

Georgia Department of Transportation ESPCP General Notes  
Updated: August 24, 2011

(Sheet 1 of 5)

**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 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 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, lime and mulching rates for this project can be found in section 700 of the current edition of the Department's specifications 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 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 this ESPCP. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

The Initial BMP Installation is shown in the Initial phase and this includes all perimeter silt fence controls. The silt fence shall be installed concurrent with clearing and grubbing operations. Intermediate and final BMPs are shown throughout all stages of the intermediate phase. The BMPs to be installed during these stages are additional silt fence due to construction staging, inlet sediment traps, ditch checks, slope mats, rip rap, construction exits, diversions, earth berms, rip rap check dams, sediment barriers, temporary grassing, mulching, permanent grassing, temporary pipe slope drains. These BMPs shall be installed concurrently with mass grading operations with the exception of ditch checks and inlet traps which should be installed prior to mass grading operations. During mass grading operations, runoff from disturbed area must be directed to sediment control BMPs. Sediment basins are not utilized on this project due to adverse impacts of constructing and removing the basin. Final BMPs included in this project are rip rap, grassing, slope mats, and rip rap check dams. These items are installed during mass grading operations, but are noted on the plans as permanent BMPs for final stabilization of that stage.

**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 BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GARI00002 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.

**POST-CONSTRUCTION BMP'S**

All permanent, post-construction BMPs are shown in the construction plans and in the ESPCP plan. The post-construction BMPs for this project consist of 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 BMPs 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 back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique, or configuration, is commonly referred to as 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 Construction Detail D-24C. The maximum spacing of J hooks is reached when the top of the adjacent downgradient J hook is at the same elevation as the bottom of the adjacent upgradient J hook. J hooks shall be paid for as silt fence items per foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

**MAINTENANCE AND STABILIZATION MEASURES**

See Special Provision 161 and 700 and other contract documents for maintenance and stabilization 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**

All inspections shall be documented on the appropriate Department Inspection forms. See 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.

**MONITORING SAMPLING METHODS & PROCEDURES**

See Special Provision 167 and other contract documents for Monitoring Sampling Methods and Procedures.

**NON-STORM 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 contract documents.

**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 GARI00002 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 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 Specifications.

**SEDIMENT STORAGE**

The site has a total disturbed area of 68.23 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 BMPs specified in this table.

Location	Total Drainage Area (acres)	Drainage across Disturbed area (acres)	Required Sediment Storage Volume (yd <sup>3</sup> )	Total Storage Volume Provided (yd <sup>3</sup> )	Sediment Basins		Check Dam (6-80 yd <sup>3</sup> /each)		Inlet sediment Traps (5-25 yd <sup>3</sup> /each)		Silt Fence (0.28 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> )
Outfall 1 STA.66+24 RT	124	5.7	382	651			8	168	2	32	3041	451
Outfall 2 STA.70+88 RT	26	10.51	704	908			1	12	23	363	3600	533
Outfall 3 STA.1202+73 RT	1.7	1.61	108	130			7	67	4	63		
Outfall 4 STA.1211+01 RT	7.8	4.94	331	580			11	230	17	269	550	81
Outfall 5 STA.1224+92 RT	32	5.66	379	524			5	224	19	300		
Outfall 6 STA.1264+12 RT	21	7.30	489	709			17	424	12	190	640	95
Outfall 7 STA.1271+15 RT	6.6	2.16	145	159			7	143	1	16		
Outfall 8 STA.1291+01 RT	21	5.39	361	576			23	544	2	32		
Outfall 9 STA.1303+20 RT	12	5.87	393	456			3	78	9	142	1595	236
Outfall 10 STA.1323+69 RT	8.7	4.78	320	586			4	438	1	16	890	132
Outfall 11 STA.1334+74 RT	16	2.83	190	310			6	310				
Outfall 12 STA.1358+18 RT	16	9.55	640	813			22	627	3	47	935	139
Outfall 13 STA.1378+38 RT	6.8	1.91	128	146			7	130	2	16		
Total Sheet Flow												

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.

**TEMPORARY SEDIMENT BASIN DETAILS**

Sediment basins are not utilized on this project due to adverse impacts of constructing and removing the basin to the surrounding ESA's.

**USE OF ALTERNATIVE AND/OR ADDITIONAL BMPS**

No alternative or additional BMPs will be used on this project.

**RELEASED FOR CONSTRUCTION - 12/05/11**



REVISION DATES		STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: INNOVATIVE PROGRAM DELIVERY ESPC GENERAL NOTES
6/17/2013		
		DRAWING No. <b>51-001</b>