

INC. STATHOS TRIMSTERS m THE

#2108

= 2108 = 436 = 356 = 927

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

H SQUARED HOME DESIGN, INC.

THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2012 EDITION.

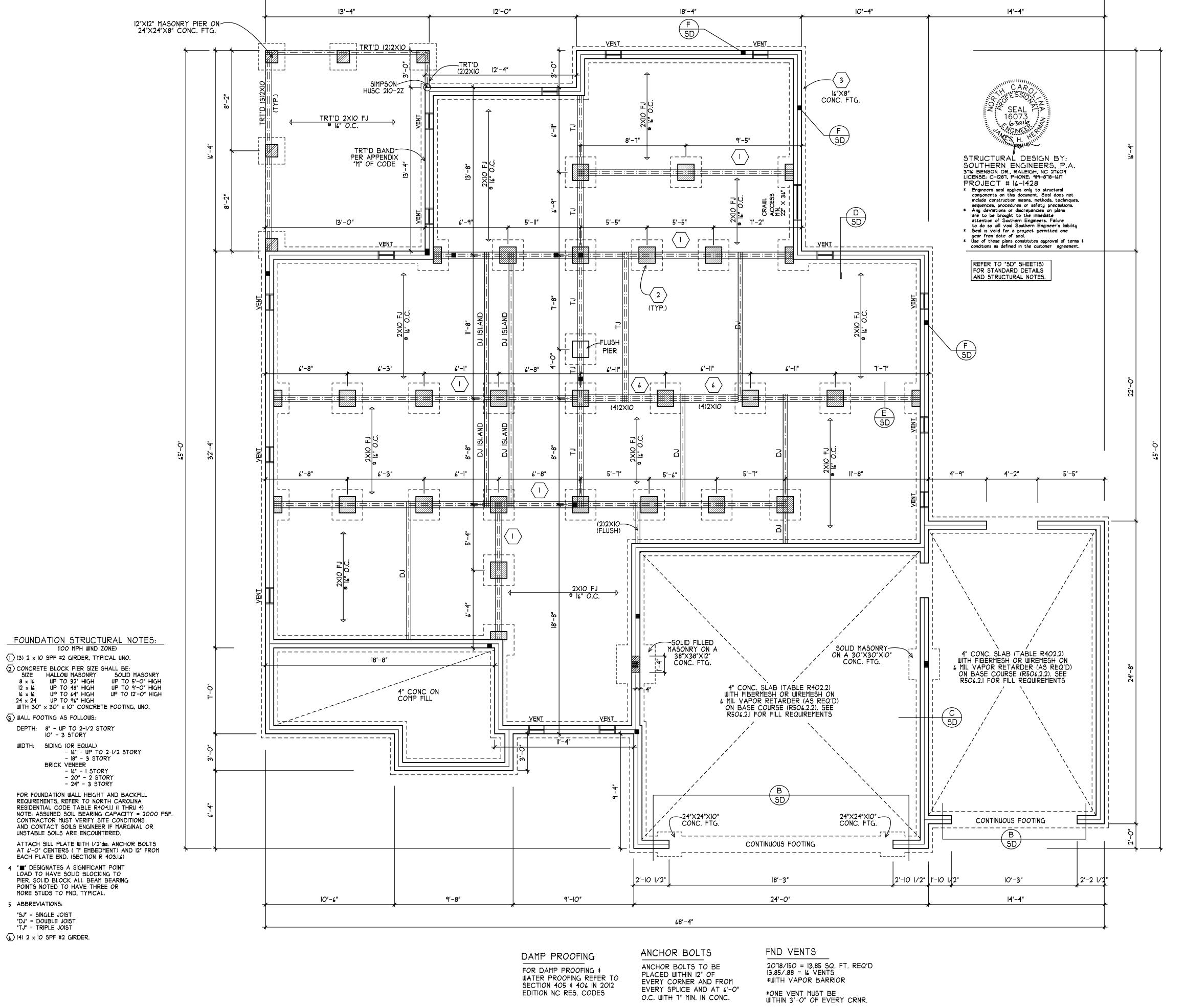
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DATE: 06/23/16

I STORY

042816



68'-4"

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

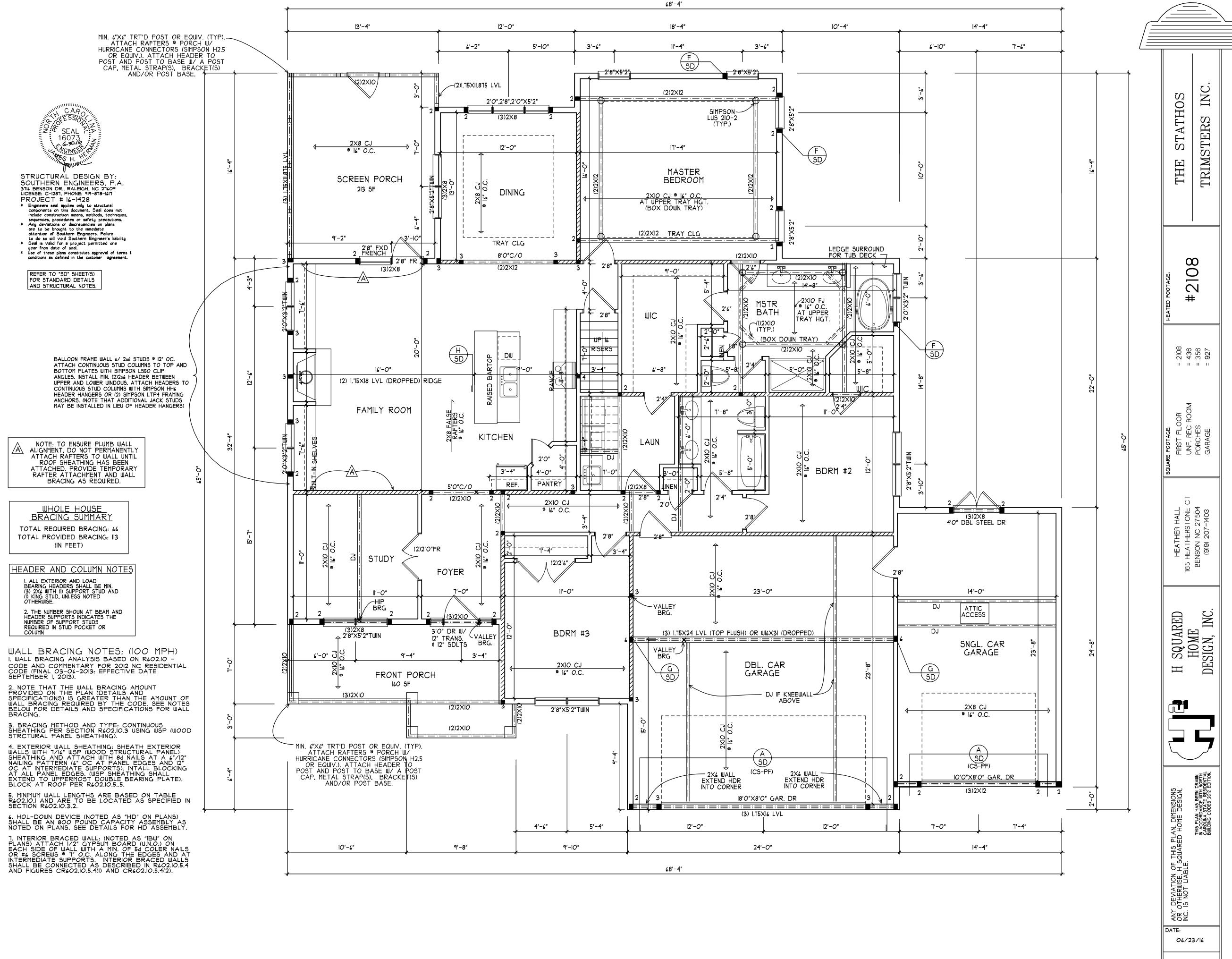
STATHOS TRIMSTERS THE 2108 2108 436 356 927 CT H SQUARED HOME DESIGN, INC. THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2012 EDITION. DEVIATION OF THIS PLAN, OTHERWISE, H SQUARED HO IS NOT LIABLE. AN COR DATE:

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\*2X6 EXTERIOR WALLS

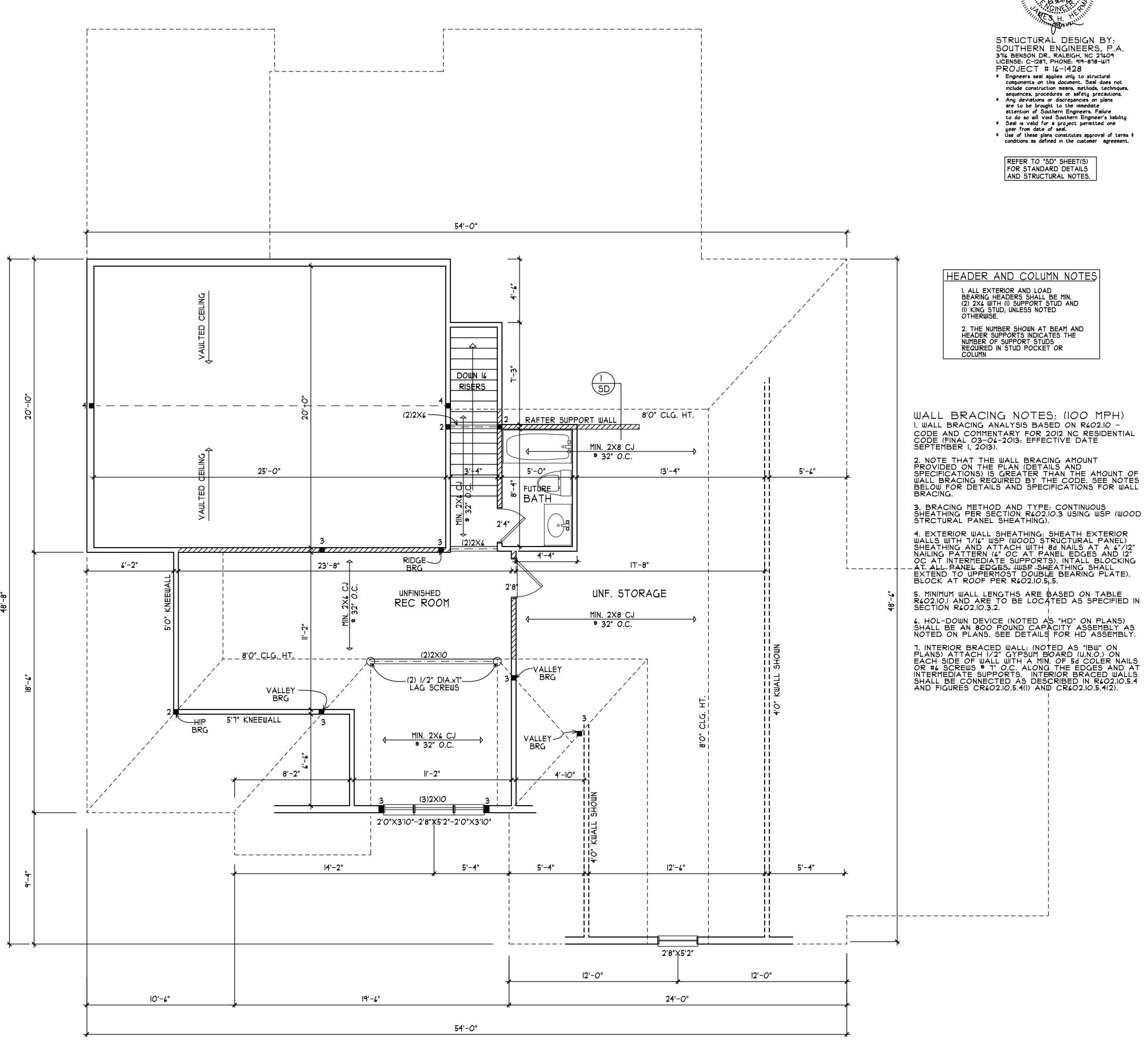
FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

I STORY

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INC. STATHO

TRIMSTERS THE

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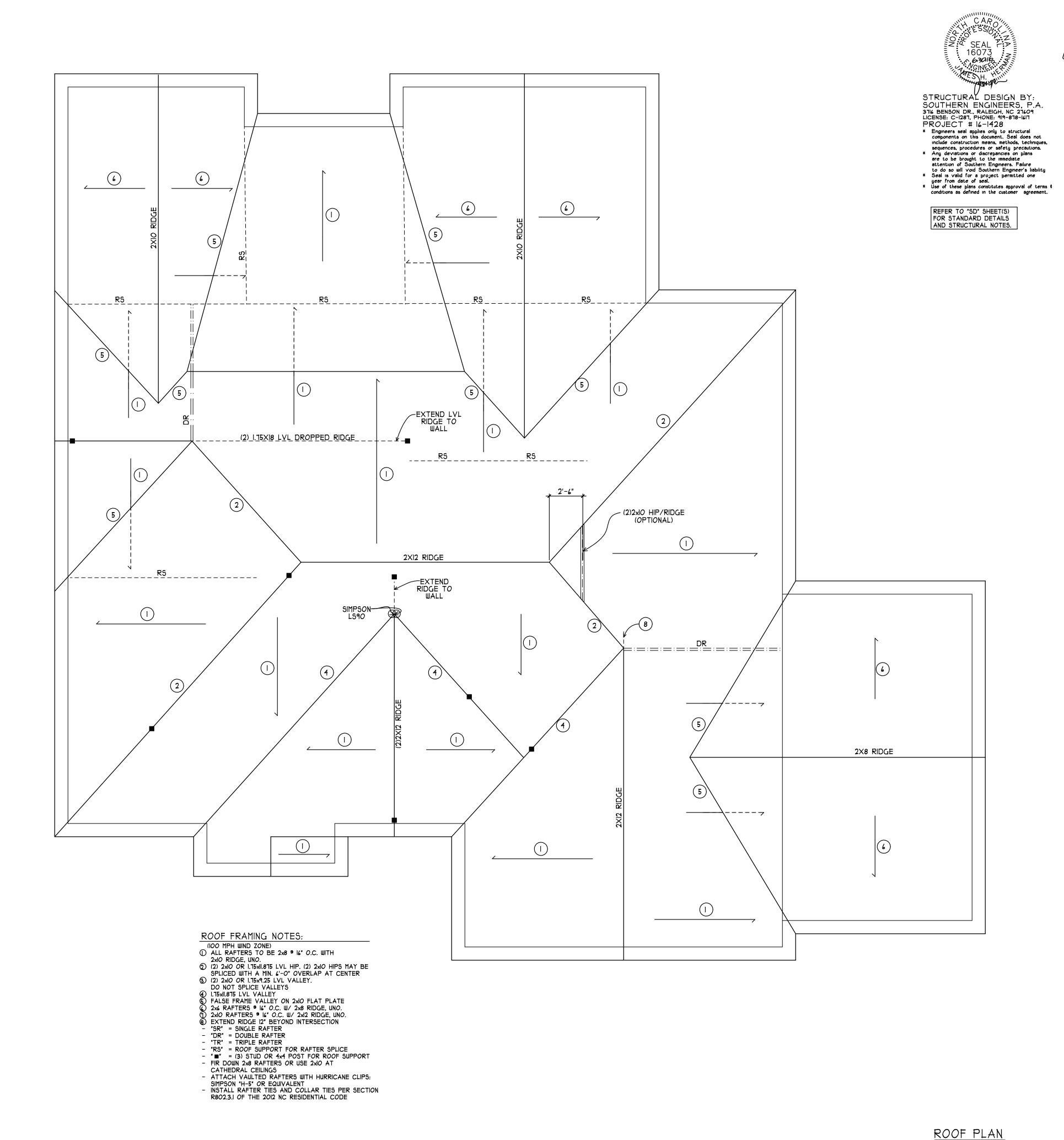
' DEVIATION OF THIS PLAN, DIMENSIONS OTHERWISE, H SQUARED HOME DESIGN, IS NOT LIABLE. AN C

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



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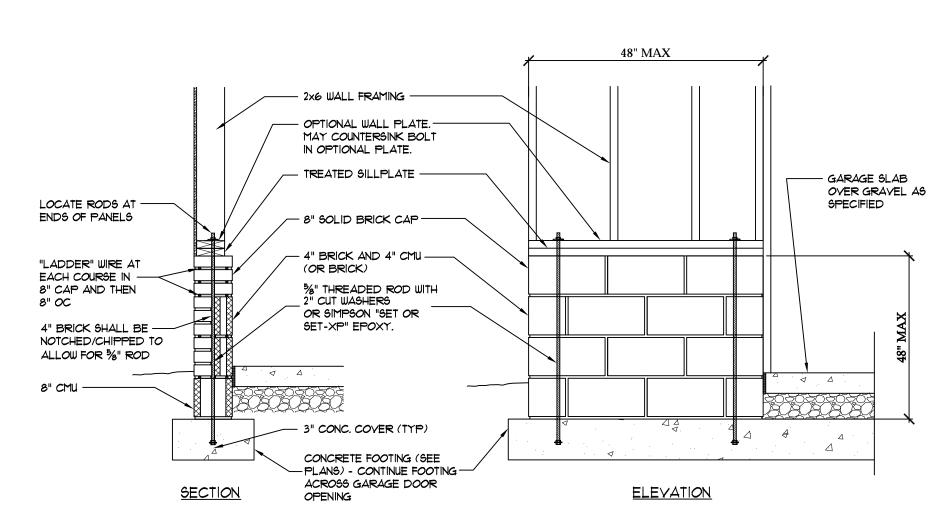
SCALE 1/4" = 1'-0"

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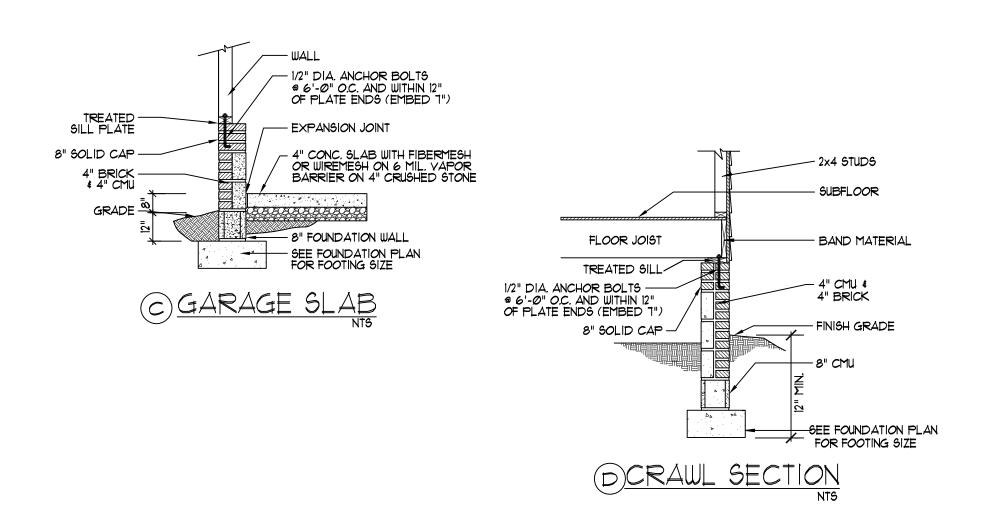
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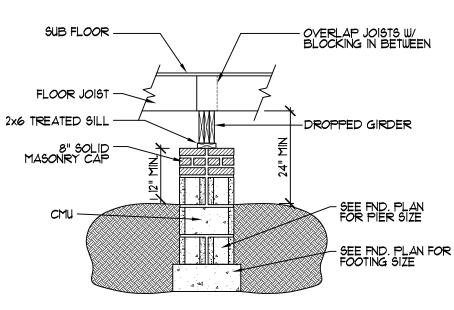
042816

CS-PF: CONTINUOUS PORTAL FRAME CONSTRUCTION
DETAIL AND APPLICATION BASED ON NORCE FIGURE
R602.10.1 - PORTAL FRAME CONSTRUCTION

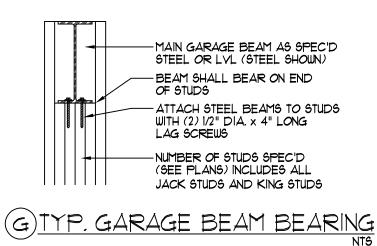


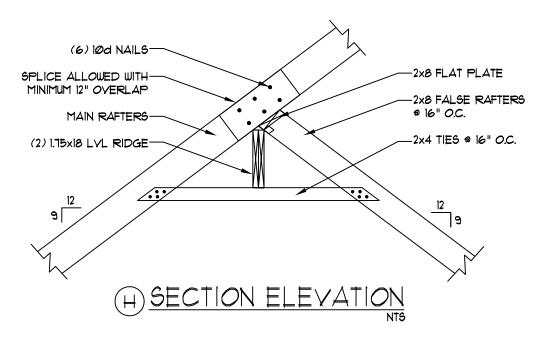
## B GARAGE 'WING WALL' REINFORCING (CODE REFERENCE: IRC FIGURE R602.10.5.3)

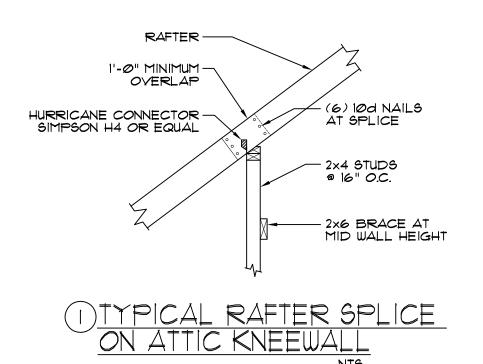


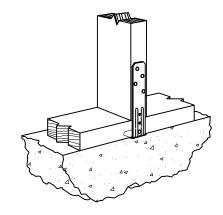


## E DROPPED GIRDER



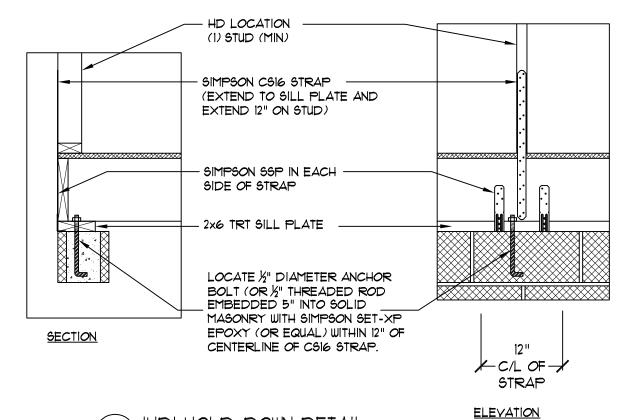








<u>SIMPSON SSP</u>



F HD' HOLD-DOWN DETAIL (OVER WOOD FLOOR)

NOTE: ALTERNATE HD HOLD-DOWN DEVICES OR SYSTEMS MAY BE USED TO MEET THE CODE REQUIRED 800 LB CAPACITY IN LIEU OF THE ABOVE DETAIL.

STRUCTURAL NOTES
2012 NCRC (2003 IRC)
100 mph ZONE

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 (2009 IRC), 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 (R3Ø1.4) (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION LIMIT)

ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, 10 PSF, L/360)
SLEEPING ROOMS: (30 PSF, 10 PSF, L/360)
ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360)
ATTIC WITH OUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360)
ATTIC WITH OUT STORAGE: (10 PSF, 10 PSF, L/240)
STAIRS: (40 PSF, --, L/360)
EXTERIOR BALCONIES: (60 PSF, 10 PSF, L/360)
DECKS: (40 PSF, 10 PSF, L/360)
GUARDRAILS AND HANDRAILS: (200 LBS)
PASSENGER VEHICLE GARAGES: (50 PSF, 10 PSF, L/360)
SNOW: (20 PSF)
WIND LOAD: (BASED ON 100 MPH WIND VELOCITY)

4) WALL BRACING: WALLS SHALL BE BRACED ACCORDING TO R602.10- CODE AND COMMENTARY FOR 2012 NC RESIDENTIAL CODE (FINAL 03-06-2013: EFFECTIVE DATE SEPTEMBER 1, 2013). NOTE THAT THE BRACING AS SPECIFIED ON THE PLANS IS BASED ON THE PRESCRIPTIVE BRACING REQUIREMENTS OF THE CODE AND SHALL BE VERIFIED AND/OR APPROVED BY THE CODE OFFICIAL.

5) 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 4022. 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 WILL S

1) 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).

8) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 6'-@" MAX. BEAM SPAN (UNO), (2) 2x4 STUDS FOR BEAM SPAN GREATER THAN 6'-@" (UNO).

9) L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 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 MANUFACTURERS INSTRUCTIONS.

10) ALL ROOF TRUSS AND 1-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND 1-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR 1-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 × 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, ASTM615, GRADE 60.

13) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) 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.

14) 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 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 - 2012 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 Southern Engin James H. Herman, P

President

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(919)

Raleigh, No

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**PROJEC** 

H SQUARED HOM DESIGN, INC. 165 HEATHERSTONE COURT BENSON, NC 27504 919-207-1403

THE STATHOS RIMSTERS, INC

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