

т 919 773-1200 = F 919 773-9658

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

www.tyndallengineering.com

May 15, 2025

Brandon Smith Smith Woodworks, Inc. 1607 Clayhole Road Dunn, NC 28334

Email: sccbsmith@yahoo.com

Reference: Engineering Services

553 Bumpas Crk Acc, Dunn, NC 28334

TE&D Project No.: 2501-020351

To Whom It May Concern:

As requested, a representative of Tyndall Engineering & Design, PA (TE&D) was on-site to observe the following item(s):

1) Proposed opening of the wall dividing the existing kitchen area and the proposed kitchen/eating area.

The following conclusions and recommendations were noted:

- 1) We understand the new opening is to be approximately 18'-7.5" wide. Based on our observations and analysis, the wall to be removed is considered load bearing. The new opening is to be framed with (1) of the following options:
 - a. A (3) 1-3/4" x 22" LVL beam supported by (4) 2 x 4 jack studs and (4) 2 x 4 king studs at each end:
 - b. A (4) 1-3/4" x 20" LVL beam supported by (5) 2 x 4 jack studs and (4) 2 x 4 king studs at each end;
 - c. A W 14 x 26 steel beam supported by (4) 2 x 4 jack studs and (4) 2 x 4 king studs at each end;
 - d. A PL 15-1/2" x 3/4" steel flitch plate. The flitch plate is to be "sandwiched" between full length 1-3/4" x 16" LVL plys and fastened with 5/8" through bolts at 16" o.c. staggered. The new beam is to be supported by (4) 2 x 4 jack studs and (4) 2 x 4 king studs at each end;
 - e. (2) PL 13-1/2" x 5/8" steel flitch plates. The flitch plates are to be "sandwiched" between full length 1-3/4" x 14" LVL plys and fastened with 5/8" through bolts at 16" o.c. staggered. The new beam is to be supported by (5) 2 x 4 jack studs and (4) 2 x 4 king studs at each end.

Stud columns are to be blocked solid to the existing foundation wall. In lieu of stud columns, a 3" diameter, schedule 40 steel pipe may be installed. Additionally, the continuous footing is to be supplemented per the attached detail on Page 3 of this letter.



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Upon completion of the above recommendations, the newly framed opening will provide the required 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

Tripp Amos

RS | 2501-020351

Prentice Tyndall Jr., P.E.



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Front of Residence



Wall to be Removed

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