



April 19, 2023

Alexander Reese  
Founder, CEO  
Acrewell Land Company

**Re: Preliminary Soil/Site Suitability Evaluation Report**  
323 Lake Montonia Road, Kings Mountain, North Carolina

Dear Mr. Reese:

A preliminary soil/site suitability evaluation was performed on the above mentioned tract on March 31, 2023 at your request to determine areas of usable soils and favorable site conditions that have potential for the installation of a subsurface wastewater treatment and disposal system. The tract was traversed and observations were made of landforms (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. The site was evaluated during moist soil conditions. The soil/site criteria used are contained in 15ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems".

**FINDINGS:** This preliminary soil/site suitability evaluation confirmed the potential for the use of a subsurface conventional septic system to service one single family residence on the above referenced tract. Due to the topography, shape and size of the provisionally suitable soil area, an on-site layout of the overall drain field (primary system and repair) may be appropriate to determine the number of allowable bedrooms and placement of the house.

The unsuitable portion of this tract shown on the attached figure is due to depressional topography, surface drainage feature, and shallow depth to rock or unsuitable material. The southern portion of the tract contains usable soils similar to the Uwharrie soil series (Mapped as UvC-Uwharrie-Tatum complex on the attached figure) with depths to rock extending to 38 to 48 inches and is therefore considered provisionally suitable for subsurface conventional or modified conventional septic systems. The most hydraulically limiting soil texture class (silty clay) observed in the field has an estimated LTAR of 0.2 gallons per square foot per day. In general, 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.

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.

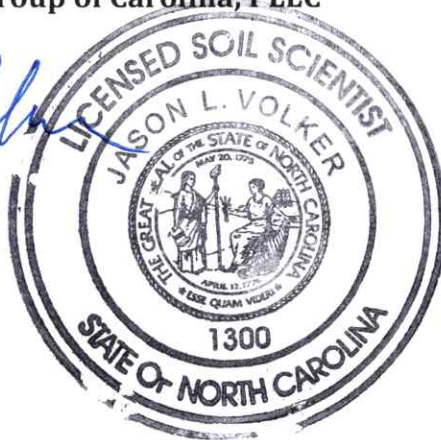
ONE appreciates the opportunity to provide soil evaluation services to Acrewell Land Company. If you should have any questions or comments about this report, please do not hesitate to contact me at (919) 880-3137.

Sincerely,

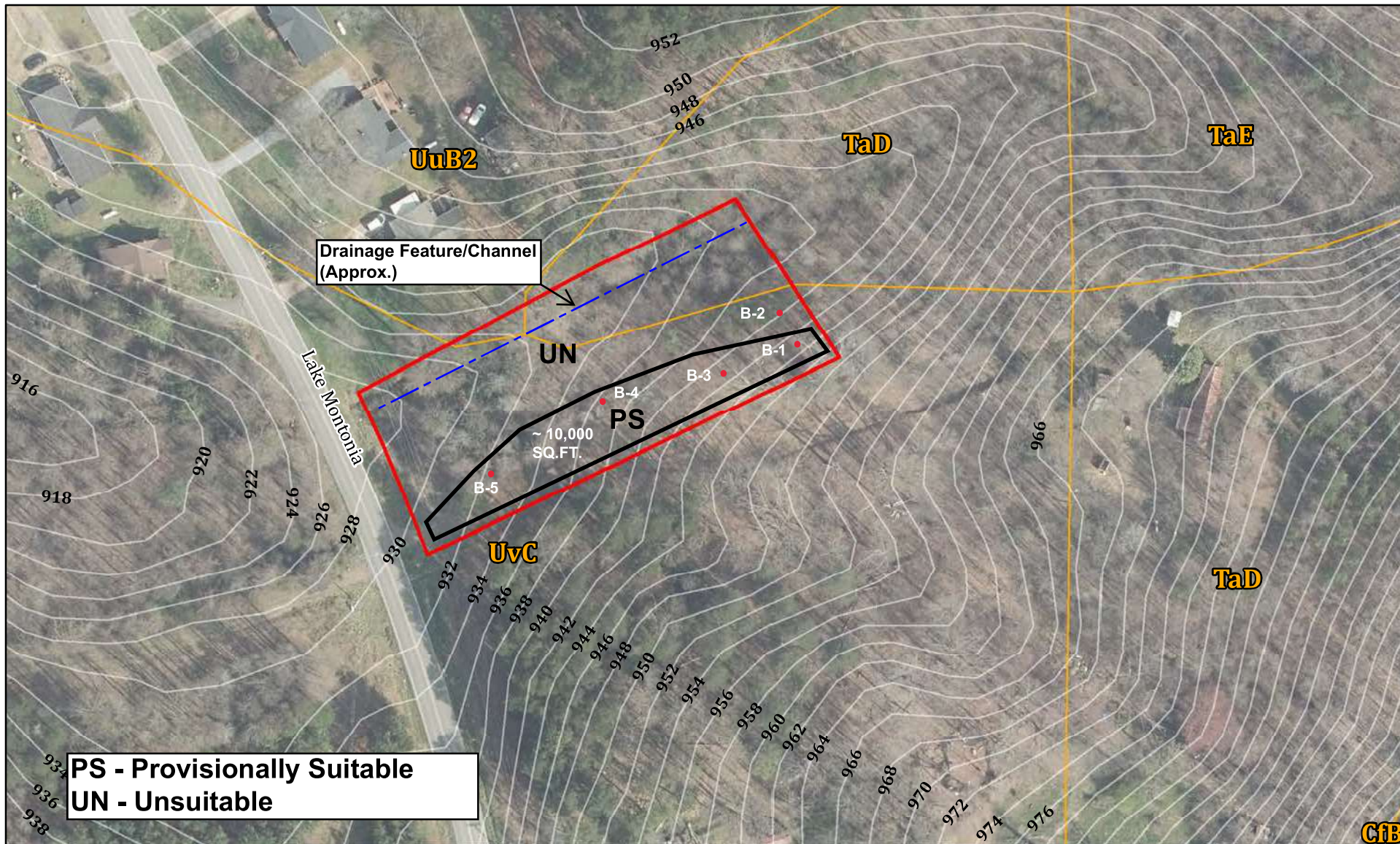
**ONE Environmental Group of Carolina, PLLC**

  
Jason Volker, PE, LSS  
Senior Project Manager

Attachments: Site Map







**PS - Provisionally Suitable**  
**UN - Unsuitable**



323 Lake Montonia Rd  
 Kings Mountain, NC 28086-9731  
 APN: 12688  
 1.02acres  
 Owner Name: Lula Kay Oliver

Property Boundary

0 50 100  
 Feet



Project Manager:  
 JV

Drawn By:  
 EJK

Checked By:  
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