POSTCONSTRUCTION BMP'S FOR STORMWATER MANAGEMENT

All permanent postconstruction BMP's are shown in the construction plans and in the ESPCP plan. The postconstruction BMP's for this project consist of open waters, sand filter basins, vegetation, permanent slope drains and/or flumes, riprap at pipe outlets for velocity dissipation and outlet stabilization, bio slopes, vegetated swales/ditches where practical, channel/ditch stabilization with turf reinforcing mats, riprap and concrete ditch lining where necessary. The postconstruction BMP's will provide permanent stabilization of the site and prevent abnormal transportation of sediment and pollutants into receiving waters.

SILT FENCE INSTALLATION 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-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 STABLIZATION AND BMP MAINTENANCE MEASURES

See the Department's Standard Specifications (or Special Provisions) 161, 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 (GDOT) 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 BMPs 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 BMPs 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 within 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.

NONSTORMWATER DISCHARGES

Nonstormwater 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. The NPDES does not authorize the discharge of soaps or solvents used in vehicle and equipment washing or the discharge of wastewater containing stucco, paint, oils, curing compounds, and other construction materials.

DEWATERING 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 all 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 161 of the current edition of the Department's Standard Specifications.

RETENTION OF RECORDS

The Department will retain all records related to the implementation of this ESPCP in accordance with Part IV.F of the General Permit GAR100002.

TEMPORARY SEDIMENT BASIN DETAILS:

There are no TEMPORARY SEDIMENT BASINS located on this project due to adverse IMPACTS of ENVIRONMENTALLY SENSITIVE AREAS throughout the project limits.

SEDIMENT STORAGE

The site has a total disturbed area of 15.810 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	Side	Total Drainage Area (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (yd³)	Total Storage Volume Provided (yd³)	Rock Filter Dams (#yd³/each)		Check Dam (#yd³/each)		Inlet sediment (#yd³/each)		Silt Fence (0.167 yd³/ft)		Justification for Not using Sediment Basin	Justification for Not Meeting Storage
						# of Devices	Total Volume (yd³)	# of Devices	Total Volume (yd³)	# of Devices	Total Volume (yd³)	Length of Fence (ft)	Total Volume (yd³)		
Outfall 1 (STAGE 2)	R	3.8	2.001	243	106	2	68	10	38					Existing Terrain is not suited for sediment basin	Maximum BMP's have been placed based on conditions. The BMP's should prevent erosion and sediment from leaving the project.
Outfall 2 (STAGE 1)	L	6.34	1.761	358	111	2	70	11	41					Existing Terrain is not suited for sediment basin	Maximum BMP's have been placed based on conditions. The BMP's should prevent erosion and sediment from leaving the project.
Outfall 3 (STAGE 2)	R	5.36	1.28	145	153	1	36	9	117					Existing Terrain is not suited for sediment basin	n/a
Outfall 4 (STAGE 1)	L	5.2	1.25	306	335	1	36	23	299					Existing Terrain is not suited for sediment basin	n/a
Outfall 5 (STAGE 1/2)	R	38.6	2.8	2587	701	2	72	21	273			2132	356	Existing Terrain is not suited for sediment basin	Maximum BMP's have been placed based on conditions. The BMP's should prevent erosion and sediment from leaving the project.
Outfall 6 (STAGE 1)	L	1.36	0.62	91	105			7	105					Existing Terrain is not suited for sediment basin	Maximum BMP's have been placed based on conditions. The BMP's should prevent erosion and sediment from leaving the project.
Total Sheet Flow Area 1	R	3.51	3.51	236	482							2888	482	n/a	n/a
Total Sheet Flow Area 2	L	1.197	1.197	81	209							1252	209	n/a	n/a
Total Sheet Flow Area 3	L	2.27	1.39	152	222	3	108					680	114	n/a	n/a
Totals		67.64	15.81	2595	2068	11	390	81	873			4820	805		

DISCHARGES INTO OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an impaired stream segment that has been listed for criteria violated, "Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

STATE-WATER BUFFER LOCATIONS

State-water Buffers, as defined by O.C.G.A. 12-7-1, are impacted by this project.

Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation without first acquiring the necessary variances and permits.

The Contractor is not authorized to enter state-water buffers, except as described in the table below:

Name or Number of Stream or other State Water Type	Location of Stream or other State Waters**			State Water Type (Warm/Cold Water)**	Buffer Variance Required? (Yes/No)
	Stream Alignment	Begin Station and Offset	End Station and Offset		
Stream 4	Stream 4	39+99 8.0' Lt	42+70 74.0' Lt	WARM	NO
Stream 4	Stream 4	39+98 8.0' Rt	41+52.74 17.30' Rt	WARM	NO
(Construction of bridge, placement of rip rap around bent end rolls, and construction fill limits.)					
Open Water 6	Open Water 6	43+28 71.0' Lt	49+60 80.0' Lt	WARM	YES
(Construction of proposed roadway, cut and fill limits, placement of drainage structures and outlet					
Open Water 7	Open Water 7	49+53 76.0' Lt	51+97 75.0' Lt	WARM	YES
(Construction of proposed roadway, cut and fill limits, placement of drainage structures and outlet					

Unless noted otherwise, utility companies will be submitting the required permits/variances in conjunction with the impacts caused by their activities. If utility impacts are covered by the Department's stream buffer variance, this shall be noted in the buffer-variance-required column.

* Warm water streams have a 25-foot minimum buffer as measured from the wrested vegetation. Cold Water streams have a 50-foot buffer as measured from the wrested vegetation.
**Locations are approximate, a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets

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.

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 the delivery of Portland cement concrete 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 travelled way, including shoulders, for a wash-down pit. The pit shall be large enough to store all wash-down water without overtopping. 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 it shall be graded to match the elevation of the surrounding areas. 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 pit that includes the following: (1) a location away from any storm drain, stream, or river, (2) access to the vehicle being used for wash down, (3) sufficient volume for wash-down water, and (4) permission to use the area for wash down.

On sites where permission or access to excavate a wash-down pit is unavailable, the Contractor may have to wash-down into a sealable 55-gallon drum or other suitable container and then transport the container 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".

WATER QUALITY INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the inspecting and sampling procedures.

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPS:

Fabric check dams will be used on this project as an alternative BMP. ThE use of the alternative BMP for stone check dams has been reviewed by the Georgia EPD and has been determined by the Georgia EPD to be allowable only for this ESPCP. This review was site specific and was based on documentation submitted and certified by the Level-II Certified Design Professional and was required by the Georgia EPD and the Georgia SWCC.

REVISION DATES
12/9/16

NTS

ESPCP GENERAL NOTES

0011676-PE

BEN HILL / WILCOX COUNTIES

CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No. 51-002