HAL OWEN & ASSOCIATES, INC.

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15 October 2009

Mr. James R. Kennedy
209 Wintersweet Way
Sharpsburg, GA 30277

Reference: Preliminary Soil Investigation
Lot #2 Cypress Woods (6.2 Acres)

Dear Mr. Kennedy,

A site investigation has been conducted for the above referenced property, located on the eastern side of Cypress Woods Lane, Harnett County, North Carolina. The purpose of this investigation was to determine the site's ability to support a subsurface sewage waste disposal system and repair area for a four-bedroom home. All sewage disposal 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. An improvement permit for all residences will need to be obtained from the Health Department that specifies the proposed home size and location, and the design and location of the septic system to be installed.

A portion of this lot was observed to be underlain by soils that are rated as provisionally suitable soils for subsurface sewage waste disposal (see attached map). These provisionally suitable soils were observed to be friable to firm sandy clay loams to greater than 30 inches and will support long term acceptance rates of 0.4 to 0.5 gal/day/sqft. In other words, you should expect that 80 to 100 feet of drainline will be required for each bedroom in the proposed home. Blue flags were hung at each soil boring location where these soils were observed. It appears that the soils on this lot are adequate to support a conventional septic system and repair area for a four bedroom residence.

The unsuitable soil area is so rated due to inadequate soil depth to wetness conditions. The ability to utilize alternative systems or make modifications to this area to allow for septic systems is minimal. One area of high ground was observed in the southeastern corner of the lot that may have some potential to support septic systems. This area is across the creek and remote from the likely home site and does not appear to be needed for the septic needs of the home. Therefore subsurface borings were not conducted in this small area, but it is shown on the attached map.

An area immediately north of the pond appears well suited for establishment of a garden. This area is less well drained so it should not be as drought prone as the remainder of the lot. The topsoil contains somewhat more organic matter and likely slightly higher fertility. Using this site will facilitate irrigation from the pond. In my experience, having a soil test is critical to obtaining good fertility (contact county extension agent for free supplies and directions). Fertility and especially water for the plants are the two most important ingredients to a successful garden. You should expect to need to add a significant amount of lime (two tons per acre is not unusual), especially at first. Dolomitic limestone contains both calcium and magnesium and is recommended in pellet or granular form applied in the fall of the year. Efforts on your part to build up the organic matter content will improve water holding capacity and plant growth. Winter cover crops, tilling in crop residues and use of mulches can aid with this endeavor.

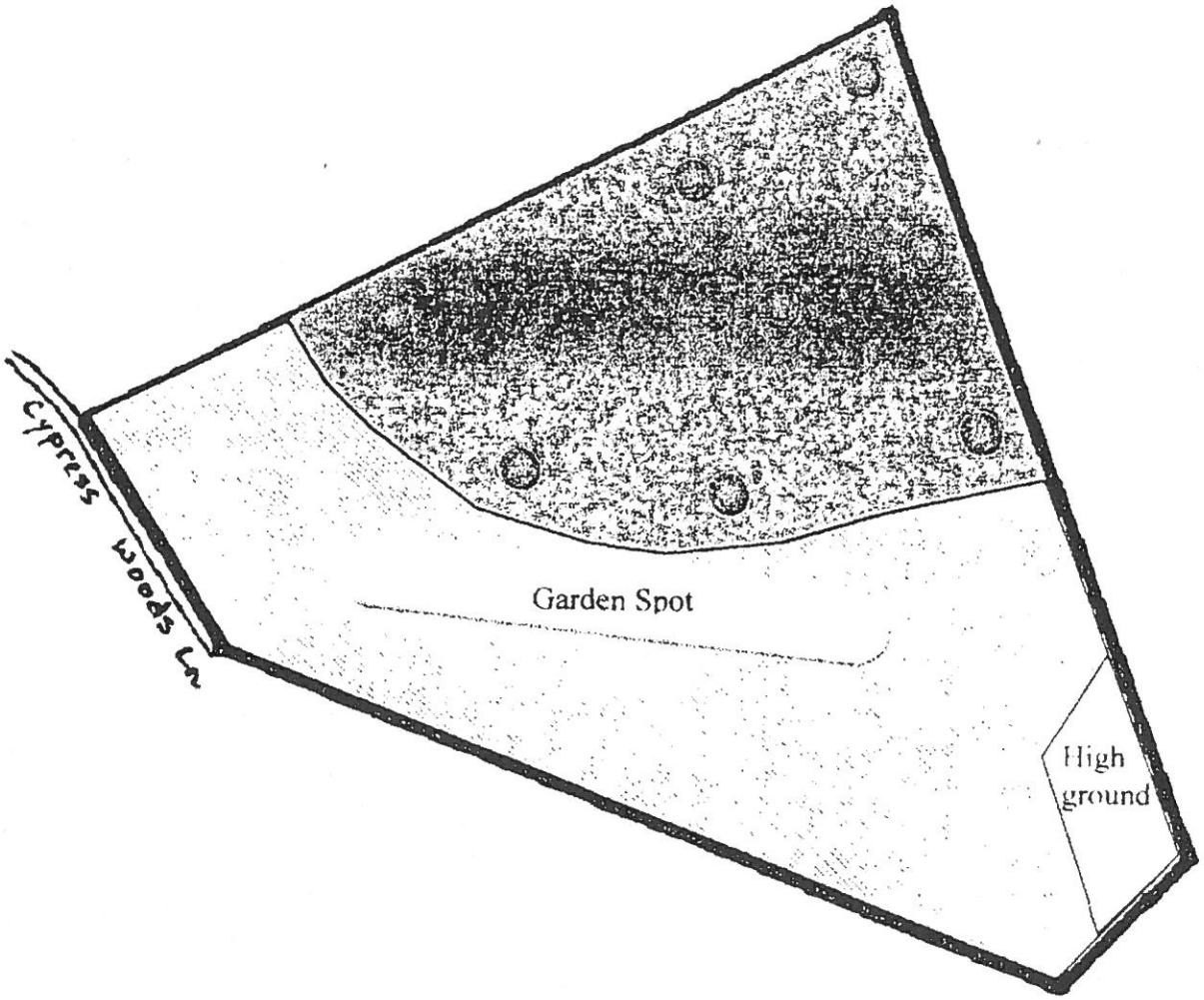
I appreciate the opportunity to provide this service and trust that you will feel free to call on me again in the future. If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

Hal Owen

Hal Owen
Licensed Soil Scientist

Preliminary Soil Investigation
Lot #2 Cypress Woods (6.2 Acres)
For James Kennedy
15 October 2009



Soil Legend

Provisionally Suitable Soils for Subsurface Sewage Waste Disposal Systems

Unsuitable Soils for Subsurface Sewage Waste Disposal Systems

Auger boring locations