

October 15, 2022

Adams Homes 149 US 70 West Garner, NC 27529

Attn: Matt Galvin, 919-903-0735, matt.galvin@adamshomes.com, raleighadmin@adamshomes.com, raleighpermits@adamshomes.com, bjohnson@adamshomes.com

**CREEP -** Engineering - Field Observation, Subgrade Testing, Undercut/Subgrade Repair at Footing Excavations Lot 14 Cameron Woods Subdivision 22 Red Pine Court, Sanford, NC Project No. 22PG-0914-C, Harnett County Permit No. SFD-2108-0084

Dear Mr. Galvin,

Thank you for using Piedmont Geotechnical. The site was visited on September 14, 2022, twice on September 15, 2022 and September 16, 2022 to test the subgrade and monitor the subgrade repair at the undercut sections of the footing excavations at the above referenced address. The subgrade was tested with a Dynamic Cone Penetrometer (DCP) test in general accordance with (ASTM) special publication 399, and found to be of adequate bearing capacity. The footing excavation bottoms were probed with a steel probe rod and for comparison to the test locations.

The test results indicated that the red tan silty sand/clayey sand was of adequate bearing at the existing excavation bottoms at about 2 feet below the surrounding grade except at the left, right and rear walls. These areas required undercutting the footing excavations to depths ranging from 1 ft to 6 ft below grade through the soft soils to the adequate bearing tan silty sandy soils. The excavation bottoms were found to have perched water conditions in the footing excavations for the back wall and the approximate back 40 ft. of the side walls. Per our recommendation, the soft soils were undercut to adequate bearing soil at about 1 to 4 feet below the planned bottom of footing elevation and backfilled with no. 67 washed stone wrapped in filter fabric up to the planned bottom of footing elevation. During our visits, the undercut excavation bottoms were tested and found to be terminated in adequate bearing soil. On September 16, 2022. The undercut areas were observed to properly backfilled with washed No. 67 stone wrapped in fabric. The stone backfill was compacted in lifts.

Based on testing, observation and implementation of the recommendations, the subgrade was properly prepared for placing concrete and is adequate to support the proposed loads (2,000 psf) of the home.

Sincerely,

MINEER

D. Allen Hughes, P.E., President Piedmont Geotechnical, Inc., P.A.