June 25, 2025

Mr. Thomas Crews Dan Ryan Builders – North Carolina, LLC 1101 Slater Road, Suite 300 Durham, North Carolina 27703

Subject: Summary of Foundation Bearing Material Evaluation Lot No. 44 – (516 Winding Creek Drive) The Farm at Neills Creek Subdivision Lillington, North Carolina Project Number: 3241-14R (42796-00) Order No.: 5255\_011050

Dear Mr. Crews:

On June 17, 2025, a representative of UES PROFESSIONAL SOLUTIONS 29, INC. (**UES**) visited the subject site for the purpose of observing the near surface foundation bearing materials for the proposed residential structure. The following is a summary of our onsite observations and evaluation.

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Concrete was placed prior to our site visit. Our testing was performed adjacent to the existing foundation.

Our work included testing and bearing grade evaluations of the in-place soil adjacent to the existing foundation. Hand auger borings were incrementally advanced by manually twisting a sharpened steel auger into the soil at selected locations adjacent to the existing foundation. The soil consistency adjacent to the existing foundation 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.

The materials exposed adjacent to the existing foundation generally consisted of brown-tan, sandy-clay (fill 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, **UES** can provide these services.

Based on the results of our DCP testing, hand probing, and our site observations, the soils encountered adjacent to the existing foundation 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 HUD requirements.

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

**UES** 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,

**UES** PROFESSIONAL SOLUTIONS 29, INC.

Jeff A. Taylor, P.E. Geotechnical Engineer

Adam D. Perry, E.I. Staff Professional

