

**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 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 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".

**MONITORING GENERAL NOTES:**

The total site size is 11.66 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, 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 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 outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternative representative monitored features are identified in the table below.

SAMPLING INFORMATION										OUTFALL CHARACTERISTICS					
Primary Monitored 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)	Total Project Area (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 Outfall Drainage Basins
A	20+67.89 54.19' LT	KIMBALL'S LAKE	ALL	OUTFALL	0.12	11.66	WARM	50	N/A	STR A-1	MAINTENANCE/SAFETY	1.69	.029	6.5	N/A
C	34+85.00 70.64' LT	SHOAL CREEK	ALL	OUTFALL	0.13	11.66	WARM	50	N/A	STR C-2	MAINTENANCE/SAFETY	0.32	.022	6.5	B,D,G,H,J
F	116+50.00 44.23' LT	KIMBALL'S LAKE	ALL	OUTFALL	0.12	11.66	WARM	50	N/A	STR F-1	MAINTENANCE/SAFETY	3.18	.06	6.5	N/A
K	121+00 24.65' LT	KIMBALL'S LAKE	ALL	OUTFALL	0.12	11.66	WARM	50	N/A	4' FB DITCH CR 35/VAUGHN	MAINTENANCE/SAFETY	0.21	.035	6.5	E,J

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.

**Ditch Lining Details**

System	Roadway	Beginning Station	Ending Station	Side	Drainage Area (ac)	Q <sub>25</sub> (cfs)	Ditch Slope %	Bottom Width (ft)	Front Slope Z1	Back Slope Z2	Erosion Index	Manning's n	Velocity (ft/s)	Normal Depth Dn (ft)	Min. Required Lining Height H <sub>l</sub> (ft)	Lining Type
SYSTEM A	SR 16/NEWMAN ROAD	20+75	24+00	RT	4.23	14.01	2.0	4	4	2	6.50	0.03	4.12	0.59	2.0	PSRM
SYSTEM A	SR 16/NEWMAN ROAD	24+00	27+00	RT	3.02	11.03	2.7	4	4	2	6.50	0.03	4.22	0.48	1.5	PSRM
SYSTEM A	SR 16/NEWMAN ROAD	27+00	28+25	RT	2.00	8.25	5.5	2	4	2	6.50	0.03	5.47	0.45	1.5	PSRM
SYSTEM A	CR 507/ROVER ZETELLA ROAD	106+50	111+75	LT	2.00	8.25	1.1	4	4	2	6.50	0.03	2.93	0.51	2.0	GRASS
SYSTEM B	SR 16/NEWMAN ROAD	19+50	27+50	LT	0.96	5.40	1.7	4	4	2	6.50	0.03	2.86	0.35	2.0	GRASS
SYSTEM E	CR 507/ROVER ZETELLA ROAD	105+00	106+00	RT	2.14	7.52	3.6	4	4	2	6.50	0.03	4.25	0.35	1.5	PSRM
SYSTEM E	CR 507/ROVER ZETELLA ROAD	103+00	106+50	LT	2.62	9.63	1.0	4	4	2	6.50	0.03	2.89	0.58	1.5	GRASS
SYSTEM F	SR 16/NEWMAN ROAD	29+50	30+50	RT	0.5	2.50	8.0	4	4	2	6.50	0.03	3.75	0.15	1.5	PSRM
SYSTEM F	SR 16/NEWMAN ROAD	29+50	30+00	LT	1.00	5.00	5.5	4	4	2	6.50	0.03	4.21	0.25	1.5	PSRM
SYSTEM F	CR 507/ROVER ZETELLA ROAD	106+50	111+25	RT	4.80	15.04	1.2	4	6	2	6.50	0.03	3.29	0.68	2.5	GRASS
SYSTEM F	CR 35/VAUGHN ROAD	112+50	115+50	RT	10.5	29.24	4.3	4	4	2	6.50	0.03	6.72	0.71	2.0	PSRM
SYSTEM F	CR 35/VAUGHN ROAD	115+00	117+50	LT	0.42	1.79	2.7	4	6	4	6.50	0.03	2.33	0.16	1.5	GRASS
SYSTEM F	CR 35/VAUGHN ROAD	116+50	117+50	RT	2.55	7.99	0.8	4	6	2	6.50	0.03	2.40	0.54	2.5	GRASS
SYSTEM G	CR 35/VAUGHN ROAD	117+50	121+00	RT	5.18	14.12	0.6	4	4	2	6.50	0.03	2.67	0.82	2.5	GRASS
SYSTEM H	SR 16/NEWMAN ROAD	38+00	42+00	RT	2.77	8.71	1.5	4	6	2	6.50	0.03	3.07	0.48	2.0	GRASS
SYSTEM I	SR 16/NEWMAN ROAD	4+00	42+00	LT	0.06	0.33	0.9	4	6	4	6.50	0.03	0.94	0.08	1.0	GRASS
SYSTEM J	CR 507/ROVER ZETELLA ROAD	103+50	104+50	RT	1.40	4.83	1.1	2	8	2	6.50	0.03	2.36	0.47	2.0	GRASS
SYSTEM K	CR 35/VAUGHN ROAD	117+50	121+00	LT	0.39	2.30	2.6	4	4	4	6.50	0.03	2.54	0.19	1.5	GRASS

**STORM WATER PROTECTION CHART (RIP RAP CHART):**

OUTFALL LOCATION	PIPE DIAMETER (INCHES)	Q (CFS)	V (FPS)	TAIL WATER CONDITION	L <sub>a</sub> (FT)	W <sub>1</sub> (FT)	W <sub>2</sub> (FT)	D <sub>50</sub> (FT)	DEPTH (INCHES)
A-1 20+67.89 54.19' LT	18	15.47	13.76	MIN - FLAT OUTFALL	16	4.5	17.5	0.8	24
C-1 34+85.00 70.64' LT	18	18.38	11.92	MIN - FLAT OUTFALL	16	4.5	17.5	0.7	24
D-1 35+50.00 64.64' LT	24	20.02	9.45	MIN - FLAT OUTFALL	14	6	16	0.5	24
F-1 116+50.00 44.23' LT	30	39.35	11.57	MIN - FLAT OUTFALL	18	7.5	20.5	0.6	24

**GEORGIA**  
DEPARTMENT OF TRANSPORTATION

**REVISION DATES**

11/28/2012		

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

OFFICE: ROADWAY DESIGN

**ESPCP GENERAL NOTES**

SR 16 @ CR 35 & CR 507  
SPALDING COUNTY

DRAWING No.  
**51-002**