

Approved
 Harnett COUNTY NORTH CAROLINA
 Issued 10/24/2018

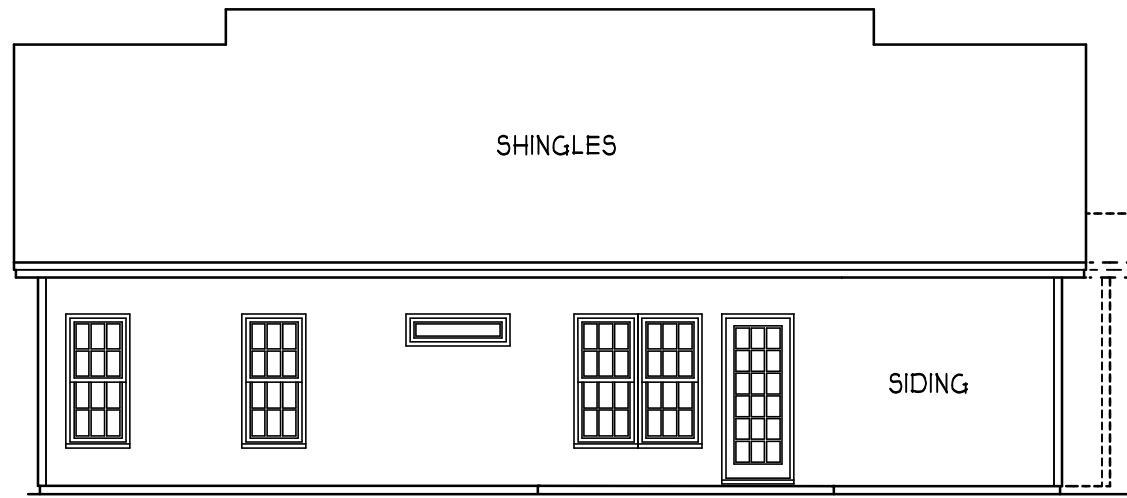


FRONT ELEVATION
 SCALE 1/4" = 1'-0"

ATTIC VENTILATION:

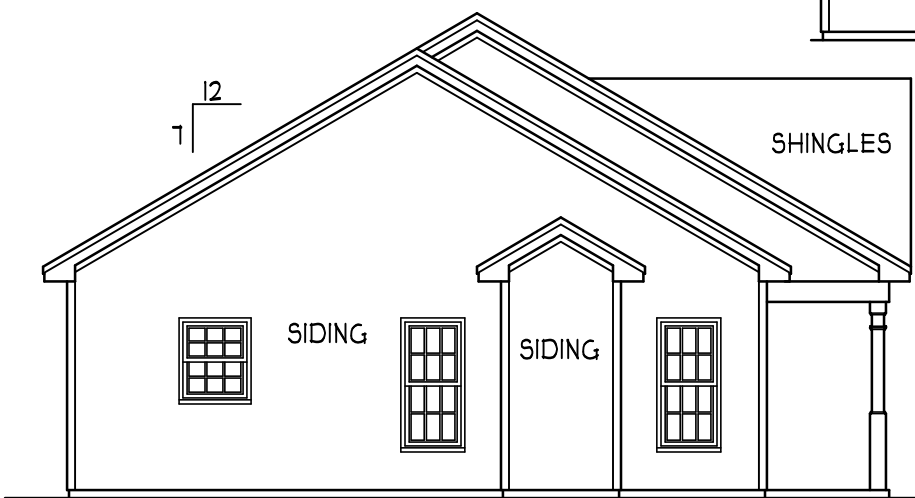
THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 TO 150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT THE AREA MAY BE 1 TO 300, PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE 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 1369 SQ.FT.
 1369/150 = 9.1 SQ.FT. NET FREE AREA

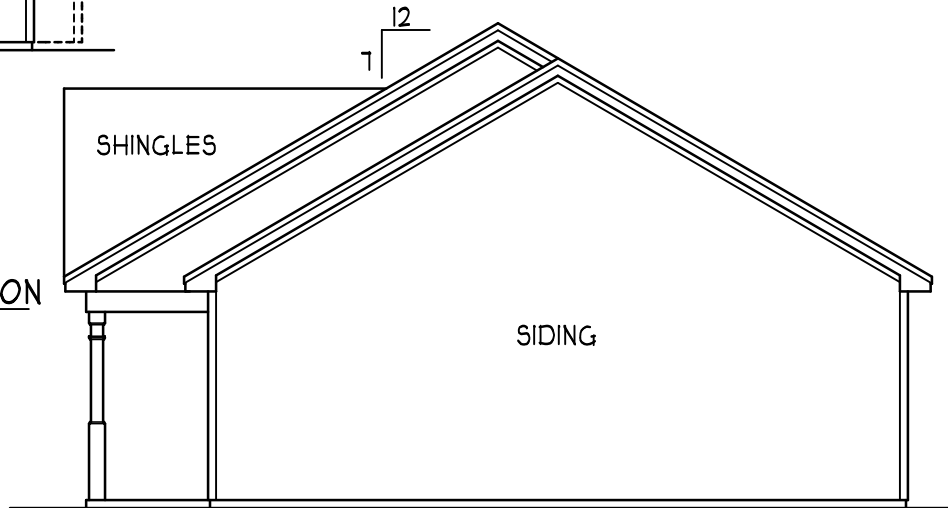


REAR ELEVATION
 SCALE 1/8" = 1'-0"

ENERGY COMPLIANCE
 ZONE 3 = MAX. GLAZING U-FACTOR .35
 R-VALUE = CEILING R30, WALLS R13,
 FLOORS R19 FOR JOHNSTON, WAYNE COUNTY
 ZONE 4 = MAX. GLAZING U-FACTOR .35
 R-VALUE = CEILING R38, WALLS R15,
 FLOORS R19 FOR WAKE, ORANGE COUNTY



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



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

THE PINE
 JOHNSON BUILDING COMPANY, INC.

HEATED FOOTAGE: **#1244**

SQUARE FOOTAGE:
 FIRST FLOOR = 1244
 FRONT PORCH = 125

HEATHER HALL
 165 HEATHERSTONE CT
 BENSON NC 27504
 (919) 207-1403

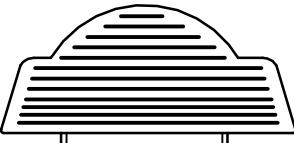
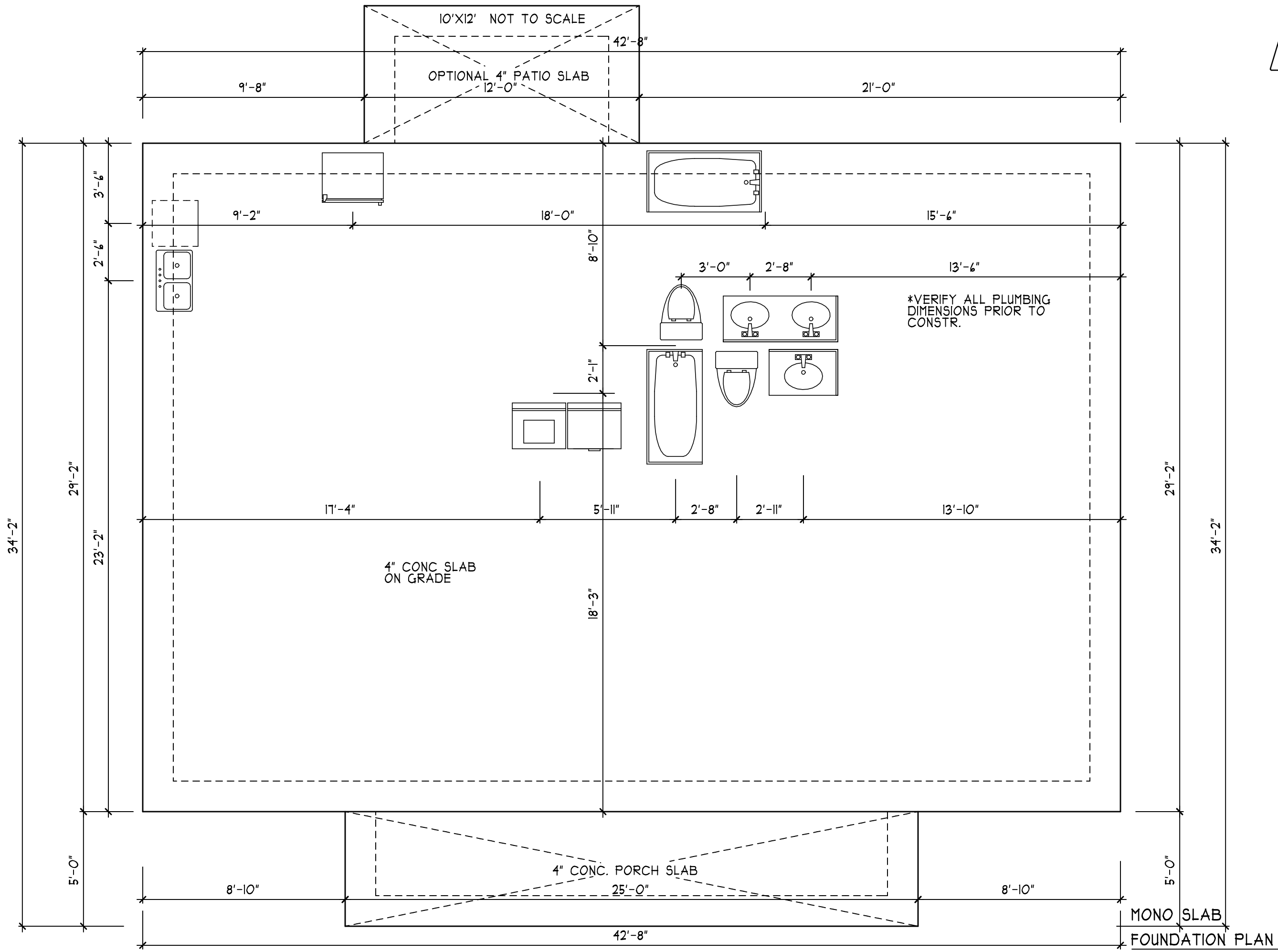
H SQUARED HOME DESIGN, INC.

ANY DEVIATION OF THE SPECIFIED REQUIREMENTS OF THIS PLAN SHALL BE THE DESIGNER'S LIABILITY.
 THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2001 EDITION.

DATE: 06/08/18

1 STORY

FILE: 051218



THE PINE
JOHNSON BUILDING
COMPANY, INC.

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#1244

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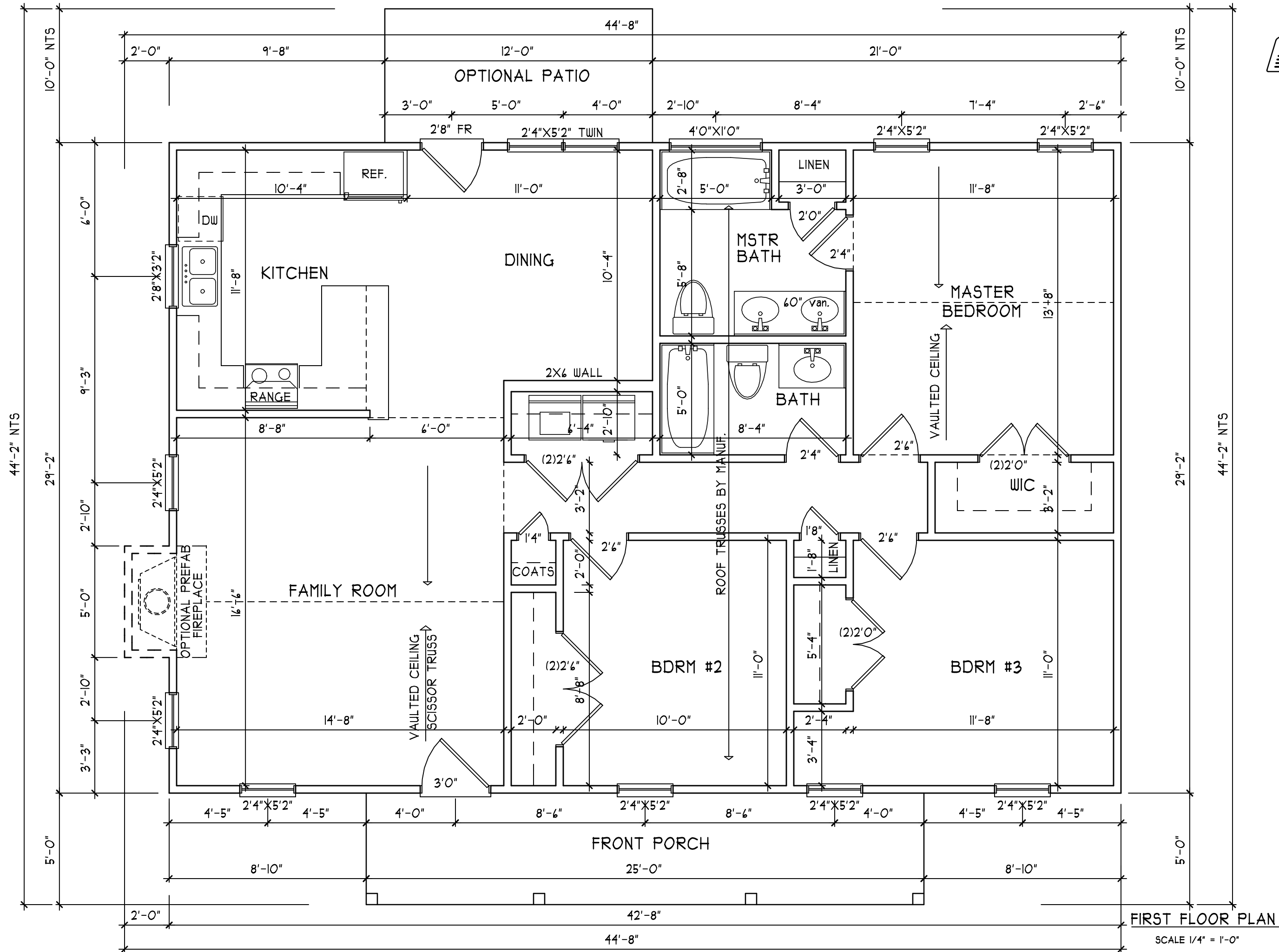
H SQUARED
HOME
DESIGN, INC.

ANY DEVIATION OF THE SPECIFIED MEASUREMENTS SHALL BE THE RESPONSIBILITY OF THE CLIENT. THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2007 EDITION.

DATE: 06/08/18

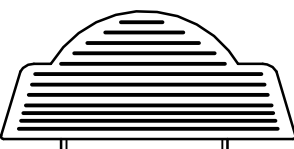
1 STORY

FILE: 051218



FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"



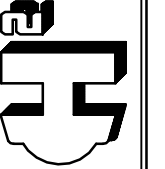
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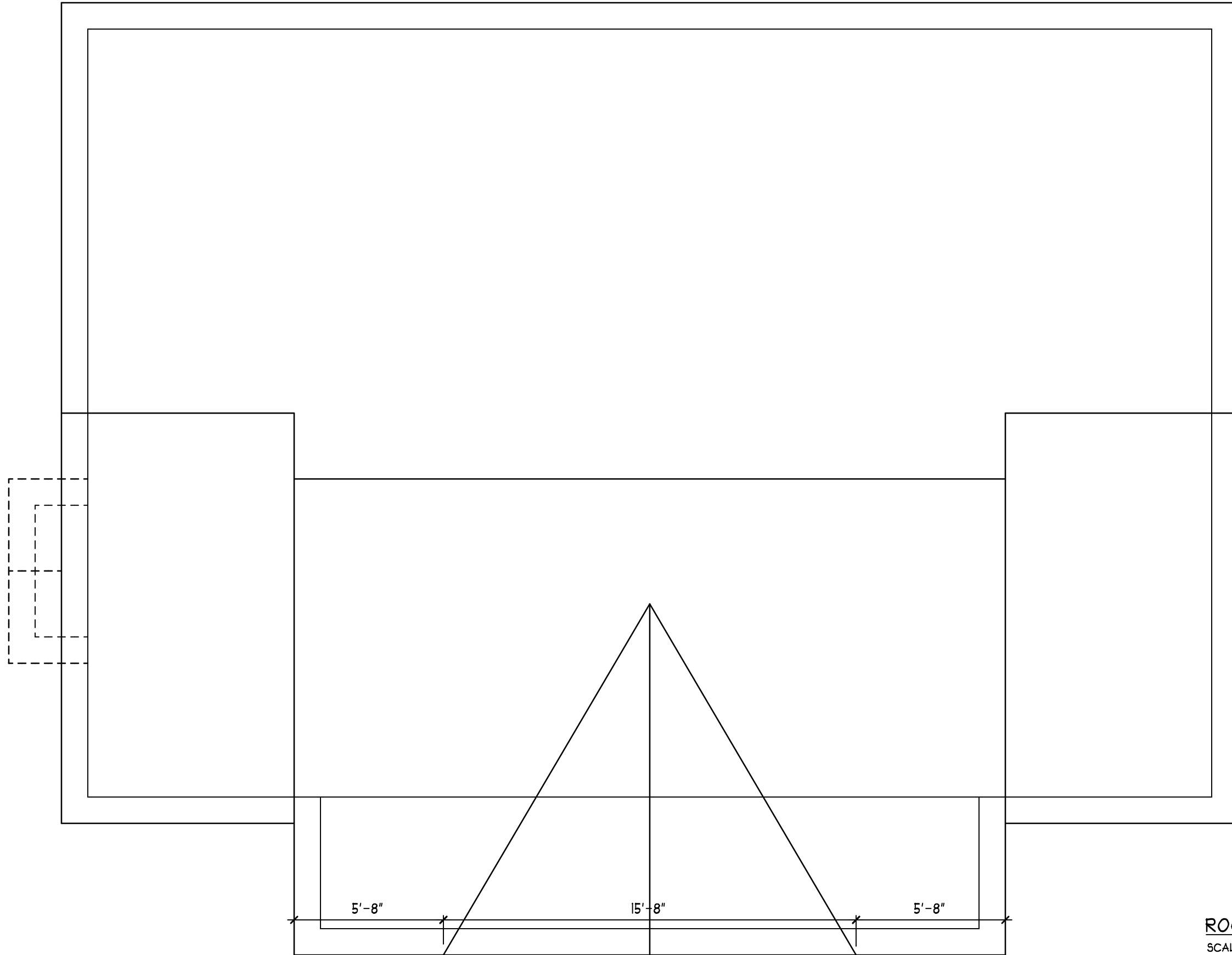
H SQUARED
HOME
DESIGN, INC.



ANY DEVIATION OF THE
SPECIFIED MEASUREMENTS
OR DIMENSIONS FROM THE DESIGN
OR DIMENSIONS SHOWN ON THIS
PLAN HAS BEEN DRAWN
IN ACCORDANCE WITH RESIDENTIAL
BUILDING CODES 2001 EDITION.
DATE:
06/08/18

1 STORY

FILE:
051218



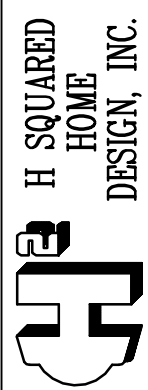
ROOF PLAN
SCALE 1/4" = 1'-0"

ANY DEVIATION OF THE SPECIFIED MEASUREMENTS OF THIS PLAN SHALL BE THE USER'S LIABILITY. THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2001 EDITION.

DATE: 04/08/18

1 STORY

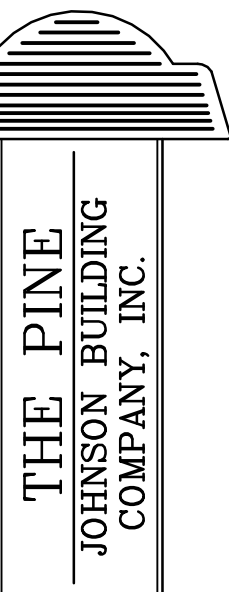
FILE: 051218



HEATHER HALL
165 HEATHERSTONE CT
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SQUARE FOOTAGE:
FIRST FLOOR = 1244
FRONT PORCH = 125

HEATED FOOTAGE:
#1244



STRUCTURAL NOTES

1) ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM AND FOOTINGS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. SOUTHERN ENGINEERS, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.

2) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2012 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.

3) DESIGN LOADS (R301.4)

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (LL)
ROOMS OTHER THAN SLEEPING ROOMS	40	10	L/360
SLEEPING ROOMS	30	10	L/360
ATTIC WITH PERMANENT STAIR	40	10	L/360
ATTIC WITH OUT PERMANENT STAIR	20	10	L/360
ATTIC WITH OUT STORAGE	10	10	L/240
STAIRS	40	---	L/360
EXTERIOR BALCONIES	40	10	L/360
DECKS	40	10	L/360
GUARDRAILS AND HANDRAILS	200	---	---
PASSENGER VEHICLE GARAGES	50	10	L/360
FIRE ESCAPES	40	10	L/360
SNOW	20	---	---

WIND LOAD (BASED ON 100 MPH WIND VELOCITY & EXPOSURE B)

4) WALL BRACING: BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO SECTION R602.10.3. THE AMOUNT AND LOCATION OF BRACING SHALL COMPLY WITH TABLE R602.10.1. THE LENGTH OF BRACED PANELS SHALL BE DETERMINED BY SECTION R602.10.4. LATERAL BRACING SHALL BE SATISFIED PER METHOD 3 BY CONTINUOUSLY SHEATHING WALLS WITH STRUCTURAL SHEATHING PER SECTION R602.10.3. NOTE THAT ANY SPECIFIC BRACED WALL DETAIL SHALL BE INSTALLED AS SPECIFIED.

5) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINMENT PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP.

6) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.

7) 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 (Fcp(perp) = 425 PSI - MIN).

8) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 4'-0" MAX. BEAM SPAN (UNO), (2) 2x4 STUDS FOR BEAM SPAN GREATER THAN 4'-0" (UNO).

9) L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2400 PSI, Fv=285 PSI, E=1.9x10⁶ PSI. P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2400 PSI, Fv=290 PSI, E=2.0x10⁶ PSI. L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55x10⁶ PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

10) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.

11) 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 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 x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. . ALL STEEL TUBING SHALL BE ASTM A500.

12) REBAR SHALL BE DEFORMED STEEL, ASTM#65, GRADE #40.

13) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 4" FROM EACH END.

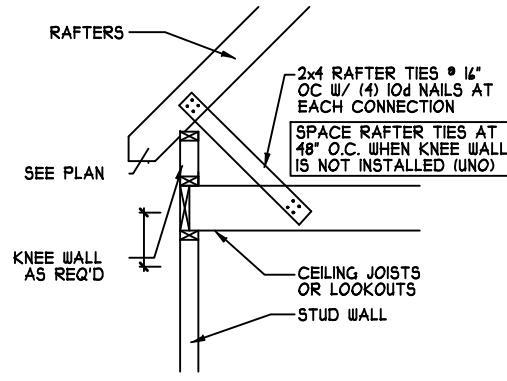
14) BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 4'-0" SPAN AND 4"x4"x1/4" STEEL ANGLE WITH 4" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).

15) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF.

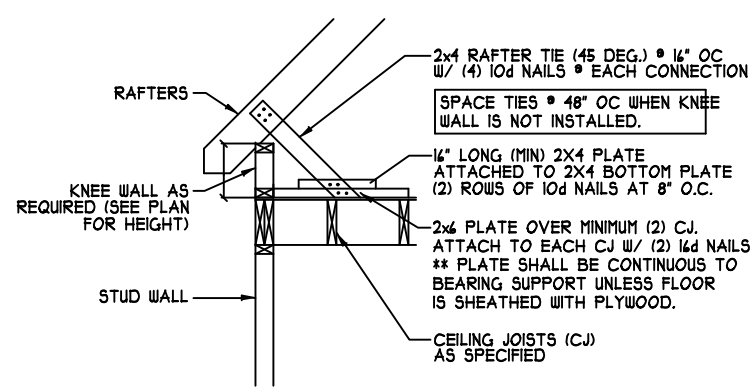
THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2009 EDITION SHALL BE AS FOLLOWS:

ROOF:
45.4 PSF - 2.25:12 PITCH OR LESS
34.8 PSF - 2.25:12 TO 1:12 PITCH
21 PSF - 1:12 TO 12:12 PITCH

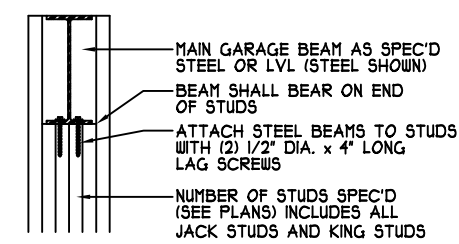
WALLS:
24.1 PSF - WALLS



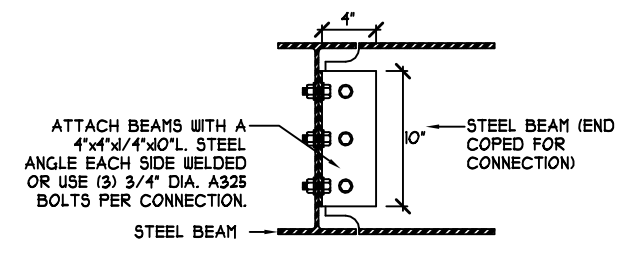
○ RAFTER TIE DOWN (TYP) NTS.



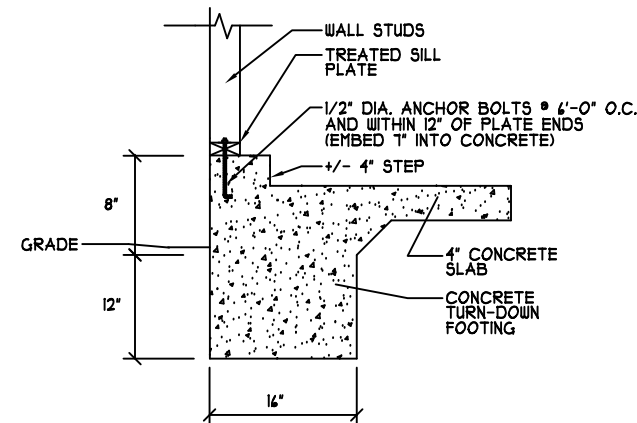
○ RAFTER TIE DOWN (TYP) (RAFTERS PERPENDICULAR TO JOISTS) NTS.



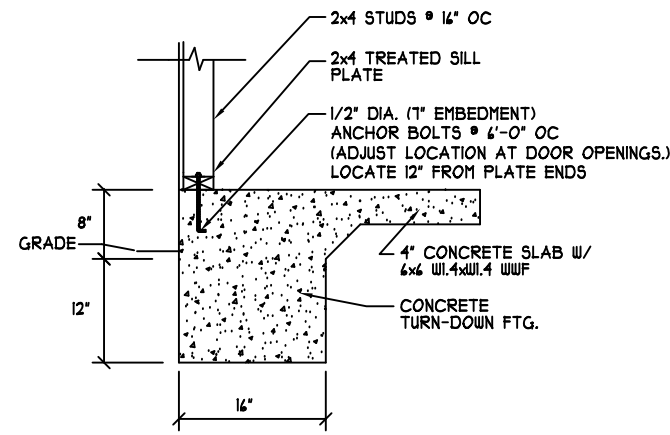
○ TYP. GARAGE BEAM BEARING NTS



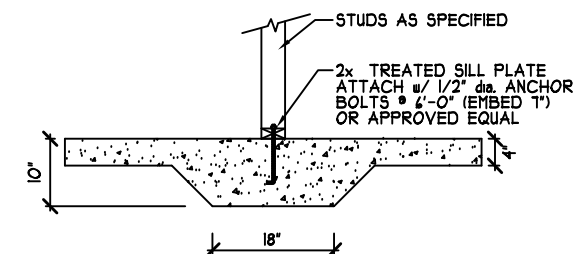
○ BEAM CONNECTION DETAIL (THREE BOLTS) NTS



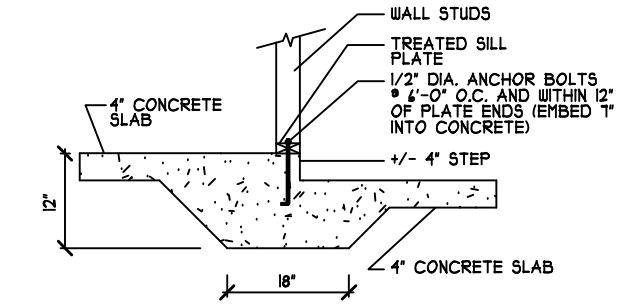
○ TURN DOWN SLAB @ GARAGE (SIDING) NTS



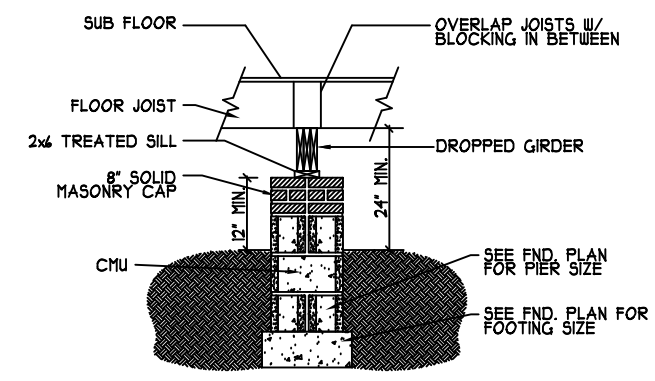
○ TURN DOWN SLAB FOOTING NTS



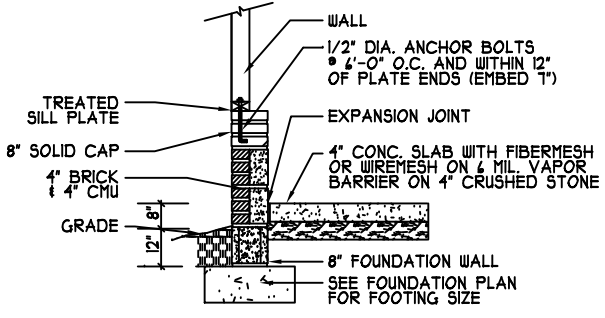
○ TYPICAL THICKENED SLAB NTS



○ TYPICAL THICKENED SLAB NTS



○ DROPPED GIRDER NTS



○ GARAGE SLAB NTS

TYPICAL DETAIL SHEET
NOT ALL DETAILS MAY APPLY TO THIS PLAN

H SQUARED HOME DESIGN, INC.

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165 HEATHERSTONE CT
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ANY DEVIATION OF THE SPECIFIED REQUIREMENTS OF SOUTHERN ENGINEERS, INC.'S LIABILITY. THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2012 EDITION.

DATE: _____

FILE: _____