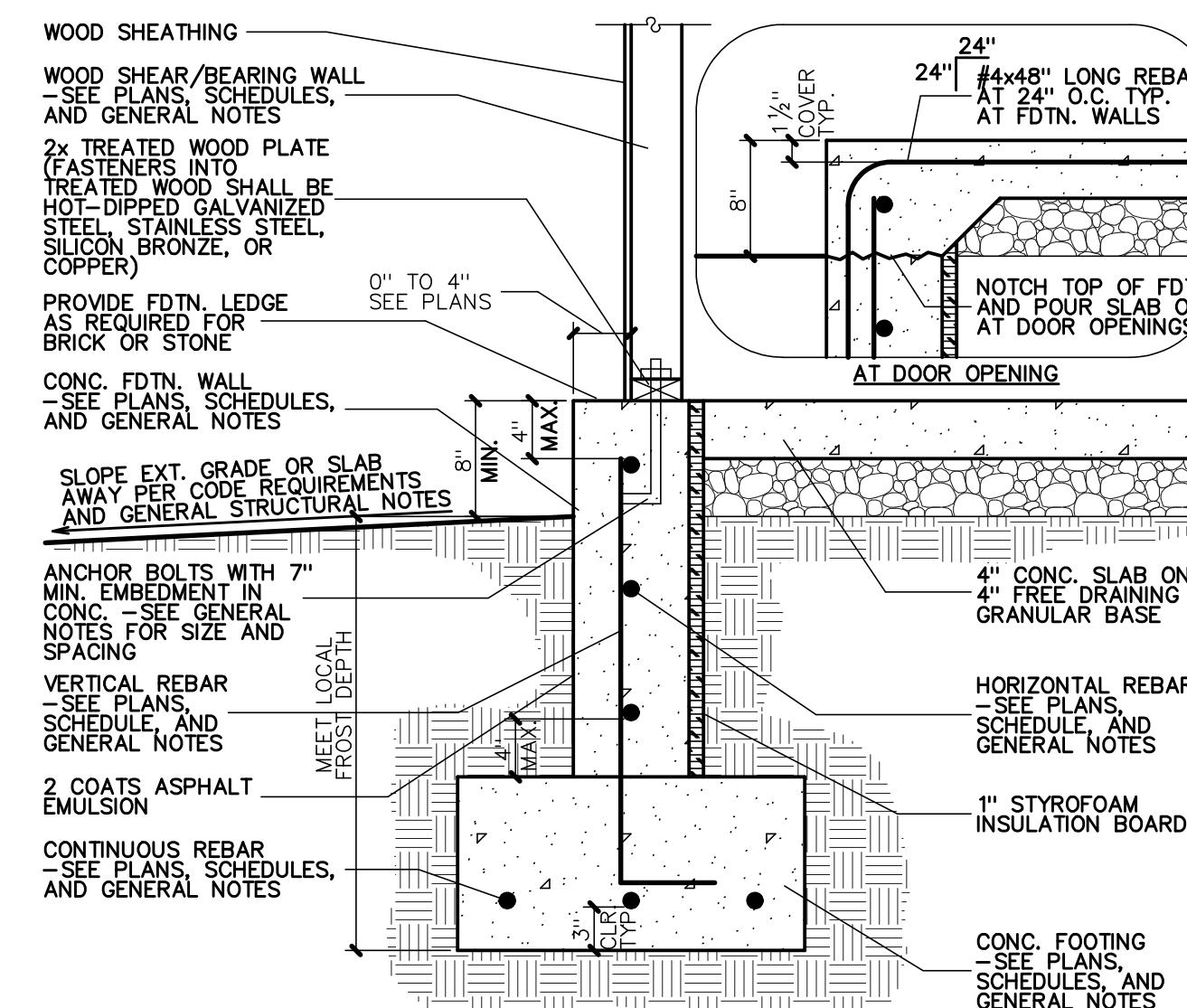
FOUNDATION WALL ON FOOTING



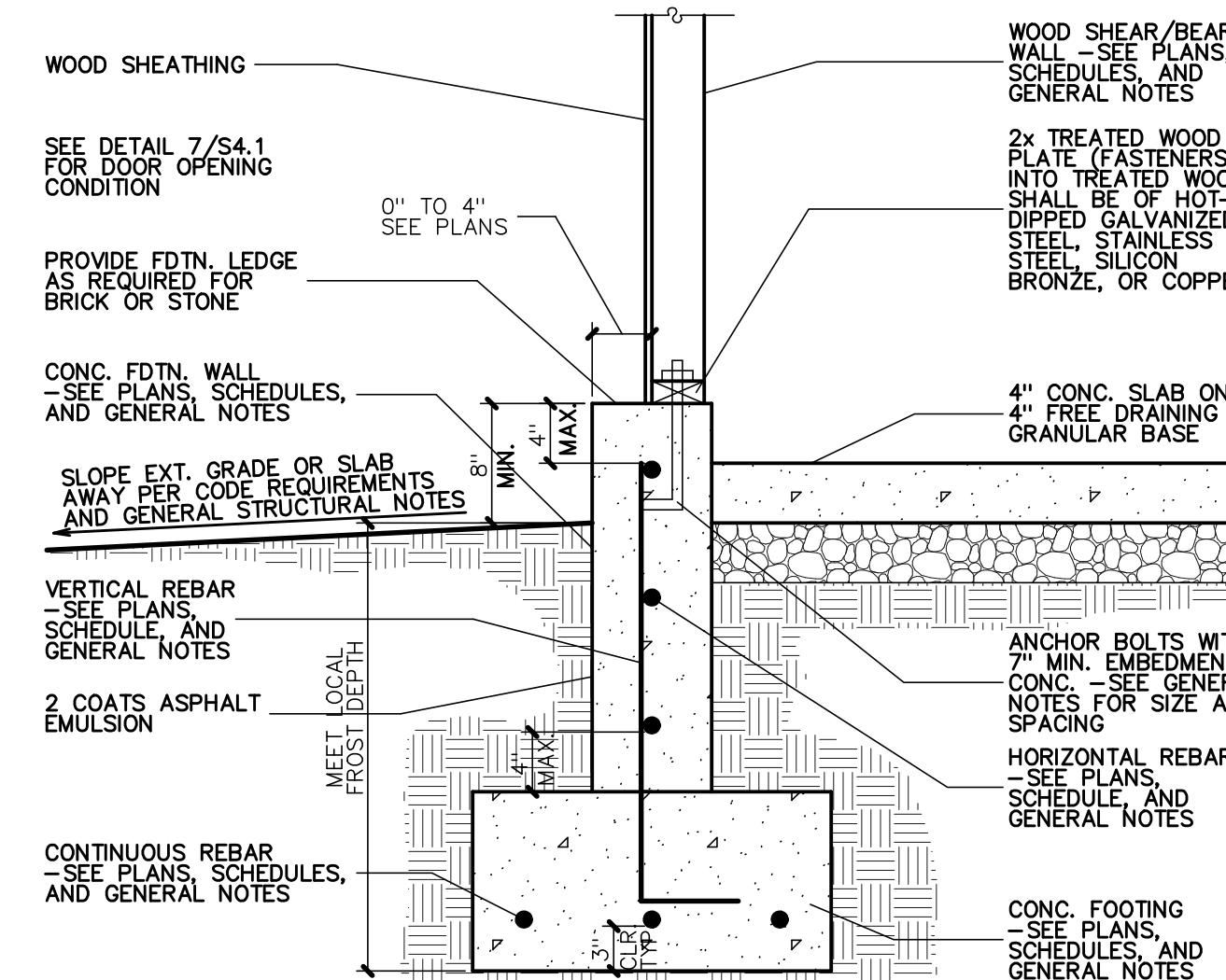
EXTERIOR WOOD POST ON CONC. PIER/FOOTING 9
NO SCALE S4.1



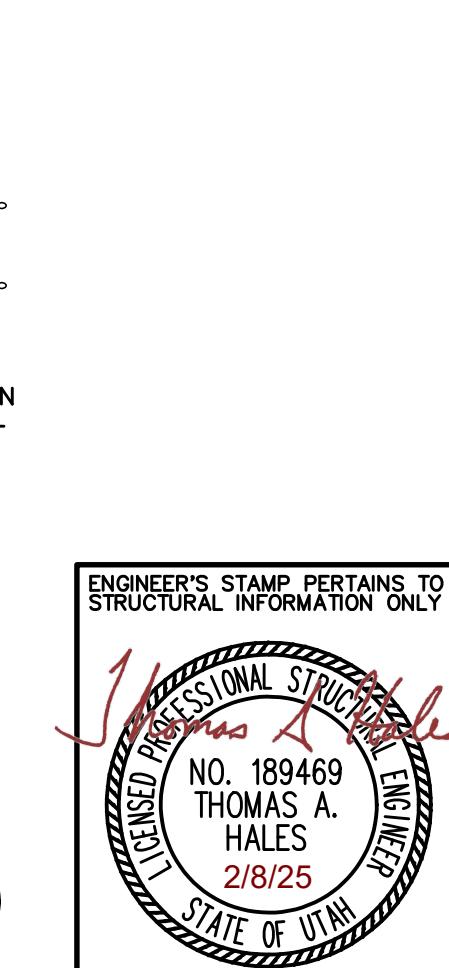
STEPPED FOOTING DETAIL



FOUNDATION WALL ON FOOTING



FOUNDATION WALL ON FOOTING

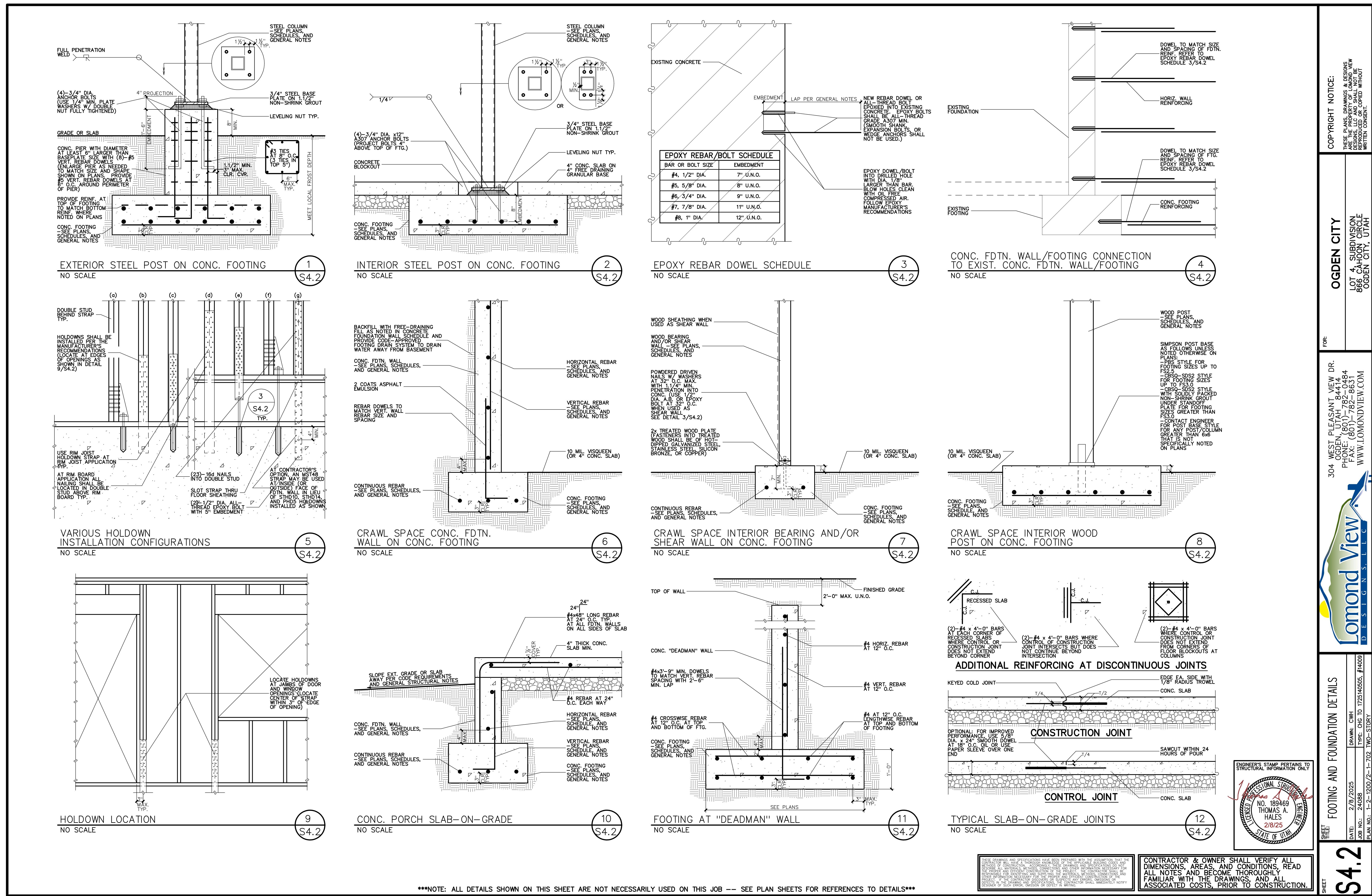


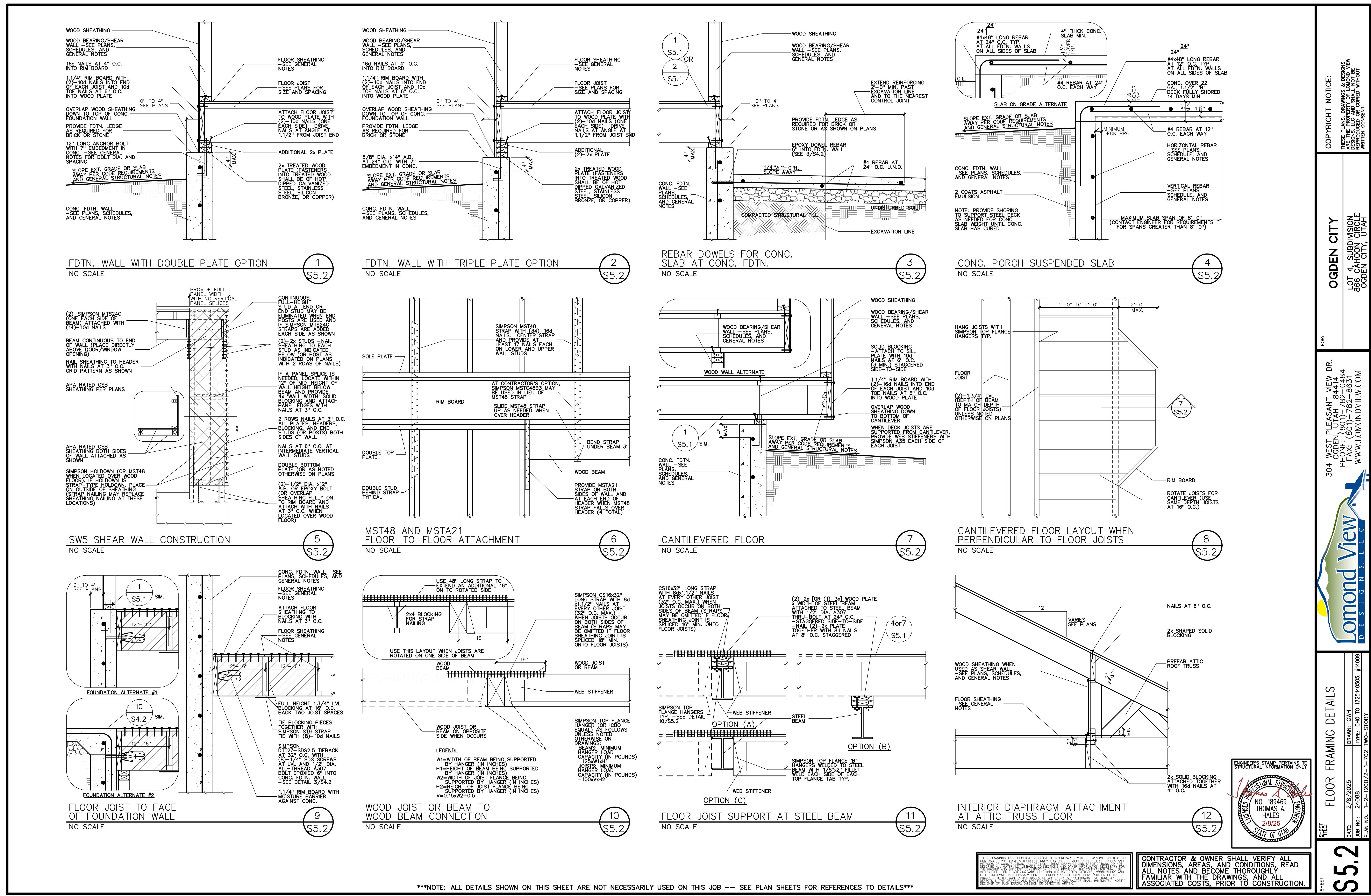
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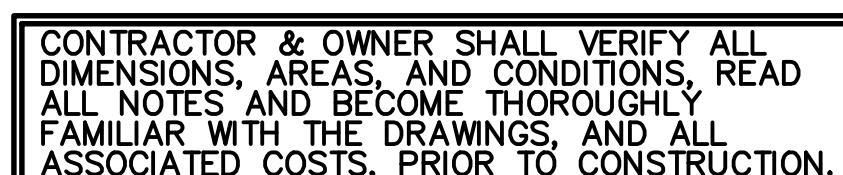
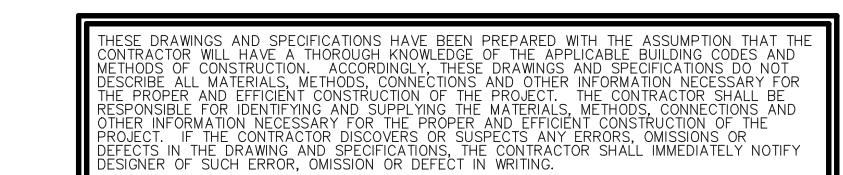
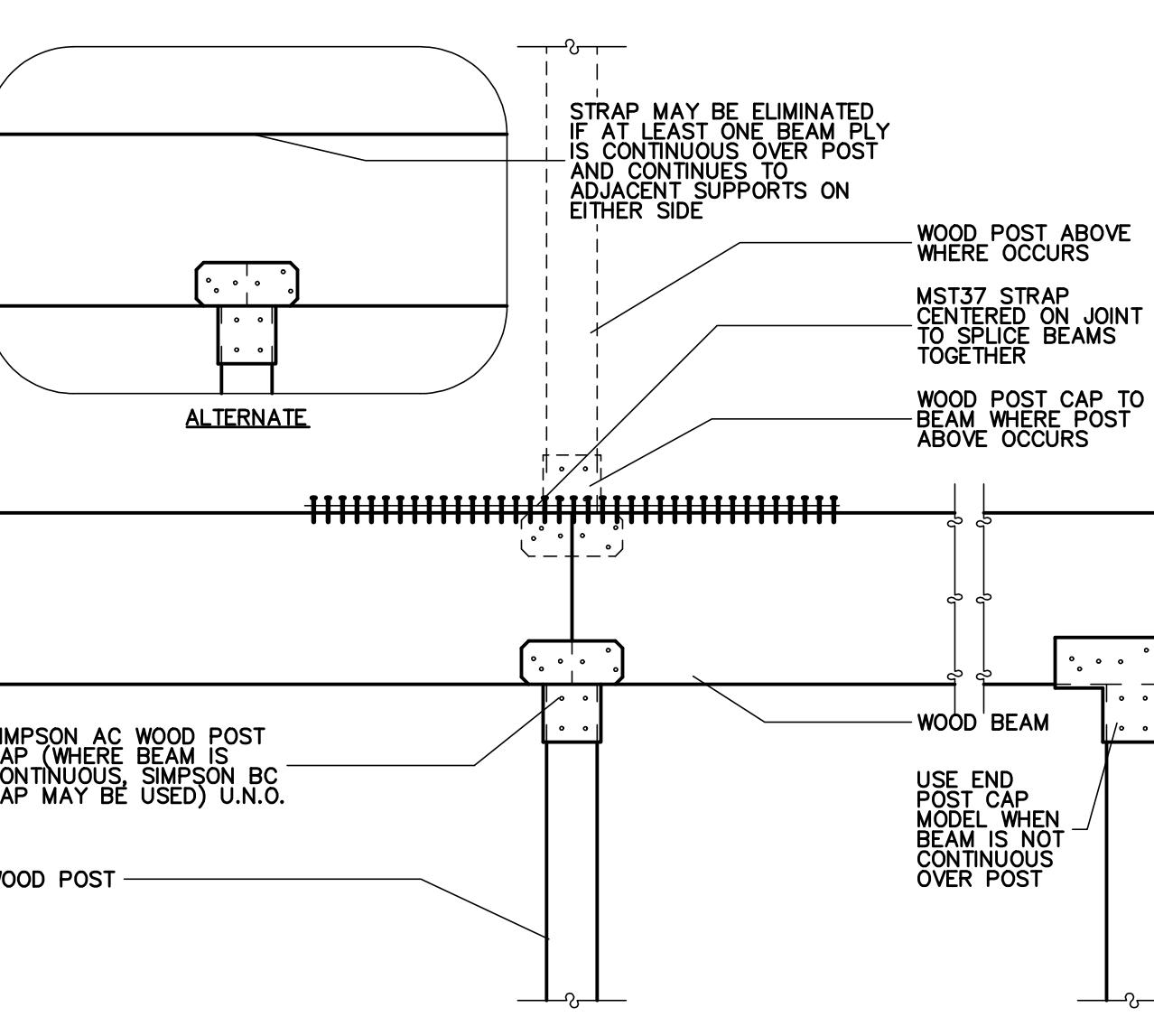
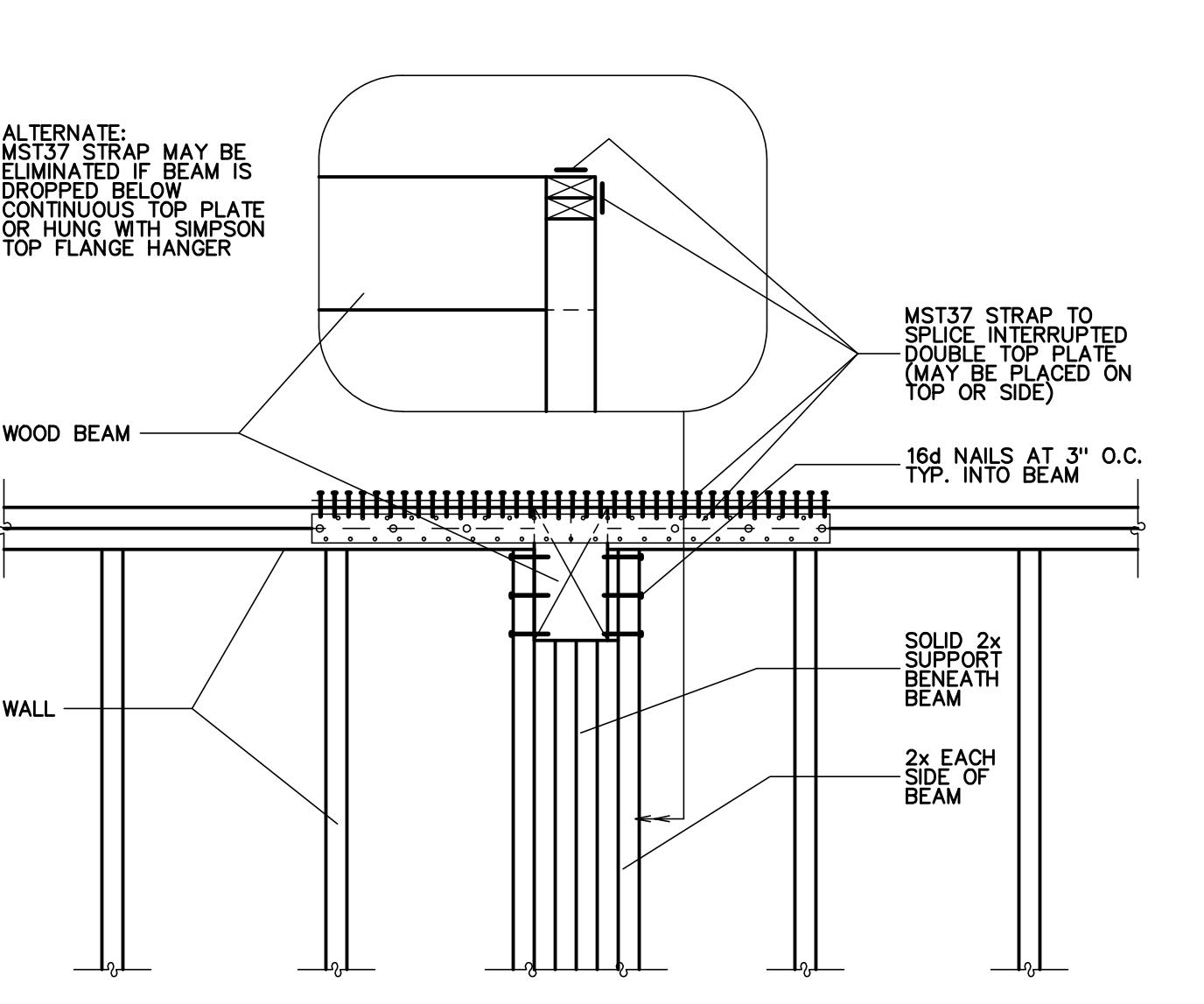
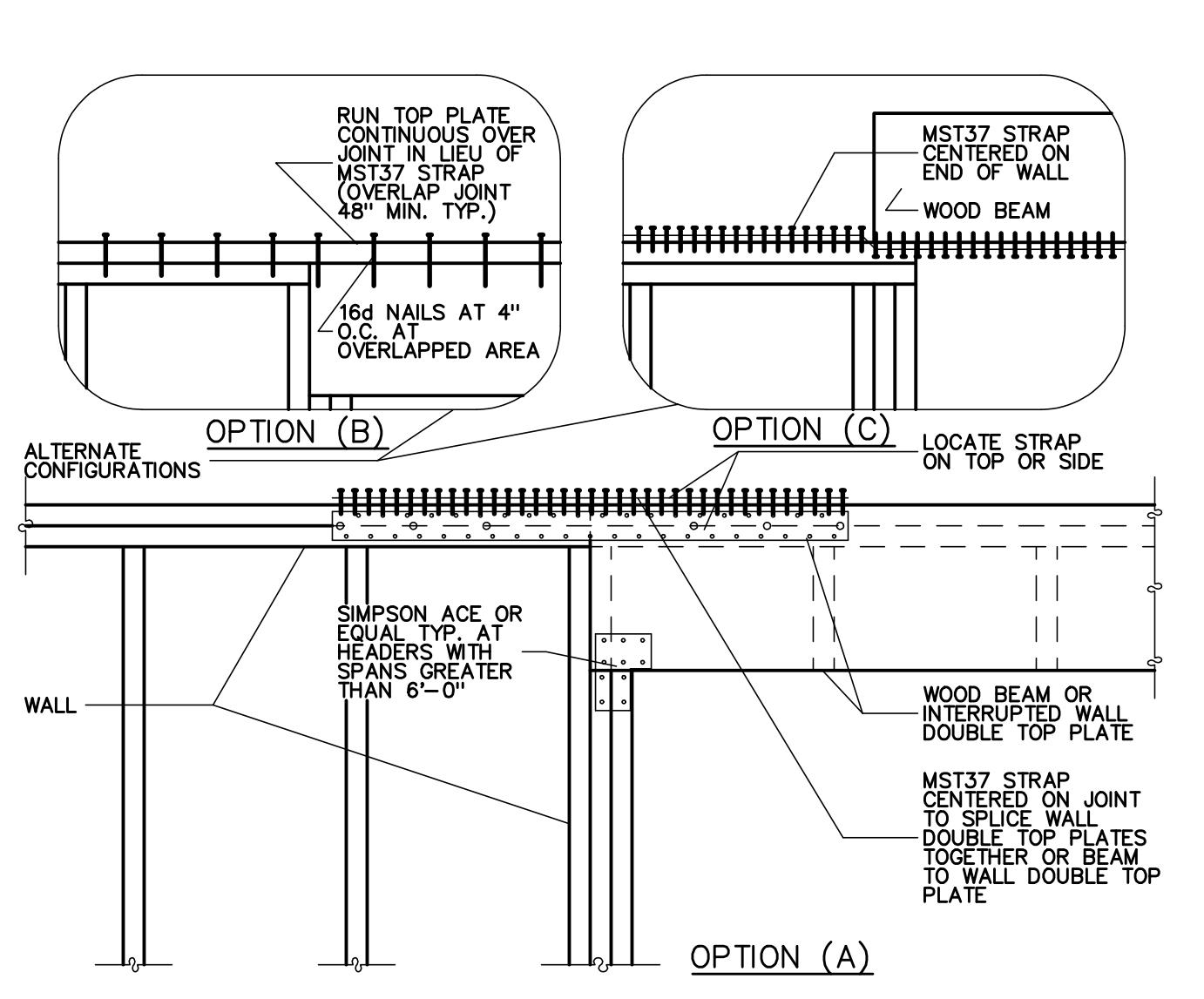
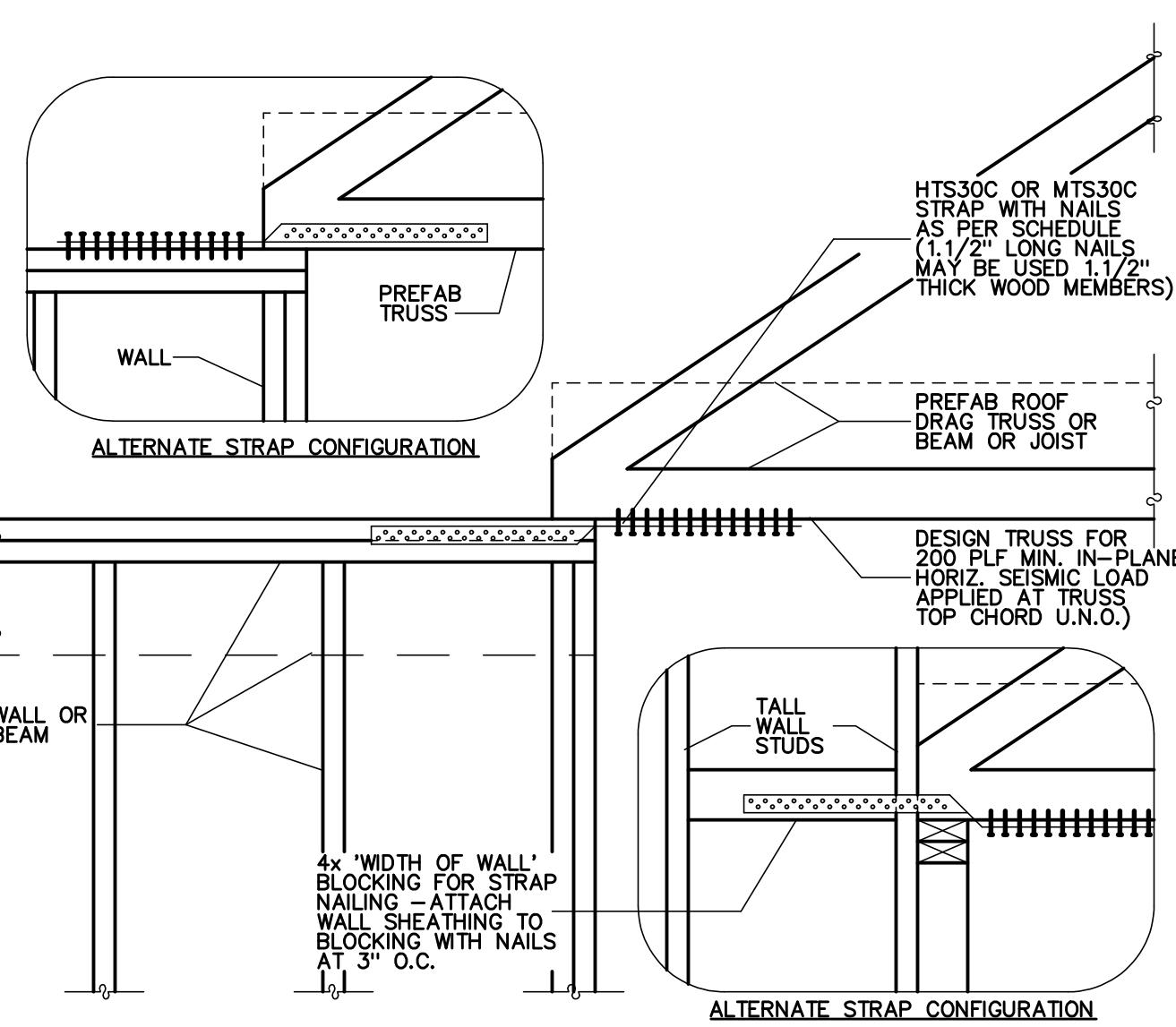
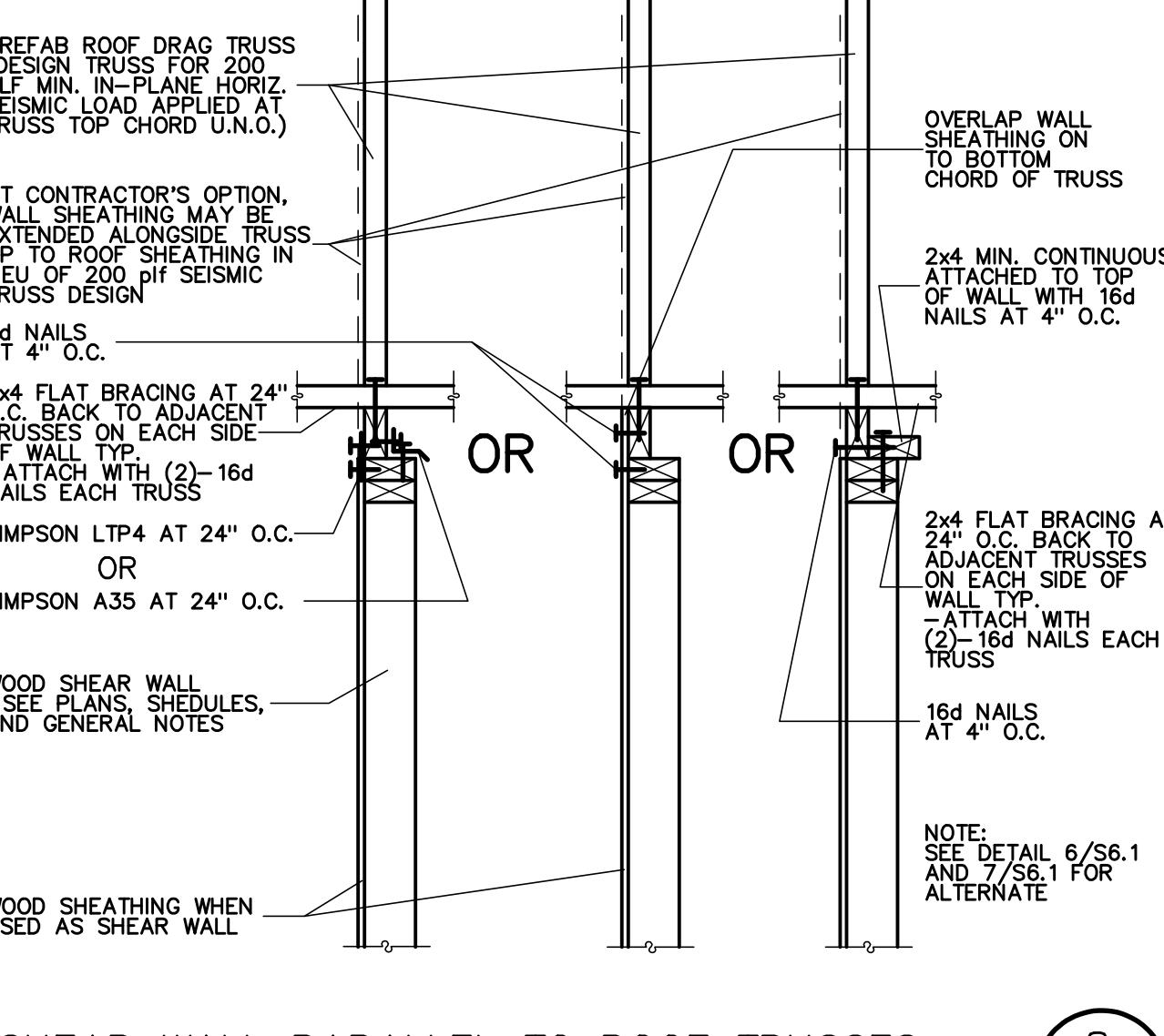
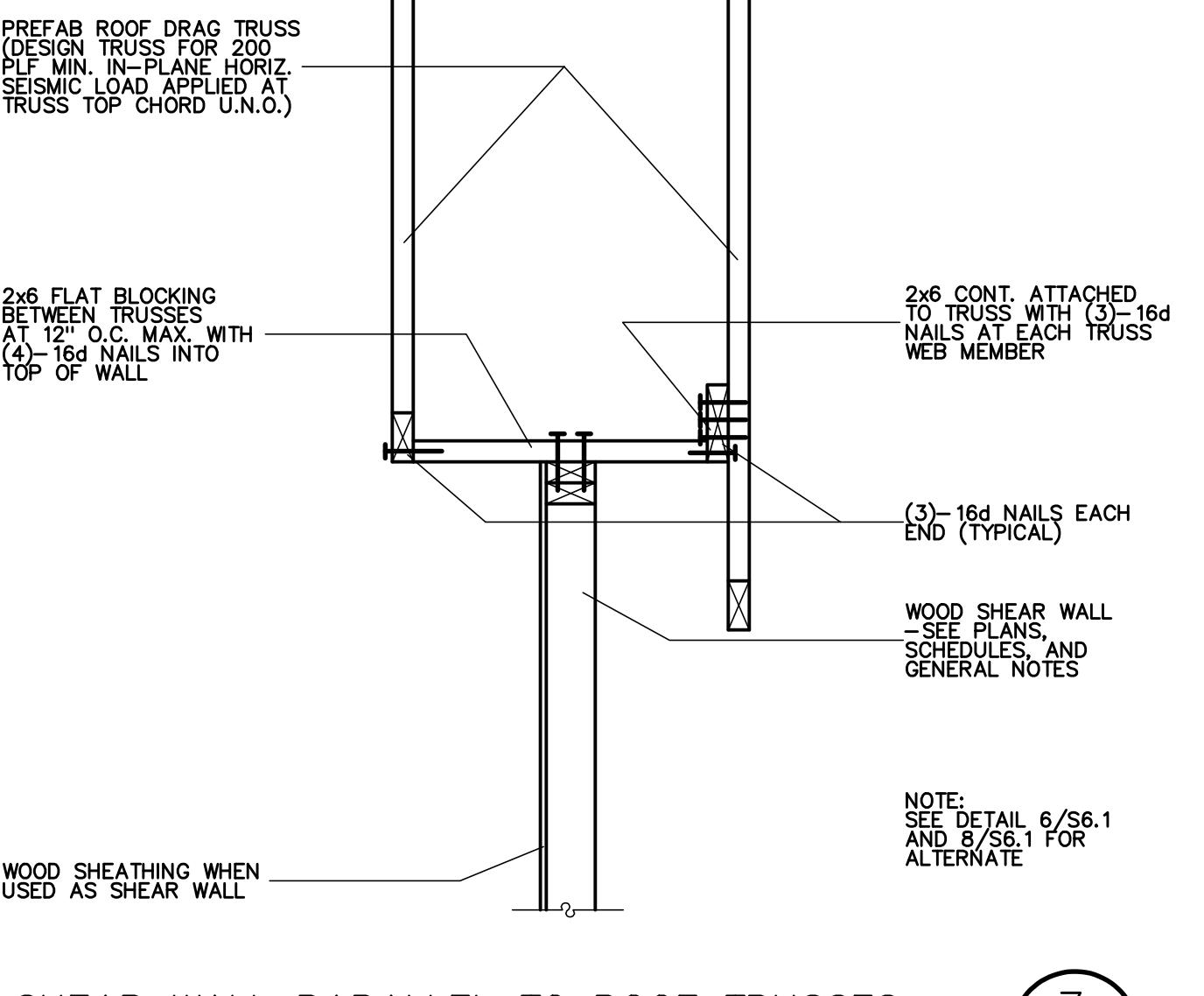
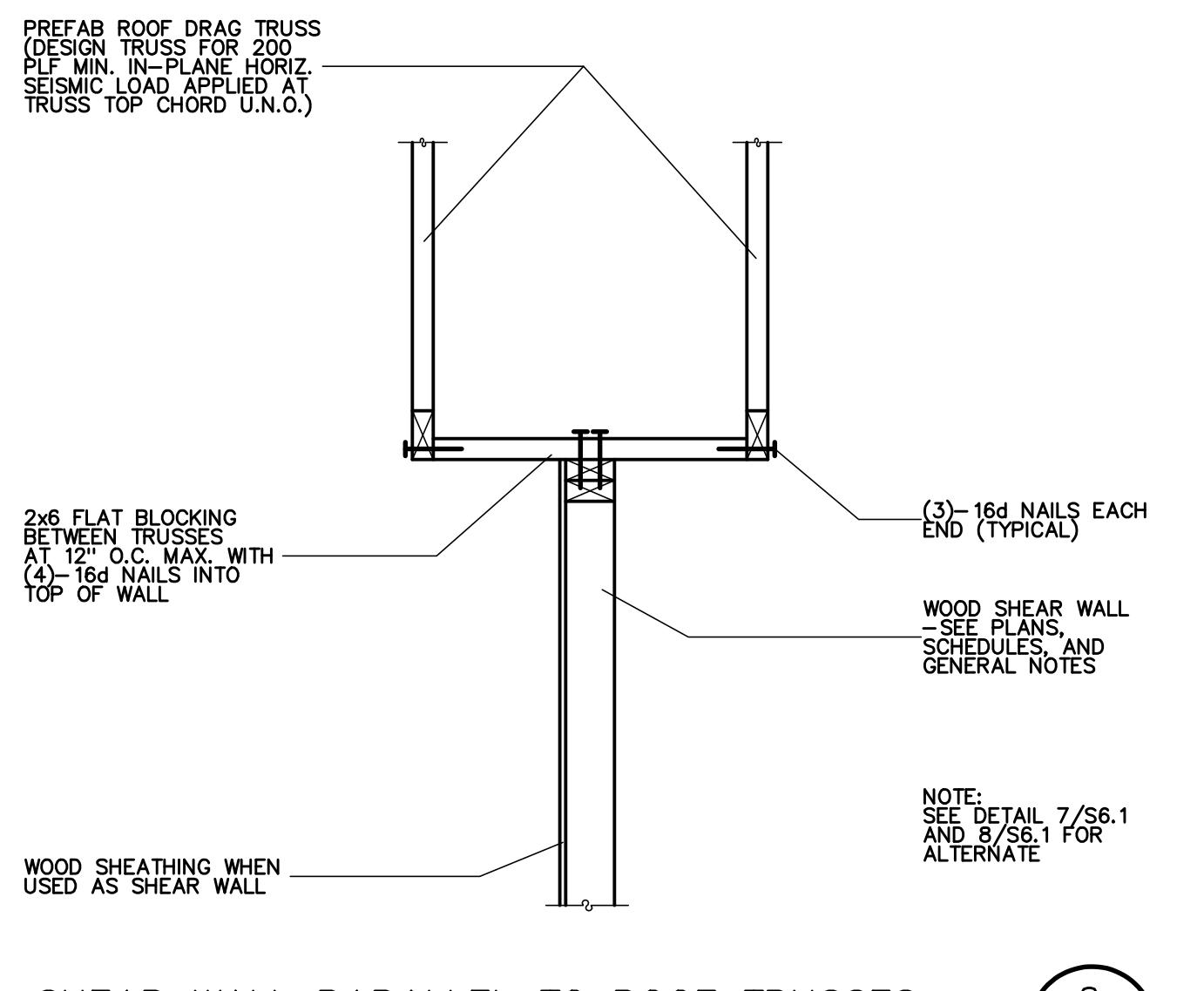
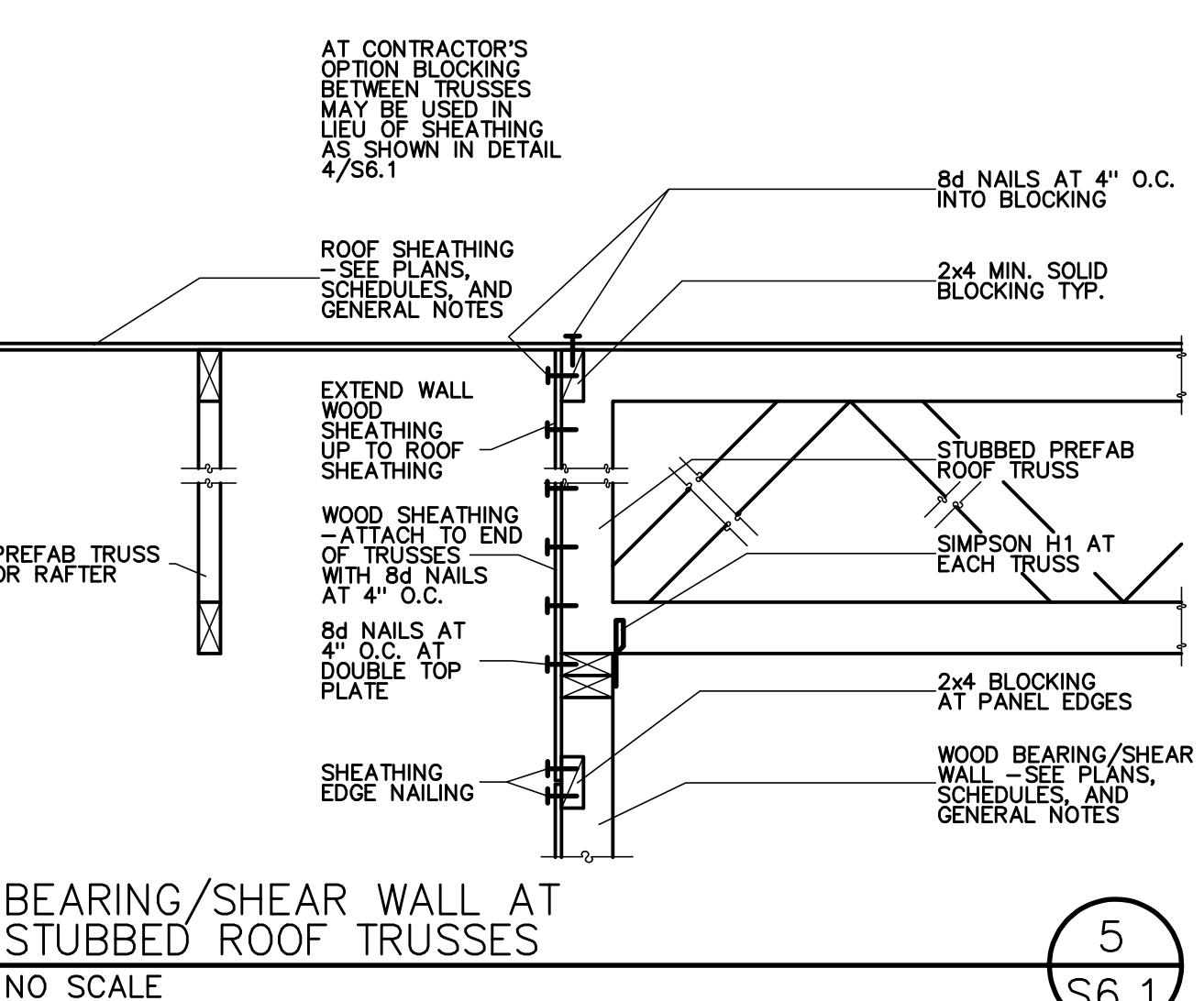
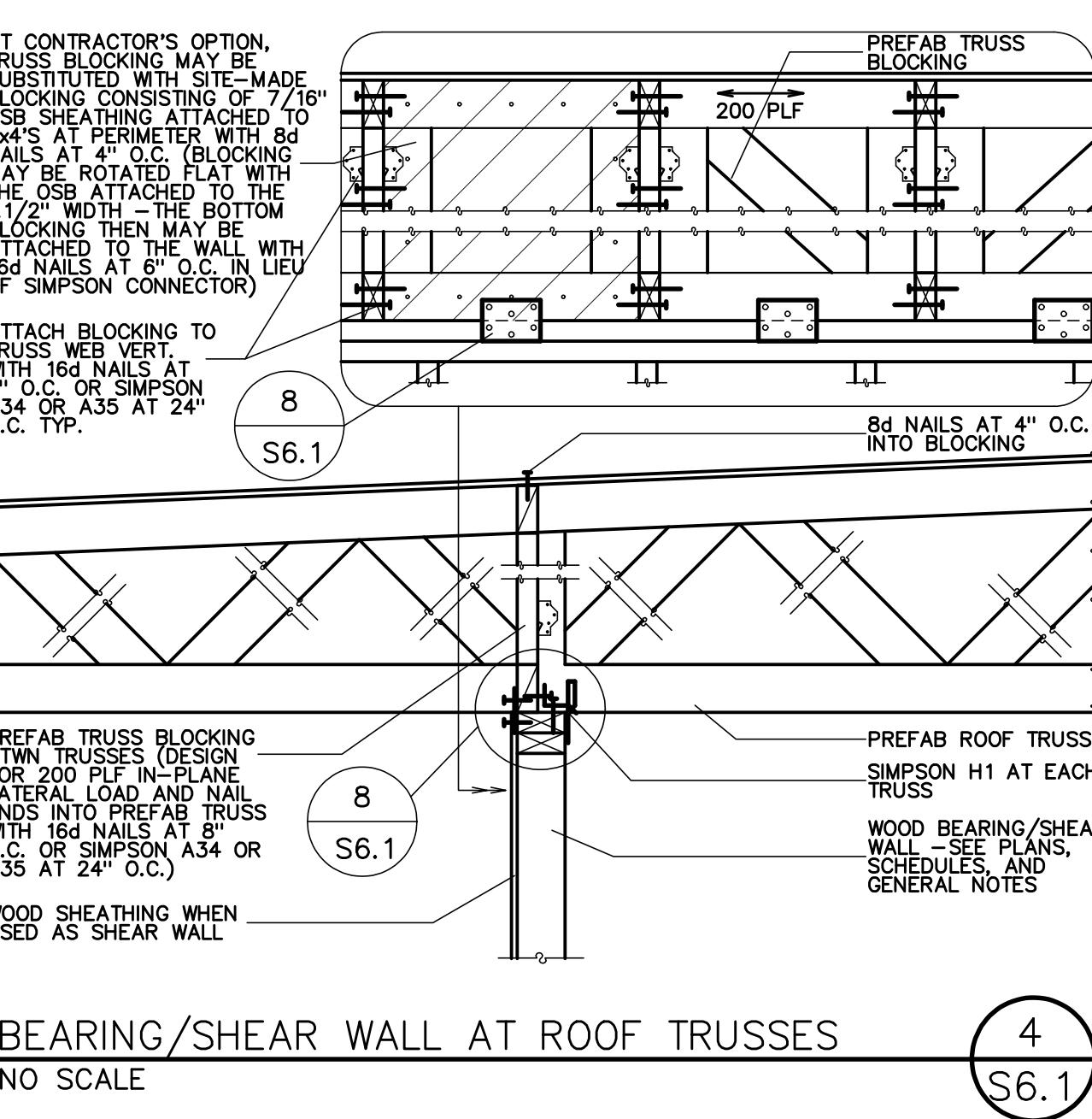
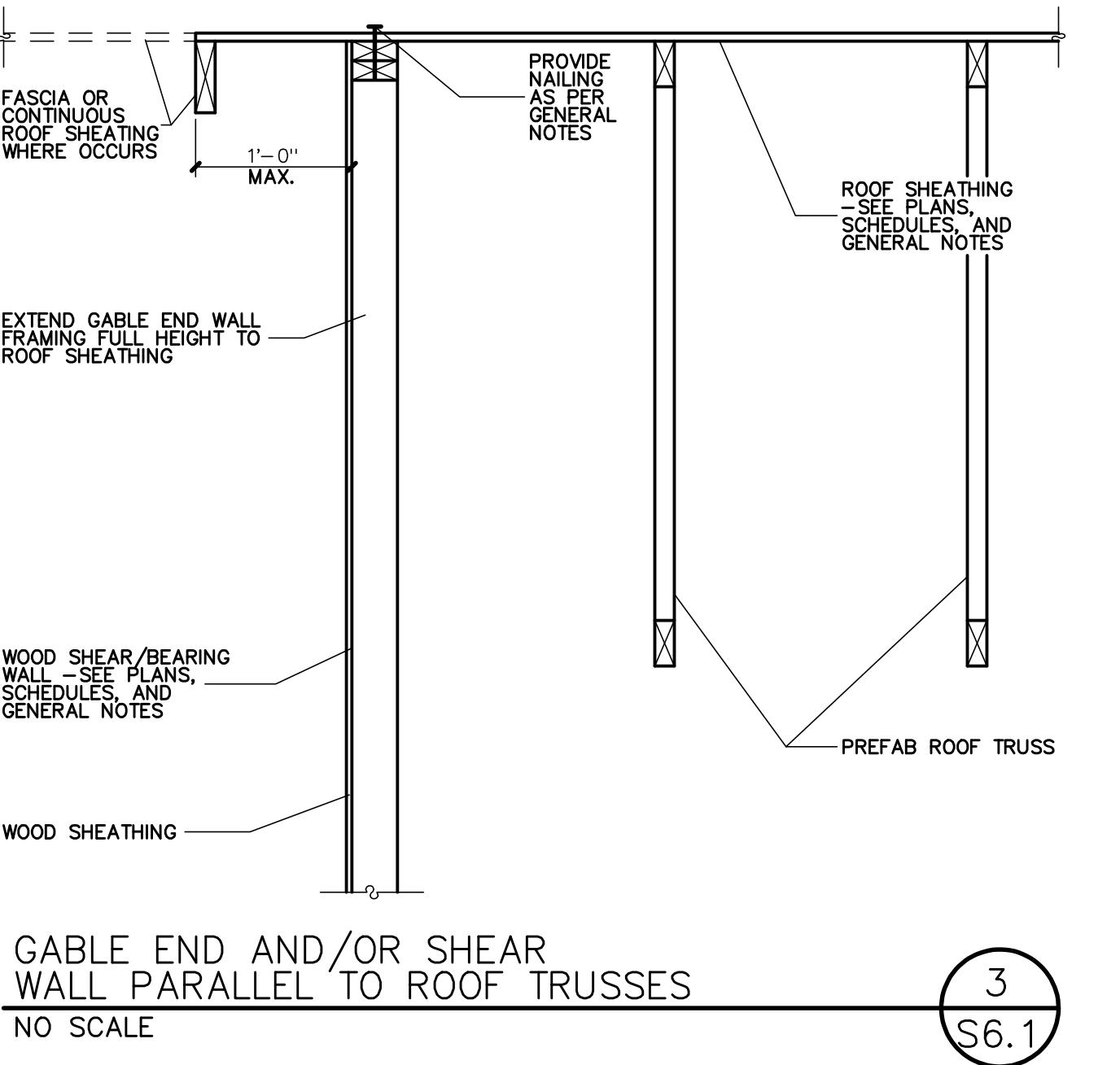
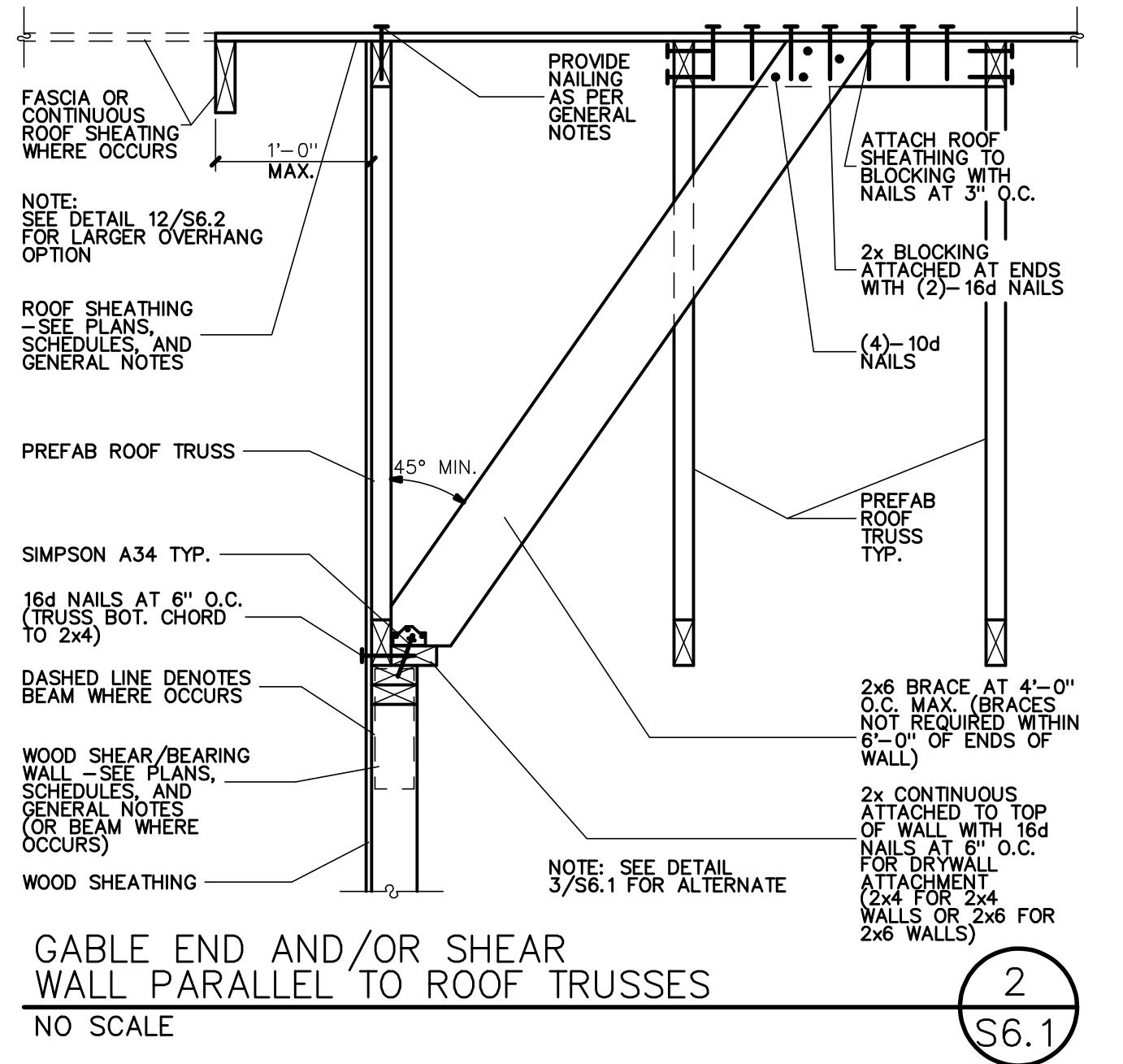
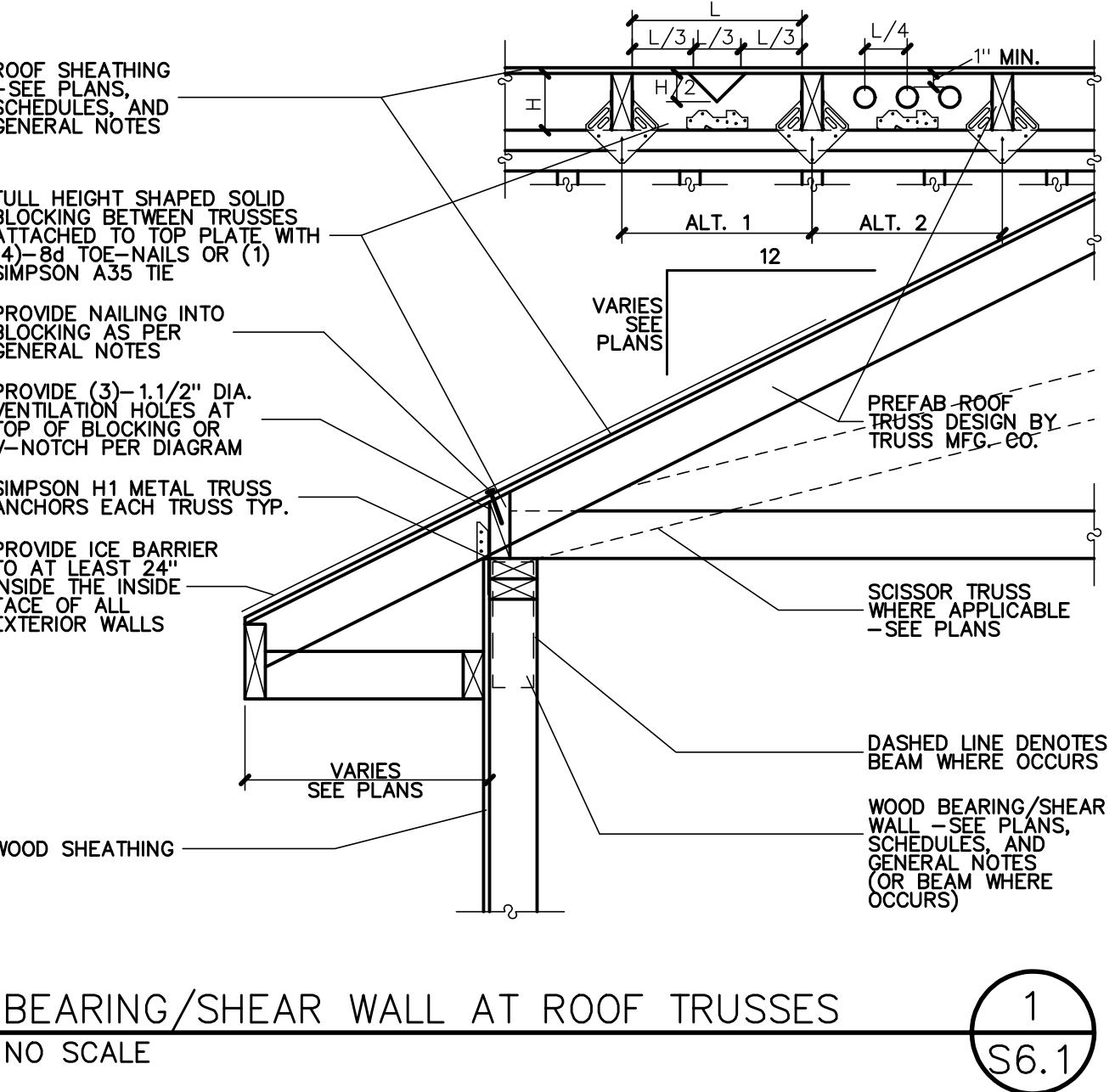
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Lomond View Designs, LLC

304 W. Pleasant View Dr.
Ogden, UT 84414
phone: 801-782-0484

Structural Calculations for Ogden City (1-2-1200 / 2-1-702 2-Story) for Ogden, Utah

February 7, 2025

Note: These calculations are to be used only for the plan number and the building lot and/or address shown above. Use of these calculations for any other plan or location is prohibited unless written/signed agreement is obtained from Thomas A. Hales indicating otherwise.

Prepared By:
Thomas A. Hales, P.E.

Job # 24088

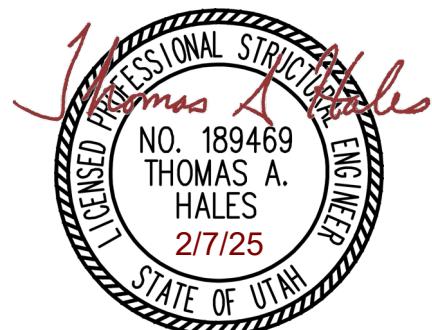


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WOOD FRAMING DESIGN	WF-1 TO WF-4
LATERAL ANALYSIS	L-1 TO L-2

DESIGN CRITERIA:

- A. GOVERNING BUILDING CODE: 2021 INTERNATIONAL BUILDING CODE (IBC) AND 2021 INTERNATIONAL RESIDENTIAL CODE (IRC)**
- B. GRAVITY LIVE LOADING:**
 - 1. ROOF: 30 PSF SNOW LOAD
 - 2. FLOOR: 40 PSF LIVE LOAD
 - 3. DECK: 60 PSF LIVE LOAD
- C. EARTHQUAKE: $V=Sds*I*W/R = 2/3*Sms*I*W/R$**
 - 1. $Sms = USE 1.6$ (SDC = 'D2')
 - 2. $I, IMPORTANCE FACTOR = 1.0$
 - 3. $R, BUILDING TYPE = 6.5$ (USE 6)
 - 4. $W, WEIGHT OF STRUCTURE$
- D. WIND:**
 - 1. VELOCITY: 115 MPH (LRF) * 0.775 → 90 MPH (ASD), BASIC WIND SPEED (IBC 1609.3.1)
 - 2. EXPOSURE: TYPE C
 - 3. IMP. FACTOR: 1.0, STANDARD OCCUPANCY
- E. SOIL BEARING PRESSURE: 1500 PSF ASSUMED BY OWNER**
- F: SEE DRAWINGS FOR GENERAL NOTES AND CONSTRUCTION REQUIREMENTS**

COLUMN AND FOOTING LOADS AND SIZES

Project: JOB #24088

Date: 2/7/2025

Allow. Soil Bearing Press. 1500 psf

Engineer: Tom Hales

CONTINUOUS FOOTINGS

Footing/Column Location: TYP. EXTERIOR WALL (WORST CASE)

Alt. Soil Bearing Pressure

COMMENT	TRIBUTARY AREA			SUB TOTAL	CUM. TOT.
	LENGTH 1	PER 1 FT.	WEIGHT		
ROOF SNOW LOAD	17.0 ft		30 psf	510 plf	510 plf
ROOF DEAD LOAD	17.0 ft		17 psf	289 plf	799 plf
UPPER FLOOR LIVE LOAD	8.0 ft		40 psf	320 plf	1119 plf
MAIN FLOOR LIVE LOAD	6.0 ft		40 psf	240 plf	1359 plf
MAIN FLOOR DEAD LOAD	6.0 ft		15 psf	90 plf	1449 plf
FDTN WALL LOAD	4.0 ft		100 psf	400 plf	1849 plf
				TOTAL LOAD	1849 plf
				REQ'D FTG. WIDTH	1.2 ft
					USE FC1.7

Footing/Column Location: TYP. INTERIOR BEARING WALL (WORST CASE)

Alt. Soil Bearing Pressure

COMMENT	TRIBUTARY AREA			SUB TOTAL	CUM. TOT.
	LENGTH 1	PER 1 FT.	WEIGHT		
FLOOR LIVE LOAD	12.0 ft		40 psf	480 plf	480 plf
FLOOR DEAD LOAD	12.0 ft		15 psf	180 plf	660 plf
WALL LOAD	12.0 ft		15 psf	180 plf	840 plf
				TOTAL LOAD	840 plf
				REQ'D FTG. WIDTH	0.6 ft
					USE FC1.5

Footing/Column Location:

Alt. Soil Bearing Pressure

COMMENT	TRIBUTARY AREA			SUB TOTAL	CUM. TOT.
	LENGTH 1	PER 1 FT.	WEIGHT		
				TOTAL LOAD	0 plf
				REQ'D FTG. WIDTH	0.0 ft

**WOOD BEAM DESIGN
FOR UNIFORM LOADING CONDITIONS**

Project: JOB #24088
Description: 3'-0" MAIN FLOOR TYP. HEADER

Date: 2/7/2025
Engineer: TAH

INPUT:

Length of Span - L (ft): 3.5
Distance from Support to Calc. Shear - d (in) 7

Roof Loads:

Trib. Length (ft): 29
Snow Load (psf): 30
Dead Load (psf): 17

Floor Loads:

Trib. Length (ft): 15
Live Load (psf): 40
Dead Load (psf): 7

Linear Loads:

Snow Load (plf): 0
Live Load (plf): 0
Dead Load (plf): 0

Total Load Deflection Criteria (Span/Δ) - Δ: 240
Live Load Deflection Criteria (Span/Δ) - Δ: 360

Total Load (plf): 2068 plf

Total Live Load (plf): 1470 plf

Beam	DL= 1046.5 lbs
Reactions:	LL= 2572.5 lbs
	TL= 3619 lbs

OUTPUT:

DOUGLAS FIR-LARCH

Allowable Shear Stress - Fv (psi): 95	I (TL) (in^4): 24.94
Modulus of Elasticity - E (ksi): 1600	I (LL) (in^4): 26.59
Allowable Bending Stress - Fb (psi): 1313 2x4	A (in^2): 38.09
	S (in^3) 2x4: 28.94
1139 2x6	2x6: 33.36
1052 2x8	2x8: 36.12
961 2x10	2x10: 39.54 3-2x10's (0.91)
845 2x12	2x12: 44.97 3-2x12's (0.75)

GLUED-LAMINATED (24F-V4)

Allowable Shear Stress - Fv (psi): 190	I (TL) (in^4): 22.17
Modulus of Elasticity - E (ksi): 1800	I (LL) (in^4): 23.63 3.125 x 7.5 GLB (0.81)
Allowable Bending Stress - Fb (psi): 2400	A (in^2): 19.05 5.125 x 6 GLB (0.62)
	S (in^3): 15.83

MICRO-LAM

Allowable Shear Stress - Fv (psi): 285	EI (TL) k-in^2: 39899
Modulus of Elasticity - E (ksi): 1900	EI (LL) (k-in^2): 42543 (2)-1.75 x 5.5 M-L (0.75)
Allowable Bending Stress - Fb (psi): 2600	Shear (lbs): 2413
	Moment (ft-lb): 3167

VERSA-LAM

Allowable Shear Stress - Fv (psi): 285	EI (TL) k-in^2: 39899
Modulus of Elasticity - E (ksi): 2000	EI (LL) (k-in^2): 42543 (2)-1.75 x 5.5 V-L (0.71)
Allowable Bending Stress - Fb (psi): 2800	Shear (lbs): 2413
	Moment (ft-lb): 3167

NOTE: A LOAD DURATION FACTOR OF 1.0 IS USED FOR ALL BEAMS

**WOOD BEAM DESIGN
FOR UNIFORM LOADING CONDITIONS**

Project: JOB #24088 **Date:** 2/7/2025
Description: 6'-0" MAIN FLOOR HEADER (DBL WINDOW) **Engineer:** TAH

INPUT:

Length of Span - L (ft): **6**
Distance from Support to Calc. Shear - d (in) **7**

Roof Loads:		Floor Loads:	
Trib. Length (ft):	16	Trib. Length (ft):	7
Snow Load (psf):	30	Live Load (psf):	40
Dead Load (psf):	17	Dead Load (psf):	7
Linear Loads:			
Snow Load (plf):	0	Total Load Deflection Criteria (Span/ Δ) - Δ:	
Live Load (plf):	0	240	
Dead Load (plf):	0	Live Load Deflection Criteria (Span/ Δ) - Δ:	
Total Load (plf):	1081 plf	360	
Total Live Load (plf):	760 plf		
Beam	DL= 963 lbs		
Reactions:	LL= 2280 lbs		
	TL= 3243 lbs		

OUTPUT:

DOUGLAS FIR-LARCH

Allowable Shear Stress - Fv (psi):	95	I (TL) (in^4):	65.67
Modulus of Elasticity - E (ksi):	1600	I (LL) (in^4):	69.26
Allowable Bending Stress - Fb (psi):	1313 2x4	A (in^2):	41.25
	1139 2x6	S (in^3) 2x4:	44.46
	1052 2x8	2x6:	51.25
	961 2x10	2x8:	55.49
	845 2x12	2x10:	60.74
		2x12:	3-2x10's (0.99)
			3-2x12's (0.81)

GLUED-LAMINATED (24F-V4)

Allowable Shear Stress - Fv (psi):	190	I (TL) (in^4):	58.37
Modulus of Elasticity - E (ksi):	1800	I (LL) (in^4):	61.56
Allowable Bending Stress - Fb (psi):	2400	A (in^2):	20.62
		S (in^3):	24.32

MICRO-LAM

Allowable Shear Stress - Fv (psi):	285	EI (TL) k-in^2):	105073
Modulus of Elasticity - E (ksi):	1900	EI (LL) (k-in^2):	110808
Allowable Bending Stress - Fb (psi):	2600	Shear (lbs):	2612
		Moment (ft-lb):	4865

VERSA-LAM

Allowable Shear Stress - Fv (psi):	285	EI (TL) k-in^2):	105073
Modulus of Elasticity - E (ksi):	2000	EI (LL) (k-in^2):	110808
Allowable Bending Stress - Fb (psi):	2800	Shear (lbs):	2612
		Moment (ft-lb):	4865

NOTE: A LOAD DURATION FACTOR OF 1.0 IS USED FOR ALL BEAMS

**WOOD BEAM DESIGN
FOR UNIFORM LOADING CONDITIONS**

Project: JOB #24088
Description: 9'-0" COVERED PORCH BEAM

Date: 2/7/2025
Engineer: TAH

INPUT:

Length of Span - L (ft): 9
Distance from Support to Calc. Shear - d (in) 7

Roof Loads:

Trib. Length (ft): 6
Snow Load (psf): 30
Dead Load (psf): 17

Floor Loads:

Trib. Length (ft): 0
Live Load (psf): 40
Dead Load (psf): 7

Linear Loads:

Snow Load (plf): 0
Live Load (plf): 0
Dead Load (plf): 0

Total Load Deflection Criteria (Span/Δ) - Δ: 240
Live Load Deflection Criteria (Span/Δ) - Δ: 360

Total Load (plf): 282 plf

Total Live Load (plf): 180 plf

Beam	DL=	459 lbs
Reactions:	LL=	810 lbs
	TL=	1269 lbs

OUTPUT:

DOUGLAS FIR-LARCH

Allowable Shear Stress - Fv (psi): 95
Modulus of Elasticity - E (ksi): 1600
Allowable Bending Stress - Fb (psi): 1313 2x4
1139 2x6
1052 2x8
961 2x10
845 2x12

I (TL) (in^4): 57.82

I (LL) (in^4): 55.36

A (in^2): 17.44

S (in^3) 2x4: 26.10

2x6: 30.08

2x8: 32.57

3-2x8's (0.83)

2x10: 35.65

2-2x10's (0.83)

2x12: 40.55

2-2x12's (0.64)

GLUED-LAMINATED (24F-V4)

Allowable Shear Stress - Fv (psi): 190
Modulus of Elasticity - E (ksi): 1800
Allowable Bending Stress - Fb (psi): 2400

I (TL) (in^4): 51.39

I (LL) (in^4): 49.21

3.125 x 6 GLB (0.91)

5.125 x 6 GLB (0.56)

A (in^2): 8.72

S (in^3): 14.28

MICRO-LAM

Allowable Shear Stress - Fv (psi): 285
Modulus of Elasticity - E (ksi): 1900
Allowable Bending Stress - Fb (psi): 2600

EI (TL) k-in^2: 92510

EI (LL) (k-in^2): 88574

(2)-1.75 x 7.25 M-L (0.43)

Shear (lbs): 1105

(3)-1.75 x 5.5 M-L (0.68)

Moment (ft-lb): 2855

VERSA-LAM

Allowable Shear Stress - Fv (psi): 285
Modulus of Elasticity - E (ksi): 2000
Allowable Bending Stress - Fb (psi): 2800

EI (TL) k-in^2: 92510

EI (LL) (k-in^2): 88574

(2)-1.75 x 5.5 V-L (0.95)

Shear (lbs): 1105

Moment (ft-lb): 2855

NOTE: A LOAD DURATION FACTOR OF 1.0 IS USED FOR ALL BEAMS

**WOOD BEAM DESIGN
FOR UNIFORM LOADING CONDITIONS**

Project: JOB #24088
Description: 4'-0 BSMT INTERIOR BEARING WALL HEADER

Date: 2/7/2025
Engineer: TAH

INPUT:

Length of Span - L (ft): 4.5
Distance from Support to Calc. Shear - d (in) 7

Roof Loads:

Trib. Length (ft): 0
Snow Load (psf): 30
Dead Load (psf): 17

Floor Loads:

Trib. Length (ft): 12
Live Load (psf): 40
Dead Load (psf): 15

Linear Loads:

Snow Load (plf): 0
Live Load (plf): 0
Dead Load (plf): 0

Total Load Deflection Criteria (Span/Δ) - Δ: 240
Live Load Deflection Criteria (Span/Δ) - Δ: 360

Total Load (plf): 660 plf

Total Live Load (plf): 480 plf

Beam	DL=	405 lbs
Reactions:	LL=	1080 lbs
	TL=	1485 lbs

OUTPUT:

DOUGLAS FIR-LARCH

Allowable Shear Stress - Fv (psi): 95	I (TL) (in^4): 16.92
Modulus of Elasticity - E (ksi): 1600	I (LL) (in^4): 18.45
Allowable Bending Stress - Fb (psi): 1313 2x4	A (in^2): 17.37
1139 2x6	S (in^3) 2x4: 15.27
1052 2x8	2x6: 17.60 3-2x6's (0.78)
961 2x10	2x8: 19.06 2-2x8's (0.8)
845 2x12	2x10: 20.86 2-2x10's (0.63)
	2x12: 23.72 2-2x12's (0.51)

GLUED-LAMINATED (24F-V4)

Allowable Shear Stress - Fv (psi): 190	I (TL) (in^4): 15.04
Modulus of Elasticity - E (ksi): 1800	I (LL) (in^4): 16.40
Allowable Bending Stress - Fb (psi): 2400	A (in^2): 8.68
	S (in^3): 8.35
	3.125 x 6 GLB (0.46)
	5.125 x 6 GLB (0.28)

MICRO-LAM

Allowable Shear Stress - Fv (psi): 285	EI (TL) k-in^2: 27064
Modulus of Elasticity - E (ksi): 1900	EI (LL) (k-in^2): 29525
Allowable Bending Stress - Fb (psi): 2600	Shear (lbs): 1100
	Moment (ft-lb): 1671
	(2)-1.75 x 5.5 M-L (0.39)

VERSA-LAM

Allowable Shear Stress - Fv (psi): 285	EI (TL) k-in^2: 27064
Modulus of Elasticity - E (ksi): 2000	EI (LL) (k-in^2): 29525
Allowable Bending Stress - Fb (psi): 2800	Shear (lbs): 1100
	Moment (ft-lb): 1671
	(2)-1.75 x 5.5 V-L (0.37)

NOTE: A LOAD DURATION FACTOR OF 1.0 IS USED FOR ALL BEAMS

IBC LATERAL ANALYSIS

Project: JOB #24088
Description: MAIN LATERAL

Date: 2/7/2025
Engineer: Tom Hales

Seismic (V=2/3*Sms*I*W/R*(1/1.4))

I = 1

Sms=Fa*Ss 1.6 NOTE: Site Class D is assumed

R = 6

2/3*Sms*I/R/1.4) = 0.1270 (ASD)

<u>Wind</u>	90 mph	Basic Wind Speed	p_{s30}	p_s
Exposure =	C	A =	14.4 psf	17.4 psf
Exp Coef =	1.21	B =	9.9 psf	12.0 psf
K_{zt} =	1	C =	11.5 psf	13.9 psf
I_w =	1	D =	7.9 psf	9.6 psf

Roof height = 13.0 ft (top of wall to ridge)

Building Info.

Wall Weight = 12 psf
Roof Weight = 17 psf
Seismic snow =
Total Roof Weight = 17 psf
Floor to Roof Height = 8 ft
Building Width = 30 ft
Building Length = 45 ft
Building Height = 21 ft
a = 3.0 ft

		Veneer		Total Weights (pounds)	Dir. perp. to width
		Weights (pounds)	Veneer		
Wall	1440	0		25830	
Wall	2160	0		27270	Dir. perp. to length
Roof	22950			30150	Tot. Building Wt.
		Vmid =		3828.6	

Seismic Shear Forces

Diaphragm Shears: (per side)	pounds	plf		
Walls perpendicular to building width:	1640	36		
Walls perpendicular to building length:	1731	58		

Mid-Ht Wall Shears: (per side)	pounds	plf		
Walls perpendicular to building width:	1914	43		5.5 ft
Walls perpendicular to building length:	1914	64		5.5 ft

USE 7/16" SHEATHING w/8d NAILS @ 6" o.c. G.F. 170plf

Wind Shear Forces

Diaphragm Shears: (per side)	pounds	plf		
Walls perpendicular to building width:	2945	65	CONTROLS=>	6.0 ft
Walls perpendicular to building length:	4303	143	CONTROLS=>	8.8 ft

Mid-Ht Wall Shears: (per side)	pounds	plf		
Walls perpendicular to building width:	2945	65	CONTROLS=>	6.0 ft
Walls perpendicular to building length:	4303	143	CONTROLS=>	8.8 ft

USE 7/16" SHEATHING w/8d NAILS @ 6" o.c. G.F. 240plf

Note: Veneer is assumed to resist its own in-plane shear.

SHEAR & OVERTURNING ANALYSIS

Project: JOB #24088
Description: MAIN LATERAL

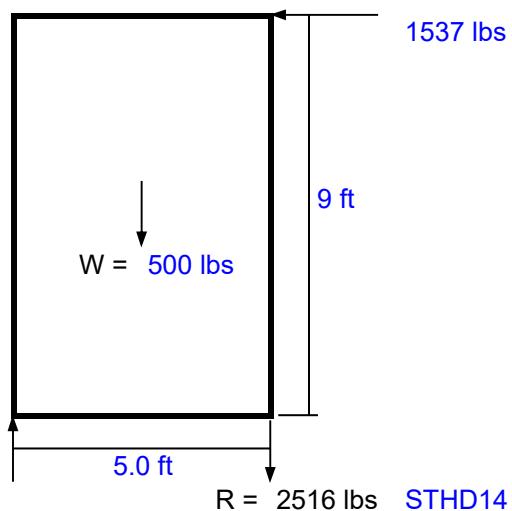
Date: 2/7/2025
Engineer: Tom Hales

SHEAR WALL CHECK

Shear Wall Capacity: 350 plf 4"O.C. EDGE NAILING
Total Shear: 3074 lbs
Req'd Wall Lngth: 9 ft PLENTY OF WALL AVAILABLE

WALL OVERTURNING

Description: 5'-0" FRONT WALL PIECES



WALL OVERTURNING

Description: 4'-0" SIDE WALL PIECE

