April 15, 2024

Mr. David Carter
Dan Ryan Builders – North Carolina, LLC
3131 RDU Center Drive, Suite 120
Morrisville, North Carolina 27560

Subject: **Summary of Foundation Bearing Material Evaluation & 3rd Party Inspection**
Lot No. 98 – (87 Whimbrel Court)
Blake Pond Subdivision
Lillington, North Carolina
Permit Number: 2401-0156
SUMMIT Project Number: 3241-14R (40204-00)
Order No.: 5322_000684 & 5322_000695

Dear Mr. Carter:

On April 8, 2024, a representative of SUMMIT Engineering, Laboratory and Testing, Inc. (**SUMMIT**) visited the subject site for the purpose of observing the near surface foundation bearing materials and to perform a third-party foundation inspection for the proposed residential structure. The following is a summary of our onsite observations and evaluation.

The third-party footing inspection failed during our first site visit due to missing rebar in the 36" x 36" lug footings. The contractor was informed and **SUMMIT** recommended installing rebar in accordance with the specified plans provided onsite. **SUMMIT** returned later on April 8, 2024 and observed that the recommended remedial measures had been completed. The residential footings were excavated approximately 16 inches wide and approximately 18 inches below the existing ground surface. We observed that the exterior and interior wall foundations, rebar and lugs were prepared per the structural plans provided onsite.

Our work included testing and bearing grade evaluations of the in-place soil at the bottom of the foundation excavations. Hand auger borings were incrementally advanced by manually twisting a sharpened steel auger into the soil at selected locations along the footing excavation. The soil consistency in the bottom of the excavation and at selected intervals below the bearing grade were evaluated by Dynamic Cone Penetrometer (DCP) testing. The conical point of the DCP was first seated to penetrate any loose cuttings and then driven three additional 1-3/4 inch increments with blows from a 15-pound hammer falling 20 inches. The soil's strength characteristics and foundation support capability was determined based on the average blows per increment (bpi) over the last two increments to achieve this penetration. Additionally, the entire excavated foundation was evaluated by hand probing using a ½ inch diameter steel probe rod to check for soft areas at the surface intermediate of our hand auger boring locations.

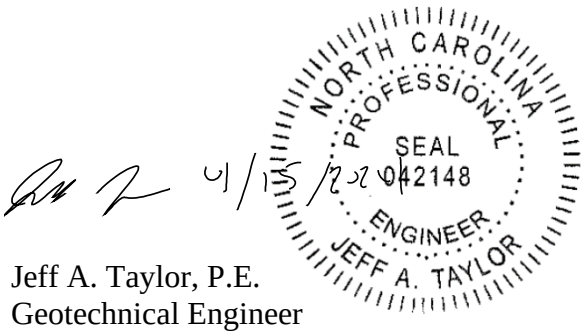
The materials exposed at the bottom of excavations generally consisted of tan-brown, sandy-clay (residual soils) and were free of significant quantities of organics and debris. If additional testing for the purpose of estimating volumetric change (shrink/swell) potential or to estimate consolidation of the tested soils is desired, **SUMMIT** can provide these services.

Based on the results of our DCP testing, hand probing, and our site observations, the soils encountered are suitable for support of the residential structure utilizing a net allowable soil bearing pressure of **2,000 pounds-per-square-foot**. The foundation bearing soils are in accordance with the HUD requirements.

If foundation bearing materials are exposed to inclement weather or adverse construction activities, **SUMMIT** should be contacted to re-evaluate the foundation bearing materials prior to concrete placement.

SUMMIT appreciates the opportunity to provide our professional services to you on this project. If you have any questions concerning the information in this report or if we can be of further service, please contact us.

Sincerely,
SUMMIT Engineering, Laboratory and Testing, Inc.



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