

ES&PC Plan Review Checklist

Common Development Construction Projects
January 2014



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.**

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS

SWCD: _____

Project Name: _____ Address: _____
City/Country: _____ Date on Plan: _____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
<input type="checkbox"/>	<input type="checkbox"/>	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of the year in which the land-disturbing activity was permitted. <i>(The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)</i>
<input type="checkbox"/>	<input type="checkbox"/>	2 Level II certification number issued by the Commission, signature and seal of the certified design professional. <i>(Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)</i>
<input type="checkbox"/>	<input type="checkbox"/>	3 Limit of disturbance shall be no greater than 50 acres at any one time with outprior written authorization from the E District Office. If EPCD approves the request to disturb 50 acres or more at any one time, the plan must include at the BMPs listed in Appendix 1 of this checklist? <i>(A copy of the written approval by EPCD must be attached to the plan for the plan to be reviewed)</i>
<input type="checkbox"/>	<input type="checkbox"/>	4 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution control
<input type="checkbox"/>	<input type="checkbox"/>	5 Provide the name, address and phone number of primary permittee.
<input type="checkbox"/>	<input type="checkbox"/>	6 Note total land disturbed acreage of the project or phase under construction.
<input type="checkbox"/>	<input type="checkbox"/>	7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees
<input type="checkbox"/>	<input type="checkbox"/>	8 Initial date of the Plan and the date of any revision made to the Plan including the entity who requested the revision
<input type="checkbox"/>	<input type="checkbox"/>	9 Description of the nature of construction activity.
<input type="checkbox"/>	<input type="checkbox"/>	10 Provide vicinity map showing gate's relation to surrounding areas. Include designation of specific phases, if necessary
<input type="checkbox"/>	<input type="checkbox"/>	11 Identify the project receiving waters and describe all sensitive sub-categories including streams, lakes, residential wetlands, etc. which may be affected
<input type="checkbox"/>	<input type="checkbox"/>	12 Design professional's certification statement and signature that the site was visited prior to development of the ES Plan as stated on page 15 of the permit
<input type="checkbox"/>	<input type="checkbox"/>	13 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMP's and sampling to meet permit requirements as stated on page 15 of the permit
<input type="checkbox"/>	<input type="checkbox"/>	14 Clarify on the statement that "The design professional who prepares the ES&PC Plan is to inspect the installation of initial sediment storage requirements and perimeter control BMP's within 7 days after installation."
<input type="checkbox"/>	<input type="checkbox"/>	15 Clarify on the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed buffers as measured from the point of waste to vegetation without first acquiring the necessary variance and permit"
<input type="checkbox"/>	<input type="checkbox"/>	16 Clarify on the statement that "Any ditches or alterations to the ES&PC Plan which have a significant effect on EMI hydraulic component must be certified by the design professional."
<input type="checkbox"/>	<input type="checkbox"/>	17 Clarify on the statement that "Waste materials shall not be discharged to waters of the State, except as authorized section 404 permit"
<input type="checkbox"/>	<input type="checkbox"/>	18 Clarify on the statement that "The escape of sediment from the site shall be prevented by the installation of erosion sediment control measures and practices prior to land disturbing activities."

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. The Level II certification must be issued to the Design Professional whose signature and seal are on the plan.**



	GSWCC	GEORGIA SOIL AND WATER CONSERVATION COMMISSION
_____ Level II Certified Design Professional		
CERTIFICATION NUMBER _____		
ISSUED _____ EXPIRES _____		

3.

- Limit of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.
- A copy of the written approval by EPD must be attached to the plan for the plan to be reviewed.

4.

- The name and phone number of the 24-hour local contact responsible for erosion, sedimentation, and pollution controls.
- **May be shown on ES&PC Plan sheets and/or ES&PC notes.**

**24 Hour Contact:
John Doe
555-555-5555**

5.

- Provide the name, address, and phone number of primary permittee or tertiary permittee.
- **May be shown on cover sheet, ES&PC Plan, or under ES&PC notes.**

Primary Permittee/Tertiary Permittee:

(Company/Person)

(Address)

(Contact)

(Phone)

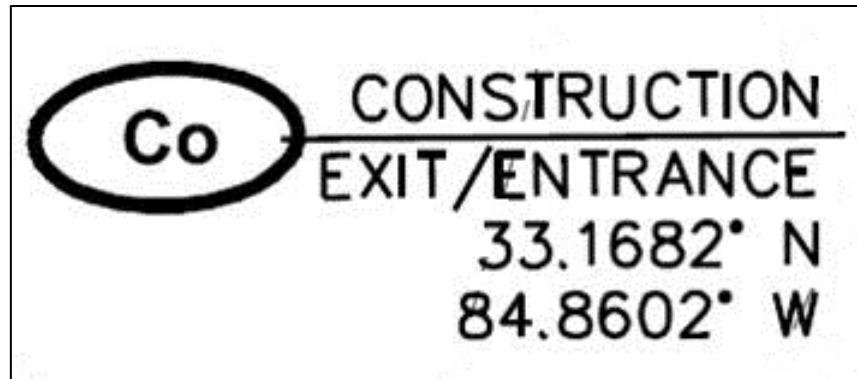
6.

- Note total and disturbed acreage of the project or phase under construction.
- **Must be shown on ES&PC Plan or under ES&PC notes.**

**OVERALL SITE AREA: 43.8 ACRES
TOTAL DISTURBED AREA: 9.7 ACRES**

7.

- Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
- **GPS location of the construction exit must be shown on **cover sheet** and may also be shown on ES&PC Plan sheets and ES&PC notes. It must match the NOI.**



8.

- Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
- **The initial Plan date should be shown on all pages. With each resubmittal the revision date and the entity requesting revisions should be shown on cover sheet and each sheet that has been revised.**

ISSUE DATE	14 MAR 2014
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REVISIONS:	
03/10/14	GSWCC COMMENTS
03/18/14	GSWCC COMMENTS

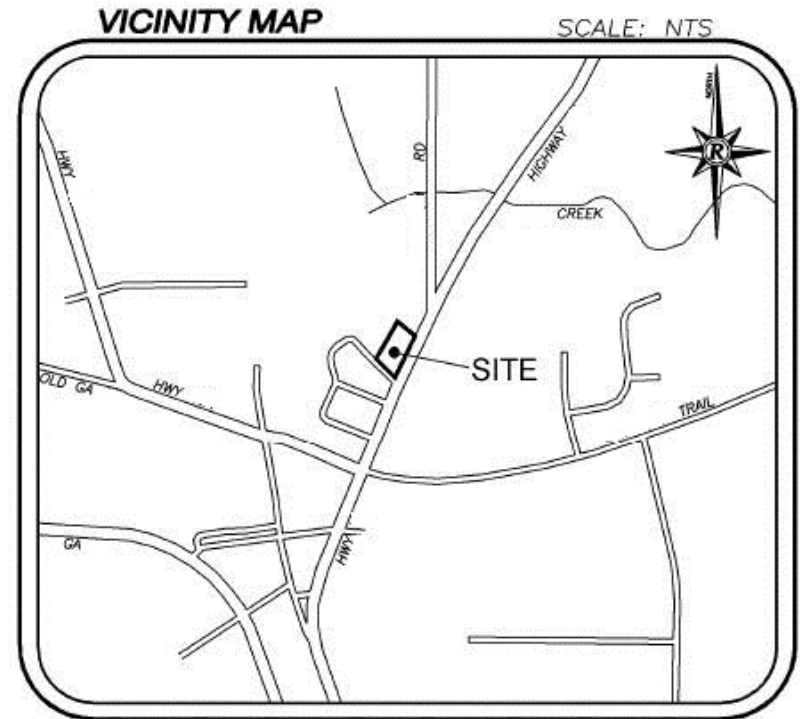
9.

- Description of the nature of construction activity.
- Provide a description of the existing site and a description of the proposed project. These must be shown on ES&PC Plan or under ES&PC notes.

The site is currently developed and has one structure on the property. The proposed construction consists of an access drive and grading for a future expansion. The proposed construction will also include landscaping, and a storm conveyance system.

10.

- Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
- **Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information is important for plan reviewers if a site visit is needed, or if the site needs to be located on another map.**



11.

- Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, etc. which may be affected.
- **The name of the initial receiving water(s) or if unnamed the first named blue line stream indicated on the appropriate USGS topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of the whether the receiving water(s) supports warm water fisheries or is a trout stream. Describe any neighboring area which could be affected by the post-developed runoff from the site.**

12.

- Design professional's **certification statement** and **signature** that the site was visited prior to development of the ES&PC plan as stated on page 18 of the permit.
- **The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes:**
 - *“I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision.”*

13.

- 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 pages 17 & 18 of the permit.
- **The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes:**
 - *"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 100003."*

14.

- Clearly note the statement 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.”**

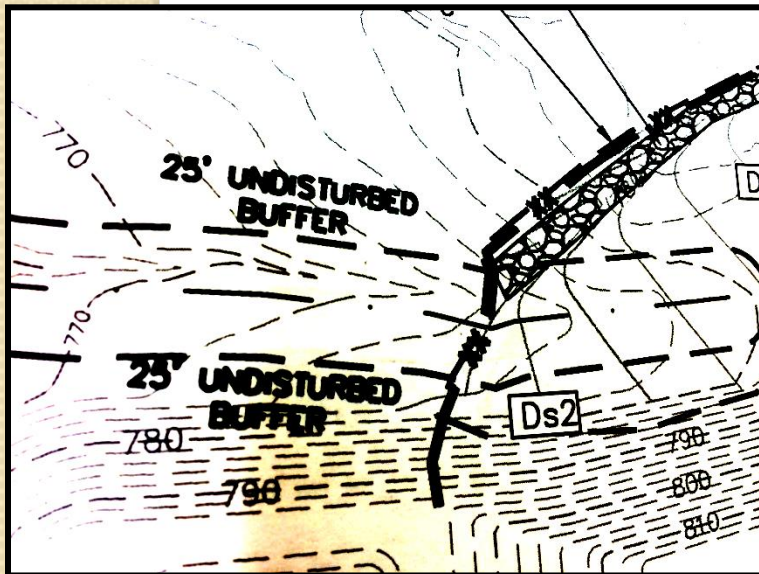
The Plan must include a statement indicating that the primary permittee must retain the design professional who prepared the Plan, except when the primary permittee has requested in writing and EPD has agreed to an alternate design professional, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs which the design professional designed within seven (7) days after installation. The design professional shall determine if these BMPs have been installed and are being maintained as designed. The design professional shall report the results of the inspection to the primary permittee within seven (7) days and the permittee must correct all deficiencies with two (2) business days of receipt of the inspection report from the design professional unless weather related site conditions are such that additional time is required.

DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION	
DATE OF INSPECTION _____	
I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE ON INSPECTION.	
_____ GSWCC LEVEL II DESIGN PROFESSIONAL	_____ CERTIFICATION #
INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN.	

THE DEFICIENCIES MUST BE ADDRESSED AND AN RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.	

15.

- Clearly note the statement 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.”**



See Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (I) and (II) on pages 15, 16, 17 & 18 of the permit and show under ES&PC notes.

16.

- Clearly note the statement 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.”**
- See Part IV. C. on page 21 & 22 of the permit. This can be clarified in a narrative and shown under ES&PC notes. Revisions or amendments should be submitted to the Local Issuing Authority for review.

17.

- Clearly note the statement that **“Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit.”**
- **The Plan must include a description of how waste materials, including waster building materials, construction, and demolition debris, concrete washout, excavated sediment, etc., will be properly disposed of. Any disposal of solid waste to waters of the State is prohibited unless authorized by a Section 404 permit.**

WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY AND TRASH WILL BE HAULED AS REQUIRED BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON SITE.

ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

18.

- Clearly note the statement that **“The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities.”**
- **Must be shown on ES&PC Plan or under ES&PC notes.**

19.

- Clearly note the statement that **“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.”**
- **Must be shown on ES&PC Plan or under ES&PC notes.**

20.

- Clearly note the statement that **“Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.”**
- **Must be shown on ES&PC Plan or under ES&PC notes.**

21.

EACH SECONDARY PERMITTEE SHALL BE PROVIDED WITH A COPY OF THE EROSION CONTROL PLANS OR PORTIONS OF THE PLAN APPLICABLE TO THEIR SITE AND EACH SECONDARY PERMITTEE SHALL SIGN THE PLAN OR PORTION OF THE PLAN APPLICABLE TO THEIR SITE.
SECONDARY PERMITTEES SIGN WHEN RECEIVING PLANS. ALL SECONDARY PERMITTEES MUST SUBMIT SECONDARY NOI AT LEAST 14 DAYS PRIOR TO BEGINNING CONSTRUCTION ACTIVITY.

NAME COMPANY ADDRESS ADDRESS GSWCC LEVEL IA CERTIFICATION NO. _____	PHONE: FAX: SIGNATURE _____
NAME COMPANY ADDRESS ADDRESS GSWCC LEVEL IA CERTIFICATION NO. _____	PHONE: FAX: SIGNATURE _____
NAME COMPANY ADDRESS ADDRESS GSWCC LEVEL IA CERTIFICATION NO. _____	PHONE: FAX: SIGNATURE _____
NAME COMPANY ADDRESS ADDRESS GSWCC LEVEL IA CERTIFICATION NO. _____	PHONE: FAX: SIGNATURE _____

- Indication that the applicable portion of the primary permittees ES&PC Plan is to be provided to each secondary permittee prior to the secondary conducting any construction activity and that each secondary shall sign the Plan or portion of the Plan applicable to their site. List the names and addresses of all secondary permittees.
- **The Plan must contain a list and contact information for all secondary permittees and a statement that the primary permittee shall provide a copy of the Plan (and any subsequent revisions to the Plan) to each secondary permittee. The Plan must include a section for each secondary to sign indicating that they have made a written acknowledgement of receipt of the Plan and a copy of the acknowledgement must be kept in the primary's records.**

22.

- Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.



If any storm water associated with construction activities discharges into an Impaired Stream Segment that has been listed for the criteria violated, “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), the ES&PC Plan must include at least four (4) of the BMPs listed in Part III.C.2. (a)-(t) of the Permit. The Impaired Stream Segment(s) should be delineated on the ES&PC Plan. Georgia’s most current and subsequent “305(b)/303(d) List Documents (Final) can be viewed on the GAEPD website.

23.

- If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.
- List of TMDL Implementation Plans can be viewed on the GAEPD website, www.gaepd.org
- The TMDL Implementation Plan for sediment should be delineated on the ES&PC Plan.

24.

NOTES:

1. EXCAVATE 10'X20' PIT TO A MINIMUM OF 1' DEEP
2. PROVIDE SILT FENCE ALONG SURFACE DOWNGRADE
3. WASH OUT AREA FOR CHUTES, TOOLS, HOPPERS AND WHEELS ONLY. DISCHARGE OF EXCESS CONCRETE FROM DRUM IS **NOT** ALLOWED ON SITE PER NPDES REQUIREMENTS.
4. A SEPARATE ROLL-OFF CONTAINER MAY BE USED FOR CONCRETE WASH OUT, AS APPLICABLE.
5. THIS AREA IS **NOT** FOR FUEL STORAGE OR FOR REFUELING TRUCKS.
6. CONTRACTOR IS RESPONSIBLE TO NOTE WHERE THEY MAY BE PERFORMING RE-FUELING ACTIVITIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT CORRECT BMP'S ARE IN PLACE IN ANY AREA THAT RE-FUELING OCCURS.

EXISTING GRADE

FILL WITH 3" TO 6"
THICK STONE RIP RAP
FOR TRUCK WHEEL WASH

LINE BOTTOM AND SIDES OF
PIT WITH FILTER FABRIC

CONCRETE WASH AREA

NOT TO SCALE

CONCRETE WASH AREA
WASHOUT OF DRUM IS
PROHIBITED.

- BMPs for concrete wash-down of tools, concrete mixer chutes, hoppers, and the rear of the vehicles. **Washout of the drum at the construction site is prohibited.**
- When the project allows for the concrete wash-down of tools, concrete mixer chutes, hoppers, and the rear of the vehicles on the project site delineate the location of the area provided for washing and provide detail of BMPs that will be used. If the project does not allow for the concrete wash-down on the project site, note that on the plan.

25.

- Provide BMPs for the remediation of all petroleum spills and leaks.
- The Plan must provide BMPs and guidance for the prevention of spills and leaks of petroleum products from any areas where such products are stored or used as well as guidance for the proper remediation of any spills and leaks that do occur. This information can be in the form of a separate Spill Prevention/Spill Response document so long as that information accompanies the Plan.

Spill Cleanup and Control Practices

- Local, State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to, brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, sawdust and properly labeled plastic and metal waste containers.
- Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary to prevent future spills.
- All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, State, and Federal regulations.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1 - 800 - 426 - 2675.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1 - 800 - 426 - 2675.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE GEORGIA E.P.D. WILL BE CONTACTED WITHIN 24 HOURS.
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

The contractor shall notify the licensed professional who prepared this Plan if more than 1320 gallons of petroleum is stored onsite (this includes capacities of equipment) or if any one piece of equipment has a capacity greater than 660 gallons. The contractor will need a Spill Prevention Containment and Countermeasures Plan prepared by that licensed professional.

26.

- 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.
- The Plan must contain a 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 may include storm water detention and retention structures, use of vegetated swales and natural depressions for flow attenuation or a combination of these practices (sequential systems). The Plan must also include a technical explanation of the basis used to select these practices where flows will exceed pre-development levels. The Plan must indicate that velocity dissipation devices will be placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act.
- Note: The permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction activities have been completed.

27.

- Description of the practices that will be used to reduce the pollutants in storm water discharges.
- **The Plan must identify all potential sources of storm water pollution expected to be present on the site and provide a narrative explaining how the pollutants will be minimized in the storm water discharges.**

Product Specific Practices

Petroleum Based Products – Containers for products such as fuels, lubricants, and tars will be inspected daily for leaks and spills. This includes onsite vehicles and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from State Waters, natural drains, and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels, and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and State regulations.

Paints/Finishes/Solvents – All products will be stored in tightly sealed original containers when not in use. Excess product will not be discharged to the storm water collection system. Excess product, materials used with these products, and product containers will be disposed of according to manufacturer's specifications and recommendations.

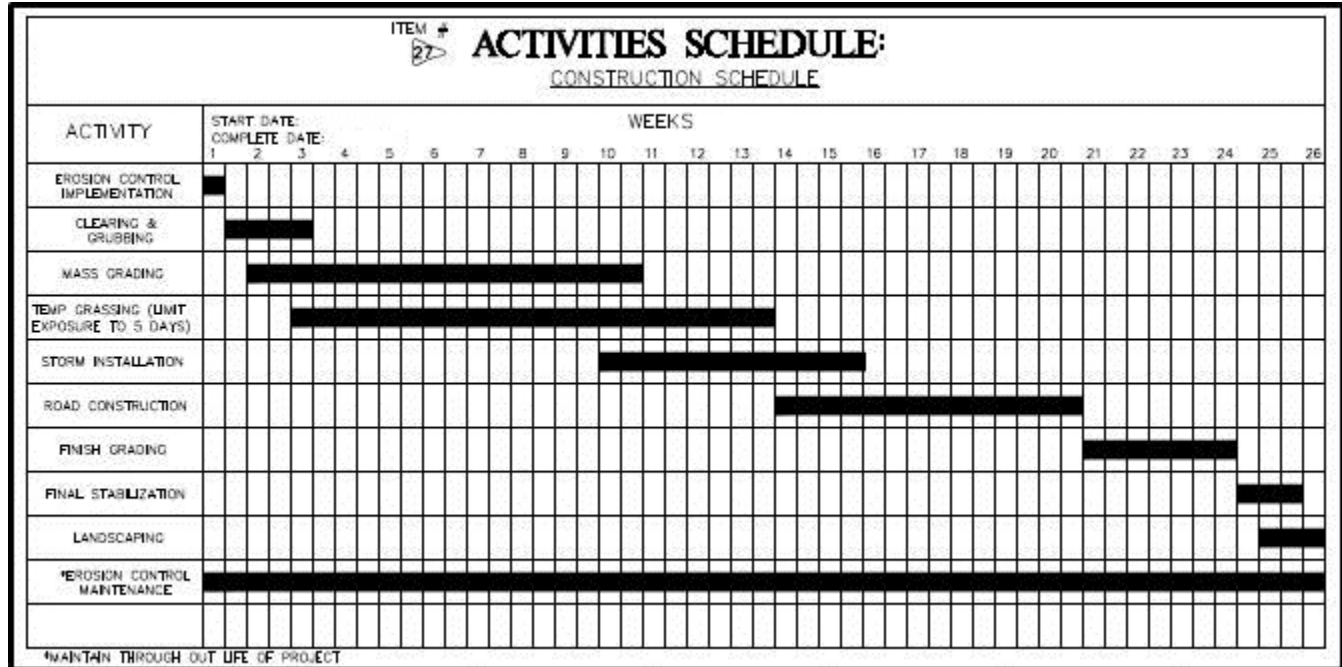
Concrete Truck Washing – NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water onsite.

Fertilizer/Herbicides – These products will be applied at rates that do not exceed the manufacturer's specifications or above the guidelines set forth in the crop establishment or in the GSWCC Manual for Erosion and Sediment Control in Georgia. Any storage of these materials will be under roof in sealed containers.

Building Materials – No building or construction materials will be buried or disposed of onsite. All such material will be disposed of in proper waste disposal procedures.

28.

- 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.**



29.

- Provide complete requirements of inspections and record keeping by the primary permittee or tertiary permittee.
- **The Plan must include all of the inspections and record keeping requirements of the primary permittee as stated in Part IV.D.4.a. on page 25 of the Permit. The complete inspection and record keeping requirements shall be shown on the Plan under ES&PC notes.**

4. Inspections.

a. Permittee requirements.

(1). Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking.. These inspections must be conducted until a Notice of Termination is submitted.

(2). Measure rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the primary permittee) shall inspect the following at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site ; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation ; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.(4). These inspections must be conducted until a Notice of Termination is submitted.

(4). Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is received by EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(5). Based on the results of each inspection, the site description and control measures identified in the Erosion, Sedimentation and Pollution Control Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as possible but not later than seven (7) calendar days following each inspection.

(6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5). of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

30.

- Provide complete requirements of sampling frequency and reporting of sampling results.
- See page 31 Sampling Frequency and page 32 section E. Reporting in the permit. Complete sampling frequency and reporting requirements are to be shown on the Plan under ES&PC notes.

d. *Sampling Frequency.*

(1). The primary permittee must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall location within in forty-five (45) minutes or as soon as possible.

(2). However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge.

(3). Sampling by the permittee shall occur for the following qualifying events:

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first;

(c). At the time of sampling performed pursuant to (a) and (b) above, if BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained;

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations under (a), (b) or (c) above; and

(e). Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

*Note that the permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

31.

- Provide complete details for retention of records as per Part IV.F. of the permit.
- See page 33 section F. Retention of Records in the permit. Complete details of retention of records are to be shown on the Plan under ES&PC notes.

F. Retention of Records.

1. The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

- a. A copy of all Notices of Intent submitted to EPD;
- b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
- c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
- d. A copy of all sampling information, results, and reports required by this permit;
- e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
- f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and
- g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI. of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

32.

- Description of analytical methods to be used to collect and analyze the samples from each location.
- **This narrative must be shown on the Plan under ES&PC notes and shall include quality control/assurance procedures and precise sampling methodology for each sampling location.**

B. SAMPLE TYPE. ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

1. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
2. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
3. LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
4. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
5. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

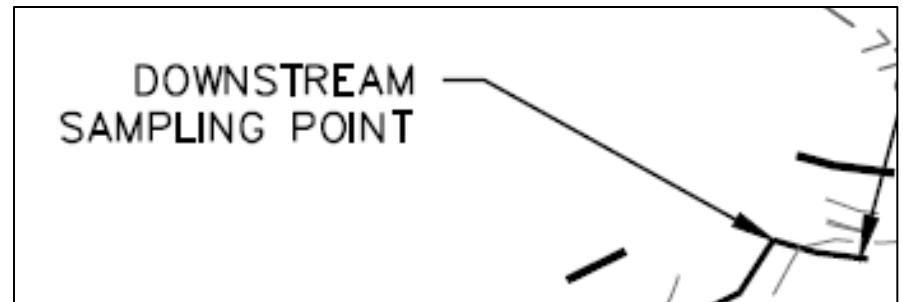
33.

- 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).

		Waters Supporting Warm Water Fisheries							
		Surface Water Drainage Area, square miles							
		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
Site Size, acres	1.00-10	75	150	200	400	750	750	750	750
	10.01-25	50	100	100	200	300	500	750	750
	25.01-50	50	50	100	100	200	300	750	750
	50.01-100	50	50	50	100	100	150	300	600
	100.01+	50	50	50	50	50	100	200	100

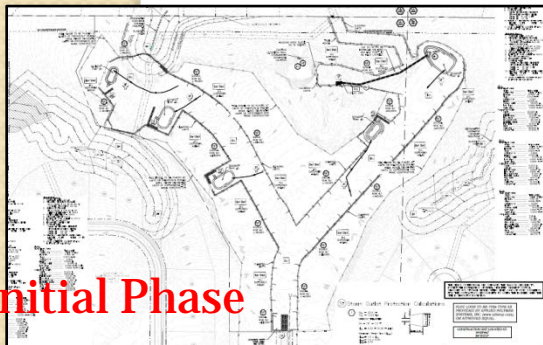
34.

- Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.
- 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 USS topographic map.

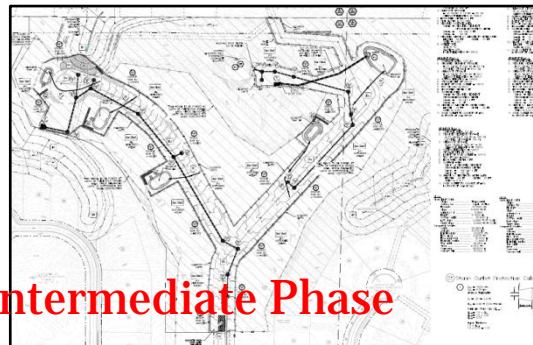


35.

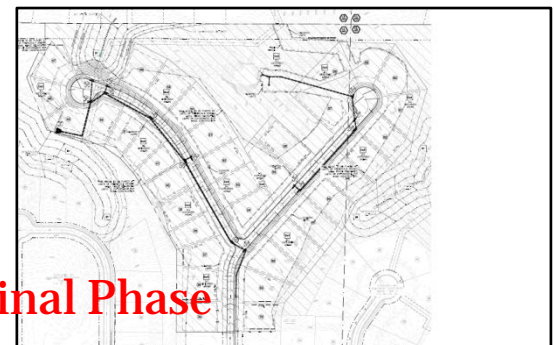
- A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs (2) intermediate grading and drainage BMPs and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.
- The Plan must be shown in a minimum of three phases with each phase shown on a separate sheet. Initial phase of the Plan must include the required 67 cy per acre sediment storage, construction exit, tree-save fence if applicable and any other BMPs necessary to prevent sediment from leaving the site such as silt fence, inlet protection on existing storm drain structures, diversions, check dams, temporary ground cover, etc. Limits of disturbance for the initial phase are to be only the areas needed to install initial BMPs. The intermediate phase should show rough grading and utility construction. BMPs should include initial protection, additional silt fence as needed, any revised sediment storage needed as drainage basins are altered, outlet protection, retrofit if applicable, matting with temporary or permanent vegetation as needed, temporary down drains, filter rings, etc. Final phase of Plan should show finished grade, curbing and paving if applicable, building construction if applicable, etc. BMPs should include permanent vegetation, appropriate inlet protection, etc. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and the final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment.



Initial Phase

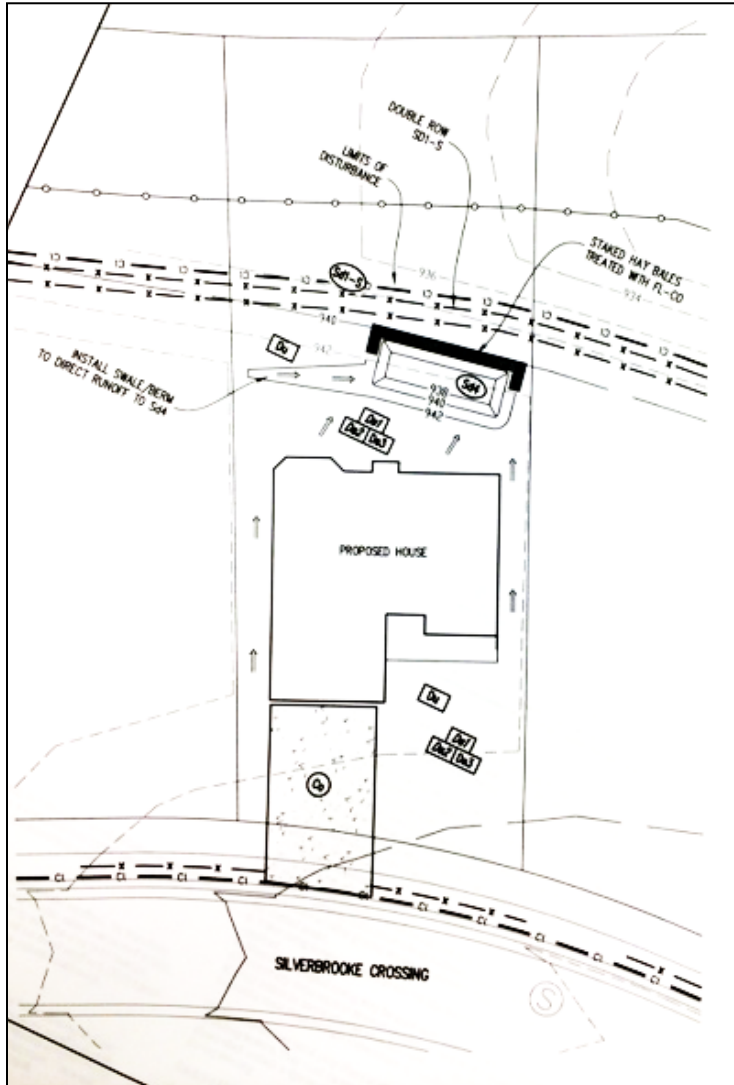


Intermediate Phase



Final Phase

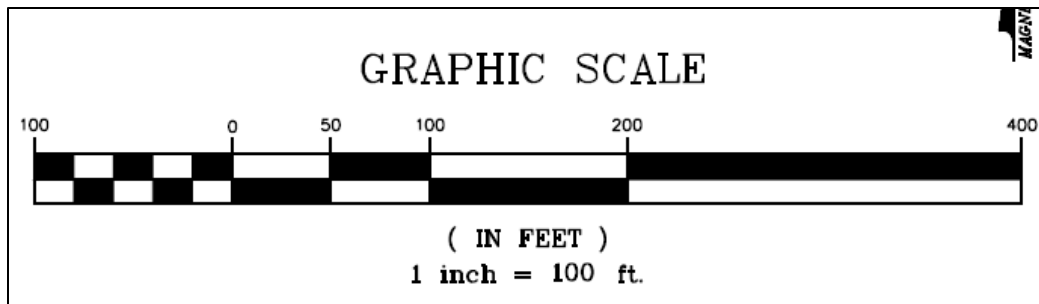
36.



- Plan addresses BMPs for all phases of common development including individual building lots and out-parcels, etc. regardless of who owns or operates the individual sites. Include a typical and any situational lots applicable.
- **The Erosion, Sedimentation, & Pollution Control plans for a common development is designed for the life of the project and must include practices to be implemented by all secondary permittees involved, whether the primary permittee relinquishes ownership of the land rights or not. This includes providing an ES&PC Plan for typical and situational lots for each secondary permittee (builder) who purchases a lot from the primary permittee (developer). Situational lots may include, but are not limited to, lots adjacent to state waters buffers (in which a double row of Type S sediment barriers must be shown adjacent to wetlands, lots with an extreme grade, etc.**

37.

- Graphic Scale & North Arrow
- The graphic scale and north arrow must be clearly shown on all phases of the ES&PC Plan sheets.



38.

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

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or	Flat 0 - 2%	0.5 or 1
larger scale	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

- The initial, intermediate, and final phase sheets of the Plan must show the proposed grade in bold contour lines with the above intervals overlaying the original contour lines. Elevations of both the existing and proposed contour lines must be shown.

39.

GSWCC Guidance Document for Alternative BMPs

Permit Erosion and Sedimentation Controls:

Use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission).

Required Documentation for Alternative BMPs:

1. One page summary detailing why the alternative BMP is equivalent or superior to the conventional BMPs found in the "Manual for Erosion and Sedimentation Control in Georgia" (Manual).
2. Documented side by side testing (alternative BMP vs. conventional BMP) using the appropriate design requirements and specifications contained in the Manual.
3. Proof that the alternative BMP was previously installed and worked under conditions comparable to the environmental conditions of the proposed site. This can be documented with photographs.
4. All specifications including the design requirements and the procedures for proper installation and maintenance.

All forms of documentation must be signed and certified by the Design Professional who is preparing the ES&PC Plan and must include the Design Professional's seal and GSWCC Design Professional certification.

ES&PC Plan

When an ES&PC Plan has been reviewed by the GSWCC, EPD or a Local Issuing Authority (LIA) with a Memorandum of Agreement (MOA) to review ES&PC Plans, the following statement must be on the plan review sheet:

The use of the alternative BMP for _____ (type of BMP, e.g., silt fence Sd1) has been reviewed and has been determined to be allowable only for this ES&PC Plan. This review was site-specific based on the documentation submitted and certified by the Design Professional and required by the Georgia Environmental Protection Division and the Georgia Soil and Water Conservation Commission.

FAQ: Frequently Asked Questions

Q: If replacing a conventional BMP with an alternative BMP on a previously approved set of ES&PC Plans, does the Design Professional have to resubmit the ES&PC Plans?

A: Yes, the Design Professional must resubmit the ES&PC Plans with the required alternative BMP documentation.

Q: What is meant by equivalent or superior to the conventional BMP found in the Manual?

A: Based on documentation that side by side testing has been conducted under comparable site conditions using the appropriate design requirements and specifications contained in the Manual. The alternative BMP is just as effective in its purpose and meets the same criteria as the conventional BMP in the Manual, OR its effectiveness exceeds those in the Manual for its purpose and meets or exceeds the criteria for the conventional BMP in the Manual for which it is designed to replace.

Q: What if a LIA with MOA wants to deny an alternative BMP?

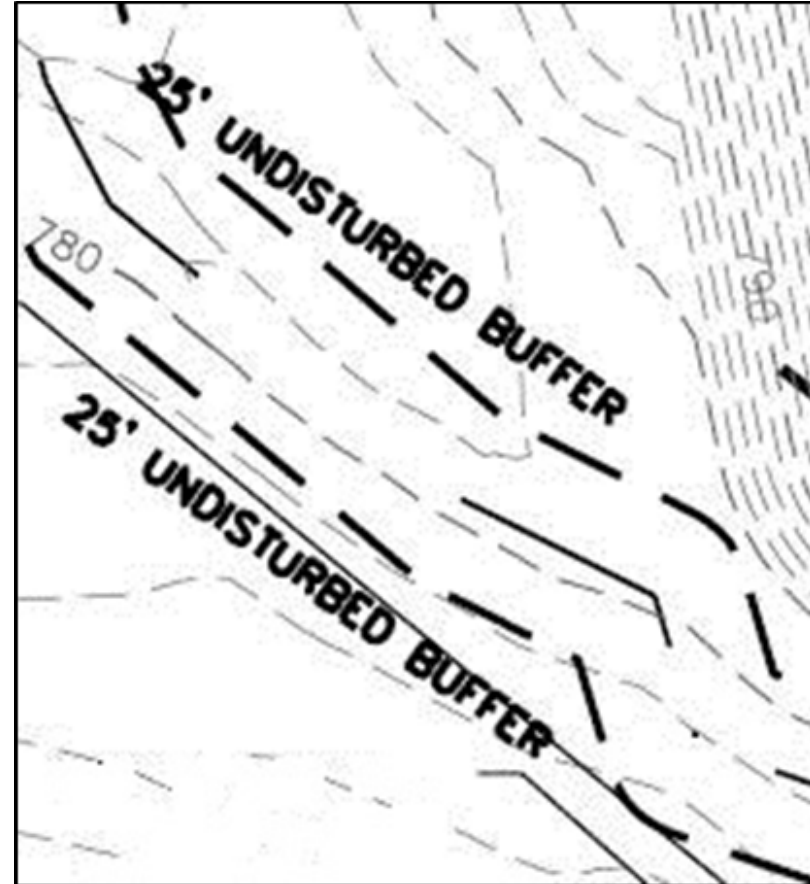
A: The LIA with the MOA must forward the ES&PC Plan with the required alternative BMP documentation to the GSWCC (Urban Program).

NOTE: In jurisdictions where there is no LIA, the alternative BMP documentation must be submitted to EPD. In jurisdictions where there is a LIA, the alternative BMP documentation must be submitted to the GSWCC. Upon receiving the alternative BMP documentation, the GSWCC and EPD will work together to make the call of disapproval. This will improve communication and ensure coordination throughout the review process.

- 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 GSWCC).
- Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org

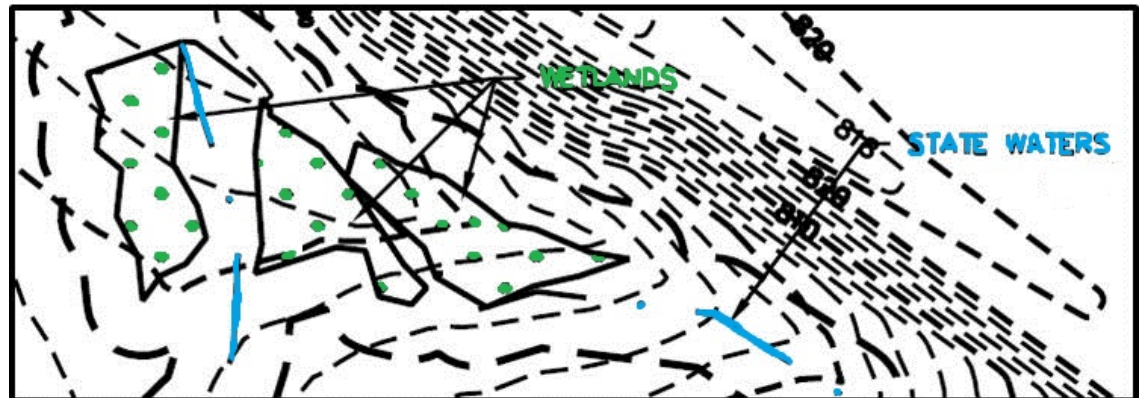
40.

- 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 areas of impact.
- **The State Law of Georgia mandates these minimum undisturbed buffers, but the Local Issuing Authority 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.**

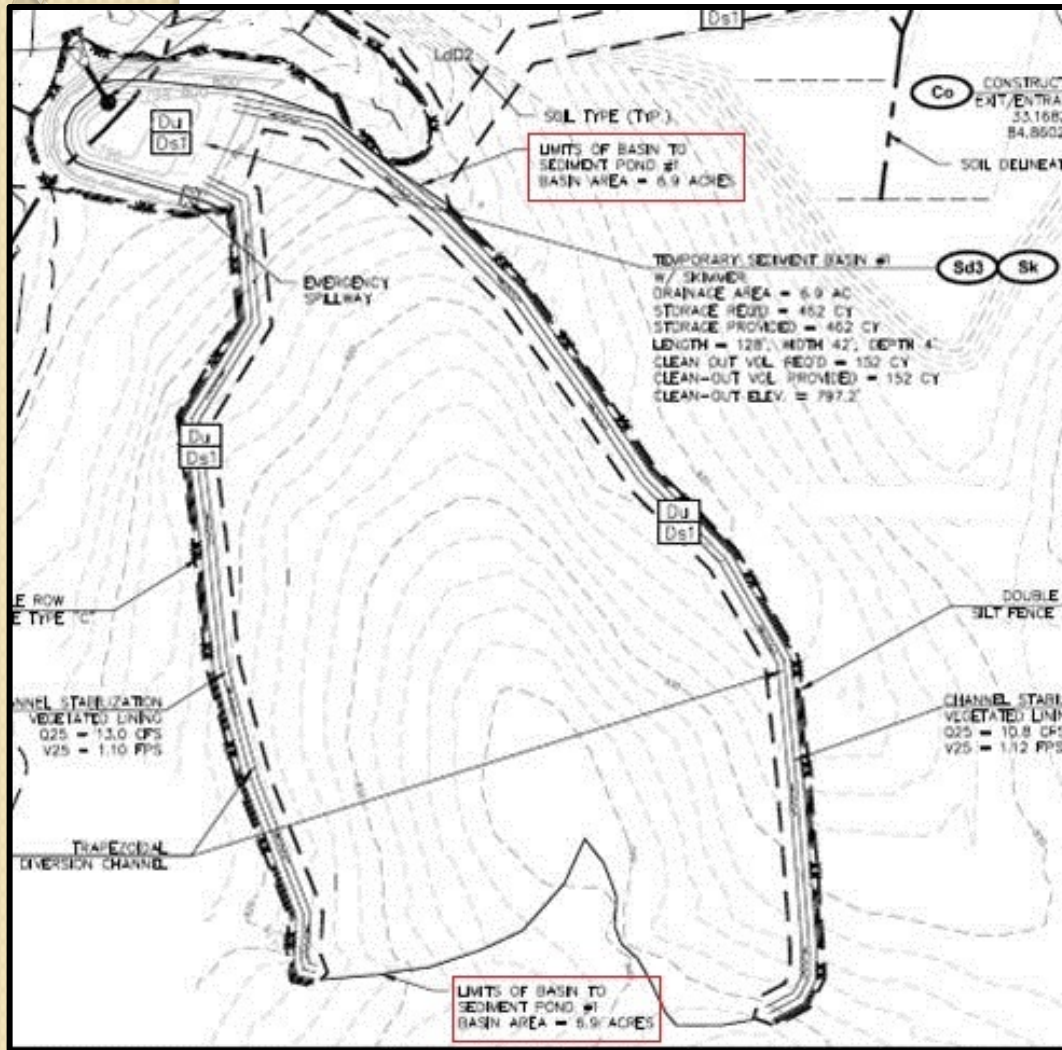


41.

- 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, EPD is responsible for State waters determinations and there is no time limits 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.



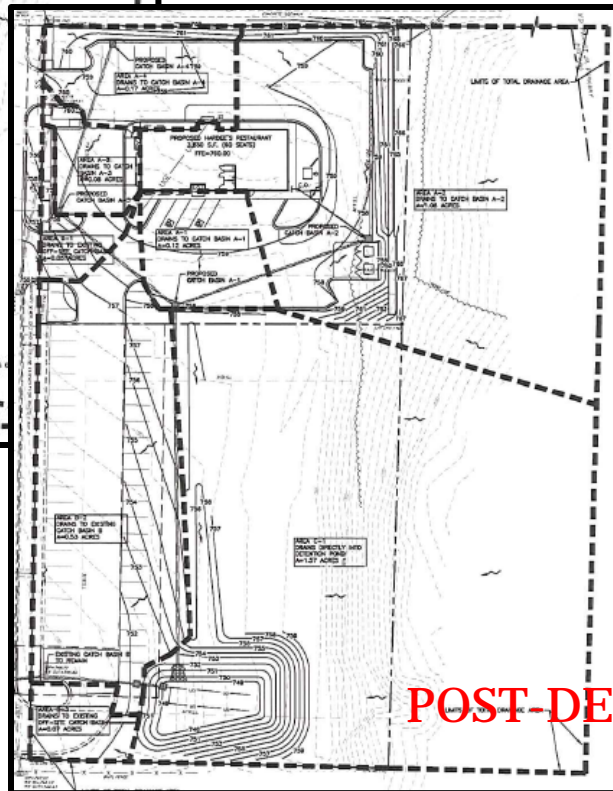
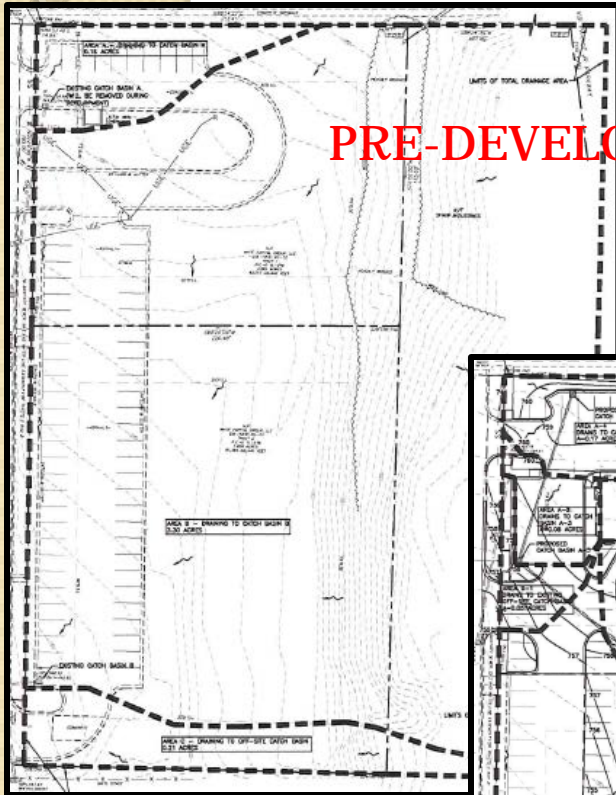
42.



- 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.

43.

PRE-DEVELOPED



POST-DEVELOPED

- Provide hydrology study and maps of drainage basins for both pre and post developed conditions.
- 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.

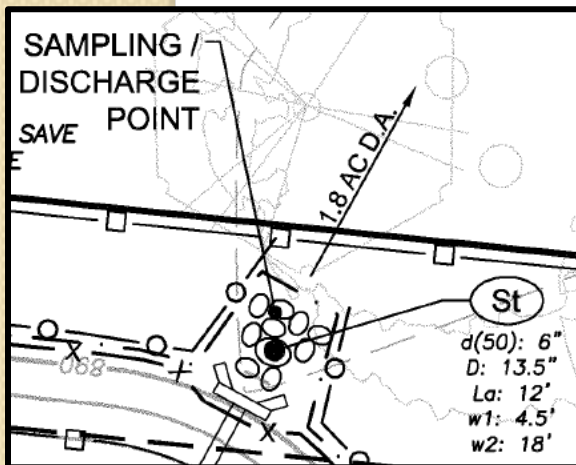
44.

- An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
- The Plan must provide both pre and post construction estimates of the runoff coefficient or peak discharge flow for the site. This can be in the form of a hydrologic study so long as that study is made a part of the Plan and accompanies the Plan. A complete hydrologic study is not required element of the Plan, only the pre and post construction estimates of the run-off coefficient or peak discharge flow for the site.

PRE-DEVELOPED COMPOSITE CN: 57
POST-DEVELOPED COMPOSITE CN: 83

45.

- 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 on the 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 6-24.1 and 6-24.2 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.



Pipe Chart											
Element ID	From (Inlet) Node	To (Outlet) Node	Drainage Area (ac)	Rational Coeff.	Length (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow into node (cfs)	Peak Flow (cfs)	Peak Flow Velocity (ft/sec)
PIPE 1.1	P.OCS.1B	P.HW.1A			26.76	1.0000	18.000	0.0190		3.10	3.25
PIPE 2.1	P.WQ.2B	P.HW.2A			19.49	1.0000	18.000	0.0190		6.80	9.11
PIPE 2.2	P.DWCB.2C	P.WQ.2B	0.42	0.9000	20.50	10.0000	18.000	0.0190	2.26	6.80	5.72
PIPE 2.3	P.SWCB.2D	P.DWCB.2C	0.61	0.8500	80.77	2.0000	18.000	0.0190	3.11	2.98	2.12
PIPE 3.1	P.JB.3A	P.WQ.2B	0.00	-	67.58	5.7500	10.000	0.0120	0.00	1.20	3.10
PIPE 3.2	P.JB.3B	P.JB.3A	0.11	0.9500	38.89	1.0000	10.000	0.0120	0.63	1.20	3.10
PIPE 3.3	P.JB.3C	P.JB.3B	0.11	0.9500	67.58	5.7500	10.000	0.0120	0.63	0.61	3.61

46.

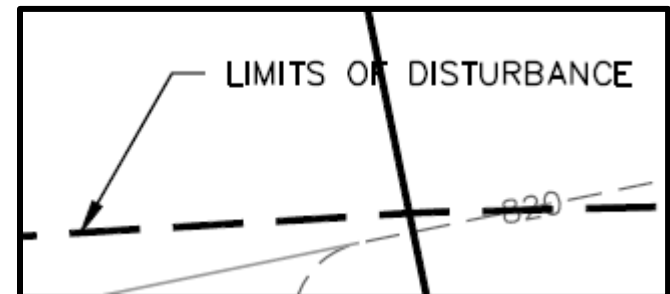
- Soil series for the project site and their delineation.
- Soil series delineations are required for the Plan review and can be found on the NRCS website. The highest level of soil survey required for the project site, such as a level three or level four survey for projects that will be using septic systems, must be delineated on the Plan. The soil series delineation should be shown on the existing site Plan or the initial phase Plan. A chart listing the soils located on the project should be shown on the sheet with their delineation.

SOIL TYPES										
SYMBOL	SOIL NAME	DEPTH (inches)	ERODIBILITY	PERMEABILITY (inches/hour)	TEXTURE	DRAINAGE	SLOPE	STRUCTURE	EROSION FACTORS	
									K	T
LeC3	Lloyd Clay Loam	0-7	Severe	0.57-1.98	Clay Loam	Well Drained	6-10%	GRANULAR	---	---
LeD3	Lloyd Clay Loam	0-7	Severe	0.57-1.98	Clay Loam	Well Drained	10-15%	GRANULAR	---	---
LeD4	Lloyd-Gullied Clay Loam	0-7	Severe	0.57-1.98	Clay Loam	Well Drained	10-15%	GRANULAR	---	---
LdB2	Lloyd Sandy Loam	0-7	Slight	0.57-1.98	Sandy Loam	Well Drained	2-6%	GRANULAR	---	---
LdC2	Lloyd Sandy Loam	0-7	Severe	0.57-1.98	Sandy Loam	Well Drained	6-10%	GRANULAR	---	---
LdD2	Lloyd Sandy Loam	0-7	Severe	0.57-1.98	Sandy Loam, Clay Loam	Well Drained	10-15%	GRANULAR	---	---
Alp	Alluvial Land	0-60	---	---	Sandy Loam	Somewhat Poorly	0-2%	---	---	---

NOTE:
SOILS INFORMATION WAS TAKEN THE MERIWETHER COUNTY WEB SOIL SURVEY.

47.

- The limits of disturbance for each phase of construction.
- The limits of disturbance for the initial phase should delineate only the area required to be disturbed for the installation of perimeter control and initial sediment storage. The intermediate phase should delineate the entire area to be disturbed for that phase, such as grading, drainage, utilities installed, etc. The final phase should delineate any additional areas to be disturbed such as individual lots, etc.



48.

- 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 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, 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 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 in 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.

GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

49.

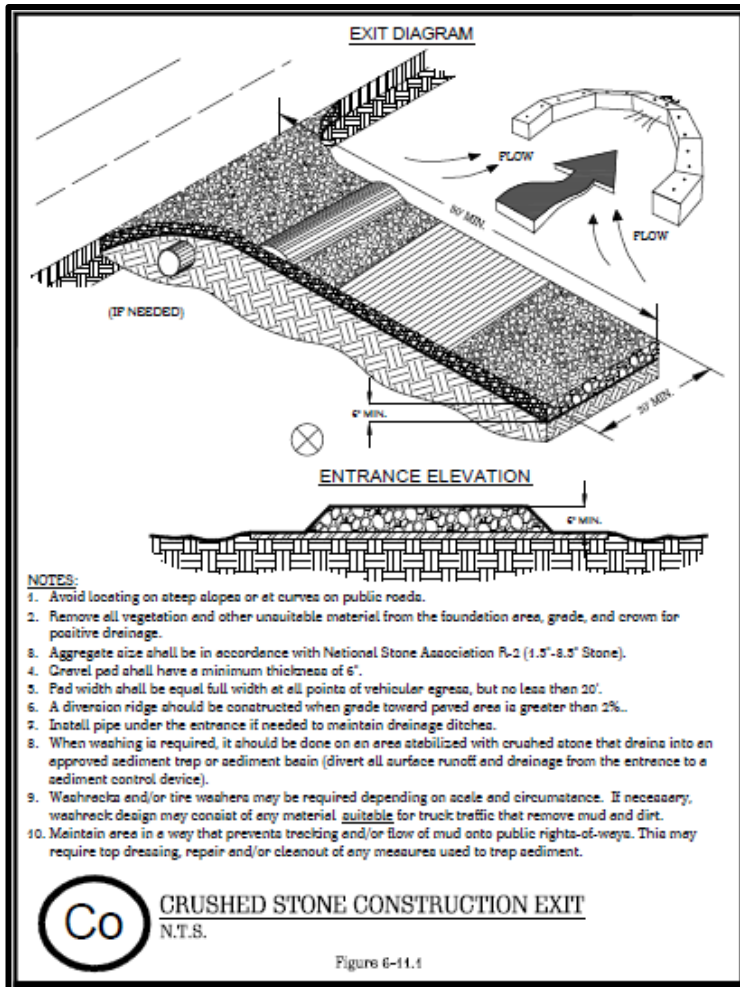
STRUCTURAL PRACTICES				
CODE	SYMBOL	DEFINITION	TOP VIEW	DESCRIPTION
		A small temporary barrier or dam constructed across a ditch, drainage ditch or area of concentrated flow.		
01		Applying straw/straw or mulch in row ditches, existing stream, or ditch.		
02		A crushed stone pad located at the construction site exit to provide a clean, firm surface and from this nearby, preferably public access.		
03		A trench constructed as part of a construction site ditches, roads, utility lines, existing roads and other on-site vehicle transportation routes.		
04		A temporary channel constructed to convey the runoff of construction site with a permanent structure in place.		
05		An earth dam or other barrier across ditch or stream. A silt fence is a temporary structure.		
06		A flexible barrier of heavy-duty fabric or other material designed to collect sediment runoff from a slope. This is temporary and reusable.		
07		A silt fence, silt barrier, silt trap or other structure designed to catch sediment before runoff down a slope.		
08		A temporary silt barrier constructed at stream bank, bank and post outlets.		
09		Two fiber burlap mats are fastened to the banks facing and existing structure.		
10		Permanent structure installed to provide drainage or drainage, where otherwise the slope would be sufficient for the runoff water to run off.		
11		A structure to control concentrated flow of water into less erodible area. This should be constructed only on undisturbed soil.		
12		A permanent or temporary structure that can handle some small streams or tributaries.		
13		A wall designed to stabilize soil and to slope where erosion-prone areas are not erodible. Each structure will require special design.		
14		A ditch or structure placed in front of a permanent structure to divert runoff water structure to serve as a temporary sediment trap.		
15		A barrier to prevent sediment from leaving the construction site. It may be made of straw, hay or hay bales, hay and straw, straw or a silt fence.		
16		An temporary structure to collect sediment runoff from a stream, ditch, or ditch. The structure is to be used and replaced in compliance with construction activities.		
17		A bank created by excavation or a dam across a stream. The surface water runoff is temporary structure, which is to be removed by the end of the project.		
18		A small temporary pond that traps a sediment area on the sediment site with soil. The practice involves installing a temporary sediment trap from a temporary sediment bank in the back of a site of the.		
19		A support device that releases/directs water from the surface of roadway, paths, trails, or banks at a construction site or site.		
20		A linear surface device constructed as a device to stabilize the soil surface of the project. The practice involves installing a temporary sediment trap from a temporary sediment bank in the back of a site of the.		
21		A support device that releases/directs water from the surface of roadway, paths, trails, or banks at a construction site or site.		
22		A linear surface device constructed as a device to stabilize the soil surface of the project. The practice involves installing a temporary sediment trap from a temporary sediment bank in the back of a site of the.		
23		A support device that releases/directs water from the surface of roadway, paths, trails, or banks at a construction site or site.		
24		A linear surface device constructed as a device to stabilize the soil surface of the project. The practice involves installing a temporary sediment trap from a temporary sediment bank in the back of a site of the.		

STRUCTURAL PRACTICES				
CODE	SYMBOL	DEFINITION	TOP VIEW	DESCRIPTION
25		A temporary bridge or short-span structure providing a stream of sediment from directly nearby construction equipment.		
26		A pond or short section of pipe, located at the outlet of a slope, which captures sediment from the concentrated runoff.		
27		A rough soil surface with horizontal depression to a surface or slope left in a rougher condition after grading.		
28		A trench or ditch located within the site of a building, road, or other structure.		
29		The practice of digging off the loose soil, debris, and other material from the disturbed area after completion of construction activities.		
30		To prevent debris from being carried by construction activity.		
31		To prevent debris from being carried by construction activity.		
32		To prevent debris from being carried by construction activity.		

VEGETATIVE PRACTICES				
CODE	SYMBOL	DEFINITION	TOP VIEW	DESCRIPTION
33		Use of undisturbed original vegetation, enhanced natural existing vegetation, or the establishment of vegetation according to area of disturbance or existing stream.		
34		Planting vegetation on areas that are disturbed, artificially constructed, or re-constructed.		
35		Establishing temporary practices for disturbed areas that will not have a surface planting season to provide or assist in stabilizing soil.		
36		Establishing a temporary vegetative cover with fast growing sods on disturbed areas.		
37		Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes in disturbed areas.		
38		A permanent vegetative cover, such as trees, shrubs, vines, grasses, or legumes in disturbed areas.		
39		Controlling surface soil or movement of dirt or construction site, including any other area.		
40		Debris removed to avoid in the collection operation of suspended particles in runoff.		
41		No use of readily erodible surface soil practices to maintain and enhance streambanks, or to prevent, or reduce and repair small streambank erosion problems.		
42		A protective covering used to prevent erosion and stabilize temporary or permanent equipment on steep slopes, shore lines, or channels.		
43		Debris used to anchor, shore or log mats by causing the system material to bind together.		

- 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.**

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.
- The erosion and sediment control detail sheet must show a detailed drawing for each structural BMP shown on the Plan. All BMPs and details shown must, at a minimum, meet the guidelines given in the Manual. Note that a worksheet is provided in the Manual for most structural BMPs that must be included on the ES&PC Plan or detail sheet.

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.
- **Must be shown on ES&PC Plan, on the ES&PC detail sheet or under ES&PC notes.**

<u>DEFINITION</u>				<u>SPECIFICATIONS</u>			
The establishment of temporary vegetative cover with fast growing seedings for seasonal protection on disturbed or denuded areas.				Grading and Shaping			
<u>CONDITIONS</u>				Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.			
Temporary grazing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to ensure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established.				No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.			
SEEDING RATES FOR TEMPORARY SEEDING				Seedbed Preparation			
<u>SPECIES</u>	<u>RATE Per 1,000 sq.ft.</u>	<u>RATE Per Acres *</u>	<u>PLANTING DATES **</u>	When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or handseeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.			
Flye	3.5 pounds	3 bu.	3/1-3/1	When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.			
Flyegrass	0.5 pound	40 lbs.	3/15-4/1	Lime and Fertilizer			
Annual Leopards	0.5 pound	40 lbs.	1/15-3/15	Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate of one ton per acre. Graded areas require lime application. Soils can be tested to determine if fertilizer is needed. On reasonably fertile soils or soil material, fertilizer is not required. For soils with very low fertility, 500 to 700 pounds of 10-10-10 fertilizer or the equivalent per acre (15-16 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before land preparation and incorporated with a disk, ripper or chisel.			
Weeping Lobelia	0.1 pound	4 lbs.	3/15-4/15	Seeding			
Quakergrass	1.4 pounds	60 lbs.	3/1-3/1	Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand.			
Browntop Millet	0.5 pound	40 lbs.	4/1-7/15	Mulching			
Wheat	4.1 pounds	3 bu.	3/15-2/1	Temporary vegetation can, in most cases, be established without the use of mulch. Mulch without seeding should be considered for short term protection. Refer to Part - Disturbed Area Stabilization (With Mulching Only).			
* Unusual site conditions may require heavier seeding rates ** Seeding dates may need to be altered to fit temperature relations and conditions.				Irrigation			
Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)				During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.			