

January 15, 2024

Mr. Rich Sherman
New Home Inc.
rich.sherman@newhomeinc.com

**Report of Footing Examination
Duncan's Creek - Lot 157
428 Duncan Creek Road
Lillington, North Carolina
Our Project Number 121-22-110410**

Gentlemen:

As requested, our representative was present onsite on January 14, 2025, to test the shallow subsurface soils of the footing excavations of Lot 157 of the residential home located at 428 Duncan Creek Road in Lillington, North Carolina. Based upon our understanding of the planned residential construction, we have assumed an allowable soil bearing capacity of 2,000 pounds per square foot (psf).

Our testing consisted of visual observations, hand rod probing, and dynamic cone penetrometer testing in accordance with ASTM STP-399 at selected locations to a maximum depth of 3 feet below the bearing surface. Our scope did not include mechanically drilled soil test borings to evaluate deeper subsurface soil conditions that could affect foundation support. Deeper borings can be provided, if desired.

Based on our observations and the results of our testing, soft, wet soils were encountered to a depth of approximately 6 inches below the excavated foundation bearing surface. We recommended that the soft, wet soils be removed to the above-referenced depths and backfilled with #57 stone wrapped in non-woven geotextile fabric. A representative of New Home Inc. elected to backfill with additional concrete. After these remedial measures are performed, the design bearing pressure of 2,000 pounds per square foot (psf) should be available at the locations and depths tested at the time of our investigation.

Exposure to the environment, especially rainfall, may weaken the soils at the foundation bearing surface, if they are exposed for extended periods of time prior to concrete placement. If the foundation bearing surface becomes softened due to exposure, the soft soils should be removed prior to placement of concrete.

If you have any questions concerning this information, please contact us.

Sincerely,

NV5 Engineers and Consultants, Inc. (F-1333)



William M. Cruikshank, E.I.
Project Manager

Justin R. Pescosolido, P.E.
Principal Geotechnical Engineer

