

GSWCC Checklist – Common Questions

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Presented July 13, 2009 and July 14, 2009 to GDOT
Personnel

1.) *“The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)”*

The checklist gets updated every year on January 1st.

Projects in the design phase must have the most up to date checklist.

Projects in the construction phase must have the checklist applicable **at the time the Permit was given.**

Fill in Yes, No, or N/A in for each checklist. Blank areas are not acceptable.

The image shows a portion of the GSWCC Checklist form. It is a table with multiple columns and rows of questions. The questions are related to erosion, sedimentation, and pollution control measures. The form includes checkboxes for 'Yes', 'No', and 'N/A'. The text is small and difficult to read, but it appears to be a standard checklist format used for permit applications.

Plan sheet view

Plan Page #	Included Y/N	To Be Shown On ES&PC Plan
51-01	Yes	1. The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed.)
50-01	Yes	2. Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and level II number must be on each sheet pertaining to ES&PC plan or the Plan will not be reviewed.)

**List the first page the information appears in the plan
Use reference plan sheet numbers
i.e. 51-08**

Use N/A if a statement is Not applicable

Plan Page #	Included Y/N	Description
54-01	Yes	24. Best Management Practices to minimize off-site erosion.
51-08	Yes	25. BMPs for concrete wash down of tools, on the construction site is prohibited.
51-01	Yes	26. Provide BMPs for the remediation of all pet waste.
54 series	Yes	27. Location of Best Management Practices that are required to be installed.
51-09	Yes	28. Description of the nature of construction activity that will be performed.
51-09	Yes	29. A description of appropriate controls and management requirements and performance control I.
51-09	Yes	30. Description and detail of maintenance of the site (i.e., initial maintenance and sediment storage capacity and final maintenance).
51-09	Yes	31. Description of the practices that will be used to control erosion.
51-01	Yes	32. Description of the measures that will be implemented after construction operations have been completed.
50-01	Yes	33. Design professional's certification statement as required on page 17 of the permit.
50-01	Yes	34. Design professional's certification statement as required on page 17 of the permit.
50-01	Yes	35. Certification statement and signature of the state general permit.
50-01	Yes	36. An estimate of the runoff coefficient or peak runoff rate for the site.
51-01	Yes	37. Indication that non-erect activities shall be limited to the point of natural vegetation within the project area.
51-07	Yes	38. Indication that non-erect activities shall be limited to the point of natural vegetation within the project area.

2.) "Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC plan or the Plan will not be reviewed)"

As per Agreement with GDOT and EPD the signature, seal and Level II number are only required on ES&PC cover sheet.

For GDOT designed plans, the Chief Engineer signature, seal and Level II number are required.

For Consultant designed plans, the Consultants and Chief engineers signature, seal and Level II number is required.

Major revisions or revisions generated by a designer require the signature and Level II number of the Chief Engineer for in house plans or the Consultant for consultant designed plans.

3.) *“The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.”*

The 24 hour contact is the Contractor’s Work Zone Erosion Control Supervisor.

Because the Contractor is unknown at the time of plan submission, a fill in the blank 24 hour contact block is acceptable.

<u>24 HOUR CONTACT:</u>

Name

Phone Number
Contractor shall complete the information in this box.

4.) *“Provide the name, address and phone number of primary permittee.”*

This information is provided in the NOI. The name of the Department of Transportation is on the cover sheet.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

5.) *“Note total and disturbed acreage of the project or phase under construction.”*

This is provided on the drainage area map and is required per the PPG.

TOTAL DISTURBED PROJECT AREA = 95 ACRES
TOTAL PROJECT = 277 ACRES



The calculation of Project areas and Disturbed areas will be discussed in other portions of this class.

6.) "Provide land lot and district numbers for site location. Describe critical areas and any additional measures that will be utilized for these areas."

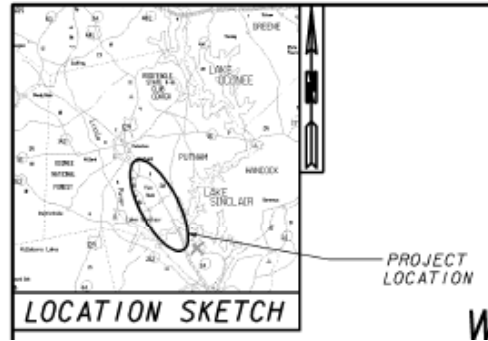
- The land lot and district numbers are on the cover sheet, and plan sheets.
- Right of way and property lines are shown on the cover sheet and BMP plans sheets.
- Refer to the separate right of way plans for specific parcel information.
- The site location is described on the cover sheet.
- Critical areas are any ESA areas that require special attention
- Many of the areas are described in the general notes STREAM BUFFER ENCROACHMENT section.
- Additional critical areas may need to be described in detail in the General Notes
- This is required per the PPG.

Buffer Encroachment table:

STREAM BUFFER ENCROACHMENT										
<p>A longitudinal encroachment is impacting the stream buffer</p> <ul style="list-style-type: none"> • Buffer is impacted • Buffer Variance is required • Describe work inside the buffer, Describe permissible activities in the buffer 										
Stream 0a	US 441/SR 24	159+57 LT	168+44 LT	Warm	No	No	No	No	No	<p>No work is being performed in this buffer</p>
Open Water 2	US 441/SR 24	169+50 LT	192+00 LT	Warm	Yes	Yes	Yes	Yes	Yes	<p>This buffer is not impacted,</p> <p>• State the Contractor is not permitted to enter this buffer</p>
Stream 4	US 441/SR 24	234+28 LT	238+64 RT	Warm	Yes	No	No	No	No	<p>Work in the buffer includes a roadway drainage structure installation</p> <ul style="list-style-type: none"> • Buffer is impacted • Buffer Variance is not required • Describe work inside the buffer • Describe permissible activities in the buffer
Stream 5 Little Creek	US 441/SR 24	241+99 RT	247+41 LT	Warm	Yes	No	No	No	No	<p>Work in the buffer includes a roadway drainage structure installation</p> <ul style="list-style-type: none"> • Buffer is impacted • Buffer Variance is not required • Describe work inside the buffer • Describe permissible activities in the buffer

- 7.) "Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary."
- 8.) "Graphic scale and north arrow."

Both are shown on the cover sheet and are required Per the PPG.



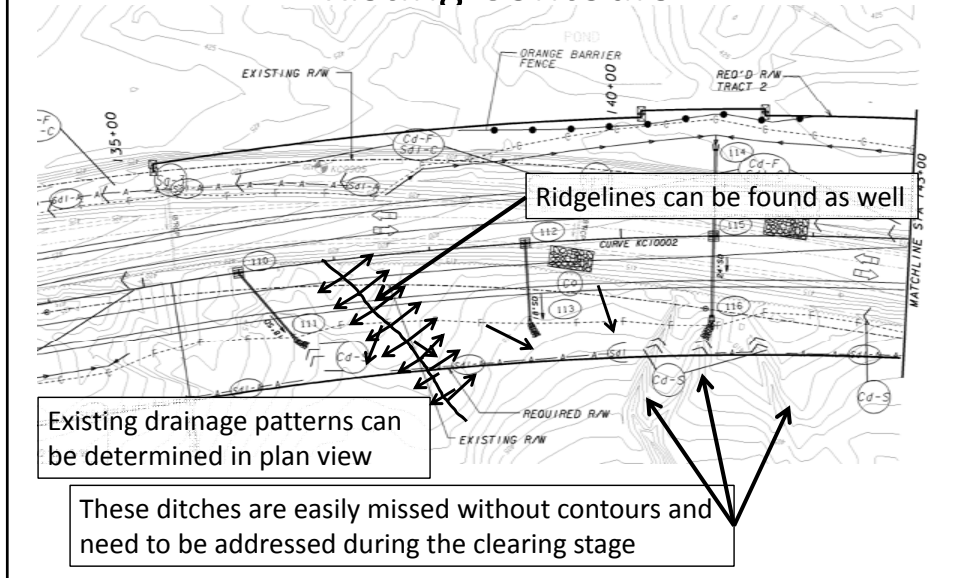
- 9.) "Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Existing Contours:	USGS 1":2000' Topographical Sheets
Proposed Contours:	1" : 400' Centerline Profile

Contour lines are recommended to be shown on the clearing and grubbing sheet

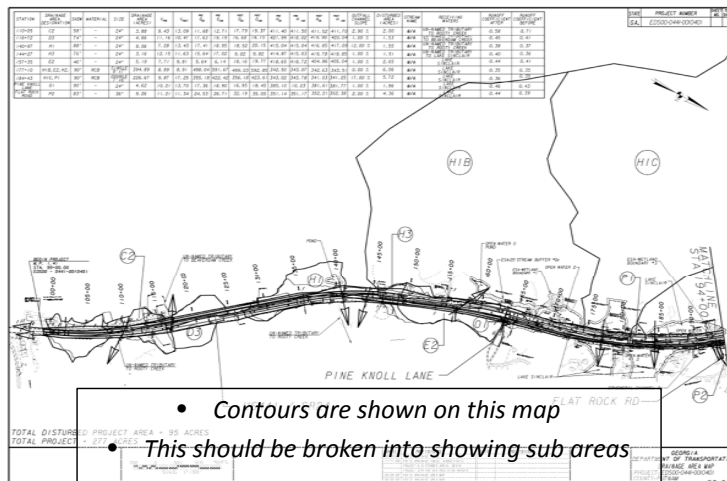
For subsequent stages, the cross section and profile sheets provide equivalent earthwork information

Clearing and Grubbing BMP Sheet with Existing Contours



10.) "Delineation and acreage of contributing drainage basins on the project site."

The PPG requires that this information be provided on the ES&PCP drainage area map.

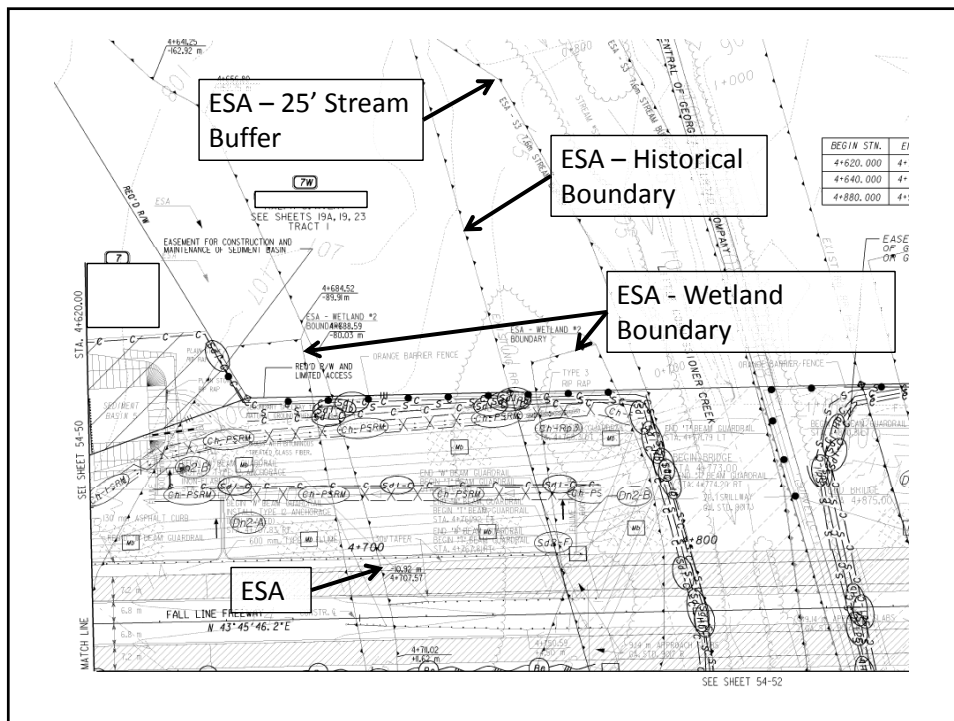


11.) *“Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.*

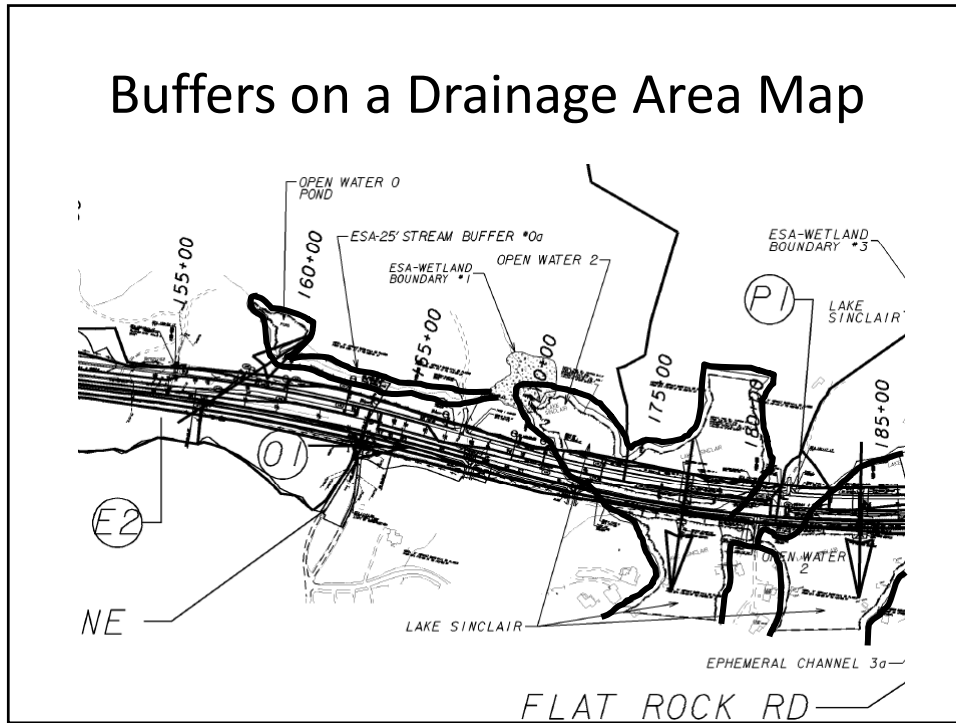
The Department will clearly identify and delineate all on-site wetlands and all state waters on and adjacent to the project site. Many individual BMP plans sheets do not show areas that are a full 200 feet outside of the project site. Off-site state waters are identified and delineated by showing USGS blue-line streams on the drainage area maps and watershed maps. The PPG requires this item on all sheets, where applicable.

12.) *“Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.”*

Required by the PPG on the Drainage area map, watershed map and BMP sheets. Buffers within the project site that are not to be disturbed are protected by orange barrier fence for the duration of the construction activity. State waters could be streams, lakes, or any standing water.

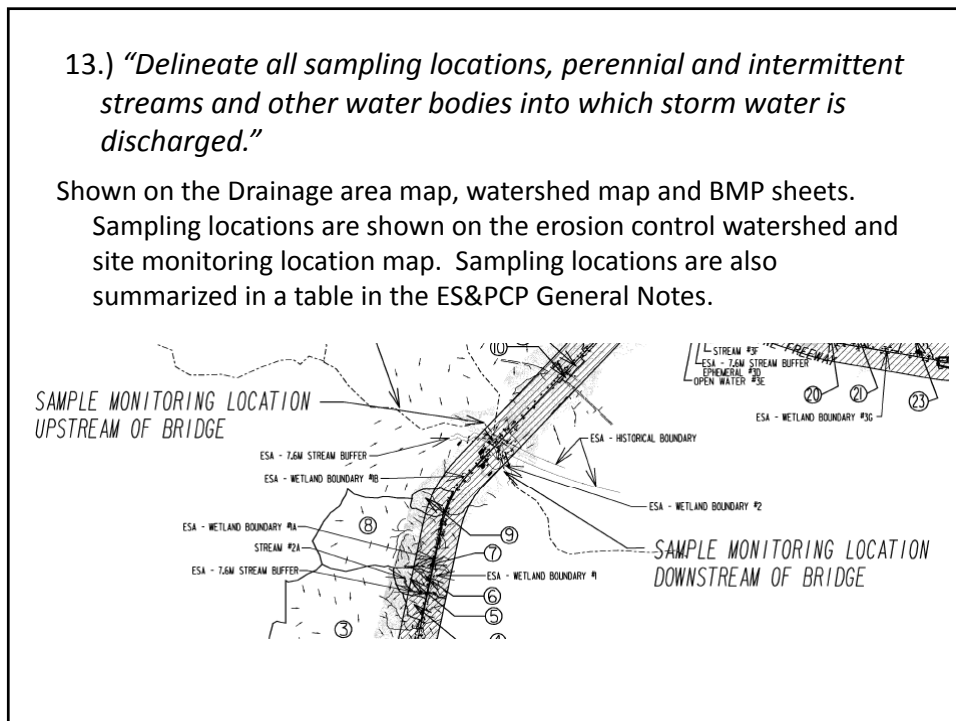


Buffers on a Drainage Area Map



13.) "Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged."

Shown on the Drainage area map, watershed map and BMP sheets. Sampling locations are shown on the erosion control watershed and site monitoring location map. Sampling locations are also summarized in a table in the ES&PCP General Notes.



14.) "Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points."

The discharge velocity of major outfalls is listed on the drainage area map. All other hydraulic design information is contained in the hydraulic design/drainage design notes for the project and can be made available for review upon request. The PPG specifies that this information be provided on the drainage area map. Outlet protection, when necessary, is designed by the engineer and specified in the construction plans and BMP sheets.

No.	Location	Slope angle	Contributing drainage area (Acres)	Drainage area (Acres)	Disturbed area (Acres)	Size, sq ft	Existing		Proposed		Existing		Proposed		Existing		Proposed		Runoff Coefficient	
							Q50 cfs	Q100 cfs	Q50 cfs	Q100 cfs	Q50 cfs	Q100 cfs	V50ft/s	V100ft/s	V50ft/s	V100ft/s	Existing	Proposed		
1	1-584 (FLP)	80° 00' 00"	3.79	3.15	750	--	--	0.39	0.49	--	--	195.60	195.60	--	--	5.94	5.94	0.29	0.29	
2	2-018 (FLP)	83° 40' 12" 45	4.59	2.42	750	--	--	0.34	0.45	--	--	137.96	137.12	--	--	6.58	6.71	0.44	0.48	
3	2-640 (FLP)	83° 00' 00" 85	192.28	2.61	1800x1800	--	--	0.75	0.30	--	--	116.99	117.11	--	--	6.54	6.06	0.60	0.60	
4	2-808 (FLP)	70° 00' 00" 85	4.24	0.59	750	--	--	0.89	0.97	--	--	120.58	126.62	--	--	3.34	3.40	0.44	0.46	
5	2-910 (FLP)	80° 00' 00" 45	8.00	0.39	1800	--	--	1.07	0.34	--	--	140.72	142.79	--	--	3.99	6.01	0.50	0.56	
6	3-140 (FLP)	54° 13' 40" 15	1.03	0.48	450	--	--	0.27	0.23	--	--	127.83	137.98	--	--	4.89	4.80	0.30	0.34	
7	3-277 (FLP)	82° 00' 00" 85	1.37	0.65	600	--	--	0.40	0.44	--	--	129.58	129.62	--	--	5.84	6.00	0.59	0.62	
8	3-745 (FLP)	70° 00' 00" 85	65.62	0.94	1800x1800	--	--	4.02	4.38	--	--	116.25	116.25	--	--	4.51	4.60	0.60	0.60	
9	3-882 (FLP)	73° 00' 00" 17	8.58	0.47	1200	--	--	1.34	2.12	--	--	114.28	114.23	--	--	3.92	4.00	0.59	0.61	
10	3-920 (FLP)	73° 00' 00" 45	8.75	0.36	450	--	--	0.15	0.17	--	--	122.37	122.49	--	--	2.85	2.90	0.60	0.60	
11	3-988 (FLP)	84° 00' 00" 85	1.31	1.50	450	--	--	0.27	0.29	--	--	129.79	132.62	--	--	3.39	3.44	0.60	0.60	
12	4-180 (FLP)	74° 00' 00" 17	2.54	0.72	600	--	--	0.52	0.56	--	--	124.37	124.41	--	--	2.31	2.33	0.58	0.64	
13	4-581 (FLP)	84° 00' 00" 17	0.51	0.71	750	--	--	0.59	0.65	--	--	124.96	125.91	--	--	3.15	3.23	0.53	0.57	
14	4-782 (FLP)	69° 00' 00" 17	23.51	1.18	2x1050	--	--	3.36	3.68	--	--	123.29	123.45	--	--	4.97	5.06	0.33	0.33	
15	4-880 (FLP)	132° 00' 00" 17	25.85	2.28	1800x1800	--	--	4.81	5.29	--	--	125.84	126.75	--	--	6.89	7.06	0.60	0.61	
16	4-920 (B) (COP)	80° 00' 00" 17	2.46	0.05	600	--	--	0.49	0.53	--	--	150.60	152.64	--	--	4.97	4.94	0.39	0.40	
17	4-940 (FLP)	80° 00' 00" 85	4.41	2.05	750	--	--	0.39	0.98	--	--	121.99	124.05	--	--	4.93	4.94	0.44	0.48	
18	4-982 (FLP)	53° 00' 00" 17	16.03	1.32	1800	--	--	2.05	0.23	--	--	126.09	126.17	--	--	4.62	4.93	0.45	0.47	
19	5-129 (FLP)	64° 00' 00" 17	6.27	1.56	300	--	--	1.29	1.40	--	--	123.89	123.87	--	--	3.97	4.05	0.59	0.62	

15.) "Soil series for the project site and their delineation."

The Department generally prepares a project specific soil survey and geotechnical report for all major projects. The General Notes refer to the project's soil survey, which provides more complete information than a soil series map. This is addressed by the SOIL SERIES INFORMATION note in the plans. GDOT's General notes template, has several prewritten notes in the soil series section. The designer should use every note that is applicable to the project.

SOIL SERIES INFORMATION
 A project specific soil survey and geotechnical investigation was performed for this project and can be made available upon request. Soil characteristics have been given full consideration in the hydrologic analysis, the design of channels and bings, selection of temporary BMP's, design of energy dissipaters, and the in the selection of permanent vegetation and fertilizers.

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

EROSION HAZARD (ROAD, TRAIL) - SUMMARY BY MAP UNIT - PUTNAM COUNTY, GEORGIA					
MAP UNIT SYMBOL	MAP UNIT NAME	RATING	COMPONENT NAME (PERCENT)	RATING REASONS (NUMERIC VALUES)	PERCENT OF AOI
Cot	Congaree and Toccoa soils	Slight	Congaree (60%)	N/A	1.7%
			Toccoa (35%)	N/A	
			Wehaka (5%)	N/A	
Cst	Chewacla and Starr soils	Slight	Chewacla (75%)	N/A	1.2%
			Starr (20%)	N/A	
			Wehaka (5%)	N/A	
CyB2	Cecil sandy loam	Moderate	Cecil (100%)	0.50	9.3%
CyC2	Cecil sandy loam	Moderate	Cecil (100%)	0.50	3.6%

This has been discussed in previous slides.

Appendix 1 Checklist

- Required to be completed if the project falls within 1 mile and within the same watershed of a Biota impaired stream.
- 4 of the 20 items on the checklist are required to be used when the project is within the 1 mile limit.
- Directly Copy Checklist onto the General Notes Sheet*

*One exception – Change GAR100003 to GAR 100002

APPENDIX 1
THE ESRAP PLAN MUST INCLUDE AT LEAST FOUR (4) OF THE FOLLOWING BMPs FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO A BIOTA-IMPAIRED STREAM SEGMENT AND FOR WHICH CONCRETE WORK IS APPROVED IN WRITING TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME.

Item #	Description
1	During construction activities, double the width of the 25 foot undisturbed vegetative buffer along all State waters requiring a buffer and the 10 foot undisturbed vegetative buffer along all State waters classified as "biota impaired" requiring a buffer. During construction activities, EPC will not grant variances to any such buffers that are increased in width.
2	Use buffers on all temporary sediment basins and stabilized storm water management basins to at least double the conventional flow path length to the outlet structure.
3	Place a large sign (minimum 4 feet x 8 feet) on the site visible from the roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s).
4	Use anionic polyacrylamide (PAM) and/or mulch to stabilize areas left disturbed for more than seven (7) calendar days in accordance with Part III, D.1. of the NPDES Permit GAR 100002.
5	Use mulch filter berms (minimum 4 feet high) on the site perimeter whenever storm water may be discharged.
6	Apply the appropriate Florida Department of Transportation approved erosion control matting or temporary fiber matting (except Geotextile Part 3.1).
7	Use concrete erosion control matting or blankets instead of concrete in construction storm water ditches and storm drains that lead into temporary sediment basins and stabilized management basins.
8	Install silt for a minimum 25 foot width, in lieu of seeding, along the site perimeter whenever storm water may be discharged.
9	Use a surface draining system designed to drain temporary sediment basins and stabilized storm water management basins over a minimum three (3) day period.
10	Qualified personnel shall conduct inspections of final erosion control measures (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV D.4.A.(2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15), (16), (17), (18), (19), (20), (21), (22), (23), (24), (25), (26), (27), (28), (29), (30), (31), (32), (33), (34), (35), (36), (37), (38), (39), (40), (41), (42), (43), (44), (45), (46), (47), (48), (49), (50), (51), (52), (53), (54), (55), (56), (57), (58), (59), (60), (61), (62), (63), (64), (65), (66), (67), (68), (69), (70), (71), (72), (73), (74), (75), (76), (77), (78), (79), (80), (81), (82), (83), (84), (85), (86), (87), (88), (89), (90), (91), (92), (93), (94), (95), (96), (97), (98), (99), (100).
11	Apply the appropriate Florida Department of Transportation approved erosion control matting or temporary fiber matting (except Geotextile Part 3.1).
12	Use concrete erosion control matting or blankets instead of concrete in construction storm water ditches and storm drains that lead into temporary sediment basins and stabilized management basins.
13	Install silt for a minimum 25 foot width, in lieu of seeding, along the site perimeter whenever storm water may be discharged.
14	Use a surface draining system designed to drain temporary sediment basins and stabilized storm water management basins over a minimum three (3) day period.
15	Qualified personnel shall conduct inspections of final erosion control measures (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV D.4.A.(2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15), (16), (17), (18), (19), (20), (21), (22), (23), (24), (25), (26), (27), (28), (29), (30), (31), (32), (33), (34), (35), (36), (37), (38), (39), (40), (41), (42), (43), (44), (45), (46), (47), (48), (49), (50), (51), (52), (53), (54), (55), (56), (57), (58), (59), (60), (61), (62), (63), (64), (65), (66), (67), (68), (69), (70), (71), (72), (73), (74), (75), (76), (77), (78), (79), (80), (81), (82), (83), (84), (85), (86), (87), (88), (89), (90), (91), (92), (93), (94), (95), (96), (97), (98), (99), (100).
16	Apply the appropriate Florida Department of Transportation approved erosion control matting or temporary fiber matting (except Geotextile Part 3.1).
17	Use concrete erosion control matting or blankets instead of concrete in construction storm water ditches and storm drains that lead into temporary sediment basins and stabilized management basins.
18	Install silt for a minimum 25 foot width, in lieu of seeding, along the site perimeter whenever storm water may be discharged.
19	Use a surface draining system designed to drain temporary sediment basins and stabilized storm water management basins over a minimum three (3) day period.
20	Qualified personnel shall conduct inspections of final erosion control measures (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV D.4.A.(2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15), (16), (17), (18), (19), (20), (21), (22), (23), (24), (25), (26), (27), (28), (29), (30), (31), (32), (33), (34), (35), (36), (37), (38), (39), (40), (41), (42), (43), (44), (45), (46), (47), (48), (49), (50), (51), (52), (53), (54), (55), (56), (57), (58), (59), (60), (61), (62), (63), (64), (65), (66), (67), (68), (69), (70), (71), (72), (73), (74), (75), (76), (77), (78), (79), (80), (81), (82), (83), (84), (85), (86), (87), (88), (89), (90), (91), (92), (93), (94), (95), (96), (97), (98), (99), (100).

Effective January 1, 2009

Recommended Items to be used on GDOT Projects

d.) Place a large sign (minimum 4 feet x 8 feet) on the site visible from the roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s).

Required in the Section 153 of the Specifications. The Designer will need to ensure that the dimensions are 4'x8'

e.) Use anionic polyacrylamide (PAM) and/or mulch to stabilize areas left disturbed for more than seven (7) calendar days in accordance with Part III, D.1. of the NPDES Permit GAR 100002.

GDOT requires PAM with all grassing, and required mulch every seven days.

Recommended Items to be used on GDOT Projects

i.) Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less.

17 acres is the maximum disturbance currently shown in the specs. If this item is used, make it clear that waivers will not be granted to disturb more than 17 acres. This may not work for smaller projects.

m.) Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1.

Matting is already required on 2.5:1 slopes and greater. Generally, 3:1 slopes are found in transitions between 4:1 and 2:1 slopes.

Recommended Items to be used on GDOT Projects

r.) Certified personnel shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(2). (a) - (c), Part IV.D.4.b.(3). (a) - (c) or Part IV.D.4.c.(2). (a) - (c) of the NPDES Permit GAR 100002, as applicable.

Required per Special provision 167

Example TMDL plan

**Total Maximum Daily Load
Evaluation
for
Seventy Stream Segments
in the
Ocmulgee River Basin
For Sediment
(Biota Impacted)**

Submitted to:
The U.S. Environmental Protection Agency
Region 4
Atlanta, Georgia

Submitted by:
The Georgia Department of Natural Resources
Environmental Protection Division
Atlanta, Georgia

January 2007

Example Sediment Load Allocation

Total Maximum Daily Load Evaluation
Ocmulgee River Basin (Biota Impacted)

January 2007

Table 21c. Sediment Load Allocations (Impaired Piedmont)

Name	Sediment Load (tons/yr)																	Total Load (tons/yr)	Load Limit (tons/yr)		
	Open Water	Low Intensity Residential	High Intensity Residential	High Intensity Industrial	High Intensity Commercial	High Intensity Transportation	Bare Rock Sand and Gravel	Quarries and Gravel Pits	Transitional	Deciduous Forest	Evergreen Forest	Mixed Forest	Pastureland	Row Crops	Other Grasses (Non-Road)	Woolly Wetland	Emergent Herbaceous Wetlands			Road	
Barbershela Creek	0.00	368.29	62.29	3.93	0.00	10.33	0.87	0.64	0.04	0.24	6.63			0.07	8.89			240.2	661.70	0.17	
Big Sandy Creek	0.00	17.83	0.01	0.01	0.00		4.18	3.78	0.69	4.51	35.53	1.29	7.18	4.33				78.1	155.44	0.03	
Brown Branch	0.00	22.44	1.20	0.07	0.00		2.96	1.54	0.33	0.03	55.42	11.28	9.67	26.93				268.2	430.03	0.14	
Butlers Creek	0.00	7.08	0.02		0.00		4.23	2.85	1.45	0.03	0.29		0.13	13.08				30.8	56.87	0.02	
Cabin Creek	0.00	251.27	28.14	8.03	0.00		15.89	9.57	1.89	0.27	100.17	0.54	12.38	18.04				280.3	725.14	0.09	
Calapahoe Creek	0.00	23.07	2.73	0.57	0.00		2.42	0.71	0.18	1.07	19.50		12.68	21.52				124.04	208.47	0.09	
Carr Branch	0.00	18.95	1.02	0.00	0.00		4.28	2.13	0.22	1.14	3.92		0.58	6.34	3.09			15.44	56.09	0.04	
Cobb's Creek	0.00	146.68	16.83	1.92			0.04	0.27	0.00	1.89			0.11	0.06				90.01	257.86	0.14	
Cole Creek		2.24	0.11		0.00		1.76	0.31	0.05	0.78	90.62	2.08	2.57	12.93				8.93	122.47	0.14	
Doolittle Creek	0.00	337.61	47.87	7.43	0.00		0.33	0.64	0.02	0.14	26.55		0.25	0.15				291.0	712.88	0.16	
Dried Indian Creek	0.00	117.03	28.04	9.84	0.00		1.53	2.08	0.57	3.52	32.84	23.90	8.43	7.88				137.44	397.47	0.09	
Eighmie Creek	0.00	8.00			0.00		0.68	0.59	0.07	0.07	1.42		1.39	0.43				72.33	85.06	0.11	
Gamer Creek	0.00	194.95	33.10	3.17	0.00		0.83	1.32	0.03	0.58	24.51	0.82	2.30					127.49	389.09	0.12	
Gladesville Creek	0.00	16.14	0.09		0.00		8.32	3.89	2.03	7.44	4.78		25.84	30.73	0.39			82.03	181.74	0.08	
Hansford Branch		0.62					1.76	0.65	0.41		0.21		0.40	2.22				18.41	26.09	0.03	
Harmon Pye Branch		8.68	0.07				8.31	3.68	0.65		0.14		14.32	10.98				46.0	88.41	0.09	
Herds Creek	0.00	47.58	0.01	0.00	0.00	0.00	18.52	7.47	2.03	0.52	28.48		85.69	64.70				251.9	487.81	0.09	
Livershire Creek	0.00	201.11	22.33	2.16	0.00		0.77	0.03	0.14	0.13	32.44		8.25	25.24				43.3	332.83	0.05	
Island Shoal Creek	0.00	20.27	0.58	0.11	0.00		3.68	1.88	0.19	2.48	33.22	10.22	8.25	25.24				137.6	244.74	0.10	
Little Chehaw Creek	0.00		0.02	0.00	0.00		2.86	0.79	0.38	0.04	26.35		5.16	16.00				53.0	105.71	0.00	
Little Deer Creek	0.00	37.44	3.18	2.38	0.00	1301.80	12.82	5.02	1.93	0.20	10.05		0.00	24.42	35.80	0.00		147.56	1562.69	0.33	
Little Deer Creek	0.00	2.44	0.00	1.24	0.00	1301.80	1.24	0.00	0.00	0.00	0.00		1.32	3.40	1.73			20.39	1333.38	1.91	
Little Suwanee C											0.64	31.82		7.95	24.18				341.51	943.07	0.19
Long Branch											0.77	0.01	2.09		32.23	0.65			61.06	118.10	0.07
Maholms Creek											0.02	0.04	1.72	0.00	0.80	0.84			10.23	16.81	0.01

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Atlanta, Georgia
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Source: Total Maximum Daily Load Evaluation for Seventy Stream Segments in the Ocmulgee River Basin For Sediment

Common Recommendations for Roadways found in TMDL plans

- Proper Maintenance of Unpaved Roads
- Properly designed roadside ditches
- Proper design of culverts
- Compliance with the NPDES Permit

Example Bio F table

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

The following is a summary of project outfalls within 1 mile and within the watershed of an identified impaired stream segment that has been listed for criteria violation, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

OUTFALL LOCATION(S)	BASIN NAME	REACH NAME	LOCATION OF THE IMPAIRED STREAM SEGMENT AS INDICATED IN THE NPDES PERMIT (LVS)	CRITERIA VIOLATED (BFO F OR BFO M)	POTENTIAL CAUSE (NP OR UR)	CATEGORY (4a, 4b OR 5)	NUMERIC WASTE LOAD ALLOCATION FOR SEDIMENT 1	LIST THE ADDITIONAL BMPs FROM PART III C 2 OF GAR 50000 USED FOR THIS WATERSHED (A MINIMUM OF 4 ARE REQUIRED) AND IF PART III C 1 IS APPLICABLE DISCUSS HOW THE WASTE LOAD ALLOCATION FOR SEDIMENT IS ACHIEVED.
STATION FROM TO 410-00	Oconee	Rusty Creek	RD. 5 RD, Estation to Little Creek	BFO F	NPUR	4a	3381 TNYEAR	<p>There is large pipe treatment 1.8 mi. N from the site (table from the roadway showing the permittees) and the water permit(s) and telephone numbers.</p> <p>Use erosion prevention controls on the under roads to stabilize areas that disturbed for more than seven (7) calendar days in accordance with Part III, D.1, of the NPDES Permit (GAR 50000).</p> <p>Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or burlap (other means as of date of permit) (see 7.1).</p> <p>Certified personnel shall conduct inspections of best management practices (BMPs) within 24 hours of the end of the storm that is 0.7 inches rainfall or greater in accordance with Part III D.4.a(2), (a)-(c) of the NPDES Permit (GAR 50000), as applicable.</p>

Add one of the applicable notes under the table:

- "A TMDL Implementation Plan has been developed for sediment for the impaired stream segment"
- "No site-specific conditions or requirements have been include in the TMDL implementation Plan for ___ applicable to construction activities."
- "As per the TMDL plan, NPDES construction Activities are considered a significant source of pollution. Compliance with the Permits should lead to sediment loading for construction sites at or below applicable targets"

19.) "Delineate on-site drainage and off-site watersheds using USGS 1" : 2000' topographical sheets."

This is provided on the drainage area map and the watershed map in the ES&PCP. The requirements are specified in the PPG.

This is discussed in previous sections.

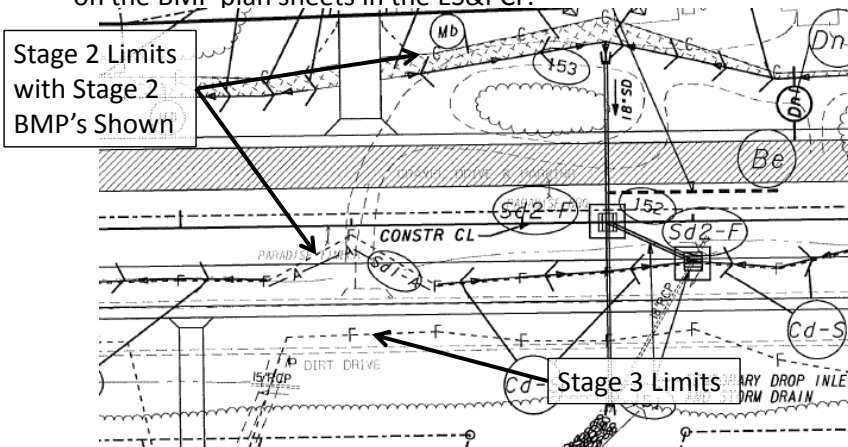
20.) "Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions."

Add this information on the cover sheet.

SMALL LEVEL OF CERTIFICATION - 0000000000			
PLANS COMPLETED: 05-08-2009			
PLANS COMPLETED FOR PFPR: 12-2002			
PLANS COMPLETED FOR FFPR: 04-2007			
LOCATION & DESIGN APPROVAL: 06-07-05			
REVISIONS			
DATE	SHEET NO.	REQUESTED BY	SIGNATURE & GSWCC CERT. NO.

21.) "The limits of disturbance for each phase of construction."

The Department's Plan Presentation Guide (PPG) requires that the limits of disturbance be shown for each major stage of construction on the BMP plan sheets in the ES&PCP.



Clip from Stage 2 BMP sheet.

22.) *“Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written rationale explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls.*

Detailed computations and design data for sediment basins are located in the hydraulic design/drainage design notes for the project and can be made available for review upon request. All standard sediment basin and riser dimensions are summarized in a table on construction detail D-22 in the plans. Design data for unique or special design basins is shown on the plans with the grading details. Sediment Storage Volumes for all project outfalls are shown on the Sediment Storage Table in the ESPCP General Notes.

Additional information provided in other sections of this class.

23.) *“Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.”*

“Alternate BMPs” are BMPs that are not found in the Manual for Erosion and Sediment Control in Georgia
Common BMPs used by GDOT that are not in the Erosion Control Manual are:

- Silt fence Check Dams
- Silt Gates

24.) *“Best Management Practices to minimize off-site vehicle tracking of sediments and the generation of dust.*

Where appropriate and feasible, construction exits are specified in the plan. Due to the dynamic nature of roadway construction, it is often necessary for construction personnel to move and or determine the precise location of construction exits. Provisions for dust control are addressed in the department's specifications and special provisions.

25.) *“BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.”*

The GDOT standard note describes concrete washdown requirements.

26.) *“Provide BMPs for the remediation of all petroleum spills and leaks.”*

Spill plan is covered in the general notes. Refer to the general note titled PETROLEUM STORAGE, SPILLS AND LEAKS.

27.) *“Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.*

The Department’s uniform code symbols are consistent with those in the Manual for Erosion and Sediment Control in Georgia. BMP legends are not shown on each sheet. The Department’s Erosion Control Legend and Uniform Code Sheets are placed in front of the BMP sheets. Legend Details can be found on the Departments Standards and Details webpage and are labeled EC-L1 thru EC-L6. Designers may add additional BMPs as necessary.

28.) *“Description of the nature of construction activity.”*

Covered in the project description on the cover sheet and NOI.

*WIDENING AND REALIGNMENT OF US 441 / SR 24
PUTNAM COUNTY *237*

29.) *“A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs.”*

The clearing and grubbing of the project site and the installation of the perimeter BMP’s is addressed in the Stage 1a. The phases and staging of the BMP plans must correspond to the staging of the roadway construction plans. The BMP plans for each stage will include all applicable initial, intermediate and final BMP’s for that stage. Unless stated otherwise in the plans, Slope mats are specified to aid in the final stabilization slopes being constructed. Temporary mulch and temporary grassing is utilized as needed until the slopes are completed, matted and permanently grassed.

Example plan sheet addressing initial, intermediate and final BMP installation.

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.

<p>Describe work being performed during the stage.</p>	<p>Stage 1a This work includes Clearing and grubbing of project area and installation of initial BMP.</p> <p>Initial BMP installation 1. Clear and grubbing activities, install all perimeter controls, sediment basins, check dams, inlet sediment basins, silt gates on exist 2. Construct side ditches that drain to the sediment basins. 3. Apply temporary grassing and mulch as necessary to disturbed areas.</p>
<p>Describe Initial, Intermediate or final BMPs being installed during the given stage</p>	<p>Final BMP installation 1. Grade to sediment basins and all ditches that drain to the sediment basins.</p> <p>Stage 1 This work includes installation of rock embankment, widening of US 441 on one side, installation of dry swales shown on the left side, construction of</p> <p>Intermediate BMP installation 1. Install silt fence, check dams, rock filter dams, as shown on the stage 1 plans, immediately when final grade for the stage has been established. 2. Mulch and plant temporary grass as required by the special provisions. 3. Install inlet sediment traps, around structures as shown. Maintain a sump around filter rings until final grade has been established a 4. Install filter rings as shown on the plans immediately after drainage structures draining through the filter ring has been installed. 5. Construct and maintain temporary berms on fill slopes and positive drainage to slope drains as embankments are being constructed. 6. Install rock filter berms after rock embankment has been placed to an elevation of 342' and before fill is placed on top of the rock embankment.</p>
<p>Note: Three phases are not necessary for every given stage.</p>	<p>Final BMP installation 1. As soon as final grade has been established, install slope blankets, ditch linings, rip rap aprons, permanent grassing. For areas where slopes are broad</p> <p>Stage 2 This work includes the widening of US 441 to the east and west, installation of dry swales on the left side. Obliteration of US 441 pavement</p> <p>Intermediate BMP installation 1. Install silt fence, check dams, rock filter dams, as shown on the stage 1 plans, immediately when final grade for the stage has been established. 2. Mulch and plant temporary grass as required by the special provisions. 3. Install inlet sediment traps, around structures as shown. Maintain a sump around filter rings until final grade has been established and stabilized. 4. Install filter rings as shown on the plans immediately after drainage structures draining through the filter ring has been installed. 5. Construct and maintain temporary berms on fill slopes and positive drainage to slope drains as embankments are being constructed.</p> <p>Final BMP installation 1. As soon as final grade has been established, install slope blankets, ditch linings, rip rap aprons, permanent grassing. For areas where slopes are broad</p>

30.) "Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization)."

Project timeline will be provided by the contractor and is included with the NOI. The project timeline will vary depending on weather, traffic, contractor's resources and the availability of materials. The Department's specifications provide a year round timeline and guidance for temporary and permanent grassing.

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.

31.) *“Description of the practices that will be used to reduce the pollutants in storm water discharges.”*

These aspects are addressed in the Narrative Statements and in the POST-CONSTRUCTION BMP'S note on the ES&PCP general notes.

32.) *“Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.”*

These aspects are addressed in the in the POST-CONSTRUCTION BMP'S note on the ES&PCP general notes.

The designer is expected to customize this note to match site specific conditions.

POST-CONSTRUCTION BMPs

Post construction BMP's for this project included dry swales, vegetated channels, slope drains, flumes, rip rap outlet protection ditch linings

All permanent, post-construction BMPs are shown in the construction plans and in the ESPCP plan. The post-construction BMPs 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 BMPs will provide permanent stabilization of the site, and prevent accelerated transportation of sediment and pollutants into receiving waters.

33.) *“Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.”*

34.) *“Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on page 14 of the permit.”*

35.) *“Certification statement and signature of the permittee or the duly authorized representative as stated in section V.G.2.d. of the state general permit.*

These items are required on the cover sheet per the PPG

Make sure that the most recent certifications are included. The last revision changed only one word.

ESPCP Cover sheet statements

Statement 34

"I certify that this Erosion, Sedimentation and Pollution Control Plan has been prepared in accordance with part IV of the General NPDES Permit No. GAR 100002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GAR 100002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified unsampled receiving water."

Statement 35

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that the certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Statement 33

"I certify under penalty of law that this plan was prepared after a site visit to the location described herein by myself or my authorized agent under my supervision."

36.) "An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed."

This information is provided on the drainage area map.

Land uses and drainage areas may change from pre to post construction conditions.

For large areas using Regression equations show an "N/A"

Detention should be considered when the peak flow increases more than 10%.

STATION	DRAINAGE AREA DESIGNATION	SHEW	MATERIAL	SIZE	DRAINAGE AREA (ACRES)	V ₁₀	V ₅₀	V ₁₀₀	V ₁₀₀₀	V ₁₀₀₀₀	V ₁₀₀₀₀₀	V ₁₀₀₀₀₀₀	V ₁₀₀₀₀₀₀₀	V ₁₀₀₀₀₀₀₀₀	V ₁₀₀₀₀₀₀₀₀₀	OUTFALL CHANNELS SCORE	DISTURBED AREA (ACRES)	STREAM NAME	RECEIVING WATERS	RUNOFF COEFFICIENT AFTER	RUNOFF COEFFICIENT BEFORE
306+39	T2	85"	-	24"	3.58	8.63	4.70	10.49	11.42	14.78	16.09	444.74	444.83	444.88	444.88	1.60	0	N/A	LITTLE CREEK	.52	.41
316+09	03,04	65"	-	42"	18.64	14.93	8.90	66.34	72.21	81.78	87.25	456.70	456.75	453.24	453.57	3.60	0	N/A	LITTLE CREEK	.42	.39
319+04	04	80"	-	24"	6.97	12.87	23.94	102.41	122.80	244.60	267.12	447.18	450.88	451.05	1.00	0	N/A	LITTLE CREEK	.44	.41	
344+02	02	60"	-	24"	3.76	8.74	10.77	8.74	12.77	13.90	17.8	17.8	501.63	501.73	5.00	0	N/A	N/A	N/A	.43	N/A
357+50	V2, V3	90"	-	18"	4.44	13.10	10.96	9.17	9.88	14.36	15.63	508.92	509.09	516.97	517.32	4.50	0	N/A	N/A	.41	.38
365+26	X1	74"	-	18"	3.32	9.79	6.53	9.54	10.39	10.03	10.82	522.26	522.48	522.97	523.39	1.00	0	N/A	N/A	.58	.37
384+12	X1	53"	-	36"	14.66	13.03	10.19	29.54	32.16	48.69	53.00	515.88	516.11	513.56	513.90	7.00	0	N/A	N/A	.42	.42

Pre and post construction peak flows

Pre and post construction coefficients

37.) *“Indication that 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.”*

This information shall be shown on the Stream buffer impact table

Existing US 441 will be widened to the west and west along this buffer at this location. The existing 8' x 7' box culvert will be replaced with a longer 8' x 7' box culvert. The existing 6' x 6' box culvert will be replaced with a double 7' x 6' box culvert to accommodate the wider roadway. Cofferdams will be used for construction of the box culverts. Rock embankment will be placed in the inundated areas from Sta. 170+00 to 192+00. A double row of Type C silt fence with hay bales between them along the base of fill slopes, Type A fences, silt retention barriers, rock filter dams, ditch plugs, ditch checks, stone filter berms erosion control mats on the slope, dry swales, grassed channels and inlet protection at all inlets will be utilized to prevent sediment from leaving the project and entering the buffer. The contractor shall not perform any work in the buffer without an approved permit.

Existing US 441 will be widened to the west along this buffer in Stage 1 with about 140' of piping of the existing stream. The existing east side will be reconstructed in Stage 2 with no additional piping of stream. This buffer is exempt from requiring a buffer variance, because the proposed 42" cross-drain will be constructed along the existing stream. In addition to the 42" cross-drain, one (1) 18" cross-drain and 3 spillways discharge toward this buffer. All of these drainage structures discharge onto rip rap outlet protection. A double row of Type C silt fence with hay bales between them along the base of the fill slopes, ditch checks, erosion control mats on the slopes, silt control gates, and inlet protection at all inlets shall be utilized upstream of this buffer to prevent sediment from leaving the project and entering the buffer.

Existing US 441 will be widened to the west and east during Stage 1 at this location. The existing triple 10' x 15' box culvert will be replaced with a longer triple 10' x 12' bridge culvert with a rip rap pad at the outlet end to accommodate the wider roadway. In addition to the bridge culvert, two (2) 18" median drain outfalls, 2 spillways, and one (1) 18" side drain - all with rip rap pads - will drain to this buffer. The buffer impact is exempt from needing a buffer variance, due to the location of the proposed bridge culvert following the existing path of the stream. The contractor shall install and maintain three (3) sediment basins, a double row of Type C silt fence with a row of hay bales between them along the base of all fill slopes, inlet protection at all inlets, ditch checks, erosion control mats on the slopes, and silt control gates upstream of the buffer to prevent sediment from leaving the project and entering this buffer.

Describe the work within the buffer and what the contractor can and cannot do.

38.) *“Indication that the design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation.*

This task has been delegated to the construction project engineer or construction project manager. A BMP installation report is kept at the project site. The General Notes refer to requirements in special provision 167.

39.) *“Indication that amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional.*

Included in the PLAN ALTERATIONS general note.

40.) *“Indication that waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit.*

A Waste Disposal note is included in the general notes.

41.) *“Documentation that the ES&PC Plan is in compliance with waste disposal, sanitary sewer, or septic tank regulations during and after construction activities have been completed.”*

Included in the OTHER CONTROLS general note.

42.) *“Provide complete requirements of inspections and record keeping by the primary permittee.”*

Included in the INSPECTIONS general note.

43.) *“Provide complete requirements of sampling frequency and reporting of sampling results.”*

Included in the INSPECTIONS general note.

ESPCP General Notes template statements

INSPECTIONS

42 All inspections shall be documented on the appropriate Department inspection forms. See Special Provisions 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.

38 By agreement with Georgia EPD, the Department's Construction Project Engineer will be responsible for the seven-day inspections required for new BMP installations.

PLAN ALTERATIONS

39 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 BMPs with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC Level II certified design professional. Additional BMPs may be added per Special Provision 161 - Control of Soil Erosion and Sedimentation.

WASTE DISPOSAL

40 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.

OTHER CONTROLS

41 The Contractor shall follow this ESPCP, and shall 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.

44.) *“Provide complete details for retention of records as per Part IV.F. of the permit.”*

Add the following note to the ESPCP general notes “The Department will retain records in accordance with Part IV. F of General Permit GAR100002.”

45.) *“Description of analytical methods to be used to collect and analyze the samples from each location.”*

Included in the MONITORING SAMPLING METHODS & PROCEDURES general note.

MONITORING SAMPLING METHODS & PROCEDURES

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

46.) *“Appendix B rationale for outfall sampling points where applicable.”*

The designer shall add to the ESPCP notes a written description of the logic behind deciding on the NTU values found in Appendix B of the permit.

47.) *“Clearly* note statement in bold letters- ‘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.’”*

48.) *“Clearly* note maintenance statement in bold letters – ‘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.’”*

49.) *“Clearly note the statement in bold letters – ‘Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.’”*

Included in the ESPCP GENERAL NOTES section

*Clearly is misspelled on the checklist

ESPCP General Notes template statements

ESPCP GENERAL NOTES

- 47 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.
- 48 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.

TEMPORARY MULCHING

- 49 EPD General Permit GAR 100002 states that, "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding." However, the Department typically requires disturbed areas to be stabilized every 7 days. The construction documents, special provisions, or specifications may require mulching more often than 7 days.

50.) *"Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia."*

Erosion control Details are found in the "D" series of the GDOT Details.

51.) *"Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia."*

Information found in the VEGETATION AND PLANTING SCHEDULE section of the General Notes.

VEGETATION AND PLANTING SCHEDULE

All temporary and permanent vegetative practices including plant special, 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.

Questions?

Contact Eugene Hopkins

or

Brad Ehrman