Alex Reese 1329 Lombard St. Apt. 311 Philadelphia, PA 19147

ER: Preliminary soil/site suitability evaluation performed on a 1.77 acre tract on Lee Porter Ln. in Harnett County, NC.

A preliminary soil/site suitability evaluation was performed on the above mentioned tract on June 11, 2022 at your request to determine areas of usable soils and favorable site conditions that have potential for subsurface wastewater treatment and disposal systems. The tract was traversed and observations were made of land forms (slopes, drainage patterns, past use, etc.) as well as soil conditions(depth, texture, structure, seasonal wetness, restrictive features, etc.) through the use of hand auger borings. This site was evaluated during dry to slightly moist soil conditions. The soil/site criteria is that contained in 15 ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems".

FINDINGS: This preliminary soil/site suitability evaluation confirmed a good potential for residential development. There is a high level of confidence that the tract will support the installation of a conventional subsurface septic system. Furthermore, based on usable soils on the entire tract and favorable site conditions alone, the tract may support as many as 2 different home sites. However, based on the local subdivision rules and local zoning rules, then the potential for this tract is outside the scope of this report and would need to be verified independently.

This tract is located in the upper Coastal Plains of Harnett County, NC. The soils are on this tract are similar to the Dothan and Fuquay soil series and they are considered provisionally suitable for subsurface conventional septic systems with 24 to 30 inches plus of usable soil material. The usable textures of loamy sand and sandy clay loam will have a LTAR of 0.45 to 0.7 gallons per square foot per day. There is a county wide water system and therefore wells would not be needed. Again, the entire tract contains suitable soils and there are not any unsuitable soils on the tract. Any potential house site with usable soils should remain undisturbed by heavy equipment, excavations, etc until authorized by the local health department and determined to be the site for the septic system and repair. The size of a subsurface drain field is determined by the: 1; the design flow from the source (120 gallons per bedroom per day in residences) and 2; the long term acceptance rate(LTAR) of the soil which is based on the hydraulic conductivity of the soil which is a function of the soil's texture, mineralogy, structure and porosity. An additional consideration is the required setbacks for the septic system and repair drain field from various elements such as wells(100ft.), streams and ponds(50ft.), property lines(10ft.), etc..

This report discusses the general location of potentially usable soils and site conditions for on-site subsurface wastewater treatment and disposal and does not constitute or imply any approval or permit as needed by the client from the local health department. I was hired for my professional and experienced knowledge in these matters.

Sincerely,

Larry T. Sink

NC Licensed Soil Scientist #1054

Soils sketch map included

Soil Suitability Sketch Map-1.77 Acre Tract on Lee Porter Ln. Harnett County, NC. June 11, 2022 PS-Provisionally Suitable Soils for Subsurface Wastewater Disposal Systems with 24+030 Plus Inches of Wasable Soil Material





