Erosion Sedimentation & Pollution Control Plan (ES&PC Plan) Deficiency Letter Review Comments from Georgia Department of Natural Resources Environmental Protection Division - Referenced to ES&PC Plan Checklist Items - Top 10 Checklist Items from January 2019 thru May 2021 Reviews				
Checklist Item Number	**Description**	**GDOT Guidance on ROADS Website**	**Common Deficiency Letter Comment**	**Additional Information**
49	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 justification 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. A written justification as to why 67 cubic yards of storage is not attainable must also be given. 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. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.	For each common drainage location, a temporary (or permanent) sediment basin (Sd3, Sd4, Rt, or excavated Sd2) providing at least 67 cubic yards of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site. The 67 cubic yards of storage per acre does not apply to flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. Sediment basins may not be appropriate for some common drainage locations and a written justification explaining the decision not to use sediment basins must be included in the Plan. Worksheets from the Manual must be completed and shown on the Plan or attached to the Plan for each temporary sediment basin designed for the project. All cross sections and details required per the Manual for Sd3's must be shown on the ES&PC detail section of the Plan. Completed worksheets from the Manual must be shown on the Plan for each retrofit and excavated inlet sediment trap. When the design professional chooses to use equivalent controls, the calculations used to obtain the required 67 cubic yards per acre drained must be included on the Plan. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. Permit IV.D.3.a.(3) pg 29	Sediment Storage table values listed do not match what the Reviewer calculates using plan set data or finds elsewhere in the plan set. Sediment Storage table information does not match information in Section 53 Drainage Area Map. Written justification not provided or incorrect as to why 67 CY of sediment storage is not attainable for the drainage location. Written justification not provided or incorrect to use equivalent controls when a sediment basin is not attainable and not provided.	GDOT R.O.A.D.S website has the GDOT Temporary Sediment Basing Design Tool v1.0. This is an Microsoft Excel based application that includes a Design Summary Worksheet that provides a Sediment Storage Table that can be exported for use in MicroStation. The tool is located at http://www.dot.ga.gov/PS/DesignManuals/DesignGuides under the selection Roadway/Category : Construction Stormwater (Erosion Control).
43	Delineation and acreage of contributing drainage basins on the project site.	All existing drainage basins on the project site and their acreage must be delineated on the existing conditions and/or on the initial phase of the Plan. As the basins are altered or new ones created during intermediate and final phases, the new basins and their acreage must be delineated throughout each phase of the Plan. Permit IV.D.2.e pg 28	Outfall(s) not clearly described/location not clearly shown or location Station & Offset data is missing or incorrect. Location incorrectly defined as a permit defined outfall. Required outfall information or all outfall locations not shown on Section 53 ESPCP Drainage Area Map. Identified outfall is not consistent with calculated values shown on the sediment storage table when cross-checked with the Drainage Area Map	Outfall location should be where storm water discharges from the project or directly into a receiving water on site. For a structure with concentrated flow outlet protection the outfall is the end of the outlet protection not the end of the structure. Sheet flows should not be identified as outfalls. Correct Outfall Station & Offset is point where storm water discharges from the project or directly into a receiving water on site.
35	Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.	The Plan shall include a USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the locations of the site or the common development. The map must include (a) the location of all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during the mandatory field verification, into which the storm water is discharged and (b) the receiving water and/or outfall sampling locations. When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be hand-drawn on the USGS topographic map from where the storm water(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic map. Permit IV.D.6.a.(1) pg 34	Sampling locations incorrectly identified on ES&PC Plan Sheets or Sampling Table location errors. Outfall Sampling location identified not a valid sampling location. All contributing drainage basins/outfalls on Section 53 Drainage Area Map not sampled or represented by a sampling location. Sampling table not consistent with other sections of the ES&PC Plan.	See Plan Presentation Guide (PPG) on GDOT R.O.A.D.S website for requirements on the Drawing Section 53 ESPCP Drainage Area Map and Drawing Section 55 Erosion Control Watershed Map and Site Monitoring Location. The PPG is located at http://www.dot.ga.gov/PS/DesignManuals/DesignGuides under the selection Plan Presentation Guidelines/Category: PPG Current.
44	Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.	Hydrology study and drainage maps should be separate from the Plan. Maps should include each individual basin draining to, through and from the project site, with each one delineated, labeled and showing its total acreage.	Sampling locations on Drainage Map, Sampling Table, and/or Watershed Map do not match. Surface water drainage area/watershed area not delineated/delineated incorrectly on Drainage/Watershed Maps. Drainage/Watershed Map feature labeling errors.	See Plan Presentation Guide (PPG) on GDOT R.O.A.D.S website for requirements on the Drawing Section 53 ESPCP Drainage Area Map and Drawing Section 55 Erosion Control Watershed Map and Site Monitoring Location. The PPG is located at http://www.dot.ga.gov/PS/DesignManuals/DesignGuides under the selection Plan Presentation Guidelines/Category: PPG Current.
50	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.	BMPs for all phases of the Plan must be consistent with and no less stringent than the Manual and shown using uniform coding symbols from the Manual. The uniform coding symbols legend from the Manual must be included and may be shown on detail sheet or any of the ES&PC Plan sheets.	Comments directing the addition of a specific BMP or BMPs. Miscellaneous presentation comments (flow arrows, staged construction, alignment labeling, notes. Uniform Coding Symbol missing from BMP or BMP not shown correctly. Temporary BMPs and Cut/Fill limits not shown faded back in subsequent phases, and installed Permanent BMPs incorrectly shown faded back. Comments referring to location of or use of specific BMP or BMPs.	Refer to GDOT Erosion Control Legend and Uniform Code Sheet Details EC-L1 through EC-L7 which are part of the ES&PC Plan set for correct BMP Symbols, Line Styles, and Patterns and Description which frequently describes correct application of the BMP.

34	Appendix B rationale for NTU values at all outfall sampling points where applicable.	When the permittee has determined that some or all outfalls will be monitored, a rationale must be shown on the Plan under ES&PC notes which includes the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the calculation of the size of the surface water drainage area, and the type of receiving water(s) (i.e., trout stream or supporting warm water fisheries). Permit IV.D.6.a.(3) pg 34	Sampling table comments related to incorrect data entered or contradicting data in other sections of the ES&PC Plan Watershed Map Site Monitoring Plan comments related to sampling locations identified and labeling Specified Outfall sampling location is not a valid sampling location – 64 Letters Specified Appendix B Values incorrect or missing	See Plan Presentation Guide (PPG) on GDOT R.O.A.D.S website for requirements on the Drawing Section 55 Erosion Control Watershed Map and Site Monitoring Location. The PPG is located at http://www.dot.ga.gov/PS/DesignManuals/DesignGuides under the selection Plan Presentation Guidelines/Category: PPG Current. GDOT R.O.A.D.S website has a link to the current NPDES General Permit No. GAR 100002 which should be used to determine the correct Appendix B NTU values for outfall sampling locations. The link is located at http://www.dot.ga.gov/PS/DesignManuals/DesignGuides under the selection External Resources/NPDES General Permit No. GAR 100002.
46	Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.	The storm-drain pipe and weir velocities must show the flow characteristics of the pipe at full flow, including pipe diameter, flow rate (cfs), velocity (fps), and tailwater conditions. This information should be shown in a chart shown on storm-drain profile sheet, ES&PC intermediate phase sheet or on the ES&PC detail sheet that shows outlet protection. The dimensions of the apron must include length (La), width at the headwall (W1), down-stream width (W2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-34.1 and 6-34.2 in the Manual. These should be shown in a chart on ES&PC intermediate and/or final phase sheet or ES&PC detail sheet with outlet protection. Velocity dissipation devices shall be placed at all discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological functions and characteristics are maintained and protected.	Outlet Protection table has missing data for a structure or errors in the data listed Structure(s) missing from Outlet Protection table or the table is missing St-Rp (Storm Drain Outlet Protection Riprap) label missing or incorrectly using Rp label instead of St-Rp BMP labels/patterns not shown correctly or missing from or shown on incorrect stage(s)	GDOT R.O.A.D.S website has a ESPCP General Notes Template which is a .zip file available for download. The download is a Microsoft Excel file which includes a Rip-Rap Outlet Protection worksheet that can be used with MicroStation. The .zip download is located at http://www.dot.ga.gov/PS/DesignManuals/DesignGuides under the selection Roadway/Category : Construction Stormwater (Erosion Control). Refer to GDOT Erosion Control Legend and Uniform Code Sheet Details EC-L1 through EC-L7 which are part of the ES&PC Plan set for correct BMP Symbols, Line Styles, and Patterns.
41	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.	The State Law of Georgia mandates these minimum undisturbed buffers, but the Local Issuing Authorities are allowed to require more stringent buffers of State waters. The minimum undisturbed buffers required by the State and all other buffers of State waters required by the issuing authority must be delineated. Any undisturbed buffer area that is impacted by the project site must be noted on the Plan. Permit IV.D.2.e pg 28.	State Waters Buffer Impact table has incorrect location data. Typical errors are on begin and end station and how a single features buffer which is on both sides of the roadway is listed. State Waters Buffer not delineated or delineated incorrectly. Incorrect delineation is often the buffer offset distance is incorrectly being measured from the middle of the stream. Non-Impacted Buffer is incorrectly included on the State Waters Buffer Impact table. State Waters Buffer Impact table is missing.	Individual feature with a buffer on both sides of the roadway should be listed on the table as two entries (left and right). Wetlands should not be included on the table since they are not a Buffered State Water. Only State Waters Buffer which are impacted by the project should be included on the table. See Checklist Item 42 comments below.
42	Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.	ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE MUST BE DELINEATED ON ALL PHASES OF THE PLAN. When a project is located in a jurisdiction with a certified Local Issuing Authority and the LIA must make a determination of State waters that are not delineated on the Plan, the Plan review could be delayed for beyond the full forty-five day review time allowed to the LIA, or the full thirty-five day review time allowed to the District if the District is reviewing the Plan. For all projects in a jurisdiction where there is no certified Local Issuing Authority regulating that project, GAEPD is responsible for State waters determinations and there is no time limit for reviewing the Plan. ALL WETLANDS LOCATED WITHIN THE PROJECT SITE ONLY MUST BE DELINEATED. If the Local Issuing Authority requires an undisturbed buffer of wetlands, delineate required buffer.	State Waters Buffer Impact table has incorrect location data. Typical errors are on begin and end station. State Waters Buffers not delineated or delineated incorrectly. Typical comment is based on more than one line delineating a Buffer feature (these were often one solid and dashed line). Delineated and Impacted State Waters Buffer not included on the State Waters Buffer Impact table. Delineated and Non-Impacted State Waters incorrectly included on the State Waters Buffer Impact table. Delineated feature which is not a State Water incorrectly included on the State Waters Buffer Impact table (these were typically Wetlands).	See Checklist Item 41 comments above.
29	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).	Activity schedule must be site specific. The narrative description and timeline for each phase of construction may be shown on ES&PC Plan sheet or under ES&PC notes. Permit IV.D.2.b pg 28.	Phase/Stage 1 description including activities that should not be taking place in the this Phase or Stage such as Clearing and Grubbing and Grading. Required chart or timeline of phases of construction missing. Incorrect, confusing, or missing information from narrative description and timeline of phases of construction.	Initial Phase of construction should only include installation of perimeter controls and initial sediment storage BMPs.