

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

March 16, 2024

RE: Preliminary soil/site suitability evaluation performed on a 22.51 acre tract on NC Hwy 71 N. near Red Springs in Robeson County, NC

A preliminary soil/site suitability evaluation was performed on the above mentioned tracts on March 15, 2024, 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 moist soil conditions. The soil/site criteria used 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 marginal potential for residential development. There is a high level of confidence that this tract will support the installation of subsurface conventional or modified conventional septic systems in the PS areas shown on the attached sketch map. Furthermore, based on the usable soils and favorable site conditions alone, this tract will most likely support 4 to 6 house sites. However, based on 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 varified independently. This tract is located in the Middle to Lower Coastal Plain Region of Robeson County, NC. The usable soils on this tract are similar to the better drained Goldsboro and Nobocco soil series, and they are considered provisionally suitable for subsurface conventional or modified conventional septic systems with 24 to 30 inches plus of usable soil material. The usable textures of sandy clay and sandy clay loam, will have a LTAR range of 0.25 to 0.4 gallons per square foot per day. 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 in the overall design of the drain field is the required setbacks for the septic system and repair drain field from various elements such as wells(50ft.), streams and ponds (50ft.), property lines(10ft.) etc. The unsuitable soils are due to soil wetness before 24 inches, and a drainage ditch in part of the tract. The unsuitable soils are similar to the Lynchburg, Rains and Goldsboro soil seris and they are moderately well (wetter version) to poorly drained.

This report discusses the general location of potentially usable soils and favorable 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
Soil sketch map included



Preliminary Soil/Site Suitability Evaluation Sketch Map on a 22.51 ac Tract on NC 71 N
in Robeson County, NC. PS - Provisionally Suitable Soils & Favorable Site Features for Subsurface
Septic Systems



UN - Unsuitable Soils & Site Features

FOR: Alex Reese
March 16 2024