



To:  <b>SUPERSEDED</b> BY <i>EB 99-066</i> EFFECTIVE <i>11/4/99</i>		New York State Department of Transportation <b>ENGINEERING          INSTRUCTION</b>	<b>EI</b>  <b>97-015</b>
<b>Title: STANDARD SPECIFICATION SECTION 713-11 WOOD FIBER MULCH, 713-12 MULCH ANCHORAGE &amp; 610 TURF and WILDFLOWER ESTABLISHMENT.</b>			
<b>Distribution:</b> <input type="checkbox"/> Manufacturers (18) <input type="checkbox"/> Surveyors (33) <input checked="" type="checkbox"/> Main Office (30) <input checked="" type="checkbox"/> Consultants (34) <input type="checkbox"/> Local Govt. (31) <input type="checkbox"/> Contractors (39) <input checked="" type="checkbox"/> Regions/Agencies (32) <input type="checkbox"/> ( )		<b>Approved:</b>  P.J. Clark, Deputy Chief Engineer, Design <div style="text-align: right;"> <i>06/16/97</i>          Date       </div>	

This Engineering Instruction supersedes EI 96-013.

**PURPOSE.** This Engineering Instruction provides revised Sections 713-11 WOOD FIBER MULCH and 713-12 MULCH ANCHORAGE of the Standard Specifications and continues the use of revised 610 Turf and Wildflower Establishment.

**EFFECTIVE DATE.** Revised Sections 713-11 WOOD FIBER MULCH, 713-12 MULCH ANCHORAGE and 610 TURF and WILDFLOWER ESTABLISHMENT shall be effective for all Department contracts that include turf establishment or erosion control and are let on or after December 11, 1997.

**BACKGROUND.** The US Environmental Protection Agency has issued regulations that require all federal agencies and others which use Federal-aid to revise their specifications for products that are, or can be manufactured from recovered materials. The revised specifications must require the use of recovered material to the maximum extent possible without jeopardizing the intended end-use of the item. Hydraulic mulch has been designated by the EPA as one of the products that is covered by the regulations.

This revision of Section 713-11 WOOD FIBER MULCH and 713-12 MULCH ANCHORAGE is required because the existing specification does not comply with current EPA regulations that require use of recovered materials in these kinds of products.

The revision of Section 713-12 MULCH ANCHORAGE also includes a technical corrections of the basis of acceptance of mulch anchorage Type B.

EI 96-013 [superseded by this Instruction] revised Section 610 TURF and WILDFLOWER ESTABLISHMENT to indicate mulch anchorage shall be 713-12 MULCH ANCHORAGE Type A unless otherwise specified in the contract documents. That revision is continued under this Instruction.

**TRANSMITTED SPECIFICATIONS.**

1. MULCH ANCHORAGE This replaces 1990 and 1995 Standard Specifications §713-12.

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2. MULCH FIBER MULCH This replaces 1990 and 1995 Standard Specifications §713-11.

3. TURF and WILDFLOWER ESTABLISHMENT This replaces 1990 and 1995 Standard Specifications §610.

The attached shelf notes will be incorporated into the next update of the Standard specifications. Until that time, they will be inserts into contract proposals beginning with the effective date of this instruction for projects containing §209.xx and §610.xx pay items.

There will be no additional costs associated with the implementation of this EI.

**CONTACT PERSON.** Gary Glath in the Landscape Architecture Bureau at (518) 457-4460.

## LANDSCAPE DEVELOPMENT MATERIALS

Make the following changes to the Standard Specifications of January 2, 1990.

Page 7-110.

Replace §713-11 WOOD FIBER in its entirety with the following:

### 713-11 WOOD FIBER MULCH

**SCOPE.** This specification covers the material requirements for wood fiber for use as a mulch in conjunction with turf establishment or erosion control.

**MATERIAL REQUIREMENTS.** Wood fiber shall be a first generation product manufactured directly from 100 percent manufactured wood which has been recovered or diverted from solid waste.

Wood fiber shall be manufactured from unadulterated wood that is not contaminated with paint, chemicals, shingles, plastic or other foreign materials. Wood fiber mulch shall not be manufactured from or include paper.

Wood fibers mulch shall be manufactured so that the wood fibers will remain uniformly suspended in water under agitation and will blend with seeds, fertilizer and other additives to form a homogeneous slurry. It shall have the characteristics which, upon hydraulic application, shall form a blotter-like ground coating with moisture absorption and percolation properties and the ability to cover and hold seeds in contact with the soil.

Wood fiber mulch shall contain no growth or germination inhibiting factors, and shall contain a non-permanent green dye. Wood fiber mulch shall be supplied in the manufacturer's standard containers with the name of the material, net weight of contents, the manufacturer's name and the air dry weight of fiber (equivalent to 10% moisture) appearing on each container.

**BASIS OF ACCEPTANCE.** Manufacturer's certification indicating compliance with these specifications and any applicable regulatory requirements pertaining to solid waste management.

## LANDSCAPE DEVELOPMENT MATERIALS

Make the following changes to the Standard Specifications of January 2, 1995.

Page 7-142

Replace § 713-11 WOOD FIBER in its entirety with the following:

### 713-11 WOOD FIBER MULCH

**SCOPE.** This specification covers the material requirements for wood fiber for use as a mulch in conjunction with turf establishment or erosion control.

**MATERIAL REQUIREMENTS.** Wood fiber shall be a first generation product manufactured directly from 100 percent wood which has been recovered or diverted from solid waste.

Wood fiber shall be manufactured from unadulterated wood that is not contaminated with paint, chemicals, shingles, plastic or other foreign materials. Wood fiber mulch shall not be manufactured from or include paper.

Wood fiber mulch shall be manufactured so that the wood fibers will remain uniformly suspended in water under agitation and will blend with seeds, fertilizer and other additives to form a homogeneous slurry. It shall have the characteristics which, upon hydraulic application, shall form a blotter-like ground coating with moisture absorption and percolation properties and the ability to cover and hold seeds in contact with the soil.

Wood fiber mulch shall contain no growth or germination inhibiting factors, and shall contain a non-permanent green dye. Wood fiber mulch shall be supplied in the manufacturer's standard containers, with the name of the material, net weight of contents, the manufacturer's name and the air dry weight of fiber (equivalent to 10% moisture) appearing on each container.

**BASIS OF ACCEPTANCE.** Manufacturer's product label and certification indicating compliance with these specifications and any applicable regulatory requirements pertaining to solid waste management.

## LANDSCAPE DEVELOPMENT MATERIALS

Make the following changes to the Standard Specifications of January 2, 1990.

Page 7-111.

Replaces § 713-12 MULCH ANCHORAGE in its entirety with following:

### 713-12 MULCH ANCHORAGE

**SCOPE.** This specification covers the material requirements for mulch anchorage.

**MATERIAL REQUIREMENTS.** Mulch anchorage shall be Type A, unless otherwise specified in the contract documents.

Type A: Shall be approved non-asphaltic commercially available products that are specifically formulated for the purpose of anchoring or tacking hay or straw mulches. Mulch anchorage shall include a non-permanent green dye. The paper content of paper-based hydraulic mulch anchorage shall be 100 percent post consumer recovered paper that has been diverted or recovered from solid waste. At least 98 percent of such paper shall be recovered newsprint. The materials shall be mixed and applied in accordance with the manufacturer's instructions.

Type B: Shall be either Type A or asphalt emulsion meeting the requirements of either 702-3201 Asphalt Emulsion or 702-90 Asphalt Emulsion Tack Coat. When asphalt emulsion is used it shall be uniformly applied at the rate of .005 gals/yd<sup>2</sup>, unless otherwise specified in contract documents.

**Packaging.** Mulch Anchorage Type A shall be furnished in the manufacturer's standard containers with the name of the material, net weight of contents, the manufacturer's name and the dry weight of fiber (equivalent to 10% moisture) appearing on each container. The instructions for mixing and application shall also appear on each container.

Asphalt emulsion used for Mulch Anchorage Type B has no packaging requirements. The Engineer shall reject any asphalt material that is not homogenous or has separated. Asphalt separation caused by freezing is unacceptable.

The Engineer shall reject any materials that have become wet, caked, frozen, separated or otherwise unfit for use.

**BASIS OF ACCEPTANCE.** The basis of acceptance for Mulch Anchorage Type A shall be the manufacturer's product label or product literature that indicated compliance with this specification.

The basis of acceptance for asphalt emulsion used as Mulch Anchorage Type B shall be as specified under Section 702 Bituminous Materials.

## LANDSCAPE DEVELOPMENT MATERIALS

Make the following changes to the Standard Specifications of January 2, 1995.

Page 7-143

Replaces §713-12 MULCH ANCHORAGE in its entirety with the following:

### 713-12 MULCH ANCHORAGE

**SCOPE.** This specification covers the material requirements for mulch anchorage.

**MATERIAL REQUIREMENTS.** Mulch anchorage shall be Type A, unless otherwise specified in the contract documents.

Type A: Shall be approved non-asphaltic commercially available products that are specifically formulated for the purpose of anchoring or tacking hay or straw mulch. Mulch anchorage shall include a non-permanent green dye. The paper content of paper-based hydraulic mulch anchorage shall be 100 percent post consumer recovered from solid waste. At least 98 percent of such paper shall be recovered newsprint. The materials shall be mixed and applied in accordance with the manufacturer's instructions.

Type B: Shall be either Type A or asphalt emulsion meeting the requirements of either 702-3201 Asphalt Emulsion or 702-90 Asphalt Emulsion Tack Coat. When asphalt emulsion is used it shall be uniformly applied at the rate of 0.02L/m<sup>2</sup>, unless otherwise specified in contract documents.

**Packaging.** Mulch Anchorage Type A shall be furnished in the manufacturer's standard containers with the name of the material, net weight of contents, the manufacturer's name and the dry weight of fiber (equivalent to 10% moisture) appearing on each container. The instructions for mixing and application shall also appear on each container.

Asphalt emulsion used for Mulch Anchorage Type B has no packaging requirements. The Engineer shall reject any asphalt material that is not homogenous or has separated. Asphalt separation caused by freezing unacceptable.

The Engineer shall reject any materials that have become wet, caked, frozen, separated or otherwise unfit for use.

**BASIS OF ACCEPTANCE.** The basis of acceptance for Mulch Anchorage Type A shall be the manufacturer's product label or product literature that indicates compliance with this specification.

The basis of acceptance for asphalt emulsion used as Mulch Anchorage Type B shall be as specified under Section 702 Bituminous Materials.

## **TURF AND WILDFLOWER ESTABLISHMENT**

Make the following changes to the Standard Specifications of January 2, 1990.

**Page 6-38**

Under §610-2.02 delete the references to "Mulch Anchorage 713-12" in the third and tenth lines to replace them with "Mulch Anchorage 713-12, Type A".

**Page 6-39**

Under §610-2.03 delete the reference to "Mulch anchorage 713-12" in the third line to and replace it with "Mulch Anchorage 713-12, Type A".

## **TURF AND WILDFLOWER ESTABLISHMENT**

**Make the following changes to the Standard Specifications of January 2, 1995:**

**Page 6-55**

**Under §610-2.02 delete the references to "Mulch Anchorage 713-12" in the third and tenth lines to replace them with "Mulch Anchorage 713-12, Type A".**

**Page 6-56**

**Under §610-2.03 delete the reference to "Mulch Anchorage 713-12" in the third line to and replace it with "Mulch Anchorage 713-12, Type A".**