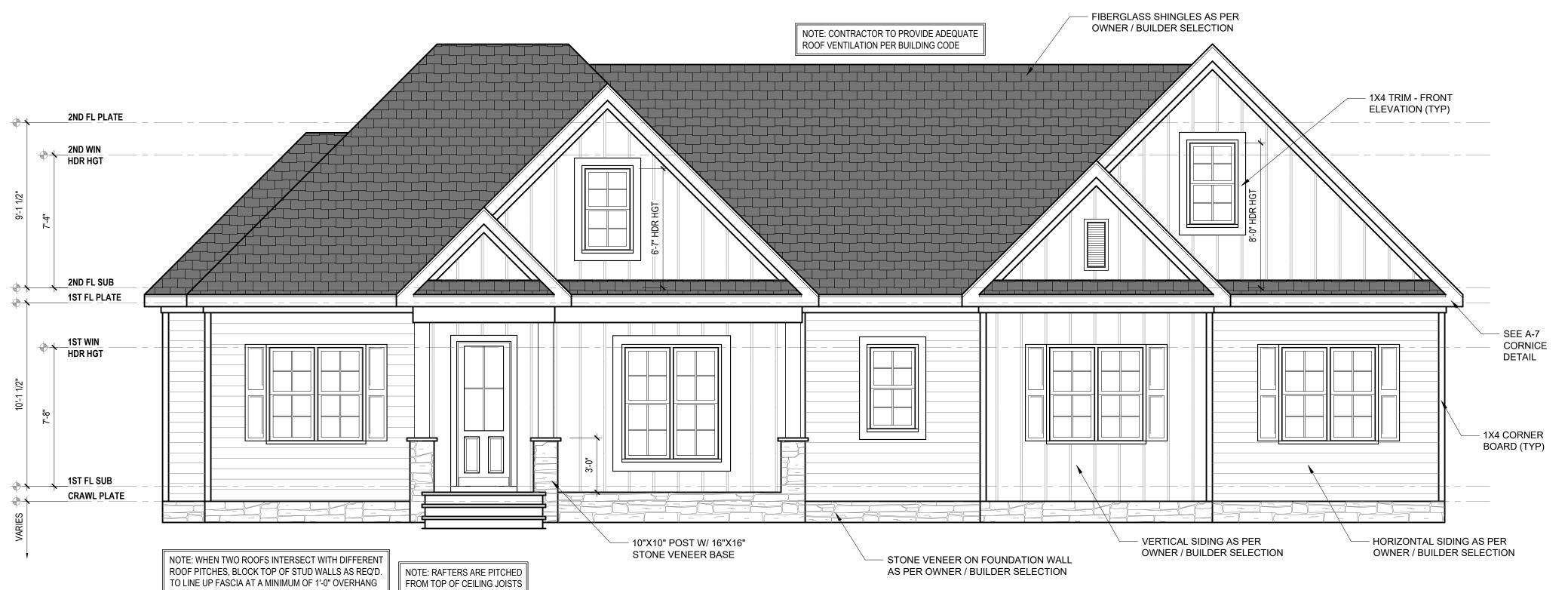
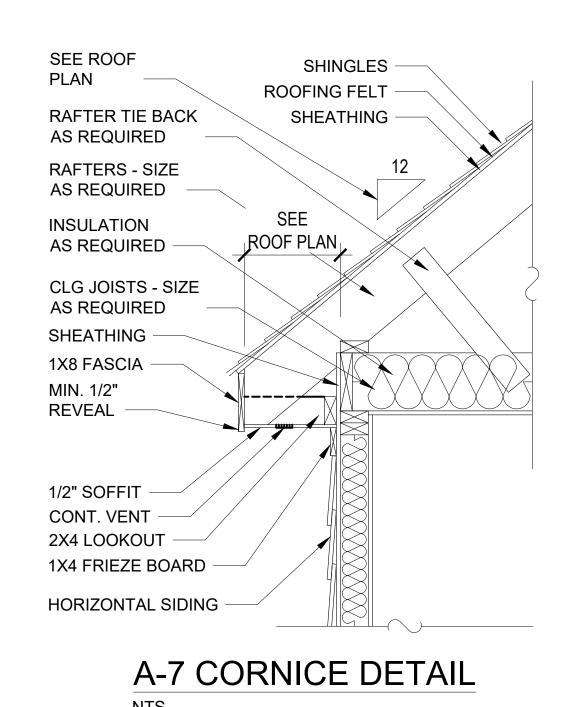
HISE RESIDENCE





FRONT ELEVATION

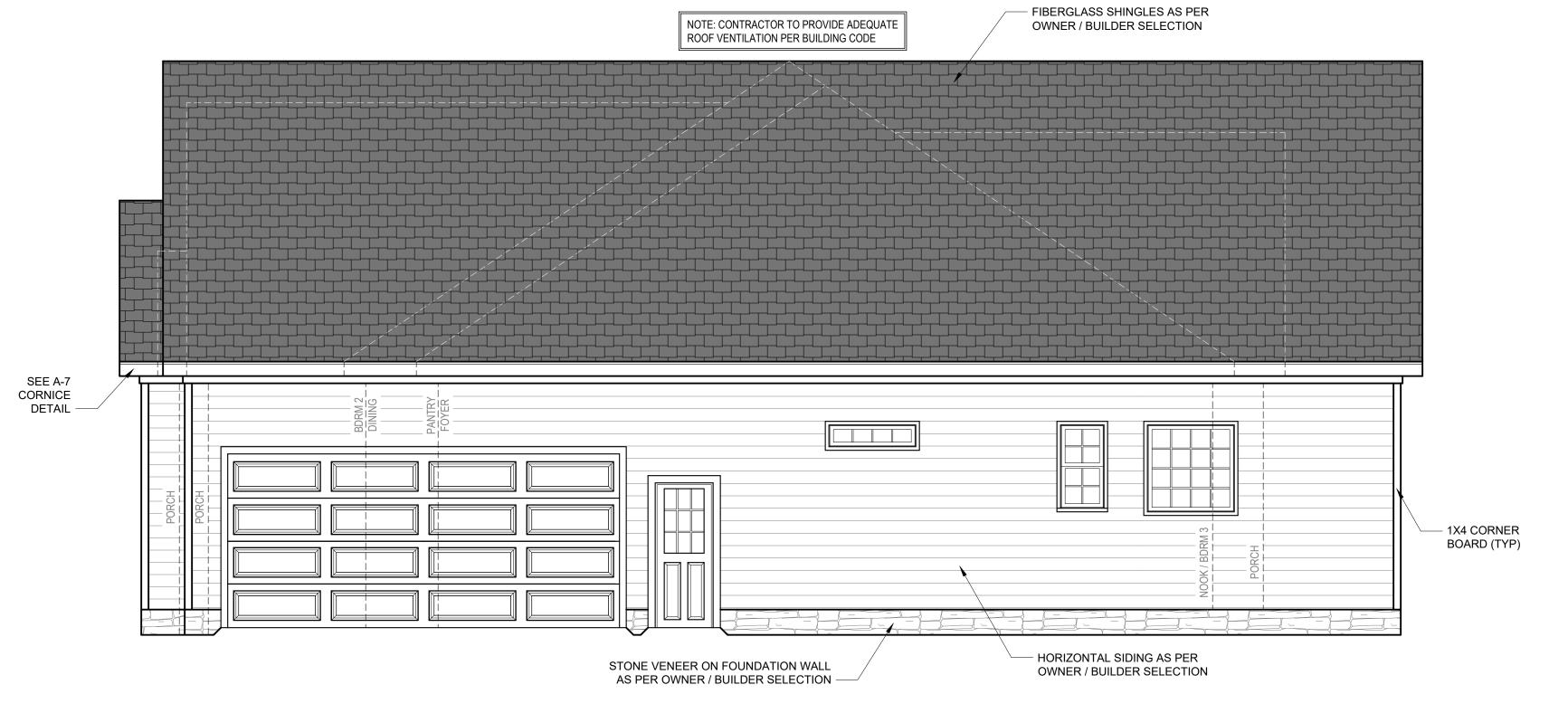
1/4" = 1'-0"



See notes on second floor floor plan

- 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
- 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.
- 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. 7. 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. 8. 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 DESIGN of responsibility for any and all consequences arriving out of such changes. 10. 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.

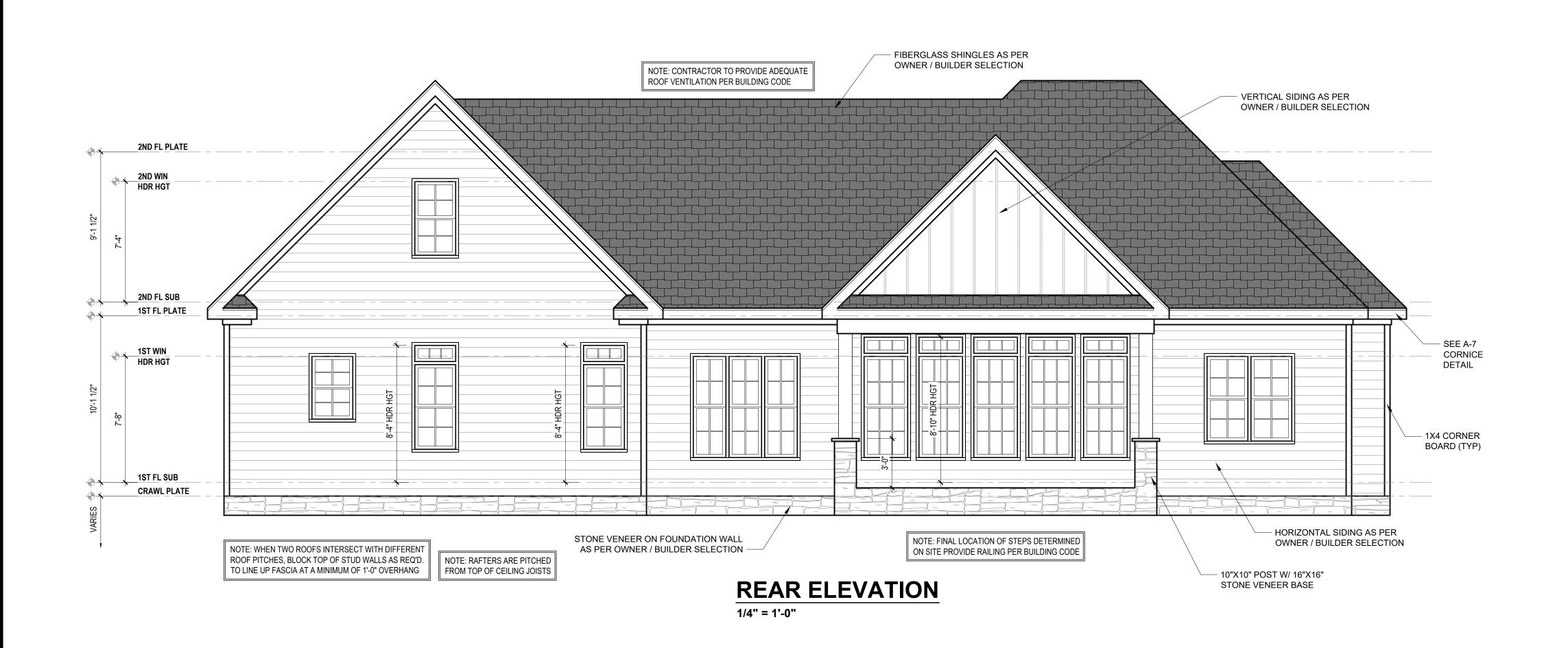


RIGHT ELEVATION 1/4" = 1'-0"

DRB2101-0064 05/23/2021 DRAWN/DESIGNED BY CHECKED BY SCALE 1/4" = 1'-0"

ELEVATIONS

HISE RESIDENCE



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

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

in addition to all local codes and regulations.

diligence, perfection is not a guarantee.

responsibilities for all consequences.

footage errors once construction has begun.

2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code",

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

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.

7. 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.

9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB

11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to

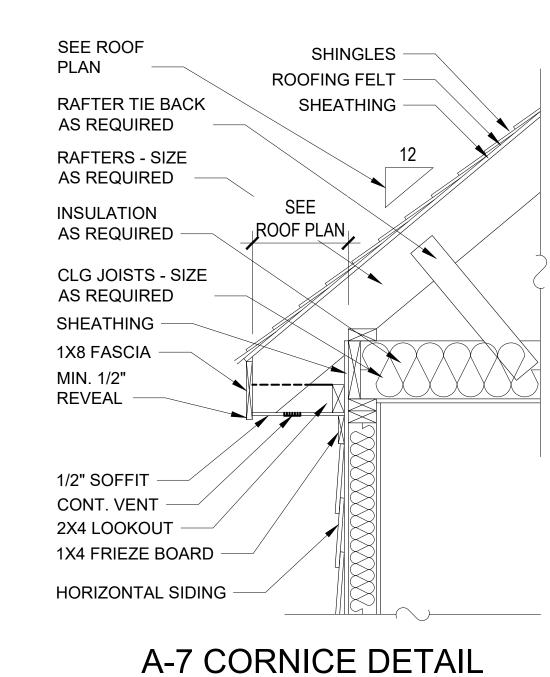
12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square

8. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all

DESIGN of responsibility for any and all consequences arriving out of such changes.

10. Written dimensions on these plans always have precedence over scaled dimensions.



FIREREGLASS SHINGLES AS PER OWNER 79 ULDER SELECTION ROCK ASSOCIATE ROCK PARTILLATION PER SUL INNO CORE

SOFT AT CORNER BOARD (1/17)

104 CORNER BOARD (1/17)

LEFT ELEVATION

1/4" = 1'-0"

STONE VENEER ON FOUNDATION WALL AS PER OWNER / BUILDER SELECTION —

- HORIZONTAL SIDING AS PER

OWNER / BUILDER SELECTION

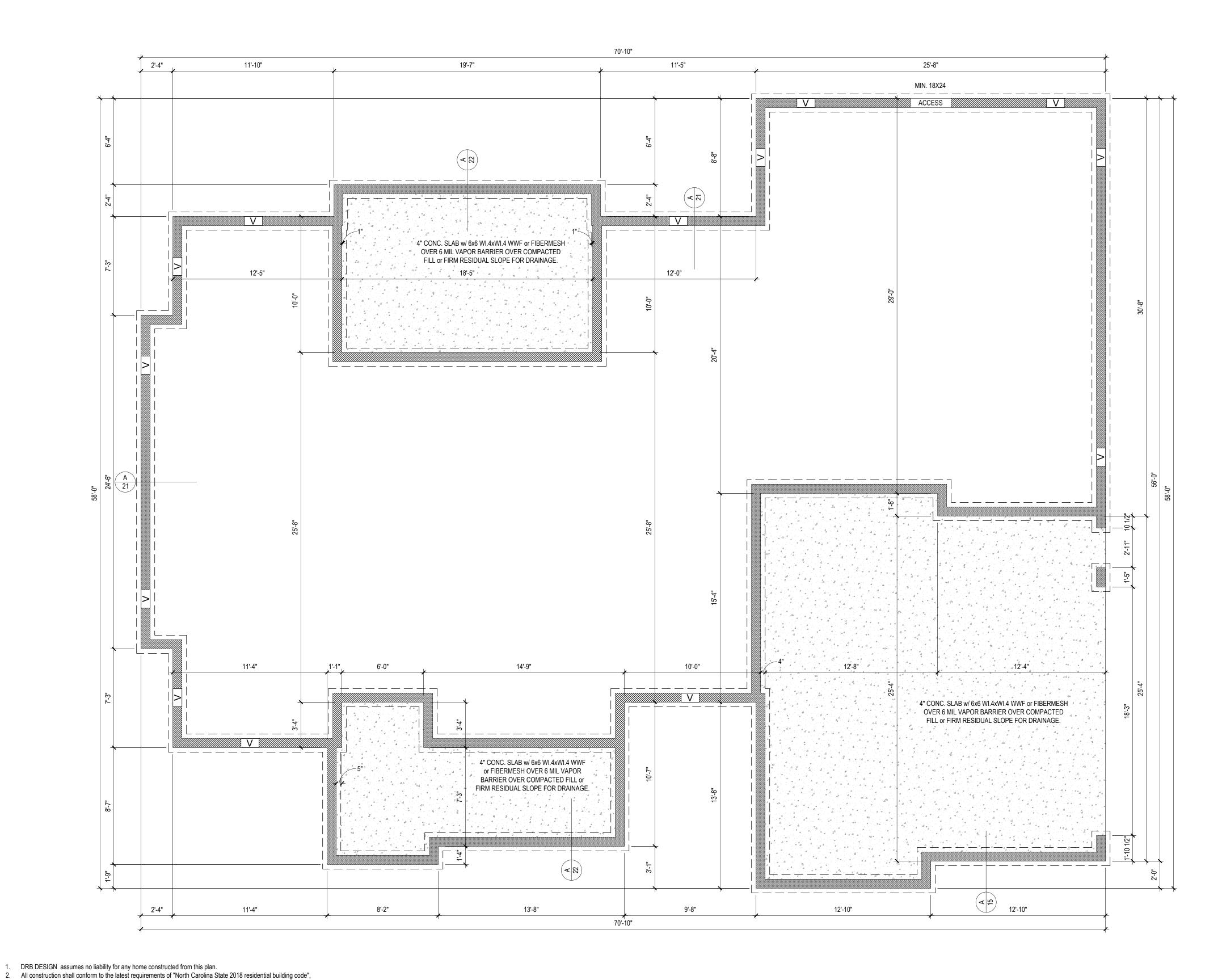
Personal Residence

DESIGN omedesign.com 919.631.5979

haron & Suzanne Hise o6 B. West Duncan St. Lillington, NC 27546 828-443-2760

SHEET NAME
ELEVATIONS

A2_{of 6}



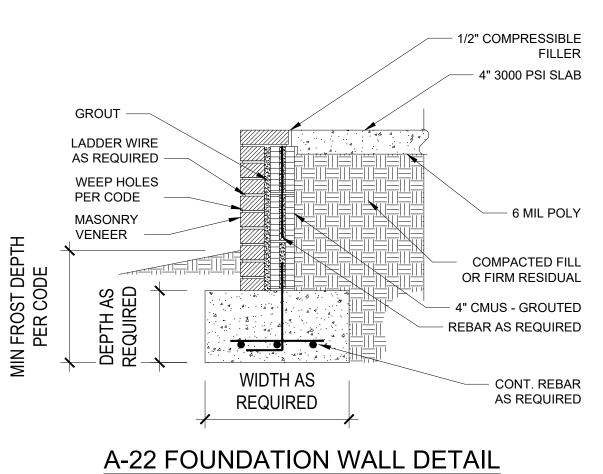
FOUNDATION PLAN 1/4" = 1'-0"

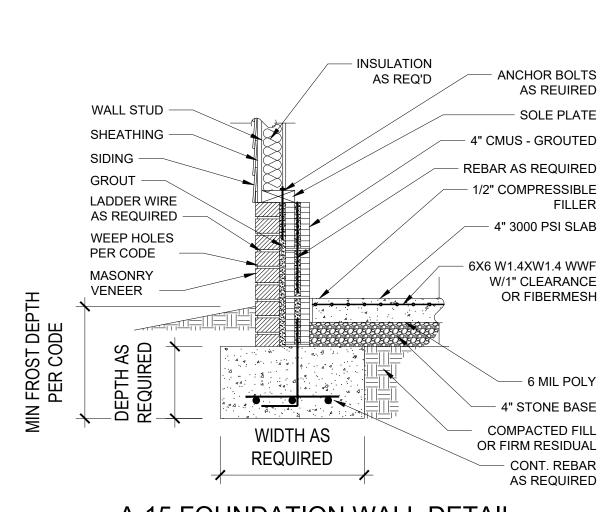
- SOLE PLATE GROUT -LADDER WIRE INSULATION AS REQUIRED -AS REQUIED WEEP HOLES FLOOR JOIST PER CODE SIZE AS REQD MASONRY TERMITE SHIELD VENEER ANCHOR BOLTS - 4" CMUS - GROUTED REBAR AS REQUIRED CONT. REBAR AS REQUIRED A-21 FOUNDATION WALL DETAIL

INSULATION

WALL STUD

AS REQUIED





A-15 FOUNDATION WALL DETAIL

DRB2101-0064

05/23/2021 DRAWN/DESIGNED BY

1/4" = 1'-0"

DRB CHECKED BY

SCALE

FOUNDATION

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.

Communication is imperfect and every contingency cannot be anticipated.

in addition to all local codes and regulations.

diligence, perfection is not a guarantee.

8. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all

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

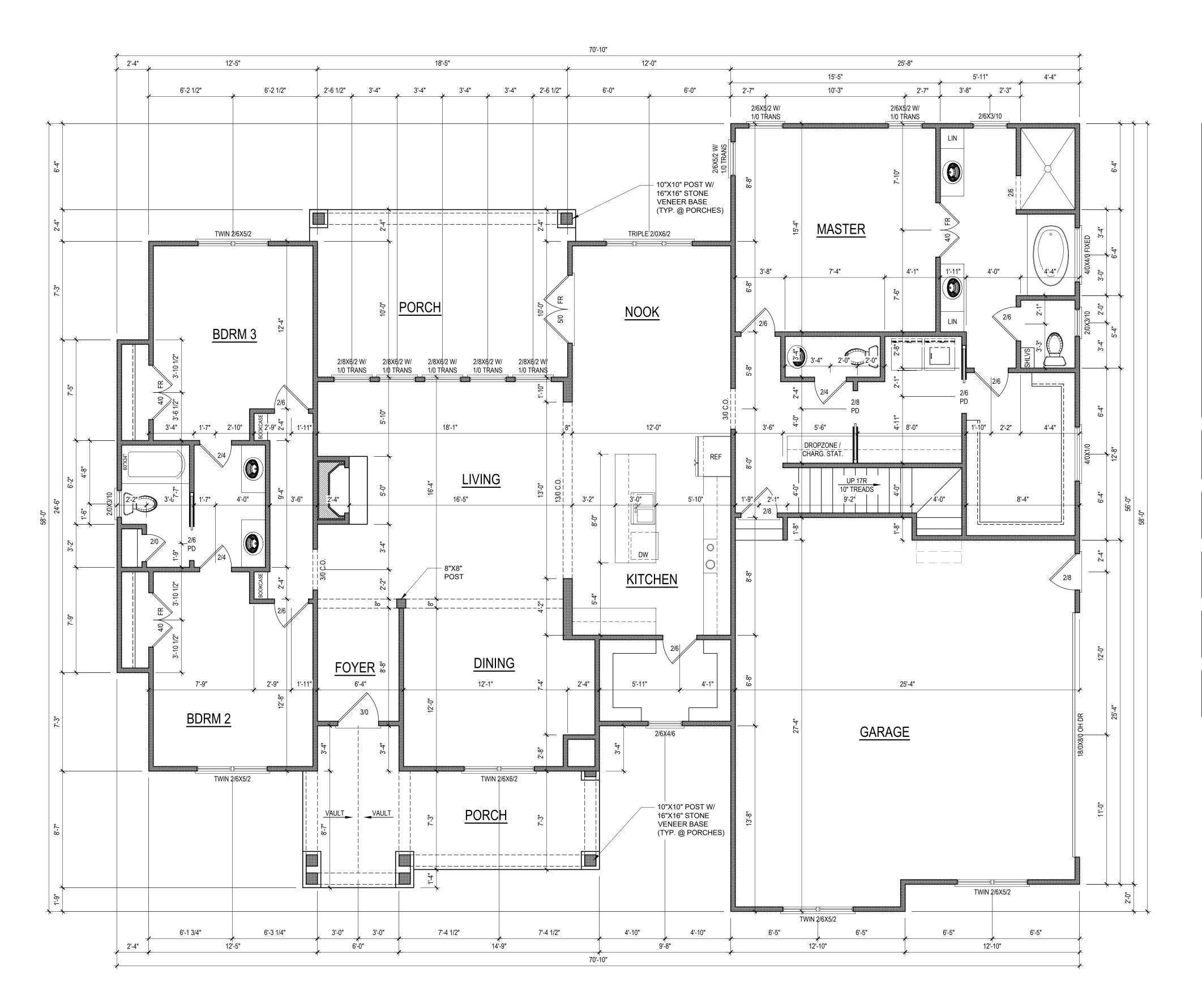
Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN. 5. Design and construction are complex and, although the designer performed his services with due care and

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

9. 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. 10. 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.



FIRST FLOOR PLAN **CEILING HGT. = 10'-0"** 1/4" = 1'-0"

HEATED/HABITABLE **SQUARE FOOTAGE**

Second Floor

Garage

Rear Porch

TOTAL UNHEATED

ALL INTERIOR WALLS ARE NOMINAL 4" UNO

ALL DIMENSIONS ARE

SEE ELEVS. FOR WINDOW HDR HGT

First Floor

2692 **TOTAL HEATED**

2261

UNHTD SQUARE FOOTAGE **Front Porch**

3804 **TOTAL SQ FT**

NOTE: ALL EXTERIOR WALLS ARE NOMINAL 4" UNO

NOTE: ALL ANGLED WALLS ARE 45° UNO

FRAME TO FRAME

DRB2101-0064

Personal Residence

05/23/2021 DRAWN/DESIGNED BY

DRB CHECKED BY

SCALE

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.

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. 5. Design and construction are complex and, although the designer performed his services with due care and

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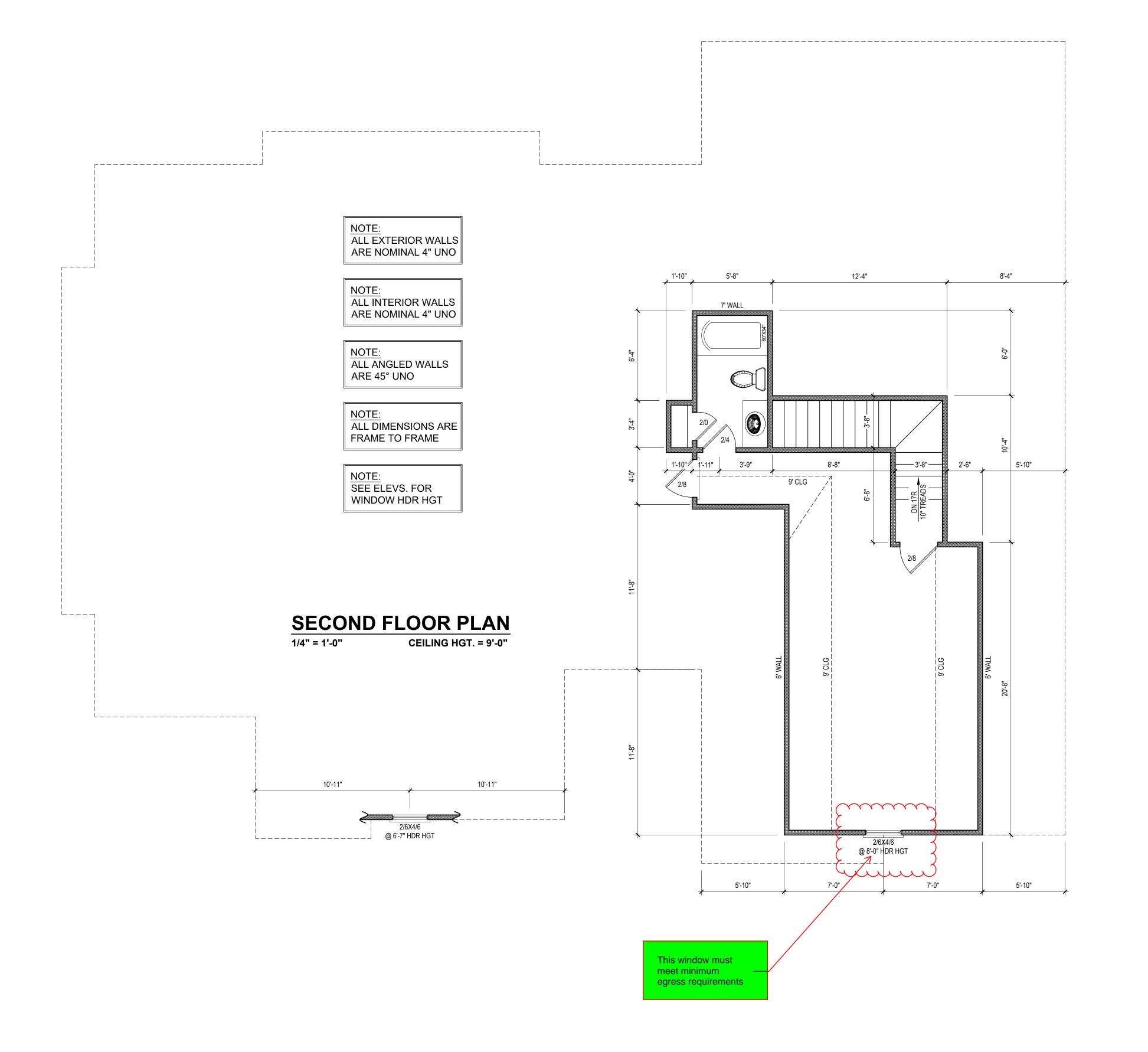
responsibilities for all consequences. 9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB

DESIGN of responsibility for any and all consequences arriving out of such changes. 10. Written dimensions on these plans always have precedence over scaled dimensions.

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1ST_FLOOR



05/23/2021 DRAWN/DESIGNED BY

SHEET NAME

2ND_FLOOR

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

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

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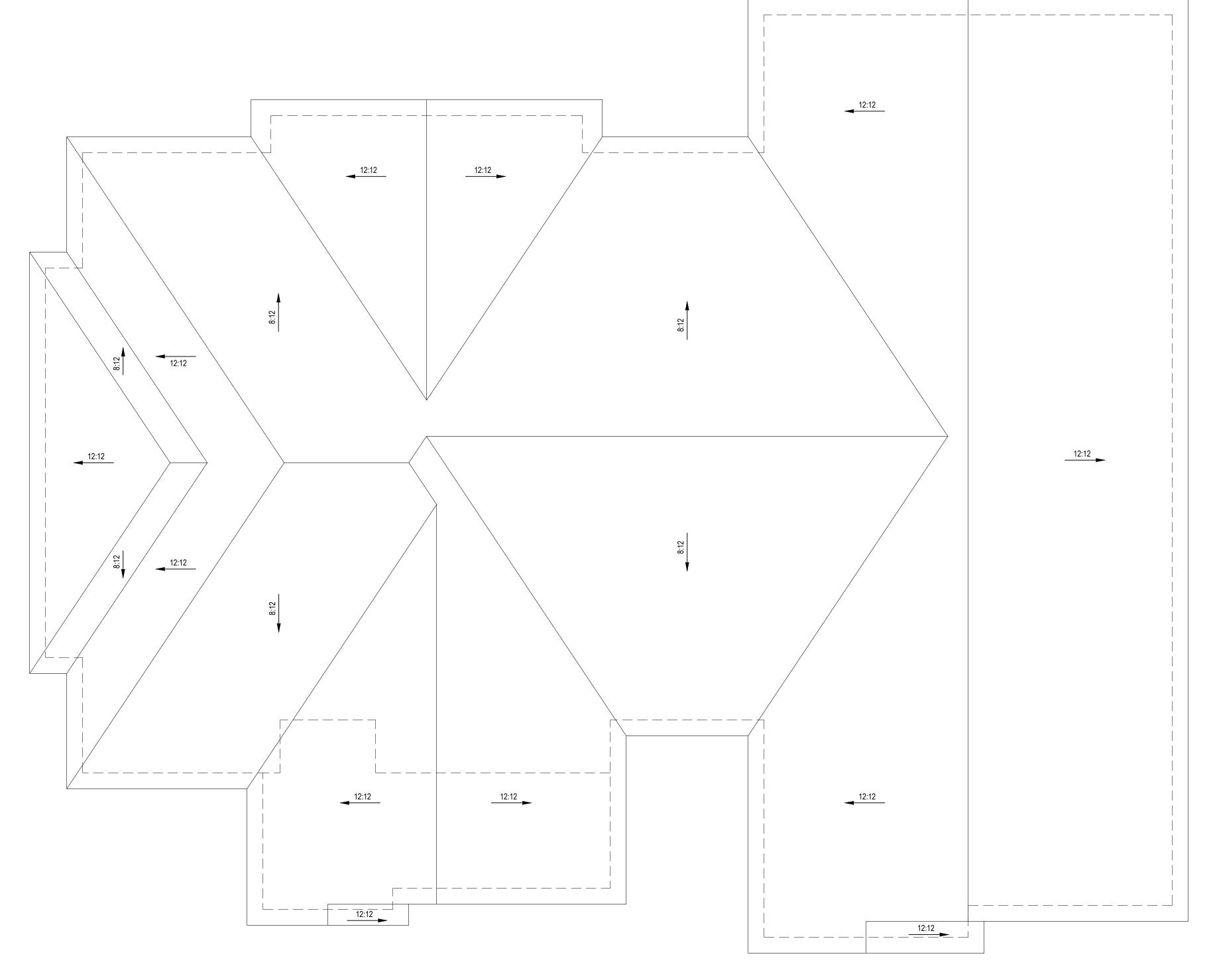
7. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs.

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



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

05/23/2021

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.

Communication is imperfect and every contingency cannot be anticipated.

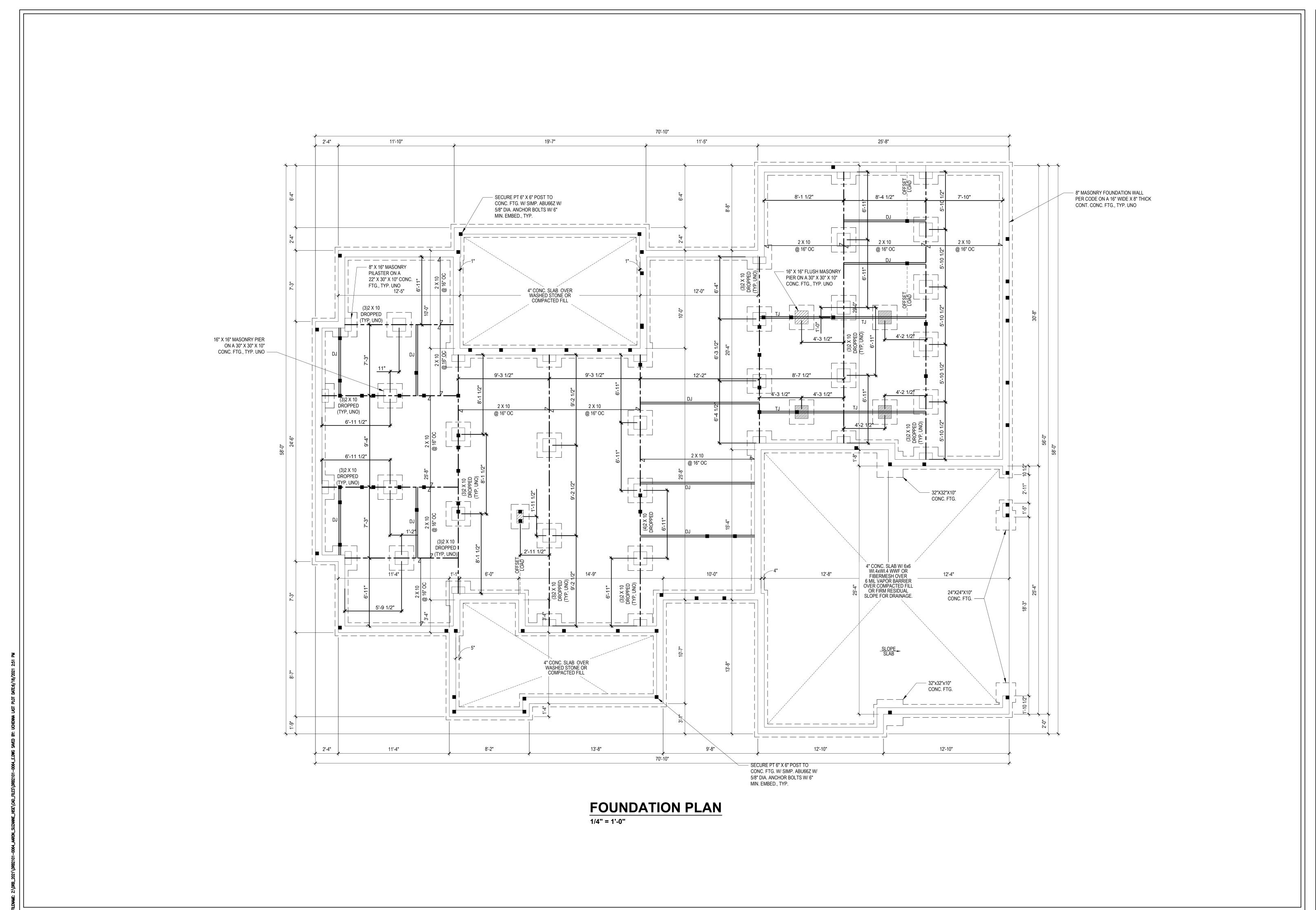
7. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB

DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs. 8. 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 DESIGN of responsibility for any and all consequences arriving out of such changes. 10. 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. ROOF

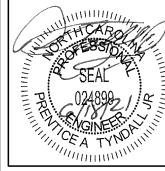


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*Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.

*Please review these documents carefully.

Tyndall Engineering & Design, P.A. will recommendations, etc. presented in these documents were deemed acceptable once construction begi



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PTII SEE PLAN

REVISIONS

Sheet Number

1 of 6

DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLE	CTION
	(- /	(- /	LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	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	BAS	SED ON 120 MPH (E	XPOSURE B)	
SEISMIC	BAS	ED ON SEISMIC ZO	NES A, B & C	

ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT

- RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS. ALL LUMBER SHALL BE SYP #2 (UNO)
- ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (I.E. iLEVEL MICROLAM)
- ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
 ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER W/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6"-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1)
- 5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND 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
- 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"Ø 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) 13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM
- OF PORCH COLUMNS. (U.N.O.)

 14) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC. 15) 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.

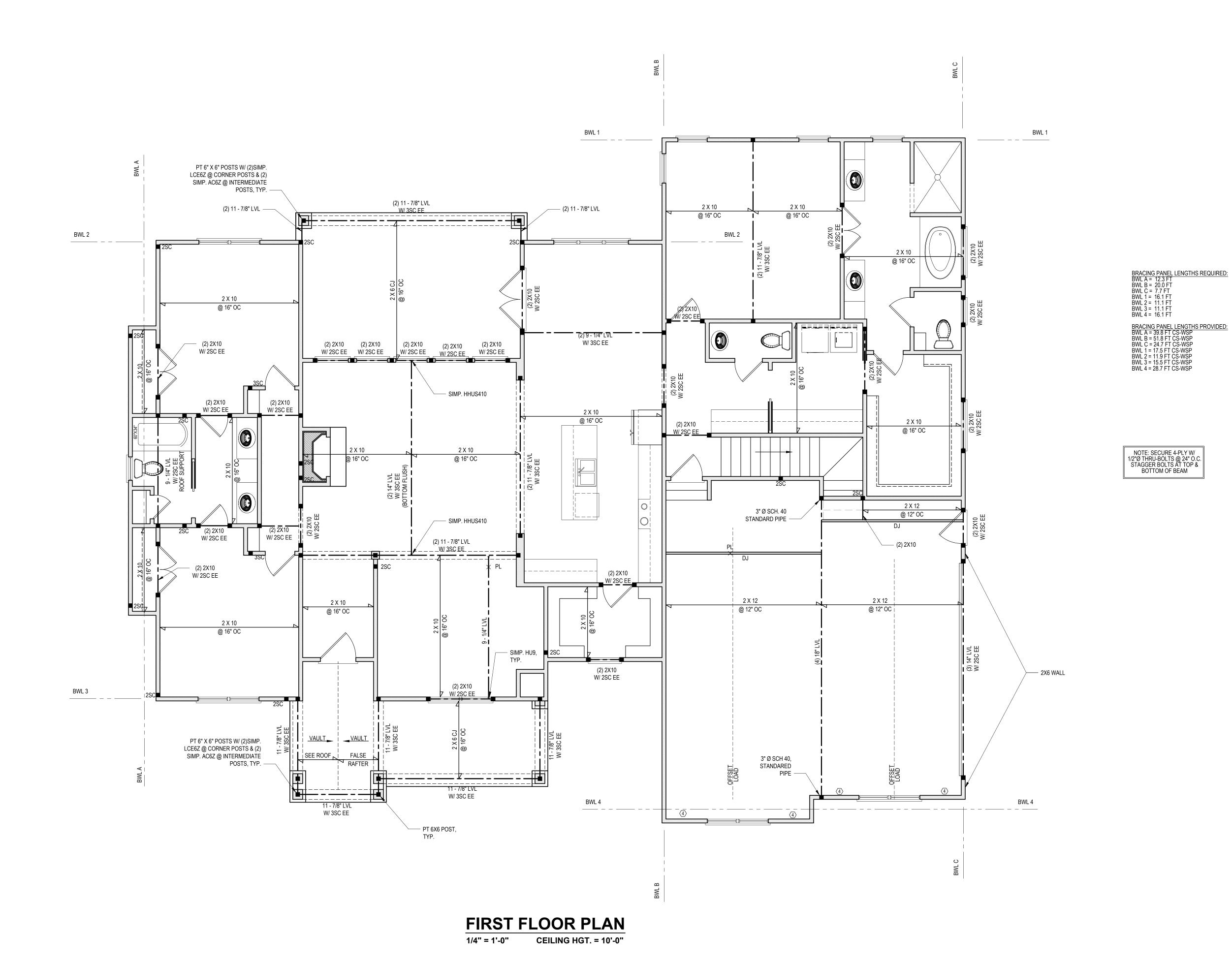
STRUCTURAL SHEATHING NOTES

- 1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR
- 2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF
- 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.
- 1 REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- 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)
- 2 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). 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
- 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. MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL
- 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

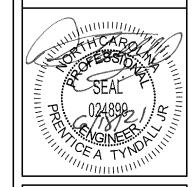
(4) SHEATH INTERIOR & EXTERIOR

8) 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

5 MINIMUM 800# HOLD-DOWN DEVICE



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Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were



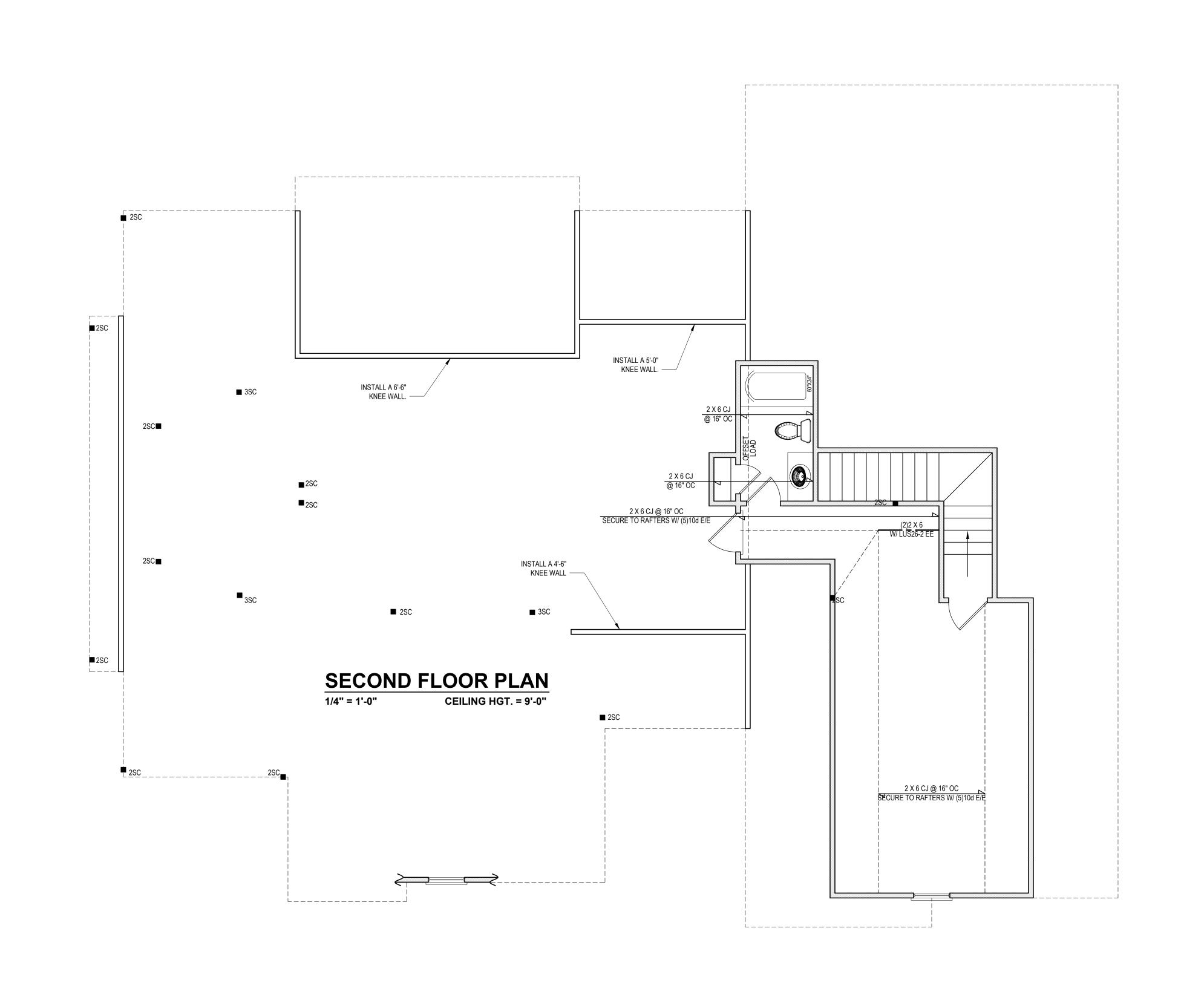
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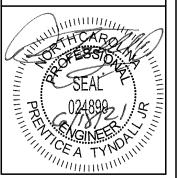
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Sheet Number

2 of 6



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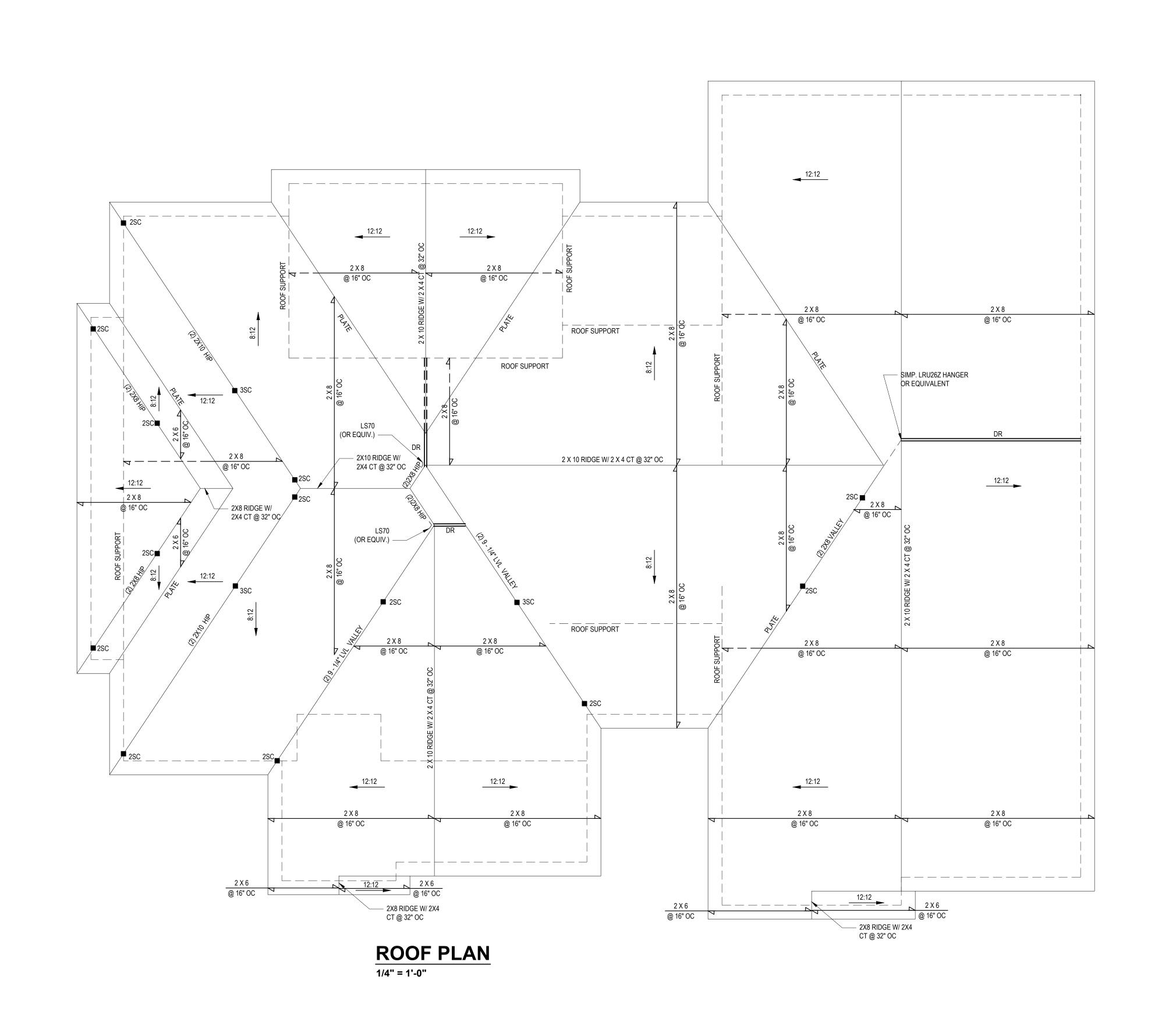
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Sheet Number

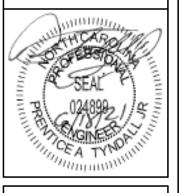
3 of 6



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Project #: DRB2101-0064 <u>Date:</u> 6/18/21 Drawn/Design By:

DWG. Checked By: PTII

Scale: SEE PLAN

REVISIONS

Sheet Number

4 of 6

2) 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 ZON	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.
- 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.

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

- $f. \ \ \text{BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY} \\ \underline{FIGURE\ N1101.7}\ \text{AND}\ \underline{TABLE\ N1101.7}.$
- 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 $\underline{\textbf{INSULATING SHEATHING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT AND ADDRESS MORE THAN 25 PERCENT ADDRESS MORE THAN 25 PERCENT$

OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2. "13 + 2.5" MEANS R-13 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
- $\underline{\text{PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY}.$ 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.

 I. 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 INCLOFF THE ATTIC ROOF DECK.
- 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.

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

2086 SQ. FT. OF CRAWL SPACE / 150 = 13.9 SQ. FT. OF REQ'D VENTILATION WITHOUT CROSS VENTILATION

13.9 SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = 31 VENTS REQ'D1

2086 SQ. FT. OF CRAWL SPACE / 1500 = 1.4 SQ. FT. OF REQ'D VENTILATION WITH CROSS VENTILATION

- 1.4 SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = 3 VENTS REQ'D2 PROVIDE ADEQUATE VENTILATION AT ALL POINTS AND TO PREVENT DEAD AIR POCKETS.
- 2) THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 OF THE CRAWL SPACE GROUND AREA WHERE THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE CRAWL SPACE, THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. ONE FOUNDATION VENT SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING. TO PREVENT RAINWATER ENTRY WHEN THE CRAWL SPACE IS BUILT ON A SLOPED SITE, THE UPHILL FOUNDATION WALLS MAY BE CONSTRUCTED WITHOUT WALL VENT OPENINGS. VENT DAMS SHALL BE PROVIDED

	WHEN THE BUTTOM OF THE FOUNDATION VENT OPENING IS LESS THAN 4 INCHES ABOVE THE FINISHED EXTERIOR GRADE.
	WALL VENTED CRAWL SPACES REQUIRE FULL COVERAGE GROUND VAPOR RETARDERS.
	* CRAWL SPACE VENTILATION CALCULATION
NO S	CALE
NO S	CALE

1800 SQ. FT. OF ATTIC / 300 = 6 SQ. FT. INLETS/OUTLETS REQUIRED

- BY EAVE VENTS.
- CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN
 THE BOTTOM OF THE ROOF DECK AND THE INSULATION.



DEFINITIONS FOR COMMON ABBREVIATIONS

ALTERNATE CANTILEVER MINIMUM CEILING JOIST ON CENTER CONCRETE MASONRY UNIT POINT LOAD COL COLUMN CONCRETE PRESSURE TREATED CONTINUOUS REINFORCED COLLAR TIE REQD REQUIRED DOUBLE ROOF SUPPORT DIAMETER STUD COLUMN DOUBLE JOIST SCHEDULE DOUBLE RAFTER EACH = SPECIFIED THICK FLOOR JOIST TRIPLE JOIST FOUNDATION TREATED TYPICAL FOOTING UNLESS NOTED OTHERWISE GALV GALVANIZED WIDE FLANGE BEAM HORIZ HORIZONTAL HEIGHT WELDED WIRE FABRIC MANUFACTURER 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

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

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

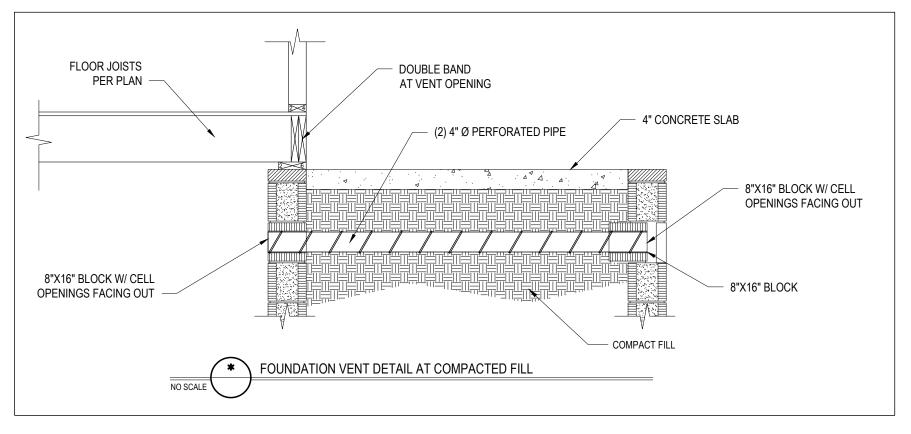
TO THE POST AND GIRDER WITH ONE 5/8"Ø HOT DIPPED GALVANIZED

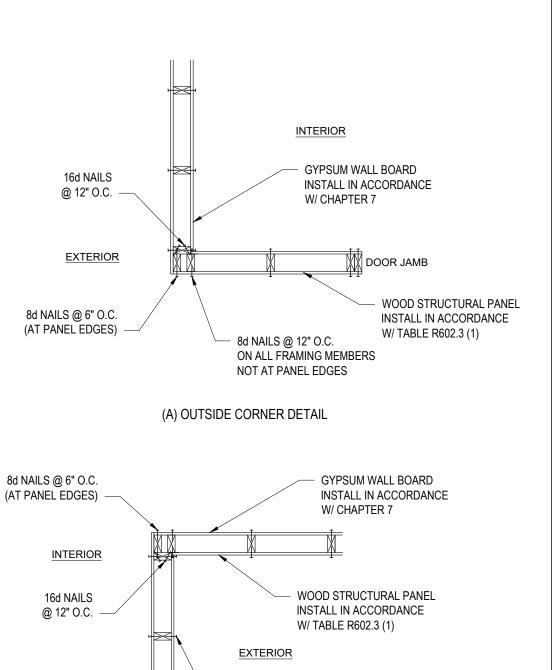
ſ	POSTS IN ACCO	RDANCE WITH THE FOLLOW	/ING:		
	POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
	4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
	6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

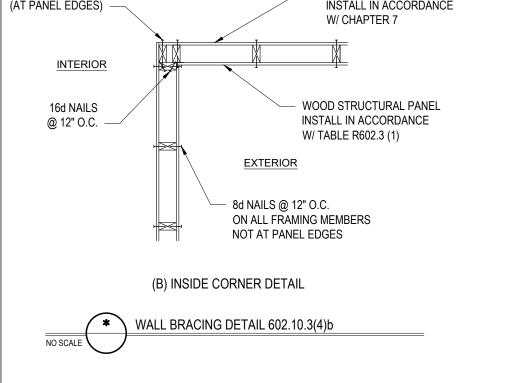
D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8"Ø HOT DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING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

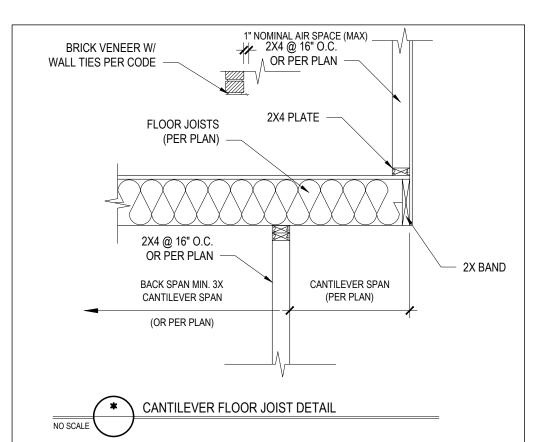
E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.

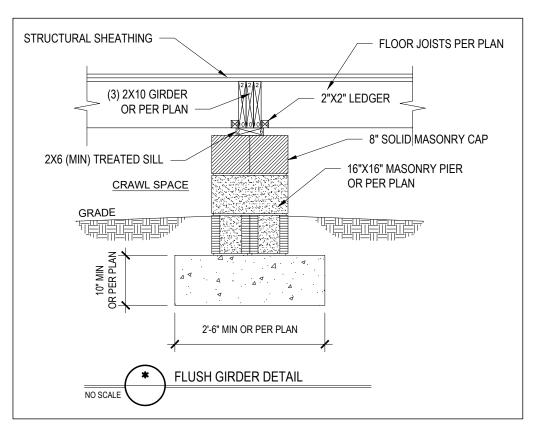
STRUCTURAL SHEATHING - FLOOR JOISTS PER PLAN (3) 2X10 GIRDER OR PER PLAN OVERLAP JOISTS 2X6 (MIN) TREATED SILL - 8" SOLID MASONRY CAP CRAWL SPACE 16"X16" MASONRY PIER OR PER PLAN 2'-6" MIN OR PER PLAN * DROPPED GIRDER DETAIL



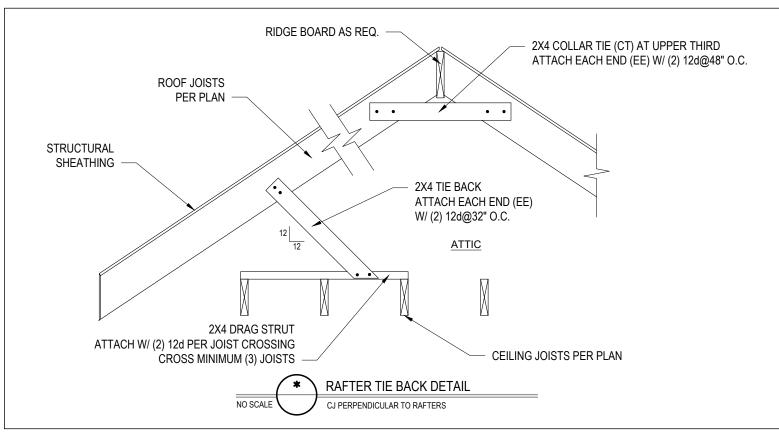


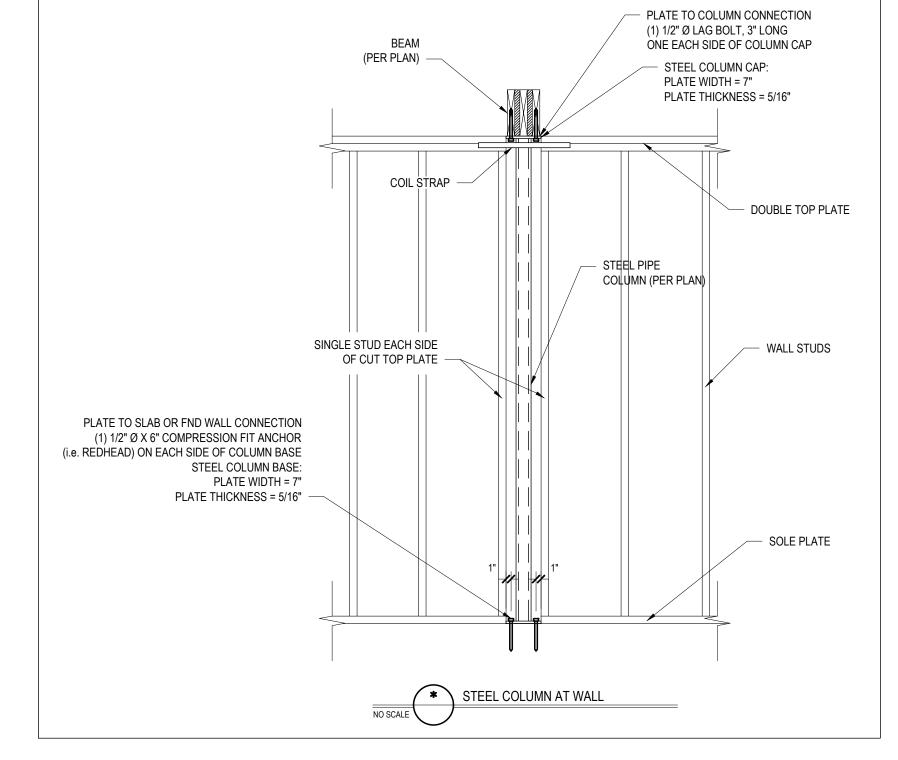




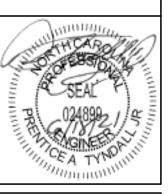


SIMPSON STRONG-TIE	USP STRUCTURAL CONNECTORS		
PRODUCT NUMBER	PRODUCT NUMBER		
\ 35	MPA1		
ABE	PAE		
CBSQ	CBSQ		
CCQ	KCCQ		
CMSTC16	CMSTC16		
CS	RS		
- 11	RT15		
H2.5A	RT7A		
H10	RT16		
HDQ8-SDS3	UPHD8		
HDU2-SDS2.5	PHD2		
HDU5-SDS2.5	PHD5		
HETA	НТА		
HGAM10KTA	HGAM		
HHDQ14-SDS2.5	UPHD14 HTW		
HTS			
HTT	НТТ		
HUS	HUS		
_TA1	LPTA		
_THJA26	HJC26		
_TP4	MP4F		
LUS	JUS		
MAS	FA3		
MSTAM	MSTAM		
PC .	PCM		
PHD-SDS3	PHD		
SSP	RSPT6		
STC	TR1		
STHD	STAD		





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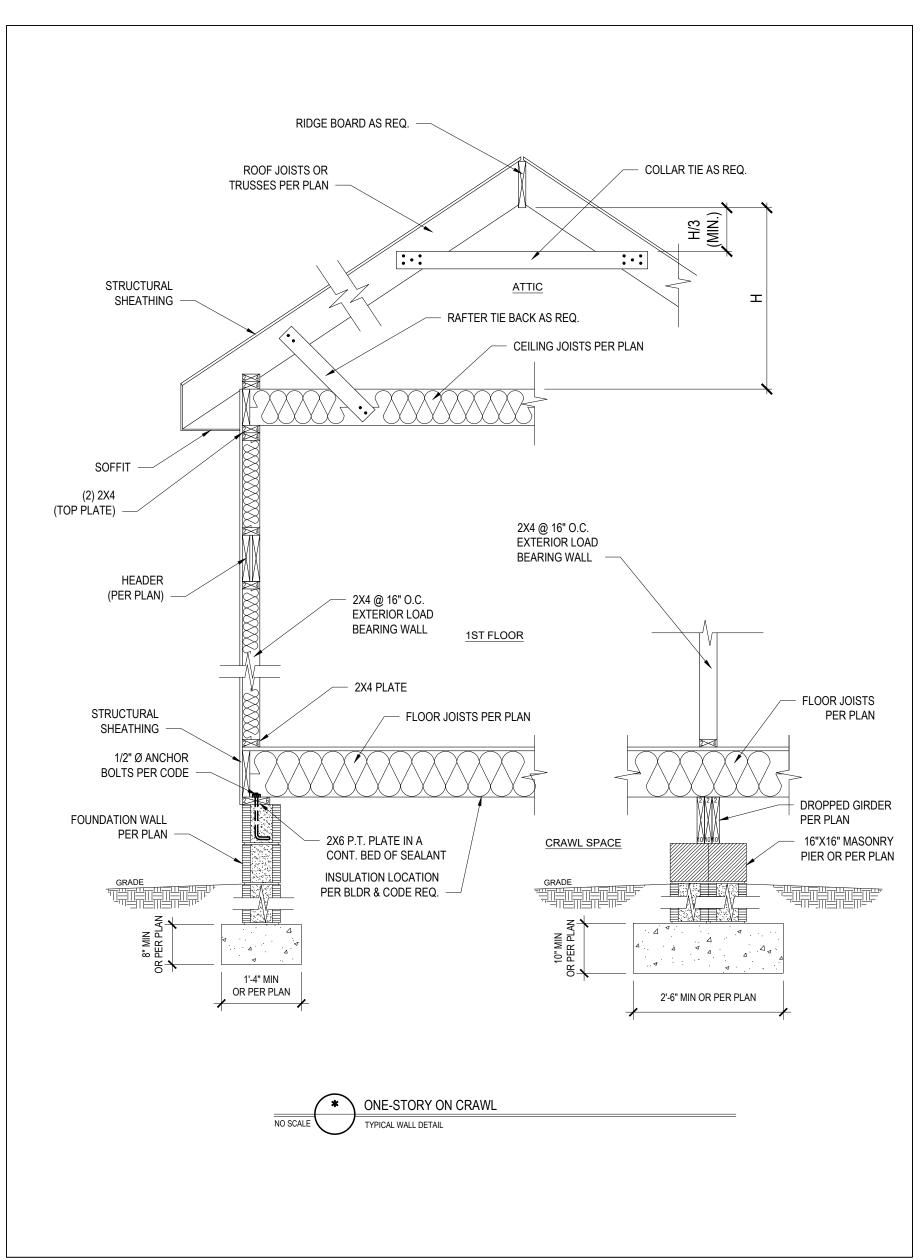


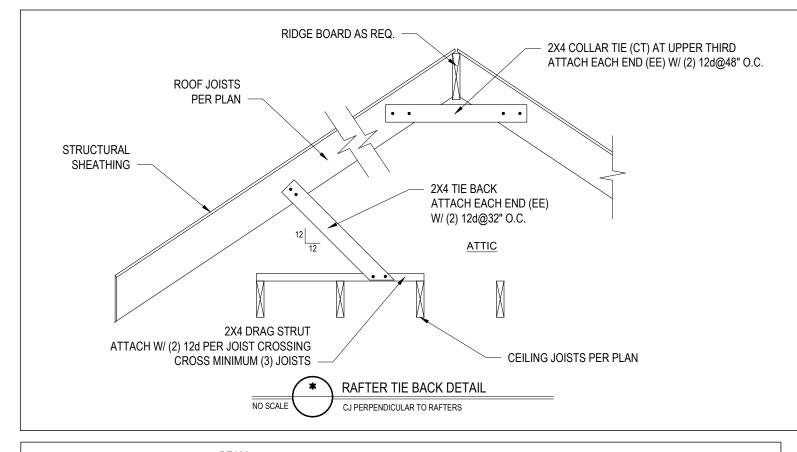
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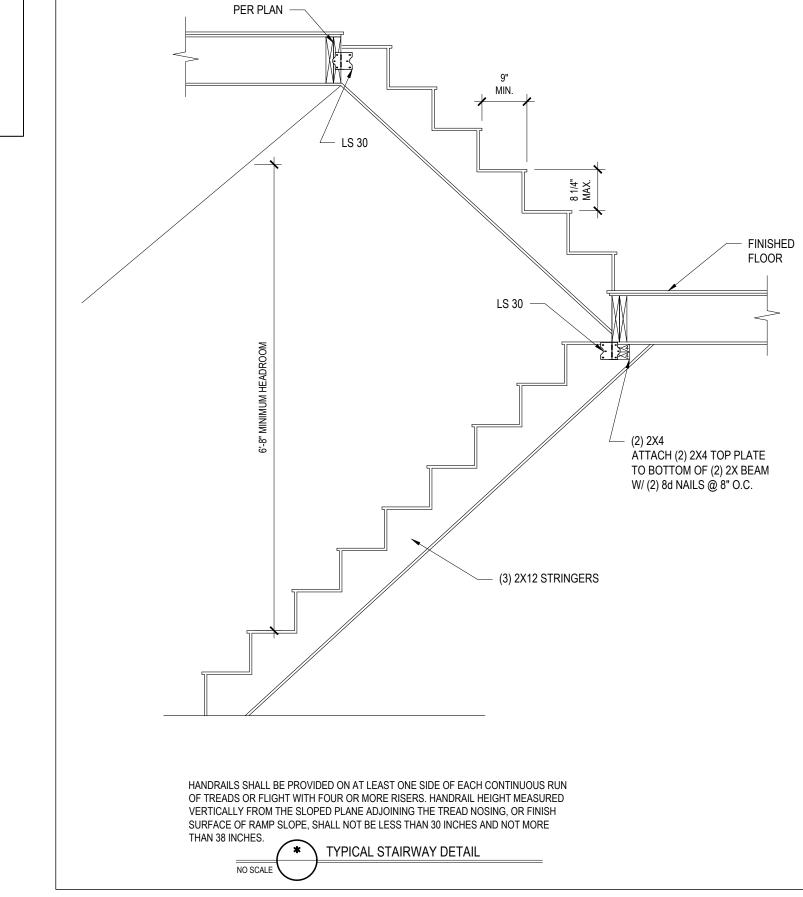
SEE PLAN REVISIONS Date:

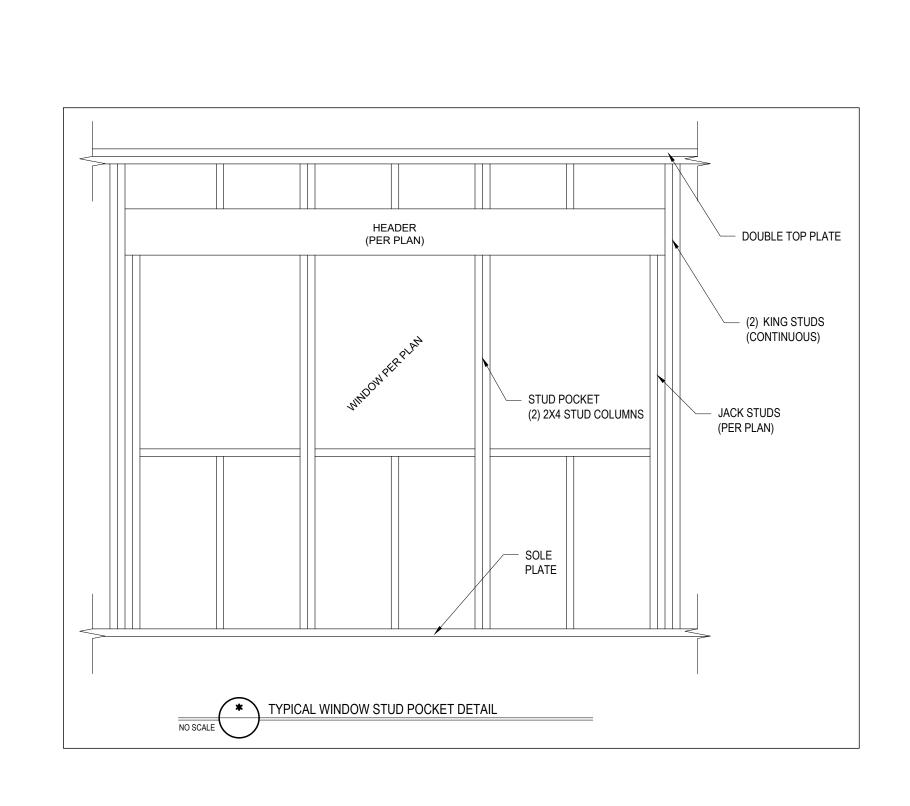
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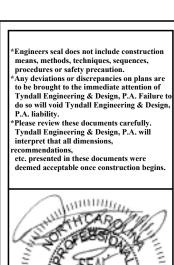
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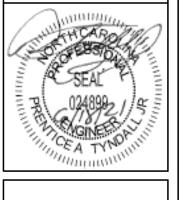












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REVISIONS

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6 of 6