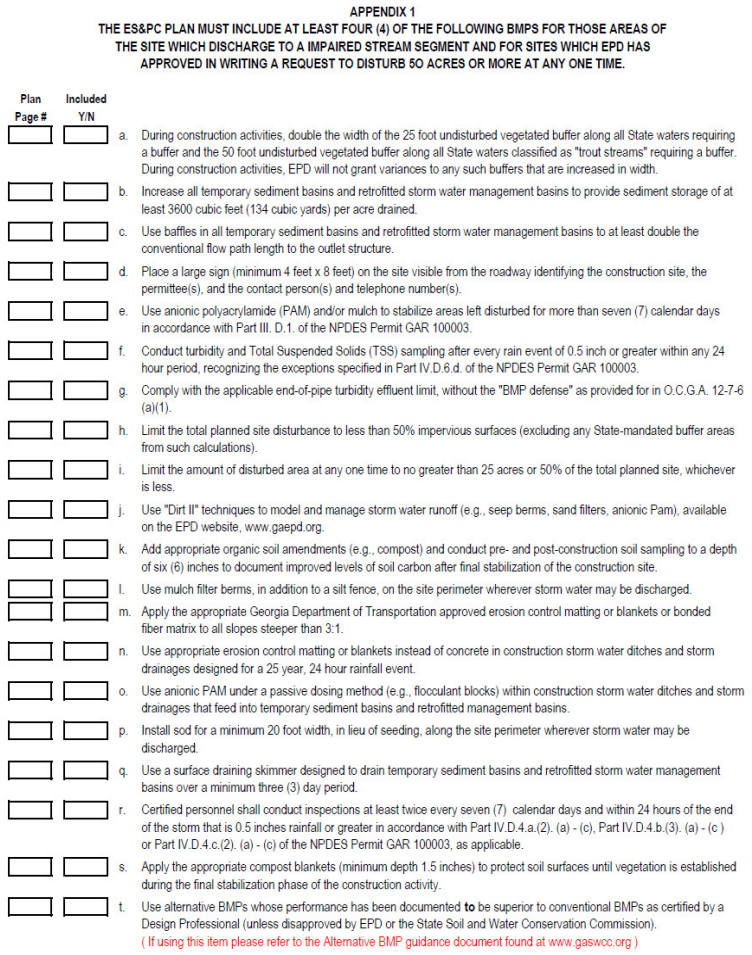
ES&PC Plan Review Checklist Training Discussion

January 13th 2009

Three Checklists

- Stand Alone Projects
- Infrastructure Projects
- Common Developments
  - Appendix 1
- Guidance Document
  - Available at www.gaswcc.org



APPENDIX 1
THE ES&PC PLAN MUST INCLUDE AT LEAST FOUR (4) OF THE FOLLOWING BMPS FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO A IMPAIRED STREAM SEGMENT AND FOR SITES WHICH EPD HAS APPROVED IN WRITING A REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME.

Plan Page #	Included Y/N		
☐	☐	a.	During construction activities, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width.
☐	☐	b.	Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.
☐	☐	c.	Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.
☐	☐	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).
☐	☐	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 100003.
☐	☐	f.	Conduct turbidity and Total Suspended Solids (TSS) sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of the NPDES Permit GAR 100003.
☐	☐	g.	Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6 (a)(1).
☐	☐	h.	Limit the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations).
☐	☐	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.
☐	☐	j.	Use "Dirt II" techniques to model and manage storm water runoff (e.g., seep berms, sand filters, anionic Pam), available on the EPD website, www.gaepd.org.
☐	☐	k.	Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of six (6) inches to document improved levels of soil carbon after final stabilization of the construction site.
☐	☐	l.	Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever storm water may be discharged.
☐	☐	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.
☐	☐	n.	Use appropriate erosion control matting or blankets instead of concrete in construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.
☐	☐	o.	Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.
☐	☐	p.	Install sod for a minimum 20 foot width, in lieu of seeding, along the site perimeter wherever storm water may be discharged.
☐	☐	q.	Use a surface draining skimmer designed to drain temporary sediment basins and retrofitted storm water management basins over a minimum three (3) day period.
☐	☐	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 100003, as applicable.
☐	☐	s.	Apply the appropriate compost blankets (minimum depth 1.5 inches) to protect soil surfaces until vegetation is established during the final stabilization phase of the construction activity.
☐	☐	t.	Use alternative BMPs whose performance has been documented **to** be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission). (If using this item please refer to the Alternative BMP guidance document found at www.gaswcc.org)

Updates

- The new revised checklists include all of the previous requirements of the July, 2007 version
- Updated to include revisions to the NPDES General Permits

Effective January 1, 2009

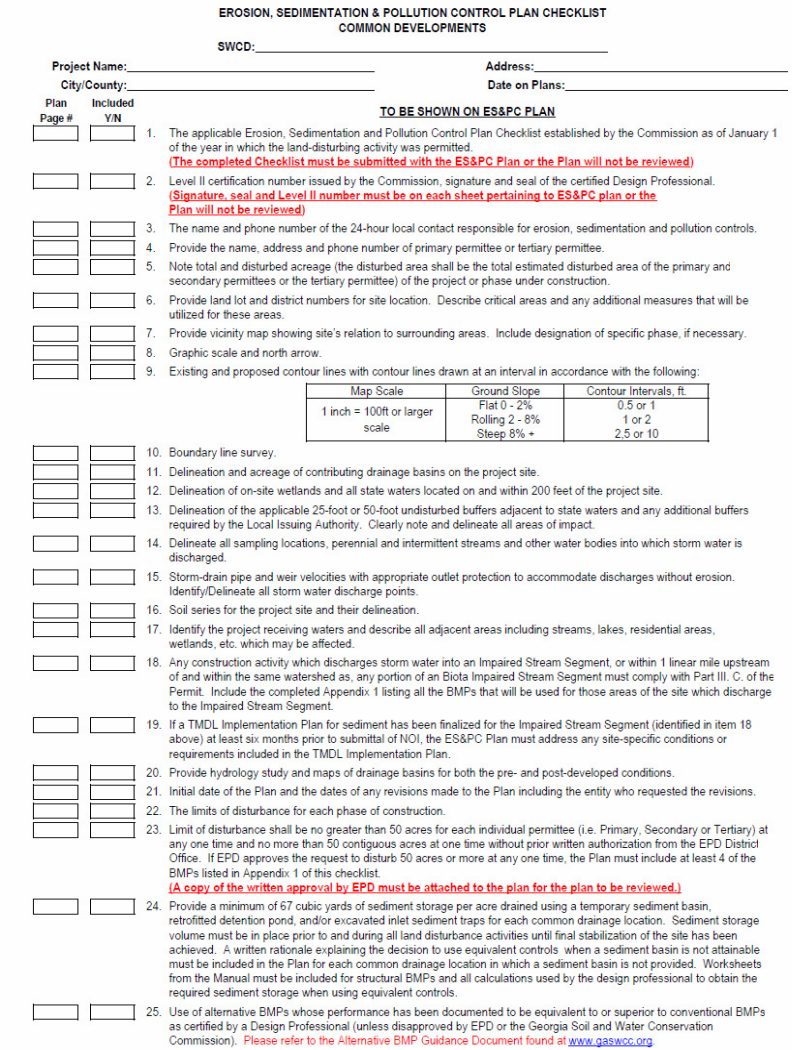
- All ES&PC plans submitted for review starting 1-1-09 will be submitted with a copy of the appropriate revised checklist filled out, indicating the page numbers where required information can be found.

Requirements

- Item by Item

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
COMMON DEVELOPMENTS

SWCD:_____

Project Name:_____ Address:_____

City/County:_____ Date on Plans:_____

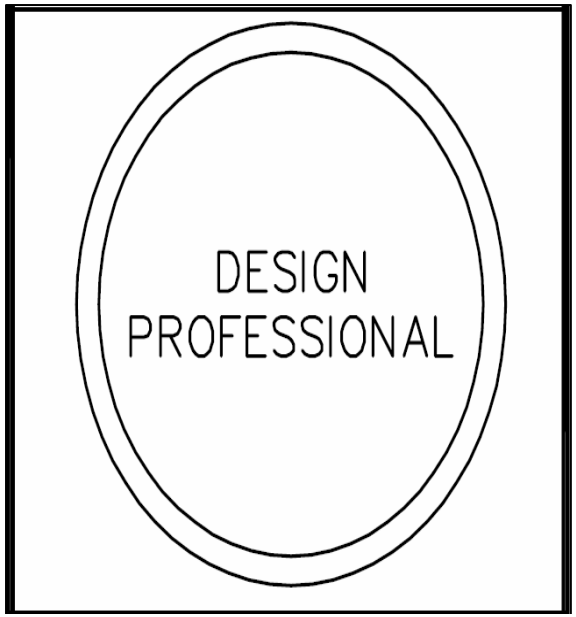
Plan Page #	Included Y/N		TO BE SHOWN ON ES&PC PLAN
		1.	The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. **(The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)**
		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)**
		3.	The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
		4.	Provide the name, address and phone number of primary permittee or tertiary permittee.
		5.	Note total and disturbed acreage (the disturbed area shall be the total estimated disturbed area of the primary and secondary permittees or the tertiary permittee) of the project or phase under construction.
		6.	Provide land lot and district numbers for site location. Describe critical areas and any additional measures that will be utilized for these areas.
		7.	Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
		8.	Graphic scale and north arrow.
		9.	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 larger scale	Flat 0 - 2% Rolling 2 - 8% Steep 8% +	0.5 or 1 1 or 2 2.5 or 10

		10.	Boundary line survey.
		11.	Delineation and acreage of contributing drainage basins on the project site.
		12.	Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
		13.	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.
		14.	Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.
		15.	Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
		16.	Soil series for the project site and their delineation.
		17.	Identify the project receiving waters and describe all adjacent areas including streams, lakes, residential areas, wetlands, etc. which may be affected.
		18.	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.
		19.	If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 18 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.
		20.	Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions.
		21.	Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
		22.	The limits of disturbance for each phase of construction.
		23.	Limit of disturbance shall be no greater than 50 acres for each individual permittee (i.e. Primary, Secondary or Tertiary) at any one time and no more than 50 contiguous acres at 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.)**
		24.	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.
		25.	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

2.

- Level II certification number issued by the Commission, signature and seal of certified Design Professional.
- Signature, seal, and GSWCC issued Level II certification number must be on each sheet pertaining to ES&PC or the Plan will not be reviewed.



GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION #

3.

- 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.

4.

- 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

OWNER/DEVELOPER	*(FIRM)*
APPLICANT:	*(ADDRESS)*
	(CONTACT)
	(PHONE:)

5.

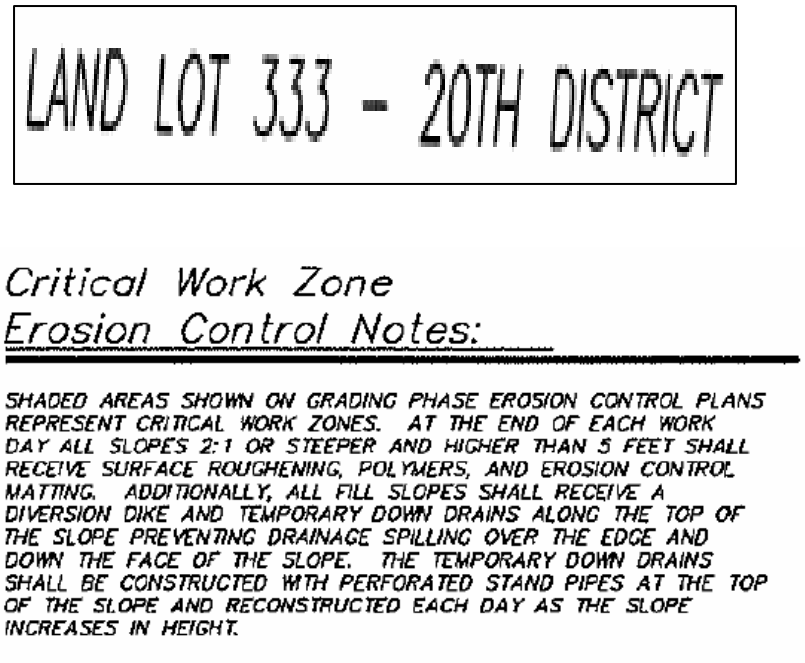
- Note total and disturbed acreage of the project or phase under construction. (The disturbed area shall be the total estimated disturbed area of the primary and secondary permittees or the tertiary permittee.)
- Must be shown on ES&PC Plan or under ES&PC notes.

Total Site Area: 76.9 Acres

Total Disturbed Area: 24.7 Acres

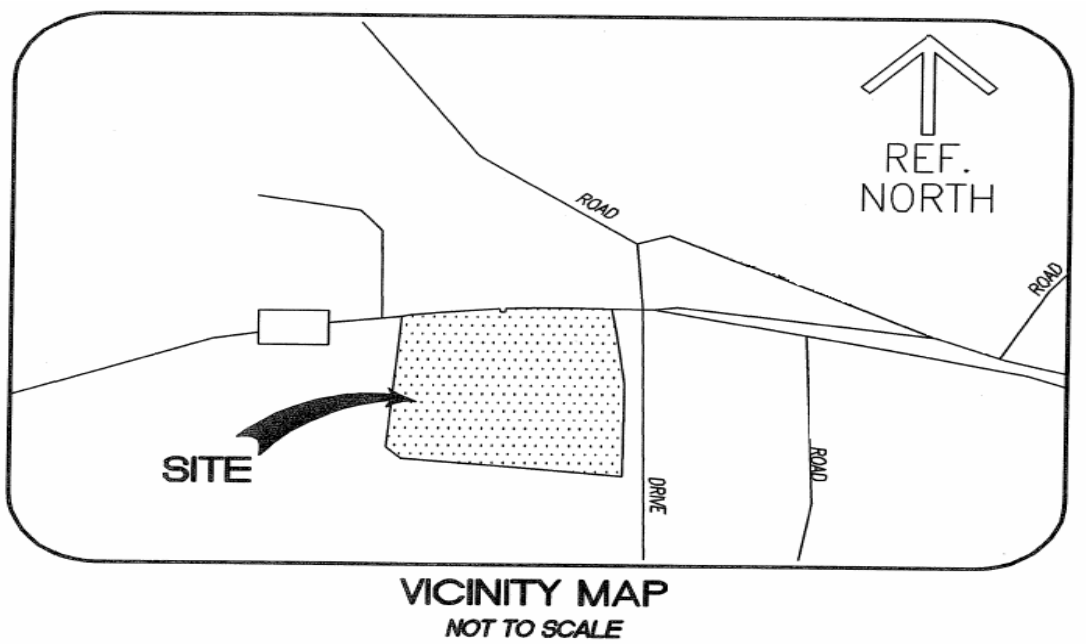
6.

- Provide Land Lot and District numbers for site location. Describe critical areas and any additional measures that will be utilized for these areas.
- Land Lot and District numbers must be shown on cover sheet and may also be shown on ES&PC Plan sheets and ES&PC notes.



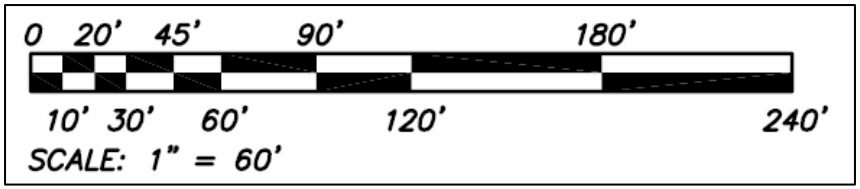
7.

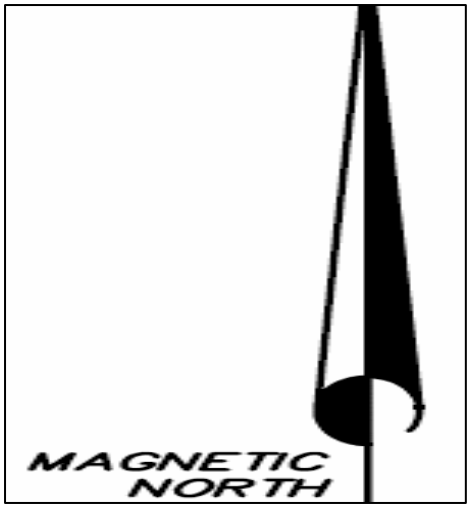
- Provide vicinity maps showing site's relation to other areas. Include designation of specific phase, if necessary.
- Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information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



8.

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





9.

- Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:
- The initial, intermediate, and final phase sheets of the Plan must show the proposed grade in bold contour lines with the below intervals overlaying the original contour lines. Elevations of both the existing and proposed contour lines must be shown.

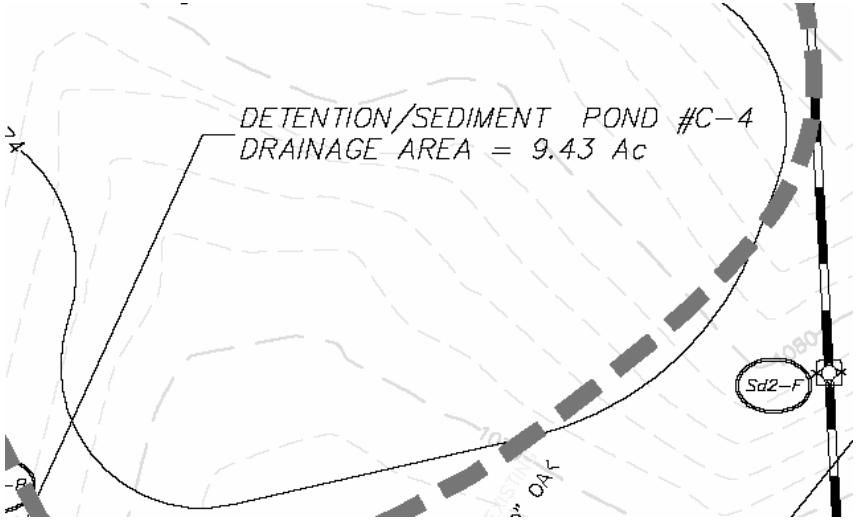
Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2% Rolling 2 - 8% Steep 8% +	0.5 or 1 1 or 2 2,5 or 10

10.

- Boundary line survey.
- The ES&PC Plan shall include existing conditions and topography sheet with the boundary lines of the project or phase shown on the sheet.

11.

- Delineation and acreage of contributing drainage basins on the project site.
- The existing site Plan or the initial phase Plan must show delineation of each drainage basin on the project site with the acreage of each basin noted. As the basins are altered during grading for the intermediate phase of the Plan, the new basins and acreage must be delineated. If the basins are changed on the final phase of the Plan, delineate new basins with acreage noted.

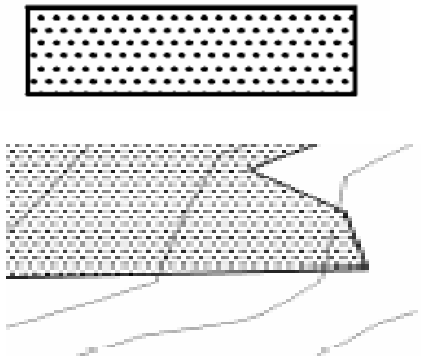


12.

- 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.

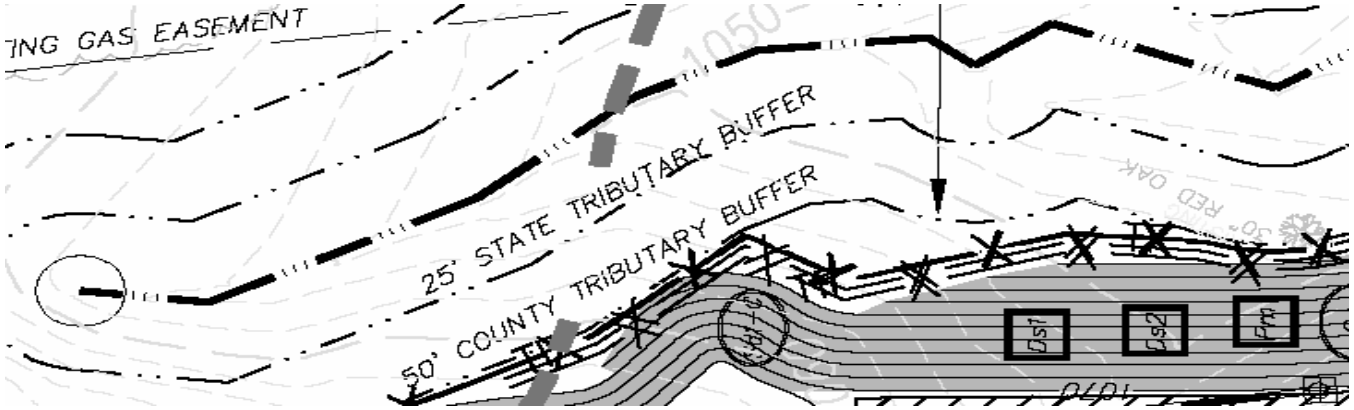
When a project is located in a jurisdiction with a certified Local Issuing Authority and the LIA must make a determination of State waters that are not delineated on the plan, the Plan review could be delayed for beyond the full forty-five day review time allowed to the LIA, or the full thirty-five day 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.

WETLANDS



13

- 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.



14

- 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 receivingwater(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 receivingwater(s) combines with the first blue line stream shown on the USGS topographic map.

15

- 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 tail water conditions. This information should be 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 6-24.1 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.

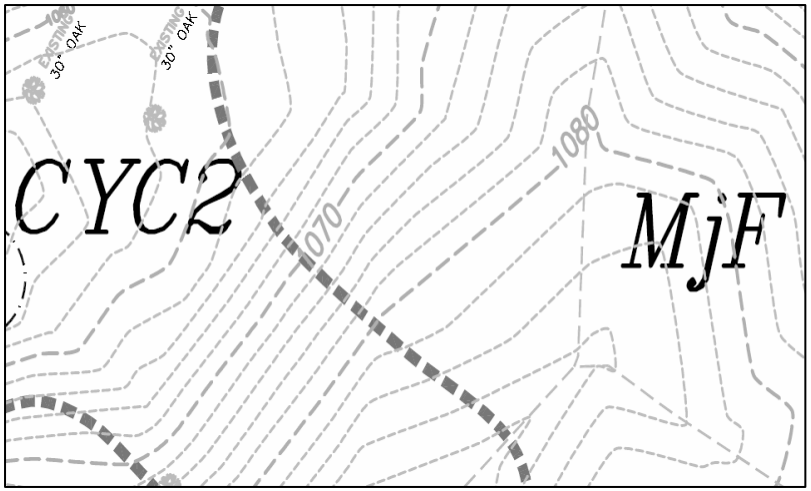
TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

1. The flow characteristics of the pipe at full flow including pipe diameter, flow rate (cfs), velocity (fps), and tailwater condition.

2. The dimensions of the apron including length (La), width at the headwall (W_1), down-stream width (W_2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-24.1 and 6-24.2.

16

- 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 web site. 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.



17

- Identify the project receiving waters and describe all 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 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.

18

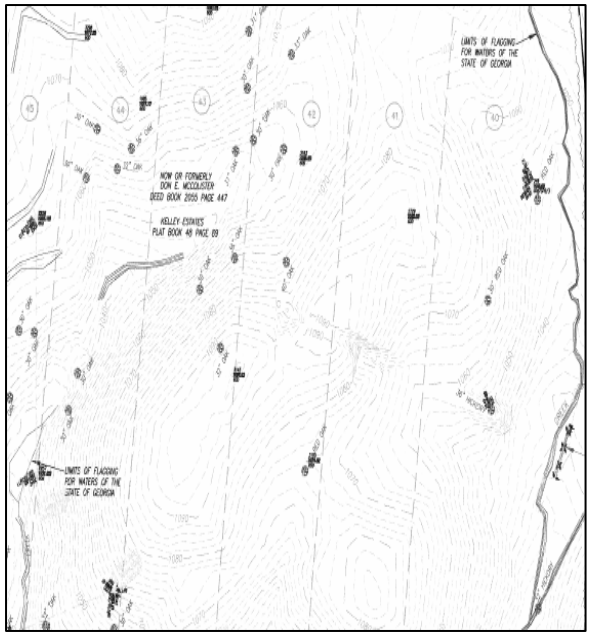
- Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the 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 Macro invertebrate 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 2008 and subsequent "305(b)/303(d) List Documents (Final)" can be viewed on the GAEPD website.

19

- If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 18 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.

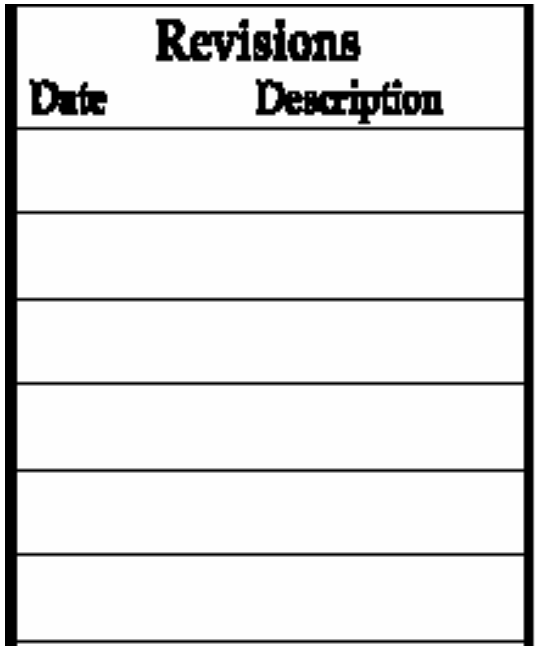
20

- Provide hydrology study and maps of drainage basins for both the 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.



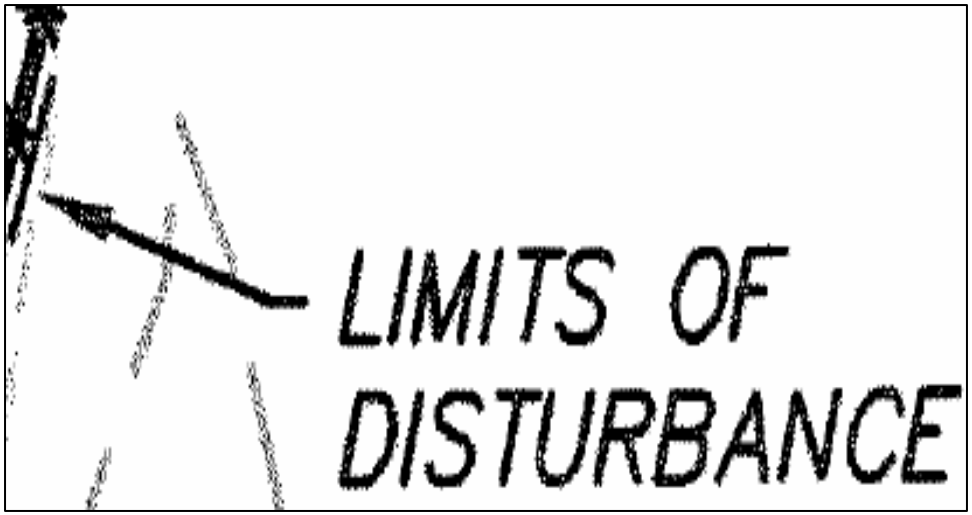
21

- 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 re-submittal the revision date and entity requesting revisions should be shown on cover sheet and each sheet that has been revised.



22

- 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.



23

- Limit of disturbance shall be no greater than 50 acres for each individual permittee (i.e. Primary, Secondary or Tertiary) at any one time and no more than 50 contiguous acres at one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at anyone 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.

24

- 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.

- 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 67cubic 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 rationale 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.

25

- 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.

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 includes 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.

26

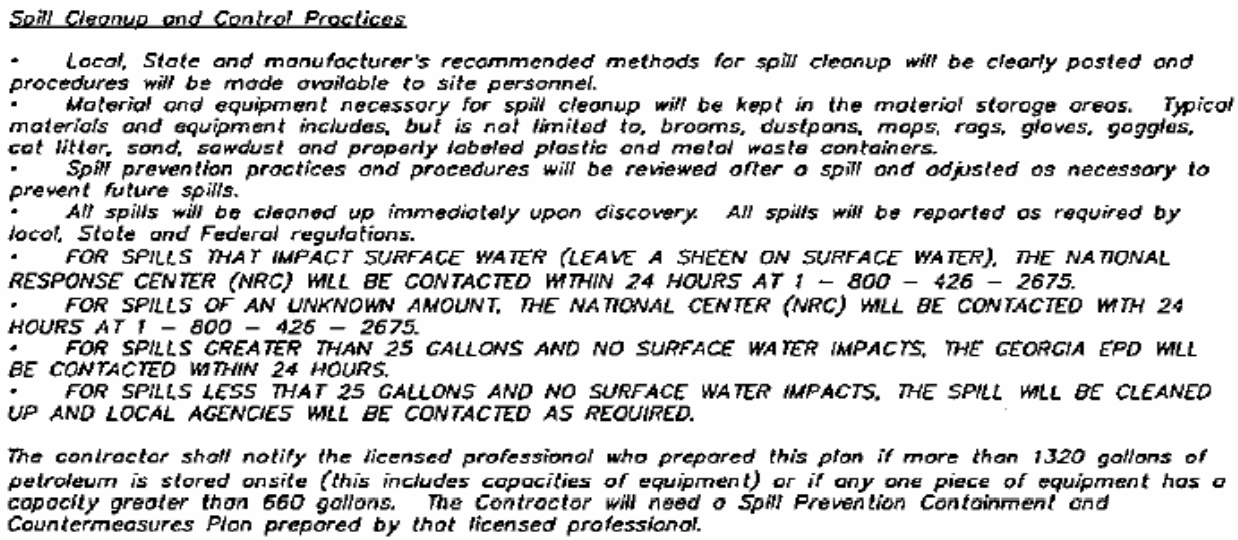
- Best Management Practices to minimize off-site vehicle tracking of sediments and the generation of dust.
- The Plan must establish BMPs designed to minimize or eliminate the off-site vehicle tracking of dust, dirt, sand, soils and sediment and the generation of dust to the maximum extent practicable. The plan should indicate structural BMPs such as construction exits as well as a narrative description of the actions to be taken and/or equipment to be available and used as necessary to control dust and off-site vehicle tracking. Some requirements of the Plan may need a more detailed description of BMPs than a typical drawing can provide. These items should be clarified with a narrative description shown on the Plan or in the ES&PC notes.

27

- 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 the concrete wash down of tools, concrete mixer chutes, hoppers and rear of the vehicles on the project site, delineate the location of the area provided for washing and provide detail(s) of BMPs that will be used. If the project does not allow the concrete washdown on the project site state so on the plan.

28

- 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 CENTER (NRC) WILL BE CONTACTED WITH 24 HOURS AT 1 – 800 – 426 – 2675.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
- FOR SPILLS LESS THAT 25 GALLONS AND NO SURFACE WATER IMPACTS, 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.

29

- 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 C silt fence must be shown adjacent to buffer), lots adjacent to wetlands, lots with an extreme grade, etc.

30

- 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.

Structural Best Management Practices

Cd	Check Dam
Ch	Channel Stabilization
Co	Construction Exit
Cr	Construction Road Stabilization
Dc	Stream Diversion Channel
Di	Diversion
Dn1	Temporary Downdrain Structure
Dn2	Permanent Downdrain Structure
Fr	Filter Ring
Ga	Gabion

Vegetative Best Management Practices

Bf	Buffer Zone
Cs	Coastal Dune Stabilization
Ds1	Disturbed Area Stabilization (With Mulching Only)
Ds2	Disturbed Area Stabilization (With Temporary Seeding)
Ds3	Disturbed Area Stabilization (With Permanent Vegetation)
Ds4	Disturbed Area Stabilization (With Sodding)
Du	Dust Control on Disturbed Areas
Mb	Erosion Control Matting and Blankets
Pm	Polyacrylamide (PAM)
Sb	Streambank Stabilization (With Permanent Vegetation)
Tb	Tackifiers and Binders

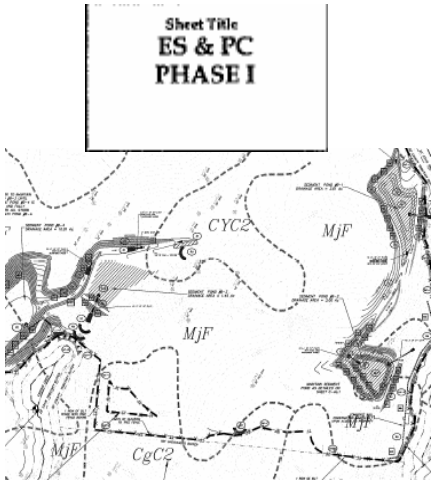
31

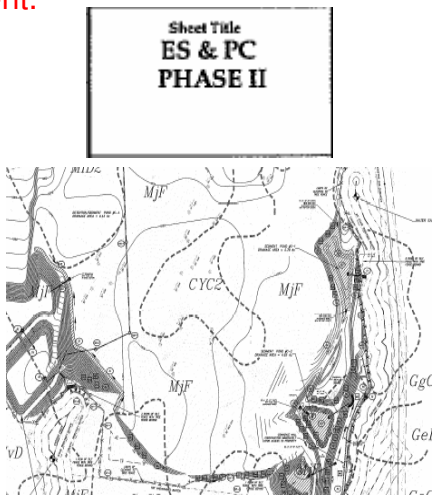
- Description of the nature of construction activity.
- Provide a description of the existing site and a description of the proposed project. These must be shown on ES&PC Plan or under ES&PC notes.

Existing land is currently undeveloped and forested with primarily pines and hardwoods. Proposed project is a 25 lot single-family residential development that will disturb 15.5 acres. Project does not propose any encroachments into the State Waters buffer area.

32

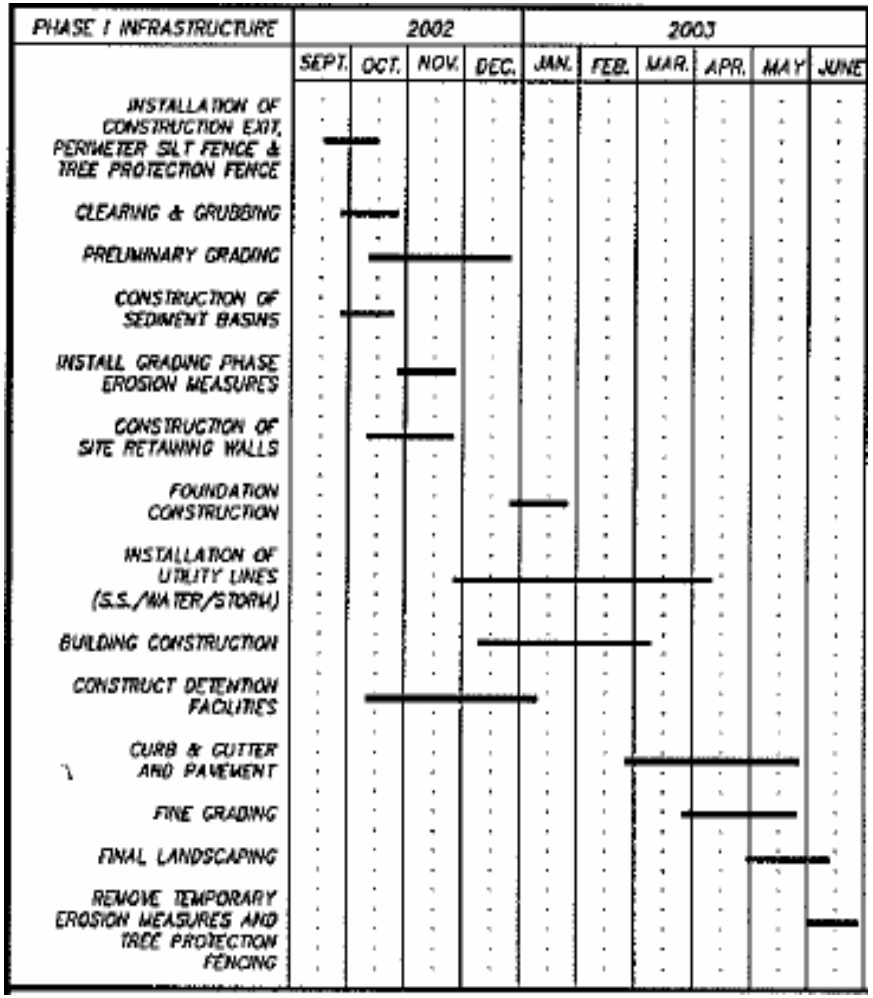
- A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs.
- The Plan must be shown in a minimum of three phases 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 inlet 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.





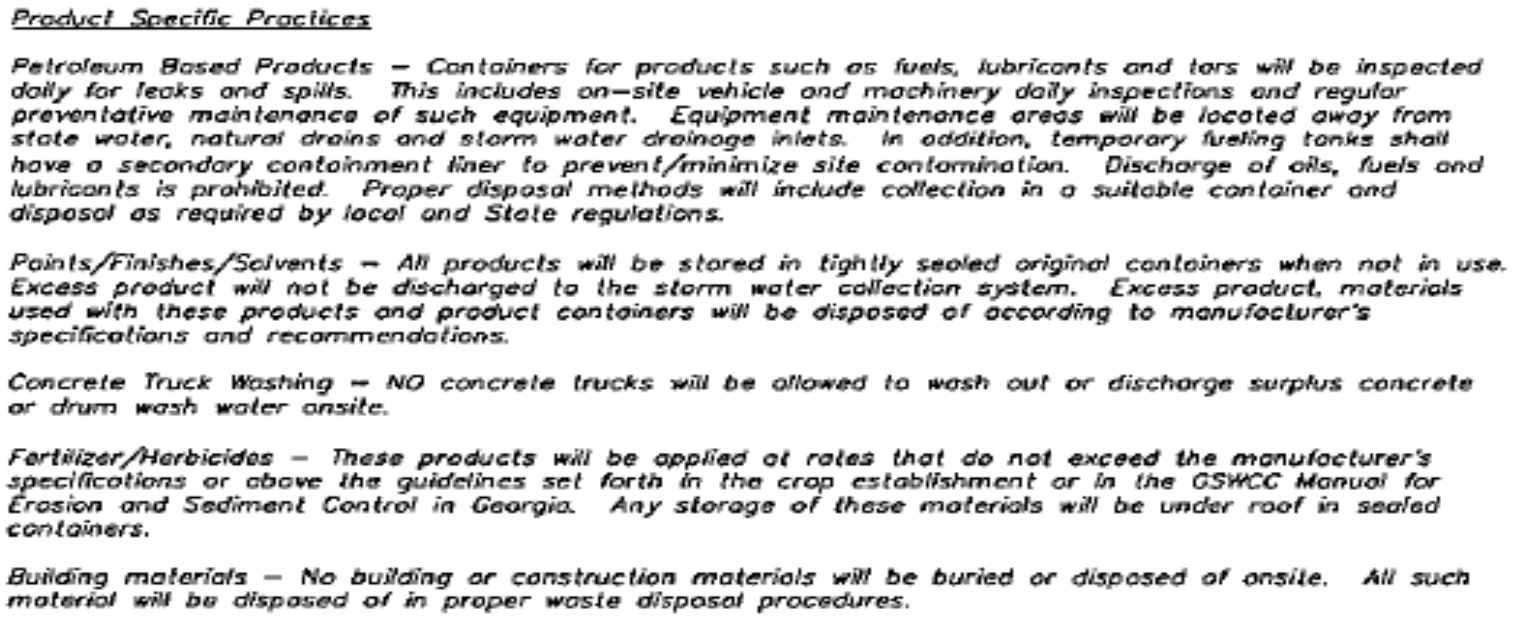
33

- 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.



34

- 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 on-site vehicle and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from state water, 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.

35

- 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.

36

- Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 17 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."

37

- 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 17 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."

38

- 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.
- The following statement and the signature of the permittee or the duly authorized representative must be shown on the ES&PC Plan or under ES&PC notes.

" 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 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."

39

- 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 a required element of the Plan, only the pre and post-construction estimates of the run-off coefficient or peak discharge flow for the site.

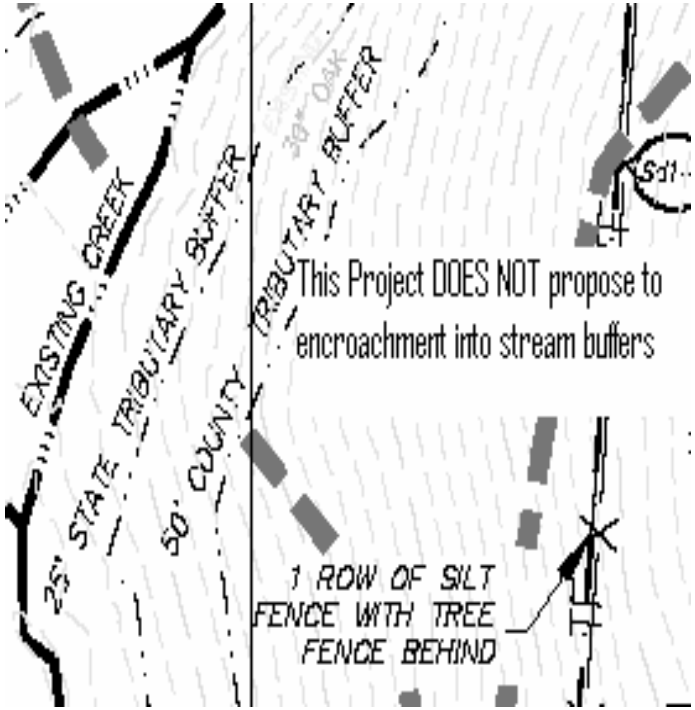
Runoff Coefficient

- *Weighted pre construction CN curve number:* ????
- *Weighted past construction CN curve number:* ????

See "Site Hydrologic Study for Shopping Center" dated ??????? for additional information.

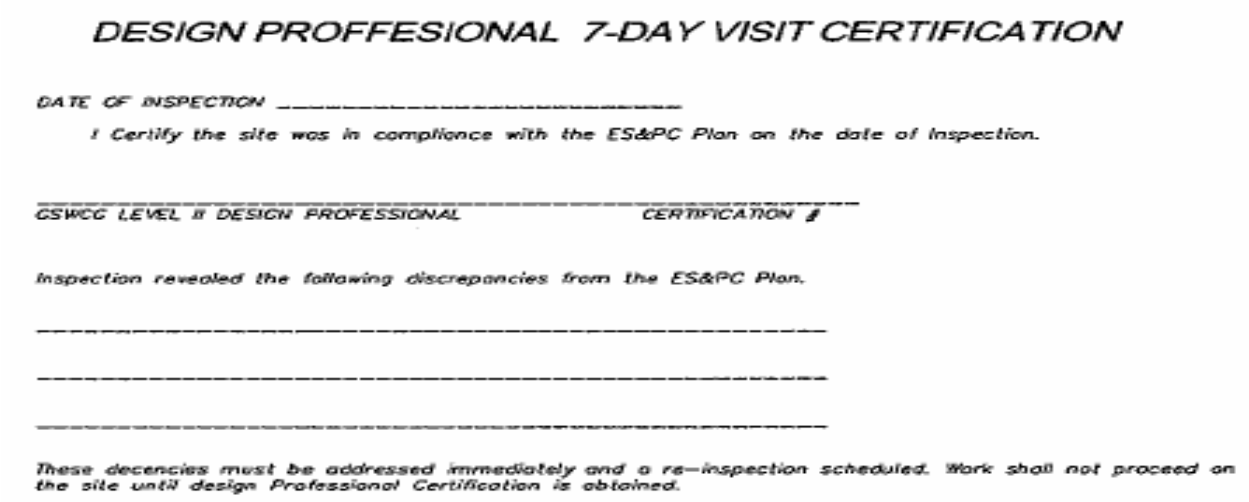
40

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



41

- 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.
- The Plan must include a statement indicating that the primary permittee and tertiary permittee(s) must retain the design professional who prepared the Plan, except when the 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 permittee within seven (7) days and the permittee must correct all deficiencies within 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 PROFFESIONAL 7-DAY VISIT CERTIFICATION

DATE OF INSPECTION _____

I Certify the site was in compliance with the ES&PC Plan on the date of Inspection.

_____

GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION #

Inspection revealed the following discrepancies from the ES&PC Plan.

_____

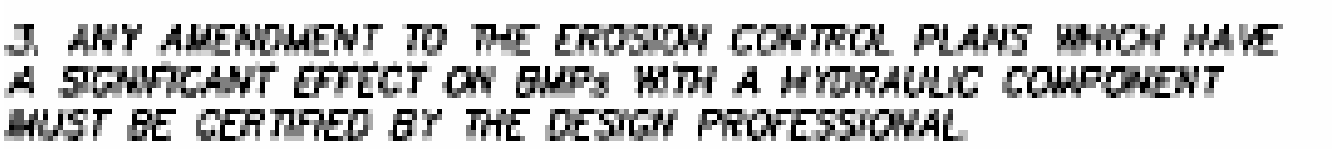
_____

_____

These decencies must be addressed immediately and a re-inspection scheduled. Work shall not proceed on the site until design Professional Certification is obtained.

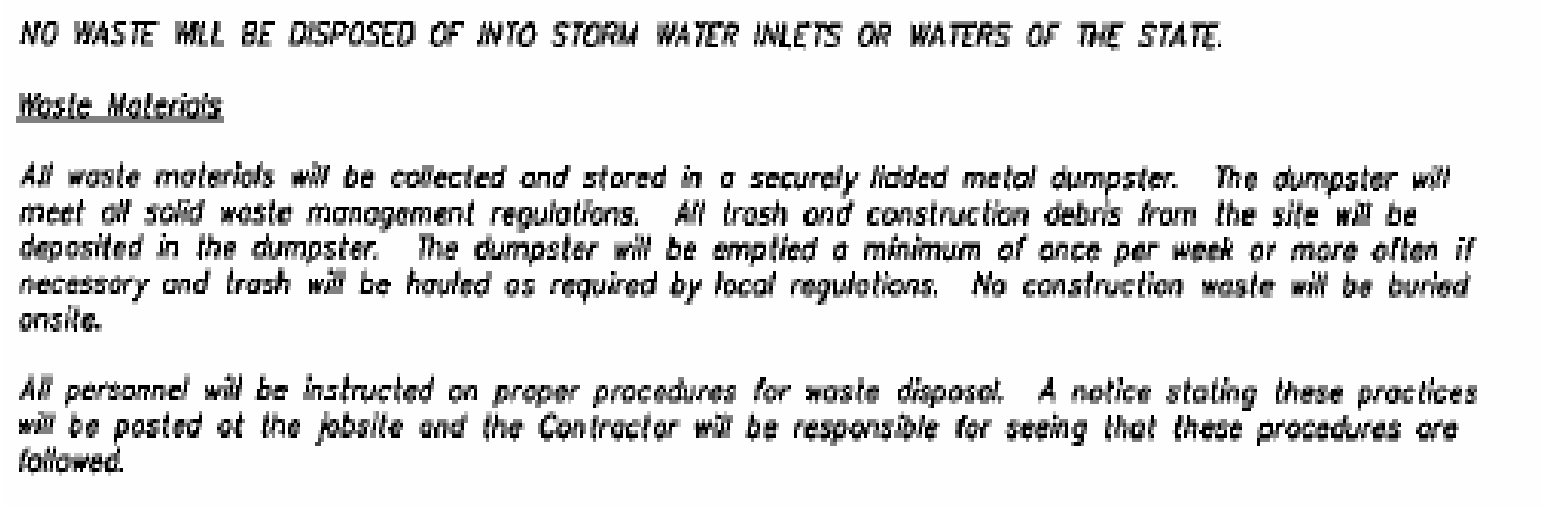
42

- 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.
- See part IV. C. on page 20 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.


3. ANY AMENDMENT TO THE EROSION CONTROL PLANS WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

43

- Indication 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 waste 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 404permit.



NO WASTE WILL BE DISPOSED OF INTO STORM WATER INLETS OR WATERS OF THE STATE.

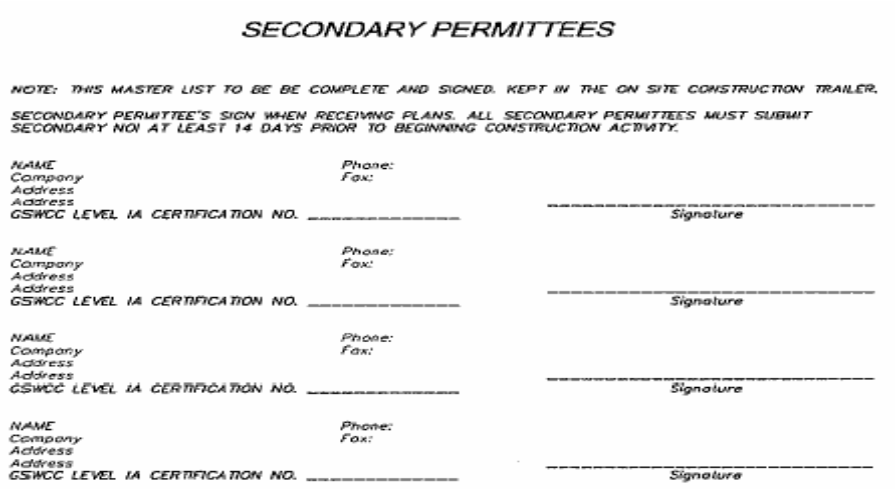
Waste Materials

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 onsite.

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.

44

- Indication that the applicable portion of 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 of 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.



SECONDARY PERMITTEES

NOTE: THIS MASTER LIST TO BE BE COMPLETE AND SIGNED. KEPT IN THE ON SITE CONSTRUCTION TRAILER.

SECONDARY PERMITTEE'S 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

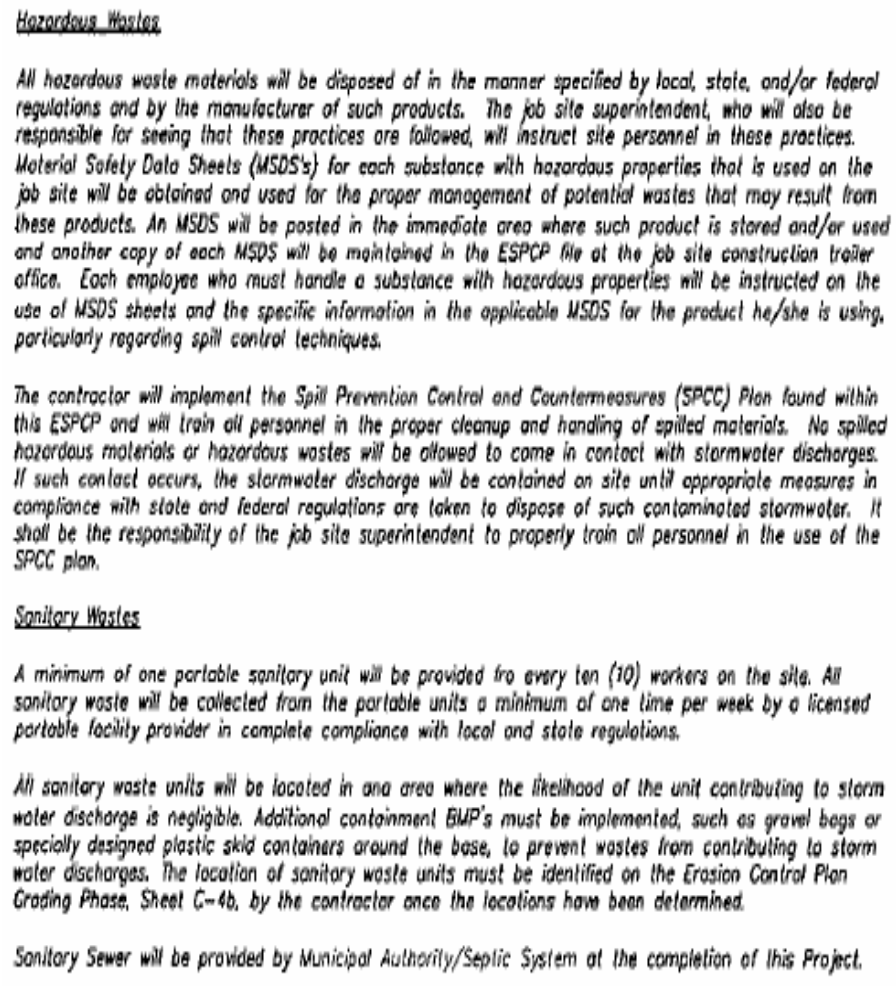
NAME
Company
Address
Address
GSWCC LEVEL IA CERTIFICATION NO. _____
Phone:
Fax:
_____
Signature

NAME
Company
Address
Address
GSWCC LEVEL IA CERTIFICATION NO. _____
Phone:
Fax:
_____
Signature

NAME
Company
Address
Address
GSWCC LEVEL IA CERTIFICATION NO. _____
Phone:
Fax:
_____
Signature

45

- 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.
- The Plan must provide for the proper disposal of sewage and other wastes generated during construction operations. The plan must ensure that the site complies with any applicable State or local regulations regarding waste disposal, sanitary sewer, or septic tanks.



Hazardous Wastes

All hazardous waste materials will be disposed of in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, will instruct site personnel in these practices. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the ESPCP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.

The contractor will implement the Spill Prevention Control and Countermeasures (SPCC) Plan found within this ESPCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with stormwater discharges. If such contact occurs, the stormwater discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated stormwater. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

Sanitary Wastes

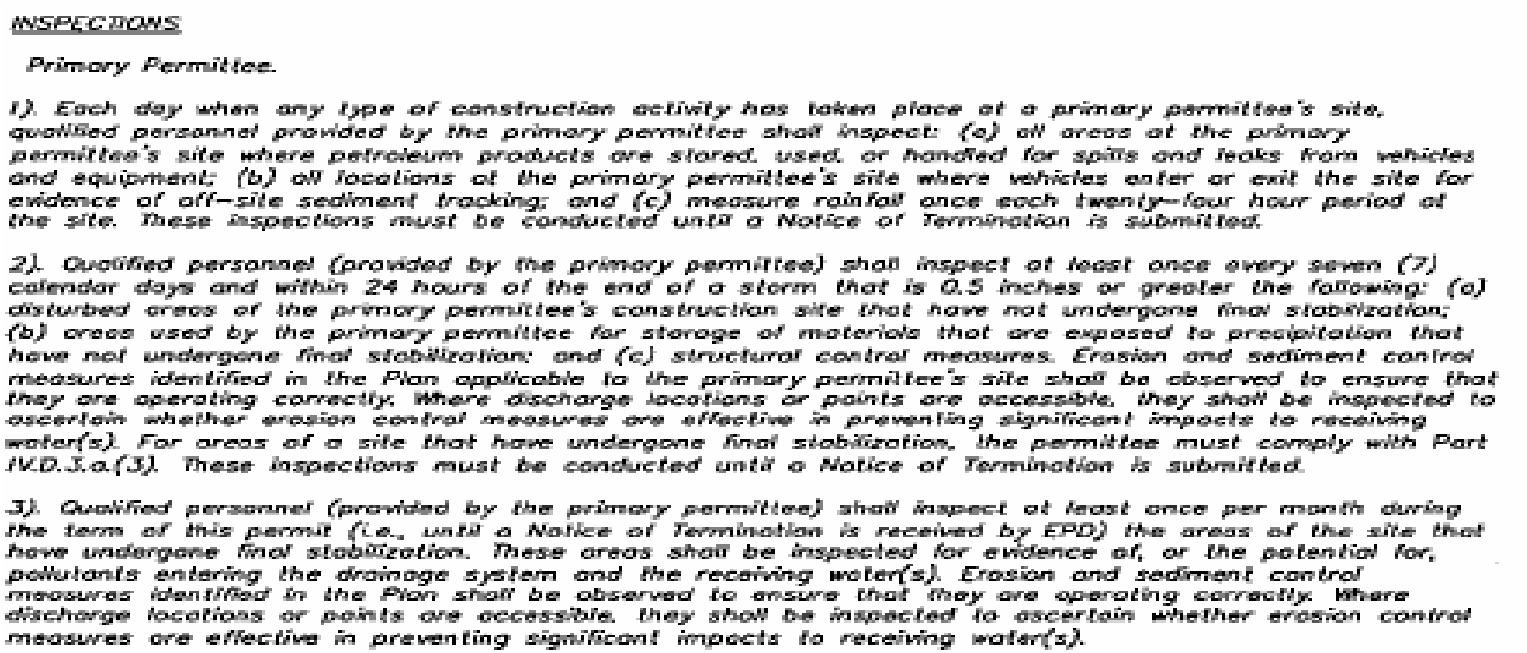
A minimum of one portable sanitary unit will be provided fro every ten (10) workers on the site. All sanitary waste will be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations.

All sanitary waste units will be located in ana area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containment BMP's must be implemented, such as gravel bags or specially designed plastic skid containers around the base, to prevent wastes from contributing to storm water discharges. The location of sanitary waste units must be identified on the Erosion Control Plan Grading Phase, Sheet C-4b, by the contractor once the locations have been determined.

Sanitary Sewer will be provided by Municipal Authority/Septic System at the completion of this Project.

46

- Provide complete requirements of inspections and record keeping by the primary permittee, secondary permittees and tertiary permittees.
- The Plan must include all of the inspections and record keeping requirements of the primary, secondary and tertiary permittees as stated in Part IV.D.4.on pages 24 - 28 of the Permit. The complete inspection and record keeping requirements shall be shown on the Plan under ES&PS notes.



INSPECTIONS

Primary Permittee.

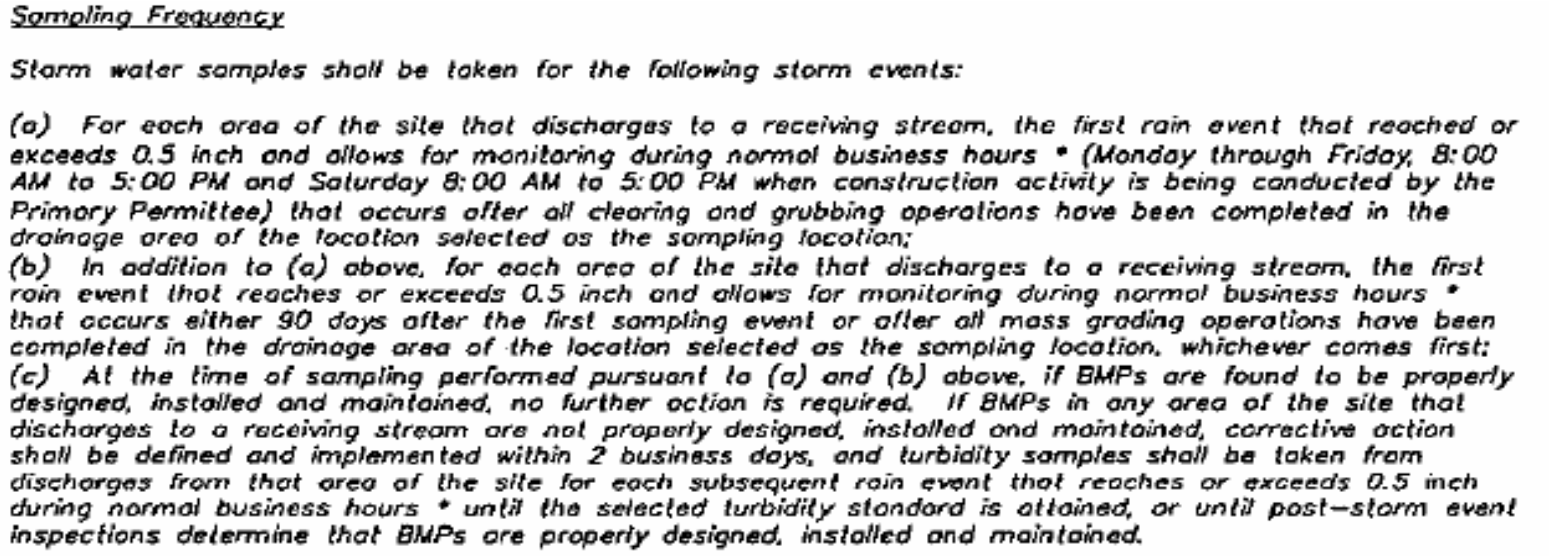
1). Each day when any type of construction activity has taken place at a primary permittee's site, qualified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles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

2). Qualified personnel (provided by the primary permittee) shall inspect at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater the following: (a) disturbed areas of the primary permittee's construction site that have not undergone final stabilization; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation that have not undergone final stabilization; 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, the permittee must comply with Part IV.D.3.a.(3). These inspections must be conducted until a Notice of Termination is submitted.

3). Qualified 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. 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).

47

- Provide complete requirements of sampling frequency and reporting of sampling results
  - See page 30 Sampling Frequency and page 31 section E. Reporting in the permit. Complete sampling frequency and reporting requirements are to be shown on the Plan under ES&PC notes.



Sampling Frequency

Storm water samples shall be taken for the following storm events:

*(a) For each area of the site that discharges to a receiving stream, the first rain event that reached or exceeds 0.5 inch and allows for monitoring during normal business hours * (Monday through Friday, 8:00 AM to 5:00 PM and Saturday 8:00 AM to 5:00 PM when construction activity is being conducted by the Primary Permittee) that occurs after all clearing and grubbing operations have been completed 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 stream, the first rain event that reaches or exceeds 0.5 inch and allows for monitoring during normal business hours * that occurs either 90 days after the first sampling event or after all mass grading operations have been completed 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 are found to be properly designed, installed and maintained, no further action is required. If BMPs in any area of the site that discharges to a receiving stream are not properly designed, installed and maintained, corrective action shall be defined and implemented within 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.*

48

- Provide complete details for retention of records as per Part IV.F. of the permit.
- See page 31 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.

Primary Permittee

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 monitoring 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.(1)(c) of this permit.

Note: requirements for the different permittees vary slightly

49

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

STORMWATER SAMPLING

SAMPLE ANALYSIS

Storm water samples are to be analyzed in accordance with methodology and test procedures established by 40 CFR Part 136 and the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001."

Storm water is to be sampled for nephelometric turbidity units (NTU) at the outfall location. A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such condition results in the turbidity of the discharge exceeding 50, the value that was selected from Appendix B in Permit No. GAR 100003. The NTU is based upon the disturbed acreage of ???? acres for the project site, the surface water drainage area of ???? square miles, and receiving water which supports warm water fisheries.

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- Appendix B rationale for 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).

Warm Water (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

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- Cleary 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.”**
- Must be shown on ES&PC Plan or under ES&PC notes.

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- Cleary 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.”**
- Must be shown on ES&PC Plan or under ES&PC notes.

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- 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.”**
- Must be shown on ES&PC Plan or under ES&PC notes.

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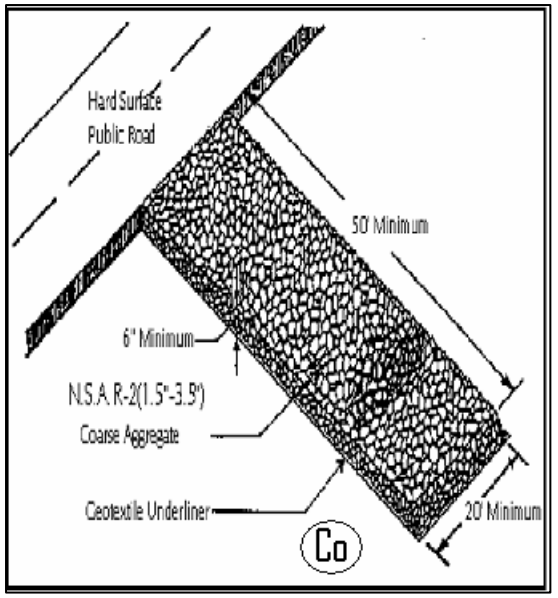
- Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
- The erosion and sediment control detail sheet must show a detailed drawing for each structural BMP shown on the Plan. 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.



55

- 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.

Details are available in CAD format at: www.gaswcc.org.

Species	Rates Per 1,000 sq. ft.	Rates per Acre	Planting Dates by Region		
			M - L	P	C
Oats Alone Oats In Mixtures	2.99 lbs. .7 lbs.	4 bu. 1 bu.	9/15-11/15	9/15-11/15	9/15-11/15
Rye (Grain) Alone Rye In Mixtures	3.9 lbs. .6 lbs.	3 bu. .5 bu.	8/15-10/31	9/15-11/30	10/1-12/31
Ryegrass	0.9 lbs.	40 lbs.	8/15-11/15	9/1-12/15	9/15-12/31
Sudangrass	1.4 lbs.	60 lbs.	5/1-7/31	5/1-7/31	4/1-7/31
Triticale Alone Triticale In Mixtures	3.3 lbs. .6 lbs.	3 bu. .5 bu.	NA	NA	10/15-11/30
Wheat Alone Wheat In Mixtures	4.1 lbs. .7 lbs.	3 bu. .5 bu.	9/15-11/30	10/1-12/15	10/15-12/31