

1. PRODUCTS

- A. Topsoil shall be capable of sustaining vigorous plant growth, not in frozen or muddy condition, containing not less than six (6) percent organic matter, and corrected to a pH of 5.9 to 7.0.
B. Lime shall be dolomitic agricultural-ground limestone containing not less than ten (10) percent magnesium oxide.
C. Fertilizer shall be commercial type 10-20-20 with fifty (50) percent of the elements derived from organic sources.
D. Seed.
1. Seed shall be certified seed or equivalent based on North Carolina Seed Improvement Association requirements for certification.
2. One (1) percent maximum weed seed content permitted.
3. Seasonal mixtures for NC DOT right-of-ways:
a. From September 1 to April 1:
Seventy-five (75) pounds per acre of Kentucky 31 Fescue, fifty (50) pounds per acre of Pensacola Bahiagrass, and five (5) pounds per acre of Centipede.
b. From April 1 to September 1:
Seventy-five (75) pounds per acre of Pensacola Bahiagrass, fifty (50) pounds per acre of Kentucky 31 Fescue, and five (5) pounds per acre of Centipede.
4. Alternative seasonal mixtures outside NC DOT right-of-ways:
a. From November 15 to March 1:
Twenty-five (25) pounds per acre of Rye Grain, seventy-five (75) pounds per acre of Tall Fescue, Kentucky 31 or Alta Tall Fescue and fifty (50) pounds per acre of Pensacola Bahiagrass.
b. From March 1 to May 15:
Seventy-five (75) pounds per acre of Tall Fescue, Kentucky 31 or Alta Tall Fescue and fifty (50) pounds per acre of Pensacola Bahiagrass.
c. From May 15 to September 15:
Sixty (60) pounds per acre of Pensacola Bahiagrass and forty (40) pounds per acre of Annual Laspedeza (Kobe or Korean).
d. From September 15 to November 15:
Seventy-five (75) pounds per acre of Tall Fescue, Kentucky 31 or Alta Tall Fescue and fifty (50) pounds per acre of Pensacola Bahiagrass.
E. Mulching material shall be oat or wheat straw, in dry condition, reasonably free from weeds and foreign matter detrimental to plant life.

3. SEEDBED PREPARATION

- A. Protect existing underground improvements from damage.
B. Clear the ground surface of stumps, stones, roots, cables, wire, grade stakes, and other materials that might hinder proper grading, tillage, seeding or subsequent maintenance operations.
C. Remove contaminated subsoil.
D. Grade to eliminate rough spots and low area where ponding may occur. Maintain smooth, uniform grade.
E. Assure positive drainage away from buildings.
F. Finish ground level firm and sufficient to prevent sinkage pockets when irrigation is applied.
G. Grades on the area to be seeded shall be maintained to a true and even condition. Maintenance shall include any necessary repairs to previously graded areas.
H. Uniformly apply lime at a rate of 4000 pounds per acre prior to preparation of seedbed.
I. Thoroughly till all graded areas to a depth of at least five (5) inches by plowing, disking, harrowing, or other approved methods until the condition of the soil is acceptable.
J. Remove from site foreign materials collected during tilling.
K. Uniformly apply fertilizer at a rate of 500 pounds per acre of 10-20-20 analysis.
L. Incorporate the fertilizer into the upper three (3) or four (4) inches of prepared seedbed just prior to the last tillage operation.
M. The seedbed should be firm and compact.
4. SEEDING
A. Do not sow seed immediately following rain, when ground is too dry, or during windy periods.
B. Apply seed at specified seasonal rate.
C. Rake seed in lightly.
D. Roll seeded area with roller not exceeding 112 pounds (50 kg).
E. Apply water with fine spray immediately after each area has been sown.
5. MULCHING PRACTICES
A. Apply one (1) to two (2) tons of mulching material per acre to seeded areas.

B. Anchor mulching material.

- 1. In areas with gentle slopes, crimp mulching material into soil.
2. On steeper slopes such as the sides of swales, anchor mulch with netting or asphalt tack.
3. On road shoulders, anchor mulch with asphalt tack if crimping is unsuccessful.
4. Use asphalt tack in lieu of crimping when required by regulatory agencies or if directed by the ENGINEER.
5. On slopes steeper than 2:1, jute, excelsior, or synthetic matting may be required to protect the slope from erosion.
6. WATERING
A. Lightly water to aid breakdown of fertilizer and to provide moist soil for seed.
7. MAINTENANCE PERIOD
A. Maintenance Period: until final acceptance.
8. MAINTENANCE
A. Maintain surfaces and supply additional topsoil where necessary.
B. Water to ensure uniform seed germination and to keep surface of soil damp.
C. Apply water slowly so that surface of soil will not puddle and crust.
D. Except for rye grain, cut grass first time when it reaches height of two and one-half (2 1/2) inches (60 mm) and maintain to minimum of two (2) inches (50 mm).
E. If rye grain is planted mow to maintain grass height between three (3) and six (6) inches until Fescue matures enough to provide ground cover.
F. After first mowing water grass sufficient to moisten soil from three (3) inches to five (5) inches (76 to 127 mm) deep.
G. Apply weed killer when weeds start developing.
H. Replant damaged grass areas showing root growth failure, deterioration, bare or thin spots, and eroded areas.
9. RESTORATION
A. Restore grassed areas until accepted.
10. ACCEPTANCE
A. Seeded areas will be accepted at end of maintenance period when seeded areas are properly established and otherwise acceptable.

2. GENERAL CONDITIONS

- A. When conditions are such by reason of drought, high winds, excessive moisture or other factors where satisfactory results will not be obtained, the WORK shall be stopped, and resumed only when conditions are favorable.

PROJECT REFERENCE NO. B-4926 SHEET NO. UC-3F
DESIGNED BY: JWM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DRAWN BY: MW
CHECKED BY: DEG UTILITIES ENGINEERING SEC.
APPROVED BY: JWM PHONE: (919)707-6690
REVISED: FAX: (919)250-4151
UTILITY CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
McDAVID ASSOCIATES, INC.
CORPORATE OFFICE: 3714 North Main Street, Farmville, NC 27828
BRANCH OFFICE: 109 East Walnut Street, Goldsboro, NC 27533
REVISIONS table with columns NO., DATE, DESCRIPTION.
MAI REVIEW OFFICER APPROVAL signature line.
DATE MAI REVIEW OFFICER 1-19-0309-3401

SEEDING CONSTRUCTION NOTES

A

B

SELF-INSPECTION, RECORDKEEPING AND REPORTING
PART III
SECTION A: SELF-INSPECTION
Self-inspections are required during normal business hours in accordance with the table below.
Table with columns: Inspect, Frequency, Inspection records must include.
(1) Rain gauge maintained in good working order.
(2) E8SC Measures.
(3) Stormwater discharge outlets (SPOs).
(4) Perimeter of site.
(5) Streams or wetlands onsite or within accessible.
(6) Ground stabilization measures.
NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

SELF-INSPECTION, RECORDKEEPING AND REPORTING
PART III
SECTION B: RECORDKEEPING
1. E8SC Plan Documentation
The approved E8SC plan as well as any approved deviation shall be kept on the site.
2. Additional Documentation to be Kept on Site
In addition to the E8SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours.
3. Documentation to be Retained For Three Years
All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

SELF-INSPECTION, RECORDKEEPING AND REPORTING
PART III
SECTION C: REPORTING
1. Occurrences that Must be Reported
Permittees shall report the following occurrences:
(a) Visible sediment deposition in a stream or wetland.
(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).
(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
(d) Anticipated bypasses and unanticipated bypasses.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment.
2. Reporting Times and Other Requirements
After a timeframe becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.
Table with columns: Occurrence, Reporting Timeframes (After Discovery) and Other Requirements.
(a) Visible sediment deposition in a stream or wetland.
(b) Oil spills and release of hazardous substances per Item (b)(1)-(c) above.
(c) Anticipated bypasses (40 CFR 122.41(m)(3)).
(d) Unanticipated bypasses (40 CFR 122.41(m)(3)).
(e) Noncompliance with the conditions of this permit that may endanger health or the environment (40 CFR 122.41(i)(7)).

PART II, SECTION 6, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT
Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible.
(a) The E8SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur.
(b) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin.
(c) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above.
(d) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(e) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT
Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively).
SECTION E: GROUND STABILIZATION
Table with columns: Site Area Description, Stabilize within this many calendar days after ceasing land disturbance, Timeframe variations.
(a) Perimeter dikes, swales, ditches, and perimeter slopes. 7. None.
(b) High Quality Water (HQW) Zones. 7. None.
(c) Slopes steeper than 3:1. 7. If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
(d) Slopes 3:1 to 4:1. 14. -7 days for slopes greater than 50' in length and with slopes steeper than 4:1.
(e) Areas with slopes flatter than 4:1. 14. -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones.
GROUND STABILIZATION SPECIFICATION
Table with columns: Temporary Stabilization, Permanent Stabilization.
POLYACRYLAMIDES (PAMS) AND FLOCCULANTS
1. Select flocculants that are appropriate for the soils being exposed during construction.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-erect containment or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE
1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any street equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.
LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE
1. Never bury or burn waste.
2. Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amount of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.
PAINT AND OTHER LIQUID WASTE
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.
PORTABLE TOILETS
1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.
EARTHEN STOCKPILE MANAGEMENT
1. Show stockpile locations on plans.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements.
5. Store flocculants in leak-proof containers that are kept under storm-erect containment or surrounded by secondary containment structures.

ON-SITE CONCRETE WASHOUT STRUCTURE WITH REUSE
CONCRETE WASHOUTS
1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available.
7. Install an alternate sign directing concrete trucks to the washout within the project limits.
8. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events.
HERBICIDES, PESTICIDES AND RODENTICIDES
1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the labels, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water.
4. Do not stockpile these materials onsite.
HAZARDOUS AND TOXIC WASTE
1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

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