# Greenville County Standard Notes

# Seeding Dates and Rates of Application

Perform seeding during the periods and at the rates specified in the seeding tables. Do not use temporary cover by seeding or permanent seeding for projects when: •The ground is frozen and/or when the 10-day forecasted low temperature remains below 35 degrees Fahrenheit:

•The ground is excessively wet; or

•The ground is excessively dry (periods of drought) unless watering is specified. During periods of adverse conditions, use temporary cover by mulch.

# Seedbed Preparation

. Ensure that the areas receiving permanent seeding are uniform and conform to the finished arade of the Project.

•Perform minor shaping and evening of uneven and rough areas outside of the graded area in order to provide for more effective erosion control and for ease of subsequent mowing operations.

•Loosen the seedbed (including cut slopes) to a minimum depth of three (3) inches before initiating permanent seeding and temporary seeding.

•An acceptable method of preparing the seedbed on slopes is vertically tracking the seedbed up and seedbed up and down the slope with proper equipment.

•Remove stones larger than two and one-half (2½) inches in any dimension, large dirt clods, roots, or other debris brought to the surface.

•Use compost if good seedbed material is not located on site or results of the soil test show the seedbed is excessively nutrient deficient to the extent of requiring costly

fertilizer additions and or have excessively low pH values (lower than 5.0). •Consider the use of mechanical seed drills to perform permanent seeding on areas

where temporary seeding or temporary cover by mulch was previously utilized.

# Mulch

Required for all permanent seeding, temporary seeding, and temporary cover applications. Do not use Mulch in areas where concentrated flow is expected. Use HECP Mulch for temporary seeding and temporary cover applications when the application area will\_require (ECB) or Turf Reinforcement Matting (TRM) in this situation.

### Wood Chip Mulch

Wood chip mulch is not acceptable for seeding applications. If wood chip mulch is used for temporary cover by mulch, it must be removed prior to performing permanent seedina

## Straw or Hay Mulch with Tackifier

Use material that is certified weed. Do not use on slopes steeper than 4H:1V. Anchor using one of the following tacking agents: •Organic or Chemical Tackifier •Hydraulic Straw Tackifiers

•Emulsified Asphalt

Applying Straw or Hay Mulch

Uniformly apply material at the rate of 2.000 pounds per acre.

#### Compost Mulch

Only use from producer that participates in the USCC STA program. Do not use materials that have been treated with chemical preservatives as a compost mulch. Do not use mixed municipal solid waste compost.

# Hydraulic Erosion Control Products (HECPs)

Use as an allowable mulch for temporary cover by mulch, temporary cover by seeding or permanent cover by seeding applications. Do not use as a channel liner or for areas receiving concentrated flaw.

### Temporary Erosion Control Blankets (ECB) and Turf Reinforcement Matting (TRM)

Consider for permanent seeding application areas with steep slopes or areas where there is a significant erosion problem or potential for erosion. Use in areas where concentrated flow is expected. Do not use for temporary seeding applications when the application areas will require additional grading or modifications prior to permanent seeding.

#### Protection of Structures

Cover any parts of bridges, culverts, guardrails, signs, sidewalks, curb and gutters, catch basins, pipe ends, and other structures as necessary to prevent discoloration before spraying HECPs, organic or chemical tackifiers.

# Slope Interruption Devices

The maximum allowable continuous slope length for straw or hay mulch, hecps, compost and ecb applications is 50 feet. Slope interruption devices (such as sediment tubes) or terms are required for continuous slope length longer than 50 feet.

#### Non Slope Areas

|   | Spring / Summer Non S                                      | when Millet reaches 18-inches in height) |                    |                      |     |     |     |     |     |     |     |     |     |     |     |     |
|---|--|--|--------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|   |  |  | Planting           | Planting Dates       |     |     |     |     |     |     |     |     |     |     |     |     |
|   | Common Name <sup>4</sup>                                   | Botanical Name                           | Rate<br>(Ibs/acre) | Rate<br>(Ibs/1000sf) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| ⊘ | Common Bermudagrass <sup>1</sup><br>(hulled = hull absent) | Cynodon da dylon                         | 50                 | 1.15                 |     |     |     | •   | ٠   | •   | •   |     |     | Γ   |     |     |
| ۲ | White Clover   | Trifolium repens                         | 5                  | 0.11                 |     |     | ٠   | ٠   |     |     |     | ٠   |     |     |     |     |
| • | Browntop Millet  | Pani cum ramosum                         | 10                 | 0.23                 |     |     |     | •   | •   | •   | •   | •   |     |     |     |     |

|   | Fall / Winter Non Slope                                       | Areas (during establ | ishment,           | mow when             | Rye | e rea | ach | es ( | Sto | 8-ir  | che  | es ir | he he | igh | t)  |   |
|---|---|----------------------|--------------------|----------------------|-----|-------|-----|------|-----|-------|------|-------|-------|-----|-----|---|
|   |   |                      | Planting           | Planting             |     |       |     |      | Pla | intin | g Da | tes   |       |     |     |   |
|   | Common Name <sup>4</sup>                                      | Botanical Name       | Rate<br>(Ibs/acre) | Rate<br>(Ibs/1000sf) | Jan | Feb   | Mar | Apr  | May | Jun   | Jul  | Aug   | Sep   | Oct | Nov | å |
| 1 | Tall Fescue (KY-31)   | Festuca arundinacea  | 50                 | 1.15                 | •   | •     | •   | •    |     |       |      |       | •     | ٠   | •   | • |
| 1 | Common Bermudagrass <sup>1</sup><br>(unhulled = hull present) | Cynodon dadylon      | 15                 | 0.34                 | •   | •     | •   |      |     |       |      | ٠     | ٠     | ٠   | •   | • |
| ۲ | White Clover  | Trifolium repens     | 5                  | 0.11                 |     | •     | •   | •    |     |       |      |       | ٠     | •   | •   |   |
| 1 | Crimson Clover <sup>2</sup>                                   | Trfolium incarnatum  | 20                 | 0.46                 | •   | •     | •   | •    |     |       |      |       | •     | •   | •   | • |
| 0 | Rye Grain <sup>3</sup>  | Secale cereale       | 15                 | 0.34                 | •   | •     | •   | •    |     |       |      |       | •     | •   | •   | • |

Common Bermudagrass: Do not use Glant Bermudagrass/W-37). <sup>2</sup> Only use pre-inoculated legames or use an appropriate inoculant with the send at planting. <sup>3</sup> Mow Rye Grain (no lower than 3 inches) once it reaches a height of 6-8 inches to reduce competitiveness will <sup>4</sup> the Common Neme of the seed static in the Tables is not a aliable, use seed with the lated Botanical Name.

## Road Medians & Shoulders

|  |                                      | Planting                       | Planting                         |                |          |           |       | Ph     | intin       | g Da | 695 |         |         |         |             |
|--|--------------------------------------|--------------------------------|----------------------------------|----------------|----------|-----------|-------|--------|-------------|------|-----|---------|---------|---------|-------------|
| Common Name <sup>4</sup>                                   | Botanical Name                       | Rate Rate                      |                                  | Jan            | Feb      | Mar       | Apr   | May    | Jun         | Jul  | Aug | Sep     | Oct     | Nov     | Dec         |
| Common Bermudagrass <sup>1</sup><br>(hulled = hull absent) | Cynodon dadylon                      | 25                             | 0.57                             |                |          |           | •     | •      | •           | •    |     |         |         |         |             |
| Browntop Millet  | Pani cum ramosum                     | 10                             | 0.23                             |                |          |           | •     | •      | •           | •    | •   |         |         |         |             |
| Fall / Winter Road Med                                     | lian & Shoulders (duri               | ng establi                     | shment, mo                       | Planting Dates |          |           |       |        |             |      |     |         |         |         |             |
|  |                                      |                                |                                  |                |          |           |       |        | -           | - 0- | *** |         |         |         |             |
| Common Name <sup>4</sup>                                   | Botanical Name                       | Planting<br>Rate<br>(Ibs/acre) | Planting<br>Rate<br>(Ibs/1000sf) | lan            | fe<br>Le | Mar       | Apr   |        | intin<br>un | g Da | _   | Sep     | Oct     | Vor     | ĕ           |
| Common Name <sup>4</sup>                                   | Botanical Name                       | Rate                           | Rate                             | Jan            | Feb      | Mar       | Apr   | Pa Arm | <u> </u>    | Č    | _   | Sep     | Oct     | Nov     | å           |
| Common Name <sup>4</sup><br>Tall Fescue (KY-31)            | Botanical Name<br>Festuca aruninacea | Rate                           | Rate                             | • Jan          | • Feb    | • Mar     | • Apr |        | <u> </u>    | Č    | _   | • Sep   | • Oct   | • Nov   | •<br>Dec    |
|  |                                      | Rate<br>(Ibs/acre)             | Rate<br>(Ibs/1000sf)             | net • •        | • Feb    | • • Mar   | • Apr |        | <u> </u>    | Č    | _   | • • Sep | • • Oct | • • Nov | •           |
| Tall Fescue (KY-31)  | Festuca aruninacea                   | Rate<br>(Ibs/acre)<br>50       | Rate<br>(Ibs/1000sf)<br>1.15     | • • Jan        | • • Feb  | • • • Mar | Apr   |        | <u> </u>    | Č    | _   | • • Sep | • • 0ct | • • Nov | •<br>•<br>• |

<sup>1</sup> Common Bermudagrass: Do not use Giant Bermudagrass(NK-37).

Chly use pre-incoulated legumes or use an appropriate incoulant with the seed at planting. Mow Rye Grain (no lower than 3 inches) once it reaches a height of 6.8 inches to reduce competitivenes If the Common Manne of the seed Istick in the Tables is not available, use seed with the Isted Botanical N competitiveness with permanent vegetation

### Slopes & Buffers

Spring / Summer Slopes (during establishment, mow when Millet reaches 18-inches in height. After establishment, only mow at end of winter season)

|        | Arter establishment, on                                    |                    | Planting           | Planting             | Planting Dates |     |     |     |     |     |     |     |     |     |     |     |  |
|--------|--|--------------------|--------------------|----------------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
|        | Common Name <sup>4</sup>                                   | Botanical Name     | Rate<br>(Ibs/acre) | Rate<br>(Ibs/1000sf) | uau            | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |  |
|        | Tall Fescue (KY-31)  | Festuca aruninacea | 50                 | 1.15                 |                |     | •   | •   |     |     |     |     |     |     |     |     |  |
| Pick 1 | Bahiagrass   | Paspalum notatum   | 30                 | 0.69                 |                |     | •   | •   | •   | •   | •   |     |     |     |     |     |  |
|        | Common Bermudagrass <sup>1</sup><br>(hulled = hull absent) | Cynodon dadylon    | 15                 | 0.34                 |                |     |     | ٠   | ٠   | •   | •   |     |     |     |     |     |  |
| 0      | White Clover   | Trifolium repens   | 5                  | 0.11                 |                |     | •   | •   |     |     |     | •   |     |     |     |     |  |
| ۲      | Weeping Lovegrass  | Erograstis curvula | 5                  | 0.11                 |                |     | •   | •   | •   | •   | •   | •   |     |     |     |     |  |
| 0      | Hairy Vetch <sup>2</sup>                                   | Vicia villosa      | 10                 | 0.23                 |                |     |     | •   |     |     |     |     |     |     |     |     |  |
| 0      | Browntop Millet  | Panicum ramosum    | 10                 | 0.23                 |                |     |     | •   | •   | •   | •   | •   |     |     |     |     |  |

Fall / Winter Slopes (during establishment, mow when Rye reaches 6 to 8-inches in height

|      |   |                     | Planting           |                                  |     |     | Pk  | intin | g Da | ato s |    |     |     |     |     |   |
|------|---|---------------------|--------------------|----------------------------------|-----|-----|-----|-------|------|-------|----|-----|-----|-----|-----|---|
|      | Common Name <sup>4</sup>                                      | Botanical Name      | Rate<br>(Ibs/acre) | Planting<br>Rate<br>(Ibs/1000sf) | Jan | Feb | Mar | Apr   | May  | ۳     | Πŋ | Bny | Sep | oct | Nov | ă |
| V    | Tall Fescue (KY-31)   | Festuca aruninacea  | 50                 | 1.15                             | •   | •   | •   |       |      |       |    |     | •   | •   | •   | • |
| V    | Common Bermudagrass <sup>1</sup><br>(unhulled = hull present) | Cynodon dadylon     | 15                 | 0.34                             | •   | •   | •   |       |      |       |    |     | •   | •   | •   | • |
| V    | White Clover <sup>2</sup>                                     | Trifolium repens    | 5                  | 0.11                             |     | •   | •   |       |      |       |    |     | •   | •   | •   |   |
| V    | Weeping Lovegrass   | Erograstis curvula  | 5                  | 0.11                             | •   | •   | •   |       |      |       |    |     | ٠   | •   | •   | • |
| k 1  | Crimson Clover <sup>2</sup>                                   | Trfolium incarnatum | 20                 | 0.46                             | •   | •   | •   |       |      |       |    |     | •   | •   | •   | • |
| Pick | Hairy Vetch <sup>2</sup>                                      | Vicia villosa       | 10                 | 0.23                             | •   | •   | •   |       |      |       |    |     | •   | •   | •   | • |
| V    | Rye Grain <sup>3</sup>  | Secale cereale      | 15                 | 0.34                             | •   | •   | •   |       |      |       |    |     | ٠   | •   | •   | • |

Common Remudarcass: Do not use Giant Remudarcass/NK-37)

Common eleminativas. Los nos des cara teamorales aceversativas de la common de la common de la commonaria este Toda y use pre-inconstatel legumento una a magorpriste la constante with the seed at planting. Mow Rye Grain (no lover than 3 inches) constitucadhes a height of 68 inches to reduce competitiveness with permanent vegetation if the Common Name of the seed states in the Tables is not available, use seed with the lated Bolanical Name.

### Inspection

Ensure that all seed, Sod, fast acting lime, biological growth stimulants, agricultural granular lime, granular fertilizer, straw and hay mulch, HECPs, compost mulch, and ECBs are applied as Specified. The Design Engineer or Landscape Architect, or member of the Design Engineer or Landscape Architect staff must document on-site that these materials are applied correctly by completing and signing proper forms.

## Maintenance

Perform all maintenance necessary to keep Stabilization areas in a satisfactory condition until the work is finally accepted. This includes mowing, repairing areas of erosion and washes, and applying additional seed, fertilizer, and mulch to areas where a satisfactory stand of grouss has not been achieved.

## Mowing

Mow road shoulders and medians when vegetation reaches a height of approximately 18 to 24 inches. Do not perform excessive mowing of Slopes resulting in ruts, furrows or grooves. Do not perform excessive mowing of Slopes that inhibits the establishment of the slope vegetation.Do not perform mowing when soil and weather conditions are such that rutting or other damage to the Project may occur.

Ensure mowing results in a uniform vegetation height of 4 to 6 inches, unless otherwise directed. When utilizing a nurse crop for permanent seeding, mow Millet (no lower than 3 inches) once it reaches a height of 18 inches to reduce competitiveness with the permanent vegetation. Maw Wheat and Rye Grain (no lower than 3 inches) once they reach a height of 6–8 inches to reduce competitiveness with permanent vegetation.

| MULCH | APPLICATION TABLE |
|-------|-------------------|
|-------|-------------------|

| Mulch                       | Applicable<br>Slopes (H:V) <sup>1</sup> | Minimum Application Rate<br>(Ibs/acre -dry) <sup>2</sup> |
|-----------------------------|---|--|
| Wood Chips                  | ≤ 4:1                                   | 500 CY/acre  |
| Straw or Hay with Tackifier | ≤ 4:1                                   | 2,000  |
| HECP Type 1                 | ≤ 4:1                                   | 2,000  |
| HECP Type 2                 | 4:1< S ≤ 3:1                            | 2,500  |
| HECP Type 3                 | 3:1< S ≤ 2:1                            | 3,000  |
| HECP Type 4                 | 2:1< S ≤ 1:1                            | 3,500  |
|                             | >1:1                                    | 4,000 (temp cover only)3                                 |
| Compost Mulch               | ≤ 2:1                                   | 200 CY/acre  |

1 The maximum allowable continuous slope length for all mulch applications is 50 feet. Slope interruption devices or TRMs are required for continuous slope length longer than 50

2 Strictly comply with the manufacturer's mixing recommendations for the actual slope steepness and the actual continuous slope length of the application.

3 HECP Type 4 may be used for permanent cover applications on slopes 1:1 or greater at a minimum rate of 4,500 pounds per acre.

### ECB and TRM APPLICATION TABLE

| ECB/TRM Type <sup>1</sup>   | Slope (H:V) <sup>2</sup> | Minimum Slope Length (ft) |  |  |  |  |  |  |
|-----------------------------|--------------------------|---------------------------|--|--|--|--|--|--|
| Temporary ECB or Type 1 TRM | ≤ 2:1                    | 5                         |  |  |  |  |  |  |
| Type 2 TRM                  | ≤ 1.5:1                  | 5                         |  |  |  |  |  |  |
| Type 3 TRM                  | ≤ 1:1                    | 5                         |  |  |  |  |  |  |

Strictly comply with the manufacturer's specifications

The maximum allowable continuous slope length for ECBs is 50 feet. Slope interruption devices or TRMs are required for continuous slope length longer than 50 feet.

**Greenville County** 3 Storm Water Management Greenville Countu Seeding / Stabilization STANDARD DRAWING NO. FC = 0.3BJanuary 2018 APPROVED BY: GREENVILLE COUNTY STORM WATER MANAGEMENT DATE