STREAM/POND BUFFER ENCROACHMENT

Stream Buffers are Impacted by this project.

The Contractor Is not authorized to enter Into stream buffers,except as described In the table below:

Name or Number of Stream or other Water Body Type	Location of Buffered Streams and State Waters **			Stream Type (Warm/Cold Water) *	Buffer Impacted? (Yes/No)	Buffer Variance Required? (Yes/No)
	Stream Alignment	Begin Station and Offset	End Station and Offset			
Stream 7	SR 96	1451+81, Lt	1452+43, Lt	Warm	Yes	No
Roadway construction,placement of fill slopes,culvert extension and Installation of erosion control measures. Proposed Impacts to the buffer are exempt under both the roadway drainage structure and drainage structure exemptions.						
Drainage Feature	SR 96	1452+30, Lt	1453+60, Lt	Warm	Yes	Yes
Roadway construction,placement of fill slopes,and Installation of erosion control measures.						
Pond 16a	SR 96	1526+99,Lt	1526+99,Lt	Warm	No	No
Pond outside project limits. Orange barrier fence utilized to avoid any Impacts to the buffer area.						
Stream 18	SR 96	1554+72, Rt	1556+23, Lt	Warm	Yes	No
Roadway construction,placement of fill slopes,culvert extension and Installation of erosion control measures. Proposed Impacts to the buffer are exempt under both the roadway drainage structure and drainage structure exemptions.						
Stream 18a	SR 96	1554+80,Lt	1555+50,Lt	Warm	Yes	Yes
Roadway construction,placement of fill slopes and culvert extension.						
Stream 18b	SR 96	1555+48,Rt	1556+51,Lt	Warm	Yes	Yes
Roadway construction,placement of fill slopes and culvert extension.						
Pond 20	SR 96	1559+56,Lt	1560+60,Lt	Warm	No	No
Removal of existing roadbed. Orange barrier fence utilized to avoid any Impacts to the buffer area.						
Stream 21	SR 96	1572+46, Lt	1573+25, Lt	Warm	Yes	No
Roadway construction,placement of fill slopes,culvert extension and Installation of erosion control measures. Proposed Impacts to the buffer are exempt under the roadway drainage structure exemption.						
Stream 13	US 129/SR 247	121+22, Lt	121+98, Rt	Warm	Yes	No
Roadway construction,placement of fill slopes,culvert extension and Installation of erosion control measures. Proposed Impacts to the buffer are exempt under both the roadway drainage structure and drainage structure exemptions.						

* 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.

MONITORING SAMPLING METHODS & PROCEDURES

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

MONITORING GENERAL NOTES:

The total project site size Is 124.21 acres. Representative sampling may be utilized on this project.

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,thedisturbed 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 sedimentation and pollution control plans,the Department has determined that representative sampling 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 drainage basins when similar outfall drainage basins exist.Approved primary and alternate representative monitored features are identified In the table below.

SAMPLING INFORMATION												OUTFALL CHARACTERISTICS				
Monitored Feature	Primary or Alternate Feature	Location (Sta.and offset)	Name of Receiving water	Applicable construction stage for monitoring	Sampling Type (Outfall or Receiving Water)	Drainage Area for the receiving water (sq mi)	Upstream Disturbed Area (acres)	Total Site Size (Acres)	Warm or Cold water Stream	Appendix B NTU value (Outfall Monitoring Only)	Allowable NTU Increase (For Receiving Water)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope (rise/run)	Soil Erosion Index	Alternate (Similar) Outfalls
1.	Primary	Sta.1452+31 102' Left	Stream 7	2 & 3	Outfall	0.54		124.21	Warm	50		Proposed Ditch	Road Widening	9.62	0.0066	8.0	1,2,3,4,5,6,7,8,9,10,11,14
2.	Primary	Sta.1526+90 115' Left	Pond 16A	1,2 & 3	Outfall	0.04		124.21	Warm	50		48 IN FES	New Road - Fill	13.14	0.01	8.0	32,33,34,35,36,37,39,40,41,42,43,44,45
3.	Primary	Sta.1555+03.50 89' Right	Stream 18	1,2 & 3	Outfall	0.32		124.21	Warm	50		Proposed Ditch	Road Widening	0.73	0.0789	8.0	58,59,60,61
4.	Primary	Sta.1572+91 98' Left	Stream 21	1,2 & 3	Outfall	0.12		124.21	Warm	50		42 IN FES	Road Widening	3.75	0.0284	8.0	62,63,64,73
5.	Primary	Sta.1603+40 47' Right	Stream 23	1,2 & 3	Outfall	0.30		124.21	Warm	50		Proposed Ditch	Road Widening	2.02	0.044	8.0	65,66,67,68,69,70,71,72
6.	Primary	Sta.121+48 83' Left US 129/SR 247	Stream 13	2 & 3	Outfall	0.012		124.21	Warm	50		Double 24 IN FES	Road Widening	0.34	0.022	8.0	12,13,15,16,17,18,19,20,21,22,23,24, 25,26,27,28,29,30,31,38
7.	Primary	Sta.213+74 84' Right RELOC OLD HAWKINSVILLE ROAD	Stream 15	1	Outfall	0.06		124.21	Warm	50		5 X 4 Box Culvert	New Road - Fill	2.60	0.020	8.0	46,49,50,51,52,53
8.	Primary	Sta.244+37 89' Right RELOC OLD HAWKINSVILLE ROAD	Stream 17	1,2 & 3	Outfall	0.32		124.21	Warm	50		Double 48 IN FES	New Road - Fill	4.56	0.0032	8.0	47,48,54,55,56,57

(Note that outfall monitoring requires one sample per onitoring event while receiving-water monitoring requires apair of samples,one sample upstream and one sample downstream,per monitoring event. The italicized example Information In the table represents the minimum number of monitored features for representative sampling and Is to be replaced with site-specific Information. Alternate monitored features are optional. According to the EPD,additional monitoring sites may be required depending on significant changes during the project.)

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

ATKINS

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 25845 11-21-13 SCOTT M. DUBOARD

GSWCC LEVEL II Certification #0000007807

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: PROGRAM DELIVERY

ESPC GENERAL NOTES

SR 96 PHASE III

DRAWING No. 51-002