


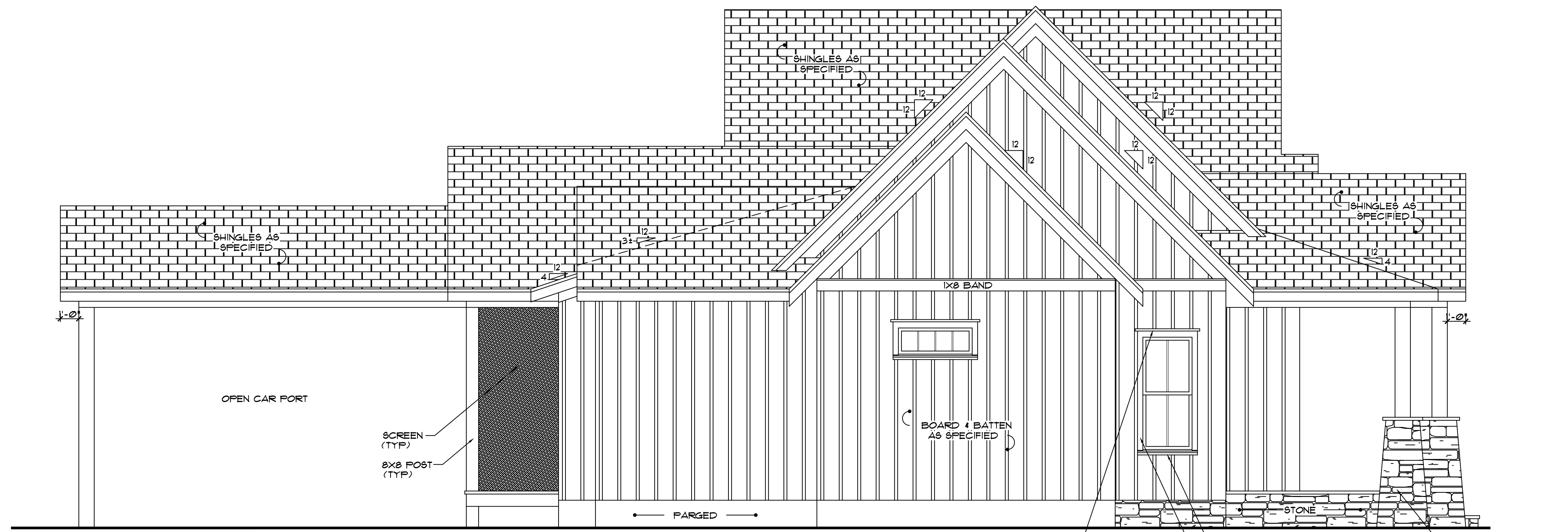
NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

05/28/2021




FRONT ELEVATION
SCALE: 1/4"=1'



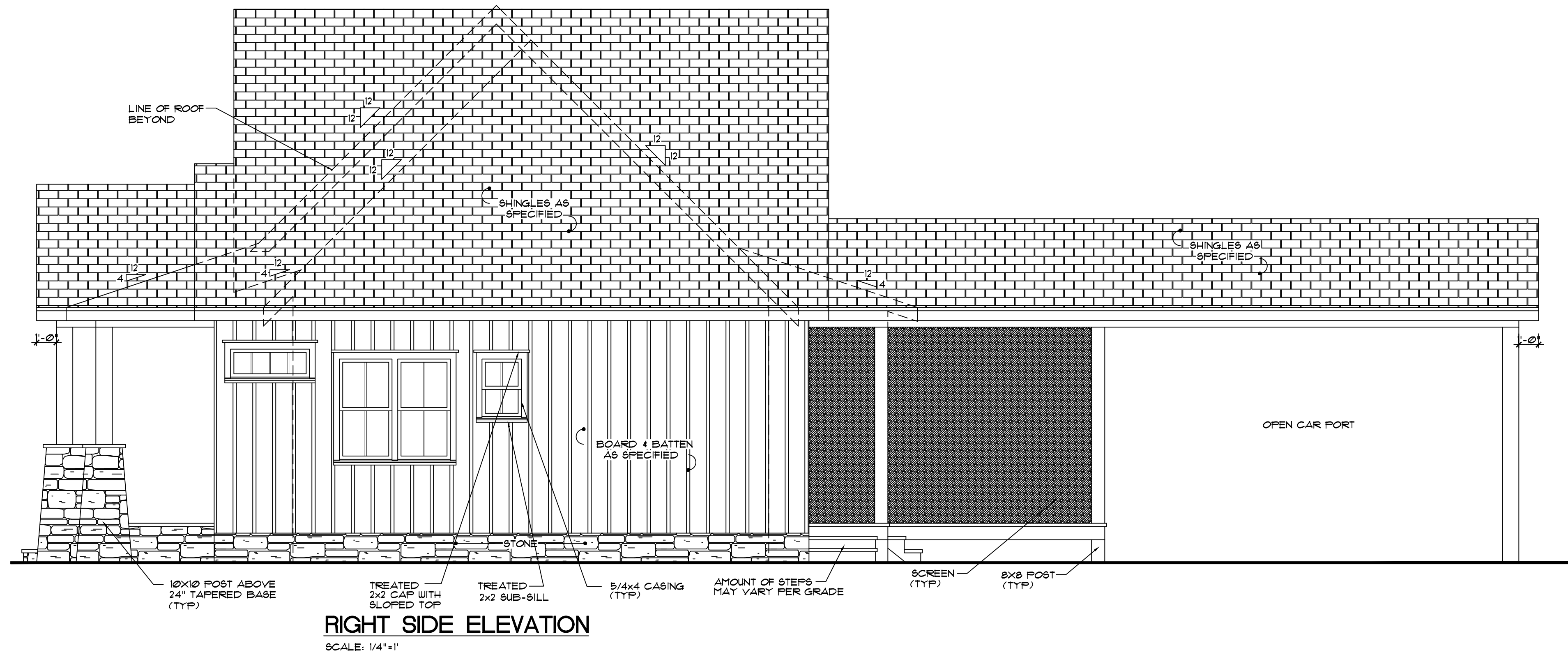
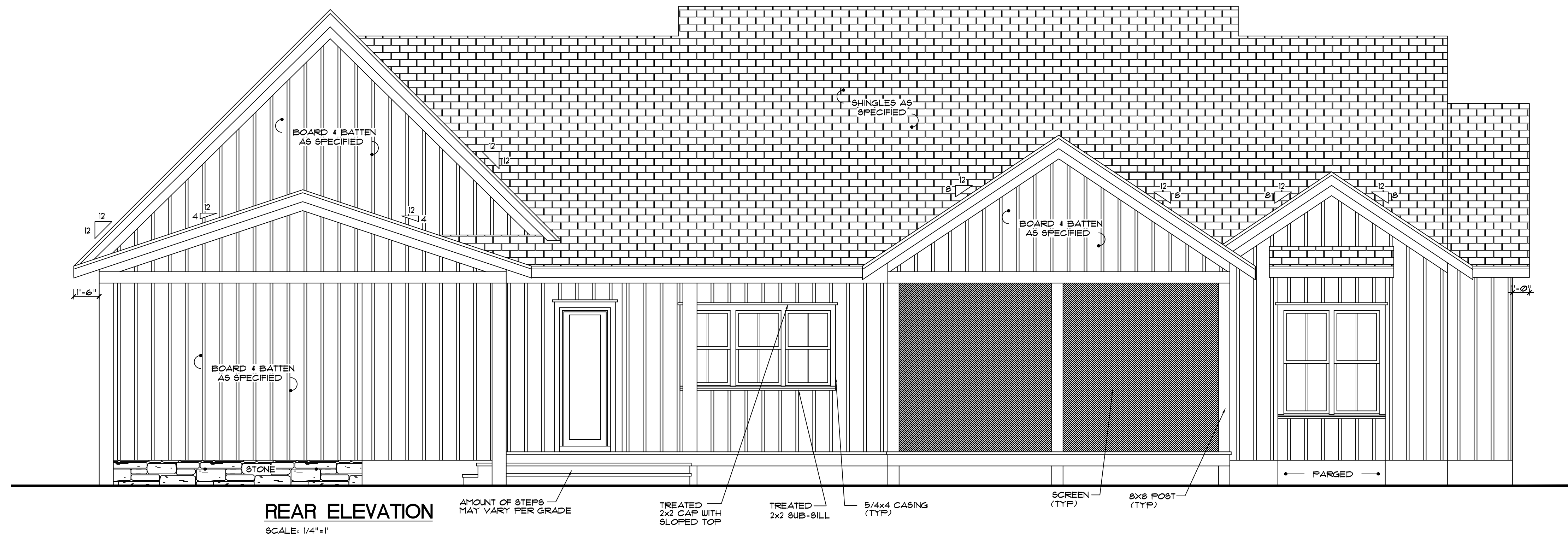
LEFT SIDE ELEVATION
SCALE: 1/4"=1'

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CONWAY RESIDENCE

Drawn by: KM
Date: 08/02/2020
Revision:
ELEVATIONS
Sheet: A1

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CONWAY RESIDENCE

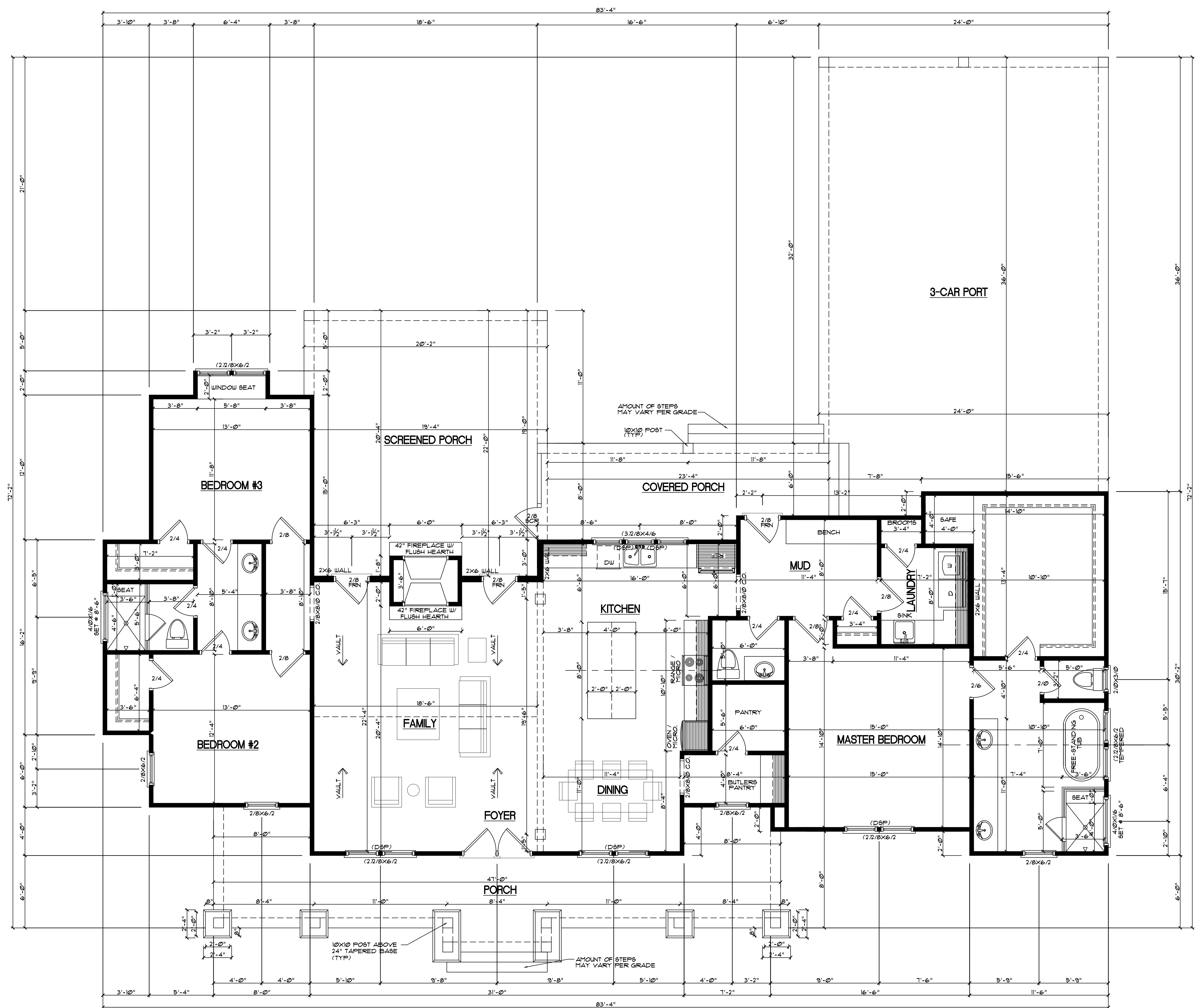
Drawn by: KM
Date: 08/02/2020
Revision:

ELEVATIONS

Sheet:

A2

CLIMATE ZONE	FENESTRATION U-FACTOR	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAIL SPACE WALL R-VALUE
3	U-0.35/ SHGC-0.30	20	13	5/10	15	10/13	0	5/13
4	U-0.35/ SHGC-0.30	38	15, 13+2.5	5/10	15	10/13	10.2 FT.	10/13



PLANS ARE DESIGNED TO MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2012 EDITION

GENERAL NOTES

WALLS:
ALL WALLS ARE DRAWN 4" THICK UNO. ANGLED WALL ARE DRAWN #45° UNO.

SMOKE DETECTORS:
LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

EGRESS:
ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE NC. BLDG. CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

ATTIC ACCESS:
MIN. ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

WALL/CEILING HGT.
WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE. KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

FLOOR AREA:

FIRST FLOOR HTD. *	2240*
TOTAL HTD. SQ. FT. *	2240*
PORCH *	363*
SCREENED PORCH *	418*
COVERED PORCH *	11*
3-CAR PORT *	816*

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CONWAY RESIDENCE

Drawn by: KM
Date: 08/02/2020
Revision:

FIRST FLOOR

Sheet: A3

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 ENGINEERING & DESIGN P.A.
 300 Blywood Drive • Cary • North Carolina • 27509
 919.774.2400 • 919.774.4444
 www.tyndallengineering.com

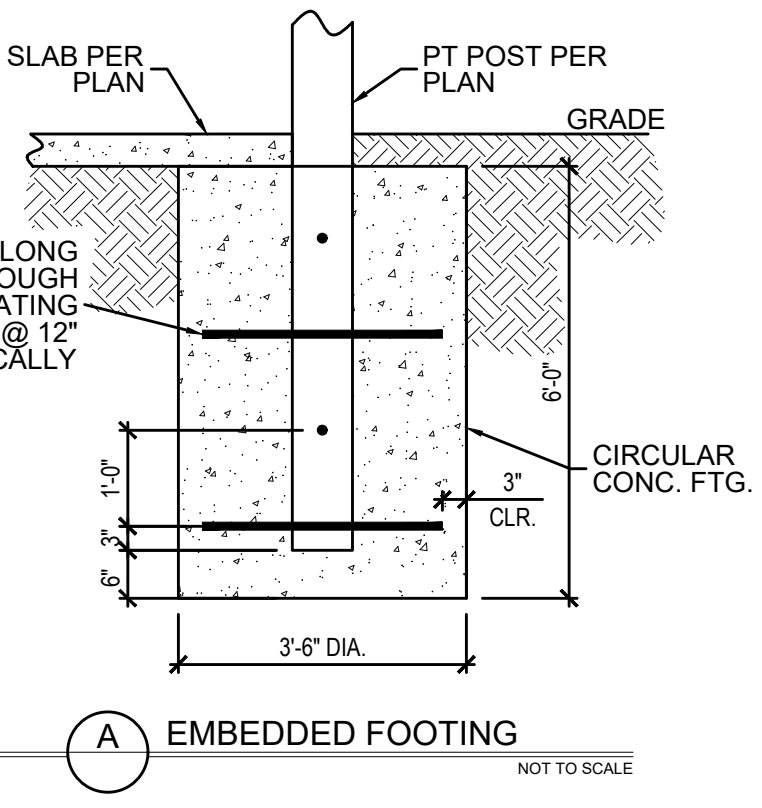
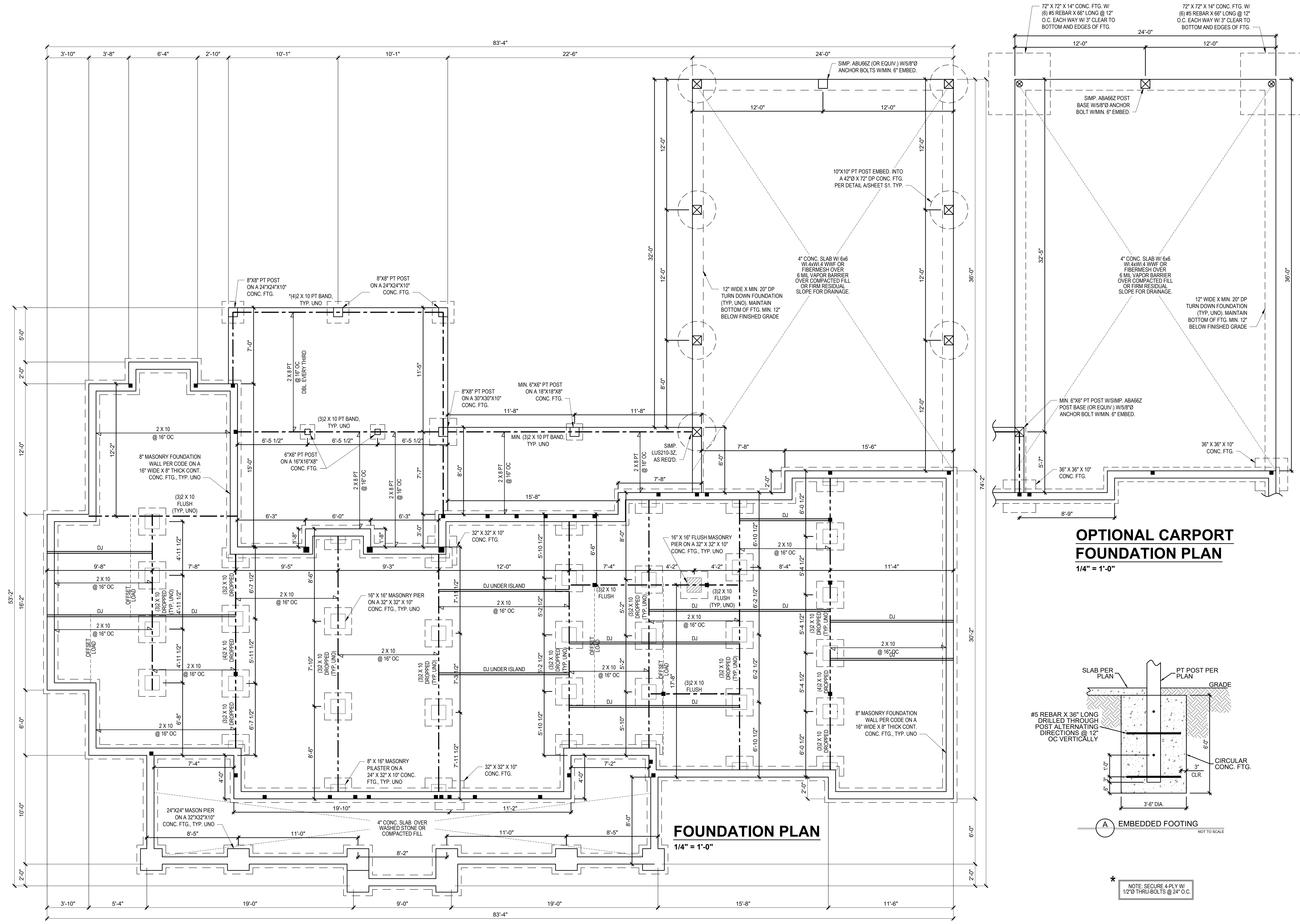
CLIENT: POPE BUILDERS
 PROJECT: CONWAY RESIDENCE

**FOUNDATION PLAN
 1ST FLOOR FRAMING**

Project #: 2001-010525
 Date: 10/30/20
 Drawn/Design By: KFR
 DWG. Checked By: PAT
 Scale: SEE PLAN

REVISIONS		
No.	Date	Remarks

Sheet Number
S1
 1 of 6



FILENAME: Z:\RESIDENTIAL_ENR\2020 STRUCTURAL PROJECTS\2001-010525 - CONWAY RESIDENCE - POPE BUILDERS - CONWAY RESIDENCE.dwg PLOT DATE: 12/4/2020 8:08 AM

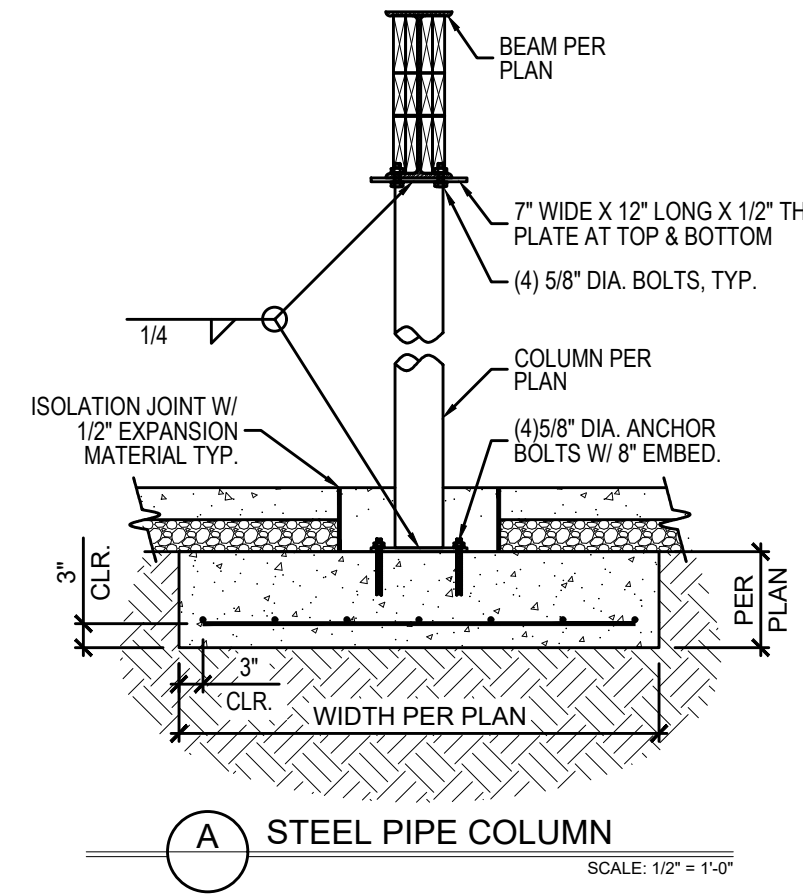
DESIGN LOADS

Table with columns: LIVE LOAD (PSF), DEAD LOAD (PSF), DEFLECTION (LL, TL). Rows include FLOOR (primary), FLOOR (secondary), ATTIC (no storage), ATTIC (no access), EXTERNAL BALCONY, ROOF TRUSS, WIND LOAD, SEISMIC.

STRUCTURAL SHEATHING NOTES

- 1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NRC.
3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO).
5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO).
6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8" SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
- 24' ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
- 30' ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT
- 45' FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT
8) SHEATH INTERIOR & EXTERIOR
9) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(A), IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.
10) MINIMUM 800# HOLD-DOWN DEVICE

NOTE: SECURE 4-PLY W/ 1/2" THRU-BOLTS @ 24" O.C.



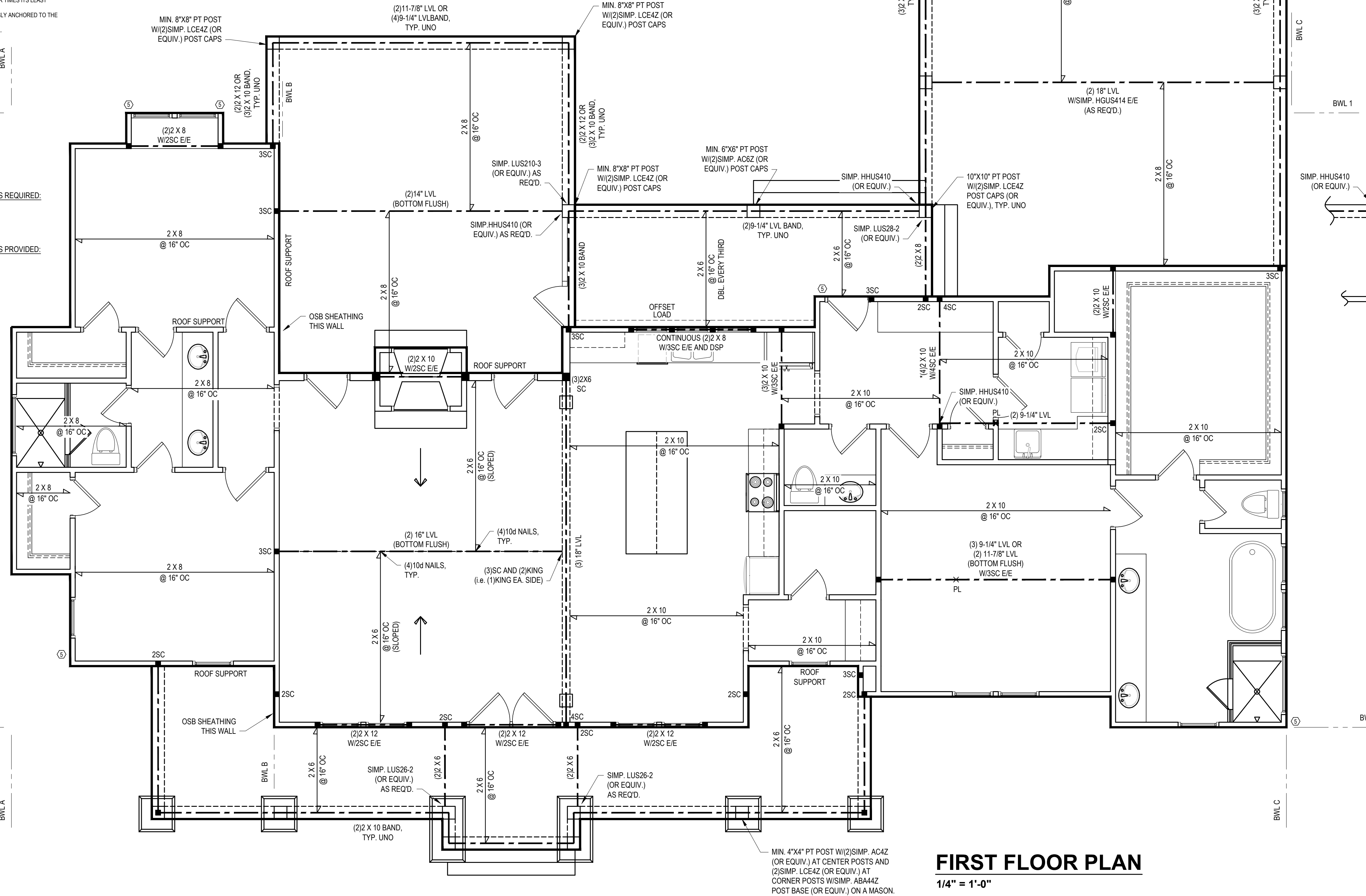
STEEL PIPE COLUMN SCALE: 1/2" = 1'-0"

STRUCTURAL NOTES

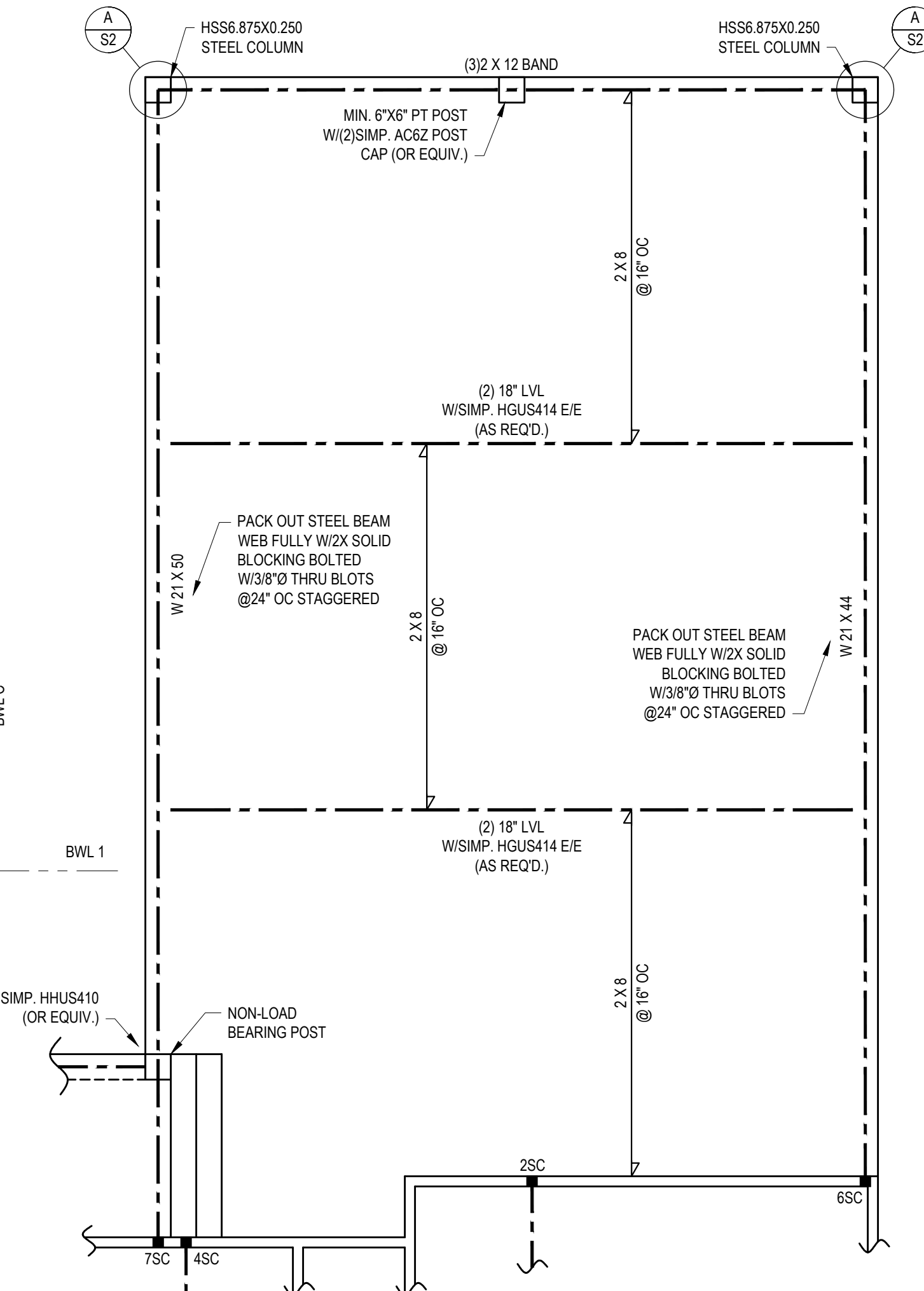
- 1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
2) IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, P.A. IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
3) ALL LUMBER SHALL BE SYP #2 (UNO).
4) ALL LVL LUMBER IS TO BE 1.5SE (Fb = 2325 PSI) (E.E. LEVEL MICRO-AM).
5) ALL LOAD BEARING EXTERIOR WINDOW HEADERS WITH MAXIMUM SPAN OF 5'-6" SHOULD BE A (2) 2x10 W/ (1) 2x4 KING STUD AND (1) 2x4 JACK STUD NAILED TOGETHER W/ (2) 10d @ 8" O.C. PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-0" MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6", OTHERWISE REFER TO TABLE R502.5(1).
6) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (UNO). REFER TO TABLE R502.5(1) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO).
7) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
8) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 Fy = 50 KSI MIN. (UNO).
9) ALL EXTERIOR LUMBER TO BE #2 SYP PT.
10) ALL CONCRETE, fc = 3000 PSI MIN.
11) PRESUMPTIVE BEARING CAPACITY = 2000 PSF.
12) 1/2" ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER, THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
13) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO).
14) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PIERON COLUMNS. (UNO).
15) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC. MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

BRACING PANEL LENGTHS REQUIRED: BWL A = 2.9 FT, BWL B = 12.6 FT, BWL C = 9.7 FT, BWL 1 = 6.3 FT, BWL 2 = 6.3 FT

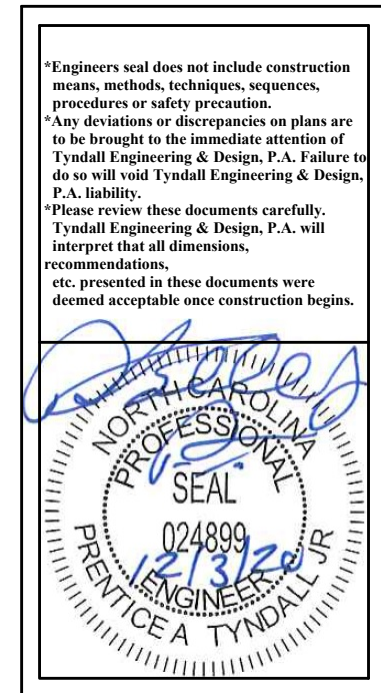
BRACING PANEL LENGTHS PROVIDED: BWL A = 26.2 FT CS-WSP, BWL B = 19.0 FT CS-WSP, BWL C = 14.5 FT CS-WSP, BWL 1 = 43.3 FT CS-WSP, BWL 2 = 50.7 FT CS-WSP



FIRST FLOOR PLAN 1/4" = 1'-0"



OPTIONAL CARPORT FIRST FLOOR PLAN 1/4" = 1'-0"



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POPE BUILDERS CONWAY RESIDENCE

1ST FLOOR HEADER 2ND FLOOR FRAMING

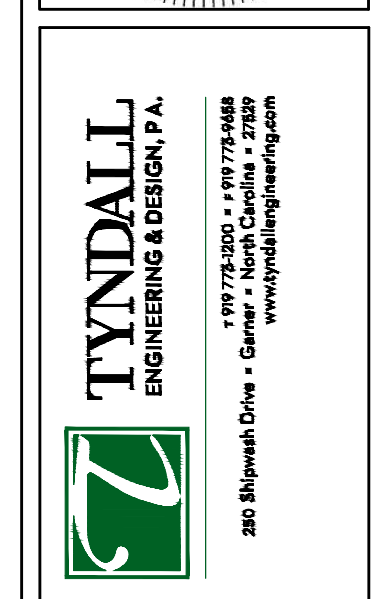
Project Information: Project #: 2001-010525, Date: 10/30/20, Drawn/Design By: KFR, DWG. Checked By: PAT, Scale: SEE PLAN

REVISIONS table with columns: No., Date, Remarks

Sheet Number S2 2 of 6

FILENAME: Z:\RESIDENTIAL\DWG\2020 STRUCTURAL PROJECTS\2001-010525 - CONWAY RESIDENCE\DWG SWED BY: KWHYNY LAST PLOT DATE: 12/14/2020 9:09 AM

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 280 Blinnworth Drive • Garner • North Carolina • 27839
 919 775-2510 • 919 775-4444
 www.tyndallengineering.com

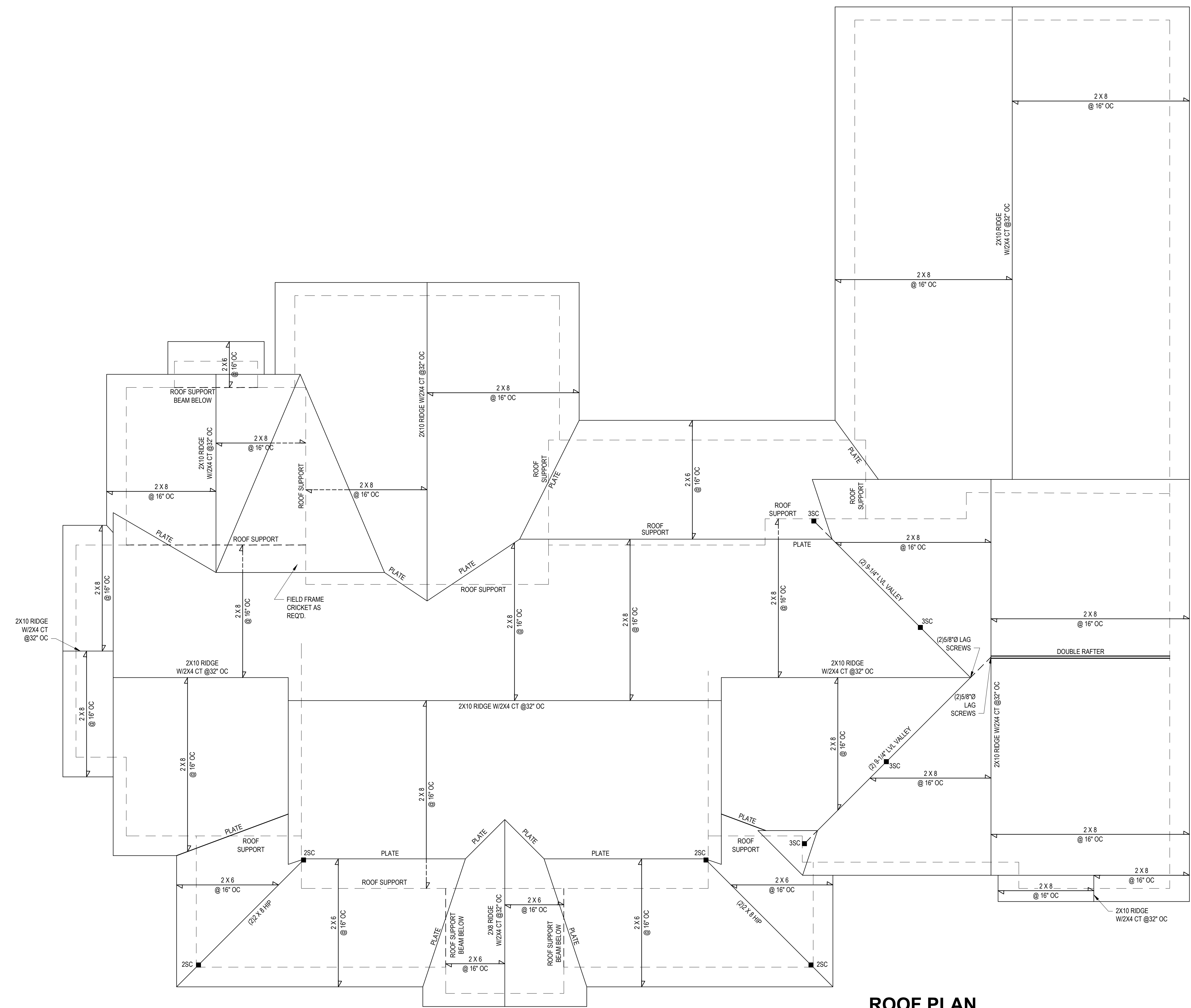
Client: **POPE BUILDERS**
 Project: **CONWAY RESIDENCE**

ROOF PLAN

Project #: 2001-010525
 Date: 10/30/20
 Drawn/Design By: KFR
 DWG. Checked By: PAT
 Scale: SEE PLAN

REVISIONS		
No.	Date	Remarks

Sheet Number
S3
 3 of 6



ROOF PLAN
 1/4" = 1'-0"

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STRUCTURAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF 'NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE', IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- DESIGN LOADS:

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
ALL FLOORS	40	10	L/360	L/240
ATTIC (w/ walk up stairs)	30	10	L/360	L/240
ATTIC (pull down access)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180

WIND LOAD BASED ON 120 MPH (EXPOSURE B)
SEISMIC SEISMIC ZONES A, B & C
- MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
- CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE. (U.N.C.)
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R602.3 FOR BRACING. BRACING SHALL BE ATTACHED TO EACH SUPPORT WITH WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.
- ALL FRAMING LUMBER SHALL BE SYP #2 (F_b = 800 PSI, BASED ON D.V.I.) UNLESS NOTED OTHERWISE. ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL. ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND F_b = 2000 PSI, E = 1.9M PSI (U.N.O.) ALL L.S. LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND F_b = 2325 PSI, E = 1.8M PSI (U.N.O.) ALL PSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND F_b = 2400 PSI, E = 1.8M PSI (U.N.O.)
- ALL LOAD BEARING EXTERIOR HEADERS SHALL BE (2) 2x10 (U.N.O.) REFER TO TABLE R602.7(1) & (2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS UNLESS SPECIFICALLY NOTED ON PLANS.
- ALL STRUCTURAL STEEL W-SHAPES (I-BEAMS) SHALL BE ASTM A992 GRADE 50. ALL STEEL ANGLES, PLATES, AND C-CHANNELS SHALL BE ASTM A36. ALL STEEL PIPE SHALL BE ASTM A53 GRADE B.
- STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3/4" AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO (2) LAG SCREWS (1/2" x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOISTS ARE TOE NAILED TO THE SOLE PLATES, AND THE SOLE PLATES ARE NAILED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.
- PROVIDE ANCHOR BOLT PLACEMENT PER SECTION 403.1.6: 1/2" ANCHOR BOLTS SPACED AT 6'-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. THERE SHALL BE A MINIMUM TWO ANCHOR BOLTS PER PLATE SECTION.
- FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.
- WALL AND ROOF CLADDING VALUES:
WALL CLADDING SHALL BE DESIGNED FOR 28.0 POUNDS PER SQUARE FOOT (LBS/SQFT) OR GREATER POSITIVE AND NEGATIVE PRESSURE. ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:
39.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1/12
36.0 LBS/SQFT FOR ROOF PITCHES 1/12 TO 6/12
18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12
*MEAN ROOF HEIGHT 3/4" OR LESS
- FOR ROOF SLOPES FROM 2/12 THROUGH 4/12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER.
- REFER TO SECTION R602.3 FOR FRAMING OF ALL WALLS OVER 10'-0" IN HEIGHT.
- PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 NRC.
- UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- REFER TO TABLE N1102.1 FOR PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA.
- PSL COLUMNS DESIGNED WITH MAXIMUM HEIGHT OF 9'-0" (U.N.O.)
- PROVIDE A MINIMUM OF 50# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- MAXIMUM MASONRY PER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSION OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.

DEFINITIONS FOR COMMON ABBREVIATIONS

ALT = ALTERNATE	MAX = MAXIMUM
CANT = CANTILEVER	MIN = MINIMUM
CJ = CEILING JOIST	NOM = NOMINAL
CMU = CONCRETE MASONRY UNIT	O.C. = ON CENTER
COL = COLUMN	PL = POINT LOAD
CONC = CONCRETE	PT = PRESSURE TREATED
CONT = CONTINUOUS	REIN = REINFORCED
CT = COLLAR TIE	REQD = REQUIRED
DBL = DOUBLE	RJ = ROOF JOIST
DIA = DIAMETER	RS = ROOF SUPPORT
DJ = DOUBLE JOIST	SC = STUD COLUMN
DR = DOUBLE RAFTER	SCH = SCHEDULE
EA = EACH	SPEC = SPECIFIED
EE = EACH END	THK = THICK
FJ = FLOOR JOIST	TJ = TRIPLE JOIST
FND = FOUNDATION	TRTD = TREATED
FTG = FOOTING	TYP = TYPICAL
GALV = GALVANIZED	UNO = UNLESS NOTED OTHERWISE
HORIZ = HORIZONTAL	W = WIDE FLANGE BEAM
HT = HEIGHT	WWF = WELDED WIRE FABRIC
MANUF = MANUFACTURER	XJ = EXTRA JOIST

1) MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

POST SIZE	MAX. POST HEIGHT**
4 x 4	8'-0"
6 x 6	20'-0"
***	OVER 20'-0"

* THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET WHICH MAY BE LOCATED AT DIFFERENT LEVELS.
** FROM TOP OF FOOTING TO BOTTOM OF GIRDER.
*** DECKS WITH POST HEIGHTS OVER 20'-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.

2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THESE METHODS:

- THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION (4) ABOVE. LATERAL BRACING IS NOT REQUIRED.
- 4 x 4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED TO THE POST AND GIRDER WITH ONE 5/8" Ø NOT DIPPED GALVANIZED BOLT AT EACH END OF THE BRACE.
- FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN ACCORDANCE WITH THE FOLLOWING:

POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6 SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8" Ø NOT DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER.
E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.

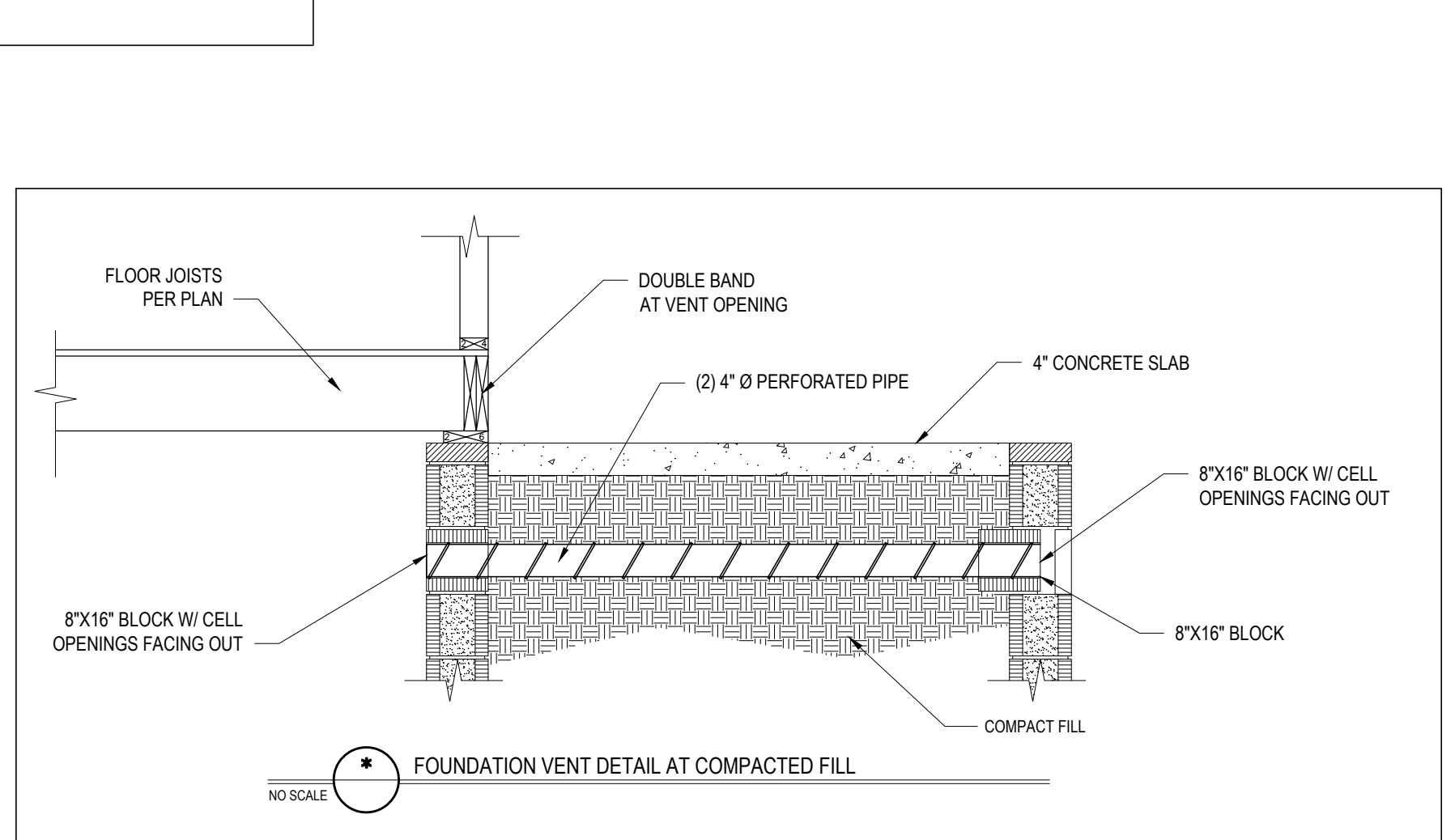
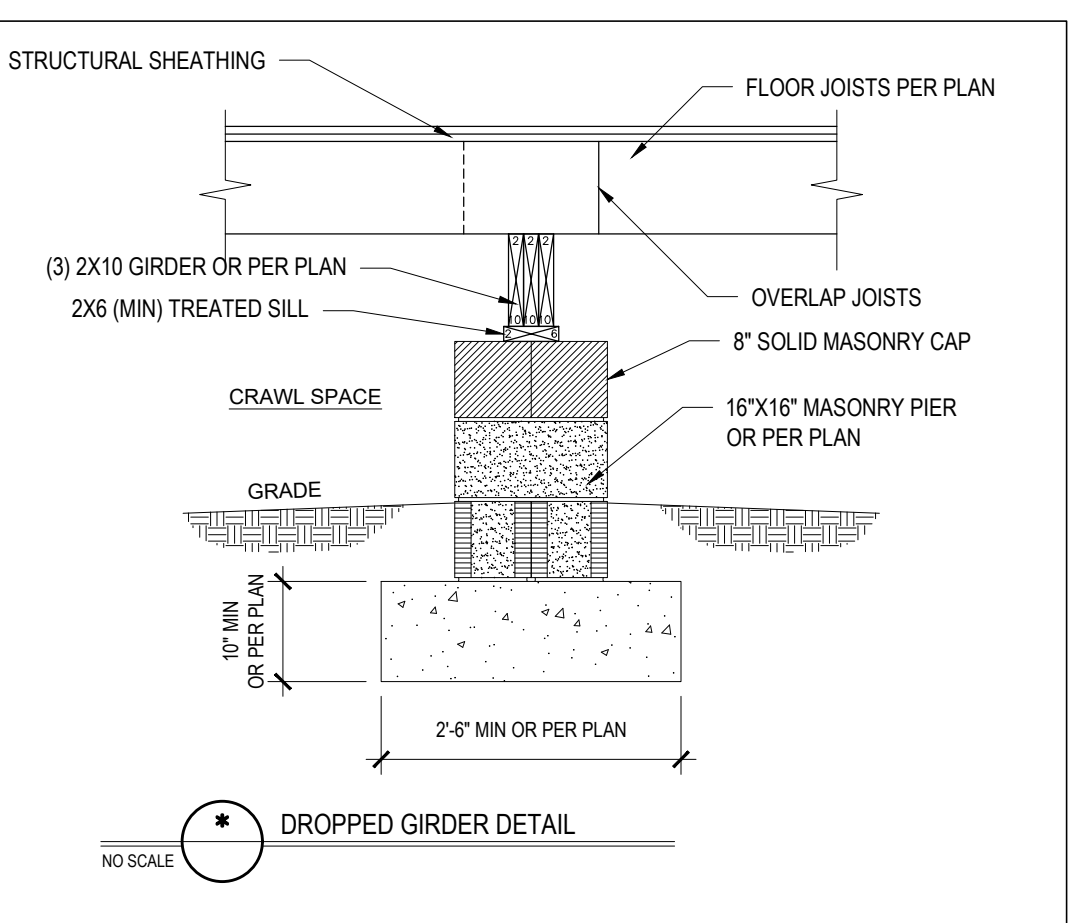
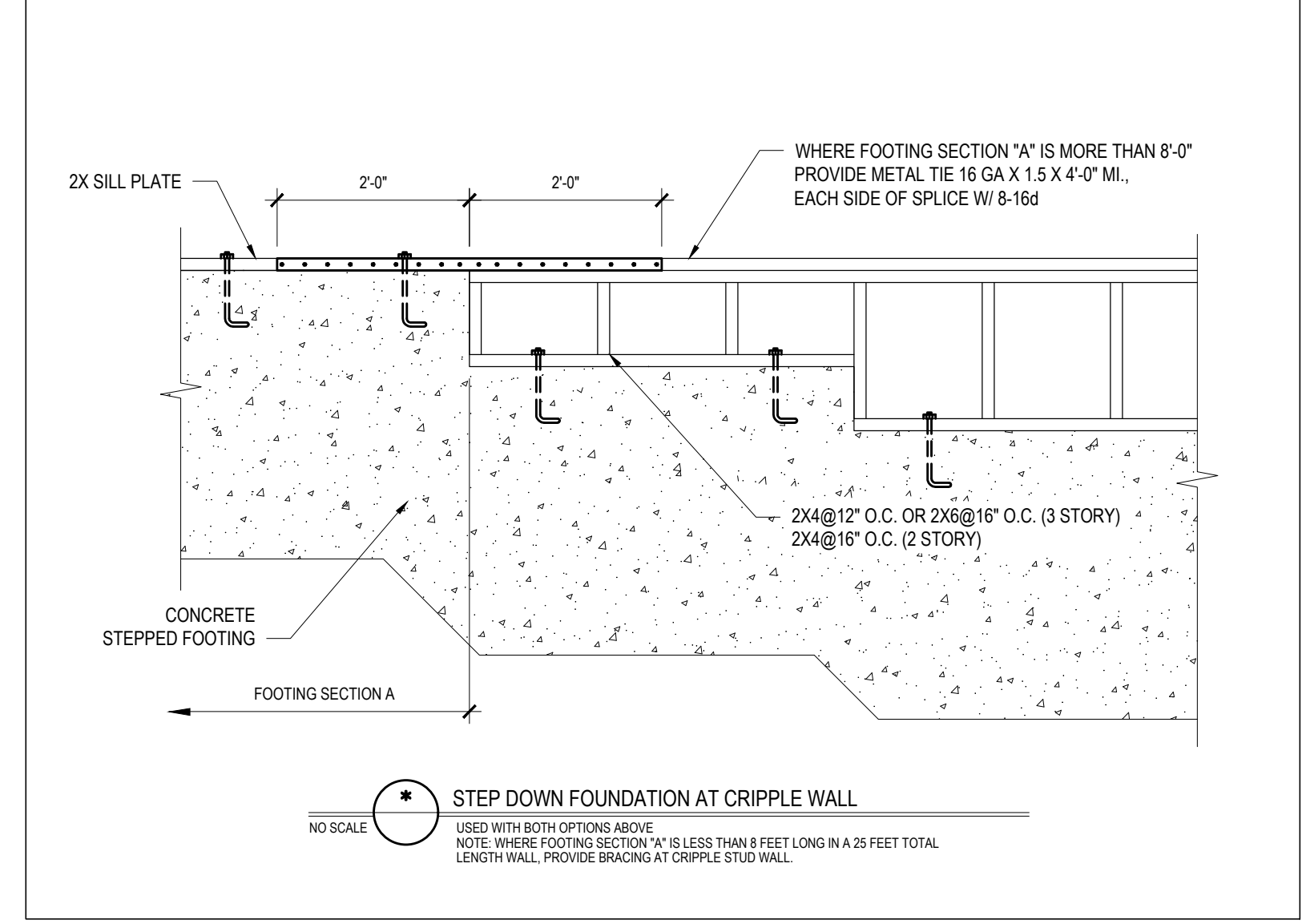
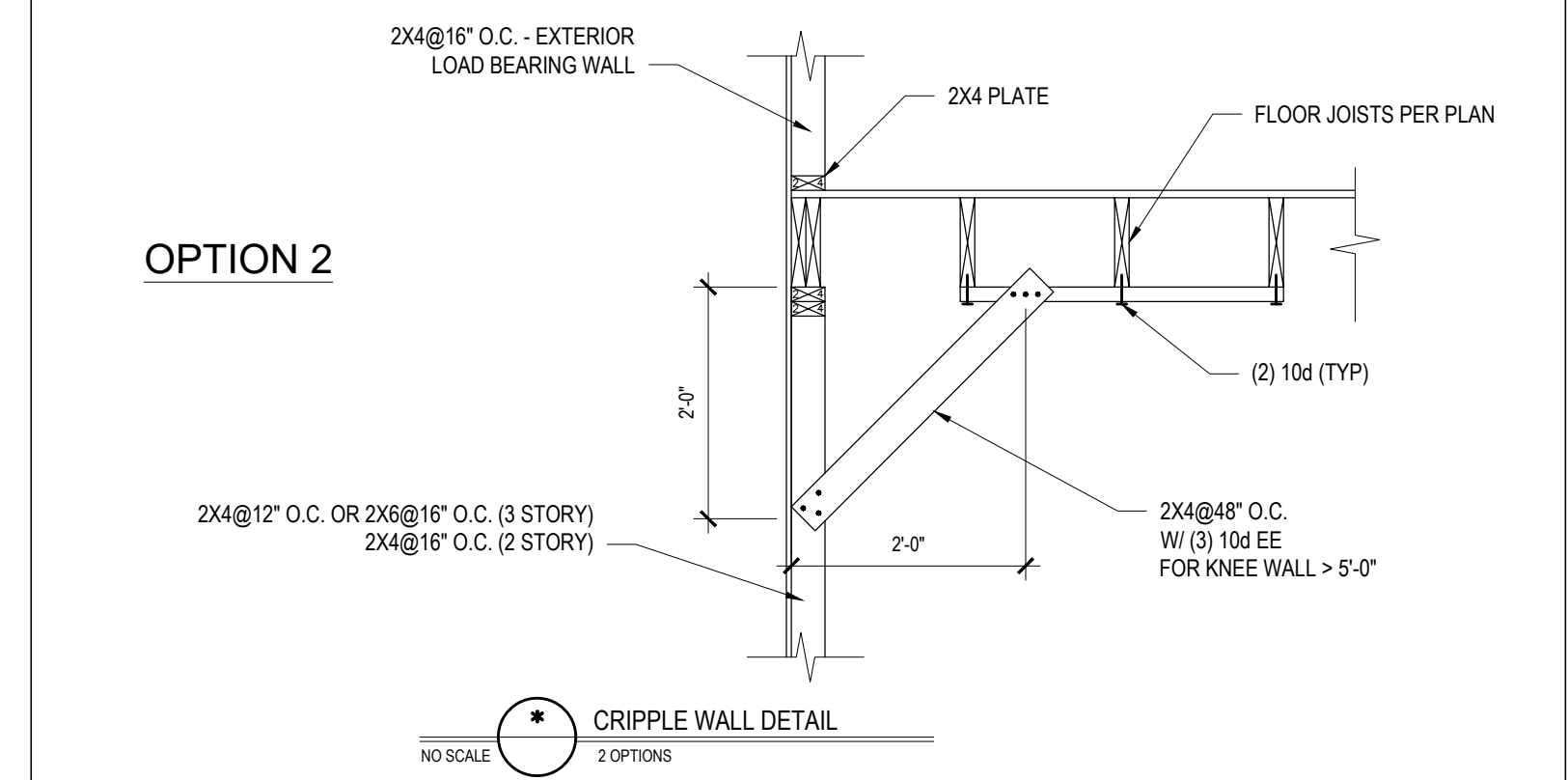
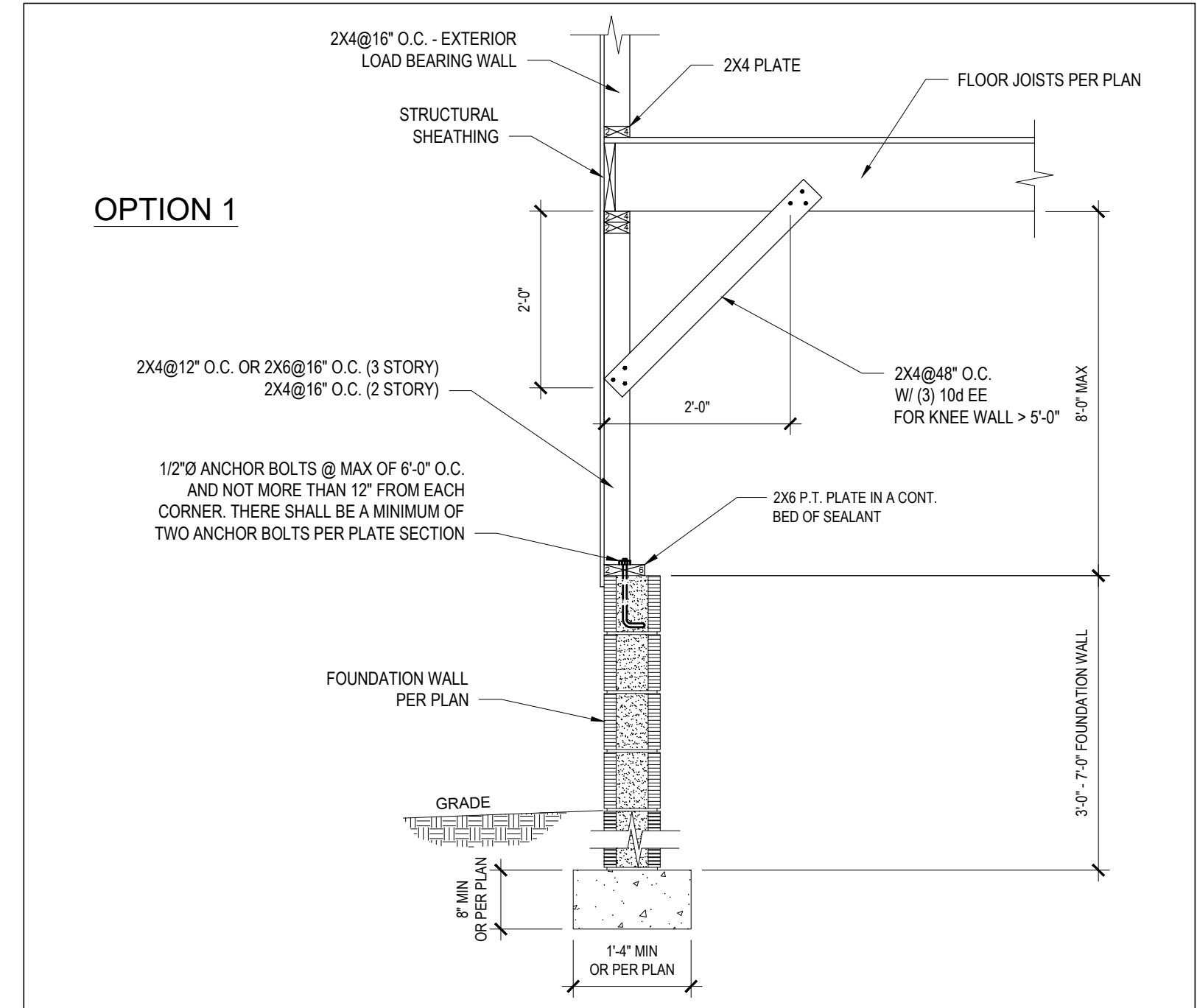
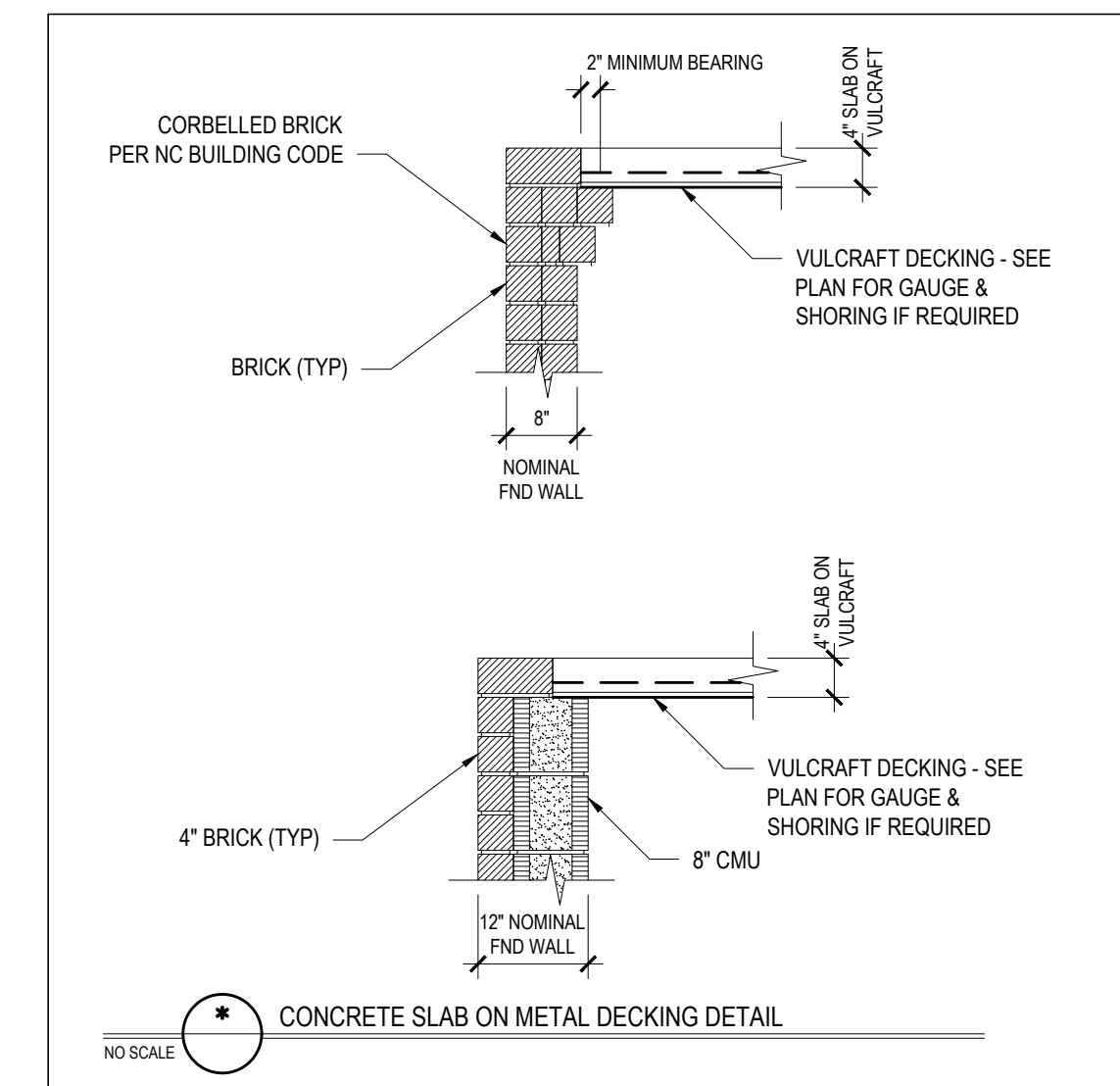
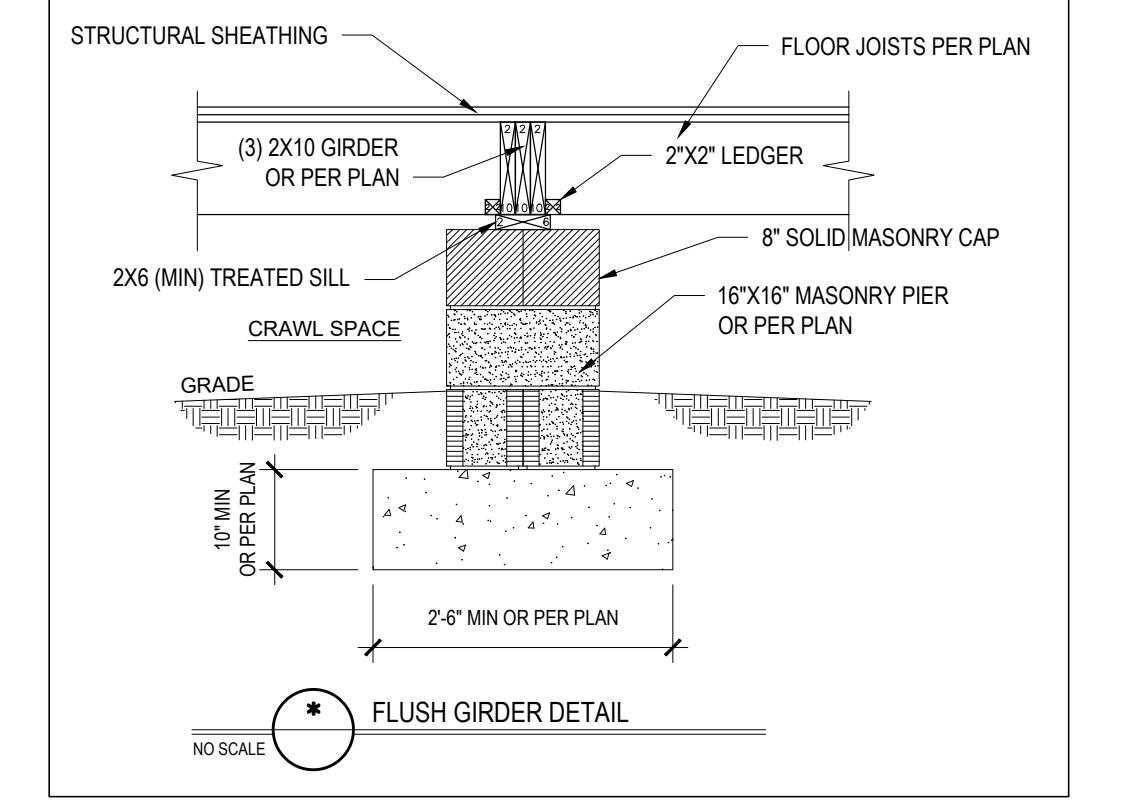
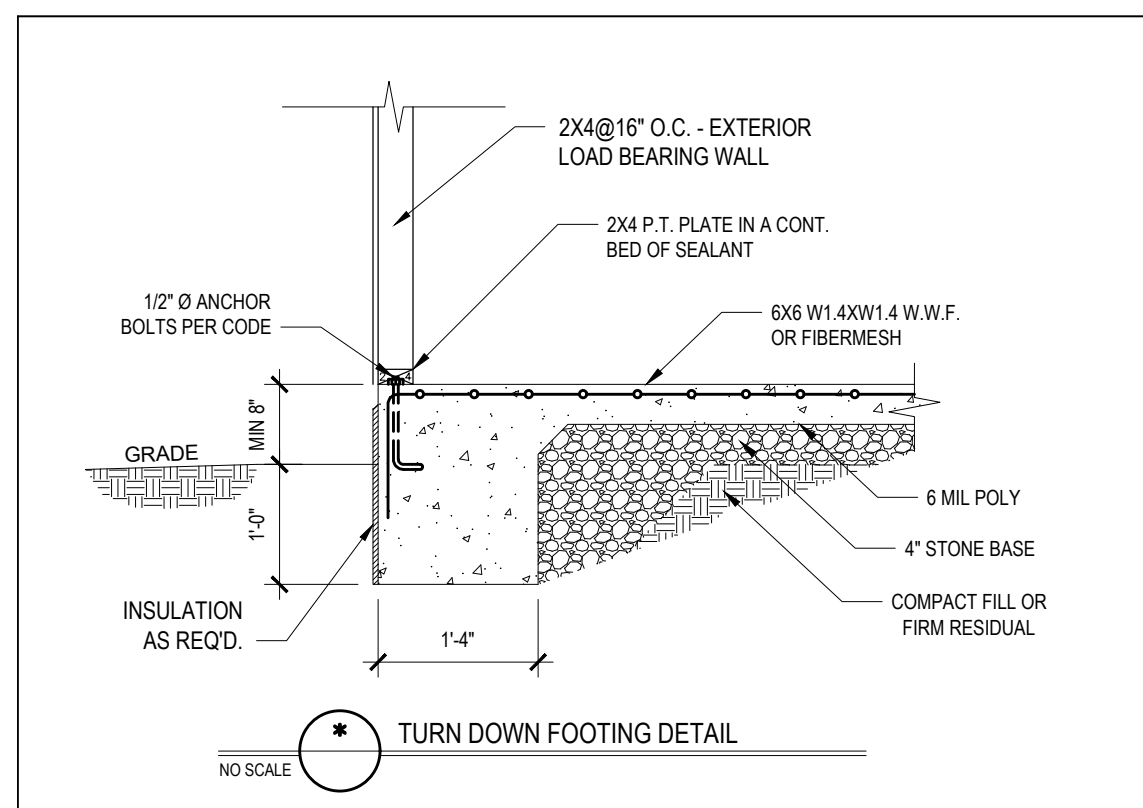
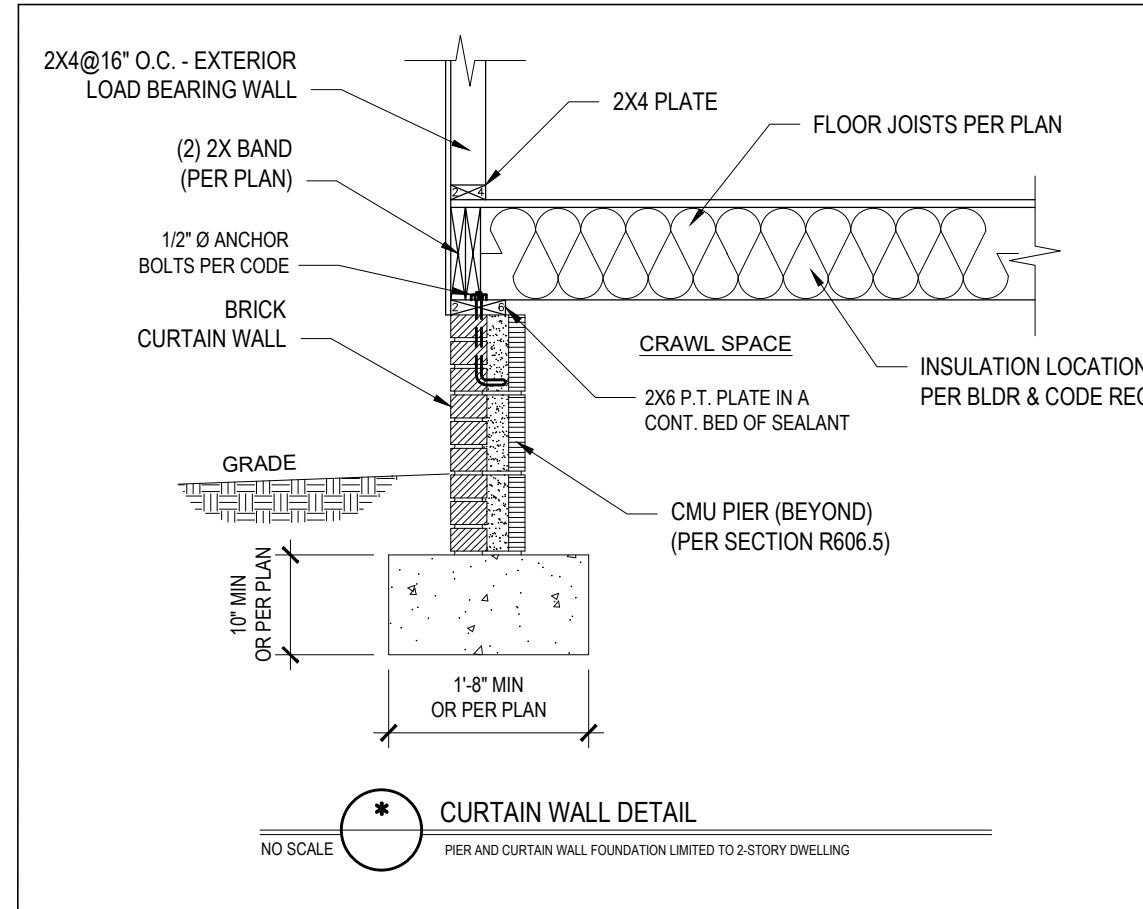


TABLE N1102.1 CLIMATE ZONES 3-5

CLIMATE ZONES	FENESTRATION U-FACTOR ^a	SKYLIGHT U-FACTOR ^b	GLAZED FENESTRATION SHGC ^{c,d,e}	CEILING ^f	WOOD FRAMED WALL ^g	MASS WALL R-VALUE ^h	FLOOR R-VALUE ⁱ	BASEMENT WALL R-VALUE ^j	SLAB R-VALUE AND DEPTH ^k	CRRAWL SPACE ^l
3	0.35	0.55	0.30	38 or 30 cont ¹	15 or 13 + 2.5 ²	5/13 or 5/10 cont ³	19	5/13	0	5/13
4	0.35	0.55	0.30	38 or 30 cont ¹	15 or 13 + 2.5 ²	5/13 or 5/10 cont ³	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont ¹	19, or 13 + 5 ² or 13 + 3 ²	13/17 or 13/12.5 cont ³	30 ⁴	10/15	10	10/15

NO SCALE

* R-VALUES ARE MINIMUM. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.

^a THE FENESTRATION U-FACTOR COLUMN EXCLUDES SKYLIGHTS. THE SOLAR HEAT GAIN COEFFICIENT (SHGC) COLUMN APPLIES TO ALL GLAZED FENESTRATION.

^b 10% IN CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.

^c 10% IN CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.

^d FOR MONOLITHIC SLAB INSULATION SHALL BE APPLIED FROM THE INSULATION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR MINIMUM OF 24" BELOW GRADE. WOOD-FRAME LEVELS OR CONTINUOUS SLAB INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24" BELOW GRADE LEVEL. R-6 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.

^e SEE LIST.

^f BASEMENT WALL INSULATION IS NOT REQUIRED IN WINDWARD LOCATIONS AS DEFINED BY EQUATION N1102.7 AND TABLE N1102.7.

^g OR INSULATION EQUIVALENT TO FILL THE FRAMING CAVITY. 10" MINIMUM.

^h THE FIRST VALUE IS CAVITY INSULATION; THE SECOND VALUE IS CONTINUOUS INSULATION. 10" 13" 15" 19" CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. 15" 19" CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. 19" 23" CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. 23" 27" CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. 27" 31" CAVITY INSULATION PLUS R-5 INSULATED SHEATHING.

ⁱ FOR MASS WALLS THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR MASS WALL.

^j IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MINIMUM OF 2" THICK GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN 0.35 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.

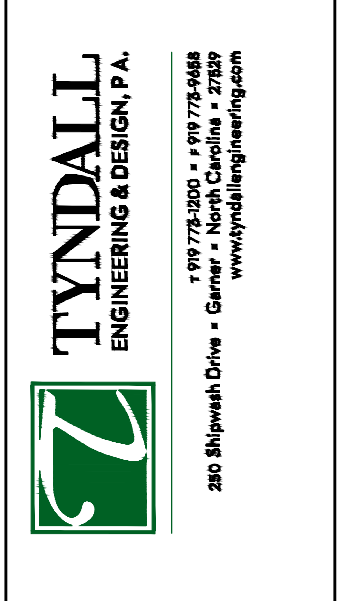
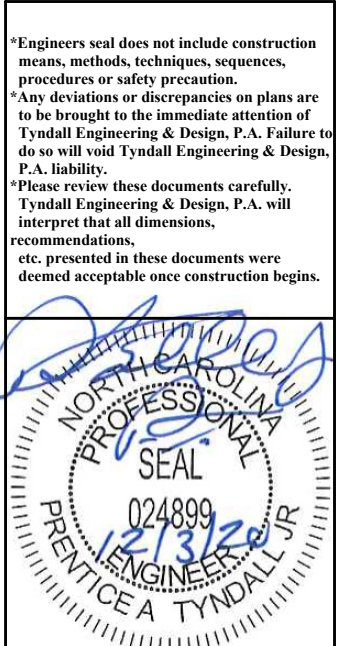
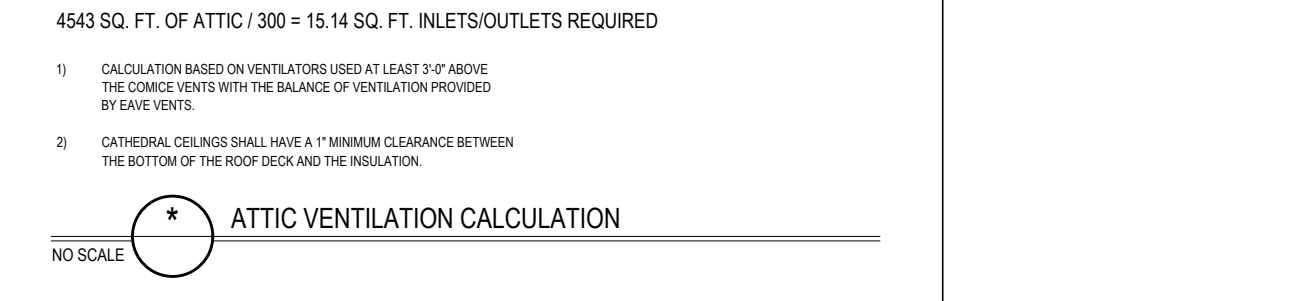
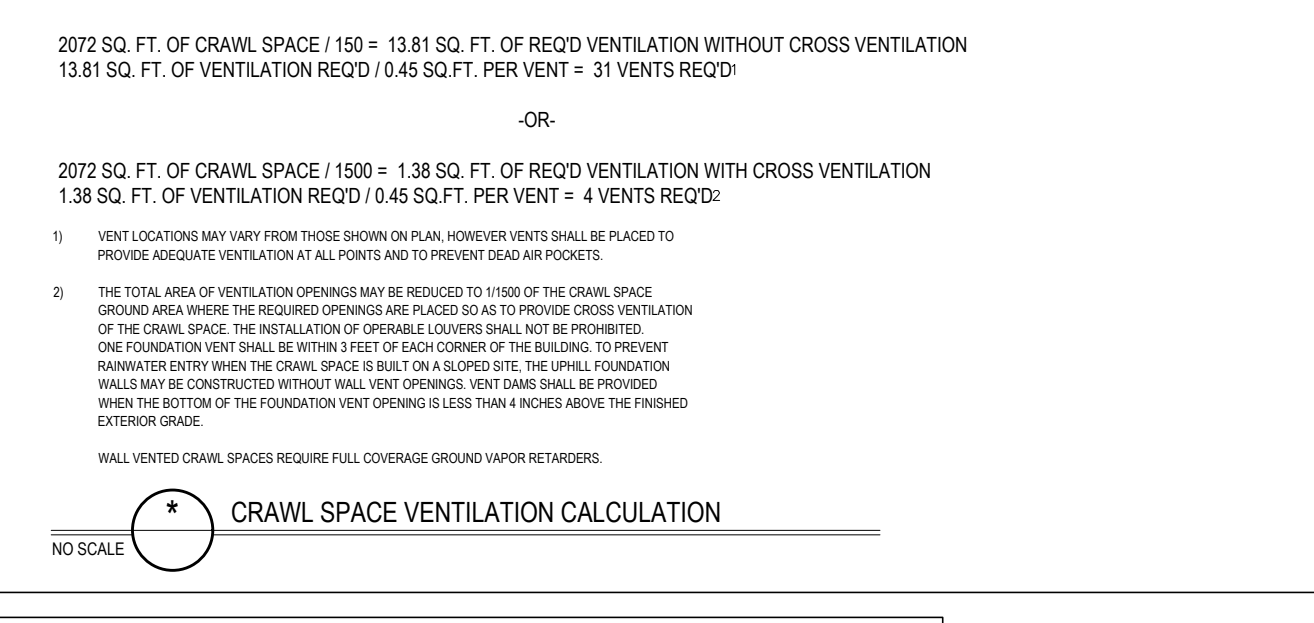
^k IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MINIMUM OF 2" THICK GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN 0.35 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.

^l R-6 SHALL BE ADDED TO THE REQUIRED INSULATION REQUIREMENT WHERE THE FULL HEIGHT OF AN INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE LEVELS OTHERWISE R-6 INSULATION IS REQUIRED WHERE NEGLIGIBLE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BATTLE OR WITHIN 1/8" OF THE EXTERIOR FACE.

^m TABLE VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OF THE ROOF. THERE THE INSULATION MUST FILL THE SPACE UP TO THE AIR BATTLE.

ⁿ 10" MINIMUM AIR BATTLE COMPRESSED AND NOTED IN A MINIMUM 2" x 4" FRAMING CAVITY IS DEEMED TO COMPLY. INSULATION BATTLE R-10 OR HIGHER COMPRESSED AND INSTALLED IN A 2x4 WALL IS NOT PERMITTED TO COMPLY.

^o BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.



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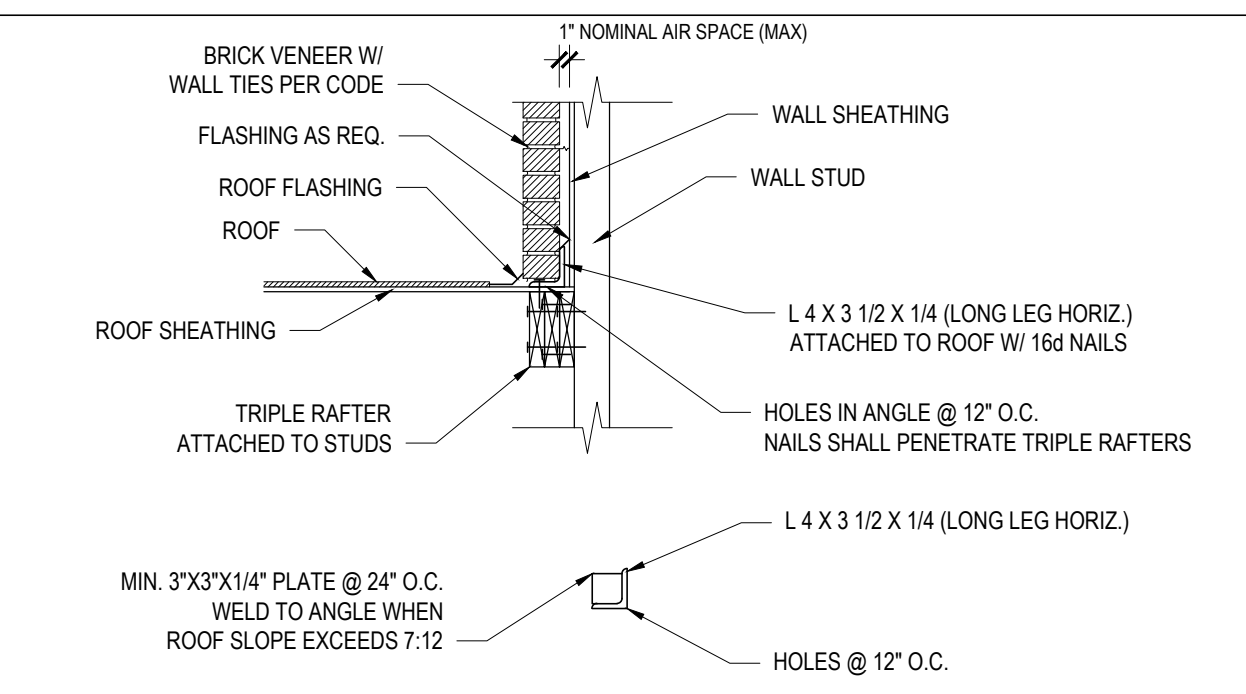
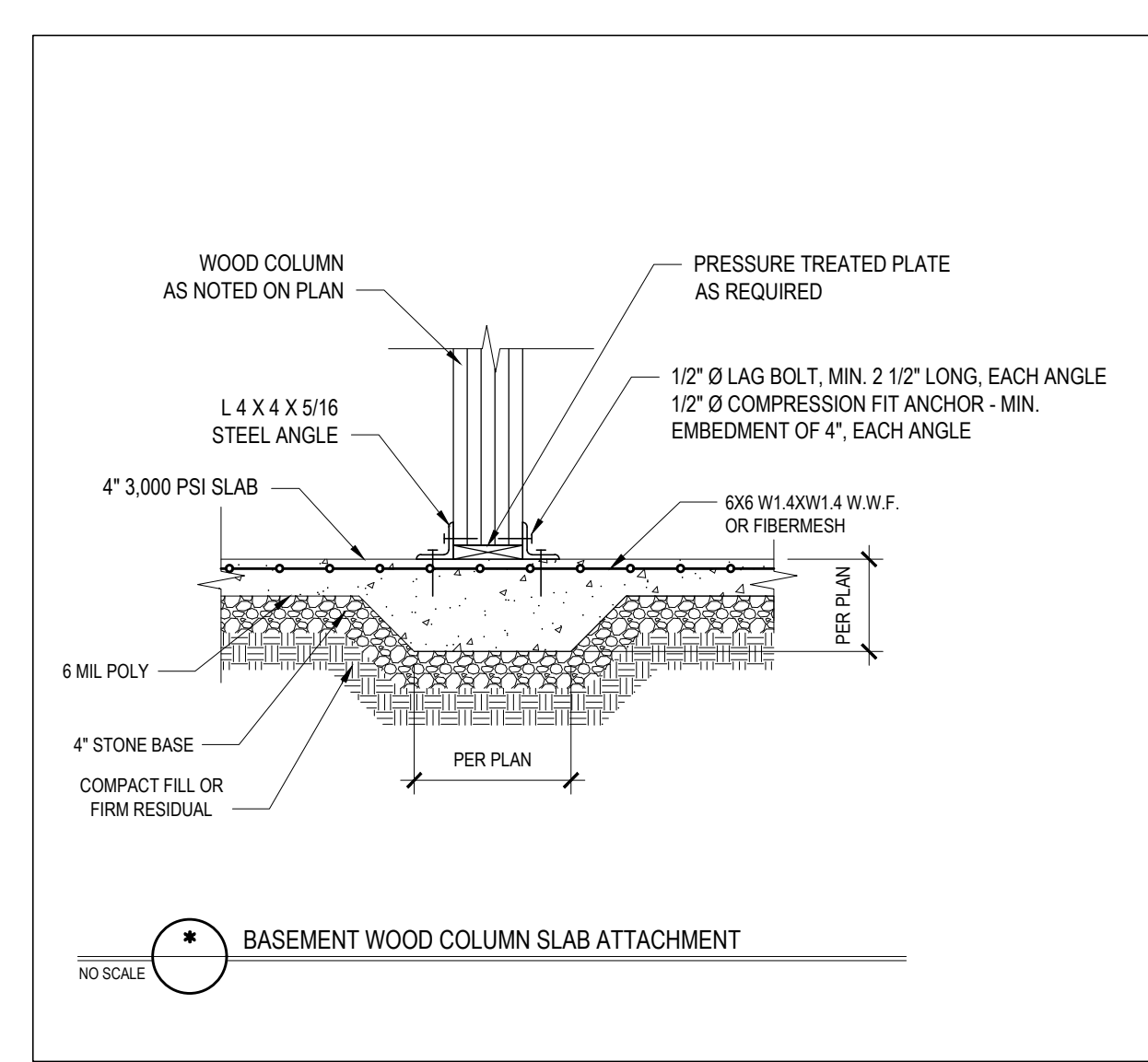
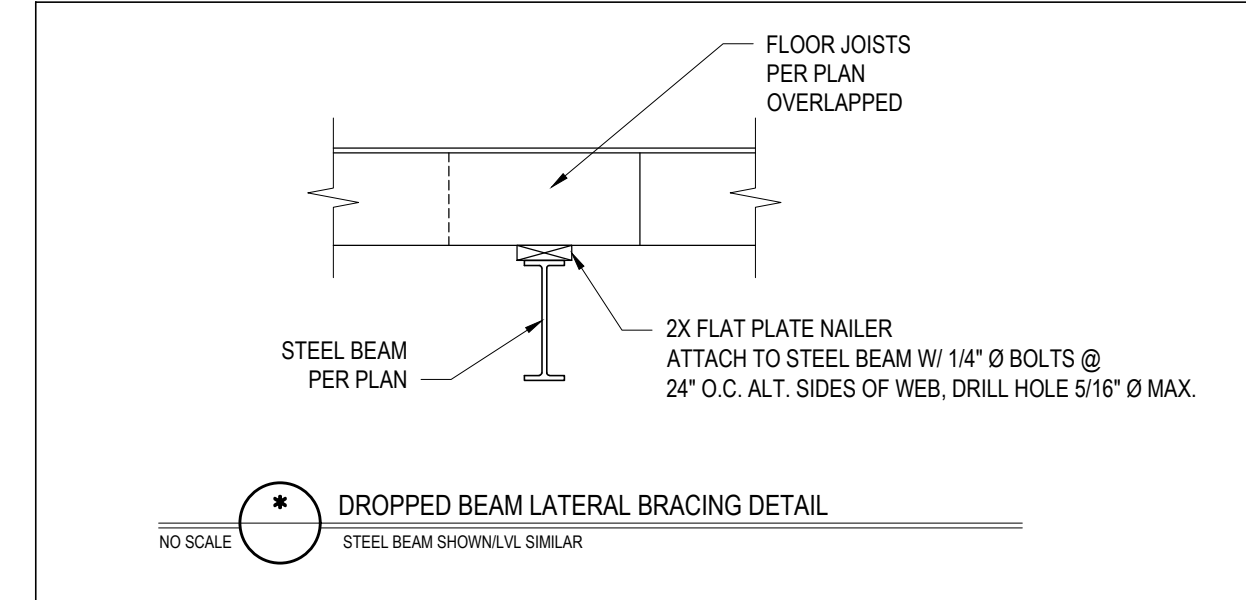
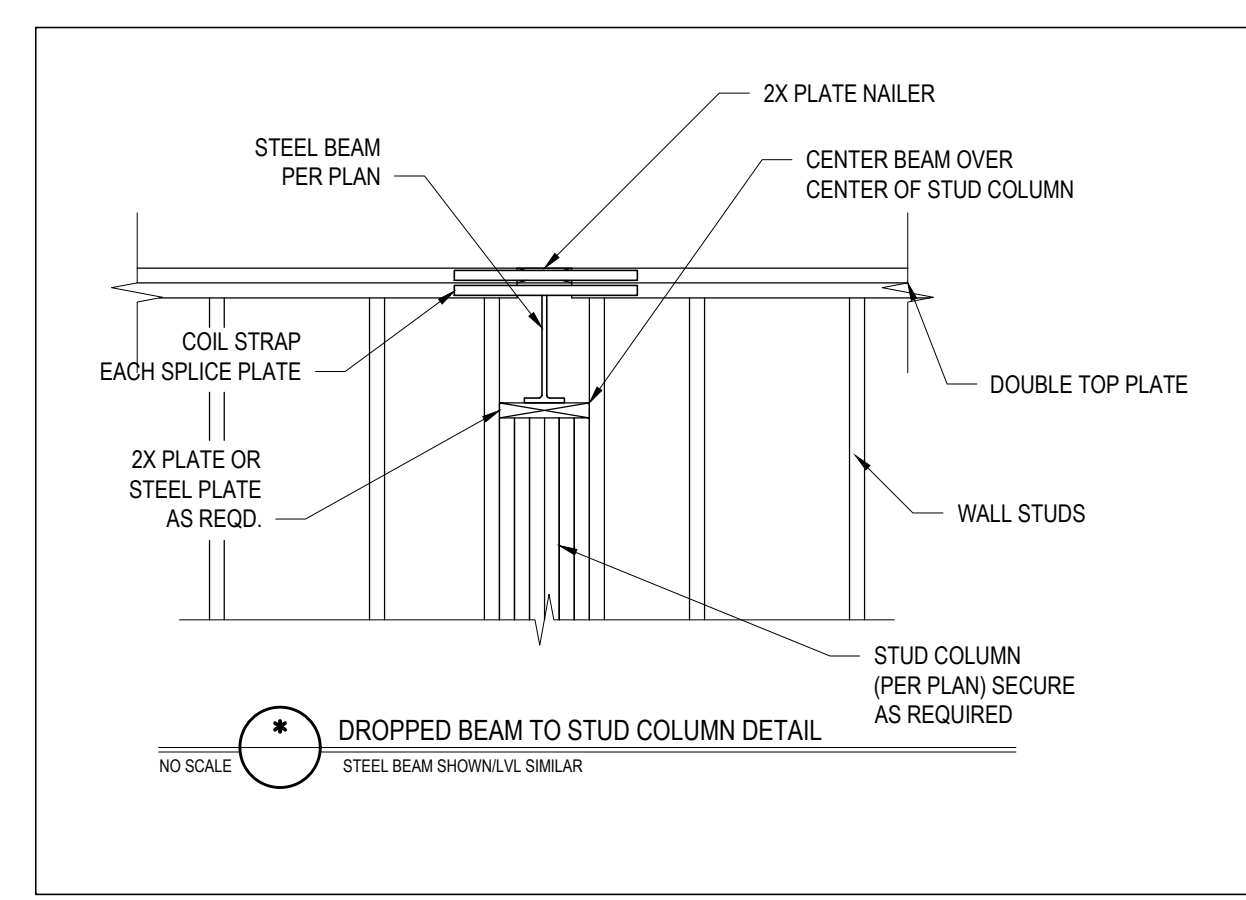
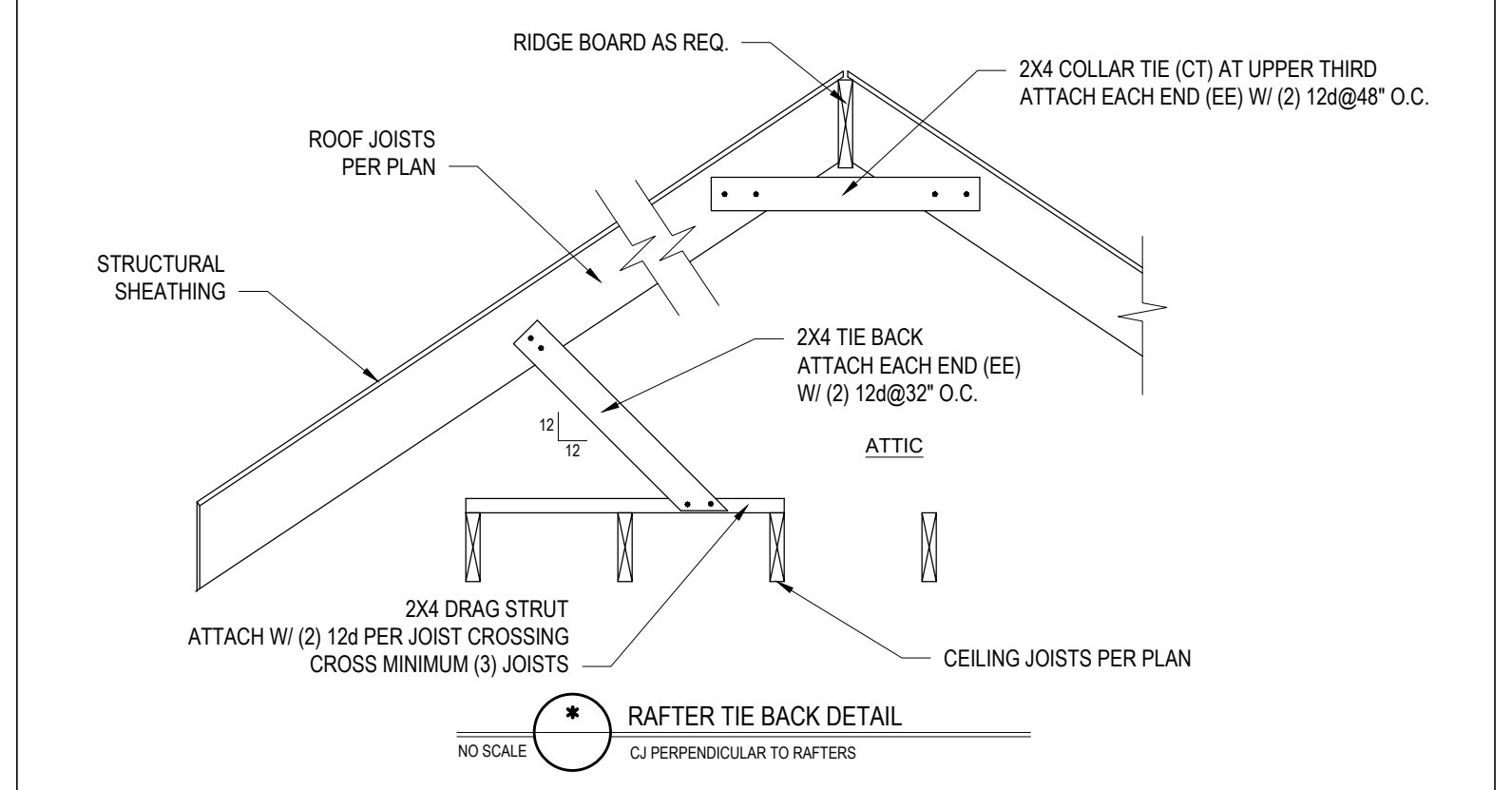
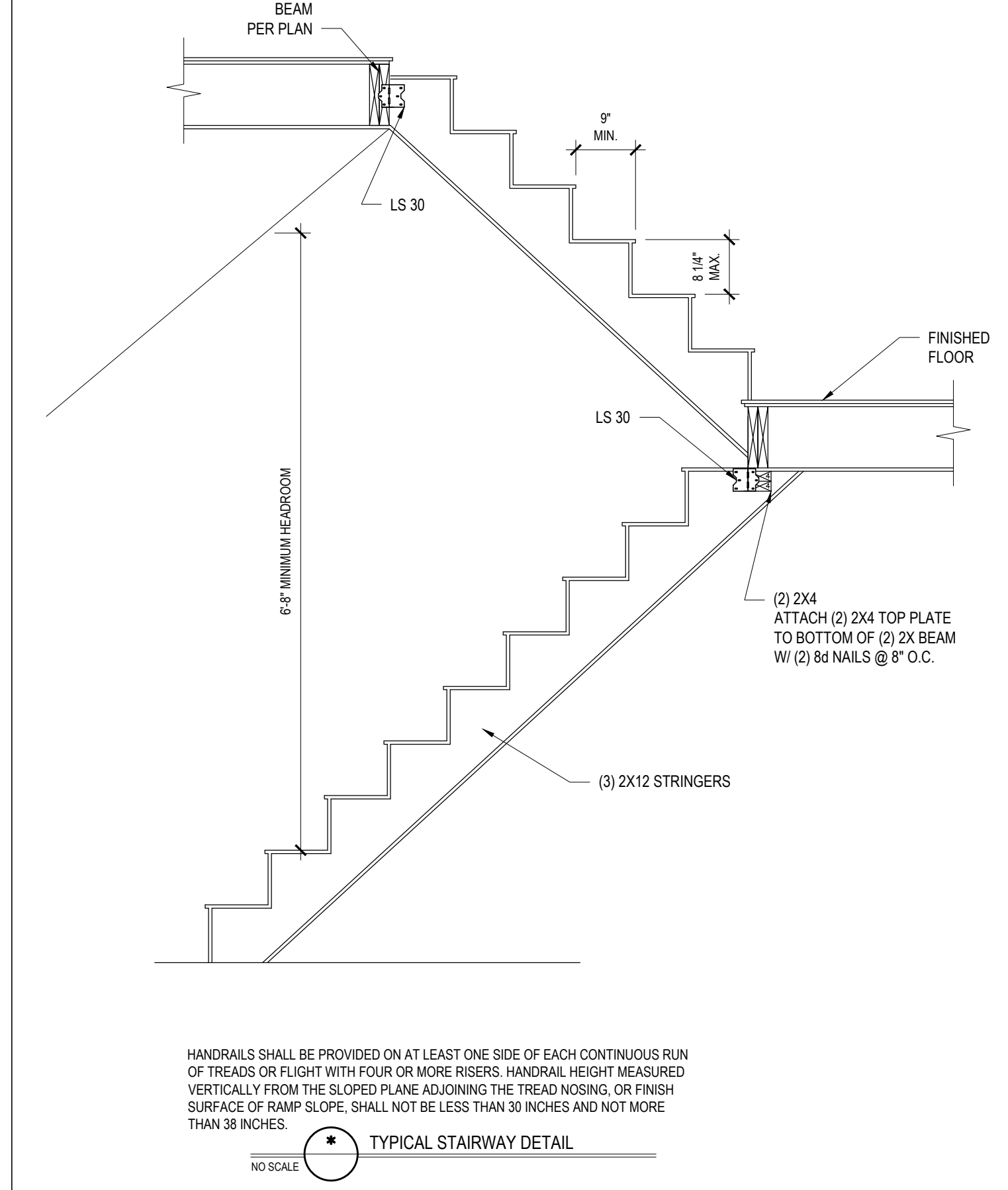
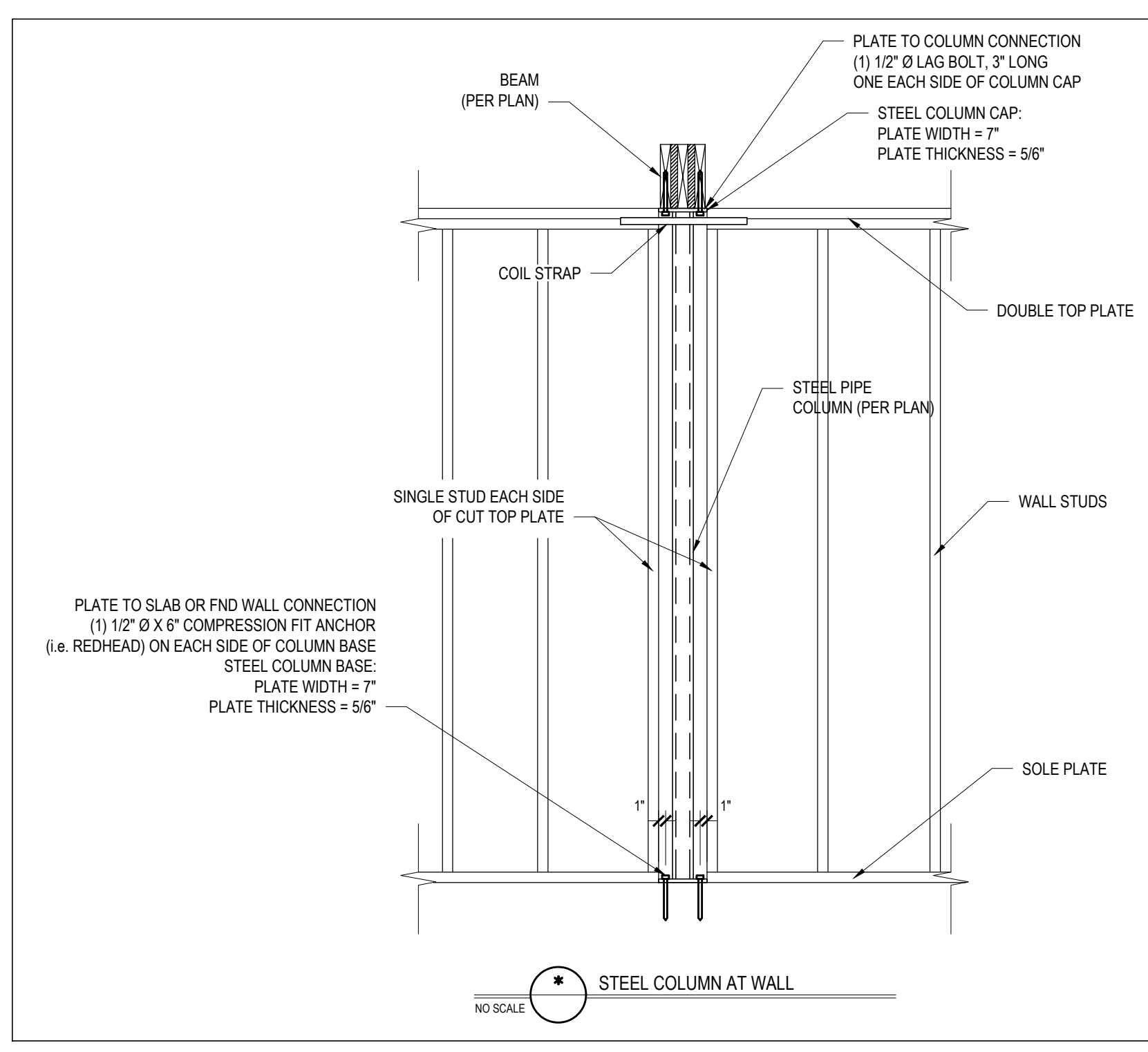
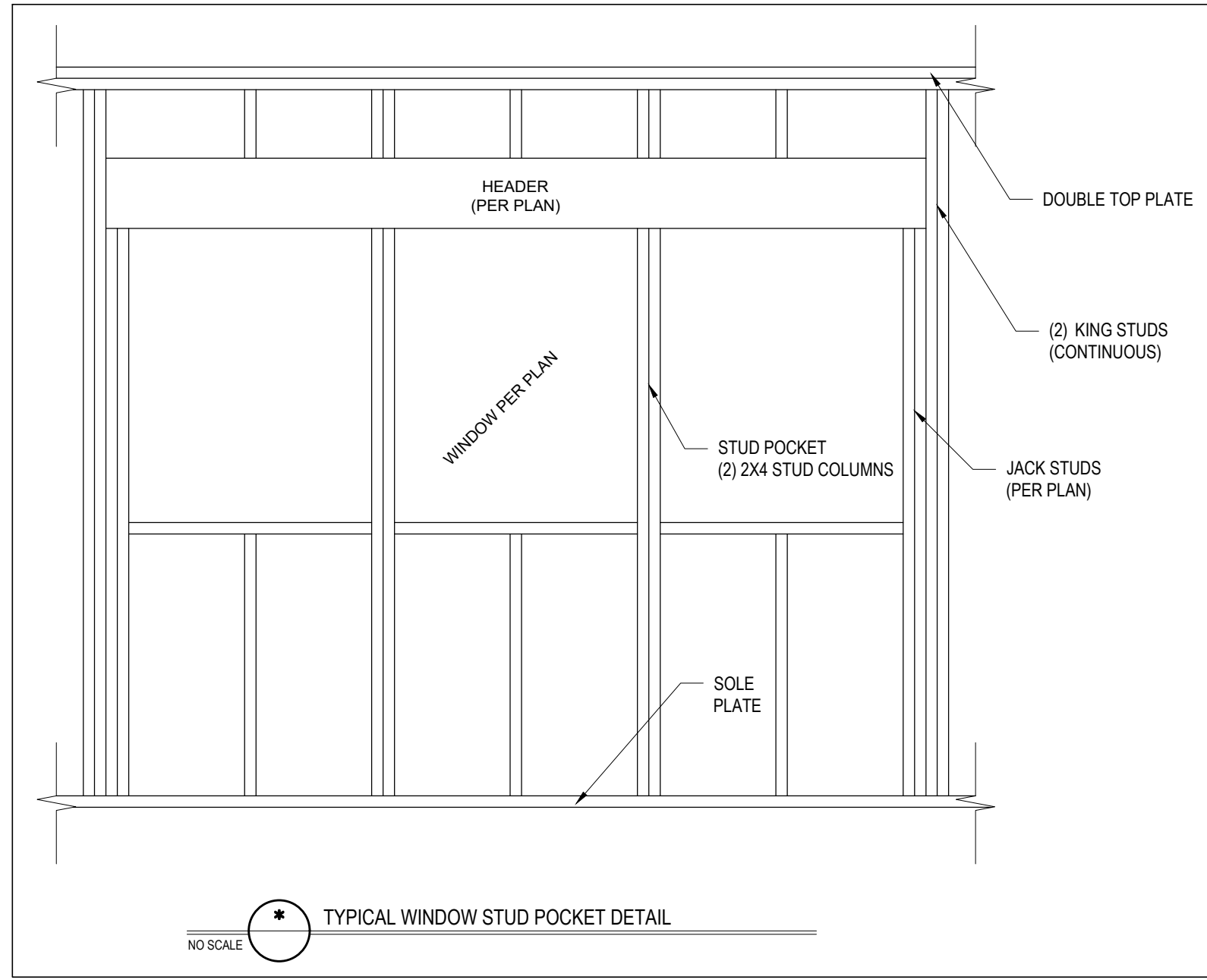
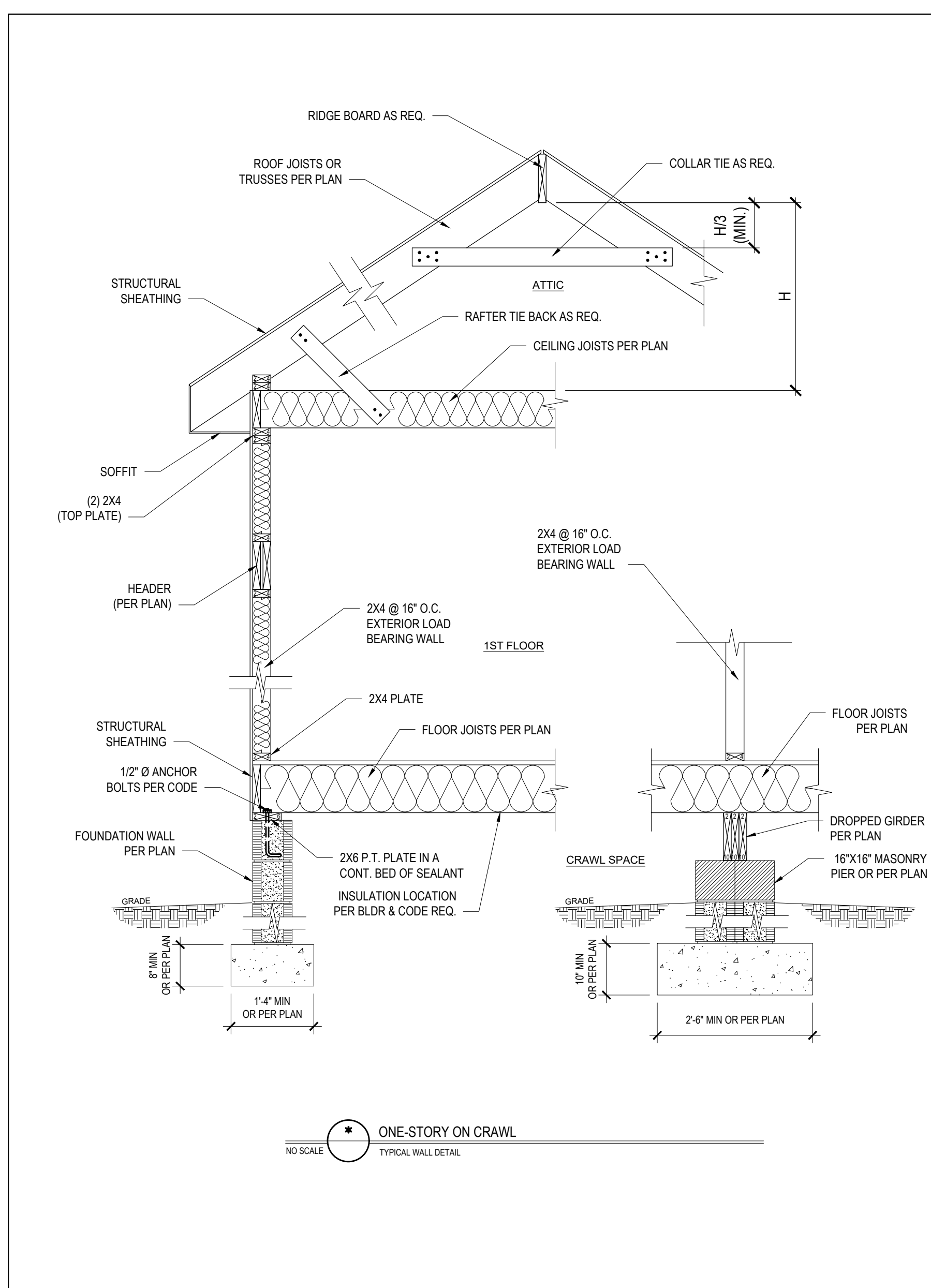
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DWG. Checked By: PAT
Scale: NOT TO SCALE

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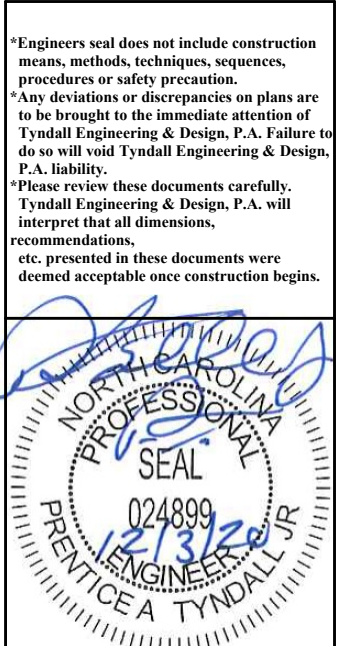
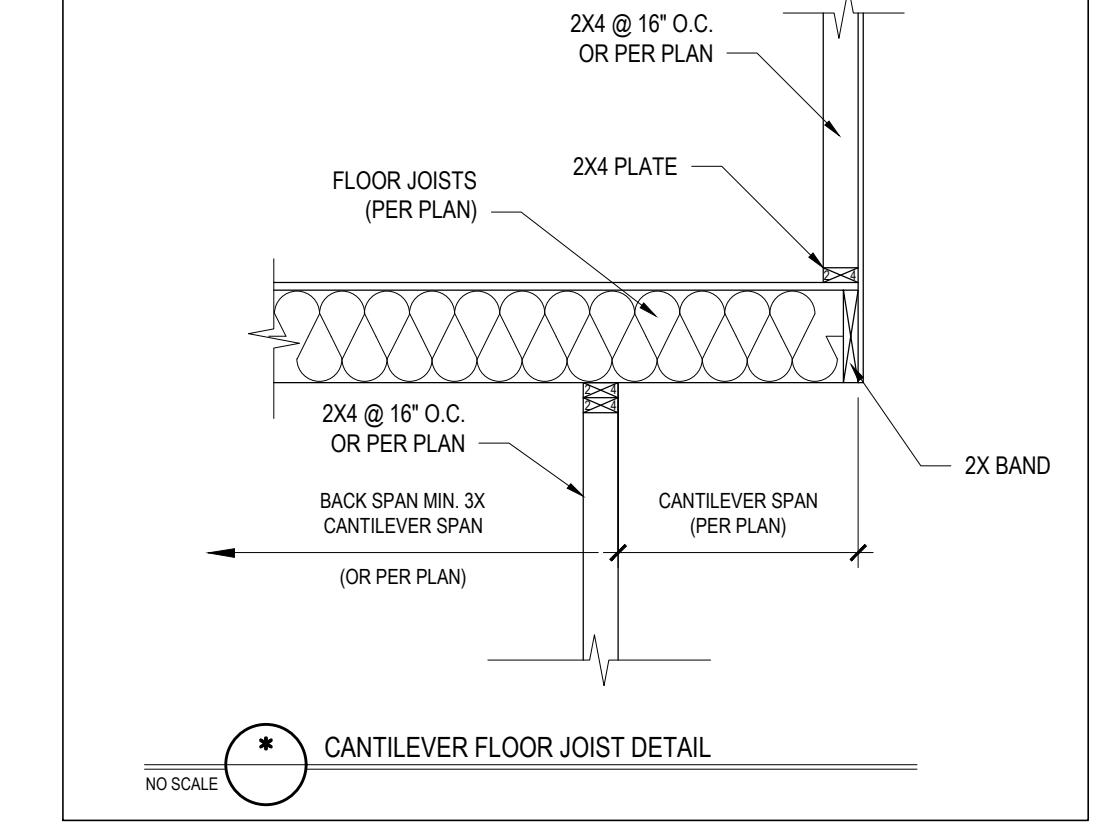
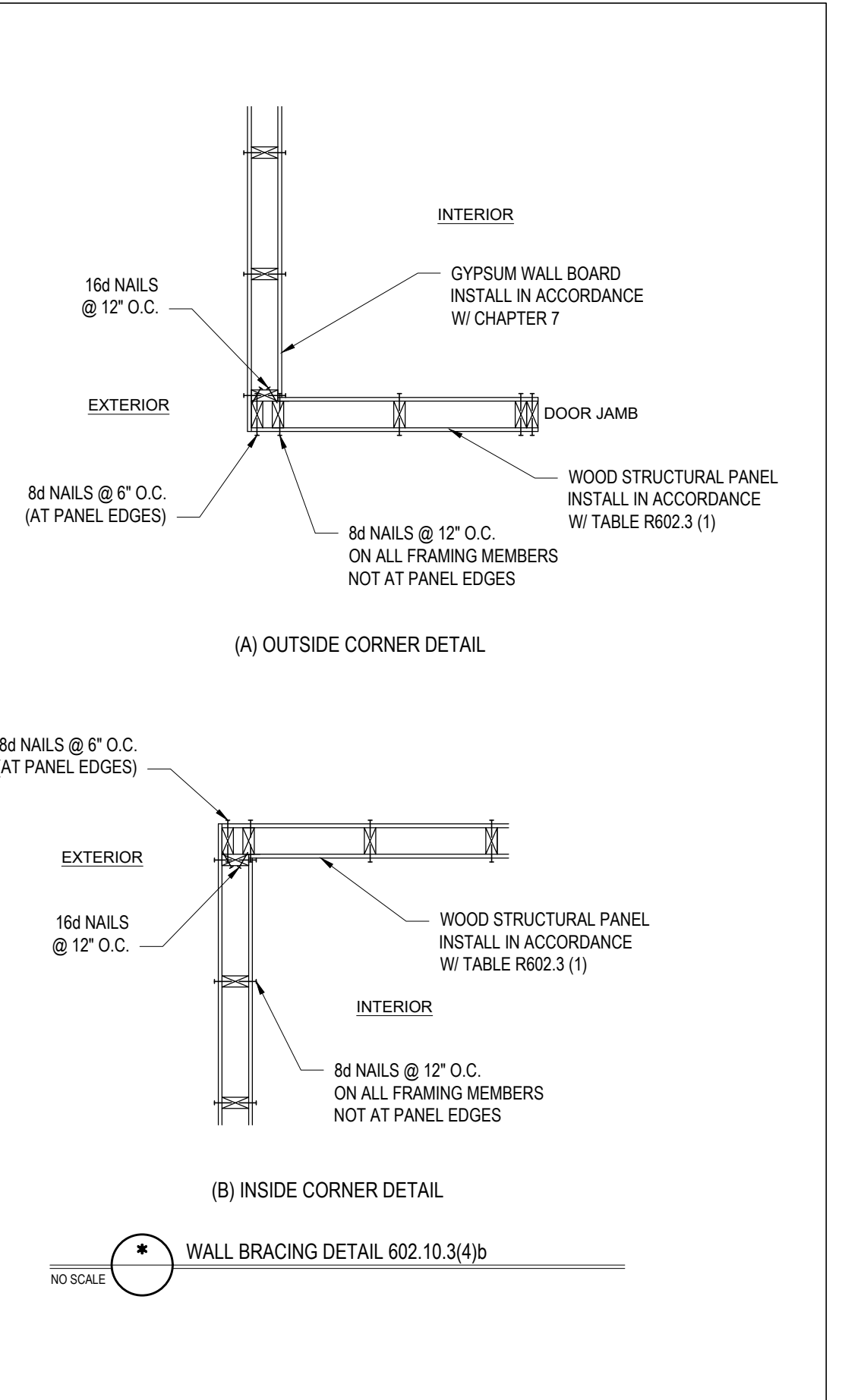
ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER

SIZE OF ANGLE (1,3)	NO STORY ABOVE (5)	1 STORY ABOVE (5)	2 STORIES ABOVE (5)	# OF 1/2\"/>
L 3 x 3 x 1/2	6'-0"	4'-6"	3'-0"	1
L 4 x 3 x 1/2	8'-0"	6'-0"	4'-6"	1
L 5 x 3 1/2 x 5/16	10'-0"	8'-0"	6'-0"	2
L 6 x 3 1/2 x 5/16	14'-0"	9'-6"	7'-0"	2
2L 5 x 3 1/2 x 5/16	20'-0"	12'-0"	9'-6"	4

- LONG LEG OF THE ANGLE SHALL BE PLACED IN A VERTICAL POSITION.
- DEPTH OF REINFORCED LINTELS SHALL NOT BE LESS THAN 8" AND ALL CELLS OF HOLLOW MASONRY LINTELS SHALL BE GROUTED. REINFORCING BARS SHALL EXTEND NOT LESS THAN 8" INTO THE SUPPORT.
- STEEL MEMBERS INDICATED ARE ADEQUATE TYPICAL EXAMPLES; OTHER STEEL MEMBERS MEETING STRUCTURAL DESIGN REQUIREMENTS SHALL BE PERMITTED TO BE USED.
- EITHER STEEL ANGLE OR REINFORCED LINTEL SHALL SPAN OPENING.
- SPANS OVER 4'-0" SHALL BE SHORED UP UNTIL CURED.

HARDWARE CROSS-REFERENCE CHART

SIMPSON STRONG-TIE PRODUCT NUMBER	USP STRUCTURAL CONNECTORS PRODUCT NUMBER
A35	MPA1
ABE	PAE
CBSQ	CBSQ
CCQ	KCCQ
CMSTC16	CMSTC16
CS	RS
H1	RT15
H2.5A	RT7A
H10	RT16
HDO8-SDS3	UPH08
HDO2-SDS2.5	PHD2
HDO5-SDS2.5	PHD5
HETA	HTA
HGAM10KTA	HGAM
HHO14-SDS2.5	UPHD14
HTS	HTW
HTT	HTT
HUS	HUS
LTA1	LPTA
LTHA26	HUC26
LTP4	MPF4
LUS	JUS
MAS	FA3
MSTAM	MSTAM
PC	PCM
PHD-SDS3	PHD
SSP	RSP18
STC	TR1
STD	STAD



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ENGINEERING & DESIGN, P.A.
1107 W. 10TH ST. SUITE 100
Raleigh, NC 27601
919.775.4444
www.tyndalleng.com

CLIENT: POPE BUILDERS
PROJECT: CONWAY RESIDENCE

STANDARD DETAILS

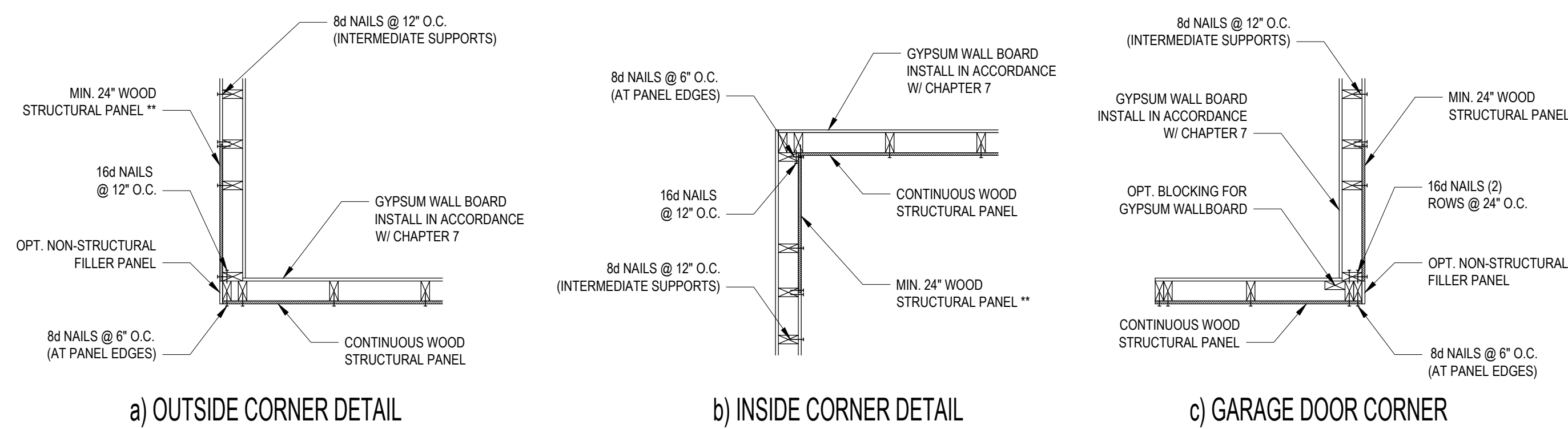
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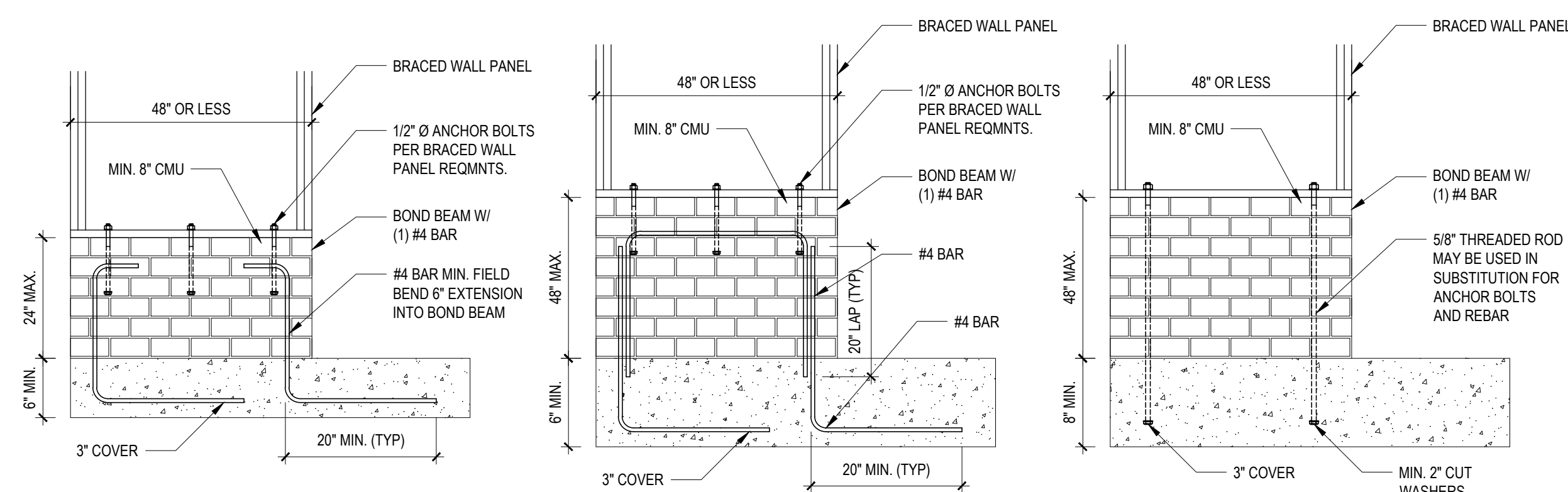
B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING
NO SCALE

STRUCTURAL SHEATHING NOTES

- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10.3 OF THE 2018 NCR.
- BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
- REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCR.
- INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO).
- 12\"/>

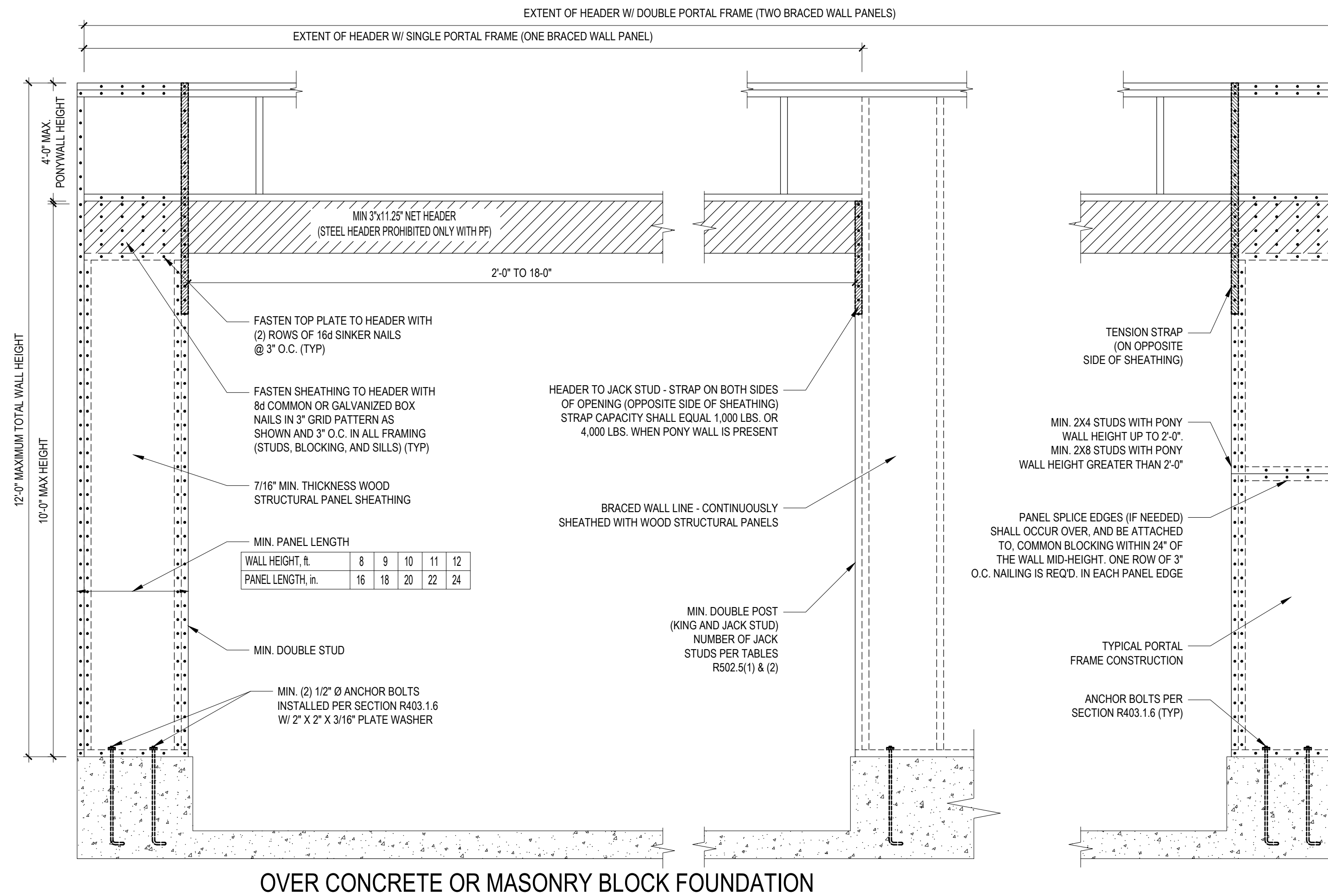
REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			@ PANEL EDGES	@ INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAIL** @ 7" O.C.	5d COOLER NAIL** @ 7" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.

**OR EQUIVALENT PER TABLE R702.3.5
B3: BRACE WALL PANEL CONNECTIONS
NO SCALE

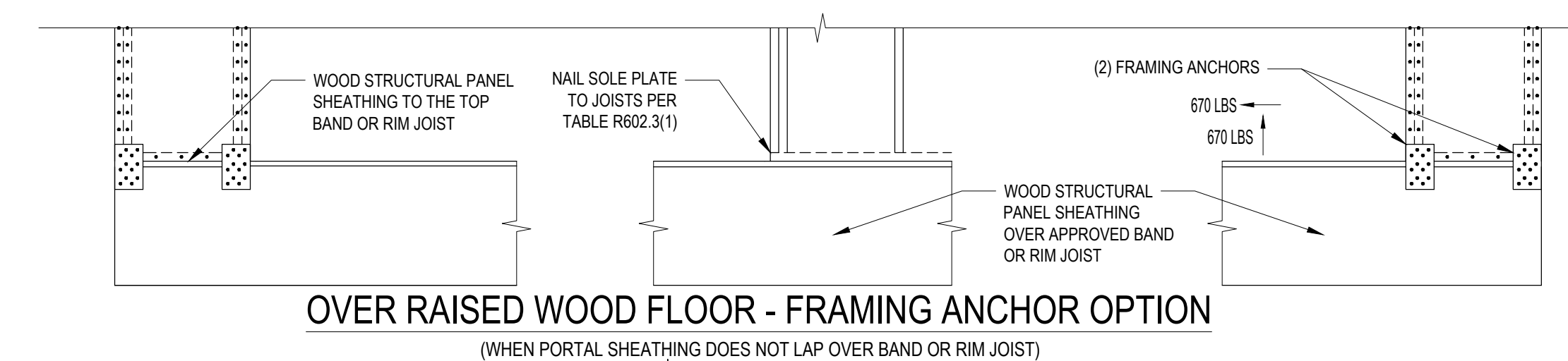


B4: MASONRY STEM WALL SUPPORTING BRACED WALL PANELS

FIGURE R602.10.4.3 OF THE 2018 NCR
NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

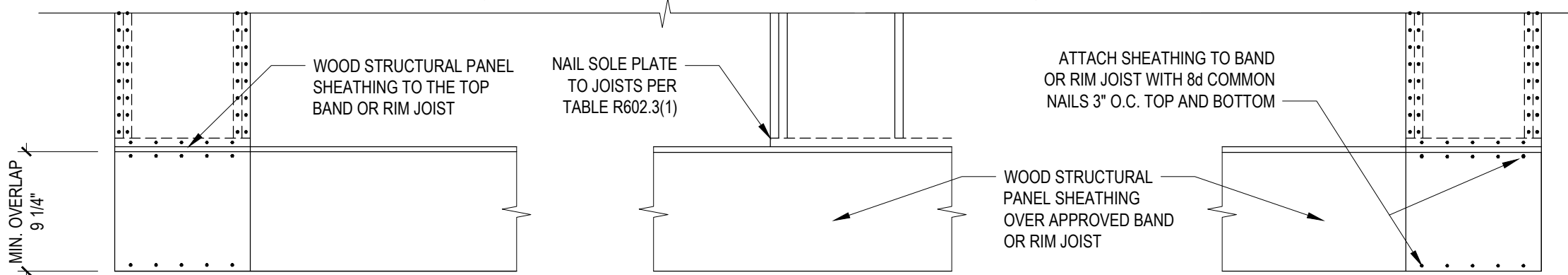


OVER CONCRETE OR MASONRY BLOCK FOUNDATION



OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION

(WHEN PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST)



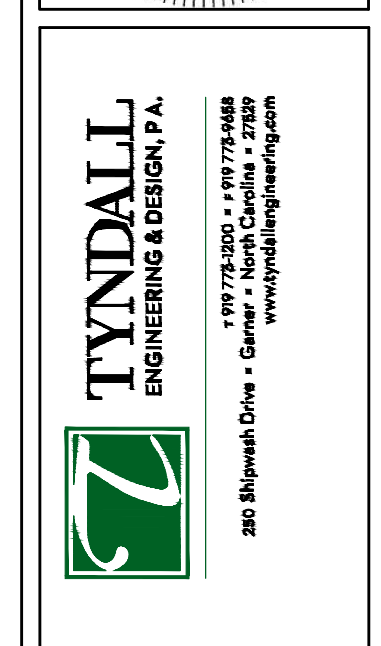
OVER RAISED WOOD FLOOR - OVERLAP OPTION

(WHEN PORTAL SHEATHING LAPS OVER BAND OR RIM JOIST)

B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME

FIGURE R602.10.1

*Engineers and designers do not include construction means, methods, techniques, sequences, procedures or safety precautions.
Any deviation or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.
Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable when construction begins.



TYNDALL
ENGINEERING & DESIGN, P.A.
1107 W. 10th Street, Suite 100
Raleigh, NC 27601
919.778.4444
www.tyndallengineering.com

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SHEATHING DETAILS

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