



September 21, 2021

Summit Homes
120 SE 30th St.
Lee's Summit, MO 64082

**RE: Revision to main and second floor framing for Lot # 102 Manor at Stoney Creek – 4421 SW Tanzanite Circle
Lee's Summit MO 64082 – Permit # PRRES20211033**

This letter addresses the revision to the main floor framing for Lot #102 Manor at Stoney Creek for field issue of over-bored holes for electrical and plumbing and a plumbing splice.

The revision shall be as follows:

Main floor framing:

- Wiring shall be removed and #2 2x10 Douglas Fir Larch #2 shall be installed sistered (4 fasteners per linear ft in "W" pattern) or adjacent to existing joist with over bored holes under bath #3 spanning from steel beam to header support.
- Wiring shall be removed and #2 2x10 Douglas Fir Larch #2 shall be installed sistered (4 fasteners per linear ft in "W" pattern) or adjacent to existing joist with over bored holes under owner's entry.
- Install approximately 32" of (2) #2 2x10 at location of plumbing hole to support floor joist with adjacent joists on each side of plumbing splice.
- Floor joist spans approximately 15' under bath #3 and 8' under owner's entry with standard D=10 psf and L=40 psf loads and are Douglas Fir Larch #2 2x10 at 16" oc.
- Holes shall be within middle third of floor joist with 2" at top and bottom of floor joist. Holes shall not be located within 2" of another hole per IRC R502.8.1.

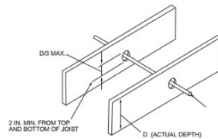
Second floor framing:

Overbored hole in garage ceiling underneath bathroom #1:

- It is structurally acceptable to have a 2.5" in diameter hole approximately 1-1/4" from top of floor joist under bathroom #1 drain.
- Floor joists span approximately 14' and are Douglas Fir Larch #2 2x10 at 16" oc with standard D=10 psf and L=40 psf loads.

Overbored hole underneath bathroom #2 toilet:

- Overbored hole is 3" in diameter for bathroom #2 toilet. Hole is centered in middle of joist and has at least 2" of floor joist above and below hole.
- Floor joists span approximately 18' - 4" and are Douglas Fir Larch #2 2x10 doubled at 16" oc with standard D=10 psf and L=40 psf loads.
- Install a 24" length of CS-16 coil strap centered over hole. Install with fasteners per manufacturer's specs.



For SI: 1 inch = 25.4 mm.

FIGURE R502.8 CUTTING, NOTCHING AND DRILLING

R502.8.1 Sawn lumber.

Notches in solid lumber joists, rafters and beams shall not exceed one-sixth of the depth of the member, shall not be longer than one-third of the depth of the member and shall not be located in the middle one-third of the span. Notches at the ends of the member shall not exceed one-fourth the depth of the member. The tension side of members 4 inches (102 mm) or greater in nominal thickness shall not be notched except at the ends of the members. The diameter of holes bored or cut into members shall not exceed one-third the depth of the member. Holes shall not be closer than 2 inches (51 mm) to the top or bottom of the member, or to any other hole located in the member. Where the member is notched, the hole shall not be closer than 2 inches (51 mm) to the notch.

Sincerely,

Bradley Huxol, PE

