



Fred D. Smith Soil Scientist

July 30, 2024

Kyle Fischer
P.O. Box 1773
Clarksville, VA 23927

Subject: Preliminary Soil Suitability for Conventional Septic Systems
4764 Old N.C. 75, Parcel 190101488061
Granville County

Dear Mr. Fischer:

This letter presents our evaluation results and conclusions regarding soil suitability for septic systems for the above-mentioned parcel.

We were asked to evaluate the soils where the current house is located and on the north side of the property. You want to determine if the soils on those portions of the parcel are suitable for conventional septic systems for a 4-5 bedroom home. You provided us the parcel number. The property lines were not flagged at the site.

Soil and Site Evaluation

The site and soil were evaluated to observe soil properties, surface features, landscapes, and site parameters. Hand auger borings were used to evaluate soil characteristics in accordance with 15A NCAC 18E (Laws and Rules for Sewage Treatment and Disposal Systems). See the attached map that shows the general location of each boring on a topographic map.

Because of the 50 foot setback requirement for existing wells, the soils around the current house location were not evaluated. The north and northeast portion of the tract was evaluated. That portion of the tract is a flat linear area with slopes of about 2-3% and is a tall grassy field.

The soils are residual soils formed from the underlying rocks of the Piedmont Region of N.C. They have sandy loam topsoil and red clay subsoils. They have angular blocky structure. They do not have a significant amount of shrink-swell clay mineralogy. They do not have shallow seasonal wetness, saprolite or rock within 40 inches of the surface.

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These soils are suitable for a shallow conventional drainfield. Based on the soil properties found we expect these suitable soils to have a loading rate of about 0.3 gallons per square feet of trench per day. We expect that the initial and repair drainfields will need approximately 4000 square feet of area(for a 5 bedroom house). The trenches can be 18-24 inches deep with the trenches installed on contour of the slope.

We appreciate the opportunity to work with you on this project. Please contact me with questions or additional information after you have reviewed the information here.

Sincerely,



Fred D. Smith, LSS



BORING MAP

