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250 Shipwash Drive, Suite 104 - Garner North Carolina - 27529

www.tyndallengineering.com

August 11, 2023 Revised August 23, 2023

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Reference: Engineering Services

6983 US-401

Fuquay-Varina, NC 27526

TE&D Project No.: 2301-020783 R

To Whom It May Concern;

As requested, a representative of Tyndall Engineering & Design, PA (TE&D) was on-site to observe the following items per the home inspection report:

- 1) Additional 2 x 4 vertical web installed to right end of B02 trusses between garage and front porch.
- 2) Analysis of LVLs used within structure.

The following conclusions and recommendations were noted:

- 1) We observed new 2 x 4 vertical webs had been installed to the B02 trusses between the garage and front porch due to the trusses being installed in the wrong orientation per the provided truss drawings. We observed the new webs had been fastened to the trusses with minimum 16" x 32" x 3/4" OSB gussets at both side of the trusses. Gussets were fastened at all intersecting members with (2) rows of nails at 3" o.c. Based on our observations and analysis, the existing configuration is adequate to support the anticipated loading conditions.
- 2) During our inspection, there were no structural drawings in regards to the first-floor wall/ceiling framing on-site; however, we observed LVLs were used at the following locations:
 - a. A (2) 1-3/4" x 9-1/4" LVL header at the middle-front bedroom supported by (2) 2 x 4 jacks and (2) 2 x 4 king studs at each end. Based on our observations and analysis, the current header is adequate to support the anticipated loading conditions.
 - b. A (2) 1-3/4" x 11-7/8" LVL header at the garage door supported by (3) 2 x 4 jacks at each end. Based on our observations and analysis, the current header is adequate to support the anticipated loading conditions.
 - c. A (3) 1-3/4" x 9-1/4" LVL header above the breakfast area supported by (4) 2 x 4 jacks at each end. Based on our observations and analysis, the current header is inadequate to support the anticipated loading conditions. TE&D recommends that the beam be enhanced to a minimum (4) 1-3/4" x 9-1/4" LVL beam supported at each end by a minimum of (5) 2 x 4 jacks.



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Upon completion, the modified framing will provide adequate support for the anticipated loading conditions. We appreciate being able to assist you during this phase of the project. If you need further assistance or require additional information, please do not hesitate to contact us.

Sincerely,

Tyndall Engineering & Design

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Prentice Tyndall Jr., P.E



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<u>Item 1)</u>



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Item 2a)



Item 2b)



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Item 2c)