

PLANS PREPARED AND SUBMITTED BY:

**AEI**

AMERICAN ENGINEERS, INC.

DESIGN CONSULTANT

PROFESSIONAL ENGINEERING

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 Glasgow, KY 42041  
 (502) 245-7220

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 Louisville, KY 40223  
 (502) 245-3813

www.aei.cc

SCALE: 1" = 2'-0"

REVISION DATES	

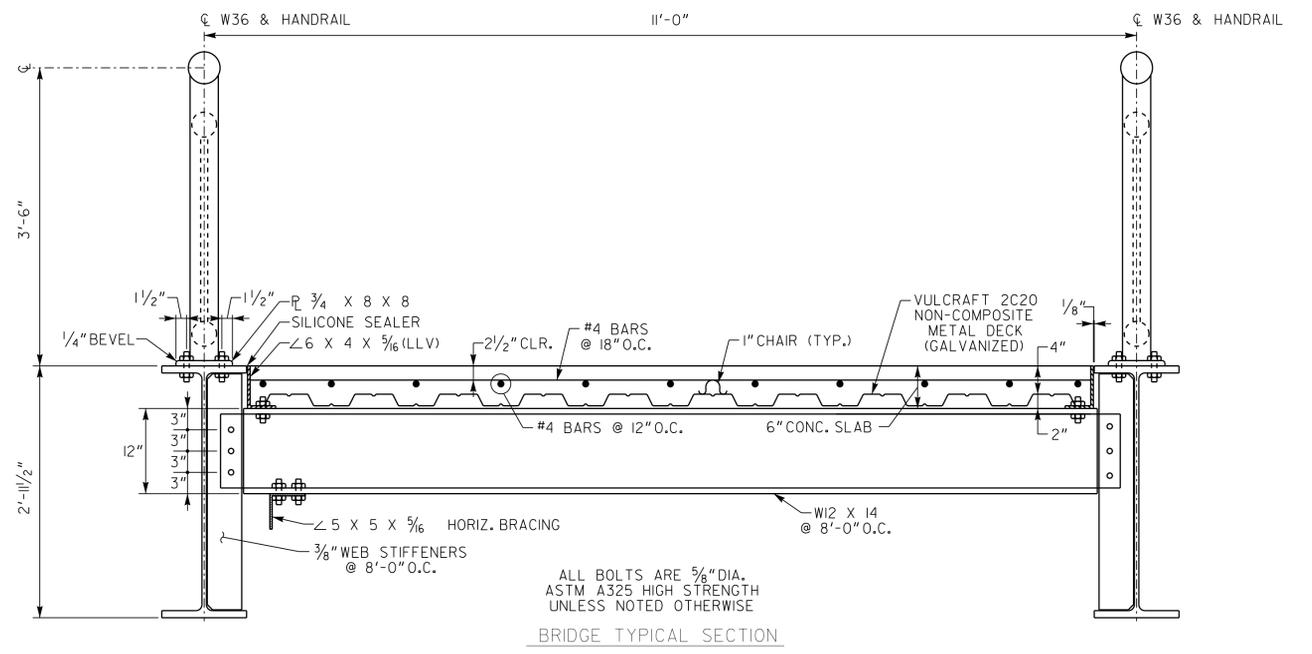
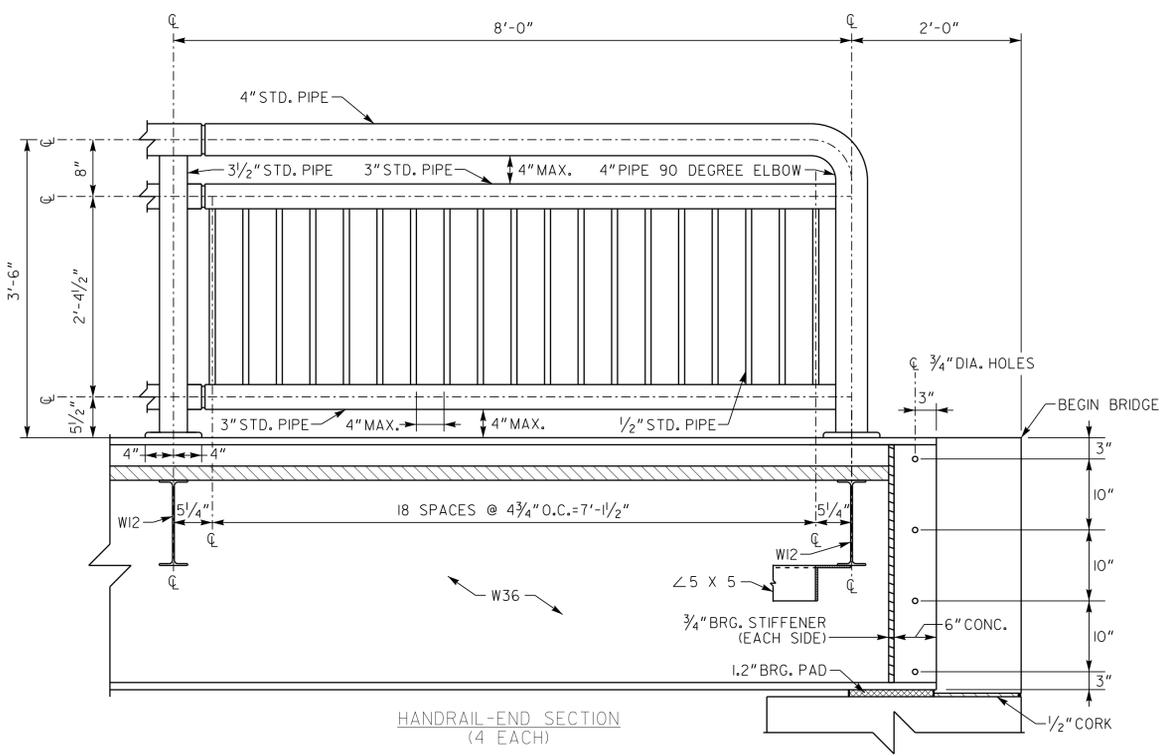
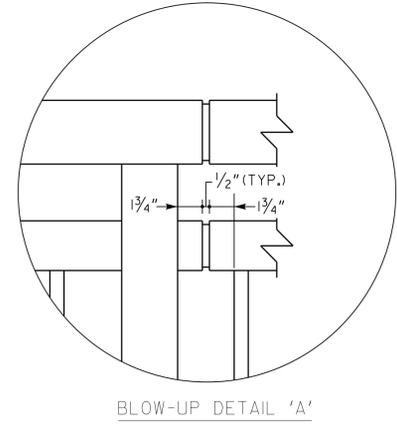
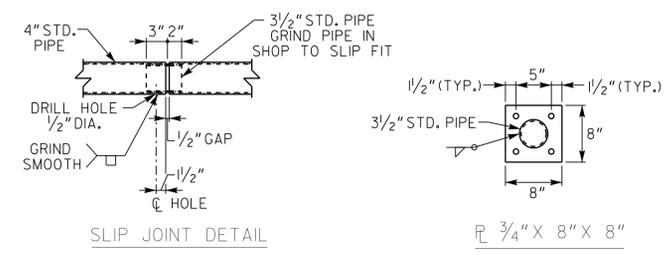
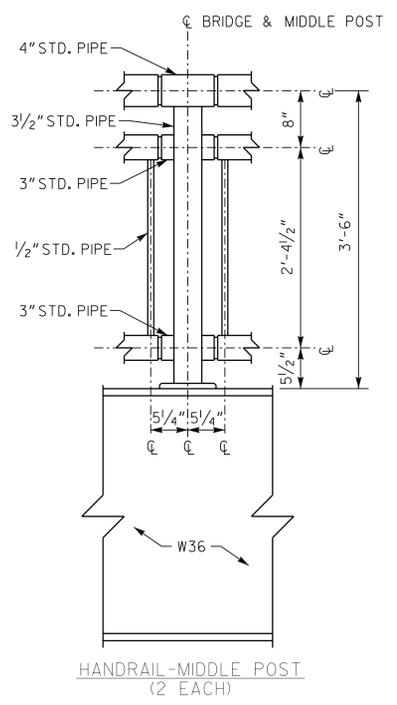
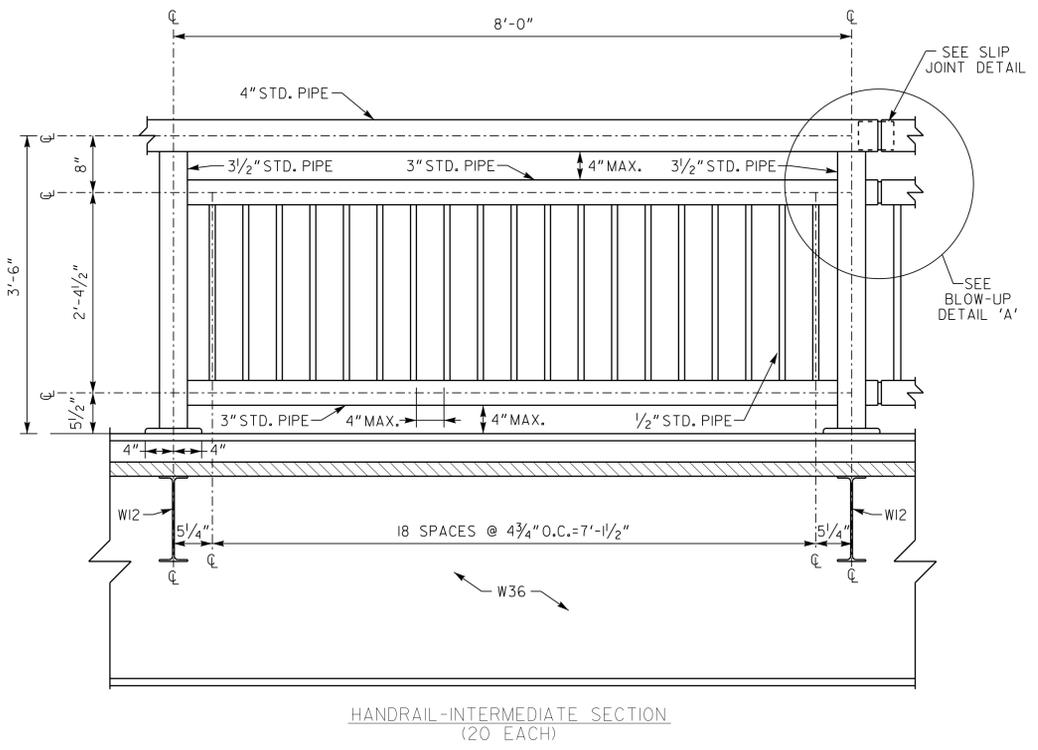
FULTON COUNTY

OFFICE: FACILITIES & TRANSPORTATION SERVICES

**BRIDGE ABUTMENT**

WOLF CREEK MULTI-USE TRAIL

DRAWING No. **35-03**

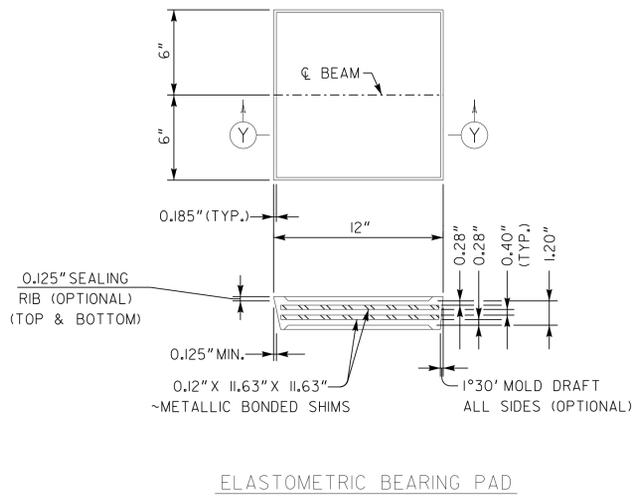
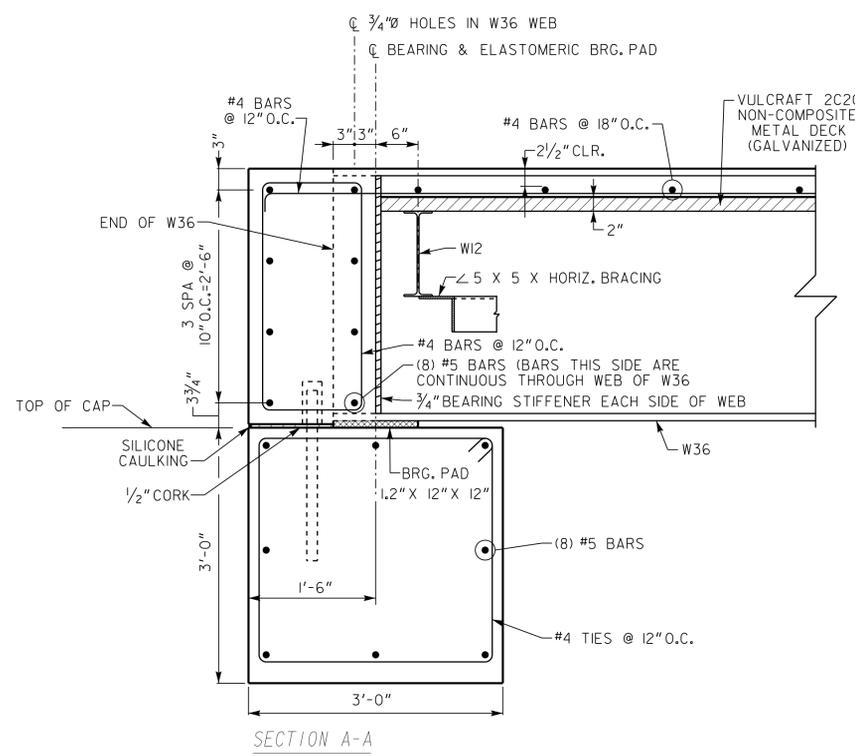
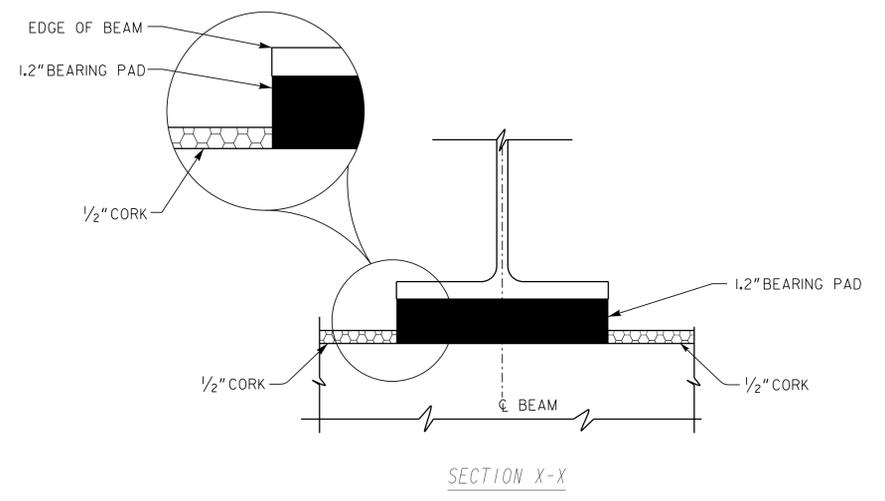
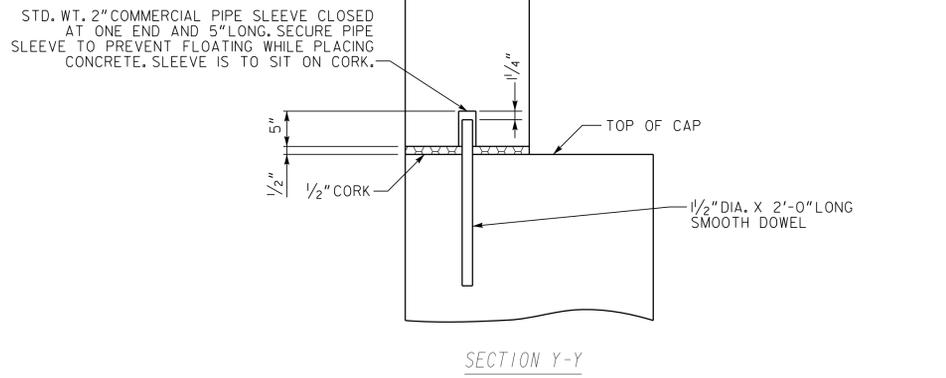
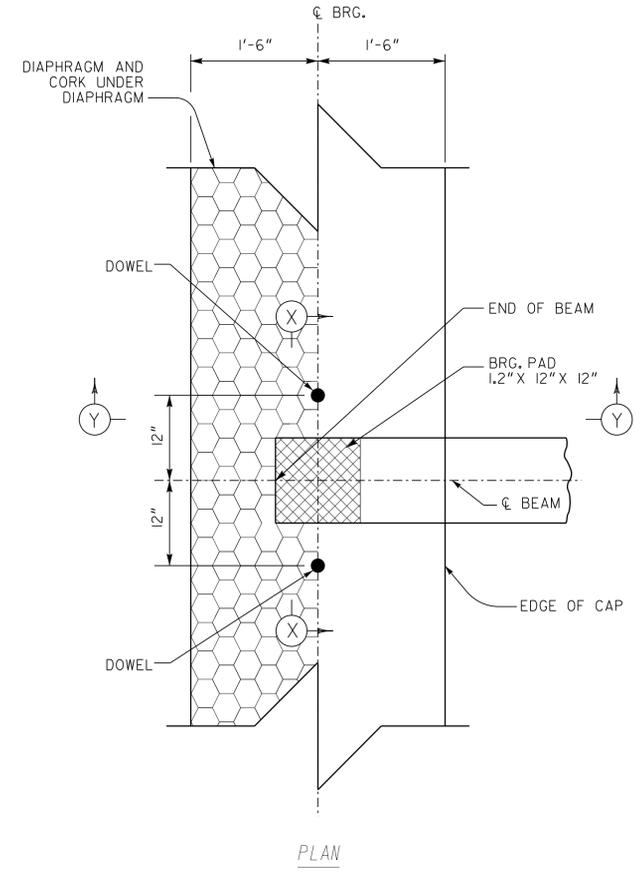
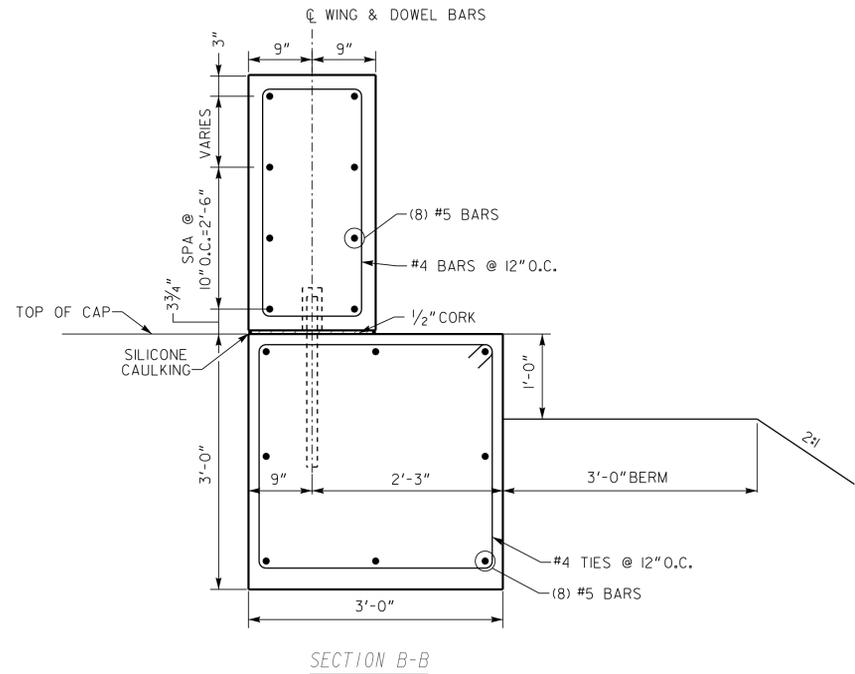


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SCALE: 1" = 1'-0"

REVISION DATES		

FULTON COUNTY  
 OFFICE: FACILITIES & TRANSPORTATION SERVICES  
**BRIDGE DETAILS**  
 WOLF CREEK MULTI-USE TRAIL  
 DRAWING No. 35-04



**GENERAL NOTES**

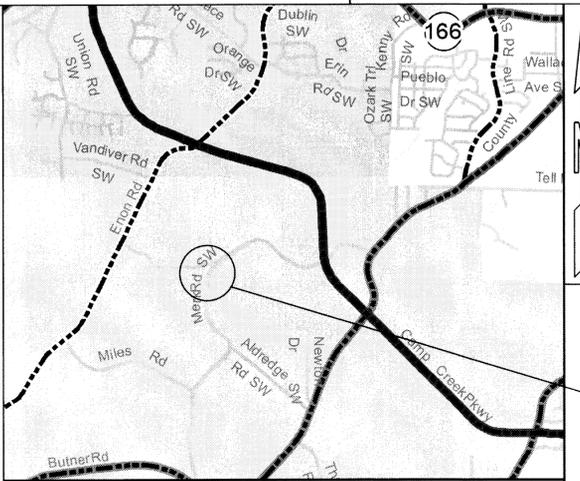
SPECIFICATIONS: FABRICATE THE ELASTOMERIC BEARING PADS TO THE DESIGN AND DIMENSIONS AS SHOWN ON THESE DRAWINGS AND TO AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 18.

ENSURE BEARINGS ARE LOW TEMPERATURE GRADE 3 WITH DUROMETER HARDNESS OF 50 AND SUBJECTED TO THE LOAD TESTING REQUIREMENTS CORRESPONDING TO DESIGN METHOD A.

REVISION DATES

# FULTON COUNTY FACILITIES & TRANSPORTATION SERVICES DEPARTMENT

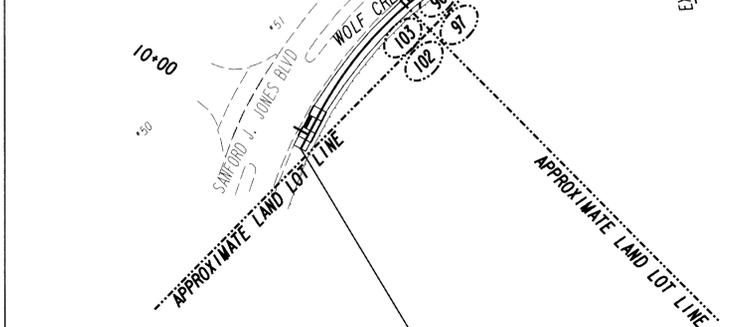
## EROSION, SEDIMENT, & POLLUTION CONTROL PLAN WOLF CREEK MULTI-USE TRAIL - PEDESTRIAN BRIDGE PROJECT



LOCATION SKETCH

**MID-POINT COORDINATES**  
 STA 17+69.96  
 Latitude 33°40'23"  
 Longitude 84°33'44"

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.



**BEGIN CONSTRUCTION  
 WOLF CREEK TRAIL**  
 STA. 9+90.63  
 LAT 33°40'25"  
 LON 84°33'54"

**END CONSTRUCTION  
 WOLF CREEK TRAIL**  
 STA. 25+49.28  
 LAT 33°40'19"  
 LON 84°33'41"

"I certify that this Erosion, Sedimentation and Pollution Control Plan has been prepared in accordance with part IV, of the General NPDES Permit No. GAR 100002." T.S.F. #0000018849

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100002." T.S.F. #0000018849

I certify under penalty of law that this plan was prepared after a site visit to the location described herein by myself or my authorized agent, under my supervision. T.S.F. #0000018849



Thomas S. Fravel, P.E., GSWCC LEVEL II Certification \*0000018849

24 Hour Contact:

Name \_\_\_\_\_

Phone Number \_\_\_\_\_

Contractor shall complete the information in this box.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.



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PLANS COMPLETED 11-22-2013

REVISIONS				
DATE	PAGE NUMBER	SIGNATURE	GSWCC LEVEL II *	REVISION-REQUESTED-BY

UPDATED: OCTOBER 18, 2013  
 ESPCP GENERAL NOTES:

The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to, or concurrent with, land disturbing activities.

Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion and sediment control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.

PLAN ALTERATIONS

The Department will maintain records in accordance with Part IV.F of the General Permit GAR 100002

PLAN ALTERATIONS

The Erosion Sedimentation and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project based on common construction methods and techniques. If the Contractor elects to alter the stage construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 16I of the contract.

The Contractor, the Certified Design Professional and the WECS shall carefully evaluate this plan prior to commencing land disturbing activities. A major modification or deletion of structural BMP's with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC level-II-certified design professional. Additional BMP's may be added per Special Provision 16I - Control of Soil Erosion and Sedimentation.

TEMPORARY MULCHING

EPD General Permit GAR 100002 states that any disturbed area where construction activities have temporarily or permanently ceased shall be stabilized within 14 days of such cessation as soon as practicable with a suitable material listed in Standard Specification (or Special Provision) Sections 163, 700, or 711. However in special cases, the Project Engineer may require the contractor to perform stabilization more often than 14 days.

VEGETATION AND PLANTING SCHEDULE

All temporary and permanent vegetative practices including plant species, planting dates, seeding fertilizer, liming, and mulching for this project can be found in section 700 of the current edition of the Department's Standard Specifications (or special provisions) and other applicable contract documents, or landscaping plans.

SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted with the NOI. A copy of the construction schedule shall be maintained at the project site.

The project budget includes sufficient funds for the payment of construction exits. The Contractor is responsible for establishing at least one (1) construction exit per the specifications of the construction exit detail included in the ESPCP. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

The existing site is an ex-Olympic Archery Range. Construction activity consists of constructing an 8 to 10 foot wide multi-use trail with a 100 foot long pedestrian bridge over a Tributary to Camp Creek.

Stage 1A is to take place before any existing ground is disturbed and is to consist of the placement of perimeter silt fencing and inlet sediment traps around existing drop inlets. Stage 1 is to consist of the placement of the construction exit, silt fence, ditch check dams, slope matting as soon as grading is complete, and rip rap in place as soon as drainage ditches are graded. All temporary BMP's are to be removed upon completion of construction and final stabilization.

PETROLEUM STORAGE, SPILLS AND LEAKS

These plans expressly delegate the responsibility of proper on-site hazardous material management to the Contractor. The contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture, clean up, and disposal of any petroleum product, or other hazardous material, leaks or spills associated with the servicing, refueling or operation of any equipment utilized at the site. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with the action plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCP addendum that addresses the additional BMP's needed for on site storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GAR100002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

SOIL SERIES INFORMATION

The following is a summary of the soils that are expected to be found on the project site:

SYMBOL	NAME
AaB	Allavista sandy loam, 2 to 6 percent slopes
AqC	Appling-Hard Labor complex, 6 to 10 percent slopes
ArE	Ashlar-Rion complex, 6 to 25 percent slopes, stony
CaA	Cartecay-Toccoa complex, 0 to 2 percent slopes, occasionally flooded
CeC2	Cecil sandy loam, 6 to 10 percent slopes, moderately eroded
GaF	Grover-Mountain Park complex, 20 to 60 percent slopes, stony
PqC2	Pacolei-Saw complex, 6 to 10 percent slopes, moderately eroded, bouldery
Pt	Pits, quarry
ReD	Rion Sandy Loam, 10 to 15 percent slopes
ReE	Rion Sandy Loam, 15 to 25 percent slopes
RaE	Rion-Louis complex, 10 to 20 percent slopes, bouldery
Ua	Udorthents, 0 to 10 percent slopes
Ub	Urban land
W	Water

POST-CONSTRUCTION BMP'S FOR STORMWATER MANAGEMENT

All permanent, post-construction BMP's are shown in the construction plans and in the ESPCP plan. The post-construction BMP's for this project may consist of permanent vegetation, permanent slope drains and/or flumes, rip-rap at pipe outlets for velocity dissipation and outlet stabilization, vegetated swales/ditches where practical, channel/ditch stabilization with Turf Reinforcing Mats, rip-rap, and concrete ditch lining where necessary. The post-construction BMP's will provide permanent stabilization of the site and prevent accelerated transportation of sediment and pollutants into receiving waters.

SILT FENCE INSTALLATIONS WITH J HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique is called using J hooks (or spurs). The J hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankment or slopes. The J hooks shall be spaced in accordance with GDOT Construction Detail D-24C. The maximum J hook spacing is reached when the top of the J hook is at the same elevation as the bottom of the immediately upgradient J hook. J hooks shall be paid for as silt fence items per linear foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

SITE STABILIZATION AND BMP MAINTENANCE MEASURES

See the Department's Standard Specifications (or Special Provisions) 16I, 163, 165, 700, 711, and other contract documents for stabilization and maintenance measures.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

INSPECTIONS

The primary permittee must retain the design professional who prepared the ESPCP, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMP's within seven (7) days of installation over the entire infrastructure project. Alternatively, for linear infrastructure projects, the permittee must retain either of these personnel to inspect the initial sediment storage requirements and perimeter control BMP's for the initial segment, as defined by Part IV.A.5. of the current GAR100002 Permit, within seven (7) days of installation and all sediment basins within the entire linear infrastructure project seven (7) days of installation. The inspecting design professional shall report the results to the primary permittee within seven (7) days, and the permittee must correct all deficiencies within two (2) business days of receipt of the inspection report, unless on-site weather conditions are such that more time is required. Additionally, the Department's Construction Project Engineer will be responsible for all subsequent seven-day inspections for all new BMP installations.

All other inspections shall be documented on the appropriate Department Inspection forms. See Standard Specification (or Special Provision) 167 and other contract documents for inspection requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

NON-STORM WATER DISCHARGES

Non-storm water discharges, except for flows from fire fighting activities, sources of non-storm water listed Part III.A.2 of this permit that are combined with the storm water discharges associated with construction activity must be identified in the Plan. The Plan shall identify and insure the implementation of appropriated pollution prevention measures for non-storm water component(s) of the discharge.

DE-WATERING ACTIVITIES AND USE OF PUMPS

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of their pumped discharges. The contractor shall prepare sampling plans in accordance with the current GAR100002 NPDES permit utilizing by a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

OTHER CONTROLS

The contractor shall follow this ESPCP and ensure and demonstrate compliance with applicable State and/or local regulations for waste disposal, sanitary sewer and septic systems, and petroleum storage.

The contractor shall control dust from the site in accordance with Section 16I of the current edition of the Department's Specifications.

SEDIMENT STORAGE

The site has a total disturbed area of 1.59 acres. The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table. Sediment storage maintenance indicators must be installed in sediment storage structures, indicating the 1/3 full volume.

Location	Total Drainage Area (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (yd <sup>3</sup> )	Total Storage Volume Provided (yd <sup>3</sup> )	Sediment Basins		Check Dam (# yd <sup>3</sup> /each)		Inlet sediment (# yd <sup>3</sup> /each)		Silt Fence (0.3 yd <sup>3</sup> /ft)	
					Pond #	Total Volume (yd <sup>3</sup> )	# of Devices	Total Volume (yd <sup>3</sup> )	# of Devices	Total Volume (yd <sup>3</sup> )	Length of Fence (ft)	Total Volume (yd <sup>3</sup> )
17+65 LT	181.1	1.59	107	1347	N/A	N/A	11	165	1	12	3900	1170
<b>Total Sheet Flow</b>												

In order to prevent runoff from bypassing inlet sediment traps, a temporary berm shall be installed on the downstream side of all inlet sediment traps that are not located in a low point or an excavated sump. Temporary berms, when necessary, shall be a minimum of 18" high and constructed in a manner that ensures stormwater does not bypass the inlet. The contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

SEDIMENT BASINS

Sediment basins will not be utilized at any outfall locations for reasons noted below:

Station 17+65 LT: A Sediment Basin is not used at this location. The disturbed acreage within the drainage area is 1.59 acres. The construction of a sediment basin will have adverse impacts from the additional disturbance.

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NTS

REVISION DATES	

FULTON COUNTY

OFFICE: FACILITIES & TRANSPORTATION SERVICES

**ESPCP GENERAL NOTES**

WOLF CREEK MULTI-USE TRAIL

DRAWING NO.  
**51-01**

**STREAM BUFFER ENCROACHMENT**  
 Stream Buffers, as defined by O.C.G.A. 12-7-1, are not impacted by this project.

**SAMPLING GENERAL NOTES:**

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index 0-10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance/safety. The disturbed area classed are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion sedimentation and pollution control plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table shows the groups of similar outfall drainage basins.

The increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

SAMPLING INFORMATION										OUTFALL CHARACTERISTICS					
Primary Monitored Feature	Location (Station and Offset)	Name of Receiving Water	Applicable Construction Stage for Monitoring	Sampling Type (Outfall or Receiving water)	Drainage Area for receiving water (mi <sup>2</sup> )	Upstream Disturbed Area (acres)	Warm or Cold Water Stream	Appendix B NTU Value (Outfall monitoring only)	Allowable NTU Increase (Receiving water monitoring only)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope (Rise/Run)	Soil Erosion Index	Alternate Outfall Drainage Basins
1	17+65, 100 ft L	Tributary	All	Outfall	0.28	N/A	Warm	50	N/A	Bridge	Trail Construction	1.59	0.017	N/A	N/A

**INSPECTING AND SAMPLING PROCEDURES**

**Sampling Frequency**

(1) The primary permittee must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall location within forty-five (45) minutes or as soon as possible.

(2) However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3) Sampling by the permittee shall occur for the following qualifying events:

(a) For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit. After all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the representative sampling location;

(b) In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the representative sampling location, whichever comes first;

(c) At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours\* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d) Where sampling pursuant to (a), (b), or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.16), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b), or (c) above; and

(e) Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

\*Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

**Reporting**

1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which sample are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

2. All sampling reports shall include the following information:

- a. The rainfall amount, date, exact place and time of sampling and measurements;
- b. The name(s) of the certified personnel who performed the sampling and measurements;
- c. The date(s) analyses were performed;
- d. The time(s) analyses were initiated;
- e. The name(s) of the certified personnel who performed the analysis;
- f. References and written procedures, when available, for the analytical techniques or method used;
- g. The results of such analysis, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results;
- h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU"; and
- i. Certification statement that sampling was conducted as per the Plan.

3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The permittee shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT is submitted in accordance with Part VI. If an electronic submittal is provided by EPD then the written correspondence may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

**RETENTION OF RECORDS**

- 1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:
  - a. A copy of all Notices of Intent submitted to EPD;
  - b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
  - c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
  - d. A copy of all monitoring information, results, and reports required by this permit;
  - e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
  - f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and
  - g. Daily rainfall information collected in accordance with Part IV.D.4.a.(1)(c) of this permit.

2. Copies of all Notices of Intent, Notices of Termination, Inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

**READY MIX CHUTE WASH-DOWN**

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of portland cement concrete is prohibited on this site. In accordance with standard Specification 107 - Legal Regulations and Responsibility to the Public, only the discharge "chute" utilized in portland cement concrete delivery may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travel way, including shoulders, for a wash/plt area. The pit shall be large enough to store all wash-down water without overlapping the pit. Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above shall be graded to match the elevation of the surrounding areas smoothed out. Alternate wash down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down water pit location that includes the following: (1) the pit is located away from a storm drain, stream or river, (2) the pit is accessible to the vehicle being used for wash-down, (3) the pit has enough volume for wash-down water, and (4) make sure you have permission to use the area for wash-down. On some sites, you may not have permission or access to a location which allows for a wash-down pit. In those cases, the Contractor may have to wash-down into a wheelbarrow or other container and carry the container for transport to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

**ALTERNATIVE BMPs**

Alternative BMPs are not used on this project.

PLANS PREPARED AND SUBMITTED BY:



AMERICAN ENGINEERS, INC.  
 DESIGN CONSULTANT

634 White Circle, Suite 101  
 Marietta, GA 30066  
 (770) 421-8422

2500 Nelson Miller Parkway  
 Louisville, KY 40223  
 (502) 249-3883

PROFESSIONAL ENGINEERING

NTS

**REVISION DATES**

NO.	DATE	DESCRIPTION

FULTON COUNTY

OFFICE: FACILITIES & TRANSPORTATION SERVICES

**ESPCP GENERAL NOTES**

WOLF CREEK MULTI-USE TRAIL

DRAWING No. 51-02

Sampling Requirements. This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. The following procedures constitute EPD's guidelines for sampling turbidity.

a. Sampling Requirements shall include the following:

- (1) A USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the location of the infrastructure construction; (a) the location of all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during mandatory field verification, into which the storm water is discharged and (b) the receiving water and/or outfall sampling locations for each representative stormwater outfall. When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be hand-drawn on the USGS topographic map from where the storm water(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic map;
- (2) A written narrative of site specific analytical methods used to collect and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling location;
- (3) When the permittee has determined that some or all outfalls will be sampled, a rationale must be included on the Plan for the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the calculation of the size of the surface water drainage area, and the type of receiving water(s) (i.e., trout stream or supporting warm water fisheries); and
- (4) Any additional information EPD determines necessary to be part of the Plan. EPD will provide written notice to the permittee of the information necessary and the time line for submittal.

b. Sample Type.

- All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved); the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-00" and guidance documents that may be prepared by the EPD.
- (1) Sample containers should be labeled prior to collecting the samples.
  - (2) Samples should be well mixed before transferring to a secondary container.
  - (3) Large mouth, well cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.
  - (4) Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. If automatic sampling is utilized and the automatic sampler is not activated during the qualifying event, the permittee must utilize manual sampling or rising stage sampling during the next qualifying event. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter. Samples are not required to be cooled.
  - (5) Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

c. Sampling Points.

- (1) For construction activities the primary permittee must sample all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or all outfalls into such streams and other water bodies, or a combination thereof. However, provided for in and in accordance with Part IV.D.6.c.(2) of this permit, primary permittees on an infrastructure construction project may sample the representative perennial and intermittent streams, other water bodies or outfalls, or a combination thereof. Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:
  - (a) The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value.
  - (b) The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.
  - (c) Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).
  - (d) Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.
  - (e) The sampling container should be held so that the opening faces upstream.
  - (f) The samples should be kept free from floating debris.
  - (g) Permittees do not have to sample sheetflow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and a seeding of target crop perennials appropriate for the region). For infrastructure construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use.
  - (h) All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.
- (2) For infrastructure construction projects, the permittee is not required to sample a perennial or intermittent stream or other water bodies (or the associated outfall, if applicable) if the design professional preparing the Plan certifies that an increase in the turbidity of a specific identified receiving water to be sampled will be representative of the increase in the turbidity of a specific identified un-sampled receiving water. A written rationale and detailed analysis shall be prepared by the design professional justifying such proposed sampling. A summary chart of the justification and analysis for the representative sampling must be included on the Plan. The justification and analysis shall include the location and description of the specified sampled and un-sampled receiving water and shall contain a detailed comparison and discussion of each such receiving water in the following areas:
  - (a) site land disturbances and characteristics;
  - (b) receiving water watershed sizes and characteristics; and
  - (c) site and watershed runoff characteristics utilizing the methods in Appendix A-I (United States Department of Agriculture Soil Conservation Service's TR-55, Urban Hydrology for Small Watersheds) of the most recent version of the "Manual for Erosion and Sedimentation Control in Georgia" for the various precipitation events and any other such considerations necessary to show that the increase in the turbidity of a specific identified sampled receiving water will be representative of the increases in the turbidity of a specific identified un-sampled receiving waters.
- (3) For infrastructure construction projects, when the permittee determines that some receiving water(s) will not be sampled due to representative sampling, the design professional making this determination and preparing the Plan must include and sign the following certification in the Plan:
 

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GAR 100002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."
- (4) For infrastructure construction projects, if at any time during the life of the project a selected receiving water no longer represents another receiving water, then the permittee shall sample the latter receiving water until selection of an alternative representative receiving water.
- (5) For infrastructure construction projects, if at any time during the life of the project a receiving water is determined not to be represented as certified in the Plan, the permittee shall sample that receiving water until a Notice of Termination is submitted or until the applicable phase is stabilized in accordance with this permit.
- (6) For infrastructure construction projects, monitoring obligations shall cease for any phase of the project that has been stabilized in accordance with Part IV.D.6.c.(1)(g).

ANTICIPATED ACTIVITY SCHEDULE

ACTIVITY / MONTH	1	2	3	4	5	6
INITIAL EROSION AND SEDIMENT CONTROL	█					
INTERMEDIATE EROSION AND SEDIMENT CONTROL		█	█	█	█	
CLEARING AND GRUBBING	█					
GRADING			█	█	█	
UTILITY RELOCATION				█	█	
PAVING			█	█	█	
MAINTAIN EROSION CONTROL		█	█	█	█	█
FINAL STABILIZATION					█	█
CLEAN UP						█

ANTICIPATED START DATE: JANUARY 2014

EXISTING IMPERVIOUS AREA:	0.00 ACRES
NET GAINED IMPERVIOUS AREA:	0.31 ACRES
NET GAINED IMPERVIOUS AREA BY PERCENTAGE OF TOTAL:	19.50%

**Primary Permittee**  
**Fulton County**  
**Facilities & Transportation Services Department**  
**141 Pryor Street, SW, Suite G119**  
**Atlanta, GA 30303**  
**404-612-8325**

<p>PLANS PREPARED AND SUBMITTED BY:</p>  <p>AMERICAN ENGINEERS, INC. www.aei.cc</p> <p>DESIGN CONSULTANT</p>	<p>NTS</p>	<p>REVISION DATES</p> <table border="1" style="width: 100%; height: 100%;"> <tr><td> </td><td> </td></tr> </table>															<p>FULTON COUNTY</p> <p>OFFICE: FACILITIES &amp; TRANSPORTATION SERVICES</p> <p><b>ESPCP GENERAL NOTES</b></p> <p>WOLF CREEK MULTI-USE TRAIL</p>
			<p>DRAWING No. <b>51-03</b></p>														



Georgia Soil and Water Conservation Commission  
**EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST**  
**INFRASTRUCTURE CONSTRUCTION PROJECTS**

SWCD: Fulton County SWCD  
 Project Name: Wolf Creek Multi-Use Trail Address: Overflow Lot of Wolf Creek Amphitheater  
 City/County: Fulton Date on Plans: 11/22/2013

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN				
51-03	Y	1. The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. <b>(The completed Checklist must be submitted with the ES&amp;PC Plan or the Plan will not be reviewed)</b>				
50-01	Y	2. Level II certification number issued by the Commission, signature and seal of the certified design professional. <b>(Signature, seal and Level II number must be on each sheet pertaining to ES&amp;PC plan or the Plan will not be reviewed)</b>				
50-01	Y	3. The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.				
51-03	Y	4. Provide name, address and phone number of primary permittee.				
53-01	Y	5. Note total and disturbed acreage of the project or phase under construction.				
50-01	Y	6. Provide land lot and district numbers for site location. Describe critical areas and any additional measures that will be utilized for these areas.				
50-01	Y	7. Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.				
50-01	Y	8. Graphic scale and north arrow.				
53-01	Y	9. Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: <table border="1" style="margin-left: 20px;"> <tr> <td>Existing Contours:</td> <td>USGS 1"=2000' Topographical Sheets</td> </tr> <tr> <td>Proposed Contours:</td> <td>1"=400' Centerline Profile</td> </tr> </table>	Existing Contours:	USGS 1"=2000' Topographical Sheets	Proposed Contours:	1"=400' Centerline Profile
Existing Contours:	USGS 1"=2000' Topographical Sheets					
Proposed Contours:	1"=400' Centerline Profile					
53-01	Y	10. Delineation and acreage of contributing drainage basins on the project site.				
N/A	N/A	11. Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.				
N/A	N/A	12. Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.				
55-01	Y	13. Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.*				
53-01	Y	14. Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.				
53-01	Y	15. Soil series for the project site and their delineation.				
53-01	Y	16. Identify the project receiving waters and describe all adjacent areas including streams, lakes, residential areas, wetlands, etc. which may be affected.				
N/A	N/A	17. Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biotically Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix I listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*				
N/A	N/A	18. If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 18 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.*				
53-01	Y	19. Delineate on-site drainage and off-site watersheds using USGS 1" = 2000' topographical sheets.				
50-01	Y	20. Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.				
54-01	Y	21. The limits of disturbance for each phase of construction.				
51-01	Y	22. Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written rationale explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls.				
51-02	N	23. Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at <a href="http://www.gswcc.org">www.gswcc.org</a> .				
54-01	Y	24. Best Management Practices to minimize off-site vehicle tracking of sediments and the generation of dust.				
51-02	Y	25. BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*				
51-01	Y	26. Provide BMPs for the remediation of all petroleum spills and leaks.*				

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
52-01	Y	27. Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
51-01	Y	28. Description of the nature of construction activity.
51-01	Y	29. A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs.*
51-03	Y	30. Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
51-01	Y	31. Description of the practices that will be used to reduce the pollutants in storm water discharges.*
51-01	Y	32. Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.*
50-01	Y	33. Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.
50-01	Y	34. Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on page 14 of the permit.*
N/A	N/A	35. Certification statement and signature of the permittee or the duly authorized representative as stated in section V.G.2.d. of the state general permit.*
53-01	Y	36. An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
51-02	Y	37. Indication that non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of westered vegetation without first acquiring the necessary variances and permits.
51-01	Y	38. Indication that the design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation.*
51-01	Y	39. Indication that amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional.*
51-02	Y	40. Indication that waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit.*
51-01	Y	41. Documentation that the ES&PC Plan is in compliance with waste disposal, sanitary sewer, or septic tank regulations during and after construction activities have been completed.*
51-02	Y	42. Provide complete requirements of inspections and record keeping by the primary permittee.*
51-02	Y	43. Provide complete requirements of sampling frequency and reporting of sampling results.*
51-02	Y	44. Provide complete details for retention of records as per Part IV.F. of the permit.*
51-03	Y	45. Description of analytical methods to be used to collect and analyze the samples from each location.*
51-02	Y	46. Appendix B rationale for outfall sampling points where applicable.*
51-01	Y	47. Clearly note statement in bold letters - <b>"The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to, or concurrent with, land disturbing activities."</b>
51-01	Y	48. Clearly note maintenance statement in bold letters - <b>"Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."</b>
51-01	Y	49. Clearly note the statement in bold letters - <b>"Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."</b>
52-01	Y	50. Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
51-01	Y	51. Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

Effective January 1, 2013

PLANS PREPARED AND SUBMITTED BY:  
 AMERICAN ENGINEERS, INC. PROFESSIONAL ENGINEERING  
 DESIGN CONSULTANT

Branch Office:  
 65 Aberdeen Drive Glasgow, KY 42041 (270) 651-7220  
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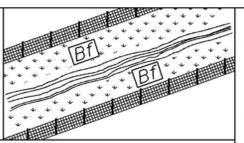
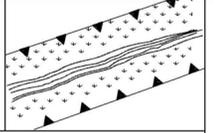
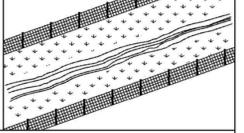
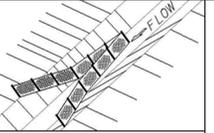
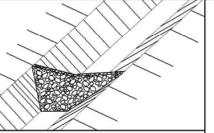
NTS

REVISION DATES

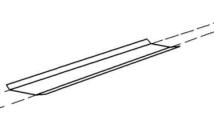
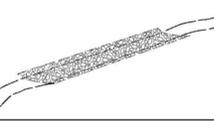
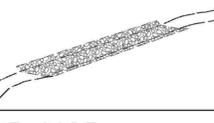
NO.	DATE	DESCRIPTION

FULTON COUNTY  
 OFFICE: FACILITIES & TRANSPORTATION SERVICES  
**ESPCP GENERAL NOTES**  
 WOLF CREEK MULTI-USE TRAIL  
 DRAWING NO. 51-04

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		32	45

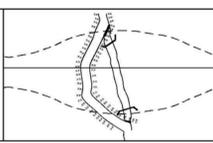
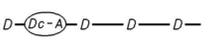
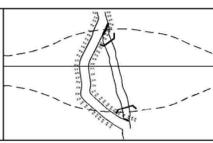
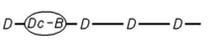
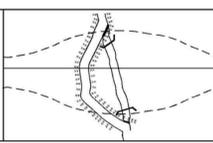
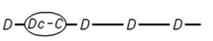
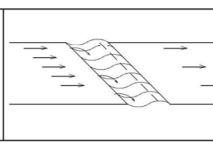
CODE	PRACTICE STD : SPC'S : SECTION	DETAIL	DESCRIPTION
Bf		BUFFER ZONE	 <p>A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS. THE BOUNDARIES OF THESE AREAS ARE BE DELINEATED BY ORANGE BARRIER FENCE.</p>
		SYMBOL	
ESA		ENVIRONMENTALLY SENSITIVE AREA	 <p>ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESA AREAS INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, ARCHAEOLOGICAL SITES, HISTORIC SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS. IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.</p>
		LINE CODE	
		ORANGE BARRIER FENCE	 <p>ORANGE BARRIER FENCE DELINEATES ESA AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.</p>
		LINE CODE	
Cd-F		FABRIC CHECK DAM CONSTRUCTION DETAIL SECTION 171	 <p>A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, AND BRACING PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24b FOR SPACING REQUIREMENT.</p> <p>THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS.</p> <p>IF THIS ITEM IS USED IN AN AREA WITHOUT A SEDIMENT BASIN CONSIDERATION SHOULD BE GIVEN TO USING TWO OR MORE ROCK FILTER DAMS NEAR THE DISCHARGE POINT.</p>
		LINE CODE	
Cd-S		STONE OR SANDBAG CHECK DAM SECTION 163, 603	 <p>STONE CHECK DAMS ARE USED IN ROADWAY DITCHES. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING STONE CHECK DAMS. CONTRACTOR MAY USE SANDBAG CHECK DAMS IN LIEU OF STONE CHECK DAMS.</p> <p>SANDBAG CHECK DAMS MUST BE USED IN CONCRETE LINED CHANNELS.</p>
		LINE CODE	

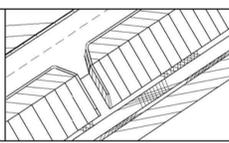
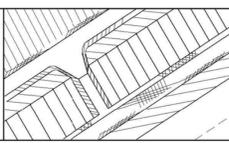
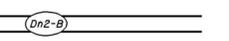
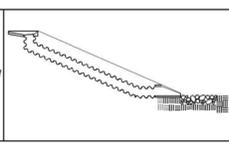
**NOTE:**  
 1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.  
 2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION CONTROL MEASURES SEE THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

CODE	PRACTICE STD : SPC'S : SECTION	DETAIL	DESCRIPTION
Ch-C		CHANNEL CONCRETE SECTION 161, 441	 <p>THIS ITEM CONSISTS OF CONSTRUCTING A 4" THICK CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE DITCH FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT DITCH PROTECTION PROGRAM</p> <p>"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS</p>
		LINE CODE	
Ch-Rp1		CHANNEL RIP RAP TYPE 1 SECTION 161, 603	 <p>THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 1 RIP RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP RAP SHALL PROTECT THE DITCH FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT DITCH PROTECTION PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED ALONG THIS CHANNEL SUCH AS Sd1-C, Rdc OR Sg.</p> <p>"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS</p>
		LINE CODE	
Ch-Rp3		CHANNEL RIP RAP TYPE 3 SECTION 161, 603	 <p>THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP RAP SHALL PROTECT THE DITCH FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT DITCH PROTECTION PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED ALONG THIS CHANNEL SUCH AS Sd1-C, Rdc OR Sg.</p> <p>"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS</p>
		LINE CODE	
Ch-V		CHANNEL GRASS SECTION 161, 700	 <p>USED TO IMPROVE OR STABILIZE A NEW OR EXISTING CHANNEL. IT IS CONSTRUCTED IN STORMWATER DRAINAGE DITCHES. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT DITCH PROTECTION PROGRAM ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. TYPICALLY NOT SHOWN IN PLANS.</p>
		LINE CODE	

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NO SCALE	JANUARY 2007
NUMBER EC-LI	DRAWING No. 52-001

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.		33	45

CODE	PRACTICE STD : SPC'S : SECTION	DETAIL	DESCRIPTION
Co	CONSTRUCTION EXIT		A STONE STABILIZED PAD LOCATED AT ANY POINT WHERE TRAFFIC WILL BE EXITING A CONSTRUCTION SITE TO A PUBLIC ROAD. BEST USED AT ACCESS POINTS, I.E. NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS ROADS, ETC. SHOULD BE MIN. 20' WIDE AND 50' LONG, AND 6" THICK. REQUIRES A GEOTEXTILE UNDERLINER, INCLUDED IN THE PRICE FOR THE CONSTRUCTION EXIT.
	CONSTRUCTION DETAIL	LINE CODE 	
Dc-A	DIVERSION CHANNEL GEOTEXTILE, POLYETHYLENE FILM		A DIVERSION CHANNEL IS A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE OR POLYETHYLENE FILM. INSTALL TWO ROWS OF Sd1-C PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS DESIGNED FOR A TWO YEAR STORM FREQUENCY WITH A FLOW RATE BETWEEN 0-2.5 fps. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	SECTION 163	LINE CODE 	
Dc-B	DIVERSION CHANNEL GEOTEXTILE ONLY		A DIVERSION CHANNEL IS A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE ONLY. INSTALL TWO ROWS OF Sd1-C PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS DESIGNED FOR A TWO YEAR STORM FREQUENCY WITH A FLOW RATE BETWEEN 2.5-9.0 fps. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	SECTION 163	LINE CODE 	
Dc-C	DIVERSION CHANNEL RIPRAP AND GEOTEXTILE		A DIVERSION CHANNEL IS A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH RIPRAP AND GEOTEXTILE. INSTALL TWO ROWS OF Sd1-C PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS DESIGNED FOR A TWO YEAR STORM FREQUENCY WITH A FLOW RATE BETWEEN 9.0-13.0 fps. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	SECTION 163	LINE CODE 	
Di	DIVERSION BERM CONSTRUCTION DETAIL		THIS IS A TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REDUCE THE LENGTH OF A SLOPE. THEY ARE USED TO INTERCEPT RUNOFF, PREVENTING SLOPE EROSION AND TO DIRECT THE RUNOFF TO A STABLE OUTLET, DOWN DRAINS "Dn1" OR CATCHMENT AREAS AND ON ALL GRADING PROJECTS.  SEE CHAPTER 6 OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA FOR DESIGN CRITERIA AND DETAILS.
	SECTION 161, 205	LINE CODE 	

CODE	PRACTICE STD : SPC'S : SECTION	DETAIL	DESCRIPTION
Dn1	DOWN DRAIN STRUCTURE FLEXIBLE		A TEMPORARY PIPE SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 500 FEET ON A 0 TO 2 PERCENT GRADE, 200 FEET ON STEEPER GRADES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE USUAL PIPE SIZE IS 10 INCH CORRUGATED. THE OUTLET AREA SHOULD BE STABILIZED WITH SILT FENCE, SUMP HOLE, HAYBALES, ANGLING OUTLET IN UPHILL DIRECTION OR OTHER APPROPRIATE MEANS FOR VELOCITY DISSIPATION AND EROSION CONTROL. THE PIPE WILL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 10'.
	CONSTRUCTION DETAIL SECTION 163	LINE CODE 	
Dn2-A	PERMANENT DOWN DRAIN STRUCTURE CONCRETE		A CONCRETE FLUME TYPE "A" IS USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25 YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	CONSTRUCTION DETAIL SECTION 441	LINE CODE 	
Dn2-B	PERMANENT DOWN DRAIN STRUCTURE CONCRETE		A CONCRETE FLUME TYPE "B" IS USED TO DIRECT SURFACE DITCH RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE CUT SLOPE. IT IS DESIGNED TO SAFELY CONVEY WATER DOWN THE CUT SLOPE. IT IS DESIGNED FOR A 25 YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	CONSTRUCTION DETAIL SECTION 441	LINE CODE 	
Dn2-I	PERMANENT DOWNDRAIN STRUCTURE		CONCRETE DRAIN INLET WITH METAL PIPE IS USED TO DRAIN CURBS, ON A GRADE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	GA. STD. 9017 J TPI, D-26 TPI SECTION 576, 577.	LINE CODE 	

- NOTE:
- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
  - FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION CONTROL MEASURES SEE THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
EROSION CONTROL LEGEND AND UNIFORM CODE SHEET SHEET 2 OF 6	
NO SCALE	JANUARY 2007
NUMBER EC-L2	DRAWING No. 52-002

TC	UPDATED DRAWING NO.	I-24-13
TC	REV. 01 LABEL DESCRIPTION, RELOCATED, Dn2-A, Dn2-B, AND Dn2-C CODES FROM ECL&UC SHEET 3 OF 6.	10-12
GLO	REVISED ORDER	11-13-07
GLO	REVISED TITLE BLOCK	11-13-07
BY	REVISION	DATE