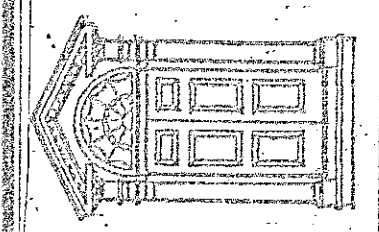


FIRST FLOOR	1942 SQ. FT.
SECOND FLOOR	1653 SQ. FT.
GARAGE	570 SQ. FT.
COVERED TERRACE	250 SQ. FT.
FRONT PORCH	71 SQ. FT.

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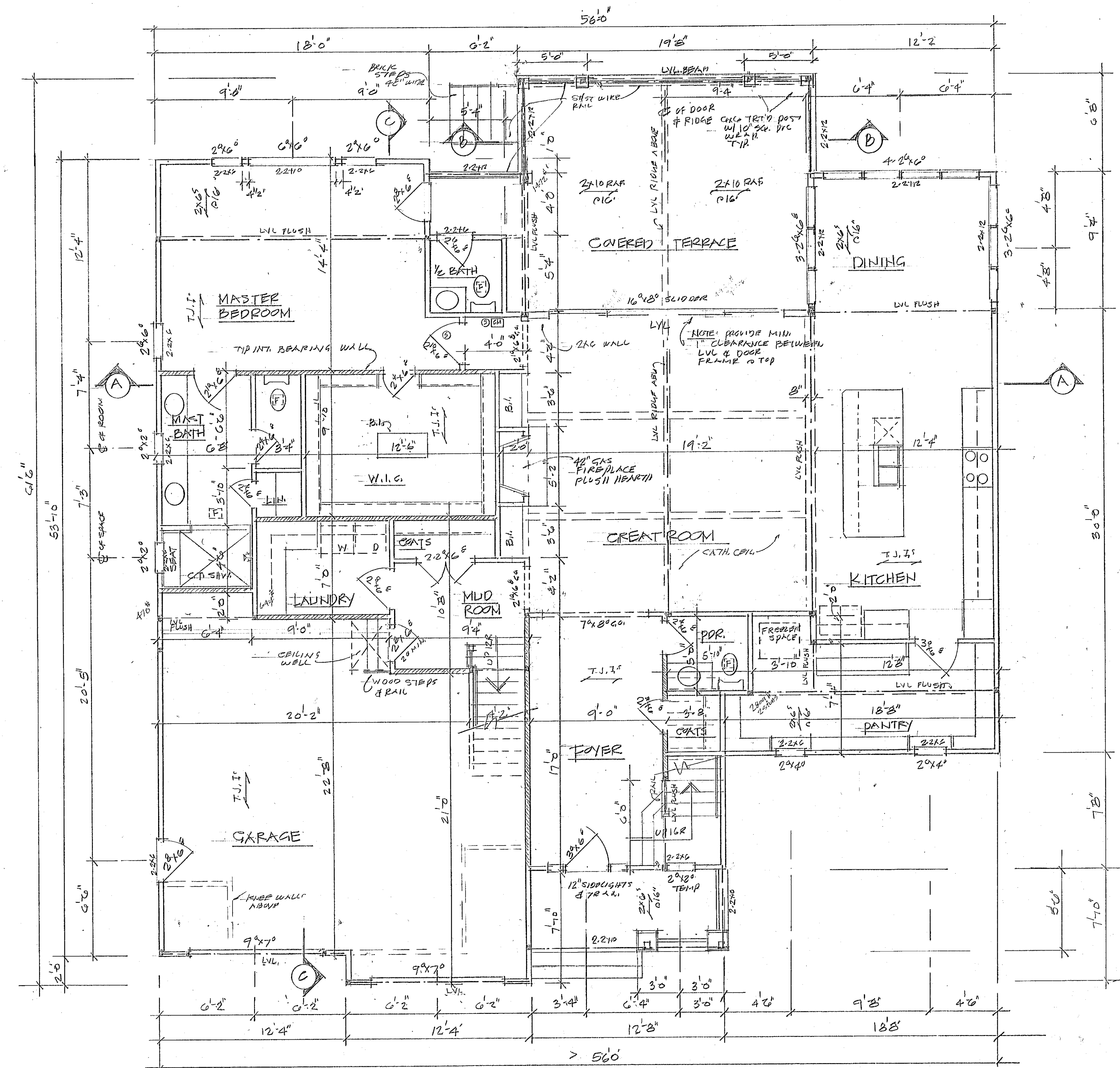


DATE: 5-19-22
 DESIGN BY: CWJ
 DRAWN BY: CWJ

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 3117 Lynnhaven Drive

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 SHEET NO. 1/5

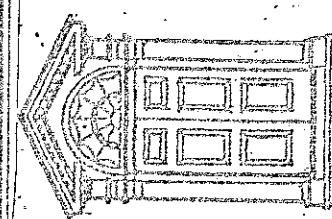


FIRST FLOOR PLAN 1/4" = 1'-0"
 9'-0" CEILING - SET WINDOWS TO 7'-8" HP

FIRST FLOOR 1942 SQ. FT.
SECOND FLOOR 1653 SQ. FT.
GARAGE 570 SQ. FT.
COVERED TERRACE 350 SQ. FT.
FRONT PORCH 71 SQ. FT.

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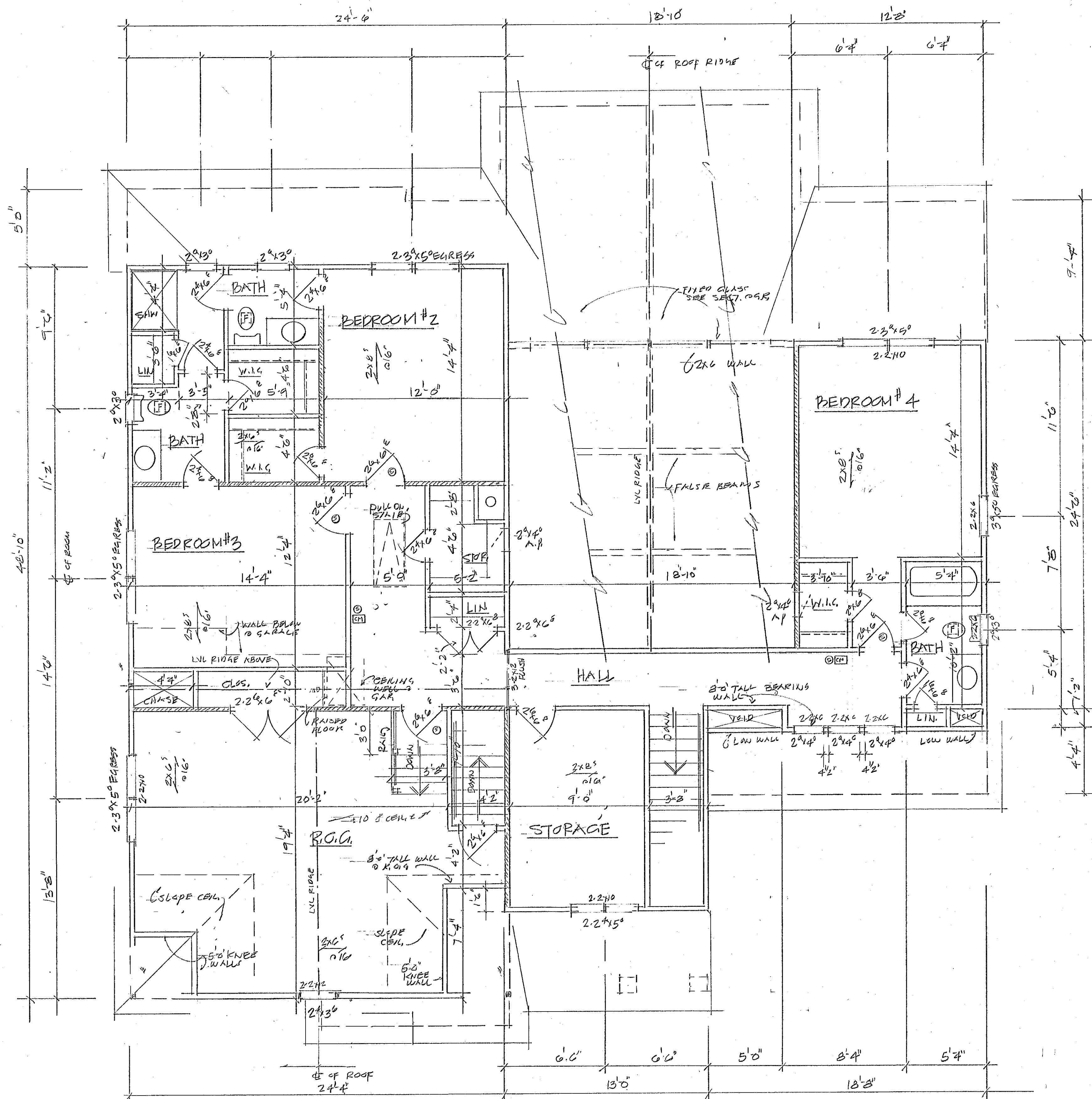
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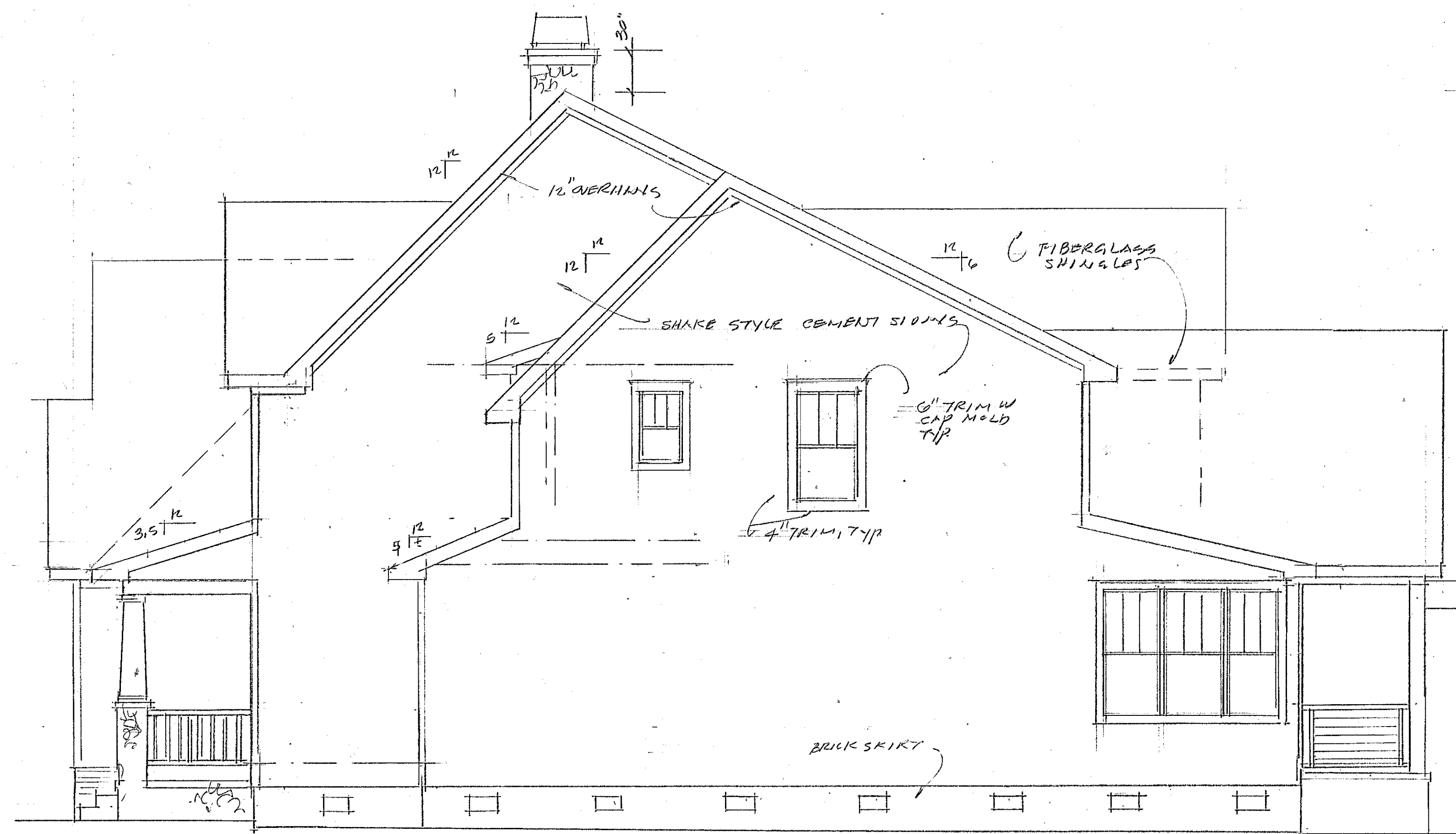
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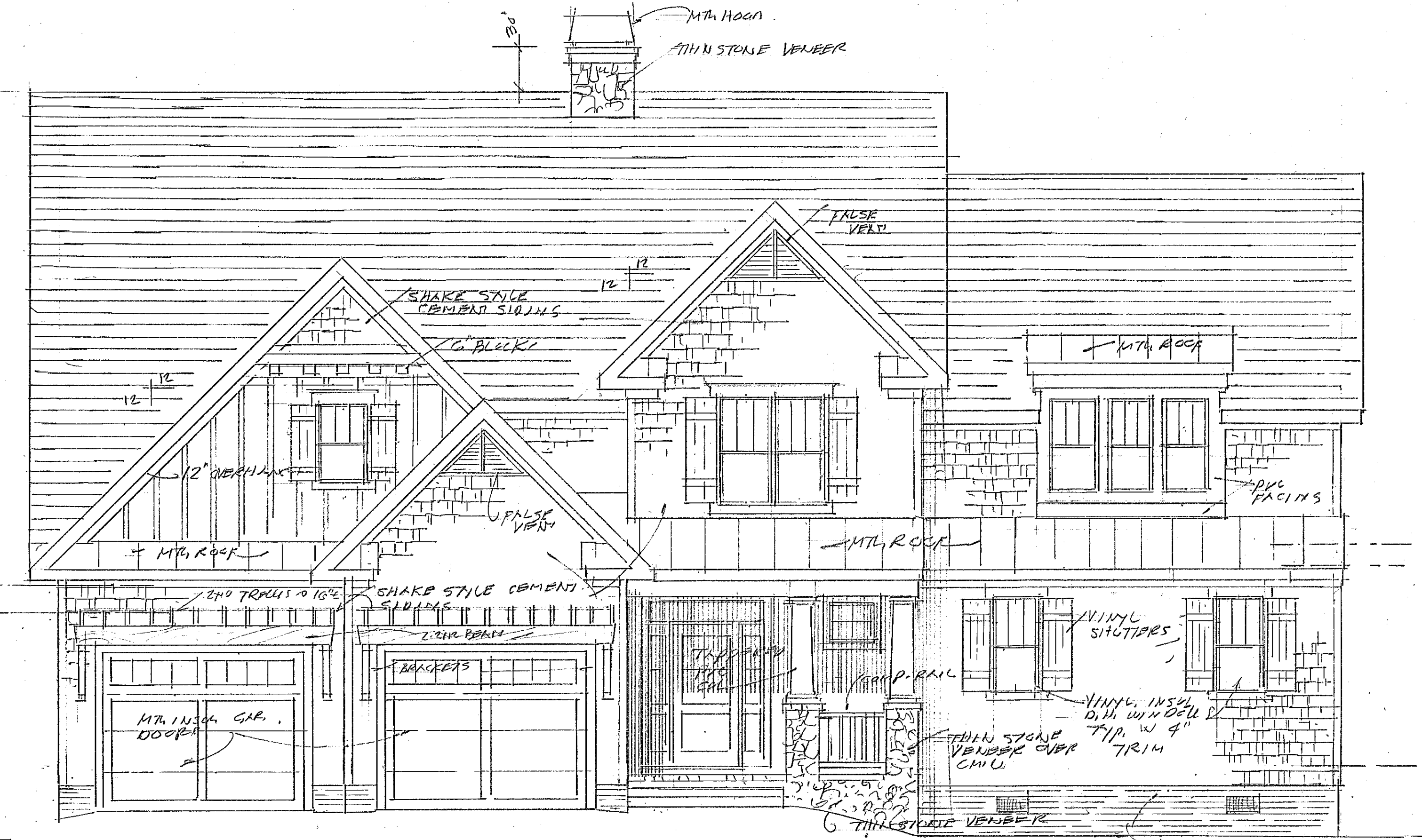
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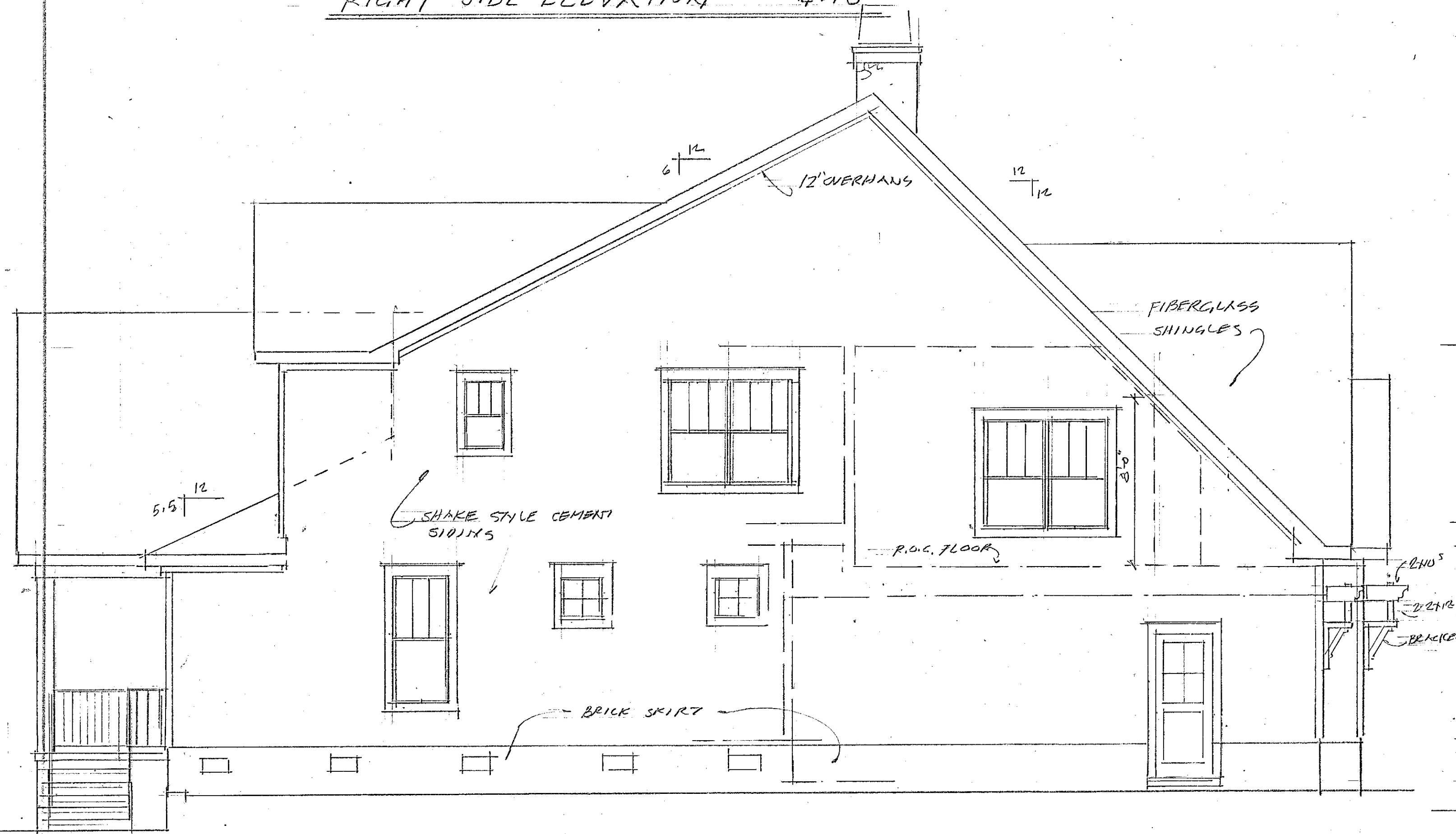
SECOND FLOOR PLAN 14'-10"
8'-0" CEILING SET WITH DOORS TO 6'-8" TH



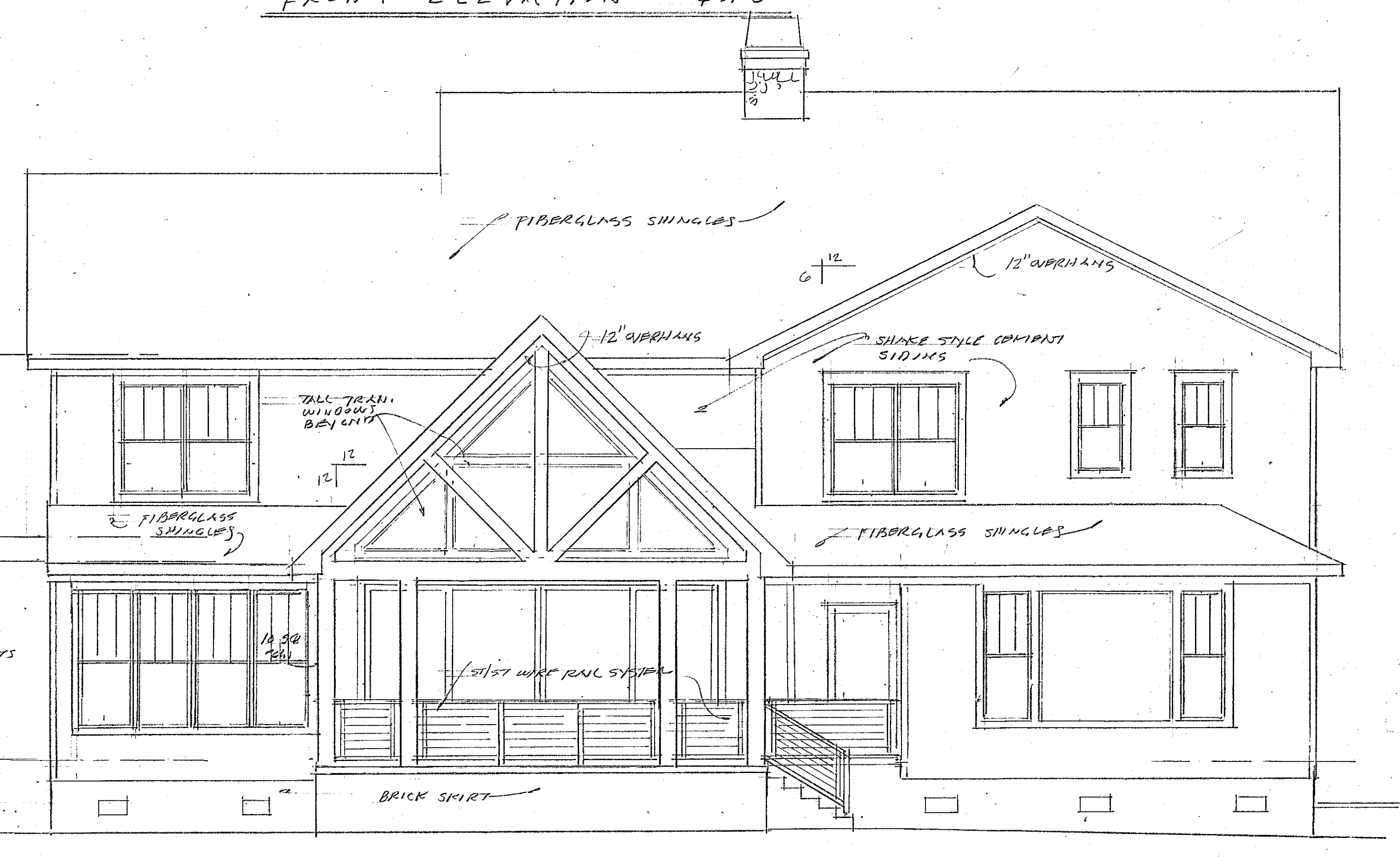
RIGHT SIDE ELEVATION 14'-10"



FRONT ELEVATION 14'-10"



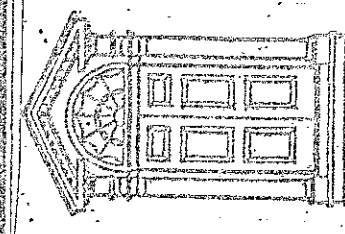
LEFT SIDE ELEVATION 14'-10"



REAR ELEVATION 14'-10"

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residentialdesigns@verizon.net



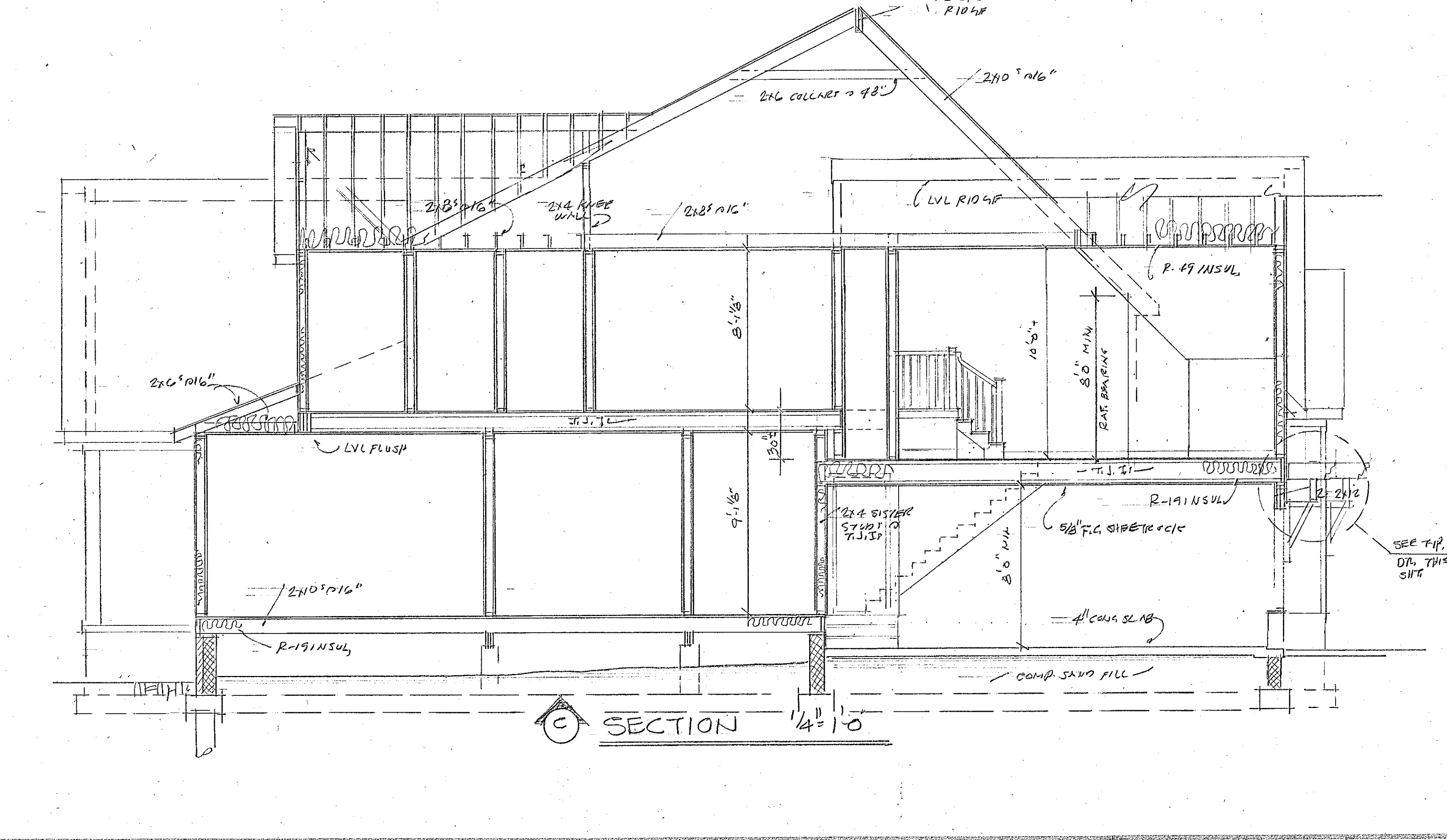
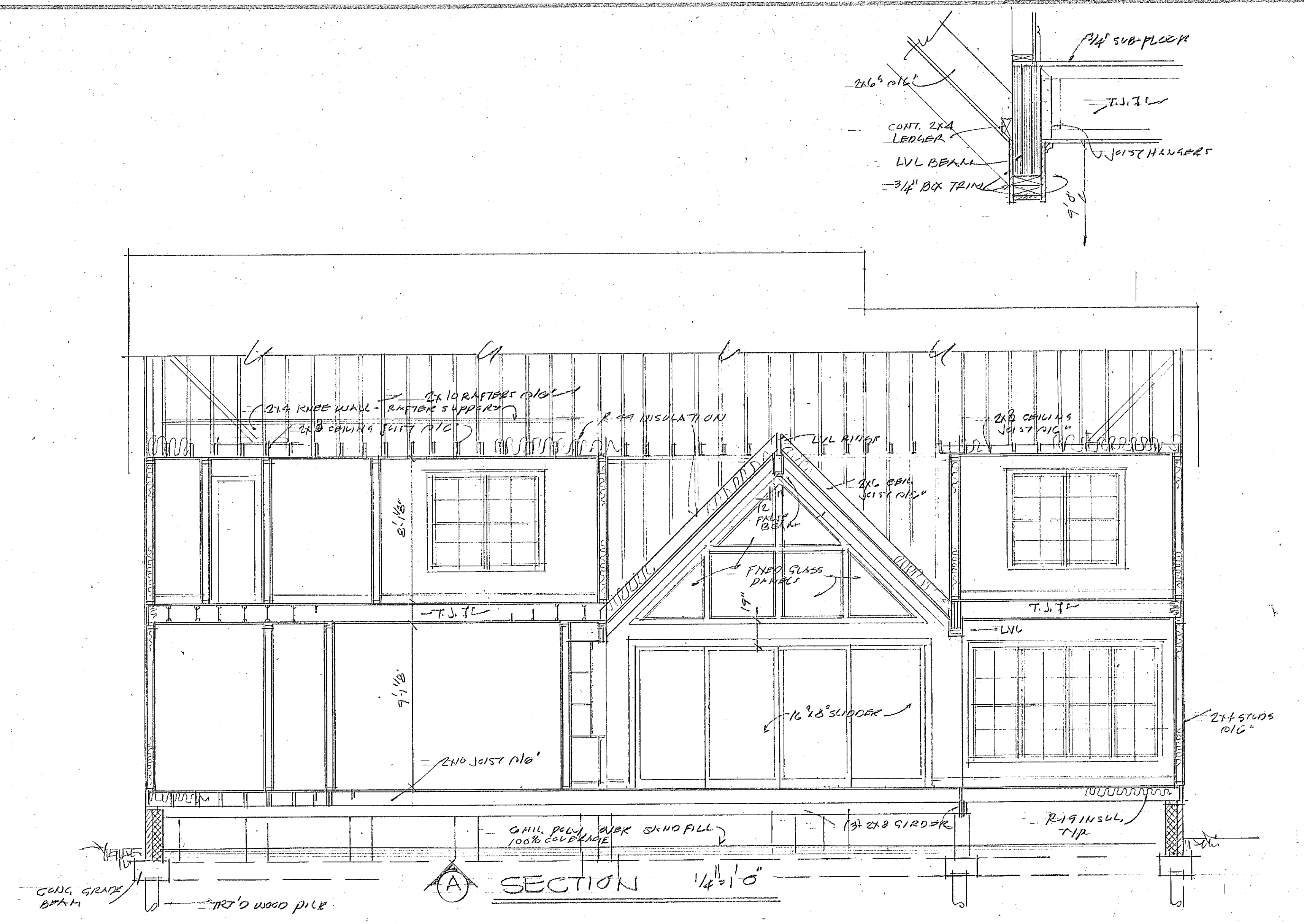
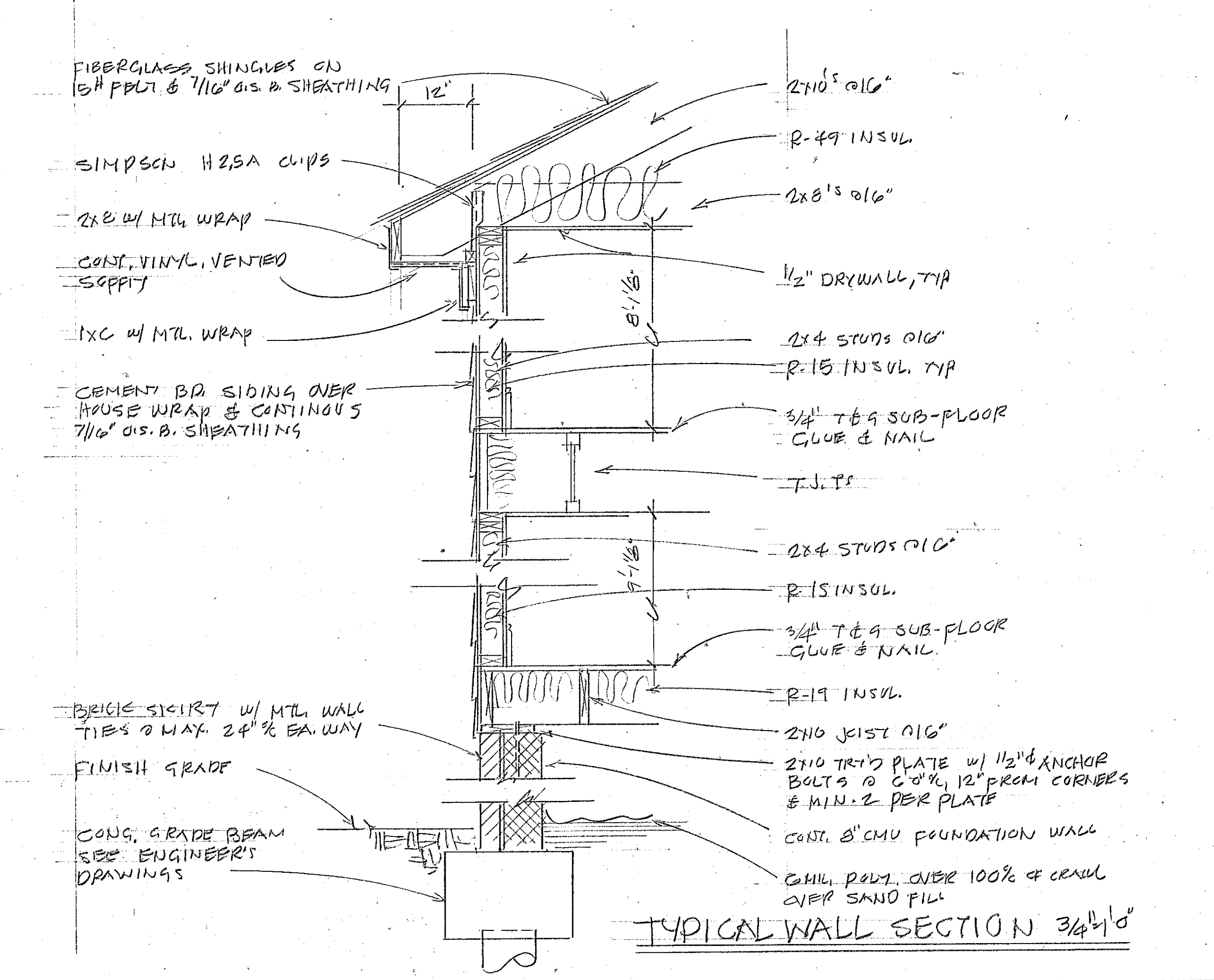
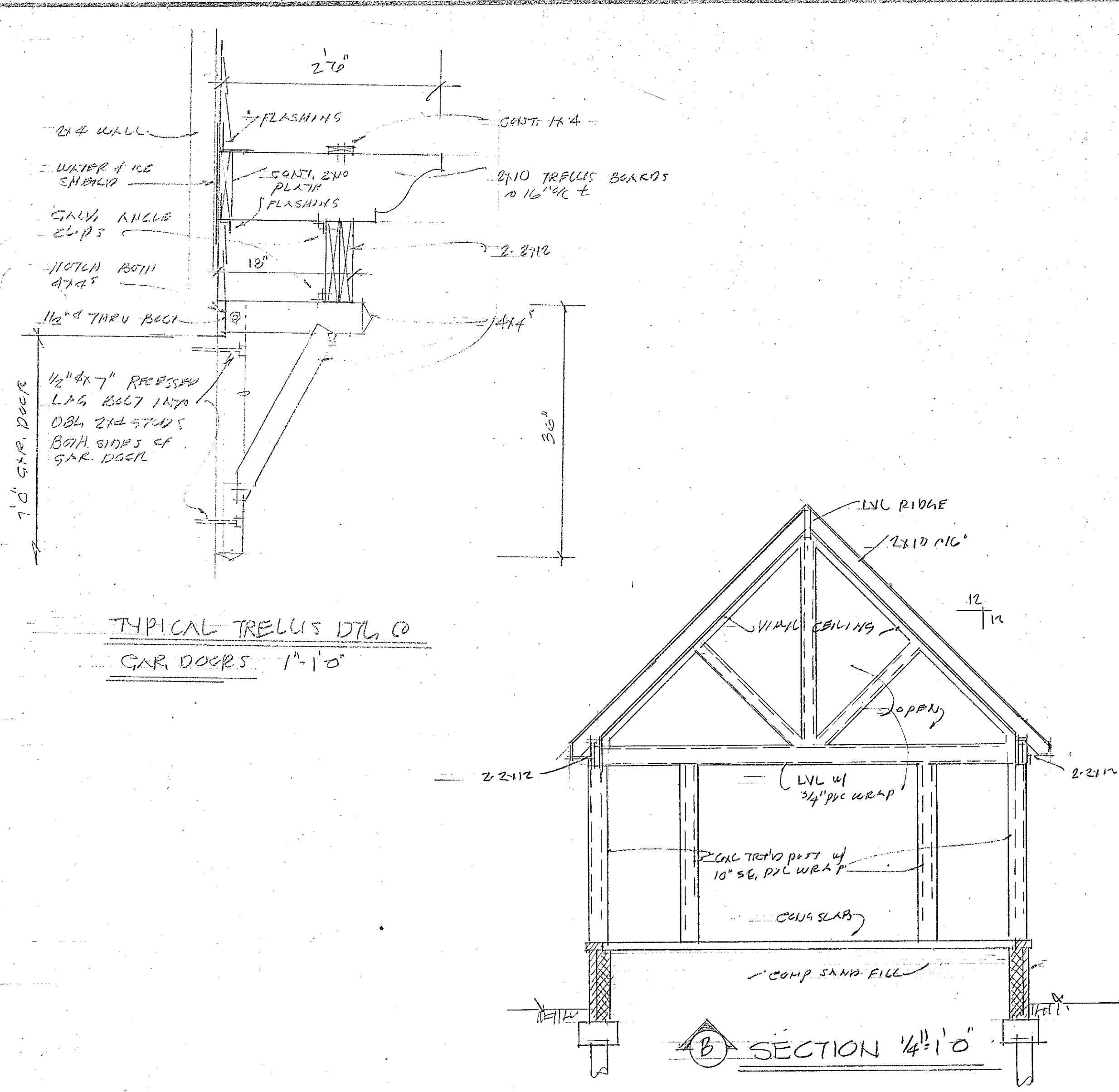
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Lewis Residence
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REVISIONS

JOB NO. 2225

SHEET NO. 3/5



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DESIGN BY: CWJ
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Lewis Residence
3117 Lynnhaven Drive

JOB NO. 2225
SHEET NO. 4/5

GENERAL NOTES

- Construction materials and installation shall comply with the 2018 edition of The International Residential Code and the 2018 edition of The Virginia Residential Code and any applicable regulations of the City.
- This structure is designed for wind exposure B, 130 MPH.
- Buildings shall be on group R5 and type of construction shall be 5II.
- Buildings shall be founded on undisturbed soil having a minimum bearing capacity of 1,500 psf. Soil conditions are the responsibility of the contractor.
- Roof live load 20 # per sq. ft. / dead load 10 # per sq. ft.
- Floor live load 40 # per sq. ft. / dead load 10 # per sq. ft. (At sleeping areas) 30 # per sq. ft. / dead load 10 # per sq. ft.
- Attic live load 20 # per sq. ft. / dead load 10 # per sq. ft.
- See site plan for finish floor elevation. Min. 12" above floor plain.
- All bedroom windows shall meet the egress code requirements as set forth in the 2018 IRC. With the window open, there shall be a net free area of 5.7 sq. ft. for both first and second floor windows. Clear opening height shall be 24" and clear opening width shall be 20". All egress window sills shall not be more than 42" above the floor. Window sills in dwelling units, where the opening of an operable window is located more than 72" above the finished grade or surface below, the lowest part of the clear opening shall be a minimum of 24" above the finished floor of the room in which the window is located. Glazing between the floor and 24" shall be fixed or have openings through which a 4" diameter sphere cannot pass.
- All windows shall be insulated, having a U value of .32.
- Dimensions shown on floor plans are taken from outside face of sheathing to inside face of studs.
- Contractor shall verify and check all notes and dimensions shown on plans before starting construction.
- All concrete footings shall be 3,000 psi placed in virgin soil.
- See tables R502.5(1) and R502.5(2) for allowable interior and exterior header and girder spans. Interior bearing walls for first and second floors are shaded. See plans for locations. These walls shall be constructed, framed and fire blocked as specified for exterior walls.
- Interior bearing walls for first and second floors are shaded. See plans for locations. These walls shall be constructed, framed and fire blocked as specified for exterior walls.
- Maximum height of all 2x4 stud walls not to exceed 10'-0".
- All stud walls to have a min. 1/2" dbl. top plate and a single 1 1/2" bottom plate.
- Stud walls bearing on concrete slabs to have treated bottom plates.
- All floor, ceiling, studs and rafter material to be #2 Southern Pine or better.
- Provide dbl. joist below all parallel walls.
- All exterior plywood sheathing to be laid vertically with no horizontal joints within 12" of floor or ceiling except at rafter bearing and at first floor of slab construction. Sheathing at gable ends to overlap top plate at ceiling line a min. of 12".
- This structure shall be fully sheathed with 1/2" plywood and will be fastened to studs as per table R602.3(1).
- Framing at braced wall lines. A load path for lateral forces shall be provided between floor framing and braced wall panels located above and below a floor, as specified in Section R602.10.8. Where joist are perpendicular to the braced wall lines above, blocking shall be provided under and in line with the braced wall panels. Where joist are perpendicular to braced wall lines below, blocking shall be provided over and in line with the braced wall panels. Where joist are parallel to braced wall lines above or below, a rim joist or other parallel framing member shall be provided at the wall to permit fastening per Table R602.3(1).
- The end of wood joist, beams or girders shall have not less than 1 1/2" of bearing and not less than 3" of bearing on masonry, except where supported by a 1 x 4 ribbon strip and nailed to an adjacent stud or by an approved metal hanger.
- Fasteners for pressure treated wood or fire treated wood shall be galvanized or stainless steel.
- Anchor bolts at slab construction shall be 1/2" dia. At 6'-0" o/c with a min. of two bolts per plate section with one bolt not more than 12" from corner or less than 7 bolt diameters from end of plate section. Anchor bolts shall extend into masonry a minimum of 7".
- CMU piers at foundations used to support girders shall not be greater in height than four times their least dimension. Unless they are filled solid with type M, S or N mortar. Hollow piers shall be capped with a 4" solid CMU or filled solid with concrete or mortar.
- Fire blocking shall be provided to cut off concealed draft openings both vertical and horizontal and form an effective fire barrier between stories, between top story and the roof space. Fire blocking shall be provided in wood frame construction in the following locations:
 - Concealed spaces of a stud wall, including furred spaces.
 - Vertically at ceiling and floor levels and horizontally at intervals not exceeding 10'-0".
 - Dropped ceilings and soffits.
 - Stair stringers at top and bottom of the run.
 - Around vents, pipes and ducts at ceiling and floor levels with approved materials.
 - Cornices of a two family dwelling at a line of dwelling unit separation.
- When there is unusable space both above and below the concealed space of a floor/ceiling assembly, draft stops shall be installed so that the area concealed does not exceed 1,000 sq. ft.
- All openings in exterior walls shall have a minimum 25# psf. Positive and minimum 25# psf. negative design rating. Vehicular access doors shall be tested in accordance with approved ASTM E 330 or ANSI/DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108.
- Roof areas where pitches are from 4/12 to 2/12 shall have two layers of 15# felt. Asphalt shingles shall be installed in accordance with Table R905.1.1(2).
- Floor and roof truss plans and details to be provided by truss supplier.
- Any wall penetrations to mechanical equipment in garage shall be fire stopped as per code.
- If garage finish floor is below flood plain, flood vents shall be installed as per manufacturer's instructions.
- Garage ceilings to be finished with one layer of 5/8" Type X sheetrock. Garage walls to be finished with minimum 1/2" reg. sheetrock.
- Heating, cooling, electrical and plumbing shall be designed and installed to comply with all applicable codes.
- All showers and tubs with showers to have non-absorbent wall surfaces. This non-absorbent surface shall extend to a height of not less than 6'-0" above the floor.
- Provide lighting at all interior and exterior stairs and exterior doors. Where lighting outlets are installed in interior stairways, there shall be a wall switch at each floor level to control the lighting outlet where the stairway has six or more risers. The illumination of exterior stairways shall be controlled from inside the dwelling unit.
- All exterior doors from heated spaces to be insulated.
- Smoke detectors shall be installed in and adjacent to all sleeping areas as per code and all wired together. Provide battery backup.
- Provide a minimum of 3'x3" landing outside of all exterior doors where there are more than three risers required. Landing not required in garage area.
- Perimeter insulation on concrete slabs to be a minimum R-10 and 24" wide.
- Weep-holes shall be provided in outside walls of masonry walls at a maximum spacing of 33" on center. Weep-holes shall not be less than 3/16" in diameter. Weep-holes shall be located immediately above the flashing.
- All metal, pre-fabricated gas fireplaces shall be installed as per manufacturer's instructions.
- All wood used in open decks shall be salt treated.
- An approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms.
- A fire extinguisher having a rating of 2-A: 10-B: C or an approved equivalent type of fire extinguisher shall be installed in the kitchen area.
- Access panels to the attic through the ceiling shall be insulated same as the ceiling and have weather stripping at all edges.
- Access panels to the attic through the walls shall be insulated same as the wall and have weather stripping at all edges.
- All roof shingles used in a wind zone of 110 mph or greater are required to be classified using ASTM D3161 CLASS F or ASTM D7158 CLASS or H. R905.2.1.
- All rafter uplift connectors must be installed per manufacturer installation instructions.
- All ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1091.4.1 of the IRC. Verification of compliance with this section shall be in accordance with either Section N1103.2.2.1 or Section N1103.2.2.2. Required thermo envelope must be maintained including all walls, floors, knee walls, ceilings, eaves / bitches and required fenestration U-factors. N1102.1. Minimum U-factor 0.32.

FASTENING SCHEDULE			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS	SPACING AND LOCATION
Roof			
1	Blocking between ceiling joists or rafters to top plate	4-8d box (2" x 0.113") or 3-8d common (2" x 0.113") or 3-10d box (3" x 0.128") or 3-3" x 0.131" nails	Toe nail
2	Ceiling joists to top plate	4-8d box (2" x 0.113") or 3-8d common (2" x 0.113") or 3-10d box (3" x 0.128") or 3-3" x 0.131" nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafters, laps over partitions (see Section R802.5.2 and Table R802.5.2)	4-8d box (2" x 0.113") or 3-8d common (2" x 0.113") or 3-10d box (3" x 0.128") or 3-3" x 0.131" nails	Face nail
4	Ceiling joist attached to parallel rafters (see Section R802.5.2 and Table R802.5.2)	Table R802.5.2	Face nail each
5	Collar tie to rafter, face nail or 19" x 29 gage strap to rafter	4-10d box (3" x 0.128") or 3-10d common (3" x 0.148") or 4-3" x 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box (3" x 0.135") or 3-10d common (3" x 0.148") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss
7	Roof rafters to ridge, valley or hip rafter or roof rafter to minimum 2" ridge beam	4-16d (3" x 0.135") or 3-10d common (3" x 0.148") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	Toe nail
8	Stud to stud (not at braced wall panels)	16d common (3" x 0.162") or 3" x 0.131" nails	24" o.c. face nail
9	Stud to stud and shoulter studs at intersecting wall corners (at braced wall panels)	16d box (3" x 0.135") or 3" x 0.131" nails	12" o.c. face nail
10	Build-up header (2" to 2" header with 1/2" spacer)	16d common (3" x 0.162") or 3" x 0.131" nails	16" o.c. face nail
11	Continuous header to stud	3-8d box (3" x 0.113") or 4-8d common (3" x 0.131") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	Toe nail
12	Top plate to top plate	16d common (3" x 0.162") or 3" x 0.131" nails	16" o.c. each edge face nail
13	Double top plate splice	16d box (3" x 0.135") or 3" x 0.131" nails	12" o.c. each edge face nail
14	Bottom plate to joist, rim joist, hand joist or blocking (not at braced wall panels)	16d common (3" x 0.162") or 3" x 0.131" nails	16" o.c. face nail
15	Bottom plate to joist, rim joist, hand joist or blocking (at braced wall panels)	3-16d box (3" x 0.135") or 2-16d common (3" x 0.162") or 4-3" x 0.131" nails	3 each 16" o.c. face nail 4 each 16" o.c. face nail
16	Top or bottom plate to stud	4-8d box (3" x 0.113") or 3-16d box (3" x 0.135") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	Toe nail
17	Top plates, laps at corners and intersections	3-8d box (3" x 0.113") or 3-16d box (3" x 0.135") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	End nail
18	1" brace to each stud and plate	3-8d box (3" x 0.113") or 3-16d box (3" x 0.135") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	Face nail
19	1" x 6" sheathing to each bearing	3-8d box (3" x 0.113") or 3-16d box (3" x 0.135") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	Face nail
20	1" x 8" and wider sheathing to each bearing	3-8d box (3" x 0.113") or 3-16d box (3" x 0.135") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	Face nail
21	Joist to sill, top plate or girder	4-8d box (3" x 0.113") or 3-8d common (3" x 0.148") or 3-3" x 0.131" nails	Toe nail
22	Rim joist, hand joist or blocking to sill or top plate (roof applications also)	8d common (2" x 0.113") or 3" x 0.131" nails	4" o.c. toe nail
23	1" x 6" subfloor or less to each joist	3-8d box (3" x 0.113") or 3-16d box (3" x 0.135") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	Face nail
24	2" subfloor to joist or girder	3-16d box (3" x 0.135") or 2-16d common (3" x 0.162")	Blind and face nail
25	2" planks (gink & beam—floor & roof)	3-16d box (3" x 0.135") or 2-16d common (3" x 0.162")	At each bearing, face nail
26	Band or rim joist to joist	3-16d common (3" x 0.162") or 4-3" x 0.131" nails or 4-3" x 14 gage, 16 gage, 1/4" crown	End nail
27	Build-up girders and beams, 2-inch lumber layers	20d common (4" x 0.192") or 16d box (3" x 0.128") or 16d common (3" x 0.148") or 4-3" x 0.131" nails	Nail each layer as follows: 32" o.c. at top and bottom and staggered. 24" o.c. face nail at top and bottom staggered on opposite sides
28	Ledger strip supporting joists or rafters	4-16d box (3" x 0.135") or 3-16d common (3" x 0.162") or 4-10d box (3" x 0.128") or 4-3" x 0.131" nails	At each joist or rafter, face nail
29	Bracing or blocking to joist	3-16d box (3" x 0.135") or 2-16d common (3" x 0.162") or 4-3" x 0.131" nails	Each end, toe nail
SPACING OF FASTENERS			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS	SPACING OF FASTENERS
Wood structural panels, exterior, roof and interior wall sheathing to framing and perpendicular wall sheathing to framing (see Table R902.3(1) for special structural wall sheathing)			
30	1/2" - 1/2"	6d common (2" x 0.113") nail (sill/floor, wall) 8d common (2" x 0.131") nail (roof); or RRS-01 (2" x 0.113") nail (roof)	6 12'
31	1/2" - 1/2"	8d common (2" x 0.131") nail (roof); or RRS-01 (2" x 0.113") nail (roof)	6 12'
32	1/2" - 1/2"	16d common (3" x 0.162") nail; or 8d (2" x 0.113") nail (roof)	6 12'
33	1/2" structural cellulose fiberboard sheathing	1/4" galvanized roofing nail, 1/4" head diameter, or 1/4" long 16 gage staple with 1/4" or 1" crown	3 6
34	1/2" structural cellulose fiberboard sheathing	1/4" galvanized roofing nail, 1/4" head diameter, or 1/4" long 16 gage staple with 1/4" or 1" crown	3 6
35	1/2" gypsum sheathing	1/4" galvanized roofing nail; staple galvanized, 1/4" long, 1/2" crown, Type W or S	7 7
36	1/2" gypsum sheathing	1/4" galvanized roofing nail; staple galvanized, 1/4" long, 1/2" crown, Type W or S	7 7
Wood structural panels, combination subfloor underlayment to framing			
37	1/2" and less	6d deformed (2" x 0.120") nail; or 8d common (2" x 0.131") nail	6 12
38	1/2" - 1/2"	8d common (2" x 0.131") nail; or 6d deformed (2" x 0.120") nail	6 12
39	1/2" - 1/2"	10d common (3" x 0.148") nail; or 8d deformed (2" x 0.120") nail	6 12

Header Insulation; Gaps in headers must be insulated to a minimum of R-3.

Wall Corner Cavity; Gaps in corners must be insulated to a minimum of R-3.

TABLE R902.3(1)
REQUIREMENTS FOR WOOD STRUCTURAL PANEL, WALL BRACING USED TO RESIST WIND PRESSURES^{a, b, c}

MINIMUM NAIL Size (24° or 30° 11° 13°)	MINIMUM WOOD STRUCTURAL PANEL RATING	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD BRACING		PANEL NAIL SPACING		ULTIMATE DESIGN WIND SPEED (mph)		Wind exposure category
			Edges (inches o.c.)	Field (inches o.c.)	V	C			
6d (0.6" or 0.113")	1.5	2x10	16	6	12	140	115	130	
8d (0.8" or 0.125")	1.75	2x16	16	6	12	170	140	155	
10d (2.5" x 0.131")	1.75	2x16	24	6	12	140	115	110	

For S1: S1 = 2.5 ft, S2 = 1 ft, S3 = 0.5 ft, S4 = 0.25 ft.
a. Panel strength is calculated perpendicular to supports. Three ply wood sheathing with studs spaced more than 16 inches on center must be applied with panels attached perpendicular to supports.
b. Table is based on lateral loading applied toward and away from building surfaces in accordance with Section R901.2. Lateral loading requirements shall be in accordance with Section R901.2.
c. Wood structural panels with studs spaced 16" or Wall 2x16 or Wall 2x18 may be permitted as an alternate to panels with a 2400-spf rating. Plywood siding rated 16 s.p.f. or 74 s.p.f. shall be permitted as an alternate to panels with a 2400-spf rating. Wall 2x16 and plywood siding 16 s.p.f. shall be used with studs spaced 16 inches on center. Wall 2x18 and plywood siding 16 s.p.f. shall be used with studs spaced 12 inches on center.

TABLE R902.3(1)
GIRDER SPANS* AND HEADER SPANS* FOR EXTERIOR BEARING WALLS
(Maximum spans for Douglas fir-larch, hem-fir, southern pine and spruce-pine-fir and required number of jack studs)

HEADERS AND GIRDERS SUPPORTING	SIZE	BULLING WIND (psf)											
		20						70					
Roof and ceiling and one clear span floor	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 6	4-0	1	3-1	2-7	2-3	1-1	2-6	2-3	2-0	2-4	2-0	2-0
	2-2 x 8	5-1	2	4-2	3-8	3-4	2-1	3-6	3-4	3-0	2-7	2-4	2-4
	2-2 x 10	6-0	2	4-8	3-11	2-5	2-2	4-0	3-4	2-7	3-6	3-0	3-0
	2-2 x 12	7-1	2	5-5	2-4	3-1	2-8	3-1	3-1	3-5	2-8	4-2	3-6
	2-2 x 14	8-0	2	6-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 16	9-0	2	6-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 18	10-0	2	7-3	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 20	11-0	2	7-9	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 22	12-0	2	8-5	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 24	13-0	2	9-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 26	14-0	2	9-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
Roof, ceiling and one clear span floor	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 6	4-0	1	3-1	2-7	2-3	1-1	2-6	2-3	2-0	2-4	2-0	2-0
	2-2 x 8	5-1	2	4-2	3-8	3-4	2-1	3-6	3-4	3-0	2-7	2-4	2-4
	2-2 x 10	6-0	2	4-8	3-11	2-5	2-2	4-0	3-4	2-7	3-6	3-0	3-0
	2-2 x 12	7-1	2	5-5	2-4	3-1	2-8	3-1	3-1	3-5	2-8	4-2	3-6
	2-2 x 14	8-0	2	6-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 16	9-0	2	6-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 18	10-0	2	7-3	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 20	11-0	2	7-9	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 22	12-0	2	8-5	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 24	13-0	2	9-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 26	14-0	2	9-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
Roof, ceiling and one clear span floor	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 6	4-0	1	3-1	2-7	2-3	1-1	2-6	2-3	2-0	2-4	2-0	2-0
	2-2 x 8	5-1	2	4-2	3-8	3-4	2-1	3-6	3-4	3-0	2-7	2-4	2-4
	2-2 x 10	6-0	2	4-8	3-11	2-5	2-2	4-0	3-4	2-7	3-6	3-0	3-0
	2-2 x 12	7-1	2	5-5	2-4	3-1	2-8	3-1	3-1	3-5	2-8	4-2	3-6
	2-2 x 14	8-0	2	6-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 16	9-0	2	6-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 18	10-0	2	7-3	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 20	11-0	2	7-9	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 22	12-0	2	8-5	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 24	13-0	2	9-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 26	14-0	2	9-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
Roof, ceiling and one clear span floor	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 6	4-0	1	3-1	2-7	2-3	1-1	2-6	2-3	2-0	2-4	2-0	2-0
	2-2 x 8	5-1	2	4-2	3-8	3-4	2-1	3-6	3-4	3-0	2-7	2-4	2-4
	2-2 x 10	6-0	2	4-8	3-11	2-5	2-2	4-0	3-4	2-7	3-6	3-0	3-0
	2-2 x 12	7-1	2	5-5	2-4	3-1	2-8	3-1	3-1	3-5	2-8	4-2	3-6
	2-2 x 14	8-0	2	6-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 16	9-0	2	6-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 18	10-0	2	7-3	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 20	11-0	2	7-9	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 22	12-0	2	8-5	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 24	13-0	2	9-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 26	14-0	2	9-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
Roof, ceiling and one clear span floor	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 6	4-0	1	3-1	2-7	2-3	1-1	2-6	2-3	2-0	2-4	2-0	2-0
	2-2 x 8	5-1	2	4-2	3-8	3-4	2-1	3-6	3-4	3-0	2-7	2-4	2-4
	2-2 x 10	6-0	2	4-8	3-11	2-5	2-2	4-0	3-4	2-7	3-6	3-0	3-0
	2-2 x 12	7-1	2	5-5	2-4	3-1	2-8	3-1	3-1	3-5	2-8	4-2	3-6
	2-2 x 14	8-0	2	6-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 16	9-0	2	6-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 18	10-0	2	7-3	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 20	11-0	2	7-9	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 22	12-0	2	8-5	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 24	13-0	2	9-1	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0
	2-2 x 26	14-0	2	9-7	3-1	2-7	3-5	3-2	3-0	3-4	3-1	4-2	4-0

For S1: S1 = 2.5 ft, S2 = 1 ft, S3 = 0.5 ft, S4 = 0.25 ft.
a. Spans are based on minimum design properties for No. 2 grade lumber of Douglas fir-larch, hem-fir, southern pine, and spruce-pine-fir.
b. Building width is measured perpendicular to the ridge. For widths between these known spans, spans are permitted to be interpolated.
c. All joists are assumed to be supported by the ridge. For widths between these known spans, spans are permitted to be interpolated by the number of framing joists required to support each end. When the number of required jack studs equals one, the header is permitted to be supported by one approved framing joist attached to the full depth walls and one to the header.
d. Use 30 psf ground snow load for regions with snow load less than 30 psf and the roof snow load to equal to the header snow load.
e. Spans are calculated assuming the top of the header or girder is laterally braced by perpendicular framing. When the top of the header or girder is not laterally braced (for example, cripple stud bearing on the header), braced spans for headers consisting of 2 x 6, 2 x 10, or 2 x 12 sizes shall be multiplied by 0.70. The header or girder shall be designed.

TABLE R902.3(1)
GIRDER SPANS* AND HEADER SPANS* FOR EXTERIOR BEARING WALLS
(Maximum spans for Douglas fir-larch, hem-fir, southern pine and spruce-pine-fir and required number of jack studs)

HEADERS AND GIRDERS SUPPORTING	SIZE	BULLING WIND (psf)											
		20						70					
One floor	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 4	4-1	1	1	1	1	4-1	1	1	1	2-4	1	1
	2-2 x 6	6-1	1	1	1	1	6-1	1	1	1	3-6	1	1
	2-2 x 8	7-9	1	1	1	1	5-5	1	1	1	4-5	1	1
	2-2 x 10	9-2	1	1	1	1	6-6	2	1	1	5-3	2	1
	2-2 x 12	10-0	1	1	1	1	7-7	2	1	1	6-3	2	1
	2-2 x 14	10-8	1	1	1	1	8-1	2	1	1	6-7	2	1
	2-2 x 16	11-6	1	1	1	1	8-9	2	1	1	7-5	2	1
	2-2 x 18	12-4	1	1	1	1	9-6	2	1	1	8-3	2	1
	2-2 x 20	13-2	1	1	1	1	10-3	2	1	1	9-1	2	1
	2-2 x 22	14-0	1	1	1	1	11-0	2	1	1	9-9	2	1
	2-2 x 24	14-8	1	1	1	1	11-8	2	1	1	10-7	2	1
Two floors	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 4	4-1	1	1	1	1	4-1	1	1	1	2-4	1	1
	2-2 x 6	6-1	1	1	1	1	6-1	1	1	1	3-6	1	1
	2-2 x 8	7-9	1	1	1	1	5-5	1	1	1	4-5	1	1
	2-2 x 10	9-2	1	1	1	1	6-6	2	1	1	5-3	2	1
	2-2 x 12	10-0	1	1	1	1	7-7	2	1	1	6-3	2	1
	2-2 x 14	10-8	1	1	1	1	8-1	2	1	1	6-7	2	1
	2-2 x 16	11-6	1	1	1	1	8-9	2	1	1	7-5	2	1
	2-2 x 18	12-4	1	1	1	1	9-6	2	1	1	8-3	2	1
	2-2 x 20	13-2	1	1	1	1	10-3	2	1	1	9-1	2	1
	2-2 x 22	14-0	1	1	1	1	11-0	2	1	1	9-9	2	1
	2-2 x 24	14-8	1	1	1	1	11-8	2	1	1	10-7	2	1
Two floors	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 4	4-1	1	1	1	1	4-1	1	1	1	2-4	1	1
	2-2 x 6	6-1	1	1	1	1	6-1	1	1	1	3-6	1	1
	2-2 x 8	7-9	1	1	1	1	5-5	1	1	1	4-5	1	1
	2-2 x 10	9-2	1	1	1	1	6-6	2	1	1	5-3	2	1
	2-2 x 12	10-0	1	1	1	1	7-7	2	1	1	6-3	2	1
	2-2 x 14	10-8	1	1	1	1	8-1	2	1	1	6-7	2	1
	2-2 x 16	11-6	1	1	1	1	8-9	2	1	1	7-5	2	1
	2-2 x 18	12-4	1	1	1	1	9-6	2	1	1	8-3	2	1
	2-2 x 20	13-2	1	1	1	1	10-3	2	1	1	9-1	2	1
	2-2 x 22	14-0	1	1	1	1	11-0	2	1	1	9-9	2	1
	2-2 x 24	14-8	1	1	1	1	11-8	2	1	1	10-7	2	1
Two floors	12	Span*	24	Span*	36	Span*	24	Span*	36	Span*	24	Span*	36
	2-2 x 4	4-1	1	1	1	1	4-1	1	1	1	2-4	1	1
	2-2 x 6	6-1	1	1	1	1	6-1	1	1	1	3-6	1	1
	2-2 x 8	7-9	1	1	1	1	5-5	1	1	1	4-5	1	1
	2-2 x 10	9-2	1	1	1	1	6-6	2	1	1	5-3	2	1
	2-2 x 12	10-0	1	1	1	1	7-7	2	1	1	6-3	2	1
	2-2 x 14	10-8	1	1	1	1	8-1	2	1	1	6-7	2	1
	2-2 x 16	11-6	1	1	1	1	8-9	2	1	1	7-5	2	1
	2-2 x 18	12-4	1	1	1	1	9-6	2	1	1	8-3	2	1
	2-2 x 20	13-2	1	1									



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

GENERAL NOTES:

1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND MEDAL BUILDING DRAWINGS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE 2018 EDITON AS ADOPTED BY THE VIRGINIA CONSTRUCTION CODE 2018 EDITION. AS REQUIRED BY THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE THIS STRUCTURE IS DESIGNED TO PROVIDE A CONTINUOUS LOAD PATH FROM THE ROOF TO THE FOUNDATIONS FOR ALL STRUCTURAL LOADS INCLUDING GRAVITY, UPLIFT AND LATERAL FORCES.
3. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL PERMANENT SUPPORTS AND LATERAL BRACING ARE IN PLACE.
4. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, AND OTHER REQUIREMENTS NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING. THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS NECESSARY FOR FABRICATION AND ERECTION OF STRUCTURAL MEMBERS.
5. [HE PROJECT SPECIFICATIONS ARE NOT SUPERSEDED BY THE STRUCTURAL NOTES BUT ARE INTENDED TO BE COMPLEMENTARY TO THEM. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS IN EACH SECTION.
6. SPECIFIC NOTES AND SPECIFIC DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER STRUCTURAL NOTES AND TYPICAL DETAILS.
7. CONSULTANTS' DRAWINGS, INCLUDING STRUCTURAL DRAWINGS, ARE CONSIDERED SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. ANY OMISSIONS OR CONFLICTS, INCLUDING DIMENSIONS, BETWEEN VARIOUS ELEMENTS OF THE CONSULTANTS' DRAWINGS BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
8. THE DOCUMENTS DEFINING THE STRUCTURE ARE INSTRUMENTS OF SERVICE PREPARED BY MICHAEL W. SCHOOLEY, P.E. FOR ONE USE ONLY. THE STRUCTURAL DOCUMENTS SHALL NOT BE REPRODUCED, OR COPIED, IN WHOLE OR IN PART BY THE CONTRACTOR OR SUBCONTRACTORS FOR PREPARATION OF SHOP DRAWINGS OR OTHER SUBMITTALS WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.
9. LOADS USED IN THE DESIGN OF THIS STRUCTURE ARE AS FOLLOWS:
- A) LIVE LOADS

SLAB-ON-GRADE

RESIDENTIAL LIVING SPACE

RESIDENTIAL SLEEPING SPACE

RESIDENTIAL BALCONY

PRIVATE BALCONY

ATTIC STORAGE (2' TO 4')

ATTIC STORAGE (4'<)

ROOF

100 PSF

40 PSF

30 PSF

60 PSF

40 PSF

20 PSF

30 PSF

20 PSF
- B) SNOW LOADS:

GROUND SNOW LOAD:

10 PSF
- C) WIND LOAD:

ULTIMATE WIND SPEED

ALLOWABLE DESIGN WIND SPEED

WIND EXPOSURE

RISK CATEGORY

INTERNAL PRESSURE COEFFICIENT

130 MPH

110 MPH

C

II

-0.18/0.18

DRIVEN PILE NOTES:

1. PILING SHALL COMPLY WITH ASTM D25. PROVIDE SOUTHERN PINE OR DOUGLAS FIR WITH A 9 INCH MINIMUM TIP DIAMETER AND PROVIDE A PRESSURE PRESERVATIVE TREATMENT IN ACCORDANCE WITH AWP A C3.
2. PILE DESIGN CAPACITIES ARE AS FOLLOWS"
- A) COMPRESSION CAPACITY

B) TENSION CAPACITY

C) LATERAL CAPACITY
- 15 TONS

5 TONS

3 TONS
3. BASE BID LENGTH SHALL BE 30 FEET FOR ALL PILES OTHER THAN TEST PILES
4. THE BASIS FOR PILE CAPACITY ACCEPTANCE WILL BE THE "STANDARD ENGINEERING NEWS RECORD FORMULA", AND THE SPECIFIED MINIMUM PENETRATION.
5. PILING SHALL BE DRIVEN TO A MAXIMUM TOLERANCE IN ANY DIRECTION OF 3 INCHES PER PILE. WHERE AN INDIVIDUAL PILE IS DRIVEN OUT OF POSITION MORE THAN 3 INCHES IN ANY DIRECTION AND/OR WHERE THE CENTER OF GRAVITY OF A PILE GROUP IS OUT OF POSITION MORE THAN 2 INCHES, THE CONTRACTOR MAY BE REQUIRED TO DRIVE AN ADDITIONAL PILE OR PILES TO COMPENSATE FOR THE ECCENTRICITY OF THE PILE AND/OR PILE GROUP.

CAST-IN-PLACE CONCRETE NOTES:

1. CAST-IN-PLACE CONCRETE FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-16) AND COMMENTARY (ACI 318R-16)".
2. CONCRETE SHALL BE NORMAL WEIGHT AND SHALL OBTAIN A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.

CAST-IN-PLACE CONCRETE NOTES CONT.:

3. REINFORCING MATERIALS SHALL BE AS FOLLOWS:
- A) REINFORCING BARS – ASTM A615, GRADE 60, DEFORMED ALTERNATIVELY, USE GRADE 40 FOR TIES AND STIRRUPS.

B) WELDED REINFORCING BARS – ASTM A706, GRADE 60

C) WELDED WIRE FABRIC – ASTM A185, WELDED STEEL WIRE FABRIC SHEET TYPE – ROLLED TYPE NOT ACCEPTABLE

D) FIBER REINFORCING:

1. STEEL – ASTM A820

2. SYNTHETIC – ASTM C-1116, TYPE III
4. ALL REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE ACCURATELY PLACED IN THE POSITIONS SHOWN AND ADEQUATELY TIED AND SUPPORTED BEFORE CONCRETE IS PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES.
5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS INDICATED ON THE DRAWINGS SHALL GOVERN WHEN IN CONFLICT WITH ACI 318-16.

CONCRETE MASONRY NOTES:

1. CONCRETE MASONRY FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI 530-16 / ASCE 5-16 / TMS 402-16.
2. CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1-16/ ASCE 6-16/ TMS 602-16.
3. REINFORCING STEEL SHALL COMPLY WITH ASTM A615, GRADE 60, SHOP FABRICATED REINFORCING BARS WHICH ARE SHOWN TO BE BENT OR HOOKED.
4. GROUT SHALL COMPLY WITH ASTM C476 OR IBC TABLE 2103-10, AND SHALL BE PROPORTIONED TO OBTAIN A 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI.
5. MORTAR SHALL COMPLY WITH ASTM C270, TYPE S OR M. AGGREGATE FOR MORTAR SHALL COMPLY WITH ASTM C144. AGGREGATE FAILING TO COMPLY WITH ASTM C144 GRADATION REQUIREMENTS MAY BE USED PROVIDED THE MORTAR CAN BE PREPARED TO COMPLY WITH THE AGGREGATE RATIO, WATER RETENTION, AND COMPRESSIVE STRENGTH REQUIREMENTS OF THE PROPERTY SPECIFICATIONS OF ASTM C270. USE TYPE M BELOW GRADE AND TYPE S ABOVE GRADE.
6. PROVIDE VERTICAL REINFORCING BARS OF THE GIVEN SIZE AND SPACING SHOWN. LAP REINFORCING AT ALL SPLICES AS FOLLOWS:
- #3 – 19"

#4 – 25"

#5 – 31"
- #6 – 52"

#7 – 67"

#8 – 93"
- #9 – 119"

#10 OR LARGER –

MECHANICALLY SPLICED'
7. PROVIDE REBAR DOWELS OF THE SAME SIZE AND SPACING AS VERTICAL REINFORCING FROM FOUNDATION. DOWELS SHALL HAVE STANDARD ACI HOOKS.
8. PROVIDE STANDARD 9 GAGE LADDER TYPE HORIZONTAL JOINT REINFORCING IN CMU WALLS AT 16" ON-CENTER. JOINT REINFORCING SHALL COMPLY WITH ASTM A951 AND BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A153, CLASS B.
9. GROUT ALL CELLS SOLID BELOW FINISHED GRADE.

ROUGH CARPENTRY NOTES:

1. ROUGH CARPENTRY FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION (NFPA) "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION".
2. UNLESS OTHERWISE NOTED, ALL NAILING SHALL CONFORM TO THE "FASTENING SCHEDULE" SHOWN IN TABLE R602.3 OF THE VIRGINIA RESIDENTIAL BUILDING CODE 2018 EDITION.
3. HORIZONTAL WOOD FRAMING MEMBERS, JOISTS, RAFTERS, BEAMS AND HEADERS, SHALL COMPLY WITH OS20 "AMERICAN SOFTWOOD LUMBER STANDARD" AND THE FOLLOWING REQUIREMENTS:
- A) MOISTURE CONTENT – SEASONED, WITH 19 PERCENT MAXIMUM MOISTURE CONTENT.

B) GRADE –NO.1.

C) SPECIES –SOUTHERN PINE GRADED UNDER SPIB RULES.
4. VERTICAL WOOD FRAMING MEMBERS, WALL STUDS FOR PERIMETER WALLS, INTERIOR BEARING WALLS AND SHEAR WALLS, SHALL COMPLY WITH OS20 "AMERICAN SOFTWOOD LUMBER STANDARD" AND THE FOLLOWING REQUIREMENTS:
- A) MOISTURE CONTENT – SEASONED, WITH 19 PERCENT MAXIMUM MOISTURE CONTENT.

B) GRADE – SELECT NO. 2.

C) SPECIES –SOUTHERN PINE GRADED UNDER SPIB RULES
5. CONSTRUCTION PANELS SHALL COMPLY WITH PS 1 "U.S. PRODUCT STANDARD FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD" FOR PLYWOOD CONSTRUCTION PANELS AND THE FOLLOWING REQUIREMENTS"
- A) EXTERIOR WALL AND SHEARWALL WALL SHEATHING: 7/16", APA RATED SHEATHING, EXTERIOR EXPOSURE DURABILITY CLASSIFICATION.

B) ROOF SHEATHING: 7/16", APA RATED PLYWOOD SHEATHING, EXTERIOR EXPOSURE DURABILITY CLASSIFICATION.

C) SUBFLOOR SHEATHING: 3/4" APA RATED TONGUE AND GROOVE SUBFLOOR SHEATHING. EXPOSURE 1 DURABILITY CLASSIFICATION.

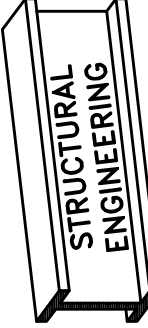
ROUGH CARPENTRY NOTES CONT.:

6. WOOD FRAMING MEMBERS PERMANENTLY EXPOSED TO THE WEATHER AND SILL PLATES AROUND THE BUILDING PERIMETER SHALL BE PRESERVATIVE-TREATED IN ACCORDANCE WITH THE BUILDING CODE. WOOD FRAMING MEMBERS IN DIRECT CONTACT WITH CONCRETE, MASONRY OR GROUT SHALL BE PRESERVATIVE-TREATED IN ACCORDANCE WITH THE BUILDING CODE.
7. STEEL PLATE CONNECTORS SHALL COMPLY WITH ASTM A36 SPECIFICATIONS (Fy=36 KSI). BOLTS CONNECTING WOOD MEMBERS SHALL COMPLY WITH ASTM A307 COMMON STEEL BOLTS, AND SHALL BE 3/4" DIAMETER UNLESS OTHERWISE SPECIFIED.
8. METAL FRAMING ANCHORS SHALL COMPLY WITH ASTM A653 GRADE A (STRUCTURAL QUALITY). ANCHORS SHALL BE CAPABLE OF SUPPORTING THE REACTION'S SHOWN.
9. PROVIDE BRIDGING FOR ALL FLOOR JOISTS AND ROOF RAFTERS. MAXIMUM SPACING SHALL BE 8'-0" UNLESS OTHERWISE NOTED.
10. PROVIDE DOUBLE JOISTS UNDER ALL PARTITIONS WHICH RUN PARALLEL WITH JOISTS, AND UNDER ALL CONCENTRATED LOADS FROM FLOORS ABOVE PROVIDE MULTIPLE STUDS WHERE INDICATED ON THE PLANS.
11. UNLESS OTHERWISE NOTED, ATTACH BLOCKING AND NAILERS TO STEEL FRAMING USING 3/16" DIAMETER POWDER ACTUATED FASTENERS AT 12" ON-CENTER OR 1/2" DIAMETER BOLTS AT 24" ON-CENTER STAGGER FASTENERS TO ALTERNATE SIDES OF BEAM WEB.
12. WHERE MULTIPLE FRAMING MEMBERS ARE INDICATED, SCAB CONTINGENT MEMBERS TOGETHER WITH 16d NAILS AT 12" ON-CENTER, ALTERNATING AT 2 INCHES FROM EACH EDGE.

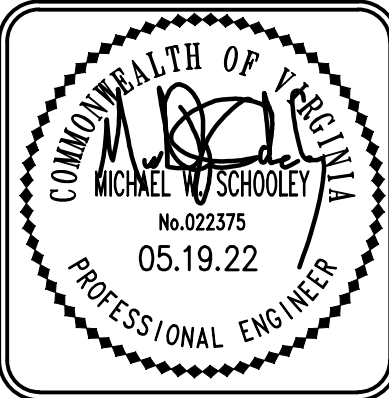
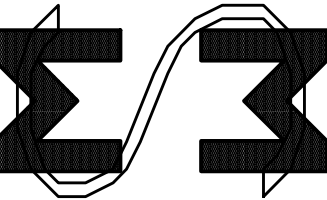
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS			
DESCRIPTION OF BUILDING ELEMENTS		NUMBER AND TYPE OF FASTENER	SPACING OF FASTENERS
JOIST TO SILL OR GIRDER, TOE NAIL		3-8d (2-1/2"x 0.113)	
1"x 6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL		2-10d (2-1/2"x 0.113) 2 staples, 1 3/4"	
2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL		2-16d (3 1/2"x 0.135")	
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL		16d (3 1/2"x 0.135")	16"
TOP OR SOLE PLATE TO STUD, END NAIL		2-16d (3 1/2"x 0.135")	
STUD TO SOLE PLATE, TOE NAIL		2-16d (3 1/2"x 0.135")	
DOUBLE STUDS, FACE NAIL		10d (3"x 0.128")	12"
DOUBLE TO PLATES, FACE NAIL		10d (3"x 0.128")	12"
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANELS		3-16d (3 1/2"x 0.135")	16"
DOUBLE TOP PLATES, MINIMUM 36" OFFSET OF END JOINTS, FACE NAIL IN LAPPED AREA		12-16d (3 1/2"x 0.135")	
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOE NAIL		3-8d (2-1/2"x 0.113)	
RIM JOIST TO TOP PLATE, TOE NAIL		8d (2-1/2"x 0.113)	6"
TOP PLATES, LAPS AT CORNERS AND AND INTERSECTIONS, FACE NAIL		4-10d (3"x 0.128")	
BUILT-UP HEADER, TWO PIECES WITH 1/2" SPACER		16d (3 1/2"x 0.135")	12" along each edge
CONTINUED HEADER, TWO PIECES		16d (3 1/2"x 0.135")	12" along each edge
CEILING JOISTS TO PLATE, TOE NAIL		3-12d (2-1/2"x 0.113)	
CONTINUOUS HEADER TO STUD, TOE NAIL		4-12d (2-1/2"x 0.113)	
CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL		5-10d (3"x 0.128")	
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL		5-10d (3"x 0.128")	
RAFTER TO PLATE, TOE NAIL		2-16d (3 1/2"x 0.135")	
1" BRACE TO EACH STUD AND PLATE, FACE NAIL		2-8d (2-1/2"x 0.113) 2 staples, 1 3/4"	
1"x 6" SHEATHING TO EACH BEARING, FACE NAIL		2-8d (2-1/2"x 0.113) 2 staples, 1 3/4"	
1"x 8" SHEATHING TO EACH BEARING, FACE NAIL		2-8d (2-1/2"x 0.113) 3 staples, 1 3/4"	
WIDER THAN 1"x 8" SHEATHING TO EACH BEARING, FACE NAIL		3-8d (2-1/2"x 0.113) 4 staples, 1 3/4"	
BUILT-UP CORNER STUDS		10d (3"x 0.128")	12"
BUILT-UP CORNER GIRDERS AND BEAMS, 2" LUMBER LAYERS		10d (3"x 0.128")	* See note at bottom of schedule
2" PLANKS		2-16d (3 1/2"x 0.135")	At each bearing
ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS:			
TOE NAIL		4-16d (3 1/2"x 0.135")	
FACE NAIL		3-16d (3 1/2"x 0.135")	
RAFTER TIES TO RAFTERS, FACE NAIL		5-10d (2-1/2"x 0.113)	
COLLAR TIE TO RAFTER, FACE NAIL, OR 1 1/4"x 20 GAGE RIDGE STRAP		3-10d (3"x 0.128")	
5/16" – 1/2" PLYWOOD		8d (2"x 0.113") nail (subfloor, wall) / 8d (2-1/2"x 0.131") nail (roof)	6" (edges) 12" (field)
19/32" – 1" PLYWOOD		10d (2-1/2"x 0.131") nail (roof)	6" (edges) 12" (field)
1/2" GYPSUM SHEATHING		1 1/2" galv. roof nail; 6d (2"x0.131")nail; staple galv. 1 1/2", 1 1/4" screw, type W or S	4" (edges) 8" (field)
5/8" GYPSUM SHEATHING		1 3/4" galv. roof nail; 6d (2"x0.131")nail; staple galv. 1 5/8", 1 5/8" screw, type W or S	4" (edges) 8" (field)
3/4" AND LESS SUBFLOOR UNDERLAYMENT TO FRAMING		8d (2-1/2"x 0.131") nail	6" (edges) 12" (field)
7/8" – 1" SUBFLOOR UNDERLAYMENT TO FRAMING		10d (2-1/2"x 0.131") nail	6" (edges) 12" (field)
1 1/8" – 1 1/4" SUBFLOOR UNDERLAYMENT TO FRAMING		12d (3"x 0.148") nail	6" (edges) 12" (field)
* NAIL EACH LAYER AS FOLLOWS: 32" AT TOP AND BOTTOM AND STAGGERED. TWO NAILS AT ENDS AT EACH SPLICE			

MICHAEL W. SCHOOLEY

4313 BONNEY ROAD
VIRGINIA BEACH, VIRGINIA 23462
OFFICE: (757) 222-1021



CHOOLEY P.E., P.C.

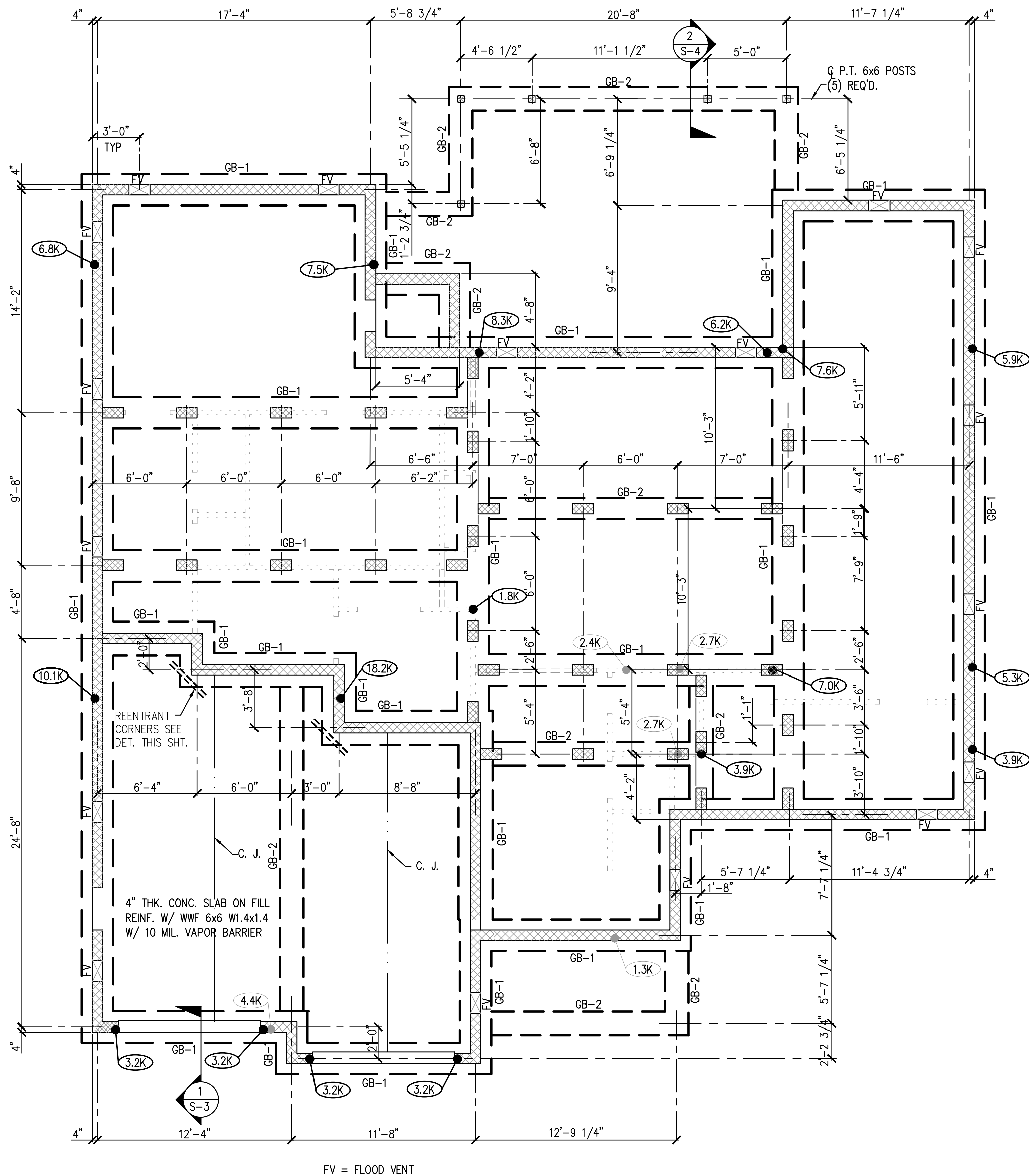


GENERAL NOTES AND NAILING SCHEDULE

LEWIS RESIDENCE
3117 LYNNHAVEN DRIVE
VIRGINIA BEACH, VIRGINIA

DATE:
05.19.22

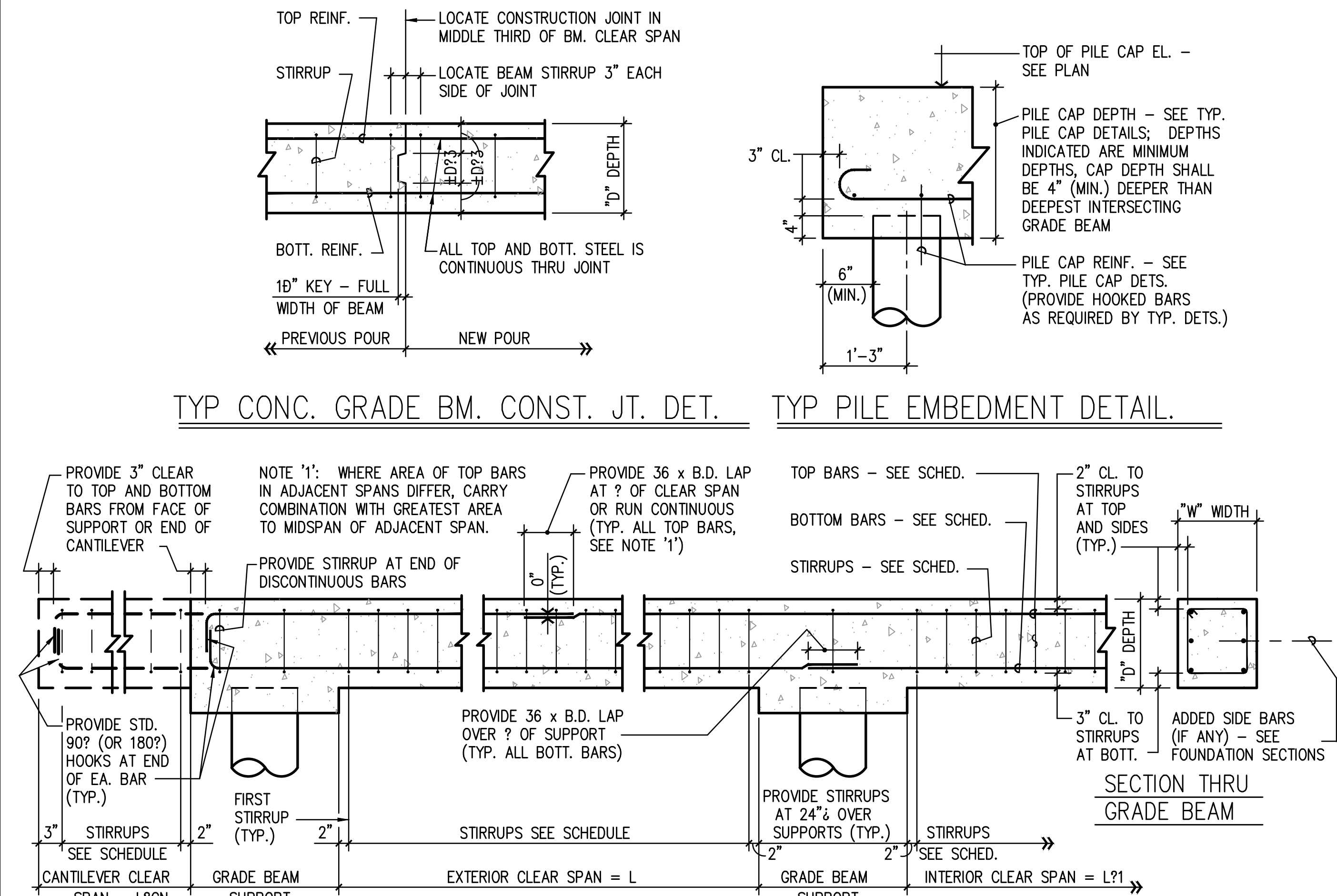
SHEET:
S-1



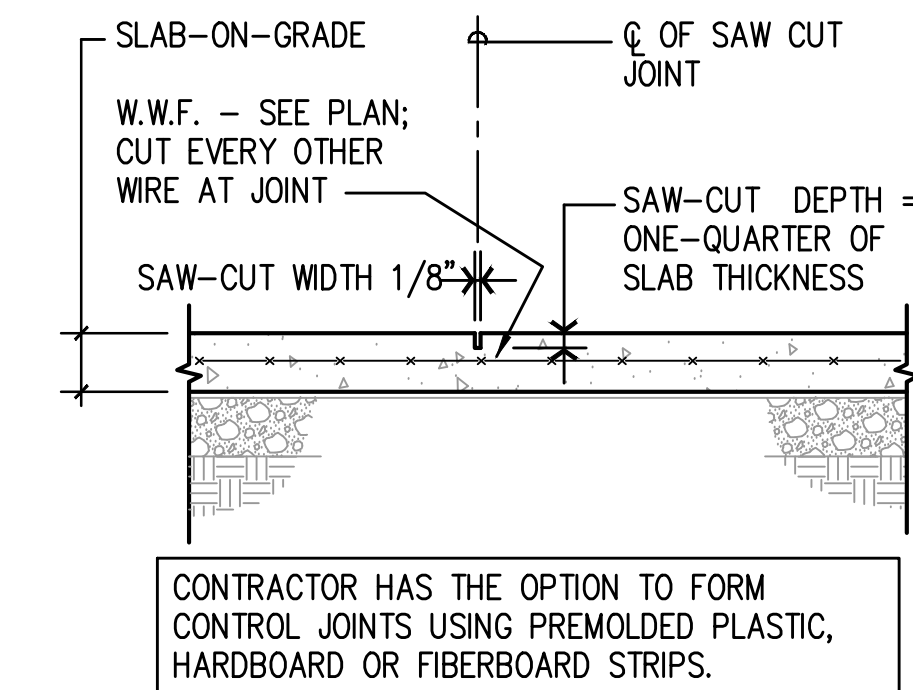
GRADE BEAM PLAN
SCALE: 1/4" = 1'-0"

CONTRACTORS NOTE:
VERIFY ALL DIMENSIONS WITH ARCHITECTURAL
DRAWINGS AND REPORT ANY DISCREPANCIES TO
ARCHITECT PRIOR TO CONSTRUCTION

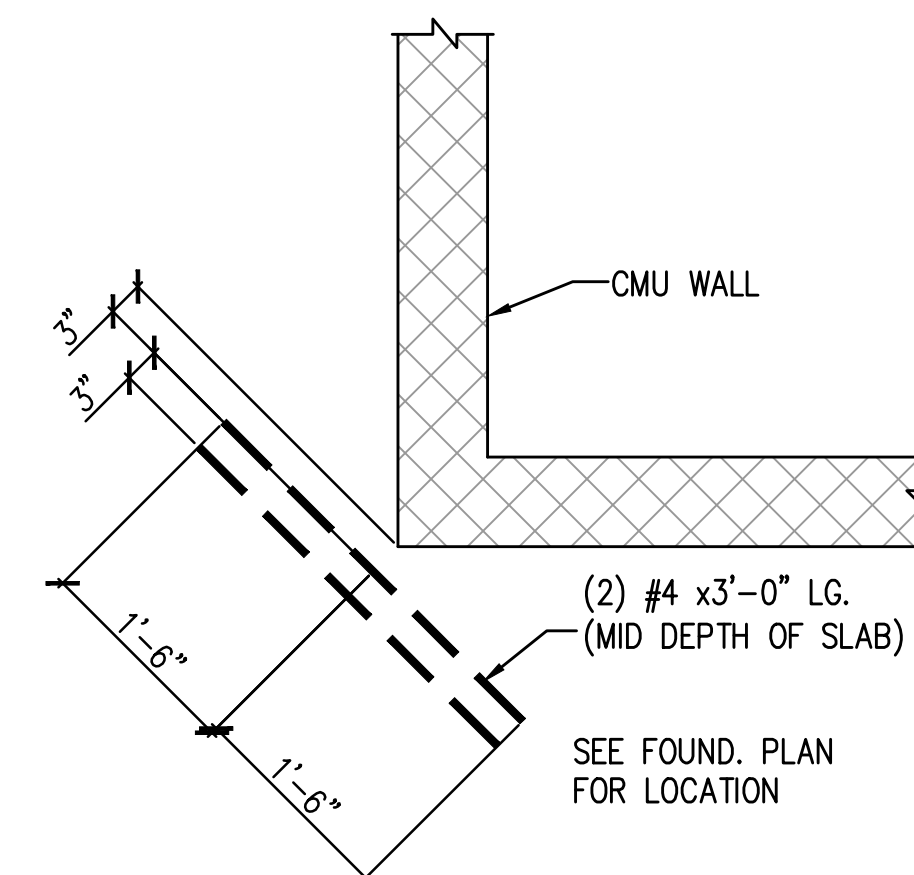
CONCRETE GRADE BEAM SCHEDULE									
MARK	"W" WIDTH (IN.)	"D" DEPTH (IN.)	TOP BARS		BOTTOM BARS		STIRRUPS		REMARKS
			QUAN.	SIZE	QUAN.	SIZE	SIZE	SPA.	
GB 1	24	24	2	#6	2	#6	#4	8"	---
GB 2	18	18	2	#6	2	#6	#4	8"	---



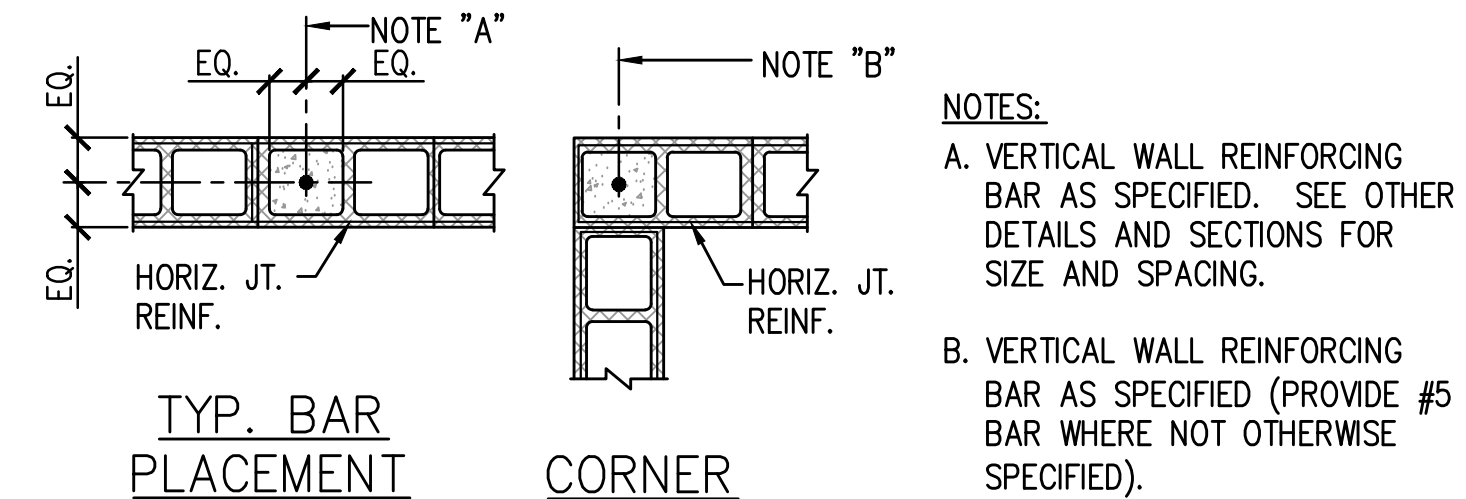
TYPICAL CONCRETE GRADE BEAM DETAIL
NOT TO SCALE



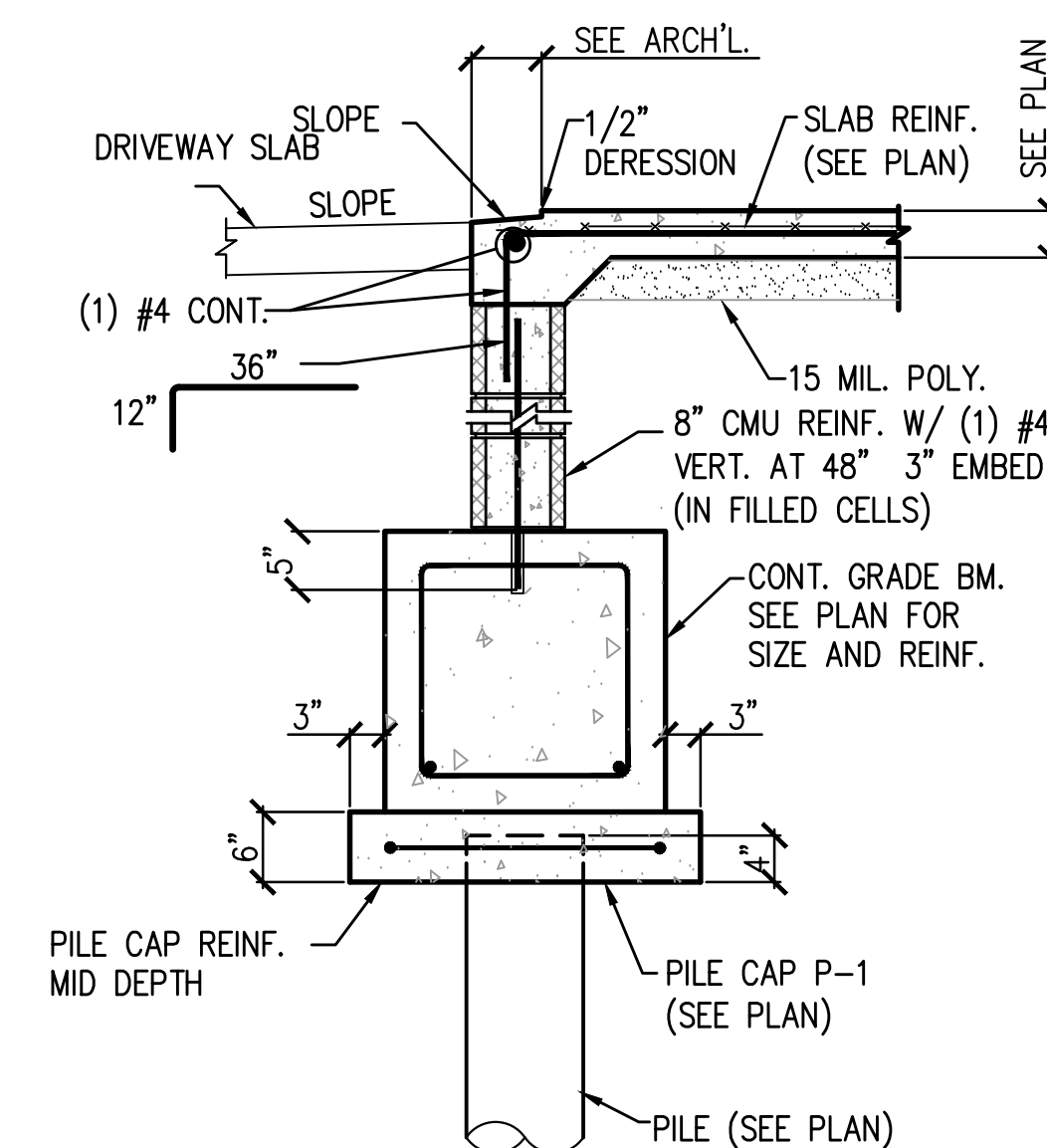
TYPICAL CONTROL JOINT DETAIL
SCALE: NONE



TYPICAL REENTRANT CORNERS
WITHOUT C.J.'S



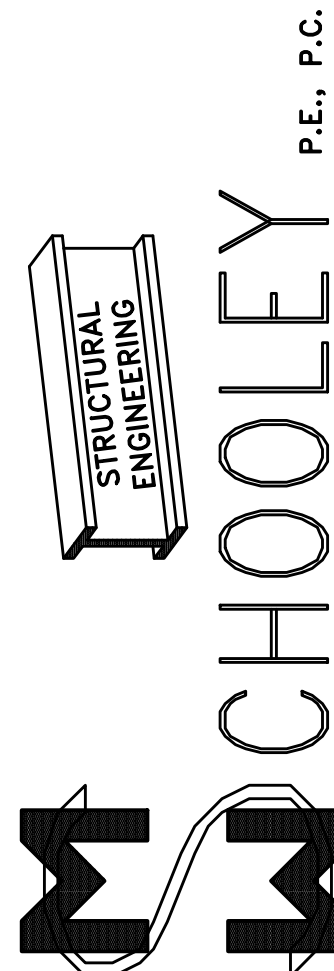
TYPICAL CONCRETE MASONRY VERTICAL
WALL REINFORCING DETAILS
SCALE: NONE



SECTION
SCALE: 3/4" = 1'-0"

MICHAEL W. SCHOOLEY

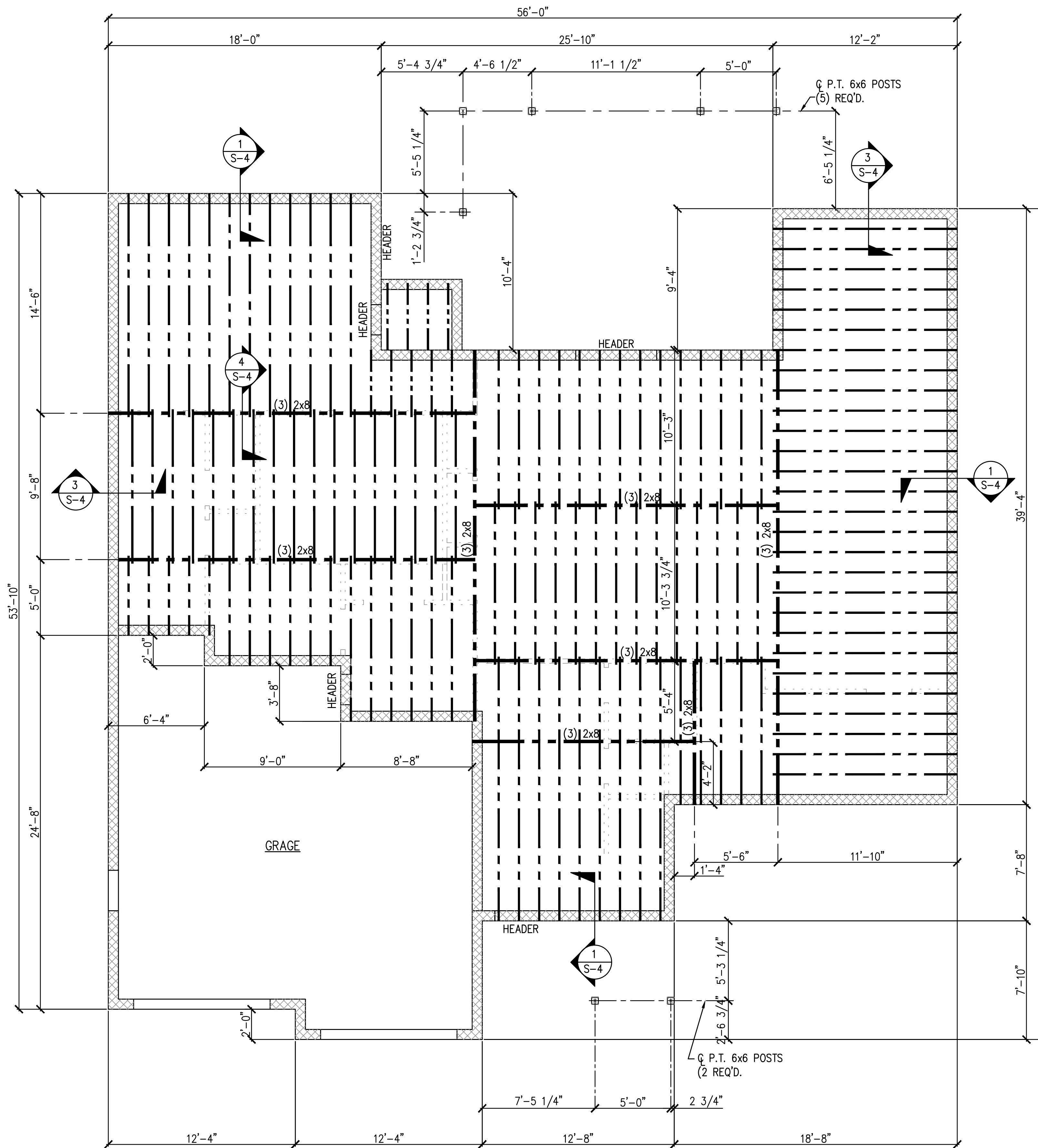
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VIRGINIA BEACH, VIRGINIA 23452
OFFICE: (757) 222-1021



GRADE BEAM PLAN AND DETAILS
LEWIS RESIDENCE
3117 LYNNHAVEN DRIVE
VIRGINIA BEACH, VIRGINIA

DATE:
05.19.22

SHEET:
S-3



FIRST FLOOR FRAMING PLAN

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

ALL FLOOR FRAMING TO BE
2x10 JOIST AT 16" O/C

CONTRACTORS NOTE:
VERIFY ALL DIMENSIONS WITH ARCHITECTURAL
DRAWINGS AND REPORT ANY DISCREPANCIES TO
ARCHITECT PRIOR TO CONSTRUCTION

CONCRETE GRADE BEAM SCHEDULE

MARK	"W" WIDTH (IN.)	"D" DEPTH (IN.)	TOP BARS		BOTTOM BARS		STIRRUPS	SPA.	REM
			QUAN.	SIZE	QUAN.	SIZE	SIZE		
GB 1	24	24	2	#6	2	#6	#4	8"	-
GB 2	18	18	2	#6	2	#6	#4	8"	-
GB 3	XX	XX	XX	XX	XX	XX	#4	XX	-

NOTE:
EXTEND SHEATHING 16" MIN. ABOVE SOLE PLATE AND
FASTEN TO EACH STUD W/ (5) 8d NAILS

7/16" WOOD PANEL
SHEATHING SEE
SHEARWALL PLANS,
SCHED.

FASTEN SHEATHING TO
SILL PLATE W/ GALV.
10d NAILS AT 3" SPA.

P.T. 2x8 PLATE (CONT.)
1/2" DIA. ANCH. ROD AT
AT 48" O/C. 12" (MIN.)
EMBEDDED INTO CMU

2x4 STUDS
AT 16" O/C
P.T. 2x8 PL. (CONT.) W/ 1/2"
DIA. ANCH. ROD AT 48" O/C.
7" (MIN.) EMBEDDED INTO CMU
FLR. JST.
(SEE PLAN)
8" CMU REINF. W/ (1)
#4 VERT. AT 48"
(IN FILLED CELLS)
CONT. GRADE BM.
SEE PLAN FOR
SIZE AND REINF.
PILE CAP REINF.
MID DEPTH
PILE CAP P-1
(SEE PLAN)
PILE (SEE PLAN)

SECTION
SCALE: 3/4" = 1'-0"

DRILL HOLES INTO GRADE BEAM TO RECEIVE DOWELS, CLEAN
HOLES OF ALL DEBRIS AND FILL WITH EPOXY. HOLE DIAMETER
SHALL BE 1/8" LARGER THAN DOWEL SIZE OR AS SPECIFIED BY
THE EPOXY MANUF. REQUIREMENTS.

2x4 STUDS
AT 16" O/C
2x BLK'G.
AT 32"
8" CMU REINF. W/
(1) #4 VERT. AT 48"
(IN FILLED CELLS)
CONT. GRADE BM.
SEE PLAN FOR
SIZE AND REINF.
PILE CAP REINF.
MID DEPTH
PILE CAP P-1
(SEE PLAN)
PILE (SEE PLAN)

SECTION
SCALE: 3/4" = 1'-0"

PROVIDE STD.
180 DEG. HOOK
EA. END
(4) #4
BOT.
P-1
(MIN. DEPTH 30'-0")

SIMPSON STAINLESS STL.
ABU-66 POST ANCHOR SEE
MANUF'R. FOR REQ'D.
ANCHORAGE INTO CONC. AND
FASTENING TO POSTS (TYP.)
P.T. 6x POST
(SEE PLAN)
5/8" DIA. STAIN
STL. ANCH. ROD
CONT. GRADE BM.
SEE PLAN FOR
SIZE AND REINF.
PILE CAP REINF.
MID DEPTH
PILE CAP P-1
(SEE PLAN)
PILE (SEE PLAN)

SECTION
SCALE: 3/4" = 1'-0"

BLK'G. EVERY
OTHER JST. SPA.
SUB-FLR'G.
(SEE NOTES)
FLR. JST.
(SEE PLAN)
FLR. JST.
(SEE PLAN)
(3) P.T. GIRDERS
(SEE PLAN)
METAL TERMITE
SHIELD (CONT.)
4" THK. (MIN.)
SOLID TOP COURSE
CRAWLSPACE
GRD.
GRD.
8" CMU PIER REINF. W/
(1) #4 VERT. AT 48"
(IN FILLED CELLS)
CONT. GRADE BM.
SEE PLAN FOR
SIZE AND REINF.
PILE CAP REINF.
MID DEPTH
PILE CAP P-1
(SEE PLAN)
PILE (SEE PLAN)

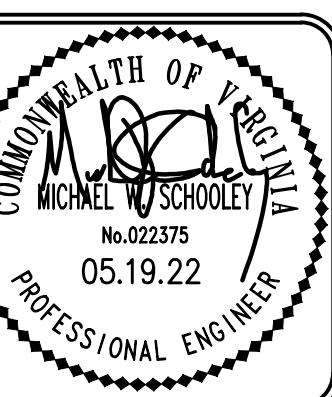
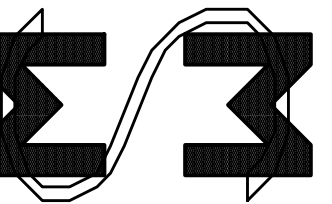
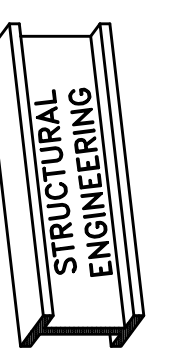
SECTION
SCALE: 3/4" = 1'-0"

COUNTINUES CMU PERIMETER
FOUNDATION WALL
SOLID CMU PERIMETER
FOUNDATION WALL
FLOOD OPENING
CRAWLSPACE
INTERIOR GRADE
EXTERIOR GRADE

FLOOD FOUNDATION OPENING
SCALE: 3/4" = 1'-0"

MICHAEL W. SCHOOLEY

4313 BONNEY ROAD
VIRGINIA BEACH, VIRGINIA 23452
OFFICE: (757) 222-1021



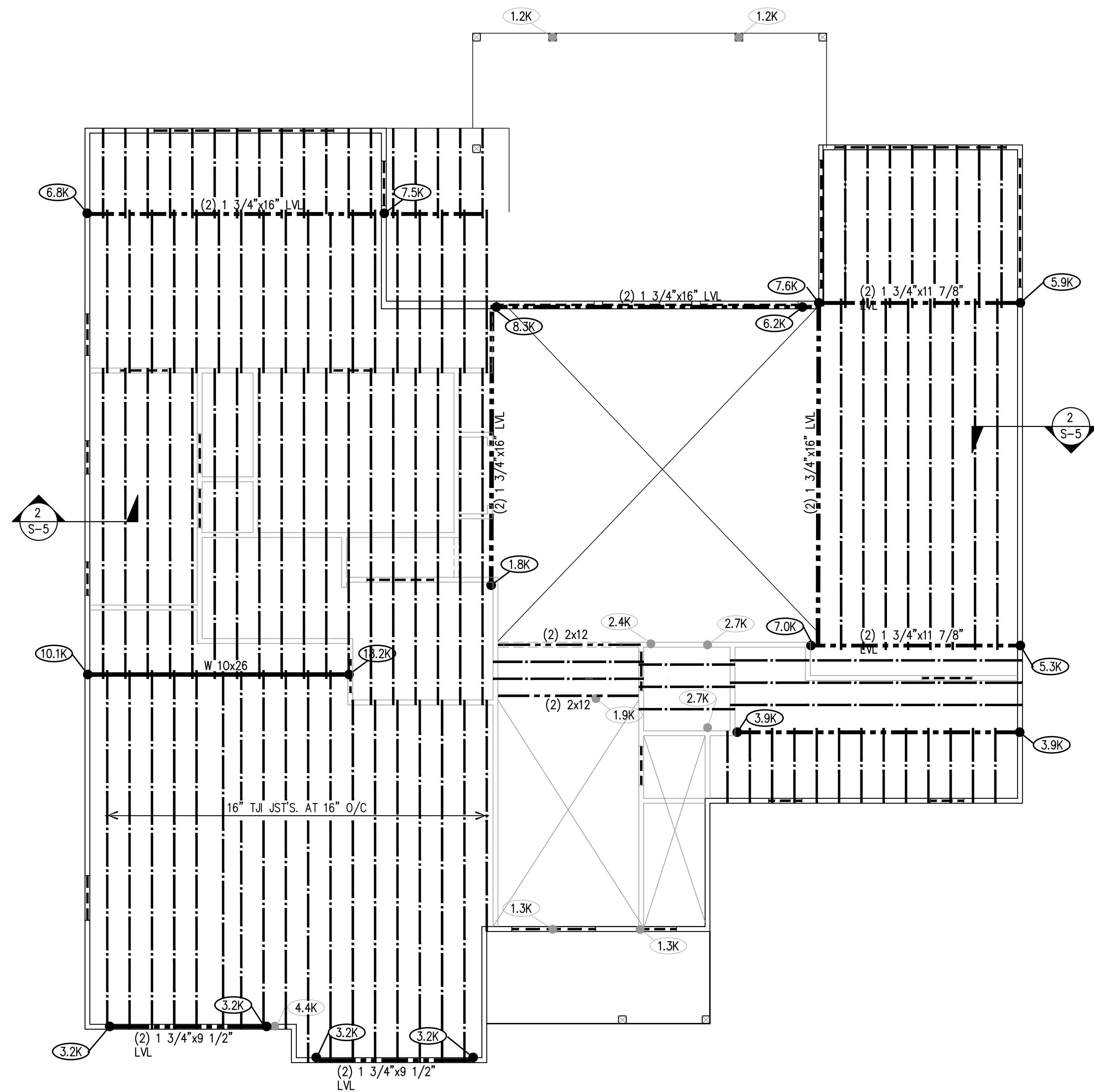
FIRST FLOOR FRAMING PLAN AND SECTIONS

LEWIS RESIDENCE
3117 LYNNHAVEN DRIVE
VIRGINIA BEACH, VIRGINIA

DATE:
05.19.22

SHEET:
S-4

P.E., P.C.



ALL FLOOR FRAMING TO BE 14"
TJI AT 16" O/C (U.N.O.)

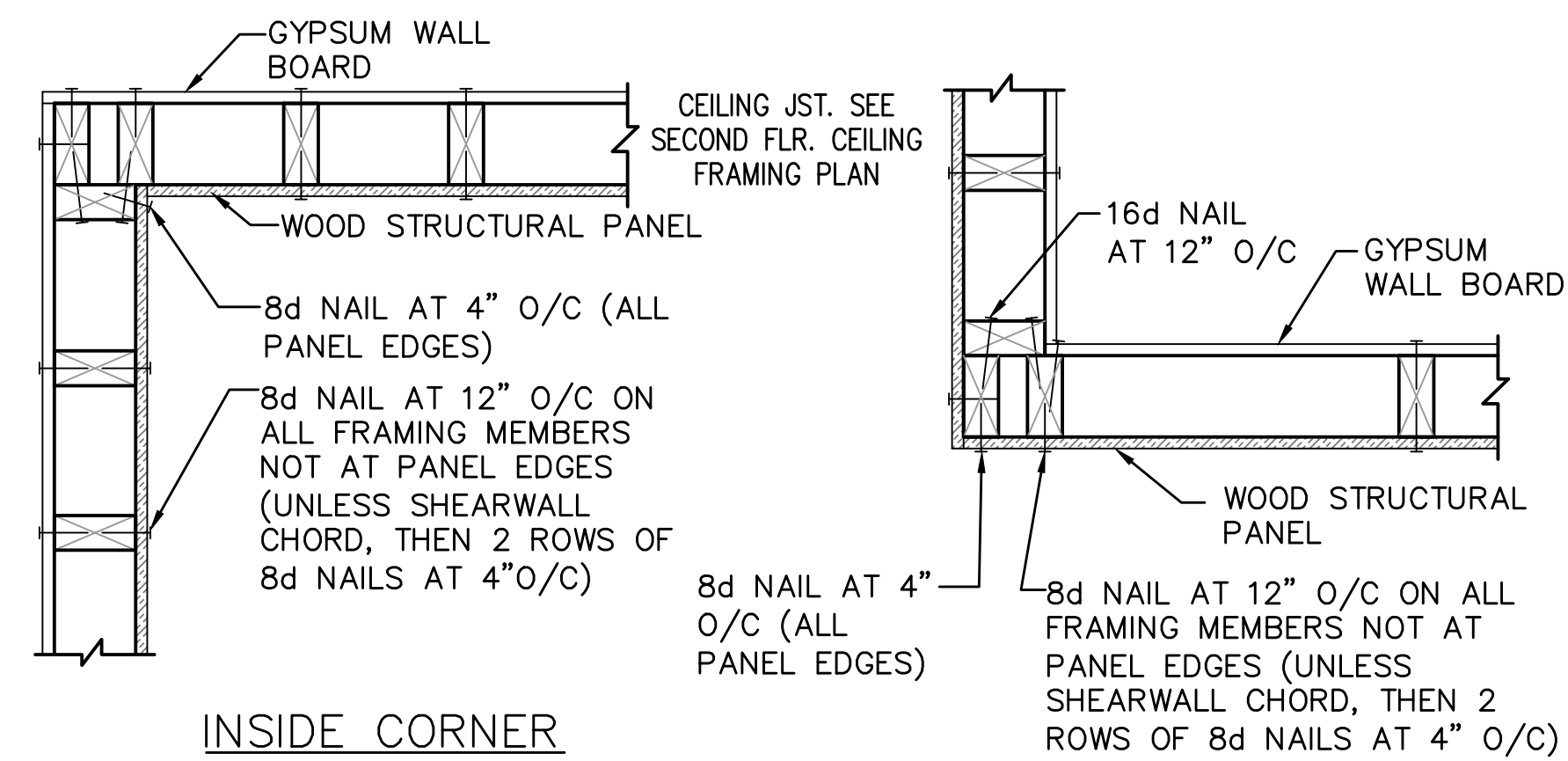
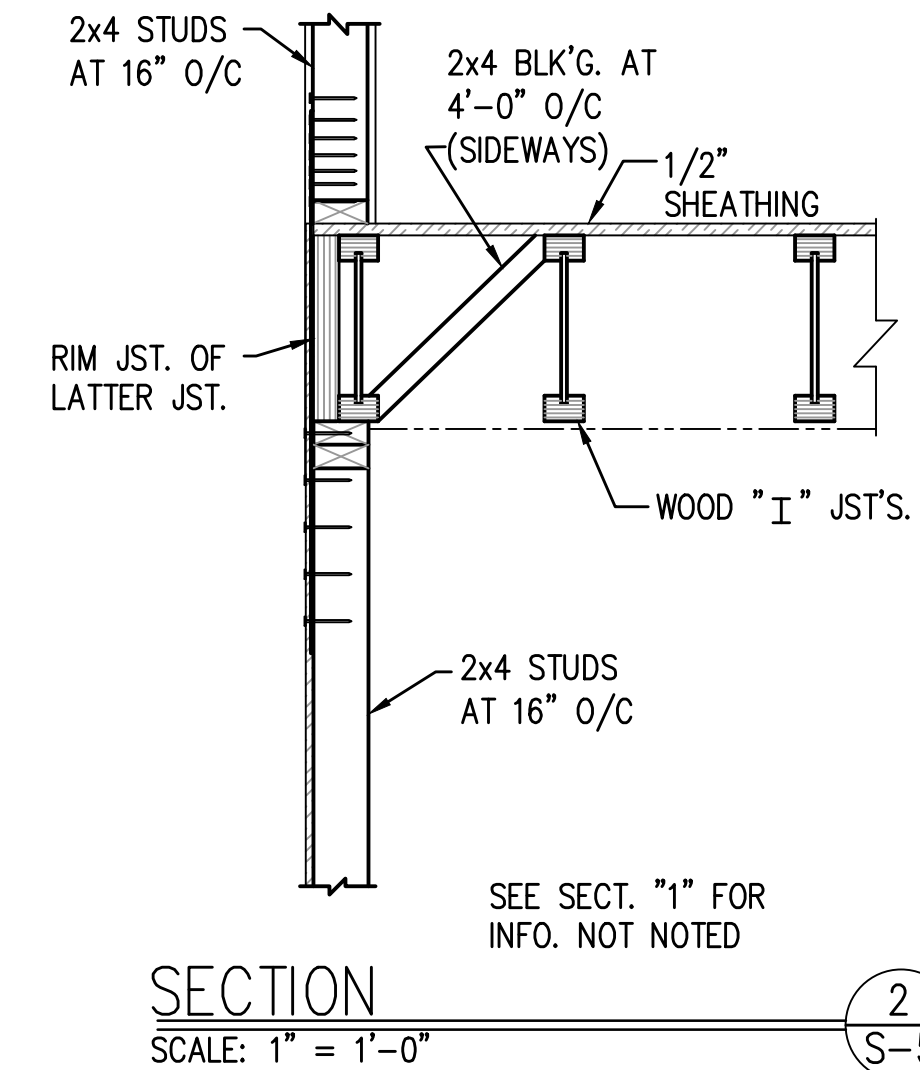
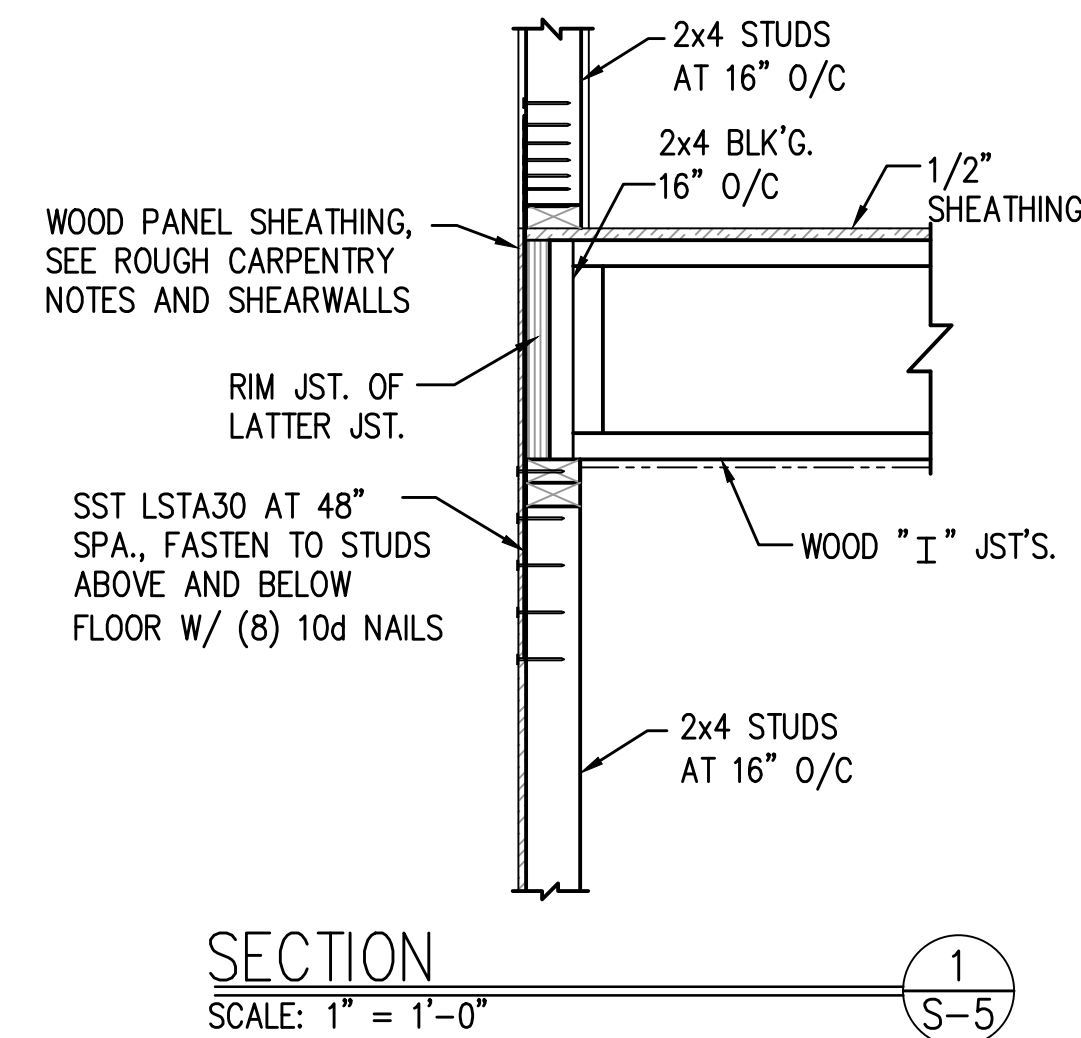
SECOND FLOOR FRAMING PLAN

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

PLAN NOTES:

1. ALL DIMENSIONS NOT SHOWN SEE ARCHITECTURAL DRAWINGS.
2. FOR FRAMING NOTES SEE SHEET S-1
3. FOR BEARING ELEVATIONS SEE ARCHITECTURAL DRAWINGS.
4. --- = HEADER SEE SCHEDULE ON S-5. POINT LOADS SHOWN AS X.XK ON PLAN FOR ADDITIONAL FRAMING INFORMATION SEE SECTIONS AND DETAILS ON THIS SHEET

7/16" WOOD PANEL SHEATHING CONT. OVER RIM JOIST WITH FIRST JOIST LOCATED 16" MIN. ABOVE SOLE PLATE AND 16" MIN. BELOW DOUBLE TOP PLATE AND FASTENED TO EACH STUD WITH (5) 8d NAILS OR LOCATE JOIST FOR FULL SHEET (4'-0") 3" MIN. ON TO RIM JOIST AND FASTEN AT JOIST WITH TWO ROWS OF 8d NAILS AT 4" SPACING.



INSIDE CORNER
CORNER FRAMING DETAILS
SCALE: NONE

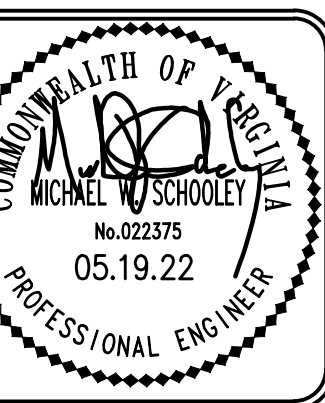
OUTSIDE CORNER

MICHAEL W. SCHOOLEY

4313 BONNEY ROAD
VIRGINIA BEACH, VIRGINIA 23452
OFFICE: (757) 222-1021



STRUCTURAL
ENGINEERING
CHOOLEY
P.E., P.C.

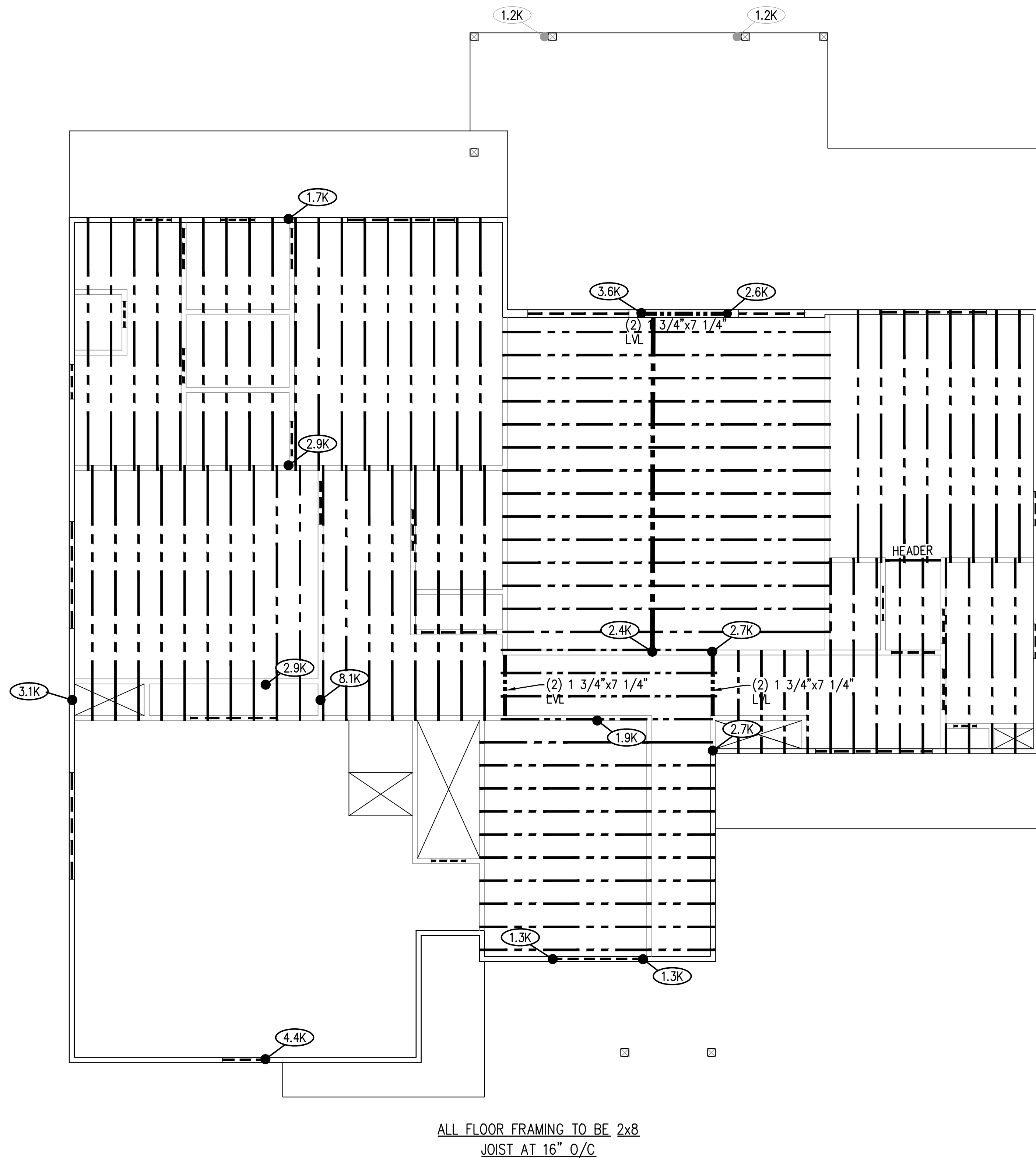


SECOND FLOOR FRAMING PLAN AND SECTIONS

LEWIS RESIDENCE
3117 LYNNHAVEN DRIVE
VIRGINIA BEACH, VIRGINIA

DATE:
05.19.22

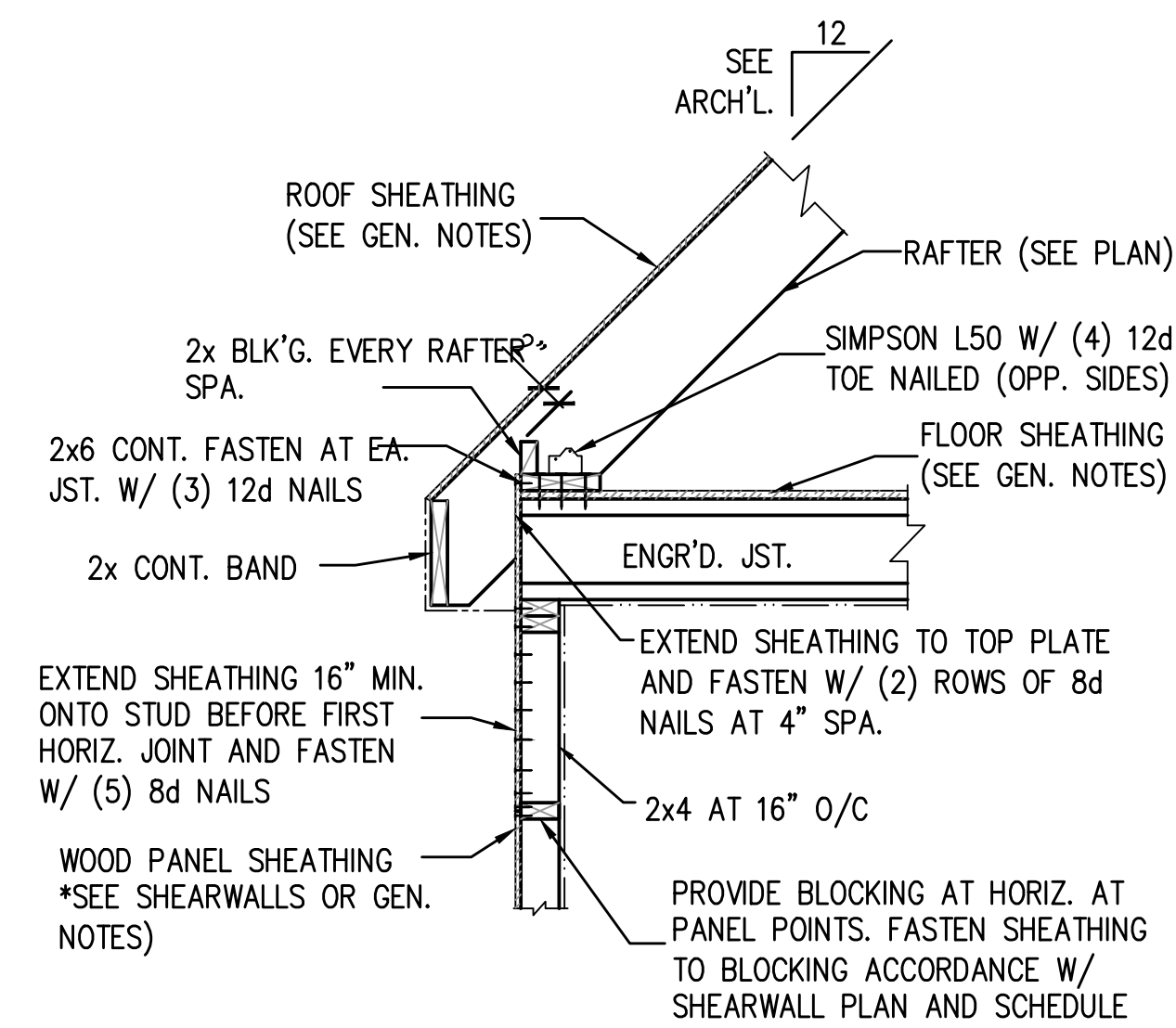
SHEET:
S-5



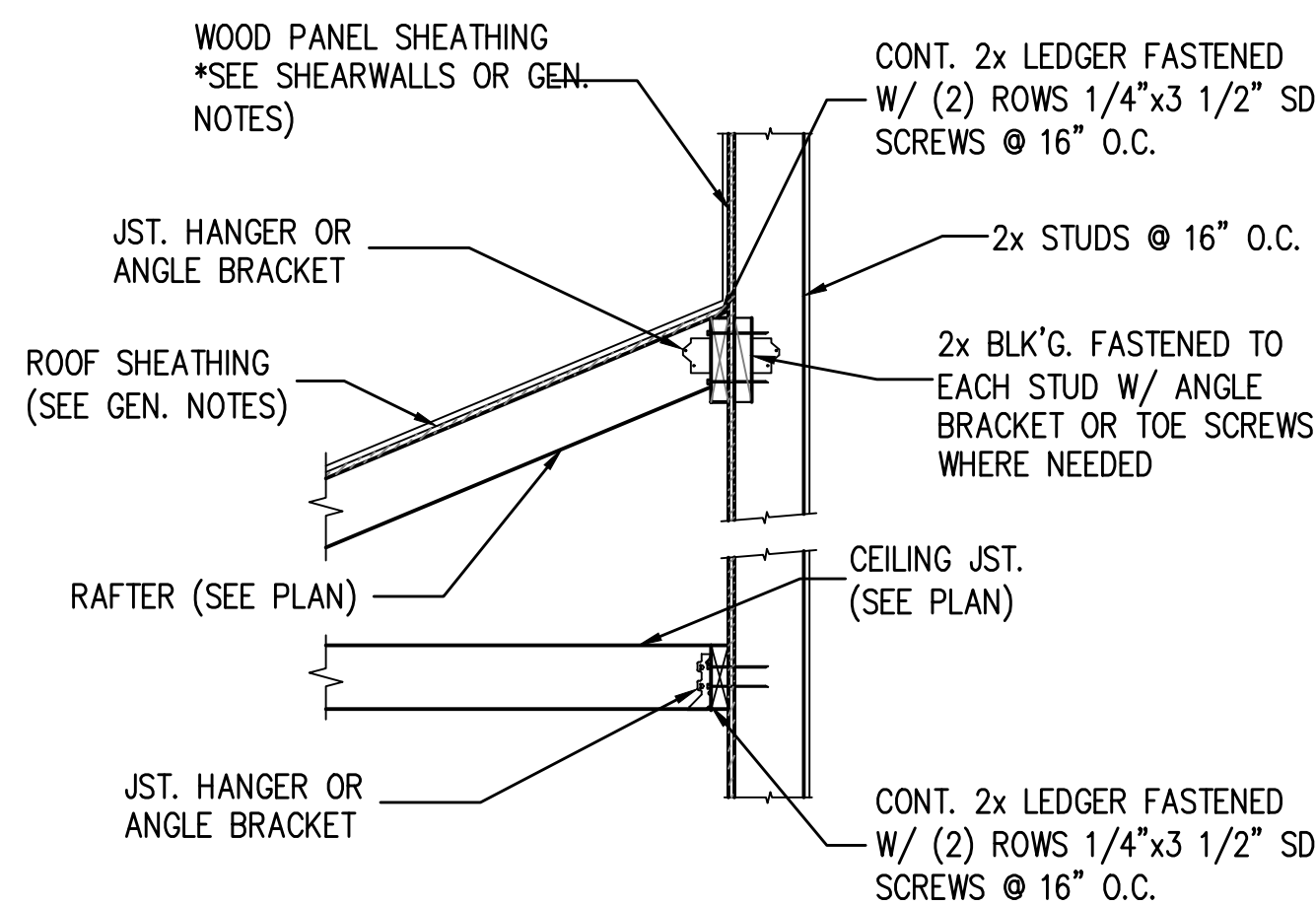
SECOND FLOOR CEILING FRAMING PLAN
SCALE: 1/4" = 1'-0"

PLAN NOTES:

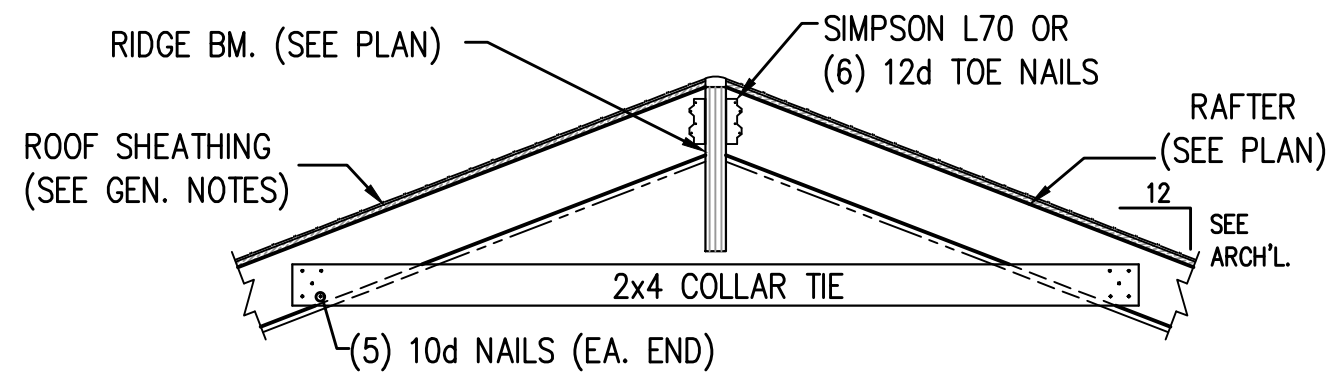
1. ALL DIMENSIONS NOT SHOWN SEE ARCHITECTURAL DRAWINGS.
2. FOR FRAMING NOTES SEE SHEET S-1
3. FOR BEARING ELEVATIONS SEE ARCHITECTURAL DRAWINGS.
4. --- = HEADER SEE SCHEDULE ON S-5
5. POINT LOADS SHOWN AS (X)K ON PLAN FOR ADDITIONAL FRAMING INFORMATION SEE SECTIONS AND DETAILS ON THIS SHEET



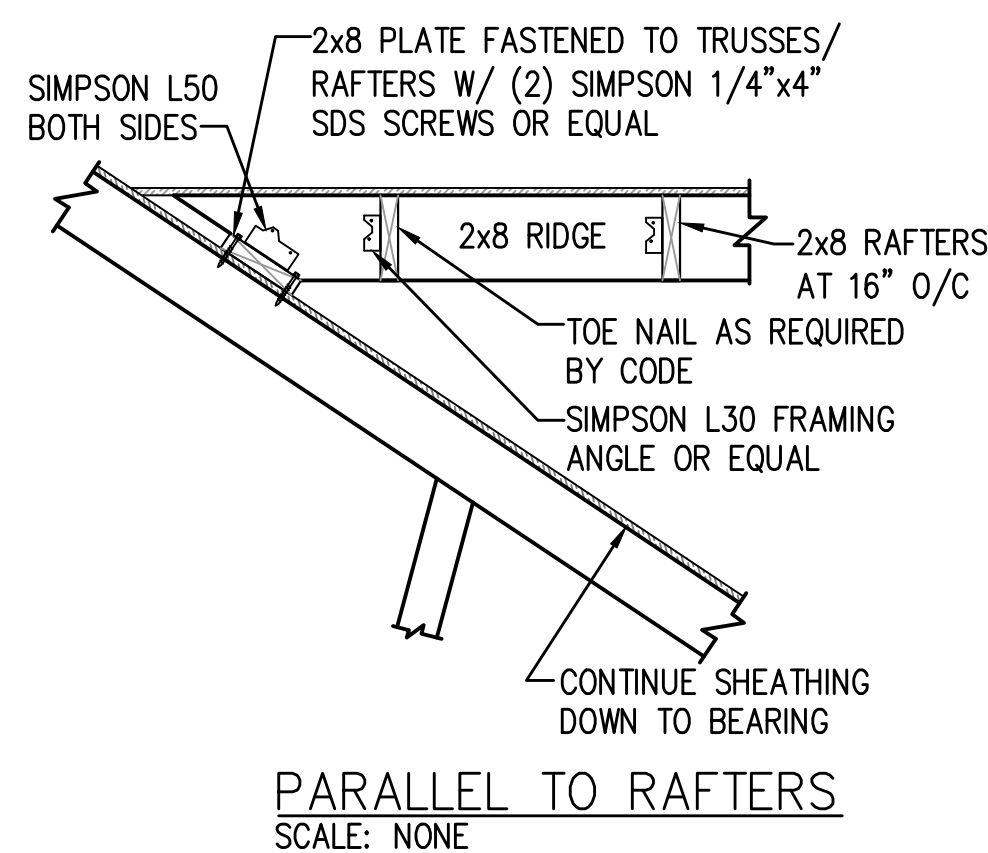
CONVENTIONAL RAFTER ON PLATE DETAIL
SCALE: 3/4" = 1'-0"



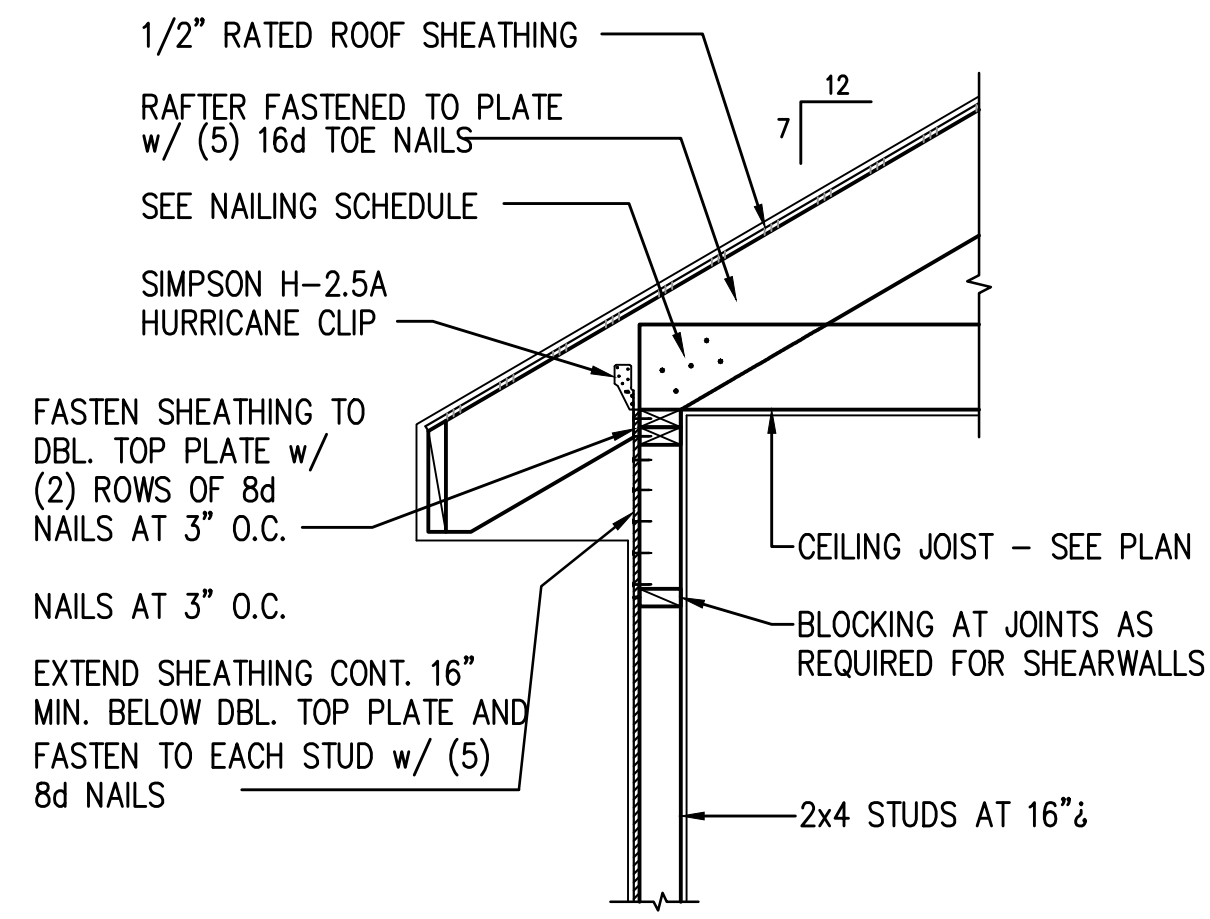
DECK/PORCH ROOF AT WALL DETAIL
SCALE: 3/4" = 1'-0"



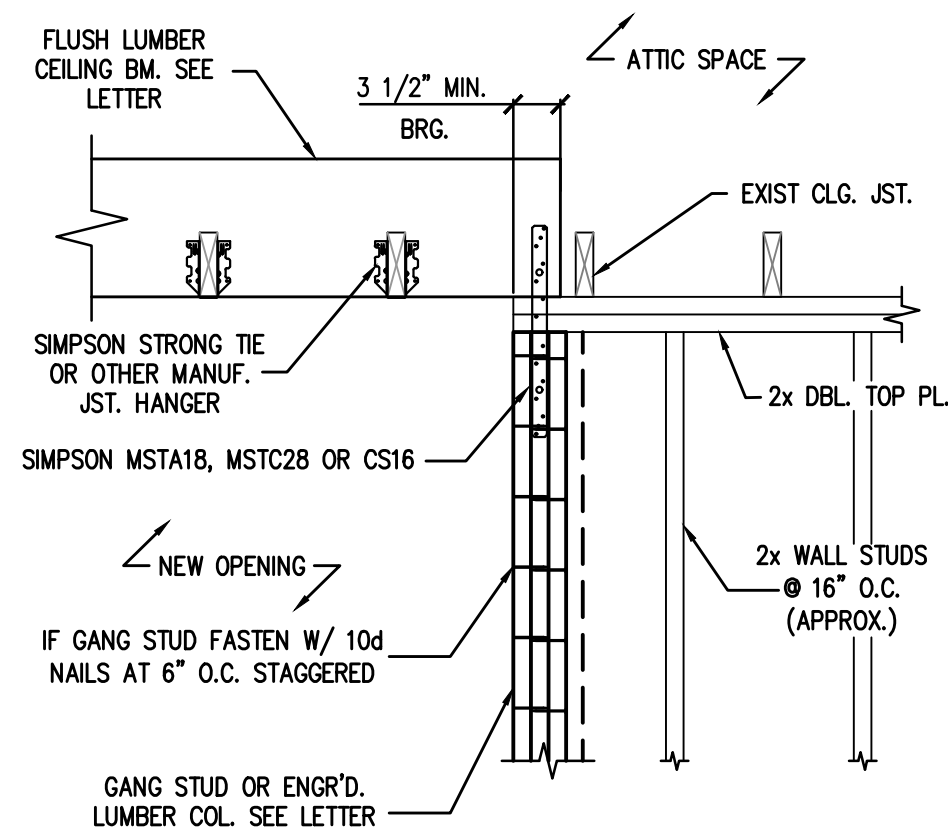
TYPICAL COLLAR TIE DETAIL
SCALE: 3/4" = 1'-0"



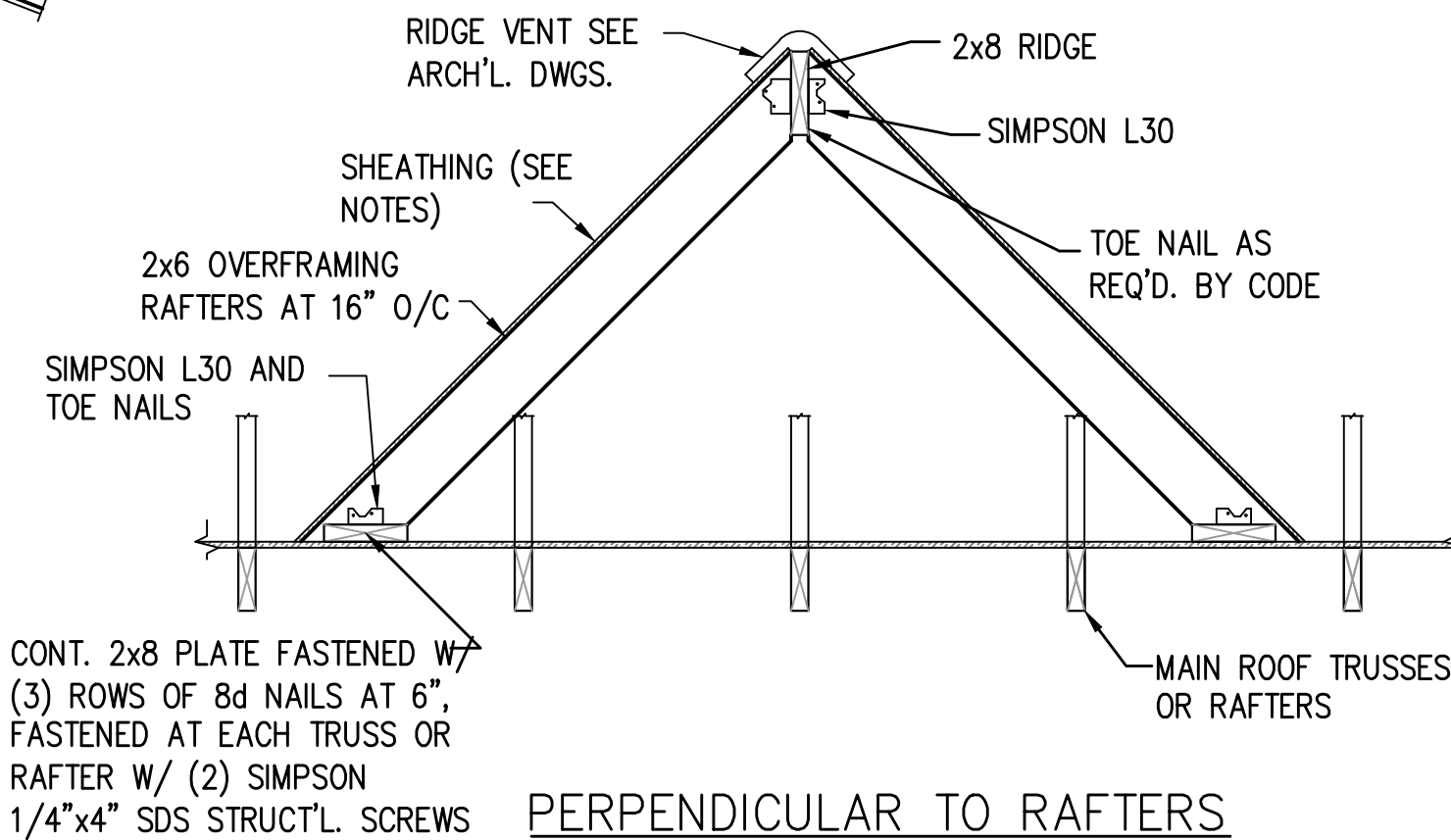
PARALLEL TO RAFTERS
SCALE: NONE



RAFTER BEARING ON WALL SECTION
SCALE: 3/4" = 1'-0"



FLUSH CEILING BEAM PARALLEL TO WALL
SCALE: 1" = 1'-0"

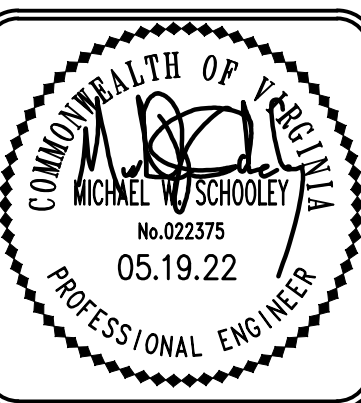
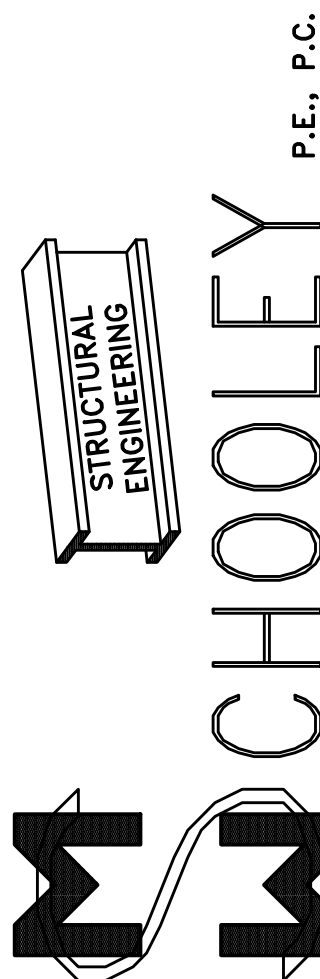


PERPENDICULAR TO RAFTERS
SCALE: NONE

TYPICAL OVER FRAMING DETAILS

MICHAEL W. SCHOOLEY

4313 BONNEY ROAD
VIRGINIA BEACH, VIRGINIA 23452
OFFICE: (757) 222-1021



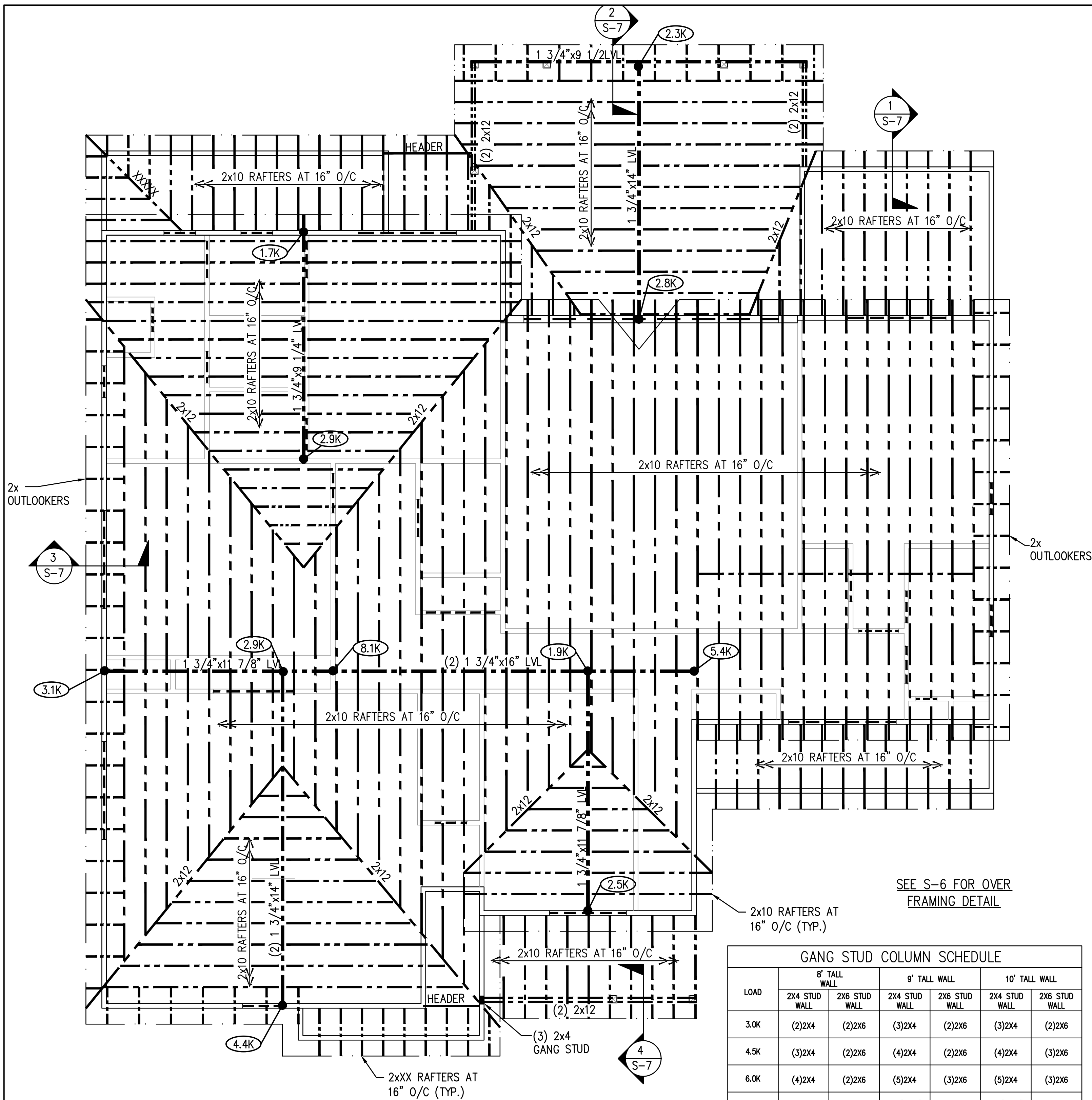
SECOND FLOOR CEILING FRAMING PLAN
AND SECTIONS

LEWIS RESIDENCE
3117 LYNNHAVEN DRIVE
VIRGINIA BEACH, VIRGINIA

DATE:
05.19.22

SHEET:
S-6

P.E., P.C.



ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

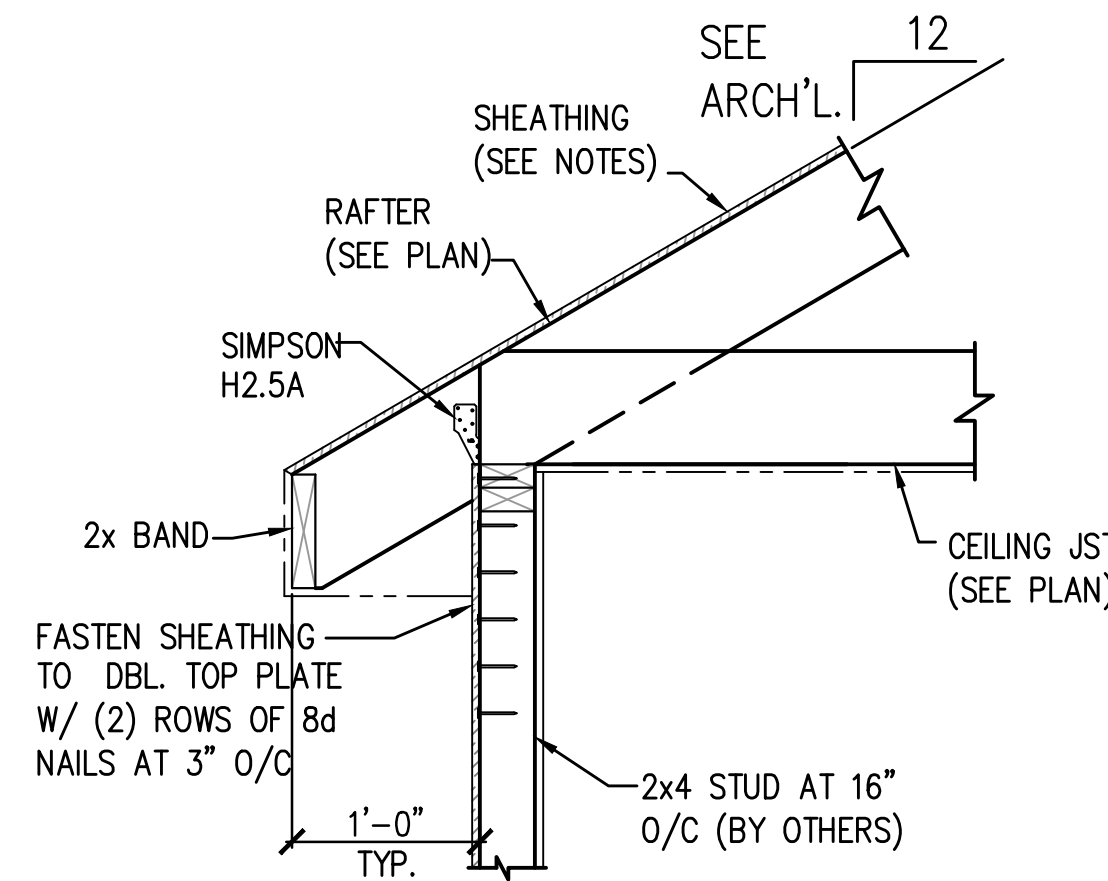
PLAN NOTES:

1. ALL DIMENSIONS NOT SHOWN SEE ARCHITECTURAL DRAWINGS.
2. FOR FRAMING NOTES SEE SHEET S-5
3. FOR BEARING ELEVATIONS SEE ARCHITECTURAL DRAWINGS.
4. --- = HEADER SEE SCHEDULE ON S-X
5. POINT LOADS SHOWN AS $\odot$ ON PLAN FOR ADDITIONAL FRAMING INFORMATION SEE SECTIONS AND DETAILS ON THIS SHEET

LOAD	GANG STUD COLUMN SCHEDULE					
	8' TALL WALL		9' TALL WALL		10' TALL WALL	
	2X4 STUD WALL	2X6 STUD WALL	2X4 STUD WALL	2X6 STUD WALL	2X4 STUD WALL	2X6 STUD WALL
3.0K	(2)2X4	(2)2X6	(3)2X4	(2)2X6	(3)2X4	(2)2X6
4.5K	(3)2X4	(2)2X6	(4)2X4	(2)2X6	(4)2X4	(3)2X6
6.0K	(4)2X4	(2)2X6	(5)2X4	(3)2X6	(5)2X4	(3)2X6
7.5K	(5)2X4	(3)2X6	3.5"x3.5" PSL COLUMN	(3)2X6	3.5"x3.5" PSL COLUMN	(4)2X6
10K	3.5"x5.25" PSL COLUMN	(4)2X6	3.5"x5.25" PSL COLUMN	(4)2X6	3.5"x5.25" PSL COLUMN	(4)2X6
12K	3.5"x7.0" PSL COLUMN	(4)2X6	3.5"x7.0" PSL COLUMN	(4)2X6	3.5"x7.0" PSL COLUMN	5.25"x7.0" PSL COLUMN
15K	3.0" DIA. std PIPE	(5)2X6	3.0" DIA. std PIPE	5.25"x5.25" PSL COLUMN	3.0" DIA. std PIPE	5.25"x5.25" PSL COLUMN
20K	3.0" DIA. std PIPE	5.25"x5.25" PSL COLUMN	3.0" DIA. std PIPE	5.25"x7.0" PSL COLUMN	3.0" DIA. std PIPE	5.25"x7.0" PSL COLUMN

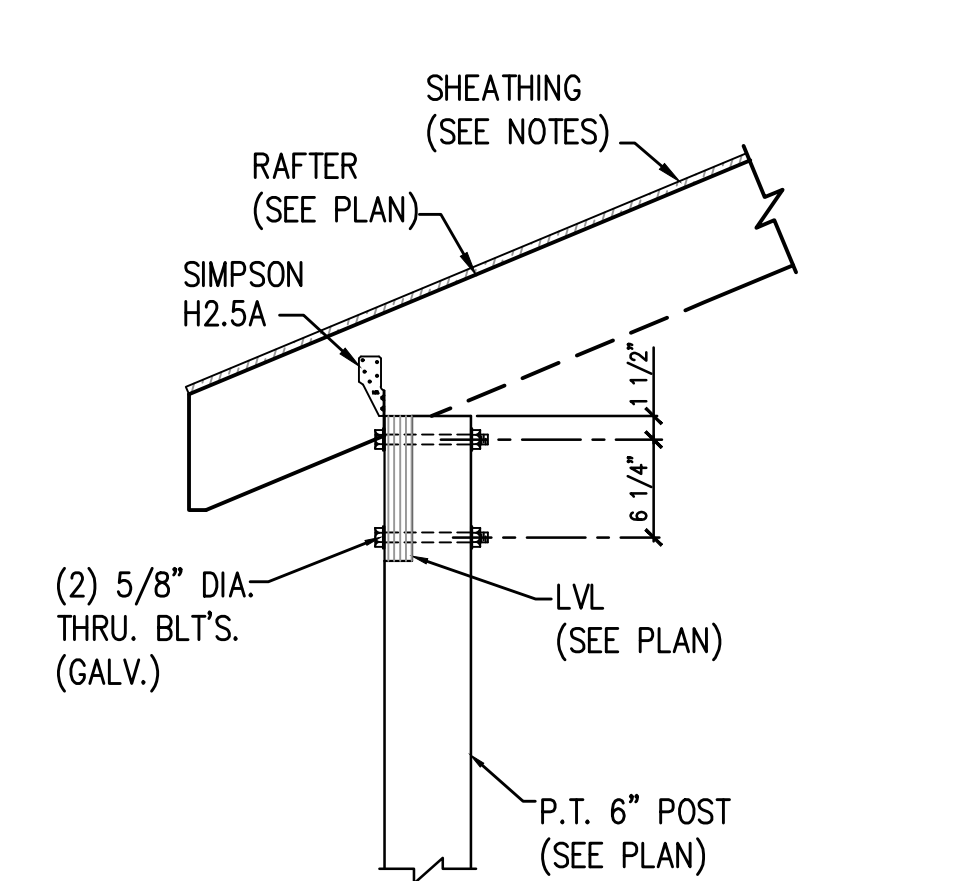
SCHEDULE NOTES:

1. SCHEDULE FOR GANG STUDS DOES NOT SUPERSEDE ANY COLUMN SIZES CALLED OUT ON FRAMING PLANS.
2. SCHEDULE FOR GANG STUDS WITHIN A WALL, SEE PLANS FOR STAND ALONE COLUMN SIZES.
3. SIZES SHOWN ARE MINIMUM NUMBER OF STUDS, TOTAL COLUMN WIDTH SHOULD PROVIDE FULL BEARING UNDER SUPPORTED MEMBER.
4. SEE ENGINEERED WOOD PLANS FOR POINT LOAD VALUES



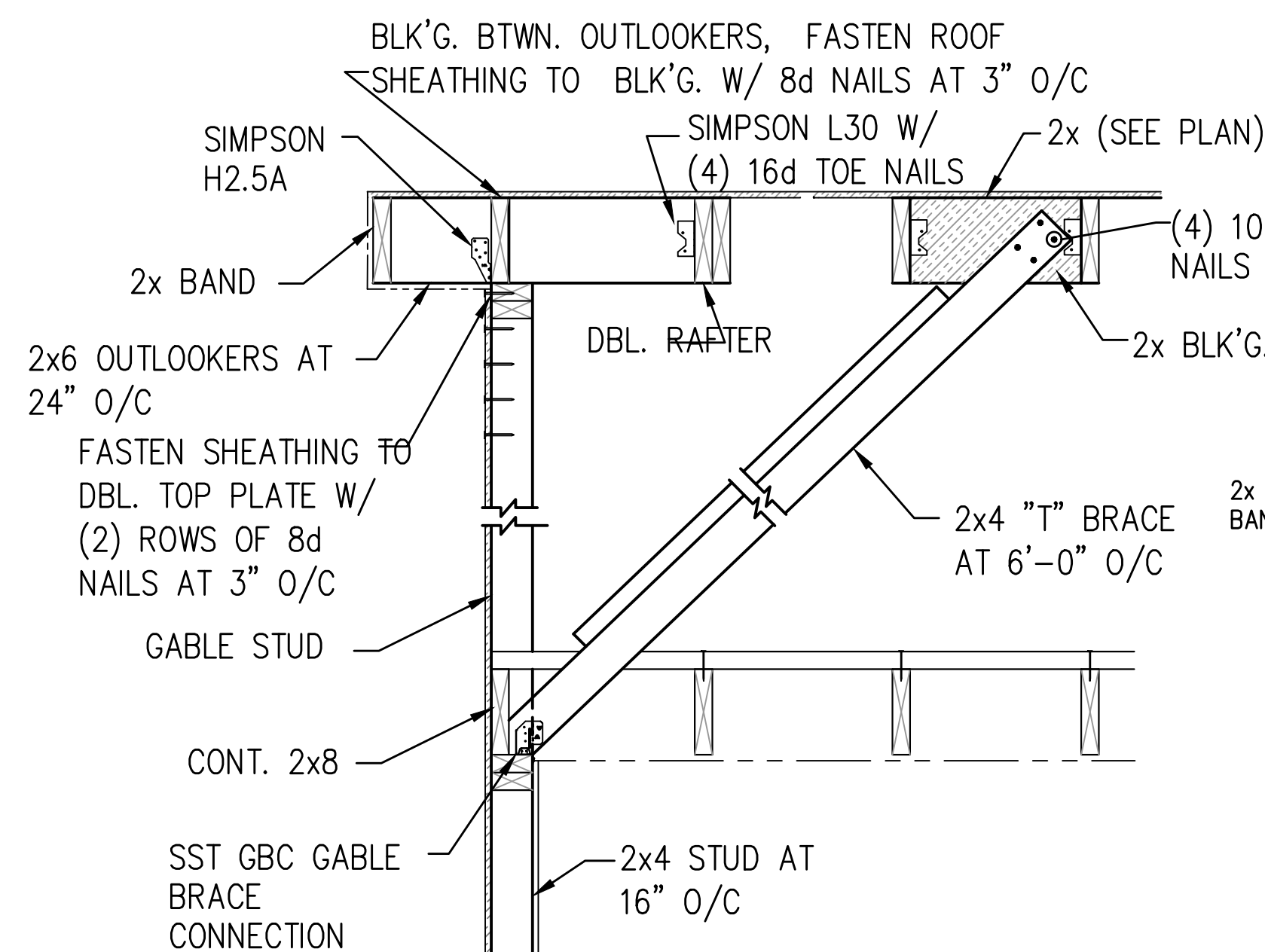
SECTION

SCALE: 1" = 1'-0"



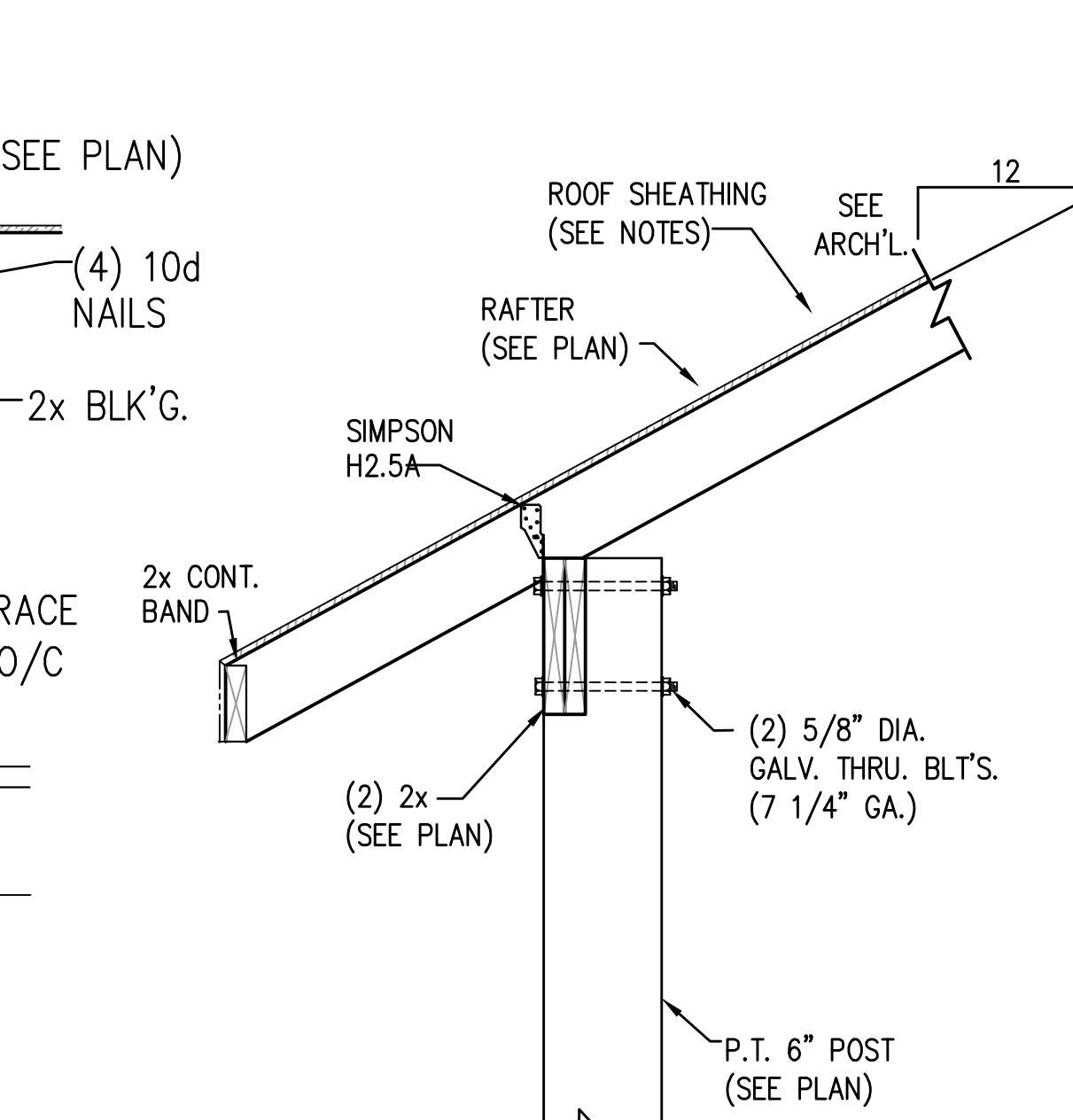
SECTION

SCALE: 1" = 1'-0"



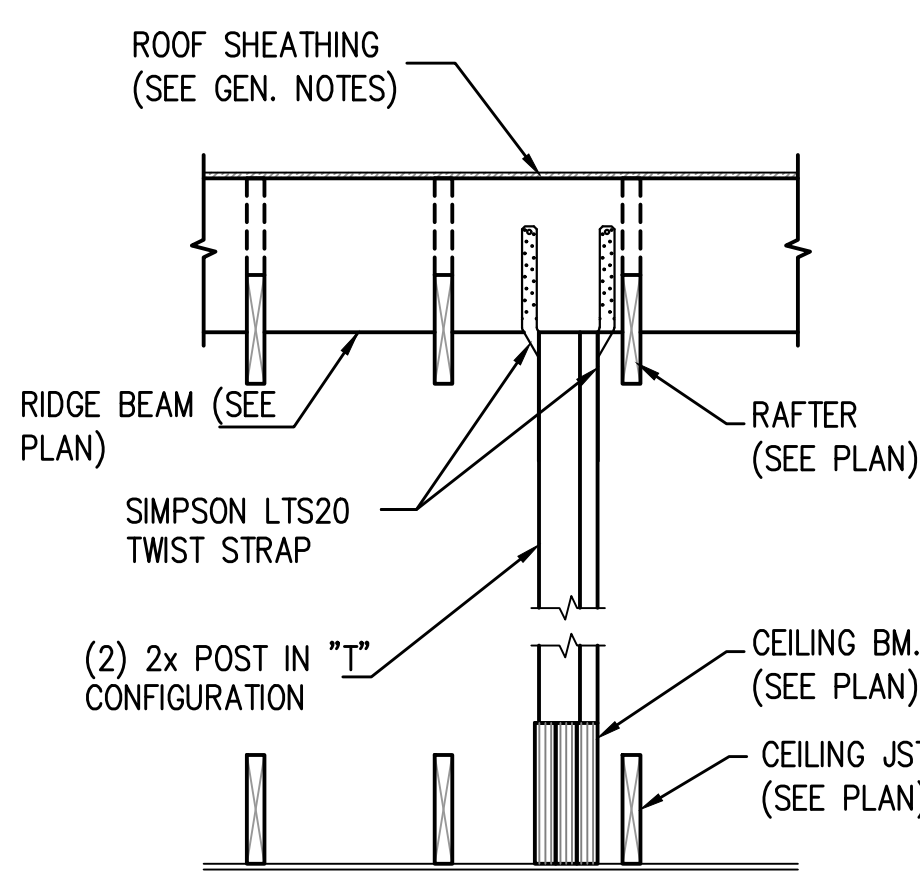
SECTION

SCALE: 1" = 1'-0"



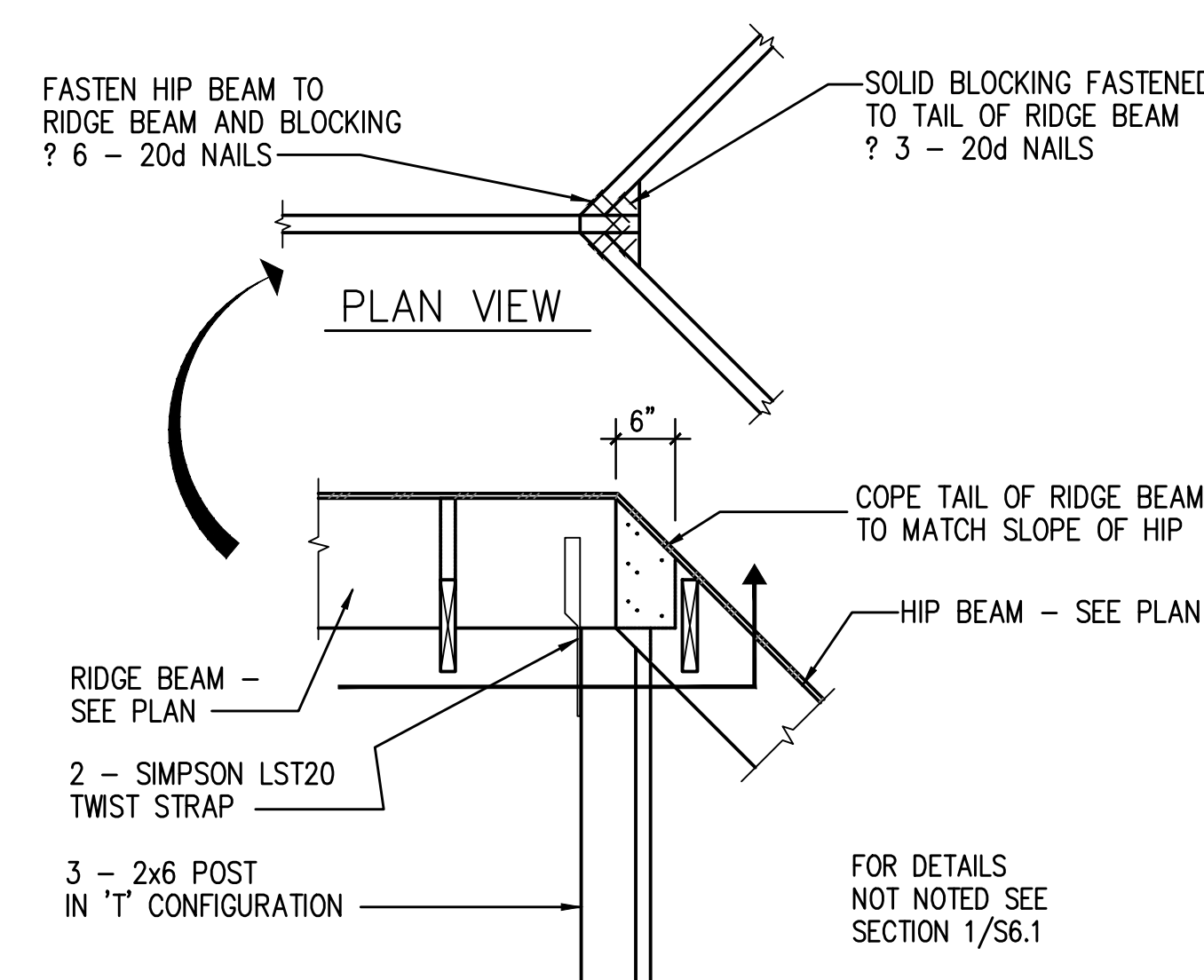
SECTION

SCALE: 1" = 1'-0"



RIDGE SUPPORT AT BEAM DETAIL

SCALE: 3/4" = 1'-0"



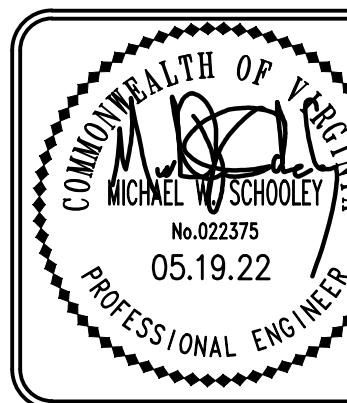
HIP BEAM TO RIDGE BEAM DETAIL

SCALE: 3/4" = 1'-0"

MICHAEL W. SCHOOLEY

4313 BONNEY ROAD
VIRGINIA BEACH, VIRGINIA 23452
OFFICE: (757) 222-1021

STRUCTURAL
ENGINEERING
CHOOLEY
P.E., P.C.

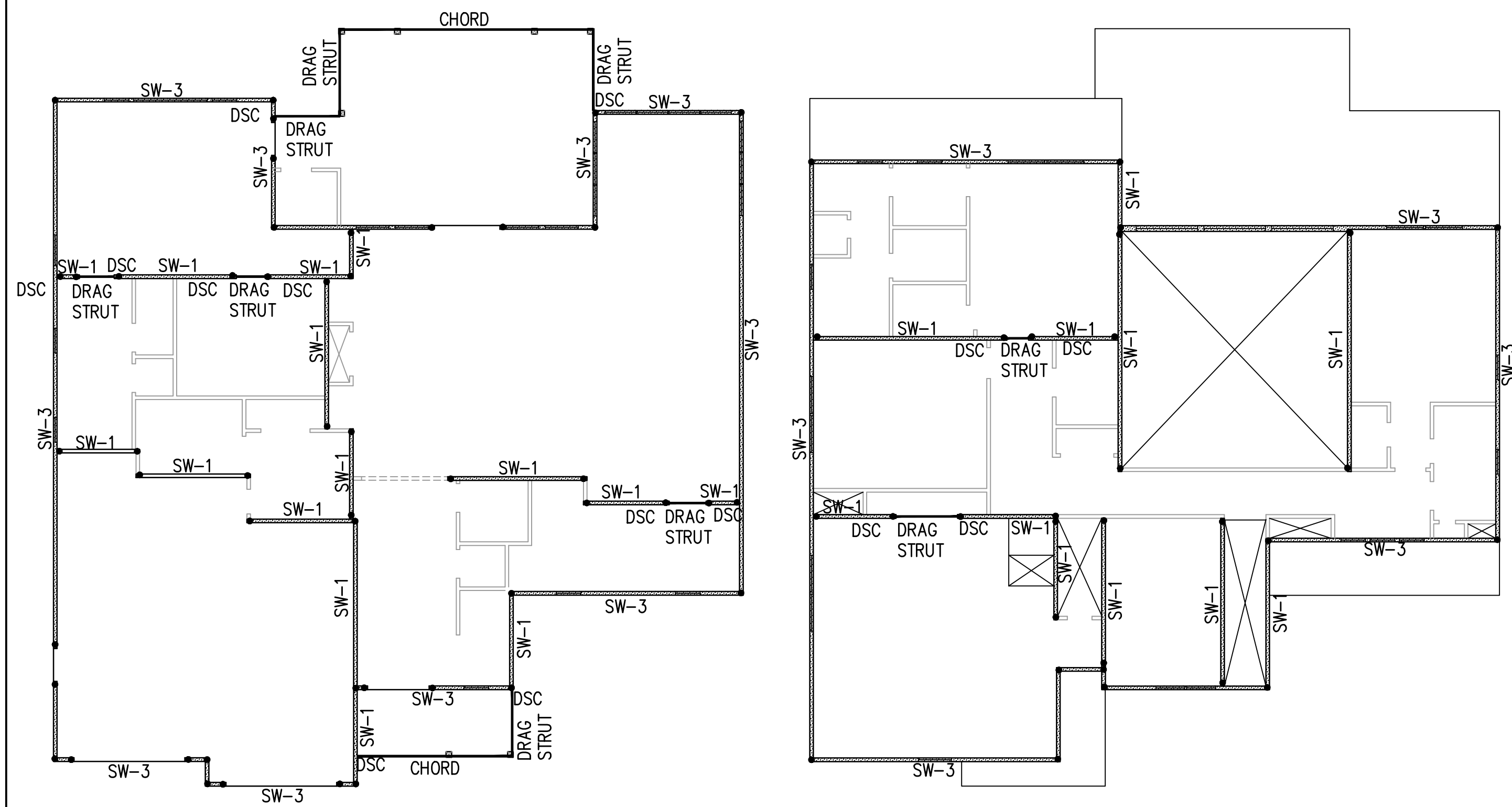


ROOF FRAMING PLAN AND SECTIONS

LEWIS RESIDENCE
3117 LYNNHAVEN DRIVE
VIRGINIA BEACH, VIRGINIA

DATE:
05.19.22

SHEET:
S-7



● = INDICATES HOLDOWN LOCATIONS

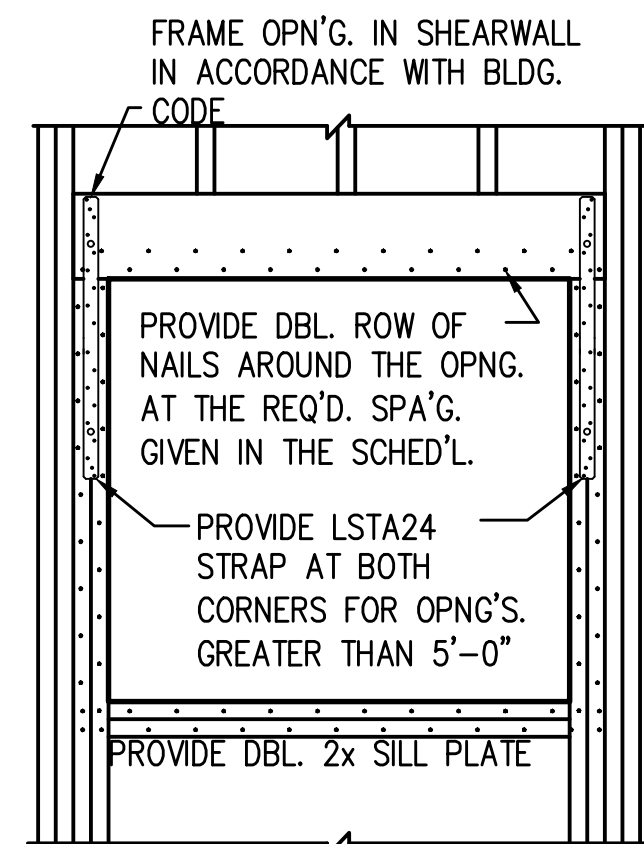
FIRST FLOOR SHEARWALL PLAN

SCALE: 1/8" = 1'-0"

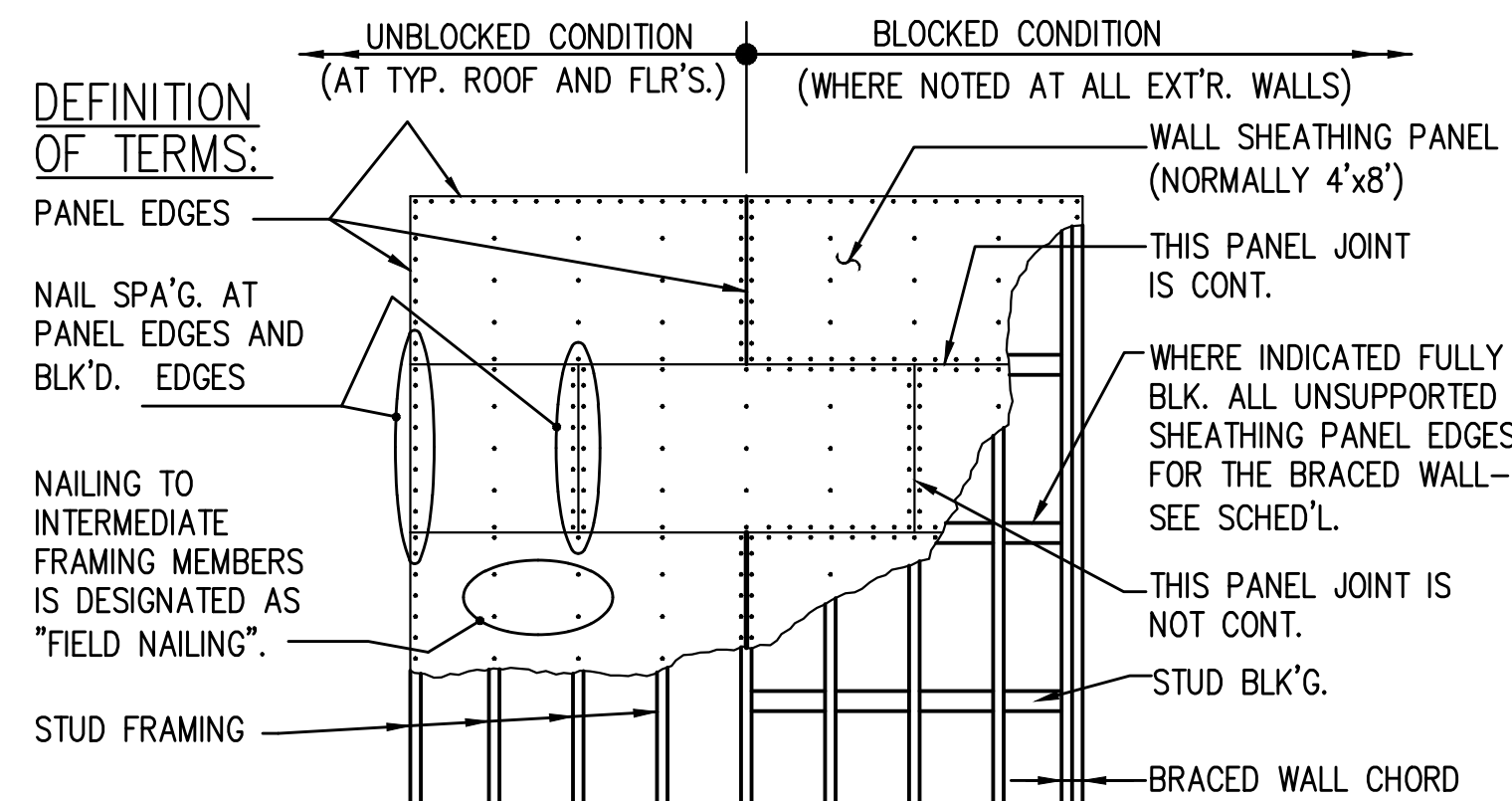
● = INDICATES HOLDOWN LOCATIONS

SECOND FLOOR SHEARWALL PLAN

SCALE: 1/8" = 1'-0"

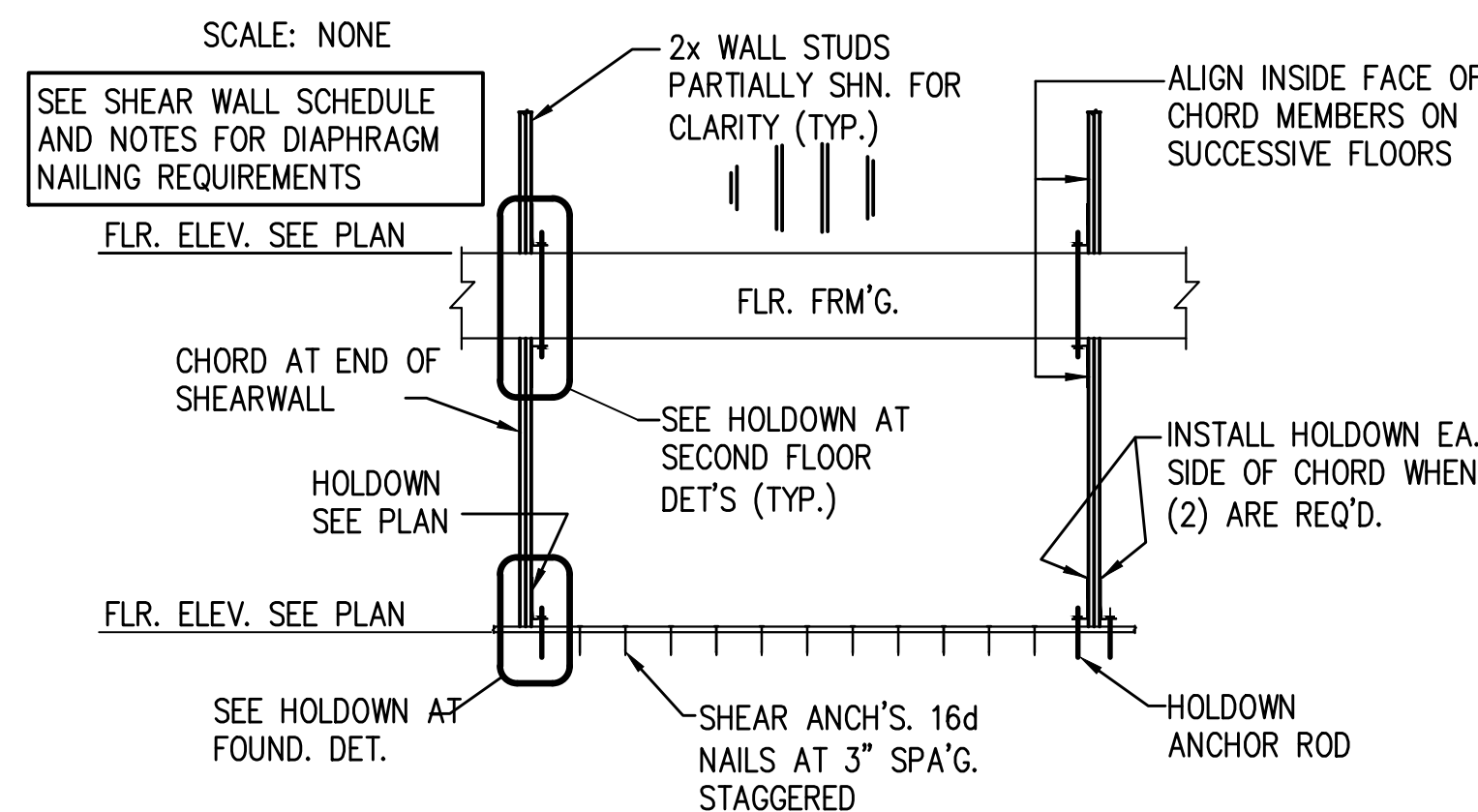


TYPICAL OPENING IN SHEAR WALL SHEATHING DETAIL



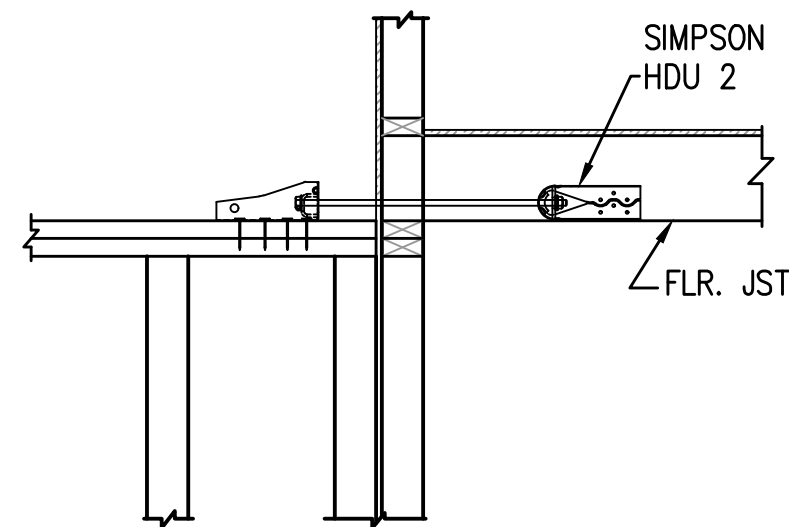
WOOD PANEL ROOF AND WALL DIAPHRAGM SHEATHING NAILING DETAILS

SCALE: NONE



TYPICAL MULTI FLOOR SHEARWALL ELEVATION

SCALE: NONE



DRAW STRUT CONNECTOR WITH HOLDOWN (DSC)

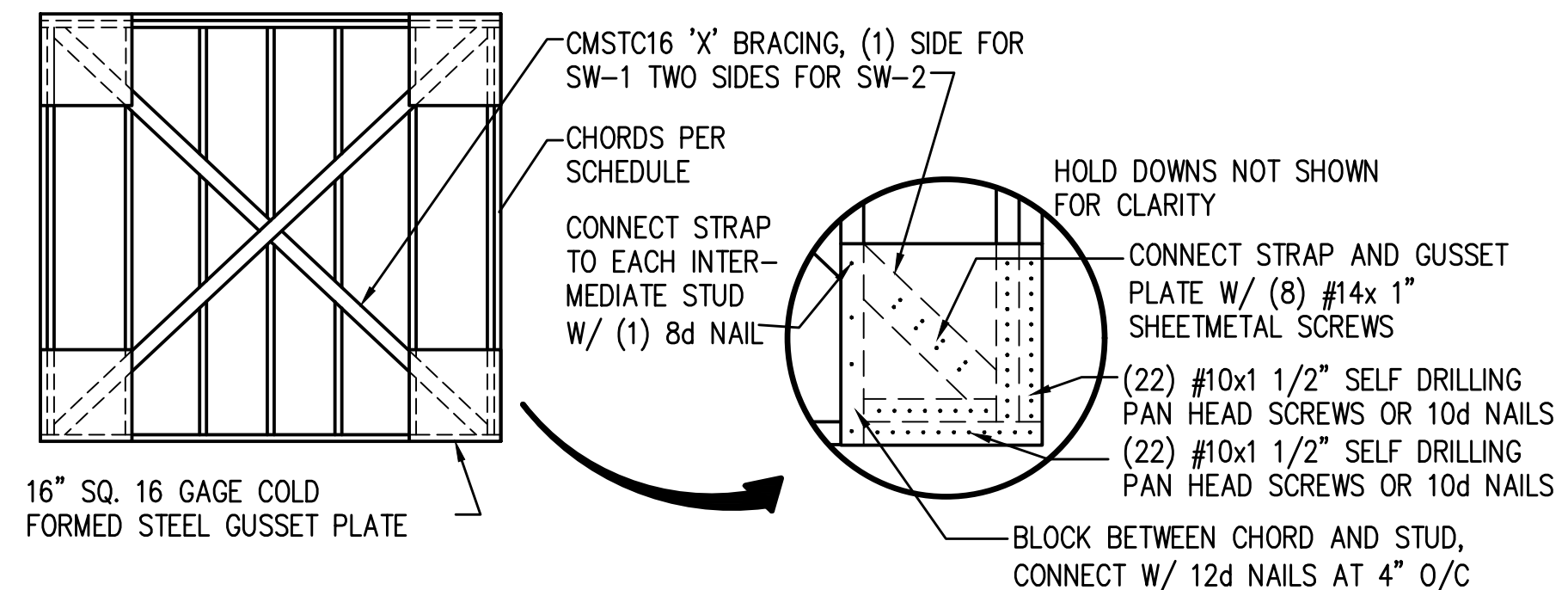
SCALE: NONE

HOLDOWN OPTIONS						
MARK	TYP. HOLD DOWN	FLAT STRAP	COIL STRAP (INCH REQ.)	STRAP TO BEAM	THREADED ROD	MASONRY STRAP
SW-1	HDU5	MSTC66	CMSTC16 (66")	MSTC66B3	5/8" DIA.	MSTCM60
SW-2	HDU8	MSTC78	CMSTC14 (78")	HST2 *	7/8" DIA.	2MSTCM60
SW-3	HDU4	MSTC52	CMSTC16 (52")	MSTC48B3	5/8" DIA.	MSTCM40
SW-4	HDU2	MSTC40	CS14 (40")	MSTC48B3	5/8" DIA.	MSTCM36
SW-5	HDU5	MSTC66	CMSTC16 (66")	MSTC66B3	5/8" DIA.	MSTCM60

SHEARWALL SCHED'L. NOTES:

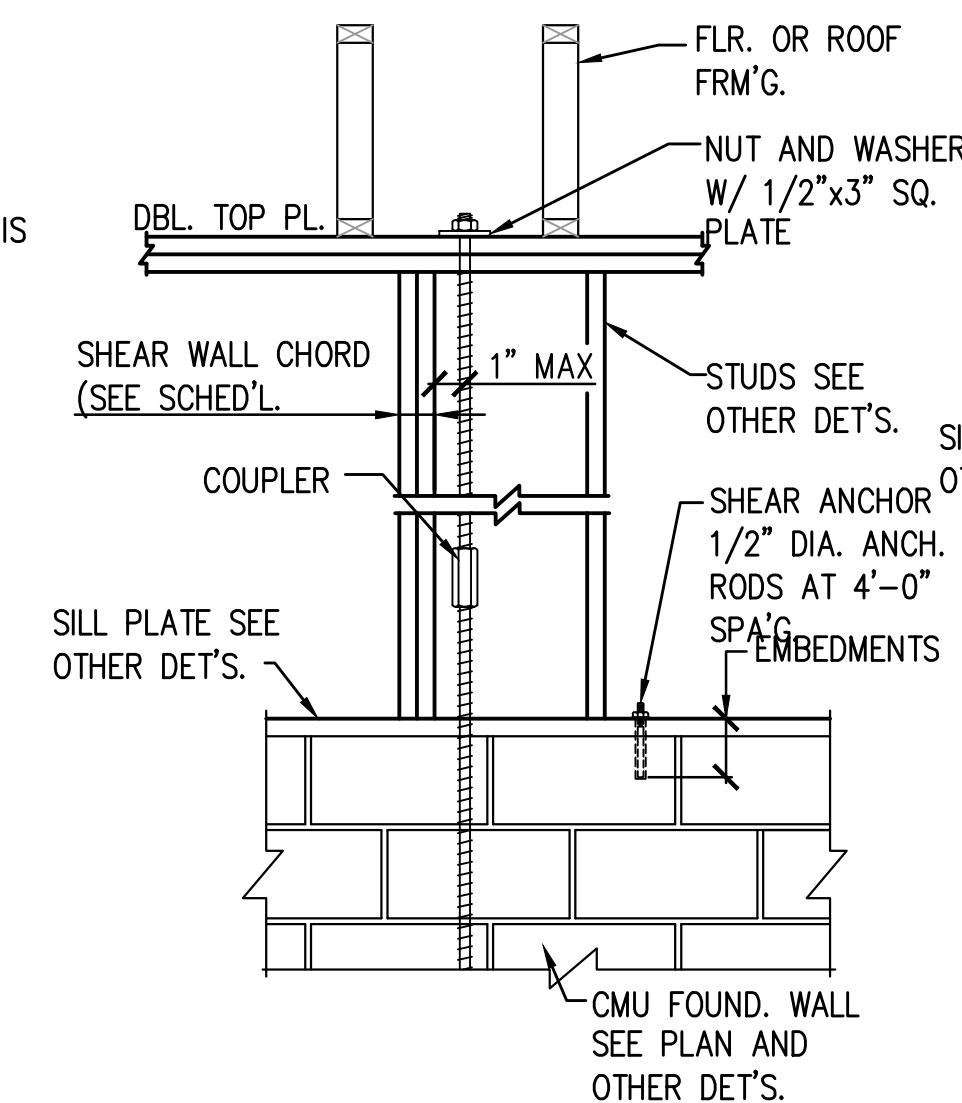
- SEE FRAMING PLAN(S) FOR SHEARWALL LOCATIONS AND MINIMUM LENGTHS.
- FOR ADDITIONAL INFORMATION ABOUT SHEARWALL CONSTRUCTION SEE "TYPICAL SHEARWALL DETAILS" ON THIS SHEET.
- THE USE OF "SS" INDICATES SHEARWALL SHEATHING IS REQUIRED ON ONLY ONE SIDE OF THE WALL. THE USE OF "DS" INDICATES SHEARWALL SHEATHING IS REQUIRED ON BOTH SIDES OF THE WALL. "GWB" INDICATES THE USE OF GYPSUM WALL BOARD.
- HOLDOWN ANCHORS SHALL BE MANUFACTURED BY "SIMPSON STRONG TIE CO." OR OF EQUIVALENT QUALITY AND STRENGTH.
- ANCHOR RODS ARE TO BE INSTALLED IN DRILLED HOLES WITH A HILTI HVA EPOXY SYSTEM OR OTHER EQUIVALENT. ANCHOR ROD DIAMETER SHALL BE IN ACCORDANCE WITH THE HOLDOWN MANUFACTURERS REQUIREMENTS
- SHEATHING PANELS CAN BE INSTALLED WITH THE LONG DIMENSION PARALLEL OR PERPENDICULAR TO THE WALL STUDS. FIELD NAILING SHALL BE AT 12" ON CENTER SPACING.
- PROVIDE SIMPSON LST24 STRAP CORNER REINFORCING AT ALL OPENINGS.
- CMSTC16 STRAPS ARE TO BE FASTENED TO SHEARWALL CHORDS AS SPECIFIED BY DETAIL.
- INSTALL DOUBLE LVLs UNDER ALL HOLDOWNS NOT LOCATED OVER A WALL UNLESS OTHERWISE NOTED. SECOND FLOOR HOLDOWNS OVER A WALL BELOW SHALL HAVE A CHORD AND HOLDOWN TO THE FOUNDATION. (CONTINUOUS LOAD PATH TO FOUNDATION)
- INSTALL SOLID BLOCKING BETWEEN JOISTS UNDER PERPENDICULAR SHEARWALLS ABOVE. install DOUBLE JOISTS UNDER SHEARWALLS PARALLEL TO FLOOR JOISTS.
- WHERE TWO INDIVIDUAL SHEARWALLS MEET, AT EITHER AN INTERSECTION OR CORNER, ONLY ONE HOLDOWN IS REQUIRED. THIS HOLDOWN IS TO BE THE LARGER OF THE HOLDOWNS REQUIRED AS LISTED IN THE SHEARWALL SCHEDULE.
- TYPICAL HOLDOWN LOCATION, ONLY ONE HOLDOWN REQUIRED AT INTERSECTIONS SHEARWALLS. (USE LARGER OF THE TWO)
- THE TWO HOLDOWNS AT FOUNDATION DETAIL AND THE TWO HOLDOWNS AT FOUNDATION DETAILS FLOOR TO FLOOR ARE BOTH OPTIONS FOR THE CONTRACTOR.

SHEARWALL SCHEDULE							
MARK	SHEATHING PANEL TYPE (S)	BLOCKED PANEL EDGES	FASTENERS AT PANEL EDGES	CHORD STUDS MINIMUM NUMBER AND SIZE	HOLDOWN (SEE NOTES 4 AND 5)		REMARKS
					TYPE	MIN. ANCHOR ROD EMB.	
SW-1	7/16" APA RATED SHEATHING	YES	8d AT 4" O/C	(3) 2x4	HDU5 OR MSTC66	5/8" DIA. (7" EMB.)	1" CONT.
	SIMPSON CMSTC-16 STRAP	YES	8d AT 4" O/C				
SW-3	7/16" APA RATED SHEATHING	YES	8d AT 4" O/C	(3) 2x4	HDU4 OR MSTC52	5/8" DIA. (7" EMB.)	PERFORATED



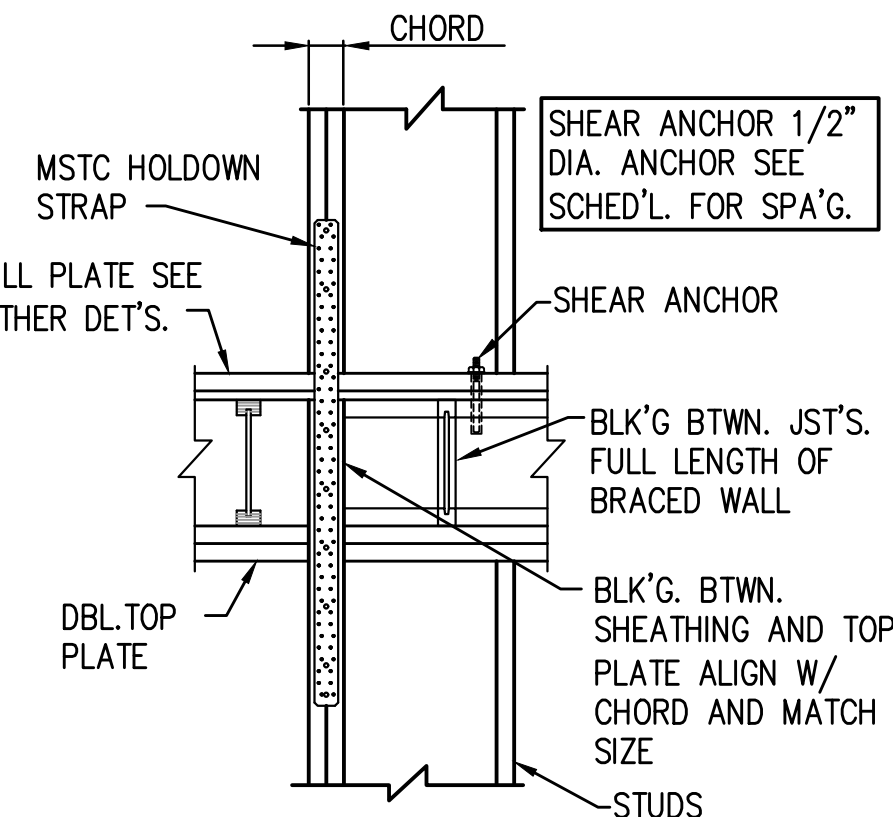
SHEARWALL WITH CMSTC STRAP DETAIL

SCALE: NONE



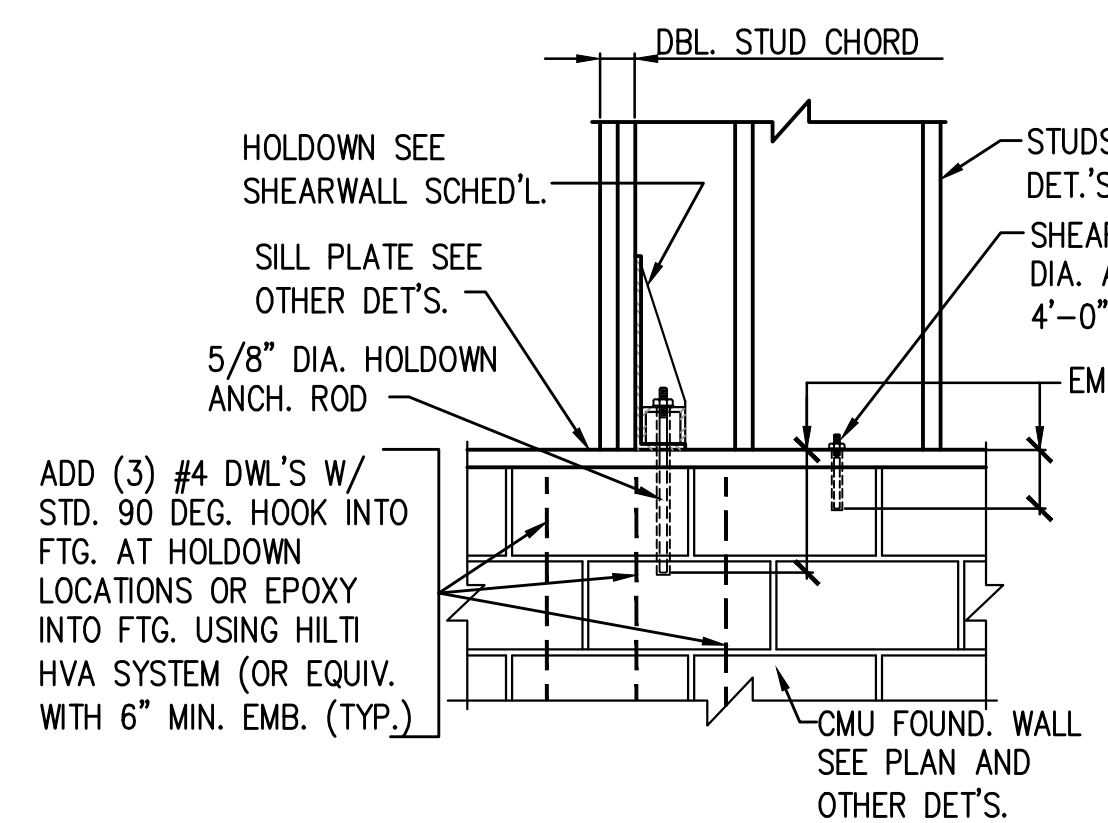
HOLDOWN AT FOUNDATION DETAIL

SCALE: NONE



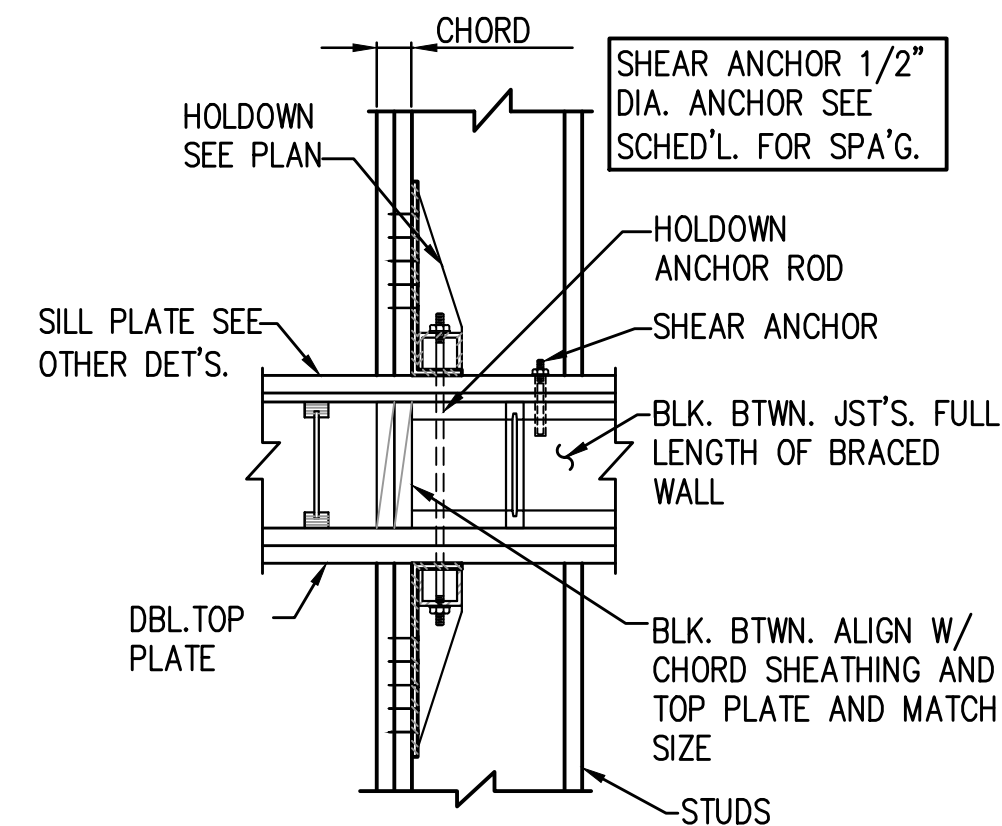
HOLDOWN AT FLOOR TO FLOOR DETAIL

SCALE: NONE



HOLDOWN AT FOUNDATION DETAIL

SCALE: NONE

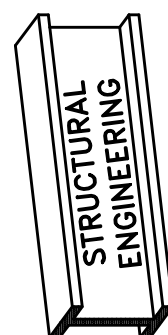


HOLDOWN AT FLOOR TO FLOOR DETAIL

SCALE: NONE

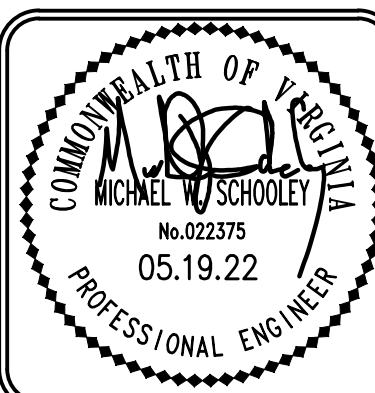
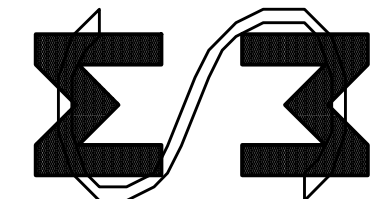
MICHAEL W. SCHOOLEY

4313 BONNEY ROAD
VIRGINIA BEACH, VIRGINIA 23452
OFFICE: (757) 222-1021



P.E., P.C.

CHOOLEY



SHEARWALL PLANS AND DETAILS

LEWIS RESIDENCE
3117 LYNNHAVEN DRIVE
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S-8