

ALL DIMENSIONS ARE TO BE VERIFIED BY OWNER/BUILDER BEFORE CONSTRUCTION BEGINS. ONCE CONSTRUCTION HAS BEGUN, DESIGNER IS RELEASED FROM ANY AND ALL LIABILITY ASSOCIATED WITH THE CONSTRUCTION OF THIS CUSTOM RESIDENCE. THIS PLAN IS DESIGNED UNDER THE 2018 NORTH CAROLINA RESIDENTIAL CODE

MEAN ROOF HEIGHT = $\frac{\quad}{\leq 30'-0''}$				
COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS				
MEAN ROOF HEIGHT	UP TO 30'	30'-1" - 35'	35'-1" - 40'	40'-1" - 45'
ZONE 1	16.5, -18.0	17.3, -18.9	18.0, -19.6	18.5, -20.2
ZONE 2	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5
ZONE 3	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5
ZONE 4	18.0, -19.5	18.9, -20.5	19.6, -21.3	20.2, -21.8
ZONE 5	18.0, -24.1	18.9, -25.3	19.6, -26.3	20.2, -27.0

MINIMUM VALUES FOR ENERGY COMPLIANCE:
ZONE 4 MAX GLAZING U-FACTOR = 0.32 CEILING R-38 WALLS R-15 FLOORS R-19



Residential Design, L.L.C.

DRAWN BY:	JD	DATE:	8-29-25
REVISIONS:	<i>Michelle Pearce</i> City of Raleigh Review Officer		

BLDR-040717-2025 FINAL PLAN SET.pdf



LEFT ELEVATION

SCALE 1/4"=1'-0"



RIGHT ELEVATION

SCALE 1/4"=1'-0"

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New Light
Residential Design, L.L.C.

NEWLIGHTDESIGN1@GMAIL.COM

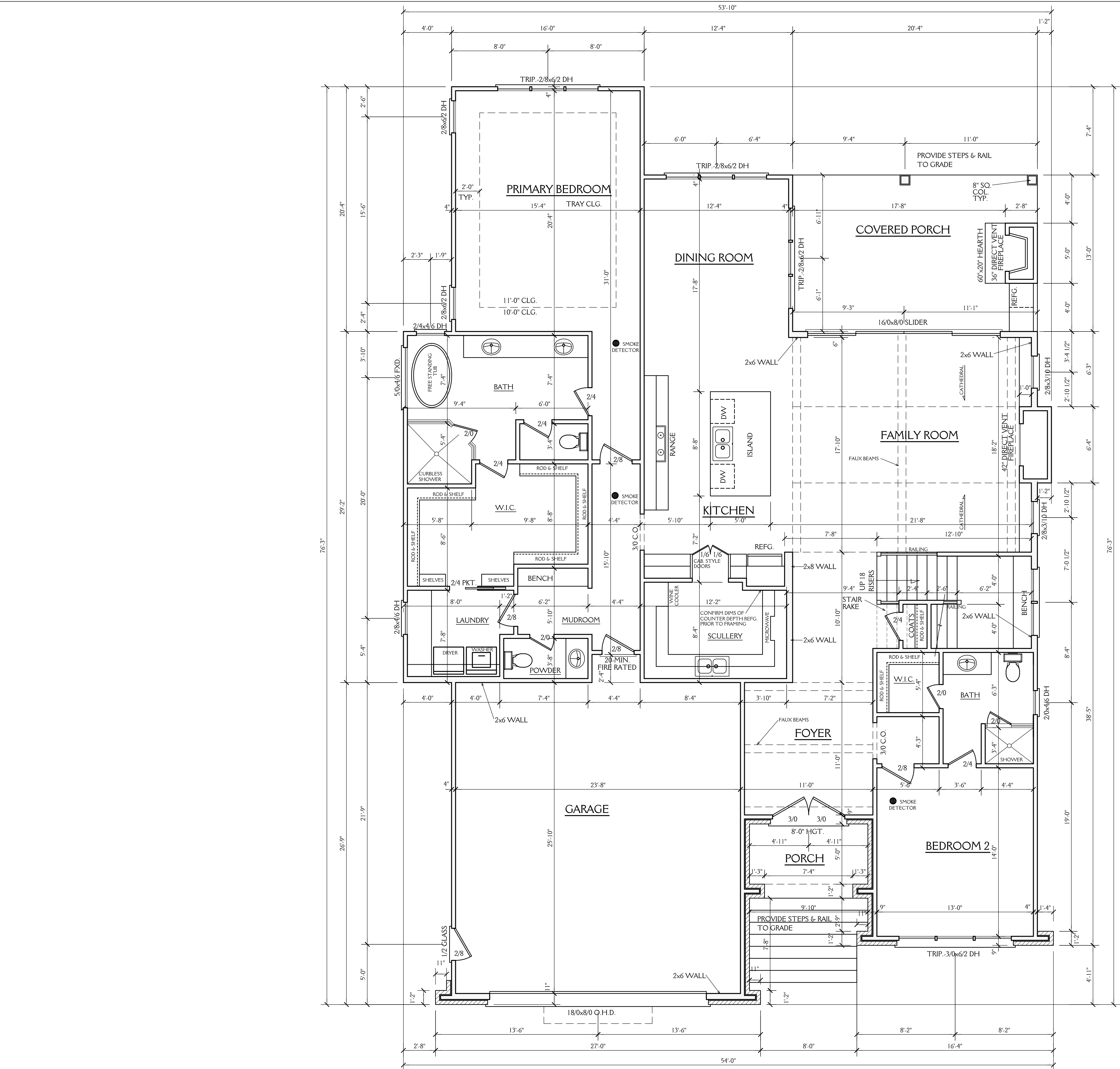
J&W CUSTOM HOMES
621 DUKE DRIVE
RALEIGH NC

DRAWN BY: JD DATE: 8-29-25

REVISIONS:

SHEET 2 OF 6

PROJECT NO. 2515



NOTE: ALL DIMENSIONS ARE TO BE VERIFIED BY OWNER/BUILDER BEFORE CONSTRUCTION BEGINS. ONCE CONSTRUCTION HAS BEGUN, DESIGNER IS RELEASED FROM ANY AND ALL LIABILITY ASSOCIATED WITH THE CONSTRUCTION OF THIS CUSTOM RESIDENCE. THIS PLAN IS DESIGNED UNDER THE 2018 NORTH CAROLINA RESIDENTIAL CODE

NOTES:
CONSTRUCTION TO MEET OR EXCEED ALL REQUIREMENTS OF THE 2018 NC RESIDENTIAL BUILDING CODE

- SEE SECTION R310 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL EMERGENCY ESCAPE & RESCUE OPENING REQUIREMENTS.
SEE SECTION R303 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR LIGHT & VENTILATION REQUIREMENTS.
SEE SECTION R310.1 & R311 OF THE 2018 NC RESIDENTIAL BUILDING CODE EGRESS REQUIREMENTS.
- BUILDER & WINDOW SALESMAN TO CONFIRM THAT WINDOWS CHOSEN MEET ALL REQUIREMENTS OF SECTION R310 OF THE 2018 NC RESIDENTIAL BUILDING CODE.
- SEE SECTION R308.4 OF THE 2018 NC RESIDENTIAL BLDG. CODE FOR GLAZING REQUIREMENTS IN HAZARDOUS LOCATIONS
- PROVIDE FALL PROTECTION AT WINDOWS AS REQUIRED BY 2018 NC RESIDENTIAL BUILDING CODE
- ALL GLASS TO HAVE A U FACTOR OF 0.32 OR BETTER AND SHGC OF .30 OR BETTER.
- SEE CHAPTER 11 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL ENERGY CONSERVATION REQUIREMENTS
- SEE SECTION R302.5 & R302.6 OF THE 2018 NC RESIDENTIAL BLDG. CODE FOR DWELLING/ GARAGE FIRE SEPARATION REQUIREMENTS
- SEE APPENDIX M OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL DECK CONSTRUCTION REQUIREMENTS
- PROVIDE CARBON MONOXIDE DETECTORS AS PER SECTION R315 OF THE 2018 NC RESIDENTIAL BUILDING CODE
- PROVIDE CRAWLSPACE ACCESS AS PER SECTION 408.8 OF THE 2018 NC RESIDENTIAL BUILDING CODE LOCATION T.B.D. IN FIELD BY BUILDER.
- PROVIDE FOUNDATION DRAINAGE AS PER CODE. SEE SECTIONS 405, 801.3 & 401.3 OF THE 2018 NC RESIDENTIAL BUILDING CODE.
- SEE SECTION R311.7 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL STAIRWAY REQUIREMENTS. SEE SECTION R312 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL GUARD RAIL & HAND RAIL REQUIREMENTS.
- SEE SECTION R307 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL BATH FIXTURE CLEARANCES.
- SEE CHAPTER 10 OF THE NC RESIDENTIAL BUILDING CODE FOR ALL FIREPLACE & CHIMNEY CLEARANCES & REQUIREMENTS.
- ALL ANGLES WALLS ARE 45° U.N.O.

ABBREVIATIONS

C.O. : CASSED OPENING	CANT. : CANTILEVER
D.W. : DISHWASHER	TYP. : TYPICAL
W.I.C. : WALK IN CLOSET	CLG. : CEILING
SHWR. : SHOWER	HGT. : HEIGHT
DN. : DOWN	COL. : COLUMN
	TRANS. : TRANSOM

FIRST FLOOR PLAN

SCALE 1/4"=1'-0"
10'-0" CLG. HGT.
SET WINDOWS AT 8'-0" AFF U.N.O.
NOTE: ALL DOORS AND CASSED OPENINGS ARE 8'-0" HGT.

New Light

Residential Design, L.L.C.

NEWLIGHTDESIGN1@GMAIL.COM

J&W CUSTOM HOMES
621 DUKE DRIVE
RALEIGH NC

DRAWN BY: JD
REVISIONS:

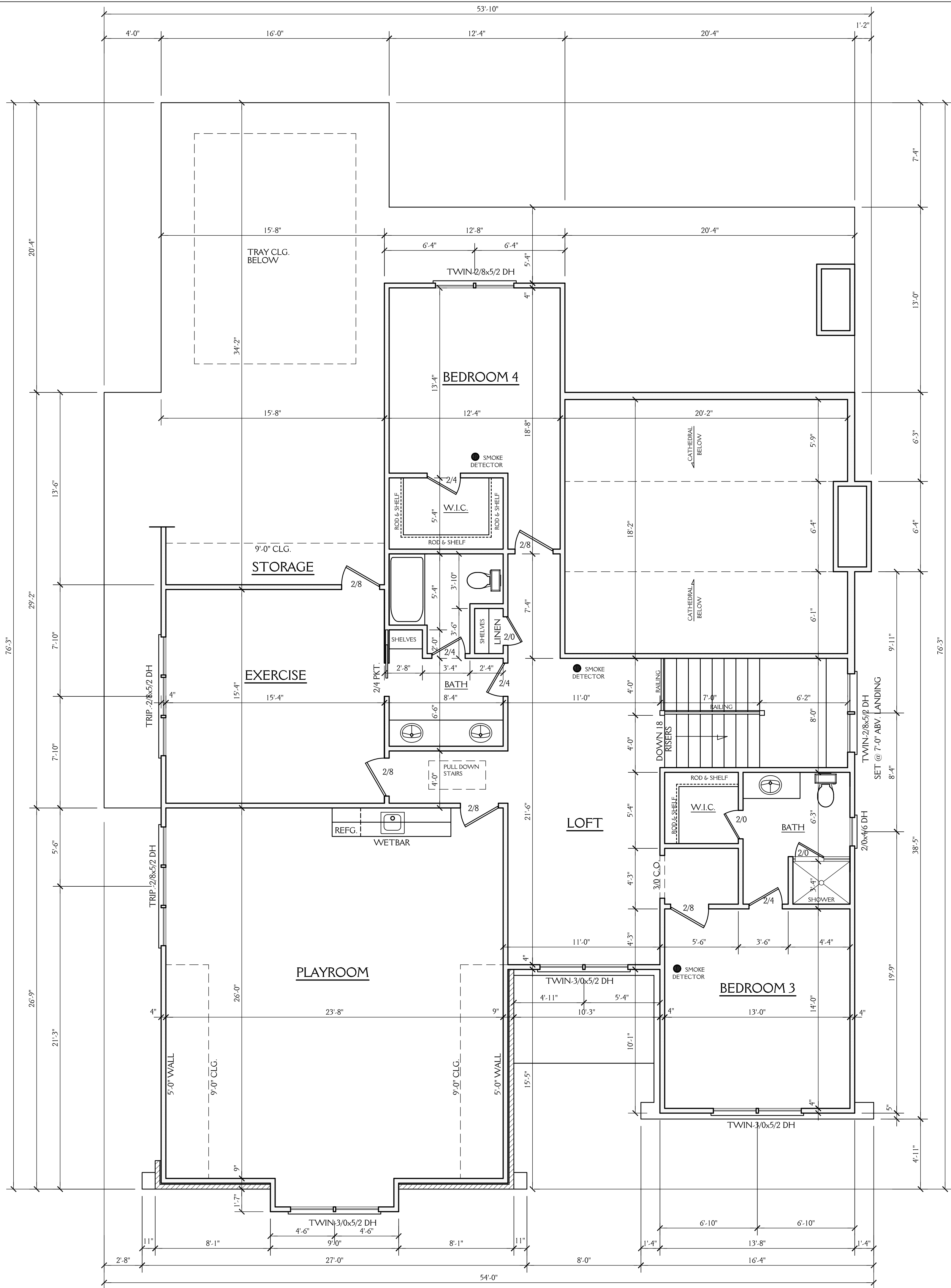
DATE: 8-29-25

SHEET
3
OF 6

PROJECT NO.
2515

2430 SQ FT HTD (1ST FLOOR)
1898 SQ FT HTD (2ND FLOOR)
4328 SQ FT HTD TOTAL

49 SQ FT (PORCH)
264 SQ FT (COV. PORCH)
646 SQ FT (GARAGE)
959 UNHEATED TOTAL



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SECOND FLOOR PLAN

SCALE 1/4"=1'-0"
9'-0" CLG. HGT.
SET WINDOWS AT 7'-6" AFF U.N.O.

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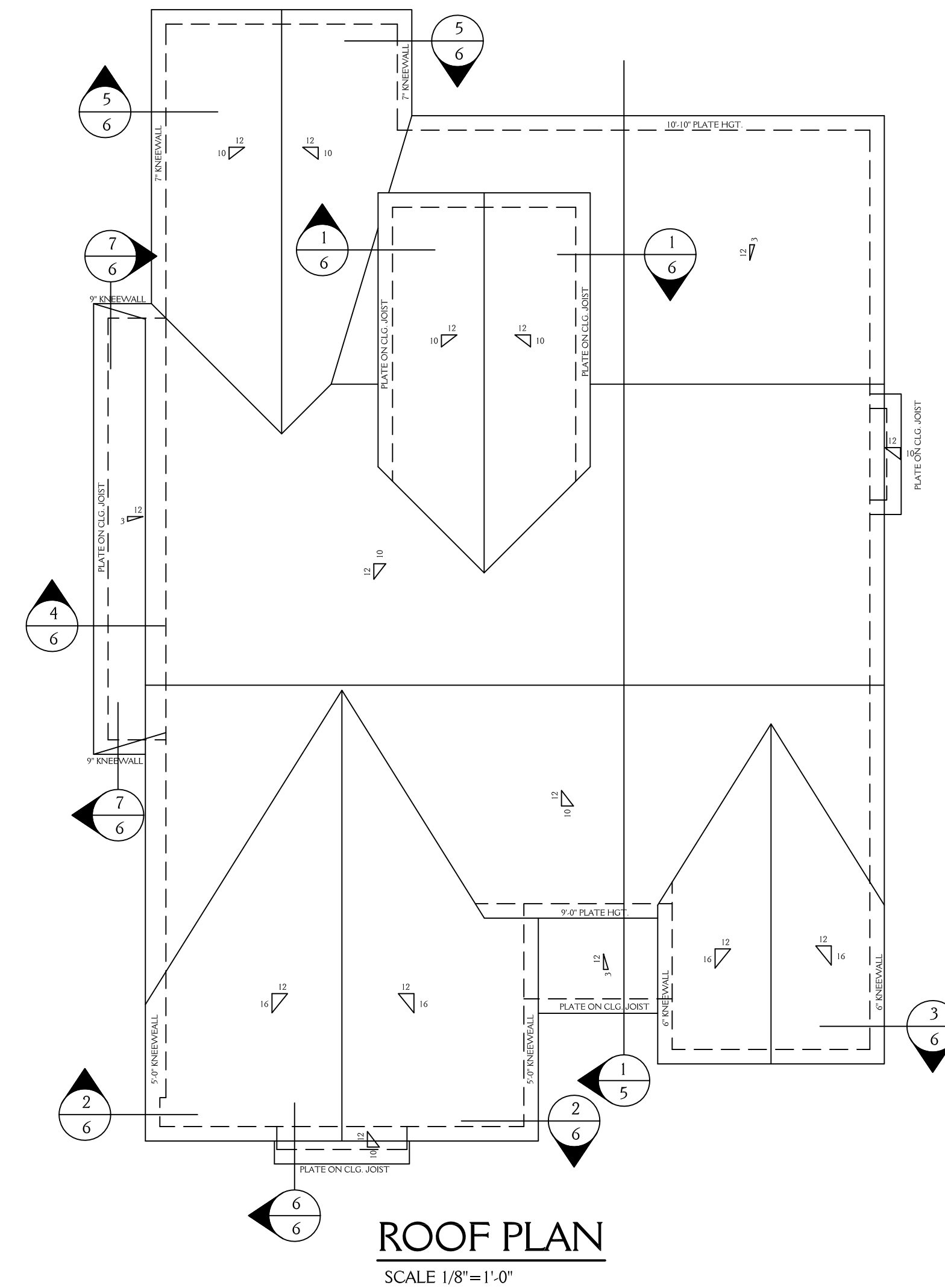
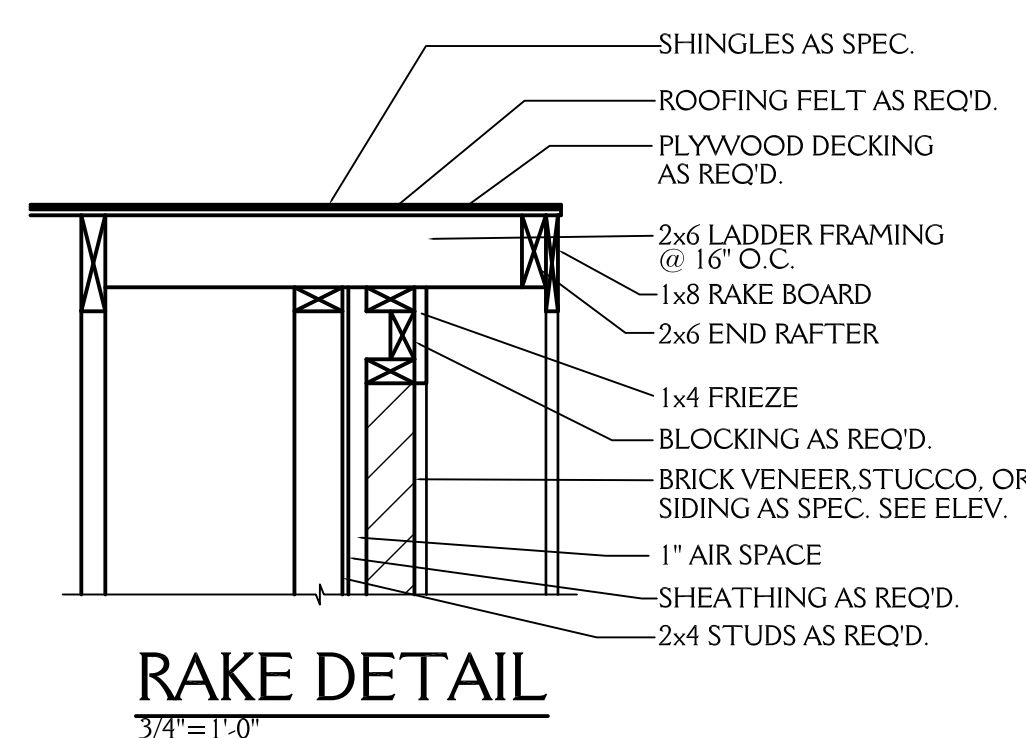
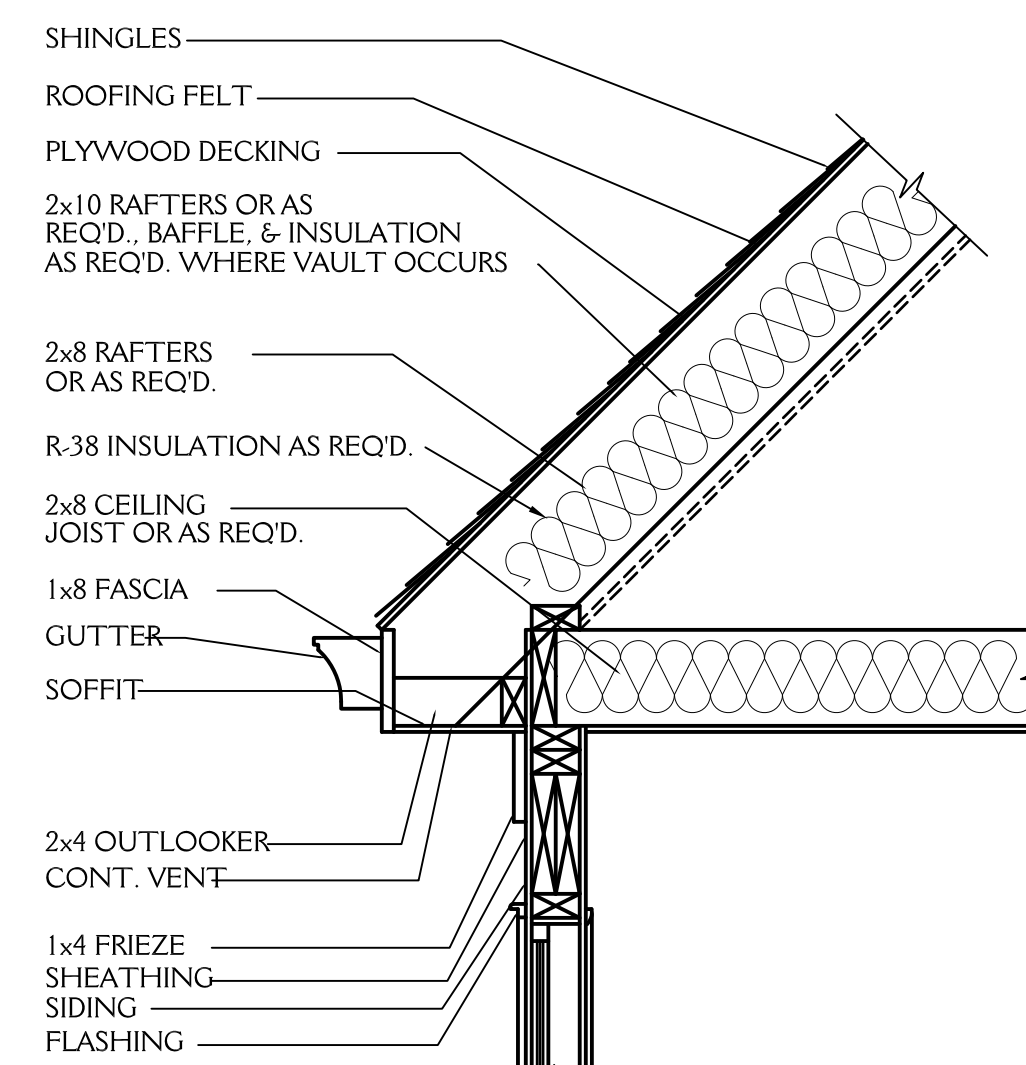
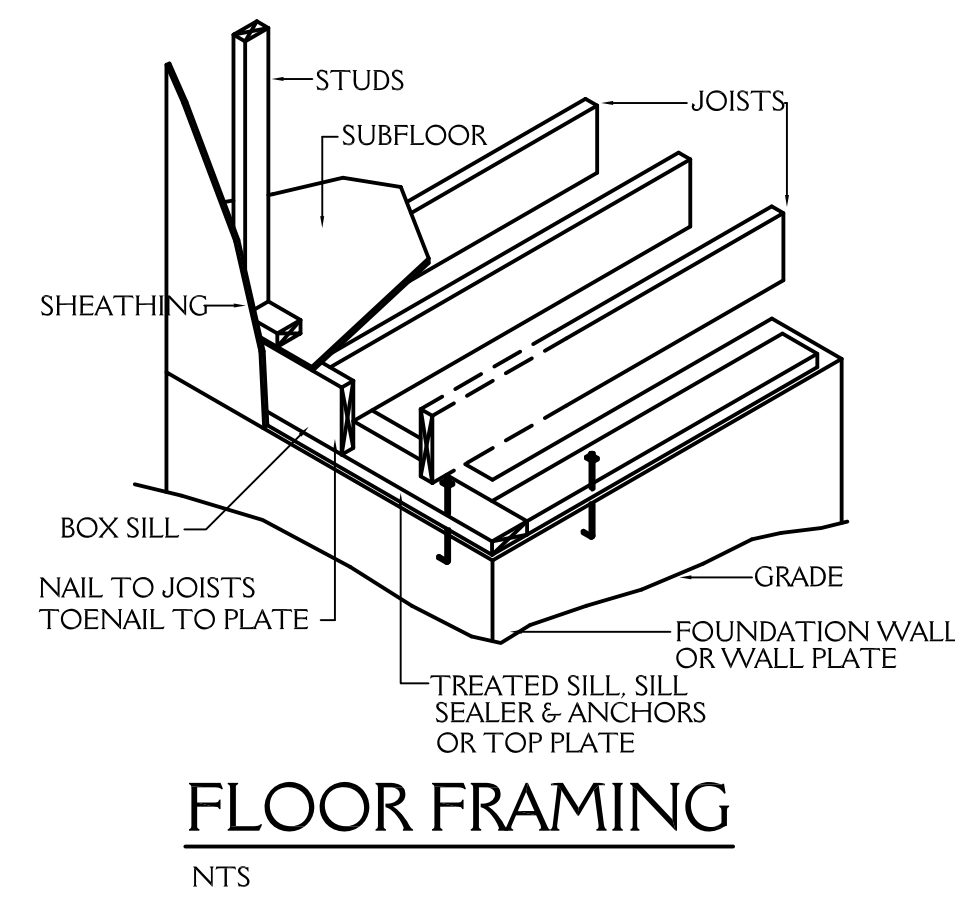
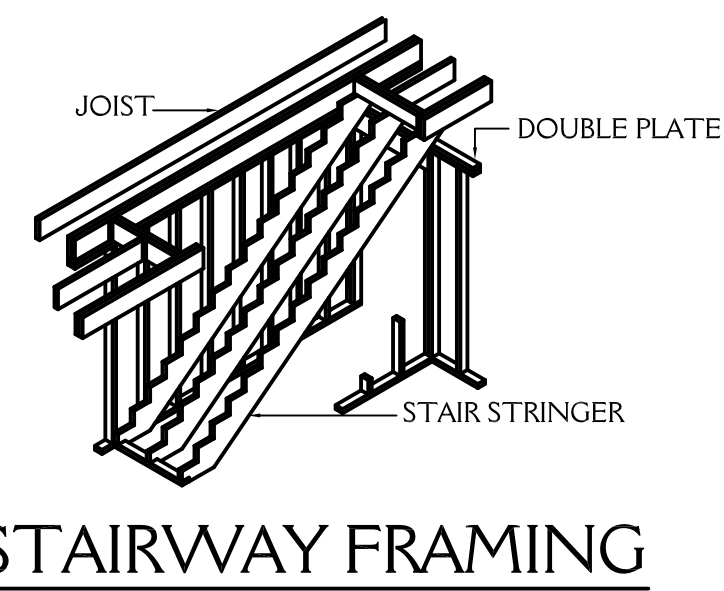
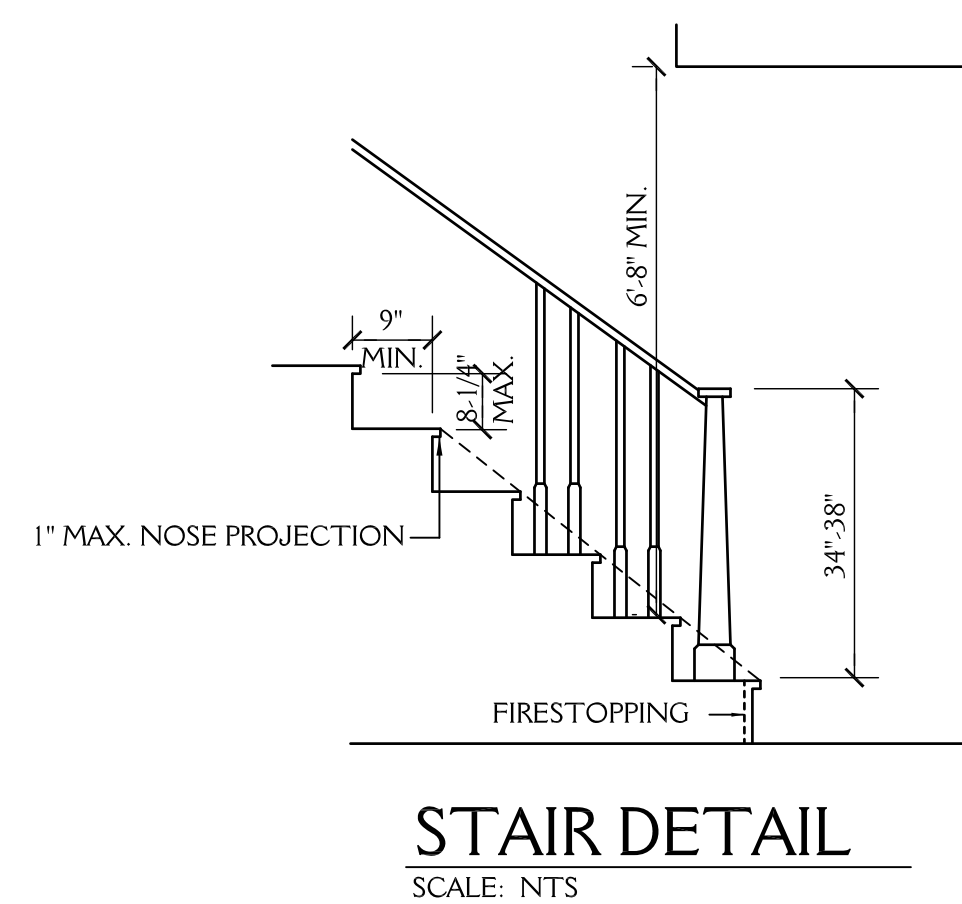
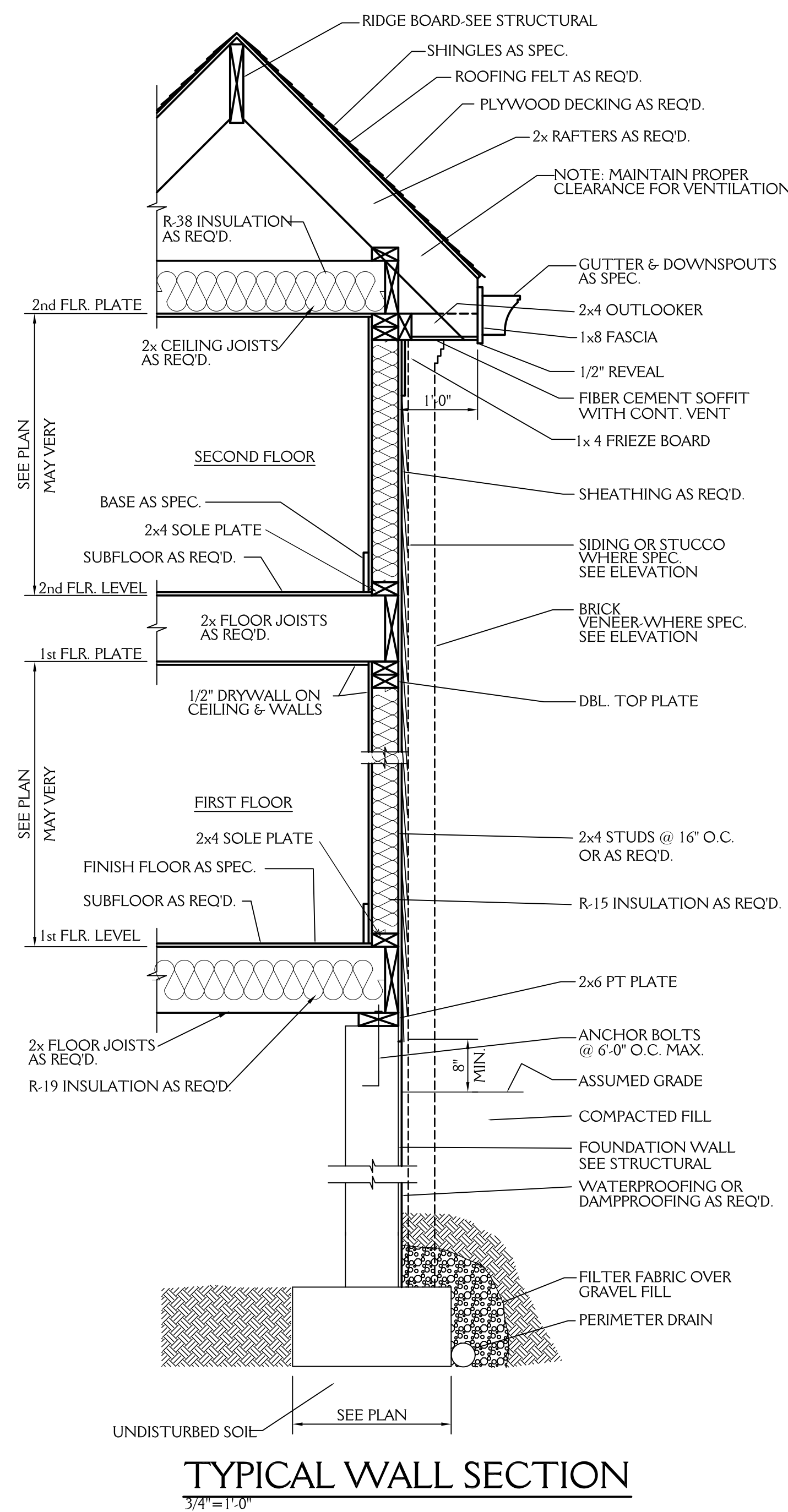
J&W CUSTOM HOMES
621 DUKE DRIVE
RALEIGH NC

DRAWN BY: JD DATE: 8-29-25

REVISIONS:

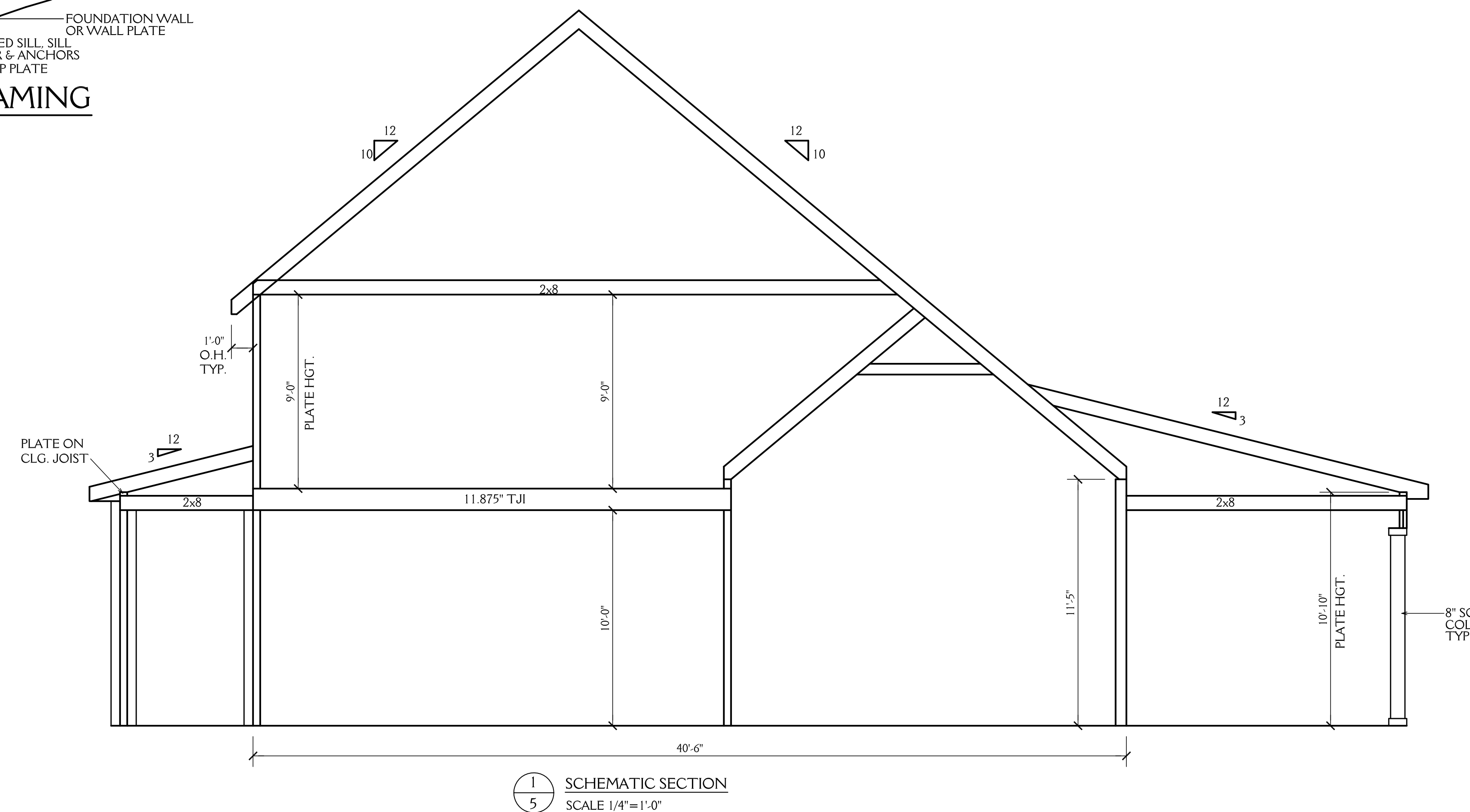
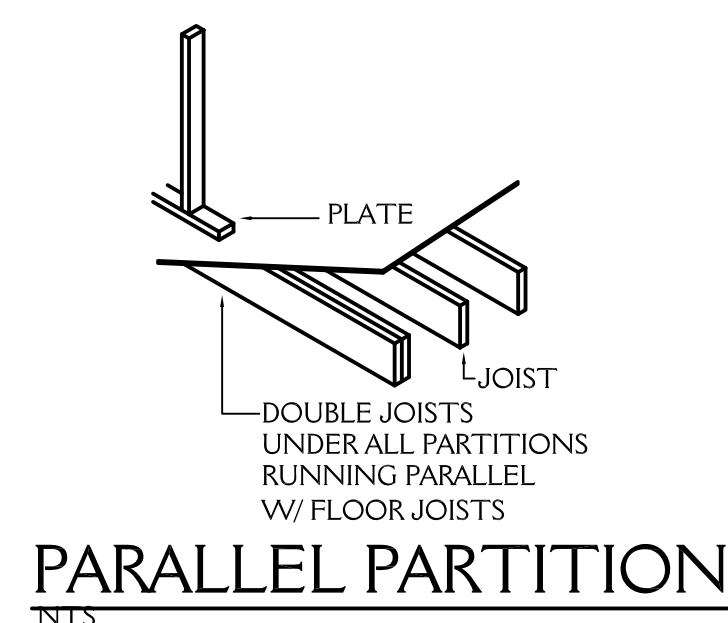
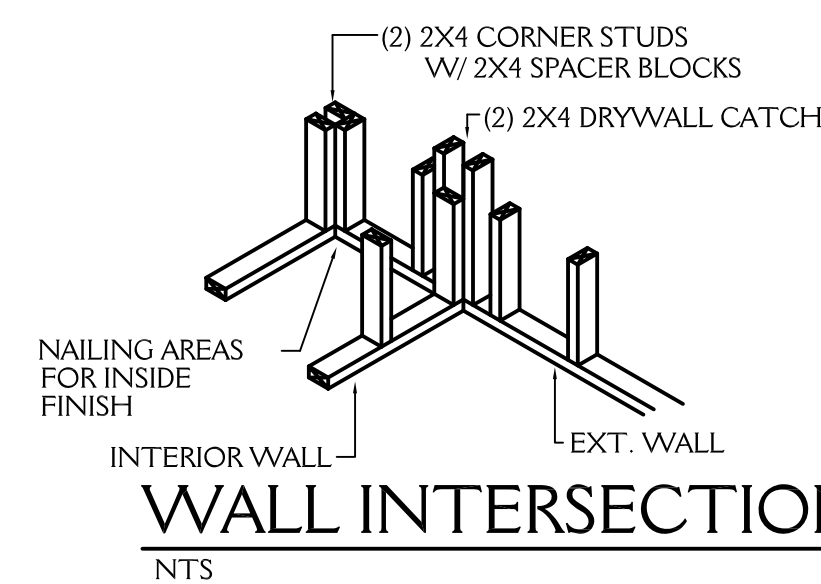
SHEET 4 OF 6

PROJECT NO. 2515



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ROOF VENT CALCS

3425 SQ.FT. /150 =22.83 SQ.FT. REQ'D
BUILDER TO PROVIDE APPROPRIATE
VENTILATION AS REQUIRED BY CODE
SEE SECTION R806 OF
THE 2018 NC RESIDENTIAL BLDG. CODE

BUILDER TO PROVIDE APPROPRIATE

SEE SECTION R806 OF
THE 2018 NC RESIDENTIAL BLDG. CODE

FND VENT CALCS

$$2276 \text{ SQ.FT.} / 150 = 15.17 \text{ SQ.FT. REQ'D}$$

BUILDER TO PROVIDE APPROPRIATE
VENTILATION AS REQUIRED BY CODE

SEE SECTION R408 OF
THE 2018 NC RESIDENTIAL BLDG. CODE

New Light
Residential Design, L.L.C.

NEWLIGHTDESIGN1@GMAIL.COM

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DATE:	8-29-25
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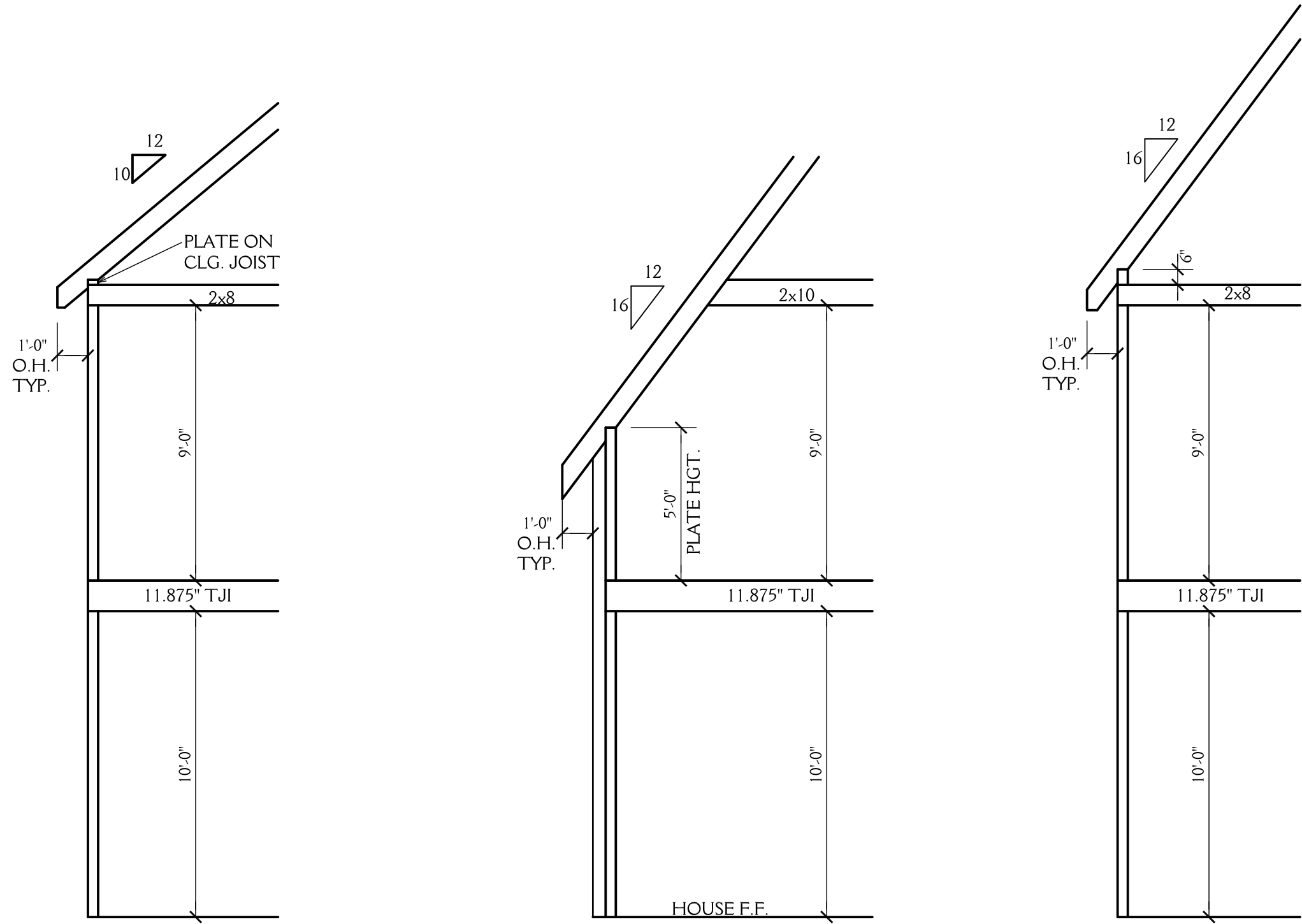
REVISIONS:

SHEET
5
OF 6

PROJECT NO.	2515
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1
6

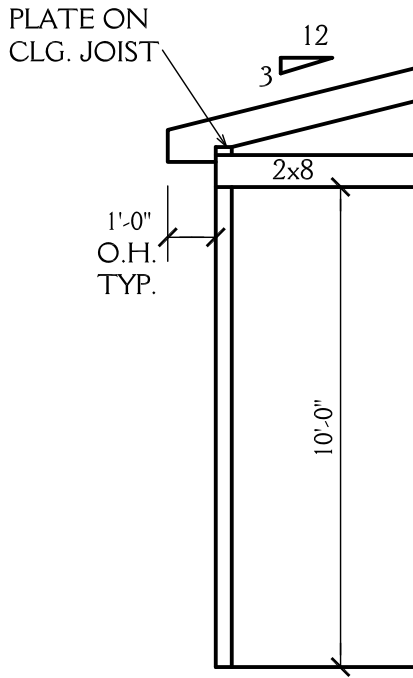
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SCALE 1/4"=1'-0"

2
6

SCHEMATIC SECTION
SCALE 1/4"=1'-0"

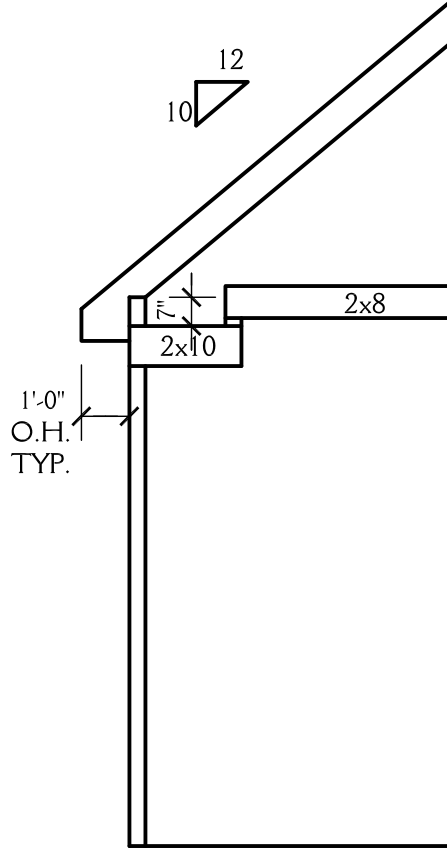
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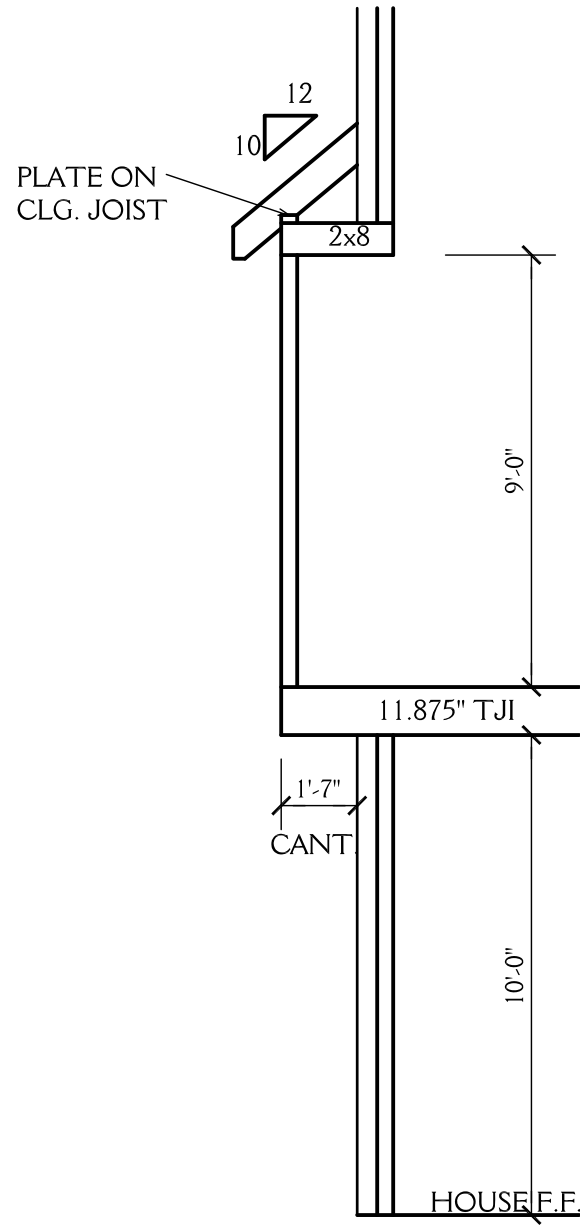
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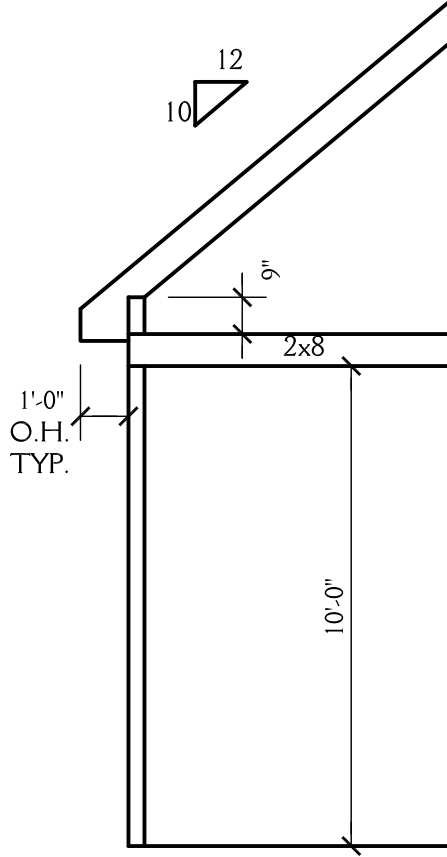
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SCHEMATIC SECTION
SCALE 1/4"=1'-0"



6
6

SCHEMATIC SECTION
SCALE 1/4"=1'-0"



7
6

SCHEMATIC SECTION
SCALE 1/4"=1'-0"

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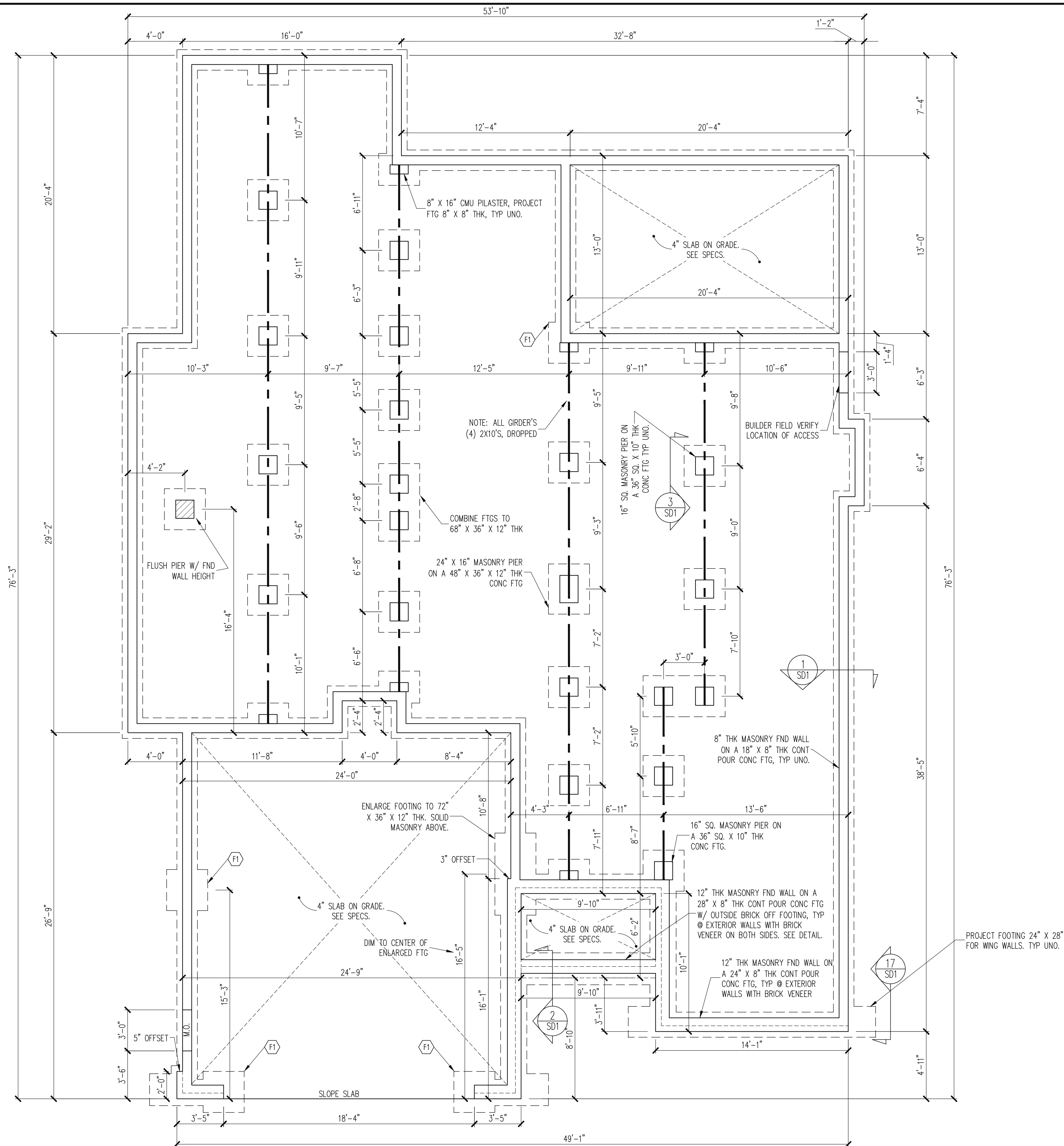
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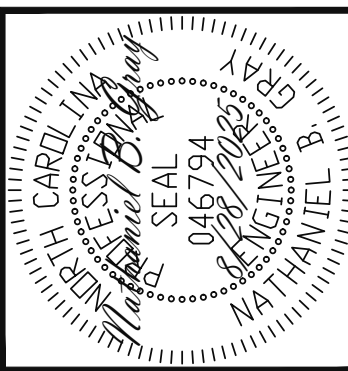
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SHEET
6
OF 6

PROJECT NO.
2515

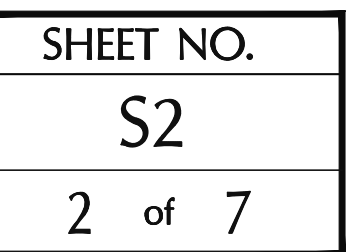


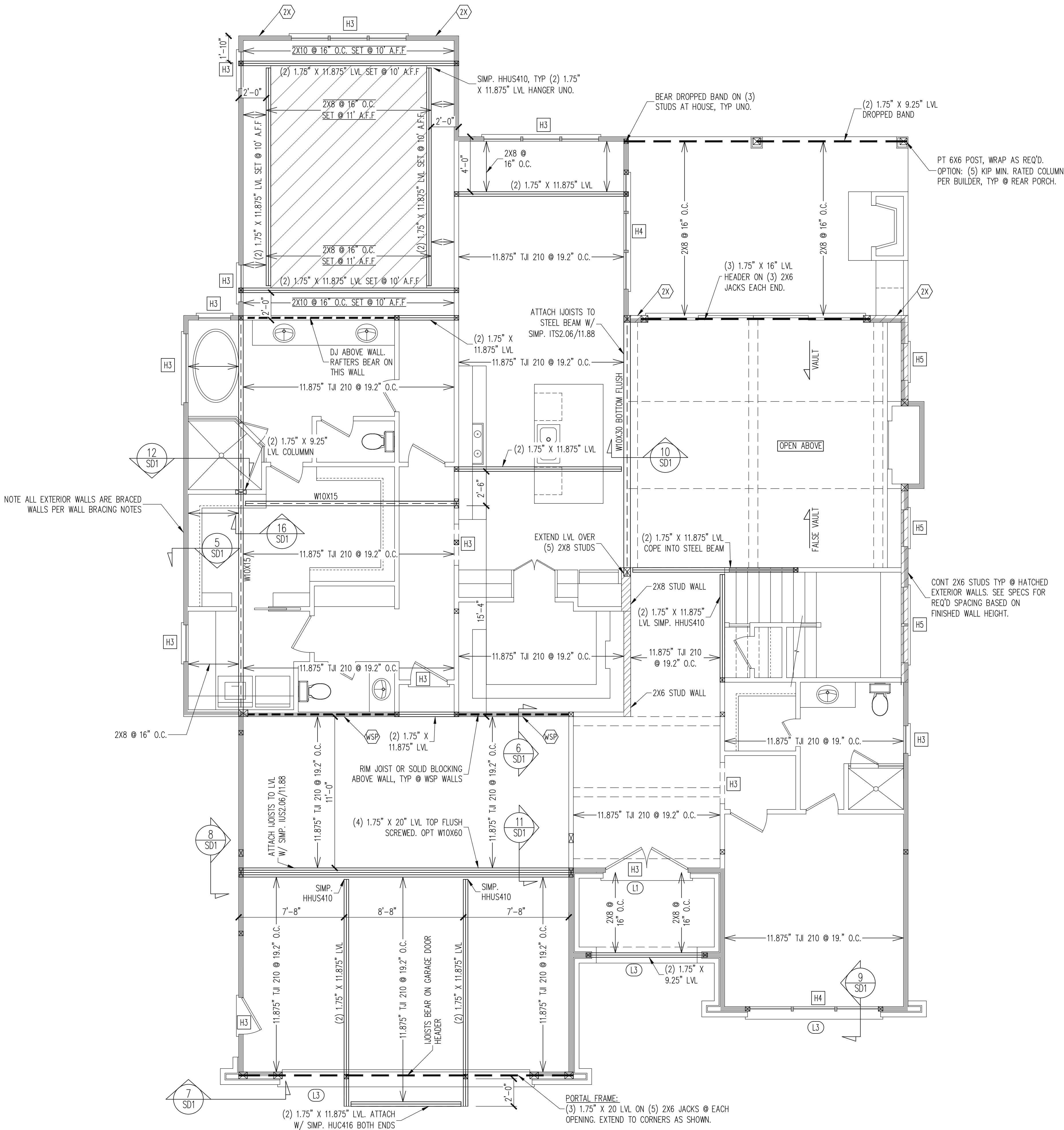
FOUNDATION PLAN
 $1/4" = 1'-0"$



J&W CUSTOM HOMES			
SCOPE:	STRUCTURAL ADDENDUM		
LOC:	621 DUKE DRIVE	REV #	REF PROJ # DATE

SHEET NO.
S1
1 of 7





WALL BRACING

SHADED WALLS:

ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

WSP - ONE SIDE OF INTERIOR WALL OR INSIDE OF EXTERIOR WALL WITH 3/8" MIN. THICKNESS WOOD STRUCTURAL PANELING. ATTACH WSP TO STUD WALL WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

GB - INTERIOR BRACED WALL. 1/2" GB SECURED PER TABLE R602.10.2 OF THE 2018 NCRBC. (FASTENERS @ 7" O.C.) BOTH SIDES OF WALL, OR (FASTENERS @ 4" O.C.) ONE SIDE OF WALL AT STAIRS (BUILDER PERMITTED TO SUBSTITUTE "WSP" FOR ANY "GB" WALL)

2X - SHEATH BOTH SIDES OF STUD WALL WITH 7/16 APA RATED OSB, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

NOTES:
PROVIDED CONTINUOUS SHEATHING = 278' MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

LINTEL SCHEDULE

L1 L 3 1/2 X 3 1/2 X 1/4 TYP UNO

L2 L 5 X 3 1/2 X 5/16

L3 L 6 X 4 X 5/16 ATTACHED TO HEADER WITH (2) 1/2" X 3" LAG SCREWS @ 16" O.C.

L4 16 GAGE STEEL FLEX LINTEL AT ARCH

HEADER SCHEDULE

H1 SINGLE 2X4 TURNED FLAT (A)

H2 (2) 2X4'S ON SINGLE JACKS (B)

H3 (2) 2X10'S ON SINGLE JACKS (C)

H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS

H5 (3) 2X10'S ON SINGLE JACKS

(A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.

(B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.

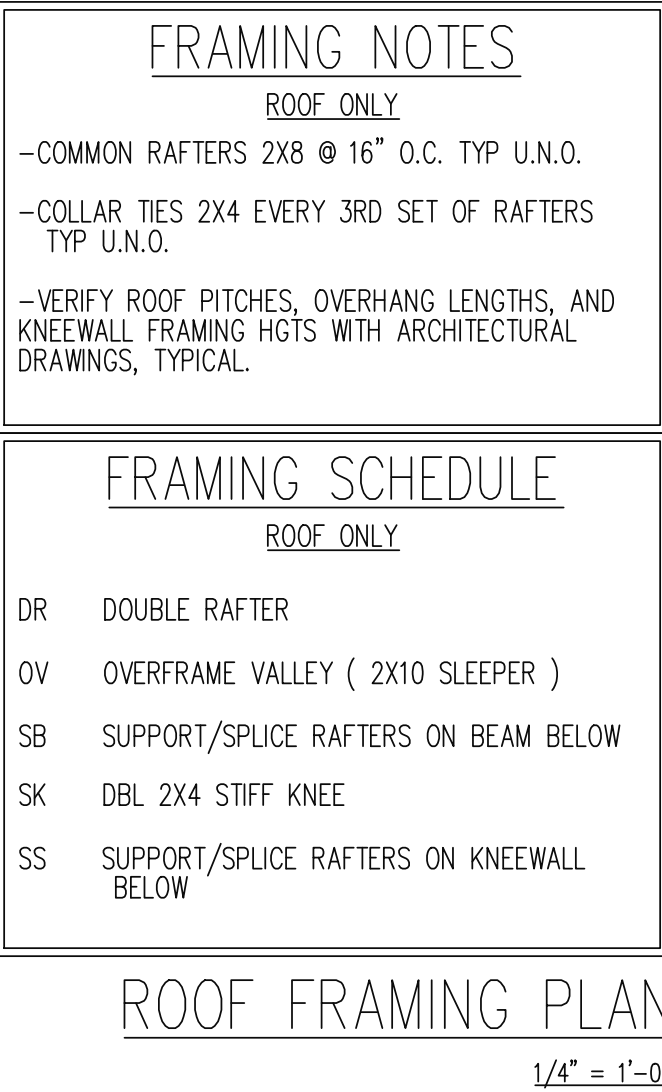
(C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

1ST FLOOR FRAMING PLAN
WALLS AND CEILING: 1/4" = 1'-0"

Engineering STRUCTURAL ENGINEERS
License No. C-3870
318 W Millbrook Rd. Unit 201
Levittown, North Carolina 27609
Associates, P.A. Phone (919) 844-6661

SCOPE:	J&W CUSTOM HOMES	
	STRUCTURAL ADDENDUM	
LOC:	621 DUKE DRIVE	
REV #	REF PROJ #	DATE
ENG: NBC/WHF		
DATE: 8/28/2025		
PROJECT NO.		
25-17-013		
SHEET NO.		
S3		
3 of 7		



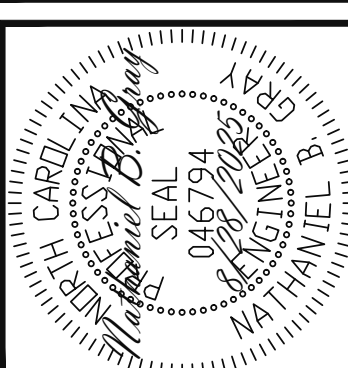
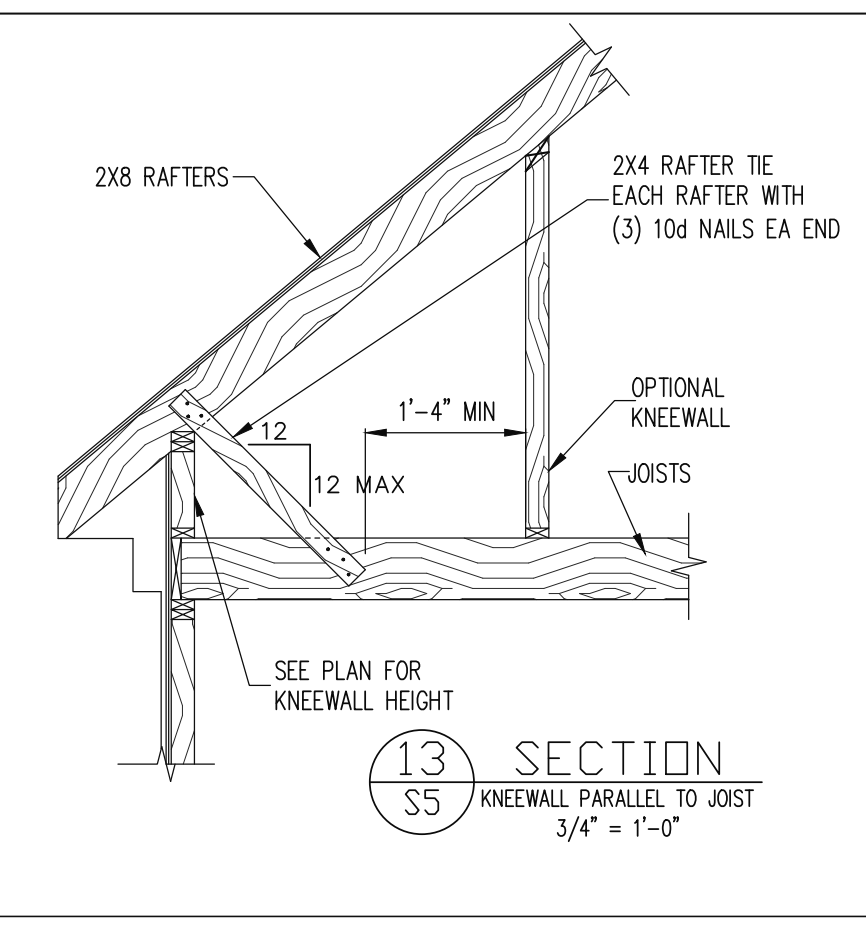
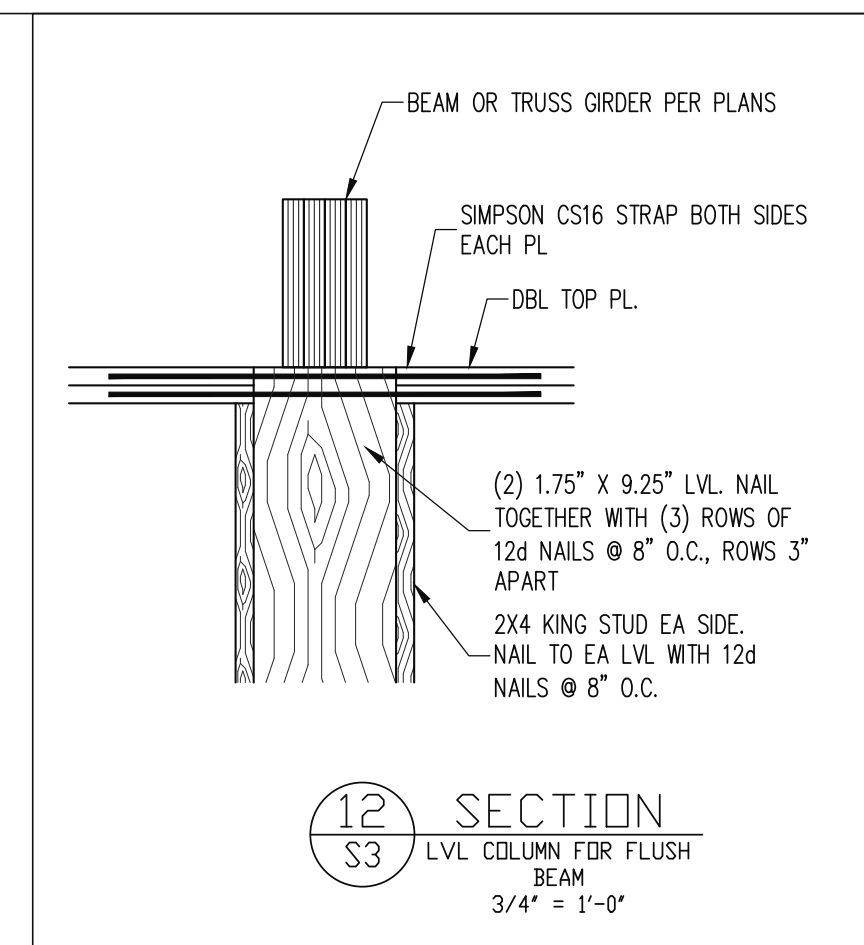
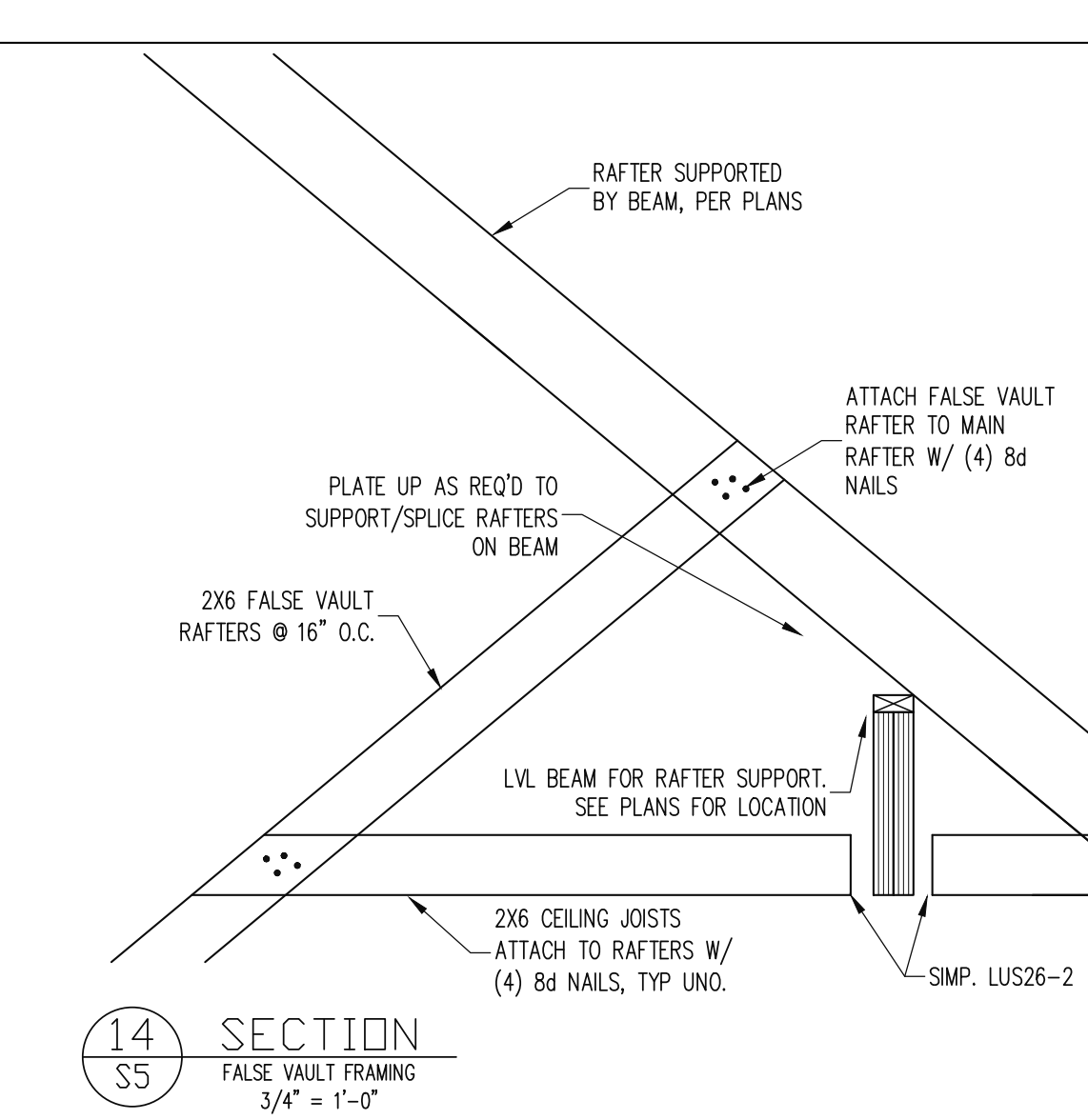
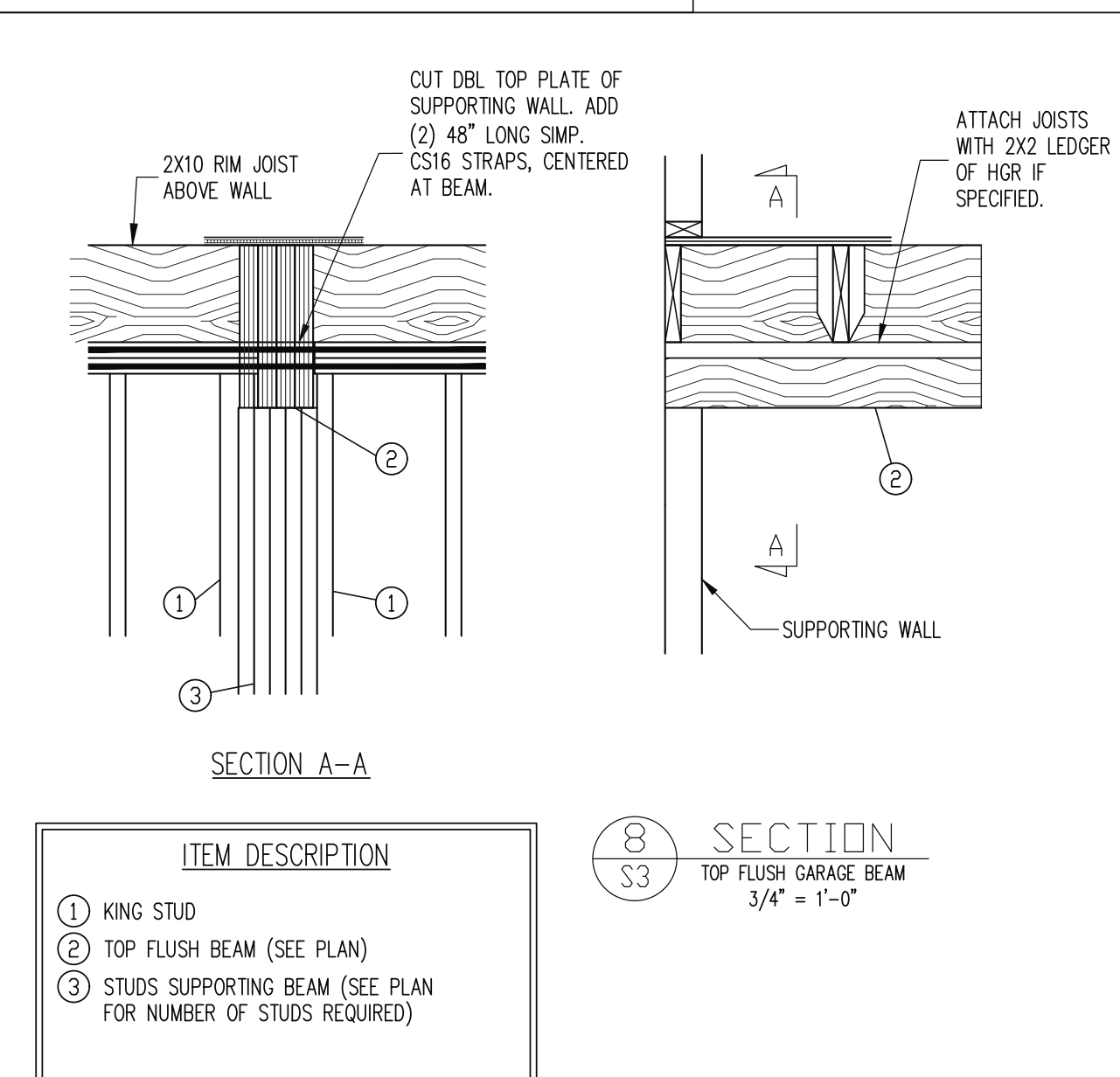
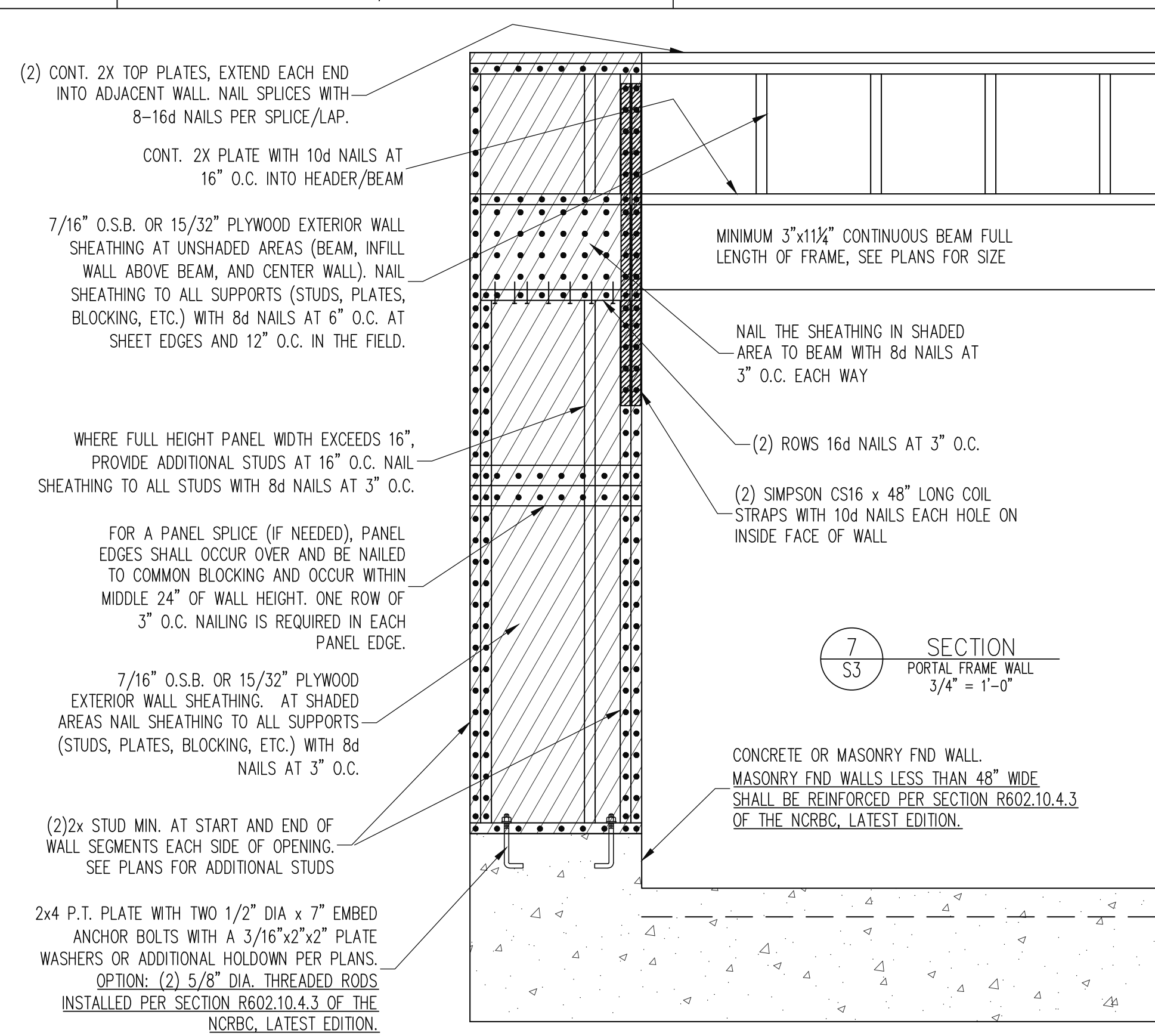
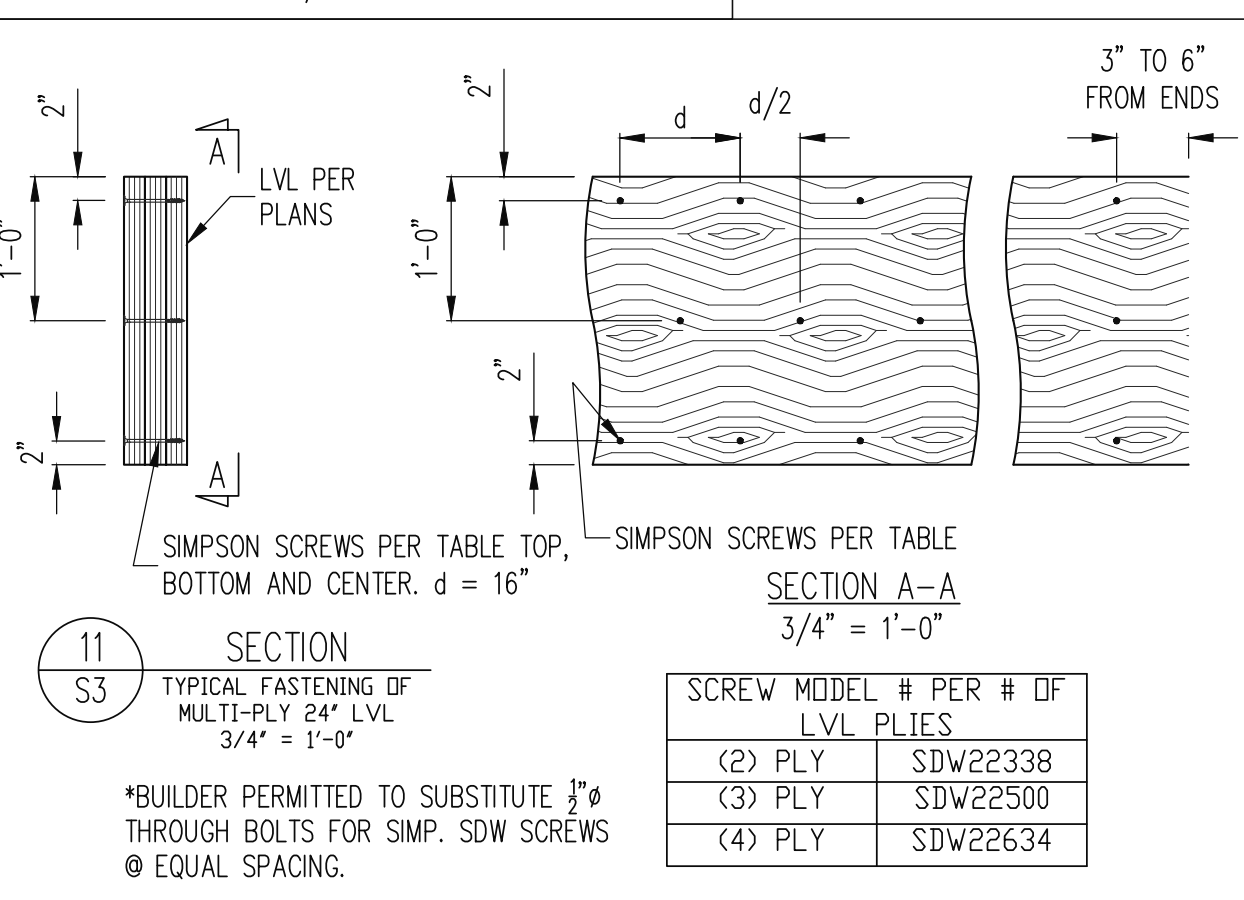
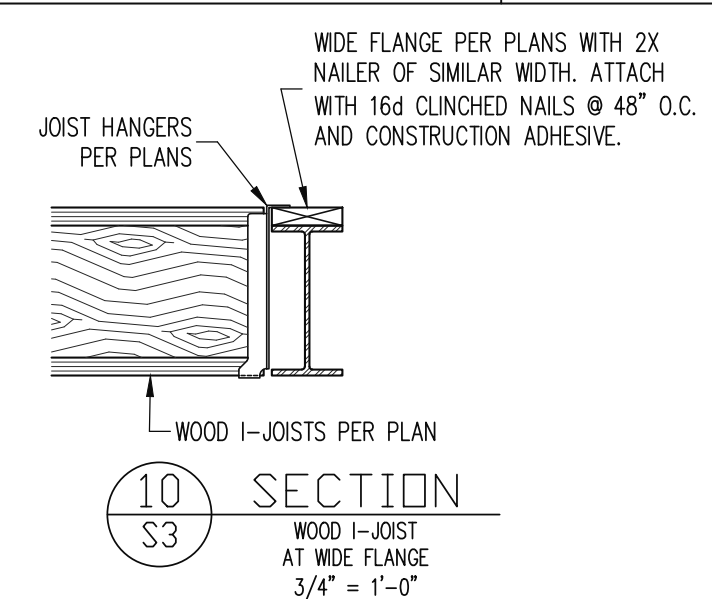
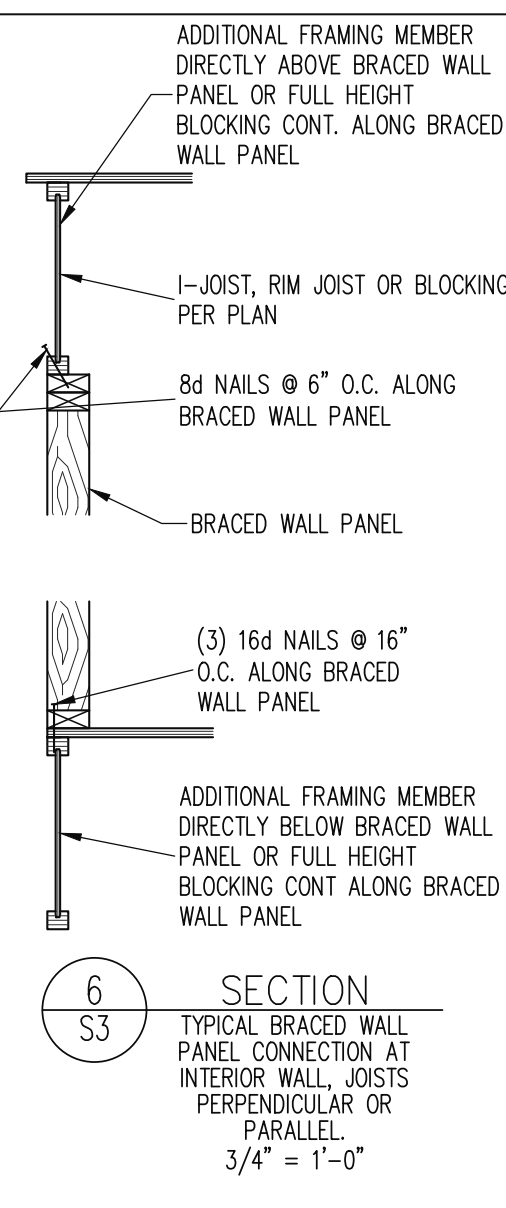
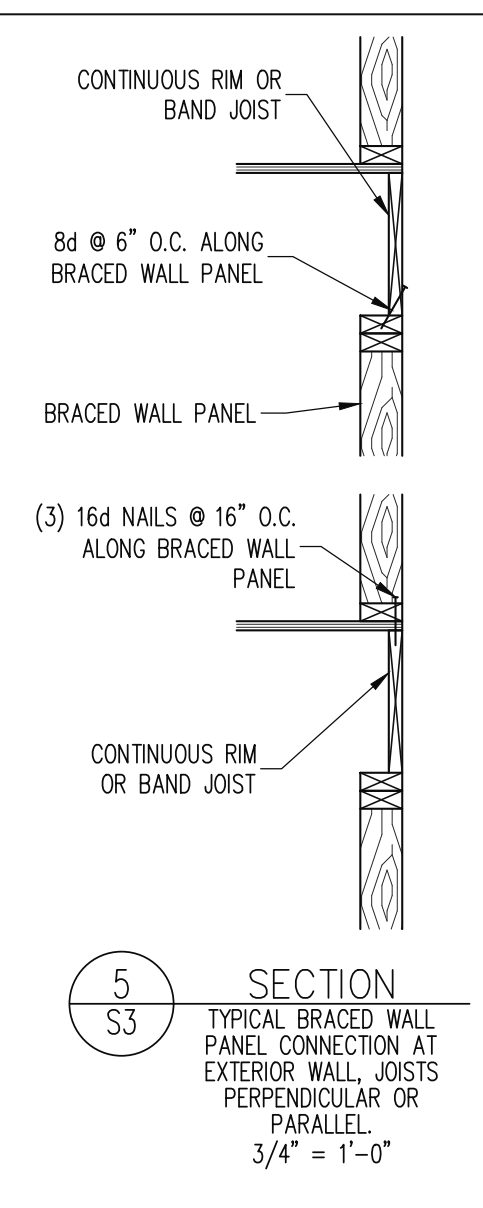
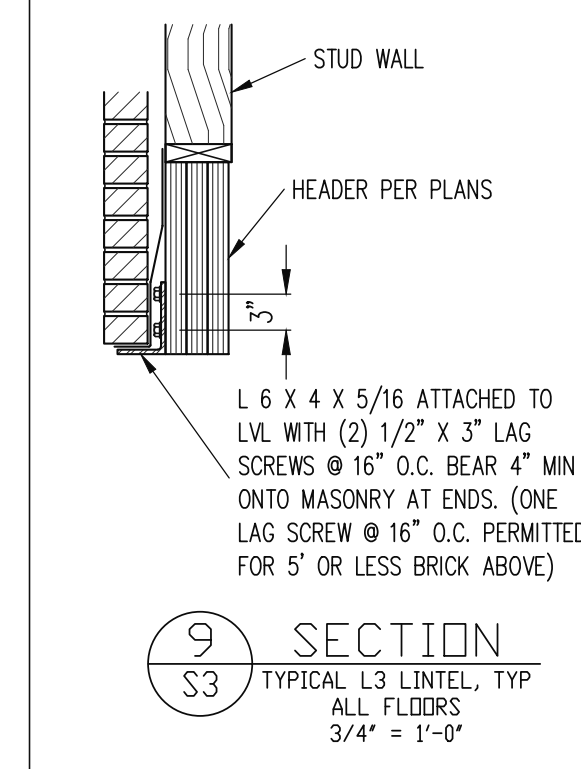
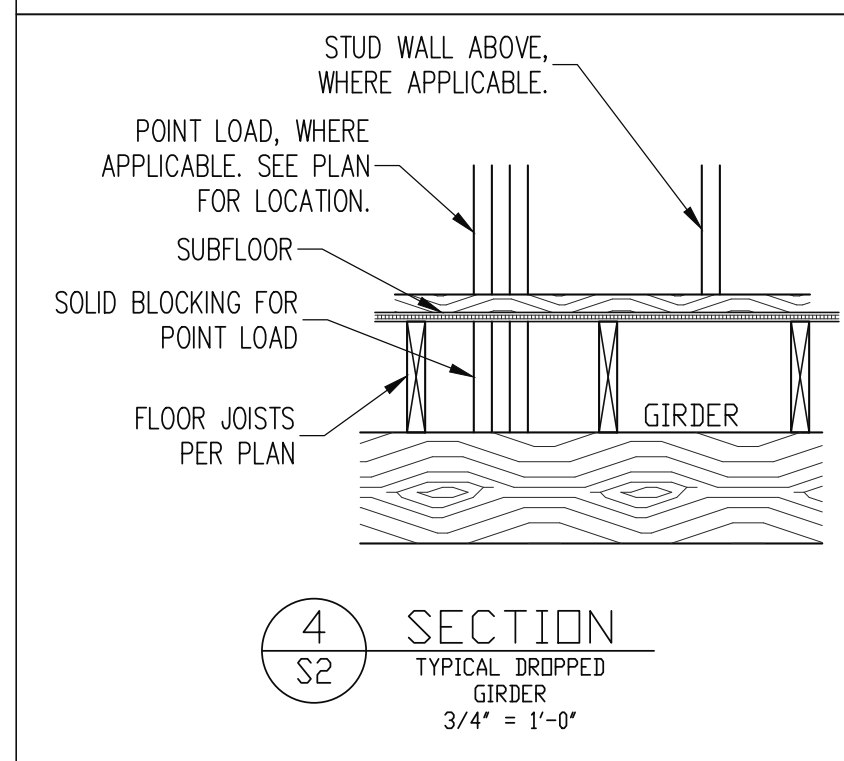
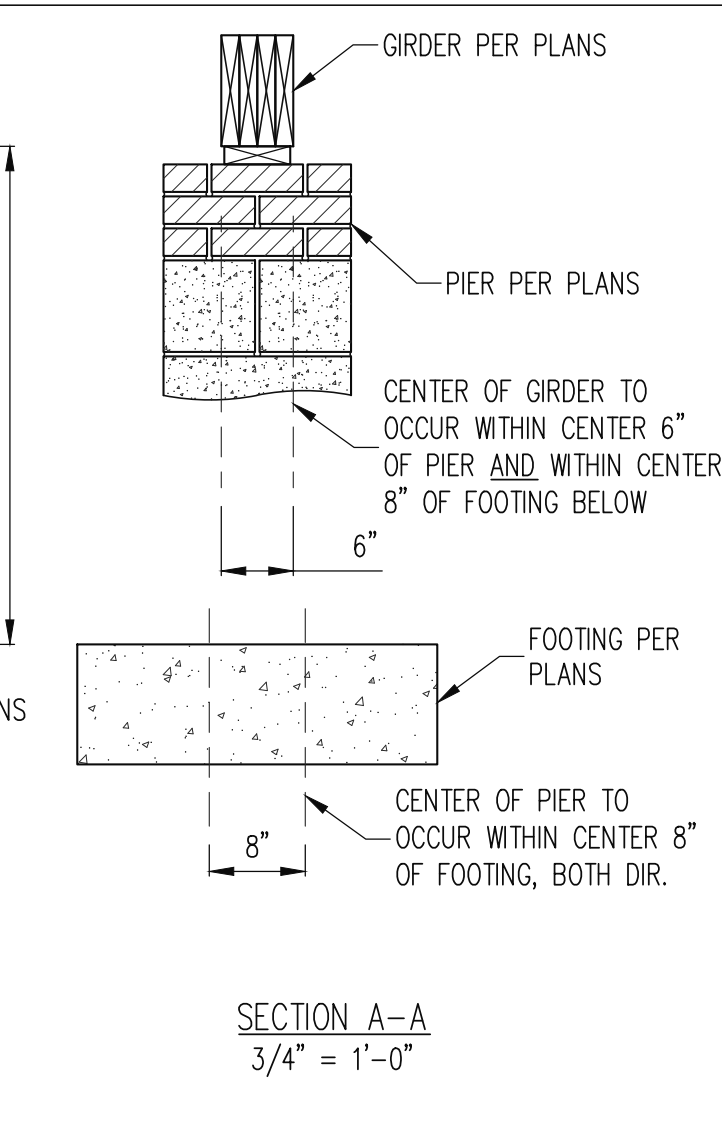
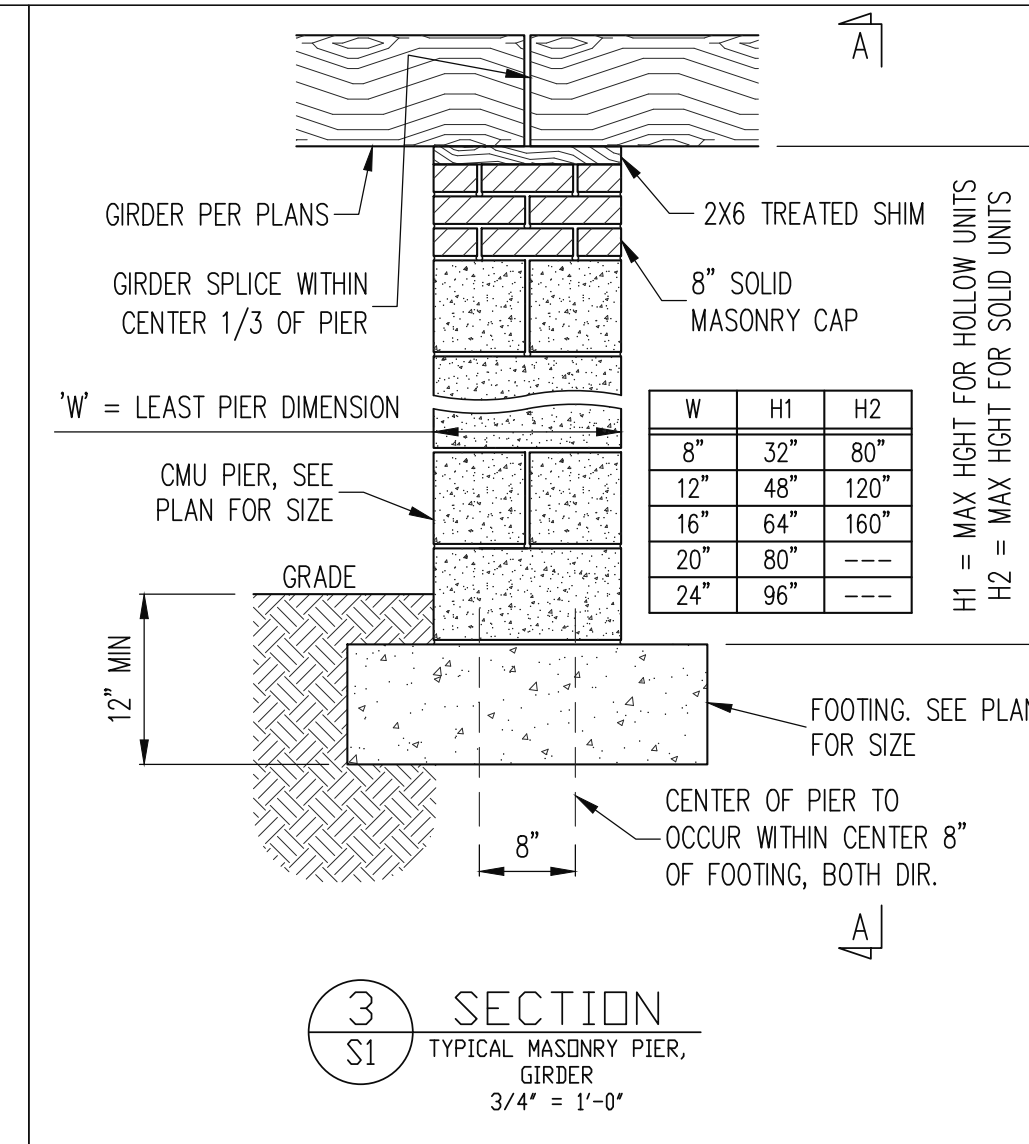
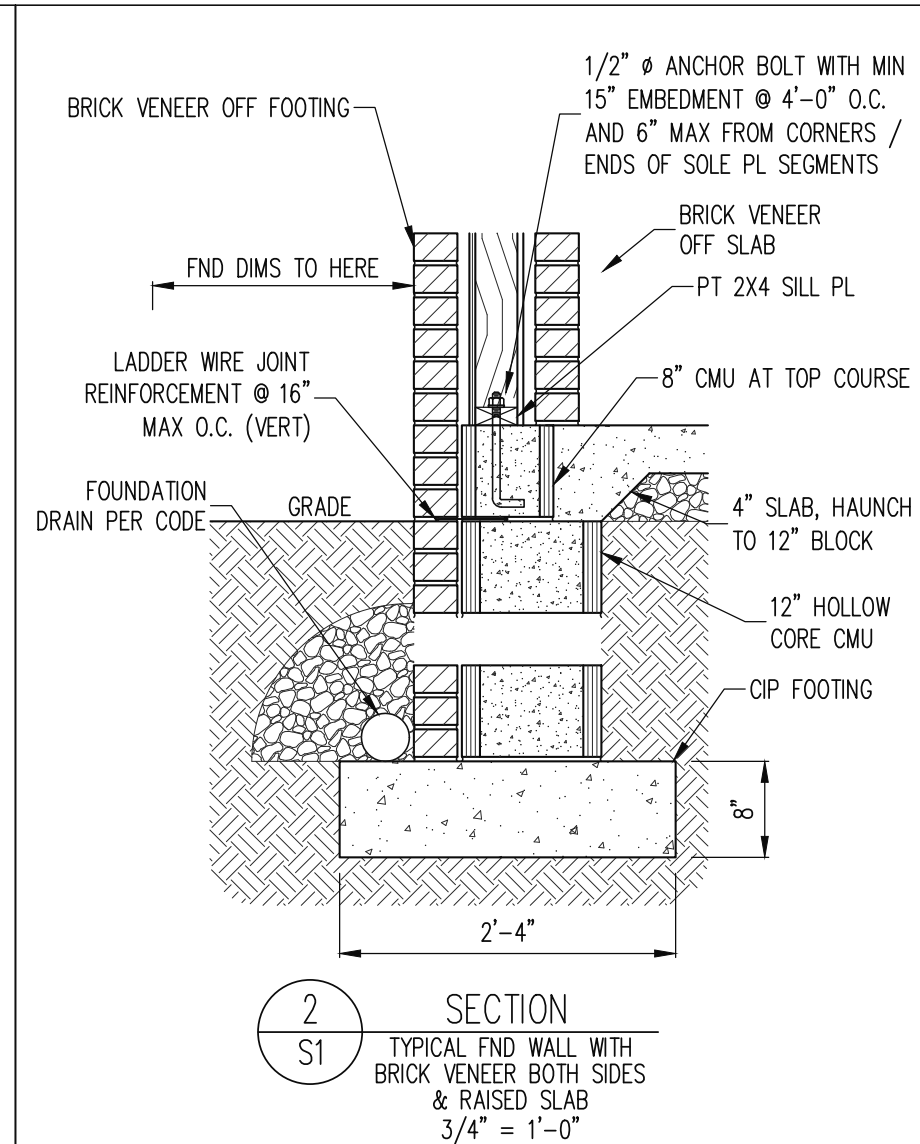
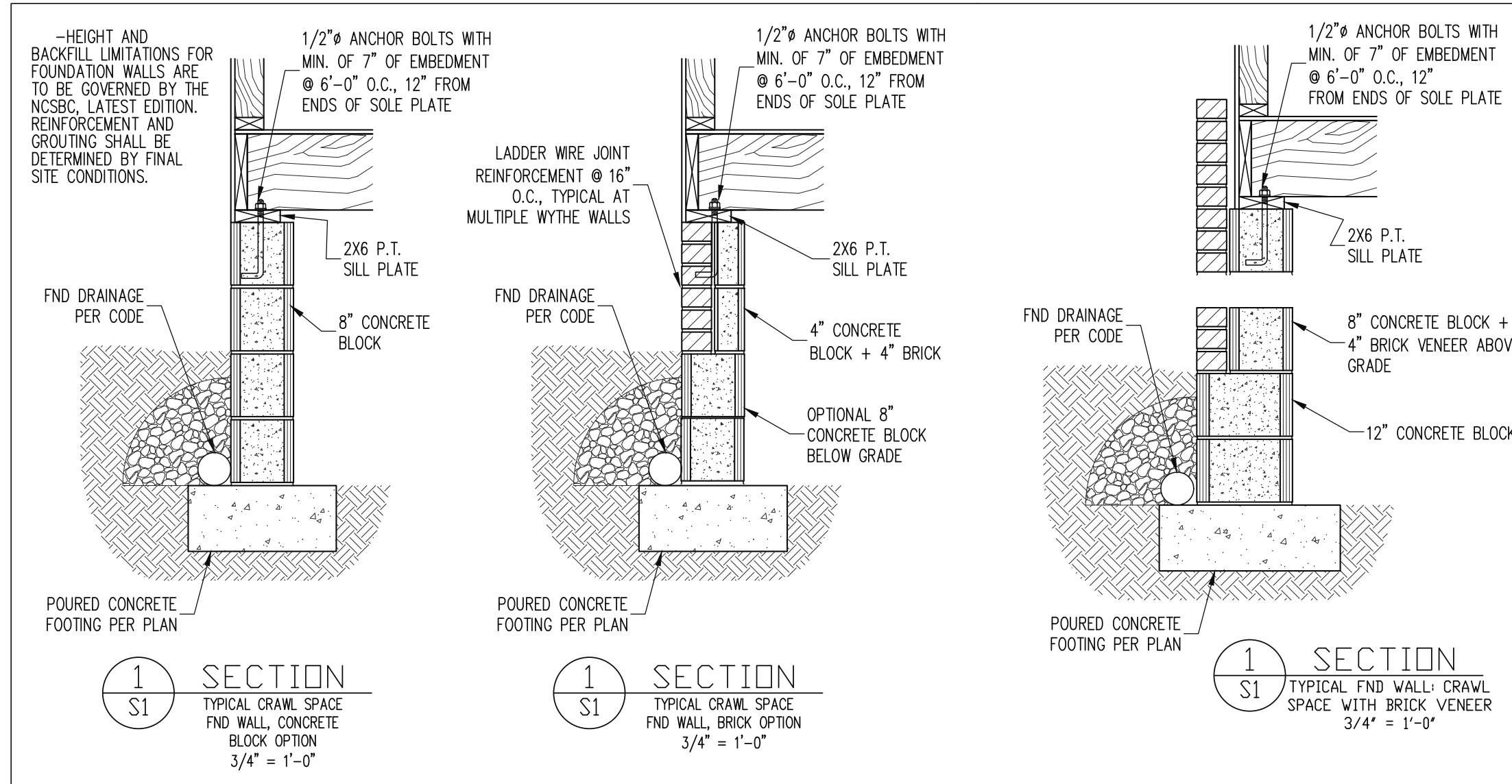
Engineering
STRUCTURAL ENGINEERS
License No. C-3870
318 W Millbrook Rd. Unit 201
Greensboro, North Carolina 27609
Phone (919) 844-1661
ASSOCIATES, P.A.

J&W CUSTOM HOMES			
SCOPE:	STRUCTURAL ADDENDUM		
LOC:	621 DUKE DRIVE	REV # REF PROJ #	DATE

ENG: NBG/WHF
DATE: 8/28/2025

PROJECT NO.
25-17-013

SHEET NO.
S5
5 of 7



Engineering STRUCTURAL ENGINEERS
License No. C-3870
318 W Millbrook Rd. Unit 201
Levittown, North Carolina 27609
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J&W CUSTOM HOMES						
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SHEET NO.
SD1
6 of 7

