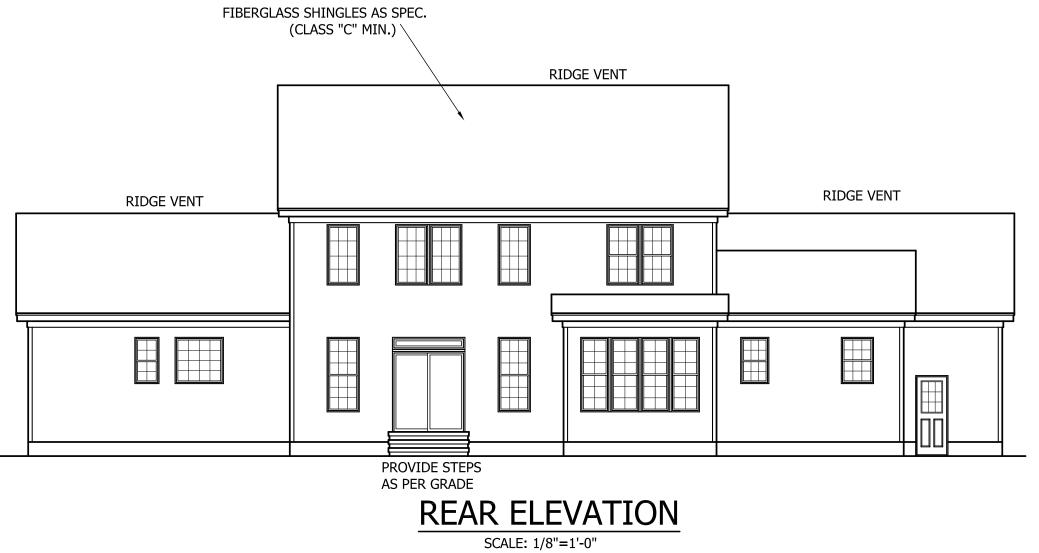


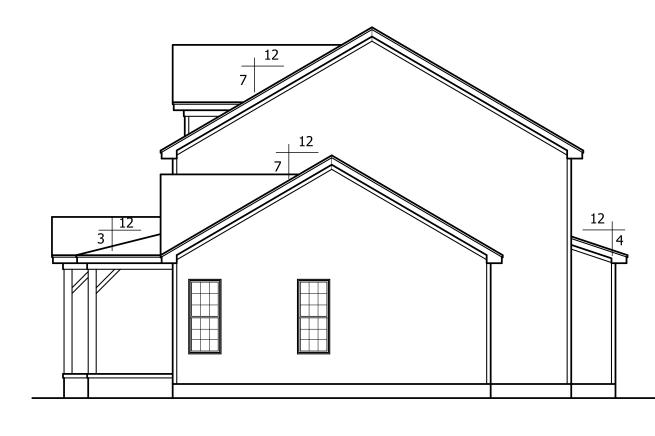
2018 NORTH CAROLINA RESIDENTIAL CODE

OR ANY DEVIATION OF THESE PLANS.

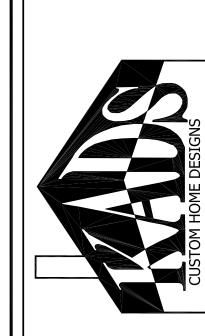
ALL WINDOWS TO BE INSTALLED MUST MEET

A MAXIMUM OF .32 U VALUE OR BETTER, UNLESS





**RIGHT ELEVATION** SCALE: 1/8"=1'-0"



ANGIER, NC 919-369-7181

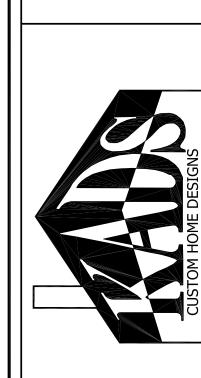
> DRAWN BY: <u>D.W.O.</u>

DATE:

3/26/21 PAGE NO

OF

PLAN NO.



ANGIER, NC 919-369-7181

DRAWN BY: D.W.O.

DATE: 3/26/21

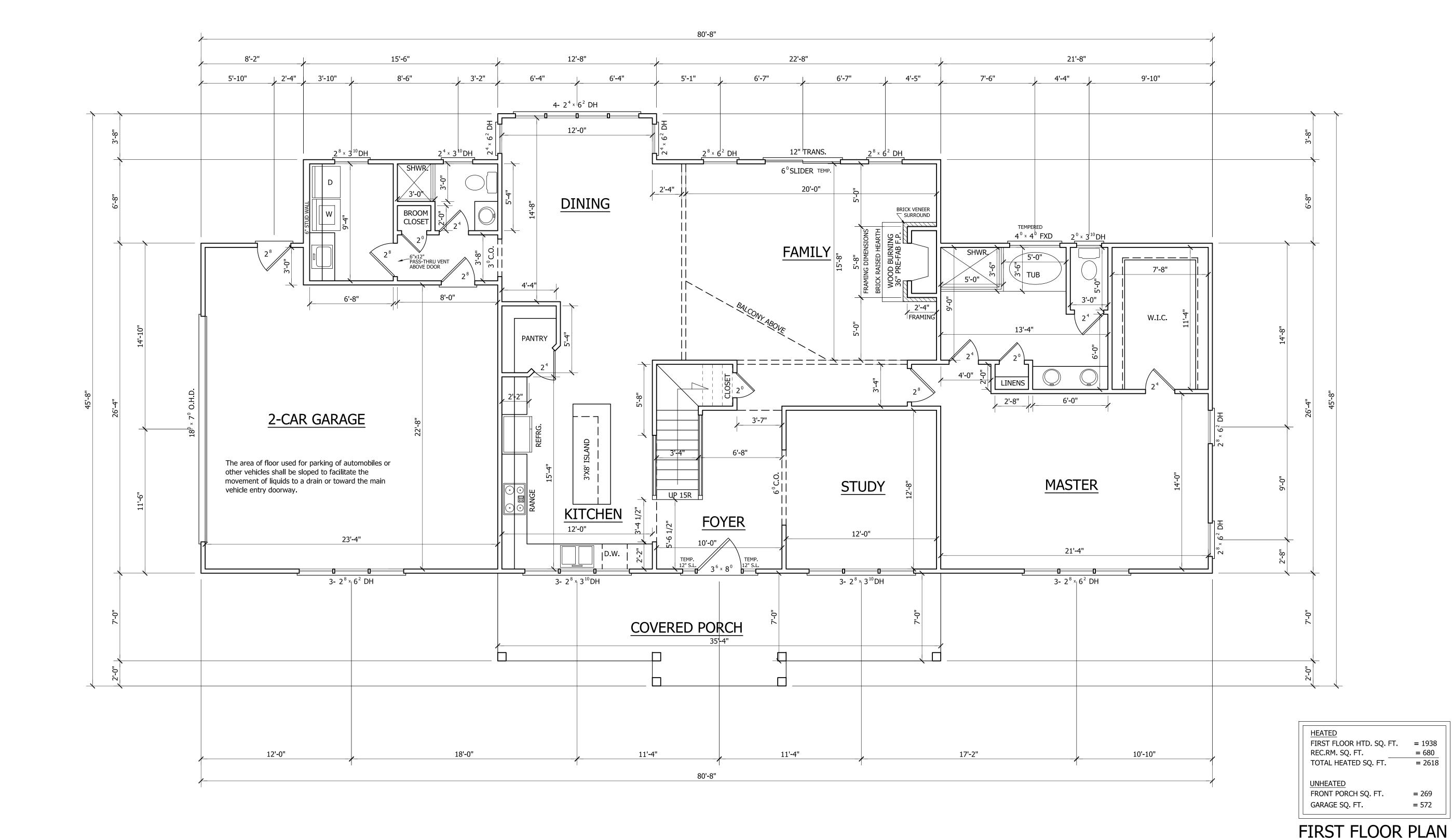
PAGE NO

2

OF

PLAN NO. DK2618

SCALE: 1/4"=1'-0" 9'-0" CLG. HGT. SET WINDOWS AT 7'-10" A.F.F.



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DATE: 3/26/21

PAGE NO

OF

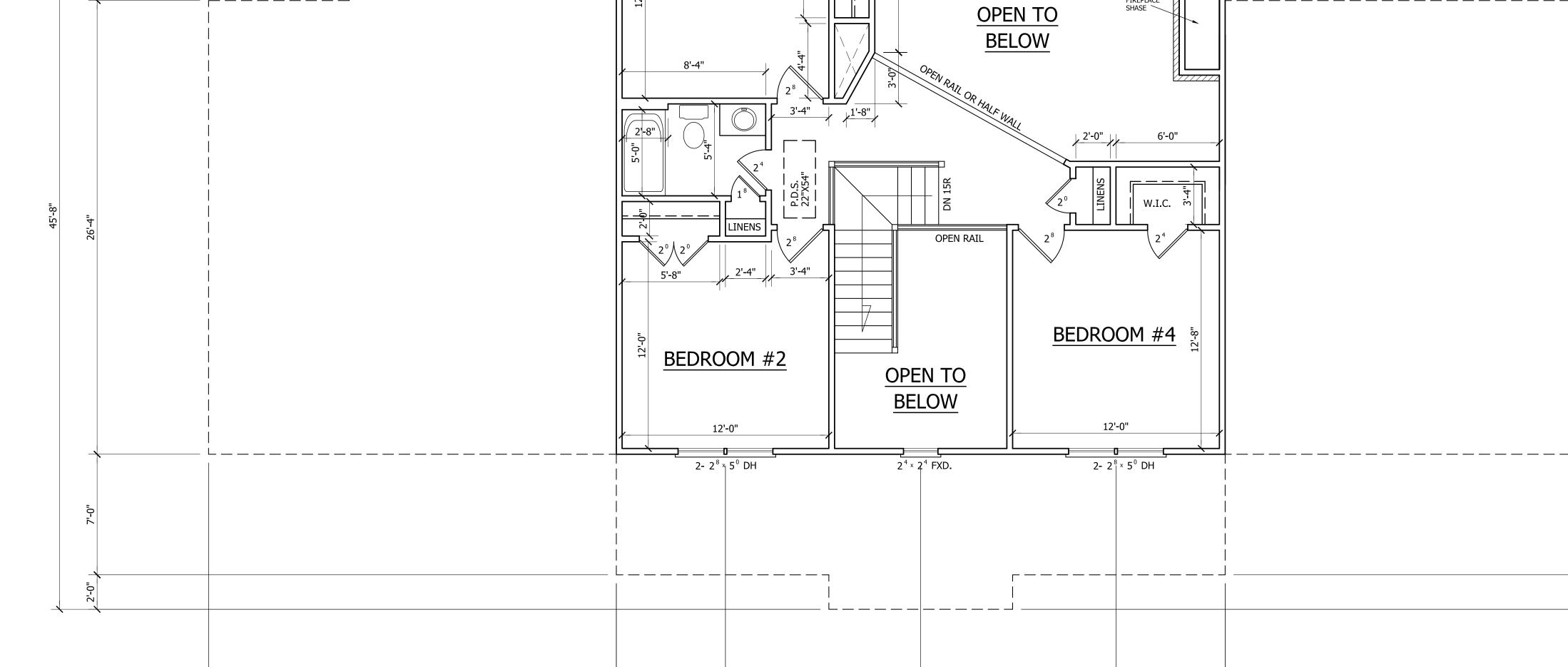
DK2618

SECOND FLOOR PLAN

SCALE: 1/4"=1'-0"
8'-0" CLG. HGT.
SET WINDOWS AT 6'-8" A.F.F. PLAN NO.

21'-8"

21'-8"



11'-4"

35'-4"

80'-8"

6'-4"

6'-4"

BEDROOM #3

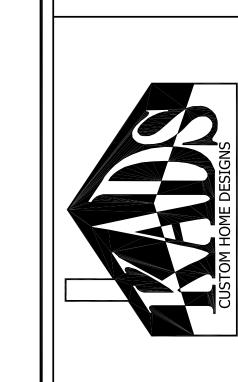
11'-5"

8'-2"

15'-6"

23'-8"





ANGIER, NC 919-369-7181

> DRAWN BY: D.W.O.

DATE: 3/26/21

PAGE NO

OF

PLAN NO. DK2618

SIDING 4" CONC. SLAB SHEATHING 4" BRICK VENEER – 6X6 10/10 WWM-INSUL. 6 MIL. POLY VAPOR BARRIER 1" AIR SPACE 2"x4" SILL— 2"x4" SILL 4" GRAVEL FILL-1/2" DIA X 15" EMBEDED ÁNCHOR BOLTS @ 6'-0" O.C. GRADE VARIES GRADE VARIES EXPANSION JOI<del>NT</del> NEEDED IF SLAB IS TO BE UNHEATED 1"x24" PERIMETER INSULATION - EXPANSION JOINT NEEDED IF SLAB IS TO BE UNHEATED BRICK VENEER SIDING 4" PERF. DRAIN SLAB FDN. DETAIL SCALE: 1" = 1'-0"

REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM

THE WALKING SURFACE TO THE REQUIRED GUARD

PASSAGE OF A SPHERE 4" IN

9" | MIN.

FIRESTOPPING:

handrail height and below the required headroom height.

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

Stairways shall not be less than 36 inches

in clear width at all points above the permitted

Handrails shall not project more than 4.5 inches

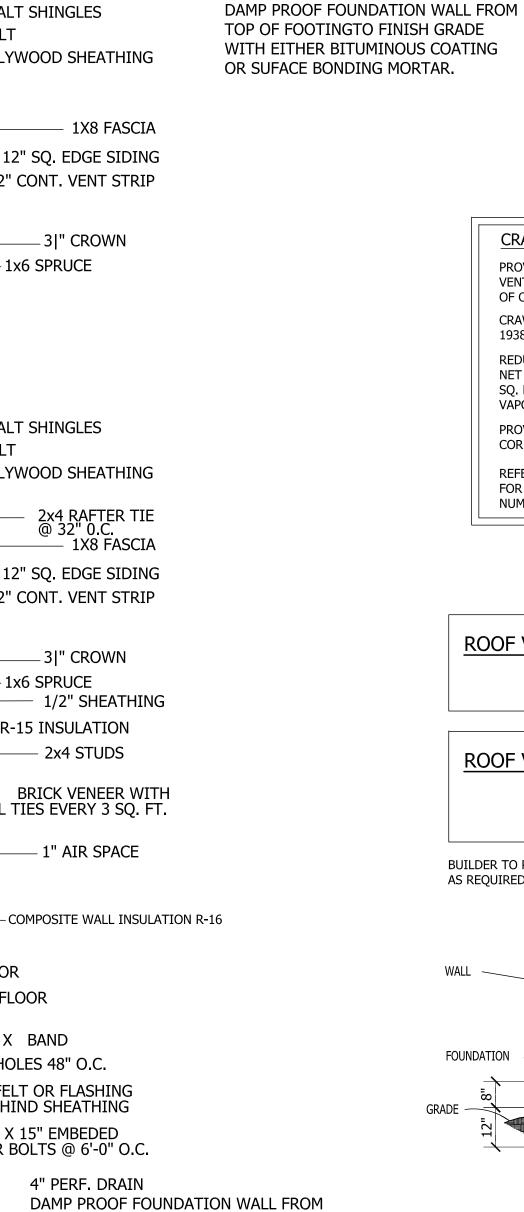
a handrail is installed on one side and 27 inches

where handrails are provided on both sides

STAIR DETAIL

HEIGHT WHICH ALLOW

1" MAX. NOSE PROJECTION



240 lb. ASPHALT SHINGLES

- \" PLYWOOD SHEATHING

- 1X8 FASCIA

12" SQ. EDGE SIDING

2" CONT. VENT STRIP

\_3|" CROWN

1x6 SPRUCE

– \" PLYWOOD SHEATHING

— 1X8 FASCIA

12" SQ. EDGE SIDING

\_3|" CROWN

- 2x4 STUDS

- 1" AIR SPACE

- 1/2" SHEATHING

- 1x6 SPRUCE

R-15 INSULATION

BRICK VENEER WITH – WALL TIES EVERY 3 SQ. FT.

2" CONT. VENT STRIP

240 lb. ASPHALT SHINGLES

— 15 lb. FELT

- SUBFLOOR

- FINISH FLOOR

- 2 X BAND

WEEP HOLES 48" O.C.

— 30# FELT OR FLASHING UP 6" BEHIND SHEATHING

1/2" DIA X 15" EMBEDED ANCHOR BOLTS @ 6'-0" O.C.

4" PERF. DRAIN

TOP OF FOOTINGTO FINISH GRADE

OR SUFACE BONDING MORTAR.

WITH EITHER BITUMINOUS COATING

— 15 lb. FELT

R-30 INSULATION

1x4 PINE

1x10 SPRUCE

1x10 SPRUCE

ROOF TRUSS PER MANUFACTURER

(SEE TRUSS DESIGN PACKAGE)

-2X4 COLLAR BEAM @ 48" O.C.

R-30 INSULATION -

CLG. JOIST

FL. JOIST

FL. JOIST

1ST FLOOR HVAC IN CRAWL SPACE

(MIN. 22" CLEARANCE)

BRICK SECTION

TREATED SILL

CORBEL BRICK

8" SOLID CAP

- CONC. BLOCK

AS SHOWN BELOW

OPTIONAL ROOF TRUSS DETAIL

1/2" GYPSUM BOARD

COMPOSITE **FLOOR** INSULATION R-20 —

R-19 INSULAT<del>IQ</del>N

- GIRDER

TYP. FOR INTERIOR WALLS

2ND FLOOR HVAC IN ATTIC

CLG. JOIST

-1x10 SPRUCE

FL. JOIST

FL. JOIST

3" MIN. PROJECTION MAX. - THICKNESS OF

**FOOTING** 

SIDING SECTION

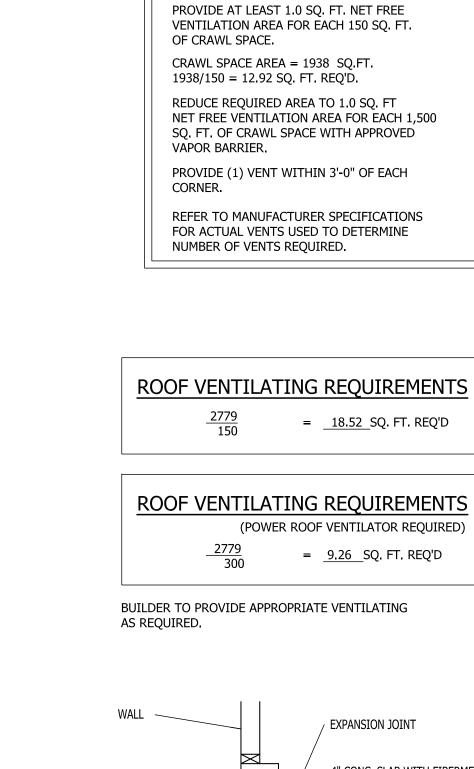
TREATED SILL

- 8" SOLID CAP FOR 2 STORY

4" SOLID CAP FOR 1 STORY

AS REQUIRED. EXPANSION JOINT 4" CONC. SLAB WITH FIBERMESH OR WIREMESH ON 6 MIL. VAPOR FOUNDATION BARRIER ON 4" CRUSHED STONE 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 2995° 29 - 8" CONC. BLK. WALL — 8"x16" CONC. FTG.

**GARAGE SLAB** 



CRAWL SPACE VENTILATION



240 lb. ASPHALT SHINGLES

240 lb. ASPHALT SHINGLES

\" PLYWOOD SHEATHING

15 lb. FELT

\" PLYWOOD SHEATHING\_

1x8 FASCIA

3|" CROWN

2x4 RAFTER TIE @ 32" O.C. 1x8 FASCIA ——

3|" CROWN

SIDING-

1/2" SHEATHING-

2x4 STUDS -

SUBFLOOR -

2 X BAND

FINISH FLOOR

FINISH GRADE -

1/2" DIA X 15" EMBEDED ANCHOR BOLTS @ 6'-0" O.C.

12" SQ. EDGE SIDING -

2" CONT. VENT STRIP

12" SQ. EDGE SIDING

2" CONT. VENT STRIP

15 lb. FELT

-1x10 SPRUCE

GENERAL FOUNDATION NOTES:

1. THIS PLAN DESIGNED IN ACCORDANCE WITH THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, 2018 EDITION.

2. EXTERIOR WALL FOOTING TO BE A MINIMUM OF 16" WIDE AND CONSTRUCTED WITH 3000 PSI CONCRETE. FOR FOUNDATION WALL HEIGHT, THICKNESS AND BACKFILL REQUIREMENTS REFER TO STATE AND LOCAL BUILDING CODES. THE ASSUMED SOIL BEARING CAPACITY FOR THIS PROJECT IS 2000 PSF. THE CONTRACTOR MUST VERIFY THE SITE CONDITIONS AND CONTACT A SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

3. ALL FOOTINGS SHALL BEAR ON UNDISTURBED SUB-GRADE A MINIMUM OF 12"
BELOW ADJACENT FINISHED GRADE OR AS OTHERWISE DIRECTED BY THE
LOCAL INSPECTOR.

4. FOUNDATION DRAINAGE SHALL BE IN ACCORDANCE WITH SECTION R405 "FOUNDATION DRAINAGE" AND SECTION R406 "FOUNDATION WATERPROOFING AND DAMPPROOFING".

5. ANCHOR BOLTS SHALL BE 1/2" DIAMETER AND INSTALLED AT 72" ON CENTER AND 12" FROM EACH CORNER OR SILL PLATE SPICE LOCATIONS.

# STRUCTURAL EVALUATION BY:

WILKINS ENGINEERING, P.C.
Post Office Box 37446
Raleigh, North Carolina 27627

7/3/2021

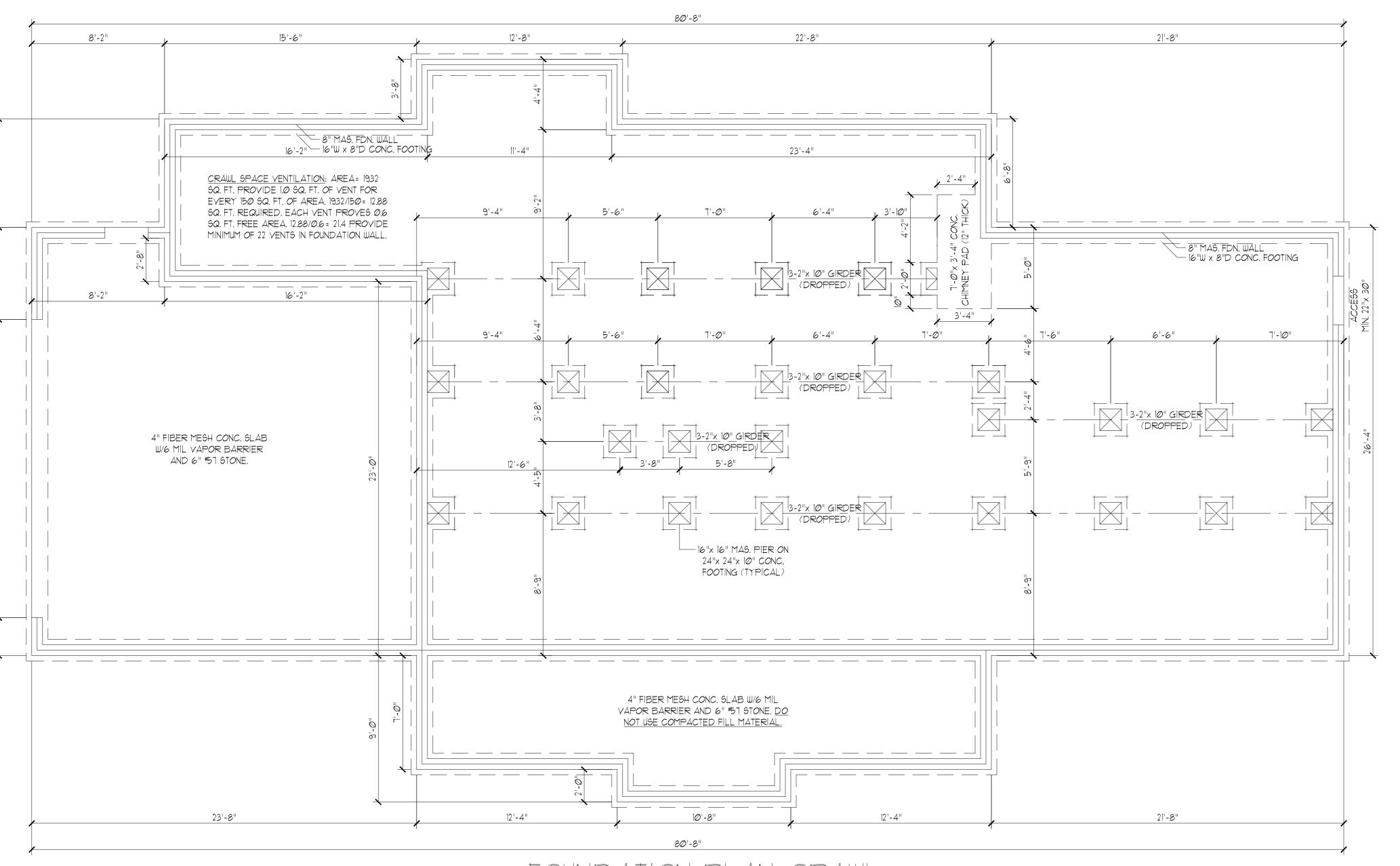
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FOUNDATION PLAN - CRAWL SCALE 1/4" = 1'-0" DO NOT SCALE THESE DRAWINGS

ALL DIMENSIONS AND SITE DIMENSIONS ARE TO BE
VERIFIED BEFORE CONSTRUCTION BEGINS. SHOULD
ANY DISCREPANCIES OR OMISSIONS BE NOTED, THE
BUILDER AGREES TO NOTIFYTHE ENGINEER IMMEDIATELY.
THESE DRAWINGS APPLY TO STRUCTURAL ELEMENTS ONLY.
THE ENGINEER ASSUMES NO RESPONSIBILITY FOR CODE
COMPLIANCE OF NON-STRUCTURAL ITEMS.

THESE DRAWINGS ARE PROTECTED UNDER FEDERAL
COPYRIGHT LAWS, THE ORIGINAL PURCHASER OF
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THE CONSTRUCTION OF ONE AND ONLY ONE SINGLE
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Raleigh, NC 27627

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2. WALL CLADDING IS DESIGNED FOR A POSITIVE/NEGATIVE PRESSURE OF NOT LESS THAN 24.1 PSF.

3. ROOF CLADDING DESIGN VALUES (POSITIVE/NEGATIVE) SHALL BE AS FOLLOWS: 45.5 PSF FOR ROOF PITCHES FROM 0/12 TO 2.25/12

34.5 PSF FOR ROOF PITCHES FROM 2.25/12 TO 1/12 21.0 PSF FOR ROOF PITCHES FROM 1/12 TO 12/12 MEAN ROOF HEIGHT FOR THIS STRUCTURE IS 18'

4. ALL WALLS, CEILINGS, AND FLOORS SHALL BE INSULATED IN ACCORDANCE WITH PART IV, ENERGY CONSERVATION, CHAPTER II, ENERGY EFFICIENCY OF THE CODE FOR ZONE 4A (TABLE NIIØ1.2.1) 5. DESIGN CRITERIA IS AS FOLLOWS:

	DEAD LOAD (PSF)	LIVE LOAD (PS
PRIMARY FLOOR	10	4Ø
SECONDARY FLOOR	10	4Ø
SLEEPING AREAS	10	4Ø
ATTIC (W/ STAIRS)	10	3 <i>Ø</i>
ATTIC (W/O STAIRS)	10	20
R00F	10	2Ø

WIND LOADING IS BASED ON 3 SECOND GUST OF 115 MILES PER HOUR LIVE LOAD DEFLECTION LIMITS (LIVE LOAD) ARE L/360 FOR FLOORS, L/240 FOR ROOF 6. ALL HEADERS IN LOAD BEARING WALL SHALL BE 2-2"x 10" UNLESS NOTED OTHERWISE. FULL HEIGHT KING STUDS SHALL BE INSTA±±ED PM EACH SIDE OF EXTERIOR WALL HEADERS AND BEAMS AS FOLLOWS:

HEADER SPAN	STUDS @ 16" O.C.	STUDS @ 24" O.C.
3'-Ø"		1
4'-Ø''	2	1
8'-Ø"	3	2
12'-Ø"	5	3
16'-0"	6	4

7. ALL LUMBER USED FOR JOISTS AND RAFTERS SHALL BE #2 SPF OR BETTER. LUMBER USED FOR STUD WALL SHALL BE #3 SPF OR BETTER DOUBLE FLOOR JOISTS SHALL BE INSTALLED UNDER INTERIOR WALLS RUNNING PARALLEL WITH THE FLOOR JOISTS.

8. LYL SHALL BE LAMINATED VENEER LUMBER OR PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM PROPERTIES: Fb=2800 PSI, Fv=285 PSI, E=2,000,000 PSI. MULTIPLE LVL PLIES CAN BE USED TO ACHIEVE THE SPECIFIED SIZE SHOWN ON THESE PLANS AND IS CONSIDERED TO BE STRUCTURALLY EQUIVALENT.

9. THE FOLLOWING SHALL APPLY TO ALL BRACED WALL LINES: ALL EXTERIOR WALLS SHALL BE CONTINUOUSLY SHEATHED WITH 1/2" OSB OR CDX. WSP SHALL BE IN ACCORDANCE WITH R-602.10.3 AND SHALL BE COVERED WITH 1/2" GYPSUM BOARD ON THE INTERIOR FACE. ALL WSP PANELS SHALL BE FASTENED WITH 8d NAILS AT 12" ON CENTER (FIELD) AND 6" ON CENTER (EDGES). ALL EXTERIOR WALLS SHALL BE 2"x 4" AT 16" ON CENTER AS A MINIMUM (EXCEPT FOR BALLOON FRAMED WALL SECTIONS AS NOTED) AND CONTINUOUSLY SHEATHED.

STRUCTURAL EVALUATION BY WILKINS ENGINEERING, P.C. Royald B. William Post Office Box 37446 Post Office Box 37446
Raleigh, North Carolina 27627

FILE: DRAIME

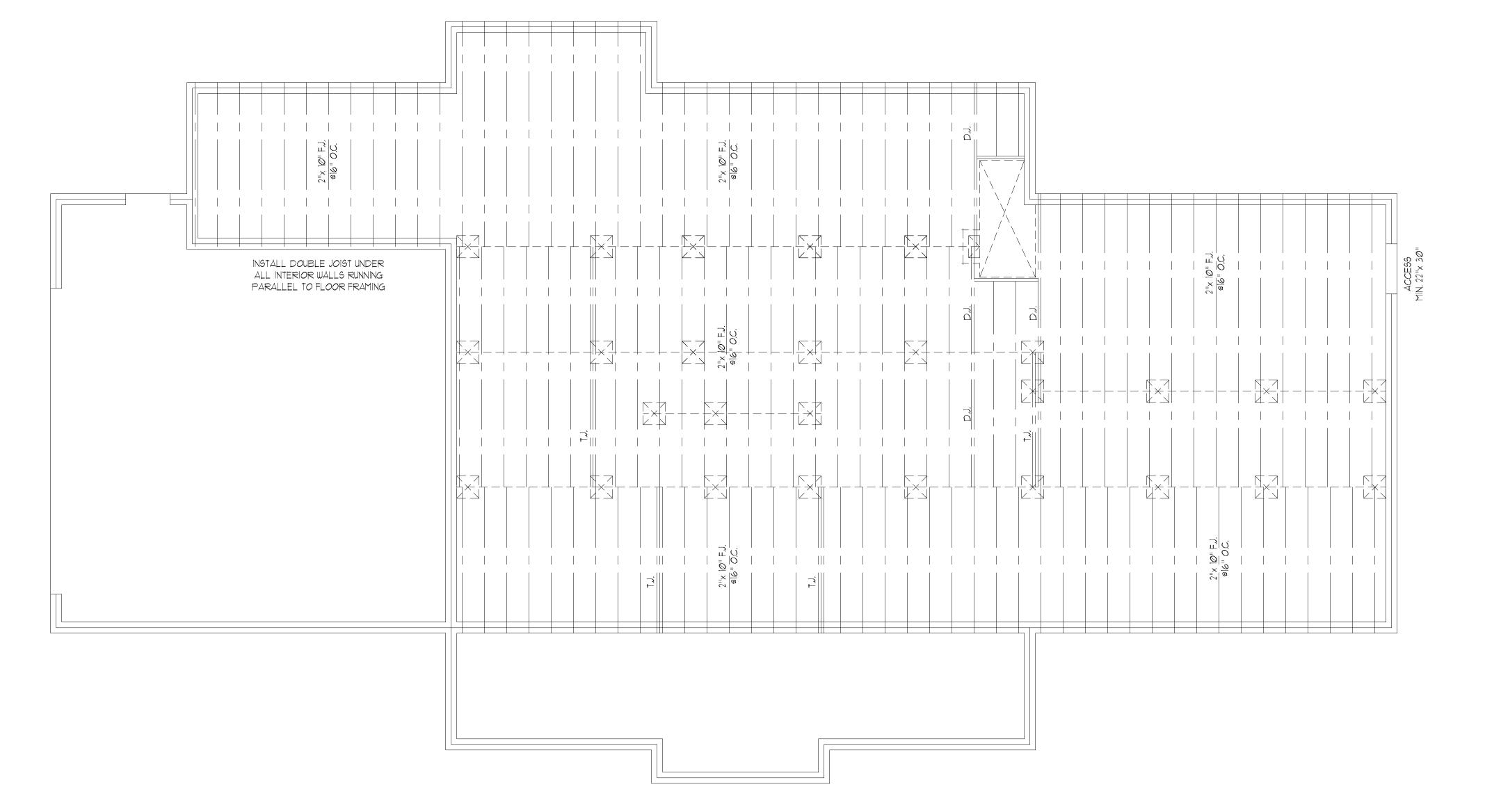
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7/3/2021

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FLOOR FRAMING PLAN SCALE 1/4" = 1'-0"

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Sheet No.

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34.5 PSF FOR ROOF PITCHES FROM 2.25/12 TO 7/12 21.0 PSF FOR ROOF PITCHES FROM 1/12 TO 12/12

MEAN ROOF HEIGHT FOR THIS STRUCTURE IS 18' 4. ALL WALLS, CEILINGS, AND FLOORS SHALL BE INSULATED IN ACCORDANCE WITH PART IV, ENERGY CONSERVATION, CHAPTER 11, ENERGY EFFICIENCY OF THE CODE FOR ZONE 4A (TABLE NIIØ1.2.1) 5. DESIGN CRITERIA IS AS FOLLOWS:

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PRIMARY FLOOR	10	4Ø
ECONDARY FLOOR	10	4Ø
LEEPING AREAS	10	4Ø
ATTIC (W/ STAIRS)	10	3 <i>Ø</i>
ATTIC (W/O STAIRS)	10	2Ø
ROOF	10	20

WIND LOADING IS BASED ON 3 SECOND GUST OF 115 MILES PER HOUR LIVE LOAD DEFLECTION LIMITS (LIVE LOAD) ARE L/360 FOR FLOORS, L/240 FOR ROOF 6. ALL HEADERS IN LOAD BEARING WALL SHALL BE 2-2"x 10" UNLESS NOTED OTHERWISE. FULL HEIGHT KING STUDS SHALL BE INSTA ! LED PM EACH SIDE OF EXTERIOR WALL HEADERS AND BEAMS AS FOLLOWS:

HEADER SF	PAN STUDS @ 16" O.C.	STUDS @ 24" O.C.
3'-Ø'	1	1
4'-Ø	" 2	1
8'-Ø	" 3	2
12'-0	" 5	3
16'-0	)" 6	4

7. ALL LUMBER USED FOR JOISTS AND RAFTERS SHALL BE #2 SPF OR BETTER. LUMBER USED FOR STUD WALL SHALL BE #3 SPF OR BETTER DOUBLE FLOOR JOISTS SHALL BE INSTALLED UNDER INTERIOR WALLS RUNNING PARALLEL WITH THE FLOOR JOISTS.

8. LYL SHALL BE LAMINATED VENEER LUMBER OR PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM PROPERTIES: Fb=2800 PSI, Fv=285 PSI, E=2,000,000 PSI. MULTIPLE LYL PLIES CAN BE USED TO ACHIEVE THE SPECIFIED SIZE SHOWN ON THESE PLANS AND IS CONSIDERED TO BE STRUCTURALLY EQUIVALENT.

9. THE FOLLOWING SHALL APPLY TO ALL BRACED WALL LINES:

ALL EXTERIOR WALLS SHALL BE CONTINUOUSLY SHEATHED WITH 1/2" OSB OR CDX. WSP SHALL BE IN ACCORDANCE WITH R-602.10.3 AND SHALL BE COVERED WITH 1/2" GYPSUM BOARD ON THE INTERIOR FACE. ALL WSP PANELS SHALL BE FASTENED WITH 8d NAILS AT 12" ON CENTER (FIELD) AND 6" ON CENTER (EDGES). ALL EXTERIOR WALLS SHALL BE 2"x 4" AT 16" ON CENTER AS A MINIMUM (EXCEPT FOR BALLOON FRAMED WALL SECTIONS AS NOTED) AND CONTINUOUSLY SHEATHED.

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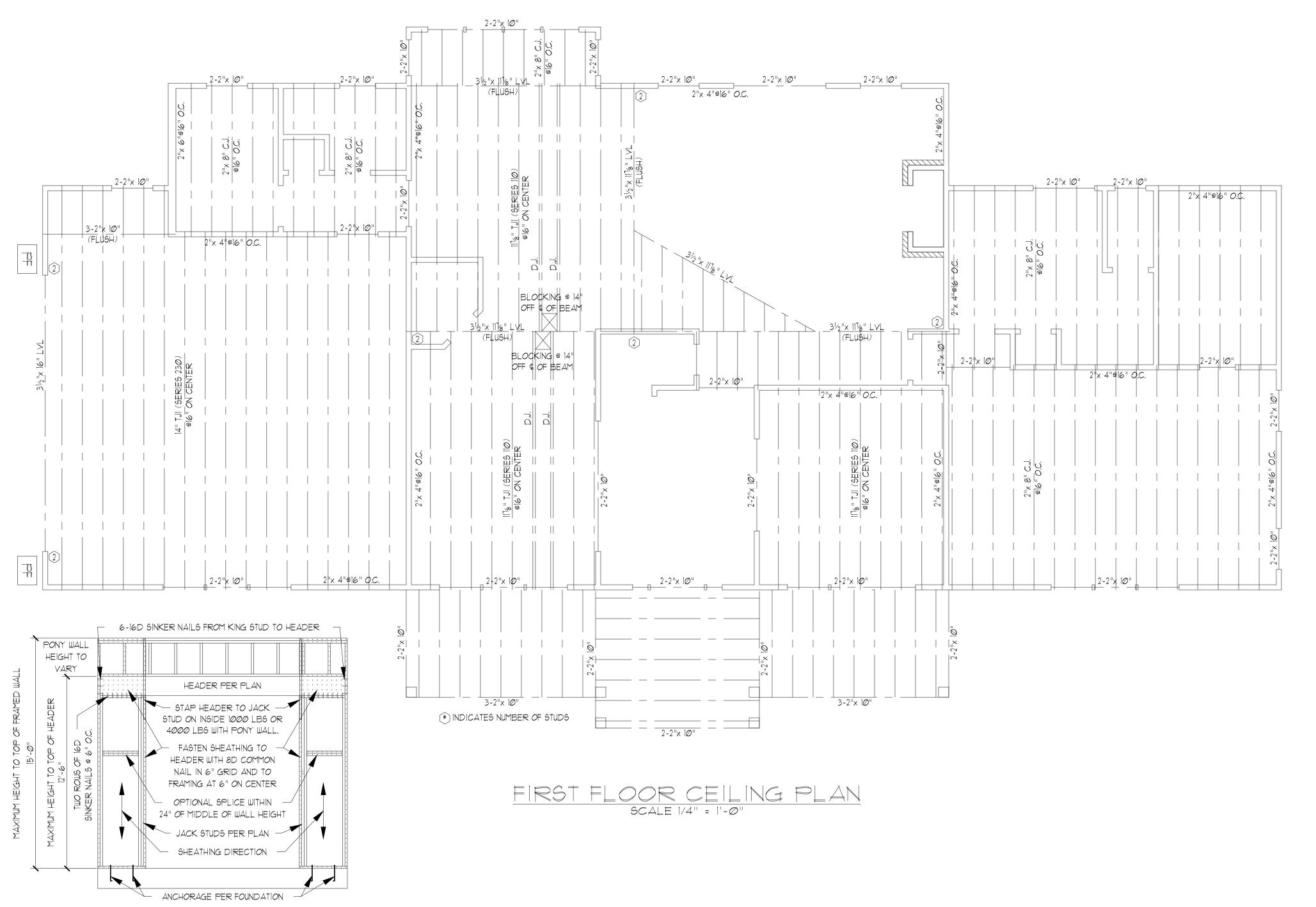
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PF PORTAL FRAME AT OPENING

( METHOD PF PER FIGURE AND SECTION R602.10.1 )

53

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Sheet No.

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TTIC (W/O STAIRS)	10	20
800F	10	2Ø

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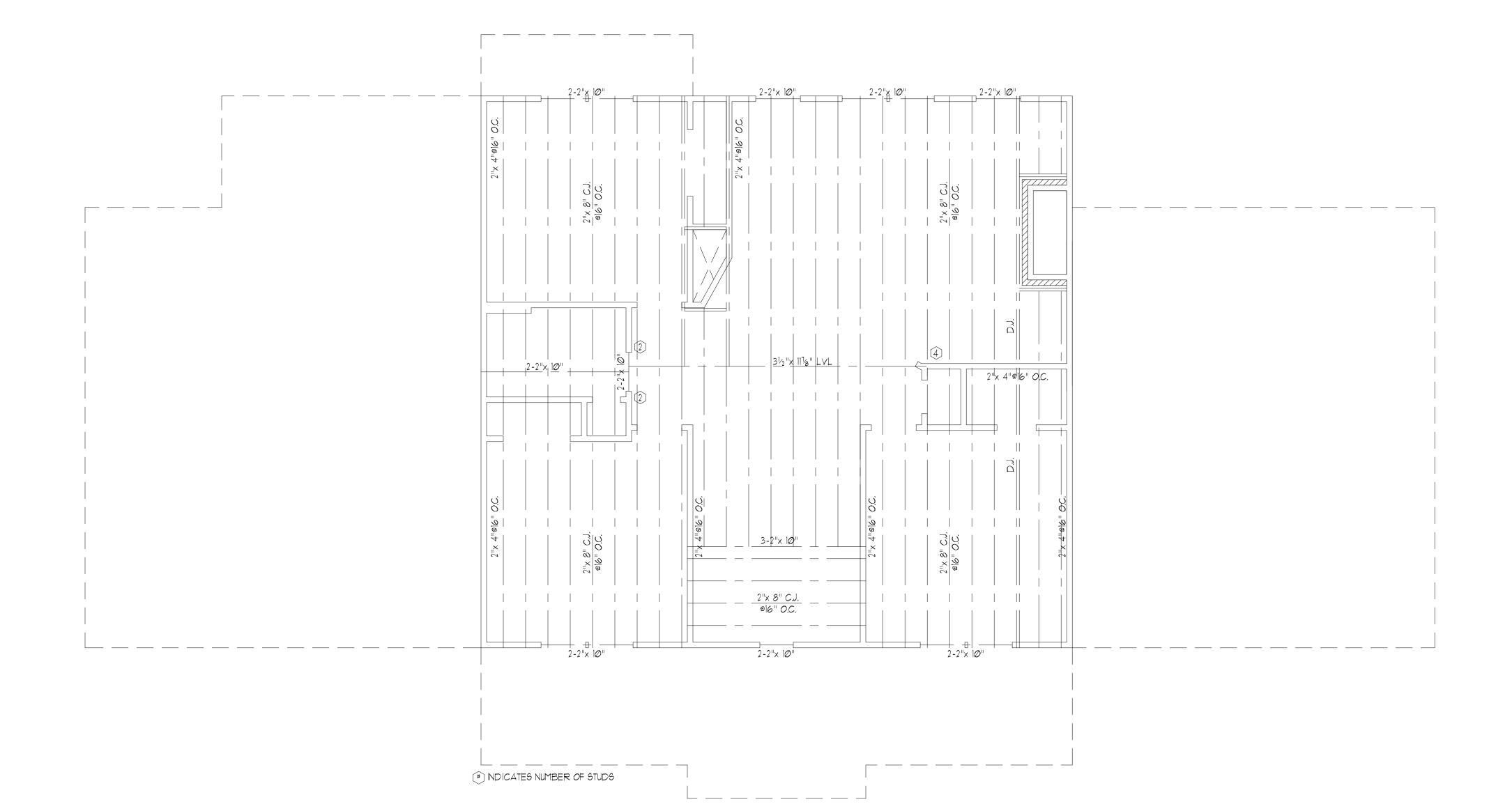
STRUCTURAL EXPOSURATION BY WILKING ENGINEERING, P.C. Ronald BAL Wilking Post Office Box 37446 Raleigh, North Carolina 27621

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SECOND FLOOR CEILING PLAN SCALE 1/4" = 1'-0"

LLC WILKING ENGINE RING Post Office Box 37446
AN Raleigh, NC 27627

\*\* -Sheet No.

PRIOR TO CONSTRUCTION.

1. THIS PLAN DESIGNED IN ACCORDANCE WITH THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, 2018 EDITION.

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34.5 PSF FOR ROOF PITCHES FROM 2.25/12 TO 7/12

21.0 PSF FOR ROOF PITCHES FROM 7/12 TO 12/12 MEAN ROOF HEIGHT FOR THIS STRUCTURE IS 18'

3. ALL ROOFING ELEMENTS SHALL MEET THE REQUIREMENTS OF CHAPTER 8 OF THE BUILDING CODE. 4. ALL LUMBER SHALL BE #2 SPF, SYP, OR BETTER.

5. THIS ROOF AND STRUCTURE ARE DESIGNED FOR A DESIGN WIND SPEED OF 115 MPH (THREE SECOND GUST). 6. ROOF TRUSSES (IF USED) SHALL BE DESIGNED BY THE MANUFACTURER AND THE

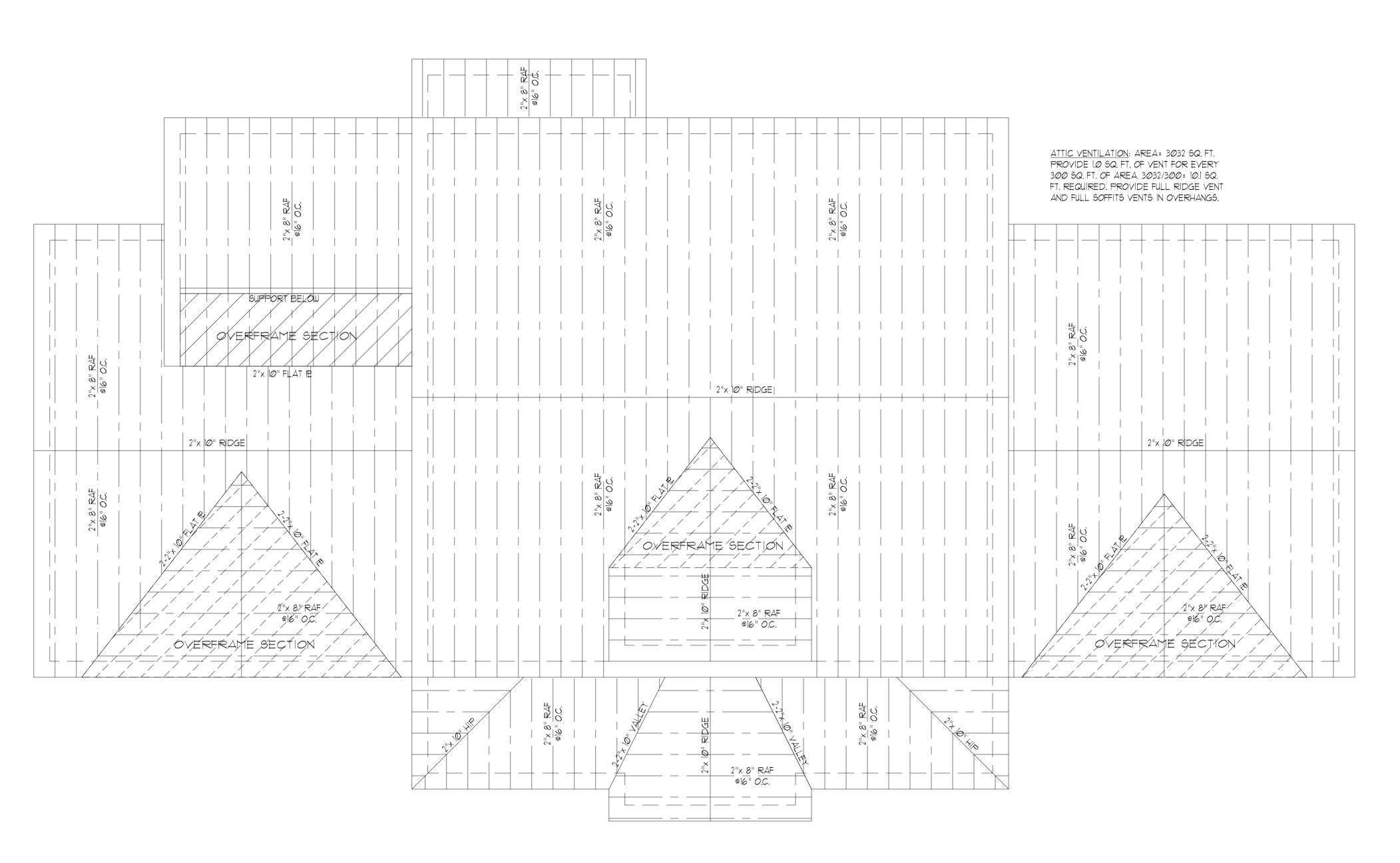
ANALYSIS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL

STRUCTURAL EVALUATION BY: WILKINS ENGINEERING, P.C. Docusioner Post Office Box 37446
Raleigh, North Carolina 27677 Royald P. Wilkins FILE: DRAIME

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

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GENERAL NOTES:

I.THIS PLAN IS DESIGNED IN ACCORDANCE WITH THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, 2018 EDITION.

2. WALL CLADDING IS DESIGNED FOR A POSITIVE/NEGATIVE PRESSURE OF NOT LESS THAN 24.1 PSF. 3. ROOF CLADDING DESIGN VALUES (POSITIVE/NEGATIVE) SHALL BE AS FOLLOWS:

45.5 PSF FOR ROOF PITCHES FROM 0/12 TO 2.25/12 34.5 PSF FOR ROOF PITCHES FROM 2.25/12 TO 1/12 21.0 PSF FOR ROOF PITCHES FROM 7/12 TO 12/12

MEAN ROOF HEIGHT FOR THIS STRUCTURE IS 18' 4. ALL WALLS, CEILINGS, AND FLOORS SHALL BE INSULATED IN ACCORDANCE WITH PART IV, ENERGY CONSERVATION, CHAPTER II, ENERGY EFFICIENCY OF THE CODE FOR ZONE 4A (TABLE NIIØI.2.1)

5. DESIGN CRITERIA IS AS FOLLOWS:

	DEAD LOAD (PSF)	LIVE LOAD (PSF)
PRIMARY FLOOR	10	4Ø
SECONDARY FLOOR	10	4Ø
SLEEPING AREAS	10	4Ø
ATTIC (W/ STAIRS)	10	3 <i>Ø</i>
ATTIC (W/O STAIRS)	10	2Ø
ROOF	10	2Ø

WIND LOADING IS BASED ON 3 SECOND GUST OF 115 MILES PER HOUR LIVE LOAD DEFLECTION LIMITS (LIVE LOAD) ARE L/360 FOR FLOORS, L/240 FOR ROOF 6. ALL HEADERS IN LOAD BEARING WALL SHALL BE 2-2"x 10" UNLESS NOTED OTHERWISE. FULL HEIGHT KING STUDS SHALL BE INSTATTED PM EACH SIDE OF EXTERIOR WALL HEADERS AND BEAMS AS FOLLOWS:

ADER SPAN	STUDS @ 16" O.C.	STUDS @ 24" O
3'-Ø"	1	1
4'-Ø"	2	1
8'-0"	3	2
12'-Ø"	5	3
16'-0"	6	4

7. ALL LUMBER USED FOR JOISTS AND RAFTERS SHALL BE #2 SPF OR BETTER. LUMBER USED FOR STUD WALL SHALL BE #3 SPF OR BETTER DOUBLE FLOOR JOISTS SHALL BE INSTALLED UNDER INTERIOR WALLS RUNNING PARALLEL WITH THE FLOOR JOISTS.

8. LYL SHALL BE LAMINATED VENEER LUMBER OR PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM PROPERTIES: Fb=2800 PSI, Fv=285 PSI, E=2,000,000 PSI. MULTIPLE LVL PLIES CAN BE USED TO ACHIEVE THE SPECIFIED SIZE SHOWN ON THESE PLANS AND IS CONSIDERED TO BE STRUCTURALLY EQUIVALENT.

9. <u>THE FOLLOWING SHALL APPLY TO ALL BRACED WALL LINES:</u> ALL EXTERIOR WALLS SHALL BE CONTINUOUSLY SHEATHED WITH 1/2" OSB OR CDX. WSP SHALL BE IN ACCORDANCE WITH R-602.10.3 AND SHALL BE COVERED WITH 1/2" GYPSUM BOARD ON THE INTERIOR FACE. ALL WSP PANELS SHALL BE FASTENED WITH 8d NAILS AT 12" ON CENTER (FIELD) AND 6" ON CENTER (EDGES). ALL EXTERIOR WALLS SHALL BE 2"x 4" AT 16" ON CENTER AS A MINIMUM (EXCEPT FOR BALLOON FRAMED WALL SECTIONS AS NOTED) AND CONTINUOUSLY SHEATHED.

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LVL RIDGE W/NO CEILING JOIST (SEE PLAN FOR SIZE) ├─ 2"x " RIDGE BEAM (SEE PLAN) -RAFTER (SEE PLAN) 2"x 4"@32" O.C. WIND BRACING SPLICE PER TABLE R602.3(1) C.J. (SEE PLAN) RAFTERS SHALL BE CONNECTED I.A.W. EXT. LOAD BEARING WALL-TABLE 802.5.1(9). CEILING JOISTS SHALL (SEE PLAN) BE CONNECTED TO TOP P. I.A.W. TABLE 602.3(1) BASED ON ROOF SLOPE. INT. LOAD BEARING WALL (SEE PLAN)

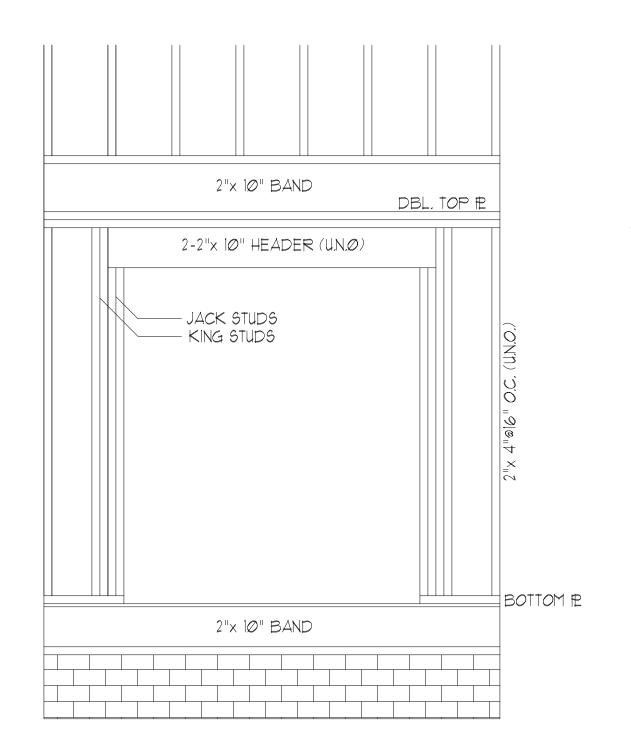
RIDGE BEAM/RAFTER DETAIL (N.T.S)

- CONC. FOOTING (SEE FOUNDATION PLAN)

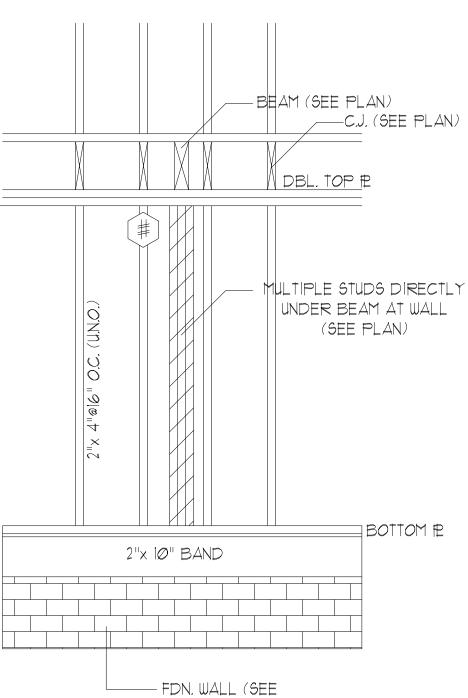
STUD SUPPORT FOR

BEAMS/HEADERS

(SECT. N.T.S)

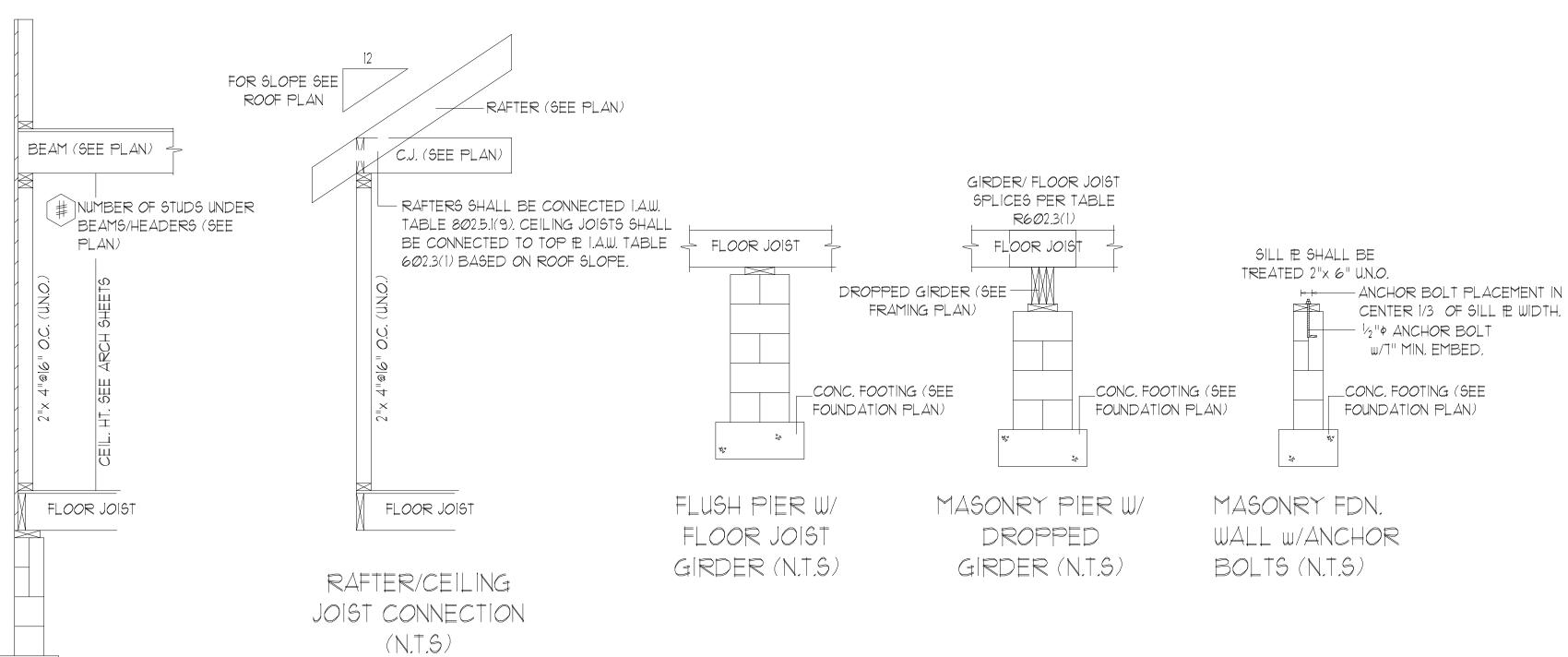


HEADER DETAIL AT EXT. WALL OPENINGS (N.T.S)



STUD SUPPORT FOR BEAMS/HEADERS (ELEV. N.T.S)

FOUNDATION PLAN)



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