Job Number: 1-1854-22

Takla Engineering, PLLC

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NORTH CAROLINA PROFESSIONAL SEAL 047507 ENGINEER ALFRED ATEF TAKLA 4/19/2022

Project: Prince Prince Lot 21

Location: 30 Blue Monarch Lane Fuquay-Varina, NC

Company: Davidson Homes

Care Of: Lee Aversano

Subject: Footing Evaluation

As requested, Alfred Takla, PE visited the aforementioned site on April 19th, 2022 to evaluate bearing capacity of the sub-grade soils supporting:

__X__ Foundation wall and/or interior pier footings including attached garage
_____ Turndown slab on grade and lug footings
__X__ Rear porch post footings
_____ Detached garage foundation wall footings
__X__ Front porch foundation wall footings

*Patio slabs with no thickened or lug footings are outside the scope of our inspection.

Observations of lot topography, vegetation horizons and soil characteristics were made in order to generally characterize the lot. Based on these observations, and evaluations by means of probing excavation bottoms with a static cone penetrometer with a 60 degree cone assembly, friction sleeve, and gauge with pressure readings correlated to blow counts associated with 7a Dynamic Cone Penetrometer (DCP), and/or a ½" diameter steel probe rod, we verify the average bearing capacity of the sub-grade soils to meet or exceed a minimum of 2000 pounds per square foot as required by NCRC 2018, Chapter 4 and engineered specifications. No mechanical soil borings, standard proctors or density testing was completed during our inspection to verify compaction or soil conditions at deeper depths. If lot has been subjected to fill (compacted or otherwise), documentation of these aspects should be provided by grading contr actor or a geotechnical engineering firm.

Unless Takla Engineering has conducted a third party inspection in-lieu of city inspections department (which would be stated below this paragraph), city/county/municipal inspector should verify if footings are clear of debris and loose/saturated soils prior to placement of concrete. The current condition of subgrades are adequate to receive concrete pending approval of city inspection department. If footing excavations are exposed to inclement weather prior to the placement of concrete, we recommend removing any standing water, loose, soft or saturated soil and scheduling a re-evaluation.