

**Adams Soil Consulting
1676 Mitchell Road
Angier, NC 27501
919-414-6761**

May 15, 2024
Project #1939

Robert Griffis

RE: Preliminary soil/site evaluation for a single parcel of approximately 5.41 acres located adjacent to Barbour Store Road in Wake County, NC (PIN# 0685663919)

Mr. Griffis,

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules, 15ANCAC 18A .1900. From this evaluation, ASC sketched the boundary between the suitable soils and unsuitable soils onto a topographic map take from the Wake County GIS data base. The soil boundary units were drawn from ground truthing utilizing GPS technology and the map is not represent a survey or created to surveying standards. This evaluation is preliminary in nature.

The above referenced parcel is located in the Coastal Plain region of Wake County. The soils have formed from marine parent material. The suitable soils on this parcel have characteristics similar to the Fuquay soil series. This soil series can be highly variable but was found to be predominately provisionally suitable with regards to the wastewater rules in this location. Any particular proposed lot will need to be evaluated individually once a subdivision proposal is developed. The attached soil map indicates the areas of suitable vs. unsuitable soils. The “cross-hatched” soil area is generally suitable for subsurface wastewater systems. That is, the morphology of the soils contains suitable characteristics that would support subsurface septic systems such as clay textured subsoils which is not considered expansive and has blocky structure with no indicators of restrictive characteristics within 20 inches of the soil surface. This area may be suitable for modified conventional, LPP, ultra-shallow conventional, drip, or low-profile chamber type septic systems. Based on the soil characteristics observed, I would recommend a septic area be designated ranging from 10,000-12,000 sq. feet on each lot in order to accommodate a 3 or 4-bedroom home (could be more or less). However, any potential lot may require a septic system utilizing pumps, shallow or ultra-shallow conventional trench placement, low pressure pipe system, pre-treatment, and/or complex reductions systems for final approval.

This report discusses the location of suitable soils for subsurface wastewater disposal systems and does not guarantee any permits or approval required by the local health department. Adams Soil Consulting is a professional consulting firm specializing in soil delineations and design for on-site wastewater disposal systems. The rules governing on-site wastewater disposal systems are complex and the interpretation of the rules are based upon the opinions of regulators (state and county level). Due to the subjective nature of the permitting process and the variability of naturally occurring soils, ASC cannot guarantee that areas delineated as suitable for on-site wastewater disposal systems will be permitted by the governing agencies. These permitting considerations should be taken into account before a financial commitment is made on a tract of land. No further subdivision should take place without a more detailed investigation.

If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me anytime. ' this site evaluation for you.

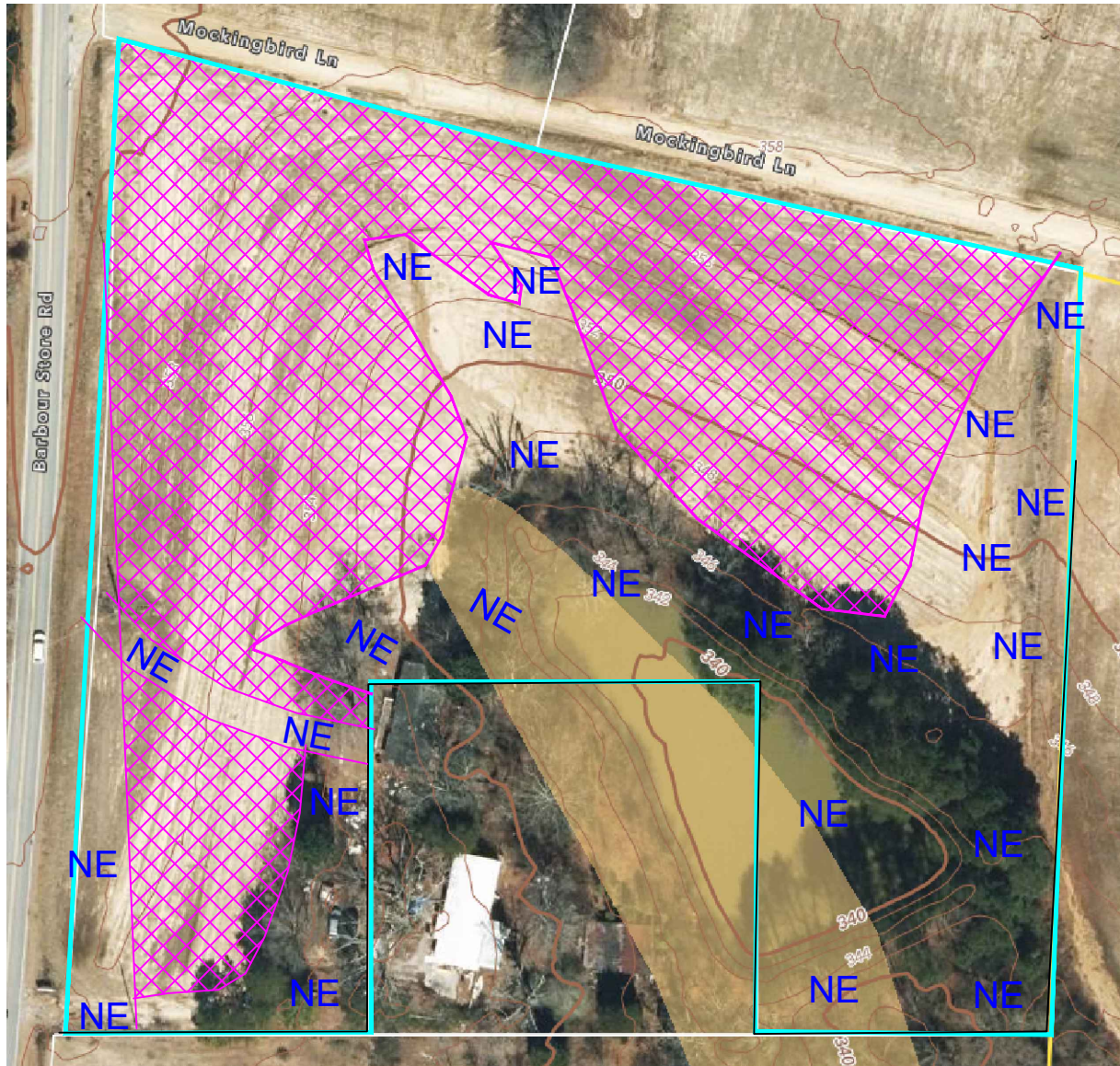
Sincerely,



Alex Adams
NC Licensed Soil Scientist #1247
Encl: Soil Map



Griffis Property ~5.41 acres - Barbour Store Road Wake County, NC



*Preliminary Soils Evaluation

*Soil boundary was sketched onto a preliminary map of the property taken from public records

*Not a Survey.

*Septic system setbacks listed below for new lots.

- 1) 10' from property lines.
- 2) 100' from wells for primary systems.
- 3) 50' from surface waters (streams, ponds, lakes).

*Any mechanical disturbances such as grading, cutting and filling of the suitable soil areas can render areas unsuitable for future septic systems.

*See accompanying report for additional information.

*Due to Soil Variability, Adams soil consulting cannot guarantee that the areas shown as suitable will be permitted by the local Health Department.

Legend



Areas contain soils with 30 inches or more of useable soil material and have potential for conventional, modified conventional, LPP or ultra-shallow conventional septic systems. There may be inclusion of soils 24-29 inches to a restrictive horizon that will have potential for LPP septic systems.

NE Unsuitable Areas for conventional type septic systems

GRAPHIC SCALE
1" = 100'



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