

Updated: January 10, 2012

**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 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.

**PLAN ALTERATIONS**

The Erosion, Sedimentation, and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project on the basis of common construction methods and techniques. If the Contractor elects to alter the staged 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 161 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 161 - Control of Soil Erosion and Sedimentation.

**TEMPORARY MULCHING**

EPD General Permit GAR 100002 states that "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding." However, the Department typically requires disturbed areas to be stabilized every 7 days. The construction documents, special provisions, or specifications may require mulching more often than 7 days.

**VEGETATION AND PLANTING SCHEDULE**

All temporary and permanent vegetative practices including plant species, planting dates, seeding, fertilizer, liming and mulching rates for this project can be found in section 700 of the current edition of the Department's Standard Specifications for special provisions and other applicable contract documents, special provisions, 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 after the project is awarded with the NOI. A copy of the construction schedule shall be maintained at the project site. The project budget includes sufficient funds for 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 this ESPCP. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

**STAGE 1**

This work includes clearing and grubbing of project area and installation of Initial BMP's.

**STAGE 1A**

This work includes placement of asphalt leveling for the construction of the new alignments.

**INITIAL BMP INSTALLATION**

1. Concurrent with clearing and grubbing activities, install all perimeter controls. Perimeter BMP's include Type C Silt Fence placed outside of the construction limits. Two rows of Type C Silt Fence is required in all areas designated as ESAs.
2. Apply Temporary Grassing and Mulch as necessary to disturbed areas.
3. Construction Exits shall be installed prior to clearing and grubbing activities.

**STAGE 2**

This work includes the construction of the new alignment of SR 112 from Sta 1+15 to 16+00 and the new alignment of 17th Ave from Sta 6+62+37 to 13+94. It includes the construction of the right turn lanes along US 84 from Sta 10+21 to 105+58 and from Sta 112+63 to 114+50. It also includes the removal of the asphalt/roadbed of existing 7th Street.

**INTERMEDIATE BMP INSTALLATION**

1. Maintain all perimeter BMP's.
2. Mulch and plant Temporary Grass as required by the special provisions.
3. Install Check Dams in proposed ditches as shown on the plans.
4. Install and Maintain Inlet Sediment Traps as shown on the plans.
5. Install Temporary Downdrain Structures as shown on the plans.
6. Provide positive drainage to Slope Drains as embankments are constructed.

**FINAL BMP INSTALLATION**

1. As soon as final grade has been established for the construction of the new alignments in the above listed locations, install Install Erosion Control Mats and Rip Rap at Storm Drain outlets.

**STAGE 3**

This work includes the construction of the new alignment of SR 112 from Sta 0+00 to 1+15 and from Sta 16+00 to 25+00. It includes the new alignment of 17th Ave from Sta from 13+94 to 18+00. It also includes the completion of the right turn lane along US 84 from Sta 114+50 to 116+13 and the Cur-de-sac at Survey CL Sta 8+18.28 is to be constructed. It also includes the removal of the asphalt/roadbeds of existing 17th Ave (from Survey CL Sta 0+00 to 9+18) and SR 112.

**STAGE 3 CONT'D**

**INTERMEDIATE BMP INSTALLATION**

1. Maintain all perimeter BMP's.
2. Mulch and plant Temporary Grass as required by the special provisions.
3. Install Check Dams in proposed ditches as shown on the plans.
4. Install and Maintain Inlet Sediment Traps as shown on the plans.
5. Install Temporary Downdrain Structures as shown on the plans.
6. Provide positive drainage to Slope Drains as embankments are constructed.

**FINAL BMP INSTALLATION**

1. As soon as final grade has been established for the construction of the new alignments in the above listed locations, install Install Erosion Control Mats and Rip Rap at Storm Drain outlets.

**PETROLEUM STORAGE, SPILLS, AND LEAKS**

These plans expressly delegate the responsibility of 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**

A project-specific soil survey and geotechnical investigation was performed for this project and can be made available upon request. Soil characteristics have been given full consideration in the hydrologic analysis, the design of channels and linings, selection of temporary BMP's, design of energy dissipaters, and in the selection of permanent vegetation and fertilizers.

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

ARDILLA LOAMY SAND, ALAPAHA LOAMY SAND, ANGIE FINE SANDY LOAM, JOHNSTON-OSIER-BIBB ASSOCIATION, LAKE LAND SAND, MASCOTTE SAND, OLUSTER SAND, PELHAM LOAMY SAND, PELHAM LOAMY SAND-LOW TERRACE

Due to the size and scope of this project and the nature of soil series maps, it is not reasonably practical to delineate the precise locations of the above listed soils on the construction plans. The NRCS soil survey and soil series maps for the project site are also available online at <http://websol survey.nrcs.usda.gov/>.

NRCS soil information is not available for this project site.

**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 consist of rip rap at pipe outlets for velocity dissipation and outlet stabilization and erosion control mats. The post-construction BMP's will provide permanent stabilization of the site and prevent abnormal 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 back 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 embankments or slopes. The J hooks shall be spaced in accordance with GDOT Construction Detail D-24C. The maximum J hooks 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 Provision) 161, 163, 165, 700, 710, and 700 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, water courses 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**

All 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.

By agreement with Georgia EPD, the Department's Construction Project Engineer will be responsible for the seven day inspections required for new BMP installations.

**NONSTORM WATER DISCHARGES**

Non-storm water discharges defined in Part III, A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and other contract documents.

**DE-WATERING AND PUMPING ACTIVITIES**

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 pumped discharges. The contractor shall prepare sampling plans in accordance with the current GAR100002 NPDES permit by utilizing 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 waste disposal, sanitary sewer or septic system regulations.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Standard Specifications.

**SEDIMENT STORAGE**

The site has a total disturbed area of 11.31 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.

LOCATION	TOTAL DRAINAGE AREA (ACRES)	DISTURBED AREA (ACRES)	REQUIRED SEDIMENT STORAGE VOLUME (yd3)	TOTAL STORAGE VOLUME PROVIDED (yd3)	SEDIMENT BASINS		CHECKDAM (*yd3/EACH)		INLET SEDIMENT TRAPS (*yd3/EACH)		SILT FENCE (0.3 yd3/FT)	
					POND*	TOTAL VOLUME (yd3)	* OF DEVICES	TOTAL VOLUME (yd3)	* OF DEVICES	TOTAL VOLUME (yd3)	LENGTH OF FENCE (FT)	TOTAL VOLUME (yd3)
OUTFALL 1	4.03	3.69	270.01	1882.30	N/A	N/A	39	1860.80	2	21.50	N/A	N/A
OUTFALL 2	1.00	0.22	67	302.60	N/A	N/A	5	302.60	N/A	N/A	N/A	N/A
OUTFALL 3	0.27	0.17	18.09	131.40	N/A	N/A	2	131.40	N/A	N/A	N/A	N/A
OUTFALL 4	0.72	0.32	48.24	131.40	N/A	N/A	2	131.40	N/A	N/A	N/A	N/A
OUTFALL 5	0.61	0.35	40.87	236.50	N/A	N/A	4	236.50	N/A	N/A	N/A	N/A
OUTFALL 6	2.97	2.05	198.99	1170.90	N/A	N/A	19	1170.90	N/A	N/A	N/A	N/A
OUTFALL 7	0.15	0.06	10.05	71.20	N/A	N/A	1	71.20	N/A	N/A	N/A	N/A
OUTFALL 8	0.19	0.14	12.73	100.00	N/A	N/A	2	100.00	N/A	N/A	N/A	N/A
OUTFALL 9	2.25	1.27	150.75	532.00	N/A	N/A	9	532.00	N/A	N/A	N/A	N/A
OUTFALL 10	0.65	0.50	43.55	148.00	N/A	N/A	3	148.00	N/A	N/A	N/A	N/A
OUTFALL 11	0.38	0.31	25.46	59.30	N/A	N/A	2	59.30	N/A	N/A	N/A	N/A
<b>TOTAL SHEET FLOW</b>	<b>4.22</b>	<b>2.23</b>	<b>282.74</b>	<b>2,337.61</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>6775</b>	<b>2,337.61</b>

In order to prevent runoff from bypassing inlet sediment traps, a temporary sump shall be installed around all inlet sediment traps that are not located in a low point or an excavated sump. Construct temporary sumps in accordance with Construction Detail D-24C. Temporary sumps shall be installed 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.

The Disturbance Activities consist of Clearing and Grubbing, Removal of Existing Pavement Structure, Removal of Existing Cross Drains, Removal of Fill, Placement of Fill and Grading. BMP's as shown on the ESPCP will be adequate to control sediment runoff at this location. Land disturbance activities associated with constructing and removing a sediment basin at this location would cause adverse impacts.

	<p><b>GEORGIA</b> DEPARTMENT OF TRANSPORTATION</p>	<p>REVISION DATES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>5-24-12</td><td></td><td></td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	5-24-12																					<p>STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: DISTRICT 4 DESIGN <b>ESPC GENERAL NOTES</b></p>
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			<p>DRAWING No. <b>51-001</b></p>																					

Use On Construction