NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

**APPROVED** Limited building only review Permit holder responsible for full compliance with the code

02/19/2021



# Approved 3rd Revision



## FRONT ELEVATION

SCALE 1/4'' = 1'0''

### ATTIC VENTILATION:

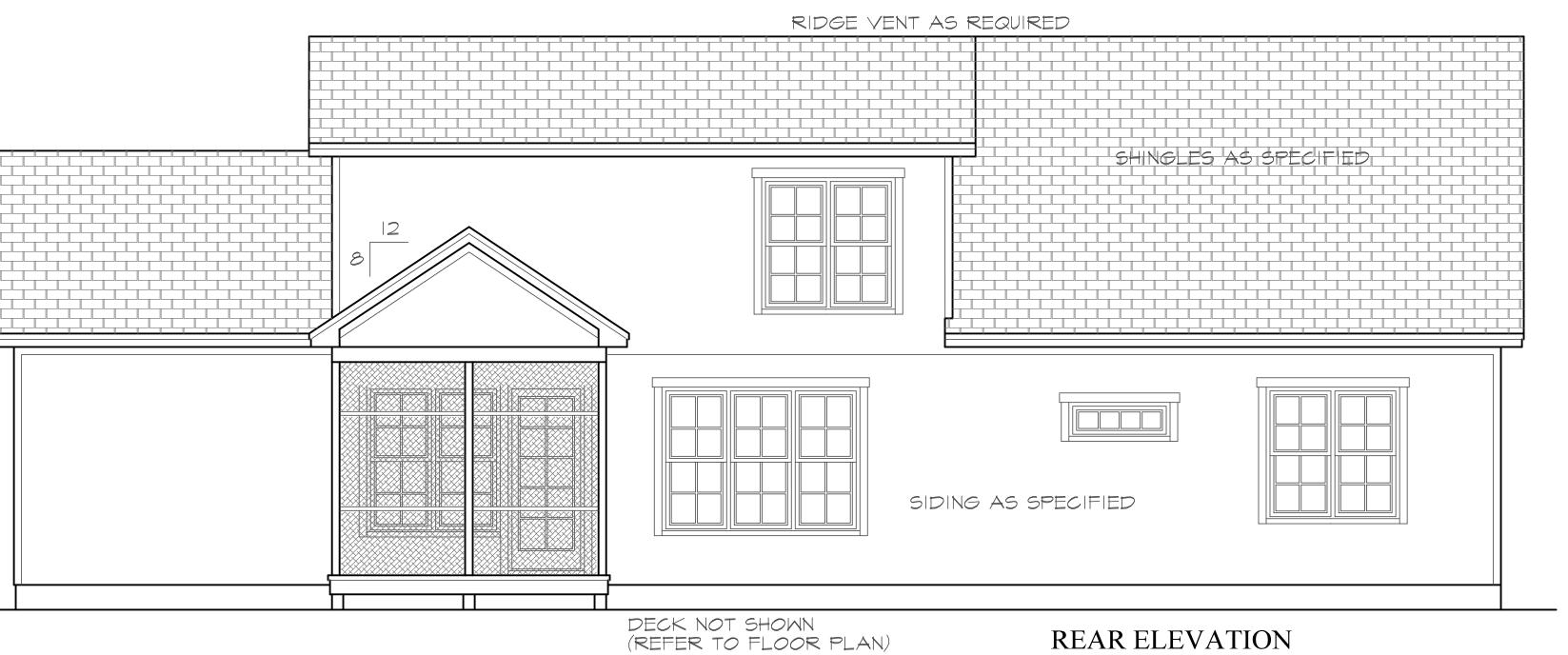
THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN I TO 150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT THE AREA MAY BE I TO 300, PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION TO BE PROVIDED BY EAVE OR CORNICE VENTS.

GROSS ATTIC AREA TO BE VENTILATED 2433 SQ.FT. 2433/300 = 8.11 SQ.FT. NET FREE AREA

50% OF VENTING MUST BE 3FT. ABOVE EAVE OR SOFFIT VENTS.

## THIS PLAN DESIGNED UNDER NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION (2015 IRC)

NC (2018 NCRC) : Wind : 115 - 120 mph



SCALE 1/8'' = 1'0''



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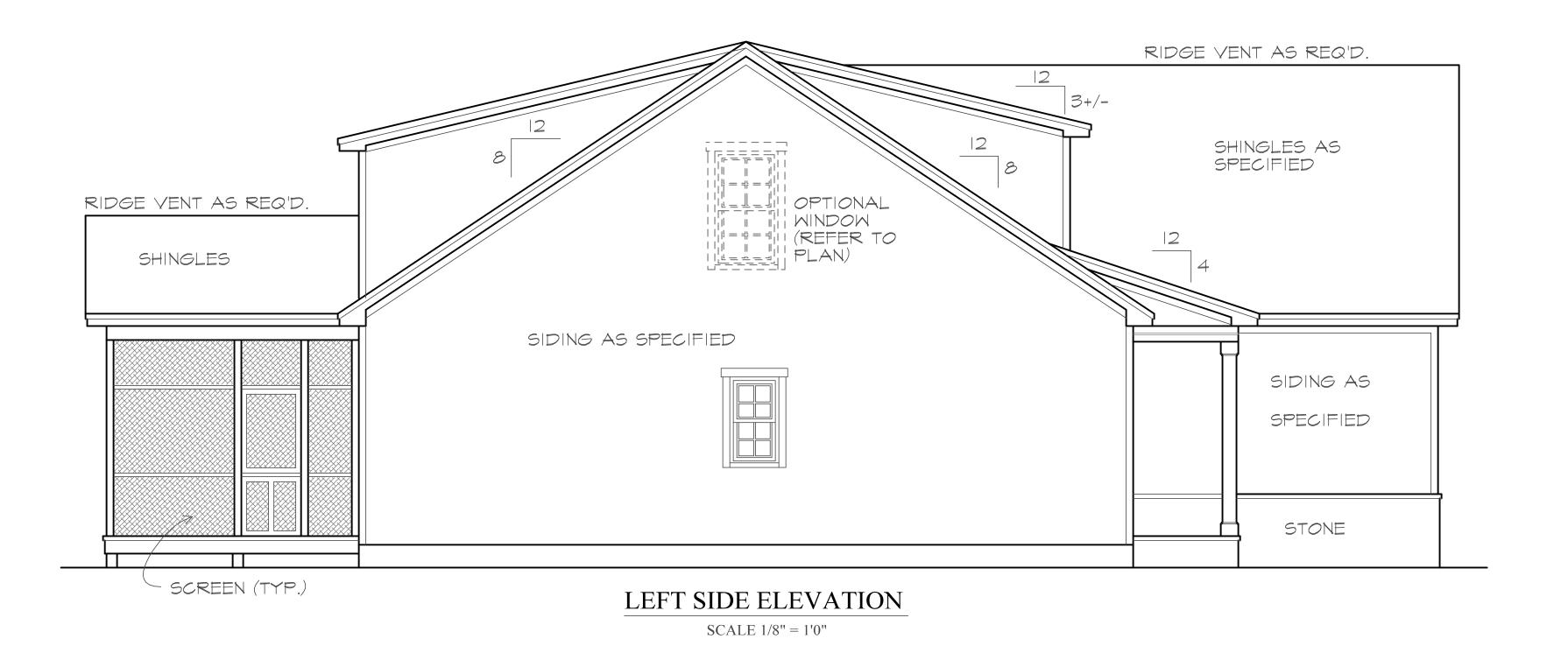
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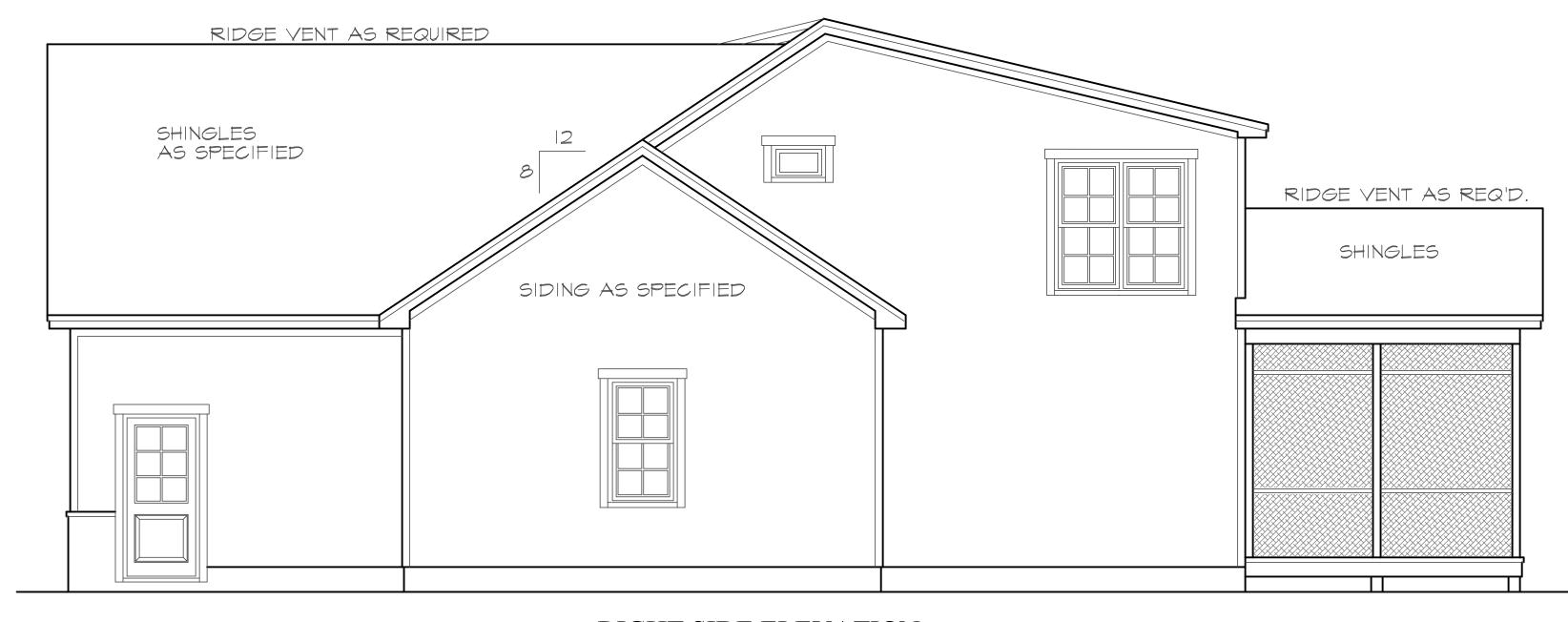
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PROJECT # 201007









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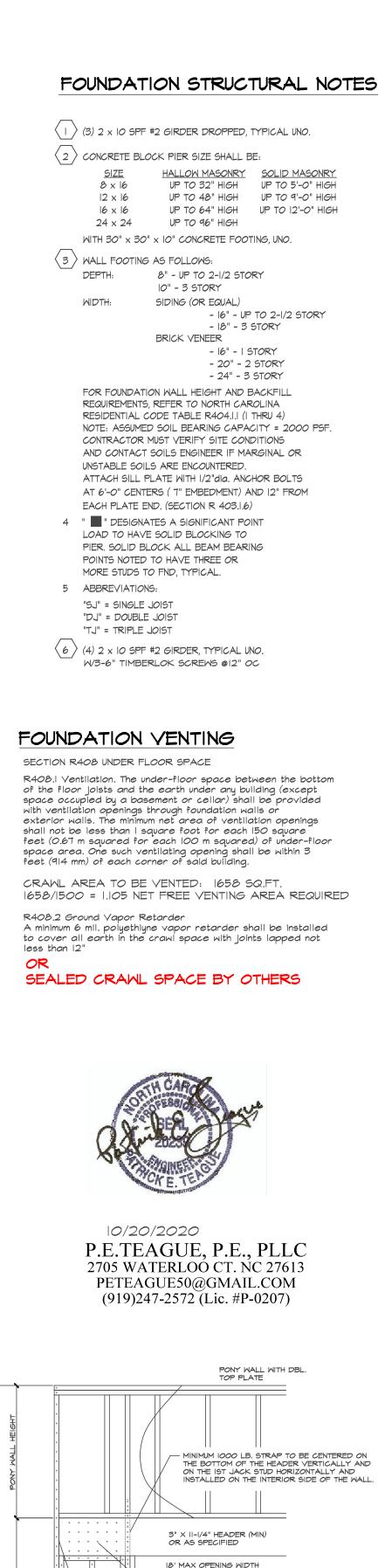
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LOT SUB.

PROJECT #

201007

#### FOUNDATION STRUCTURAL NOTES:



FASTEN SHEATHING TO HEADER WITH &d COMMON NAILS ON 3" GRID PATTERN.

INTERMEDIATE STUD AS NEEDED. NAIL

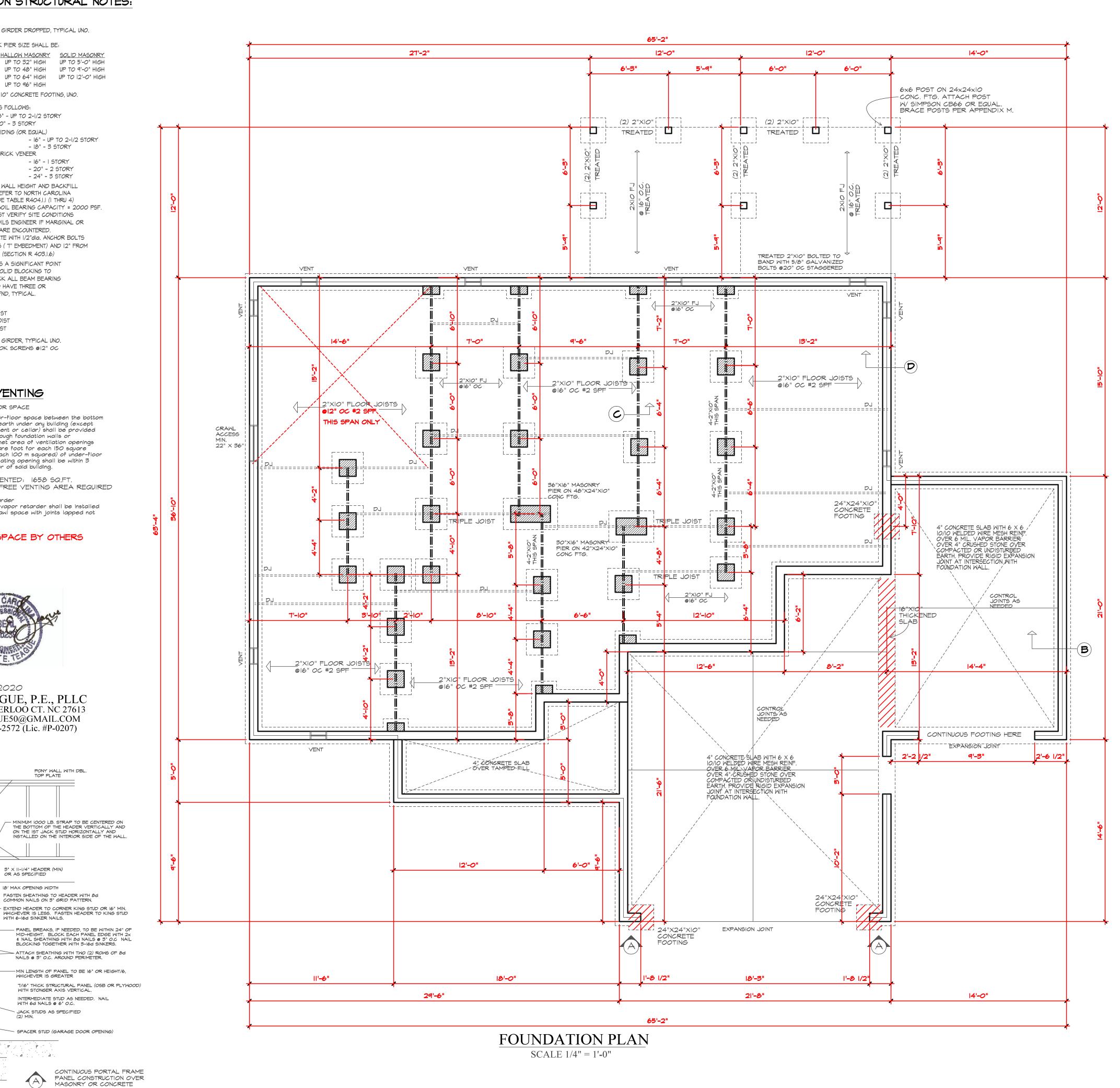
SPACER STUD (GARAGE DOOR OPENING)

WITH 6d NAILS @ 6" O.C. JACK STUDS AS SPECIFIED (2) MIN.

SINGLE BOTTOM PLATE

MASONRY WALL

I/2" ANCHOR BOLTS / PER R403.I.6 (2) MIN.





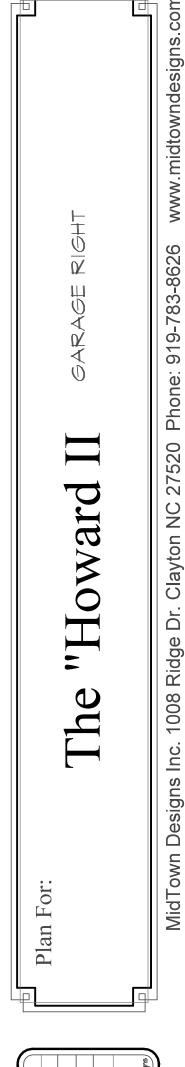
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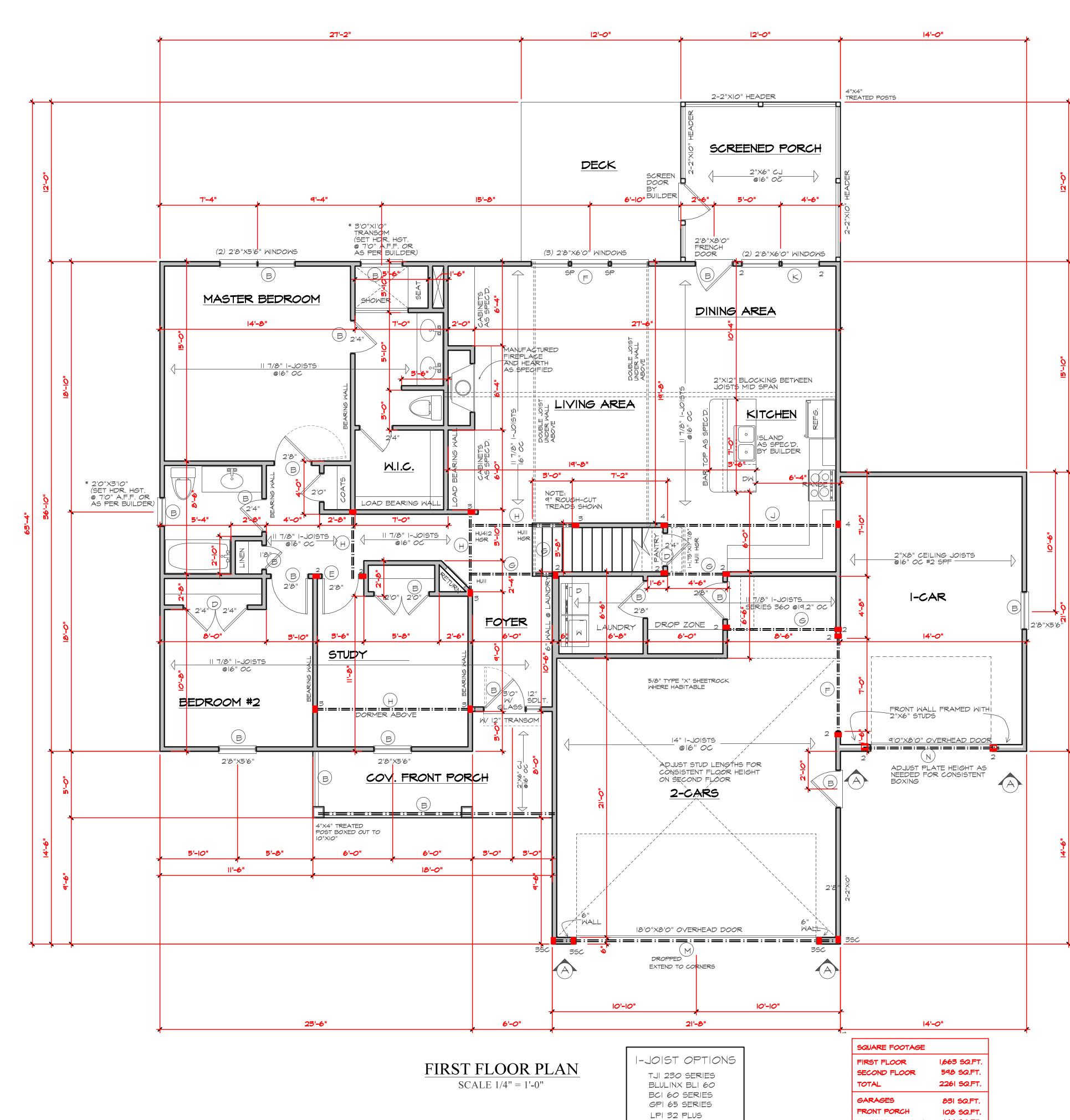
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11/2/2020

PROJECT # 201007



BEAM SCHEDULE

A 2-2"XIO" FLUSH

(c) 2-2"X8 FLUSH

B 2-2"XIO" DROPPED

D 2-2"X8" DROPPED

E) 2-1.75"X9.25" LVL FLUSH

(F) 2-1.75"X9.25" DROPPED

(6) 1-1.75"X|| 7/8" LVL FLUSH

(H) 2-1.75"X|| 7/8" LVL FLUSH

(J) 3-1.75"XII 7/8" LVL FLUSH

(M) 2-1.75"XI8" LVL DROPPED

(N) 2-1.75"XII 7/8" LVL DROPPED

2/18/2021

P.E.TEAGUE, P.E., PLLC

2705 WATERLOO CT. NC 27613 PETEAGUE50@GMAIL.COM (919)247-2572 (Lic. #P-0207)

(K) 2-2"XI2" DROPPED



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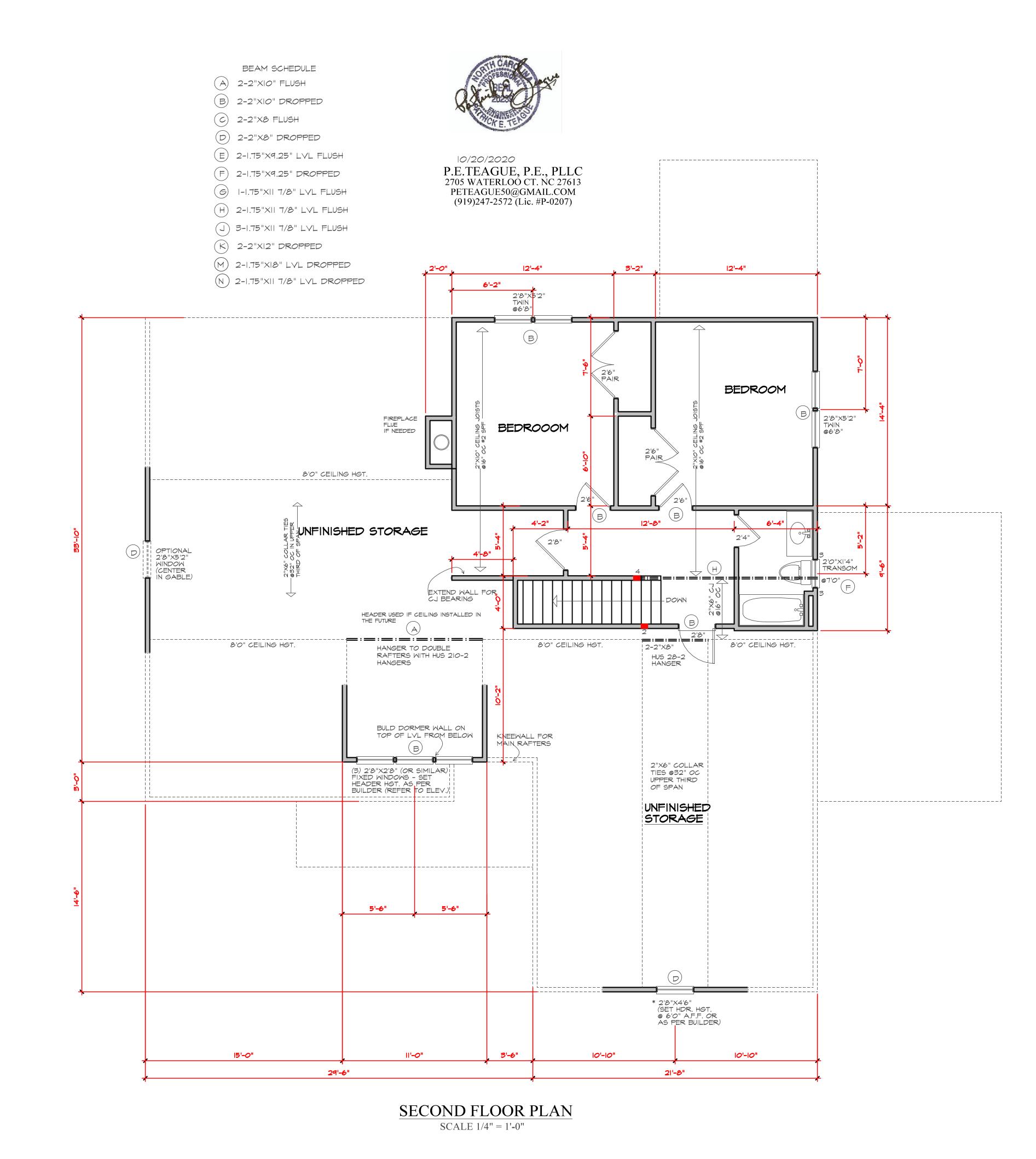
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( 2/18/2021

PROJECT # 201007

SCREENED PORCH

144 SQ.FT. 144 SQ.FT.





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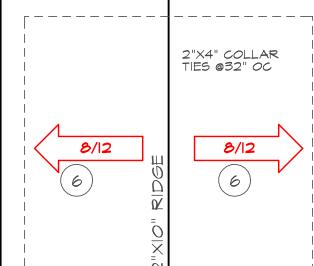
### ROOF FRAMING NOTES:

- I. ALL RAFTERS TO BE 2x8 @ 16" O.C. WITH
- 2 X 12 RIDGE, UNO. (2) (2)2xIO OR 1.75"XII 7/8" LVL HIP. HIPS MAY BE SPLICED WITH
- A MINIMUM 6'-0" OVERLAP AT CENTER. (3.) (2)2×10 OR 1.75"X9.25"VALLEY. DO NOT SPLICE VALLEYS
- (4.) 1.75×11 7/8" LVL VALLEY
- (5.) FALSE FRAME VALLEY ON 2x10 FLAT PLATE
- (6.) 2"X6" RAFTERS @ 16" OC WITH 2"X10" RIDGE
- (7.) 2"XIO" RAFTERS @ 16" OC WITH 2"XI2" RIDGE
- "SR" = SINGLE RAFTER
- "DR" = DOUBLE RAFTER
- "TR" = TRIPLE RAFTER - "RS" = ROOF SUPPORT FOR RAFTER SUPPORT
- "  $\square$ = (3) STUD OR 4x4 POST FOR ROOF SUPPORT
- FIR DOWN 2x8 RAFTERS OR USE 2x10 AT
- CATHEDRAL CEILINGS - ATTACH VAULTED RAFTERS WITH HURRICANE CLIPS:
- SIMPSON "H-5" OR EQUIVALENT

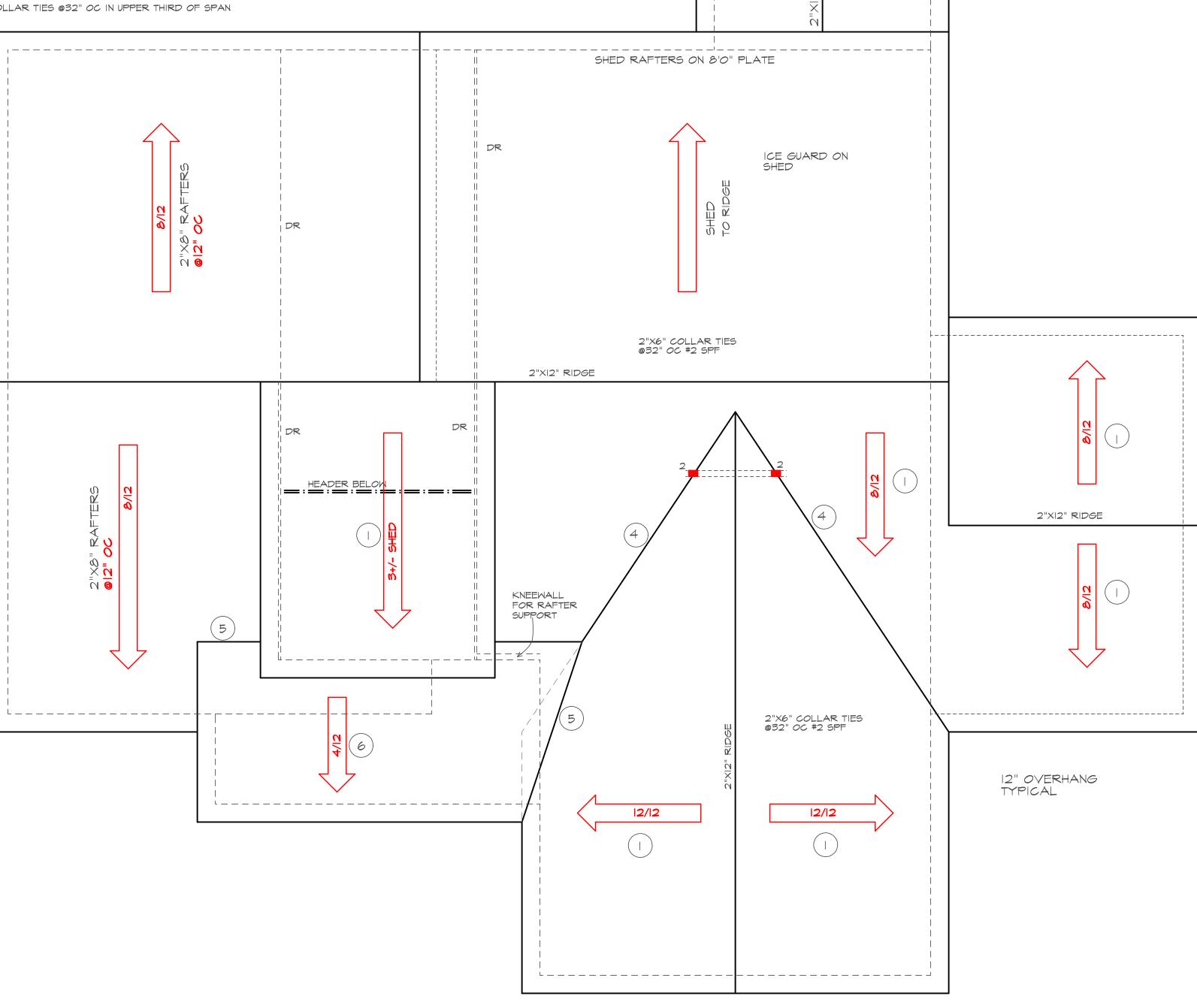
2"X6" COLLAR TIES @32" OC IN UPPER THIRD OF SPAN



10/20/2020 P.E.TEAGUE, P.E., PLLC 2705 WATERLOO CT. NC 27613 PETEAGUE50@GMAIL.COM (919)247-2572 (Lic. #P-0207)



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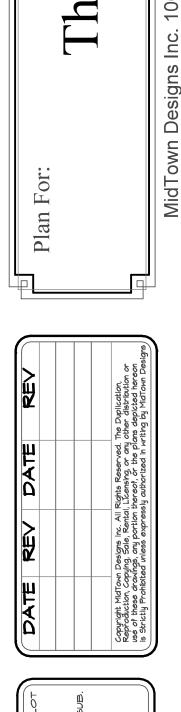
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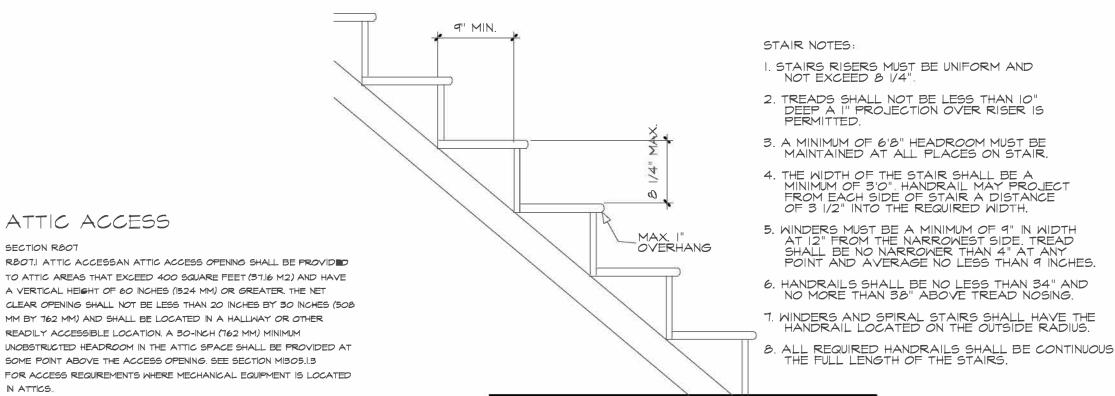
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11/2/2020

201007



#### ATTIC ACCESS

PROTRUDE INTO THE NET CLEAR OPENING.

SECTION R807

A VERTICAL HEIGHT OF 60 INCHES (1524 MM) OR GREATER. THE NET CLEAR OPENING SHALL NOT BE LESS THAN 20 INCHES BY 30 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 AT SOME POINT ABOVE THE ACCESS OPENING. SEE SECTION MI305.1.3 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED IN ATTICS

EXCEPTIONS: I. 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

## STAIR DETAIL

POINT AND AVERAGE NO LESS THAN 9 INCHES.

/ Krook 70124 / AL SPECIFIED

8" SOLID -

FLOOR JOIST

MINIMUM

2 X 2 LEDGER

STRIPS OR

HANGERS

PIER SIZE AS

SPECIFIED

AS SPECIFIED

MASONRY CAP

(3) 2 X 10 GIRDER

(3)/2 X/10 GIRDER

UNLESS NOTED

OTHERWISE

- 2 X 6 TREATED

SILL PLATE

MASONRY CAP

CONCRETE FOOTING

AS SPECIFIED SET

FOOTING BELOW

THE FROST LINE

SILL PLATE

DROPPED/FLUSH PIER

SCALE 3/4" = 1'-0"

UNLESS NOTED

OTHERWISE

2 X 6 TREATED

NO SCALE

## DWELLING / GARAGE SEPARATION

REFER TO SECTIONS R3025, R302.6, AND R302.7 FLOOR/CEILING ASSEMBLIES USED FOR SEPARATION REQUIRED BY THIS SECTION.

CEILINGS. A MINIMUM OF 1/2" GYPSUM MUST BE INSTALLED ON THE GARAGE CEILING IF THERE ARE NO HABITABLE ROOM ABOVE THE GARAGE. IF THERE ARE HABITABLE ROOM ABOVE THE GARAGE A MINIMUM OF 5/8" TYPE X GYPSUM BOARD MUST BE INSTALLED ON THE GARAGE CEILING. OPENING PENETRATIONS. OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN I 3/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN I 3/8 INCHES (35 MM) THICK, OR 20-MINUTE

DUCT PENETRATIONS. DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DIRELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE (0.48 MM) SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS

R302.6 SHALL BE PROTECTED AS REQUIRED BY SECTION R302.11, ITEM 4.

WALLS. A MINIMUM 1/2" GYPSUM BOARD MUST BE INSTALLED ON ALL WALLS SUPPORTING STAIRS. A MINIMUM OF 1/2" GYPSUM BOARD MUST BE INSTALLED ON THE UNDERSIDE AND EXPOSED SIDES OF ALL STAIRWAYS.

OTHER PENETRATIONS. PENETRATIONS THROUGH THE SEPARATION REQUIRED IN SECTION

### DECK BRACING

SECTION AMIO9

SEE CHAPTER 45.

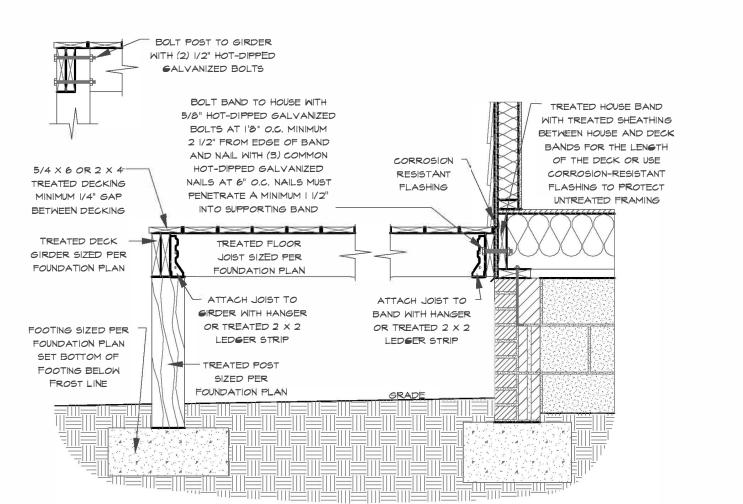
AMIO9.1 DECK BRACING. DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY. THE FOLLOWING ARE ACCEPTABLE MEANS TO PROVIDE LATERAL STABILITY, AMIO9,1.1. WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-O" ABOVE FINISHED GRADE PER FIGURE AMION AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION

AMIO4, LATERAL BRACING IS NOT REQUIRED. AMIO9.1.2. 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 DEGREES AND 60 DEGREES FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED TO THE POST AND THE GIRDER/DOUBLE BAND WITH ONE 5/8 INCH HOT DIPPED GALVANIZED BOLT WITH NUT AND WASHER AT BOTH ENDS OF THE

BRACE PER FIGURE AMIO9. AMIO9.1.3. FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY

SEDDING THE POST IN ACCORDANCE WITH FIGURE AMIOY.							
O THE FOLLOWING							
POST SIZE	MAX TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER			
4 × 4	48 SF	4'-0"	2'-6"	1'-0"			
6 X 6	120 SF	6'-0"	3'-6"	1'-8"			

AMIO9.1.4. 2 X 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO 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 INCH HOT DIPPED GALVANIZED BOLT WITH NUT AND WASHER AT EACH END OF EACH BRACING MEMBER PER FIGURE AMIO9.3. AMIO9.1.5. FOR EMBEDMENT OF PILES IN COASTAL REGIONS,



DECK ATTACHMENT DETAIL TO FRAMED WALL SCALE 3/4" TO 1'-0"

# 2" X 4" STUDS SUBFLOOR ---TREATED SILL 8" SOLID MASONRY CAP 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C. AND WITHIN 12" OF PLATE ENDS 4" BRICK -\_\_\_\_ (EMBED 7") FINISH GRADE

(D) SECTION AT CRAWL

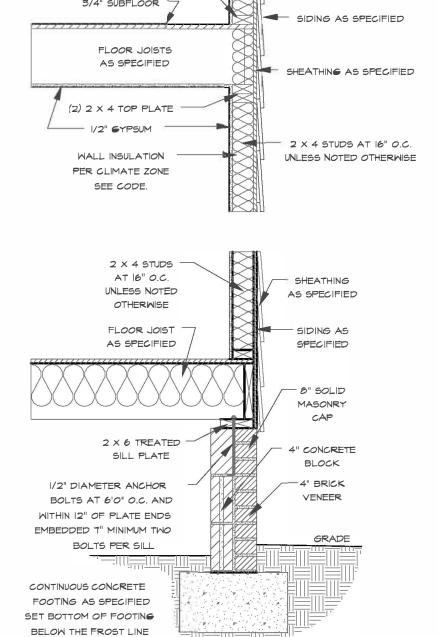
SEE FOUNDATION

PLAN FOR FOOTING SIZE Purchaser must verify all dimensions and conditions before beginning construction.

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PITCH PER ROOF PLAN

OR ELEVATIONS

ROOF INSULATION PER CLIMATE ZONE

(2) 2 X 4 TOP PLATE -

1/2" GYPSUM

WALL INSULATION

PER CLIMATE ZONE

SHINGLES AS SPECIFIED

-15# BUILDING FELT

SHEATHING AS SPECIFIED

- INSULATION BAFFLE

ROOF PLAN FOR

RAFTER AND TRUSS

FRAMING DETAILS

A S FASCIA

### THIS PLAN DESIGNED UNDER NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION (2015 IRC)

HOUSE DESIGNED FOR 115 or 120 MPH EXPOSURE B

ANCHOR BOLTS SHALL BE MINIMUM 1/2" DIAMETER & SHALL EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. ANCHOR BOLTS TO BE NO MORE THAN 6' ON CENTER AND WITHIN 12" OF ALL CORNERS. THERE SHALL BE A MINIMUM OF TWO (2) ANCHOR BOLTS PER PLATE SECTION.

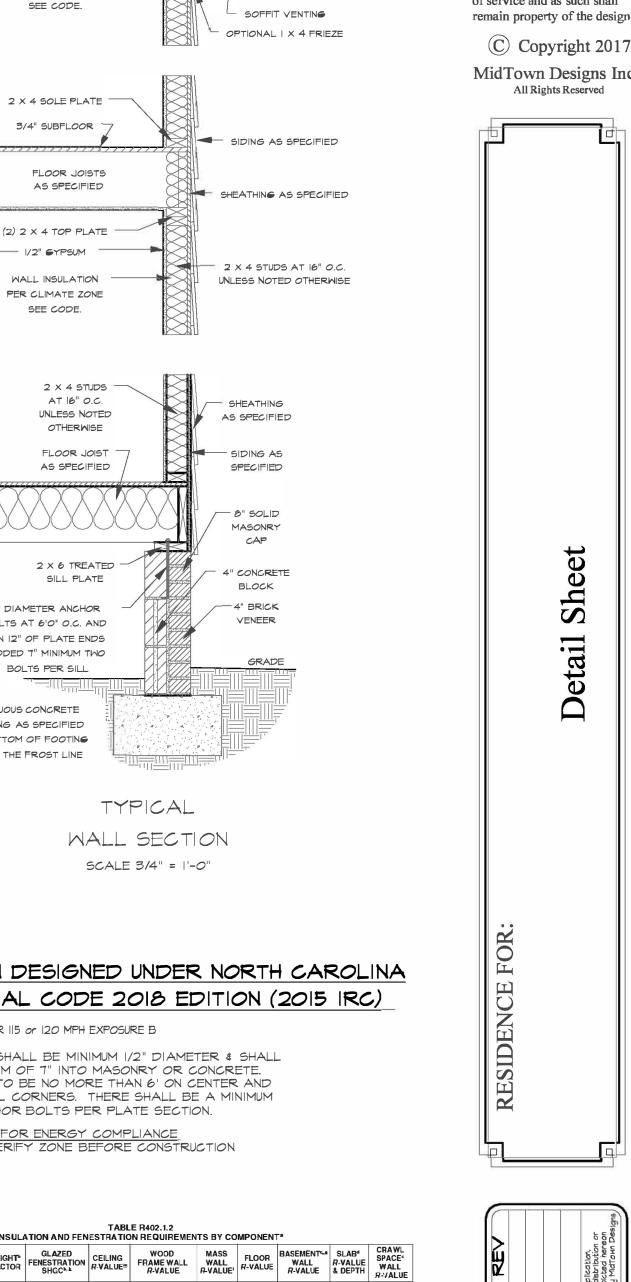
MINIMUM VALUES FOR ENERGY COMPLIANCE ZONE 4A, \$ 3. VERIFY ZONE BEFORE CONSTRUCTION

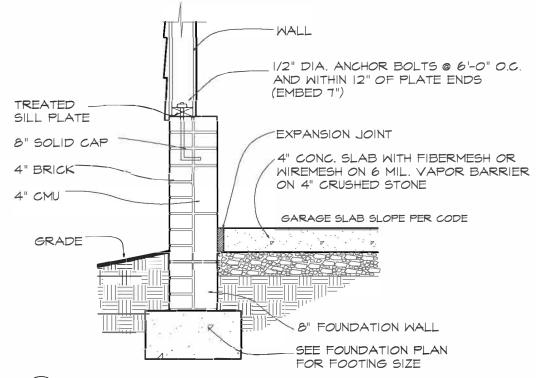
TABLE R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT*										
FENESTRATION U-FACTOR	SKYLIGHT <sup>b</sup> U-FACTOR	GLAZED FENESTRATION SHGC <sup>6, k</sup>	CEILING R-VALUE®	WOOD FRAME WALL R-VALUE	MASS WALL P-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB <sup>d</sup> R-VALUE & DEPTH	CRAW SPACE WALI R-VAL	
0.35	0.55	0.30	38 or 30ci <sup>1</sup>	15or 13+2.5h	5/13 or 5/10ci	19	5/13 <sup>f</sup>	0	5/13	
0.35	0.55	0.30	38 or 30ci <sup>L</sup>	15 or 13+2.5h	<u>5/13</u> or 5/10ci	19	1 <b>0/<u>15</u></b>	10	10/ <u>1</u> 5	
0.35	0.55	NR	38 or 30ci <sup>1</sup>	19 <sup>n</sup> or 13+5 <sup>h</sup> or	13/17 <u>or</u> 13/12.5ci	30²	10/15	10	10/19	

## TABLE R402.1.4

EQUIVALENT OFACTORS									
CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT <i>U-</i> FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR	
3	0.35	0.55	0.030	0.077	<u>0.141</u>	0.047	0.091°	0.136	
4	0.35	0.55	0.030	0.077	0.141	0.047	0.059	0.065	
5	<u>0.35</u>	0.55	0.030	0.061	0.082	0.033	<u>0.059</u>	<u>0.065</u>	

- a. Nonfenestration U-factors shall be obtained from measurement, calculation or an approved source. b. When more than half the insulation is on the interior, the mass wall U-factors shall be a maximum of 0.07 in Climate Zone 3, 0.07 in Climate Zone 4 and 0.054 in Climate Zone 5.
- c. Basement wall U-factor of 0.360 in warm-humid locations as defined by Figure R301.1 and Table R301.1.
- d. A maximum of two glazed fenestration product assemblies having a U-factor no greater than 0.55 and a SHGC no greater than 0.70 shall be permitted to be substituted for minimum code compliant fenestration product assemblies without penalty. When applying this note and using the REScheck "UA Trade-off" compliance method to allow continued use of the software, the applicable fenestration products shall be modeled as meeting the U-factor of 0.35 and the SHGC of 0.30, as applicable, but the fenestration products actual U-factor and actual SHGC shall be noted in the comments section of the software for documentation of application of this note to the applicable products. Compliance for these substitute products shall be verified compared to the allowed substituted maximum U-value requirement and maximum SHGC requirement, as applicable,





(B) SECTION AT GARAGE SLAB

STRUCTURAL NOTES

PLUS ALL LOCAL CODES AND REGULATIONS.

2) DESIGN LOADS SEE TABLE R3015

WIND SPEED: (REFER TO TABLE R301.2.4)

VERIFY ZONE BEFORE CONSTRUCTION.

MANUFACTURER'S INSTRUCTIONS.

STEEL TUBING SHALL BE ASTM A500.

SEE R301.2(6)

ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND

I) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION (2015 IRC),

BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE

3) WALL BRACING: WALLS SHALL BE BRACED ALONG BRACED WALL LINES ACCORDING TO SECTION R602.10. THE AMOUNT, LOCATION, AND CONSTRUCTION

THE PLANS IS BASED ON THE PRESCRIPTIVE BRACING REQUIREMENTS OF THE

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIT ENTRAINED PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED,

CODE AND SHALL BE VERIFIED AND/ORAPPROVED BY THE CODE OFFICIAL.

STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP.

5) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE

PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO

6) ALL FRAMING LUMBER SHALL BE SPF #2(FB = 875 PSI) UNLESS NOTED

OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP #2 (FB=975 PSI). PLATE MATERIAL MAY BE SPF #3 OR SYP #3 (FC(PERP) = 425 PSI - MIN).

7) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END

SUPPORTS: (i) 2X4 STUD COLUMN FOR 6'-0" MAX. BEAM SPAN (UNO), (2)2X4 STUDS FOR BEAM SPAN GREATER THAN 6'-0" (UNO).

6) L.V.L SHALL BE LAMINATED VENEER LUMBER: FB=2600 PSI, FV=265 PSI, E=1,900,000 PSI. P.S.L SHALL BE PARALLEL STRAND LUMBER: FB=2900 PSI, FV=290 PSI, E=2,000,000 PSI. L.S.L SHALL BE LAMINATED STRAND LUMBER: FB=2250 PSI, FV=400 PSI, E=1,550,000 PSI. INSTALL ALL CONNECTIONS PER

9) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN

ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND

IO) ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES

FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG

AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT 1

SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL

DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THE THREADED

END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX). AND STAGGERED

13) BRICK LINTELS SHALL BE 3 1/2"X3 1/2"X1/4" STEEL ANGLE FOR UP TO 6'-0"

SPAN AND 6"X4"X5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO

14) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS

SCREWS (1/2" DIAMETER X 4" LONG). LATERAL SUPORT IS CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND

12) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2"

AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.

II) REBAR SHALL BE DEFORMED STEEL. ASTM615, GRADE 60.

I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S

THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE

DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.

CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED.

HANDLED, SAMPLED, TESTED AND PLACED IN ACCORDANCE WITH ACI

OF BRACING SHALL COMPLY WITH R602.10. NOTE THAT THE BRACING SHOWN ON