

USE ON CONSTRUCTION

STREAM AND OPEN-WATER BUFFER ENCROACHMENTS

Stream Buffers, as defined by O.C.G.A. 12-7-1, are impacted by this project. The contractor is not authorized to enter into stream buffers, except as described in the table below:

Name (name or number of feature)	Location of Buffered Streams and State Waters **			Stream Type (Warm/Cold Water) *	Buffer Impacted (Yes/No)	Buffer Variance Required?
	Alignment	Begin Sta (Lt or RT)	End Sta (Lt or Rt)			
STREAM 3	SR 47/US 221	66+31 RT	66+86 RT	WARM	YES	NO
STREAM 4	SR 47/US 221	66+49 RT	68+14 RT	WARM	YES	NO
STREAM 4	SR 47/US 221	66+20 LT	67+59 LT	WARM	YES	NO

Construction activities shall consist of the following:
 STREAM 3: Reconstruction of bridge & end rolls and placing erosion control items.

STREAM 4: Reconstruction of bridge, including bridge pilings, end bents and end rolls. Erosion control devices will be placed throughout the project. All work shall be done in accordance with the GDOT Standard Specifications, current edition.

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.

SAMPLING GENERAL NOTES:

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index 0-10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance / safety. The disturbed area classes are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion and sedimentation and pollution plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table below shows the groups of similar outfall drainage basins.

The increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

SAMPLING INFORMATION											Representative Sampling Scheme OUTFALL CHARACTERISTICS				
Primary Monitoring Feature	Location (station and offset)	Name of Receiving Water	Applicable Construction Stage for Monitoring	Sampling Type (outfall or receiving water)	Drainage Area for the receiving water (mi ²)	Total Project Size (Acres)	Warm or Cold Water Stream	Appendix B NTU Value (outfall monitoring only)	Allowable NTU Increase (receiving water monitoring only)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope	Soil Erosion Index	Alternate Outfall Drainage Basins
2	20+11 218' LT	Greenbrier Creek	All	Outfall	33.4	8.6	WARM	400	N/A	End of Ditch	Road Widening	1-2	Steep	High	N/A
3	67+63 123.82' LT	Greenbrier Creek	All	Outfall	33.3	8.6	WARM	400	N/A	End of Ditch	Road Widening	>2	Mild	High	1

The primary sampled features specified should be used as the initial sampling locations. An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.

INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the Inspecting and Sampling Procedures.

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 overflowing. 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".

CHANNEL PROTECTION

LOCATION	TYPE DITCH	DEPTH OF PROT. FT	WIDTH OF DITCH FT	FRONT SLOPE FT/FT	BACK SLOPE FT/FT	TURF REINF. MAT. TYPE 1	TURF REINF. MAT. TYPE 4	CHANNEL RIP RAP TYPE 1
						SQ. YD.	SQ. YD.	SQ. YD.
SR 47/US 221								
+63+50 TO 64+15	RT	TRAPEZOID	1.5	4	4:1	2:1	125	
65+49 TO 66+80 Special Ditch	RT	TRAPEZOID	1.0	4	2:1	2:1		107
CR 578/TUBMAN								
202+00 TO 206+77	RT	TRAPEZOID	1	4	4:1	2:1	742	
204+00 TO 206+77	LT	TRAPEZOID	1	2	4:1	2:1	370	
CR 577/YELTON								
89+00 TO 96+28	LT	TRAPEZOID	1	4	4:1	2:1		1133
+96+50 TO 98+00 Special Ditch	LT	TRAPEZOID	3.5	2	2:1	2:1		345
91+10 TO 95+00	CTR	TRAPEZOID	1	4	4:1	2:1	626	
+95+00 TO 96+50	CTR	TRAPEZOID	1	8.5	4:1	4:1	350	
+96+50 TO 97+85	CTR	TRAPEZOID	1	11.5	2:1	4:1	315	
+89+00 TO 95+00	RT	TRAPEZOID	1	4	4:1	2:1	827	
+95+00 TO 97+85	RT	TRAPEZOID	1	5	2:1	2:1	297	
100' Ditch Where 30" Pipe Removed	RT	TRAPEZOID	1	10	4:1	4:1	250	

*NOTE THE DITCH BOTTOM, FRONT & BACK SLOPES VARY. DIMENSIONS SHOWN ARE AN AVERAGE. SEE CROSS SECTIONS FOR EXACT DIMENSIONS.

STORM DRAIN OUTLET PROTECTION

ID	STATION	OFFSET	DESCRIPTION	DISCHARGE (cfs)	VELOCITY (fps)	TAILWATER CONDITION	LENGTH OF APRON (L _a) (ft)	WIDTH AT HEADWALL (W ₁) (ft)	DOWNSTREAM WIDTH (W ₂) (ft)	AVERAGE STONE DIAMETER (D ₅₀) (ft)	STONE DEPTH (D) (ft)
CR 578/ TUBMAN RD											
CD1	200+68.67	36.96 LT	48" STORM DRAIN *	(50 YR) 43.93	(50 YR) 7.07	MIN	16	12	20	1.2	2.00
CD3	201+92.36	44.42 LT	18" STORM DRAIN *	(25 YR) 6.48	(25 YR) 5.27	MIN	15	4.5	16.5	1.2	2.00
CR 577/ YELTON RD											
CD2	97+03.75	47.37 RT	30" STORM DRAIN *	(25 YR) 15.34	(25 YR) 5.83	MIN	20	7.5	22.5	1.2	2.00

*Based on discharge and pipe diameter, no min rip rap required.

REVISED OCTOBER 18, 2013

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
4-29-14	OFFICE: TENNILLE DESIGN
	ESPCP GENERAL NOTES
	PROJECT CSBRG-0007-00(168) DRAWING No. 51-003
	COUNTY COLUMBIA