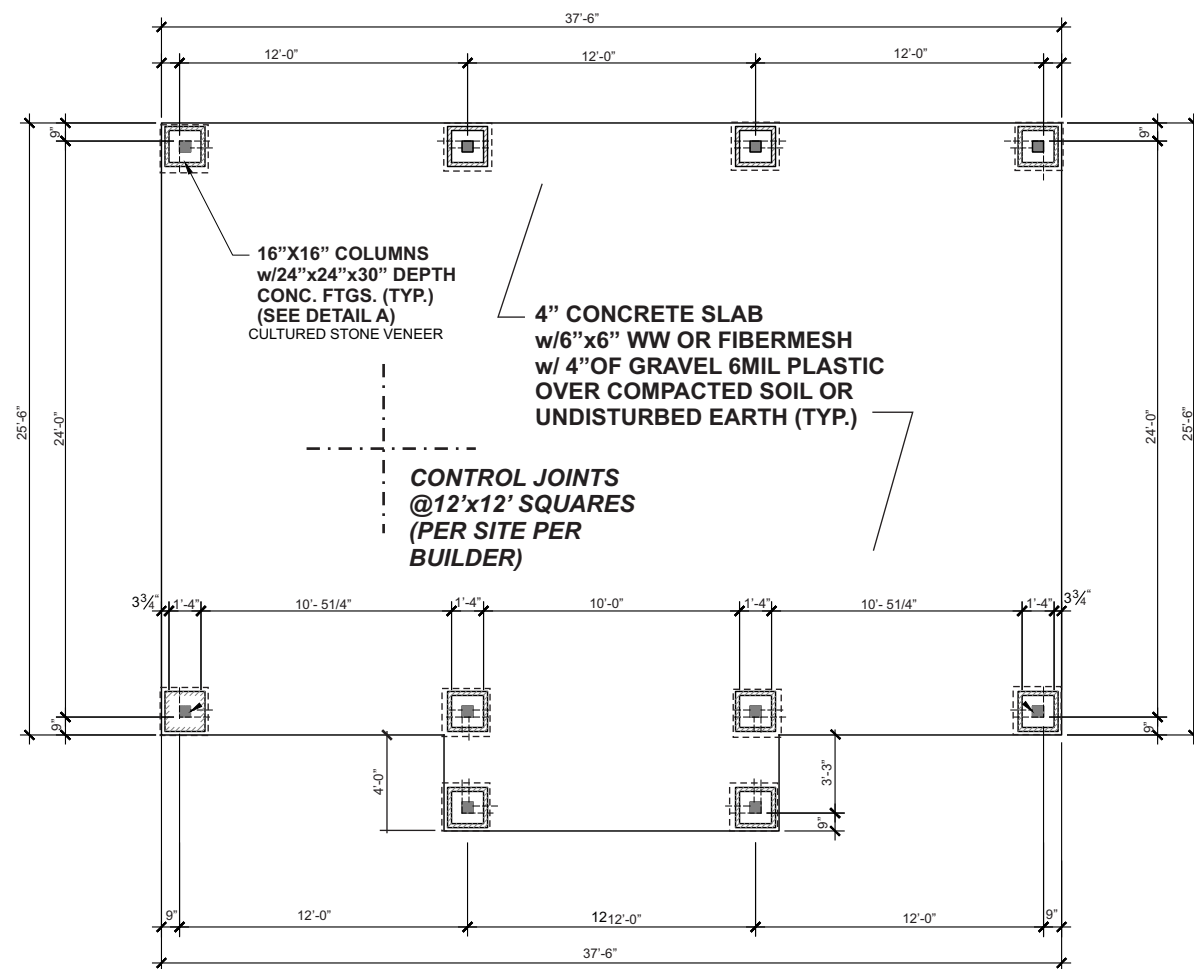


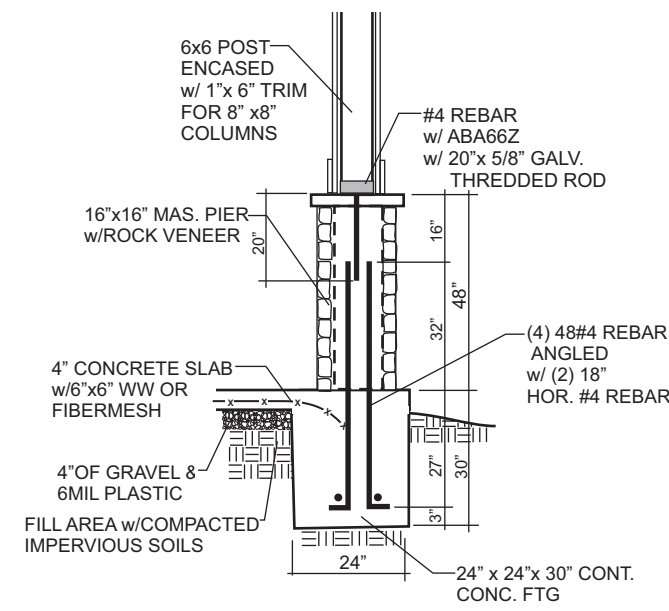
THIS PLAN DESIGNED UNDER NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION

HOUSE DESIGNED FOR 115 MPH, EXPOSURE B

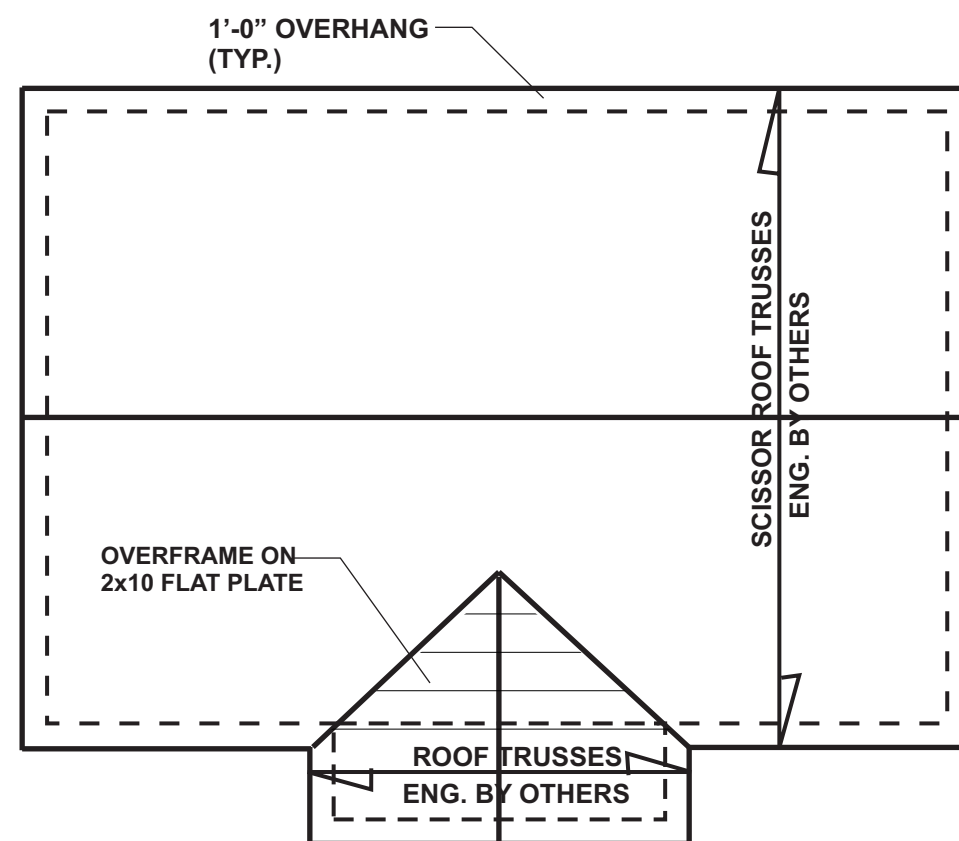
ANCHOR BOLTS SHALL BE MINIMUM 1/2" DIAMETER & SHALL EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. ANCHOR BOLTS TO BE NO MORE THAN 6'-0" ON CENTER & WITHIN 12" OF ALL PLATE SPLICES.



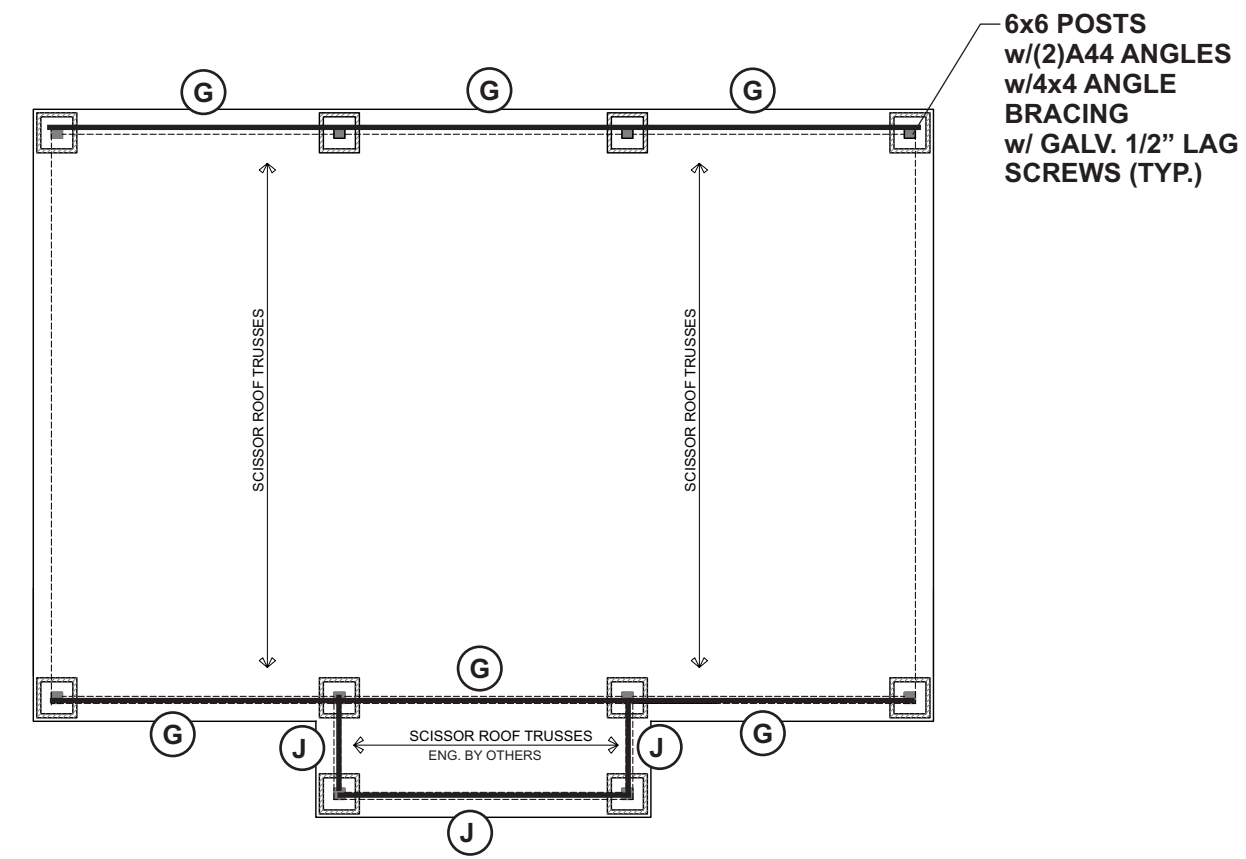
FOUNDATION



DETAIL FOR COLUMNS NOT TO SCALE



ROOF FRAMING



CEILING FRAMING

FOUNDATION NOTES:

- Deck posts min. 4'-0" above grade are to be knee or diagonally braced per Appendix M. fastening to house will be by nailer with 5/8" galvanized bolts @ 20' o.c. and 12d hot dipped galv. @ 42" o.c.
- Corners shall be braced with one of the approved methods as outlined in R602.10.3.
- Structural members fastening to conform to Table R602.3(1) and (2).
- Girders and piers shall bear on center 1/3 of pier and footing, respectively.
- 2018 NC State Residential Building Code apply to the construction of footings.
- Typical lug footing to be 18"x8" deep. (UNO)
- Pressure treated wood shall be installed for exterior use.
- Hanger Schedule (Simpson hangers) for beam to beam connections (UNO)
 - (2)2x10's: LUS210-2
 - (3)2x10's: LUS210-3
 - (2)9-1/4 LVL's: HUS410
- Concrete shall have min. 28 day strength of 3000 psi. and max. 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 current standards. All samples for pumping shall be taken from the exit pump.
- Allowable soil bearing pressure assumed to be 2000 psf. The contractor must contact Geotechnical Engineer & the Structural Engineer if unsatisfactory subsurface conditions are encountered. The surface area adjacent to the foundation wall shall be provided adequate drainage, and shall be graded so as to drain surface water away from foundation walls

STRUCTURAL NOTES:

- Framing lumber shall be SYP or #2 SPF (modulus of elasticity 1,100,000 psi, fb 950). All beams & treated lumber to be #2 SYP, E=1,600,000, fb=1100 min. Studs min #2 or stud grade.
- Use hangers for all beam to beam connections Structural fastening as per R602.3(1). Adequate connections is the sole responsibility of the general contractor and his subs.
- Structural members fastening to conform to Table R602.3(1) and (2).
- Roof Framing Notes:
 - Dbl Hips may be spliced with a min. 6'-0" overlap at center. No valley splices
 - Use 2x10 or fir down rafters for vaulted areas
 - Attach each vaulted rafters with hurricane connectors: Simpson H-2.5, H-5 or approved equal or 6" SDWC's.
- All construction shall conform to the latest requirements of the NC State Residential Building Code - 2018 Edition, plus all local codes & regulations or 2015 IBC.
- Structural Engineer is not responsible for and will not control of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the construction work.
- Structural Engineer is not responsible for the contractor's failure to carry out the proposed construction work in accordance with the contract document.
- Use Method #3 for Structural Sheathing; "Accepted Engineer's Practice"

FRAMING NOTES:

- Design Loads (R301.5)

	Live Loads (PSF)	Dead (PSF)
Rooms not for Sleeping	40	10
Sleeping Rooms	30	10
Attic w/Permanent Stairs	40	10
Attic w/o Permanent Stairs	20	10
Attic w/o Storage	10	10
Stairs	40	-
Exterior Balconies	60	10
Decks	40	10
Guardrails & Handrails	200	-
Passenger Vehicle Garages	50	10
Fire Escapes	40	10
Snow	20	-

Wind Load: (Refer to Table R301.2.4) Verify Zone before Construction Wake County 115 mph
- Wall Bracing: Braced wall panels shall be constructed according to section R602.10.3. The wall structural paneling shall comply with Table R602.10.3. 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 Table 601.3. Note that any specific braced wall detail shall be installed as specified.
- All framing lumber shall be SPF#2 (Fb=875 psi) unless otherwise noted (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.)
- All exterior headers to be (2)2x10 spf. u.n.o w/ dbl. Jacks for all openings >5'-0".
- All interior bearing headers to be (2)2x10 u.n.o. w/ dbl. jacks for all openings >4'-6", use (2)2x8 w/ dbl. Jacks for all openings >3'-0" u.n.o.
- All interior non-bearing headers to be min. (2)2x4 flat u.n.o.
- Fireblock to conform with R602.8

HEADER SCHEDULE

- (A) (2) 2x10's Flush
- (B) (2) 2x10's Dropped
- (C) (2) 2x8's Flush
- (D) (2) 2x8's Dropped
- (E) (2) 9.25" LVL's Flush
- (F) (2) 9.25" LVL's Dropped
- (G) P.T. (2)11.875" LVL's Dropped
- (H) P.T. 4" x 12" Glulam Dropped
- (J) (2) P.T. 2x12's Dropped

STRUCTURAL LAYOUT

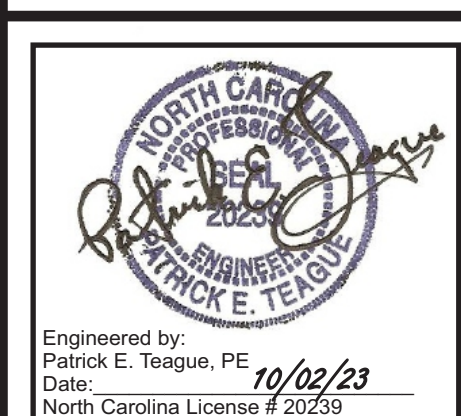
SCALE: 1/8" = 1'-0"



ENGINEER INFO:
P.E. TEAGUE, P.E., PLLC
 2705 WATERLOO COURT
 RALEIGH, NC 27613
 919-247-2572
 PETEAGUE50@GMAIL.COM
 TEAGUEENGINEERING.COM

BUILDER INFO:
 Kevin Barbour
 (919)337-6752
 ChathamCustoHomes@gmail.com

COVERED PATIO
Grantham Residence
830 Clarks Corner Road
Holly Springs, NC



SHEET NUMBER

S1
 PROJECT #PO24480KB