## HAL OWEN & ASSOCIATES, INC.

## SOIL & ENVIRONMENTAL SCIENTISTS

P.O. Box 400, 266 Old Coats Road Lillington, NC 27546-0400 Phone (910) 893-8743 / Fax (910) 893-3594 www.halowensoil.com

13 July 2010

EJ Womack Country Fair Homes 2516 Jefferson Davis Hwy Sanford, NC 27332

Reference: Final Report for Comprehensive Soil Investigation Richardson Property, Lot 2 (0.5 Acre) and Lot 3 (1.5 Acre) NC PIN 9576-79-0503

Dear Mr. Womack,

A comprehensive soil investigation has been conducted at the above referenced property, located on the eastern side of NC 27 W, Barbecue Township, Harnett County, North Carolina. The purpose of the investigation was to determine the ability of Lot 2 to support a subsurface sewage waste disposal system and repair area for a typical three-bedroom home, and to determine the existence of a subsurface sewage waste disposal system on Lot 3 and to make surface observations relative to its apparent operation. All soil ratings and determinations were made in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A .1900". It is our understanding that individual septic systems and public water supplies will be utilized at this site. The maximum house footprint used for this evaluation was 40 X 70 feet.

Lot 2 is dominated by suitable and provisionally suitable soils for subsurface sewage waste disposal. The suitable soils were observed in the northern portion of Lot 2, exhibited friable loamy sand texture to greater than 36 inches, and appear adequate to support long term acceptance rates of 0.6 to 0.8 gal/day/sqft. The provisionally suitable soils will adequately function as sewage waste disposal sites but will require shallow drainline placement due soil wetness conditions below thirty inches. The provisionally suitable soils were observed to be friable loamy sands to greater than 30 inches and appear adequate to support long term acceptance rates of 0.6 to 0.8 gal/day/sqft. It appears that the soils on this lot are adequate to support a conventional septic system and repair area for one residence. A pump could be needed depending on the placement of the home.

Lot 3 has an existing residence with an existing septic system that appeared to be functioning properly on the day of the investigation. This existing septic system appeared to be located within any setback requirements for this property. The drainlines appear to end at about the edge of the proposed access and utility easement. A soil investigation was conducted and it appears that an adequate amount of provisionally suitable soil exists on this lot to 100 % repair the system if it should fail.

Lot 3 also contains an area that exhibits the characteristics of jurisdictional waters under Section 404 of the Clean Water Act. All wetland determinations and delineations were made in accordance with the 1987 US Army Corps of Engineers Wetland Delineation Manual. A wetland area was observed on the property and is located in the southeastern corner. The boundary of the wetland area was not delineated on the ground, but is approximately shown on the attached map. It is apparent that the access easement is provided in order to meet a regulatory requirement and will not actually be constructed or utilized. In the event that a road is ever actually constructed in the easement, wetland impacts will likely be necessary and a permit will be required from the appropriate regulatory agencies.

This soil investigation report and map, when provided to the Harnett County Health Department, 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,

Hal Owen

Licensed Soil Scientist

CC: Mickey Bennett

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