JDS Consulting
ENGINEERING • DESIGN • ENERGY

543 Pylon Dr
Raleigh, NC 27606
(919) 480-1075
info@jdsconsulting.net
jdsconsulting.net

Date: **04/23/2025**

To: **Ryan Russell**
Davidson Homes
1903 N. Harrison Avenue
Cary, NC 27513
rrussell@davidsonhomesllc.com
984-800-6136

Re: **Soil Suitability for Foundation Installation**
Location: Lot 69 Wellers Knoll (433 Old Fashioned Way Lillington, NC)
JDS Project No.: RDU2504087
Date of Inspection: 4/21/2025
Foundation Type: Crawl Space
Additional Features: Rear Deck

Foundation Excavation Observations and Inspection
A JDS Consulting (JDS) representative observed and inspected the bearing capacity of subgrade materials for excavated foundations. The exposed soils were probed with a small point metal rod and tested with a hand auger and Dynamic Cone Penetrometer (DCP). Please refer to field reports for additional information.

JDS observed and inspected multiple foundations, which required over-excavation due to unsuitable subgrade materials. The foundations was undercut 1 foot to stable and firm subgrade material. Please refer to field reports for additional information.

Recommendations
Based on our review and testing, the soil and conditions for the foundation are suitable for the minimum required bearing pressure of 2000 PSF. The over-excavated areas should be backfilled with full-depth concrete at the time the slab is poured.

If you have any questions or if I can be of further assistance to you on this project, please contact me at 919-218-4421.

Reviewing Engineer: Tommy P. Matthews, PE

Respectfully Submitted,
Samantha Lux
Field Operations Manager

Project Notes
This report is an assessment of vertical bearing capacity only. Minimum testing requirements include probe rod testing across the entire excavation and augers (minimum three locations) at multiple depths with Dynamic Cone Penetrometer (DCP) testing. Bearing capacity test results are voided if significant precipitation or water intrusion has occurred before concrete placement. JDS Consulting is not responsible for site conditions that divert water towards the foundation or that prevents drainage away from the foundation, which can lead to soft soils and future settlement problems. It is the contractor's responsibility to ensure that all foundation areas are free of organics, loose material, standing water, and any other deleterious materials prior to placement of stone or concrete. Retaining wall stability nor slope stability analysis has been evaluated. JDS Consulting shall not be held responsible for current or future retaining-wall or slope-related issues.