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June 6, 2025

Edgar Ortiz New Generation Contractors, LLC 800 Lennie Lane Dunn, NC 28334 Email: edgar.newgen@gmail.com

Reference: Engineering Services

526 McLamb Road Coats, NC 27521

TE&D Project No.: 2501-020440

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) Assessment of existing rear porch foundation for proposed one-story addition.
- 2) Recommendations for removal of rear Living Room wall.

The following conclusions and recommendations were noted:

- 1) We understand that a new one-story addition is to be constructed matching the footprint of the existing porch foundation. We also understand that the existing floor framing of the porch is to be removed and reconstructed. We observed the exterior foundation as consisting of a minimum 8" thick masonry foundation on a minimum 16" wide x 8" thick continuous footing. Within the crawl space, we observed mid-span 16" x 16" CMU piers on footings. The soils at the bottom of the exterior footing were qualitatively probed and subjected to Static Cone Penetrometer (SCP) testing. Based on our observations and analysis, the existing foundation will be adequate to support the anticipated loading conditions of a new one-story addition.
- 2) We understand that the new opening is to be approximately 23'-4" wide. Based on our observations and analysis, we recommend the new opening be supported by a minimum W 21 x 44 steel beam supported by 3" diameter Schedule 40 steel pipe columns at each end. The new columns are to block solid to the existing foundation below. In addition, the existing footings at the new columns are to be widened to a minimum 36" x 36" x 8" concrete footing per the detail on page 4 of this report. Floor trusses are not to be modified to accommodate installation.

In lieu of the above, the opening may be made into (2) separate 11'-8" wide openings supported by (1) of the following options:

- A minimum (2) 1-3/4" x 14" LVL beam.
- A minimum W 10 x 12 steel beam.



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All beam options are to be supported at each end and at the midspan with (4) 2 x 6 columns. The midspan column is to be wrapped in horizontal Simpson CS16 coil strapping spaced at 16" o.c. vertically. The new columns are to block solid to the existing foundation below. In addition, the existing footings at the new columns are to be widened to a minimum 36" x 36" x 8" concrete footing per the detail on page 4 of this report. Floor trusses are not to be modified to accommodate installation.

Upon completion, the above-mentioned recommendations 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

PT III | 2501-020440

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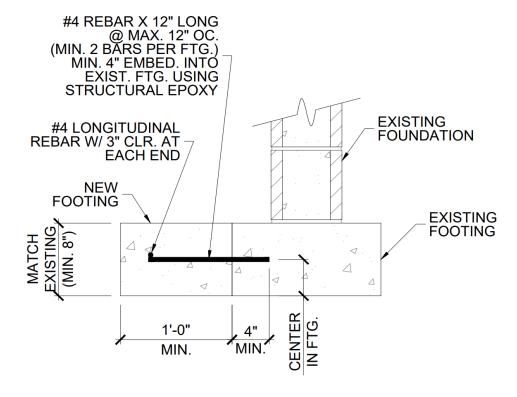
<u>Item 1) Examples of existing porch foundation</u> (floor framing to be removed per conversation with homeowner)



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Item 2) Wall to be modified



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