# State of North Carolina
## Division of Highways
### Plan for Proposed Highway Erosion Control

**Wake County**

**Location:** Bridge No. 125 over Smith's Creek on SR 2465 (Burlington Mills Rd).

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**Erosion and Sediment Control Measures**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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<tr>
<td>1630.01</td>
<td>Temporary Silt Basin</td>
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<td>1630.02</td>
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<td>1630.03</td>
<td>Temporary Diversion</td>
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<td>1630.04</td>
<td>Temporary Berms and Slope Drains</td>
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<td>1630.05</td>
<td>Rock Pipe Inlet Sediment Trap Type A</td>
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<td>Rock Inlet Sediment Trap Type C</td>
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<td>1630.08</td>
<td>Special Stilling Basin</td>
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<td>Streambank Reforestation</td>
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**Roadside Environmental Unit**

Prepared in the Office of, ROADSIDE ENVIRONMENTAL UNIT 1 South Wilkinson Dr. Raleigh, NC 27607

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2006 Standard Specifications

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Prepared in the Office of, ROADSIDE ENVIRONMENTAL UNIT 1 South Wilkinson Dr. Raleigh, NC 27607

2006 Standard Specifications
SKIMMER BASIN WITH BAFFLES DETAIL

- Steel Posts (quantity var)
- Earth Dike
- Filter Fabric
- Skimmer (size var)
- Coir Fiber Matting
- Temporary Silt Ditch / Temporary Diversion
- Emergency Spillway
- Unclassified Earth Material
- Natural Ground Level
- Coir Fiber Mat
- Anchor Options

Dimensions:
- 2" x 2" (nominal) wooden stake
- #10 steel reinforcement bar
- 1" (nominal) staple
- 3/4L
- 1/4L
- 1/2L
- 3'
- 2'
- 1.5' (max)
- 1' (min)
- 9' (min)
- 6' (min)
- 3' (min)
- 1' (min)
- 1' (min)
- 12-24"
- 1-2"
- 4" (nominal) staple

Material:
- Coir Fiber Matting
- Steel Posts
- Coir Fiber Baffle
- Temporary Silt Ditch / Temporary Diversion
- Coir Fiber Baffle
- Steel Posts
COIR FIBER BAFFLE DETAIL

Baffle material shall be secured to the bottom and sides of basin using 12" landscape staples.

Drape baffle material over wire strand and secure with plastic ties at posts and on wire every 12".

8 gauge min wire strand shall be secured to post to support baffle material.

Secure bottom of baffle to ground with 12" staples at 12" maximum spacing.

Variable depth

Install T-post to anchor baffle to side of basin and secure to vertical post.

NOTE: Install three (3) coir fiber baffles in silt basins and sediment dams at drainage outlets with a spacing of 1/4 the basin length. Two (2) coir fiber baffles can be installed in silt basins less than 20 ft. in length with a spacing of 1/3 the basin length.
TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.

1' MIN.  12" MIN.

ELEVATION VIEW
### SOIL STABILIZATION SUMMARY SHEET

#### MATTING FOR EROSION CONTROL

<table>
<thead>
<tr>
<th>CONST SHEET NO.</th>
<th>LINE</th>
<th>FROM STATION</th>
<th>TO STATION</th>
<th>SIDE</th>
<th>ESTIMATE (SY)</th>
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</table>

**SUBTOTAL:** 1870

**MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER:** 1545

**TOTAL:** 3415

**SAY:** 3415

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#### PERMANENT SOIL REINFORCEMENT MAT

<table>
<thead>
<tr>
<th>CONST SHEET NO.</th>
<th>LINE</th>
<th>FROM STATION</th>
<th>TO STATION</th>
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**SUBTOTAL:** 455

**ADDITIONAL PSRM TO BE INSTALLED:** 655

**TOTAL:** 1110

**SAY:** 1110
**PLANTING DETAILS**

**SEEDLING / LINER BAREROOT PLANTING DETAIL**

**HEALING IN**

1. Locate a healing-in site in a shady, well-protected area.
2. Excavate a flat-bottom trench 12 inches deep and provide drainage.
3. Place a 2-inch layer of well-rotted sawdust over the roots, maintaining a sloping angle.
4. Place a 2-inch layer of well-rotted sawdust at a sloping angle at one end of the trench.
5. Place a single layer of plants against the sloping end so that the root collar is at ground level.
6. Repeat layers of plants and sawdust as necessary and water thoroughly.

**Dibble PLANTING METHOD USING THE KBC PLANTING BAR**

1. Insert planting bar 2 inches toward planter from seedling.
2. Remove planting bar and place seedling at correct depth.
3. Pull handle of bar toward planter, firming soil at bottom.
4. Pull handle forward, firming soil at top.

**PLANTING NOTES:**

- During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.
- All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

**REFORESTATION**

Tree reforestation shall be planted 6 ft. to 10 ft. on center, random spacing, averaging 8 ft. on center, approximately 680 plants per acre.

**REFORESTATION DETAIL SHEET**

- **LACTUCA TYPHIFORMIS / TULIP Poplar**
  - 2 in - 18 in BR
  - 40% LIRIODENDRON Tulipifera

- **QUERCUS FALCATA / SOUTHERN RED OAK**
  - 2 in - 18 in BR
  - 30% QUERCUS FALCATA

- **QUERCUS ALBA / WHITE OAK**
  - 2 in - 18 in BR
  - 30% QUERCUS ALBA