

Georgia Department of Transportation ESPCP General Notes
Updated: August 26,2008

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 Design Professional. 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. See also Drawing No. 51-02.

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 initial BMP installation is shown in stage 1 and this includes all perimeter silt fence controls. This silt fence shall be installed concurrent with clearing and grubbing operations. Intermediate and final BMP's are shown throughout all phases of stage 2 and 3. The BMP's to be installed during these stages are additional silt fence due to temporary pavement, sediment inlet traps, ditch checks, slope mats, rip rap, construction exits, temporary grassing, mulching, permanent grassing, and temporary pipe slope drains. These BMP's shall be installed concurrently with mass grading operations with the exception of ditch checks, inlet traps and filter rings which should be installed prior to mass grading operations. During mass grading operations, runoff from disturbed area must be directed to sediment control BMP's. Sediment basins are not utilized due to adverse impacts of constructing and removing the basin within the existing wetlands. Final BMP's included in this project are rip rap, grassing, slope mats, and enhanced swales. These items are installed during mass grading operations, but are noted on the plans as permanent BMP's for final stabilization of that stage.

During construction of the bridge foundations, a double row of type C silt fence with hay bales in between the double row of silt fence shall be used. In areas where water is encountered floating silt retention barrier shall be used to supplement adequately placed BMP's.

PETROLEUM STORAGE, SPILLS AND LEAKS

Follow standard tank filling practices when filling tanks to prevent spills and overfills. Furthermore, all Above Ground Storage Tanks (AST's) should have a secondary containment area that contains and allows leaks to be more easily detected. The containment area surrounding the tank should hold 110 percent of the contents of the largest tank plus freeboard for precipitation. Secondary containment for AST's must be impermeable to the materials being stored. Methods include berms, dikes, liners, vaults, and double walled tanks. A manually controlled sump pump should be used to collect rain water that may accumulate in the secondary containment area. Any discharge should be inspected for petroleum or chemicals prior to being dispensed. Routinely monitor AST's to ensure they are not leaking. The AST's should be enclosed with fencing and locked. A fire extinguisher shall be readily accessible.

Hazardous products are to be kept in original container unless they are not resealable. If a product is transferred to a new container, it must be properly marked and labeled.

Petroleum products and any other hazardous products will be stored at the Contractor's Field Office which will be located outside the project limits just across from Skidaway Island Park Road at the existing "Jug-handle" inside GDOT right-of-way.

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 the selection of permanent vegetation and fertilizers.

POST-CONSTRUCTION BMP'S

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 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 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 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 the Typical Location Details for silt fences/baled straw. Spacing for J-hooks shall not be less than 50 feet except as noted. Silt fences that are near the outlet of culverts, cross drains, and storm drains shall have a minimum of three (3) J-Hooks on both sides of the structure at spacing not to exceed 30 feet.

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.

Owner: Department of Transportation
One Ga Center, 600 W Peachtree St. NW
Atlanta, Georgia 30060

Operator: United Contractors, Inc.
5562 Pendergrass Blvd.
Great Falls, SC 29055

24-Hour Contact: Micah Shultzman
Phone Number: 864-444-0149

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.

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 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 basins are not utilized due to adverse impacts of constructing and removing the basin within the existing wetlands.

Outfall ID	Total Drainage area (acres)	Disturbed area (acres)	Required Sediment storage Volume (yd3)	Total Storage volume provided (yd3)	Silt Fence with J-Hooks		Check Dam (6-60 yd3 each)		Inlet sediment Traps (5-25 yd3 each)	
					LF	Total Volume	# of Devices	Total Volume	# of Devices	Total Volume
STA.12+00 RT	1.95	1.45	131	314	1100	148	3	166		
STA.280+40 LT	0.50	0.50	34	103	550	88			1	15
STA.283+08 LT	0.41	0.41	27	66	460	56			1	10
STA.287+50 LT	0.55	0.55	37	101	670	91			1	10
STA.298+50 RT	4.38	2.14	293	391			3	381	2	10
STA.314+48 RT	1.48	0.96	99	106	670	101			1	5
STA.316+10 LT	0.86	0.37	58	64	300	54			1	10
STA.320+10 LT	0.55	0.55	37	73	400	63			1	10
STA.324+00 LT	2.25	2.25	151	543	1800	303	8	240		
TEMPORARY PIPE STAGING OUTFALLS										
STA.284+50 LT	0.36	0.36	24	47			1	47		
STA.287+00 LT	1.52	0.84	102	109			3	109		
STA.321+00 LT	1.35	0.86	90	111			3	111		

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.

MONITORING SAMPLING METHODS & PROCEDURES

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

NOTE:

The total disturbed area calculated on the Drainage Area Map, Drawing No. 53-01, includes the area that will be used for mitigation for the displacement of existing wetlands. Sediment storage is not provided for the mitigation site as the proposed elevation of 3.0' will be inundated by high tide twice daily. However, the slopes down into the mitigation site will be stabilized with erosion control mats.

A monitoring period of two growing seasons will be established and after two growing seasons, it is noted the chordgrass is not re-colonizing the areas per the mitigation plan, the Department will sprig the areas with appropriate vegetation to boost the naturalization of native vegetation.



REVISION DATES

REVISED 7/19/10

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: INNOVATIVE PROGRAM DELIVERY
ESPC GENERAL NOTES