Du

REFERENCES

- 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)
- Tac Tackifiers
- Cr Construction Road Stabilization
- Tp Topsoiling

(This page left blank intentionally.)

Du

Fl-Co

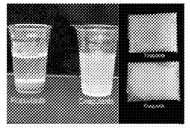
FLOCCULANTS & COAGULANTS

DEFINITION

Formulated to assist in the solids/liquid separation of suspended particles in solution.

Coagulant - Required to help give body to the water. A coagulant neutralizes the repulsive electrical charges surrounding particles allowing them to "stick together" creating clumps or floc that form a small to mid-size particle.

Flocculent - Facilitate the agglomeration or aggregation of the coagulated particles to form larger flocculies and act as a net where it gathers up the smaller coagulated particles making a larger particle. This larger particle will slowly drop out of suspension.



PURPOSE

- Settle suspended sediment, heavy metals and hydrocarbons (TSS) in runoff water from construction sites for water clarification.

INSTALLATION

- Application shall conform to manufacturer's instructions and guidelines. Fl-Co applications shall comply with all federal and local laws.
- Only anionic forms of Fl-Co shall be used.

Fl-Co

- This practice is not intended for application to surface waters of the state. It is intended for application within construction storm water ditches and storm drainage systems that feed into pre-constructed ponds or basins.

MAINTENANCE

- Maintenance shall consist of reapplying Fl-Co via the measures above when turbidity levels are no longer met or the Fl-Co is used up. Bricks, blocks, socks,logs and bags shall be maintained when sediment accumulates on the products.

Ss

SLOPE STABILIZATION

DEFINITION

A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.

Rolled Erosion Control Products (RECP)

- A natural fiber blanket with single or double photodegradable or biodegradable nets.

Hydraulic Erosion Control Products (HECP)

- HECP shall utilize straw, cotton, wood or other natural based fibers held together by a soil binding agent which works to stabilize soil particles. Paper mulch should not be used for erosion control.

PURPOSE

- Provide a cover layer that stabilizes the soil and acts as a rain drop impact dissipater while providing a microclimate which protects young vegetation and promotes its establishment.

INSTALLATION

- Installation and stapling of RECPs and application rates for the HECPs shall conform to manufacturer's guidelines for application.
- Hydraulic erosion control products shall be prepackaged from the manufacturer. Field mixing of performance-enhancing additives will not be allowed. Fibrous components should be all natural or biodegradable.

Ss

Figure 1. Hydroseeding on disturbed areas

MAINTENANCE

- Inspect all erosion control blankets and matting periodically after installation. Inspect immediately after rainstorms to check for erosion and undermining.
- Repair all dislocations and failures immediately.
- Re-install all materials after washouts or breakage occurs. Repair damage to the slope or ditch first.
- Monitor all areas until they are permanently stabilized.

Figure 2. Installation of Jute Matting

Ss

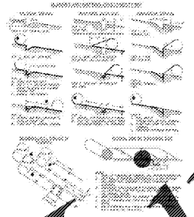


Figure 3. Typical Installation Guidelines for RECP

(This page left blank intentionally.)

Tac

TACKIFIERS

DEFINITION

A substance used as tie-down for soil, compost, seed, straw, hay or mulch. They hydrate in water and readily blend with other slurry materials to form a homogenous slurry.

PURPOSE

The purpose of tackifiers are to reduce soil erosion from wind and water on construction sites. It also increases the performance of the mulching material, so that it can:

- Increase infiltration
- Increase soil fertility
- Control undesirable vegetation
- Reduce runoff stormwater turbidity and loss of topsoil.
- Modify soil temperature.
- Increase soil cohesion and stabilization.
- Enhance seed germination

CONDITIONS

This practice is intended for direct soil surface application to sites where the timely establishment of vegetation may not be feasible or where vegetative cover is absent or inadequate.

Tac

CRITERIA

- All organic mulching materials shall be anchored by tackifiers/binders or matting/netting. Tackifiers and binders are used to anchor wood cellulose, wood pulp fiber, and other mulch materials applied with hydroseeding equipment.
- Only anionic forms of FIAM shall be used. Not harmful to plants, animals, and aquatic life.
- Application rates shall conform to manufacturer's guidelines for application.
- Shall not reduce infiltration rates.
- All organic tackifiers must be derived from natural plant sources.
- Contain no growth or germination inhibiting materials.
- Synthetic fibers shall be of nylon or polyester blends.
- There are 5 types of tackifiers:
  - Tac-1 Synthetic Polymers
  - Tac-2 Organic Polymers
  - Tac-3 Synthetic/Organic Blends
  - Tac-4 Organic Polymers w/ Synthetic Fibers
  - Tac-5 Synthetic/Organic Blends w/ Synthetic Fibers

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
- Gr Grade Stabilization Structure
- I-v Level Spreader
- Pd Pipe Drop
- Rt Rotating Wall
- Rf Retrofit
- Sd1 Sediment Barrier
- Sd2 Silt Sediment Trap
- Sd3 Temporary Sediment Basin
- Sd4 Temporary Sediment Trap
- Sk Floating Surface Skimmer
- SpB Seep Berm
- Sr Temporary Stream Crossing
- St Storm Drain Outlet Protection
- Su Surface Roughening
- Tc Turbidity Curtain
- Tp Topsoiling
- Tr Tree Protection
- Wt Vegetated Waterway or Stormwater Conveyance Ch

The practices and practices presented in this Field Manual cover the standard installation methods for each conventional BMP. New products and installation methods/processes, more the requirements for each conventional BMP. Please see the Equivalent Best Management Practices section for specific manufacturer guidelines and specifications.

Co

CONSTRUCTION EXIT

DEFINITION

A stone-stabilized pad located at any point where traffic will be leaving a construction site to a public right-of-way, street, alley, sidewalk, or parking area.

PURPOSE

- Reduce or eliminate the transport of mud from the construction area onto public right-of-ways.

INSTALLATION

- Install according to the approved plan.
- Use 1.5"-3.5" stone.
- Minimum pad thickness of 6".
- Minimum pad width of 20 ft.
- Minimum pad length of 50 ft.
- When the construction is less than 50 ft from the paved access, the length shall be from the edge of the existing pavement to the permitted building being constructed.
- When washing is required, conduct on an area stabilized with crushed stone and route runoff to an approved sediment trap or sediment basin.
- Place the geotextile liner the full length and width of the entrance.

Co

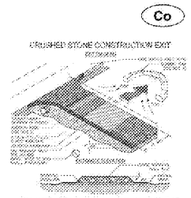


Figure 3. Crushed Stone Construction Exit Installation Requirements

Figure 2. Geotextile Underliner

MAINTENANCE

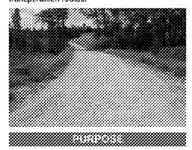
- Periodically dress with 1.5"-3.5" stone.
- Maintain in a condition that will prevent tracking or flow of mud onto public rights-of-way.
- Immediately remove mud and debris tracked or spilled onto roadways.

Cr

CONSTRUCTION ROAD STABILIZATION

DEFINITION

A travel way constructed as part of a construction plan including access roads, subdivision roads, parking areas, and other on-site vehicle transportation routes.



PURPOSE

- Provide a fixed route of travel for construction traffic.
- Reduce erosion and subsequent regrading of permanent roadbeds between time of initial grading and final stabilization.

INSTALLATION

- Install according to the approved plan.
- Temporary roads shall follow the contours of the natural terrain to minimize disturbance of drainage patterns.
- If a temporary road must cross a stream, the crossing must be designed, installed and maintained according to specification **Sr - Temporary Stream Crossing**
- Grades for temporary roads should not exceed 10% except for short lengths but maximum grades of 20% or more may be used for special uses.

Cr

MAINTENANCE

- Temporary roadbeds shall be at least 14 ft wide for one-way traffic, 20 ft wide for two-way traffic. The width for two-way traffic shall be increased approximately 4 ft for trailer traffic.
- Provide a minimum shoulder width of 2 ft on each side.
- All cut and fills shall be 2:1 or flatter. Side slopes shall be no steeper than 3:1 if mowing
- Drainage channels shall be designed to be on stable grades or protected with structures or linings for stability.
- Apply geotextile to the roadbed for additional stability according to the design manual specifications.
- Apply a 6" layer of coarse aggregate immediately after grading. For "heavy-duty" traffic situations, place stone at a depth of 8"-10".
- Stabilize all roadside ditches, cuts, fills, and other disturbed areas adjacent to parking areas and roads with appropriate temporary or permanent vegetation

MAINTENANCE

- Periodically top dress roads and parking areas with gravel to maintain the gravel depth at 6".
- Check vegetated areas periodically to ensure a good stand of vegetation is maintained.
- Remove any silt or other debris causing clogging of roadside.

RELATED SPECIFICATIONS

- Ds2 Disturbed Area Stabilization (With Temporary Seeding)
- Ds3 Disturbed Area Stabilization (With Permanent Vegetation)
- Sr Temporary Stream Crossing

PROJECT OWNER

PROJECT TITLE
POPS WINE & SPIRITS
FORSYTH COUNTY, GA

NO.	DESCRIPTION	DATE

ISSUES & REVISIONS

SITE PLAN

BUILDING NAME

DRAWING TITLE
EROSION DETAILS III

DRAWN BY	PROJECT NO
BSR	201822
CHECKED BY	SCALE
BSR	NTS
WORK ORDER	DATE
BSR	01/15/2019

DRAWING NO.
C11.05

IF YOU DIG GEORGIA
CALL US FIRST!
UTILITIES PROTECTION CENTER
1-800-282-7411
(404) 525-5090
(METRO ATLANTA ONLY)
IT'S THE LAW