

**DESCRIPTION OF PROJECT**

The project consists of replacing the bridge on CR 467/Bickley Highway over Cane Creek, constructing a new 160' x 30' concrete bridge at the existing site. The approaches will consist of two, 12' lanes with 10' rural shoulders (6.5' paved). Traffic will be maintained during construction utilizing an off-site detour.

REVISED AUGUST 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.**

**Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.**

**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 requires "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding." - The Department typically requires disturbed areas to be stabilized every 7 days. The construction documents, special provisions, or Specification 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.

BMPs shall be placed according to the phased location details. Silt fence shall be placed before clearing and grubbing. Inlet sediment traps, outlet protection, slope mats, mulch, and temporary grassing shall be placed during road construction. Final stabilization BMPs shall be the last to be placed.

**PETROLEUM STORAGE, SPILLS AND LEAKS**

The plans provided herein do not anticipate the storage of petroleum products onsite. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture and disposal of any petroleum product leaks or spills associated with the servicing, refueling or operation of any equipment utilized in the work. 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 this 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 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.

**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.

**SOIL SERIES INFORMATION**

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

Map Unit Symbol	Map Unit Name
FuB	Fuquay loamy sand, 0 to 5 percent slopes
KJA	Kinston and Johnston soils, 0 to 2 percent slopes, frequently flooded
LdA	Leefield loamy sand, 0 to 3 percent slopes
PmB	Pelham loamy fine sand, 0 to 5 percent slopes
TnA	Tifton-Florala complex, 0 to 2 percent slopes

**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 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. 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.

All silt fences must be placed as access is obtained during clearing. No grading shall be done until silt fence installation is complete. It is the Contractor's responsibility to maintain all silt fences and to repair or replace any silt fence that is not satisfactory. Erosion Control Gates shall be placed immediately after drainage structures are in place. All Erosion Control Devices shall be placed according to the plans and as directed by the Engineer. See the GoDOT Standard Specifications regarding Erosion Control and the manual for Erosion and Sediment Control by G.S.W.C.C. The Contractor shall be responsible for keeping wetland areas free from siltation. The Contractor shall obtain and abide by all Corps of Engineers rules and regulations concerning construction adjacent to waterways and maintain water quality.

**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**

Primary Permittee.

1) Each day when any type of construction activity has taken place at a primary permittee's site, qualified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment; (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking; and (c) measure rainfall once each twenty-four hour period at the site. These inspections must be conducted until a Notice of Termination is submitted.

2) Qualified personnel (provided by the primary permittee) shall inspect at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater the following: (a) disturbed areas of the primary permittee's construction site that have not undergone final stabilization; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation that have not undergone final stabilization; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization, the permittee must comply with Part IV.D.3.a.(3). These inspections must be conducted until a Notice of Termination is submitted.

3) Qualified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is received by EPD) the areas of the site that have undergone final stabilization. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

**PERMANENT BMP'S**

Measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed include permanent grassing, permanent rip rap, and stone check dams.

**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 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.

Drainage Area	Total drainage area (ac)	Disturbed area (ac)	Reg. Sediment Storage Volume (cy)	Total storage volume provided (cy)	Silt Fence		Check Dam (1.55 cy each)		Inlet Sediment Traps (67 cy/ac each)	
					LF	Total Volume	* of Devices	Total Volume	* of Devices	Total Volume
A	2.46	1.02	16482	32056	213	253.56			1	67.00
B	18.00	1.19	1206.00	24879	443	53.16	19	128.63	1	67.00
C	7.72	1.16	517.24	23682	1120	134.40	13	97.42	1	67.00
D	1.42	1.42	95.14	33807	2113	253.56	6	17.51	1	67.00

The installation of a sediment basin would increase the disturbed area and was not feasible due to property constraints. The total storage volume provided does not meet the required; however, the drainage areas ditch or sheet flows into Cane Creek which is protected by a double row of Type C silt fence. Furthermore, when the sediment fills to a volume at most 22 cy per acre, the sediment shall be removed and properly disposed by the contractor to restore the original design volume. Additionally, any areas left disturbed for more than 7 days shall be stabilized with mulch and/or anionic polyacrylamide (PAM).

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.

**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/pit 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".

**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 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, channels/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.

**INSPECTION OF INITIAL BMP'S**

The design professional who prepared the ES&PC plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMP's within 7 days after installation.



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DATE



**REVISION DATES**

02/08/11

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

OFFICE:

**ESPC GENERAL NOTES**

CR467/BICKLEY HWY AT CANE CREEK BRIDGE REPLACEMENT  
CSBRG-0006-00(441) 10/15/2010

DRAWING No.  
**51-01**