



**Date:** March 14, 2023

**To:** GFD Builders, LLC  
4467 Doc Bennett Rd.  
Fayetteville, NC 28306

**Re:** Foundation Issue  
2701 Darroch Rd.  
Lillington, NC 27546  
**SUMMIT** Job No.: 8975.T0003: 37675

To Whom It May Concern:

**SUMMIT** Engineering, Laboratory & Testing, Inc. (**SUMMIT**) was contacted by Neyser Kevin on behalf of GFD Builders, LLC to address the footing projections at the home site listed above. The structural plans used for this evaluation were provided by K. & S. Thompson, dated December 28, 2022. Below is a summary of our findings:

#### **Observations/Conclusions**

Based on our limited visual inspection, the plan specified footing projections at several areas of the foundation wall do not meet projection requirements set forth in the 2018 NCRC. The following repairs shall be made:

- Minimum 6" deep holes shall be drilled mid-depth into the exposed edges of the perimeter lug footing for the installation of new rebar dowels.
- The holes shall be spaced at 8" on center along the perimeter of the excavation where required footing projects were not met.
- A minimum #4 rebar dowel shall be installed into each hole using Simpson SET epoxy, or equivalent. Prior to the installation of the epoxy and dowels, each hole shall be thoroughly cleaned per manufacturer specifications.
- Each dowel shall have a minimum concrete embedment of 6" into the existing slab footing and shall project into the excavation a minimum of 6".
- Once these have been installed, the additional minimum 9" wide footing may be poured. New footing shall be poured to match existing footing depths.

Based on our analysis, once these repairs are complete, the new expanded footings will be structurally sufficient for the anticipated loading conditions and will meet the footing projects code requirement. No other foundation and/or framing members have been evaluated at this time and shall be framed in accordance with the structural plans permitted for this lot.

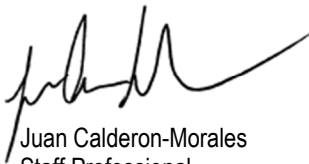


**Closing**

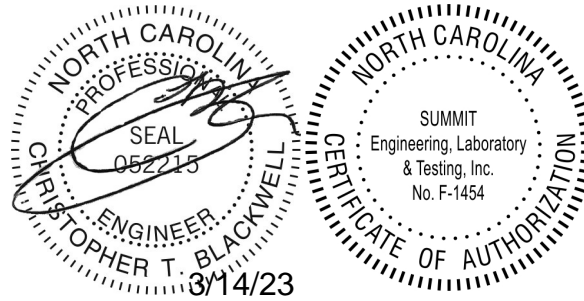
Opinions, conclusions, and recommendations made in this report are based solely on the performance observations made during the structural analysis pertaining to the scope of work as stated in the opening paragraph of this report. Performance standards are based on minimum building code requirements and the knowledge of our staff as gained through experience and professional training.

We appreciate the opportunity to assist you in this phase of your project and look forward to assisting you on future projects if possible. If you have any questions, please do not hesitate to contact us.

Sincerely,  
**SUMMIT**



Juan Calderon-Morales  
Staff Professional



Christopher T. Blackwell, P.E.  
Structural Services Manager

*Alteration of this seal without the express written consent of the sealing engineer is a violation of the provisions set forth in the North Carolina Engineering and Land Survey Act (G.S. 89C) and may result in legal action by the North Carolina Board for Engineers and Land Surveyors.*