614 SOUTH SECOND STREET

SMITHFIELD, NORTH CAROLINA 27577

(919) 934-8610

June 11, 2003

Mr. Bob Lambert 2060 Spring Hill Road Spring Hope, North Carolina 27882

Dear Mr. Lambert,

This report concerns the preliminary soils and site investigations for septic system suitability on the 7 acre tract located on the east side of Spring Hill Road about 1.5 miles north of Seven paths Road near Spring Hope.

The attached sketch map shows the approximate locations of various soils areas on the property as well as the locations of relevant drainage features. This map was prepared using a copy of the county orthophotography and tax map. The soils areas and boundaries were estimated from auger borings made at selected locations and from field observations of soil related landforms and vegetation. This map should be of sufficient accuracy for the preparation of preliminary sketch plans for subdividing the property. Some additional follow-up soils investigations and field location of drainage features (by survey methods) may be necessary before you can finalize plans for subdividing the property.

Brief descriptions of the soils areas and suitability for septic system drainfields is as follows:

SOIL AREA 1: These are well drained, gently sloping to sloping soils that are formed over residual materials weathered from rocks of the Eastern Carolina Slates. Slopes range from 2 to about 15 percent. Typically these soils have friable red clay subsoils that are underlain by loamy saprolite materials at depths ranging from 20 to more than 36 inches from the soil surface. These soils will classify provisionally suitable for conventional or modified conventional septic system drainfields. For the most part these soils can be used for conventional drainfields with few if any modifications to the system. In the lower slopes and the more sloping areas, saprolite systems may be required. Backhoe pits for the examination of the saprolites may be required before permits can be finalized in these areas. The saprolites appear to have favorable characteristics for sewage disposal.

**SOIL AREA 3:** These soils will dominantly classify <u>unsuitable</u> for septic system drainfields. The main limitation to use is poor landscape position and complex topography. These soils occur in low areas adjacent to the surface drains and include some steeply sloping soils also. Overall these soils are not usable for septic system drainfields.

Mr. Bob Lambert June 11, 2003 Page 2.

## **SUMMARY**

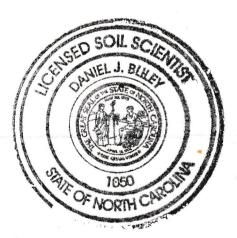
This tract is fairly well suited for development using septic systems for on site sewage disposal. The tract can be subdivided into minimum size lots and larger. The main concern for development will be the surface drainage features as shown on the map. These features are not extensive but will be restrictive for the placement of drainfield trenches. The accurate location of the drains will be necessary if you are to develop the property to it's maximum potential. There should be few if any problems with the subdivision of the property into three smaller lots relative to the soil conditions.

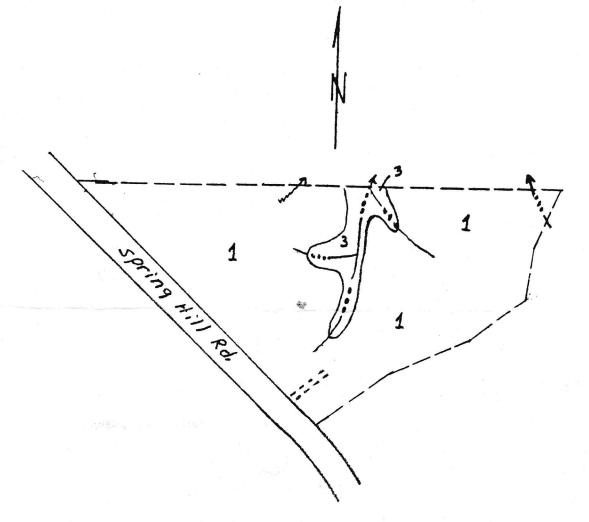
You can use this sketch map to prepare various alternatives for subdividing the property and as a tool for consulting with the County Planning Department to determine if such plans will meet the minimum requirements under the Subdivision Ordinance.

Please call me if you want to discuss the soils investigations in more detail or if you want to discuss various alternatives for developing the property.

Sincerely

Licensed Soil Scientist





## **LEGEND**



Scale: / "= 200"