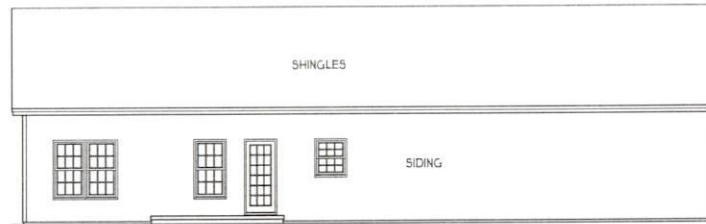
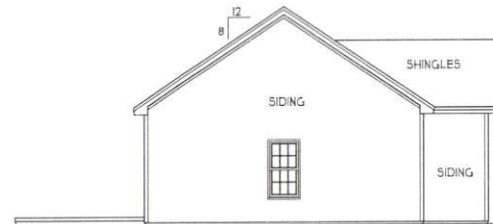




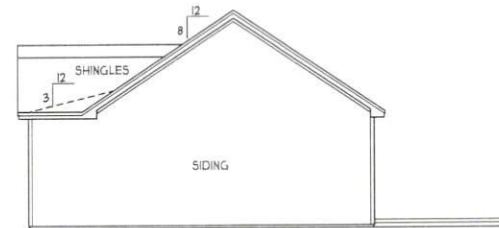
FRONT ELEVATION
SCALE 1/4" = 1'-0"



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



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



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

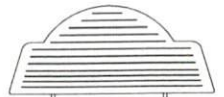
ATTIC VENTILATION:

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 1899 SQ.FT.
1899/150 = 12.66 SQ.FT. NET FREE AREA

ENERGY COMPLIANCE

ZONE 3 = MAX. GLAZING U-FACTOR .35
R-VALUE = CEILING R38, WALLS R15,
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



"THE DAKOTA II"
(LEFT HAND GARAGE)
JRT MANG. PROP.

HEATED FOOTAGE:
#1240

SQUARE FOOTAGE:
= 240
= 86
= 144
= 572
FIRST FLOOR
FRONT PORCH
WOOD DECK
GARAGE

HEATHER HALL
165 HEATHERSTONE CT
BESSON, NC 27504
(819) 207-4603

H SQUARED HOME DESIGN, INC.

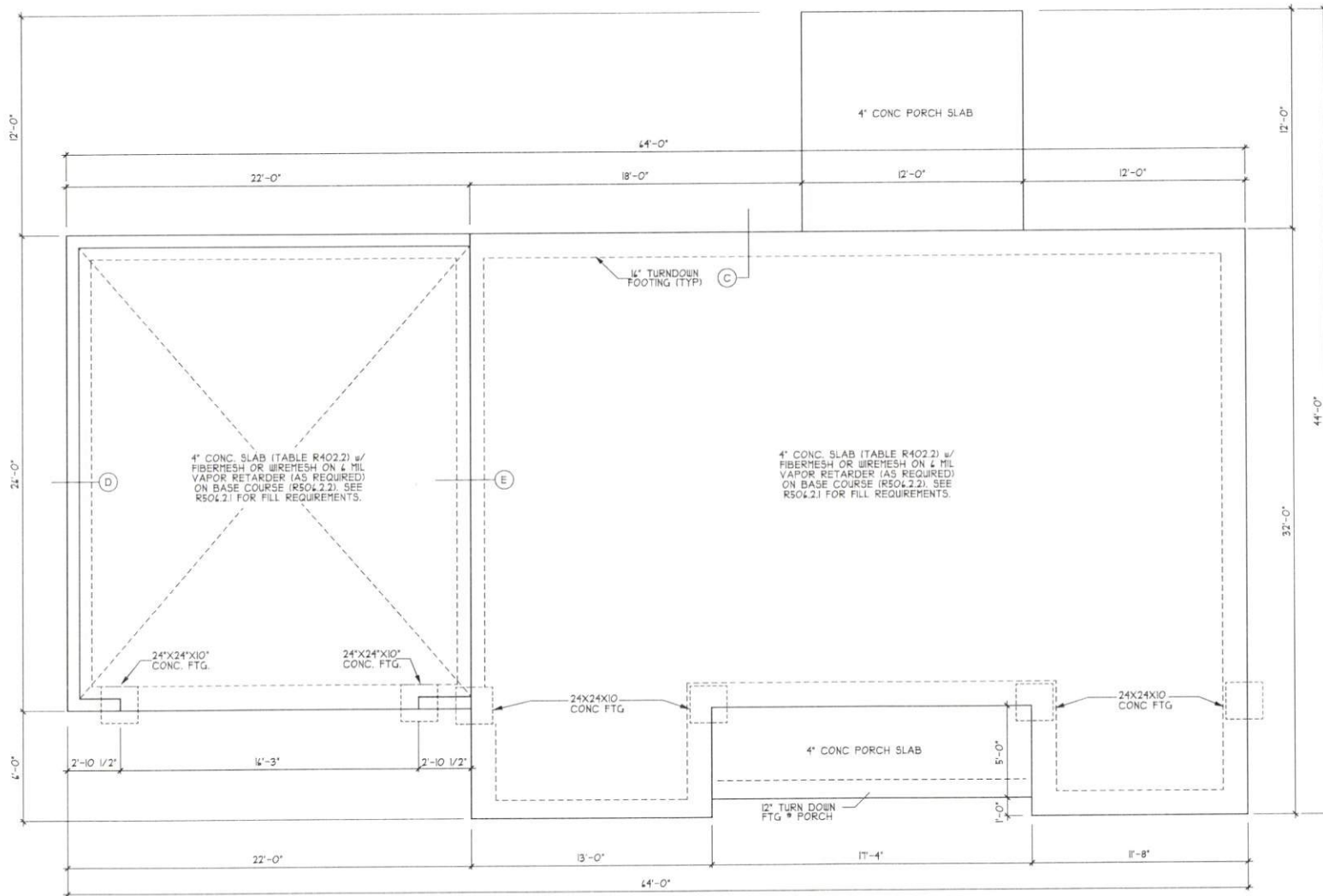


ALL ELEVATIONS OF THE
OFFERED IMPROVEMENTS
WILL BE CONSIDERED AS
APPROXIMATE. THE DESIGN
IS ACCORDANCE WITH NORTH
CAROLINA BUILDING CODES
2008 EDITION.

DATE:
02/25/2020

1 STORY

FILE:
020320



ANCHOR BOLTS

ANCHOR BOLTS TO BE PLACED WITHIN 12" OF EVERY CORNER AND FROM EVERY SPLICE AND AT 4'-0" O.C. WITH 1" MIN. IN CONC.

DAMP PROOFING

FOR DAMP PROOFING & WATER PROOFING REFER TO SECTION 405 & 404 IN 2018 EDITION NC RES. CODES

REFER TO '50' SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS, AND STRUCTURAL NOTES

FOUNDATION PLAN

SCALE 1/4" = 1'-0"



"THE DAKOTA II"
(LEFT HAND GARAGE)

JRT MANG. PROP.

HEATED FOOTAGE:

#1240

= 240

= 86

= 84

= 572

SQUARE FOOTAGE:

FIRST FLOOR

FRONT PORCH

WOOD DECK

GARAGE

HEATHER HALL

165 HEATHERSTONE CT

BENSON NC 27504

1999/2017-1403

H SQUARED

HOME

DESIGN, INC.

NOT TO SCALE UNLESS SPECIFICALLY NOTED OTHERWISE

THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA BUILDING CODES 2018 EDITION

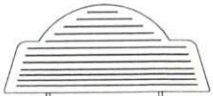
DATE:

02/25/2020

1 STORY

FILE:

020320



"THE DAKOTA II"
(LEFT HAND GARAGE)
JRT MANG. PROP.

HEATED FOOTAGE:
1240

SQUARE FOOTAGE:
= 1240
= 86
= 84
= 572

FIRST FLOOR
FRONT PORCH
WOOD DECK
GARAGE

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

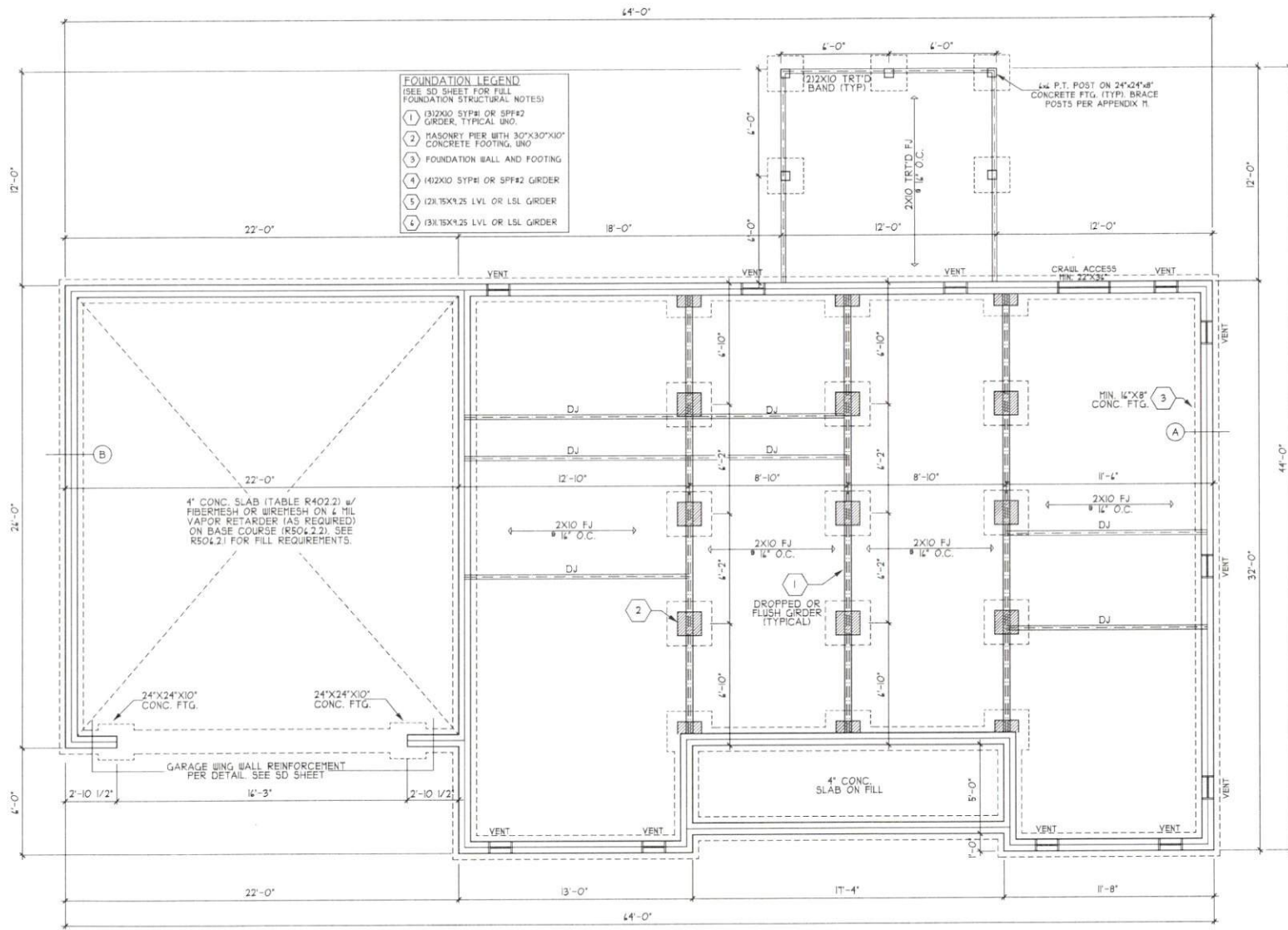
H SQUARED HOME DESIGN, INC.

ANY MODIFICATION OF THE
FOUNDATION OR OTHER ELEMENTS
MUST BE MADE BY THE
DESIGNER.
THIS PLAN HAS BEEN DRAWN
IN ACCORDANCE WITH NORTH
CAROLINA STATE BOARD OF
BUILDING CODES 2008 EDITION.

DATE:
02/25/2020

1 STORY

FILE:
020320



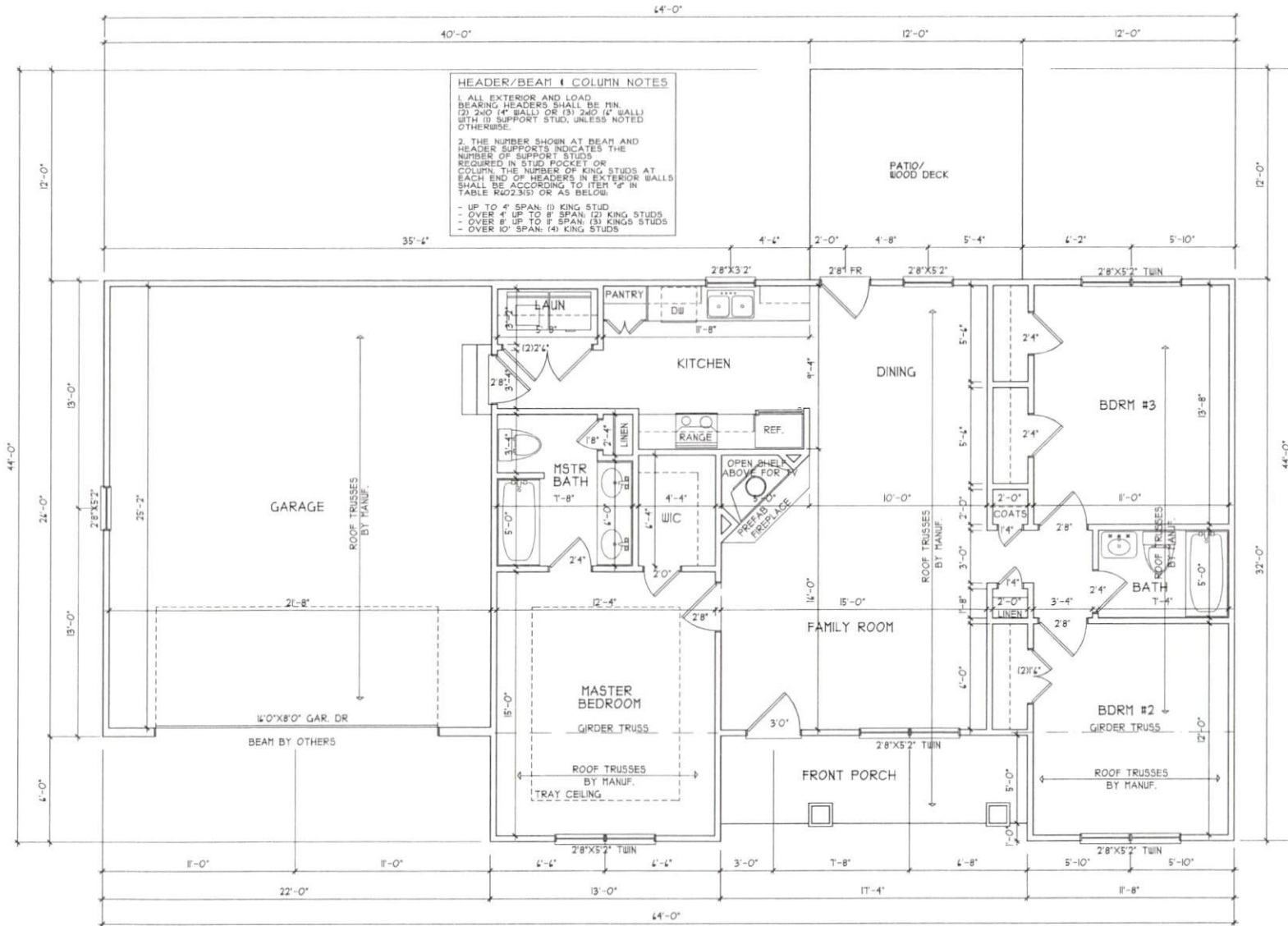
- FOUNDATION LEGEND**
(SEE SD SHEET FOR FULL FOUNDATION STRUCTURAL NOTES)
- ① (3)2X10 SYP#1 OR SPF#2 GIRDER, TYPICAL UNO
 - ② MASONRY PIER WITH 30"X30"X10" CONCRETE FOOTING, UNO
 - ③ FOUNDATION WALL AND FOOTING
 - ④ (4)2X10 SYP#1 OR SPF#2 GIRDER
 - ⑤ (2)R.15X1.25 LVL OR LSL GIRDER
 - ⑥ (3)R.15X1.25 LVL OR LSL GIRDER

DAMP PROOFING
FOR DAMP PROOFING & WATER PROOFING REFER TO SECTION 405 & 406 IN 2018 EDITION NC RES. CODES

VENT FENDS
1240/150 = 8.3 SQ. FT. REQ'D
8.3/.88 = 9 VENTS
*WITH VAPOR BARRIER
*ONE VENT MUST BE WITHIN 3'-0" OF EVERY CRNR.

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS, AND STRUCTURAL NOTES

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



REFER TO 'SD' SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS, AND STRUCTURAL NOTES

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



"THE DAKOTA II"
(LEFT HAND GARAGE)
JRT MANG. PROP.

HEATED FOOTAGE:
#1240

SQUARE FOOTAGE:
FIRST FLOOR = 1240
FRONT PORCH = 86
WOOD DECK = 144
GARAGE = 572

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

H SQUARED HOME DESIGN, INC.



ALL CREATION OF THIS PLAN IS THE PROPERTY OF H SQUARED HOME DESIGN, INC. THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH THE NATIONAL BUILDING CODES AND LOCAL ORDINANCES.

DATE: 02/25/2020

1 STORY

FILE: 020320

STRUCTURAL NOTES

- D ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2008 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER OR DESIGNER 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 OR DESIGNER 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 TRACED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.
- 2) DESIGN LOADS (R301.4)
- | | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION (LL) |
|---------------------------------|-----------------|-----------------|-----------------|
| ROOTS 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/360 |
| STAIRS | 40 | --- | L/360 |
| EXTERIOR BALCONIES | 40 | 10 | L/360 |
| DECKS | 40 | 10 | L/360 |
| GUARDRAILS AND HANDRAILS | 200 | --- | --- |
| PASSENGER VEHICLE GARAGES | 80 | 10 | L/360 |
| FIRE ESCAPES | 40 | 10 | L/360 |
| SNOW | 20 | --- | --- |
- WIND LOAD (BASED ON 15/20 MPH WIND VELOCITY & EXPOSURE B)
- 3) WALL BRACING: BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO SECTION R402.3. THE AMOUNT AND LOCATION OF BRACING SHALL COMPLY WITH TABLE R402.3.1. THE LENGTH OF BRACED PANELS SHALL BE DETERMINED BY SECTION R402.3.4. LATERAL BRACING SHALL BE SATISFIED PER METHOD 3 BY CONTINUOUSLY SHEATHING WALLS WITH STRUCTURAL SHEATHING PER SECTION R402.3.3. 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). AN ENTRAINED AIR TABLE R402.2, ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPS 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 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.
- 6) ALL FRAMING LUMBER SHALL BE SPF #2 (F_b = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP #2 (F_b = 1175 PSI). PLATE MATERIAL MAY BE SPF #3 OR SYP #3 (F_c = 425 PSI = MIN).
- 7) 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).
- 8) L.V.L. SHALL BE LAMINATED VENEER LUMBER. F_b=2400 PSI, F_v=285 PSI, E=1,740,000 PSI. P.S.L. SHALL BE PARALLEL STRAND LUMBER. F_b=2700 PSI, F_v=270 PSI, E=2,040,000 PSI. L.S.L. SHALL BE LAMINATED STRAND LUMBER. F_b=2250 PSI, F_v=400 PSI, E=1,550,000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S 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 MANUFACTURER'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH DESIGNER OR ENGINEER.
- 10) 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" LENGTH. 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 x 4" O.C. AND ALL STEEL TUBING SHALL BE ASTM A500.
- 11) REBAR SHALL BE DEFORMED STEEL ASTH36, GRADE 60.
- 12) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTH 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.
- 13) BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x4" STEEL ANGLE FOR UP TO 4'-0" SPAN AND 4"x4"x4" STEEL ANGLE WITH 1" LEG VERTICAL FOR SPANS UP TO 4'-0" (UNO).
- 14) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A PEAK 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 - 2008 EDITION SHALL BE AS FOLLOWS:
- ROOF:
45.4 PSF - 2/12 PITCH OR LESS
34.8 PSF - 2/12 TO 1/12 PITCH
21 PSF - 1/12 TO 1/12 PITCH
- WALLS:
241 PSF - WALLS

HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x10 (4" WALL) OR (3) 2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD ROCKS OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM 4" IN TABLE R402.3(5) OR AS BELOW:
- UP TO 4' SPAN; (1) KING STUD
 - OVER 4' UP TO 8' SPAN; (2) KING STUDS
 - OVER 8' UP TO 12' SPAN; (3) KING STUDS
 - OVER 12' SPAN; (4) KING STUDS

FOUNDATION STRUCTURAL NOTES:

- NC (2008 NCRCS) Wind 15-20 MPH
- (1) 2x10 SYP #2 OR SPF#2 GIRDER, TYPICAL UNO.
- (2) CONCRETE BLOCK PIER SIZE SHALL BE:
SIZE: HOLLOW MASONRY SOLID MASONRY
8" x 16" UP TO 32" HIGH UP TO 5'-0" HIGH
12" x 16" UP TO 48" HIGH UP TO 9'-0" HIGH
16" x 16" UP TO 64" HIGH UP TO 12'-0" HIGH
24" x 24" UP TO 96" HIGH
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
WIDTH: SIDING OR EQUAL
- 12" - UP TO 2 1/2 STORY
- 20" - 3 STORY
BRICK VENEER
- 12" - 1 STORY
- 20" - 2 STORY
- 24" - 3 STORY
- FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO NORTH CAROLINA RESIDENTIAL CODE TABLE R404.1 (I THRU G). NOTE: ASSUMED SOIL BEARING CAPACITY - 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

- (4) 2x10 SYP#2 OR SPF#2 GIRDER.
(5) 15X19.25 LVL OR LSL GIRDER
(6) 15X19.25 LVL OR LSL GIRDER
1. ■ DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO BEAR SOLID BLOCK ALL BEAR BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO END, TYPICAL.
8. ABBREVIATIONS:
"S" = SINGLE JOIST
"D" = DOUBLE JOIST
"T" = TRIPLE JOIST

FIGURE RIBS 10.3.2 ALTERNATE BRACED WALL PANEL

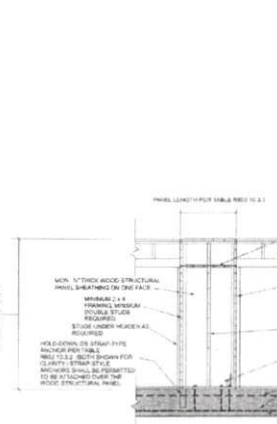
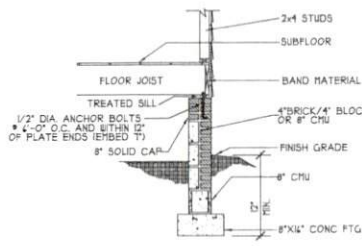
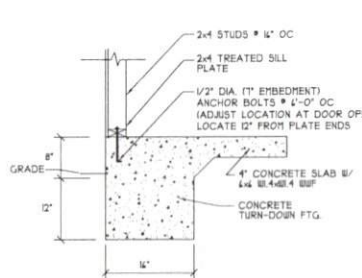


FIGURE RIBS 10.3.2 ALTERNATE BRACED WALL PANEL

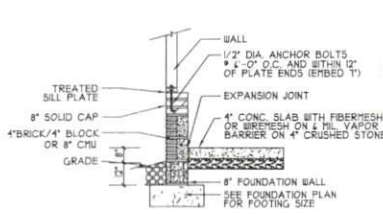
FIGURE RIBS 10.3.3 METHOD FOR PORTAL FRAME WITH HOLD-DOWNS



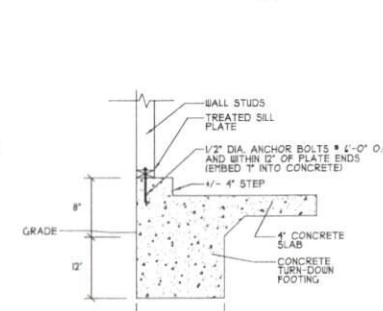
(A) CRAWL SECTION NTS



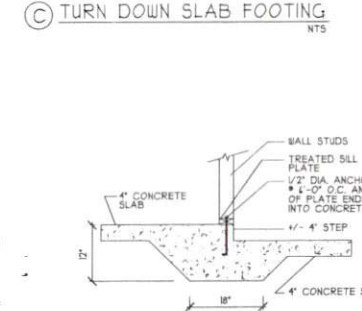
(C) TURN DOWN SLAB FOOTING NTS



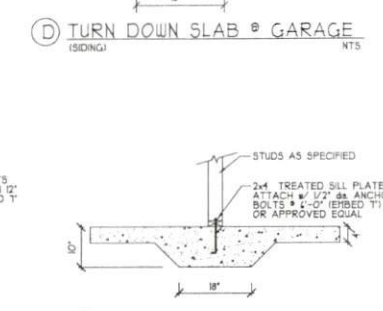
(B) GARAGE SLAB NTS



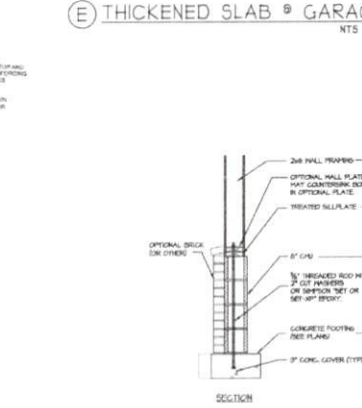
(D) TURN DOWN SLAB @ GARAGE NTS



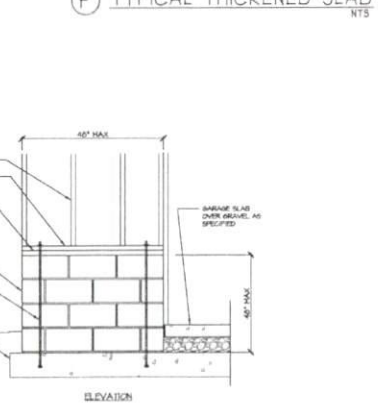
(E) THICKENED SLAB @ GARAGE NTS



(F) TYPICAL THICKENED SLAB NTS



(E) THICKENED SLAB @ GARAGE NTS



(F) TYPICAL THICKENED SLAB NTS

GARAGE WING WALL REINFORCING PER IBC FIGURE R602.10.4.3



BASIC BUILDING
DETAIL SHEET

PLEASE NOTE THAT NOT ALL DETAILS APPLY TO EVERY PLAN.

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

H SQUARED HOME DESIGN, INC.



DATE: _____
FILE: _____