

**STATEMENT OF FINDINGS
AND
FINDINGS OF NO SIGNIFICANT IMPACT**

File No. 200602762 FINAL ENVIRONMENTAL ASSESSMENT

Graham Corporation – Willow Fork Relocation Project

**PROPOSED RELOCATION OF WILLOW FORK
AND DISCHARGE OF FILL MATERIAL
INTO ADJACENT WETLANDS
TO FACILITATE A RETAIL DEVELOPMENT
IN KNOX COUNTY, TENNESSEE**

**U.S. ARMY CORPS OF ENGINEERS
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Table of Contents

- 1.0 Proposed Activity**
 - 1.1 Background
 - 1.2 Project Purpose
 - 1.3 Proposed Mitigation
 - 1.4 Decision Required
 - 1.5 Other Approvals Required
 - 1.6 Scope of Analysis
 - 1.7 Site Inspections

- 2.0 Public Involvement Process**
 - 2.1 Public Notice
 - 2.2 Public Notice Comments
 - 2.3 Applicant's Response/Rebuttal

- 3.0 Environmental and Public Interest Factors Considered**
 - 3.1 Introduction
 - 3.2 Physical/Chemical Characteristics and Anticipated Changes
 - 3.3 Biological Characteristics and Anticipated Changes
 - 3.4 Human Use Characteristics and Anticipated Impacts
 - 3.5 Cumulative and Secondary Impacts

- 4.0 Alternatives**
 - 4.1 Introduction
 - 4.2 No Action Alternative
 - 4.3 Location Alternative
 - 4.4 Reconfiguration Alternative
 - 4.5 Conclusion

- 5.0 Findings**
 - 5.1 Consideration of Public Comments
 - 5.2 Public Hearing Determination
 - 5.3 Clean Air Act General Conformity Rule Review
 - 5.4 Appropriate Mitigation
 - 5.5 Section 404(b)(1) Determination
 - 5.6 Water Quality Certification
 - 5.7 Environmental Justice
 - 5.8 Permit Condition Consideration
 - 5.9 Findings of No Significant Impact
 - 5.10 Public Interest Considerations
 - 5.11 Public Interest Determination

Table of Contents (continued)

6.0 Appendices

- A. Inspection and Photographs
- B. Public Notice
- C. Public Comments and Applicant's Response/Rebuttal
- D. Mitigation Plan
- E. Section 404(b)(1) Guidelines Compliance
- F. Section 401 Water Quality Certification Waiver

1.0 Proposed Activity

1.1 Background. On 15 March 2007, The Graham Corporation submitted an application for an individual Department of the Army (DA) permit. The application requested authorization under Section 404 of the Clean Water Act (CWA) for the proposed relocation of 2,319 feet of Willow Fork and 176 feet of an unnamed tributary. Much of the affected stretch of channel lacks a vegetative buffer and has been degraded by erosion due to grazing of cattle. Willow Fork would be relocated approximately 250 feet to the southeast of its current location. The applicant also proposes to fill an adjacent 0.60 acre wetland area. Discharges of fill material into waters would facilitate the development of a new retail center. The current land use surrounding this section of Willow Fork is largely agricultural, the rolling topography covered primarily only with open pasture.

1.2 Project Purpose. As part of the analysis to evaluate practicable alternatives, the project purpose was defined based on two principles: basic project purpose and overall project purpose. Section 404(b)(1) Guidelines make a distinction between basic and overall project purpose (40 CFR 230.10(a)). For this project, the basic project purpose is defined as the development of the proposed agricultural site into a retail center. This basic project purpose is a fundamental, essential, and discernable purpose of the proposed project that is used in this analysis to determine if the applicant's project is water dependent. The basic project purpose does not consider viability, need, or level of impacts. The overall project purpose serves as the basis for this alternative analysis. The overall project purpose is to construct a retail development in the Hall's Crossroads Area that will be as economically beneficial as possible.

1.3 Proposed Mitigation. Mitigation for the impacts would be performed at the site. Mitigation would involve the establishment of 2,530 feet of channel using natural channel design across the back side of the property. Mitigation for the impacted wetlands would involve the creation of 1.81 acres of wetlands in the floodplain of the newly relocated Willow Fork Channel. This would be a mitigation ratio of 3:1 since the original wetland was 0.60 acres. All new wetlands in the mitigation plan are proposed on sites with 0-3% grade and all sites contain hydric soils. In addition, the applicant has proposed a monitoring plan to measure vegetation and hydrology of the relocated stream and new wetland at least once per year. Soils will also be monitored for the new wetlands under the mitigation plan. A copy of the detailed mitigation plan is included as Appendix D.

1.4 Decision Required. Section 301 of the CWA prohibits the discharge of dredged or fill material into waters of the U.S. unless authorized by the DA pursuant to Section 404 of the same Act. Willow Fork, as well as the unnamed tributary and adjacent wetlands being impacted, are waters of the U.S. as defined by 33 CFR 328. A DA permit under Section 404 is required for the work; therefore, the U.S. Army Corps of Engineers must decide on one of the following:

- issuance of a permit for the proposal
- issuance of a permit with modifications or conditions; or
- denial of the permit.

1.5 Other Approvals Required. Other federal, state and local approvals would be required for this proposal. Water quality certification from the Tennessee Department of Environment and Conservation (TDEC) is necessary in accordance with Section 401(a)(1) of the Clean Water Act

(CWA). TDEC issued the required certification for the proposal on 25 September 2007.

1.6 Scope of Analysis. The Corps must determine the proper scope of analysis for National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), Endangered Species Act (ESA), and any other laws related to its permit actions. Once the scope of analysis is established, the Corps can address the impacts of the specific activity requiring a DA permit and those portions of the entire project over which we have sufficient control and responsibility to warrant federal review. This is generally coincidental with the definition for "Permit Area". NEPA Implementation Procedures for the Corps Regulatory Program (33 CFR 325, Appendix B, Paragraph 7b) list the typical factors to be considered in determining whether sufficient control and responsibility exists to warrant federal review. Four factors are presented: (a) whether the regulated activity comprises merely a link in a corridor type project, (b) whether there are aspects of the upland facility in the immediate vicinity of the regulated activity which affect the location and configuration of the regulated activity, (c) the extent to which the entire project will be within Corps jurisdiction, and (d) the extent of cumulative federal control and responsibility. In determining whether sufficient cumulative federal involvement exists to expand the scope of federal action outside the "Permit Area", we should consider whether other federal agencies are required to take federal action under other environmental review laws and/or executive orders.

Once the scope of analysis is determined, alternatives to the proposed action (see Section 4) and primary, secondary, and cumulative impacts (see Section 3.5) must be considered in the appropriate NEPA analysis. However, when analyzing secondary impacts, the strength of the relationship between those impacts and the regulated portion of the activity should be considered, i.e., whether or not the impacts are likely to occur even if the permit is not issued, in deciding the level of analysis and what weight to give these impacts in the decision. This attenuation should consider whether another project, not requiring a permit, could likely occur at the site or in the vicinity, and whether its impacts would be similar to impacts of the project requiring a permit.

In light of the above discussion, we have concluded that the scope of analysis for this DA permit application should be limited to the "Permit Area", which includes the stream and wetland areas directly impacted by excavation and filling activities as well as all site development activities within the property boundaries.

1.7 Site Inspections. Two site inspections have been made to the proposed development area over the past year. Joe McMahan of the U.S. Army Corps of Engineers visited the site on 18 December 2006 to confirm the wetland delineation submitted by the applicant. The site was also visited by Marty Tyree of the U.S. Army Corps of Engineers on 27 March 2007. A copy of Mr. Tyree's inspection report is included as Appendix A.

2.0 Public Involvement Process

2.1 Public Notice. On 10 July 2007, the Corps issued Joint Public Notice (PN) 07-37 to advertise the proposed work (Appendix B). The PN was distributed to a wide list of interested parties that included federal, state, and local agencies, elected officials, private and public organizations, news agencies, individuals, and adjacent property owners.

2.2 Public Notice Comments. The U.S. Fish and Wildlife Service (USFWS), Tennessee Wildlife Resources Agency (TWRA), Tennessee Historical Commission (THC), and two Knox County (TN) Commissioners commented.

Copies of the comments are included in Appendix C. The comments have been summarized below. Where appropriate, a response follows the comment.

U. S. Fish and Wildlife Service (USFWS) - The USFWS responded to the public notice by letter dated 8 August 2007, stating, that it is their belief that there are no federally listed or proposed endangered or threatened plant or animal species in the impact area of the project, and that requirements of Section 7(c) of the Endangered Species Act of 1973, as amended, are fulfilled. However, USFWS felt that the mitigation plans proposed by the Graham Corporation were insufficient. They believe that the applicant is seeking both stream mitigation and wetland mitigation credit for the riparian zone restoration because the proposed new wetlands are contiguous to the newly created stream channel and therefore inside the 50 foot buffer zone required by the "Stream Mitigation Guidelines for the State of Tennessee". The letter further states that the applicant should be required to create a minimum of 2.4 acres of wetlands outside of the 100-foot stream buffer zone either on or off-site to comply with a 4:1 wetland mitigation ratio. USFWS recommended that the permit as proposed be denied.

Corps Response: These concerns were addressed by the Tennessee Department of Environment and Conservation (TDEC) in their Notice of Determination for this project dated 25 September 2007. TDEC determined that the proposed mitigation is sufficient for several reasons. First, the proposed wetland mitigation sites have a high probability of success due to their location in the floodplain and the fact that the sites contain hydric soils located beneath the fill and disturbed soils at a depth of 2 to 4 feet. Second, the relocation of the 2495 feet is an on-site relocation and the proposed natural channel design would not result in a loss of stream. The wetland mitigation would serve as a credit within the riparian area of the relocated stream system. Since the current wetlands are part of the floodplain and riparian area of the existing stream channel, this proposal represents an equivalent functional scenario and would not represent a double mitigation credit. We are in agreement with TDEC that the proposed mitigation is sufficient.

Tennessee Wildlife Resources Agency (TWRA) - TWRA responded to the PN by letter dated 2 August 2007. TWRA also felt that the proposed mitigation was insufficient and their comments echoed those of the USFWS. TWRA was also concerned that there was no monitoring plan in the original proposal to ensure success of both the stream and wetland mitigation efforts. TWRA recommended that the permit be held in abeyance until the applicant provided appropriate wetland and stream mitigation for review and comment by regulatory and resource agencies. They recommended that the permit as proposed be denied.

Corps Response: These are the same concerns that were voiced by USFWS. We feel that the proposed mitigation will be sufficient for the reasons listed in our response to their concerns. The permit will be conditioned to require 5 years of monitoring to ensure mitigation efforts are successful.

Tennessee Historic Commission (THC) - The THC responded to the public notice by letter dated 31 July 2007 stating that based on the information submitted no National Register of Historic Places (NRHP) listed or eligible property would be affected by the undertaking

Response: We concur with the THC findings.

Public Comment: Mr. Larry Smith, a Knox County Commissioner of the 7th District, submitted a letter voicing his full support for the stream relocation. Likewise, Mr. Scott Moore, also a Knox County Commissioner of the 7th District, submitted a letter voicing his full support for the stream relocation.

Response: Comments Noted

2.3 Applicant's Response/Rebuttal. The responses to the PN were sent to the applicant for resolution or rebuttal. S&ME Incorporated (S&ME) provided written responses to the issues on behalf of the applicant on 7 September 2007. (Appendix C).

3.0 Environmental and Public Interest Factor Considered. In accordance with 33 CFR 320.4 (a), the decision whether to issue a permit is based on an evaluation of the probable impacts including cumulative impacts of the proposed activity and its intended use on the public interest. All factors that may be relevant to the proposal must be considered. The following sections provide a concise description of these factors and the effect this project would have on them.

3.1 Introduction. In my evaluation of the environmental effects of the work proposed in this permit application, the following items have been considered:

- information provided in the applicant's permit application.
- the site inspections conducted on 18 December 2006 and 27 March 2007.
- PN Comments.
- mitigation proposed to offset stream impacts.
- TDEC's issuance of Section 401 WQC.

3.2 Physical/Chemical Characteristics and Anticipated Changes.

Substrate. Substrate is the earthy material (soil, rock, sand, gravel, etc.) that exists along the stream bottom. The existing substrate along the entire 2,319 linear feet of intermittent stream and 176 linear feet of ephemeral stream would be mitigated by the construction of 2,530 feet of new stream channel. The new stream channel would have patterns, profiles, and dimensions similar to the current Willow Fork conditions.

Currents, Circulation or Drainage Patterns. These characteristics would be minimally affected by the project after mitigation is complete. The mitigation plan calls for designed meanders and riffle-pool sequences at suitable locations along the channel to provide a natural appearance and flow regime for the relocated stream channel. Straight lengths of channel would not exceed 75 to 100 feet in length without either a meander or riffle-pool sequence.

Suspended Particulates; Turbidity. During construction, there would be a short-term increase of suspended particulates and turbidity. This would be the result of site preparation. Mitigation efforts along Willow Fork would provide long term benefit to the aquatic system in the

form of reduced turbidity through the exclusion of cattle from Willow Fork and creation of a stable channel.

Water Quality. The TDEC Division of Water Pollution Control determined in the 401 Water Quality Certification that the relocated stream channel, if implemented as designed, should not result in a loss of resource value. It also states that there should be no measurable chemical changes in the water since the relocated channel would be constructed in the same soil series and underlying geology as the existing stream. We concur with the determination of TDEC and feel that there would be a de minimus affect to water quality downstream.

Flood Control Functions. After proposed mitigation, impacts to flood control functions from this project would be negligible and could improve due to the creation of new wetlands along the relocated Willow Fork Channel.

Storm, Wave and Erosion Buffers. The relocated stream channel would have a buffer zone that would range between 50 and 150 feet along the entire 2,530 stretch. This buffer would help to prevent erosion along the affected reach of stream

Erosion and Accretion Patterns. Mitigation plans show that the relocated channel is designed with a meandering path and riffle-pool sequences that would serve to slow storm water flows and prevent significant soil erosion. The fact that cattle would no longer use this reach of stream could have a positive impact on soil erosion if the property is developed as planned.

Aquifer Recharge. This project would have no effect on aquifer recharge.

Baseflow. Baseflow is the amount of water that would drain absent any rain inputs, and is usually from groundwater. There would be no reduction to the baseflow expected along the affected reach of relocated stream channel or to the newly constructed wetlands .

Mixing Zone. This characteristic is not associated with the proposed work.

3.3 Biological Characteristics and Anticipated Changes

Special Aquatic Sites. Lost in the project would be an existing 2,319 reach of Willow Fork, a perennial stream that runs a relatively straight course with few riffle-pool sequences as defined in 40 CFR Part 230, Section 404(b)(1), Subpart E, Section 230.45. Also lost would be 176 feet of an unnamed intermittent tributary that has little biological value. The proposed relocation of Willow Fork would result in the creation of a 2,530 foot channel that would replace both streams, and run a more meandering path creating an estimated 49 riffle-pool sequences. The retail development would also destroy 0.60 acres of existing wetlands adjacent to Willow Fork, but mitigation should surround the stream with 1.81 acres of quality wetland areas based on the 0-3% slope and hydric soils present on-site.

Habitat for Fish and Other Aquatic Organisms. The project would temporarily affect habitat along the affected reach of ephemeral and intermittent stream. Once the mitigation work is completed, it would replace any aquatic habitat that is taken by the project.

Wildlife Habitat. Adverse impacts to wildlife habitat would be temporary and nominal. The

minor impact to wildlife habitat along the impact reach would be adequately replaced by mitigation work occurring along Willow Fork.

Endangered or Threatened Species. A review of the existing databases and records did not reveal the presence of any federally listed threatened or endangered species or designated critical habitat the project site. Based upon the information from our review and the response from the USFWS, we have determined the proposal would have no effect on threatened or endangered species or their designated critical habitat.

Biological availability of possible contaminants in dredged or fill material. The fill material for the project would utilize clean commercial materials and onsite materials. There is nothing in the composition of the fill material or the source to suggest the material would contain toxic pollutants. Therefore, in accordance with 40 CFR 230.60(c), no chemical or biological testing is required to make the factual determination for this fill material.

3.4 Human Use Characteristics and Anticipated Impacts

Existing and Potential Water Supplies; Water Conservation. We do not have knowledge of any municipal water supply intakes vicinity of the work that would be affected by the project. One well was found in a search conducted by TDEC that covered a one mile radius of the project. The well is located directly across the road from the proposed site, on Emory Rd. and is adjacent to a tributary of the Willow Fork. Recognizing that the use of blasting could pose a potential impact to underground water features, the applicant has committed to having a geotechnical engineer oversee and approve all uses of blasting. TDEC 401 Water Quality Certification **NRS 07.077** requires the applicant to repair any fractures that may divert water flow and provide documentation of those actions should the project proceed.

Water Related Recreation. The stream reach is small and the property is privately owned. The area does not lend itself to public recreation opportunities. Hence, any effect of the proposed project on this characteristic would be minimal.

Aesthetics. NEPA Section 101(b) requires that measures be taken to insure that aesthetically pleasing surroundings be retained for all Americans. The site is located along a busy highway in a suburban area of Knox County, in which land use varies from rural farmland to residential subdivisions and also includes commercial development. The proposed development site is currently used for grazing cattle. The proposed development would require land stripping, excavation, grading, new buildings, roads, parking lots, and other disturbances to the land. Modifications have begun to occur in the site's vicinity due to increased development. The effects on the aesthetics of the surrounding area would be moderate both during and after construction.

Parks, National and Historic Monuments, Wild and Scenic Rivers, Wilderness Areas, Research Sites, Etc. There are no parks, historic monuments, rivers or wilderness areas in the immediate area that will be affected.

Traffic/Transportation Patterns. The proposed action would bring increased traffic to the local area. The operation would continue to utilize its current access road to the facility.

Energy Consumption or Generation. The project would not result in a substantial increase in energy consumption nor generation of energy.

Navigation. Navigation would not be impacted by the project since stream impacts are limited to non-navigable reaches of waters of the U.S.

Safety. The activity is not anticipated to affect public safety.

Air Quality. The proposed action would result in only minimal indirect emissions. Resulting direct pollutant emissions (those from construction activities) would also be minimal. A conformity applicability determination pursuant to regulation implementing Section 176 of the Clean Air Act has been made in Section 5.3.

Noise. Machinery utilized for the installation and mitigation activities would result in a temporary and unavoidable increase in ambient noise levels. Also, the increased traffic and human activity would produce a minor increase in noise levels over the long-term. Noise levels at the site are already substantial during most hours due to the volume of passing traffic along State Hwy. 33 (Maynardville Hwy.). The proposed project will not conflict with any applicable noise restrictions imposed by regulatory agencies.

Historic Properties. There are no known historic or archaeological sites that would be adversely affected by the proposed work. The Corps determined that no historic properties listed on or eligible for listing on the National Register of Historic Places would be affected by the landfill expansion project. The THC concurred via letter dated 5 July 2007.

Land Use Classification. The project site is currently zoned by Knox County (TN) as Planned Commercial. Although most of the land in the immediate area is zoned for residential or agricultural use, the site is adjacent to several other tracts of land that are under commercial zoning as well. This project would be consistent with current land use practices in the area.

Economics. The jobs supplied by this operation and the service provided to the local community would be beneficial to the local, state, and national economy.

Prime and Unique Farmland (7 CFR Part 658). Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Unique farmland is defined as land other than prime farmland that is used for the production of specific high-value food and fiber crops...such as, citrus, tree nuts, olives, cranberries, fruits, and vegetables. Additional farmland of statewide or local importance is land identified by state or local agencies for agricultural use, but not of national significance. The proposal would not impact any prime or unique farmland.

Food and Fiber Production. The previous owner did contribute to food production through the operation of a cattle farm on the area adjacent to the impact and mitigation reaches. The proposal would not result in a substantial loss of food production.

Mineral Needs. The proposal would not supply any local, state, and/or national mineral needs.

Consideration of Private Property. Corps regulations at 33 CFR 320.4(g) state that authorization of work by the DA does not convey any property rights, either in real estate or material of any exclusive privileges. Furthermore, a DA permit does not authorize any injury to property or invasion of right or any infringement of federal, state, or local laws or regulation.

After notification during the public notice review period, there were no objections from adjacent landowners. We are satisfied that private property rights have been adequately considered and are not an issue. Property proposed to be impacted by the project and the mitigation work has been secured by the applicant.

Other. No other issues were raised.

3.5 Cumulative and Secondary Impacts. Cumulative effects are broadly defined by the Council on Environmental Quality (CEQ) guidelines for implementing NEPA as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions” (40 CFR 1508.7). An additional component of cumulative effects are the underlying adverse effects that may compound one another, creating net negative effects of a different and potentially more intense nature referred to as synergism. Cumulative effects within or among watersheds can cause unacceptable changes to downstream aquatic, terrestrial, and human resources.

It is also necessary to consider the secondary effects of activities associated with the construction of a proposed project. Secondary effects are actions which, in this case, are conducted in support of establishing or operating a facility, and are defined by CEQ as those that are “caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable” (40 CFR 1508.80).

This proposal would result in the permanent relocation of 2,319 feet of perennial stream and 176 feet of intermittent stream channel. Also, .60 acres of wetlands would be filled and replaced on the project site at a 3:1 ratio. It would occur within the Tennessee River – Ft. Loudon Lake Hydrologic Unit Code (06010201). The length of impacted stream constitutes only a small fraction of the available stream length in this basin.

While there is uncertainty over what the potential impacts of future projects may be, available information suggests that overall aquatic resource impacts associated with the proposed action and others in the general area, are minimal.

Because of opportunity to review the aquatic impacts associated with this and future proposals, the ability to add special conditions to DA permits, the national permitting goals requirements for no net loss to wetlands, and the requirement for stream mitigation measures, cumulative effects to Willow Fork and downstream drainage areas would be substantially reduced or avoided. Special conditions (described in this document) would help to ensure that the cumulative and secondary effects would be minor.

4.0 Alternatives

4.1 Introduction. This section discusses alternatives as required by 33 CFR 320.4(a)(2) and 40 CFR 230.10. The alternatives that were given consideration are listed in the following section. Under Section 404(b)(1) Guidelines, the applicant's proposed design was determined to be the least environmentally damaging, reasonable, and practicable alternative and is therefore being chosen. All practicable alternatives that are available and capable of being completed after taking into consideration cost, existing technology, environmental consequences, and logistics in light of overall project purposes have been examined in

accordance with 40 CFR 230.3(q).

4.2 No Action Alternative. The No Action Alternative would result from a permit denial or withdrawal. The alternative is not considered identical to existing or baseline conditions of the affected environment. This option would result in no direct impact to the aquatic resources as a result of the proposed stream relocation but also would not provide employment and economic benefits for the local community. The 2,319 reach of Willow Fork, as well as the 176 feet of ephemeral stream would remain; although a surrounding area would likely be considered for retail development which could have an equal or greater impact on the local watershed. This alternative is not considered a viable alternative because it does not meet the present or future needs of the applicant and community.

4.3 Location Alternative. The applicant recognized the need to avoid and minimize discharges of fill material into waters of the U.S. when they designed the project. As such, three alternative sites, that were deemed to have suitable traffic flow, were considered before selecting the current project location. The first site (Site A) is located directly across Maynardsville Hwy. from the current project site. Development of this site would result in significant impacts to the stream channel and wetlands along Mill Branch, a tributary of Willow Fork. The second site (Site B) is located approximately one mile southwest of the current site, also on Maynardsville Hwy. The development of Site B would also result in substantial impacts to Mill Branch. The third alternative site (Site C) is located approximately 1.75 miles southwest of the current site at the junction of Norris Parkway and Maynardsville Pike. Development of Site C would involve impacts to Beaver Creek, a downstream tributary of Willow Fork and Mill Branch. We feel that development to any of these three alternative sites would result in impacts to waters of the United States to a similar or greater degree than the Applicant's Proposed Action.

4.4 Reconfiguration Alternative. The applicant submitted two on-site reconfiguration alternatives, as part of a response to public comments, on 7 September 2007. In the first reconfiguration alternative, "Plan B", the outparcel buildings originally proposed have been eliminated and much of the parking areas for the remaining commercial outlets have been moved to the other side of Hwy. 33 in order to avoid Willow Fork and the adjacent wetlands. The second reconfiguration alternative, "Plan C", includes the outparcel buildings but eliminates much of the required parking space for the retail outlets. The remaining parking spaces would be across Hwy. 33, similar to "Plan B". Due to the minimal impacts and proposed mitigation which adequately offsets these impacts, further consideration of alternatives is not warranted.

4.5 Proposed action. The applicant proposed design was developed following coordination with both the Corps and TDEC. Minor impacts and a temporary loss of perennial stream channel, intermittent stream channel, and wetlands would occur but would be compensated for per the applicant's proposed mitigation plan. The community would benefit from the creation of new employment opportunities.

4.6 Conclusion. An analysis of alternatives has been conducted. The no-action alternate did not meet the present or future needs of the applicant or the community. Both reconfiguration plans of the retail outlet design were eliminated from consideration because the location of parking across State Highway 33 would create an unreasonable safety hazard to the public. We have determined that the least environmentally damaging practicable alternative is the applicant's preferred alternative which satisfies the overall project purpose and minimizes long-term, adverse environmental effects to the extent possible. The applicant proposes to mitigate

for the impacted reaches of stream and to mitigate wetlands at a 3:1 ratio in an area that has a high probability of success.

5.0 Findings.

5.1 Consideration of Public Comments. Comments were received from the TWRA, THC, USFWS, and individual letters from two Knox County (TN) Commissioners. The comments were evaluated for consideration of the permit decision and addition of permit conditions. The comments resulted in additional correspondence with the applicant as well as subsequent information being furnished for our review. All comments were satisfactorily addressed.

5.2 Public Hearing Determination. A request for a public hearing was not received.

5.3 Clean Air Act General Conformity Rule Review. The proposed project has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit will not exceed de-minimus levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps continuing program responsibility, and cannot be practicably controlled by the Corps, and, for these reasons, a conformity determination is not required for a permit.

5.4 Appropriate Mitigation. The applicant developed a plan to provide compensatory mitigation for impacted stream reach and affected wetland areas. Mitigation would involve the establishment of 2,530 feet of channel using natural channel design across the back side of the property. Mitigation for the impacted wetlands would involve the on-site creation of 1.81 acres of wetlands in the floodplain of the newly relocated Willow Fork Channel. This would be a mitigation ratio of 3:1 since the original wetland was 0.60 acres. There is also a monitoring plan in place to ensure success of the new stream and wetlands.

The mitigation measures as well as the permit conditions identified in Section 5.8 are necessary to comply with federal law while affording appropriate and practicable environmental protection. Implementation of the mitigation measures in conjunction with conditioning of the permit would minimize impacts to acceptable levels. The permit would be conditioned to require the mitigation identified for the project. Despite the objections of USFWS and TWRA, we concur with the TDEC determination that proposed mitigation is adequate.

5.5 Section 404(b)(1) Determination. Section 230.10 requires that the discharge meet certain restrictions in order to be authorized. The project is to be evaluated and comply with the following restrictions: (a) there would be no other practicable alternatives to the proposal that would have less adverse impacts on the aquatic environment; (b) that the discharge would not adversely impact water quality, violate State water quality standards, toxic effluent standards, or jeopardize the continued existence of a threatened or endangered species as identified under the Endangered Species Act; (c) the discharge would not cause or contribute to the significant degradation of waters of the U.S.; and (d) the project would be designed in such a manner as to minimize to the extent possible the adverse impacts on the aquatic environment. Evaluation of the guidelines is attached to this document as Appendix E. Based on the probable impacts addressed above, compliance with the restrictions, and all other information concerning the fill materials to be used, the proposed work complies with the Guidelines and the intent of Section 404(b)(1) of the CWA.

5.6 Water Quality Certification. TDEC issued Graham Corporation water quality certification (NRS 07.077) for the proposed project on 25 September 2007. The certification is attached as Appendix F.

5.7 Environmental Justice. Executive Order 12898, Environmental Justice requires federal projects to not disproportionately impact low-income or minority populations. The project will not result in changes in neighborhood or community cohesion or split neighborhoods. It will not impact special groups such as handicapped, minorities, or elderly. The project would provide jobs and economic benefit to the local community for the foreseeable future. No one identifying as a low-income person indicated any objection to the proposal. Therefore, the requirements and provisions of EO 12898 have been met.

5.8 Permit Condition Consideration. The following permit conditions, when applicable, are typically included in most DA permits, and are necessary to comply with federal law, while affording appropriate and practicable environmental protection:

- a. The work must be performed in accordance with the site plans and mitigation plans attached to the permit and the information submitted in support of the DA permit application. A copy of the permit must be available at the site and all contractors must abide by the permit conditions. The applicant must certify that the work authorized under the permit and the required mitigation was done in accordance with the DA authorization upon completion of the permitted and mitigation work. Justification: To minimize permit noncompliance [33 CFR 326.4(d)].
- b. An erosion and sediment control program must be implemented and maintained for the life of the project. Disturbance to surrounding surface areas shall be minimized to the extent practicable. Disturbed areas shall be properly seeded or otherwise stabilized as soon as practicable to minimize sedimentation into waters of the U.S. Justification: To minimize impacts on water quality and the aquatic environment (environmental protection).
- c. Excess materials associated with the project or mitigation shall be disposed of in an upland area. No material shall be disposed of in waters of the U.S. except for the filling authorized by the permit. Justification: To minimize impacts on water quality and the aquatic environment (environmental protection).
- d. The permittee must mitigate impacted stream reaches in a timely manner, concurrent with the permitted activity as designated in the mitigation plan. Justification: To minimize temporal loss to the aquatic environment and compensate for aquatic impacts (environmental protection).
- e. 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. The restrictive covenant shall protect in perpetuity the ecological values of the mitigation site. Justification: To reduce the potential for failure of the mitigation effort (environmental protection).

f. This permit and 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 this office within 30 days of recording. Justification: To reduce the potential for failure of the mitigation effort (environmental protection).

g. The permittee must provide annual monitoring and assessment reports to the U. S. Army Corps of Engineers, Nashville District for review under the guidelines of Regulatory Guidance Letter No. 06-03. Mitigation efforts shall be monitored for a minimum of five years after the completion of the mitigation work to ensure that proper hydrologic conditions and sufficient vegetation have established. The reports shall provide the status of the mitigation work and include photo documentation of the stream segments. Corrective measures shall be suggested and submitted with the monitoring reports if the mitigation fails to meet success criteria. After coordination with the Corps, corrective measures shall be implemented to eliminate deficiencies. Justification: To reduce the potential for failure of the mitigation effort (environmental protection).

5.9 Findings of No Significant Impact. Based on a full consideration of the EA, information obtained from cooperating federal and state agencies, and the comments from the public, I have concluded that issuance or denial of the requested permit would not constitute a major federal action that would significantly affect the quality of the human environment. This constitutes a Findings of No Significant Impact (FONSI); therefore, the preparation of an Environmental Impact Statement is not required. This FONSI was prepared in accordance with paragraph 7a of Appendix B, 33 CFR 325 dated 3 February 1988 (effective 4 March 1988).

5.10 Public Interest Considerations.

a. **The relative extent of the public and private need for the proposed work.** The public interest rests with the local employment and economic benefits that would be created with the development of a retail outlet. The private need rests with the potential success of this private enterprise profiting from the sale or lease of the developed land to retail businesses.

b. **The practicability of using reasonable alternative locations to accomplish the objective of the proposed action.** As described in Section 4, a review of alternative actions was performed. Onsite reconfigurations to avoid the impact reach of stream were considered but not deemed to be practicable alternatives. Offsite alternatives were evaluated but none were found in this market area that were clearly superior to the current proposal.

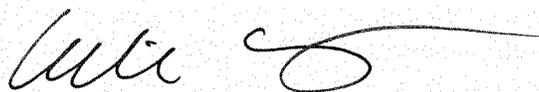
c. **The extent and permanence of the beneficial and/or detrimental effects the proposed work may have on the public and private uses to which the area is suited.** The permit area contains waters of the U.S. that provide "goods and services" to the public through ecological functions. These ecological functions would be lost along Willow Fork and adjacent wetlands as a result of this project. However, the loss of these functions would be adequately replaced with successful implementation of the proposed stream and wetland mitigation plan.

5.11 Public Interest Determination. I have reviewed the application, responses to the PN,

and the Environmental Assessment. The "Proposed Action with Additional Modifications and/or Special Conditions" would only result in relatively minor environmental and socioeconomic impacts. Graham Corporation has offered appropriate on-site mitigation for wetland and stream loss impacts. The proposal would provide substantial socioeconomic benefits to the applicant and public while not resulting in substantial environmental impacts. Having weighed the potential benefits that may be accrued against the reasonably foreseeable detrimental effects, I conclude that permit issuance would not be contrary to the public interest.

FOR THE COMMANDER:

15 December 2007



William L. James
Chief, Eastern Regulatory Section
Operations Division