HAL OWEN & ASSOCIATES, INC.

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17 April 2023

Junior Singh
Truck Tire Pro, Inc.
4553 Bent Grass Drive
Fayetteville, NC 28312

Reference: Preliminary Soil Investigation
918 Long Branch Rd, Dunn NC; PIN 1515-43-5001

Dear Mr. Singh,

A site investigation has been conducted for a portion of the above referenced property, located on the southern side of Long Branch Road (S.R. 1002), Harnett County, North Carolina. The purpose of this investigation was to determine the site's ability to support subsurface sewage waste disposal systems. All sewage disposal ratings and determinations were made in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A .1900". This report represents my professional opinion as a Licensed Soil Scientist but does not guarantee or represent permit approval for any lot by the local Health Department. It is our understanding that the existing building will be modified to add restrooms. An improvement permit will need to be obtained from the Health Department that specifies the proposed building improvements, and the design and location of the septic system to be installed.

A portion of this property was observed to be underlain by a mixture of soils that range from provisionally suitable to unsuitable for subsurface sewage waste disposal (see attached map). The soils shown as provisionally suitable will adequately function as sewage waste disposal sites. Due to clayey textured subsoil characteristics, you should expect that 83 to 100 feet of chamber type drainline would be required for the initial system per 100 gallons of design daily flow.

The soils shown as provisionally suitable for low profile chamber systems are limited in soil depth to the extent that low profile chamber type drainlines installed ultra shallow will likely be required. Due to ultra shallow trench depths, the addition of approximately 6 inches of topsoil will be necessary to completely cover the system. You should expect that 133 feet of low profile chamber drainlines would be required for the initial system per 100 gallons of design daily flow.

The unsuitable soil area is so rated due to inadequate soil depth to excessive soil wetness conditions and/or unsuitable landscape position. The ability to utilize alternative systems or make modifications to this area to allow for septic systems is minimal.

It appears that the soils underlying the southeastern corner of this property are adequate to support the sewage waste disposal needs of a proposed business with a design daily flow up to 750 gallons per day. The design flow for a non-residential building is dependent upon the type of establishment it is. "Service Stations" are assigned a design daily flow of 250 gallons per water closet or urinal (i.e., 2 toilets X 250 gal/toilet = 500 gallon design daily flow). A "Business" is calculated using 25 gallons/employee with a minimum design daily flow of 100 gallons per day. If you don't have many customers stopping by and using your toilets, then using employees to calculate the daily flow may be sufficient. The goal is to design a septic system large enough to safely treat and dispose of all of the wastewater generated by the building without resulting in a hydraulic failure. If you have water data for a similar facility, its daily water usage may serve as a reasonable guide for determining usage at the new facility.

I appreciate the opportunity to provide this service and trust that you will feel free to call on me again in the future. If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

Hal Owen
Licensed Soil Scientist

Preliminary Soil Investigation
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SOIL MAP