



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY DISTRICT, MOBILE**  
**CORPS OF ENGINEERS**  
**P.O. BOX 2288**  
**MOBILE, ALABAMA 36628-0001**

June 5, 2008

REPLY TO:  
Inland Branch  
Regulatory Division  
**Public Notice No. SAM-2007-01549-SVL**

**JOINT PUBLIC NOTICE**  
**U.S. ARMY CORPS OF ENGINEERS**  
**AND**  
**STATE OF ALABAMA**  
**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**Proposed Perry County Landfill Expansion**  
**Shelby County, Alabama**

**TO ALL CONCERNED:** The U.S. Army Corps of Engineers, Mobile District, has received an application for a Department of the Army Permit pursuant to Section 404 of the Clean Water Act (33 USC 1344). This public notice is being distributed to all known interested persons to assist in developing facts on which a decision by the Corps can be based. Please communicate this information to interested parties.

**APPLICANT:** Perry County Associates Landfill (Applicant)  
Route 2 Box 110A  
Uniontown, AL 36786

**AGENT:** Ecological Solutions, Inc. (Ecological)  
Attn: Mr. David Smith  
630 Colonial Park Dr., Suite 200  
Roswell, GA 30075, GA 30075

**LOCATION:** The project site is located on the southern portion of Perry County, east of Uniontown, Alabama. The site is bounded on the north by the Norfolk Southern Railway which runs parallel to U.S. 80 and State Route 1 to the south. According to the 1974 Hydrologic Unit Map of Alabama, the project area is located within the Gulf Unit Code 03150203, of the Middle Alabama River Basin. The site is located at approximately 32° 26.30'N and 87° 26.70'W on the Uniontown East, Alabama, United States Geological Survey (USGS) 7.5-minute topographic map (Figure 2).

**SITE CONDITIONS:** The existing landfill is on an approximately 1,100-acre (ac) tract of land (Parcel I) with the rail spur and associated haul road begin on a 268-ac tract of land (Parcel II) adjacent and generally north of the landfill; combined equal a project area of 1,368-ac. The majority of the project site is former agricultural land consisting primarily of overgrown pastures with sporadic stands of mature trees, surrounded by rural residences.

**HISTORY:** The Perry County Landfill is permitted by the Alabama Department of Environmental Management (ADEM). Jordan, Jones & Goulding, Inc. (JJG) was the original consultant for the design and permitting of a Municipal Solid Waste landfill in Perry County, Alabama. The original site review began in 1999, when JJG, in collaboration with Ecological Solutions, Inc. (Ecological) conducted a wetlands/waters delineation in accordance with the 1987 *U.S. Army Corps of Engineers Wetlands Delineation Manual*. A jurisdictional verification request was submitted to the Mobile District of the U.S. Army Corps of Engineers (USACE) and verification was issued on November 2, 2001 (File # ALJ01-01547-N); it was extended for an additional 5 years on May 13, 2003 (File # ALJ03-

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01547-N). Since the original approval of the landfill design, a rail spur has been permitted to facilitate the delivery of waste from the Norfolk Southern main rail line to the landfill property. The previously permitted rail spur and access road (Permit #SAM-2007-01549-SVL) impacted 552 linear feet (lf) of stream and 0.44 ac of wetland. The impacts were mitigated through the purchase of mitigation credits from an approved mitigation bank.

**WORK:** The currently approved landfill facility was designed to avoid all impacts to jurisdictional areas. However, Ecological’s assessment of the JJG design determined that the construction of LFU 3 would actually impact 687 lf of Stream 8, which is accounted for in this application. Please note that this impact has not occurred. PCA proposes expanding the footprint of LFU 3. To accommodate the permitted waste stream, the rail spur will be widened from the current design of three rail tracks to seven tracks. A secondary access road will be constructed north of Tayloe Creek from the rail unloading area to the disposal areas; general layout is shown on Figure 4. To construct the proposed expansion, impacts to jurisdictional streams cannot be completely avoided. Proposed impacts equate to five streams (Streams 1, 2, 3, 4, and 8) totaling 1,486 linear feet (lf) of intermittent streams and 77 lf of perennial streams; and three wetland areas (Wetlands N, L, and D) totaling 1.10 acres (ac) of impact (Table 4).

Jurisdictional System	Type of System	Latitude and Longitude	Type of Impact	Impact size (ac/lf)
Stream 1	Perennial	Lat 32.4294°N Long 87.4738°W	Access Road Crossing	77 lf
Stream 2	Intermittent	Lat 32.4381°N Long 87.4531°W	Partial piping	658 lf
Stream 3	Intermittent	Lat 32.4272°N Long 87.4731°W	Access Road Crossing	81 lf
Stream 4	Intermittent	Lat 32.4225°N Long 87.4719°W	Access Road Crossing	60 lf
Stream 8	Intermittent	Lat 32.4231°N Long 87.4653°W	Fill	687 lf
Wetlands A, L & N	PFO	Lat 32.4386°N Long 87.4550°W	Fill, Rail Spur	0.78 ac
Wetland D	PFO	Lat 32.4369°N Long 87.4661°W	Fill, Rail Spur	0.32 ac
<b>Total</b>				<b>1,563 lf / 1.10 ac</b>

Because the landfill build out is proposed to occur over an extended period of time, the impacts have been phased so that the actual impacts to jurisdictional areas will not be implemented until they are required for each phase of expansion. The proposed landfill expansion is divided into two phases.

- Phase 1:** includes the expansion of the rail transportation corridor, installation of road crossings to facilitate access to the site, and build out of the current LFU 1 (Figure 9). Impact Area 1 (see Figure 10) shows the impacts associated with the crossing of the unnamed, intermittent tributary (Stream 2) that discharges to Tayloe Creek, and impacts to Wetlands A, L and N adjacent to the unnamed tributary. Expanding the rail transportation corridor will impact approximately 658 lf of Stream 2, and will require fill material to be placed over 0.78 ac of wetlands. The impacts caused by the rail transportation corridor primarily result from the nature of the rail, which for safety and operational considerations must be kept straight and leveled. The rail transportation corridor was aligned to minimize impacts to Stream 2. Currently, the rail transportation corridor is 180 ft wide to allow three railroad tracks and a haul road. The rail transportation corridor crosses Stream 2 by extending the two, 8' x 8' box culverts that have been previously permitted. The proposed expansion will widen the rail transportation corridor to 533 ft (at the elevation of the road surface) to accommodate a total of seven railroad tracks and a haul road impacting 658 lf of Stream 2. The box culvert will be extended to contain the flow in the intermittent stream. The stream bed runs approximately parallel to the rail spur on the north side, causing the length of stream impact to be increased. Due to property line constraints on the western end, wetland and road crossing restraints on eastern end, and the length of straight rail track needed for the spur, the impacts to the section of Stream 2 on the north are unavoidable. A stream profile for Impact Area 1 is included on Figure 11 while a cross section is provided on Figure 12. Impact Area 2, presented on Figure 13, includes 0.32 acre of fill placed over Wetland D. The fill is a result of widening the rail transportation corridor. Impact Area 2 is at the western end of the rail corridor. The seven tracks converge on the western end so train engines can be switched to the center track. The width of the corridor narrows, but the 0.32 ac impact is unavoidable. Impact areas associated with the secondary access roads are shown on Figure 14. An access road will cross Tayloe Creek (Stream 1) at Impact Area 4 (Figure 15). A crossing over Tayloe Creek was previously permitted (SAM-2007-01549-SVL, issued

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November 8, 2007), and is located approximately 2,000 ft east of the proposed crossing. While the secondary access road may be used for return trips to the rail unloading area (so that traffic will move one way), its primary purpose is to provide service vehicles access to the landfill from the rail unloading area. It will also be used during construction of the landfill phases, so that construction traffic can be kept separate from waste hauling trucks. The secondary access road would also be used by emergency vehicles. Without the crossing, the distance from the rail corridor to the north end of the expanded LFU 1 is approximately 3 miles. The crossing will shorten the distance to less than 0.75 mile, which will shorten the trip by several minutes. The crossing will impact 77 lf of Tayloe Creek, the only disturbance to a perennial stream in this application. Streams 3 and 4 are intermittent streams located between LFUs 1, 2, 3. A proposed crossing of Stream 3 is shown on Figure 16. The crossing will impact 81 linear feet of Stream 3. A proposed crossing of Stream 4 is shown on Figure 17 and will impact 60 linear feet of Stream 4. Without the crossings, getting from LFU 3 to LFUs 1 and LFU 2 would require a trip of approximately 10,000 ft instead of 500 ft. The crossings will be used by maintenance, operations, and monitoring vehicles that need to go to the different LFUs, as well as emergency vehicles if necessary. If the waste hauling traffic is kept one-way, then trucks would use this crossing and the Tayloe Creek crossing on return trips to the rail corridor. The proposed impacts associated with Phase 1 would be conducted within three years of permit approval.

- **Phase 2 - Construction of LFU 3:** Impacts are associated with the construction of LFU 3 and are denoted as Impact Areas 3, 4 and 5 depicted on Figure 14, which highlights the northern end of the proposed expansion. Impact Area 3 (Figure 18) is the only jurisdictional impact; fill is proposed to be placed over 687 feet of Stream 8 which originates on site. At the anticipated disposal rates, these impacts will be required within 5 years.

**ALTERNATIVE ANALYSIS:** The applicant has implemented the Section 404(b)(1) analysis process for this project. This implementation has addressed any potential reduction of jurisdictional impacts through avoidance, minimization, and mitigation efforts. As it pertains to this project, each step of the 404(b)(1) analysis process is discussed below, beginning with an intensive site selection process for suitable properties followed by site-specific avoidance/minimization measures.

### ***Site Evaluation Criteria:***

- ***Parcel size:*** A minimum parcel size was not formally determined, as in order to fulfill the need and purpose of the landfill development, the maximum amount of available contiguous acres are necessary for maximization of landfill footprint, air space volume and facility life span. To meet the economic return desired, the landfill needs to have an available capacity of approximately 58 million cubic yards. Depending on the shape of the landfill footprint and the allowable depth of excavation, the capacity requirements could be met with a disposal area ranging from approximately 400 to more than 600 ac. However, additional areas are needed for containment berms, access roads, storm water basins leachate storage facilities, soil borrow areas and property buffers. These additional areas can easily double or triple the property requirements beyond the disposal area, necessitating a property size of 1,200 to more than 2,000 ac.

- ***Appropriate zoning:*** Suitable properties already acceptably zoned are desirable as the rezoning process can be a difficult and time-consuming process, with no guarantees on the outcome. Properties already containing suitable zoning allow for the planning/development process to continue without delay. The current site lies within an industrial park planned for the region.

- ***Location/Proximity to Major Access Ways and Existing Infrastructure:*** Presence of existing infrastructure to include sites that have access to roads that can adequately accommodate the projected vehicular traffic without negatively impacting existing traffic patterns for nearby residents, commuters or local businesses. Additionally, sufficient access to nearby highways, rail lines, and ports, makes a property more practicable for landfill development by decreasing additional time and costs for planning, designing, permitting, and construction required to bring these services to the area.

- ***Environmental Impacts:*** Significant impacts to sensitive areas increases site development costs by increasing the amount of coordination with regulatory agencies and increasing compensatory mitigation requirements.

- **ADEM site selection criteria for landfills included in ADEM regulation Chapter 335-13-4-.01, certain criteria regarding location including:** Floodplains; Threatened or endangered species; Wetlands; Proximity to airports;

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Areas of active faults, seismic impact zone or unstable areas; Archaeologically or historically sensitive areas; and Water quality standards. A SAR prepared by JJG for the landfill property was submitted to ADEM in March 2002. The SAR provided information and data to demonstrate the suitability of a proposed landfill site. The SAR and other landfill design documents comprise the information required by ADEM regulations to review and approve a Solid Waste Facility Permit. The Solid Waste Facility Permit (Permit #53-03) was issued for the Perry County Landfill in July 2006, documenting the site's suitability to receive solid waste.

### *Development Alternatives*

To satisfy the Purpose and Need for this project, two strategies were developed and analyzed during the planning and design process. The first strategy involved developing a new landfill site. The second strategy involved the expansion of a currently permitted site. The alternatives associated with the expansion of an existing site include a "No Expansion" scenario, and two alternative footprint designs within the currently permitted site.

- *Developing a New Site:* Potential landfill properties can be found throughout central and southern AL and several sites were explored to satisfy the purpose and need of this project. Sites of the appropriate size were identified near major transportation corridors; however, these sites were ruled out because of a number of factors. The most common aspects that led to a site being eliminated for consideration were the inability to achieve the proper zoning or local approval required for a landfill; lack of proximity to rail service; greater impacts to higher quality streams and wetlands; and the lack of sufficient acreage. As noted above, a stringent site selection analysis is required for potential landfill sites to comply with ADEM requirements. Site selection also focused on sites meeting zoning requirements appropriate for the construction and operation of a MSW landfill, for reasons stated above. Because of high costs and lengthy timeframes associated with siting, developing, and permitting a new landfill location, the "Developing a New Site" strategy was dismissed and the expansion of an existing facility was examined to satisfy the purpose and need for the project.

- *Onsite Expansion Alternatives:* A detailed alternative analysis for the current Perry County Landfill site is included below for four development possibilities, including a "No Expansion" alternative (Alternative 1), combining the three LFUs into one (Alternative 2), combining LFUs 1 and 2, while enlarging LFU 3 (Alternative 3), and enlarging LFU 3 with minimal impacts (Alternative 4). Figure 4 presents an overview of the entire property. The streams and wetlands are shown, with identifying labels. The outline of the landfill footprint for the preferred alternative (Alternative 4) is also shown. Since Figure 4 is at a scale of approximately 1:24000 (1 inch = 2000 feet), three additional figures are referenced that present the areas of interest at larger scales (Figures 9 and 14).

- *Alternative 1 – No Expansion (currently permitted footprint):* The currently permitted Perry County Landfill is designed to meet ADEM requirements for a composite lined, municipal solid waste facility. The current design (including all three LFUs as shown on Figure 5) has a total capacity of 30 million cubic yards (cy) of waste, with 2.6 million allocated to LFU 1. While the proposed life of the landfill footprint as permitted is approximately 38.9 years, life calculations were based on receiving 1,500 tons of waste per day for 312 days per year. This calculation was based on typical conditions from other landfill sites. However, the current permit allows for 7,500 tons of MSW, C&D, and specialty waste per day from a sixteen-state region. The recently permitted stream crossing for rail transportation corridor will allow the site to receive waste loads closer to the permitted rate of 7,500 tons per day, dramatically reducing the life of the currently permitted landfill. However, to receive waste at the permitted rate, the three railroad tracks under construction will need to be expanded to seven tracks. Expanding the rail transportation corridor is a common feature of each alternative. The rail corridor expansion will have impacts of 1.10 ac of wetlands and 658 lf of stream. A design resulting in total avoidance of all jurisdictional systems would not allow for enough disposal capacity to accommodate the need and purpose of the project. The small intermittent drainages on site do not constitute a significant resource, and avoidance cannot be justified in comparison to volume and airspace achieved through the proposed expansion. Additionally, in order to complete current site assessments and footprint expansion design options, the applicant has invested substantial resources, including thorough engineering designs, procurement of environmental and archeological services, and necessary site permitting through state agencies. Adoption of the "No Expansion" option would result in a substantial financial loss to the applicant, as well as a loss of tax revenue and waste disposal fees for the community. As a result, the "No Expansion" option does not meet the projects purpose and need.

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○ *Alternative 2 - LFUs 1, 2, & 3 combined:* This option maximizes the landfill footprint by combining LFUs 1, 2, and 3 into one large contiguous site (Figure 6) with a disposal capacity of 190 million cy. This alternative also includes expanding the existing rail spur from the main rail line to increase rail capacity totaling approximately 585 ac of landfill area, with the additional supporting infrastructure such as road systems, rail widening, and ancillary facilities. It would provide the largest economic gain from the property and increase six-fold the airspace and landfill volume, but would entail significant impacts to natural resources, specifically jurisdictional systems, as a result of this design. The development of the combined LFUs would impact 11,090 lf of stream and 4.36 ac of wetland. The existing rail spur includes three tracks from the main line. The proposed expansion adds an additional four tracks to increase the capacity and facilitate the delivery of waste via rail. The expansion of the rail spur impacts an additional 1.10 ac of wetlands and 658 lf of stream. This Alternative was not selected as the preferred Alternative by the Applicant due to the extensive environmental impacts and mitigation costs associated with said impacts. Through project redesign, impacts to jurisdictional systems have been reduced, as described in Alternative 3.

○ *Alternative 3: LFUs 1 & 2 Combined and Enlarge LFU 3:* Consists of combining the existing LFUs 1 and 2 and developing LFU 3 (Figure 7) to achieve the necessary airspace for the long term viability of the Perry County Landfill. This Alternative consists of approximately 520 acres of disposal area and includes expanding the existing rail spur from the main rail line to increase rail capacity. The development of this preferred alternative would impact 5,702 lf of intermittent stream, 77 lf of perennial stream, and no wetlands. The proposed expansion of the rail spur would add an additional four tracks to the existing rail spur and would impact 1.10 ac of wetlands and an additional 658 lf of intermittent stream. This Alternative increases the disposal capacity at the landfill to 120 million cy and provides enough disposal capacity to make the project a long term solution to solid waste disposal; however, the impacts proposed under this alternative would extend 35 to 50 years into the future and were not determined to be practicable at this time. Because these impacts extended so far into the future, this Alternative was not selected as the preferred Alternative by the Applicant.

○ *Alternative 4: Expand LFU 3 with minimal impacts (Preferred Alternative):* The Applicant has gone through a lengthy process including public meetings, agency coordination, and significant investment of time and financial resources to obtain zoning, local approval, and the solid waste permit for the Perry County Landfill. No zoning restrictions exist within a one mile radius of the existing Perry County Landfill site, with the principal zoning within one mile radius being agricultural and low-density residential. The current permit allows for 7,500 tons of MSW, C&D, and specialty waste per day from a sixteen state region. With the site's location in central Alabama, approximately 75 miles from Montgomery and 80 miles from Birmingham, the site is conveniently located for access and waste disposal from major metropolitan areas within the state. Additionally, a Norfolk Southern rail line with connectivity to other markets runs through the northern section of the facility. The Perry County Landfill site is one of the few landfill locations in the southeastern U.S. with direct rail service to the site. Rail access is considered a great site asset as shipping waste by rail is quickly becoming the most energy efficient and cost effective mode of transportation to deliver waste to a landfill. Multiple rail capabilities results in convenient and cost competitive access to the north, southeast, and the post-Hurricane Katrina waste markets of New Orleans and the Gulf Coast. Alternative 4 consists of developing LFU 3 (Figure 8) to achieve the necessary airspace for the long term viability of the Perry County Landfill. This alternative consists of approximately 447 ac of disposal area and includes expanding the existing rail spur from the main rail line to increase rail capacity. The development of this preferred alternative would impact 687 lf of intermittent stream for the expansion of LFU 3, 141 lf of intermittent stream for road crossings, 77 lf of perennial stream for road crossings, and no wetlands. The proposed expansion of the rail spur would add an additional four tracks to the existing rail spur and would impact 1.10 ac of wetlands and an additional 658 lf of intermittent stream. This alternative increases the disposal capacity at the landfill to approximately 71 million cy. This maximizes avoidance while still providing enough disposal capacity to make the project a long term solution to solid waste disposal and economically feasible for the Applicant. This Alternative achieves a balance of environmental stewardship and economics, and was determined by the Applicant to be the preferred alternative for expansion of the landfill because it satisfies the project purpose and need.

The alternatives were further analyzed by the Applicant for their economic benefit, as well as for their environmental impact. The economic benefit was compared by calculating the tons of disposal capacity for each acre of landfill constructed. General information about the proposed alternatives is summarized in Table 2.

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Table 2. Summary of On-Site Expansion Alternatives				
Item	Alternative 1	Alternative 2	Alternative 3	Alternative 4
	Currently Permitted Footprint	LFUs 1, 2, & 3 Combined	LFUs 1&2 Combined and Enlarge LFU 3	Expansion with Minimal Impacts (Preferred Alternative)
Approx. Landfill Area (AC) <sup>1</sup>	256	585	520	447
Approx. Net Volume (Million Tons) <sup>2</sup>	21	133	84	50
Approx. Stream Impact (LF) <sup>3</sup> for the Landfill Only	664	11,090	5,779	687
Additional Wetland Impact (AC) <sup>4</sup> for the Landfill Only	0	4.36	0	0
Approximate Open Water Impact (AC) <sup>5</sup>	0	0.53	0.53	0
Total Cost of Landfill Construction (\$) <sup>6</sup>	\$141 million	\$389 million	\$330 million	\$283 million
Efficiency (\$/ton) <sup>7</sup>	\$6.70	\$2.93	\$3.93	\$5.83

**Notes**

- The landfill acreages are from the following sources:  
 The Permitted landfill acreage is from the JGG solid waste permit application  
 The acreages for Options 1 & 2 were found by a planimeter on the conceptual design.  
 The acreages for Option 3 is from CAD areas for the conceptual designs.
- Disposal tons are calculated assuming a density of 0.7 tons per cubic yard, with volumes based on the Solid Waste Permit Application (Sept. 2005) prepared by JGG.
- The lengths of stream impacts were scaled from the attached figures. The stream impacts do not account for approximately 658 feet of stream impacts outside of the landfill footprint.
- The area of Additional Wetland Impact does not include the surface acreage of the streams impacted, nor does it include impacts to wetlands outside the landfill footprint. Additional impacts of approximately 1.10 acre are needed for infrastructure construction.
- Open water impacted is the farm pond located on the property.
- Landfill construction cost is the per acre cost of cell construction (estimated at \$350K/AC) and cell closure (est. at \$150K/AC). A premium was added to Alternatives 2 & 3 to account for extra expenses in cell excavation and in landfill closure, due to larger storm water handling features and a larger gas collection system. Total assumed costs per acre, including construction and final closure, were:  
 \$550,000/AC for Alternative 1  
 \$665,000/AC for Alternative 2  
 \$635,000/AC for Alternative 3  
 \$635,000/AC for Alternative 4.
- The efficiency cost is for comparing only the landfill construction options. No attempt has been made to include cost for constructing related infrastructure (i.e. roads, rail, storage tanks, etc.) or equipment costs or operating expenses.

By the criteria presented in Table 2, the most economically advantageous option is Alternative 2. Based on the efficiency of disposal capacity vs. construction cost, Alternative 2 is approximately 43% of the cost of Alternative 1. However, Alternative 2 would require impacting approximately 11,090 lf of intermittent stream to construct the landfill. Alternative 3 has a per ton construction cost of approximately \$3.67, or about 55% of the cost of Alternative 1, with approximately 1/2 of the stream impacts of Alternative 2. Although Alternative 4 is not as economically advantageous as Alternatives 2 or 3, it minimizes impacts and was chosen by the Applicant as their ‘Preferred Alternative’.

**AVOIDANCE & MINIMIZATION:** The entire site consists of approximately 1,367.5 ac, with an initial design consisting of an approximately 447-ac landfill footprint (Alternative 2). This concept was considered because it optimized available airspace for disposal activities. Even though the pursuit of this concept footprint would have maximized disposal capacity, impacts to jurisdictional systems would have doubled from the preferred alternative. This impact would have included impacting approximately 5.46 ac of jurisdictional wetlands and open waters, and piping or filling approximately 11,748 lf of streams. The landfill expansion concept, when re-designed, decreased impacts to jurisdictional systems by over 80 percent by dividing the landfill footprint into two separate sections, avoiding significant impacts to six onsite streams and all jurisdictional wetlands within the landfill footprint. Impacts to 1.10 ac of wetlands can not be avoided during expansion of the rail spur due to alignment limitation and space constraints associated with the additional tracts. Through the redesign process, the applicant utilized means to avoid and minimize impacts to jurisdictional systems to the fullest extent practicable, while still meeting the project’s purpose and need. The preferred site alternative avoids impacts to Tayloe Creek (Stream 1) and several of its

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intermittent tributaries (Streams 3, 4, 5 and 7) totaling 15,140 lf. This avoidance effort constitutes 90% avoidance of onsite streams. Additionally, impacts to wetlands have been reduced to those necessary for the expansion of the rail spur, leaving 92% of onsite wetlands undisturbed. Please refer to Table 5 for a summary of avoidance efforts. Please note that a minimum 50-ft buffer will be maintained along undisturbed streams, and a 200-ft buffer will be kept on the perennial stream. Through buffer preservation, direct impacts to undisturbed reaches will be avoided, with their associated buffers greatly increasing areas of permeability for storm run-off to infiltrate before entering the stream. These buffers will provide filtering capacity for removal of sediment and pollutants, erosion protection of the undisturbed channels, as well as provide an extended habitat corridor for wildlife and filtering floodwaters during overbank flood events. Avoiding impacts to streams and their buffers will reduce possible off-site impacts to water quality. Riparian buffers provide a natural filter for sediment, organic matter, and attached nutrients/pollutants prior to their discharge into surface waters. Chemical and biological processes that occur within buffer areas convert many nutrients into forms that may then be used by plants and microorganisms. Other ecological functions performed by vegetated riparian buffers include energy dissipation of flows during overbank flood events, increased groundwater infiltration capacity, habitat and migration corridors for wildlife, and regulation of surface water temperatures through shading of stream channels. Further, stormwater management will be achieved through a series of sediment basins located along the perimeter of the landfill footprints. A total of 12 permanent sediment basins will be constructed for the collection of surface runoff from the landfill cells. Please note all sediment basins have been designed to be located offline, avoiding impacts to streams or wetlands (Figure 8). In addition, leachate will be collected through a leachate collection system and will be stored in tanks onsite prior to removal and disposal at an authorized treatment facility. Avoidance of jurisdictional systems has been implemented to the fullest extent practical and no feasible opportunities exist for avoiding impacts to the remaining jurisdictional areas found on-site without compromising the project's purpose and need and maximizing developable area. Table 5 summarizes impact reductions.

Impact Area	Alternative 2 (acre/LF)	Alternative 3 (acre/LF)	Alternative 4 (acre/LF)	Reduction
Landfill footprint	585	520	447	24%
Wetlands	5.46	1.10	1.10	80%
Streams	11,748	6,497	1,486	87%
Open Waters	0.53	0.53	0.00	100%

While the ac reduction for Alternative 2 versus Alternative 4 is less than 25%, it is not representative of the lost airspace and potential financial return. Alternative 2 would increase disposal capacity by approximately 63% and would increase lifespan by approximately 30 years at the projected disposal rates. Following implementation of the avoidance measures discussed above, the remaining proposed jurisdictional impacts were evaluated for further minimization by the Applicant. The minimization efforts provided a significant reduction of the amount of waters to be impacted. Although some impacts to jurisdictional areas are unavoidable, measures have been used in order to minimize impacts to systems on-site. Complete avoidance to five unnamed tributaries to Tayloe Creek (Stream 1) and two jurisdictional wetlands (Wetlands E and F) was achieved through this process. Through impact minimization, a total of 10,262 additional lf of impacts were reduced. The stream impacts will be further minimized by a stringent approach to erosion control and by retaining vegetated buffers to the fullest extent practicable throughout the site and any of the non-impacted streams. Any additional minimization of proposed jurisdictional impacts would reduce the amount of available disposal capacity; therefore, making the project financially unfeasible for the Applicant.

**MITIGATION:** The Corps is currently reviewing the Applicants Mitigation Plan and will verify data sheets and calculated mitigation sheets submitted to ensure correctness sufficiency in offsetting the functional loss of jurisdictional waters.

The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposal on the public interest. That decision will reflect the national concern for both protection and use 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 and their cumulative effects relevant to the proposal will be considered, including conservation, economics, aesthetics, general

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environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, property ownership, and in general the needs and welfare of the people.

To evaluate the impacts of this proposal, the Corps is soliciting comments from the public; Federal, State and local agencies and officials; Indian Tribes; and other interested parties. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted, in writing, setting forth sufficient detail in order to furnish a clear understanding of the reasons for support or opposition. Comments will be considered to determine whether to issue, modify, condition or deny a permit. To make this decision, an Environmental Assessment is prepared in accord with the National Environmental Policy Act; impacts are assessed on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest.

This notice is being sent to appropriate State and Federal agencies, including the Alabama Historical Commission Office (AHC) and the U.S. Department of the Interior, National Park Service, Division of Archeological Services, and the U.S. Environmental Protection Agency.

Environmental Resource Analysts, Inc. completed an archaeological and cultural resource evaluation from May 29 to August 25, 2001 on Parcel I that indicated then need for a Phase II Survey on eight potentially eligible sites within the landfill property. The Phase II survey for Parcel I was completed by Environmental Services, Inc. (ESI) in 2007. AHC (AHC 2002-0018), in a letter dated September 21, 2007, advised "...specific clearance for the archaeological sites listed ...were evaluated at the Phase II level at the Perry County Landfill property in Perry County, Alabama. As noted in our letter dated August 10, 2007, we agree with you findings that none of the eight evaluated sites...retain the context necessary to yield significant information about life at the Rurrill Hill Plantation...we offer this letter with the explicit statement that the historical sites shown on the Solid Waster Permit Plans approved by the ADEM may now have impacts from development provided that all necessary permits are obtained. Also consistent with our August 10, 2007 letter, we recommend that any inadvertent discovery of either burial shafts or human remains associated with the purported cemetery be immediately conveyed to our office and that all ground disturbing activities cease in that area." A Phase I survey was also conducted on Parcel II, AHC (AHC 08-0024), in a letter dated November 5, 2007, "determined that project activities will have no adverse effect on cultural resources eligible for or listed on the National Register of Historic Places".

An office review of available resources was performed to develop a list of potential federal- and state-listed species for Perry County. The list of known protected species was compiled by review of a copy of the Unites States Fish and Wildlife Service (USFWS) county database (April 2007), *Alabama Wildlife Volume Two* (Mirarchi *et al.*, 2004), *Fishes of Alabama and the Mobile Basin* (Mettee *et al.*, 1996), and various county/state lists developed for previous projects in Perry County and the surrounding area. The review indicated that four federal-listed and one species protected by the Bald and Golden Eagle Protection Act are known to occur in Perry County. In follow-up a habitat survey was conducted for the project area; neither federally-listed protected species, nor their habitats were observed during the field studies. This information was provided to the USFWS, with whom the Applicant coordinated with during the initial development of the concept design. The USFWS (2008-TA-0494) on May 7, 2008, advised that "No federally listed species/critical habitat are known to occur in the project area. As described, the project will have no significant impact on fish and wildlife resources."

Other impacts from fill activities will be evaluated by applying EPA 404(b)(1) guidelines. After review of public comments, the ADEM will determine if the proposal complies with or operated and maintained in a manner consistent with the Clean Water Act. It should be noted that the Perry County Landfill is an existing landfill permitted by ADEM. Site Analysis Report (SAR) was initially submitted to ADEM in March 2002, providing information and data necessary to demonstrate suitability of the site for landfill development. Following the subsequent review process and approval of the site's suitability and engineering design, a solid waste disposal facility permit was issued by ADEM to PCA on July 6, 2006, under Permit #53-03. The permit allows the landfill to receive a maximum daily volume of 7,500

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tons per day of MSW, C&D waste, industrial waste, commercial waste, special wastes approved by ADEM, and other similar wastes. The permitted Perry County Landfill waste disposal area (referred to as the “footprint”) consists of three separate LFUs totaling approximately 256 acres of lined landfill area when fully developed.

Any correspondence concerning this publication should refer to this Public Notice SAM-2007-01549-SVL and should be directed to the following address:

District Engineer  
U.S. Army Engineer District, Mobile  
Regulatory Division, Birmingham Field Office  
Attn: SAM-2007-01549-SVL  
218 Summit Parkway, Suite 222  
Homewood, Alabama 35171

with a copy to the:

Director  
Alabama Department of Environmental Management  
Post Office Box 301463  
Montgomery, Alabama 36130-1463

All comments should be received no later than 30 days from the date of issuance of this Public Notice.

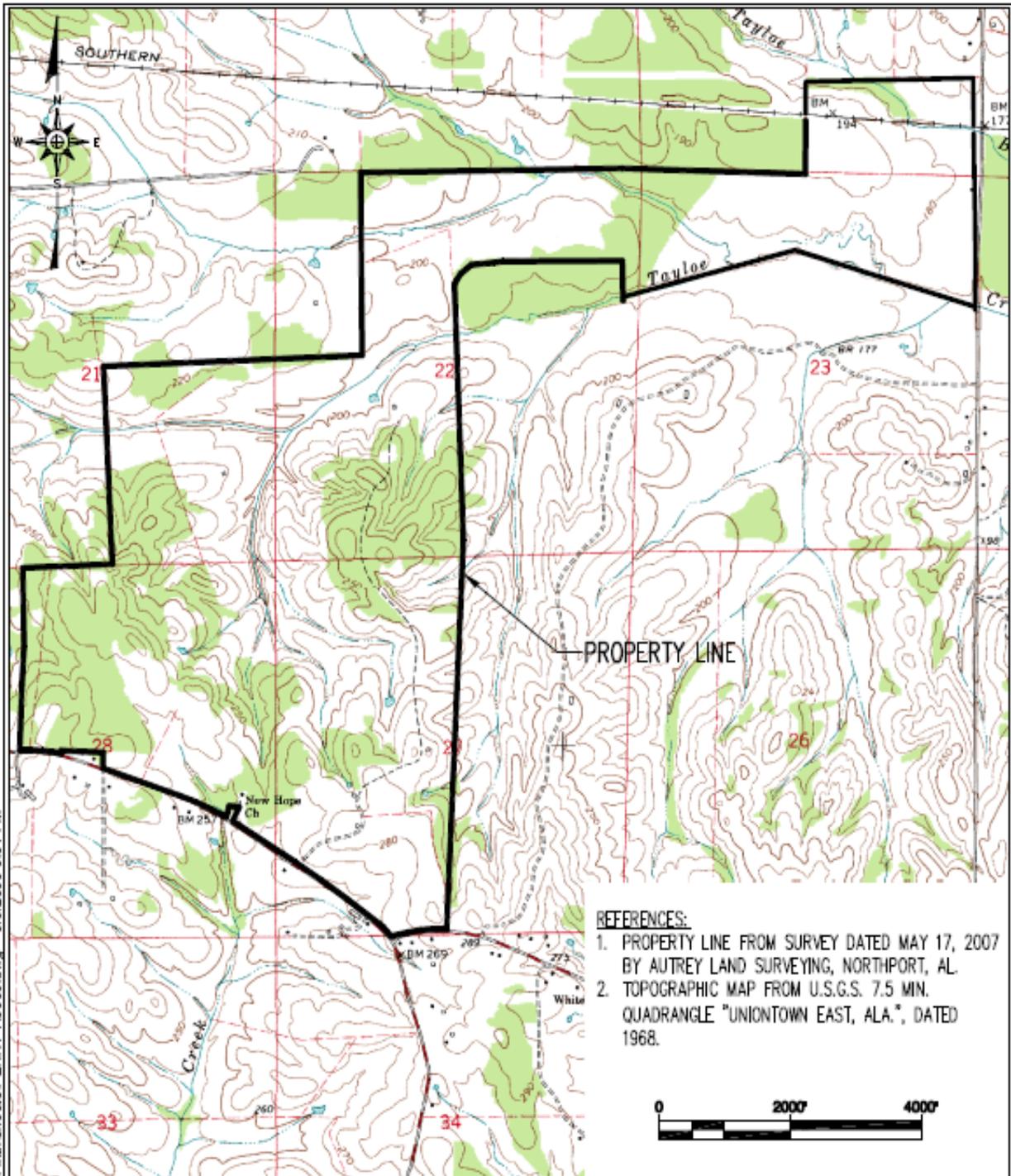
Enclosed to assist you with your review are the USGS Topozone map, proposed impact diagrams/charts, and the applicant’s site location, wetland delineation, and proposed impact maps.

If you have any questions concerning this public notice, you may contact the Mobile District Regulatory Division, Birmingham Field Office at 205-290-9096. Please reference the above public notice number when calling and/or include it in your written correspondence.

For additional information about the Mobile District’s Regulatory Program, please take a moment to visit our web site located at [www.sam.usace.army.mil/RD/reg](http://www.sam.usace.army.mil/RD/reg). While there, please take a moment to complete our customer satisfaction survey. Your responses are appreciated and will allow us to improve our services.

MOBILE DISTRICT  
U.S. Army Corps of Engineers

Enclosures



- REFERENCES:**
1. PROPERTY LINE FROM SURVEY DATED MAY 17, 2007 BY AUTREY LAND SURVEYING, NORTHPORT, AL.
  2. TOPOGRAPHIC MAP FROM U.S.G.S. 7.5 MIN. QUADRANGLE "UNIONTOWN EAST, ALA.", DATED 1968.

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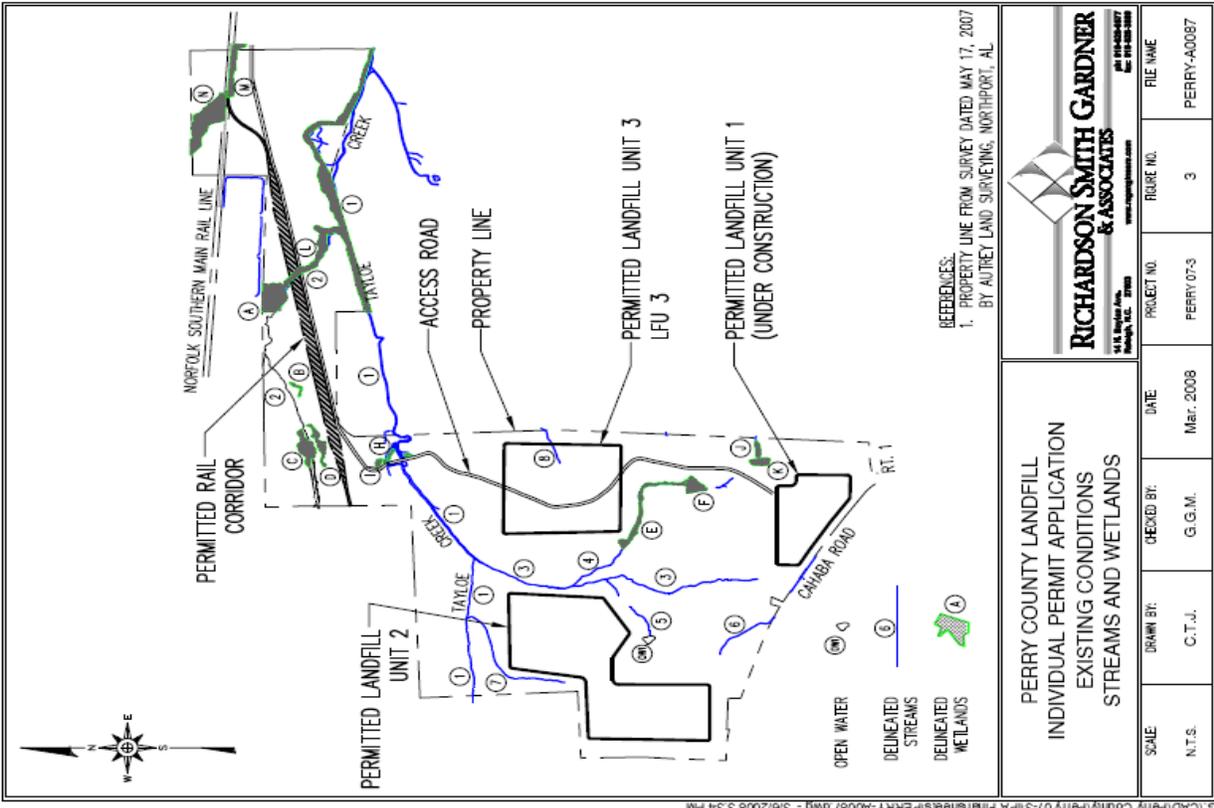
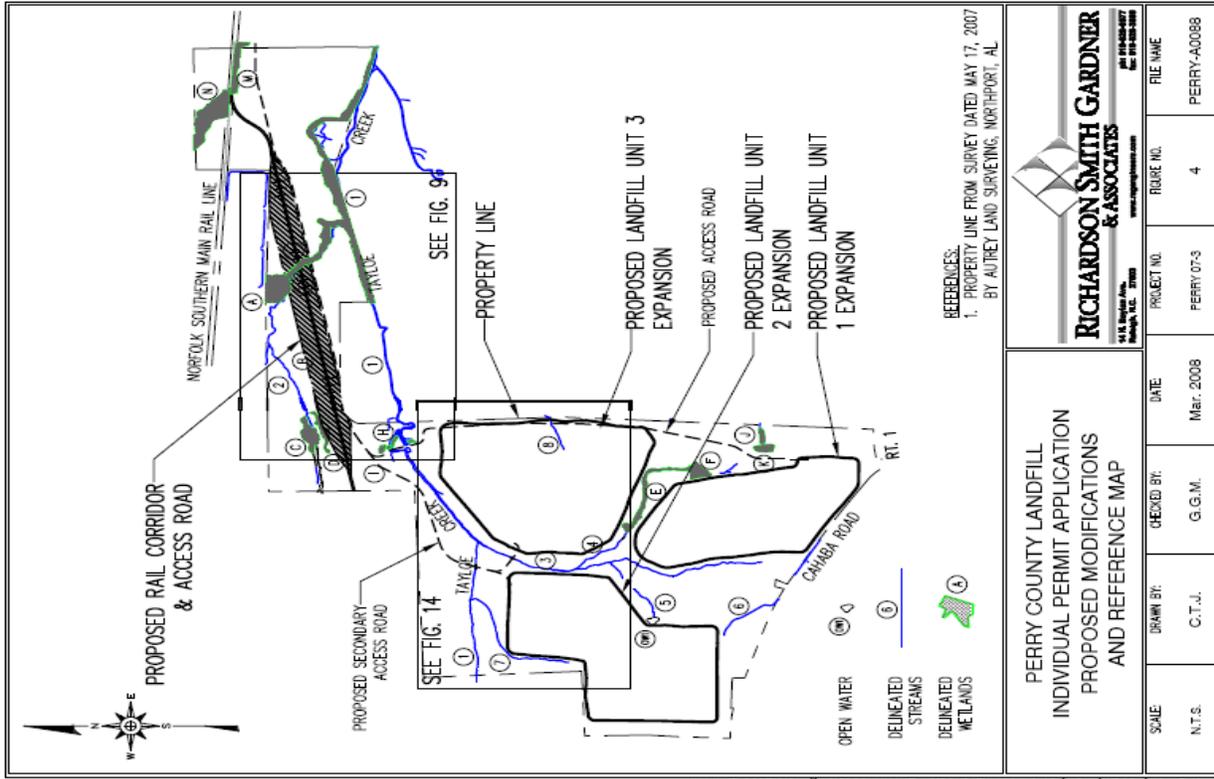
**PERRY COUNTY LANDFILL  
INDIVIDUAL PERMIT APPLICATION  
SITE TOPOGRAPHIC MAP**

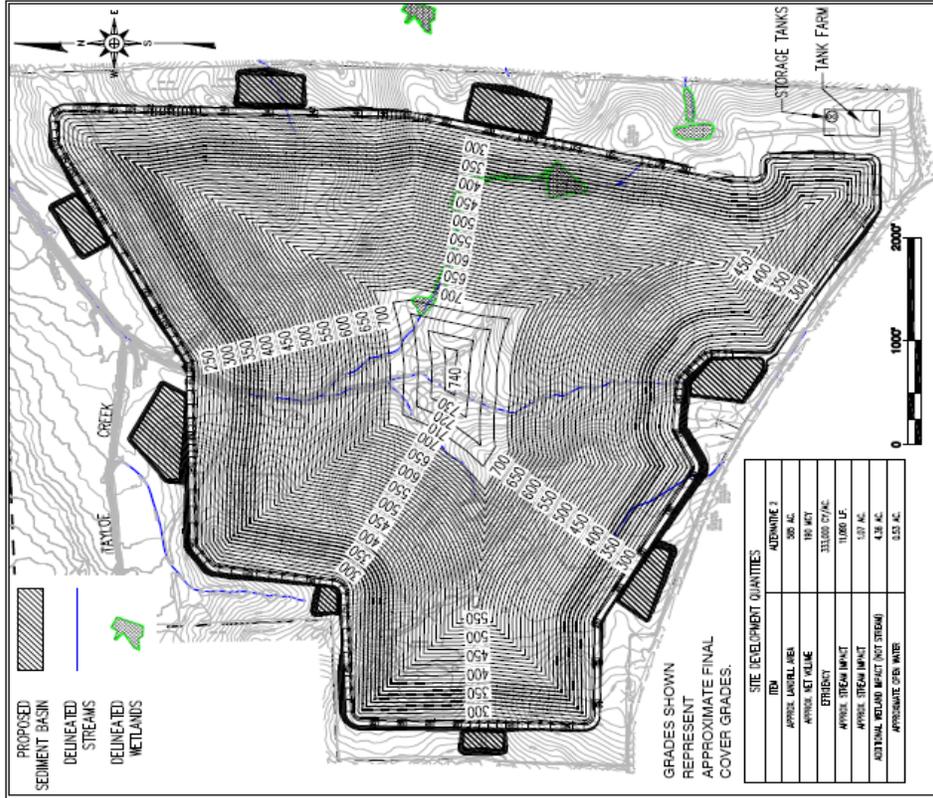


**RICHARDSON SMITH GARDNER  
& ASSOCIATES**

54 N. Baylan Ave.  
Raleigh, N.C. 27603      [www.rsgingh.com](http://www.rsgingh.com)      phone 919-833-6377  
fax 919-833-3888

SCALE	DRAWN BY:	CHECKED BY:	DATE	PROJECT NO.	FIGURE NO.	FILE NAME
AS SHOWN	C.T.J.	G.G.M.	Mar. 2008	PERRY 07-3	2	PERRY-A0088



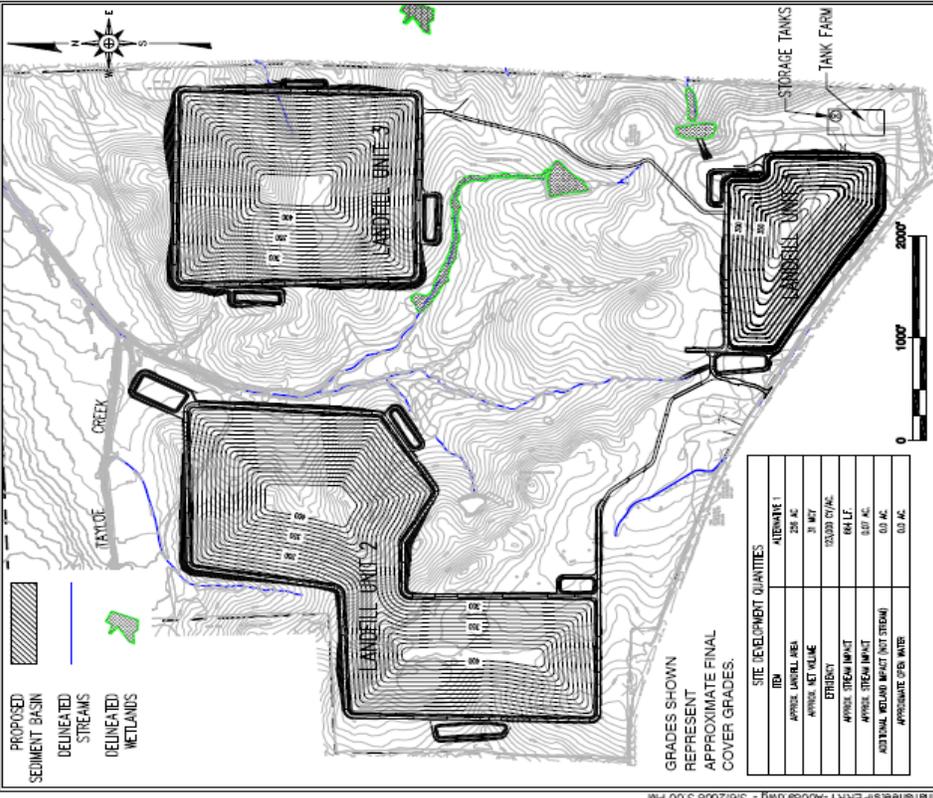


**PERRY COUNTY LANDFILL  
INDIVIDUAL PERMIT APPLICATION  
ALTERNATIVE 2  
COMBINE LFU 1, 2, AND 3**

**RICHARDSON SMITH GARDNER  
& ASSOCIATES**  
1114 S. Bayshore Ave., Tallahassee, FL 32304  
Tel: 904-224-8887 Fax: 904-224-8888

SCALE	AS SHOWN	DRAWN BY:	C.T.J.	CHECKED BY:	G.G.M.	DATE	Mar-2008	PROJECT NO.	PERRY 07-3	FIGURE NO.	6	FILE NAME	PERRY-A0090
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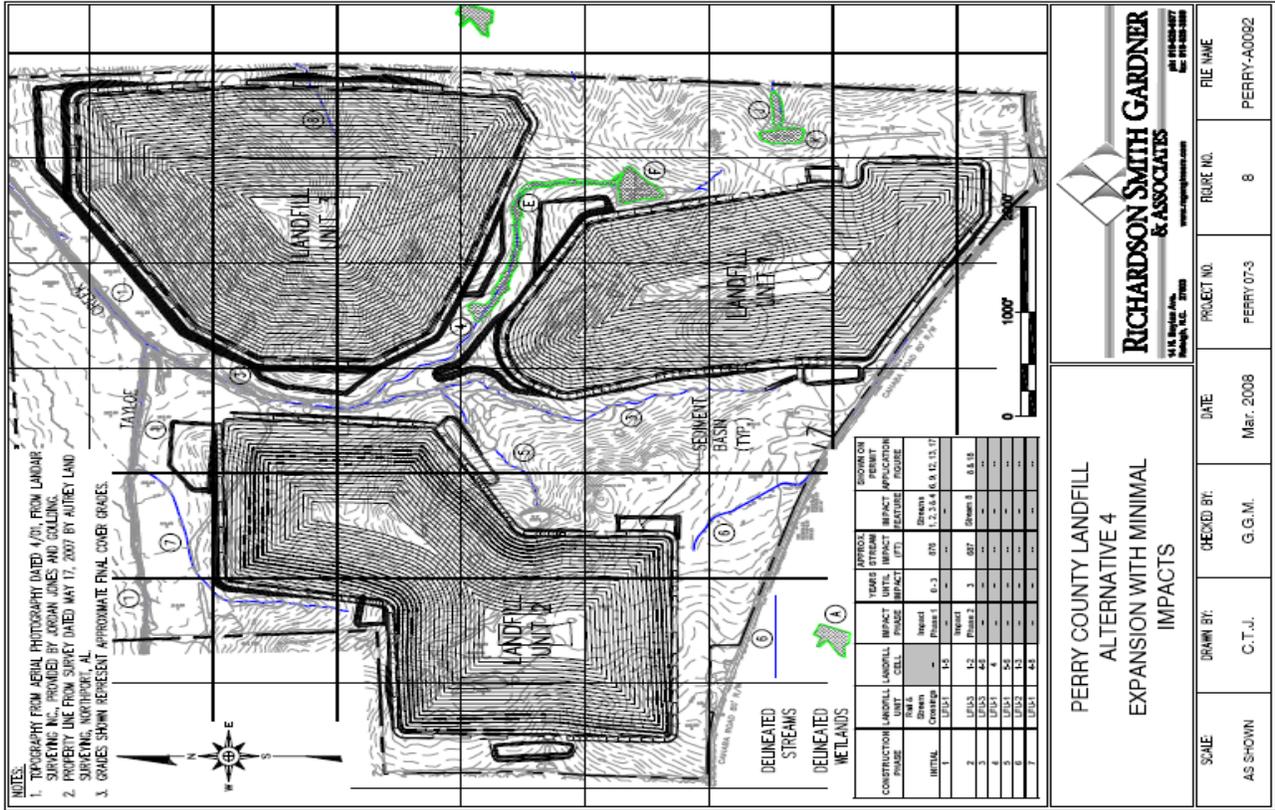


**PERRY COUNTY LANDFILL  
INDIVIDUAL PERMIT APPLICATION  
ALTERNATIVE 1 (NO EXPANSION)  
(PERMITTED LANDFILL AS OF 7/6/06)**

**RICHARDSON SMITH GARDNER  
& ASSOCIATES**  
1114 S. Bayshore Ave., Tallahassee, FL 32304  
Tel: 904-224-8887 Fax: 904-224-8888

SCALE	AS SHOWN	DRAWN BY:	C.T.J.	CHECKED BY:	G.G.M.	DATE	Mar-2008	PROJECT NO.	PERRY 07-3	FIGURE NO.	5	FILE NAME	PERRY-A0089
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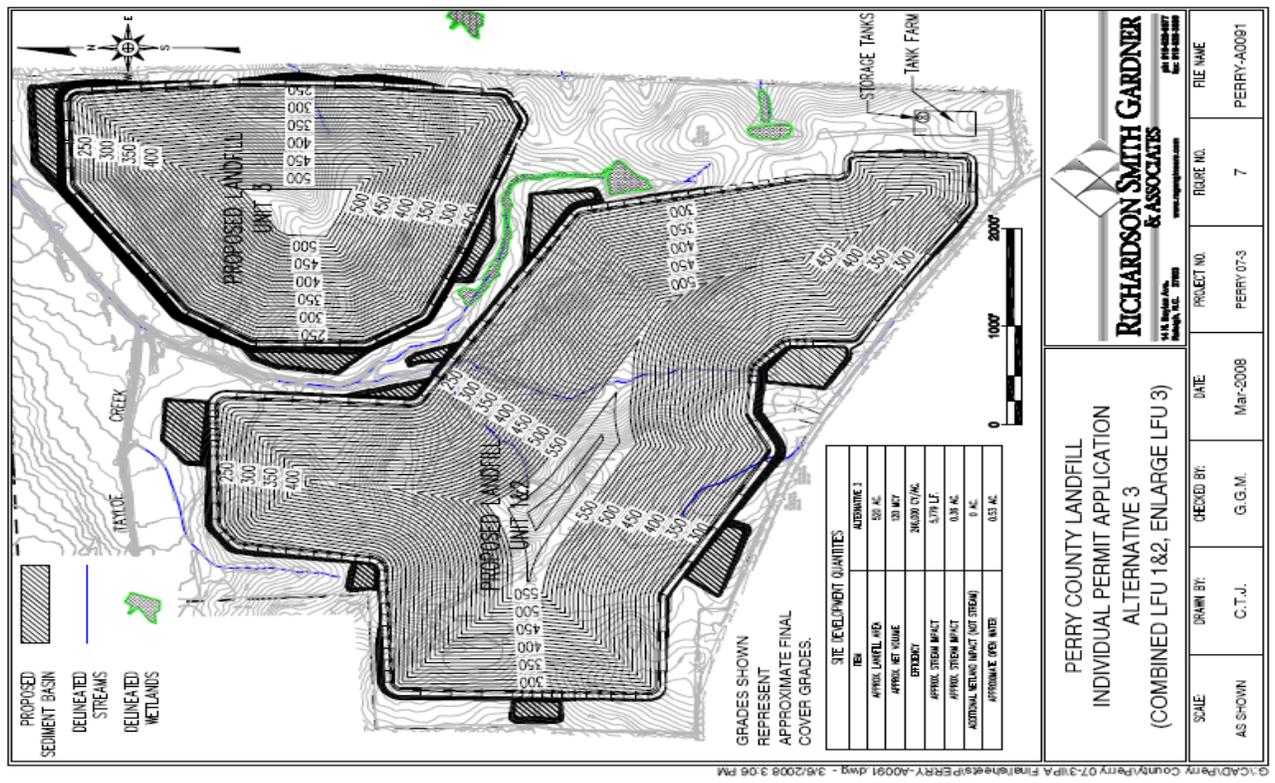
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**PERRY COUNTY LANDFILL ALTERNATIVE 4 EXPANSION WITH MINIMAL IMPACTS**

**RICHARDSON SMITH GARDNER & ASSOCIATES**  
 114 S. Butler Ave., Tallahassee, FL 32301  
 Tel: 904-224-8877 Fax: 904-224-8888  
 www.rsga.com

SCALE	AS SHOWN	DRAWN BY:	C.T.J.	CHECKED BY:	G.G.M.	DATE:	Mar. 2008	PROJECT NO.:	PERRY 07-3	FIGURE NO.:	8	FILE NAME:	PERRY-A0092
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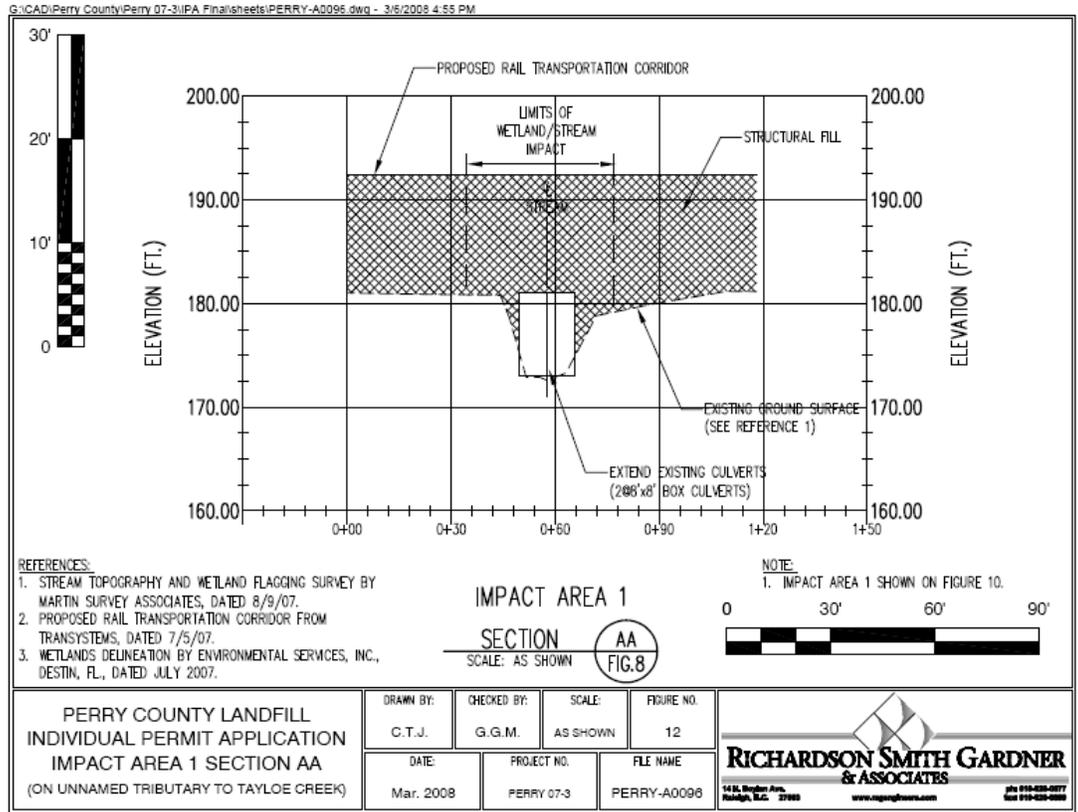
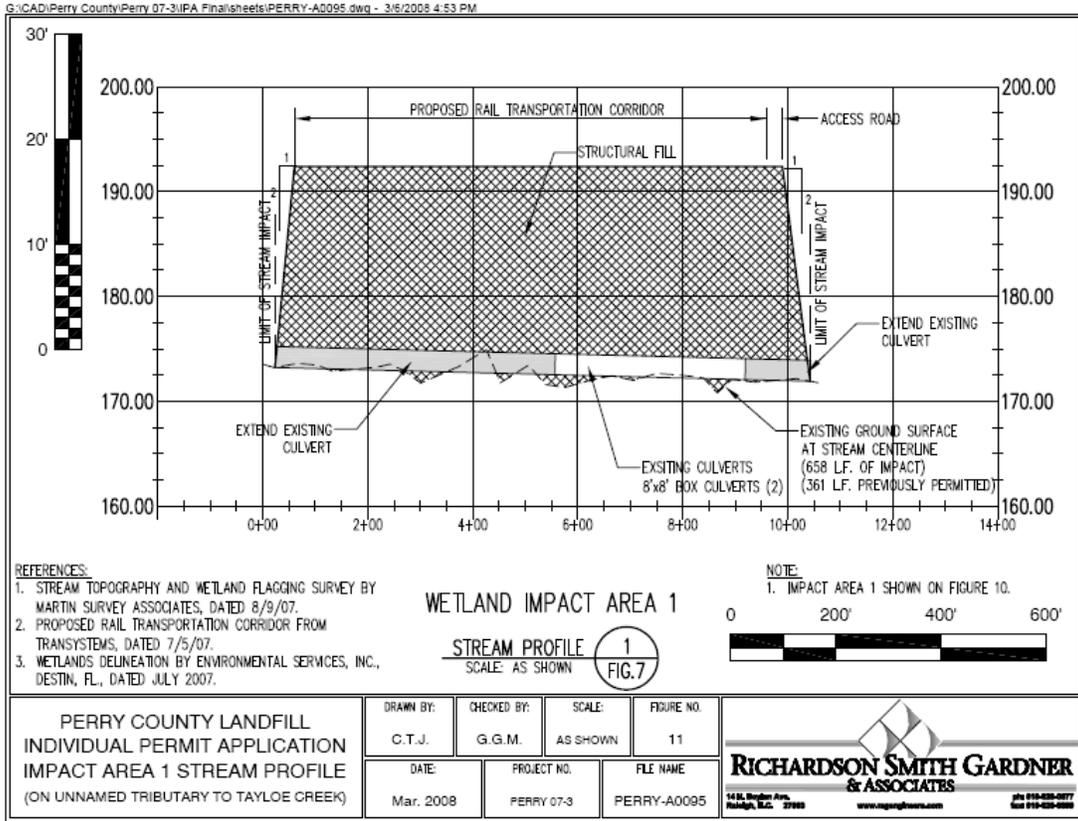
**PERRY COUNTY LANDFILL INDIVIDUAL PERMIT APPLICATION ALTERNATIVE 3 (COMBINED LFU 1&2, ENLARGE LFU 3)**

**RICHARDSON SMITH GARDNER & ASSOCIATES**  
 114 S. Butler Ave., Tallahassee, FL 32301  
 Tel: 904-224-8877 Fax: 904-224-8888  
 www.rsga.com

SCALE	AS SHOWN	DRAWN BY:	C.T.J.	CHECKED BY:	G.G.M.	DATE:	Mar-2008	PROJECT NO.:	PERRY 07-3	FIGURE NO.:	7	FILE NAME:	PERRY-A0091
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**PUBLIC NOTICE NO. SAM-2007-01549-SVL**



**PUBLIC NOTICE NO. SAM-2007-01549-SVL**

