



Project #: 25-371
Date: 10-13-25
Drawn/Design By: KBB
Scale: REFER TO ELEV.



9101 Ten-Ten Rd.
Raleigh, NC 27603
O: (919) 302-0693



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Email: Kent@KandAHomeDesigns.com

Website: www.KandAHomeDesigns.com

Lanier Falls
Hideaway
(Ranch)

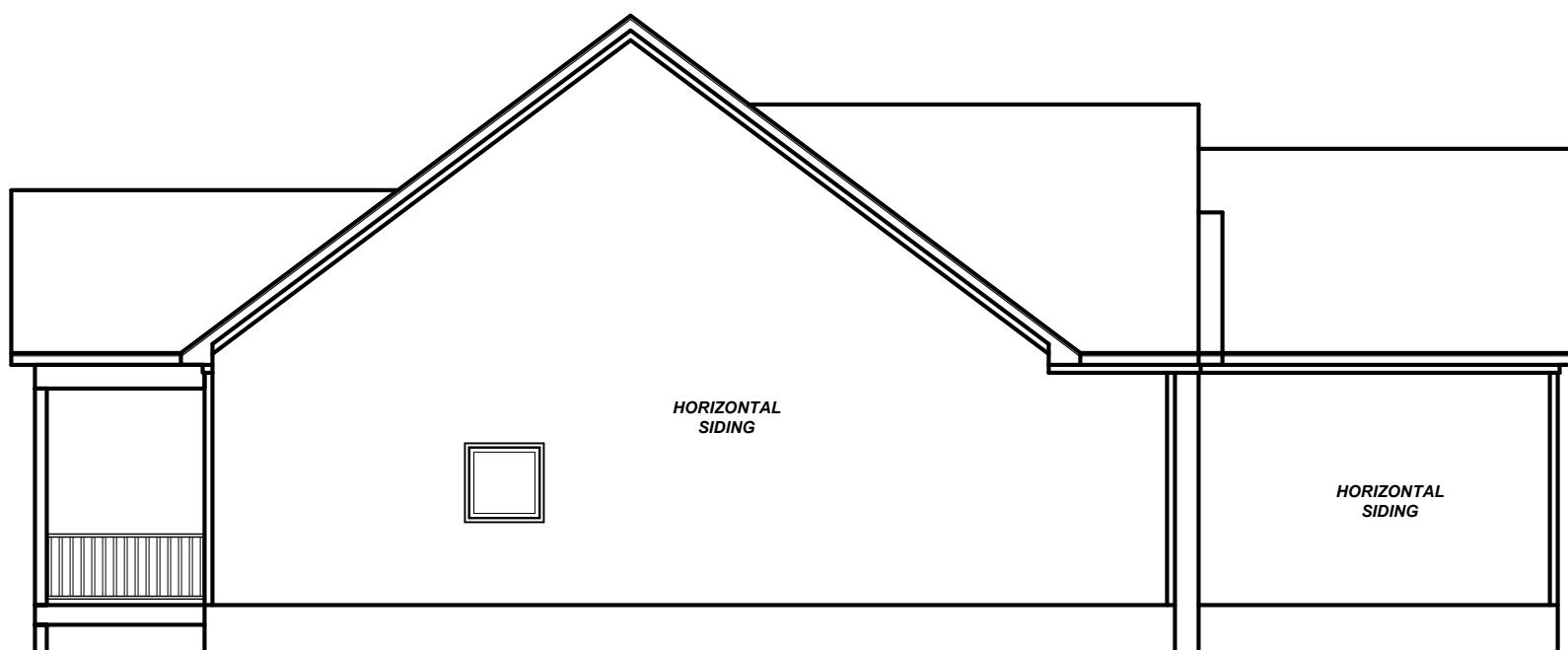
C&M Constructions

Sheet Number: 1
of 2



FRONT ELEVATION

1/4" = 1'-0"



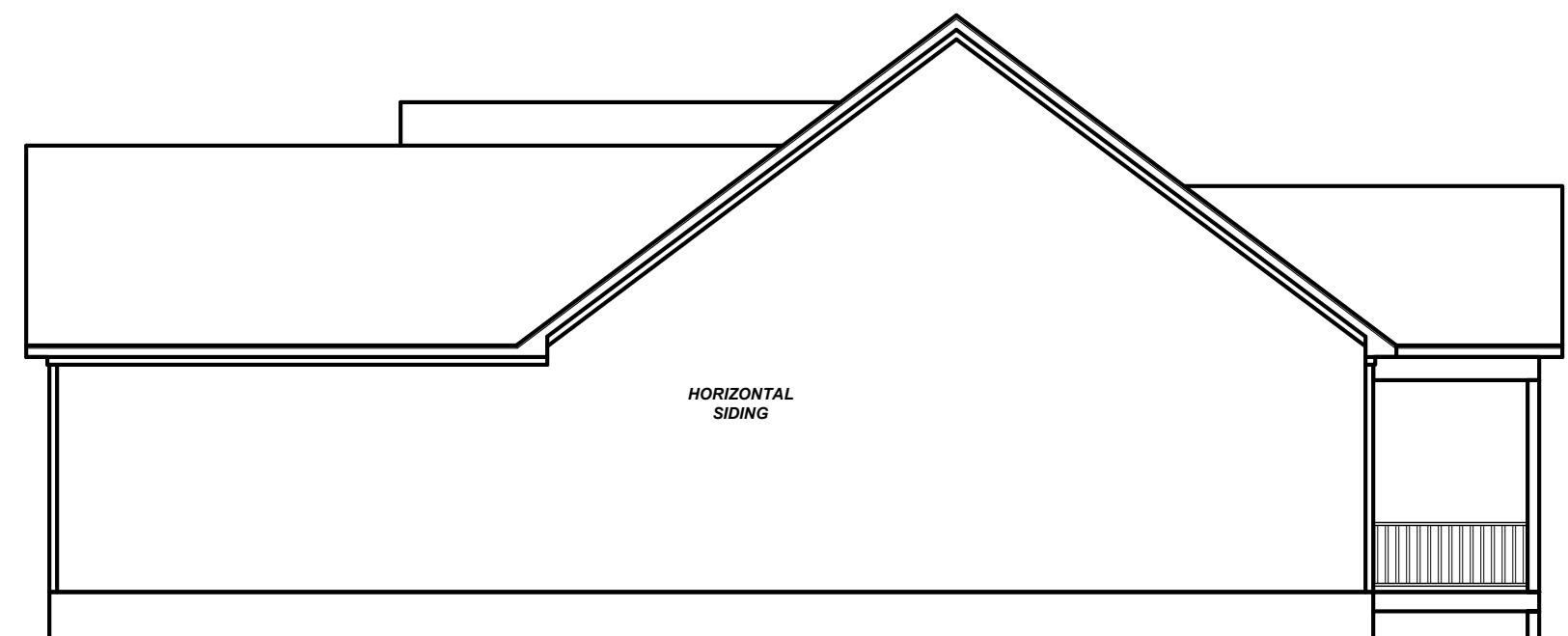
LEFT ELEVATION

1/8" = 1'-0"



REAR ELEVATION

1/8" = 1'-0"



RIGHT ELEVATION

1/8" = 1'-0"

Sheet Number: 1
of 2

ELEVATIONS



REVIEWER'S SEAL

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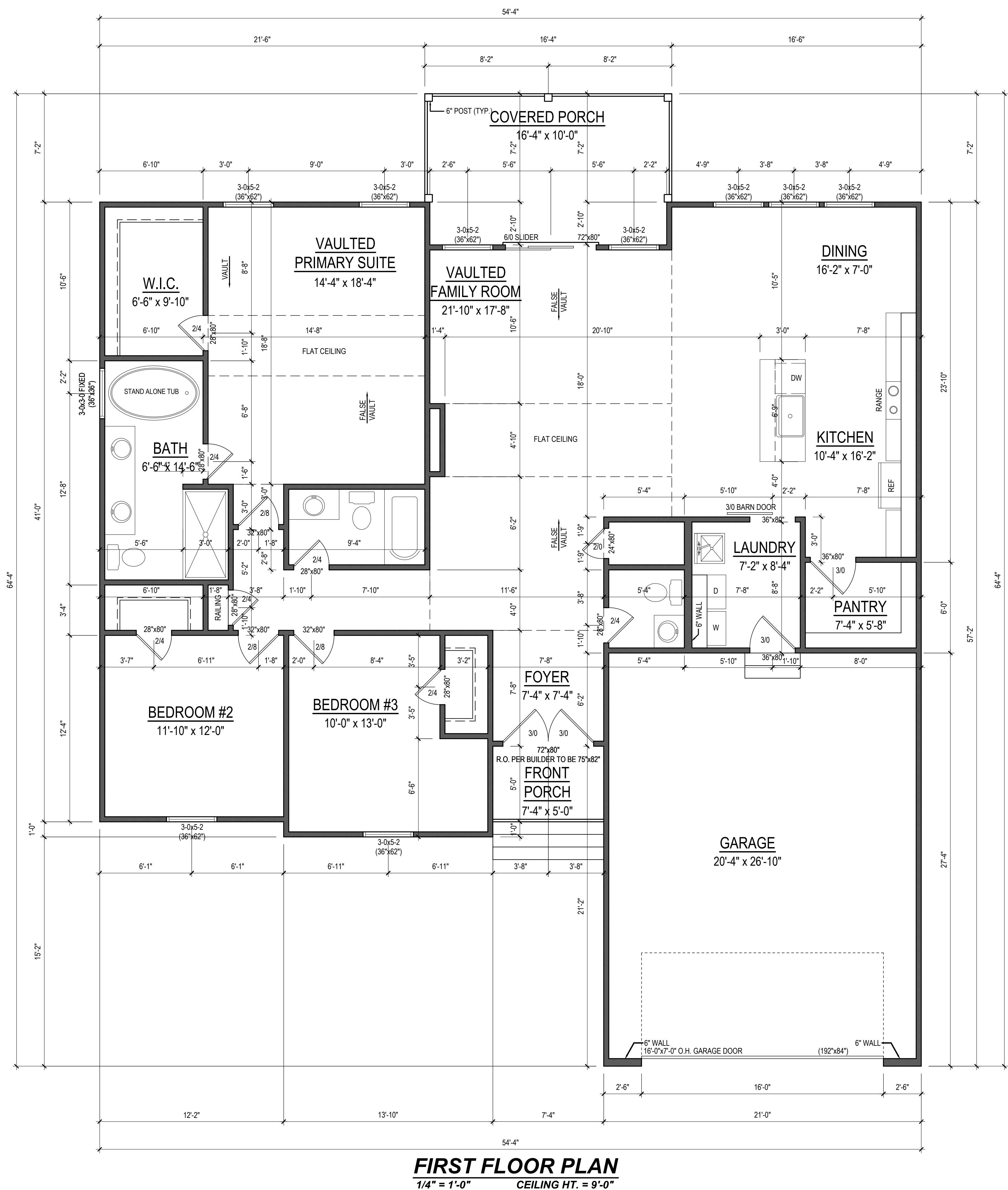
HOME DESIGN INC.

The logo for K&A is a stylized graphic. It features the letters 'K' and 'A' in a bold, black, sans-serif font. The letter 'A' is partially obscured by a large, orange, stylized ampersand symbol (&) positioned between them. The entire logo is set against a white background with black vertical lines on either side.

Manier Falls Hideaway (Ranch)

C&M Constructions

2
of 2



FIRST FLOOR PLAN

Sheet Number
2
of 2

GENERAL NOTES:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT ALL DIMENSIONS, ROOF PITCHES, AND SQUARE FOOTAGE ARE CORRECT PRIOR TO CONSTRUCTION. K&A HOME DESIGNS, INC. IS NOT RESPONSIBLE FOR ANY DIMENSIONING, ROOF PITCH, OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- ALL WALLS SHOWN ON THE FLOOR PLANS ARE DRAWN AT 4" UNLESS NOTED OTHERWISE.
- ALL ANGLED WALLS SHOWN ON THE PLANS ARE 45 DEGREES UNLESS NOTED OTHERWISE.
- STUD WALL DESIGN SHALL CONFORM TO ALL NORTH CAROLINA STATE BUILDING CODE REQUIREMENTS.
- DO NOT SCALE PLANS. DRAWING SCALE MAY BE DISTORTED DUE TO COPIER IMPERFECTIONS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA RESIDENTIAL STATE BUILDING CODE, 2024 EDITION.

SQUARE FOOTAGE

<u>HEATED SQUARE FOOTAGE</u>	<u>UNHEATED SQUARE FOOTAGE</u>
FIRST FLOOR= 1928	GARAGE= 572
SECOND FLOOR= N/A	FRONT PORCH= 37
THIRD FLOOR= N/A	CVD. PORCH= 161
BASEMENT= N/A	DECK= N/A
	STORAGE= N/A
TOTAL HEATED= 1928	TOTAL UNHEATED= 770

CRAWL SPACE VENTILATION CALCULATIONS

- VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON THE PLAN BUT SHOULD BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS TO PREVENT DEAD AIR POCKETS.
- 100% VAPOR BARRIER MUST BE PROVIDED WITH 12" MIN. LAP JOINTS.

THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 AS LONG AS REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS-VENTILATION OF THE SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. (COMPLY WITH NC CODE MIN. WITH REGARD TO VENT PLACEMENT FROM CORNERS)

1928 SQ. FT. OF CRAWL SPACE/1500

1.29 SQ. FT. OF REQUIRED VENTILATION

PROVIDED BY: 3 VENTS AT 0.45 SQ. FT. NET FREE

VENTILATION EACH= 1.35 SQ. FT. OF VENTILATION

****FOUNDATION DRAINAGE- WATERPROOFING PER SECTIONS 405 & 406.**

ATTIC VENTILATION CALCULATIONS

- CALCULATIONS SHOWN BELOW ARE BASED ON VENTILATORS USED AT LEAST 3 FT. ABOVE THE CORNICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED BY EAVE VENTS.

- CATHEDRAL CEILINGS SHALL HAVE A MIN. 1" CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

2698 SQ. FT. OF ATTIC/300= 8.99

EACH OF INLET AND OUTLET REQUIRED.

***WALL AND ROOF CLADDING DESIGN VALUES**

- WALL CLADDING IS DESIGNED FOR A 24.1 SQ. FT. OR GREATER POSITIVE AND NEGATIVE PRESSURE.

- ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:

45.5 LBS. PER SQ. FT. FOR ROOF PITCHES OF 0/12 TO 2.25/12

34.8 LBS. PER SQ. FT. FOR ROOF PITCHES OF 2.25/12 TO 7/12

21 LBS. PER SQ. FT. FOR ROOF PITCHES OF 7/12 TO 12/12

**** MEAN ROOF HEIGHT 30' OR LESS**

STRUCTURAL NOTES

1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2024 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	L360
ATTIC (pull down access)	20	10	L240
ATTIC (no access)	10	5	L240
EXTERNAL BALCONY	60	10	L360
ROOF	20	10	L180
ROOF TRUSS	20	20	L240
WIND LOAD			[BASED ON 120 MPH (3-second gusts)]

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 (UNO).

5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R404 OF 2024 NC RESIDENTIAL 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) UNO.

ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL.

7) ALL LOAD BEARING HEADERS SHALL BE 2x2x10 (UNO). 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 IF LESS THAN 50 PERCENT OF THE WALL LENGTH IS SHEATHED. WHERE BLOCKING IS REQ'D. 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 TOE NAILED TO THE SOLE PLATES, AND THE SOLE PLATES ARE NAILED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.

10) ANCHOR BOLT PLACEMENT PER SECTION R403.1.6. 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 2024 NC RESIDENTIAL BUILDING CODE

12) WALL AND ROOF CLADDING VALUES:
WALL CLADDING SHALL BE DESIGNED FOR A 24.1 SQ.FT. OR GREATER POSITIVE AND NEGATIVE PRESSURE
ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:

45.5 LBS/PSF FOR ROOF PITCHES OF 0/12 TO 2.25/12

34.8 LBS/PSF FOR ROOF PITCHES OF 2.25/12 TO 7/12

21.0 LBS/PSF FOR ROOF PITCHES OF 7/12 TO 12/12

** MEAN ROOF HEIGHT 30' OR LESS

13) 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

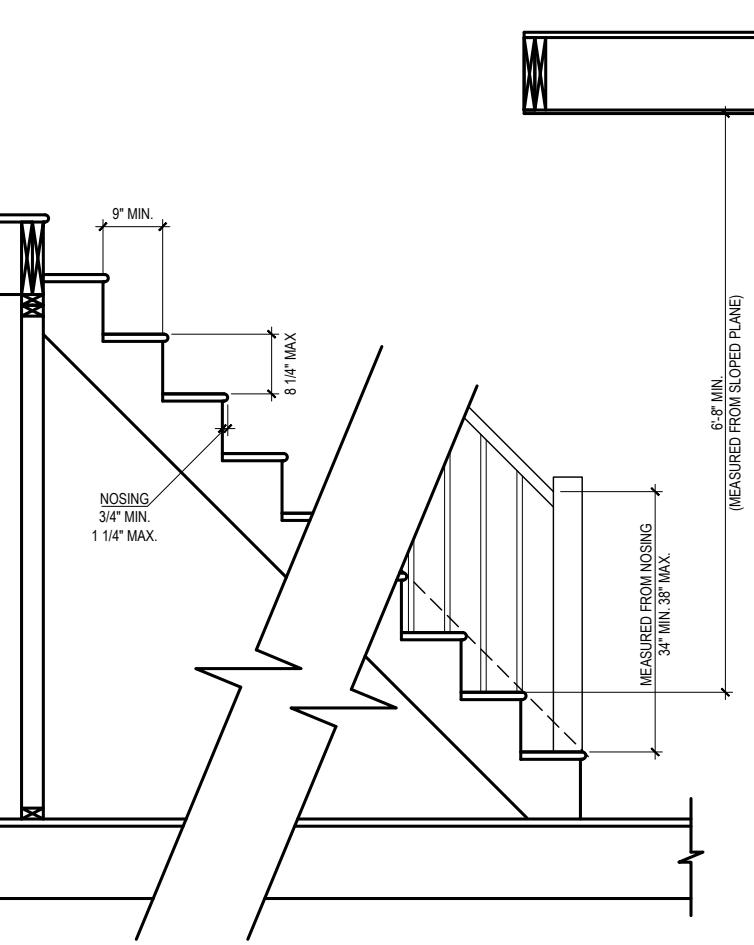
TABLE N110.1 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

CLIMATE ZONE	MAXIMUM GLAZING U-FACTOR	MINIMUM INSULATION R-VALUE				
		CEILINGS	WALLS	FLOORS	BASEMENT WALLS	SLAB PERIMETER
3	.35	R-38 or R-30	R-15	R-19	R-5/13	R-0
4	.35	R-38 or R-30	R-15	R-19	R-10/15	R-10

**R808.4.5 GLAZING & WET SURFACES:**

GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHROOMS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES. MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION. THIS SHALL APPLY TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

EXCEPTION: GLAZING THAT IS MORE THAN 60 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, FROM THE WATER'S EDGE OF A BATHTUB, HOT TUB, SPA, WHIRLPOOL, OR SWIMMING POOL OR FROM THE EDGE OF A SHOWER, SAUNA OR STEAM ROOM

**R807.1 ATTIC ACCESS:**

AN ATTIC ACCESS OPENING SHALL BE PROVIDED TO ATTIC AREAS THAT EXCEED 400 SQUARE FEET (37.16 M²) AND HAVE A VERTICAL HEIGHT OF 60 INCHES (1524 MM) OR GREATER. THE NET CLEAR OPENING SHALL NOT BE LESS THAN 20 INCHES (508 MM BY 762 MM) AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. A 30-INCH (762 MM) MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE PROVIDED FROM SOME POINT ABOVE THE ACCESS OPENING. SEE SECTION M1305.1.3 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED IN ATTICS.

EXCEPTION: 1) CONCEALED AREAS NOT LOCATED OVER THE MAIN STRUCTURE INCLUDING PORCHES, AREAS BEHIND KNEE WALLS, DORMERS, BAY WINDOWS, ETC. ARE NOT REQUIRED TO HAVE ACCESS.
2) PULL DOWN STAIR TREADS, STRINGERS, HANDRAILS, AND HARDWARE MAY PROTRUDE INTO THE NET CLEAR OPENING.

DWELLING / GARAGE SEPARATION (SECTION R302.5, R302.6 and R302.7):

WALLS - A MINIMUM 1/2" GYPSUM BOARD MUST BE INSTALLED ON ALL WALLS SUPPORTING FLOOR-CEILING ASSEMBLIES USED FOR SEPARATION REQUIRED BY THIS SECTION.
OPENING PROTECTION - OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 1/8 INCHES (35MM) IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 1/8 INCHES (35MM) THICK, OR 20-MINUTE FIRE-RATED DOORS.

DUCT PENETRATION - DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAUGE (0.48MM) SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL NOT HAVE OPENINGS INTO THE GARAGE.

CEILINGS - GARAGE TO BE SEPARATED FROM HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8-INCH TYPE X GYPSUM BOARD OR EQUIVALENT PER NCRC SECTION R302.6N

STAIRS - ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER-STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH (12MM) GYPSUM BOARD.

OTHER PENETRATIONS - PENETRATIONS THROUGH THE SEPARATION REQUIRED IN SECTION R302.6 SHALL BE PROTECTED AS REQUIRED BY SECTION R302.11, ITEM 4.

STAIRWAYS & GUARDS REQUIREMENTS PER 311.7 & R312

EACH TREAD AND RISER MUST BE UNIFORM. THE GREATEST RISER HEIGHT SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".
THE GREATEST TREAD DEPTH SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".
THE TOP AND BOTTOM RISER OF INTERIOR STAIRS SHALL NOT EXCEED THE SMALLEST RISER BY MORE THAN 3/4".

R609.1 EXTERIOR WINDOWS & DOORS:

THIS SECTION PRESCRIBES PERFORMANCE AND CONSTRUCTION REQUIREMENTS FOR EXTERIOR WINDOWS AND DOORS INSTALLED IN WALLS. WINDOWS AND DOORS SHALL BE INSTALLED AND FLASHED IN ACCORDANCE WITH THE FENESTRATION MANUFACTURER'S WRITTEN INSTRUCTIONS. WINDOW AND DOOR OPENINGS SHALL BE FLASHED IN ACCORDANCE WITH SECTION R703.4. WRITTEN INSTALLATION INSTRUCTIONS SHALL BE PROVIDED BY THE FENESTRATION MANUFACTURER FOR EACH WINDOW OR DOOR.

R605.2

REFERENCES TABLE R605.1.1(2) WHICH STATES THAT "FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2:12), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4:12), UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER: APPLY A 15-INCH STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVE. STARTING AT THE EAVE, APPLY 36-INCH-WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL."

R301.5

IS A TABLE TITLED "MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (IN POUNDS PER SQUARE FOOT)". IT STATES THAT THE LIVE LOAD FOR STAIRS IS 40, WITH A NOTE THAT INDIVIDUAL STAIR TREADS SHALL BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OR A 300-POUND CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQUARE INCHES, WHICHEVER PRODUCES THE GREATEST STRESS.

ALL DOORS LEADING TO DWELLING FROM THE GARAGE TO BE 20-MINUTE FIRE RATED DOOR

PER NCRC SECTION R302.5.1

GARAGE TO BE SEPARATED FROM HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8-INCH TYPE X GYPSUM BOARD OR EQUIVALENT

PER NCRC SECTION R302.6N

WINDOW FALL PROTECTION

PER NCRC SECTION R312.2

CARBON MONOXIDE ALARMS

ARE REQUIRED TO BE INSTALLED OUTSIDE ALL SLEEPING AREAS
PER NCRC SECTION R315

EMERGENCY ESCAPE AND RESCUE OPENINGS AS

PER NCRC SECTION R310

PENETRATION SEALING:

SEAL ALL PENETRATIONS IN FIRE-RATED WALLS, CEILINGS, OR FLOORS WITH UL-RATED FIRESTOP MATERIALS.

UL FIRESTOP SYSTEMS:

GENERAL NOTES:

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2. ALL WALLS SHOWN ON THE FLOOR PLANS ARE DRAWN AT 4" UNLESS NOTED OTHERWISE.
3. ALL ANGLED WALL SHOWN ON THE PLANS ARE 45 DEGREES UNLESS NOTED OTHERWISE.
4. STUD WALL DESIGN SHALL CONFORM TO ALL NORTH CAROLINA STATE BUILDING CODE REQUIREMENTS.
5. DO NOT SCALE PLANS. DRAWING SCALE MAY BE DISTORTED DUE TO COPIER IMPERFECTIONS.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA RESIDENTIAL STATE BUILDING CODE, 2024 EDITION.

SQUARE FOOTAGE**HEATED SQUARE FOOTAGE UNHEATED SQUARE FOOTAGE**

FIRST FLOOR=	1928	GARAGE=	572
SECOND FLOOR=	N/A	FRONT PORCH=	37
THIRD FLOOR=	N/A	CVD. PORCH=	208
BASEMENT=	N/A	DECK=	148
		STORAGE=	N/A

TOTAL HEATED= 1928 TOTAL UNHEATED= 965

CRAWL SPACE VENTILATION CALCULATIONS

-VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON THE PLAN BUT SHOULD BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS TO PREVENT DEAD AIR POCKETS.

-100% VAPOR BARRIER MUST BE PROVIDED WITH 12" MIN. LAP JOINTS.

-THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 AS LONG AS REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS-VENTILATION OF THE SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. (COMPLY WITH NC CODE MIN. WITH REGARD TO VENT PLACEMENT FROM CORNERS)

1928 SQ. FT. OF CRAWL SPACE/1500

1.29 SQ. FT. OF REQUIRED VENTILATION

PROVIDED BY: 3 VENTS AT 0.45 SQ. FT. NET FREE

VENTILATION EACH= 1.35 SQ. FT. OF VENTILATION

****FOUNDATION DRAINAGE- WATERPROOFING PER SECTIONS 405 & 406.**

ATTIC VENTILATION CALCULATIONS

- CALCULATIONS SHOWN BELOW ARE BASED ON VENTILATORS USED AT LEAST 3 FT. ABOVE THE CORNICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED BY EAVE VENTS.

- CATHEDRAL CEILINGS SHALL HAVE A MIN. 1" CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

2744 SQ. FT. OF ATTIC/300= 9.15

EACH OF INLET AND OUTLET REQUIRED.

***WALL AND ROOF CLADDING DESIGN VALUES**

- WALL CLADDING IS DESIGNED FOR A 24.1 SQ. FT. OR GREATER POSITIVE AND NEGATIVE PRESSURE.

- ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:

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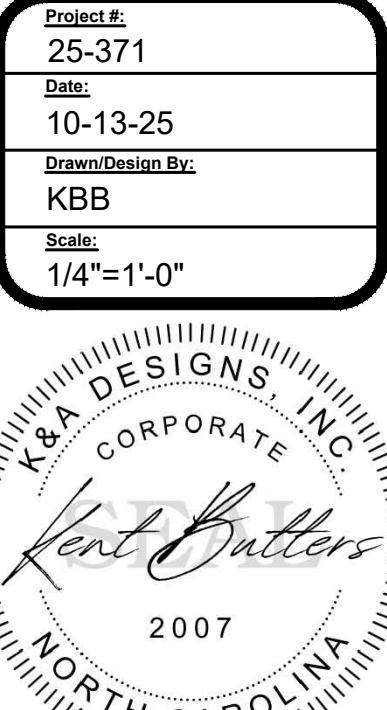
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21 LBS. PER SQ. FT. FOR ROOF PITCHES OF 7/12 TO 12/12

**** MEAN ROOF HEIGHT 30' OR LESS**

REVIEWER'S SEAL

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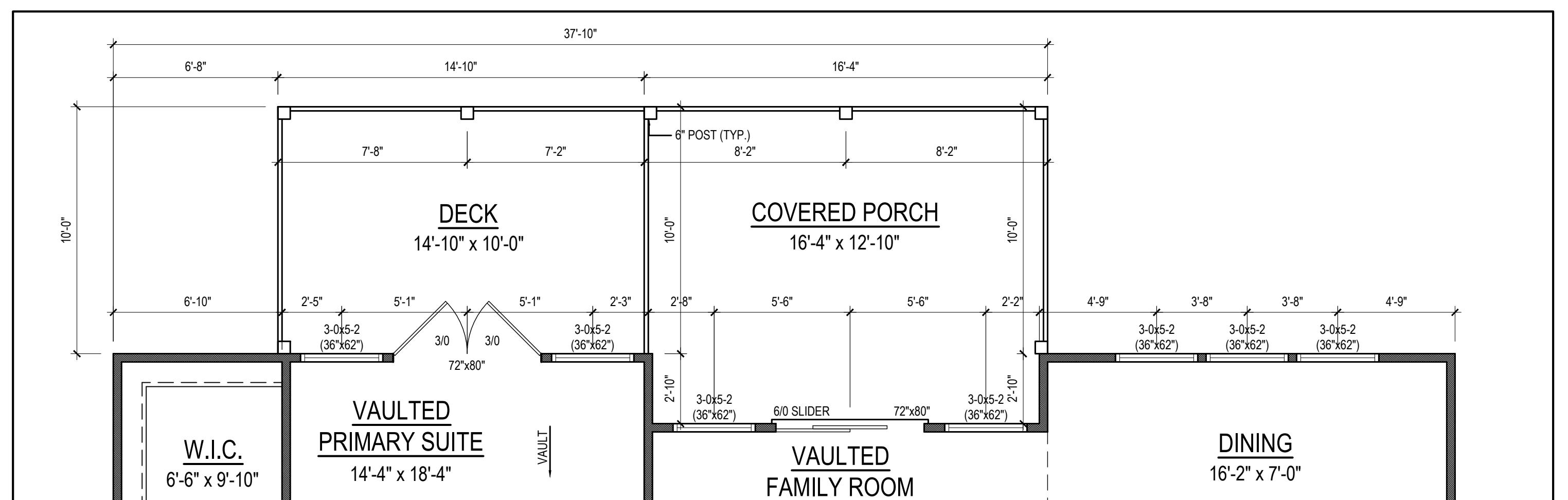
Email: Kent@KandAHomeDesigns.com

Project Name:

C&M Constructions

Sheet Name:
COVERED PORCH/DECK OPTION

Sheet Number:
1



REVIEWER'S SEAL

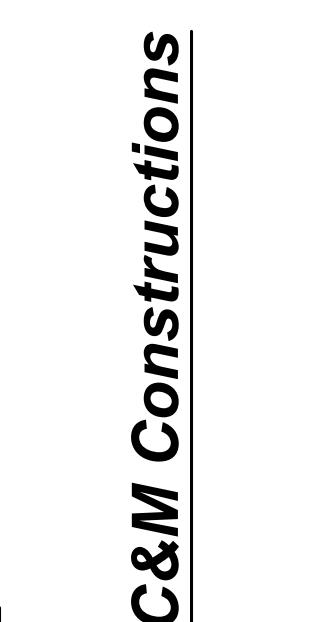
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BB	
<u>Title:</u>	
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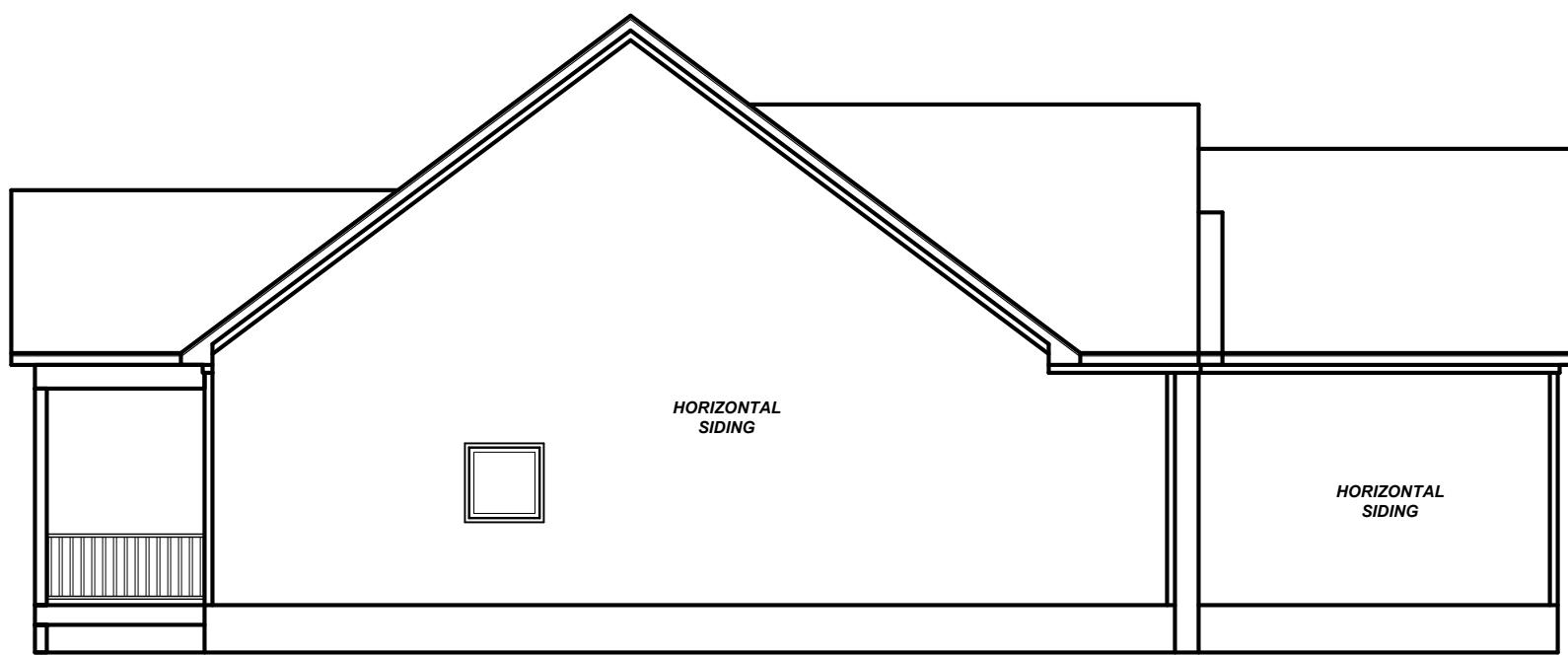


ELEVATIONS



FRONT ELEVATION

1/4" = 1'-0"



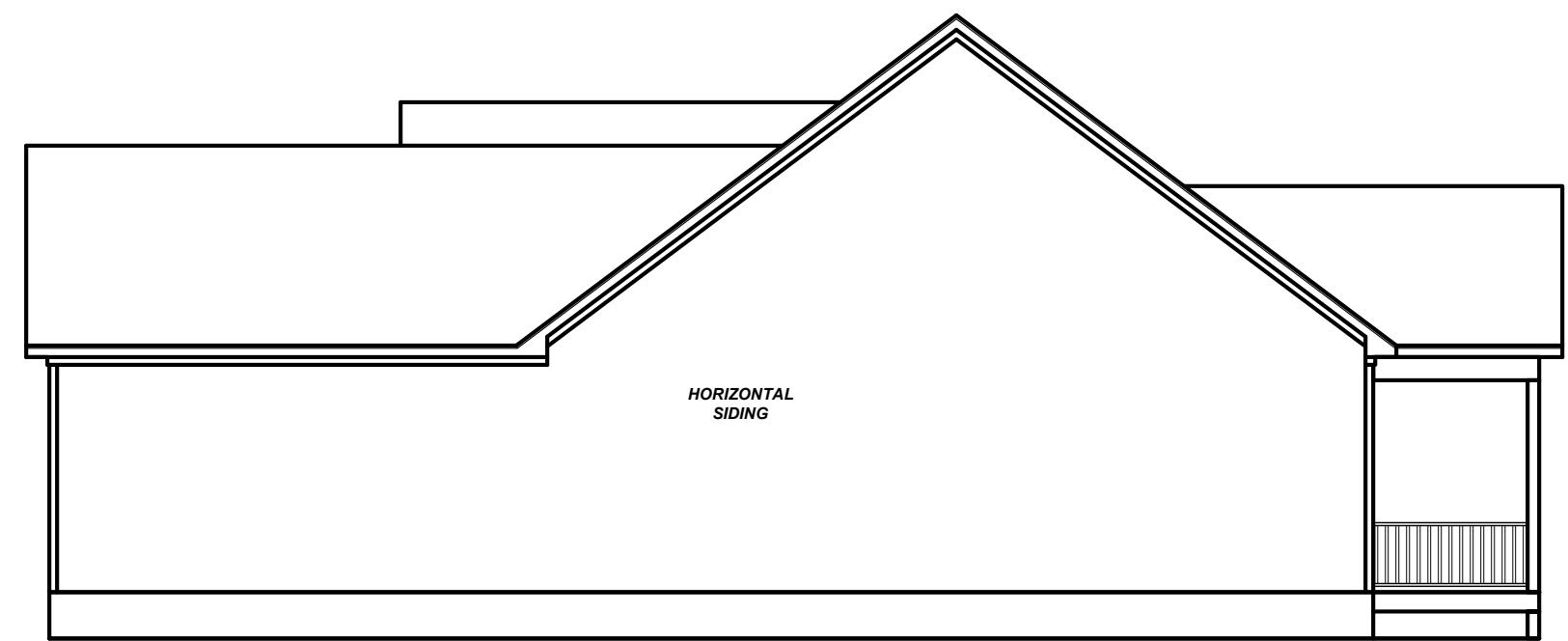
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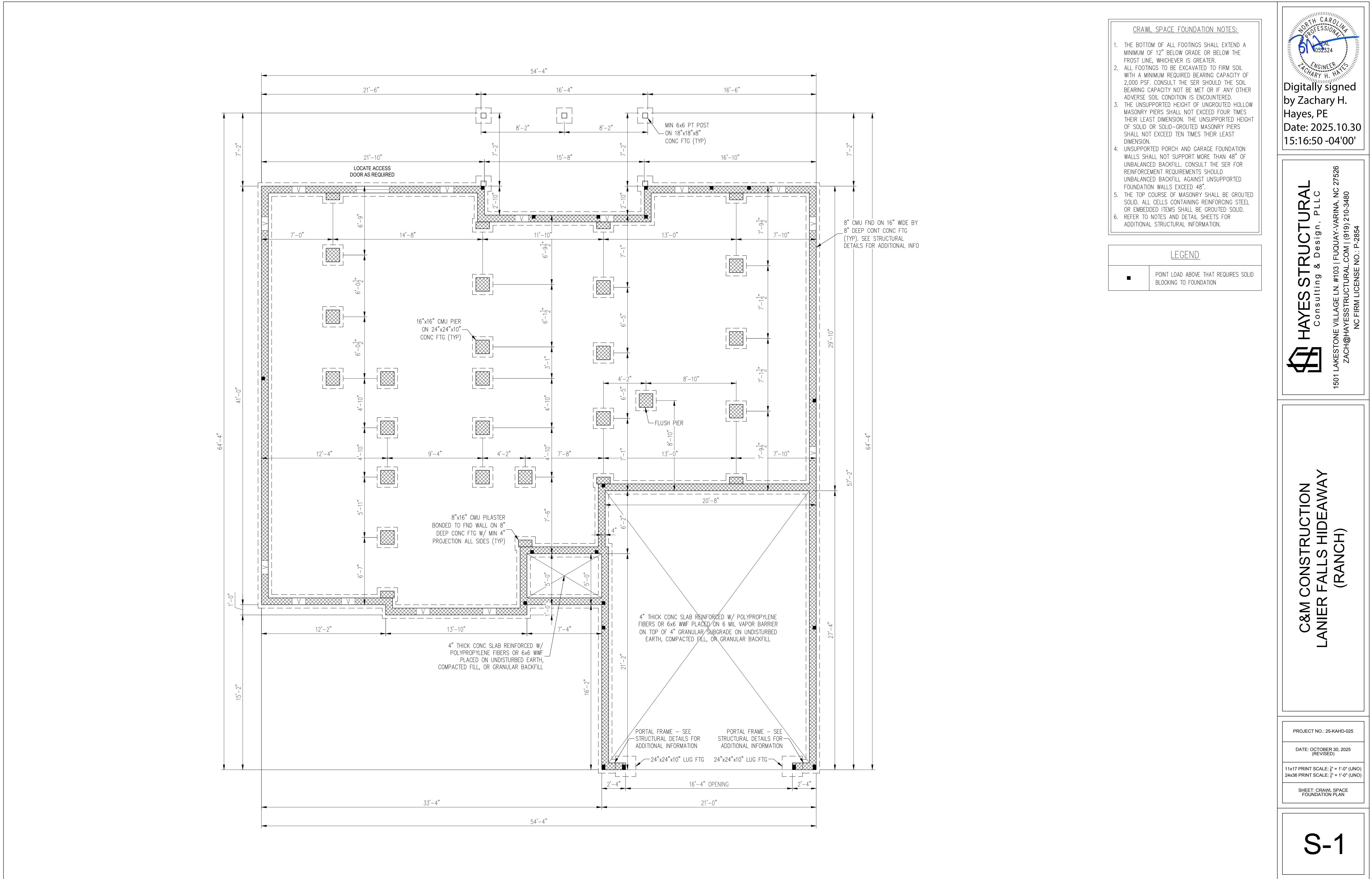
RIGHT ELEVATION

1/8" = 1'-0"

ELEVATIONS

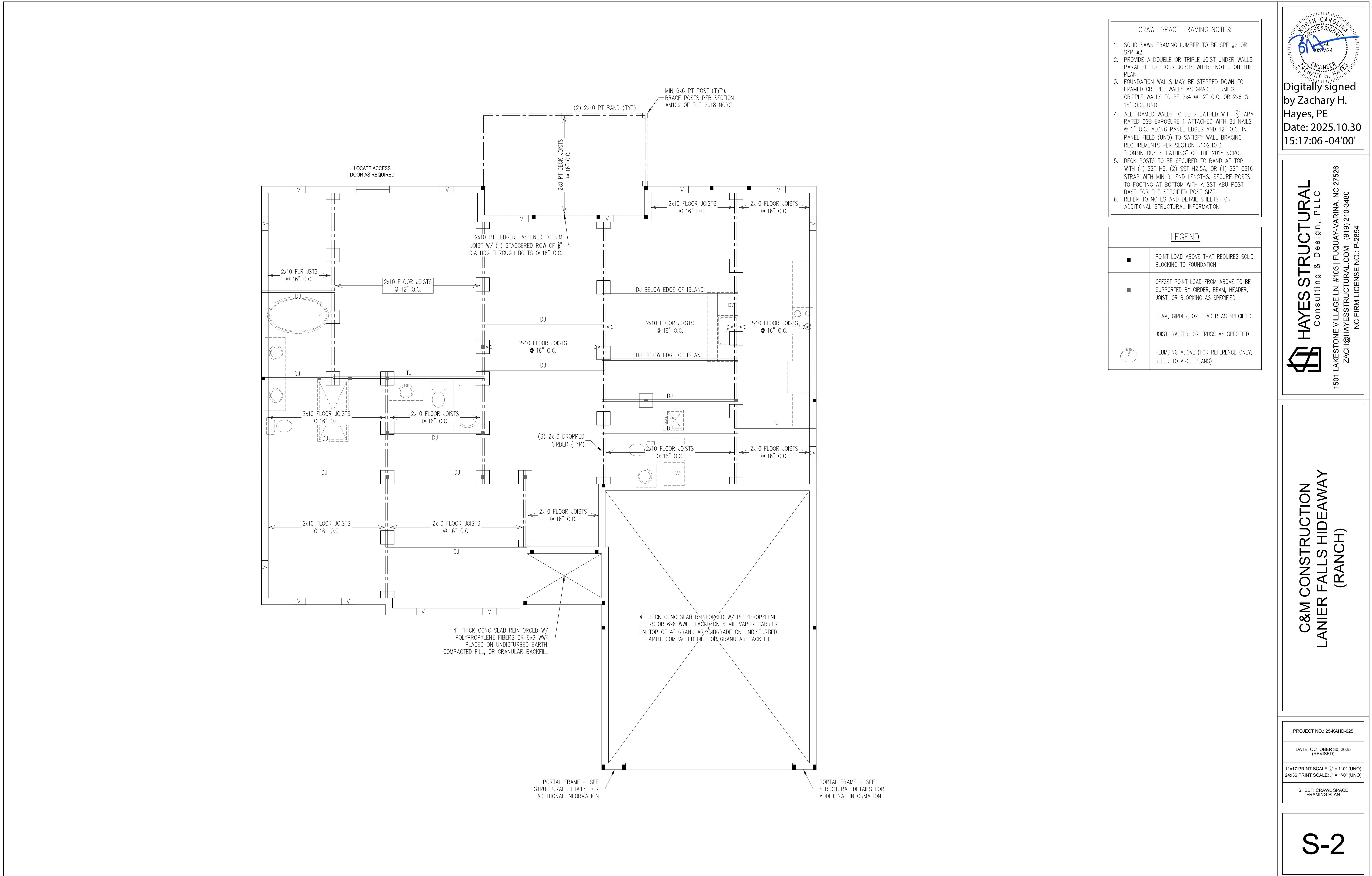
DIGITALLY SIGNED
BY ZACHARY H. HAYES
HAYES, PE
Date: 2025.10.30
15:16:33 -04'00'

HAYES STRUCTURAL
Consulting & Design, PLLC
1501 LAKESTONE VILLAGE LN #103 | FUQUAY-VARINA, NC 27526
ZACH@HAYESSTRUCTURAL.COM (919) 210-3484
NC FIRM LICENSE NO.: P-2854



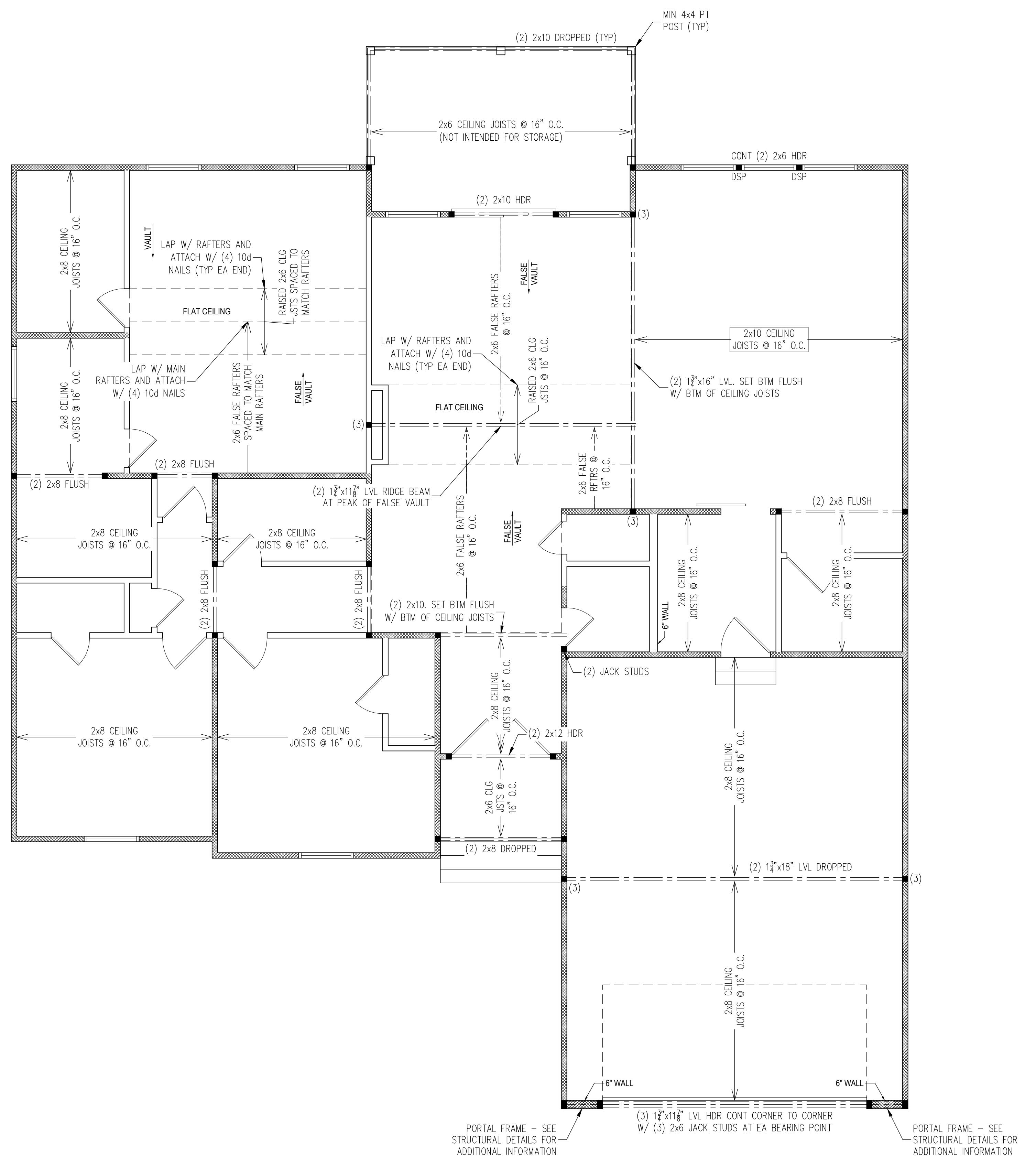
Digitally signed
by Zachary H.
Hayes, PE
Date: 2025.10.30
15:16:50 -04'00'

HAYES STRUCTURAL
Consulting & Design, PLLC
1501 LAKESTONE VILLAGE LN. #103 | FUQUAY-VARINA, NC 27526
ZACH@HAYESSTRUCTURAL.COM (919) 20-3480
NC FIRM LICENSE NO.: P-2854



Digitally signed
by Zachary H.
Hayes, PE
Date: 2025.10.30
15:17:06 -04'00'





FIRST FLOOR FRAMING NOTES:

1. SOLID SAWN FRAMING LUMBER TO BE SPF #2 OR SYP #2.
2. ALL LOAD BEARING HEADERS TO BE (2) 2x6 UNO.
3. HEADERS TO BE SUPPORTED BY JACK STUDS AND KING STUDS PER THE TABLE BELOW.
4. EXTERIOR AND INTERIOR LOAD BEARING WALLS TO BE 2x4 @ 16" O.C. OR 2x6 @ 24" O.C. UNO.
5. ALL EXTERIOR WALLS TO BE SHEATHED WITH 7/16" APA RATED OSB EXPOSURE 1 ATTACHED WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD (UNO) TO SATISFY WALL BRACING REQUIREMENTS PER SECTION R602.10.3 "CONTINUOUS SHEATHING" OF THE 2018 NCRC.
6. PORCH POSTS TO BE SECURED TO BAND AT BOTTOM AND BEAN AT TOP WITH (1) SST H6, (2) SST H2.5A, OR (1) SST CS16 STRAP WITH MIN 9" END LENGTHS. FOR MASONRY FOUNDATIONS, SECURE POSTS AT BOTTOM WITH A SST ABU POST BASE FOR THE SPECIFIED POST SIZE.
7. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

HAYES STRUCTURAL
Consulting & Design, PLLC
1501 LAKESTONE VILLAGE LN. #103 | FUQUAY-VARINA, NC 27526
NC FIRM LICENSE NO.: P-2854

C&M CONSTRUCTION
LANIER FALLS HIDEAWAY
(RANCH)

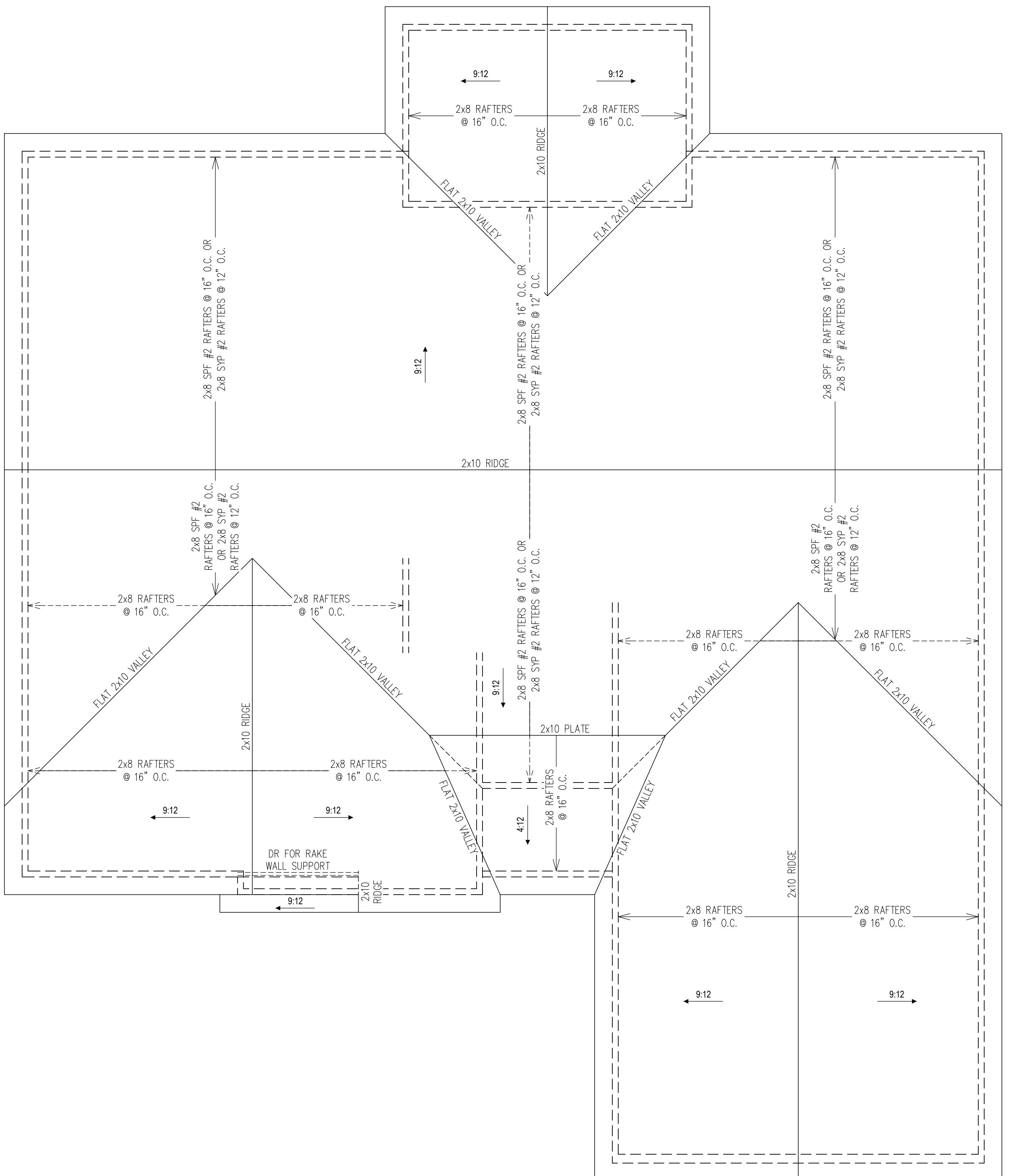
PROJECT NO.: 25-KAHD-025
DATE: OCTOBER 30, 2025
(REVISED)
11x17 PRINT SCALE: 1" = 1'-0" (UNO)
24x36 PRINT SCALE: 1" = 1'-0" (UNO)
SHEET: FIRST FLOOR
FRAMING PLAN

S-3

Digitally signed
by Zachary H.
Hayes, PE

Date: 2025.10.30
15:17:25 -04'00'

NORTH CAROLINA
PROFESSIONAL
ENGINEER
ZACHARY H. HAYES
SAL 052324



ROOF FRAMING NOTES:

1. SOLID SAWN FRAMING LUMBER TO BE SPF #2 OR SYP #2.
2. ROOF SHEATHING TO BE $\frac{1}{2}$ " MINIMUM APA RATED OSB EXPOSURE 1 ATTACHED TO ROOF FRAMING WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD UNO. SHEATHING SHALL HAVE A SPAN RATING THAT MATCHES OR EXCEEDS THE FRAMING SPACING.
3. FASTEN PLATES AND FLAT VALLEYS TO EVERY OTHER CROSSING RAFTER BELOW (32" O.C. MAX) WITH (2) $4\frac{1}{2}$ " LONG SST SDS SCREWS.
4. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND

—	RAFTER OR TRUSS AS SPECIFIED
====	ROOF SUPPORT BELOW

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Consulting & Design, PLLC
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ZACH@HAYESSTRUCTURAL.COM (919) 210-3484
NC FIRM LICENSE NO.: P-2854

C&M CONSTRUCTION
LANIER FALLS HIDEAWAY
(RANCH)

PROJECT NO.: 25-KAHD-025
DATE: OCTOBER 30, 2025
(REVISED)
11x17 PRINT SCALE: $\frac{1}{8}$ " = 1'-0" (UNO)
24x36 PRINT SCALE: $\frac{1}{4}$ " = 1'-0" (UNO)
SHEET: ROOF FRAMING PLAN

S-4



Digital signed
by Zachary H.
Hayes, PE
Date: 2025.10.30
15:17:43 -04'00'



Digitally signed
by Zachary H.
Hayes, PE

Date: 2025.10.30

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by Zachary H.
Hayes, PE

Date: 2025.10.30

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Date: 2025.10.30

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Digitally signed
by Zachary H.
Hayes, PE

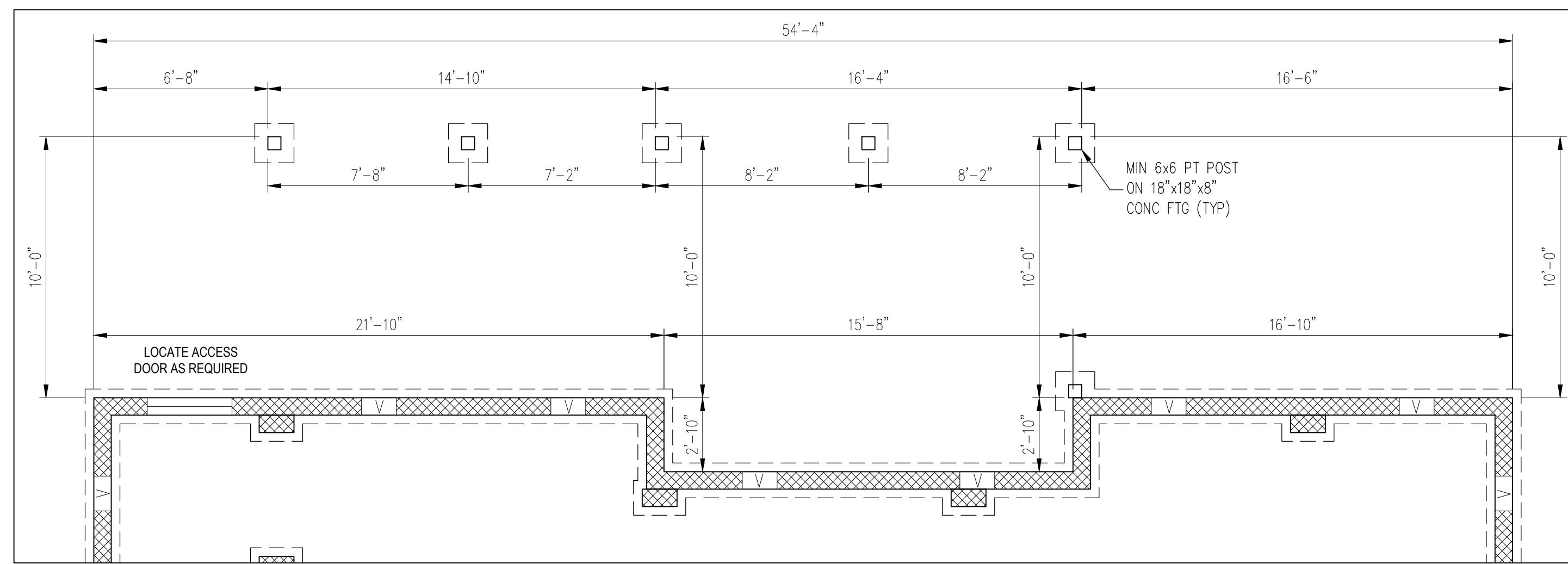
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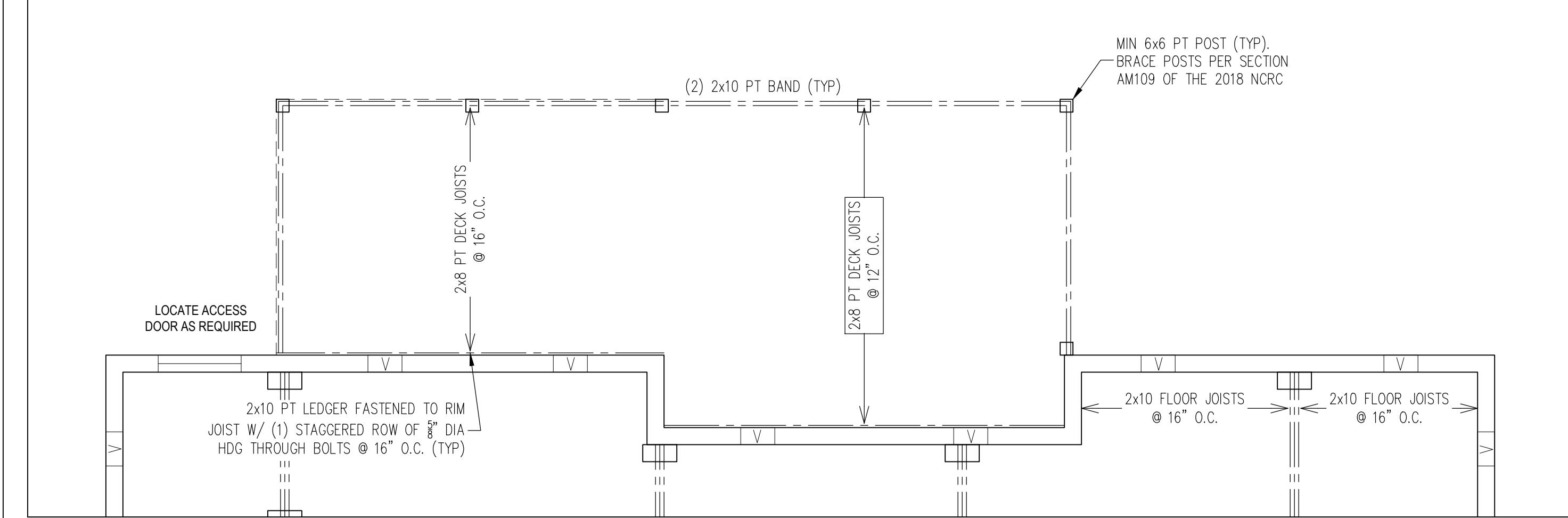
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by Zachary H.
Hayes, PE

Date: 2025.10.30

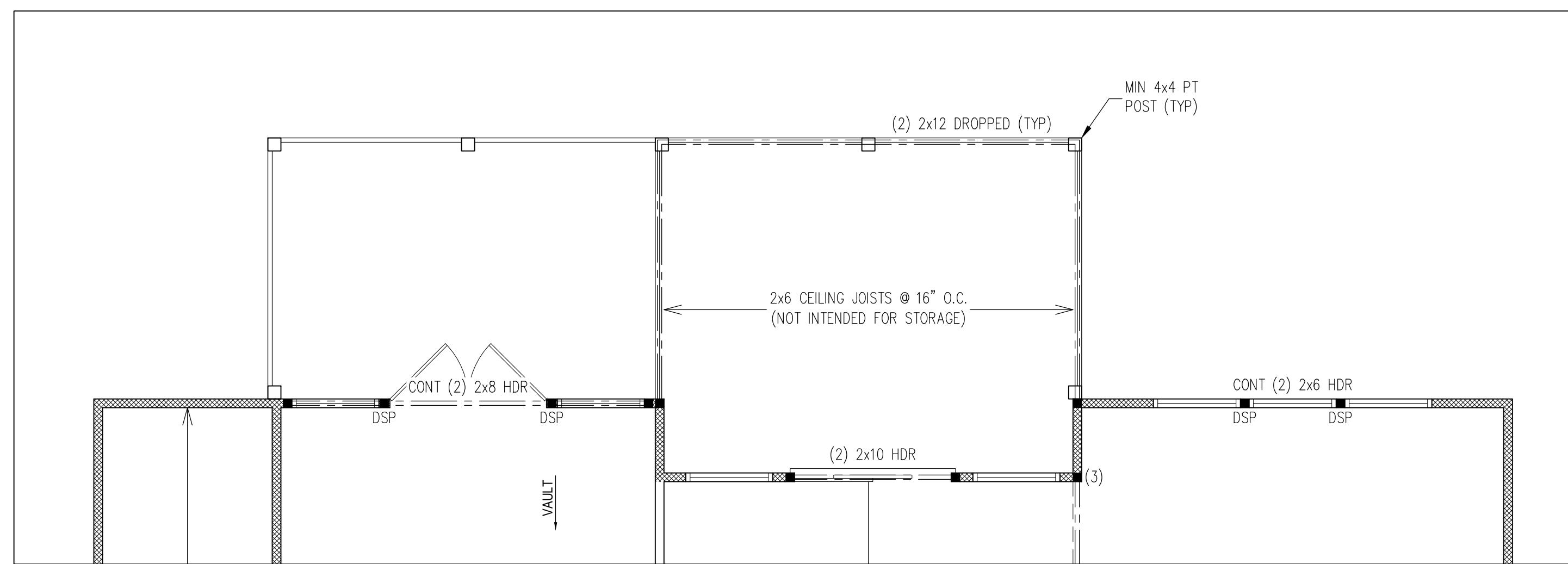
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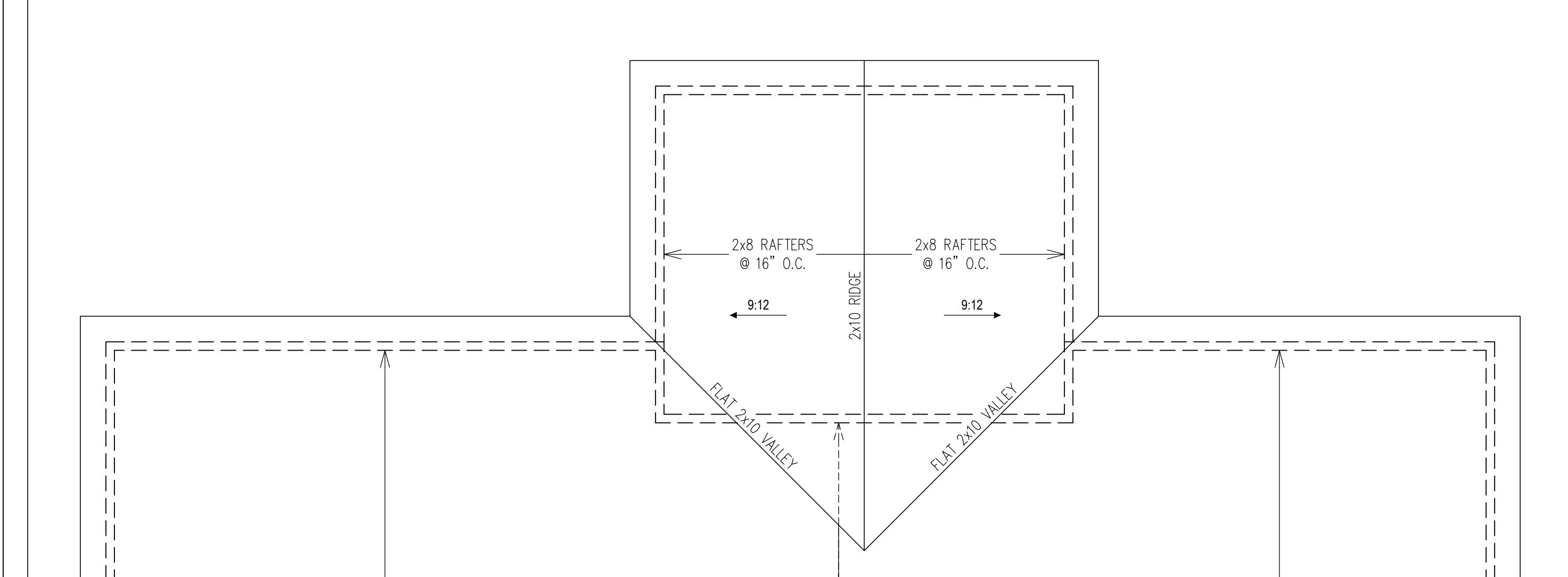
**OPTIONAL DECK/COVERED PORCH
FOUNDATION PLAN**



**OPTIONAL DECK/COVERED PORCH
FLOOR FRAMING PLAN**



**OPTIONAL DECK/COVERED PORCH
CEILING FRAMING PLAN**



**OPTIONAL DECK/COVERED PORCH
ROOF FRAMING PLAN**

**C&M CONSTRUCTION
LANIER FALLS HIDEAWAY
(RANCH)**

PROJECT NO.: 25-KAHD-025
DATE: OCTOBER 30, 2025
(REVISED)
11x17 PRINT SCALE: 1' = 1'-0" (UNO)
24x36 PRINT SCALE: 1' = 1'-0" (UNO)
SHEET: OPTIONAL DECK/PORCH
FOUNDATION AND FRAMING PLANS

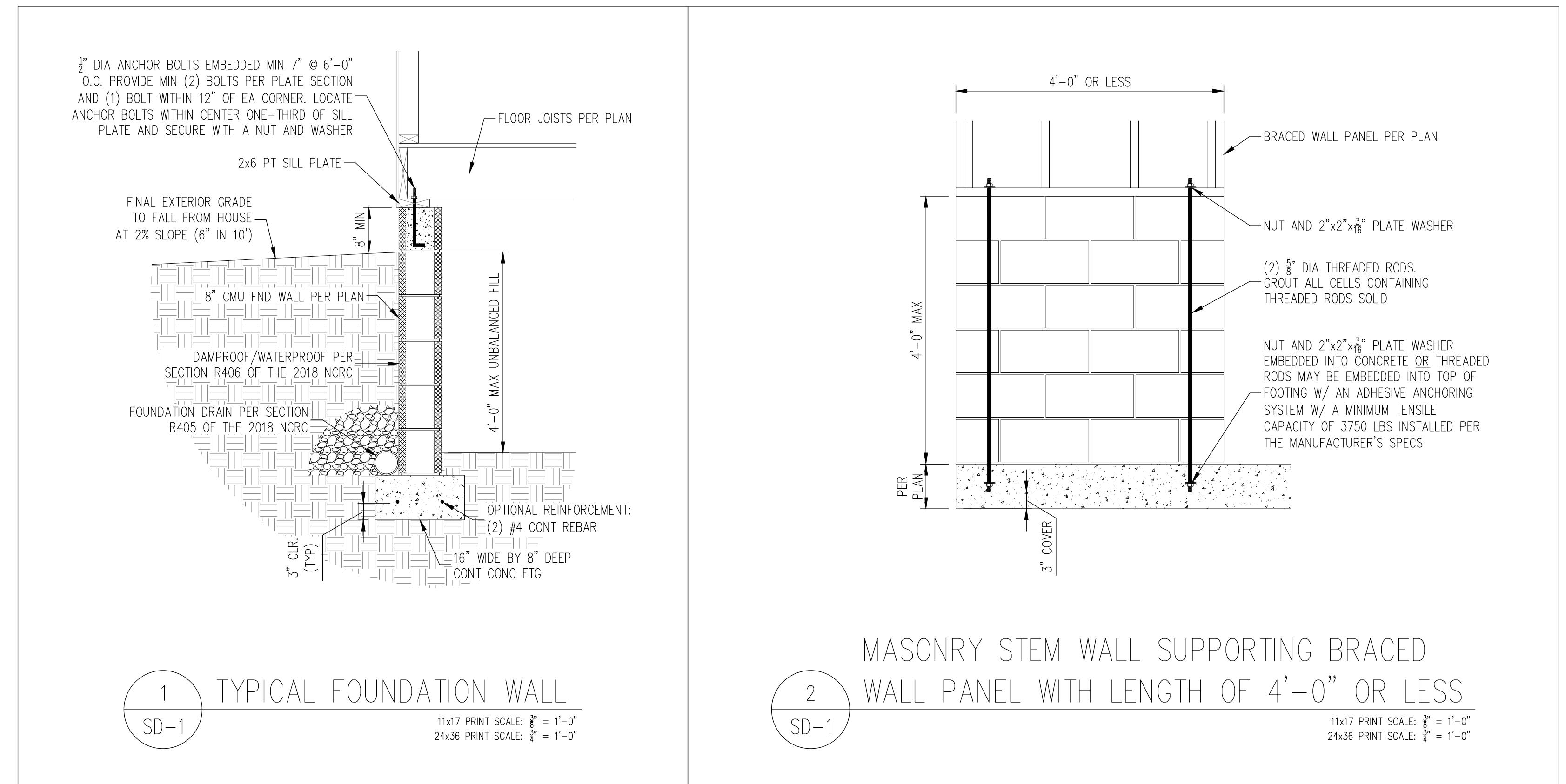
S-5



Digitally signed
by Zachary H.
Hayes, PE
Date: 2025.11.04
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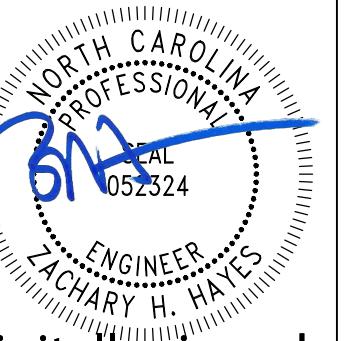
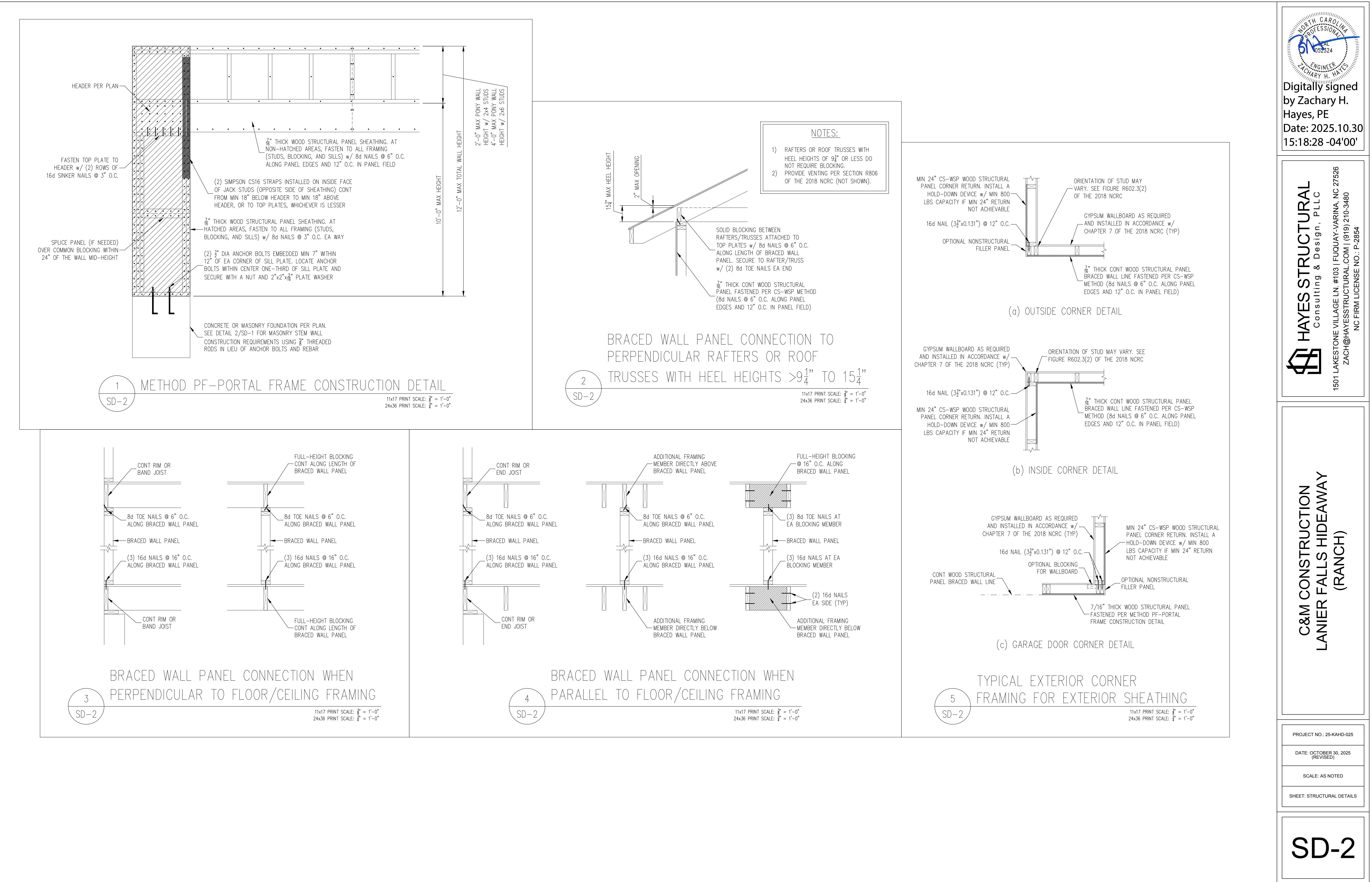
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PROJECT NO.: 25-KAHD-025
DATE: NOVEMBER 4, 2025
(REVISED)
SCALE: AS NOTED
SHEET: STRUCTURAL DETAILS

SD-1



Digitally signed
by Zachary H.
Hayes, PE
Date: 2025.10.30
15:18:28 -04'00'

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SD-2