RE: Preliminary soil/site suitability evaluation performed on the northern part of a 8 acre tract on NC 902 Hwy in Chatham County, NC. The tract is about 800 feet south of the Hwy with an easement planned to access the tract.

A preliminary soil/site suitability evaluation was performed on the above mentioned tract on Aug. 23, 2025 at your request to determine areas of usable soils and favorable site features 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 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 a residential lot. There is a high level of confidence that the tract will support the installation of a subsurface conventional or modified conventional septic system. This tract is located in the Piedmont-Carolina Slate Belt Region of Chatham County, NC. The usable soils on this are similar to the Georgeville and Nanford soil series and they are considered provisionally suitable for subsurface conventional septic systems with 24 to 30 plus inches of usable soil material. The usable textures of clay and silty clay will have a LTAR of 0.2 to 0.25 gallons per square foot per day. The small "PS" area in the north eastern corner of the tract has marginal soils with mixed mineralogy and therefore close to being expansive clay. I believe that they do not have the expansive traits, but may still be boarder line mixed mineralogy. The soils did have blocky structure and maybe more like Nanford or Tatum soil series. The larger "PS" area on the north western side of the tract contains Georgeville soils and Nanford soils with "BC" and or saprolite material around 30 to 36 inches. 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. Since this tract is mainly wooded, then any potential house site with usable soils should still remain undisturbed by heavy equipment, excavations, etc, until authorized by the local health and determined to be the site for the septic system and repair. An additional consideration 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 "UN" unsuitable areas are due soils with shallow to saprolite, moderately well drained with expansive clays. These soils are similar to the Nason and Pittsboro soil series. There are some areas with piles of rock and old metal items and junk.

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 7. Sink

NC Licensed Soil Scientist #1054

Soils sketch map attached

Preliminary Soil/Site Suitability Evaluation Sketch Map on a Northern Portion of 8 ac. Tracton (off) NC 902 Hwy, in Chatham Co. NC. P5-Provisionally Suitable for Subsurface Septic Systems.
UN = Unsuitable Soils and Site Features.

NE-Not Evaluated For Julia - Land Sell USA

Aug, 24, 2025



AN