

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

November 14, 2023

RE: Preliminary soil/site suitability evaluation performed on a 18.11 acre tract and a 0.89 acre tract, adjacent tracts, on W. White Pond Rd. Rd. in Robeson County, NC

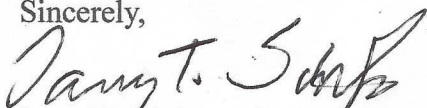
A preliminary soil/site suitability evaluation was performed on the above mentioned tracts on November 11, 2023, at your request to determine areas of usable soils and favorable site conditions that have potential for subsurface wastewater treatment and disposal systems. The tracts were traversed and 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 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 good potential for a residential lot. There is a high level of confidence that these tracts combined will support the installation of a subsurface conventional or modified conventional septic system for a three or maybe a four bedroom house. An on-site layout of the drain lines maybe necessary to see if a four bedroom system and repair will fit. Furthermore, based on the usable soils and favorable site conditions alone, this tract will most likely support one house site. Careful site planning is necessary to make this potential lot work for a septic system, well and house placement. However, based on local sub division rules and local zoning rules; then the potential for this tract is outside the scope of this report and would need to be varied 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 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 loam and sandy clay loam, will have a LTAR range of 0.35 to 0.5 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. Depending on the house placement, a pump septic system maybe needed. 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 couple of small drainage ways (shown on the map) for unsuitable site features. The unsuitable soils are similar to the Lynchburg, Rains and Coxville soil series and they are somewhat poorly to poorly drained.

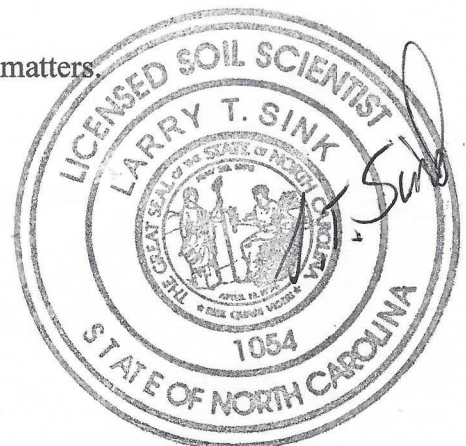
This report discusses the general location of potentially usable soils and favorable site conditions for on-site subsurface wastewater treatment and disposal and does not constitute or imply any approval or permit as needed by the client from the local health department.

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 18.11 ac. tract and a 0.89 ac. tract on W. White Pond Rd. in Robeson County, NC. / PS - Provisionally Suitable Soils for Subsurface Septic Systems. UN - Unsuitable Soils and Site Conditions

FOR: Alex Reese

NOV. 11, 2023

