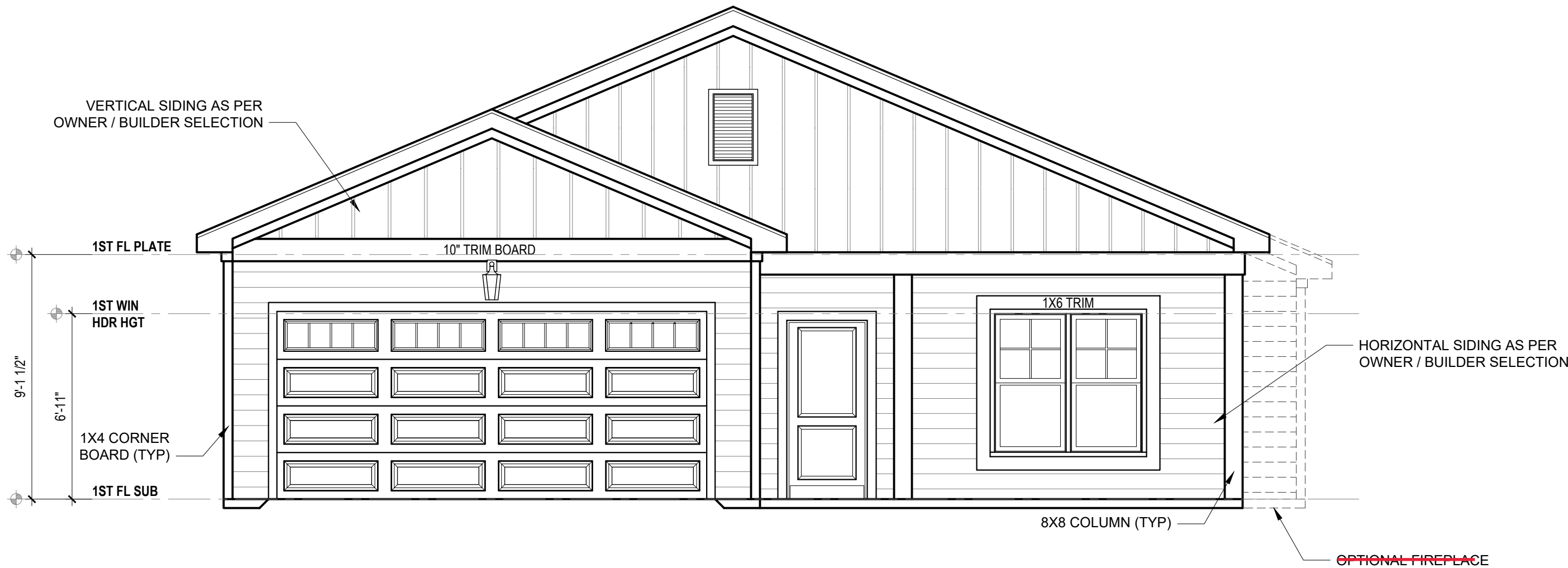
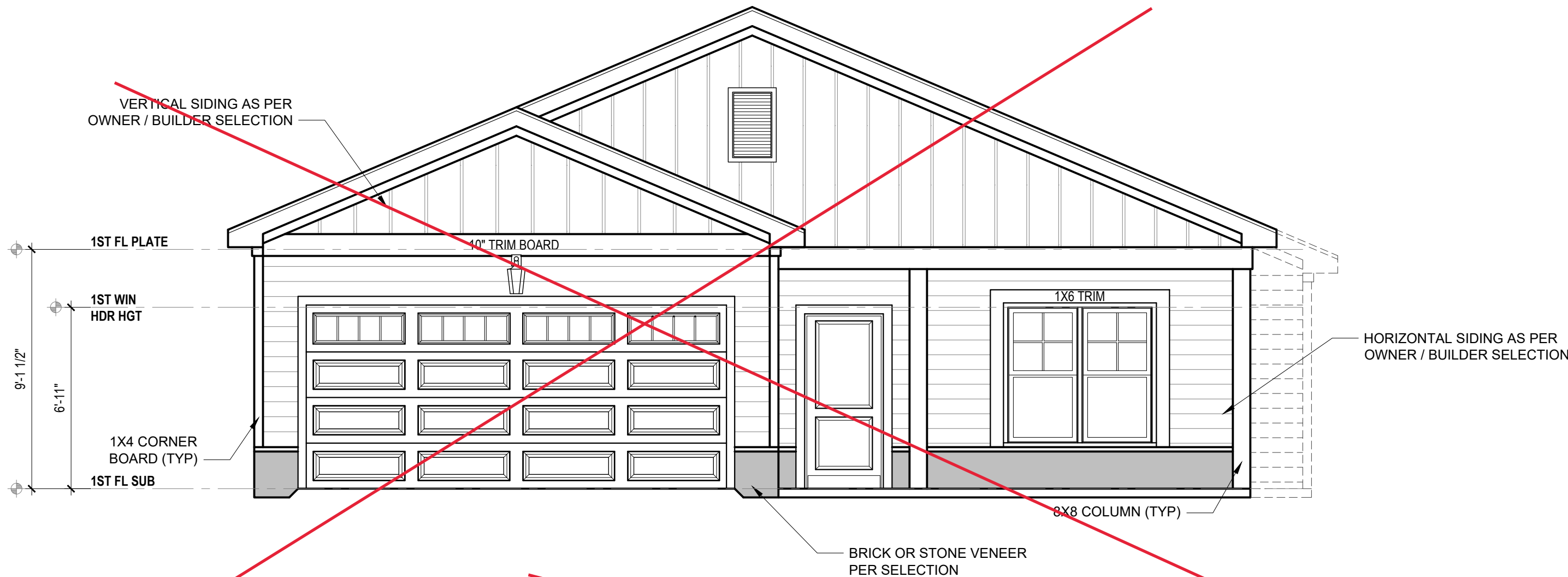


THE HAVILLAND

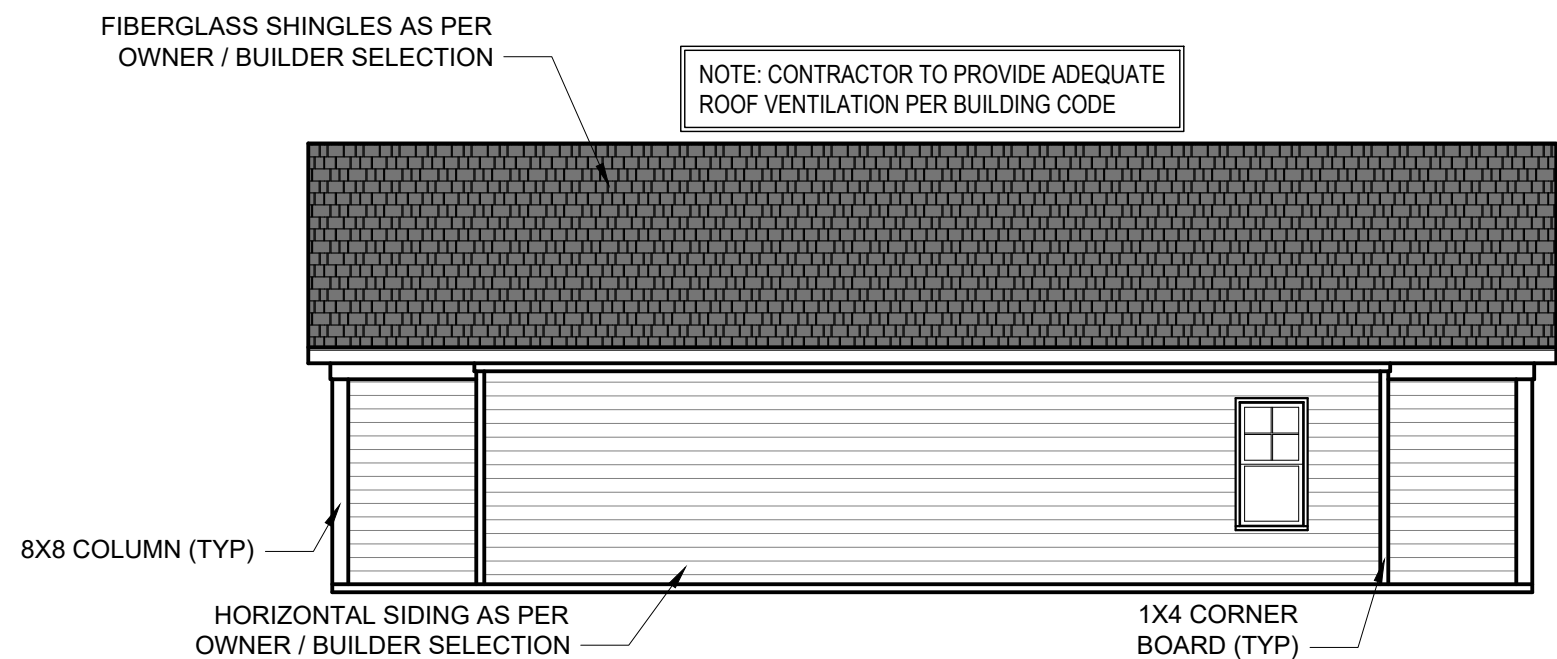
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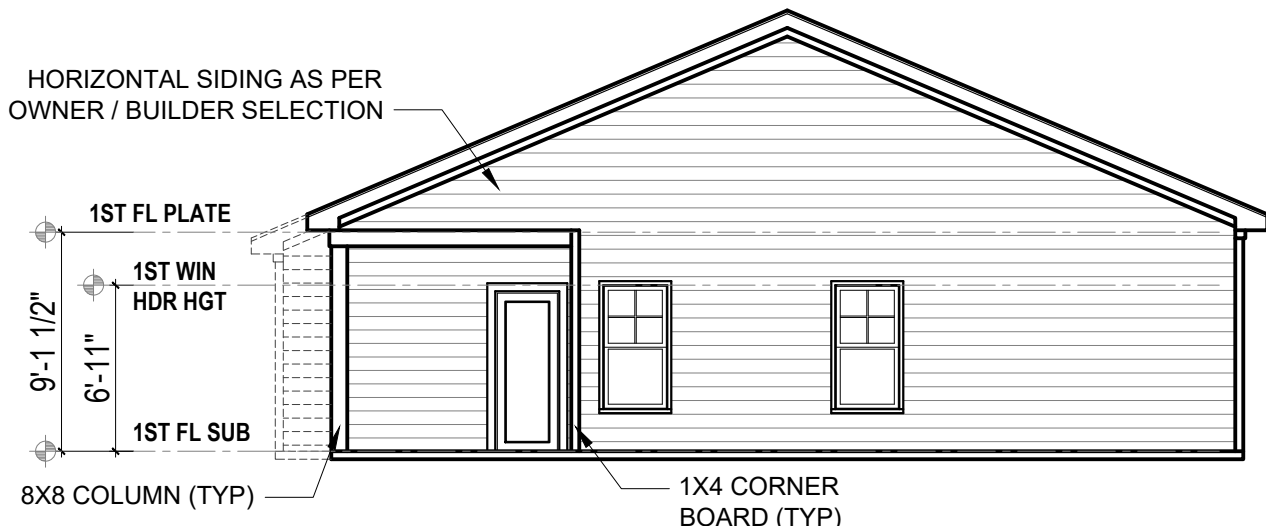
FRONT ELEVATION B
1/4" = 1'-0"



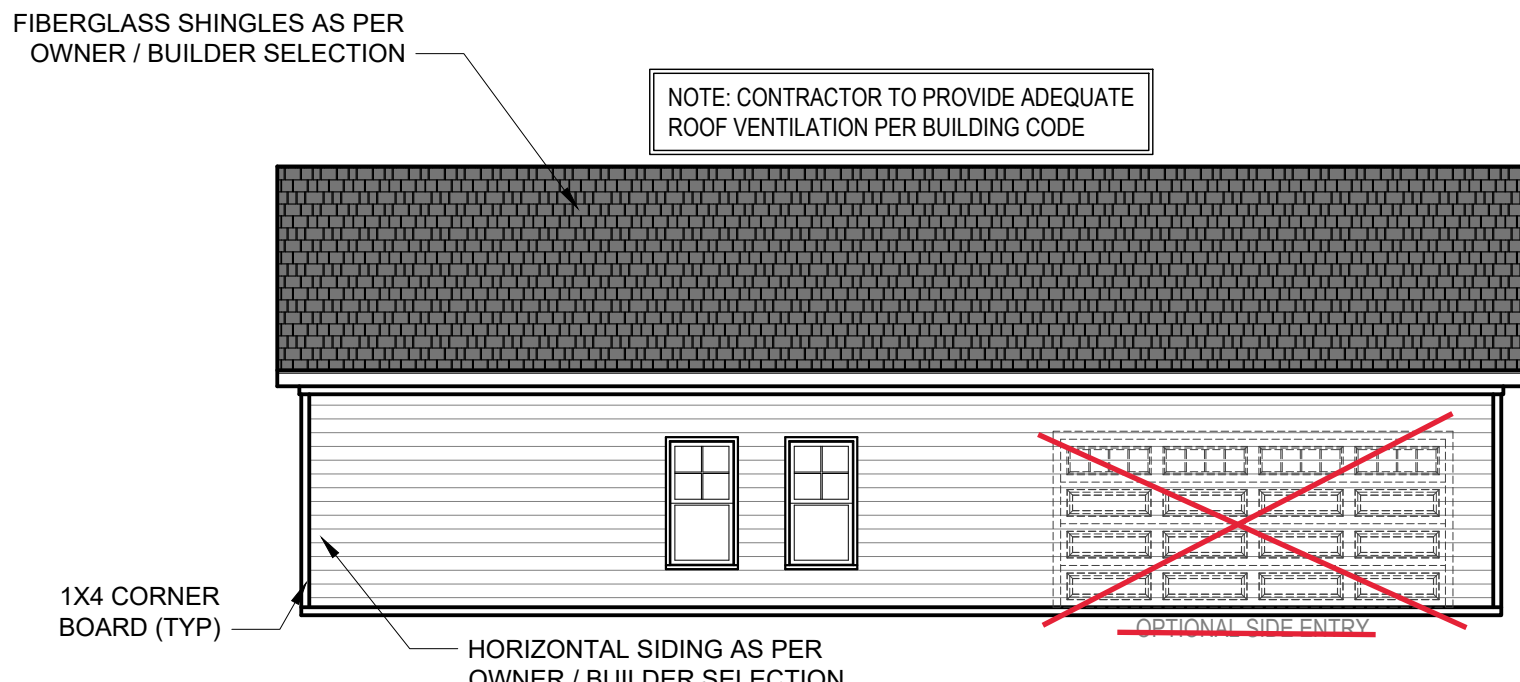
**FRONT ELEVATION B
W/ OPTIONAL VENEER**
1/4" = 1'-0"



RIGHT ELEVATION B
1/8" = 1'-0"



REAR ELEVATION B
1/8" = 1'-0"



LEFT ELEVATION B
1/8" = 1'-0"

2x4 WALLS; 2X4
GARAGE WALLS
& 2X6 PLUMBING
WALLS AS
NEEDED. 8'
CEILINGS

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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.

PROJECT #
DRB2301-0091A
DATE
06/27/2023
DRAWN/DESIGNED BY
NW
CHECKED BY
DRB
SCALE
1/4" = 1'-0"

WEBSITE
www.
drbhomedesign
.com

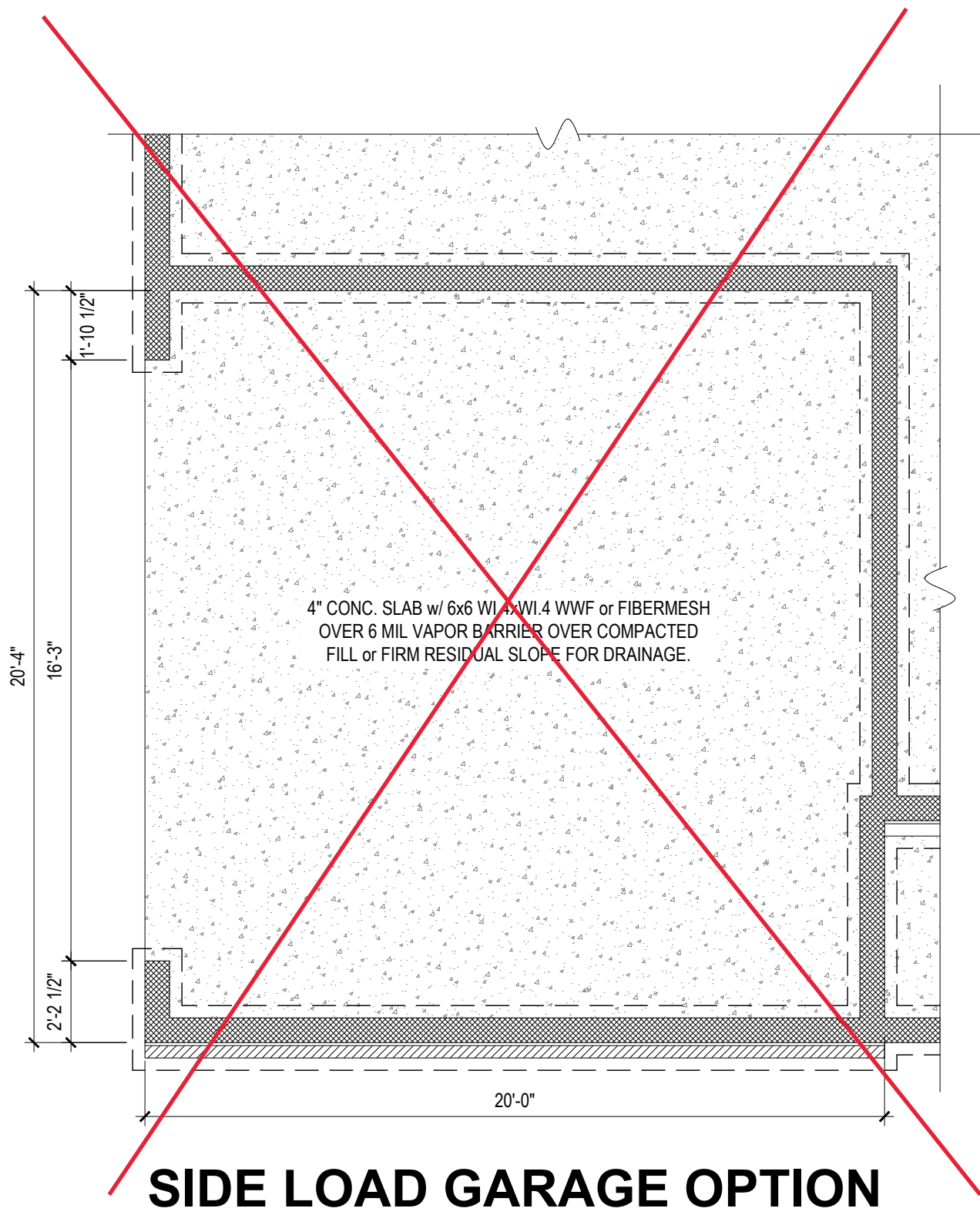
PROJECT NAME
THE
HAVILLAND

drbdesign@drbhomedesign.com 919.631.5979
250 Shipwash Dr Suite 105 Garner, NC 27529

CLIENT NAME
A&G Residential
916 Arsenal Ave. Suite B.
Fayetteville, NC 28305
jenn@agresidentialnc.com
(910) 237-7944

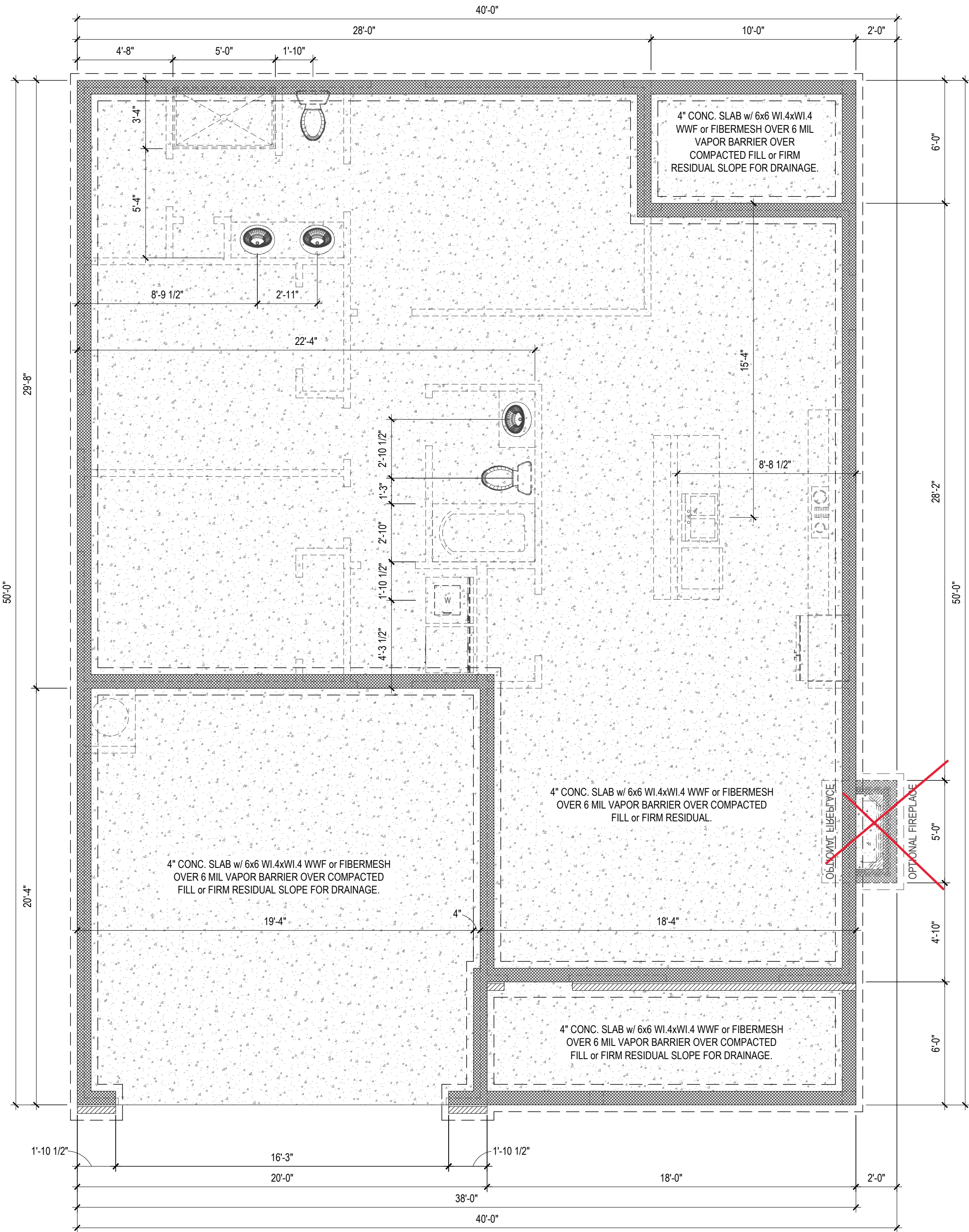
SHEET NAME
ELEVATIONS
SHEET #

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- 12.



2x4 WALLS; 2X4 GARAGE WALLS & 2X6 PLUMBING WALLS AS NEEDED. 8' CEILINGS

PLUMBING PAGE ONLY; NOT FOR FOUNDATION



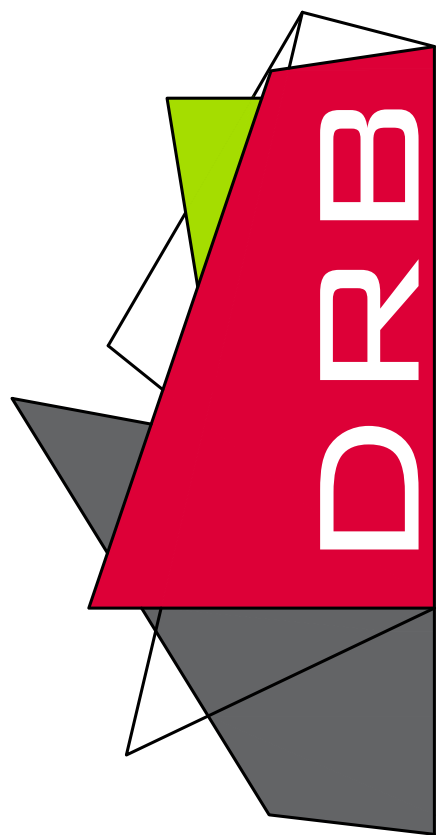
FOUNDATION PLAN
1/4" = 1'-0" STEM WALL

NOTE: SEE STRUCTURAL PLANS FOR ENGINEERING INFORMATION

PROJECT #
DRB2301-0091_D
DATE
01/25/2024
DRAWN/DESIGNED BY
NW
CHECKED BY
DRB
SCALE
1/4" = 1'-0"

WEBSITE
www.
drbhomedesign
.com

PROJECT NAME
THE
HAVILLAND



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SHEET NAME
FOUNDATION

SHEET #

6

of 10

2x4 WALLS; 2X4
GARAGE WALLS
& 2X6 PLUMBING
WALLS AS
NEEDED. 8'
CEILINGS

HEATED SQUARE FOOTAGE	
First Floor	1330
TOTAL HEATED	1330
UNHTD SQUARE FOOTAGE	
Garage	402
Front Porch	108
Rear Porch	60
TOTAL UNHEATED	570
TOTAL SQ FT	1900

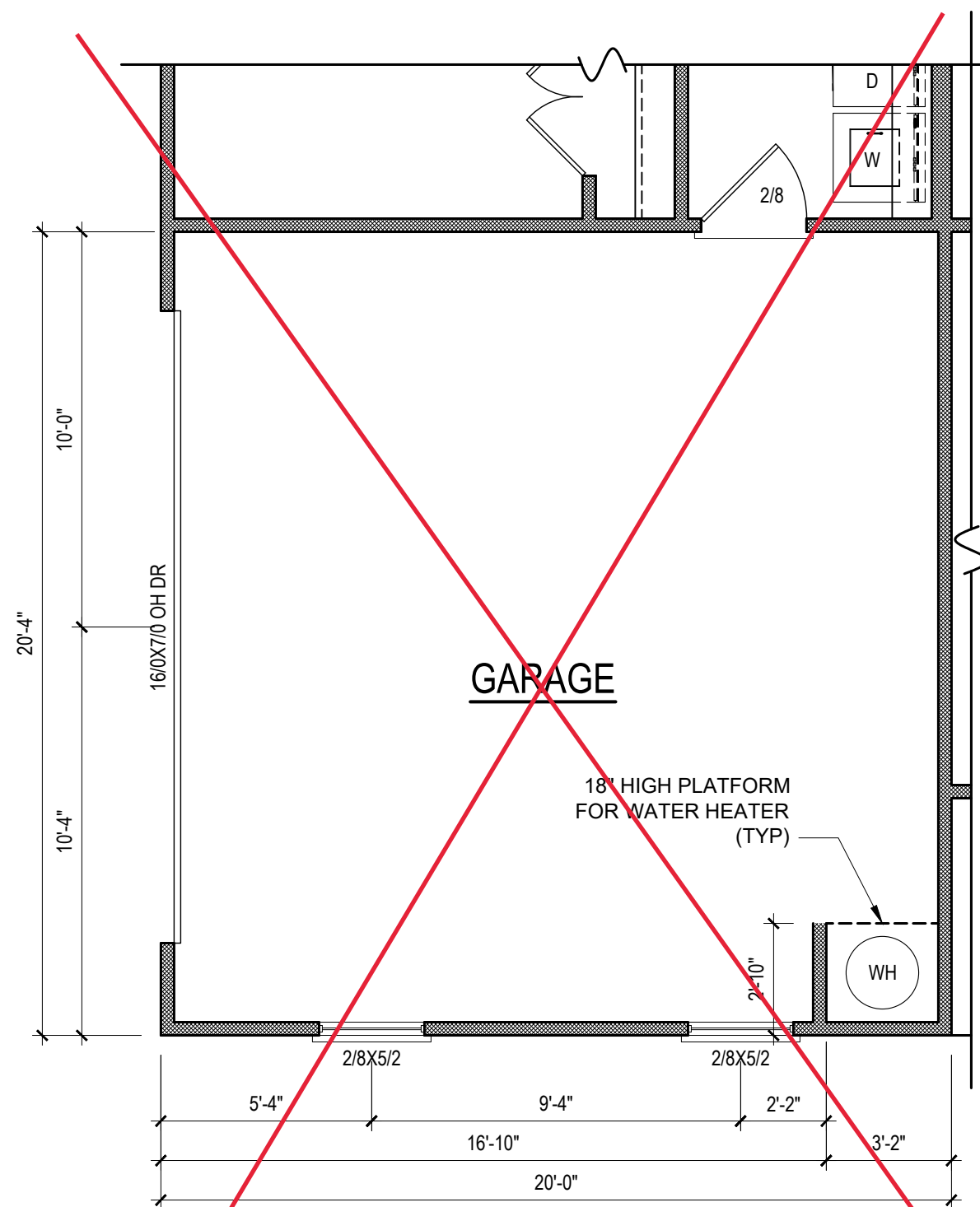
NOTE:
ALL DOORS ARE 6'-8"
TALL UNO

NOTE:
SEE ELEVATIONS FOR
WINDOW HDR HGTS

NOTE:
ALL INTERIOR WALLS
ARE NOMINAL 4" UNO

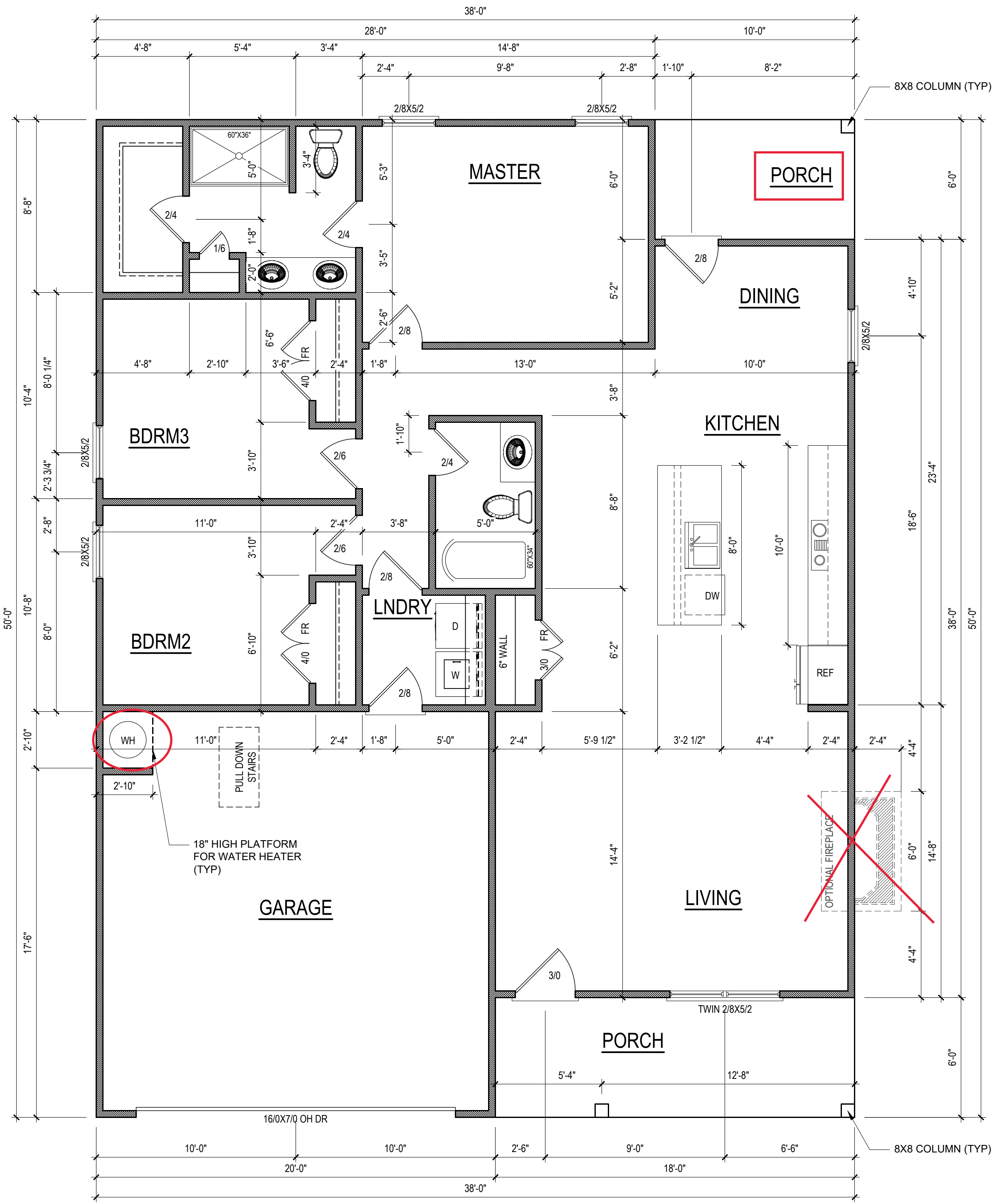
NOTE:
ALL EXTERIOR WALLS
ARE NOMINAL 4" UNO

NOTE:
ALL DIMENSIONS ARE
FRAME TO FRAME



GARAGE OPTION

1/4" = 1'-0"



NOTE: VERIFY WINDOW SILL HEIGHT CLEARANCE
ABOVE TUBS AND COUNTERTOPS TO ALLOW FOR
TRIM AND/OR BACKSPLASH

FIRST FLOOR PLAN

1/4" = 1'-0"

CEILING HGT. = 9'-0"

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- 12.

PROJECT #
DRB2301-0091A
DATE
06/27/2023
DRAWN/DESIGNED BY
NW
CHECKED BY
DRB
SCALE
1/4" = 1'-0"

WEBSITE

www.
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.com

PROJECT NAME

THE
HAVILLAND

drbdesign@drbhomedesign.com 919.631.5979
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SHEET NAME

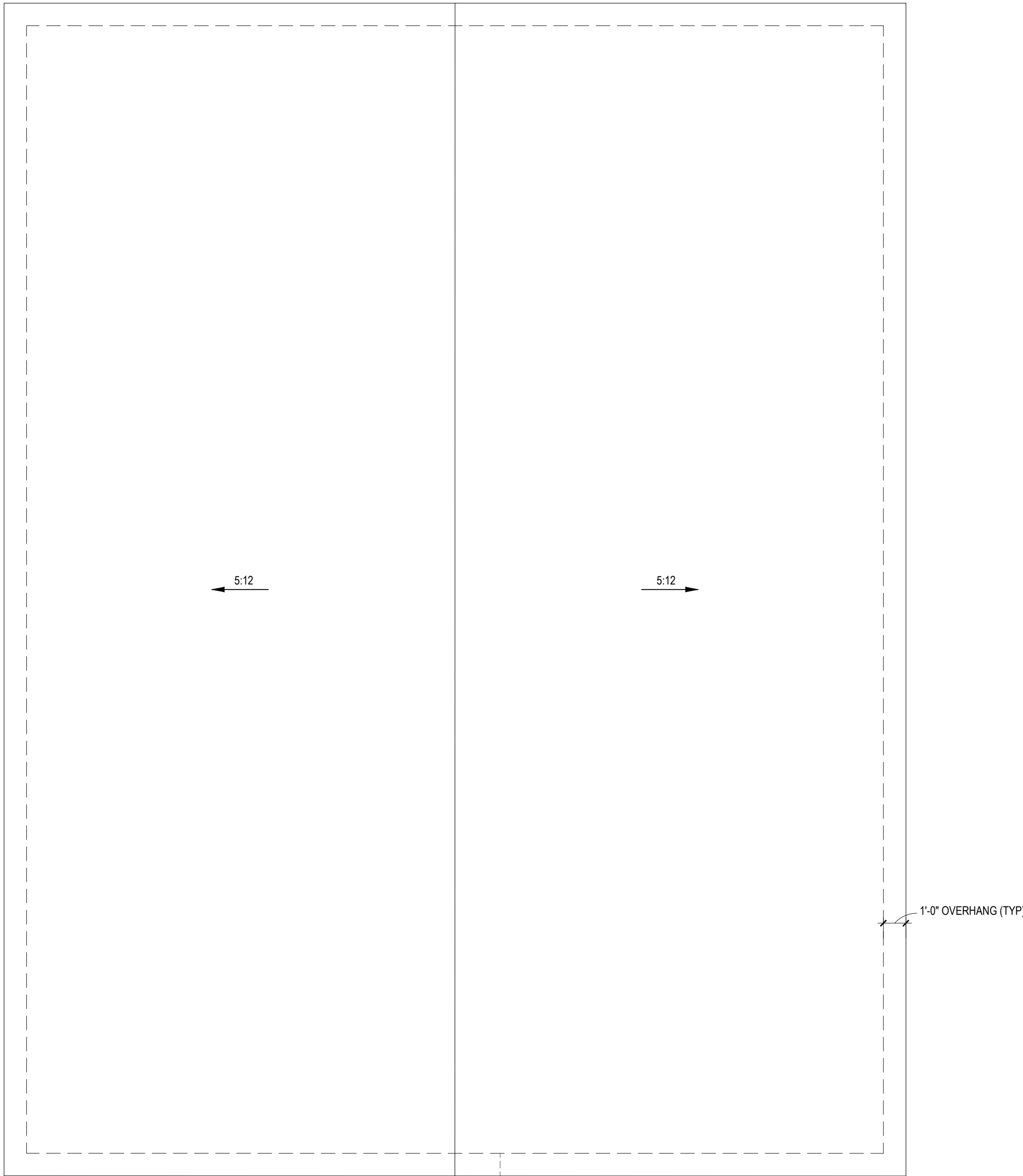
1ST_FLOOR

SHEET #

8

of 10

2x4 WALLS; 2X4 GARAGE WALLS
& 2X6 PLUMBING WALLS AS
NEEDED. 8' CEILINGS

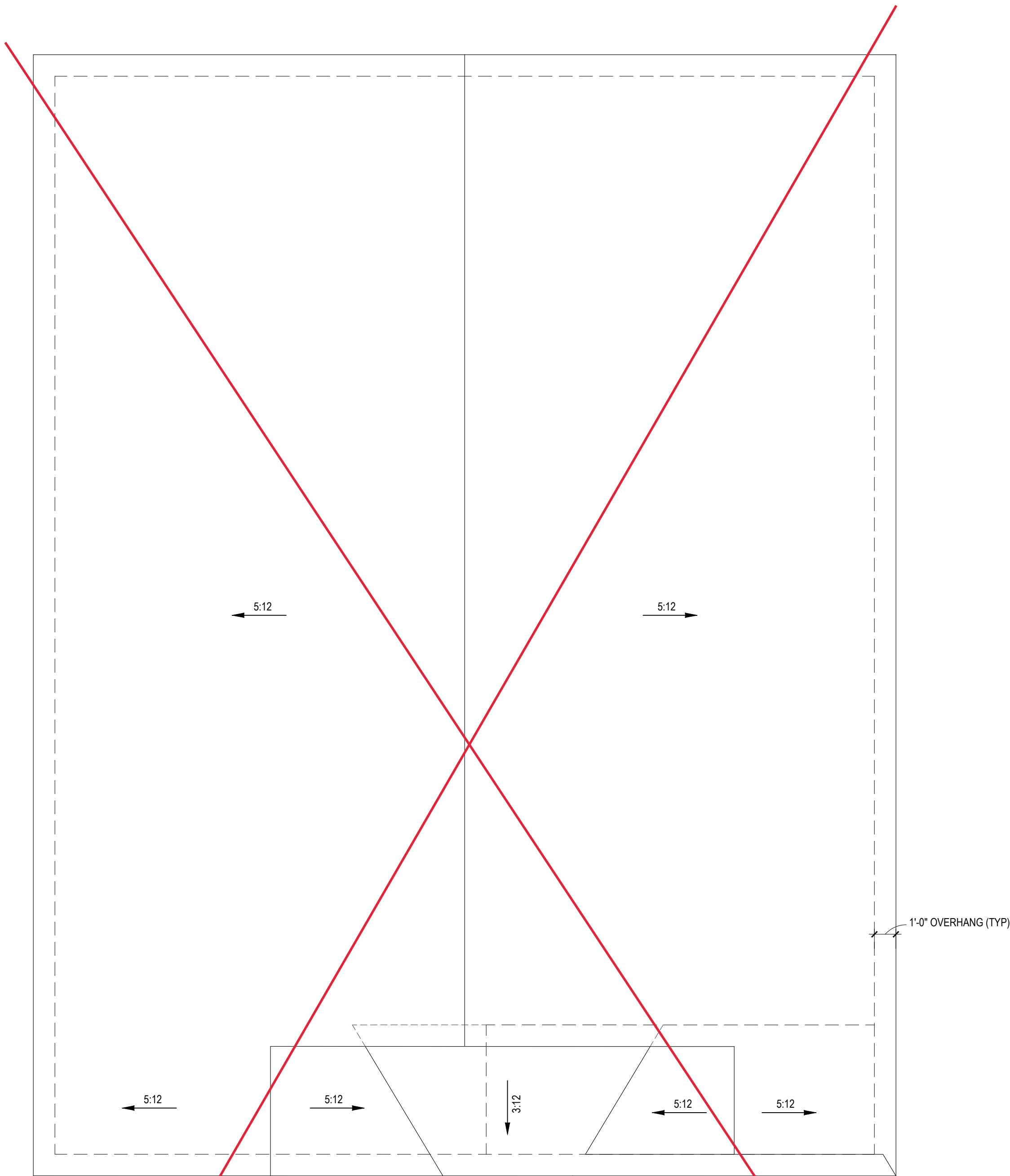


NOTE: SEE STRUCTURAL PLANS FOR
ATTIC VENTILATION CALCULATIONS

NOTE: ANY ROOF PITCH 4:12 OR LESS SHALL BE
PROPERLY WATERPROOFED PER BLDG. CODE

ROOF PLAN - ELEVS A,B
1/4" = 1'-0"

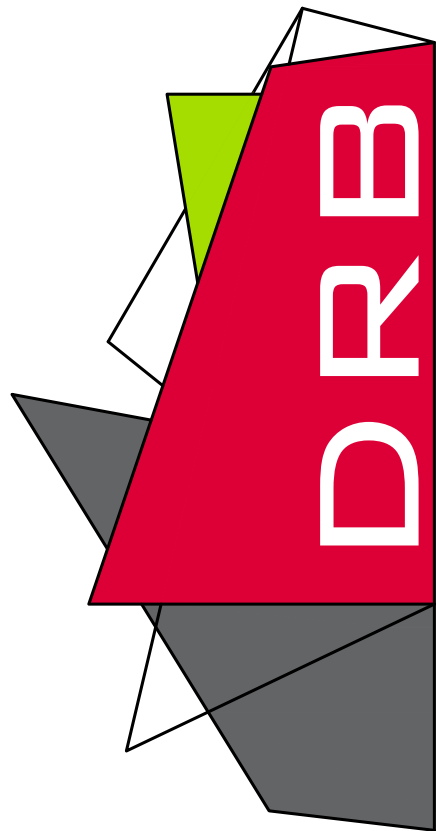
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NOTE: SEE STRUCTURAL PLANS FOR
ATTIC VENTILATION CALCULATIONS

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ROOF PLAN - ELEVS C,D
1/4" = 1'-0"



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SHEET NAME

ROOF

SHEET #

9

of 10

WEBSITE

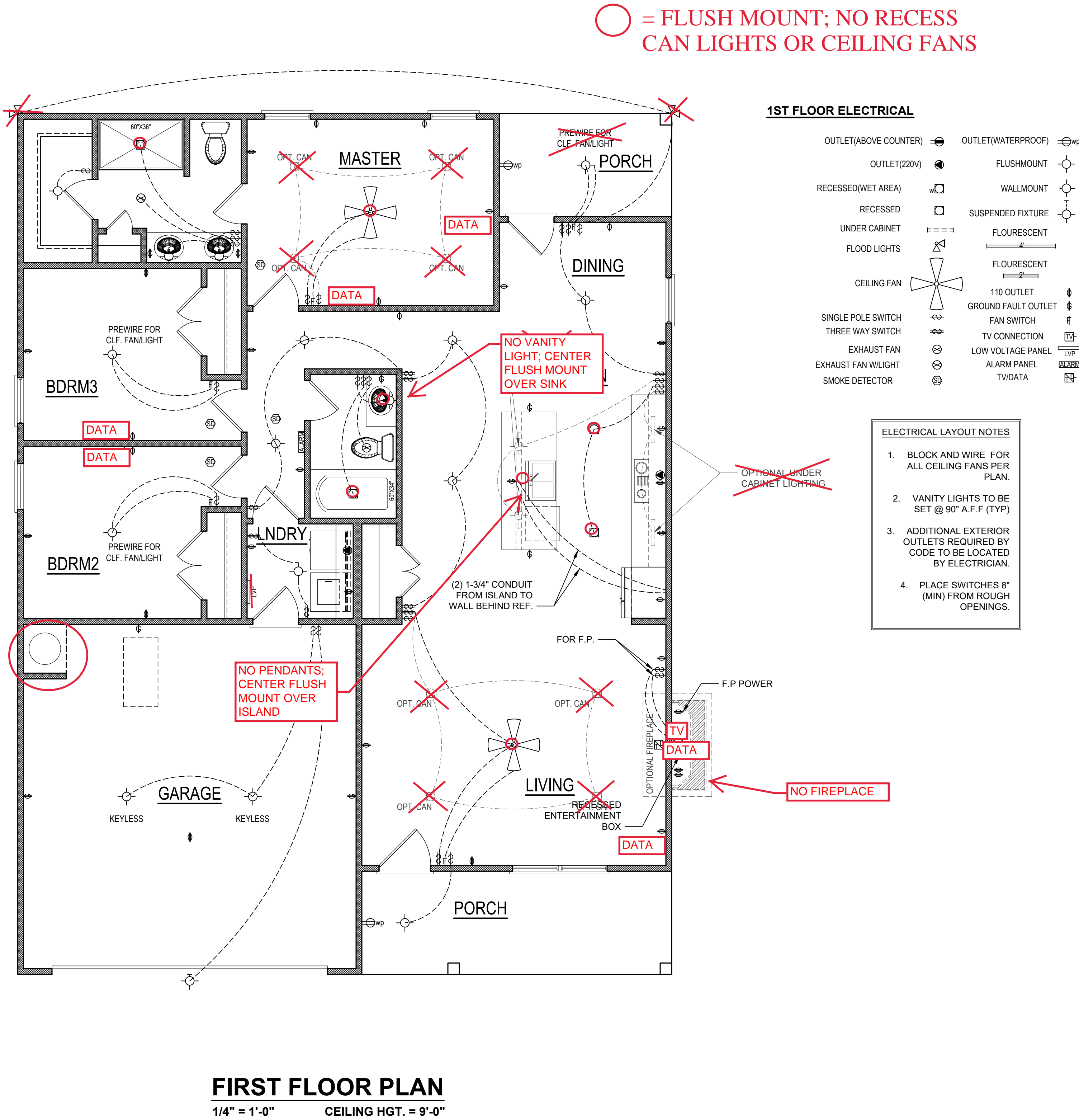
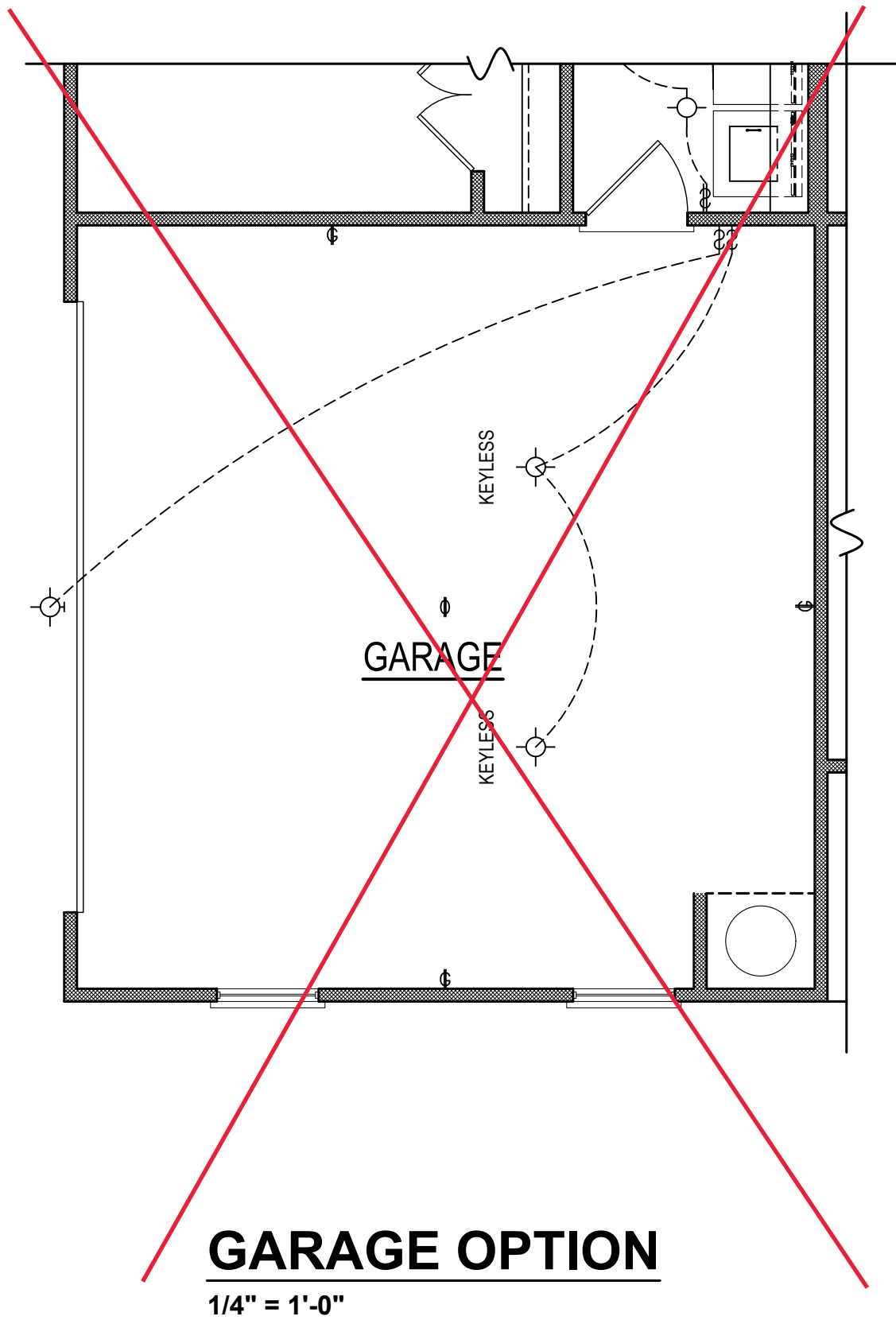
www.
drbhomedesign
.com

PROJECT NAME

THE
HAVILLAND

PROJECT #
DRB2301-0091A
DATE
06/27/2023
DRAWN/DESIGNED BY
NW
CHECKED BY
DRB
SCALE
1/4" = 1'-0"

2x4 WALLS; 2X4
GARAGE WALLS
& 2X6 PLUMBING
WALLS AS
NEEDED. 8'
CEILINGS



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DRB2301-0091A
DATE
06/27/2023
DRAWN/DESIGNED BY
NW
CHECKED BY
DRB
SCALE
1/4" = 1'-0"

WEBSITE
www.
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PROJECT NAME
THE
HAVILLAND

DRB
DESIGN
drbdesign@drbhomedesign.com 919.631.5979
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SHEET NAME
ELECTRICAL
SHEET #

DESIGN LOADS				
	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			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	10	L/240	L/180
WIND LOAD		BASED ON 120 MPH (EXPOSURE B)		
SEISMIC		BASED ON SEISMIC ZONES A, B & C		

2X4 WALLS; 2X4
GARAGE WALLS &
2X6 PLUMBING
WALLS AS NEEDED.
8' CEILINGS



- ## STRUCTURAL SHEATHING NOTES

- 1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- 2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NRCR.
- 3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3, REFERRING 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 NRCR.
- 4) INTERIOR BRACED WALL PANELS (BWPP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
 - 1) 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE W/ 54 COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 8" O.C. AT INTERMEDIATE SUPPORTS.
 - 3) 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 (BWPP) 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 7" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
- 7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
 - 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
 - 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT.
 - 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 FLOORING BELOW.
- ⑤ MINIMUM 800# HOLD-DOWN DEVICE

<p>A&G RESIDENTIAL</p>	<p>THE HAVILLAND GARAGE LEFT</p>
-----------------------------------	---

1ST FLOOR HEADER
1ST FL CEILING FRMG

Project #:
DRB2301-0091A

Date:
7/6/2023

Engineered By:
HJS

DWG. Checked By:
PTII

Scale:
SEE PLAN

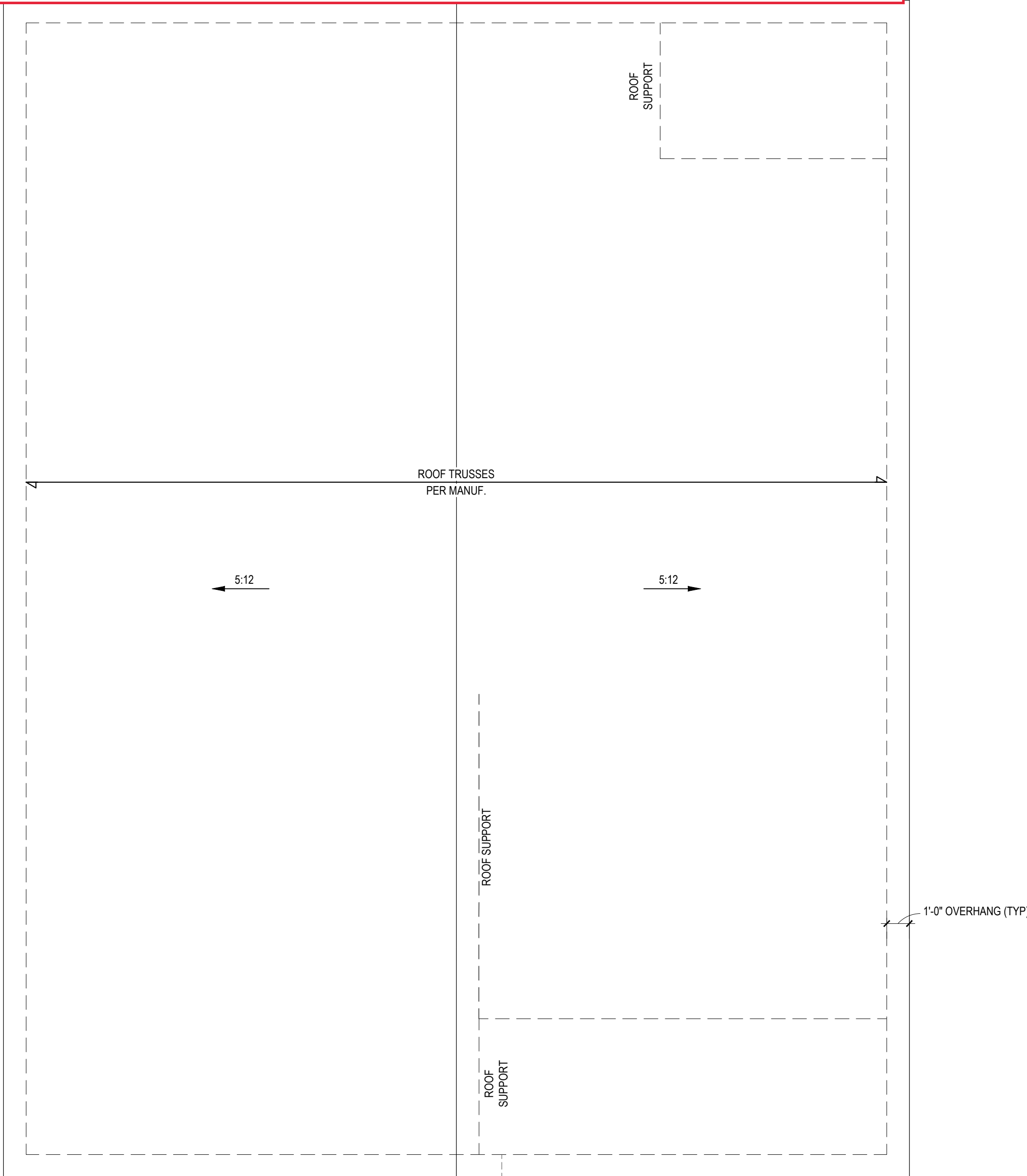
REVISIONS		
No.	Date:	Remarks
1		
2		
3		
4		

Sheet Number

S2

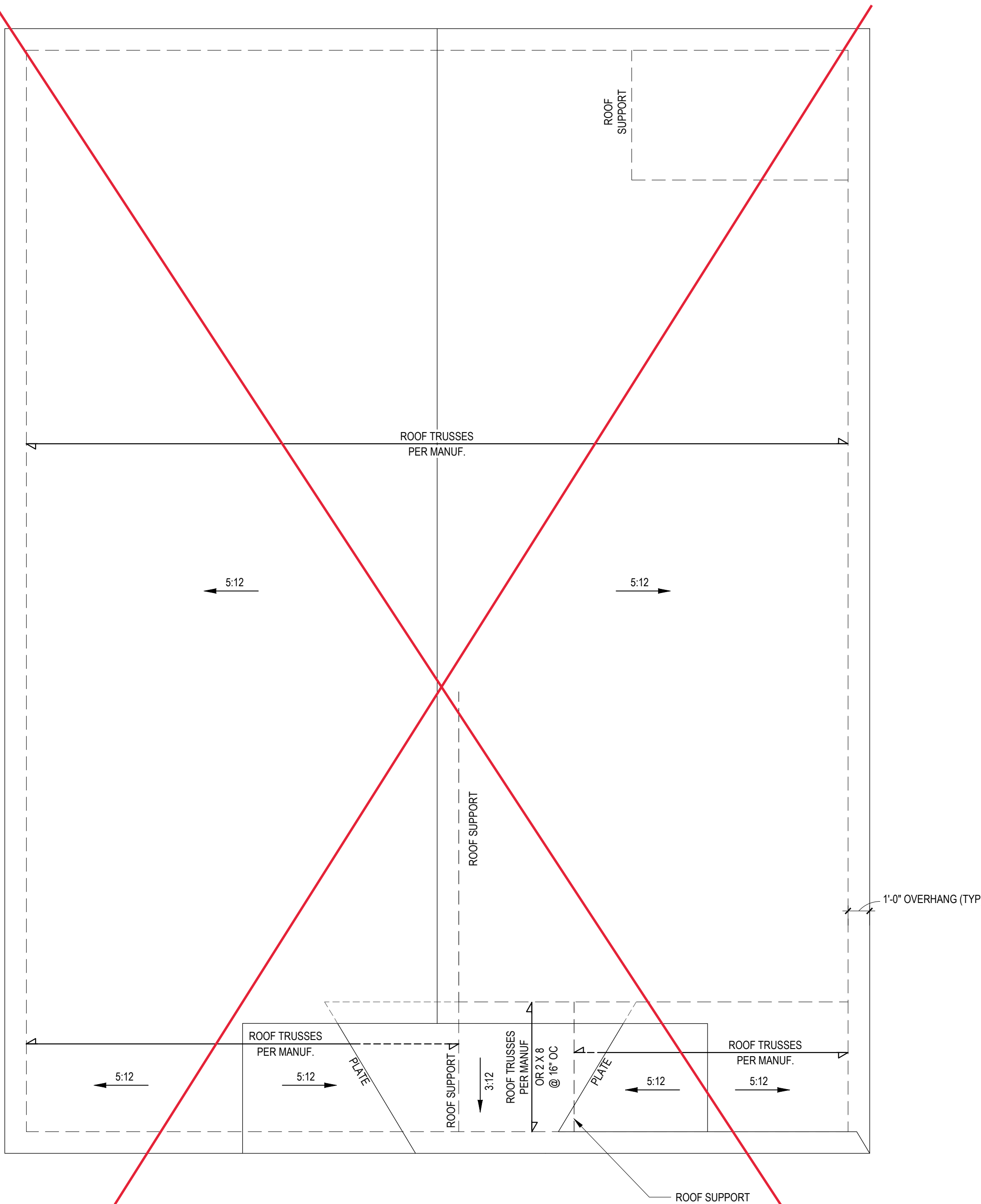
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2X4 WALLS; 2X4 GARAGE
WALLS & 2X6 PLUMBING
WALLS AS NEEDED. 8'
CEILINGS



ROOF PLAN - ELEVS ~~A,B~~

1/4" = 1'-0"



ROOF PLAN - ELEVS C,D

1/4" = 1'-0"

1900 SQ. FT. OF ATTIC / 300 = 7 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 BY EAVE VENTS.
- 2) CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

NO SCALE  ATTIC VENTILATION CALCULATION

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



Client: A&G RESIDENTIAL
Plan: THE HAVILLAND GARAGE LEFT

ROOF PLAN

Project #: DRB2301-0091A
Date: 7/6/2023
Engineered By: HJS
DWG. Checked By: PTII
Scale: SEE PLAN

REVISIONS		
No.	Date:	Remarks
△		
△		
△		
△		

Sheet Number
S3
3 of 5

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 R602.3 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) (U.N.O.)
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 = 1.9M PSI (U.N.O.)
- 7) ALL LOAD BEARING EXTERIOR HEADERS SHALL BE AT (2) 2x10 (U.N.O.) & (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: 12"x9" 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 1/12
36.0 LBS/SQFT FOR ROOF PITCHES 1/12 TO 6/12
18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12
*MEAN ROOF HEIGHT 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 NRC.
- 16) UPLIFT LOADS GREATER THAN 50#F 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 50#F UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- 20) MAXIMUM MASONRY PER 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.

DEFINITIONS FOR COMMON ABBREVIATIONS

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

1) MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

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

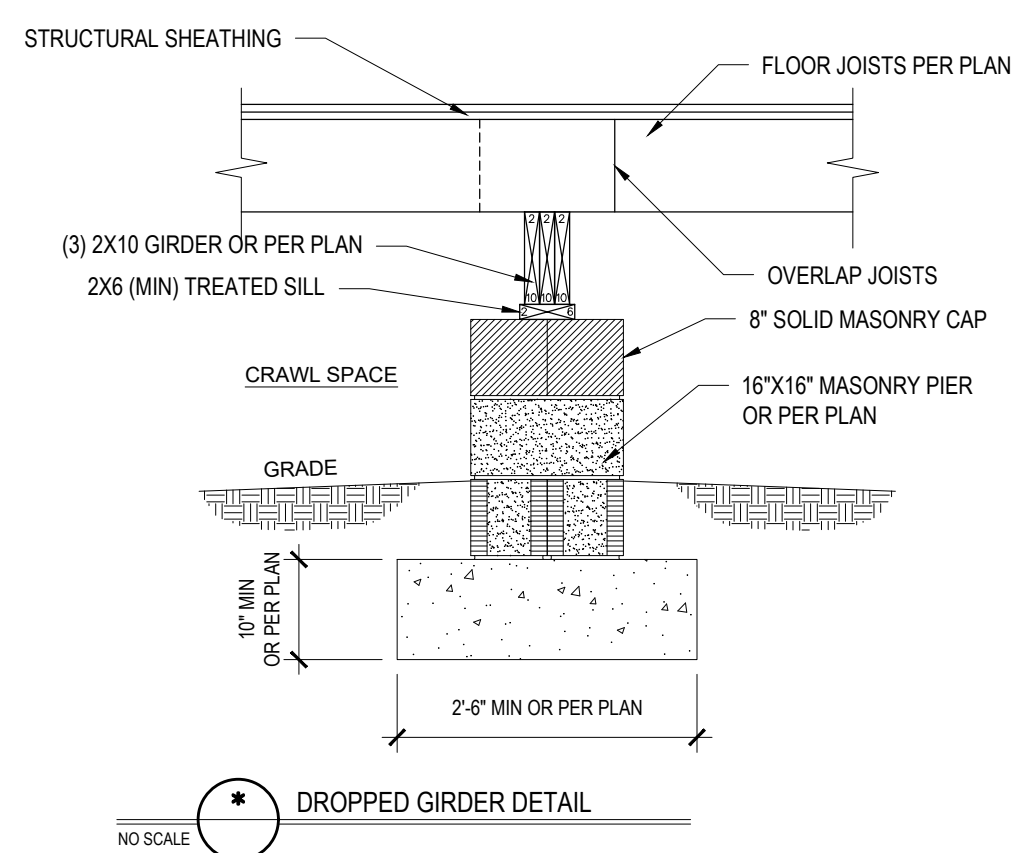
- * THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET WHICH MAY BE LOCATED AT DIFFERENT LEVELS.
- ** FROM TOP OF FOOTING TO BOTTOM OF GIRDER.
- *** DECKS WITH POST HEIGHTS OVER 20'-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER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

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

- 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 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED TO THE POST AND GIRDER WITH ONE 5/8" HOT DIPPED GALVANIZED 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.

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



DROPPED GIRDER DETAIL

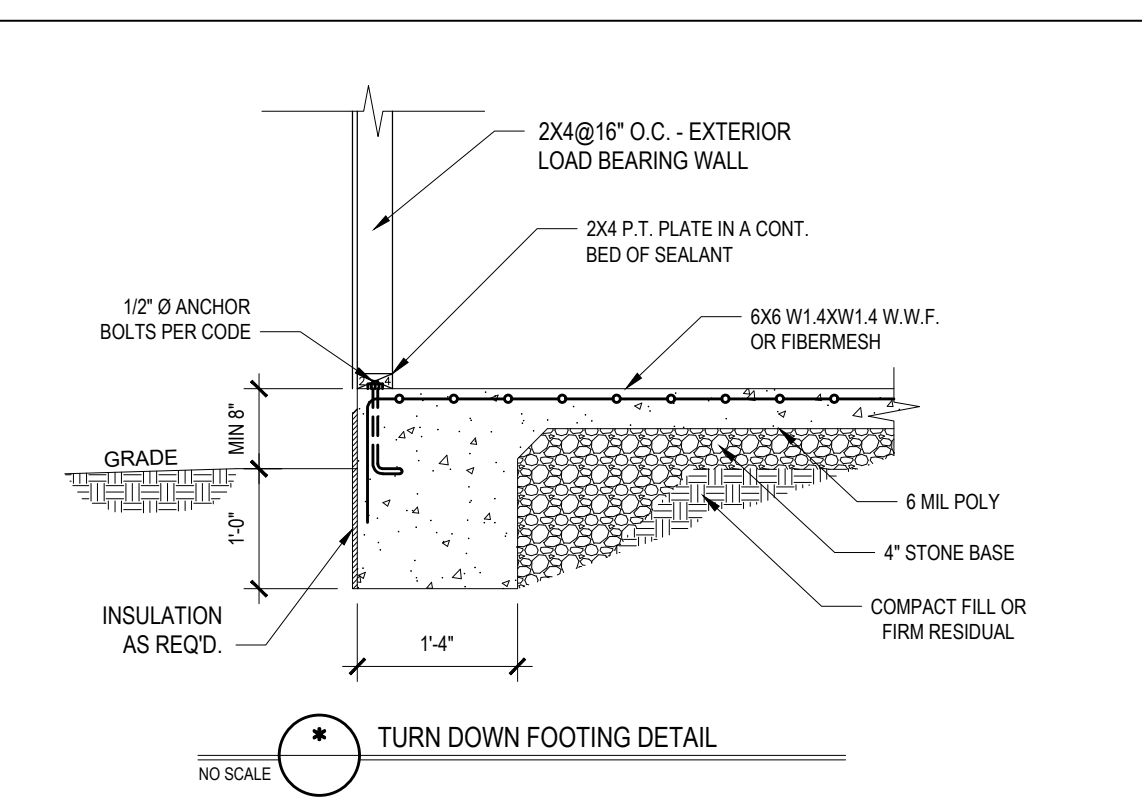
NO SCALE

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

TABLE N1102.1 CLIMATE ZONES 3-5

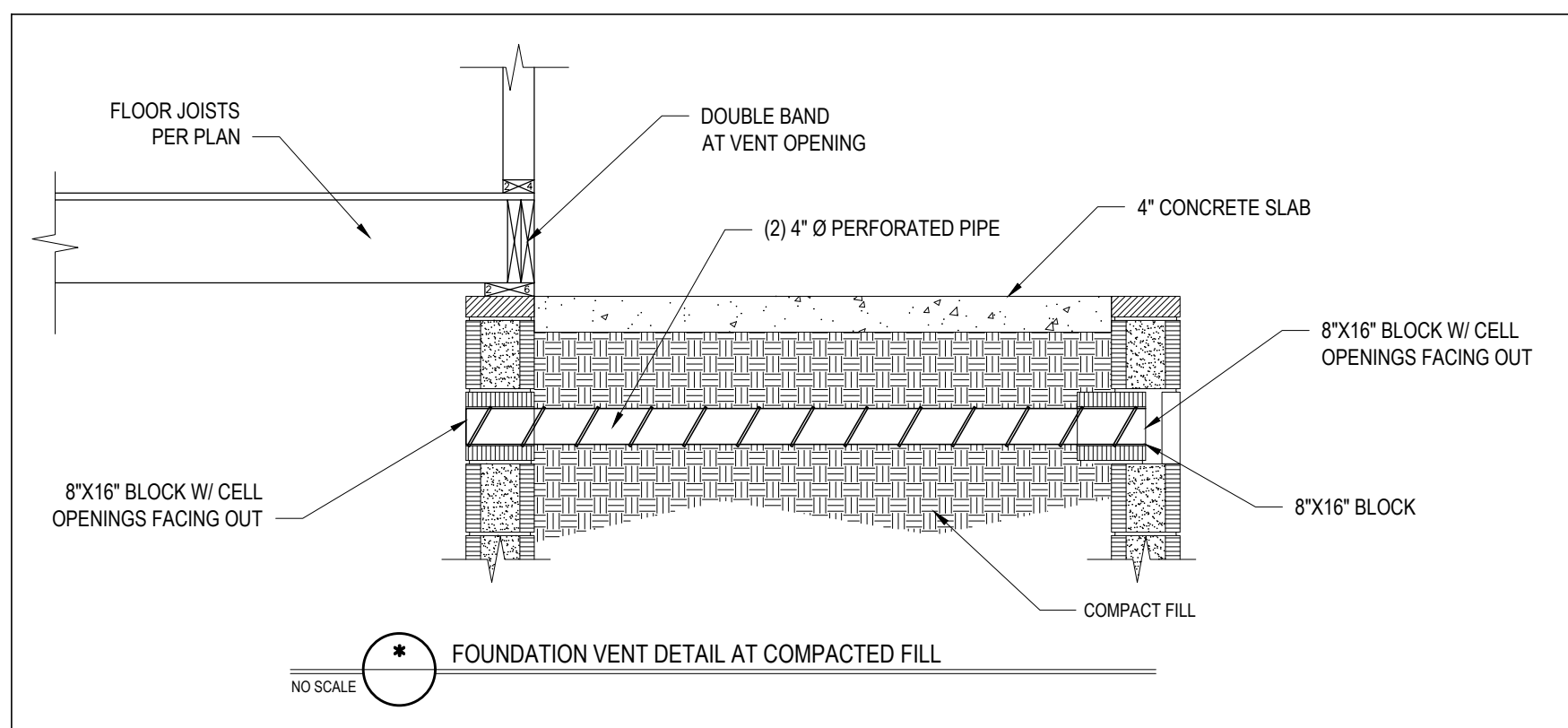
NO SCALE

- a. R-VALUES ARE MINIMUM. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.
- b. THE FENESTRATION U-FACTOR COLUMN EXCLUDED SKYLIGHTS, THE SQUARE-HEAT GAIN COEFFICIENT (SHGC) COLUMN APPLIES TO ALL GLAZED FENESTRATION.
- c. "30/10" MEANS R-10 CONTINUOUS INSULATION 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 SLAB INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR A MINIMUM OF 24" BELOW GRADE. MINIMUM R-VALUE FOR CRAWLING SPACE INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL, OR 24" MIN ABOVE GRADE. R-10 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.
- e. DELETED.
- f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARMER LOCATIONS AS DEFINED BY FIGURE N1102.2 AND TABLE N1102.7.
- g. OR INSULATION SUFFICIENT TO FILL THE FINISHED CAVITY. R-10 MINIMUM.
- h. THE FIRST VALUE IS CAVITY INSULATION. THE SECOND VALUE IS CONTINUOUS INSULATION. NO "13+0" MEANS R-13 CAVITY INSULATION PLUS R-0 INSULATED SHEATHING. "13+0" MEANS R-13 CAVITY INSULATION PLUS R-3 INSULATED SHEATHING. IF STRUCTURAL SHEATHING COVERS 20% OR LESS OF THE EXTERIOR, INSULATED SHEATHING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 20% PERCENT OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2. "13 + 2+0" MEANS R-13 CAVITY INSULATION PLUS R-2+0 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-30 SHALL BE REQUIRED TO SATISFY THE CEILING INSULATION REQUIREMENT. THE CEILING INSULATION SHALL BE INSULATED OVER THE WALL TOP PLATE AT THE LEAVES. OTHERWISE R-30 INSULATION IS REQUIRED WHERE NEGLIGIBLE CLEARANCE EXISTS OR INSULATION WOULD EXTEND TO EITHER THE INSULATION BATTLE OR WITHIN 1/8" OF THE ROOF EDGE.
- m. LABEL VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OF THE ROOF. THERE THE INSULATION MUST FILL THE SPACE UP TO THE AIR BATTLE.
- n. IF PERFORMED AS BATTLE COMPRESSED AND NOTED IN A DRAWING, 1 + 4" FINISHING CAVITY IS DEEMED TO COMPLY. PERFORM AS BATTLE COMPRESSED AND NOTED IN A DRAWING IS NOT PERMITTED TO COMPLY.
- o. BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.



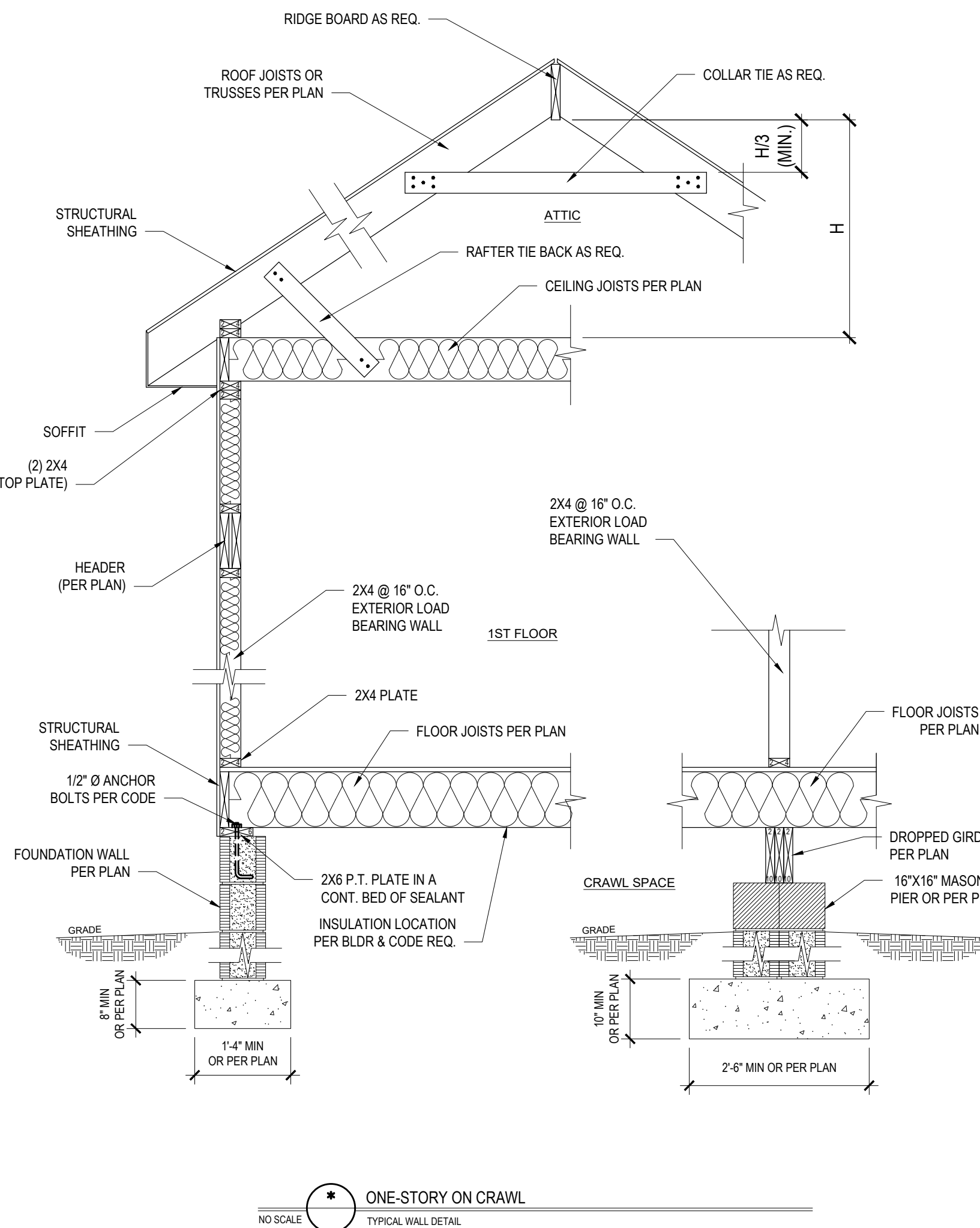
TURN DOWN FOOTING DETAIL

NO SCALE



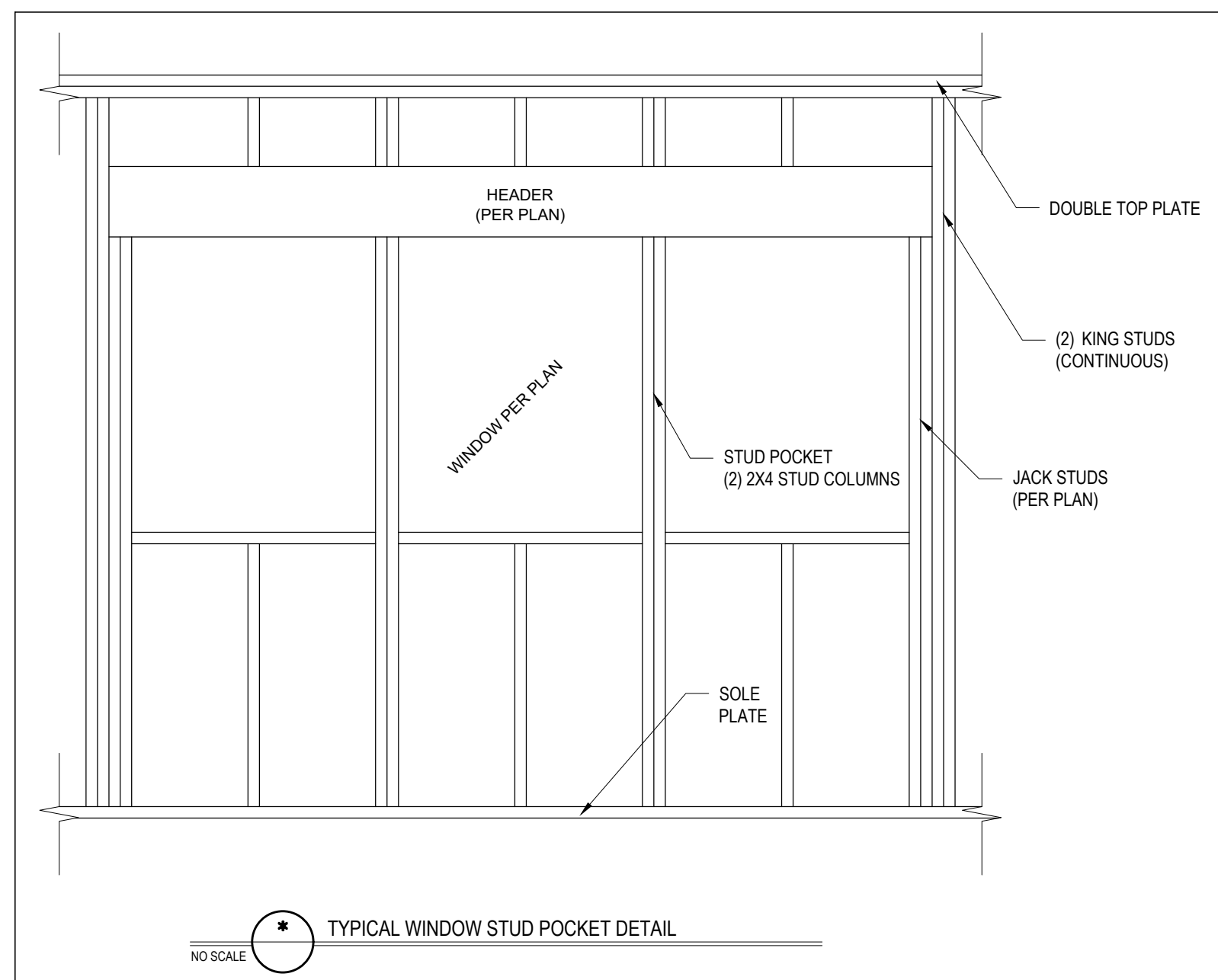
FOUNDATION VENT DETAIL AT COMPACTED FILL

NO SCALE



ONE-STORY ON CRAWL

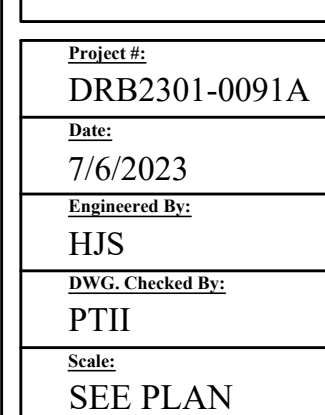
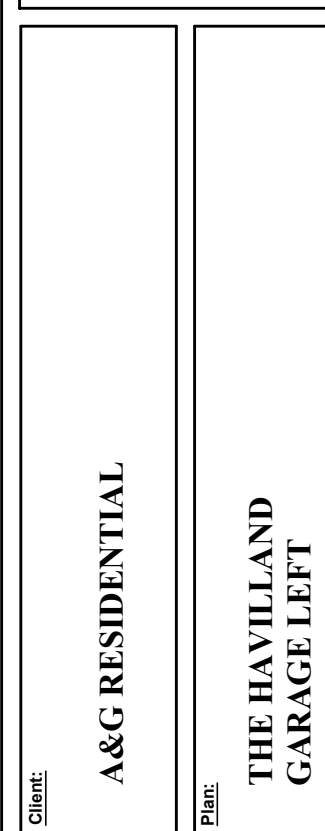
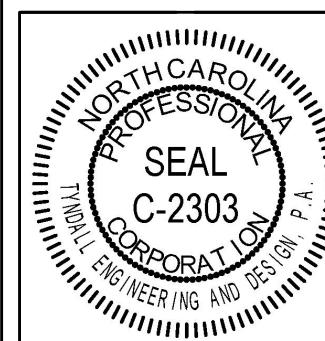
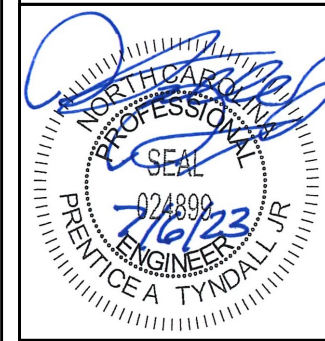
TYPICAL WALL DETAIL



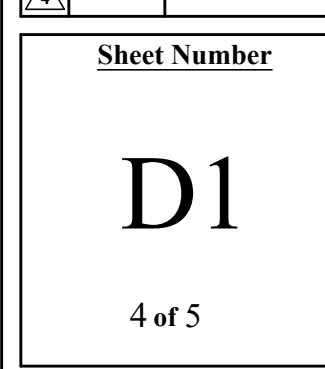
TYPICAL WINDOW STUD POCKET DETAIL

NO SCALE

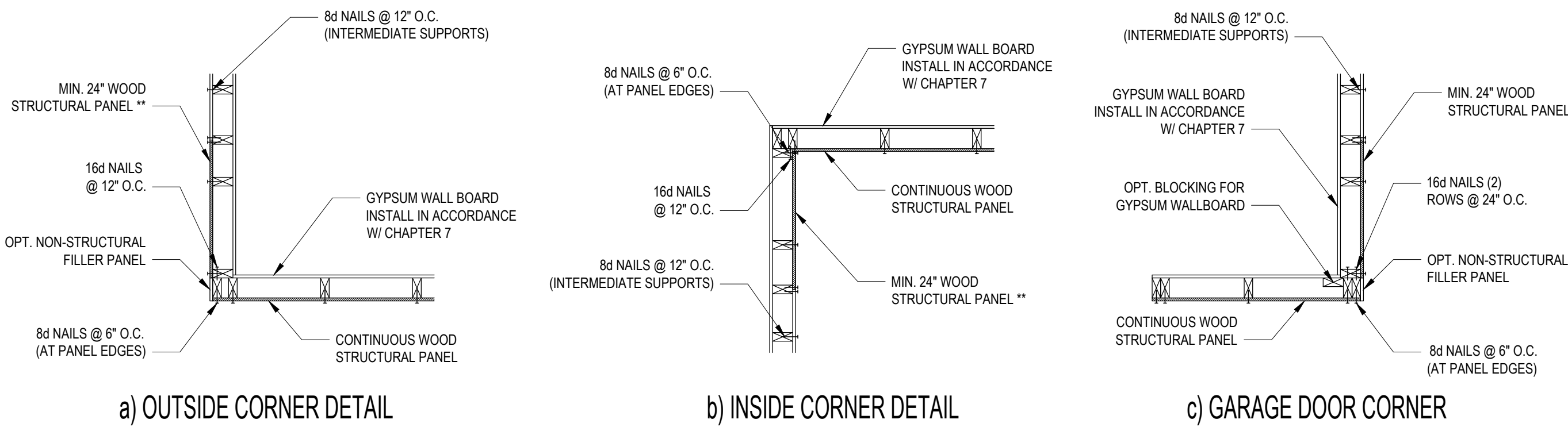
*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precautions. Any deviation or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A.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



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No.	Date	Remarks
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FILENAME: \\A:\BUILDING\OFFICE\PROJECTS\2023\060201-0091_A.G. RESIDENTIAL_HAVILLAND\060201-0091_A.G. RESIDENTIAL_HAVILLAND\060201-0091A.LTWK SHED.B1: SHEATHING LIFT PLOT DATE: 7/6/2023 3:28 PM



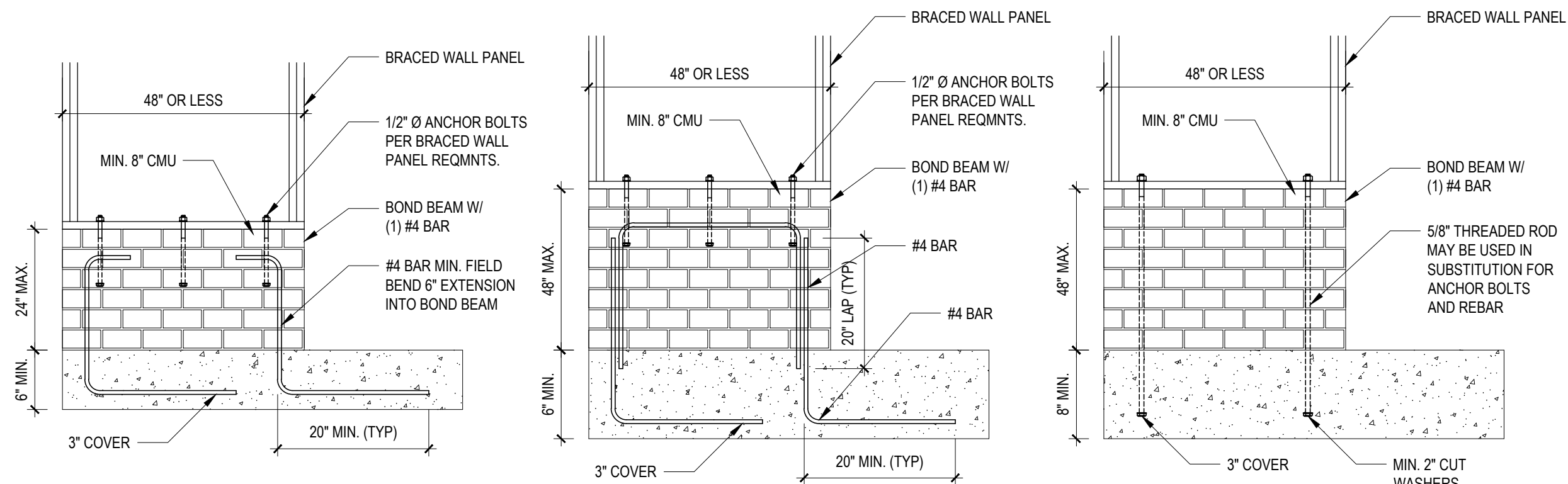
B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING
NO SCALE

STRUCTURAL SHEATHING NOTES

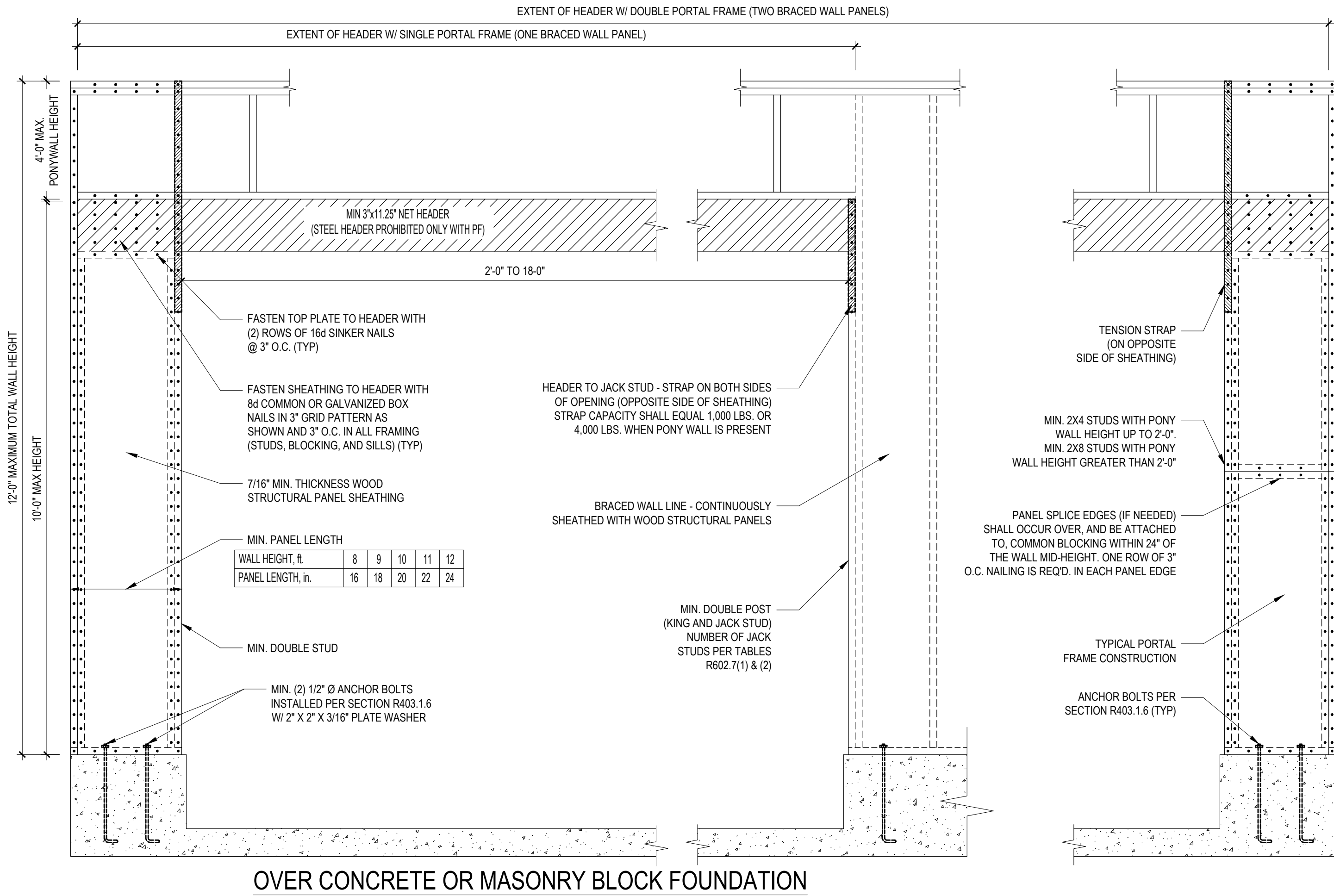
- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10.3 OF THE 2018 NCRC.
- BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
(1) REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- 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)
(3) 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
(4) SHEATH INTERIOR AND 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 MINIMUM 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
(5) 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.

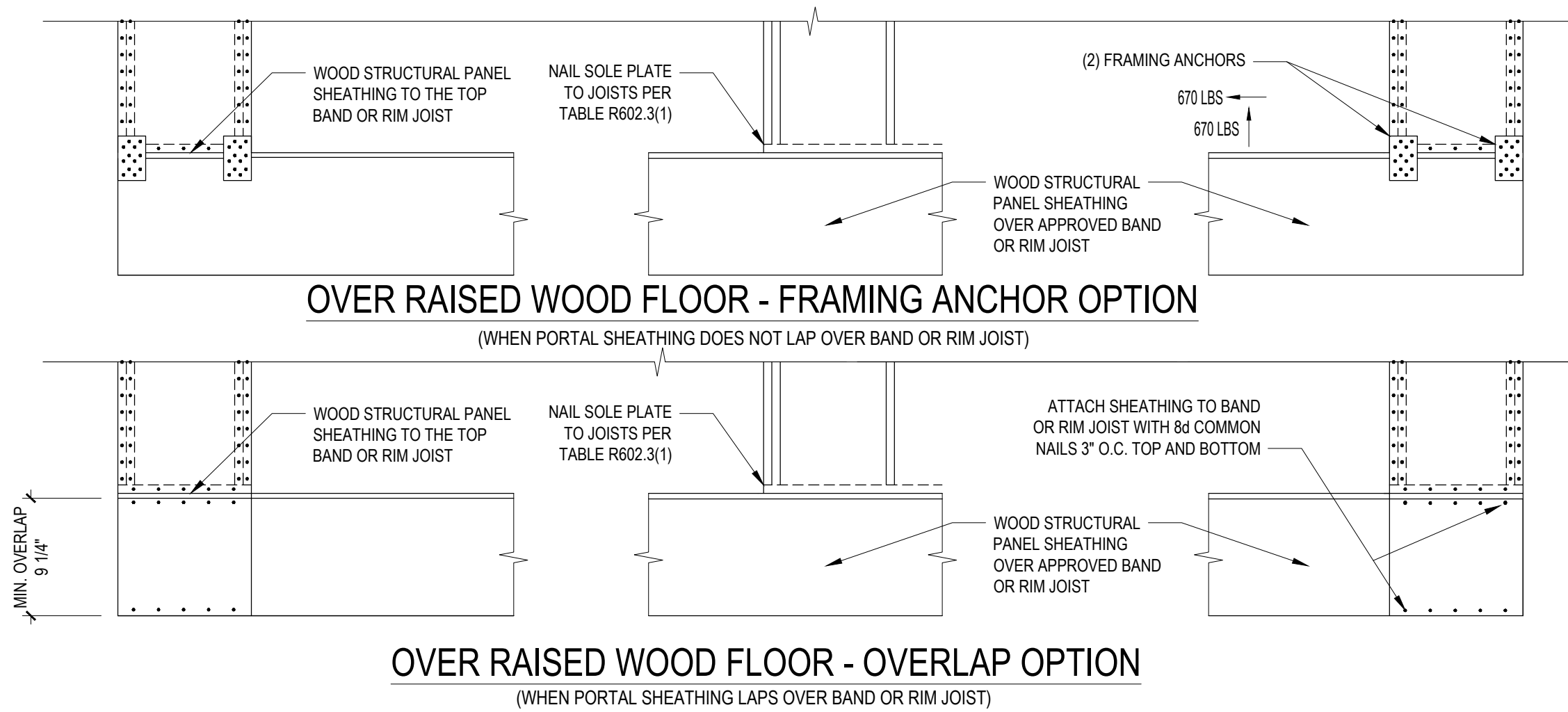
**OR EQUIVALENT PER TABLE R702.3.5
B3: BRACE WALL PANEL CONNECTIONS
NO SCALE



B4: MASONRY STEM WALL SUPPORTING BRACED WALL PANELS
FIGURE R602.10.4.3 OF THE 2018 NCRC
NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

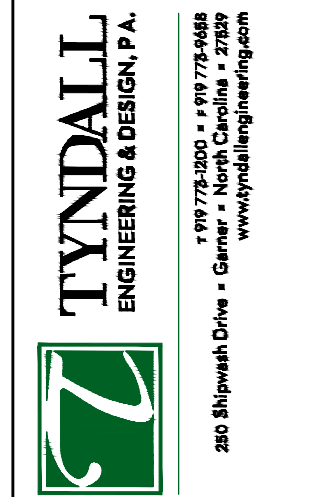
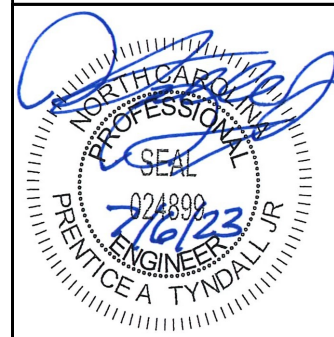


OVER CONCRETE OR MASONRY BLOCK FOUNDATION



B2: METHOD PF: PORTAL FRAME CONSTRUCTION
FIGURE R602.10.1

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



Client: **A&G RESIDENTIAL**
Project: **THE HAVILLAND GARAGE LEFT**

SHEATHING DETAILS

Project #: **DRB2301-0091A**
Date: **7/6/2023**
Engineered by: **HJS**
DWG. Checked by: **PTII**
Scale: **SEE PLAN**

REVISIONS		
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Sheet Number

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