

HAL OWEN & ASSOCIATES, INC.

SOIL & ENVIRONMENTAL SCIENTISTS

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11 April 2023

Dawn and Eric Pappan

Reference: Preliminary Soil Investigation
1087 Loop Road; PIN 0547-09-5001

Dear Mr. and Mrs. Pappan,

A soil investigation has been conducted at the above referenced property, located on the southern side of Loop Road in Harnett County, North Carolina. The purpose of the investigation was to determine the ability of two, three-acre lots to each support a subsurface sewage waste disposal system and repair area for typical three-bedroom homes. It is our understanding that individual septic systems and public water supplies will be utilized at this site.

All soil ratings and determinations were made in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A .1900". This report represents my professional opinion as a Licensed Soil Scientist but does not guarantee or represent permit approval for any lot by the Local Health Department (LHD). An improvement permit for all residences will need to be obtained from the LHD that specifies the proposed home size and location, and the design and location of the septic system to be installed.

Proposed Lot 28B was observed to be underlain by provisionally suitable soils for subsurface sewage waste disposal. These provisionally suitable soils were observed to be friable and firm sandy clay loams to greater than 44 inches and appear adequate to support long term acceptance rates of 0.35 to 0.45 gal/day/sqft. You should expect that 70 to 85 linear feet of chamber type drainline would be required per bedroom in the residence.

Proposed Lot 28C was observed to be underlain by a mixture of soils that range from provisionally suitable to unsuitable for subsurface sewage waste disposal. The provisionally suitable soils were observed to be firm sandy clays to greater than 40 inches and appear adequate to support long term acceptance rates of 0.3 to 0.35 gal/day/sqft. You should expect that 85 to 100 linear feet of chamber type drainline would be required per bedroom in the residence.

The provisionally suitable soils for modified or alternative systems were observed to be firm sandy clays to greater than 28 inches, at which point evidence of soil wetness conditions became apparent. These soils are limited in soil depth to the extent that systems that can be installed ultra shallow will likely be required. This requirement will necessitate the addition of approximately six inches of native backfill to completely cover the system. These soils appear adequate to support a long term acceptance rate of 0.3 gal/day/sqft. You should expect that 100 linear feet of chamber type drainline would be required per bedroom.

The unsuitable soil area is so rated due to inadequate soil depth to excessive soil wetness conditions and/or unsuitable landscape position. The ability to utilize alternative systems or make modifications to this area to allow for septic systems is minimal.

The soils underlying both of the investigated lots appear capable of supporting the subsurface sewage waste disposal needs of three-bedroom residences. This soil investigation report and map, when provided to the LHD, should allow them to sign the maps for recordation. I appreciate the opportunity to provide this service and hope to be allowed to assist you again in the future. If you have any questions or need additional information, please contact me at your convenience.



Sincerely,

A handwritten signature in black ink that reads "Hal Owen". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Hal Owen
Licensed Soil Scientist

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Soil Map

