

# Permanent Critical Area Planting

**Definition:** Stabilization of sediment producing areas on a long term basis with herbaceous or woody plants.

**Purpose:** To stabilize eroding areas, reduce sedimentation, improve appearance, and produce wildlife food and cover.

**Where Applicable:** All kinds of disturbed land resulting from urban development (industrial, commercial, residential) as well as highway construction. Does not apply to lawn seeding, see lawn seeding standard.

## Specifications

### Herbaceous Plants

1. **Runoff Control** — Control runoff flowing across the site with temporary and permanent structures as necessary. Refer to structural measures section.
2. **Tillage** — Prepare the seedbed by tillage to a depth of 4-6 inches. Apply lime and fertilizer before the final tillage operation. Cultipack the seedbed.
3. **Liming** — Apply lime according to a soil test to correct the pH to 5.5 to 6.0. If a soil test cannot be analyzed before lime must be applied, apply three tons of ground limestone per acre (150 pounds per 1,000 square feet) and apply the balance recommended by the soil test when the test results are available.

4. **Fertilizer** — Apply fertilizer according to a soil test. If a soil test cannot be analyzed before fertilizer must be applied, apply 500 pounds of 10-20-10 (12 pounds per 1,000 square feet) and apply the balance recommended by the soil test when the test results are available. Apply maintenance fertilizer according to a soil test. If nitrogen applications cannot be split, nitrogen should be applied as urea-formaldehyde, or sulfur-coated urea.

5. **Seeding Method** — Sow seed by hydroseeder, drill, or broadcast and cultipacked. All spreaders should be calibrated before use. For even distribution, the seed should be divided in half and spread in perpendicular directions.

6. **Mulching** — Mulch the seeding immediately after seeding with two tons of straw or weed-free hay per acre, wood fiber, or mulch netting. Anchor the straw or hay with asphalt emulsion, chemical anchoring solution, netting, or a mulch anchoring tool.

7. Species to seed and rate of seeding:

<u>Species<sup>2</sup></u>	<u>Seeding Rate (# per acre)<sup>1</sup></u>	<u>Drainage Adaptation<sup>5</sup></u>	
		<u>Excessively Drained</u>	<u>Poorly Drained</u>
Tall Fescue	60	x	x
Tall Fescue and Red Fescue or Hard Fescue	40 10 10	x	

Drainage Adaptation<sup>5</sup>

<u>Species<sup>2</sup></u>	<u>Seeding Rate (# per acre)<sup>1</sup></u>	<u>Excessively Drained</u>	<u>Poorly Drained</u>
Tall Fescue	20	x	x
Bird's-foot Trefoil <sup>3</sup>	6		
Red Fescue or Hard Fescue	20	x	
Bird's-foot Trefoil <sup>3</sup>	6		
Tall Fescue or Red Fescue or Hard Fescue	20	x	
Sericea Lespedeza <sup>3</sup>	10		
Reed Canarygrass	20	x	x
Reed Canarygrass	15	x	x
Bird's-foot Trefoil <sup>3</sup>	6		
Crown vetch <sup>3</sup> and Tall Fescue or Red Fescue or Hard Fescue or Perennial Ryegrass	20	x	
Flatpea <sup>3</sup> and Tall Fescue or Red Fescue or Hard Fescue or Perennial Ryegrass	40	x	
Perennial Pea <sup>3</sup> and Tall Fescue or Red Fescue or Hard Fescue or Perennial Ryegrass	20	x	
Switchgrass <sup>4</sup>	10	x	x

<u>Species<sup>2</sup></u>	<u>Seeding Rate (# per acre)<sup>1</sup></u>	<u>Excessively Drained</u>	<u>Poorly Drained</u>
Switchgrass <sup>4</sup>	10	x	x
Bird's-foot Trefoil <sup>3</sup> or Sericea Lespedeza <sup>3</sup>	6	x	x
Deertongue <sup>4</sup>	15	x	
Deertongue <sup>4</sup> or Bird's-foot Trefoil <sup>3</sup> or Sericea Lespedeza <sup>3</sup>	15	x	

<sup>1</sup> Use the species listed in temporary critical area planting specifications as nurse crops at half the rate.

<sup>2</sup> Consult the Extension Service for forage and turf cultivar recommendations. Other species recommendations: Crown vetch — 'Penngift'; Flatpea 'Lathco'; Perennial Pea 'Lancer'; Sericea lespedeza 'Appalow'; Deertongue 'Tioga'; Switchgrass 'Blackwell' (erosion control) Shelter (wildlife habitat) 'Cave-in-Rock' (forage).

<sup>3</sup> Inoculate legume seeds, use four times the normal rate when hydroseeding.

<sup>4</sup> Use these mixtures on gentle, less erosive slopes.

<sup>5</sup> "x" indicates acceptable species for condition listed.

8. Date of seeding:

*Cool Season Grasses and Legumes*

Optimum — March 1 to April 15

Extended — November 15 to June 15

August 15 to September 15

*Warm Season Grasses (switchgrass and*

Drainage Adaptation<sup>5</sup> 3.7



*A cultipacker seeder is being used to seed a lawn during August, a desirable seeding month.*



*A hydroseeder will seed large areas. Fertilizer and seed are mixed with water in the hydroseeder tank and broadcast under pressure.*

*deertongue)*

Optimum — March 1 to April 15

Extended — December 1 to April 15

### **Woody Plants**

Woody plants can be used for erosion control on areas where long term stands are desired, mowing and frequent fertilization cannot be done, barriers, windbreaks,

and hedges are needed, and also for shade and general improvement of the appearance of the area. Retaining existing desirable trees is an important consideration during site development. Vines are suitable for short, steep, or odd areas where mowing is not feasible and where permanent low-growing vegetation is desired.



*Trees and shrubs planted around a home (above) can shelter it from winter winds. Trees saved during construction (below) will beautify and shade a home.*

