DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
1590 ADAMSON PARKWAY, SUITE 200
MORROW, GEORGIA 30260-1777

FEB 28 2011

REPLY TO
ATTENTION OF

Regulatory Division
SAS-2001-02070

JOINT PUBLIC NOTICE
Savannah District/State of Georgia

The Savannah District has received an application for a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), as follows:

Application Number: SAS-2001-02070

Applicant: Mr. Billy Malone
Dekalb County Public Works Department
Sanitation Division
3720 Leroy Scott Drive
Decatur, Georgia 30032

Agent: Mr. J. Andrew Whorton
Geosyntec Consultants
Project Ecologist
80 Shades Crest Road
Birmingham, Alabama 35226

Location of Proposed Work: The project site is located at (Latitude 33.6583, Longitude -84.2703), 420 Clevemont Road, in the City of Ellenwood, in DeKalb County, Georgia.

Description of Work Subject to the Jurisdiction of the U.S. Army Corps of Engineers:
DeKalb County Seminole Road Landfill began operation in 1977, receiving solid waste in Phase 1 and Phase 2 cells. The initial cells were officially closed in 2012. On August 22, 2003 DeKalb County Department of Public Works received US Army Corps of Engineers (USACE) Permit No. 2001-02070 to fill 4,404 linear feet of stream bed and 0.01 acres of wetland for the expansion of the landfill (Phase 3 cells). The Phase 3 cells remain active today and continue to receive waste.

As a requirement of the USACE permit for development of the Phase 3 cells, permittee-responsible on-site compensatory mitigation areas including a 0.8-acre adjacent off-site riparian preservation mitigation area were established to mitigate for impacts to on-site resources. The location and extent of the on-site mitigation areas

(totaling 148.85 acres) are depicted on Figure 1 of the attached "Final Revised Mitigation Plan" dated September 3, 2003, and prepared by Wetland & Ecological Consultants, LLC. Restrictive covenants were established and filed for the on-site and off-site mitigation areas by DeKalb County, and monitoring of the mitigation areas began in 2004. Monitoring was successfully completed in 2009, fulfilling mitigation responsibilities for the permit.

As shown on Figure 1 of the 2003 Final Revised Mitigation Plan, multiple "utility crossing" corridors were included within the overall permitted mitigation area to account for existing stream crossings for roadways and utilities. The proposed area of modification to the restrictive covenant boundary is located at the northernmost "utility crossing" in Mitigation Area 6 (Riparian Preservation) along Stream 8 (refer to Figure 1 of 2003 Final Revised Mitigation Plan and Exhibit 1). Hereinafter, this crossing is referred to as Stream Crossing #1 and Stream 8 is referred to as North Creek.

For reference, Mitigation Area 6 provided stream/riparian preservation credits utilizing a credit factor of 0.88 per linear foot of stream. Mitigation Area 6 included a total of 2,810 linear feet of stream and generated 2,472.8 compensatory stream mitigation credits (USACE Permit No. 2001-02070).

Stream Crossing #1 was a historical (pre-existing) gravel road that traversed the property prior to the permitted project. The original crossing consisted of a multi-barrel corrugated metal pipe (CMP) culvert without headwalls. The restrictive covenant boundary at this crossing provided for an approximately 50-foot wide area to accommodate the existing gravel road and its use by the landfill.

As a result of the September 2009 storm event (an approximately 200-year return interval for this area of DeKalb County), the CMP stream crossing (including approaching road) described above was completely washed out leaving little trace of the crossing. After the event the CMP pipes were later retrieved some distance downstream on North Creek. The county received federal funding for replacement of the culverts, and a triple (3) 48-inch, reinforced concrete pipe (RCP) culvert crossing was installed in late Fall of 2009 to early Spring of 2010 at the same approximate location as the previous crossing (Exhibit 1). The new culvert included construction of concrete headwalls and roadway/embankment protection for additional support from future storm events. The replacement culvert was also slightly longer in length in comparison to the original culvert crossing. Additionally, DeKalb County built an access ramp on the upstream side of Stream Crossing #1 that extended to the edge of the stream bank to obtain water for dust abatement.

Dekalb County Public Works Department discovered that the footprint for the rebuilt culvert crossing and a corner of the ramp were occupying a small portion (approximately 0.11 acre) of Mitigation Area 6, Stream Crossing #1 (Exhibit 1). Since this discovery DeKalb County has verified the remaining restrictive covenant area boundaries and has placed additional buffer stakes to better define these areas to

insure no activity occurs within them. As for Stream Crossing #1, DeKalb County is proposing to retain the ramp and rebuilt culvert crossing in place considering existing site conditions, DeKalb County is requesting a modification of the restrictive covenant boundary (Exhibit 2). The proposed modification to the restrictive covenant boundary to account for the rebuilt road crossing footprint will require removal of approximately 50 linear feet of Mitigation Area 6 stream (North Creek) and its associated buffer preservation (approximately 0.37 acre).

DeKalb County is aware that additional mitigation must be provided to compensate for the removal of approximately 50 linear feet of Mitigation Area 6 stream (North Creek) and buffer preservation (approximately 0.37 acre). DeKalb County is also aware that revisions to the restrictive covenant are required and that the affected area may require either a modification to the existing USACE Permit No. 2001-02070 or an additional permit action.

To mitigate for the loss of mitigation area (e.g., aquatic resources and associated buffers) and the extended culvert footprint, DeKalb County proposes to purchase 488 stream mitigation credits from an approved compensatory mitigation bank within the same watershed proposed for mitigation to modify the restrictive covenant boundary.

BACKGROUND

This Joint Public Notice announces a request for authorizations from both the U.S. Army Corps of Engineers and the State of Georgia. The applicant's proposed work may also require local governmental approval.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of 30 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required for a Federal Permit to conduct activity in, on, or adjacent to the waters of the State of Georgia. Copies of the application and supporting documents relative to a specific application will be available for review and copying at the office of the Georgia Department of Natural Resources, Environmental Protection Division, Water Protection Branch, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, during regular office hours. A copier machine is available for public use at a charge of 25 cents per page. Any person who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of application in writing and state the reasons or basis of objections or request for a hearing. The application can be reviewed in the Savannah District, US Army Corps of Engineers, Regulatory Division, 1590 Adamson Parkway, Suite 200 Morrow, Georgia 30260-1777.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit or other appropriate instrument.

US ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army Permit.

Cultural Resources Assessment: Review of the latest published version of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion are located at the site or in the area affected by the proposed work. Presently unknown archaeological, scientific, prehistorical or historical data may be located at the site and could be affected by the proposed work.

Endangered Species: Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), we request information from the U.S. Department of the Interior, Fish and Wildlife Service, the U.S. Department of Commerce, the National Oceanic and Atmospheric Administration, and the National Marine Fisheries Service; or, any other interested party, on whether any species listed or proposed for listing may be present in the area.

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

Consideration of Public Comments: The U.S. Army Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are

also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Application of Section 404(b)(1) Guidelines: The proposed activity involves the discharge of dredged or fill material into the waters of the United States. The Savannah District's evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act.

Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army Permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

Comment Period: Anyone wishing to comment on this application for a Department of the Army Permit should submit comments in writing to the Commander, U.S. Army Corps of Engineers, Savannah District, Attention: Maya B. Odeh-Adimah, 1590 Adamson Parkway, Suite 200, Morrow, Georgia 30260-1777, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments.

If you have any further questions concerning this matter, please contact Maya B. Odeh-Adimah, Regulatory Specialist, Piedmont Branch at 678-422-5731.

Enclosures
1. Alternative Analysis for Seminole Road Landfill Restrictive Covenant
2. Figure 1, Stream and Wetland Mitigation Area Map
3. Exhibit 1, Existing Conditions Mitigation Area and Restrictive Covenant
4. Exhibit 2, Proposed Modifications to Mitigation Area and Restrictive Covenant

DeKalb County, Georgia

Public Works Department
Sanitation Division
404-294-2927

3720 Leroy Scott Drive, Decatur, Georgia 30032

CERTIFIED MAIL
7004 1160 0006 7101 8420

January 17, 2014

Ms. Maya B. Odeh-Adimah
Regulatory Division, Piedmont Branch
U.S. Army Corps of Engineers – Savannah District
1590 Adamson Parkway, Suite 200
Morrow, Georgia 30260-1777

RE: USACE Permit No. 2001-02070
Alternatives Analysis for Restrictive Covenant Modification Request
Seminole Road Landfill
Ellenwood, Georgia

Dear Ms. Odeh-Adimah:

DeKalb County Sanitation Division (Sanitation) is requesting to modify the Declarations of Covenants and Restrictions (restrictive covenants) associated with Seminole Road Landfill (USACE No. 2001-02070). On December 20, 2013, you contacted the County's approved Consultant Geosyntec regarding the initial modification request submitted to your office on December 10, 2013 via Certified Mail (7004 1160 0006 7101 8437) and requested an Alternatives Analysis for the proposed modification to complete the original submittal and so that a public notice for the modification can be issued. For your convenience, we are including portions of the originally submitted letter to provide context and are including the requested Section 404(b)(1) Alternatives Analysis within.

1.0 PROJECT AND PERMIT HISTORY

DeKalb County Seminole Road Landfill (**Figure 1**) began operation in 1977, receiving solid waste in Phase 1 and Phase 2 / 2A and most recently Phase 3. These initial phases except phase 3 were officially closed in 2012. On August 22, 2003 DeKalb County Department of Public Works received USACE Permit No. 2001-02070 (**Attachment A**) to fill 4,404 linear feet of stream bed and 0.01 acres of wetland for the expansion of the landfill (e.g., Phase 3 expansion). Phase 3 remains active today and continues to receive waste.

As a requirement of the USACE permit for development of Phase 3, permittee-responsible on-site compensatory mitigation (**Attachment B**) areas including a 0.8-acre adjacent off-site riparian preservation mitigation area were established to mitigate for impacts to on-site resources. The location and extent of the on-site mitigation areas (totaling 148.85 acres) are depicted on Figure 1 of the attached "Final Revised Mitigation Plan" dated September 3, 2003, and prepared by Wetland & Ecological Consultants, LLC (**Attachment B**). Restrictive covenants were established and filed for the on-site and off-site mitigation areas (**Attachment A**) by DeKalb County, and monitoring of the mitigation areas began in 2004. Monitoring was successfully completed in 2009, fulfilling mitigation responsibilities for the permit.

As part of Seminole Landfill operations, Sanitation is actively mining borrow material in uplands around the landfill disposal phases to obtain required structural fill and intermediate and side slope cover materials. Over the years, Sanitation has proactively acquired available adjacent lands to utilize as either additional landfill buffer from surrounding residential developments and/or for use as borrow material sites. One such property is the Johnson Property, located to the west of the Landfill and west of an existing road/utility crossing on Stream 8 (North Creek), referred to as Stream Utility Crossing #1 below (**Figure 2**). Sanitation acquired the Johnson Property prior to 2001. The Property was initially permitted as a borrow

source in 2006 and active borrow material mining began in 2012. The Johnson Property is currently the only landfill property being actively mined for borrow material.

2.0 EXISTING CONDITIONS

Stream Utility Crossing #1 (previously, Seminole Road) has been the historical connection between the landfill and the Johnson Property prior to the Johnson Property acquisition (Figure 3). Based on historic aerial imagery and other documentation, this road was constructed prior to the currently permitted landfill development. No original construction date is available, but the original crossing consisted of a multi-barrel corrugated metal pipe (CMP) culvert without headwalls. The restrictive covenant boundary, which was surveyed and recorded following USACE permit approval, included an approximately 50-foot wide corridor termed a "utility crossing" to accommodate the existing gravel road and for other utility crossing needs. The inclusion of the 50-foot wide utility crossing allowed for its continued use by the landfill to access the Johnson Property and vice versa.

As a result of the well-documented September 2009 storm event (an approximately 200-year return interval for this area of DeKalb County), the CMP stream crossing described above was completely washed out including all the structural fill and drainage pipes especially to the north. The CMP (2 - 36" and one 30") pipes were later retrieved some distance downstream. Sanitation received federal funding for replacement of these culverts, and a triple (3) 48-inch, reinforced concrete pipe (RCP) was installed in late Fall of 2009 to early Spring of 2010 at the same approximate location as the previous crossing (**Attachment C, Exhibit 1**). The new culvert included construction of concrete headwalls and roadway/embankment protection for additional support from future storm events. The replacement culvert was also slightly longer in length in comparison to the original culvert crossing and the new pipes included the addition of headwalls. Additionally, Sanitation built an access ramp on the upstream side of Stream Utility Crossing #1 that extended to the edge of the stream bank to obtain water for dust abatement.

During a recent survey (November 2013) of Stream Utility Crossing #1 (Figure 3), it was discovered that the footprint for the rebuilt culvert crossing and the ramp were occupying a small portion (approximately 0.11 acre/50 linear feet) of Mitigation Area 6. Based on the survey and existing site conditions, which revealed disturbance within the restrictive covenant boundary, Sanitation is requesting to amend the restrictive covenant (**Attachment C, Exhibit 2**). This request is supported by the following Alternatives Analysis, which provides the purpose and need for the utility crossing and evaluates potential alternatives. Finally, Sanitation understands that additional compensatory mitigation will be required and is addressed in Section 5.0 below.

3.0 ALTERNATIVES ANALYSIS

Per the USACE's January 2004 "Guidance for Amendments to the Declaration of Covenants and Restrictions", the following discussion presents Sanitation's Purpose, Need, and Alternatives Analysis for requiring an amendment to the restrictive covenants to account for the recently identified disturbance described above.

3.1 PURPOSE

The purpose of this request is to amend the Declarations of Covenants and Restrictions associated with the Seminole Road Landfill located in DeKalb County, Georgia. The request is necessary in order to expand a utility crossing footprint so that long-term operational activities of the landfill may continue in the most practicable and feasible manner possible, while also being the least environmentally damaging project alternative.

3.2 NEED

Overall, the continued operations of the landfill are dependent on a multi-purpose, utility crossing for the daily operations and maintenance of the Seminole Road Landfill. A practical and feasible means of access for transporting borrow materials from borrow mining areas west of North Creek to the landfill disposal phases using internal landfill roads is necessary for landfill operations. In addition, Sanitation requires a practical and feasible location to obtain water during drought events to

supplement dust suppression activities associated with landfill activities in compliance with Sanitation's Title V Operating Permit (Permit #4953-089-0299-V-03-0). Finally, Sanitation requires a suitable location for drainage infrastructure to accommodate drainage pipes that convey stormwater overflow from the recently developed borrow sites. This drainage system is necessary to prevent widespread flooding of the borrow sites during significant rain events, which could contribute to increased site erosion and sedimentation while also halting landfill operation activities.

3.3 ALTERNATIVES DISCUSSION

Provided below is a discussion of various alternative options for the required utility crossing, including the no-build alternative, an evaluation of other potential sites for the utility crossing, the preferred alternative, and a discussion of avoidance/minimization measures proposed for the preferred alternative.

3.3.1 No-Build Alternative

The No-Build Alternative would require that Sanitation abandon the Stream Utility Crossing #1. This alternative requires that a suitable, utility/road corridor that meets the project's purpose and need currently exists. Since the Johnson Property is currently the only active borrow mining site for the landfill, there is no existing alternative internal route to provide the transport of borrow material to the disposal phases (located east of North Creek). Further, the abandoning of the crossing requires an alternative location for obtaining water for dust suppression in drought conditions and a new location for proposed stormwater drainage infrastructure associated with managing borrow site stormwater.

Since no other internal roads exist that connect the Johnson Property to the landfill disposal phases east of North Creek (and its associated riparian buffer- which is largely protected under restrictive covenant), the No-Build Alternative necessitates that Sanitation relocate borrow material transport routes to Ward Lake Road and possibly Linecrest Road, which are public roads (**Figure 2**). Transporting material on public roads often results in nuisances to neighboring communities due to dirt on roads, increased traffic, and truck-traffic hazards. The use of public roads would also cause logistical and cost issues because the transport of borrow material on public roads requires tandem trucks as opposed to the 40-ton off-road trucks currently used at the Landfill. The requirement to obtain a different mode of transport on public roads hinders the economic feasibility of the Project.

The No-Build Alternative is also much more costly in terms of transporting the material. The existing Stream Utility Crossing #1 (Preferred Site Alternative) is approximately 0.52 mile from the center location of the borrow sites to the westernmost edge of the disposal phases. Should Sanitation select the No-Build Alternative, the transport route increases to 1.67 miles, more than three times the distance of the Preferred Alternative (replacing Stream Utility Crossing #1). Based on this analysis, the No-Build Alternative would roughly triple the fuel and labor costs.

Further, the No-Build Alternative would require that water access to North Creek (obtained for dust abatement during periods of drought) be abandoned at this location. North Creek is the only suitable, non-potable water source within proximity to landfill activities. Due to the lack of road access and environmental constraints on Conley Creek and its associated floodplain, no other sources of non-potable water are available in proximity to landfill operations. The nearest source is Ward Lake, which requires traversing a public road to gain access. The Preferred Alternative (discussed in Section 3.3.3 below) is centrally located; selecting the No-Build Alternative would require water access from an off-site source, which is less practical. While potable water is accessible at the landfill, Sanitation, in an attempt to minimize/eliminate the use of potable water for dust suppression activities at the direction of the DeKalb Board of Commissioners, has committed to avoid using drinking water sources for dust suppression. This commitment is based on relatively recent drought conditions in metropolitan Atlanta that triggered the need for municipalities and their various departments to identify ways of reducing demand on drinking water sources. Drinking water sources are also much more costly and not practical for the purposes of dust suppression.

Finally, the No-Build Alternative would abandon the proposed placement of borrow site overflow drainage culverts within proximity to the Stream Utility Crossing#1. This alternative would not meet one of the project's needs, as no other suitable and practicable location exists without causing additional impacts to other mitigation areas protected under restrictive covenants or requiring significant increases in the length of drainage culvert. Neglecting to build the drainage culvert would cause flooding of the borrow sites without a designated outflow point resulting in potential erosion of adjacent mitigation areas.

Based on the evaluation of the No-Build Alternative above, this alternative does not meet the project purpose/need and would not be as practicable or feasible as the Preferred Alternative.

3.3.2 Stream/Utility Crossing Location Alternatives

Because the No-Build Alternative is not suitable, Sanitation evaluated other stream utility crossing location alternatives to assess whether they may be as practicable and feasible and less environmentally damaging as the Preferred Alternative. Other stream utility crossing locations that meet the project purpose and need are limited on the site. Both the Johnson Property and the Seminole Road Landfill property are bounded by Conley Creek to the north and its associated floodplain and wetlands. Much of this area is under restrictive covenant as part of the landfill's Mitigation Plan (**Figure 3**). Therefore, any new crossing proposed to the north would require substantial impacts to floodplains, wetlands, streams and the restrictive covenants. Further, any route in this direction would be circuitous and require long hauling distances, increased transport costs, and excessive construction costs.

As demonstrated in the No-Build Alternative, proposing an alternative route to the south would require utilizing Ward Lake Road and possibly Linecrest Road, which was evaluated above as a route that is too costly, less practicable, and does not meet certain components of the project's purpose and need. Additional stream utility crossings along North Creek were also considered; however, the majority of North Creek is encumbered by the same restrictive covenants (**Figure 3**). Because of the legal and environmental constraints along other areas of North Creek, only one other potential crossing location is available for consideration. This area is located south of Stream Utility Crossing #1 along the existing power line transmission easement corridor, which runs east/west across the Johnson Property and the Seminole Road Landfill where it crosses North Creek (**Figure 3**).

In terms of proximity, this alternative stream utility crossing location presents a viable alternative. The location of this alternative, however, would also likely require modification to the existing Seminole Road Landfill USACE permit. Both the Preferred Alternative crossing and the alternative stream utility crossing are specifically depicted and discussed within the authorized permit, the main differences are that the alternative stream utility crossing location has no existing road crossing and possess an aerial ductile iron pipe (natural gas pipeline) which restricts the developable area within the already established utility crossing within the final Mitigation Plan (see Figure 1 of **Attachment B**). Constructing a new stream crossing would require impacts to North Creek that likely exceed those described in the Preferred Alternative. This crossing would also further fragment North Creek, reducing its overall functions and values. In addition, the construction of an entirely new crossing would necessitate both new culverts as well as road material for the crossing and their associated approaches (which include considerable elevation changes). Although Alternative Crossing 1 may meet the project purpose and need as a suitable site for the borrow site drainage culvert, this culvert would likely double in length, which increases construction costs. Finally, access to North Creek for water to provide dust suppression would require additional construction costs in establishing a suitable site for trucks to approach North Creek, which causes this alternative to be less feasible than the Preferred Alternative.

3.3.3 Preferred Site Alternative

In submitting the original permit application, Sanitation recognized that the Preferred Alternative Crossing (Stream Utility Crossing #1) location (**Figure 3**) is the best location available for a multi-purpose stream utility crossing in terms of proximity, practicality, and feasibility. This location also represents the least environmentally damaging alternative because of its location within the corridor of an existing crossing possessing internal road access between the landfill and the Johnson Property. The specified location in the original Individual Permit application and Mitigation Plan documents (**Attachment B**) and figures indicate that Sanitation required this crossing for future landfill operations. Consequently, Sanitation proceeded with rebuilding the crossing within the same general footprint as the road/utility crossing that was washed out during the 2009 flood. Selecting the Preferred Site Alternative at Stream Utility Crossing #1 provides for the least damaging environmental alternative while also achieving all of the project's purposes and needs.

While the overall goal was to replace the existing Stream Utility Crossing #1, the repair/rehabilitation of this feature included upgrades to the infrastructure so that it could withstand potential future storm events of similar magnitude. Because the Seminole Road Landfill is dependent upon this crossing for the reasons described above, the replacement crossing included upstream and downstream headwalls as well as riprap protection to minimize erosion along the culvert/headwall abutments. Due to high traffic associated with the regular transport of borrow material from the Johnson Property and future borrow areas to the disposal phases, the crossing was also widened in order to increase hauling capacity and driver/truck safety.

widening allowed for two lanes of traffic which reduced transport time and minimized the possibility of hauling accidents. Stream and buffer impacts associated with this widening, along with the presence of a small access ramp for water access, necessitates the request to amend the restrictive covenant.

The Preferred Site Alternative also provides the most practicable and feasible location to continue obtaining non-potable water for dust abatement during drought years and for location of a borrow area stormwater drainage culvert to allow water to be discharged to North Creek. Amending the restrictive covenant to allow for continued water access (when necessary) facilitates access to water near the center of the site, thus reducing travel time for water trucks to disperse water on dusty haul roads and other surfaces requiring dust suppression. Finally, the drainage culvert will allow the borrow areas to have a designated outflow point to North Creek which will aid in maintaining baseflows for the creek when there is excess water in the borrow pits.

4.0 AVOIDANCE AND MINIMIZATION

The Alternative Analysis for the siting of the utility/road crossing provides the first step in minimizing and/or avoiding impacts to aquatic resources. As described above, the Preferred Alternative identified a site where impacts to the stream and riparian buffer had previously occurred. The replacement of the crossing required only minimal impacts to North Creek and its associated buffer, which were needed for reinforcing the drainage structure and widening the road. Impacts to North Creek and its associated buffer, as a result of achieving the project purpose and need, total to 50 linear feet of stream and 0.11 acre of buffer/mitigation area. Additionally, the location of the crossing allows for minimal slopes so that the crossing footprint width does not extend further than necessary. Due to the nature of the project in constructing/repairing a road/utility crossing, no additional minimization measures were practicable.

5.0 IMPACTS DISCUSSION AND PROPOSED MITIGATION

A review of the Mitigation Plan indicated that the compensatory mitigation offered within the modification area was limited to stream/riparian buffer preservation, comprised of an average minimum buffer width of 66 feet on both the east and west sides of North Creek. The 2000 Standard Operating Procedures (SOP) document was utilized for the permitted mitigation credit calculations to obtain credit values for each proposed mitigation action and location.

Per conversations with the USACE and our understanding of the requirements to resolve this matter, Sanitation is aware that additional mitigation must be provided to compensate for the removal of approximately 50 linear feet of Mitigation Area 6 stream (North Creek) and buffer preservation (approximately 0.37 acre). Sanitation is also aware that an amendment to the restrictive covenant are required and that the affected area may require either a modification to the existing USACE Permit No. 2001-02070 or an additional permit action.

To compensate for the loss of mitigation area (e.g., aquatic resources and associated buffers), Sanitation proposes to purchase mitigation credits from an approved compensatory mitigation bank within the same watershed based. The mitigation credit calculation for the proposed modification follows:

- 44 stream credits are proposed to compensate for the loss of 50 linear feet of the existing Mitigation Area 6 (refer to **Attachment D** for the 2000 SOP credit calculation worksheet). This calculation was determined using a 0.88 credit factor multiplied by 50 linear feet of stream length in the modified mitigation area gives 44 stream credits;

- Mitigation credits for compensation of the rebuilt culvert along North Creek within Mitigation Area 6 (where 50 linear feet of stream impact of culvert, riprap, and headwall occurred outside of the previous road/utility crossing footprint) were calculated using the most recent March 2004 SOP (**Attachment D**). The calculations require a credit factor of 4.0 to be applied per linear foot of impact, thus a credit total of 200 stream credits; and,

Per USACE guidance for amending restrictive covenants, DeKalb County is offering to purchase stream credits at a 2:1 ratio. Combining the mitigation credits generated by the original portion of the mitigation area (44 stream credits)

- and the rebuilt Stream Crossing #1 (200 stream credits) totals 244 streams credits. Applying the 2:1 ratio to the previous total equates to 488 stream credits being proposed for mitigation to modify the restrictive covenant boundary.

6.0 CLOSURE

In summary, the Alternatives Analysis provided an evaluation of stream utility crossing alternatives associated with the request to amend the Declaration of Covenants and Restrictions associated with the Seminole Road Landfill project. As provided in this document, the alternative of amending the restrictive covenant and permanently establishing the road/utility crossing at Stream Utility Crossing #1 was determined to be the Preferred Alternative.

Stream Crossing #1 remains the only on-site/internal access pathway for construction equipment; including heavy off-road dump trucks (40-ton), to transit between the Johnson Property and the landfill to transport borrow material to the disposal phases without the need to utilize public roads. This access pathway/utility corridor significantly reduces time and transport costs (e.g., fuel and labor), as well as eliminating increased traffic on Ward Lake Road and the resulting public safety concerns. The utility crossing further allows its multipurpose objective to provide access to water for dust suppression and placement of necessary infrastructure to manage stormwater on the Johnson Property for the benefit of North Creek.

Finally, in selecting the Preferred Alternative, the proposed amendment to the restrictive covenant boundary will remove approximately 50 linear feet of Mitigation Area 6 stream (North Creek) and its associated buffer preservation (approximately 0.37 acre) along and adjacent to northern and southern portions of the Stream Utility Crossing #1 corridor. Sanitation proposes to purchase 488 stream credits (based on a 2:1 impact to mitigation ratio) from a USACE authorized mitigation bank to mitigate for the impacts associated with the Preferred Alternative.

Sanitation respectfully requests your expeditious review of the information and submittal of the proposed modification for Public Notice at your earliest convenience. If you have any questions concerning this modification request, please call the Sanitation Associate Director, Billy Malone, at (404) 294-292.

Sincerely,

Billy Malone
Associate Director

Attachments: **- Figures**

- Figure 1 – Site Location Map
- Figure 2 – Seminole Road Landfill Property
- Figure 3 – On-Site Mitigation Areas
- Figure 4 – Alternatives Analysis/Environmental Constraints

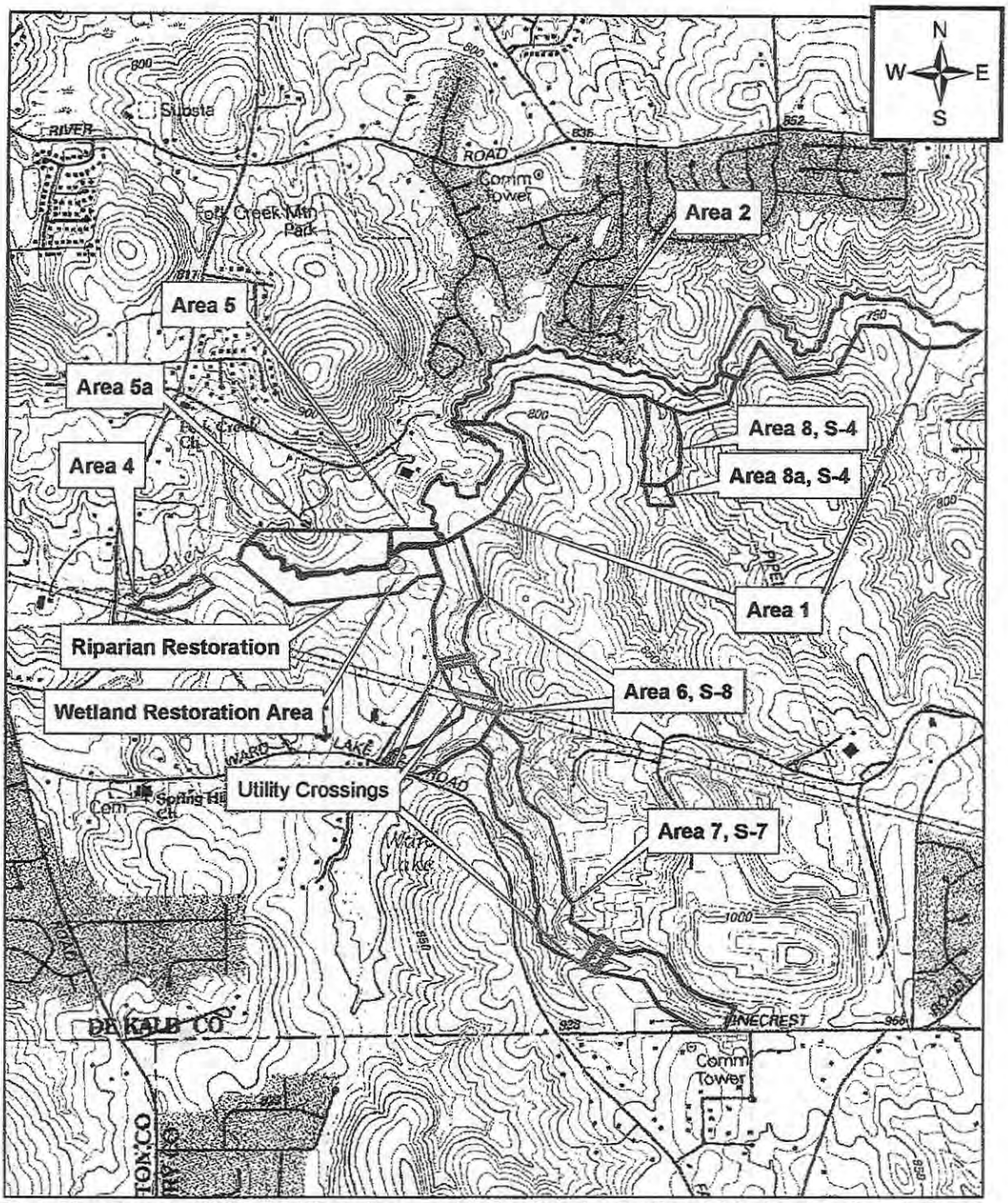
- Attachment A - Original USACE Permit No. 2001-02070 and Restrictive Covenant Documentation

- Attachment B - "Final Revised Mitigation Plan for Seminole Road Municipal Solid Waste Landfill (USACE Permit No. 2001-02070)" dated September 3, 2003 and prepared by Wetland & Ecological Consultants, LLC

- Attachment C - Exhibits for Modification Request:
- Exhibit 1 – Existing Conditions – Mitigation Area and Restrictive Covenants
- Exhibit 2 – Proposed Modifications to Mitigation Area and Restrictive Covenants

- Attachment D - Mitigation Calculation Worksheets:
- Stream Preservation and Relocation Mitigation Credit Worksheet (2000)
- Worksheet 1: Adverse Impact Factors for Riverine Systems Worksheet (2004)

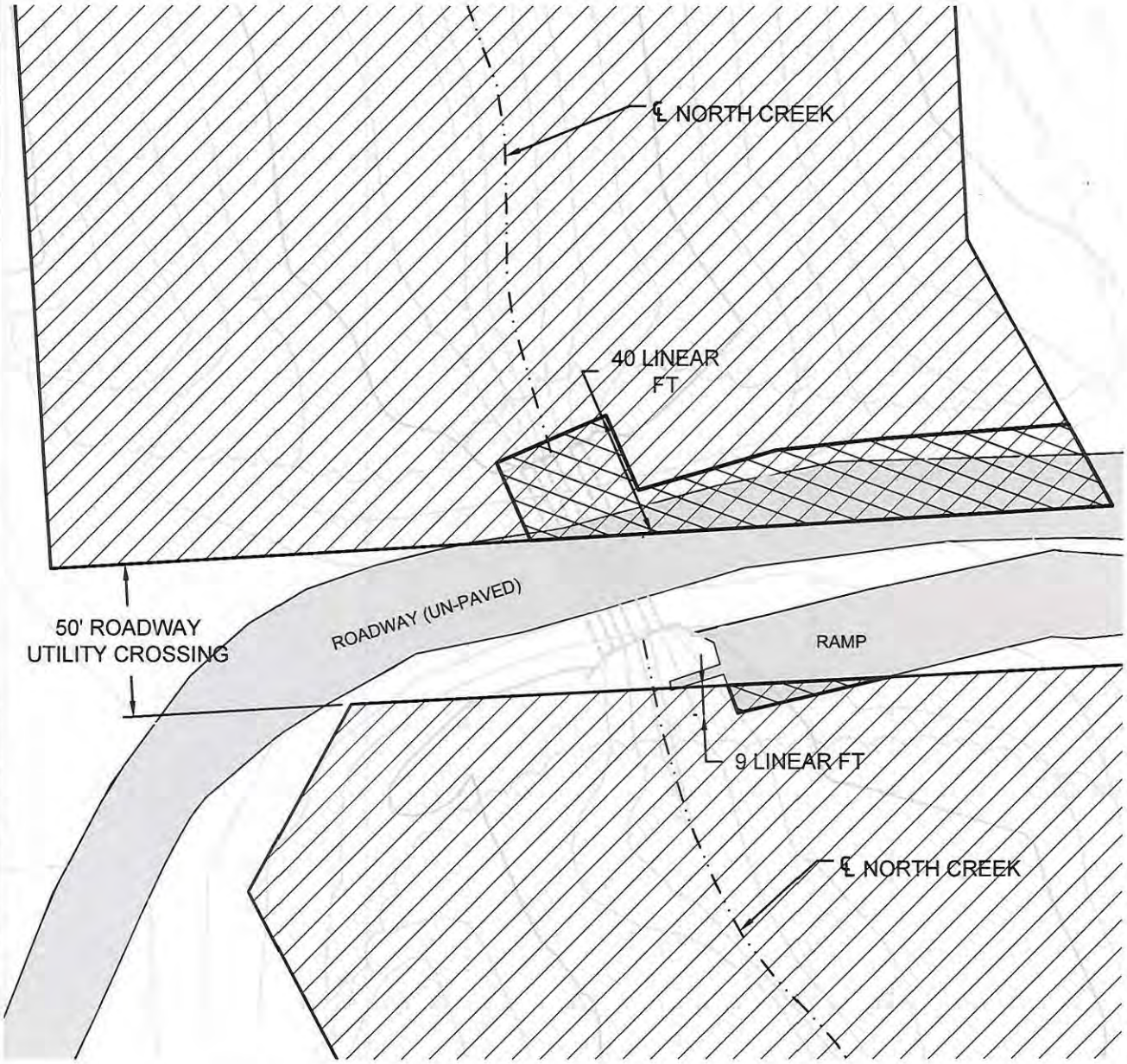
cc: Doug Edwards
Sowmya Bulusu (Geosyntec)
Andy Whorton (Geosyntec)
Tracy Hutchinson
David Vance (Geosyntec)



Base Map Source: USGS 7.5-Minute Topographic Quadrangle: Southeast Atlanta, Georgia 1:20,000

Seminole Road MSW Landfill Stream Mitigation **DeKalb County, Georgia**	**WETLAND & ECOLOGICAL CONSULTANTS, LLC** **Woodstock, Georgia**	**Stream and Wetland Mitigation Area Map** **Figure 1** **WEC Project No. 02-053003**

EXISTING CONDITIONS MITIGATION AREA AND RESTRICTIVE COVENANTS



LEGEND

- MITIGATION AREA AND LIMITS OF RESTRICTIVE COVENANTS (USACE IP # 200102070)
- EXISTING CULVERTS
- EXISTING ROADWAY (PAVED OR UNPAVED)
- APPROXIMATE LIMITS OF MITIGATION AREA 6 DISTURBANCE (0.11 ACRES)

0 50' 100'

SCALE IN FEET

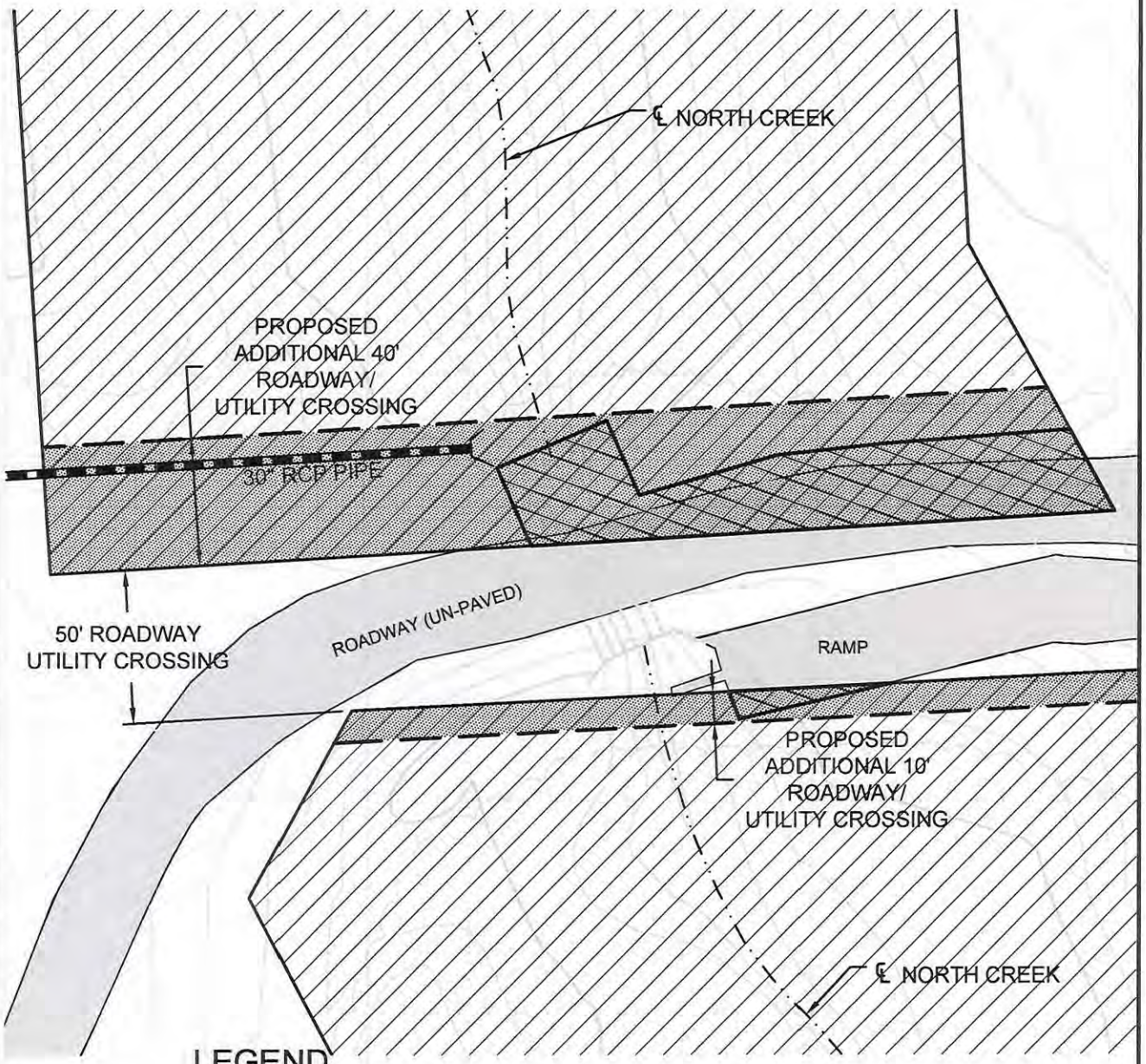
Geosyntec consultants

KENNESAW, GA

DATE:	DEC 2013	SCALE:	AS SHOWN
PROJECT NO.	GD5409.03	FILE NO.	AS SHOWN
DOCUMENT NO.	–	EXHIBIT NO.	1

L:\CADD\D\DEKALB COUNTY LANDFILL\PERMIT\WARD LAKE BORROW AREA\FIGURES\FIGURE 1

PROPOSED MODIFICATIONS TO MITIGATION AREA AND RESTRICTIVE COVENANTS



LEGEND

- PROPOSED AREA TO BE REMOVED FROM RESTRICTIVE COVENANTS (0.37 ACRES)
- APPROXIMATE LIMITS OF MITIGATION AREA 6 DISTURBANCE (0.11 ACRES)
- MITIGATION AREA AND LIMITS OF RESTRICTIVE COVENANTS (USACE IP # 200102070)
- EXISTING CULVERTS
- EXISTING ROADWAY (PAVED OR UNPAVED)

0 50' 100'

SCALE IN FEET

Geosyntec consultants

KENNESAW, GA

DATE:	DEC 2013	SCALE:	AS SHOWN
PROJECT NO.	GD5409.03	FILE NO.	AS SHOWN
DOCUMENT NO.	–	EXHIBIT NO.	2

L:\CADD\D\DEKALB COUNTY LANDFILL\PERMIT\WARD LAKE BORROW AREA\FIGURES\FIGURE 1