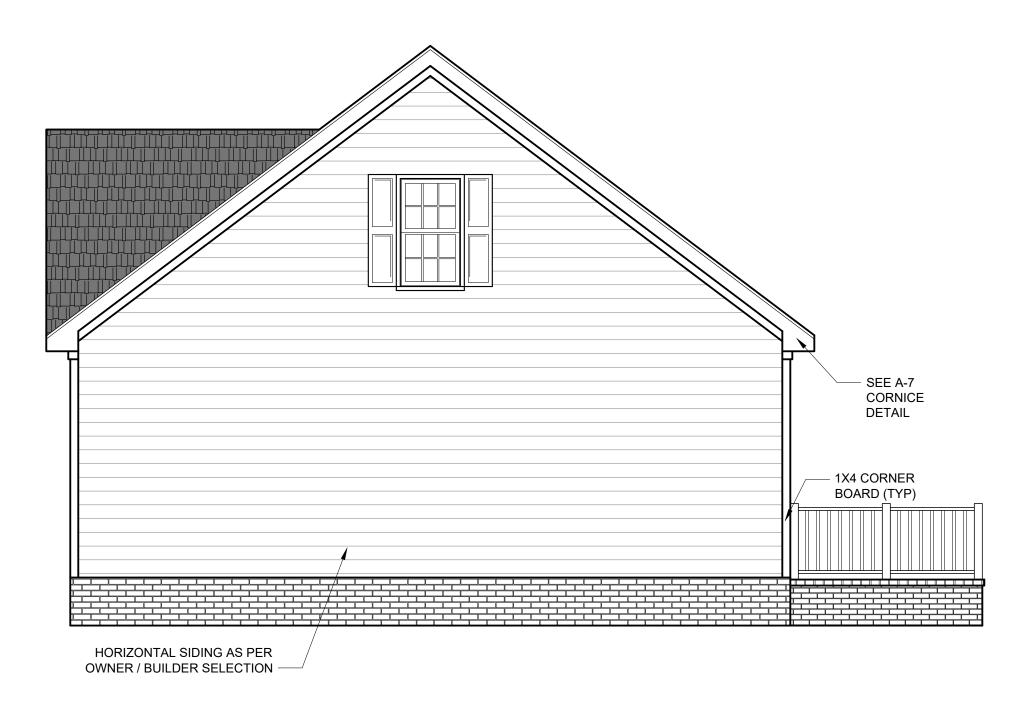
# BRUSAK RESIDENCE

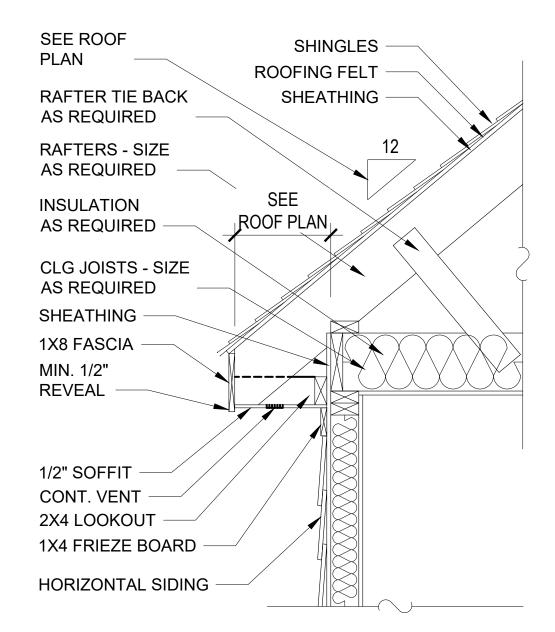


# FRONT ELEVATION 1/4" = 1'-0"



RIGHT ELEVATION

1/4" = 1'-0"



A-7 CORNICE DETAIL

- DRB DESIGN assumes no liability for any home constructed from this plan.
   All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code",
- in addition to all local codes and regulations.3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the
- services of a structural engineer after notifying DRB DESIGN that such services are required.
- Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.
   Design and construction are complex and, although the designer performed his services with due care and
- diligence, perfection is not a guarantee.

  6. Communication is imperfect and every contingency cannot be anticipated.
- Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs.
   A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all
- responsibilities for all consequences.

  9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB
- Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB DESIGN of responsibility for any and all consequences arriving out of such changes.
   Written dimensions on these plans always have precedence over scaled dimensions.
- 11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square
- footage errors once construction has begun.

  12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

DRB2101-0128

DATE

06/07/2021

DRAWN/DESIGNED BY

KFR

CHECKED BY

DRB

SCALE

1/4" = 1'-0"

Qrbhomedesign.com

drbhomedesign.com

PERSONAL

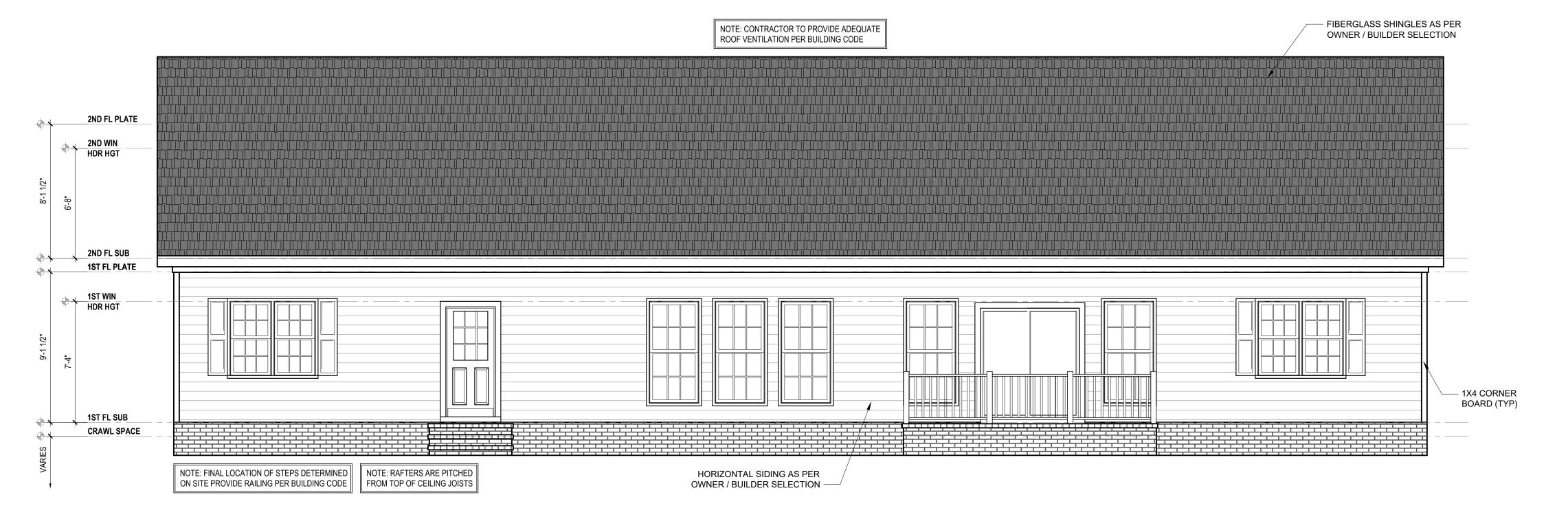
DESIGN
rbhomedesign.com 919.631.5979
ash Dr Suite 105 Garner, NC 27529

Ken Dawson Homes, Inc. 2493 NC Hwy 242 N. Benson, NC 27504 KenDawson@hotmail.com

SHEET NAME
ELEVATIONS
SHEET #

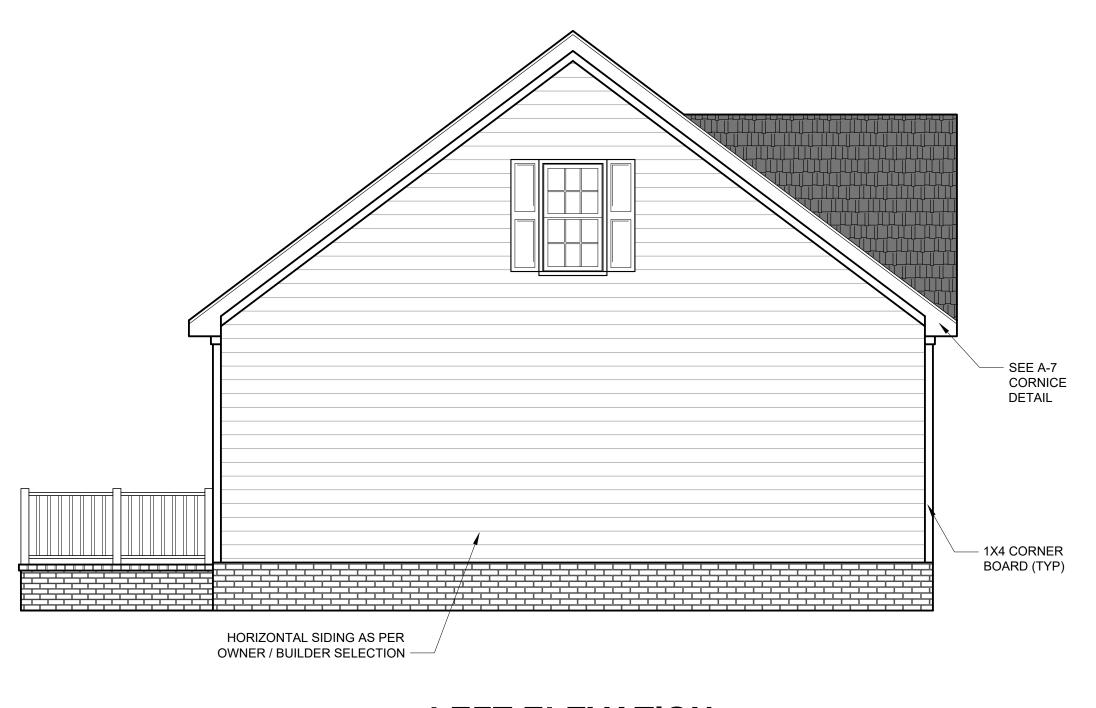
A1 of 6

# BRUSAK RESIDENCE



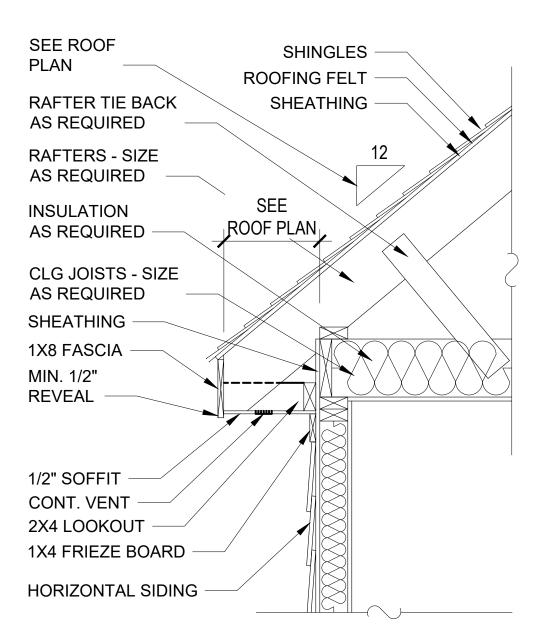
## **REAR ELEVATION**

1/4" = 1'-0"



LEFT ELEVATION

1/4" = 1'-0"



A-7 CORNICE DETAIL

NTS

- DRB DESIGN assumes no liability for any home constructed from this plan.
   All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code",
- in addition to all local codes and regulations.Should these plans require structural calculations for permitting the contractor shall be required to obtain the
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- DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

DESIGN
Suite 105 Garner, NC 27520

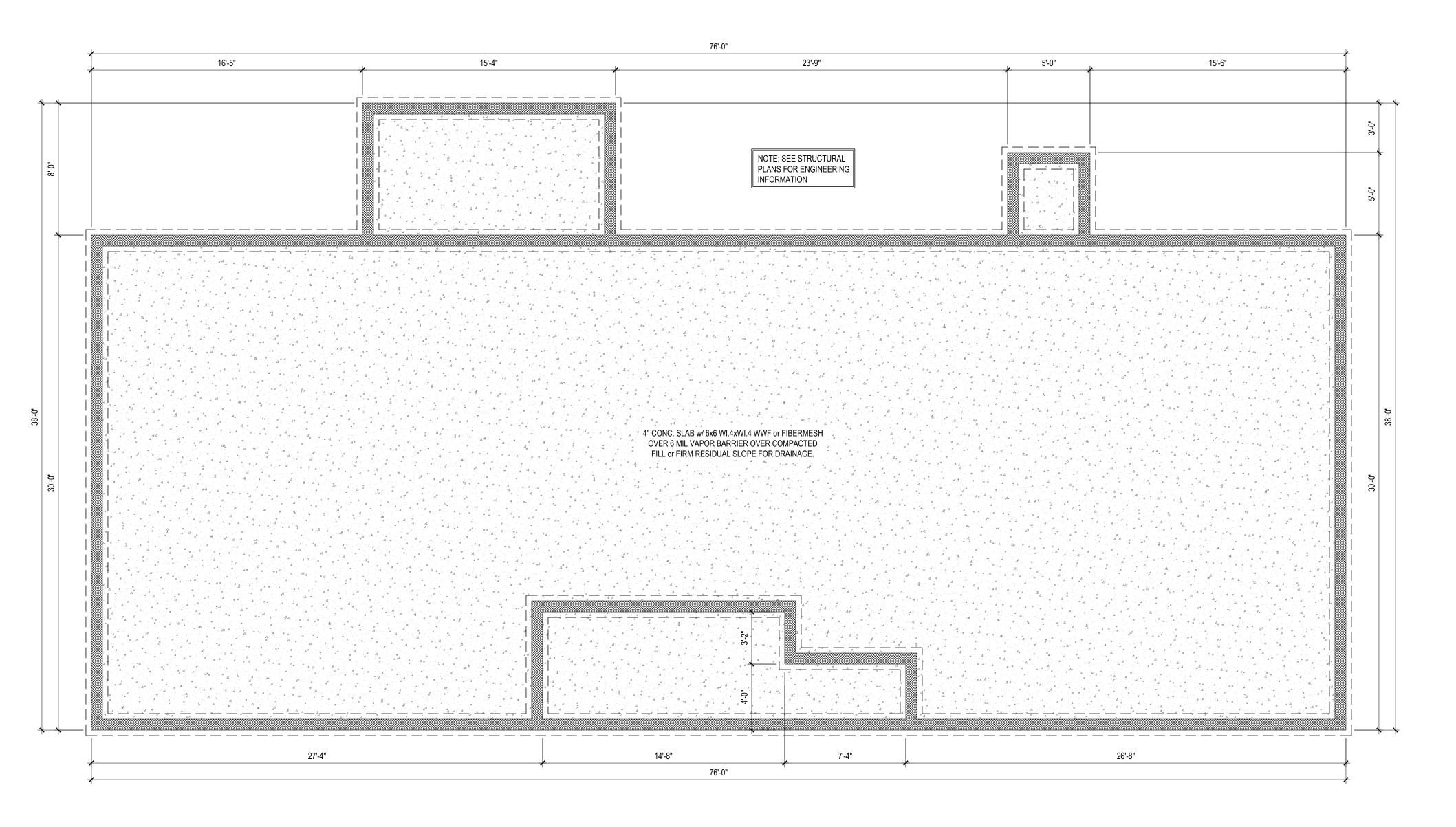
DRAWN/DESIGNED BY

 $\frac{\text{SCALE}}{1/4"} = 1'-0"$ 

Ken Dawson Homes, Inc. 2493 NC Hwy 242 N. Benson, NC 27504 KenDawson@hotmail.com

SHEET NAME
ELEVATIONS
SHEET #

 $A2_{\text{of }}$ 



**FOUNDATION PLAN** STEM WALL 1/4" = 1'-0"

- DRB DESIGN assumes no liability for any home constructed from this plan.
- All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.
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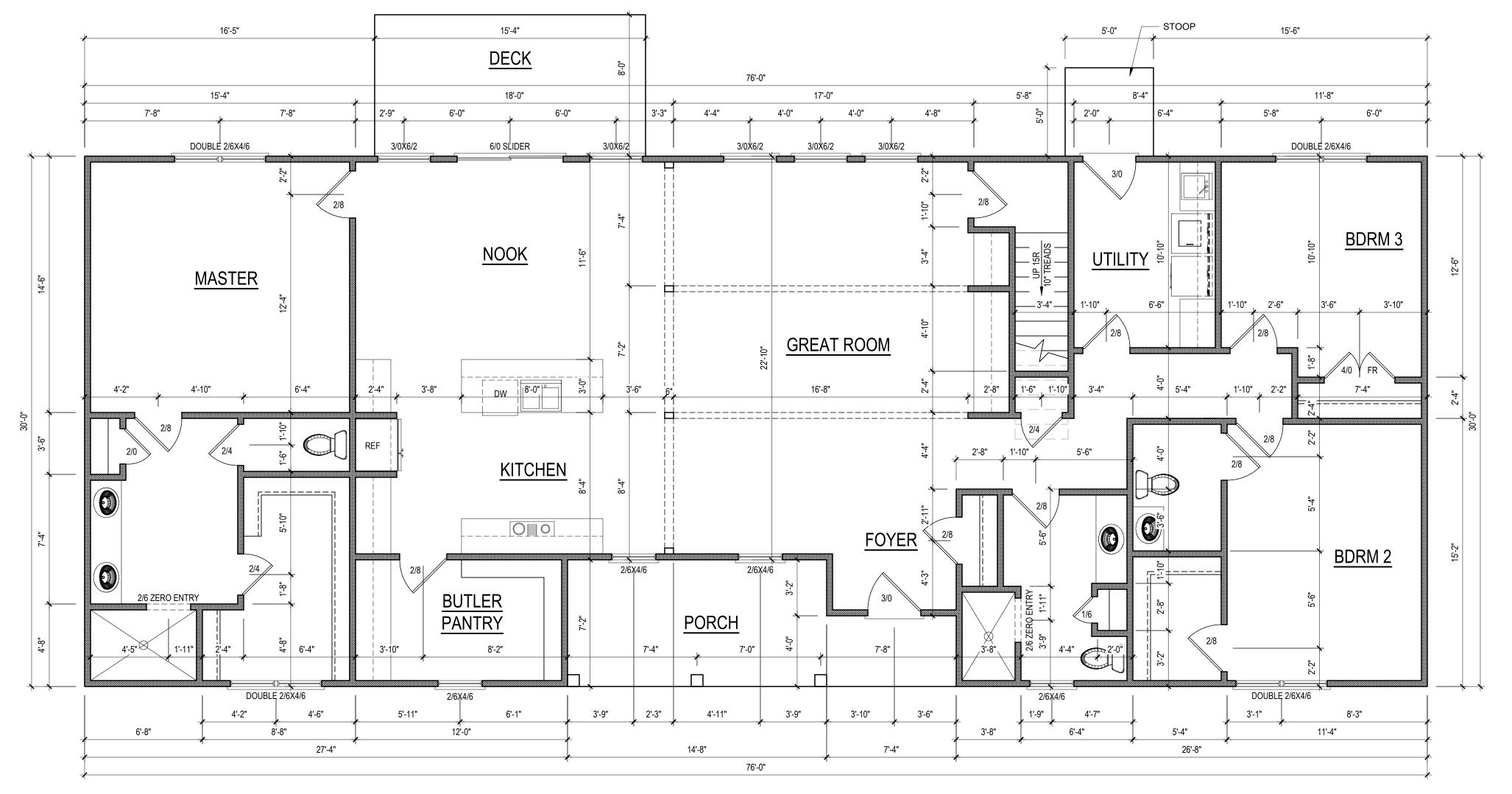
HEATED/HABITABLE **SQUARE FOOTAGE** 2146 First Floor 2146 **TOTAL HEATED UNHTD SQUARE FOOTAGE Second Floor** 135 **Porch** 123 Deck Stoop 1512 **TOTAL UNHEATED** 

**ALL EXTERIOR WALLS** ARE NOMINAL 4" UNO

**TOTAL SQ FT** 

**ALL INTERIOR WALLS** ARE NOMINAL 4" UNO

ALL DIMENSIONS ARE FRAME TO FRAME



FIRST FLOOR PLAN CEILING HGT. = 9'-0"

- DRB DESIGN assumes no liability for any home constructed from this plan.
- All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.
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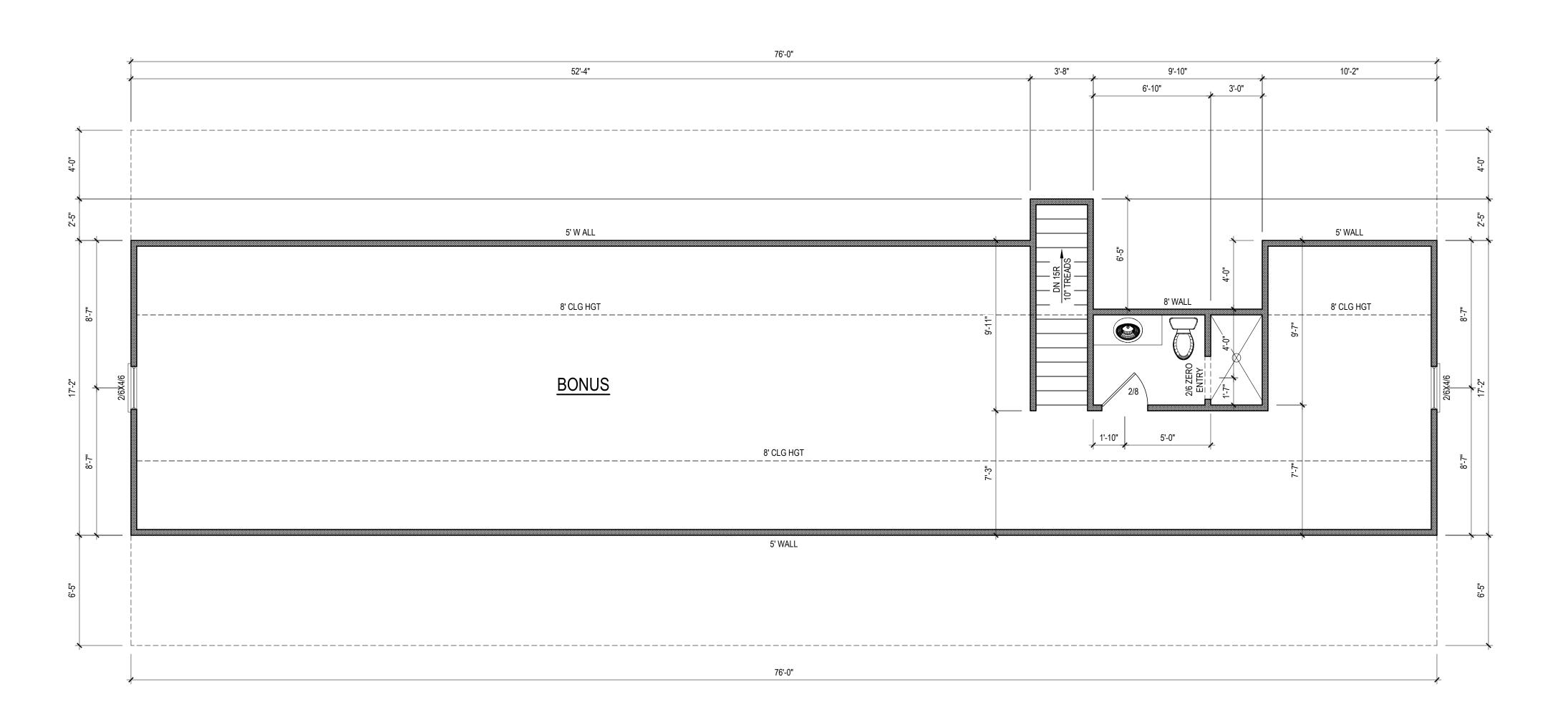
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DRB2101-0128

06/07/2021 DRAWN/DESIGNED BY

CHECKED BY

1ST\_FLOOR



# SECOND FLOOR PLAN 1/4" = 1'-0" CEILING HGT. = 8'-0"

DRB DESIGN assumes no liability for any home constructed from this plan.

All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.

3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the

services of a structural engineer after notifying DRB DESIGN that such services are required.

4. Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.

5. Design and construction are complex and, although the designer performed his services with due care and diligence, perfection is not a guarantee.

6. Communication is imperfect and every contingency cannot be anticipated.

responsibilities for all consequences.

Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB
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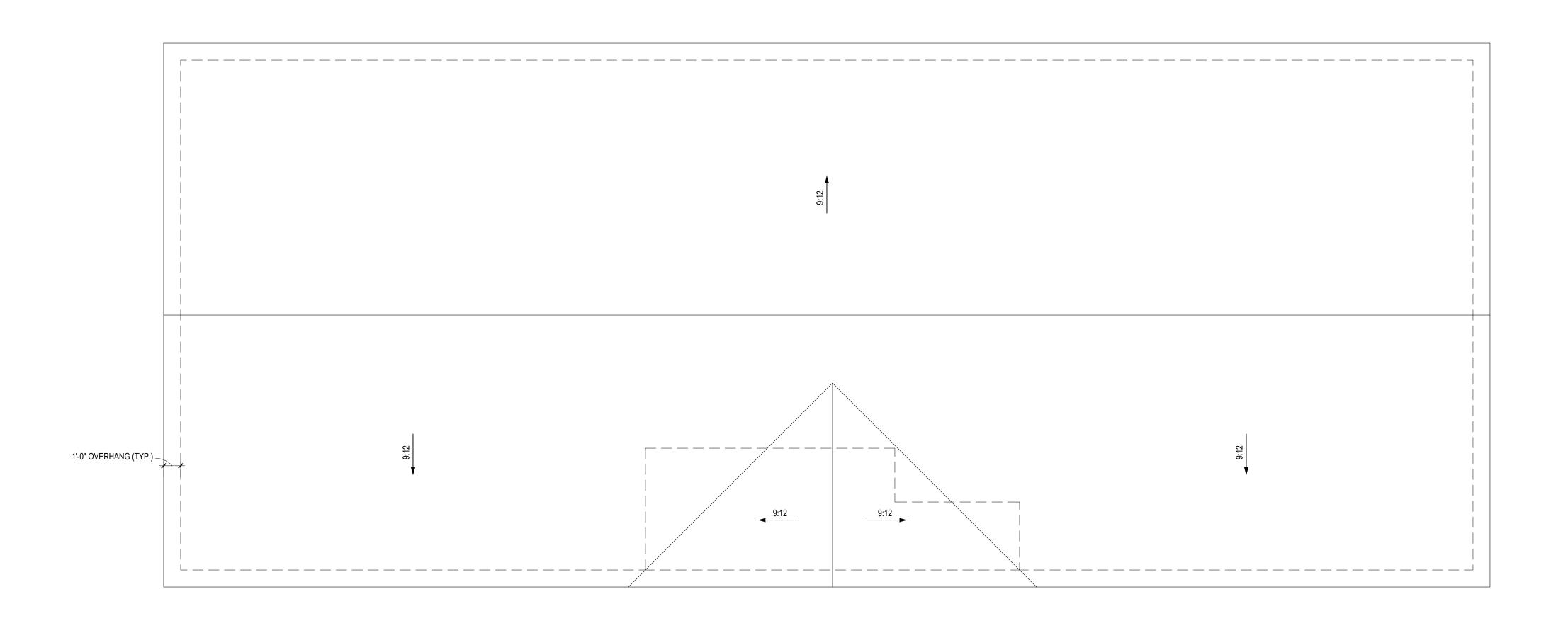
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DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

DESIGN RD PROPERTY OF STREET BY A STREET B

Ken Dawson Homes, Inc. 2493 NC Hwy 242 N. Benson, NC 27504

ND\_FLOOF



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

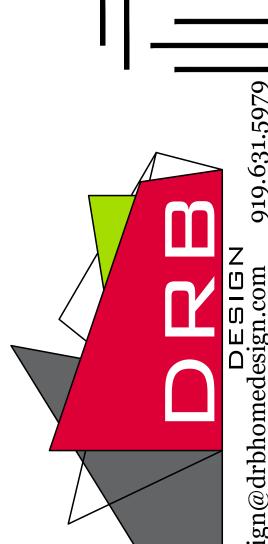
- DRB DESIGN assumes no liability for any home constructed from this plan.
- 2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.
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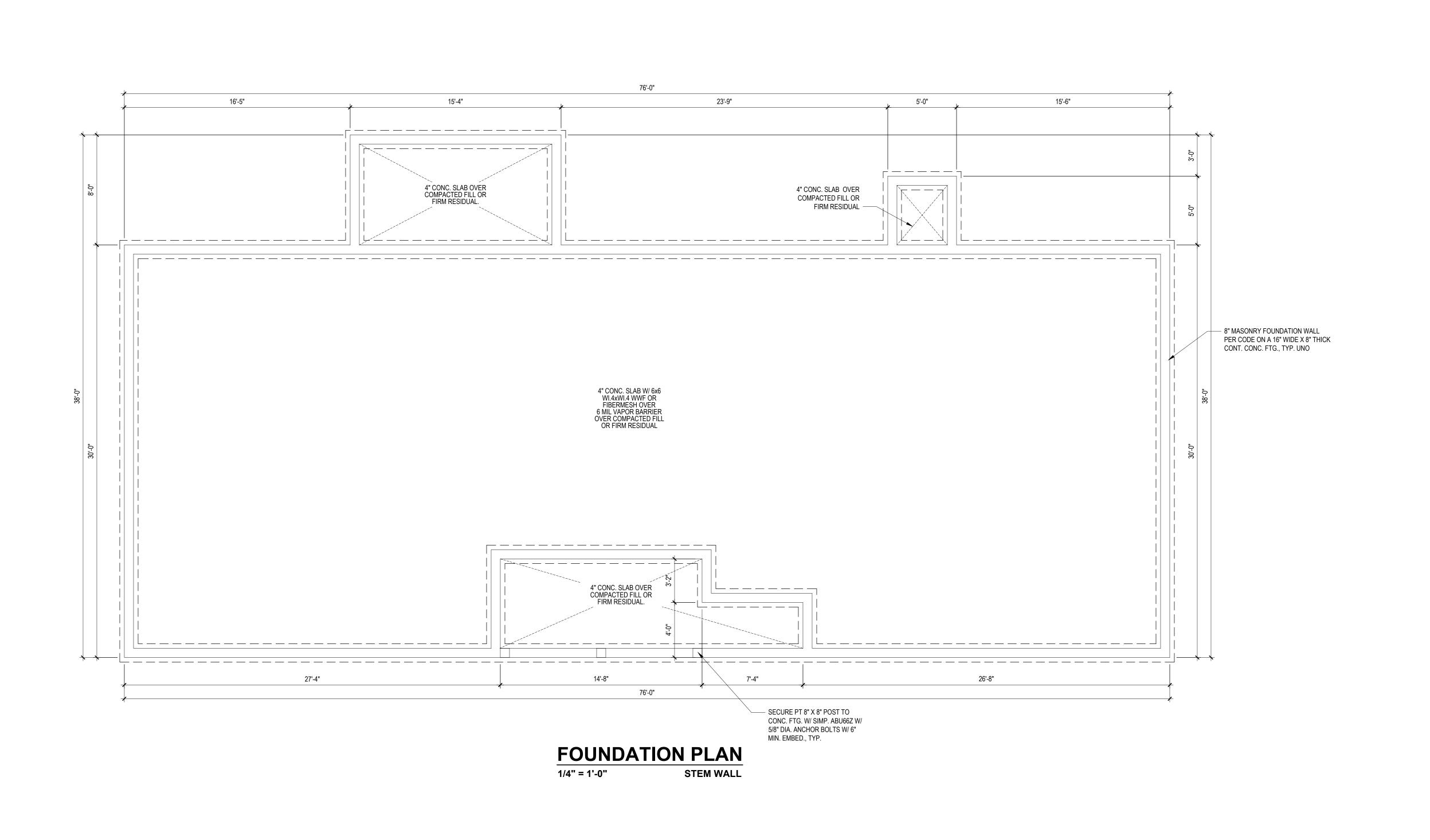
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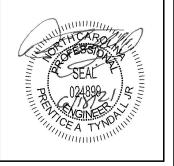
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- footage errors once construction has begun.

  12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.





\*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
\*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.



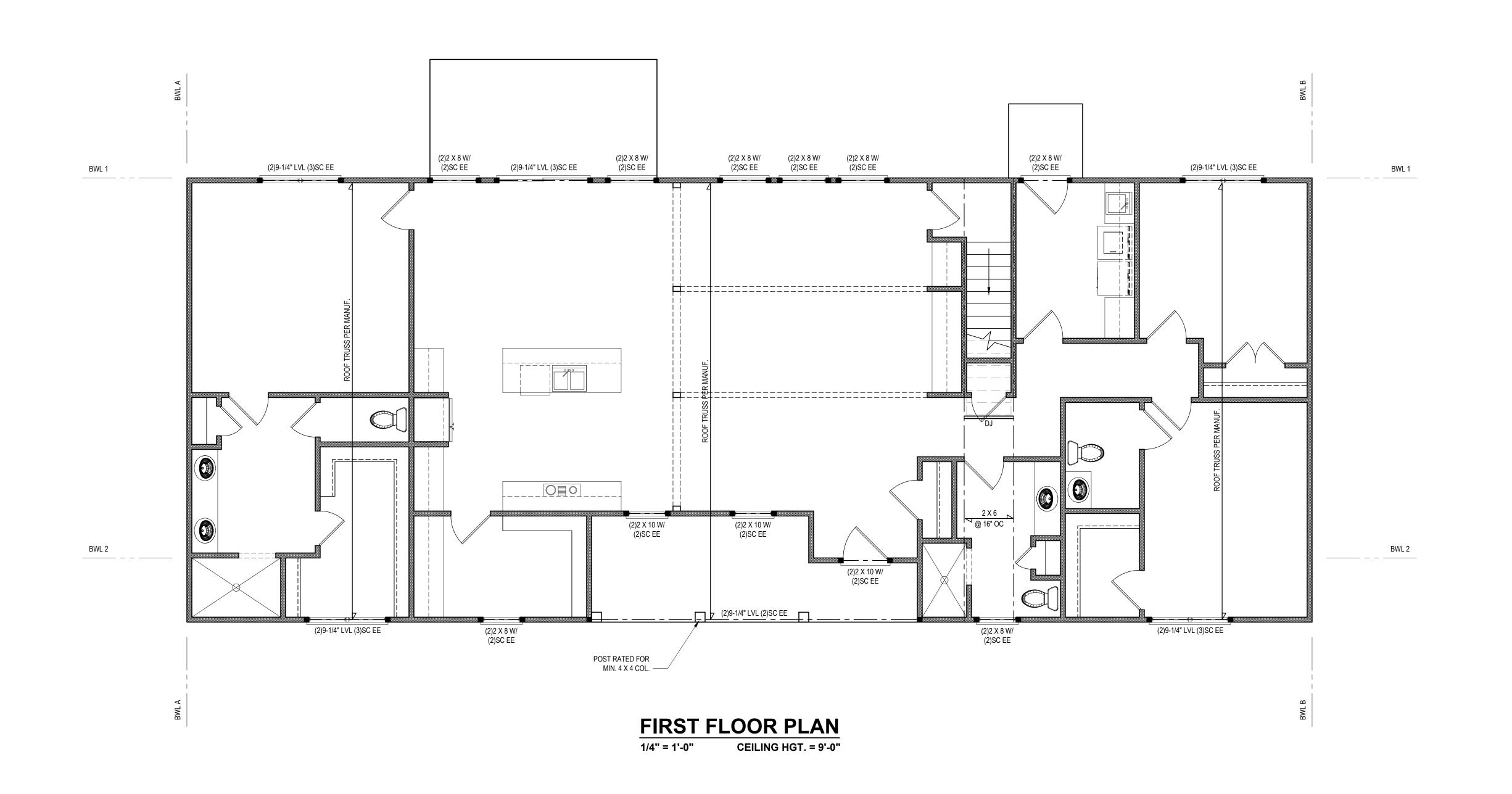
DRB2101-0128 05/24/21 PAT

SEE PLAN

**REVISIONS** 

**Sheet Number** 

1 of 7

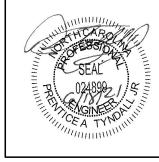


BRACING PANEL LENGTHS REQUIRED:
BWL A = 20.7 FT
BWL B = 20.7 FT
BWL 1 = 7.6 FT
BWL 2 = 7.6 FT
BWL A = 30 FT CS-WSP
BWL B = 30 FT CS-WSP
BWL B = 35 FT CS-WSP
BWL 1 = 35 FT CS-WSP
BWL 2 = 52.5 FT CS-WSP

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GINEERING & DESIGN, P.A.
GINEERING & DESIGN, P.A.

1919 773-1200 = 1919 773-9488
Garner = North Carolina = 27829
www.kyndellengineering.com

ENGINEERING & DESIG

KEN DAWSON HOMES, INC.

1ST FLOOR HEADER 2ND FLOOR FRAMING

Project #:

DRB2101-0128

Date:

05/24/21

Drawn/Design By:

KFR

DWG. Checked By:

PAT

PAT
Scale:
SEE PLAN

 REVISIONS

 No.
 Date:
 Remarks

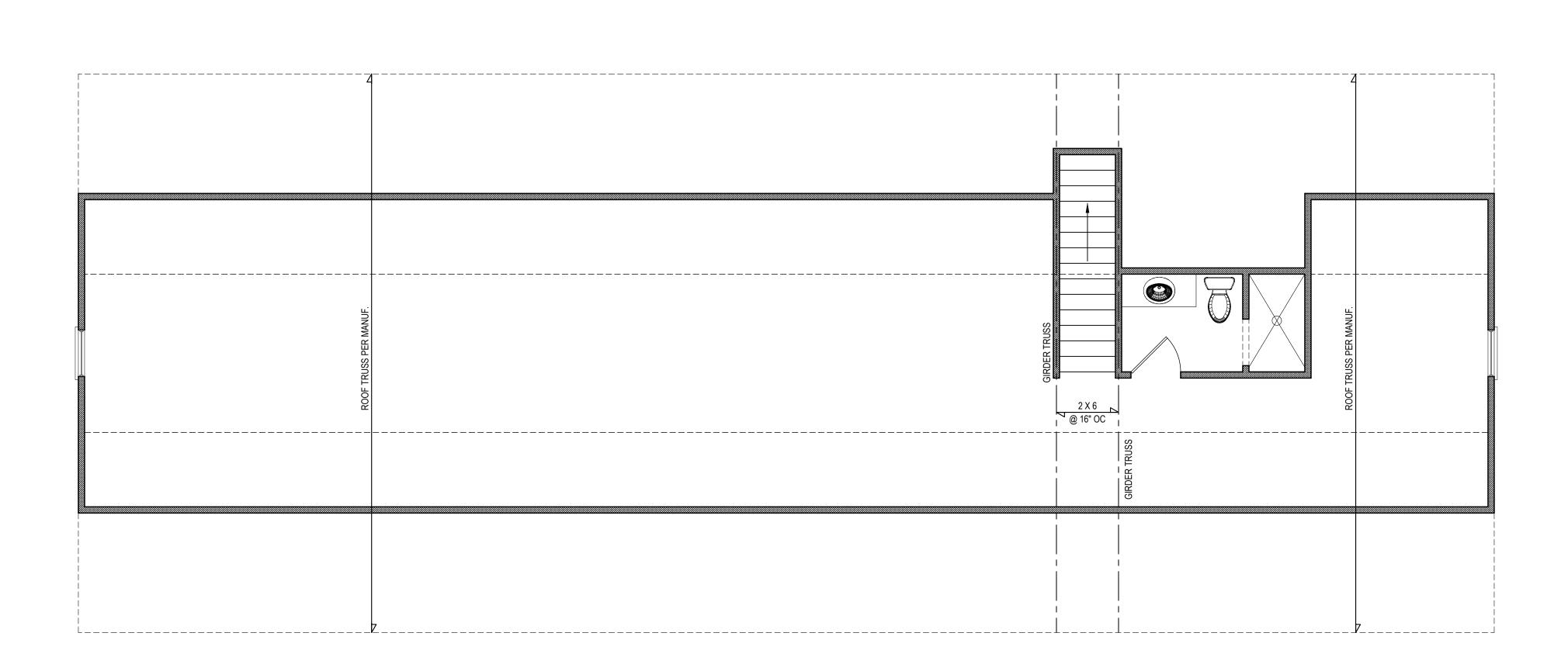
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 2

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 4

**Sheet Number** 

S2

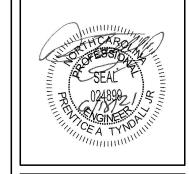
2 of 7



SECOND FLOOR PLAN

CEILING HGT. = 8'-0"

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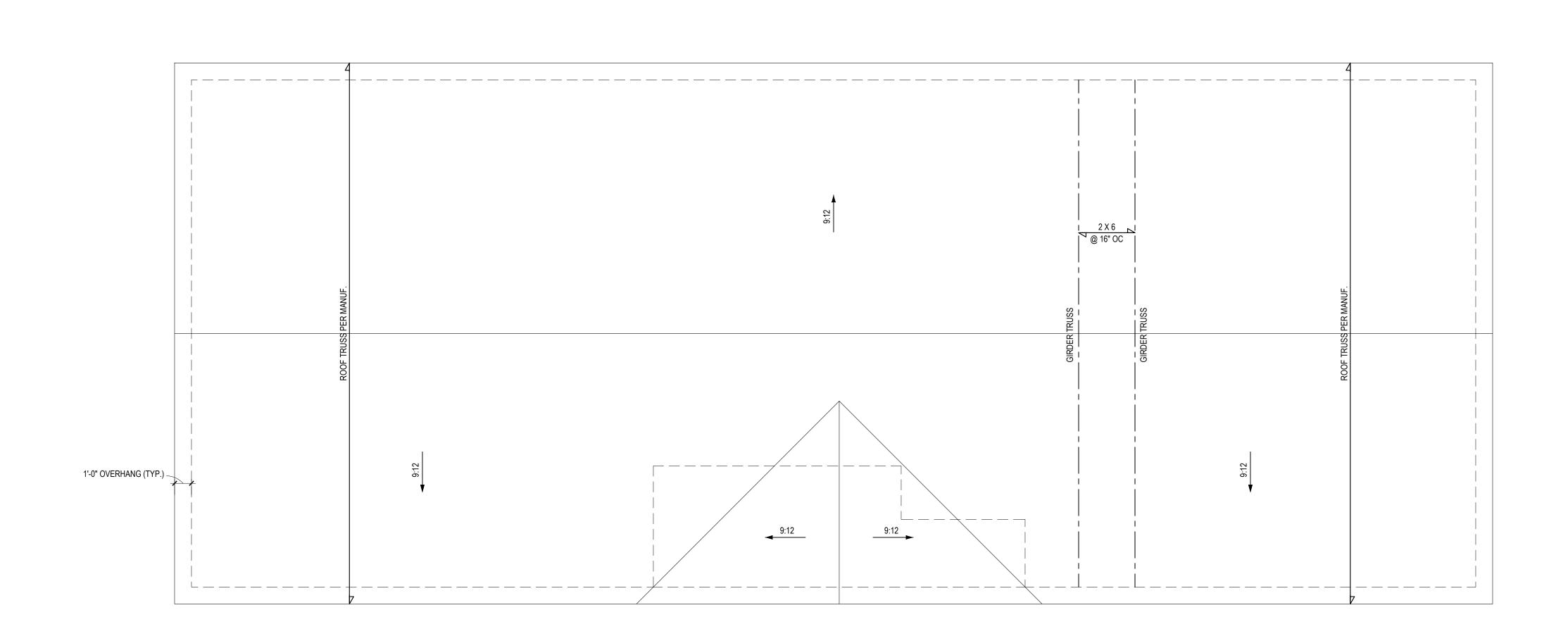




<u>Project #:</u>
DRB2101-0128 05/24/21

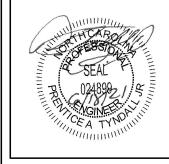
SEE PLAN

**Sheet Number** 



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

\*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
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ENGINEERING & DESIGN, P.A.

TYPY 773-1200 - 19 19 773-9458

www.tyndellengineering.com



Plan:

ROOF PLAN

Project #:

DRB2101-0128

Date:

05/24/21

Drawn/Design By:

KFR

DWG. Checked By:
PAT
Scale:

Scale: SEE PLAN REVISIONS

REVISIONS

No. Date: Remarks

2
3

Sheet Number

S4

4 of 7

#### 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.

DESIGN LOADS:

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLE	CTION
	( - /	( - /	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 MF	PH (EXPOSURE B)	
SEISMIC		SEISMIC ZOI	NES 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.)
- 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"Ø 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"Ø 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: 39.0 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
- 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 NCRC.
- 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.)

\*\*MEAN ROOF HEIGHT 30'-0" OR LESS

- 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.

ZONES	FENESTRATION U-FACTOR b, j	SKYLIGHT <sup>D</sup> U-FACTOR	FENESTRATION SHGC <sup>b,<u>k</u></sup>	CEILING <sup>m</sup> R-VALUE	FRAMED WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT <sup>c,o</sup> WALL R-VALUE	SLAB <sup>d</sup> R-VALUE AND DEPTH	CRAWL SPACE ° WALL R-VALUE
3	0.35	0.55	0.30	38 or 30 cont	15 or 13 + 2.5	<u>5/13 or</u> 5/10 cont	19	<u>5/13</u> f	0	5/13
4	0.35	0.55	0.30	38 or 30 cont	15 or 13 + <u>2.5</u> h	<u>5/13 or</u> 5/10 cont	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont	<sup>n</sup> <u>19, or 13 + 5</u> <u>or 15 + 3</u>	13/17 <u>or</u> 13/12.5 cont	30 <sup>g</sup>	<u>10/15</u>	10	10/19

### \* 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 EXCLUDED 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-15 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 WHICHEVER IS LESS. FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24", WHICHEVER IS LESS. R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.
- e. DELETED
- f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1101.7 AND TABLE N1101.7. 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  $\underline{\text{OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2.}} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY R-13 CAVI$
- 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  $\underline{\textbf{PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY}.$
- 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.
- R-30 SHALL BE DEEMED TO SATISFY THE CEILING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE

  AT THE EAVES. OTHERWISE R-38 INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1 INCH
- 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 BAFFLE.

  1. R.-19 FIBERGLASS BATTS COMPRESSED AND INSTALLED IN A NOMINAL 2 × 6 FRAMING CAVITY IS DEEMED TO COMPLY. FIBERGLASS BATTS RATED R-19 OR HIGHER COMPRESSED

  AND INSTALLED IN A 2X4 WALL IS NOT DEEMED TO COMPLY.

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

- 2280 SQ. FT. OF ATTIC / 300 = 7.6 SQ. FT. INLETS/OUTLETS REQUIRED
- 1) CALCULATION BASED ON VENTILATORS USED AT LEAST 3'-0" ABOVE THE COMICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED
- CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

## \* ATTIC VENTILATION CALCULATION

#### **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	REINF	=	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

#### MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS: POST SIZE MAX POST HEIGHT\*\*

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

- 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:
- A. 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. B. 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
- BOLT AT EACH END OF THE BRACE. C. FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE

POSTS IN ACCORDANCE WITH THE FOLLOWING:

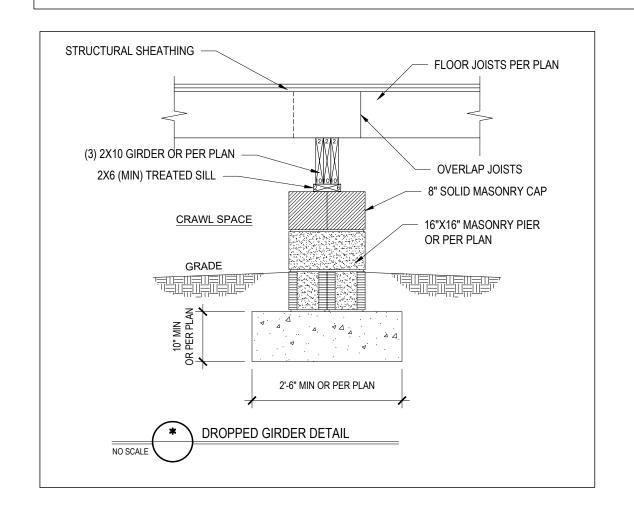
45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED

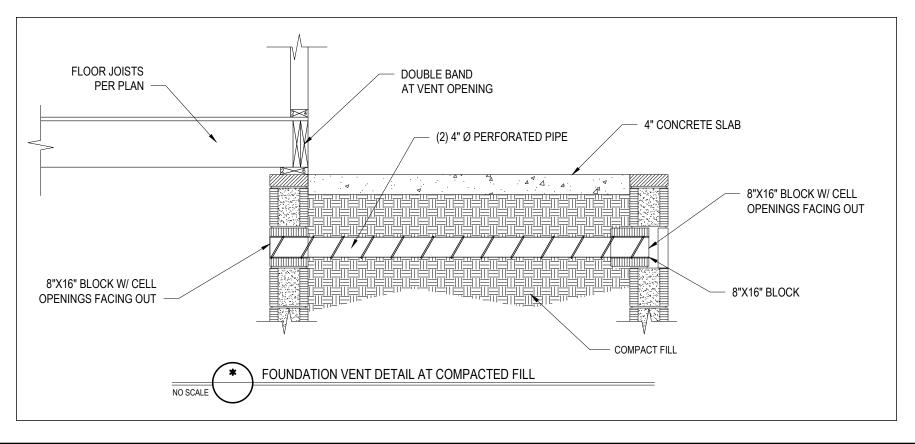
TO THE POST AND GIRDER WITH ONE 5/8"Ø HOT DIPPED GALVANIZED

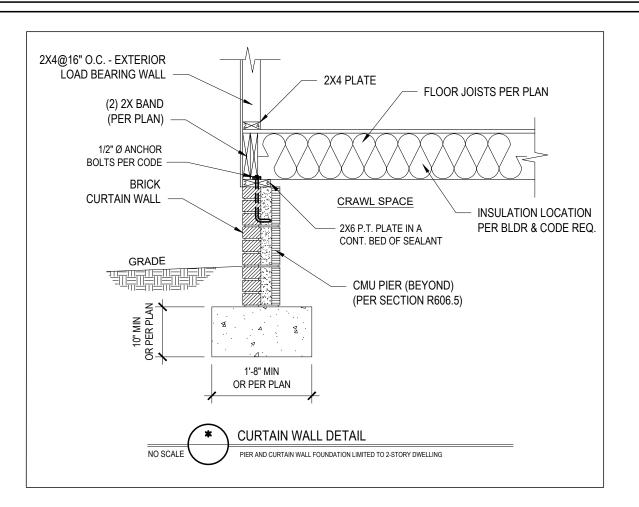
[					
	POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
	4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
	6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

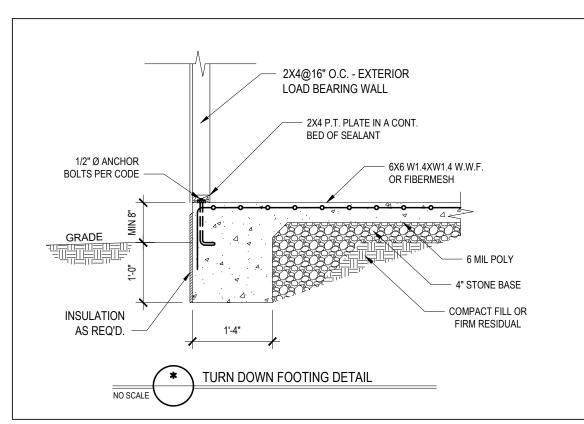
D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8"Ø HOT

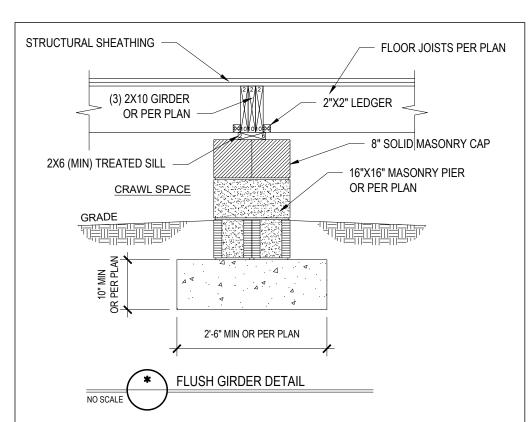
#### DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER. E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.

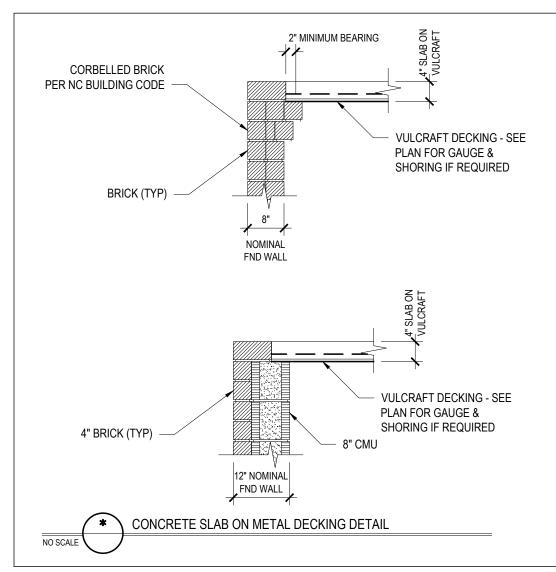


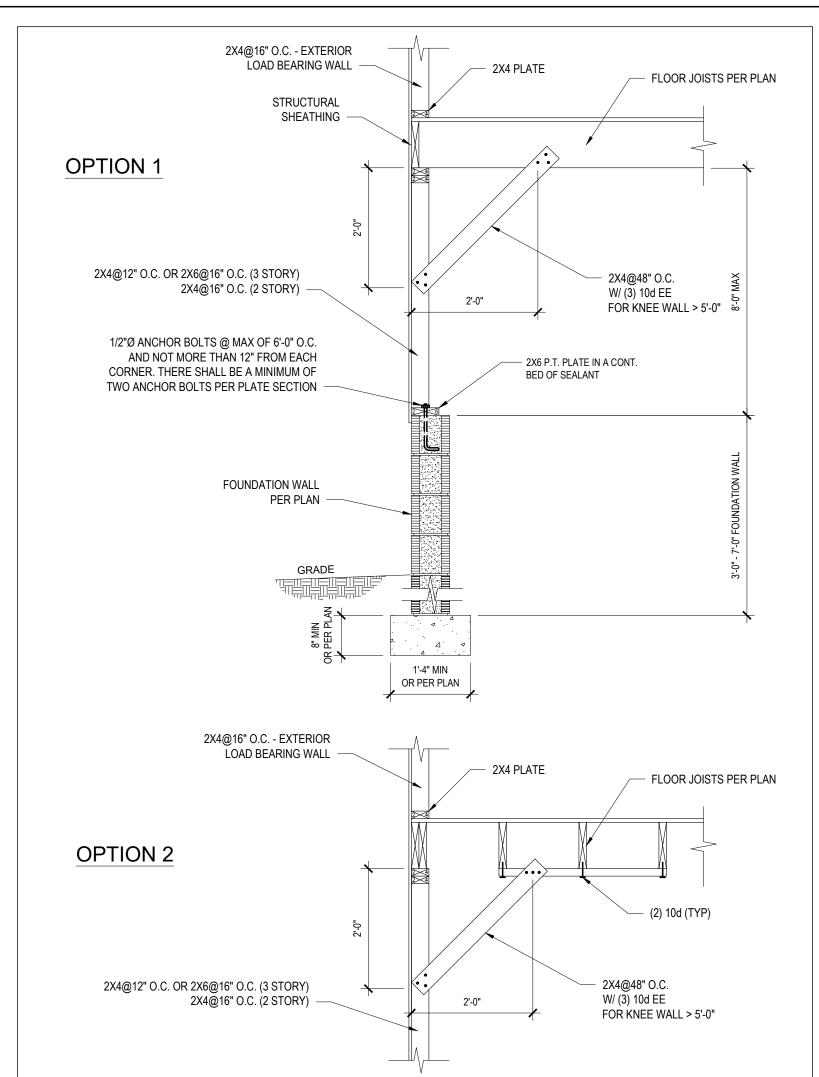


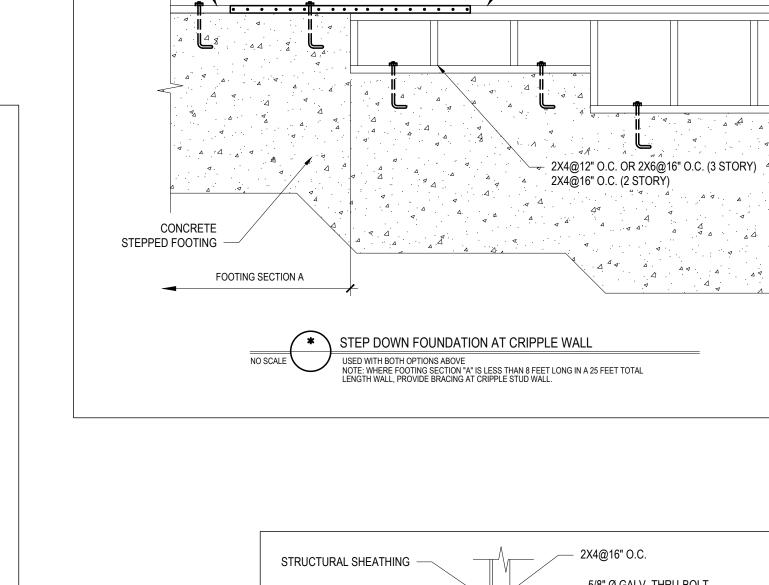








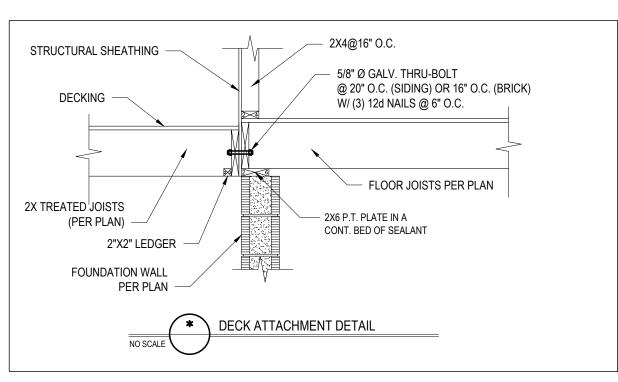




2'-0"

2'-0"

2X SILL PLATE -

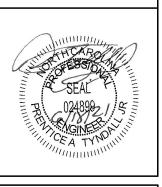


WHERE FOOTING SECTION "A" IS MORE THAN 8'-0" PROVIDE METAL TIE 16 GA X 1.5 X 4'-0" MI.,

EACH SIDE OF SPLICE W/ 8-16d

ocedures or safety precaution. Any deviations or discrepancies on plans ar o be brought to the immediate attention of Please review these documents carefully Tyndall Engineering & Design, P.A. will interpret that all dimensions, etc. presented in these documents were



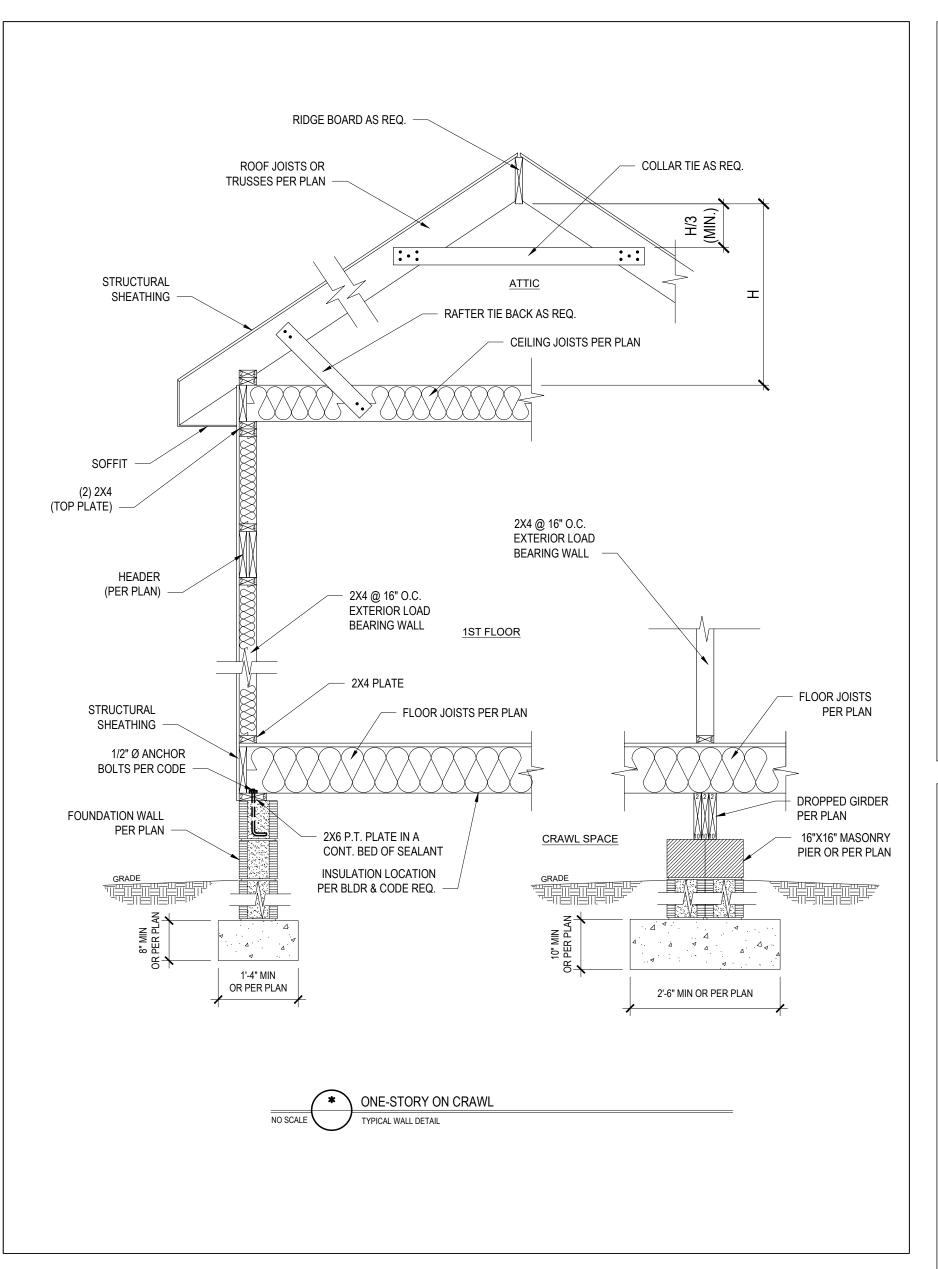


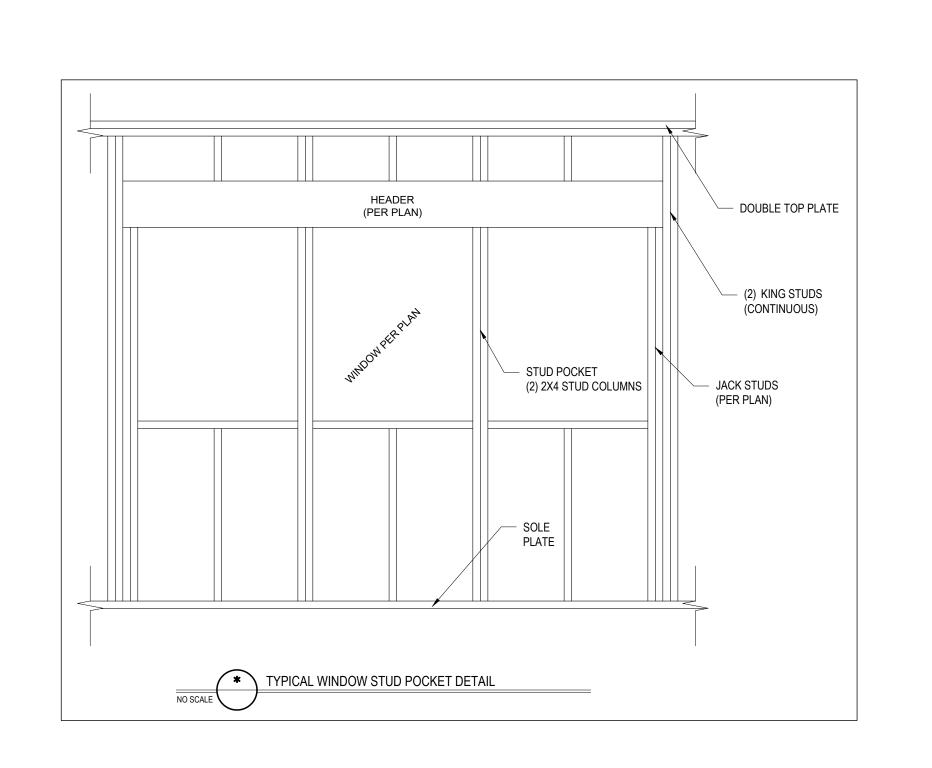
DRB2101-0128 05/24/21 Drawn/Design By: KFR DWG. Checked By: PAT

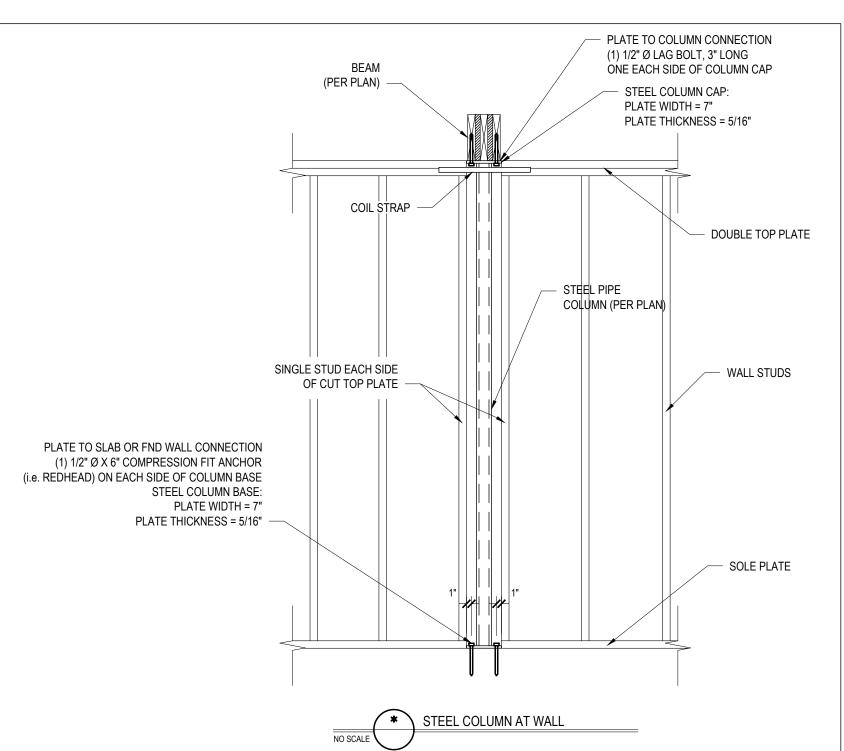
SEE PLAN REVISIONS

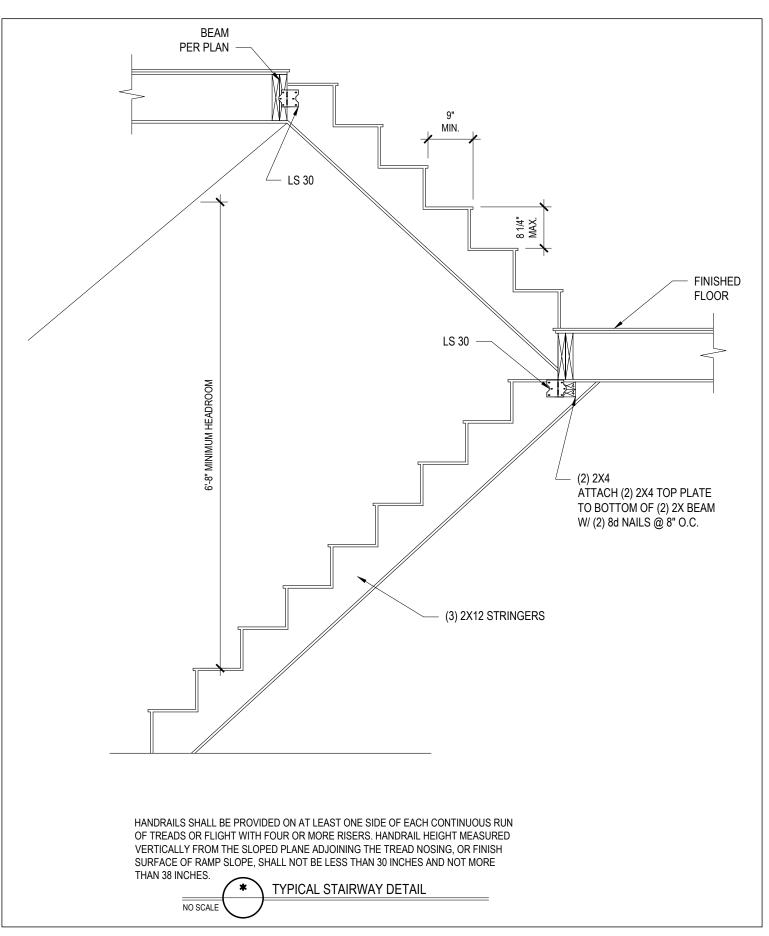
Date:

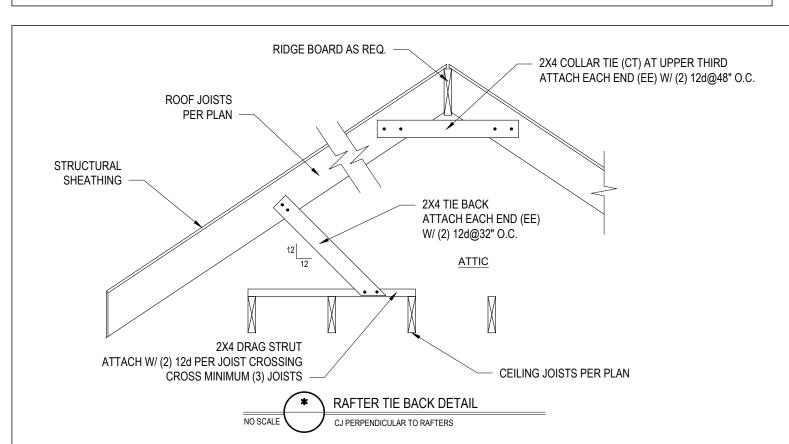
Sheet Number

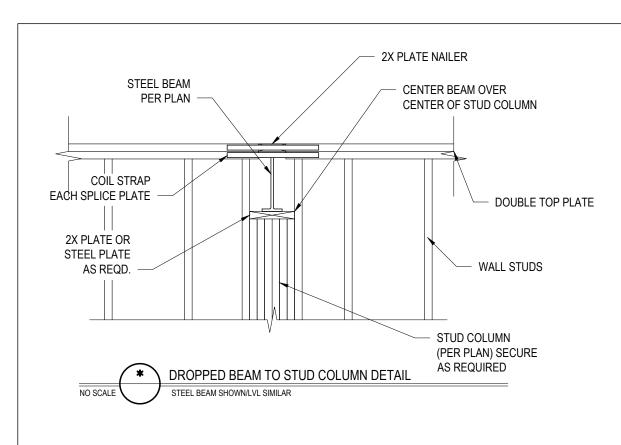


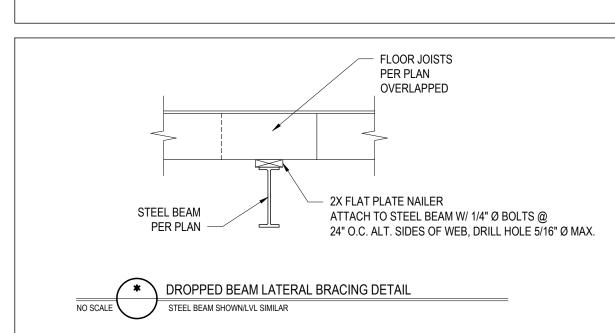


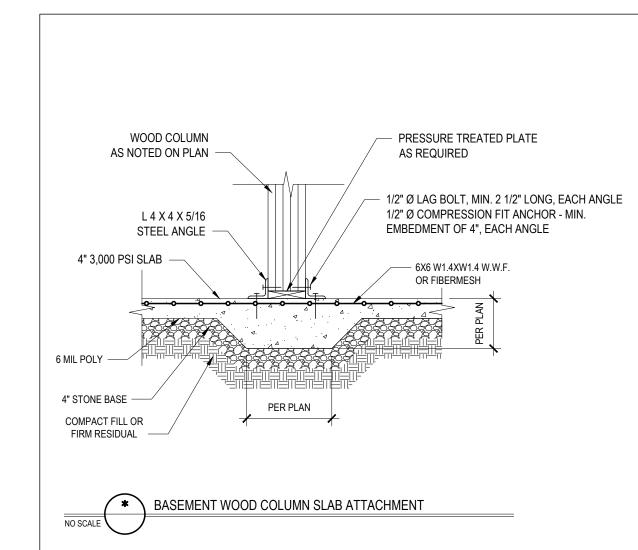


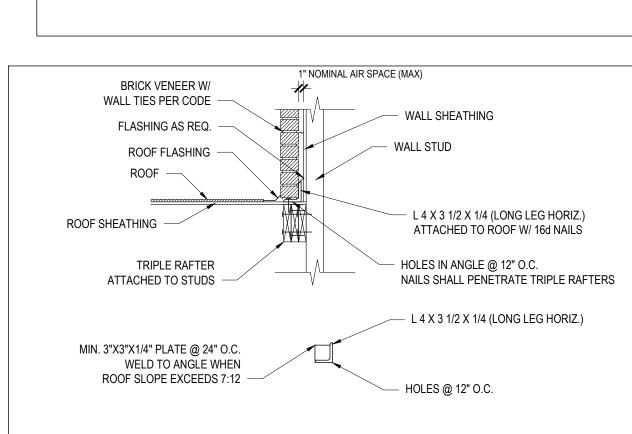












ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER	
ALLOW BLE OF A CONTROL OF CHARACTER AND CONTROL ALLOW AND CONTROL	

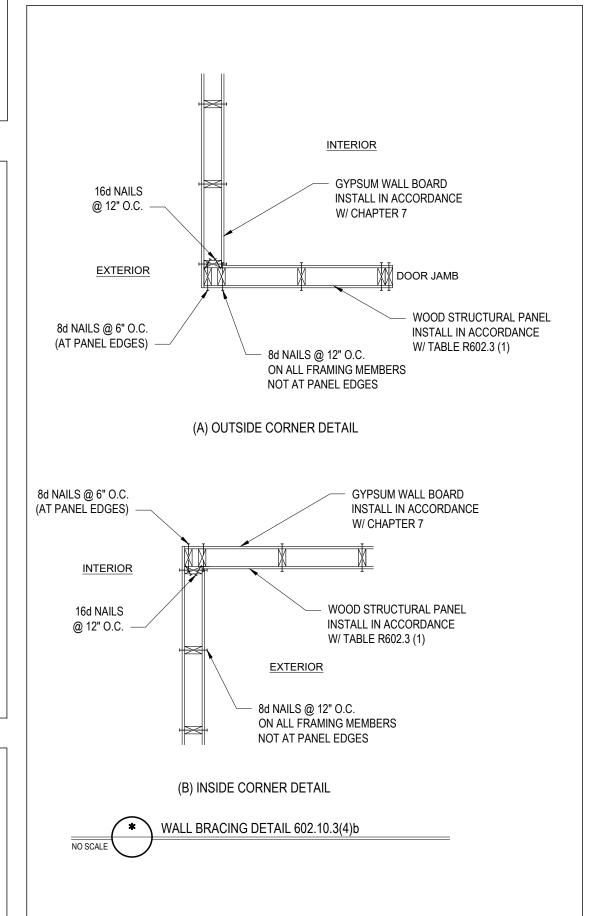
SIZE OF ANGLE (1,3)	NO STORY ABOVE (5)	1 STORY ABOVE (5)	2 STORIES ABOVE (5)	# OF $\frac{1}{2}$ " (OR EQUIV.) REINFORCING BARS IN REINFORCED LINTEL (2.4.5)
L 3 x 3 x 1/4	6'-0"	4'-6"	3'-0"	1
L 4 x 3 x ½	8'-0"	6'-0"	4'-6"	1
L 5 x 3 ½ x 5/16	10'-0"	8'-0"	6'-0"	2
L 6 x 3 ½ x 5/16	14'-0"	9'-6"	7'-0"	2
2L 5 x 3 ½ x 5/16	20'-0"	12'-0"	9'-6"	4

- 1. 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

  3. 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.	
MASONRY VENEER SUPPORT FIG 703.8.3.1	

HARDWARE CI	ROSS-REFERENCE CHART			
SIMPSON STRONG-TIE	USP STRUCTURAL CONNECTORS			
PRODUCT NUMBER	PRODUCT NUMBER			
A35	MPA1			
ABE	PAE			
CBSQ	CBSQ			
CCQ	KCCQ			
CMSTC16	CMSTC16			
CS	RS			
H1	RT15			
H2.5A	RT7A			
H10	RT16			
HDQ8-SDS3	UPHD8			
HDU2-SDS2.5	PHD2			
HDU5-SDS2.5	PHD5			
HETA	НТА			
HGAM10KTA	HGAM			
HHDQ14-SDS2.5	UPHD14			
HTS	HTW			
-TT	НТТ			
HUS	HUS			
LTA1	LPTA			
LTHJA26	HJC26			
_TP4	MP4F			
LUS	JUS			
MAS	FA3			
MSTAM	MSTAM			
PC	PCM			
PHD-SDS3	PHD			
SSP	RSPT6			
STC	TR1			
STHD	STAD			



2X4 @ 16" O.C.

2X4 PLATE

CANTILEVER SPAN

(PER PLAN)

FLOOR JOISTS

2X4 @ 16" O.C.

OR PER PLAN -

BACK SPAN MIN. 3X

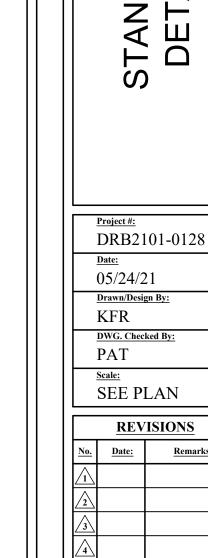
CANTILEVER SPAN

(OR PER PLAN)

\* CANTILEVER FLOOR JOIST DETAIL

(PER PLAN) —

OR PER PLAN -



\_\_\_\_ 2X BAND

**Sheet Number** 

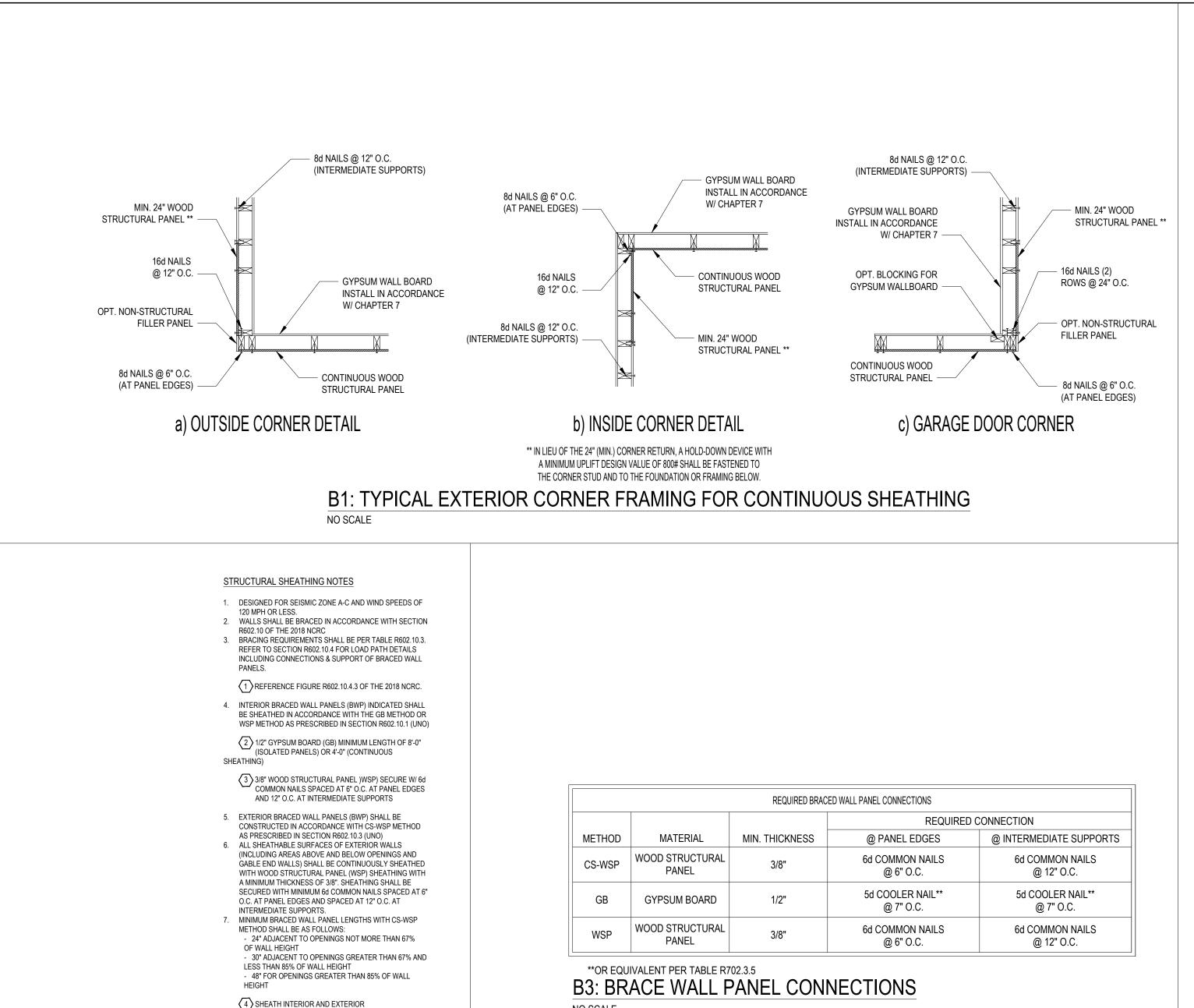
\*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.

\*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.

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 beg



NO SCALE

8. FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL

5 MINIMUM 800# HOLD-DOWN DEVICE

PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH

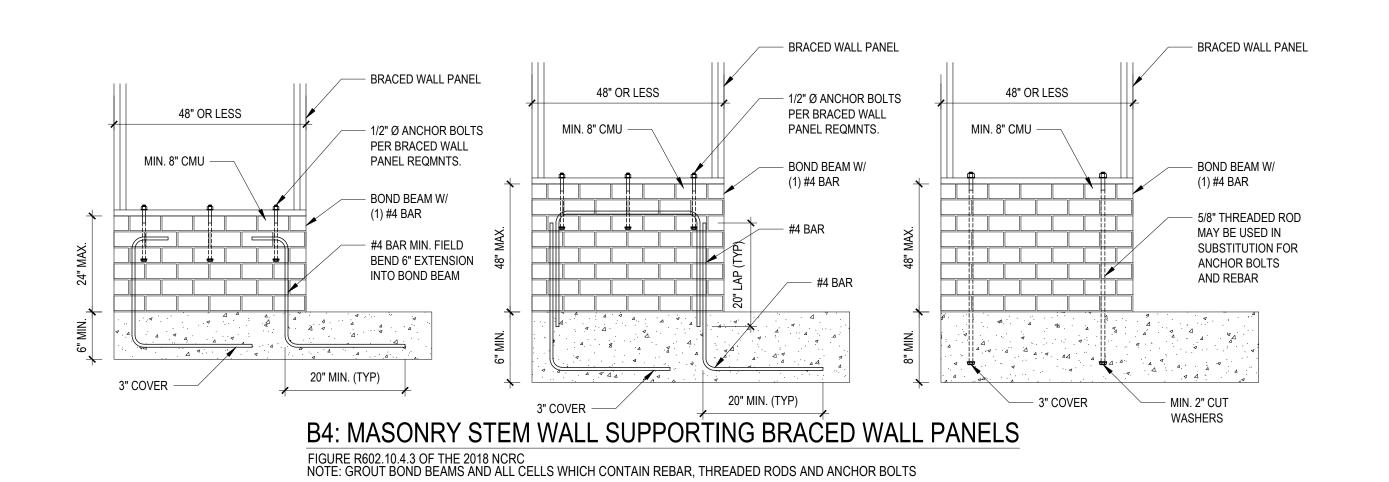
ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH

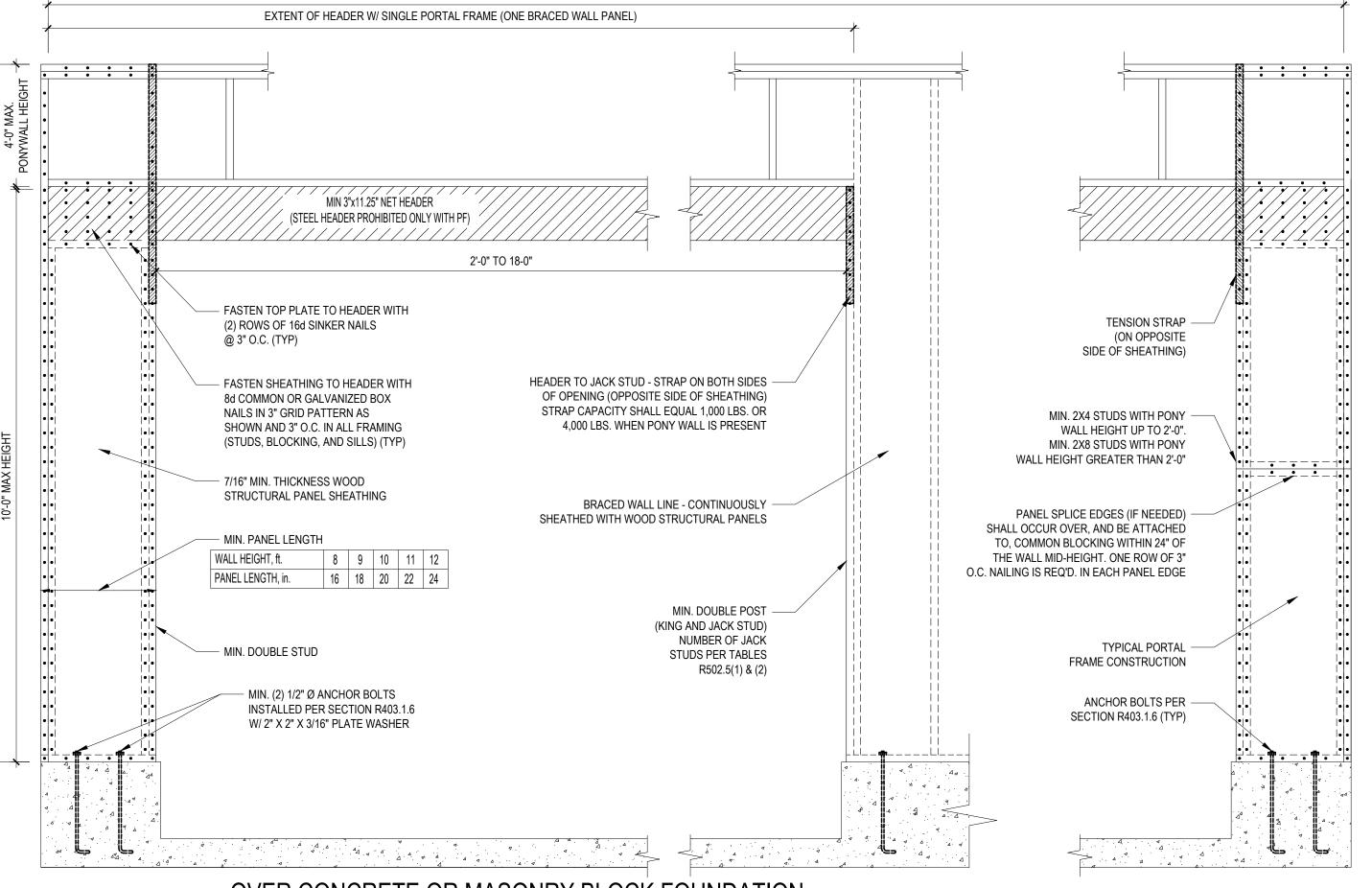
WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE

CLOSEST TO THE CORNER AND TO THE FOUNDATION OR

FASTENED TO THE EDGE OF THE BRACED WALL PANEL

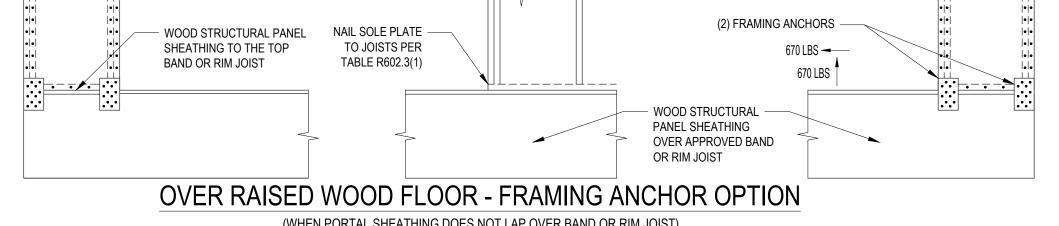
FIGURE R602.10.3 (4). IN LIEU OF A CORNER RETURN, EITHER A MINIMUM 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE

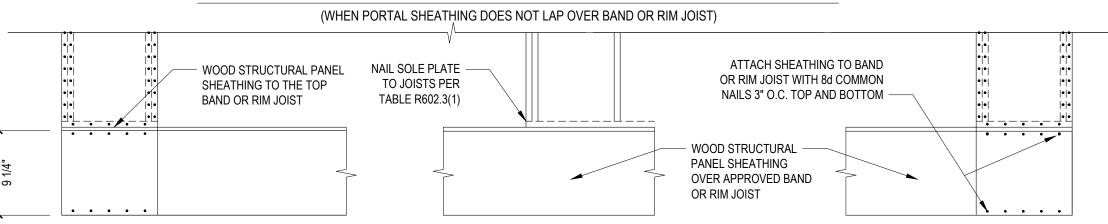




EXTENT OF HEADER W/ DOUBLE PORTAL FRAME (TWO BRACED WALL PANELS)

### OVER CONCRETE OR MASONRY BLOCK FOUNDATION





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

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www.syndellengineering.com

ENGINEER ENGINEER - 1919

Plan:
2493 NC HWY 242 N, BENSON, NC

SHEATHING DETAILS

Project #:

DRB2101-0128

Date:

05/24/21

Drawn/Design By:

KFR

DWG. Checked By:

PAT

PAT
Scale:
SEE PLAN

REVISIONS

Date: Remarks

**Sheet Number** 

D3