A. A. Takla Engineering, PLLC

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Consulting | Design | Efficiency

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Project: 224 Sneed Ln.

Location: Fuquay Varina, NC

Company: Gutierrez Framing

Care Of: Alex Mejias

Subject: Framing Items

Job Number: 1582-23

Electronically signed by Andy A. Takla, PE
Date:2023.10.03
Time:2:17:15 PM

NORTH CAROLINA PROFESSIONAL SEAL 050695 ENGINEER ANDREW ATEF TAKLA

As requested, Andy Takla, PE visited the above referenced site on October 3rd, 2023 to review the following framing items presented to engineer by the framing contractor:

1) The 3 ply LVL in the garage features no bolts. Moving forward, **we recommend installing (2) 5" long LegerLoks spaced at 24" on center driven from one face of the beam; Use a 2"-4" edge distance from top/bottom edges of beam.**

2) The per plans (2)14" LVL in-line with the forward stairwell wall (in 1st story ceiling) does not extend to the right exterior wall as specified in the plans; Instead it stops at the right foyer wall (unfortunately where no lug footing exists). Based on review **we recommend removing the OSB sheathing attached to the front face of the front stairwell wall, cutting the bottom 14" of all studs in this wall (including the stud column which support the right end of the (2) 14" LVL beam), and install a (2) 14" LVL beam extending from the right exterior wall to the aforementioned stud column. Allow beam to continuously bear on the bottom plate. It is acceptable to notch the beam as required about any anchor bolts. Thereafter, reapply sheathing. This repair is intended to support the point load via the (2) 14" LVL "in cantilever" as to not apply significant loading on the location of the slab lacking the lug footing.**

3) The framing overhead as one enters the 2nd story (near top of stairs) is framed very differently from the sealed plans. This is primarily a result of an error when designing the right side 3 ply girder roof truss. The girder truss's bottom chord was cut at the stiarwell wall to accommodate adequate head room. We understand the framers have implemented changes to this area (to include the installation of three (3) 9 1/4" flush LVL headers to transfer loads to 2nd story walls) as instructed by the truss suppliers. Based on review, the framing is found to be both appropriate and adequate to carry the loads **provided a (4) stud column is installed supporting the right end of the rear (left-right) spanning (2) 9 1/4" LVL at the rear stairwell wall; Install the same (4)2x4 stud column in the 2nd story wall, and 1st story wall to the foundation. No additional foundational reinforcements are required.**

4) At least four (4) 2x10 bottom chords of roof trusses to the right of the right side 3 ply girder roof truss at bearings on rear stairwell wall (of 2nd story) are less than adequately bearing on the wall. **Moving forward, we recommend installing a 4' long 2x10 scab to one side of each bottom chord; Allow scab to fully bear on top plate and attach with (3) 10d nails spaced at 6" on center.**

5) In the 3rd story, several rafters (where bearing on a (4)stack 2x4 top plate) are excessively notched. Moving forward, **we recommend installing an L50 clip to at least one side of each rafter; Connecting the lower portion of the rafters to the (4)stack top plate. Typical at each.**