



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



**NOSNHO** 

KATHY

BUILDERS

BIM

> 650 40

FRONT PORCH FLOOR

DESIGNED BY:

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

H SQUARED HOME DESIGN, INC.

ANY DEVIATION OF THE SPECIFIED HEASUREMENTS OR DIMENSIONS VOIDS H SQUARED HOME DESIGN, INC.'S LIABILITY.

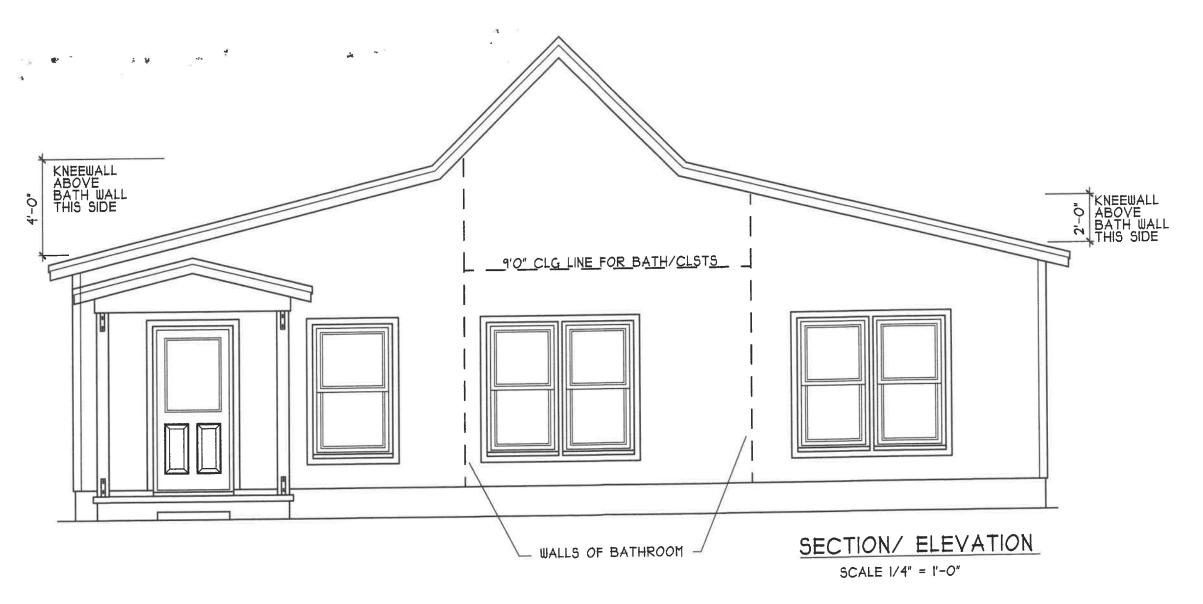
THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2016 EDITION.

THIS PLAN IS TO ONLY BE BUILT BY THE ABOVE CITED BUILDER OR HOMEOWNER. NOT FOR MULTIPLE BUILDS UNLESS APPROVED BY H SQUARED.

DATE: 06/14/23

I STORY

FILE: 022923



## 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.

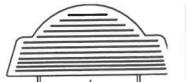
GROSS ATTIC AREA TO BE VENTILATED 850 SQ.FT.

850/150 = 5.66 SQ.FT. NET FREE AREA

ENERGY COMPLIANCE

ZONE 3 = MAX. GLAZING U-FACTOR .35

R-VALUE = CEILING R38, WALLS RIS, FLOORS RI9
FOR JOHNSTON, SAMPSON, WAYNE COUNTY ZONE 4 = MAX. GLAZING U-FACTOR .35 R-VALUE = CEILING R38, WALLS RI5, FLOORS RI9 FOR WAKE, DURHAM, ORANGE COUNTY



BUILDERS

BIM

JOHNSON KATHY

> 50 9

650 9

FLOOR

DESIGNED BY: HEATHER OF JOHNATHAN HALL 165 HEATHERSTONE CT BENSON NC 27504 (919) 207-1403

H SQUARED HOME DESIGN, INC. 

ANY DEVIATION OF THE SPECIFIED HEASUREHENTS OR DIMENSIONS VOIDS H SQUARED HOME DESIGN, NC.'S LIABILITY.

THIS PLAN HAS BEEN DRAWN
IN ACCORDANCE WITH NORTH
CAROLINA STATE RESIDENTIAL
BUILDING CODES 2016 EDITION.

THIS PLAN IS TO ONLY BE BUILT BY THE ABOVE CITED BUILDER OR HOMEOWNER. NOT FOR MULTIPLE BUILDS UNLESS APPROVED BY H SQUARED.

04/14/23

I STORY

FILE: 022923

DEFLECTION LIVE LOAD DEAD LOAD DESIGN LOADS (R301.4) (PSF) (PSF) THAN SLEEPING ROOMSMO ROOMS 40 10 L/360 60 EXTEROR BALCONIES 10 L/340 40 **DECKS** 200 50 40 20 GUARDRAILS AND HANDRAILS L/360 PASSENGER VEHICLE GARAGES L/360 FIRE ESCAPES WIND LOAD (BASED ON 115/120 MPH WIND VELOCITY & EXPOSURE B)

3) 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.

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINED 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.

5) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTUAL 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 DRAINSURFACE WATER AWAY FROM FOUNDATION WALLS.

4) ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP # 2 (Fb=915 PSI). PLATE MATERIAL MAY BE SPF # 3 OR SYP #3 (Fc(perp) = 425 PSI - MIN).

1) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (I) 2x4 STUD COLUMN FOR 4'-O' MAX. BEAM SPAN (UNO), (2) 2X4 STUDS FOR BEAM SPAN GREATER THAN 4'-O" (UNO).

8) L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fy=285 PSI, E=1.9xl05, PSI. P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2900 PSI, Fy=290 PSI, E=2.0xl05, PSI. L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55xl05, PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

9) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH ANY 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 DESIGNER OR ENGINEER.

IO) ALL STRUCTURAL STEEL SHALL BE ASTM A-34. 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 9 48" O.C. . ALL STEEL TUBING SHALL BE ASTM A500.

II) REBAR SHALL BE DEFORMED STEEL, ASTM45, GRADE 40.

12) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A3OT) 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 6" FROM EACH END.

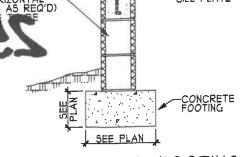
13) BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 4'-O" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-O" (UNO).

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

15) THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 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 - 7:12 TO 12:12 PITCH

WALLS: 24.1 PSF - WALLS 1/2" DIA, ANCHOR BOLTS 9 6'-0" OC (1" EMBEDMENT) FLOOR SYSTEM 2X6 TREATED



SPACE FOOTING

## FOUNDATION STRUCTURAL NOTES: NC (2018 NCRC):

(1) (3) 2x8 SYP #2 OR SPF#2 GIRDER, TYPICAL UNO.

(2) CONCRETE BLOCK PIER SIZE SHALL BE: HOLLOW MASONRY SOLID MASONRY SIZE UP TO 5'-O" HIGH UP TO 32" HIGH UP TO 9'-0" HIGH UP TO 48" HIGH 12 x 16 UP TO 12'-O" HIGH UP TO 64" HIGH 16 x 16 UP TO 96" HIGH 24 x 24 WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

3 WALL FOOTING AS FOLLOWS: DEPTH: 8" - UP TO 2-1/2 STORY 10" - 3 STORY

> SIDING (OR EQUAL) - 16" - UP TO 2-1/2 STORY

- 20" - 3 STORY BRICK VENEER

- 16" - 1 STORY

- 20" - 2 STORY - 24" - 3 STORY

FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO NORTH CAROLINA RESIDENTIAL CODE TABLE R404.LI (I THRU 4) NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

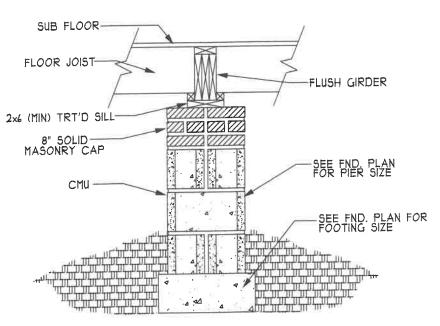
(4) (4) 2x8 SYP#2 OR SPF#2 GIRDER.

(5) (2) 1.75X7.25 LVL OR LSL GIRDER

(6) (3) 1.75X7.25 LVL OR LSL GIRDER

7. DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER, SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.

8. ABBREVIATIONS: "SJ" = SINGLE JOIST "DJ" = DOUBLE JOIST "TJ" = TRIPLE JOIST



FLUSH GIRDER

1989 1989

## HEADER/BEAM & COLUMN NOTES

I. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x0 (4" WALL) OR (3) 2x0 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED

2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW:

UP TO 4' SPAN: (1) KING STUD OVER 4' UP TO 8' SPAN: (2) KING STUDS OVER 8' UP TO 11' SPAN: (3) KINGS STUDS OVER 11' SPAN: (4) KING STUDS

## TRUSS SYSTEM REQUIREMENTS

I. TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.

2. TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.

3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).

4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS

NC (2018 NCRC):

SQUARED HOME DESIGN, I H

SHEET

DETAIL

MPH)

(115/120)

S MA)

ETAIL

o d

NOT ALL APPLY TO

CT

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

105

INC.

DATE:

BD-