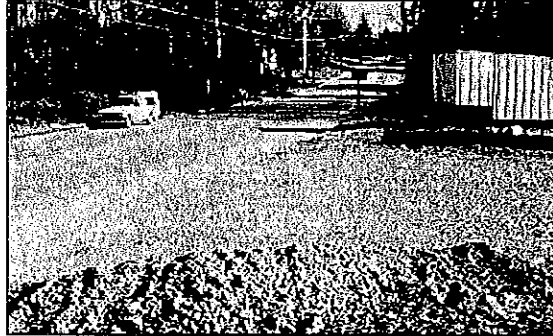


STABILIZED CONSTRUCTION ENTRANCE AND TIRE WASH



DESCRIPTION & PURPOSE: A stabilized pad at vehicle entrance to construction site reduces the amount of sediment transported onto nearby roadways and potentially into waterways. Before leaving the site, runoff must pass through a sediment trap or other sediment filtration measure as well.

- CONSTRUCTION GUIDELINES:**
- Use crushed rock, asphalt, or cement.
 - Pave driveways to the intersecting road edge before installing construction entrance (prevents damage to roadway).
 - Install driveway culvert if a roadside ditch is present.
 - Construct entrance on a firm, compacted subgrade (reduces maintenance).
 - Place geotextile or ground wood chips under gravel to prevent sediment from pumping up into the rock pad.
 - Crown the entrance so that runoff drains back onto construction site.
 - Direct wastewater from tire wash to sediment trap or pond.

- LOCATION:**
- Wherever construction entrance intersects a paved road or other paved areas within 1,000 feet

ESTIMATED LIFE:
2 years

DO'S & DON'TS:

- ☞ Install fencing as necessary to restrict construction traffic to stabilized entrance.
- ☞ Do not clean roadway by washing unless sweeping or shoveling is ineffective or there is a threat to public safety.

MAINTENANCE:

- Remove any mud or gravel tracked onto pavement by sweeping or shoveling it back onto site.
- Keep public streets and sidewalks swept clean of construction site dirt and debris.
- Add more gravel when wear and tear reduces effectiveness of the construction entrance to prevent sediment from being tracked onto pavement.

Refer to the BMP Maintenance Checklist onn pages 53 and 54.

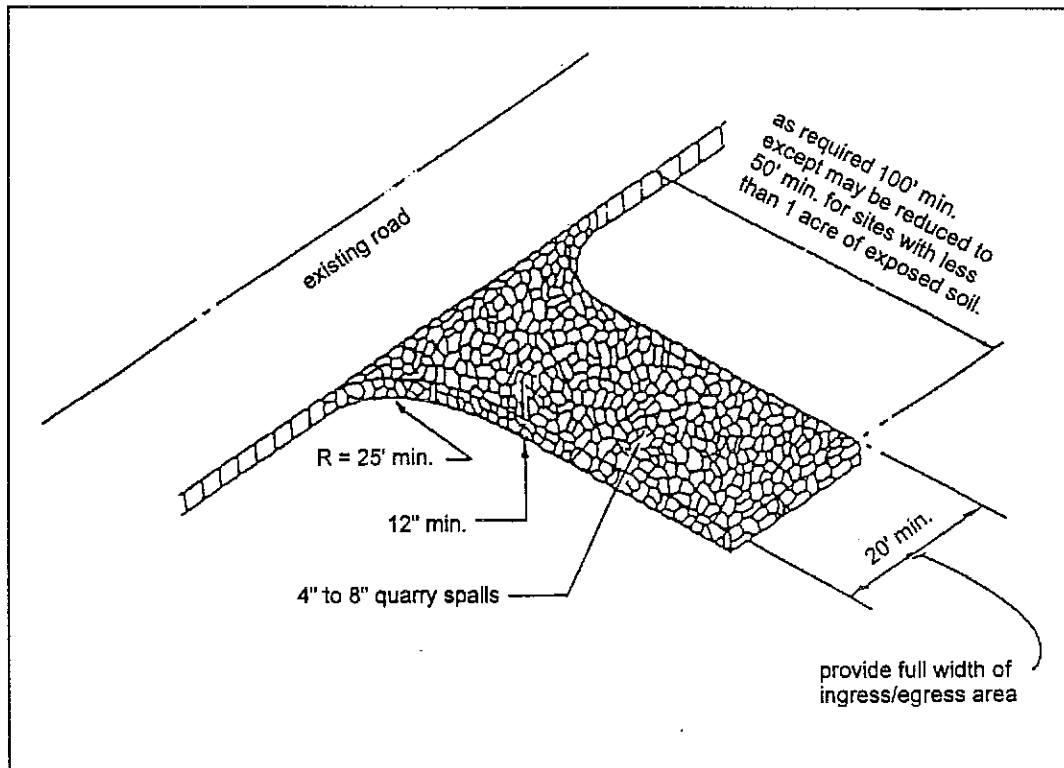


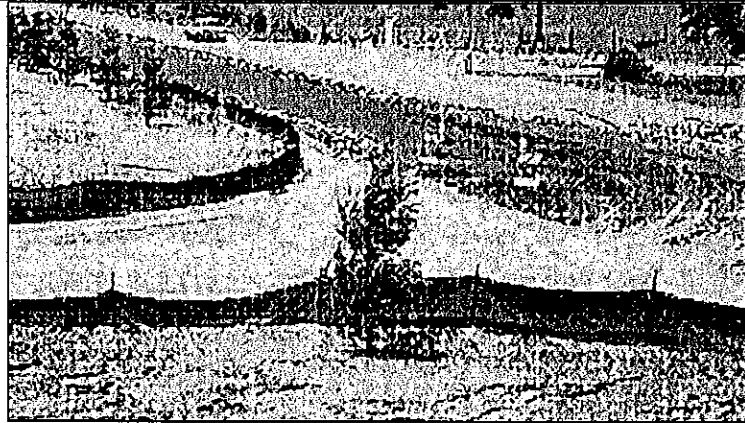
Figure 1. Stabilized Construction Entrance

Code: CE

Symbol:

STABILIZED CONSTRUCTION ENTRANCE AND TIRE WASH

SILT FENCE



DESCRIPTION & PURPOSE: Silt fencing, also known as filter fabric fencing, provides a temporary physical barrier to intercept and prevent sediment from leaving the construction site. Before leaving the site, runoff must pass through filter fabric fencing or other sediment filtration measure to protect waterways.

- CONSTRUCTION GUIDELINES:**
- Follow manufacturer's instructions for installation of filter fabric.
 - Choose filter fabric with proper porosity and ability to trap sediments for type of soil and its location.
 - Splice fabric joints together only at support posts, with a minimum 6 inch overlap.
 - Place posts a maximum of 6 feet apart, driven 30 inches into the ground (where possible).
 - Dig a trench 1-foot deep along line of posts; extend fabric into the trench, then fill the trench with $\frac{3}{4}$ inch gravel.
 - Use wire fence backing and/or closer posts to increase fence strength when needed.

- LOCATION:**
- Downside of all slopes
 - At site perimeter
 - At maximum slope steepness of 1H:1V
 - No more than 100 feet from upper edge of a disturbed slope (more than one row of silt fencing may be needed)
 - At minor swales and ditches, prior to or following a sediment trap (not intended for areas of concentrated flows)

ESTIMATED LIFE:

6 Months

DO'S & DON'TS:

- ☞ Do not install across streams or v-shaped ditches. (Not intended to treat concentrated flows.)
- ☞ Do not attach to existing trees. (Threatens tree health.)
- ☞ Construct the trench to follow the natural contour to ensure proper placement and best protection.

MAINTENANCE:

- Inspect fencing on a regular basis (and daily during periods of prolonged rainfall).
- Repair any damage immediately.
- Remove sediment from the uphill side when it reaches 6 inches in height.

Refer to the BMP Maintenance Checklist on pages 53 and 54.

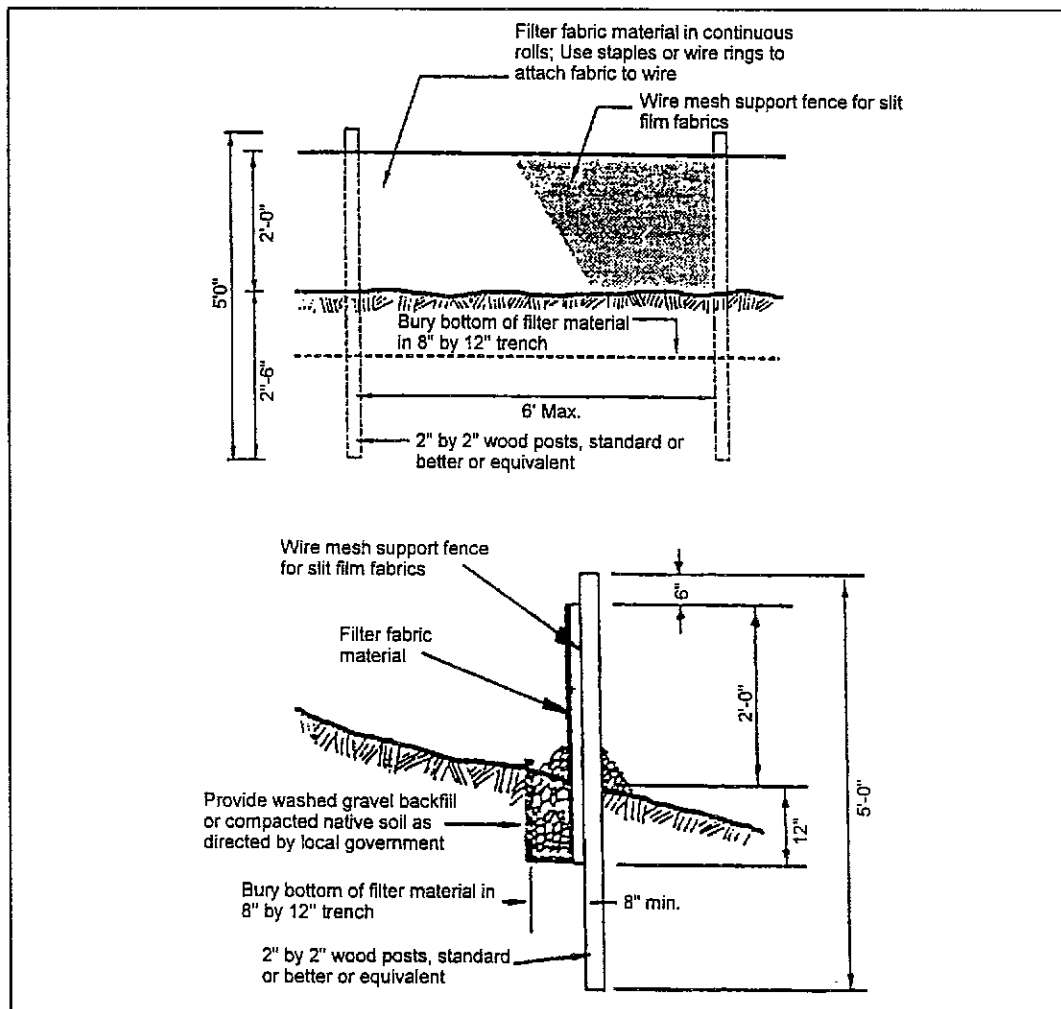
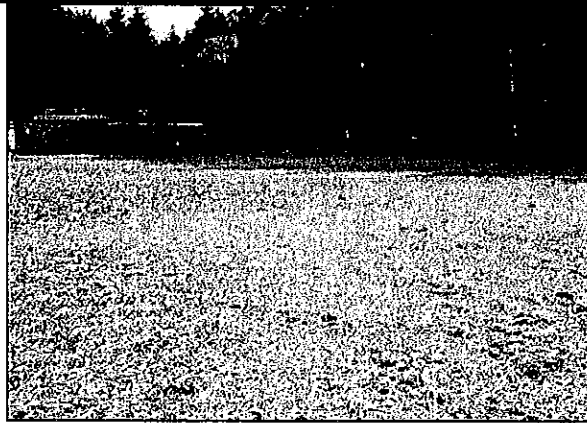


Figure 2. Silt Fence

Symbol:  Code: SF

SILT FENCE

MULCHING



DESCRIPTION & PURPOSE:

Mulch is a temporary cover measure to protect against erosion. It also conserves moisture, moderates soil temperature, and holds topsoil, seed, and fertilizer in place while turf becomes established.

CONSTRUCTION GUIDELINES:

- Use type of mulch appropriate for area being covered. (See Table 3.)
- Use *chipped site vegetation* as a cost-effective way of disposing of site clearing debris and avoiding burning.
- Use mature (completely decomposed) quality *compost*, purchased from a fully permitted supplier.
- Use hydromulcher to apply *wood fiber cellulose* mulch.
- Use *straw* applied by hand or blower, where appropriate.
- Apply thicker applications for areas prone to high erosion.

LOCATION:

- Any disturbed areas that require protection for less than 30 days
- Over newly seeded areas during the wet season and hot summer months
- During the wet season on slopes greater than 3H:1V

ESTIMATED LIFE:

6 to 8 months

DO'S & DON'TS:


- ☞ Use compost for protecting final grades (till into soil as an amendment).
- ☞ Do not use chipped site vegetation on steep slopes. (Stormwater runoff will carry it off slopes.)
- ☞ Do not use chipped site vegetation within 200 feet of surface water. (It could carry it into water, compromising water quality and wildlife habitat.)
- ☞ Do not use chipped site vegetation where seeding is expected shortly after mulching. (Makes a poor surface for seeding.)

- MAINTENANCE:**
- Maintain thickness of mulch, add more as required.
 - Remulch eroded areas.

Refer to the BMP Maintenance Checklist on pages 53 and 54.

TABLE 3. MULCH TYPES AND APPLICATIONS

MATERIAL	APPLICATION RATE	ADDITIONAL GUIDELINES
Straw	2-3 inches thick; 2-3 bales per 1000 sq. ft. or 2-3 tons per acre	Use air-dried straw, free from seed and coarse material. Apply straw by hand thicker than blown straw. Reduce straw thickness by half when used with seeding.
Wood Fiber Cellulose	25-30 lbs. per 1000 sq. ft. or 1000-1500 lbs. per acre	Use only material free from growth-inhibiting factors. Apply with hydromulcher. Double application rate if used without seed and tackifier.
Compost	2 inches thick minimum; 100 tons per acre or 800 lbs. per yard	Increase thickness to 3" for more effective control.
Chipped Site Vegetation	2 inches thick minimum	Make average chip size several inches.

Symbol:  Code: MU

MULCHING

NETS AND BLANKETS



DESCRIPTION & PURPOSE:

Nets and blankets are used for permanent stabilization of soils in critical areas. They hold seed and mulch in place while vegetation becomes well established. A net is open woven fibers resembling a net; a blanket is a layer of interlocking fibers held together by netting material.

CONSTRUCTION GUIDELINES:

- Consult a design engineer to assure the appropriate product is used for each area where nets/blankets will be applied.
- Repair damage to the slope or ditch prior to re-installing material.
- Permanently stabilize a slope with natural fiber, biodegradable nets, and blankets.
- Permanently stabilize a channel with synthetic, non-biodegradable nets and blankets (sometimes an alternative to rip rap).
- Install nets and blankets with firm, continuous contact with the soil.
- Use mulch with natural fiber matting because of the open structure of the weave.
- Wood fiber cellulose blankets do not require mulch.

LOCATION:

- On short, steep slopes where erosion hazard is high and planting is likely to be slow in establishment (use natural fiber materials)
- On stream banks or tidal shorelines where moving water is likely to wash out new plantings
- On drainage ditches (use synthetic materials)
- On swales (use natural fiber materials)

ESTIMATED LIFE:
N/A

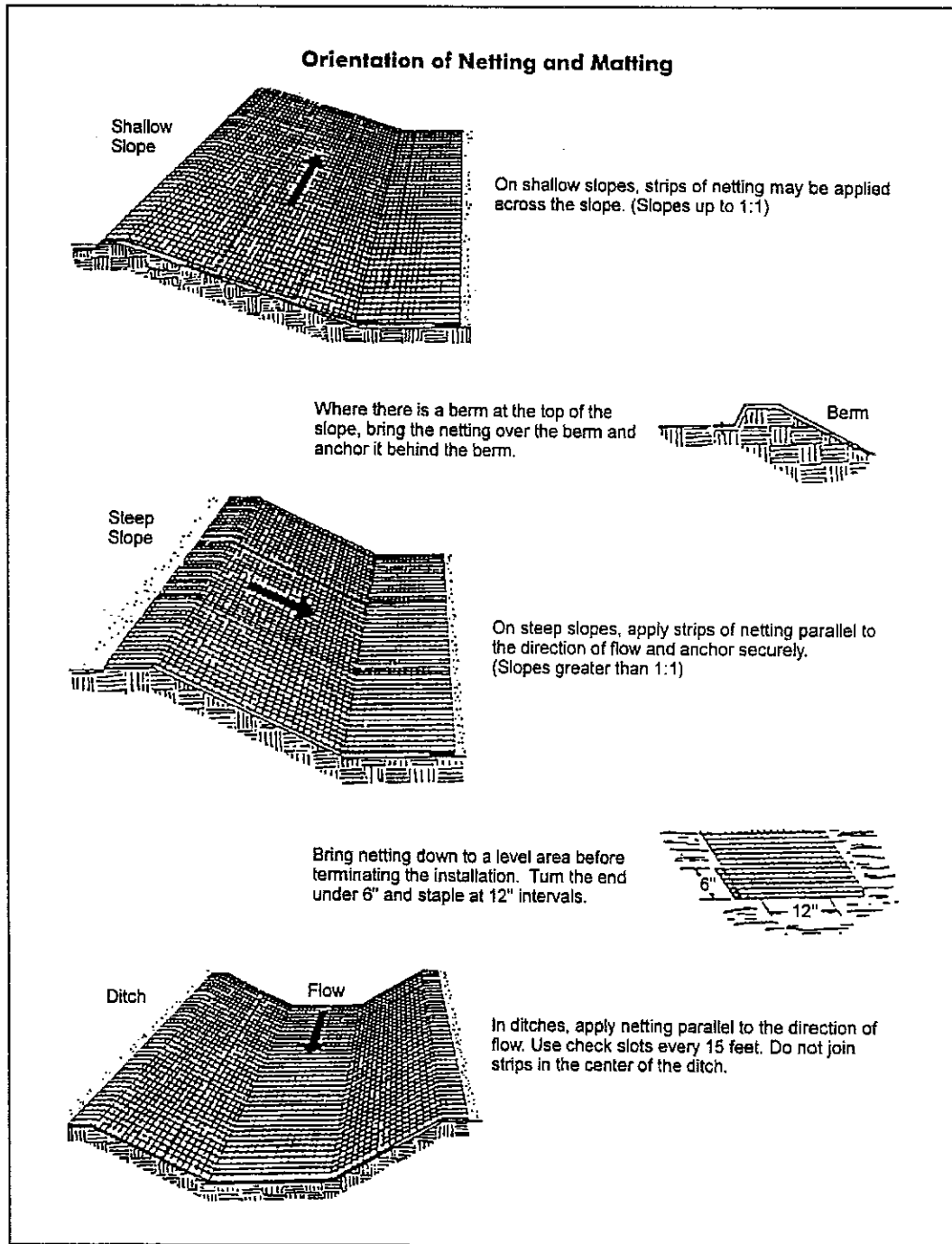
DO'S & DON'TS:

- ☞ Maintain good ground contact to ensure effectiveness.
- ☞ Do not allow erosion under the nets or blankets.
- ☞ Use synthetic nets and blankets only for long-term stabilization of ditches or channels. They do not biodegrade.

MAINTENANCE:

- Monitor until the area is permanently stabilized.
- Repair any damage to nets and blankets immediately.
- Maintain good ground contact with nets and blankets.

Refer to the BMP Maintenance Checklist on pages 53 and 54.




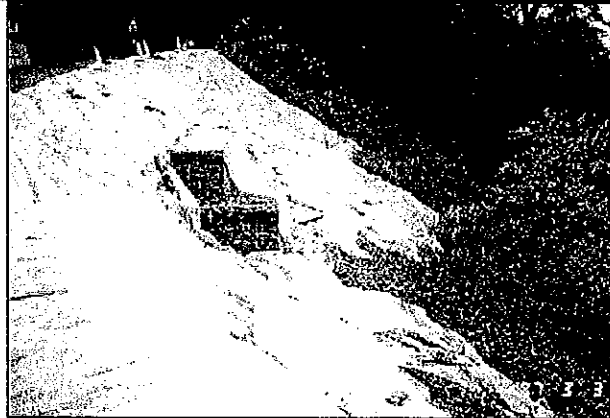
Symbol:  Code: NE
NETS AND BLANKETS

Figure 8. Nets and Blankets

PLASTIC SHEETING



DESCRIPTION & PURPOSE:

Plastic sheeting is an immediate but temporary erosion protection for disturbed areas of soil. (Be aware that plastic sheeting can cause rapid runoff.)

CONSTRUCTION GUIDELINES:

- Use plastic with a minimum thickness of 6 mil.
- Overlap edges of plastic at least 12 inches and apply weights or tape to seams.
- Install a gravel berm, rip rap, silt fence or other BMP protection at the bottom of a plastic sheeted slope to reduce erosion from runoff.
- Weight plastic with tires, sandbags or equivalent on ropes with maximum 10-foot grid spacing in all directions.

LOCATION:

- Any disturbed areas that require protection for less than 30 days
- On cut and fill slopes and stockpiles
- Over newly seeded areas as a greenhouse effect during cooler months

ESTIMATED LIFE:

N/A

DO'S & DON'TS:

- ☞ Do not use on steep or unstable slopes. (Causes too rapid, erosive runoff on slopes.)

MAINTENANCE:

- Tape or replace any tears in plastic sheeting.
- Re-anchor as necessary.
- Replace completely any plastic showing deterioration from the sun.
- Remove all plastic from job site when no longer needed.

Refer to the BMP Maintenance Checklist on pages 53 and 54.

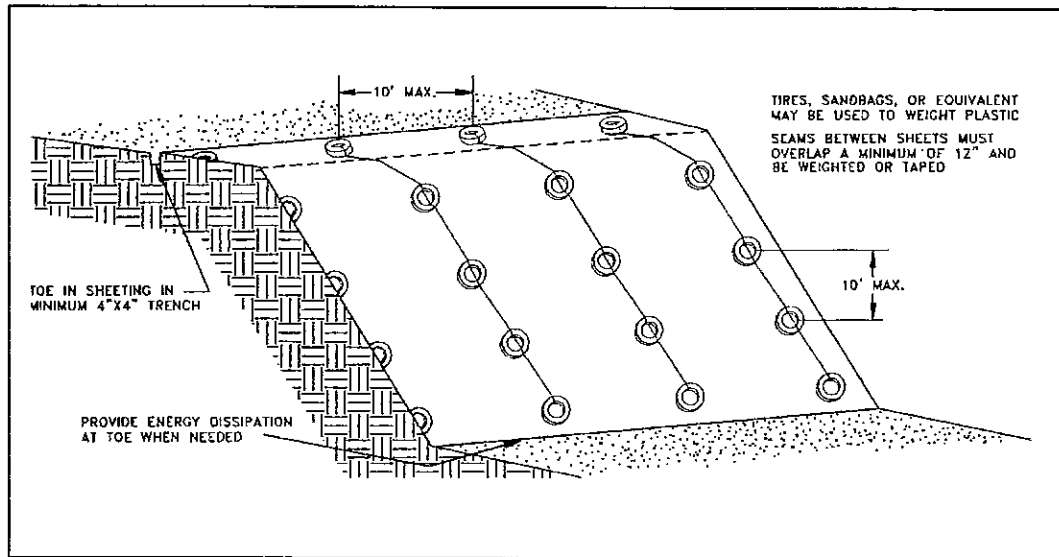


Figure 9. Plastic Sheeting

Symbol:  Code: PC

PLASTIC SHEETING

TEMPORARY SEEDING

DESCRIPTION & PURPOSE: Temporary seeding prevents erosion by stabilizing soils during construction.

- CONSTRUCTION GUIDELINES:**
- Install all surface runoff control measures before seeding.
 - Seed disturbed areas at least one week prior to the wet season to prevent wash off.
 - Roughen slopes steeper than 3H:1V.
 - Use standard temporary erosion control seed mix of:
 - 40% chewings or red fescue, and
 - 40% annual or perennial rye, and
 - 10% redtop or colonial bentgrass, and
 - 10% white dutch clover.
 - Use Table 4 for bioswale and wet or dry mix of formulas.
 - Mulch all seeded steep slopes (greater than 3H:1V).
 - Mulch all seeded areas during the wet season.
 - Use a tackifier when hydroseeding.

- LOCATION:**
- On exposed soils that will remain unworked for more than 30 days, especially during the wet season
 - In vegetation-lined channels
 - In retention/detention ponds as required

ESTIMATED LIFE:

Temporary

DO'S & DON'TS:

- ☞ Mulch to protect seeds from heat, cold, moisture loss, and from being washed away.
- ☞ Use slow release, low-phosphorous fertilizer if within 200 feet of water bodies or wetlands (portions: 3-1-2 N-P-K). (More efficient and fewer negative environmental impacts).

- MAINTENANCE:**
- Reseed any areas failing to establish at least 80 percent coverage within 1 month.
 - Reseed and mulch seeded areas experiencing erosion.
 - Keep seeded areas adequately moist, but not enough to cause runoff or seeds to wash away.


Refer to the BMP Maintenance Checklist on pages 53 and 54.

TABLE 4. TEMPORARY SEEDING MIXES

BIOSWALE SEED MIX	PERCENT
Tall or meadow fescue	75-80
Seaside/Creeping bentgrass	10-15
Redtop bentgrass	5-10

DRY AREA SEED MIX	PERCENT
Dwarf tall fescue	45
Dwarf perennial rye (Barclay)	30
Red fescue	20
Colonial bentgrass	5

WET AREA SEED MIX	PERCENT
Tall or meadow fescue	60-70
Seaside/Creeping bentgrass	10-15
Meadow foxtail	10-15
Alsike clover	1-6
Redtop bentgrass	1-6

Symbol:  Code: SE
TEMPORARY SEEDING