

CIVIL ENGINEERING CONSULTANTS

 1805 WATERS ROAD
 HARRISONVILLE
 MISSOURI
 64701
 816-380-5150

 FACSIMILE:
 816-884-3250
 EMAIL:
 MAIL@REOENGINEERING.COM

January 17, 2022

Attn: Brian Higgenbotham Kevin Higdon Construction 1816 SW Sage Canyon Rd. Lee's Summit, MO 64082

RE: R.E.O. Project 21-002-35 1816 SW Sage Canyon Rd 12-28-21 Inspection items

## Dear Mr. Higgenbotham,

We are providing herewith analysis and statement regarding the inspection comments from a 12-28-21, specifically rafter and ceiling joists not attached directly to top plates, hip/valley members supported on blocking, and lateral bracing method at the rear windows at the breakfast area. Where rafters and ceiling joists are not directly tied to the wall top plate, builder shall provide vertical straps at 48 inches on center where rafters are constructed on blocking greater than three net top plates; areas where ceiling joists are constructed as an energy heel. Straps shall be 1-1/4"x22 gauge and extend from the top of the rafter to 8 inches below the base of the top plate aligned with a stud in the wall construction. Seven (7) ~ 8d fasteners shall be connected to the stud with an additional seven (7) ~ 8d distributed between the rafter, blocking plates, and top plates. We consider the rafters constructed above an energy heel type blocking adequately tied.

Where hip members are supported by a single block between the energy heel top plate to the wall top plate, a strap as described above shall also be applied at each location. The single 2x4 block is adequate to support the gravity load from the energy heel to the top plate.

In lieu of the continuously sheathed portal frame at the rear breakfast wall, the builder may use method continuously sheathed wood structural panel. The framing sections shall have the wood structural panel fastened to the framing with 8d nails at six inches on center at the perimeter, 12 inches on center at the interior. The will adequately provice lateral load resistance in lieu of the CS-PF as denoted on the certified plan set.

These modifications will provide adequate support for the non-prescriptive construction items described above. No other modifications are required for these items. If there are any questions, please contact our Offices.

Very Truly Yours,

R.E.O. ENGINEERING, P.C.

- , President By:\_ Aaron D. Obermiller, P.E.

