

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
GRAHAM CORPORATION PROPOSED WETLAND FILL AND STREAM
RELOCATION, WILLOW FORK, KNOX COUNTY, TENNESSEE

Graham Corporation (Graham) proposes to fill 0.60 acre of wetlands and relocate 2,319 feet of Willow Fork in order to develop a shopping center. The Graham property is located near Halls Crossroads, Knox County, Tennessee, along Willow Fork, a tributary to Beaver Creek Mile 5.7, a tributary to Melton Hill Reservoir. In March 2007, Graham submitted applications to the Tennessee Valley Authority (TVA) and U.S. Army Corps of Engineers (USACE) for approval under Section 26a of the *TVA Act* and Section 404 of the Clean Water Act, respectively, of the wetland fill and relocation of a portion of Willow Fork. The USACE issued an environmental assessment (EA) of its permitting action on December 15, 2007. This EA is incorporated by reference.

The EA evaluated two alternatives: 1) No Action, under which the permit request would be denied, and 2) The Proposed Action, under which TVA and USACE would approve the wetland fill and relocation of 2,319 feet of Willow Fork. Two additional alternatives, a Location Alternative, under which the applicant would select a different location for the development of the retail establishment, and a Reconfiguration Alternative, under which the retail establishment would be configured in a different layout, were considered but rejected from detailed consideration because they were either not feasible or did not appreciably reduce the anticipated impacts.

The proposal was the subject of a Joint Public Notice issued by USACE and TVA in July 2007. In a letter dated August 2, 2007, Tennessee Wildlife Resources Agency disagreed with the adequacy of the proposed mitigation and recommended the application be held in abeyance until appropriate mitigation was received. In addition, the U.S. Fish and Wildlife Service (USFWS) disagreed with the proposed mitigation and recommended the permit be denied. Two Knox County Commissioners submitted letters in support of the proposal. In response to comments on the public notice, Graham submitted two on-site reconfiguration alternatives. However, USACE determined further consideration of these reconfigurations was not warranted because of the minimal impacts and the proposed mitigation adequately offset the impacts associated with the Proposed Action Alternative.

The EA concludes that impacts to terrestrial ecology, recreation, visual resources, and noise from the proposed action would be insignificant. There would be no impacts to threatened or endangered species or their habitats, and the USFWS concurred with this determination in a letter dated August 8, 2007. No archaeological sites or historic properties would be affected, and the Tennessee State Historic Preservation Officer concurred with this determination in a letter dated July 13, 2007. Navigation, air quality, environmental justice, and flood control would not be affected, and the proposal is consistent with Executive Order 11988. Although portions of the site have soils that may be classified as prime farmland, the site itself is not considered prime farmland because it has previously been zoned for non-farm uses. The proposed action would affect wetlands, water quality, and aquatic life. These effects would be minimized by implementation of the mitigation measures associated with the Proposed Action alternative and would be insignificant. The Tennessee Department of Environment and Conservation (TDEC)

issued a Water Quality Certification under Section 401(a)(1) of the Clean Water Act on September 25, 2007.

TVA conducted an independent review of the potential impacts to traffic that would result from the proposed action. The proposed development would add to the area just under 440,000 square-feet of various retail businesses, as well as eight out-lots, which are anticipated to develop as highway-oriented businesses. These businesses would generate additional traffic, which has the potential to impact the existing local road network.

Graham enlisted Wilbur Smith Associates (WSA) to assess the potential traffic impacts resulting from the proposed development. The WSA study and recommendations are attached to this FONSI. WSA analyzed the existing and future traffic conditions based upon the natural growth of existing traffic and the additional traffic from the proposed development. Some of the items analyzed were the Level of Service (LOS) of the road network, the LOS of traffic signals, the LOS of the controlled stops, and sight distance available.

The *Highway Capacity Manual* (Transportation Research Board, 2000) outlines methods for evaluating the operational conditions within a traffic stream. These methods take into account average highway speed, lane widths, shoulder widths, and alignment, among other inputs. These methods define six LOS using the letters A through F: LOS A is defined as the highest quality of service that a particular class of highway can provide; LOS B is a zone of stable flow; LOS C is a zone of stable flow, but at this volume and density level, most drivers are becoming restricted in their freedom to select speed, change lanes, or pass; LOS D approaches unstable flow; LOS E is unstable with lower operating speeds and some momentary stoppages; LOS F indicates forced-flow operations at low speeds.

The LOS under baseline conditions (2006) was compared to the 2011 No-Build conditions. The LOS dropped in all but two of the ten areas studied. The 2011 No-Build conditions were then compared to the 2011 Build Signalized and Unsignalized conditions. The LOS did not change at the development's main intersection, but conditions did worsen. The LOS of the 2011 Build Unsignalized intersections varied from an LOS A to an LOS F. Almost 36 percent of the Unsignalized intersections would have an LOS D or worse if the proposed development is constructed.

Based on the analysis, WSA made several recommendations to mitigate the traffic impacts to the area. These recommendations include improvements to existing roads, the addition of a new connector road, and additional signalized intersections. Some of the improvements to existing roads include the addition of new driving lanes, dedicated right and left turn lanes, and minimum throat depths for new driveway access points.

Before construction of the development, Graham would meet with state and local officials to evaluate the recommendations made by WSA and agree on an implementation plan to mitigate the increased traffic due to the development. With the implementation of these proposed recommendations, there would be no significant impacts to the road network.

Mitigation and Permit Conditions

In addition to adherence to routine permit conditions, including the use of construction-related Best Management Practices (BMPs), the following mitigation measures would be required. These measures and conditions would reduce the potential for adverse environmental effects.

The following measures would be included as a standard condition in the Section 26a permit:

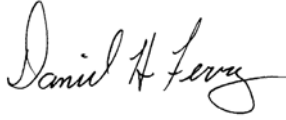
- The work must be performed in accordance with any plans attached to the permit. You must have a copy of this permit available on site and ensure that all contractors are aware of its conditions and abide by them.
- You agree to stabilize all disturbed areas within 30 days of completion of the work authorized. All land-disturbing activities shall be conducted in accordance with BMPs as defined by Section 208 of the *Clean Water Act* to control erosion and sedimentation to prevent adverse water quality and related aquatic impacts.

The following measures and conditions would be included as additional conditions in the Section 26a permit:

- Stream buffers must be expanded to at least 60 feet in width on both sides of the stream in order to comply with TDEC 303 stream riparian zones. You must perform all other measures as outlined in the Mitigation Plan attached to the Section 26a permit.
- Annual reports stating the mitigation status and including photographs taken of the stream segments must be submitted to the Watts Bar-Clinch Watershed Team (WBCWT) office for a minimum of five years after completion of the project. Copies of photographs taken during the middle stage of construction and after the project is finished shall be forwarded to the WBCWT office by mail or e-mail, Attn: Tiffany Foster.
- The mitigation area shall be indentured into a restrictive covenant that will become an attachment to the deed and run with the property. The restriction shall contain covenants prohibiting certain uses such as, but not limited to: any removal, alteration, or destruction of any native vegetation or natural habitat, any agricultural, commercial, or industrial activity, any draining, filling, excavating, or dredging, any construction of buildings, any disruption or alterations of the stream, wetland or riparian area. The restrictive covenant shall protect in perpetuity the ecological values of the mitigation site. The restrictive covenant shall be recorded in the Miscellaneous Document Book with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title and interest in real property. A certified copy of the record shall be furnished to the WBCWT office by mail or e-mail, Attn: Tiffany Foster, within 30 days of recording.
- Before construction of the development, Graham would meet with state and local planning or permitting officials to evaluate the recommendations made by WSA and agree on an implementation plan to mitigate the increased traffic due to the development. With the implementation of these proposed recommendations, there would be no significant impacts to the road network.

Conclusion and Findings

We have independently reviewed the USACE EA and conclude that it adequately assesses the environmental impacts of the proposed action. We conclude that, with adherence to the permit conditions and mitigation measures described above, issuance of the Section 26a permit for the wetland fill and relocation of a portion of Willow Fork would not be a major federal action significantly affecting the environment. Accordingly, preparation of an environmental impact statement is not required.



April 9, 2008

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Date Signed