

- LEGEND**
- AC=AIR CONDITIONING UNIT
  - BOC=BACK OF CURB
  - COV=COVERED
  - EB=ELECTRIC BOX
  - EOP=EDGE OF PAVEMENT
  - P=PATIO
  - PO=PORCH
  - SCO=CLEANOUT
  - SW=SIDEWALK
  - TP=TELEPHONE PEDESTAL
  - WM=WATER METER
  - IRON PIPE FOUND
  - IRON PIPE SET
  - NAIL SET

THIS EXHIBIT MAP IS OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.

SHAWN T. RUMBERGER, PLS L-4909 DATE

THIS MAP IS ONLY INTENDED FOR THE PARTIES AND PURPOSES SHOWN. THIS MAP IS NOT FOR RECORDATION. NO TITLE REPORT PROVIDED. THIS MAP MAY NOT BE A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS AND HAS NOT BEEN REVIEWED FOR COMPLIANCE WITH RECORDING REQUIREMENTS FOR PLATS.

GENERAL NOTES:

1. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
2. AREAS SHOWN HEREON WERE COMPUTED USING THE COORDINATE METHOD.
3. LINES NOT SURVEYED ARE SHOWN AS DASHED LINES FROM INFORMATION REFERENCED ON THE FACE OF THIS SURVEY.
4. PROPERTY MAY BE SUBJECT TO ANY/ALL EASEMENTS AND RESTRICTIONS OF RECORD. THIS SURVEY IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND OR DEEDED AND HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. A NORTH CAROLINA LICENSED ATTORNEY-AT-LAW SHOULD BE CONSULTED REGARDING CORRECT OWNERSHIP, WIDTH AND LOCATION OF EASEMENTS, AND OTHER TITLE QUESTIONS REVEALED BY TITLE EXAMINATION.
5. DRIVEWAY IMPERVIOUS CALCULATION SHOWN HEREON CALCULATED TO THE FRONT PROPERTY LINE/RIGHT-OF-WAY.
6. IN NO CASE SHALL A FIXED OPERATING WINDOW, DOOR, OR OTHER OPENING BE LESS THAN 8' FROM SIDE PROPERTY LINE AS MEASURED FROM THE FIXED OR OPERATING WINDOW, DOOR, OR OTHER OPENING. HOWEVER, THE STRUCTURE ON THE LOT ADJOINING THAT PROPERTY LINE MUST BE AT LEAST 1' FROM THAT PROPERTY LINE.

**VICINITY MAP (NTS)**

**IMPERVIOUS AREA**

HOUSE 1,817 SQ.FT.  
 DRIVE TO R/W 552 SQ.FT.  
 WALK 142 SQ.FT.

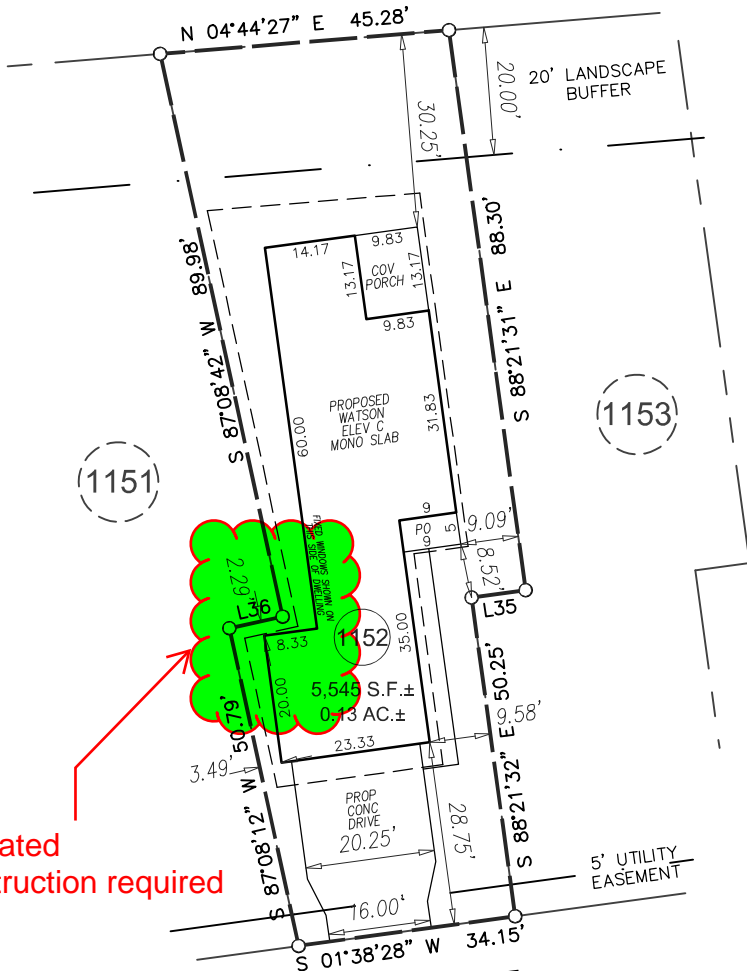
TOTAL 2,511 SQ.FT.

**SETBACKS**

FRONT 25'  
 SIDE 8' ONE SIDE  
 2' OTHER SIDE  
 REAR 25'  
 SIDE STREET 20'



ANDERSON LAKE DRIVE  
 50' PRIVATE R/W



1 Hr rated  
 Construction required

SPRUCE HOLLOW CIRCLE  
 50' PRIVATE & UTILITY R/W

GRAPHIC SCALE



1 inch = 30 ft.

**PRELIMINARY PLOT PLAN**

LINE	BEARING	DISTANCE
L35	S 01°38'28" W	8.51'
L36	N 02°51'48" W	8.51'

<b>ECLS</b>	PROJECT:	19-002 CAPITOL CITY
	DRAWN BY:	CKR
	SCALE:	1"=30'
	DATE:	06-10-2021

FOR  
 CAPITOL CITY HOMES  
 162 SPRUCE HOLLOW CIRCLE  
 LOT 1152 ANDERSON CREEK CROSSING SUBDIVISION; PHS 7  
 ANDERSON CREEK TWP., HARNETT CO., NC  
 P.B. 2018, PG. 229

**ECLS GLOBAL, INC.**  
 U.S. VETERAN-OWNED  
 19 N MCKINLEY ST  
 COATS, NC 27521  
 910.897.3257 ECLSGLOBALINC.COM  
 910.897.2329 (FAX) CO#C-4175

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States  
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada  
Design No. V340

**Bearing Wall Rating — 1 Hr Exposed to Fire on Either Face**

**Bearing Wall Rating - 2 Hr Rating Exposed to Fire on Interior Face and 1 Hr Rating Exposed to Fire on Exterior Face (See Item 2)**

**Bearing Wall Rating - 2 Hr Rating Exposed to Fire on Exterior Face and 1 Hr Rating Exposed to Fire on Interior Face (See Item 6)**

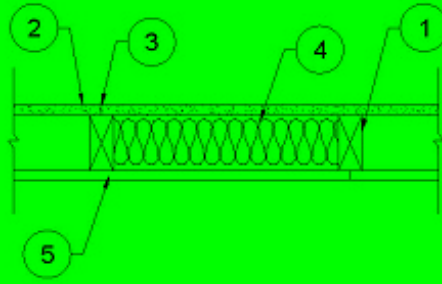
**For Wood Studs, Finish Rating — 4 min (Exposed to Fire on Exterior Face)**

**Loaded Per 2012 NDS Supplement, ASD Method, Wall Braced by Sheathing, 40% of Design Load Applied to Wall**

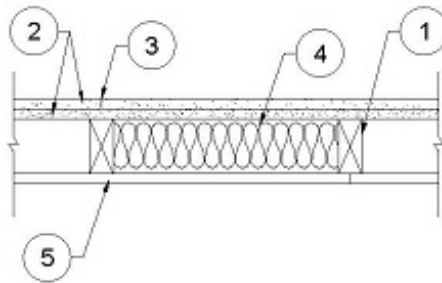
**This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide [BXUV](#) or [BXUV7](#)**

**\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

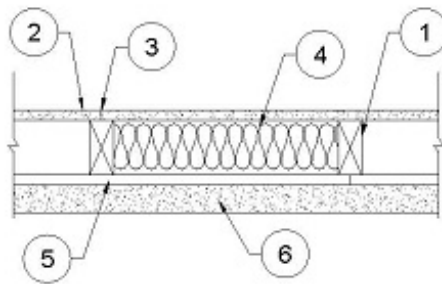
1-HOUR  
(FIRE FROM EITHER SIDE)



2-HOUR INTERIOR  
1-HOUR EXTERIOR



2-HOUR EXTERIOR  
1-HOUR INTERIOR



1. **Wood Studs** — Nom 2 by 4 in., spaced 16 in. OC with double 2 by 4 top and single 2 by 4 in, bottom plates. Studs effectively firestopped.

2. **Gypsum Board\*** — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. **1 Hr rating** - Nom. 5/8 in. thick, 4 ft. wide, applied vertically, and nailed to studs and bearing plates 7 in. OC. with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank diam. and 1/4 in. diam. head. Vertical joints centered over studs and staggered min. 1 stud cavity from the vertical joints of the building units (Item #5). **2 Hr rating** - two layers required, base layer nailed 6 in. OC. with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank diam. and 1/4 in. diam. head. The face layer nailed to the studs and bearing plates over the base layer, 8 in. OC with 8d cement coated nails, 2-3/8 in. long, 0.113 in. shank diam. 9/32 in. diam. head. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity.

3. **Joints and Nail Heads** — Wallboard joints covered with tape and joint compound. Nail heads covered with joint compound.

4. **Batts and Blankets\*** — Faced or unfaced mineral fiber insulation, 3-1/2 in. thick, minimum 2.87 pcf, friction fit in the wall cavity between stud, plates.

See **Batts and Blankets\*** (BZJZ) category for names of Classified manufacturers.

5. **Building Units\*** — Building units nailed to the wood framing, coating to studs, with 1-7/8 in. long, 6d nails, spaced 6 in. OC. on the perimeter and 12 in. OC. in the field. Vertical joints centered on studs. Horizontal joints backed with nom. 2 by 4 wood blocking.

**LOUISIANA-PACIFIC CORP** — Type Blazeguard 1-Side

**LOUISIANA-PACIFIC CORP** — Type LP FlameBlock 1-Side

6. **Exterior Facings** — Required for 2 Hour Rating on the Exterior Face. The following exterior facing shall be installed in accordance with the manufacturer's installation instructions:

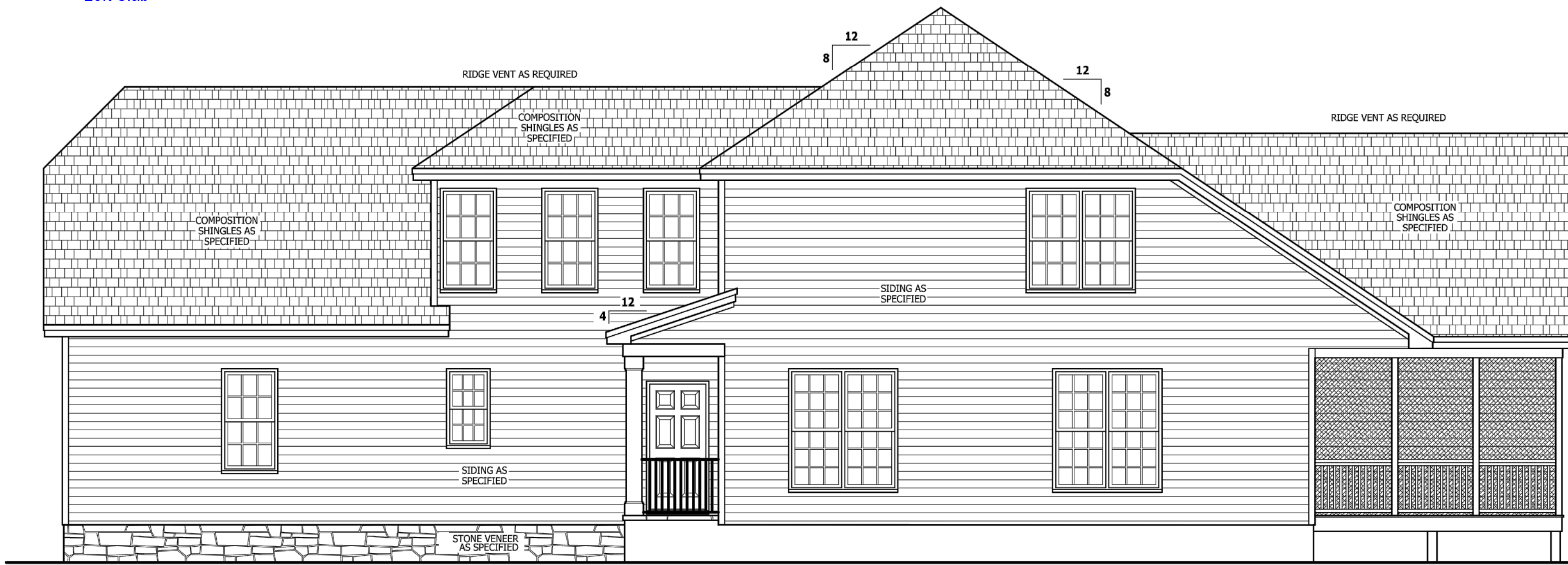
6A. **Brick** — Brick veneer, minimum thickness of 3.4 inches, meeting the requirements of local code agencies. Brick veneer attached to the studs with corrugated metal wall ties attached to each stud with 8d cement coated nails, every sixth course of bricks and max 32 in. OC horizontally. One in. air space provided between brick veneer and sheathing.

**\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



Carriage Circle 1152 - 162 Spruce Hollow Circle, Spring Lake 28390  
 Harnett County  
 Watson II C  
 Left Slab

PURCHASER MUST VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE CONSTRUCTION BEGINS. HAYNES HOME PLANS, INC. ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND PROCEDURES. CODES AND CONDITIONS MAY VARY WITH LOCATION. A LOCAL DESIGNER, ARCHITECT OR ENGINEER SHOULD BE CONSULTED BEFORE CONSTRUCTION. THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER.



**RIGHT SIDE ELEVATION**

SCALE 1/4" = 1'-0"



**FRONT ELEVATION - C**

SCALE 1/4" = 1'-0"

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

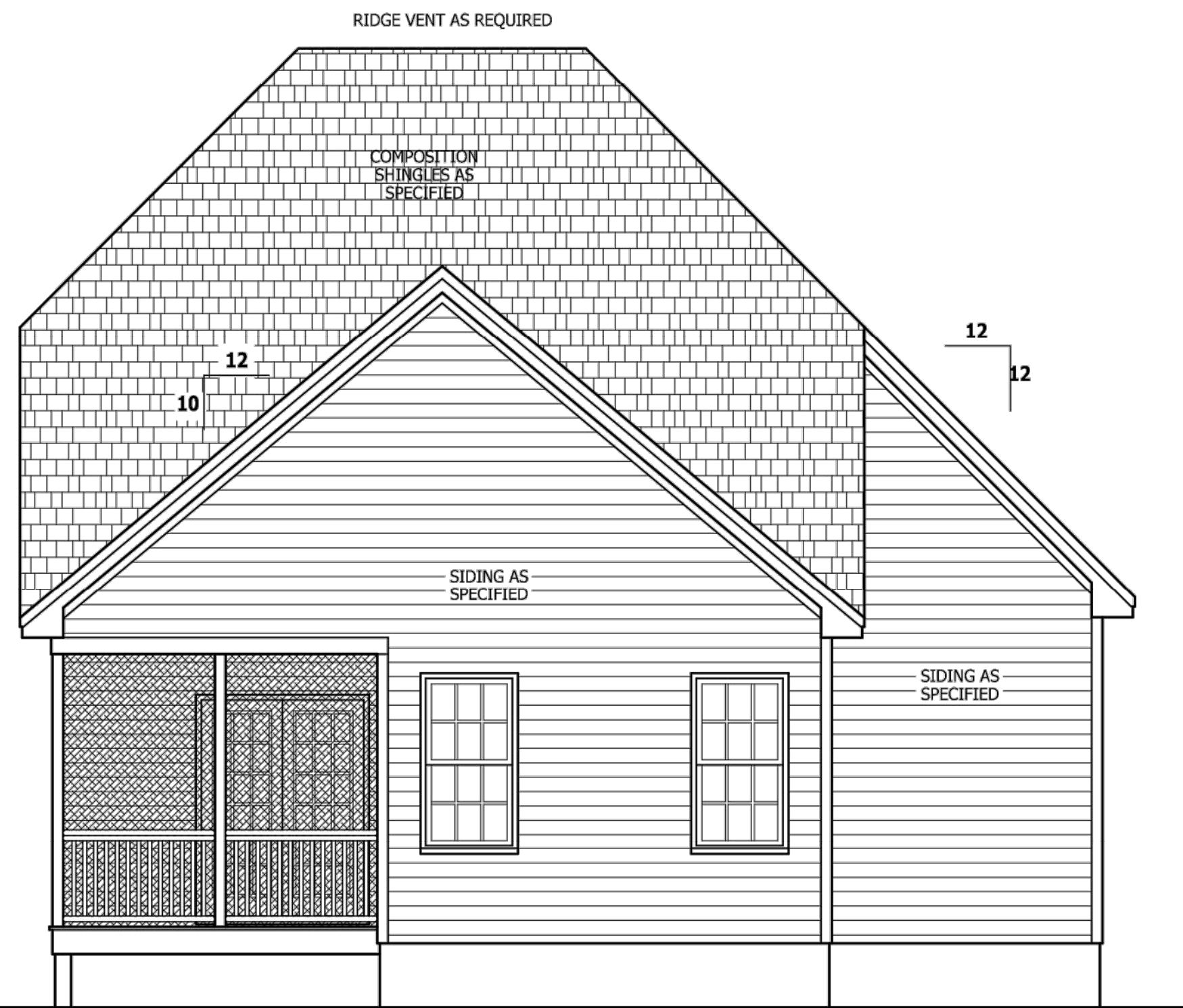
**APPROVED**  
 Limited building only review  
 Permit holder responsible for full compliance with the code

07/27/2021

**SQUARE FOOTAGE**

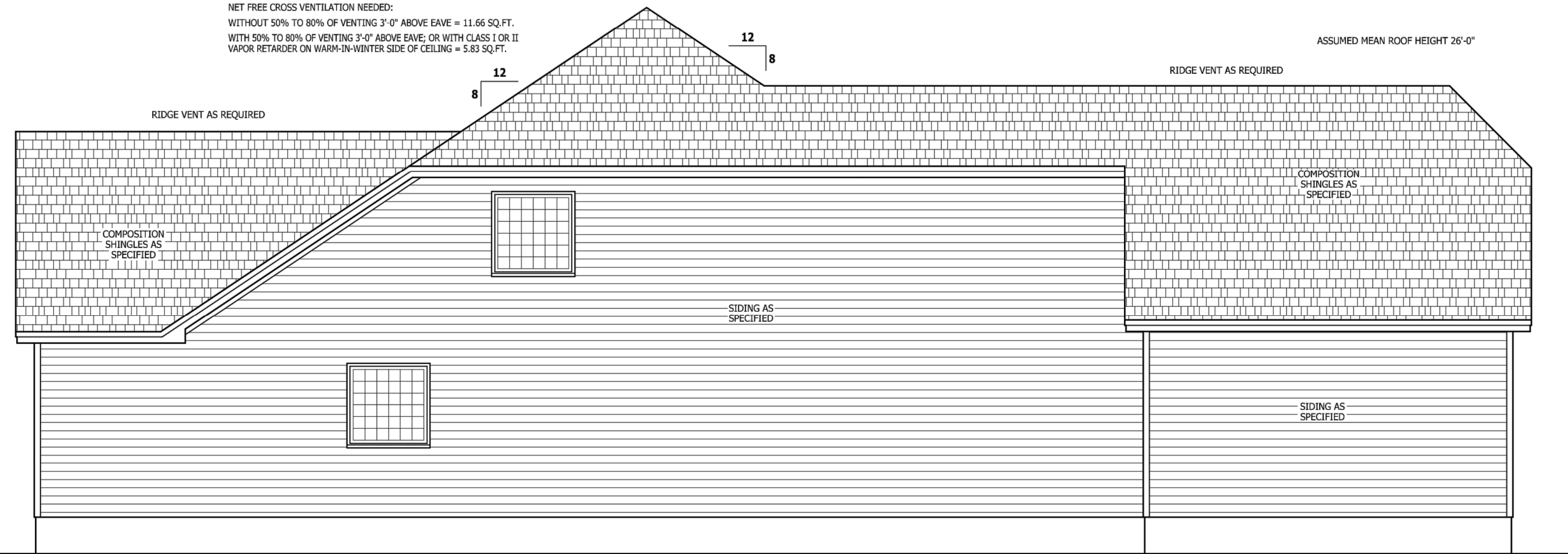
HEATED	
FIRST FLOOR	1180 SQ.FT.
SECOND FLOOR	834 SQ.FT.
PLAYROOM	263 SQ.FT.
TOTAL	2277 SQ.FT.
UNHEATED	
GARAGE	462 SQ.FT.
FRONT PORCH	45 SQ.FT.
REAR PORCH	129 SQ.FT.
TOTAL	636 SQ.FT.

SQUARE FOOTAGE OF ROOF TO BE VENTED = 1,749 SQ.FT.  
 NET FREE CROSS VENTILATION NEEDED:  
 WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 11.66 SQ.FT.  
 WITH 50% TO 80% OF VENTING 3'-0" ABOVE EAVE; OR WITH CLASS I OR II VAPOR RETARDER ON WARM-IN-WINTER SIDE OF CEILING = 5.83 SQ.FT.



**REAR ELEVATION**

SCALE 1/4" = 1'-0"



**LEFT SIDE ELEVATION**

SCALE 1/4" = 1'-0"

**THE WATSON II  
 ELEVATION - C**

**WYNN CONSTRUCTION, INC.**  
 2550 CAPITOL DR., SUITE 105  
 CREEDMOOR, NC 27522

**HAYNES  
 HOME PLANS, INC.**  
 P.O. Box 702, Wake Forest, NC 27888 919-855-8180 Fax 1-866-491-0886



**SQUARE FOOTAGE**

HEATED	
FIRST FLOOR	1180 SQ FT
SECOND FLOOR	834 SQ FT
PLAYROOM	263 SQ FT
TOTAL	2277 SQ FT
UNHEATED	
GARAGE	462 SQ FT
FRONT PORCH	45 SQ FT
REAR PORCH	129 SQ FT
TOTAL	636 SQ FT

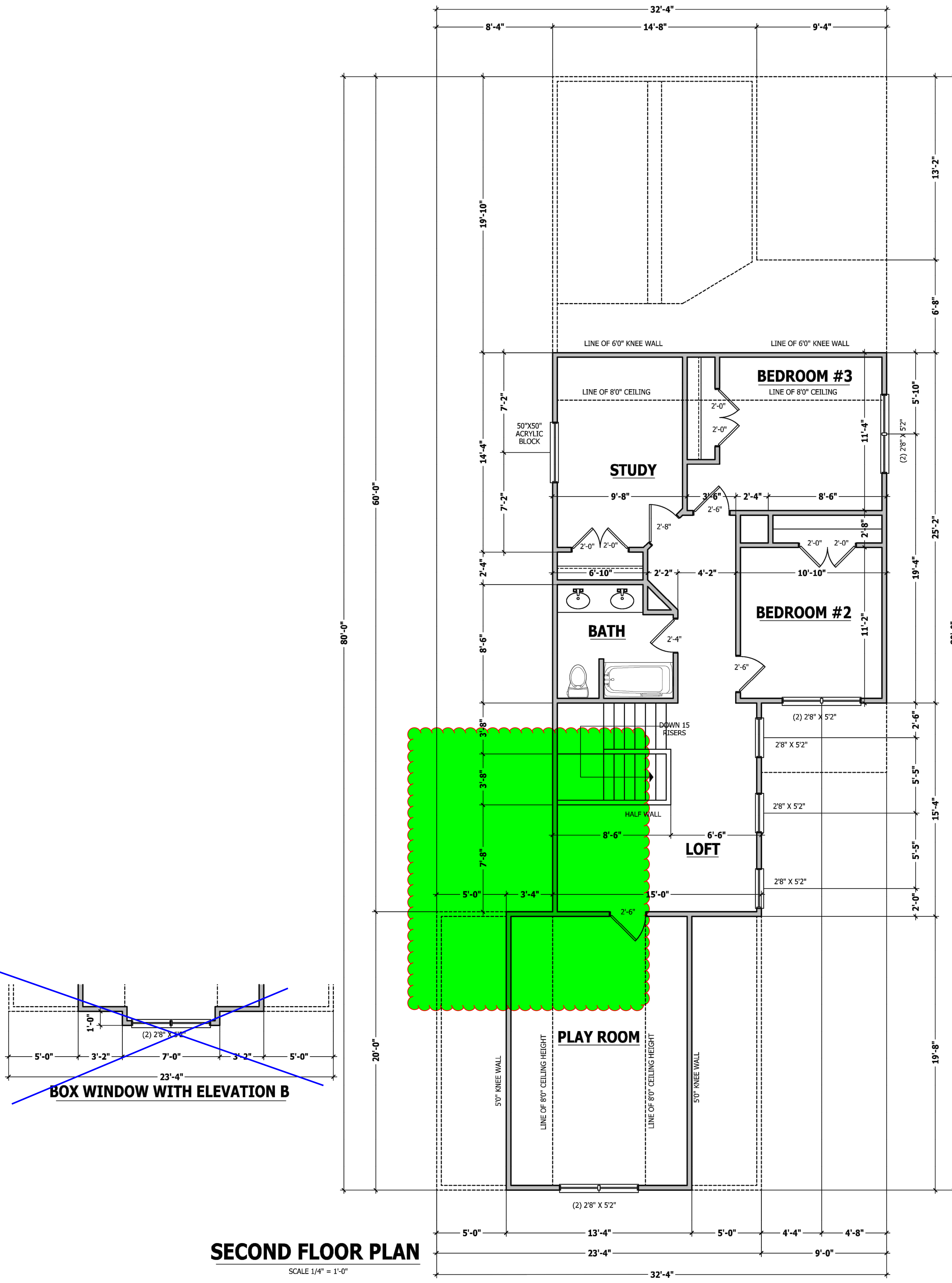
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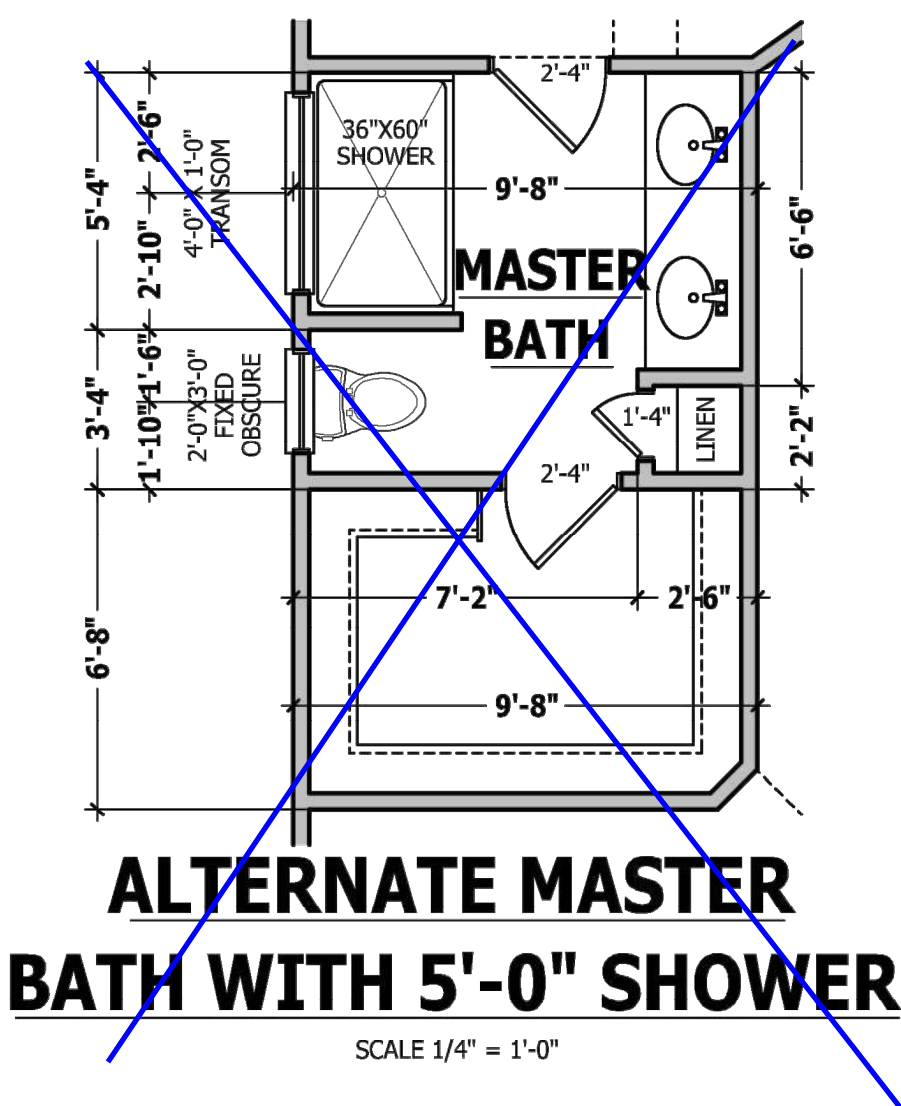




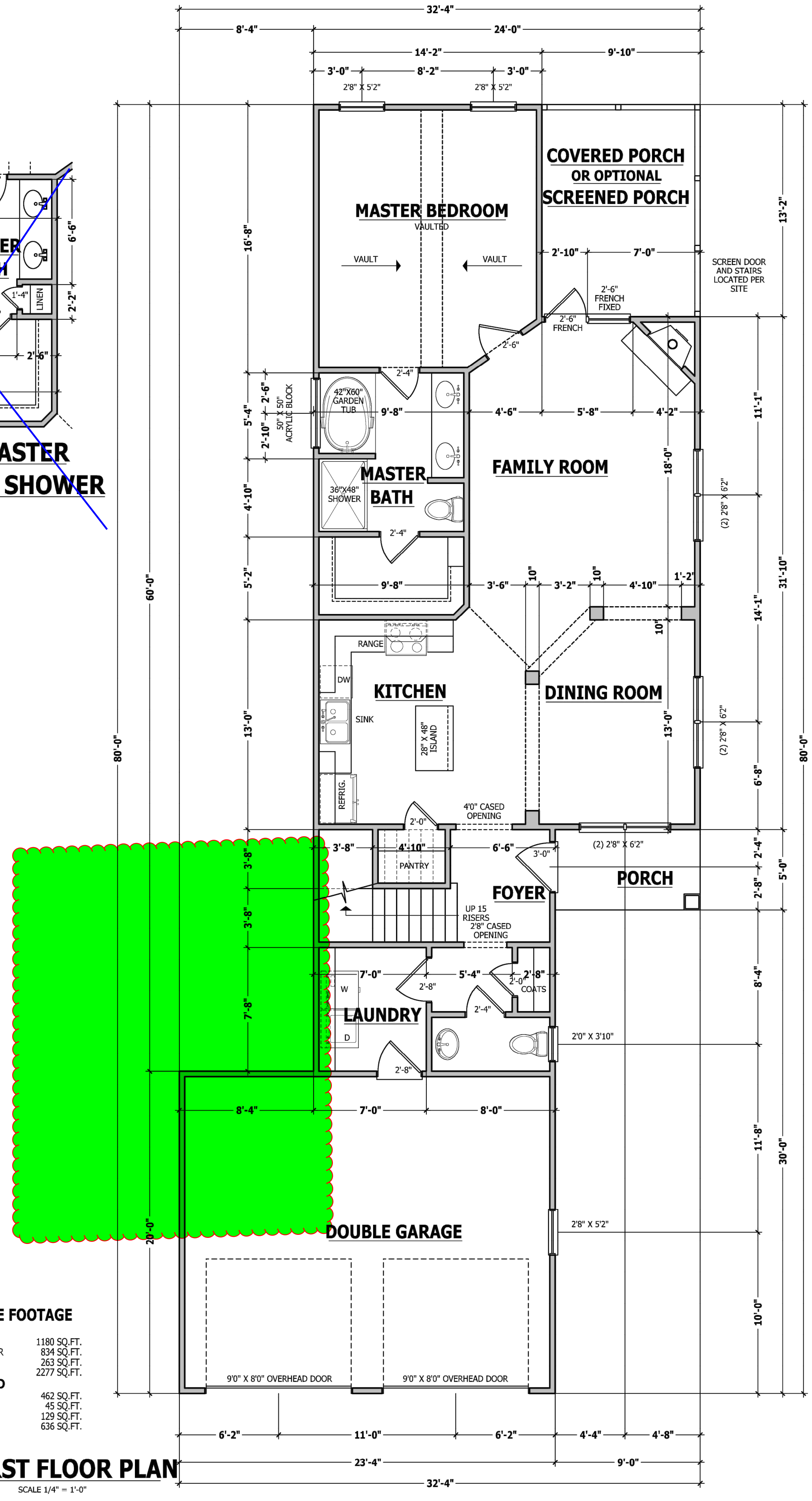
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**SECOND FLOOR PLAN**  
SCALE 1/4" = 1'-0"



**ALTERNATE MASTER BATH WITH 5'-0" SHOWER**  
SCALE 1/4" = 1'-0"



**SQUARE FOOTAGE**

<b>HEATED</b>	
FIRST FLOOR	1180 SQ.FT.
SECOND FLOOR	834 SQ.FT.
PLAYROOM	263 SQ.FT.
TOTAL	2277 SQ.FT.
<b>UNHEATED</b>	
GARAGE	462 SQ.FT.
FRONT PORCH	45 SQ.FT.
REAR PORCH	129 SQ.FT.
TOTAL	636 SQ.FT.

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

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**THE WATSON II**  
**FIRST AND SECOND FLOOR PLANS**

**WYNN CONSTRUCTION, INC.**  
2550 CAPITOL DR., SUITE 105  
CREEDMOOR, NC 27522

**HAYNES**  
**HOME PLANS, INC.**  
P.O. Box 702, Wake Forest, NC 27888 919-555-6180 FAX 1-866-481-0896



**SQUARE FOOTAGE**

<b>HEATED</b>	
FIRST FLOOR	1180 SQ.FT.
SECOND FLOOR	834 SQ.FT.
PLAYROOM	263 SQ.FT.
TOTAL	2277 SQ.FT.
<b>UNHEATED</b>	
GARAGE	462 SQ.FT.
FRONT PORCH	45 SQ.FT.
REAR PORCH	129 SQ.FT.
TOTAL	636 SQ.FT.

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HAYNES HOME PLANS, INC.  
**4/3/2012**  
**120401B**  
**PAGE 4 OF 6**



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**THE WATSON II**  
**STRUCTURAL PLANS**

**WYNN CONSTRUCTION, INC.**  
2550 CAPITOL DR., SUITE 105  
CREEDMOOR, NC 27522

**HAYNES**  
**HOME PLANS, INC.**  
P.O. Box 702, Wake Forest, NC 27888 919-435-4180 Fax 1-866-491-0396

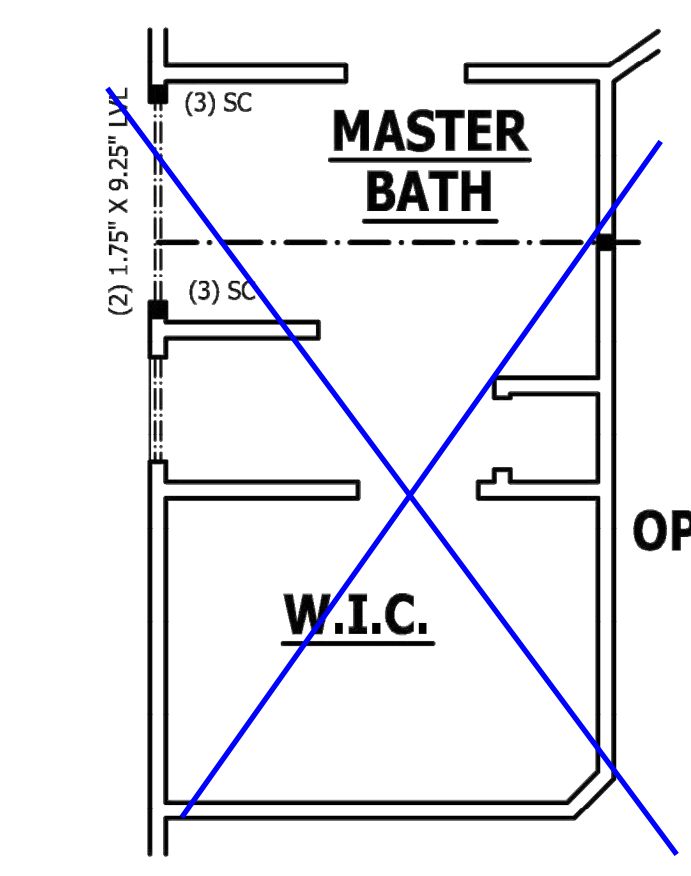
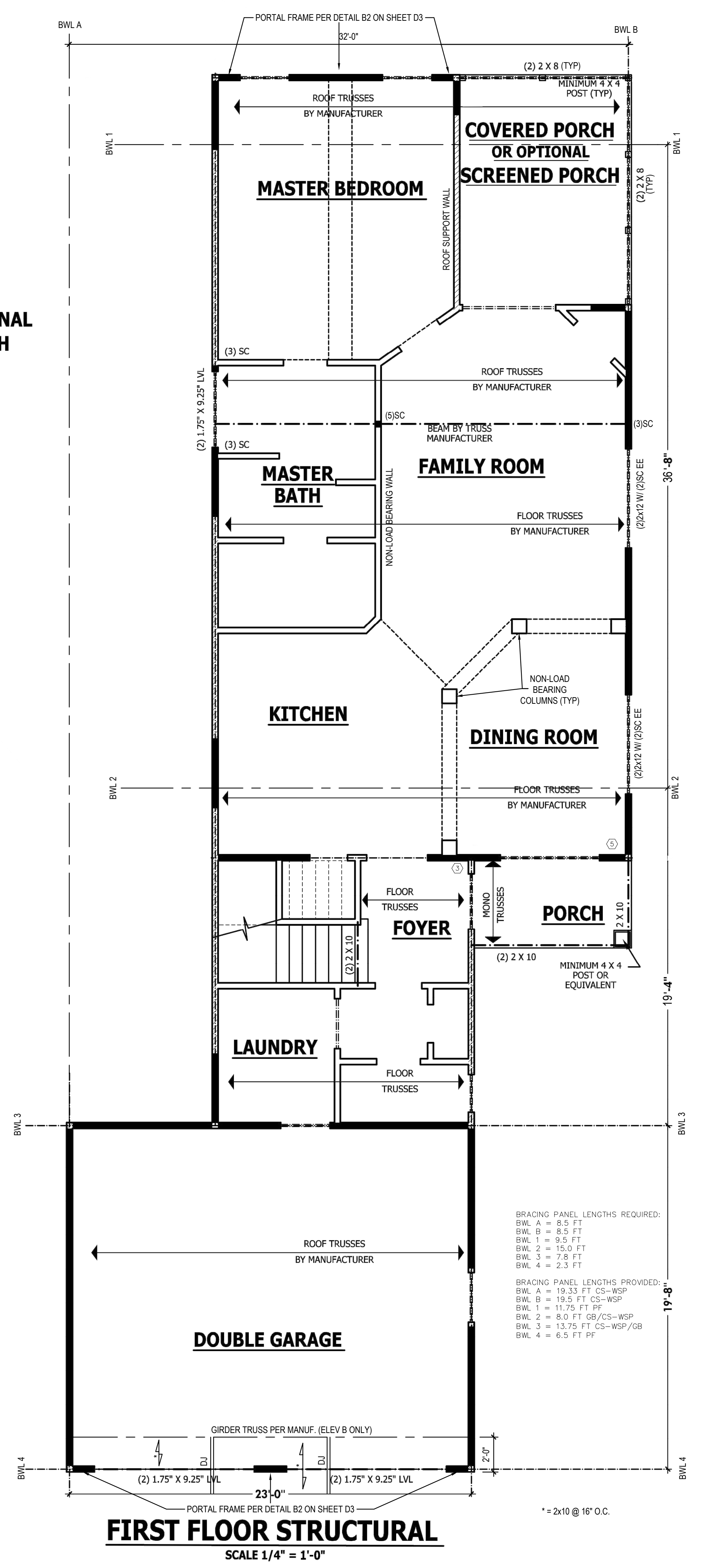


**SQUARE FOOTAGE HEATED**

FIRST FLOOR	1180 SQ. FT.
SECOND FLOOR	834 SQ. FT.
PLAYROOM	263 SQ. FT.
TOTAL	2277 SQ. FT.

**UNHEATED**

GAZON	42 SQ. FT.
FRONT PORCH	43 SQ. FT.
REAR PORCH	129 SQ. FT.
TOTAL	694 SQ. FT.



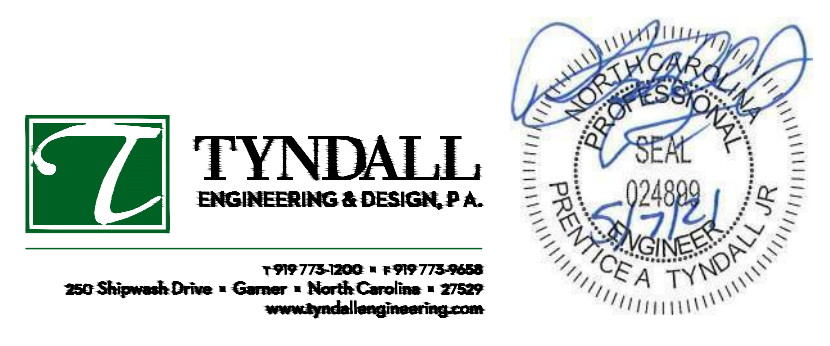
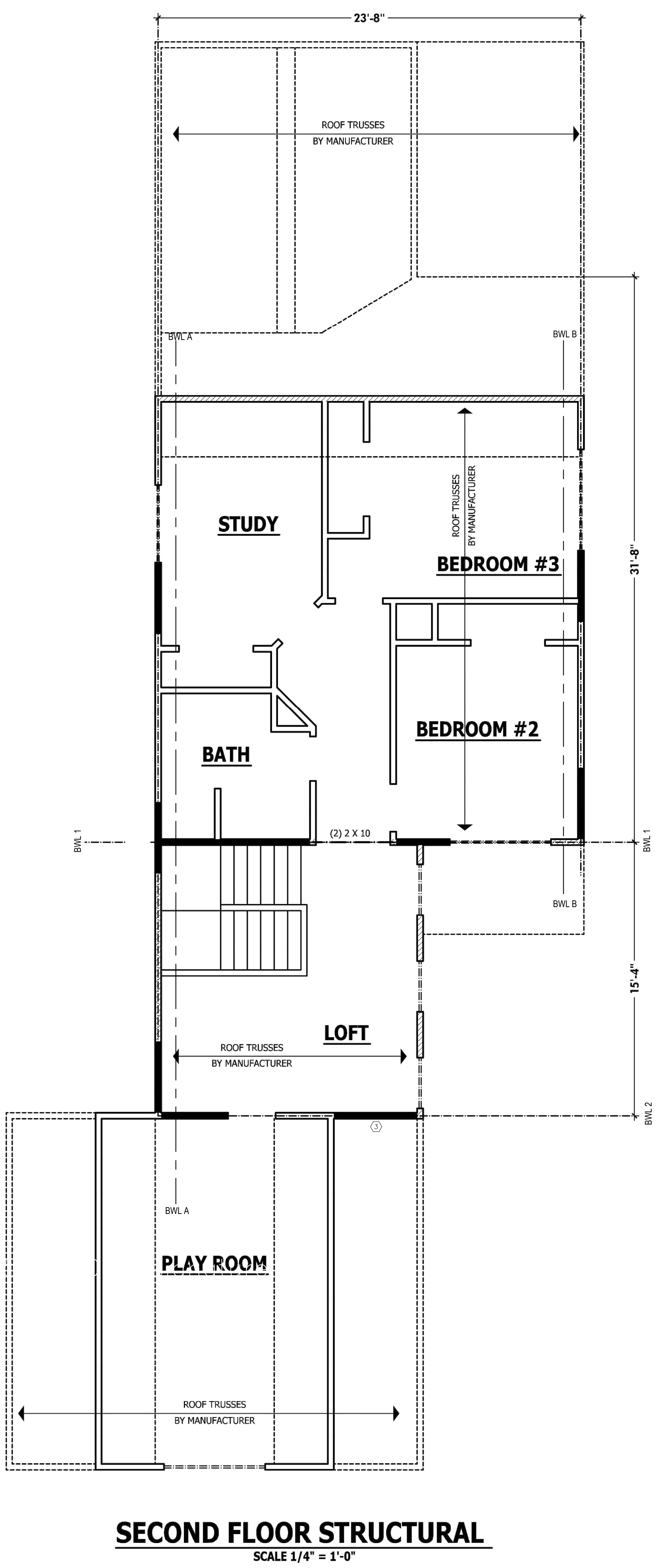
**DESIGN LOADS**

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION
			LL DL
FLOOR (primary)	40	10	1/360 L/240
FLOOR (secondary)	20	10	1/240 L/240
ATTIC (no storage)	20	10	1/240 L/180
ATTIC (no access)	10	5	1/240 L/180
EXTERNAL BALCONY	40	10	1/240 L/240
ROOF	20	10	1/240 L/180
ROOF TRUSS	20	10	1/240 L/240

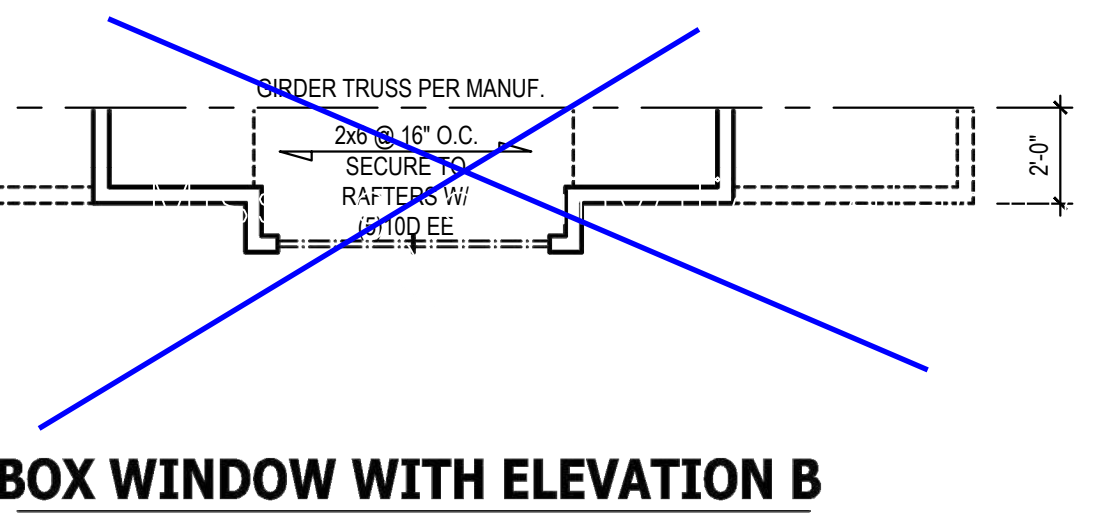
WIND LOAD BASED ON 120 MPH (EXPOSURE B)  
SEISMIC BASED ON SEISMIC ZONES A, B & C

- 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.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALE ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
  - ALL LUMBER SHALL BE SYP #2 (UNG)
  - ALL LVL LUMBER TO BE 1 7/8" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (E = LEVEL MICROLAM)
  - ALL LVL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
  - ALL LOAD BEARING EXTERIOR WINDOW HEADERS WITH MAXIMUM SPAN OF 4'-4" 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'-5" MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6", OTHERWISE REFER TO TABLE R602.7(1).
  - ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLE R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
  - REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
  - ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 Fy = 50 KSI MIN. (UNO)
  - ALL EXTERIOR LUMBER TO BE #2 SYP PT
  - ALL CONCRETE: fc = 3000 PSI MIN.
  - PRESUMPTIVE BEARING CAPACITY = 2000 PSF
  - 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.
  - PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
  - PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
  - PROVIDE CONTINUOUS SHEATHING PER SECTION R602.10.4 OF THE 2018 IRC.
  - MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
  - UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
  - METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

- 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 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)
    - 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING) SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 12" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS
    - 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
  - EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
  - 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.
  - 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.
    - 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT
  - SHEATH INTERIOR & EXTERIOR
  - 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(4). 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.
    - MINIMUM 800# HOLD-DOWN DEVICE



Project Number: 2101-010157  
\* Structural analysis based on NC Residential Building Code 2018  
The Engineer's seal applies only to structural components on this document. The seal does not include construction means, methods, techniques, procedures, or safety precautions. Any deviations or discrepancies on plans are to be brought to the immediate attention of TynDale Engineering & Design, P.A. Failure to do so will void TynDale Engineering's Liability.



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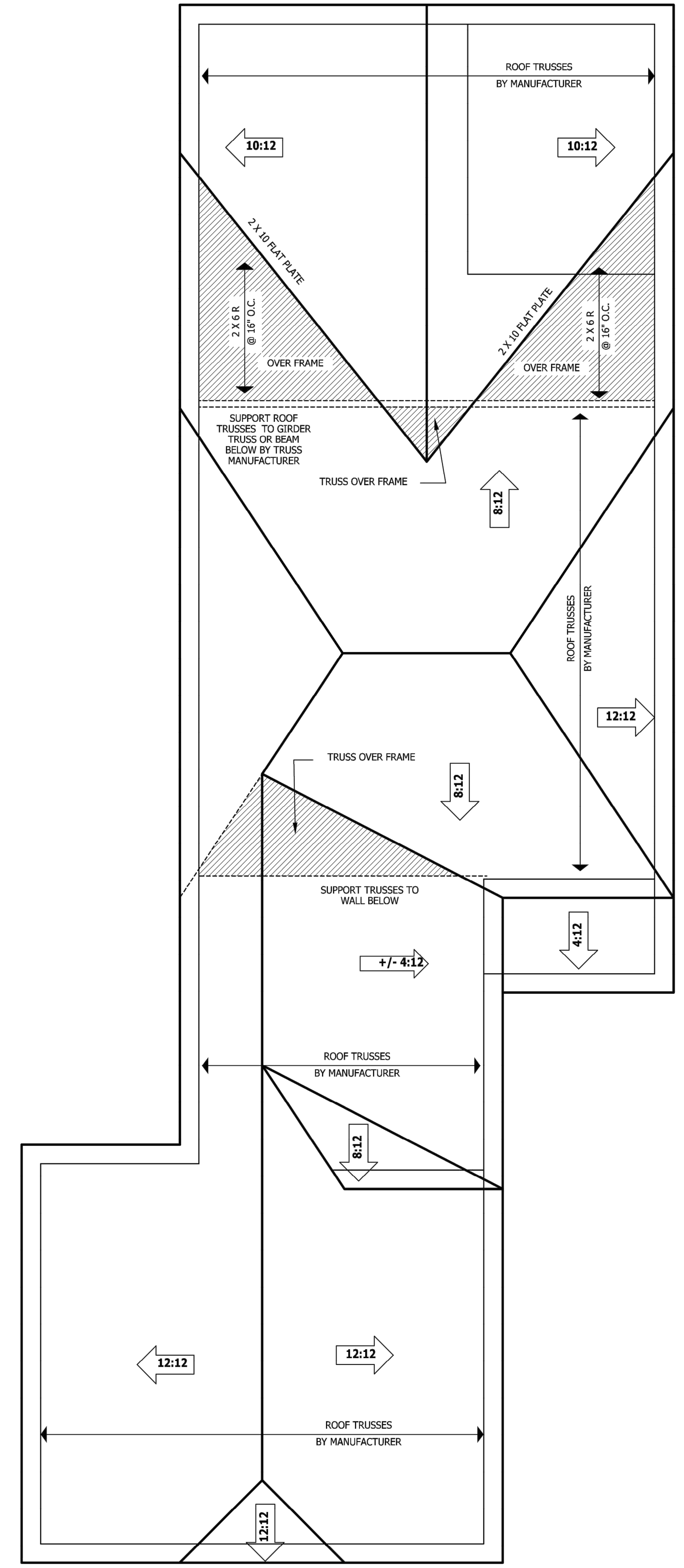
# THE WATSON II ROOF PLANS

WYNN CONSTRUCTION, INC.  
2550 CAPITOL DR., SUITE 105  
CREEDMOOR, NC 27522

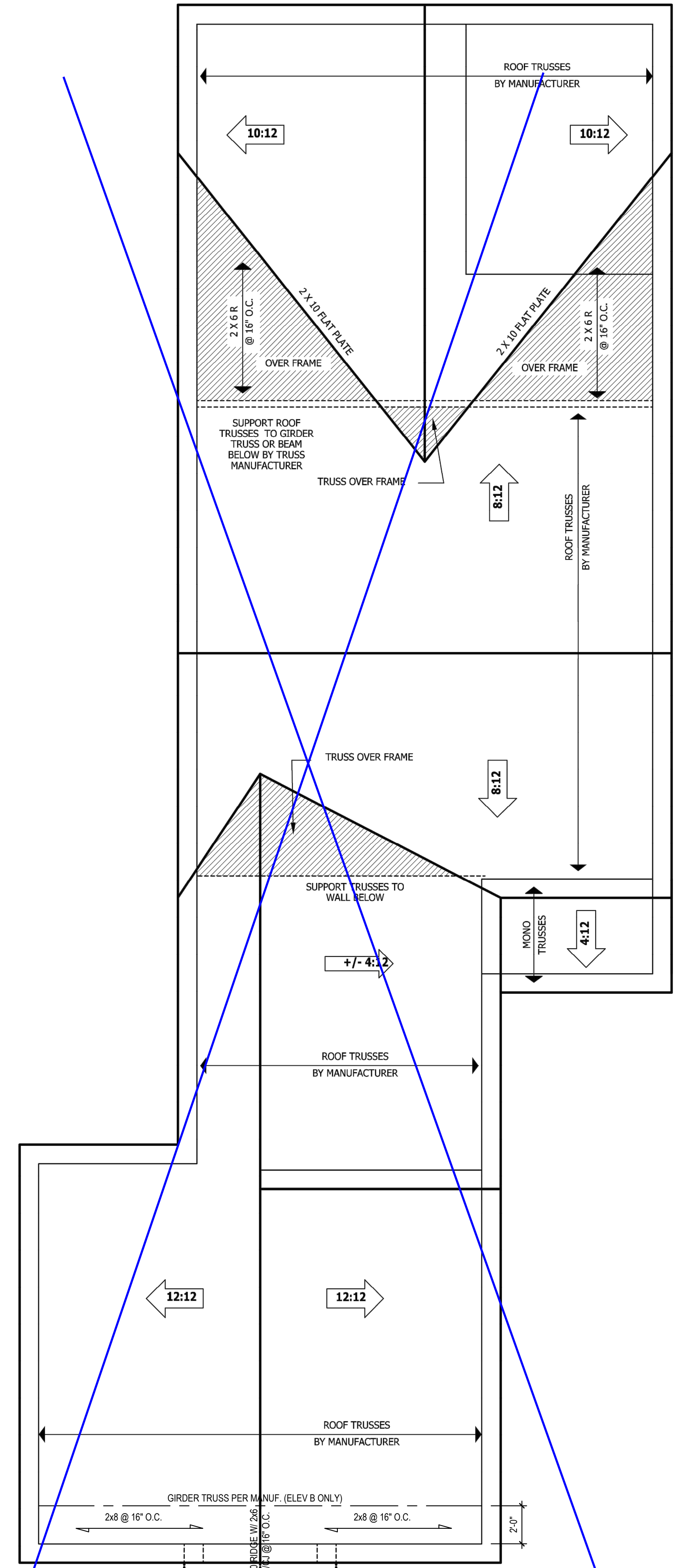
**HAYNES**  
HOME PLANS, INC.  
P.O. Box 702, Wake Forest, NC 27588 919-485-4180 Fax 1-866-491-0866



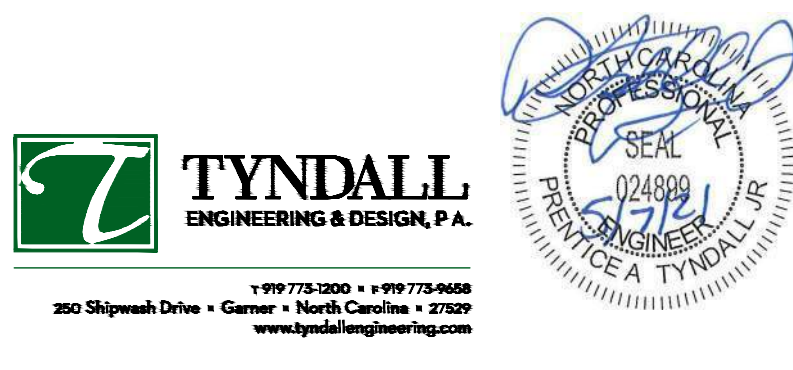
SQUARE FOOTAGE	
HEATED	
FIRST FLOOR	1889 SQ. FT.
SECOND FLOOR	894 SQ. FT.
PLAYROOM	293 SQ. FT.
TOTAL	3077 SQ. FT.
UNHEATED	
CARAGE	462 SQ. FT.
FRONT PORCH	45 SQ. FT.
REAR PORCH	129 SQ. FT.
TOTAL	636 SQ. FT.



**ROOF PLAN WITH ELEVATION C**  
SCALE 1/4" = 1'-0"



**ROOF PLAN WITH ELEVATIONS A & B**  
SCALE 1/4" = 1'-0"



Project Number: 2101-010157  
\* Structural analysis based on NC Residential Building Code 2018  
The Engineer's seal applies only to structural components on this document. The seal does not include construction means, methods, techniques, procedures, or safety precautions. Any omissions 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's Liability.

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**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) 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			

3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE. (U.N.O.)

5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R404 OF 2018 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.

6) ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 800 PSI, BASED ON 2x10) UNO. ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL. ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (U.N.O.) ALL LSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2325 PSI, E = 1.6M PSI (U.N.O.) ALL PSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2400 PSI, E = 1.8M PSI (U.N.O.)

7) ALL LOAD BEARING EXTERIOR HEADERS SHALL BE AT (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.

8) 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.

9) STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3-1/2" 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.

10) PROVIDE ANCHOR BOLT PLACEMENT PER SECTION 403.1.6: 1/2" x 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.

11) FOUNDATION DRAINAGE--DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.

12) 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: 30.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1.5/12 36.0 LBS/SQFT FOR ROOF PITCHES 1.5/12 TO 6/12 18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12 \*\*MEAN ROOF HEIGHT 30'-0" OR LESS

13) FOR ROOF SLOPES FROM 2/12 THROUGH 4/12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER.

14) REFER TO SECTION R602.3 FOR FRAMING OF ALL WALLS OVER 10'-0" IN HEIGHT.

15) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 IRC.

16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.

17) REFER TO TABLE N1102.1 FOR PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA.

18) PSL COLUMNS DESIGNED WITH MAXIMUM HEIGHT OF 9'-0" (U.N.O.)

19) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)

20) MAXIMUM MASONRY PEIR HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.

21) 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.

CLIMATE ZONES	FENESTRATION U-FACTOR	SKYLIGHT <sup>1</sup> U-FACTOR	GLAZED FENESTRATION SHGC <sup>2</sup>	CEILING <sup>3</sup> R-VALUE	WOOD FRAMED WALL R-VALUE	MASS WALL R-VALUE <sup>4</sup>	FLOOR R-VALUE	BASEMENT <sup>5</sup> WALL R-VALUE	SLAB <sup>6</sup> R-VALUE AND DEPTH	CRAWL SPACE <sup>7</sup> WALL R-VALUE
3	0.35	0.55	0.30	38 or 30 cont <sup>1</sup>	15 or 13 + 2.5 <sup>1</sup>	5/13 or 5/10 cont <sup>1</sup>	19	5/13 <sup>1</sup>	0	5/13
4	0.35	0.55	0.30	38 or 30 cont <sup>1</sup>	15 or 13 + 2.5 <sup>1</sup>	5/13 or 5/10 cont <sup>1</sup>	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont <sup>1</sup>	15 <sup>1</sup> or 13 + 5 <sup>1</sup> or 15 + 3 <sup>1</sup>	13/17 or 13/12.5 cont <sup>1</sup>	30 <sup>1</sup>	10/15	10	10/15

**TABLE N1102.1 CLIMATE ZONES 3-5**

a. R-VALUES ARE MINIMUMS. 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.

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

c. "10/15" MEANS R-10 CONTINUOUS INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-10 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.

d. FOR MONOLITHIC SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR A MAXIMUM OF 24" BELOW GRADE. WHEREVER IS LESS, FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24" BELOW GRADE. WHEREVER IS LESS, R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.

e. SEE TABLE N1102.2 FOR FLOOR FINISHES.

f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1102.2 AND TABLE N1102.7.

g. OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY. R-19 MINIMUM.

h. THE FIRST VALUE IS CAVITY INSULATION. THE SECOND VALUE IS CONTINUOUS INSULATION. SO "13+5" MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. "15+3" MEANS R-15 CAVITY INSULATION PLUS R-3 INSULATED SHEATHING. IF STRUCTURAL SHEATHING COVERS 25% OR LESS OF THE EXTERIOR, INSULATING SHEATHING IS NOT REQUIRED. WHERE THE STRUCTURAL SHEATHING IS USED, IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2. "15 + 2.5" MEANS R-15 CAVITY INSULATION PLUS R-2.5 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 MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN 0.55 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 MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN 0.70 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.

l. R-50 SHALL BE DEEMED TO SATISFY THE CEILING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-50 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE LEVEL OF THE ROOF DECK.

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

n. R-19 FIBERGLASS BATTIS COMPRESSED AND INSTALLED IN A NOMINAL 2 x 6 FRAMING CAVITY IS DEEMED TO COMPLY. FIBERGLASS BATTIS RATED R-19 OR HIGHER COMPRESSED AND INSTALLED IN A 2x6 WALL IS NOT DEEMED 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.

**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 = PLATE
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
FTC = FOOTING	TYP = TYPICAL
GALV = GALVANIZED	UNO = UNLESS NOTED OTHERWISE
HORIZ = HORIZONTAL	W = WIDE FLANGE BEAM
HT = HEIGHT	WWF = WELDED WIRE FABRIC
MANUF = MANUFACTURER	WJ = 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.

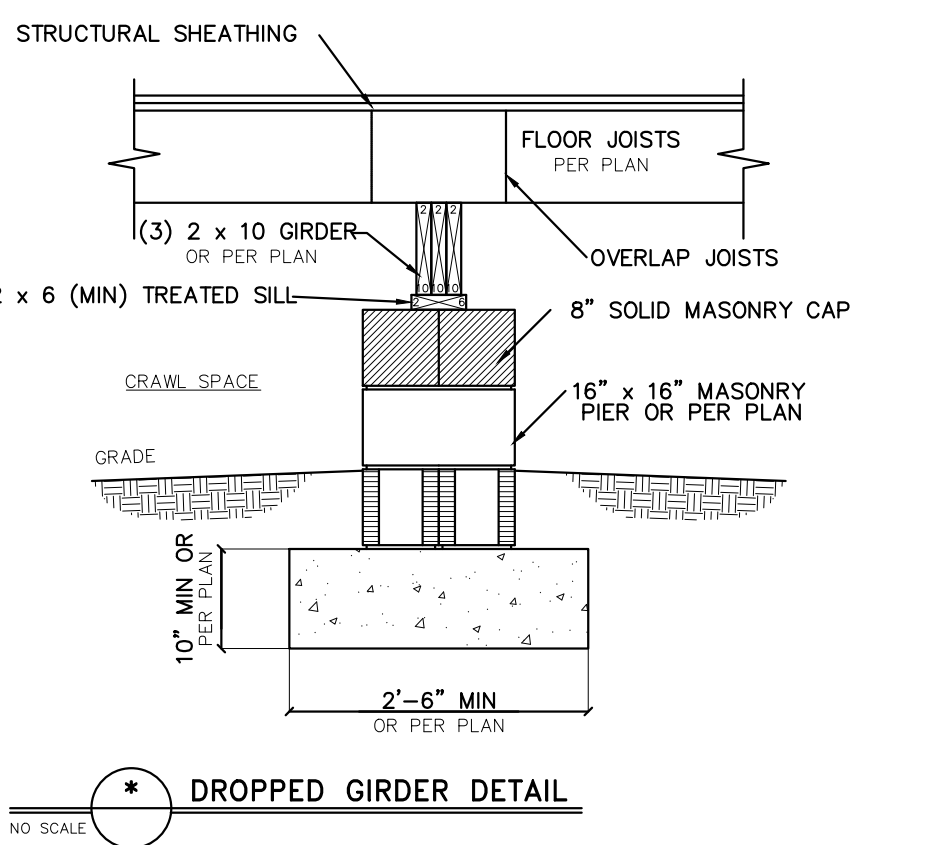
\*\* FROM TOP OF FOOTING TO BOTTOM OF ORDER

\*\*\* DECKS WITH POST HEIGHTS OVER 20'-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.

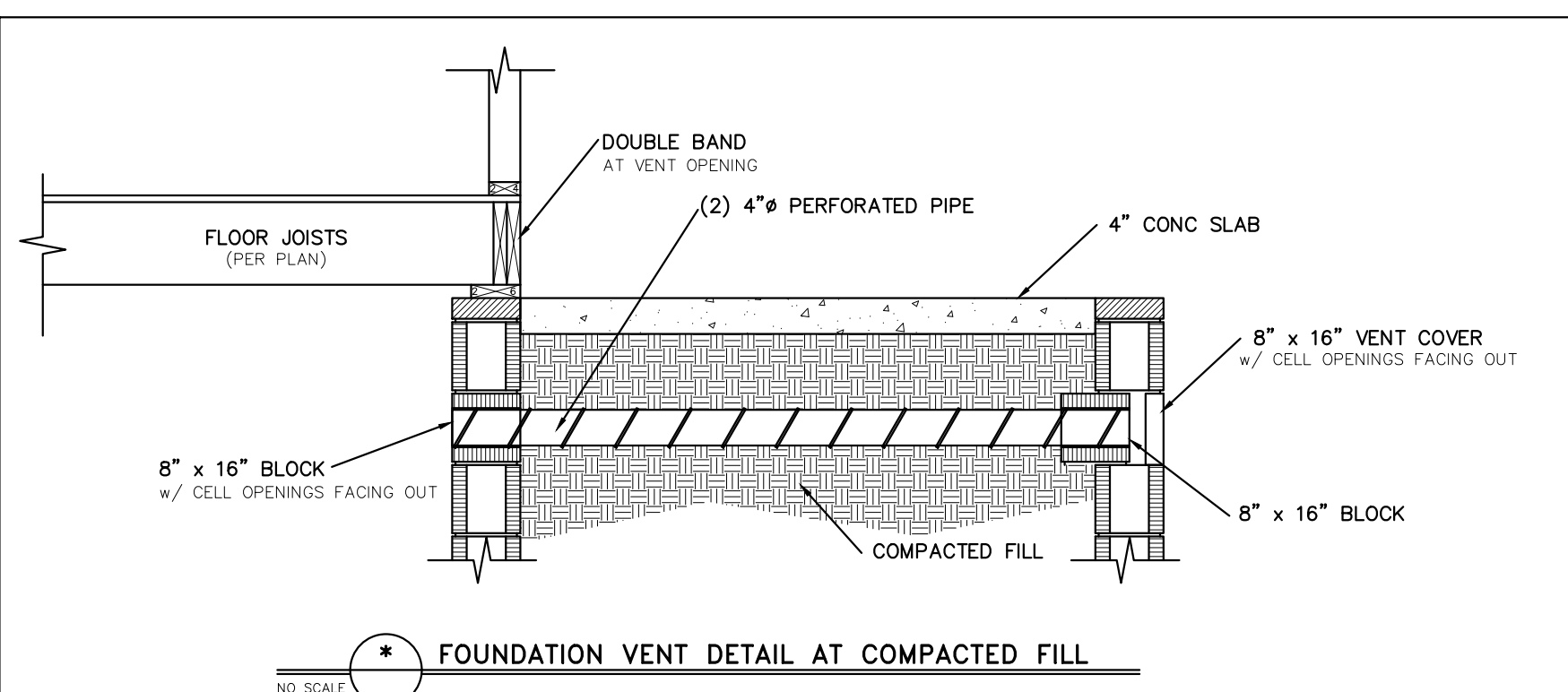
2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THESE METHODS:

- 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" x HOT 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:
 

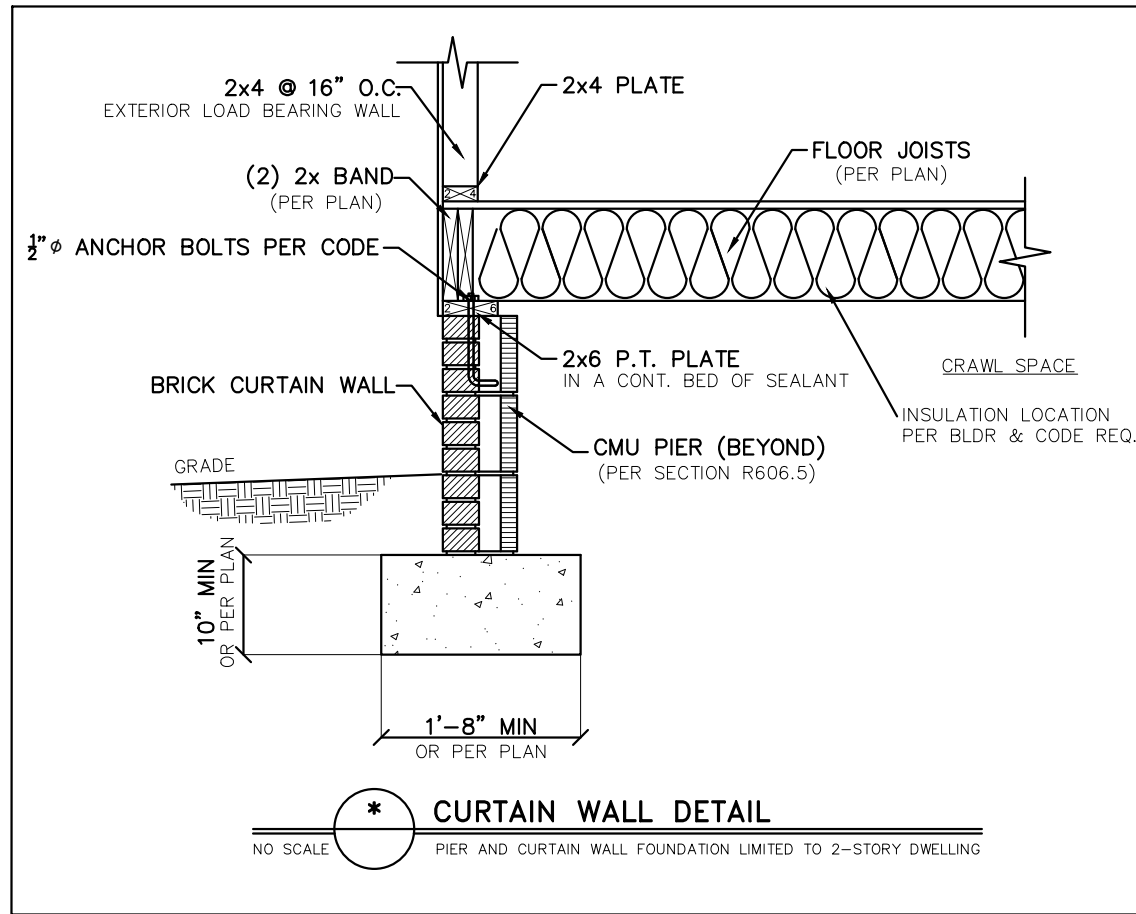
POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"
- 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8" x HOT DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER.
- FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.



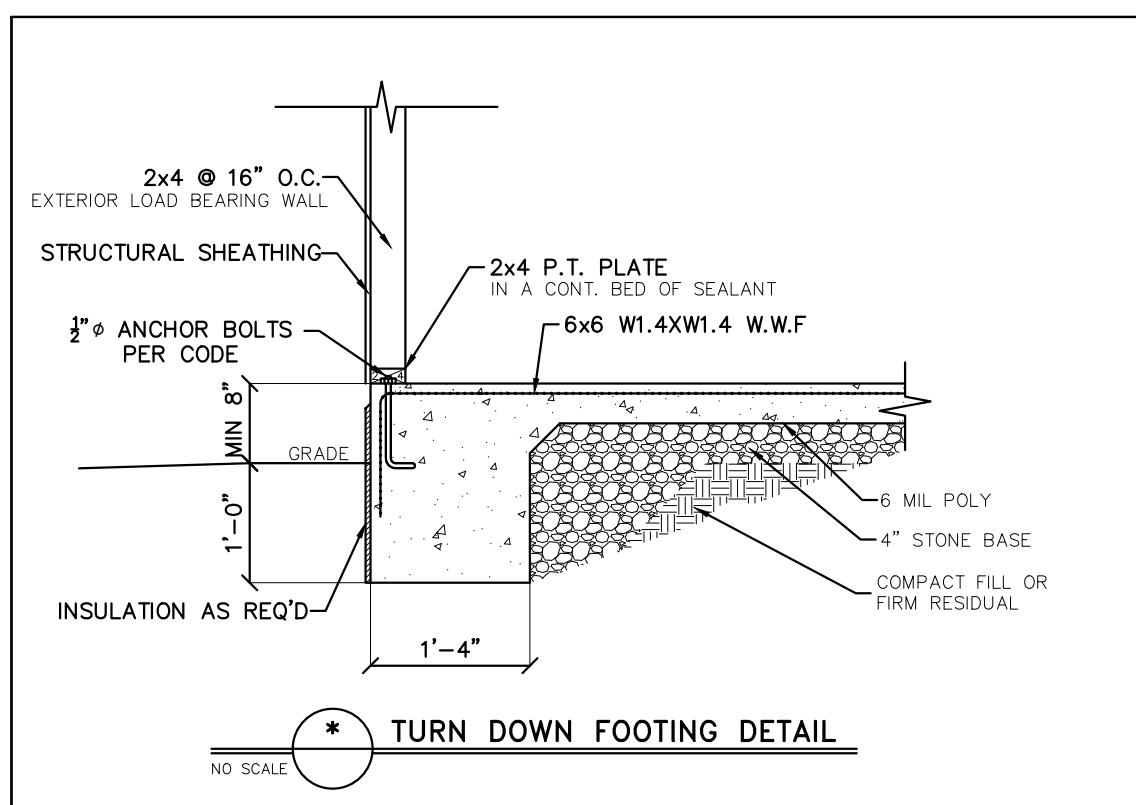
**DROPPED GIRDER DETAIL**



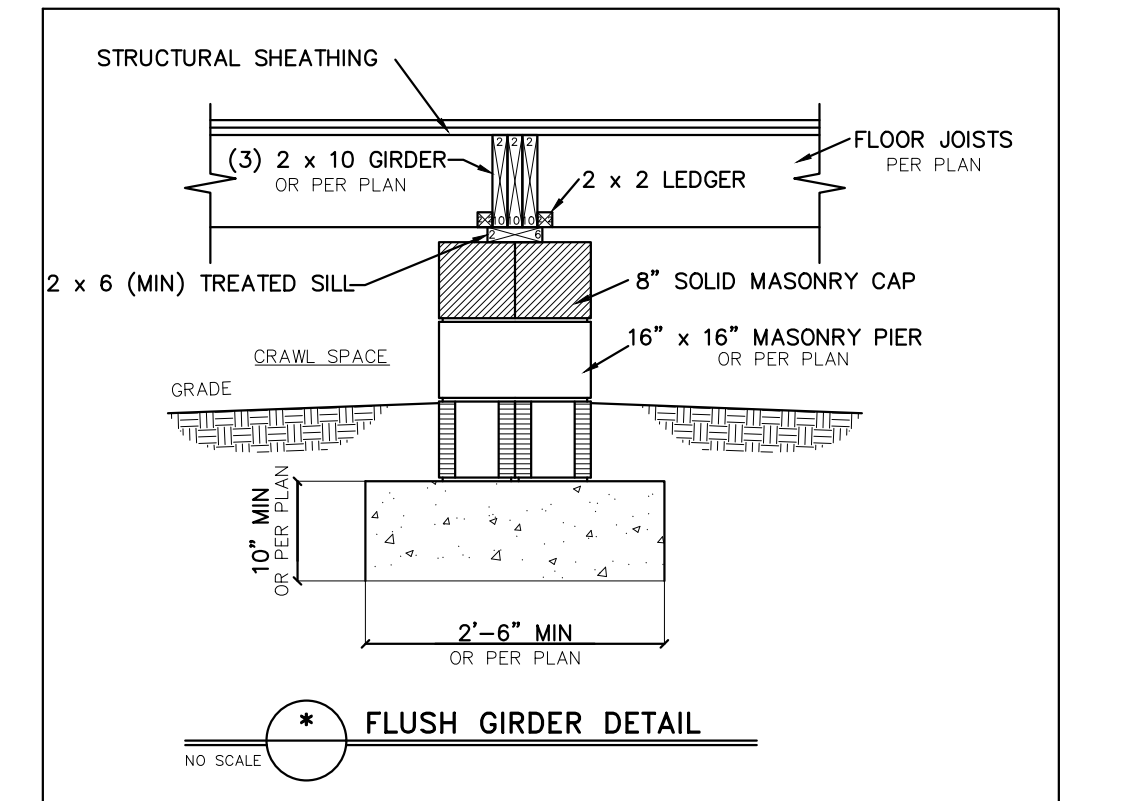
**FOUNDATION VENT DETAIL AT COMPACTED FILL**



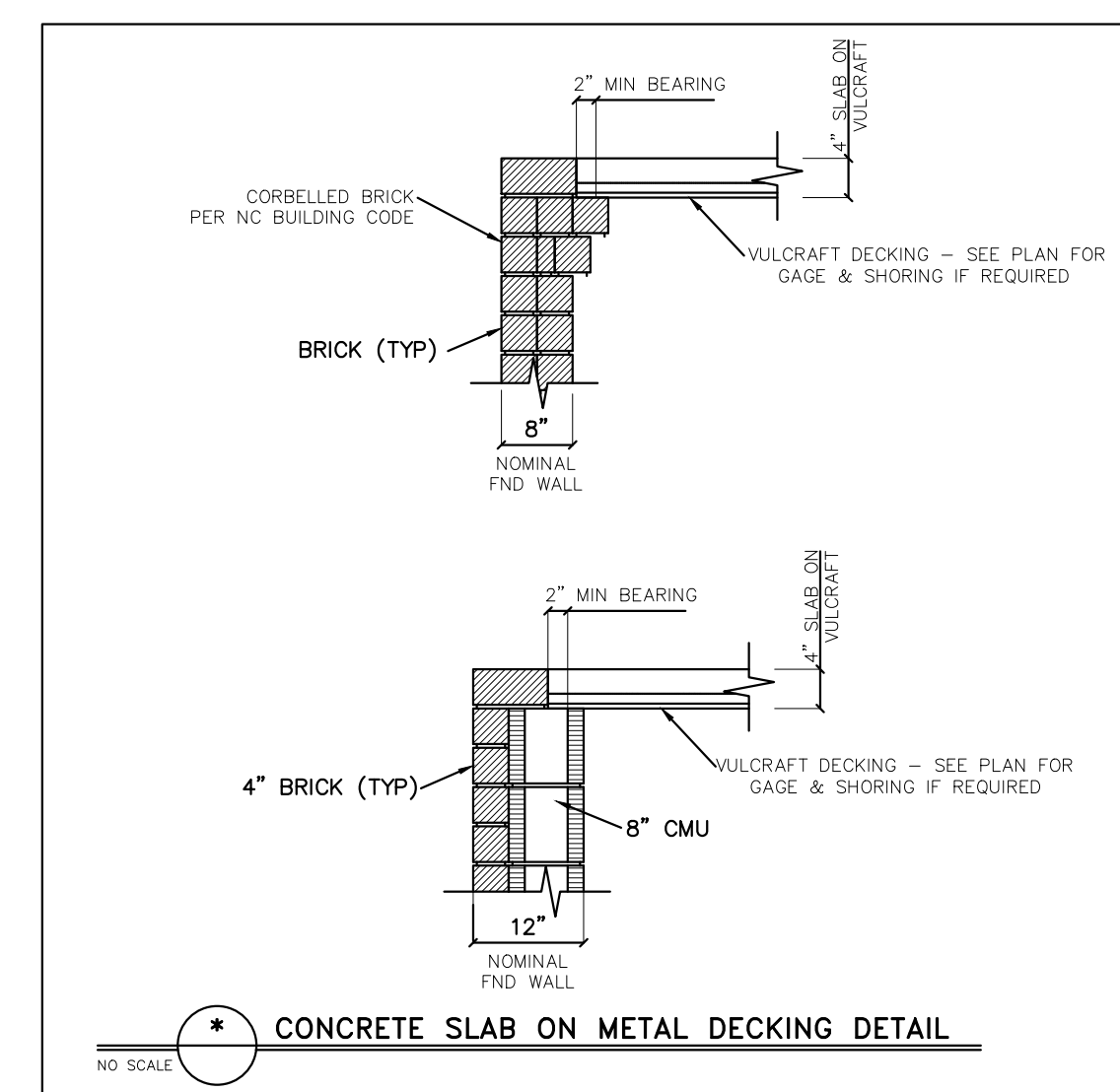
**CURTAIN WALL DETAIL**



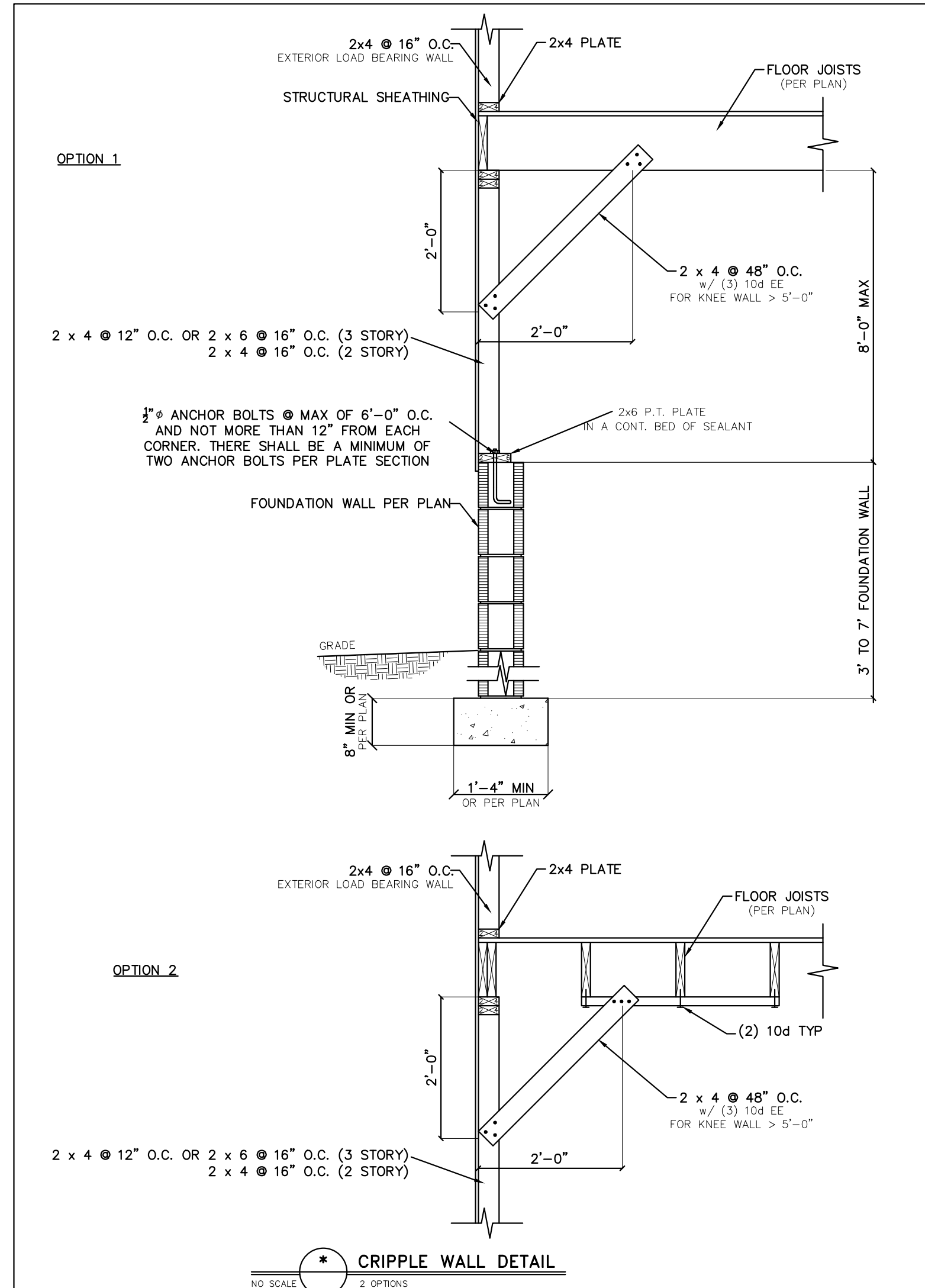
**TURN DOWN FOOTING DETAIL**



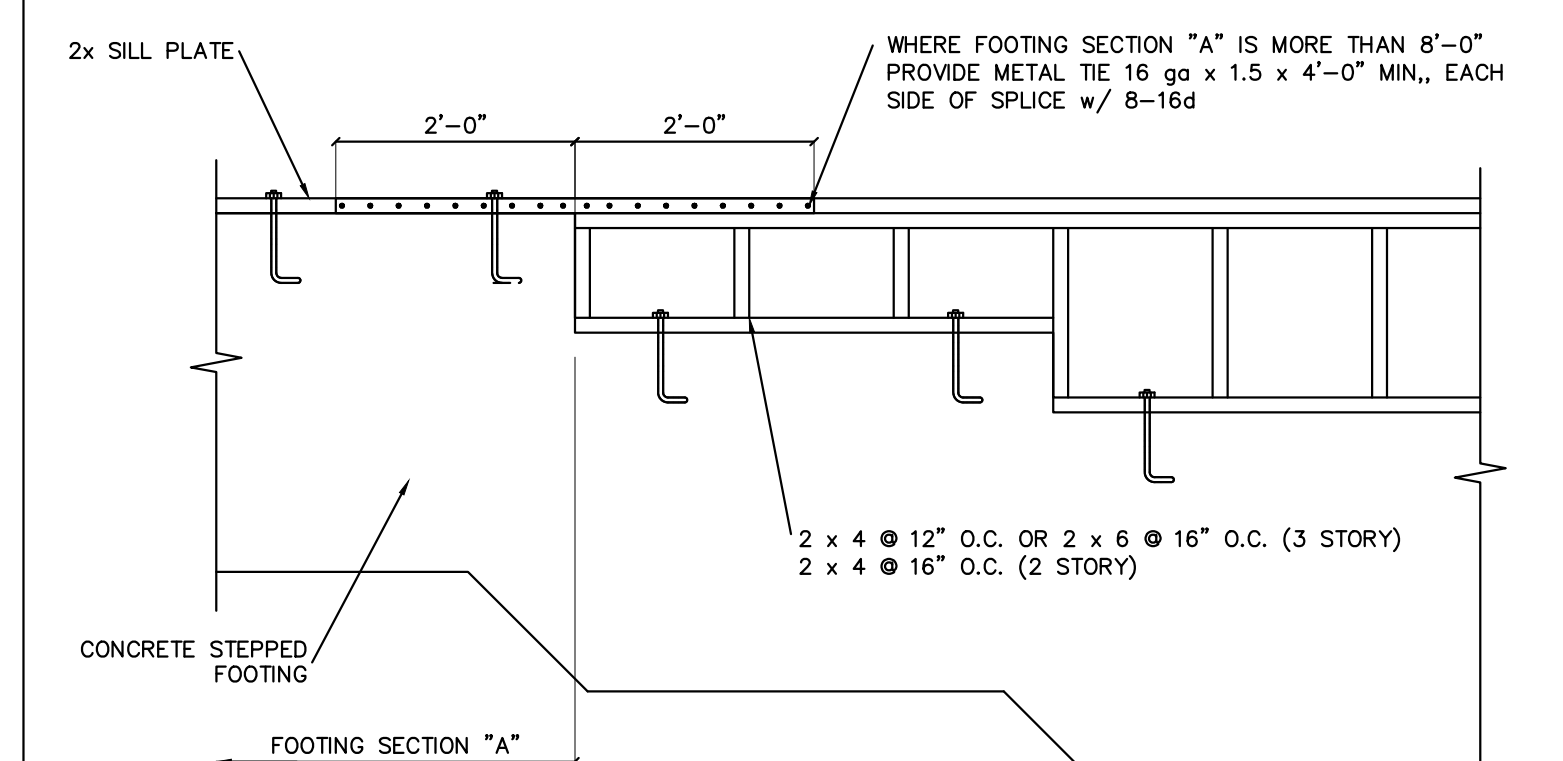
**FLUSH GIRDER DETAIL**



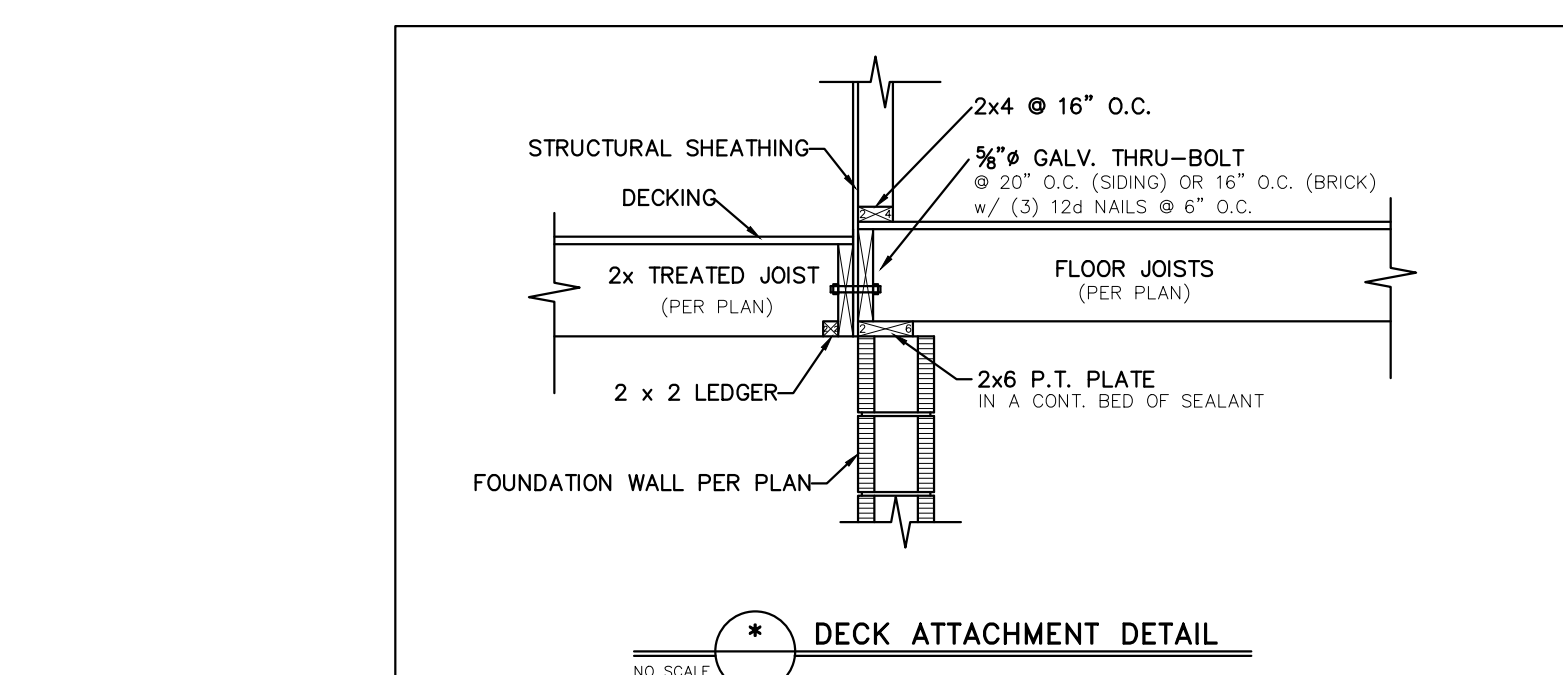
**CONCRETE SLAB ON METAL DECKING DETAIL**



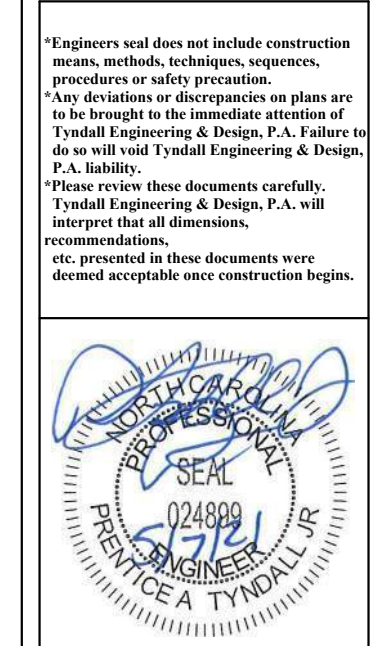
**CRIPPLE WALL DETAIL**



**STEP DOWN FOUNDATION AT CRIPPLE WALL**



**DECK ATTACHMENT DETAIL**



**TYNDALL ENGINEERING & DESIGN, P.A.**  
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Client: CAPITAL CITY HOMES  
 Project: THE WATSON II PLAN GARAGE LEFT

**STANDARD DETAILS**

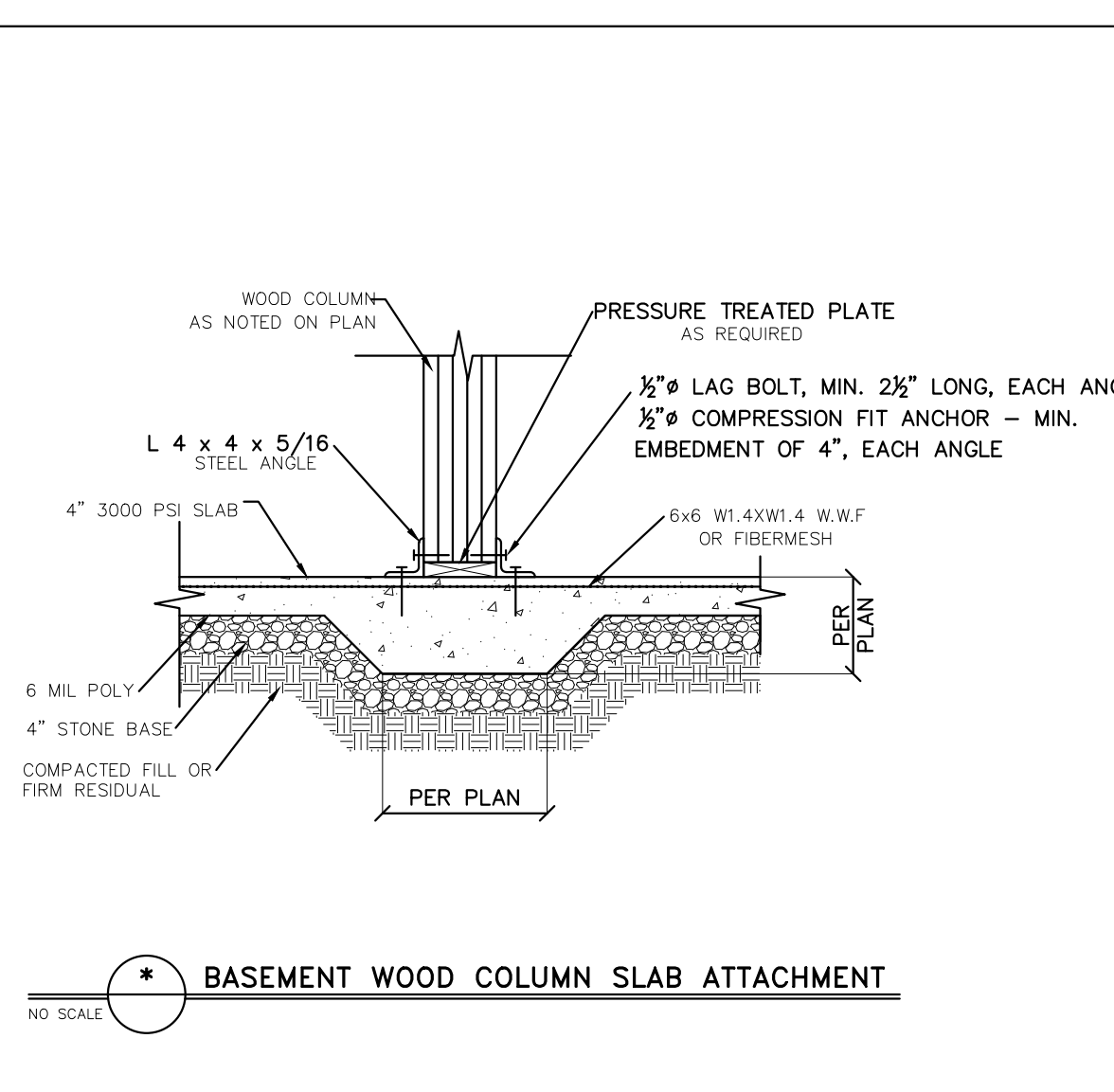
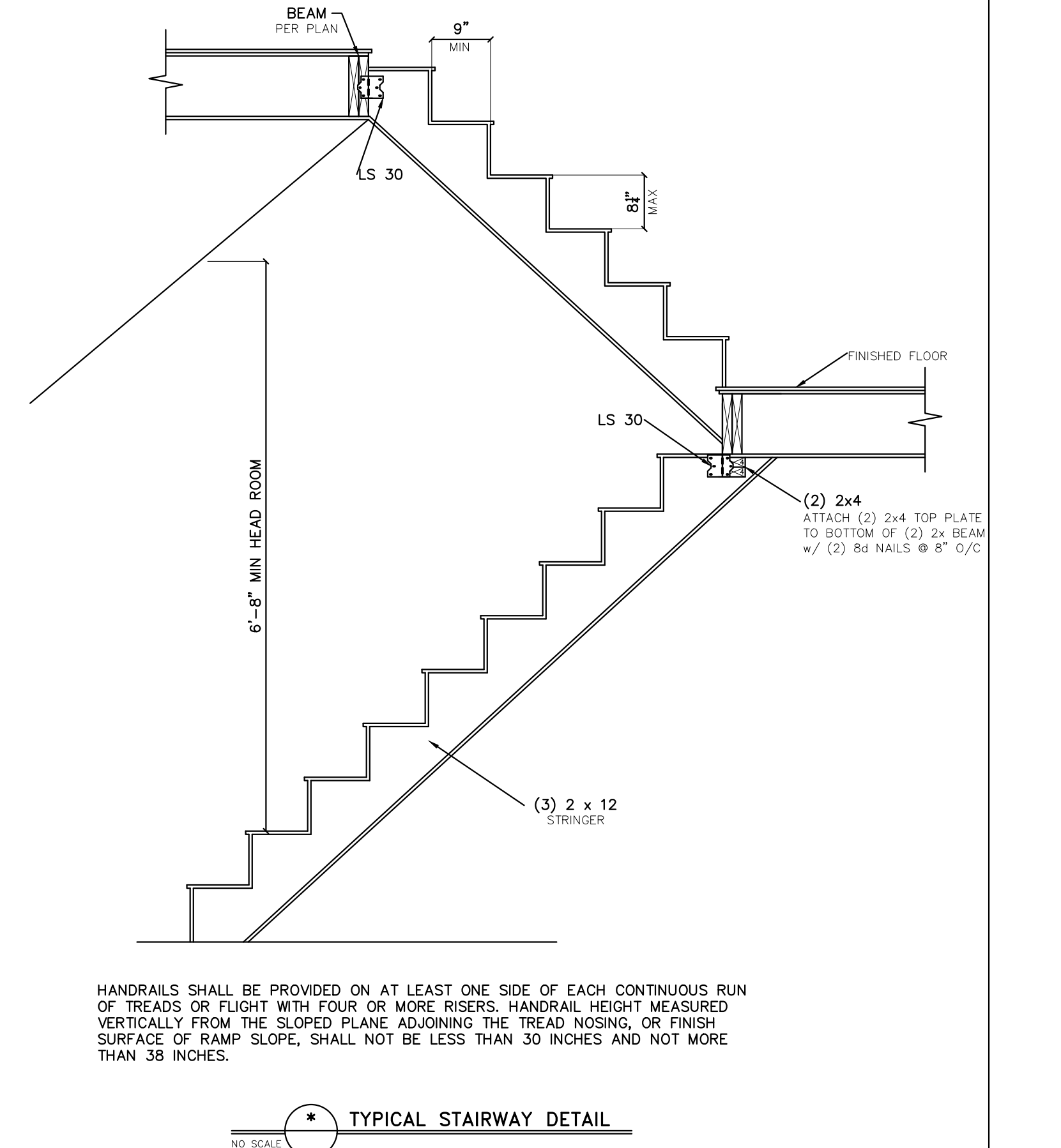
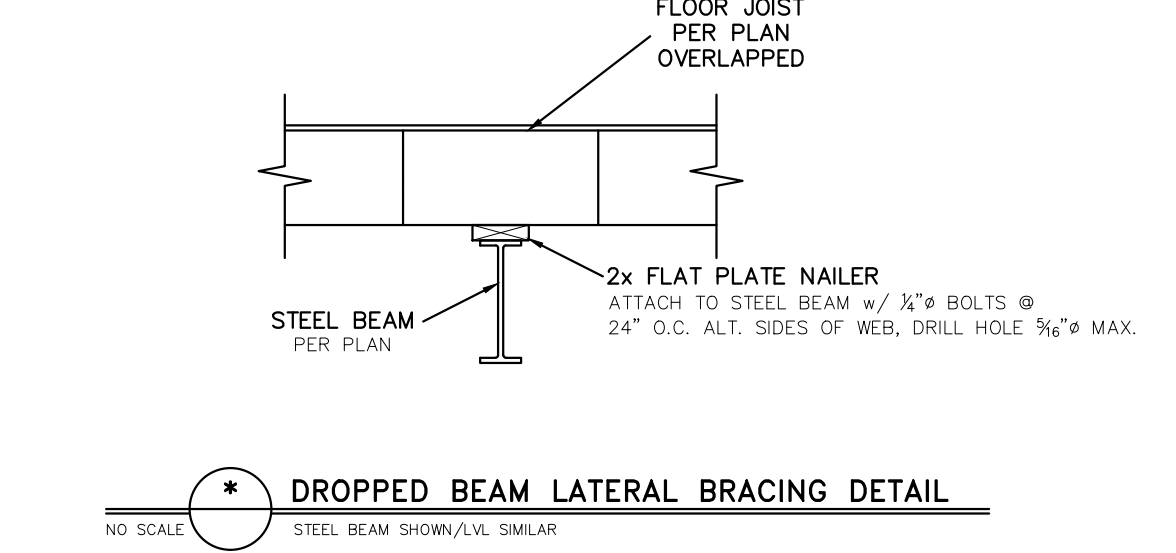
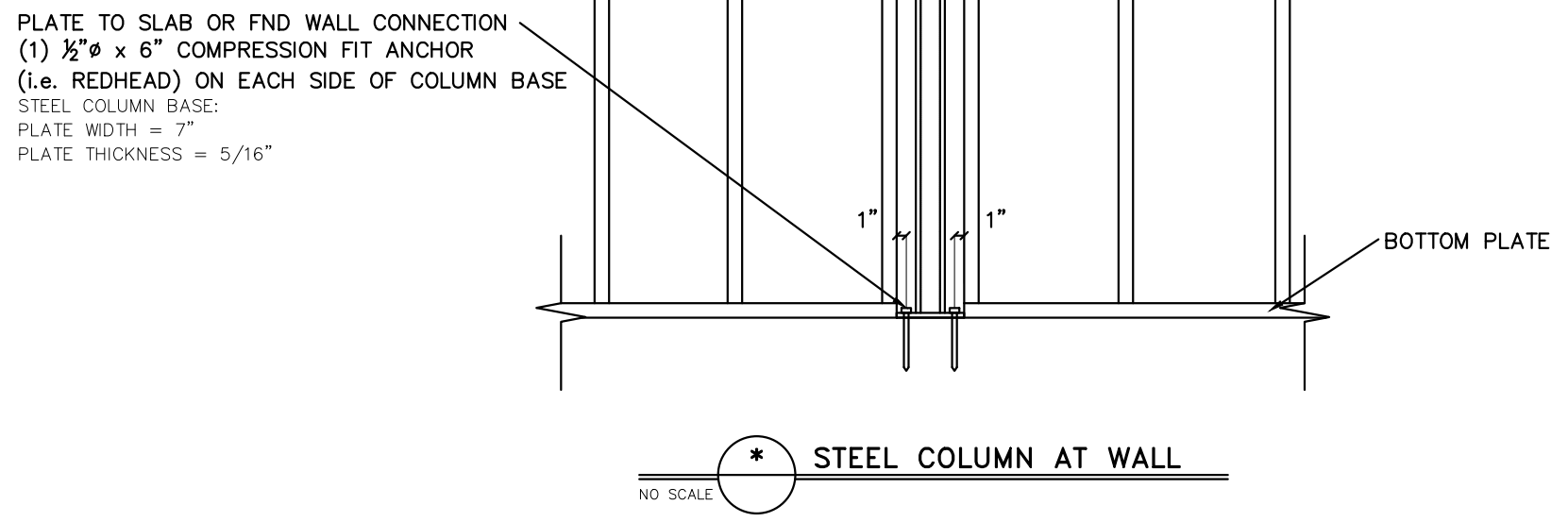
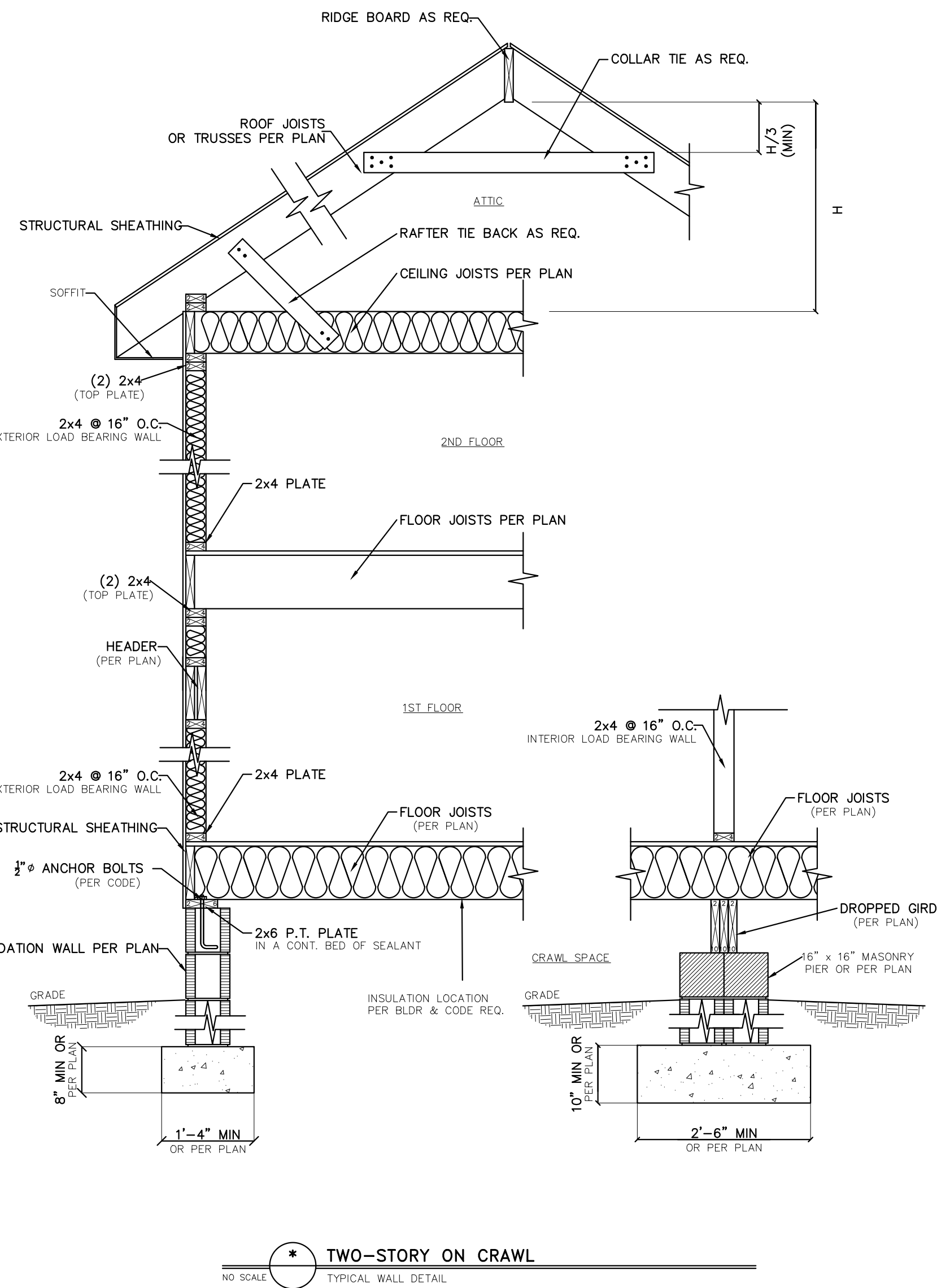
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 Date: 05/07/21  
 Drawn/Design By: JWA  
 DWG. Checked By: PTH  
 Scale: NOT TO SCALE

REVISIONS		
No.	Date	Remarks

Sheet Number

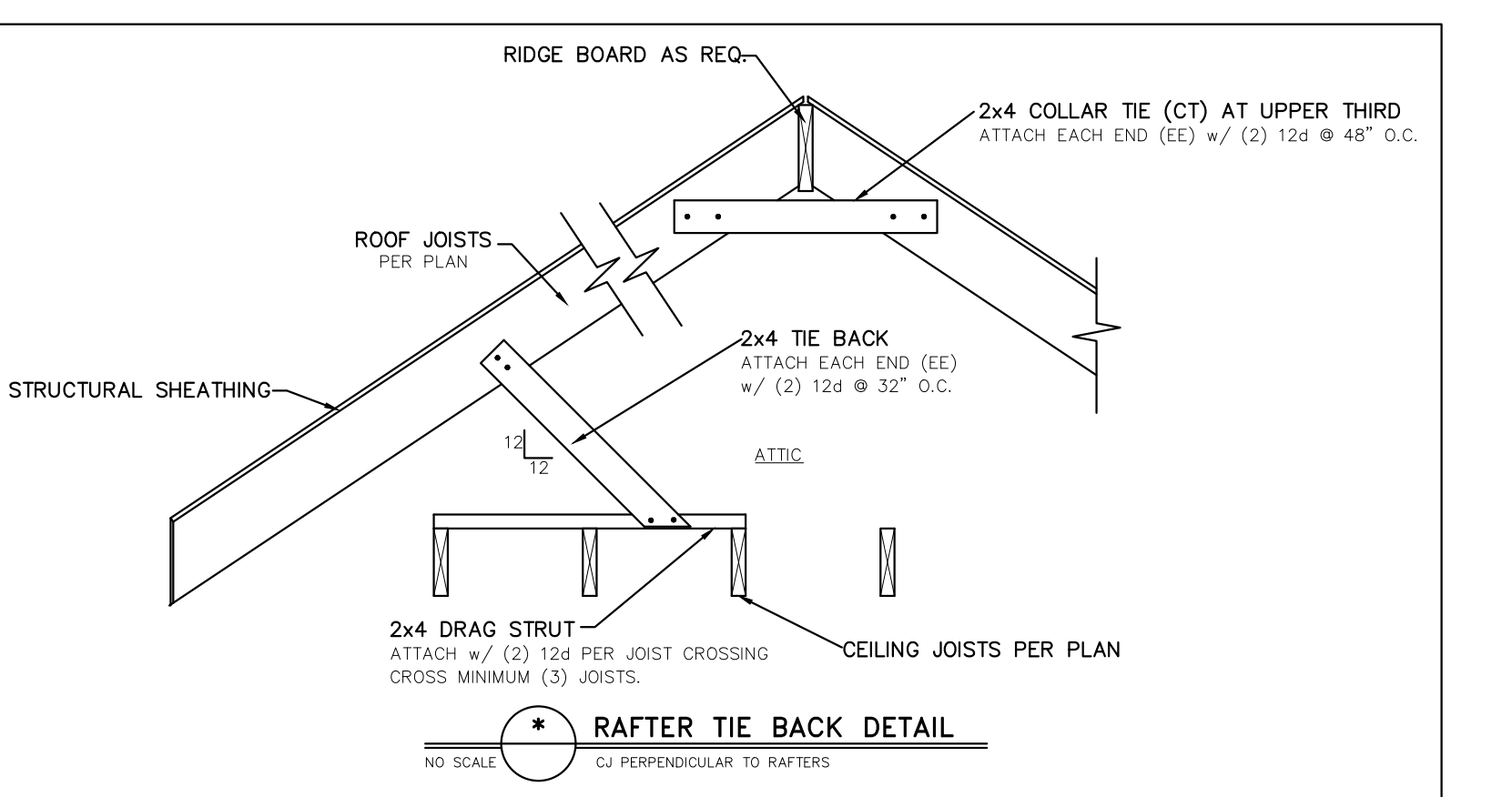
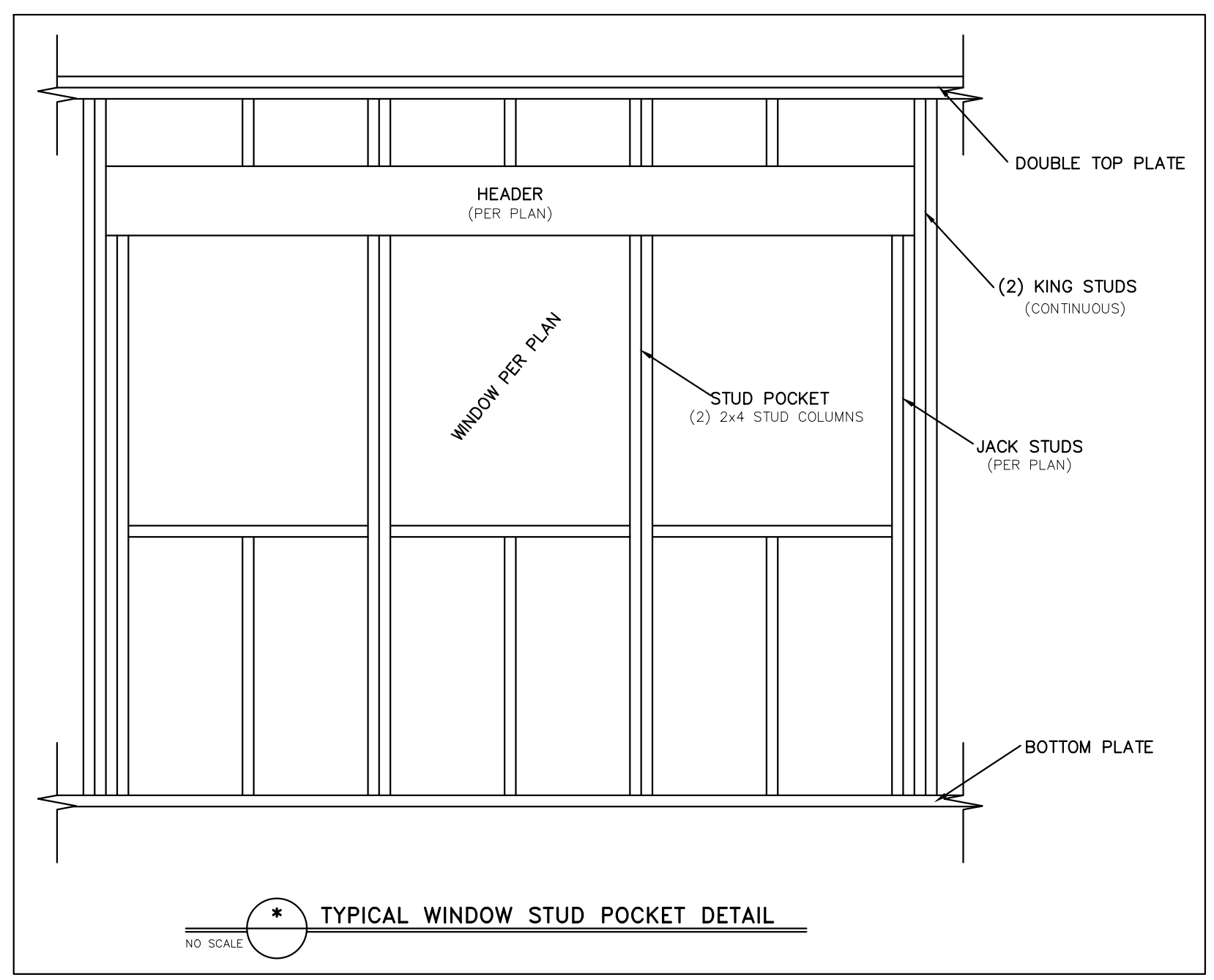
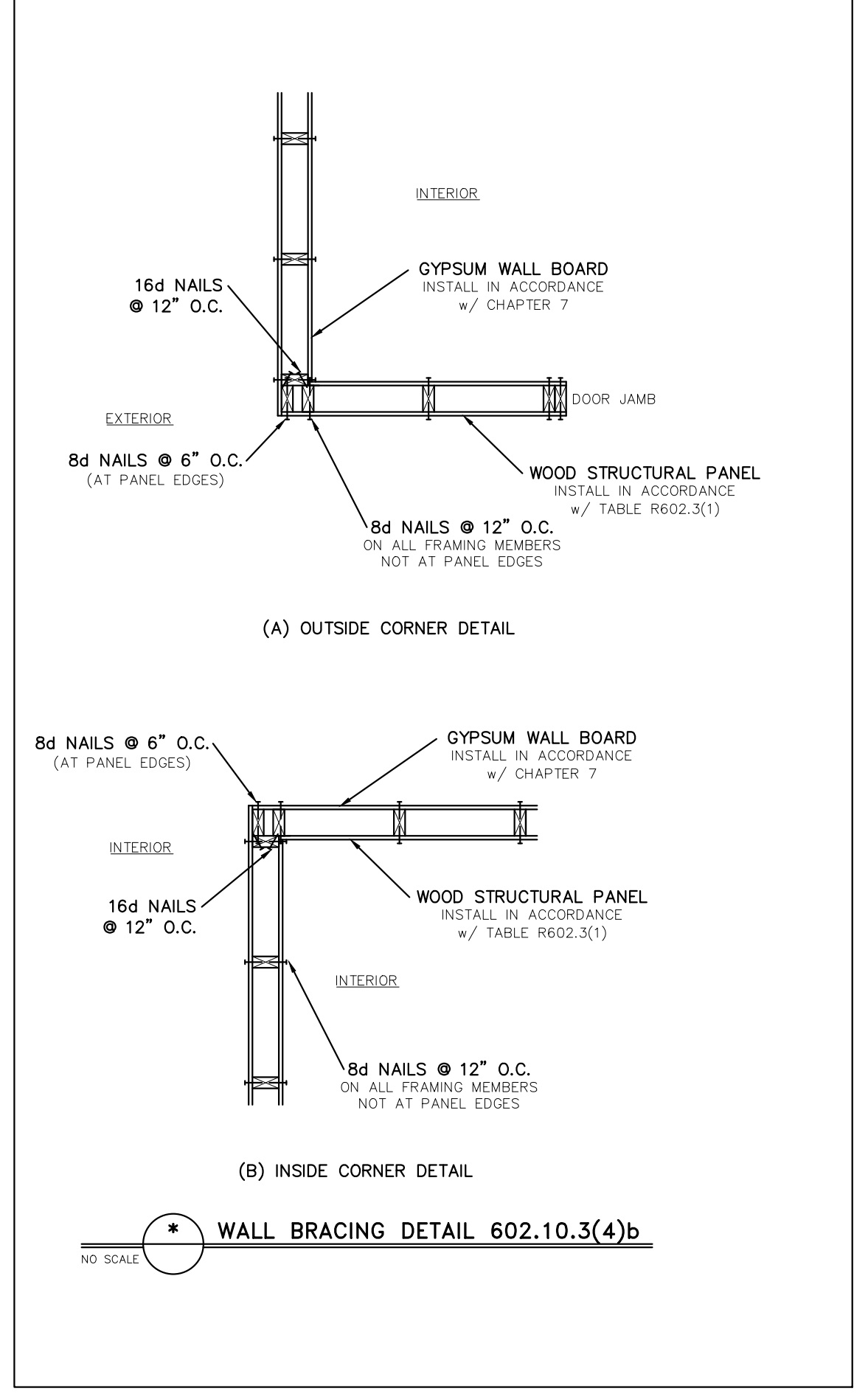
**D1**





**HARDWARE CROSS-REFERENCE CHART**

SIMPSON STRONG-TIE PRODUCT NUMBER	USP STRUCTURAL CONNECTORS PRODUCT NUMBER
A35	MPA1
ABE	PAE
CBSQ	CBSQ
CCO	KCCO
CMSTC16	CMSTC16
CS	RS
H1	RT15
H2.5A	RT7A
H10	RT16
HDQ8-SDS3	UPHD8
HDU2-SDS2.5	PHD2
HDU5-SDS2.5	PHD5
HETA	HTA
HGAM10KTA	HGAM
HHD014-SDS2.5	UPHD14
HTS	HTW
HTT	HTT
HUS	HUS
LTA1	LPTA
LTHJA26	HJC26
LTP4	MP4F
LUS	JUS
MAS	FA3
MSTAM	MSTAM
PC	PCM
PHD-SDS3	PHD
SSP	RSP16
STC	TR1
STHD	STAD

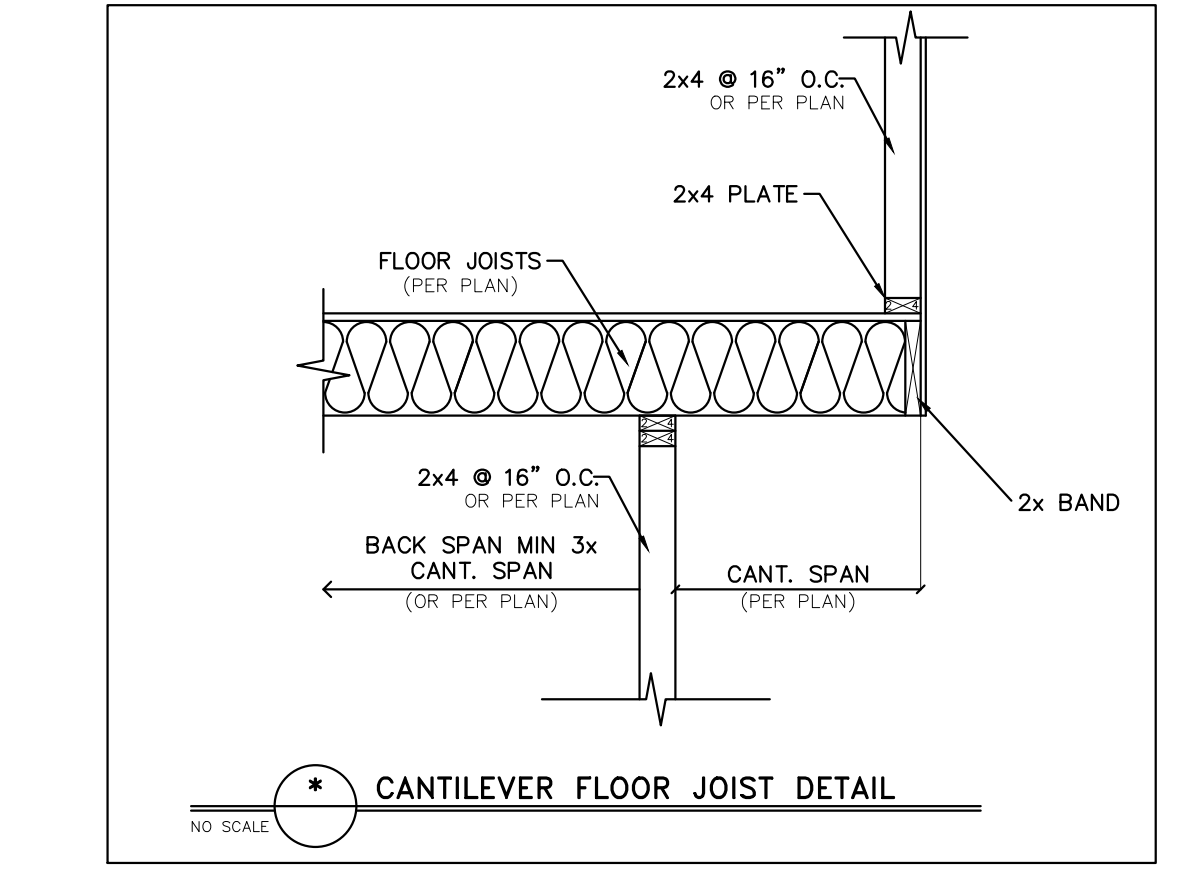


**MASONRY VENEER SUPPORT FIG 703.8.3.1**  
NO SCALE

Labels include: BRICK VENEER w/ BRICK TIES PER CODE, FLASHING AS REQ., ROOF FLASHING, ROOF SHEATHING, TRIPLE RAFTER ATTACHED TO STUDS, 1" NOMINAL AIR SPACE (MAX), WALL SHEATHING, WALL STUD, L 4 x 3 1/2 x 1/4 (LONG LEG HORIZ.) ATTACHED TO ROOF w/ 16d NAILS, HOLES IN ANGLE AT 12" O.C. NAILS SHALL PENETRATE TRIPLE RAFTERS, MIN. 3" x 3" x 1/4" PLATE @ 24" O.C. WELD TO ANGLE WHEN ROOF SLOPE EXCEEDS 7:12, L 4 x 3 1/2 x 1/4 (LONG LEG HORIZ.), HOLES AT 12" O.C.

SIZE OF ANGLE <sup>(1,3)</sup>	NO STORY ABOVE <sup>(5)</sup>	1 STORY ABOVE <sup>(5)</sup>	2 STORIES ABOVE <sup>(5)</sup>	# OF 1/2" (OR EQUIV.) REINFORCING BARS IN REINFORCED LINTEL <sup>(2,4,5)</sup>
L 3 x 3 x 1/4	6'-0"	4'-6"	3'-0"	1
L 4 x 3 x 1/4	8'-0"	6'-0"	4'-6"	1
L 5 x 3 1/2 x 3/8	10'-0"	8'-0"	6'-0"	2
L 6 x 3 1/2 x 3/8	14'-0"	9'-6"	7'-0"	2
2L 5 x 3 1/2 x 3/8	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.



Engineers and designers shall not include construction means, methods, techniques, sequences, procedures or safety precautions. Any deviation or discrepancy 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 under construction begins.

**TYNDALL ENGINEERING & DESIGN, P.A.**  
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919 775-9310 • 919 775-7444  
www.tyndallengineering.com

Client: CAPITAL CITY HOMES  
Project: THE WATSON II PLAN GARAGE LEFT

**STANDARD DETAILS**

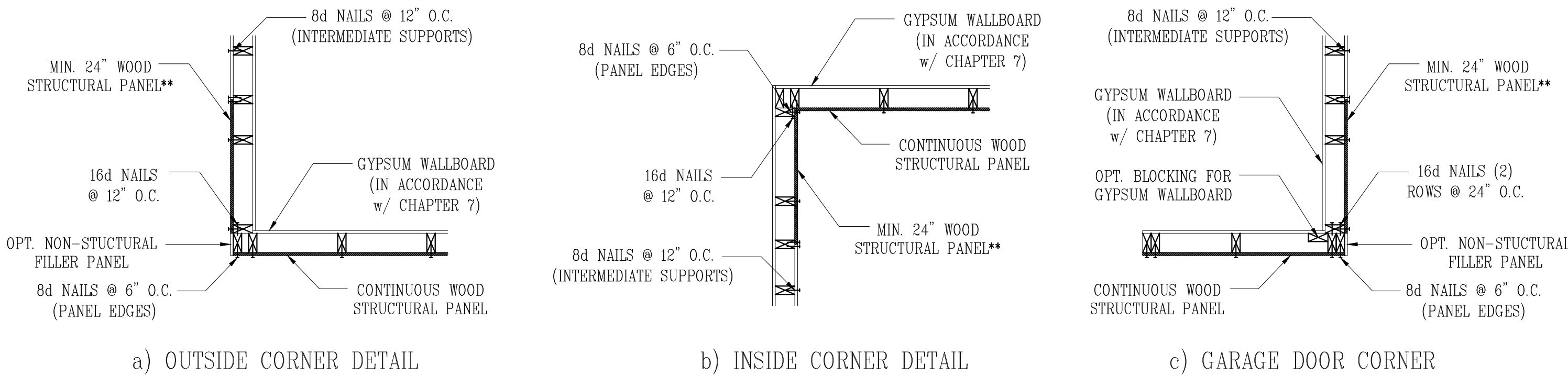
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Date: 05/07/21  
Drawn/Design By: JWA  
DWG. Checked By: PTH  
Scale: NOT TO SCALE

No.	Date	Remarks

Sheet Number: **D2**  
of 3

FILENAME: \\ESD\DRIVE\ENCL\2021 STRUCTURE PROJECTS\2101-010157 - CAPITAL CITY HOMES - STAIR WALL DETAIL\2101-010157 - WATSON II PLAN GARAGE LEFT\DWG\_SAVED BY: LORIAN LUST PLOT DATES: 5/7/2021 8:40 AM





\*\* IN LIEU OF THE 24" (MIN.) CORNER RETURN, A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE CORNER STUD AND TO THE FOUNDATION OR FRAMING BELOW.

**B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING**  
NO SCALE

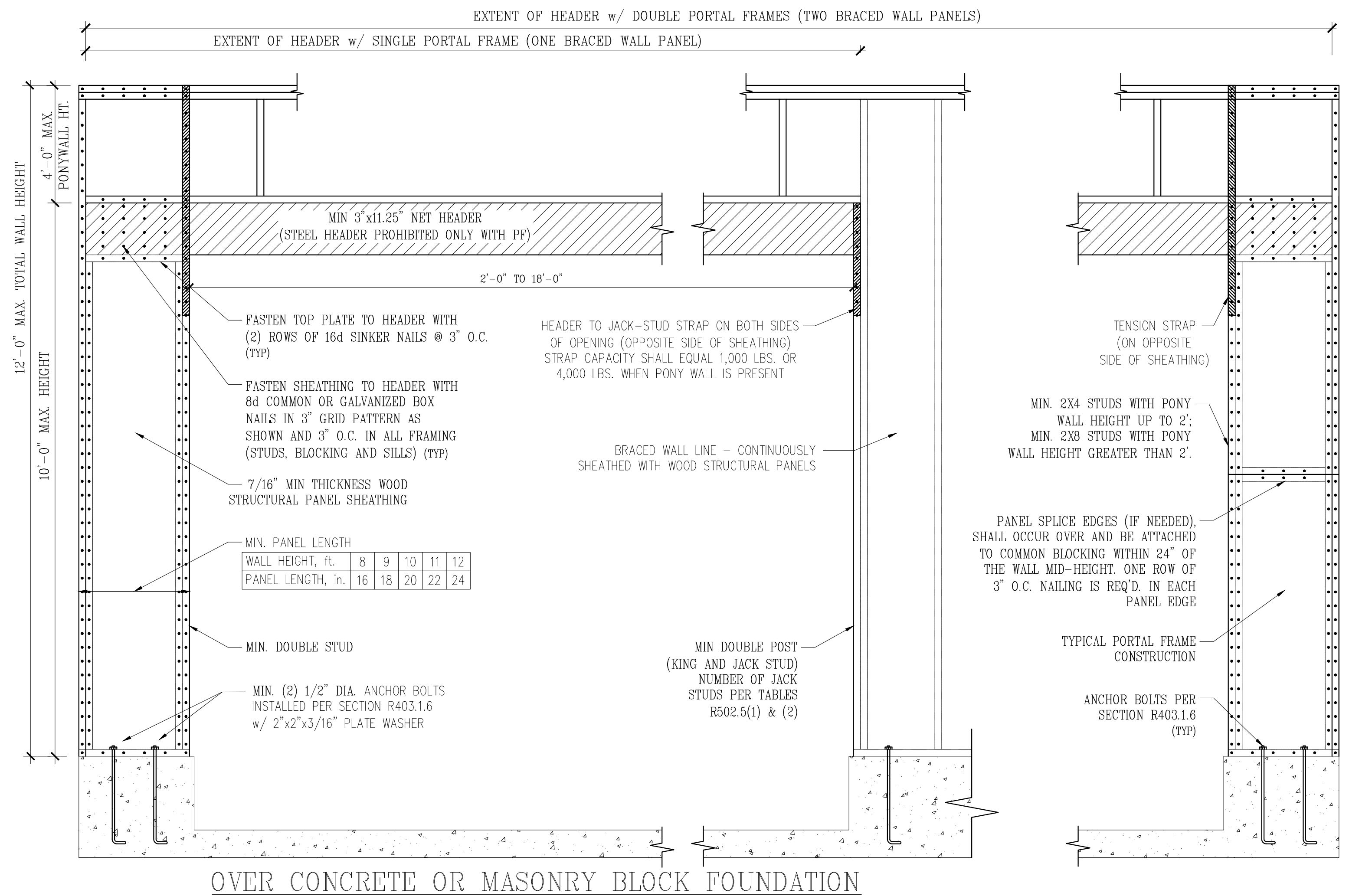
**STRUCTURAL SHEATHING NOTES**

- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 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)
  - 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS.
  - 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
- EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO).
- 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.
- 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
  - 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT
- SHEATH INTERIOR & EXTERIOR
- 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(4). 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.
  - MINIMUM 800# HOLD-DOWN DEVICE

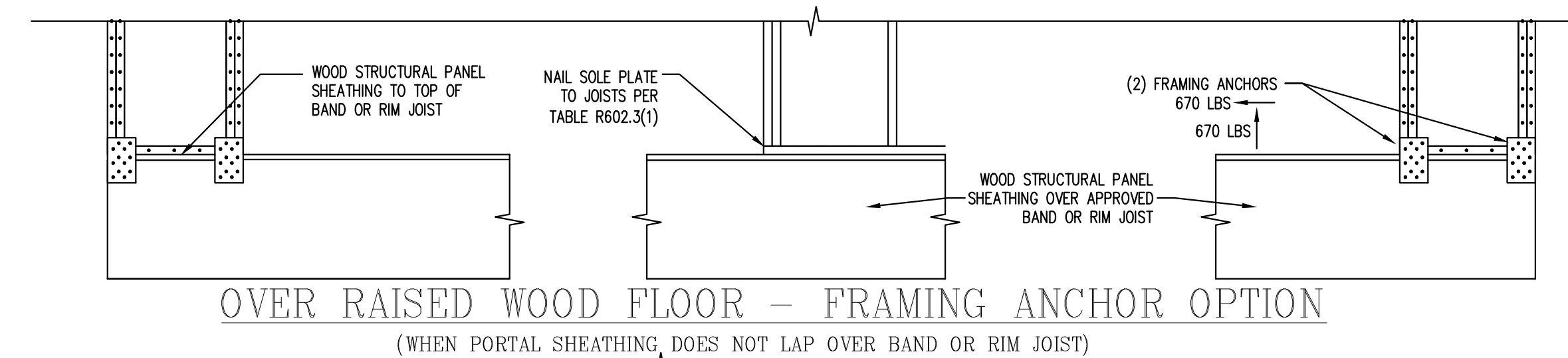
REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			@ PANEL EDGES	@ INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAIL** @ 7" O.C.	5d COOLER NAIL** @ 7" O.C.
WSP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

\*\*OR EQUIVALENT PER TABLE R702.3.5

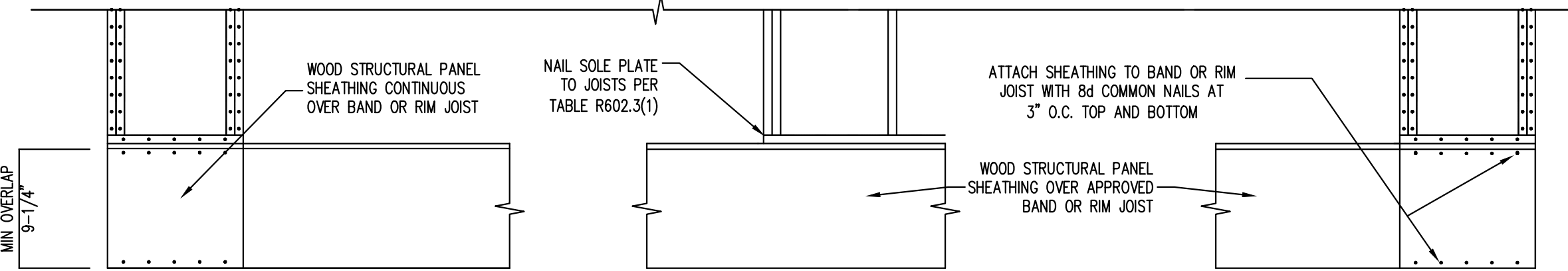
**B3: BRACE WALL PANEL CONNECTIONS**  
NO SCALE



**OVER CONCRETE OR MASONRY BLOCK FOUNDATION**

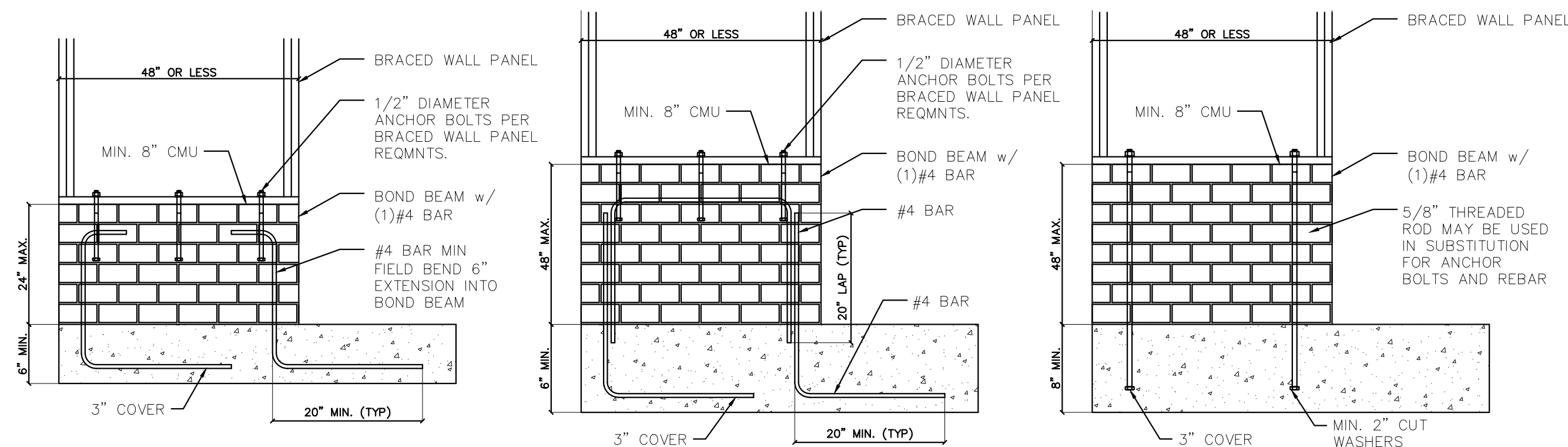


**OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION**  
(WHEN PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST)



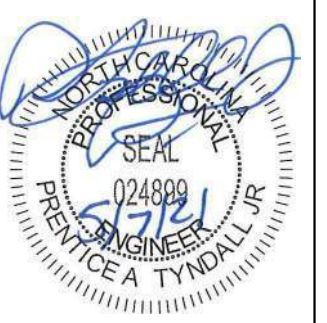
**OVER RAISED WOOD FLOOR - OVERLAP OPTION**  
(WHEN PORTAL SHEATHING LAPS OVER BAND OR RIM JOIST)

**B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME**  
FIGURE R602.10.1



**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

\*Engineers and designers shall not include construction means, methods, techniques, sequences, procedures or safety precautions.  
Any deviations 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 once construction begins.



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Client: CAPITAL CITY HOMES  
Project: THE WATSON II PLAN GARAGE LEFT

**SHEATHING DETAILS**

Project #: 2101-010157  
Date: 05/07/21  
Drawn/Design By: JWA  
DWG. Checked By: PTH  
Scale: NOT TO SCALE

REVISIONS		
No.	Date	Remarks

Sheet Number  
**D3**  
of 3

FILENAME: \\ESD000001\ENCL\2021 STRUCTURAL PROJECTS\2101-010157 - CAPITAL CITY HOMES - STEM WALL (PF) (R602.10.1-010170) (3).DWG, SHEET BY: LUDWIG LAST (R602.10.1-010170) (3).DWG, DATE: 5/7/2021 8:40 AM