

HAL OWEN & ASSOCIATES, INC.

SOIL & ENVIRONMENTAL SCIENTISTS

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4 March 2004

Mr. Dan Sullivan
Contentnea Creek Development Company
12512 Peele Road
Raleigh, NC 27614

Reference: Wetland Investigation
Big Woods Road and Hwy 64, Chatham County, North Carolina

Dear Mr. Sullivan,

A site investigation has been conducted for the above referenced property, located on the northern side of US Hwy 64 and on the western side of Big Woods Road, Chatham County, North Carolina. The purpose of this investigation was to determine the existence and extent of areas that exhibit 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.

Wetland areas observed on the property were typically very small flood channel wetlands or old oxbows that are located adjacent to stream channels. Due to the width of the environmental buffers (50 to 100 feet each side) that must be placed on the numerous streams that cross and border this property, it appears very unlikely that any impacts to these waters will be necessary other than the road crossings. After meeting with Mr. Todd Tugwell of the US Army Corps of Engineers, Hal and I investigated the property to identify the extent of the jurisdictional streams and to verify that wetlands were not located more than 50 feet away. The heads of some smaller streams were marked with flagging at the site to indicate the limit of jurisdiction, and a sketch approximating the locations of these streams was forwarded to Mr. Irvin Staton and John Harris (see attached copy). It is recommended that these streams be surveyed located and a map prepared showing all streams and associated buffers on the property. Mr. Tugwell indicated that he would certify this map with a statement that all wetlands and jurisdictional waters are contained within the buffers. A more detailed investigation can be conducted at potential impact areas once the subdivision format is set.

It is encouraged that you use care and good judgment when working in or around wetland areas. Additional information about regulatory requirements and permitting can be provided at your request. I look forward to receiving the survey map of the streams and buffers so that I may complete the certification package for submittal to the Corps of Engineers. If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

Krissina B. Newcomb

Krissina B. Newcomb

Environmental Scientist III

HOA

Transmittal

To: Irv Staton

CC: John Harris

From: K. Newcomb

Date: 5 February 2004

Re: Big Woods

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☐ **Urgent** ☒ **As Requested** ☐ **For Review** ☐ **Please Comment**

Enclosed is a map showing the approximate locations of the jurisdictional creeks at the site (both Tracts 1 and 2). John, your map also indicates major gullies and drains. At the site meeting with Todd Tugwell, Corps of Engineers, we discussed the best approach to certification of the jurisdictional waters on the property. He said that providing a map with the stream buffers and a statement that all wetlands and waters of the United States were within the buffers was sufficient for certification. Mr. Tugwell confirmed Corps jurisdiction over the blue line streams on the property and also asserted jurisdiction over a channel of "less ecological importance". He recommended that all streams on the property be surveyed for certification. Once potential impacts are identified, a more detailed delineation of stream channels and wetlands can be conducted to determine the exact extent of the impacts. Mr. Tugwell advised us that the Corps would likely deny a permit application with more than one road crossing per stream because it appears that other design alternatives with fewer impacts exist. He further advised us that cumulative¹ stream impacts in excess of 150 linear feet would likely require compensatory mitigation. Considering the topography at the site, this further supports a reduction in the number of road crossings and would likely necessitate retaining walls.

If you have any questions or need additional information, please contact us at your convenience.

Wetland Points:

A1 - A25

B1 - B4

C1 - C6

D1 - D3

AA1 - AA3

BB1 - BB3

