

WILKINS ENGINEERING, P.C.

Post Office Box 37446
Raleigh, NC 27627

November 21, 2023

Lonnie Glover Construction, LLC
924 Windrow Lane
Raleigh, North Carolina 27603-7931

SUBJECT: Masonry Basement Wall Construction
145 Alice Holleman Lane
Fuquay Varina, North Carolina
Permit #SFD2303-0023

Dear Mr. Glover:

I am writing to address a number of issues raised by the inspector during the most recent framing inspection. My findings and recommendations are outlined below.

The inspector questioned the three floor trusses that were cut to allow access to the basement via the stairway. These cut trusses were fitted with ½" OSB plates on both sides. The plates were installed with power driven fasteners and construction adhesive and are structurally adequate to support the floor loading from above. An adjacent floor truss, which had not been modified, exhibited minor damage to the top chord gusset plate. This damage was likely caused by installation of the sanitary drain piping. The damaged truss plate should be straightened as much as possible and a new gusset plate installed over the damaged plate. The new plate should be attached with nails in a pattern that fills every third hole of the plate. No other modification is required.

The header installed over the rear door to the screened porch is supported by three jack studs under each end of the header. The header is a multiple ply LVL member which supports the reaction end of the steel beam in the ceiling, and numerous king studs are installed on either side of the jack studs. I find this installation to be structurally adequate to support the reaction load from the steel beam and no modification or addition is required. First level ceiling joists have been notched and are framed into the steel beam. The original framing detail provided by the designer showed the steel beam packed out with 2"x 10" members. However, the method used is a more efficient way of supporting these ceiling joists.

The last item to be covered is the location of the stiff knee support of the hip rafters on the second level of the structure. The support is located over a center load bearing wall

and my inspection revealed that the hip rafter is properly supported. No additional support or framing is required.

I hope you find this information useful. If you have any questions, or require additional information, please do not hesitate to contact me.

Sincerely,



Ronald B. Wilkins, PE

