

MDL Engineering Services

213 Linton Banks
Cary, NC 27513

(919) 999-8153
(919) 524-4319

Date: January 28, 2019

To: Kevin Jones
RED DOOR HOMES
Office: (919) 424-4470
kjones@reddoorhomesnc.com

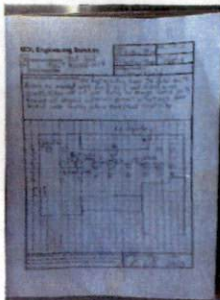
*- FOR COUNTY INSPECTOR
- DO NOT REMOVE*

Re: Footing Soils Inspection
25 Willow Stone Dr.
Fuquay-Varina, NC 27526
MDL Project No. SD10293

Dear Mr. Jones,

MDL Engineering Services was contacted on January 26, 2019 and again on January 28, 2019 to perform a footing inspection to determine the bearing condition of the exposed subsoils for the above referenced project.

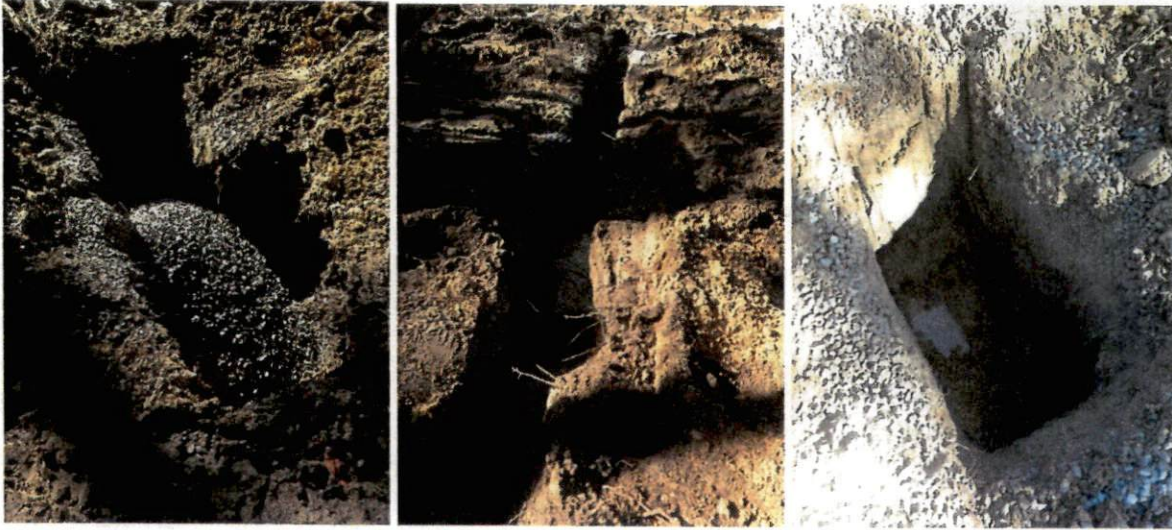
1/26/19 Observations:



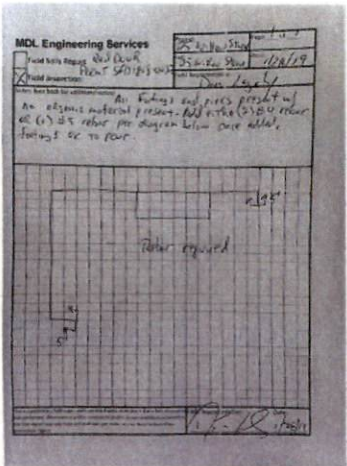
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The footing trenches were partially complete into a combination of sandy soils with some organics. Trenches were completed under observation and soils beneath probed and visually graded.



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Organics, including root balls were discovered and removed down to virgin soil before filling with stone. The area in the right rear of the building envelope was excavated to approximately 5' depth and filled with washed stone.

1/28/19 Observations:



The footing soils were visually evaluated, probed with a ½" rod and/or use of a DCP techniques to correlate surface soil conditions with bearing capacity. The area in the right rear of the building envelope had visible subsurface drainage. Rebar was added per instructions.

Recommendations:

Results of the inspection indicate that the exposed soils and stone fill in the bottom of the footing will have bearing capacity in excess of the 2000 psf required for this project. The area shown on the attached field report will have 1-#5 or 2-#4 rebars added to the footing in addition to perimeter foundation drains at these locations. It should be noted that minor cracking of concrete foundation elements commonly occur for various reasons including, but not limited to, changes in moisture content, concrete shrinkage during curing, temperature fluctuations

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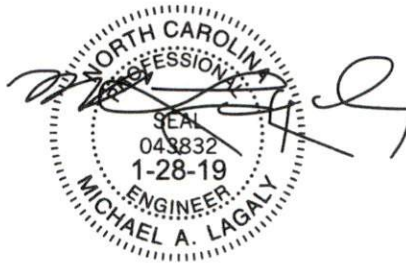
causing dissimilar expansion and contraction of construction materials, improper construction techniques, and normal settlement. No warranty for such items should be implied by this letter. Also note that exposure to the inspected subgrades by inclement weather before foundation completion may invalidate this report and require repairs and reinspection.

The site conditions and dimensions of the footings meet all the requirements of the approved drawings and the 2018 edition of the North Carolina Residential Building Code and is good to pour.

These services have been performed with the usual and customary standard of care consistent with other professional engineers performing similar work under similar circumstances. This report is the work product of an engineering investigation. It is confidential in nature and will not be released to a third party without your expressed consent. The use of this letter is limited to the express purpose for which it is intended and may not be reused, copied or distributed for any other purpose.

I appreciate the opportunity to provide these services for this phase of your project and look forward to working with you for any future needs. Please do not hesitate to contact me if you have any questions or concerns.

Regards,
MDL engineering Services



Michael A. Lagaly, P.E.
Engineering Manager

Alteration of this seal without the express written consent of the sealing engineer is a violation of the provisions set forth in the North Carolina Engineering and Land Survey Act (G.S. 89C) and may result in legal action by the North Carolina Board for Engineers and Land Surveyors.