

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 (DL & LL)
ALL FLOORS	40	10	L/360
ATTIC (full down access)	20	10	L/240
ATTIC (no down access)	10	5	L/240
EXTERNAL BALCONY	60	10	L/360
ROOF	20	10	L/240
ROOF TRUSS	20	20	L/240
WIND LOAD	(BASED ON 120 MPH (3-second gust))		
- 3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
- 4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE (AND).
- 5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION 804.9 OF 2012 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.
- 6) ALL FRAMING LUMBERS SHALL BE SYP #2 (F# = 800 PSI) LUD. ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL.
- 7) ALL LOAD BEARING HEADERS SHALL BE (2)X10 (LUD). ALL WINDOW AND DOOR HEADERS SHALL BE SUPPORTED BY (1) JACK STUD AND (1) KING STUD AT EACH END UNLESS NOTED. ALL OTHER BEAMS SHALL BE SUPPORTED BY 2 STUDS OR THE AMOUNT OF STUDS REQUIRED FOR FULL BEARING AT EACH END UNLESS NOTED. POINT LOADS (STIFF KNEES, ETC.) SHALL CONSIST OF 2 STUDS UNLESS NOTED. ALL SUPPORTS OF 2 STUDS OR MORE SHALL BE TRANSFERRED THROUGH EACH FLOOR TO THE FOUNDATION.
- 8) ALL EXTERIOR WALLS TO BE SHEATHED WITH MIN. 7/16" WOOD STRUCTURAL PANELS FASTENED WITH 8D NAILS @ 6" O.C. AT EDGES AND 12" O.C. AT INT. SUPPORTS. BLOCKING SHALL BE INSTALLED BY LESS THAN 50 PERCENT OF THE WALL LENGTH IS SHEATHED, WHERE BLOCKING IS REQD. ALL PANELS SHALL BE FASTENED AT 3" O.C. AT EDGES AND 6" O.C. AT INT. SUPPORTS.
- 9) ALL STRUCTURAL STEEL SHALL ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3-1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER AND 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TIE WALLED TO THE SOLE PLATES, AND THE SOLE PLATES ARE WALLED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.
- 10) ANCHOR BOLT PLACEMENT PER SECTION 803.1.6. 1/2" DIAMETER ANCHOR BOLTS SPACED AT 6'-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION.
- 11) FOUNDATION DRAINAGE/DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF 2012 NC BUILDING CODE
- 12) WALL AND ROOF CLADDING VALUES:
WALL CLADDING SHALL BE DESIGNED FOR A 24.1 S.F.T. OR GREATER POSITIVE AND NEGATIVE PRESSURE.
ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:
45.5 LBS/SQFT FOR ROOF PITCHES OF 0/12 TO 2.25/12
34.8 LBS/SQFT FOR ROOF PITCHES OF 2.25/12 TO 7/12
21.0 LBS/SQFT FOR ROOF PITCHES OF 7/12 TO 12/12
** MEAN ROOF HEIGHT 30' OR LESS
- 13) FOR ROOF SLOPES FROM 2:12 THROUGH 4:12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER
- 14) IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQ. FTG. ARE CORRECT PRIOR TO CONSTRUCTION. DESIGNER IS NOT RESPONSIBLE FOR DIMENSIONING OR SQ. FTG. ERRORS ONCE CONSTRUCTION BEGINS

THIS PLAN HAS BEEN DRAWN TO CONFORM TO THE 2018 NORTH CAROLINA RESIDENTIAL CODE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO BEGINNING WORK. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL STATE AND LOCAL BUILDING CODES AND ORDINANCES. KADS CUSTOM HOME DESIGNS ASSUMES NO LIABILITY FOR SITE CONDITIONS, CONSTRUCTION METHODS OR ANY DEVIATION OF THESE PLANS.

NOTE:
ALL WINDOWS TO BE INSTALLED MUST MEET A MAXIMUM OF .32 U VALUE OR BETTER, UNLESS ENERGY CALCULATIONS ARE SUBMITTED WITH PLANS PROVIDED BY BUILDER AT TIME OF PLAN REVIEW.



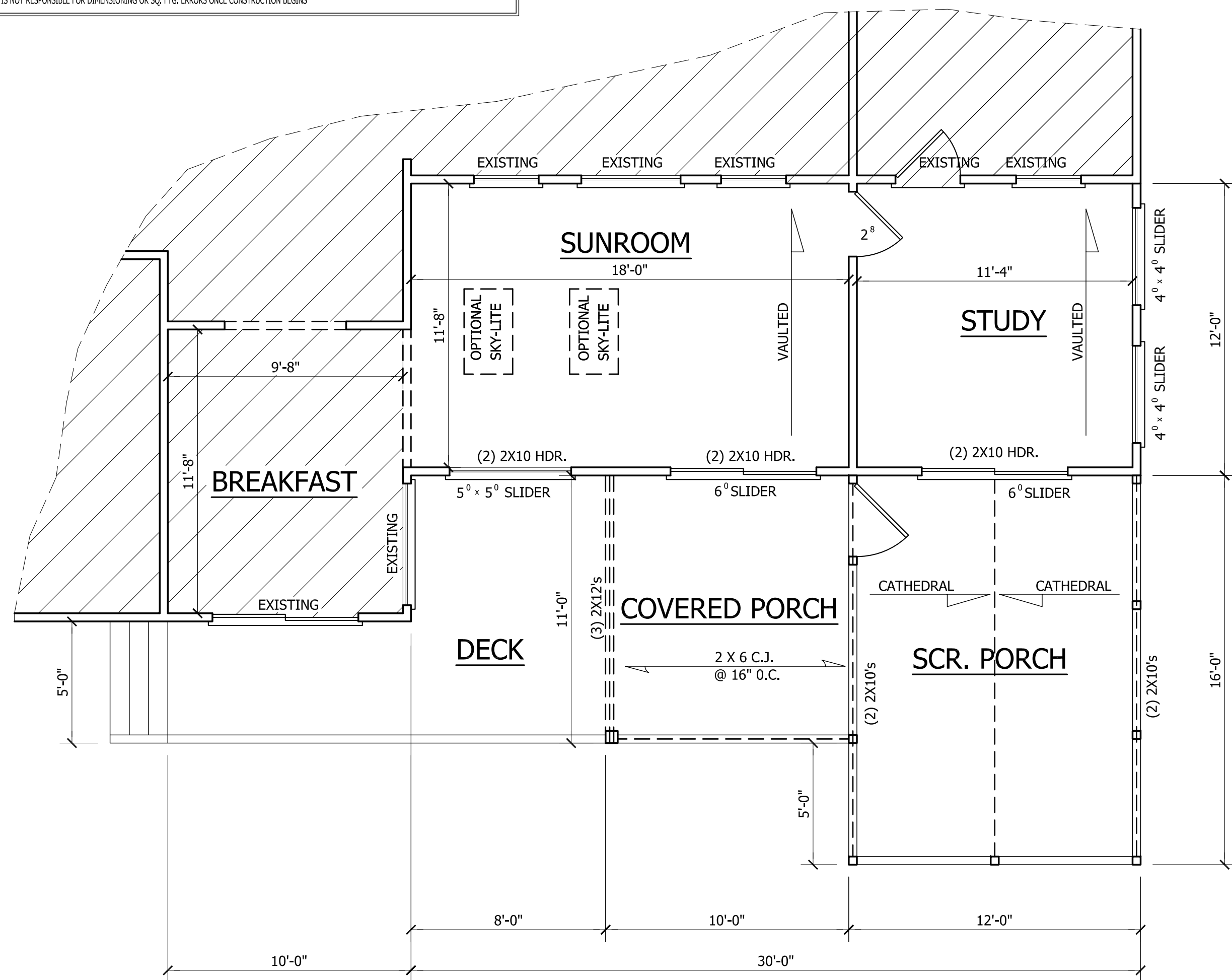
REAR ELEVATION

SCALE: 1/4"=1'-0"



SIDE ELEVATION

SCALE: 1/4"=1'-0"



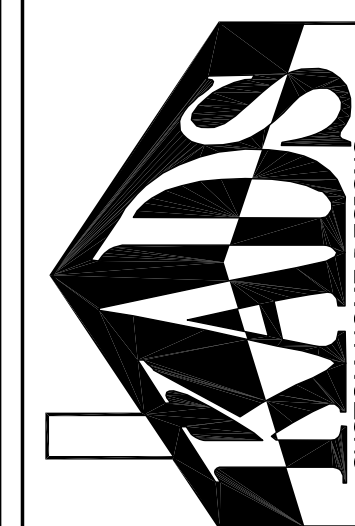
FLOOR PLAN

SCALE: 1/4"=1'-0"

ADDITION SQ. FT. CALCULATIONS

HEATED	
FIRST FLOOR HTD. SQ. FT.	= 360
UNHEATED	
SCREEN PORCH SQ. FT.	= 192
REAR PORCH SQ. FT.	= 110
DECK SQ. FT.	= 138

CRAWFORD RESIDENCE



ANGIER, NC
919-369-7181

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DATE:
1/14/23

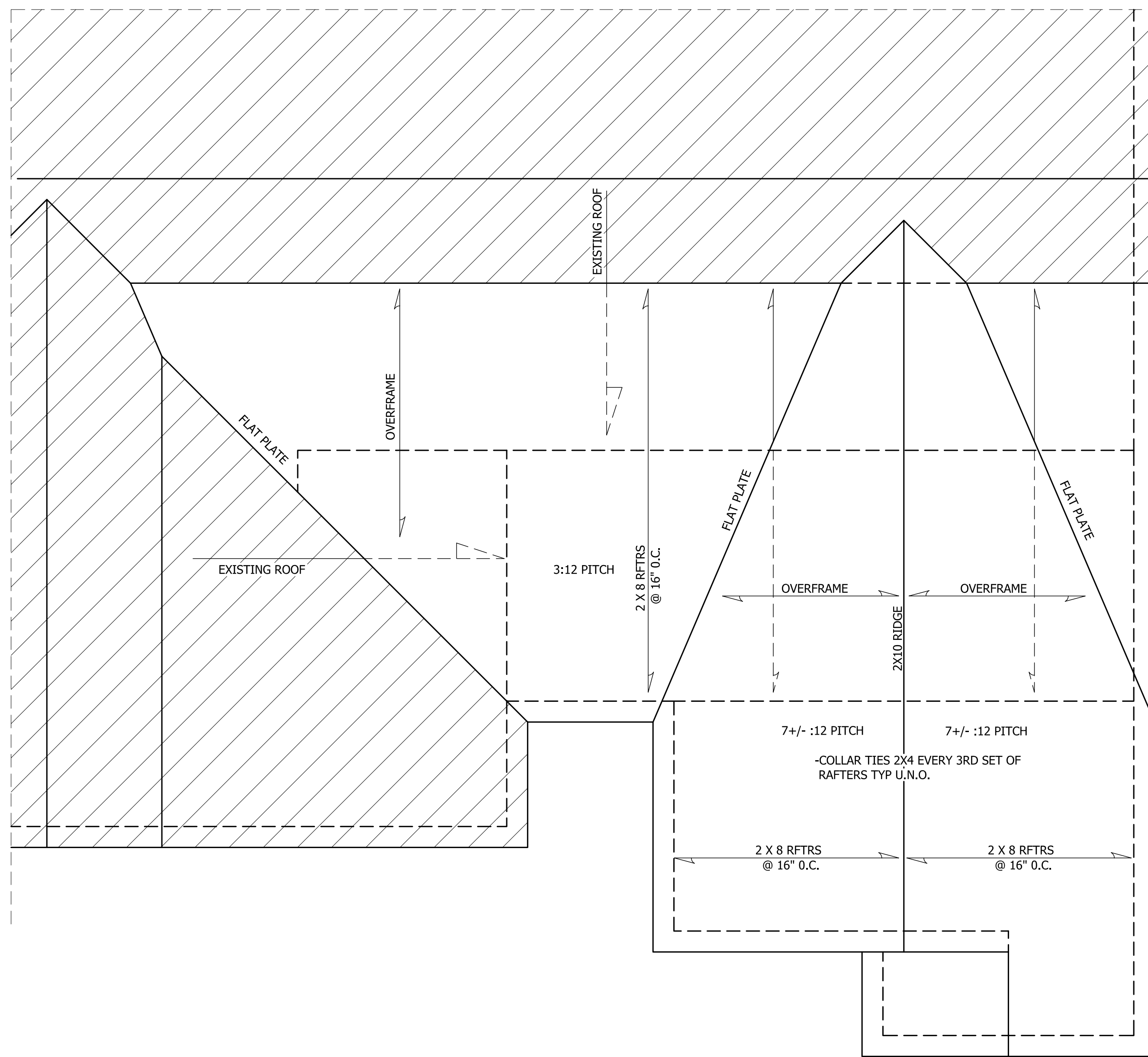
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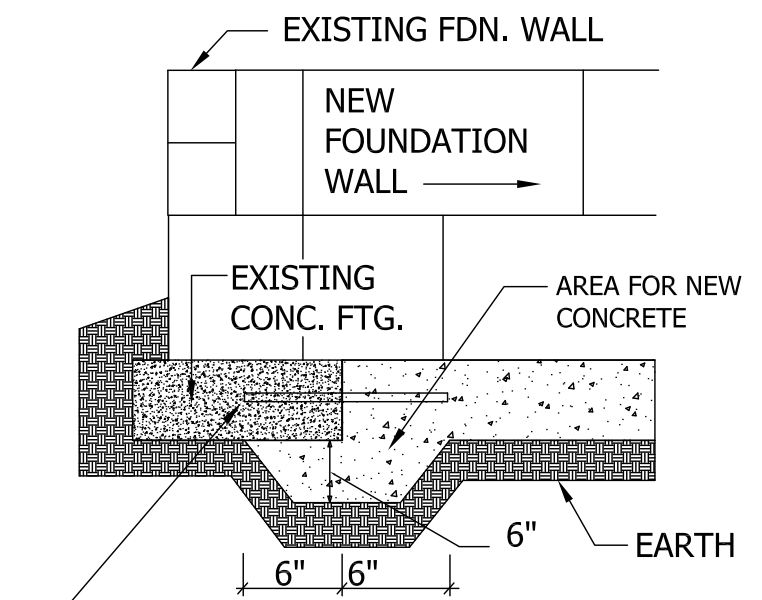
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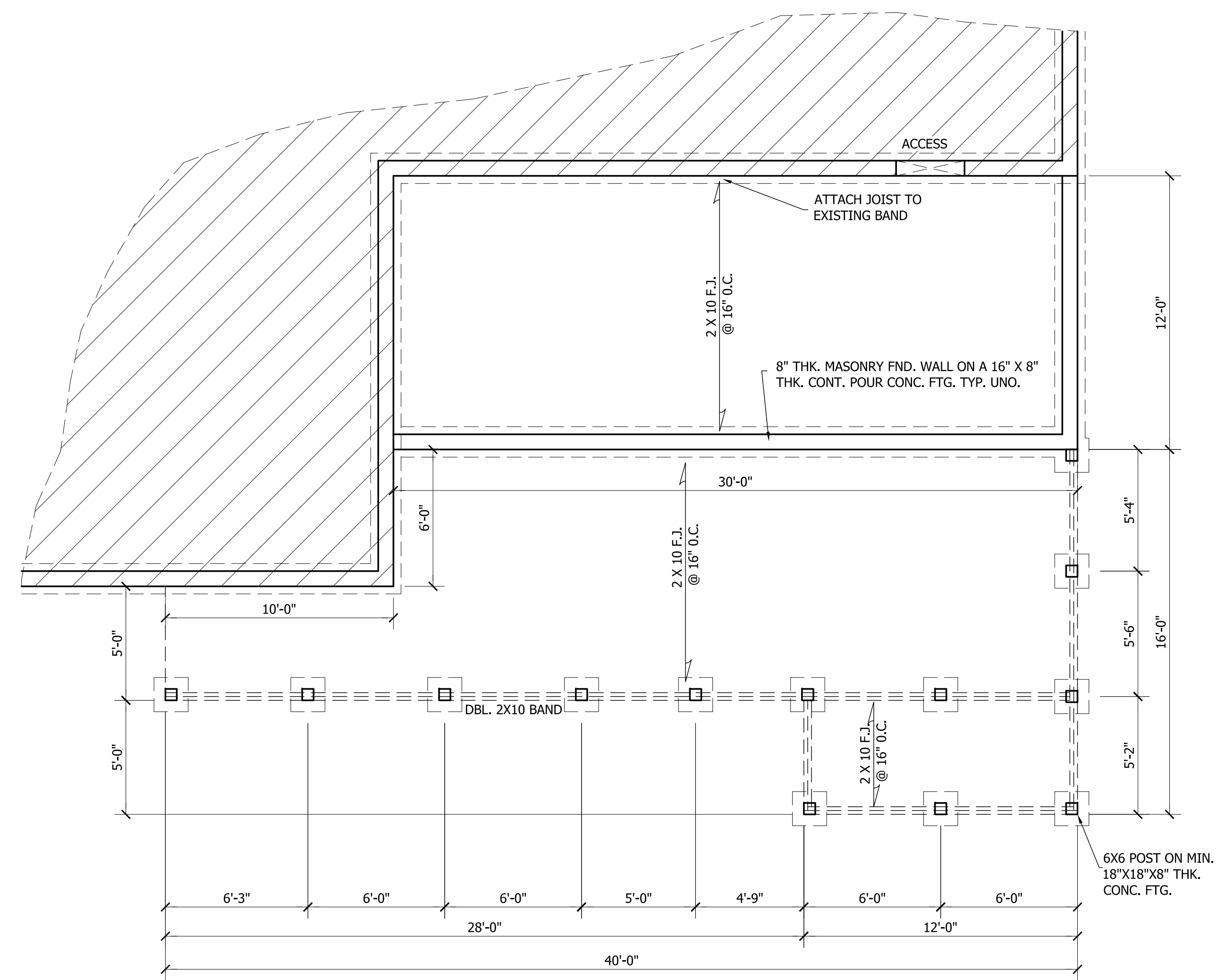


ROOF PLAN
SCALE: 1/4"=1'-0"



NOTE: IN LIEU OF UNDERCUTTING EXISTING FTG., USE (2) #4 DOWELS 12" LONG AT EACH JUNCTION BETWEEN NEW & EXISTING FTG.

NEW/EXISTING FOUNDATION DETAIL
ELEVATION (NTS)



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

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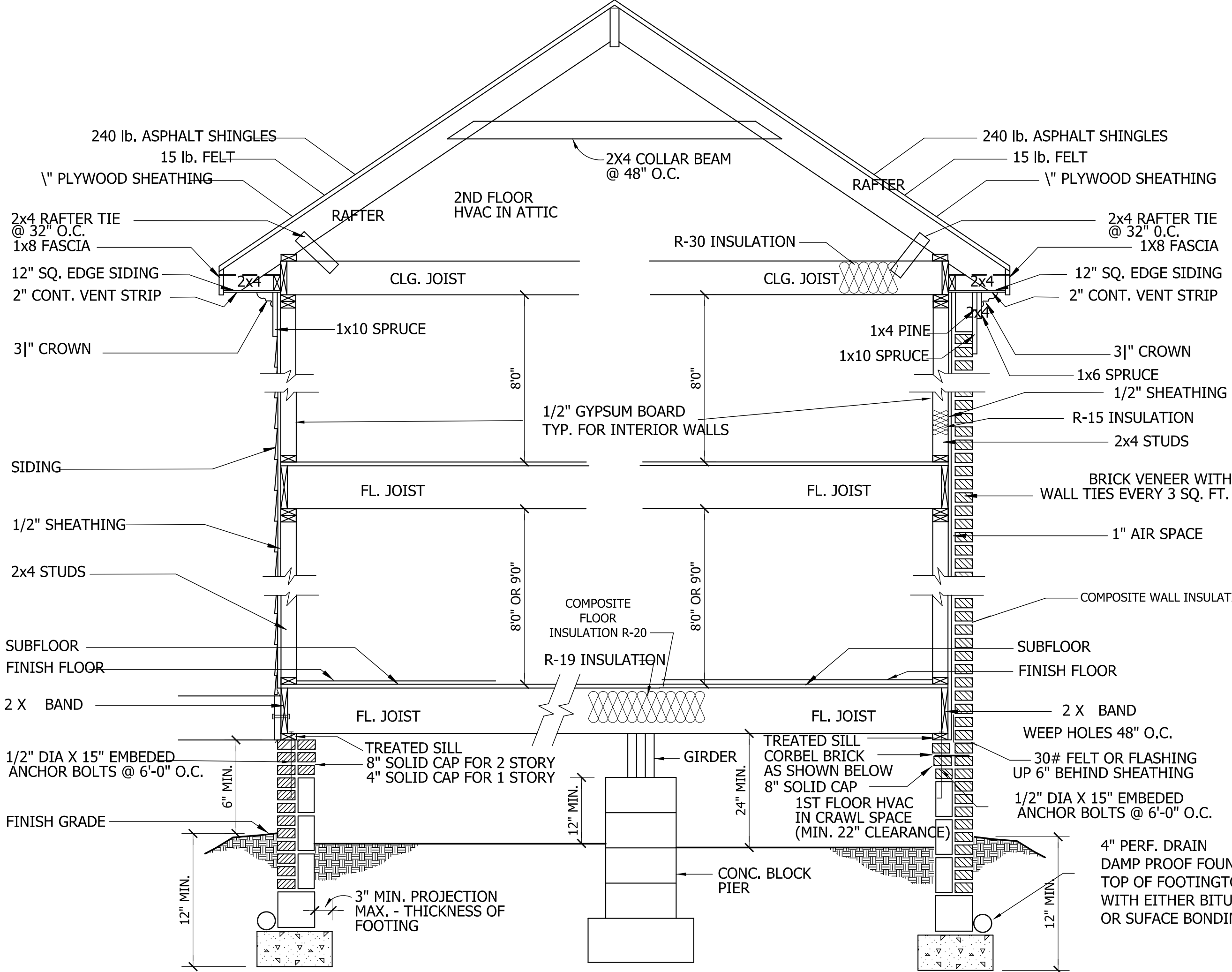
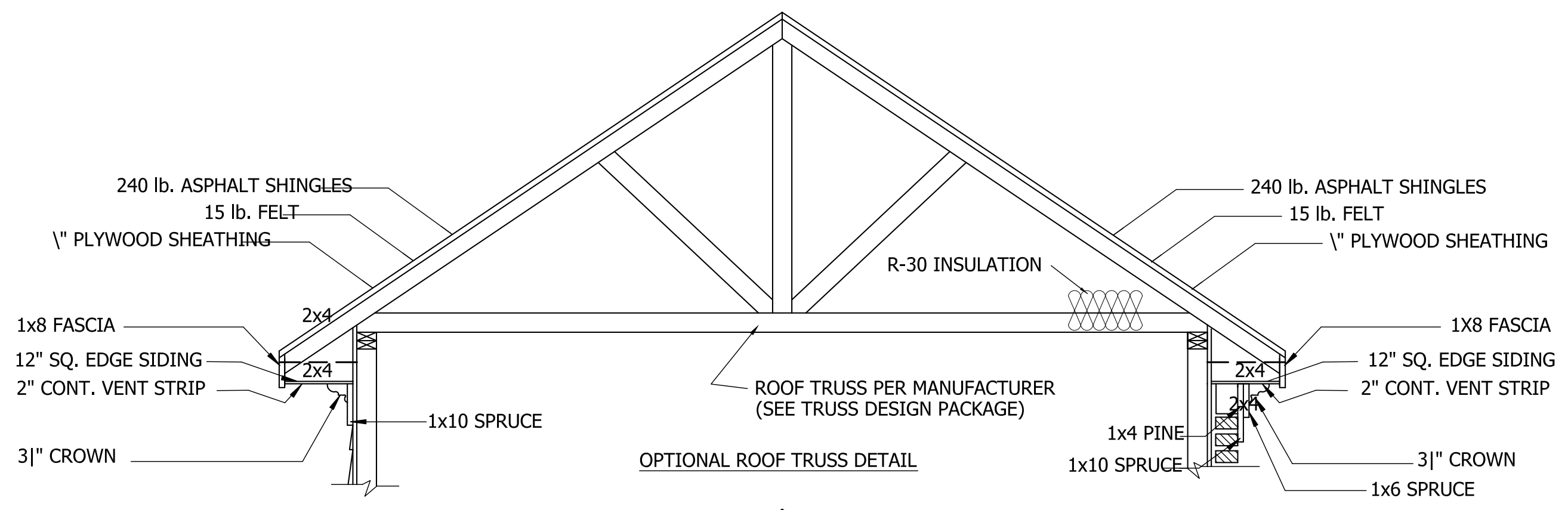
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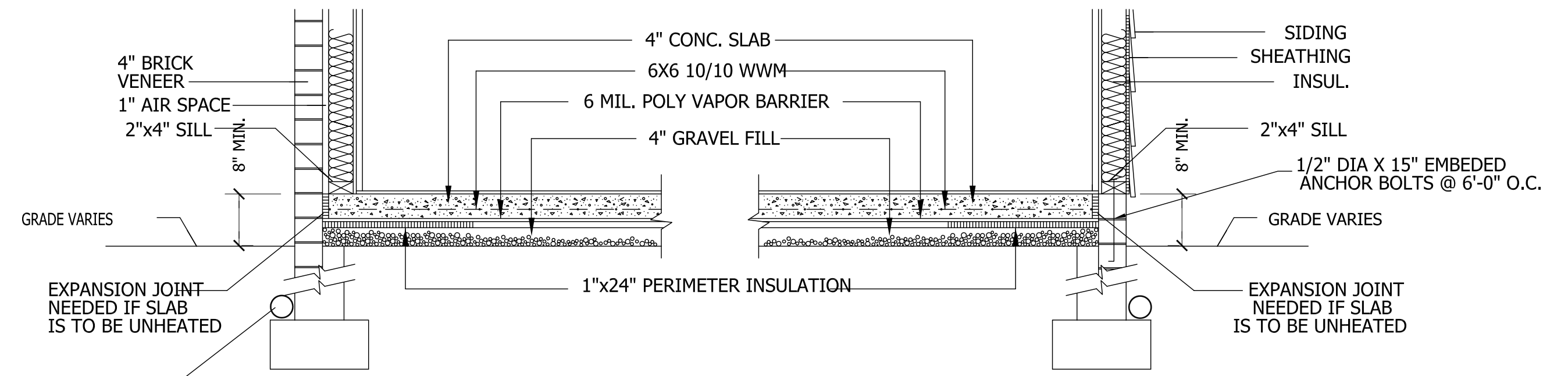


SIDING SECTION

BRICK SECTION

WALL SECTION

SCALE: 1/4" = 1'-0"



BRICK VENEER

SIDING

SLAB FDN. DETAIL

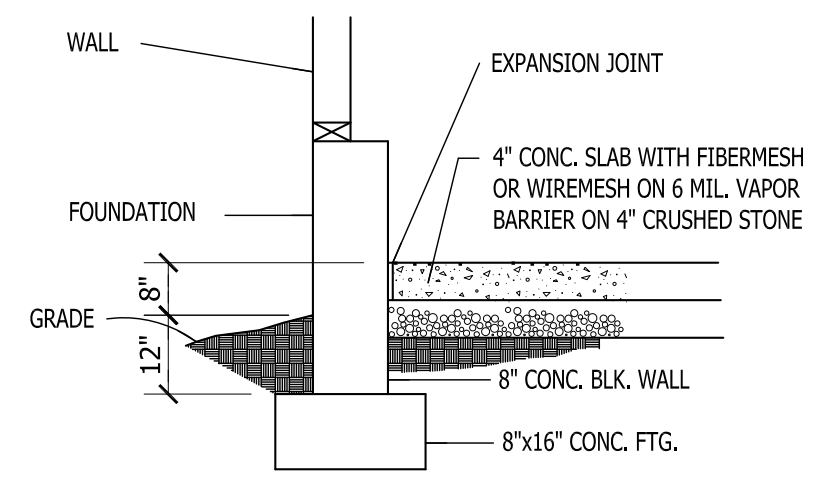
SCALE: 1" = 1'-0"

CRAWL SPACE VENTILATION
 PROVIDE AT LEAST 1.0 SQ. FT. NET FREE VENTILATION AREA FOR EACH 150 SQ. FT. OF CRAWL SPACE.
 CRAWL SPACE AREA = 360 SQ. FT.
 360/150 = 2.4 SQ. FT. REQ'D.
 REDUCE REQUIRED AREA TO 1.0 SQ. FT. NET FREE VENTILATION AREA FOR EACH 1,500 SQ. FT. OF CRAWL SPACE WITH APPROVED VAPOR BARRIER.
 PROVIDE (1) VENT WITHIN 3'-0" OF EACH CORNER.
 REFER TO MANUFACTURER SPECIFICATIONS FOR ACTUAL VENTS USED TO DETERMINE NUMBER OF VENTS REQUIRED.

ROOF VENTILATING REQUIREMENTS
 $\frac{662}{150} = 4.42$ SQ. FT. REQ'D

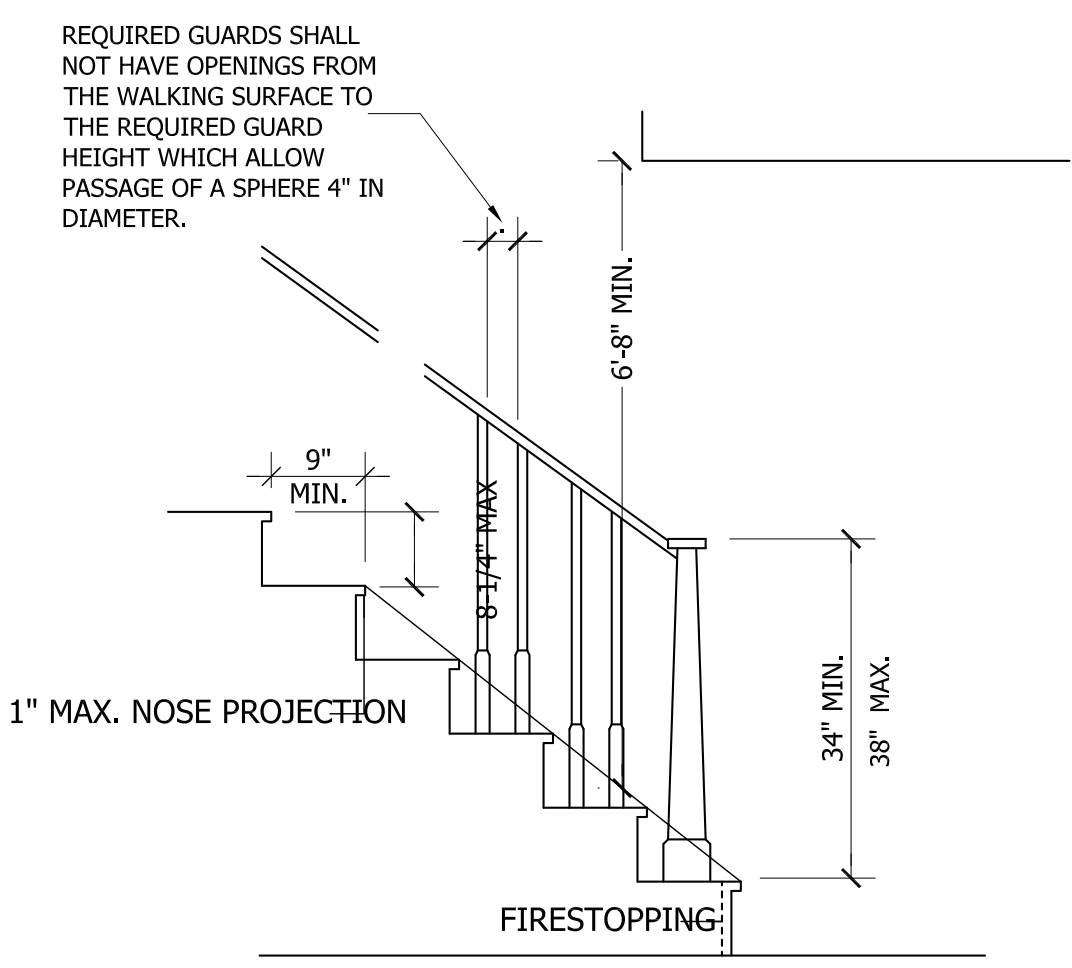
ROOF VENTILATING REQUIREMENTS
 (POWER ROOF VENTILATOR REQUIRED)
 $\frac{662}{300} = 2.21$ SQ. FT. REQ'D

BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED.



GARAGE SLAB

SCALE: NTS



NOTE:
 Stairways shall not be less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4.5 inches on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 31-1/2 inches where a handrail is installed on one side and 27 inches where handrails are provided on both sides

STAIR DETAIL

SCALE: NTS



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