GRASSING SCHEDULE: TEMPORARY AND PERMANENT
COASTAL REGION

MONTH	TEMPORARY SEEDING: SEED SPECIES[1]	TEMPORARY SEEDING: BROADCAST APPLICATION RATE (lbs./acre)	PERMANENT SEEDING (for slopes 3:1 and flatter): SEED SPECIES[2]	BROADCAST APPLICATION RATE (lbs./acre)	MULCHING DRY STRAW or (DRY HAY) (tons/acre)		PERMANENT SEEDING (for slopes 2.5:1 and steeper): SEED SPECIES	BROADCAST APPLICATION RATE (lbs./acre)	MULCHING DRY STRAW or (DRY HAY) (tons/acre)
January	Annual Ryegrass *(do not mix)*	40	Unhulled Bermuda *(with temporary cover)*	10	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Unhulled Bermuda	6	
February	Annual Ryegrass *(do not mix)*	40	Hulled Bermuda *(do not mix)*	10	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Weeping Lovegrass (alone)	4	
March	Annual Ryegrass *(do not mix)*	40	Hulled Bermuda *(do not mix)*	10	2.5 (2.0)	Mixed	Scarified Sericea Lespedeza	60	2.5 (2.0)
							Weeping Lovegrass (alone)	4	
April	Brown Top Millet *(can mix)*	40	Hulled Bermuda *(do not mix)*	10	2.5 (2.0)	Mixed	Scarified Sericea Lespedeza	60	2.5 (2.0)
							Weeping Lovegrass (alone)	4	
May	Brown Top Millet *(can mix)*	40	Hulled Bermuda *(do not mix)*	10	2.5 (2.0)	Mixed	Scarified Sericea Lespedeza	60	2.5 (2.0)
							Weeping Lovegrass (alone)	4	
June	Brown Top Millet *(can mix)*	40	Hulled Bermuda *(do not mix*	10	2.5 (2.0)	Mixed	Scarified Sericea Lespedeza	60	2.5 (2.0)
							Weeping Lovegrass (alone)	4	
July	Brown Top Millet *(can mix)*	40	Pensacola Bahia *(alone or with temporary cover)*	60	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Sudangrass (alone)	60	
August	Pearl Millet *(do not mix)*	50	Pensacola Bahia *(alone or with temporary cover)*	60	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Pensacola Bahia	30	
September	Annual Ryegrass *(do not mix)*	40	Pensacola Bahia *(alone or with temporary cover)*	60	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Pensacola Bahia	30	
October	Annual Ryegrass *(do not mix)*	40	Pensacola Bahia *(alone or with temporary cover)*	60	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Pensacola Bahia	30	
November	Annual Ryegrass *(do not mix)*	40	Unhulled Bermuda *(with temporary cover)*	10	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Unhulled Bermuda	6	
December	Annual Ryegrass *(do not mix)*	40	Unhulled Bermuda *(with temporary cover)*	10	2.5 (2.0)	Mixed	Unscarified Sericea Lespedeza	75	2.5 (2.0)
							Unhulled Bermuda	6	

[1]Do not mix temporary annual ryegrass seed with any other type of seed (including permanent seeding).
[2]Can mix with a temporary cover other than annual rye grass.

Refer to <u>Manual for Erosion and Sediment Control in Georgia</u> for additional information.

MISCELLANEOUS SPECIFICATIONS

	TEMPORARY SEEDING	PERMANENT SEEDING
SEED DEPTH:	¼" to ½" via drilling (depth is 10x the seed diameter)	¼" to ½" via drilling planting (depth is 10x the seed diameter)
LIME:	Refer to Soil Test Results	1 – 2 Tons/Acre
FERTILIZER:	Refer to Soil Test Results	Refer to Fertilizer Table
NITROGEN:	Refer to Soil Test Results	Refer to Fertilizer Table

LIME AND FERTILIZER (GRASS)

- Submit soil samples to UGA Cooperative Extension Service for Soil Analysis prior to seeding.
- Per the provided table, spread ground limestone by conventional methods at least six months prior to the planting dates (depends on soil analysis).
- Agricultural lime is required unless soil tests indicate otherwise.
- Graded areas require lime application.
- Fertilizer and lime shall be applied before land preparation and incorporated with a disk harrow, ripper or chisel. Tillage depth shall be 4 to 6 inches.

Refer to <u>Manual for Erosion and Sediment Control in Georgia</u> for additional information.

SEEDBED PREPARATION, SEEDING AND MULCHING (GRASS)

- <u>TEMPORARY AND PERMANENT GRASSING</u>: If a hydraulic seeder is utilized, seedbed preparation is not required.
- <u>TEMPORARY AND PERMANENT GRASSING</u>: Grade and shape ground to decrease stormwater runoff velocities as much as possible.
- <u>TEMPORARY AND PERMANENT GRASSING</u>: Broadcast volumes of seed are based on a Pure Live Seed ratio.
- <u>TEMPORARY AND PERMANENT GRASSING</u>: Apply irrigation water as required during dry weather periods. Irrigation water shall not directly run off the site and it shall thoroughly wet the soil to a depth to insure germination of the seed.
- <u>TEMPORARY GRASSING</u>: Seed shall be applied uniformly by hand, cyclone seeder, drill, culti-packer seeder, or hydraulic seeder.
- <u>TEMPORARY GRASSING</u>: Mulching, In most cases, is not required if the vegetation can be established quickly. Contractor to determine if mulching is necessary.
- <u>PERMANENT GRASSING</u>: Seed shall be applied uniformly by hydraulic seeding, conventional seeding, or no-till seeding.
- <u>PERMANENT GRASSING</u>: Mulching is required per the requirements of this table. Mulch material shall be applied by hand or mechanical equipment.
- <u>PERMANENT GRASSING</u>: Anchor mulch into the soil immediately after seeding. Anchor via a disk harrow or emulsified asphalt. A harrow disk's shall not cut mulch but press it into the soil. Straw or hay mulch spread with special blower-type equipment may be anchored. Tackifiers, binders and hydraulic mulch with tackifier specifically designed for tacking straw can be substituted for emulsified asphalt. Refer to Tac – Tackifiers specification.

Refer to <u>Manual for Erosion and Sediment Control in Georgia</u> for additional information.

TACKIFIER APPLICATIONS

- Tackifiers are used as a tie-down for soil, compost, seed, straw, hay or mulch. Tackifiers hydrate in water and readily blend with other slurry materials for form a homogenous slurry.
- Tackifiers reduce soil erosion from wind and water on construction sites.
- Five types of tackifier applications are available – refer to manufacturer guidelines for application.
- MAINTENANCE: Tackified areas shall be checked after every rain event. Periodic inspections and required maintenance must be provided per manufacturer's recommendations.

Refer to <u>Manual for Erosion and Sediment Control in Georgia</u> for additional information.

ISSUED FOR REVIEW

January 14, 2020

CHECKLIST APPLIES ONLY TO SANDY BEACH PARK RESTROOM AND CLAYSTONE PARK RESTROOM PROJECTS.

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

SWCD: OCMULGEE RIVER
Project Name: FACILITY IMPROVEMENT - LAKE TOBESOFKEE Address: SANDY BEACH/ARROWHEAD/CLAYSTONE PARKS
City/County: MACON-BIBB Date on Plans: January-20
Name & email of person filling out checklist: MICHAEL REEVES / michaelreeves@reevesdesign.net

<u>TO BE SHOWN ON ES&PC PLAN</u>

Plan Page #	Included Y/N	Item
C12	Y	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)
ALL	Y	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)
N/A	N	3 Limits 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.)
C1	Y	4 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
C1	Y	5 Provide the name, address, email address, and phone number of primary permittee.
C1	Y	6 Note total and disturbed acreage of the project or phase under construction.
C6-C7	Y	7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
C1	Y	8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
C1	Y	9 Description of the nature of construction activity.
C1	Y	10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
C7	Y	11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
C11	Y	12 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 18 of the permit.
N/A	N	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 Part IV page 18 of the permit. *
N/A	N	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." in accordance with Part IV.A.5 page 35 of the permit. *
N/A	N	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 or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
N/A	N	16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
N/A	N	17 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." *
N/A	N	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *
N/A	N	19 Clearly note 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."
N/A	N	20 Clearly note 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."
N/A	N	21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
N/A	N	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. *
N/A	N	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. *
N/A	N	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited. *
C11	Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.
N/A	N	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. *
N/A	N	27 Description of practices to provide cover for building materials and building products on site. *
N/A	N	28 Description of the practices that will be used to reduce the pollutants in storm water discharges. *
C7	N	29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
N/A	N	30 Provide complete requirements of inspections and record keeping by the primary permittee. *
N/A	N	31 Provide complete requirements of sampling frequency and reporting of sampling results. *
N/A	N	32 Provide complete details for retention of records as per Part IV.F. of the permit. *
N/A	N	33 Description of analytical methods to be used to collect and analyze the samples from each location. *
N/A	N	34 Appendix B rationale for NTU values at all outfall sampling points where applicable. *
N/A	N	35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged. *
N/A	N	36 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. *
C6-C7	Y	37 Graphic scale and North arrow.
ALL	Y	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 larger scale	Flat 0 - 2%	0.5 or 1
	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

Plan Page #	Included Y/N	Item
N/A	N	39 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.
N/A	N	40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. *
N/A	N	41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
C6-C7	Y	42 Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
C6-C7	Y	43 Delineation and acreage of contributing drainage basins on the project site.
N/A	N	44 Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions. *
C11	Y	45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
N/A	N	46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
C6-C7	Y	47 Soil series for the project site and their delineation.
C6-C7	Y	48 The limits of disturbance for each phase of construction.
C6-C7	Y	49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual included for structural BMPs and all calculations used by the storage design professional to obtain the required sediment 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.
C6-C7	Y	50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
C8-C11	Y	51 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.
C12	Y	52 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 the year that seeding will take place and for the appropriate geographic region of Georgia.

* If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream, the * checklist items would be N/A.

Effective January 1, 2020

FERTILIZER SCHEDULE: PERMANENT GRASSING
ALL MAJOR LAND RESOURCE AREAS

SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	NITROGEN TOP DRESSING RATE
Cool Season Grasses	First	6-12-12	1,500 lbs./acre	50-100 lbs./acre[1,2]
	Second	6-12-12	1,000 lbs./acre	-----
	Maintenance	10-10-10	400 lbs./acre	30 lbs./acre
Cool Season Grasses and Legumes	First	6-12-12	1,500 lbs./acre	0-50 lbs./acre[1]
	Second	0-10-10	1,000 lbs./acre	-----
	Maintenance	0-10-10	400 lbs./acre	-----
Ground Covers	First	10-10-10	1,300 lbs./acre[3]	-----
	Second	10-10-10	1,300 lbs./acre[3]	-----
	Maintenance	10-10-10	1,100 lbs./acre	-----
Pine Seedlings	First	20-10-5	One 21-gram pellet seedling placed in the closing hole	-----
Shrub Lespedeza	First	0-10-10	700 lbs./acre	-----
	Maintenance	0-10-10	700 lbs./acre	-----
Temporary Cover Crops Seeded Alone	First	10-10-10	500 lbs./acre	30 lbs./acre[5]
Warm Season Grasses	First	6-12-12	1,500 lbs./acre	50-100 lbs./acre[2,6]
	Second	6-12-12	800 lbs./acre	50-100 lbs./acre[2]
	Maintenance	10-10-10	400 lbs./acre	30 lbs./acre
Warm Season Grasses and Legumes	First	6-12-12	1,500 lbs./acre	50 lbs./acre[6]
	Second	0-10-10	1,000 lbs./acre	-----
	Maintenance	0-10-10	400 lbs./acre	-----

Footnotes

[1]Apply in the spring following seeding.
[2]Apply in split applications when high rates are used.
[3]Apply in three split applications.
[4]Apply when plants are pruned.
[5]Apply to grass species only.
[6]Apply when plants grow to a height of two to four inches.

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FACILITY IMPROVEMENTS AT TOBESOFKEE PARKS FOR MACON-BIBB COUNTY
MOSLEY DIXON ROAD MACON, GEORGIA

Revisions:

Sheet Title:
ESPC CHECKLIST

Project #: 1819
Date: 01/13/20

C12