


<b>TO:</b>  <b>SUPERSEDED BY EI 93-007</b> <b>EFFECTIVE 11/18/93</b>	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
<b>Distribution:</b> <p style="text-align: center;">30 Main Office    32 Regions    34 Special</p>	<b>Code:</b> <u>92-013</u> <b>Date:</b> <u>3/16/92</u> <b>Supersedes:</b>
<b>APPROVED:</b>  <hr/> David H. Fasser, Director, Landscape Architecture Bureau	

**PURPOSE:**

This Engineering Instruction transmits revisions to Sections 612, 614, 713-03, 713-05, 713-08, 713-09, 713-10, 713-11, 713-13, 713-15, 713-16, 713-17, and 713-20 of the Standard Specifications of January 2, 1990.

Section 612 SODDING AND PLACING JUTE MESH OR OTHER APPROVED EROSION CONTROL MATERIALS has been revised to eliminate the material requirements for stakes and wire staples. It will now be the contractor's responsibility to choose materials and methods of anchorage that assure successful installation and an acceptable stand of sod or seeded turf.

713-03 FERTILIZER has been revised to update the specification to be consistent with materials that are currently available.

713-05 WOOD CHIPS has been revised to include unadulterated construction and demolition waste wood chips that are consistent with NYS DEC regulations.

713-08 MATERIALS FOR PROTECTION OF PLANTS has been revised to correct several omissions in the 1990 edition of the Standard Specifications.

713-09 STAKES FOR PEGGING SOD, JUTE MESH OR OTHER APPROVED EROSION CONTROL MATERIALS AND 713-10 WIRE STAPLES FOR SOD AND APPROVED EROSION CONTROL MATERIALS have been deleted.

713-11 WOOD FIBER has been revised to require "approved first generation" wood fiber.

713-13 PESTICIDES has been revised to delete a redundant sentence.

713-15 ORGANIC MATERIAL has been added to combine and replace 713-16, 713-17 and

713-20 and to include the option to use commercially or municipally produced recycled organic materials.

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Manual	Engineering Instruction	Code	7.27-1-612; 614; 713	Date	3/16/92	Page	2
Subject: REVISIONS TO SECTIONS 612, 614 and 713 OF THE STANDARD SPECIFICATIONS OF JANUARY 2, 1990							

713-16 HUMUS OR PEAT, 713-17 ROTTED MANURE and 713-20 PEAT MOSS have been deleted and are now included in 713-15 ORGANIC MATERIAL.

**BACKGROUND INFORMATION:**

The Sodding specifications and several Landscape Development Materials specifications have been revised to continue our trend toward use of performance-oriented specifications. The revisions also update the specifications to provide for the use of unadulterated construction and demolition waste wood chips where appropriate, and commercially or municipally produced recycled organic materials as an amendment to topsoil.

The addition of recyclable materials will further promote recycling, reuse and conservation within an industry already concerned with the environment.

It is expected that the revision of Sections 612, 713-05, 713-09, 713-16, 713-17 and 713-20 may result in lower costs and bid prices. The remaining revisions are technical updates or editorial corrections that will have no effect on costs.

**EFFECTIVE DATE:**

This Engineering Instruction will become effective with the letting of June 18, 1992.

**ADDITIONAL INFORMATION:**

Questions regarding this Engineering Instruction may be directed to C. Nagel or R. Ambuske of the Landscape Architecture Bureau at (518) 457-4460.

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

Page 6-45

Under 612. - 2.01 Sodding, Fertilizer: delete "As specified in the ... Type 1 or as approved." and replace with

"As specified in the contract document. Where not specified, fertilizer shall be 713-03, Type No. 1, or as approved."

and delete

Stakes for Pegging Sod, Jute Mesh or Other Approved Erosion Control Materials 713-09

add after Sod 713-14

"Other materials used for sodding shall be as approved by the Engineer."

Under 612-2.02 Furnishing and Placing Jute Mesh or Other Approved Erosion Control Materials, delete

"Stakes for Pegging Sod, Jute Mesh or Other Approved Erosion Control Materials 713-09" and

"Wire Staples for Sod and Approved Erosion Control Materials 713-10"

Page 6-46

Under F. Pegging, delete "Pegging. Sod shall be held ... and be driven flush." and replace with

"Anchoring. Sod shall be firmly anchored in all drainageways, on slopes 1 on 2 or steeper and wherever else specified or directed. Sod shall be anchored immediately after tamping. All anchors shall be driven flush to the ground."

Page 6-47

Under 612-3.02 B. Ground Preparation and Installation -- in the first paragraph on page 6-47, delete the following sentences:

"Jute mesh shall be held tightly to the soil by staples or wooden pegs driven firmly into the ground. Staples or wooden pegs shall be spaced not more than 3 feet apart along the sides of the jute mesh and at the centerline of drainageways, and not more than 1 foot apart at roll ends, check slots and other critical areas as determined by the Engineer. Other approved erosion control materials shall be placed, stapled or pegged as per manufacturer's specifications. Areas of jute mesh and other erosion control materials shall be seeded in accordance with Section 610 Turf Establishment and/or as further specified in the contract documents, except that mulching shall be as directed or approved."

**Replace with:**

"Jute mesh shall be held tightly to the soil by anchors driven firmly into the ground. Jute mesh anchors shall be spaced not more than 3 feet apart on the sides and along the centerline of all drainageways. Jute mesh roll ends, check slots and other critical areas as determined by the Engineer, shall have anchors spaced at one foot intervals.

Other approved erosion control materials shall be firmly anchored as stated in the manufacturer's instructions.

Areas of jute mesh and other erosion control materials shall be seeded in accordance with Section 610 TURF ESTABLISHMENT and/or as further specified in the contract documents, except that mulching shall be as directed or approved."

Page 6-49

Under 614-3.02 SELECTIVE THINNING, in the first paragraph, delete the following sentence:

"All live stumps shall be sprayed with chemicals to completely encircle and saturate all above ground parts of each stump or stub to the point of runoff."

Page 6-50

Under 614-5 BASIS OF PAYMENT delete under

Item No.

614.01nnnn,  
614.02nnnn, and  
614.03 nnn

and replace with

614.01xx,  
614.02, and  
614.03xx

also delete

Note: nnnn denotes serialized pay item. See §101-53,

replace with:

Note: xx denotes serialized pay item. See §101-53.

Under 713-03 FERTILIZER, Material Requirements, Type No. 1 and Type No. 2, change "(approximate formulation)" to "(approximate analysis)."

Delete "Type No. 11. A controlled release ... unless otherwise approved." and replace with

"Type No. 11. A fertilizer in standardized packets designed to control the release of their contents over a specified period of time.

The minimum guaranteed analysis shall be 16-8-8."

Under 713-05 WOOD CHIPS -- delete this section in its entirety and replace it with

"SCOPE. This specification covers the material requirements for wood chips used as mulch, landscape bedding or erosion control.

MATERIAL REQUIREMENT. Wood chips used for mulch, landscape bedding or erosion control may be either of the following, unless otherwise specified in the contract documents. Wood chips shall not exceed 3 inches in the greatest dimension.

Type A: shall be derived from green hardwood or softwood. The chips shall be free from leaves, young growth, unchipped branches, twigs 2" or less in diameter, wood shavings, sawdust or foreign materials such as stones, nails, plastic, etc.

Type B: shall be either Type A green wood chips or wood chips derived from unadulterated construction/demolition waste wood. Wood chips derived from construction/demolition waste wood shall not be contaminated with paint, chemicals, shingles, glass, nails, etc.

#### BASIS OF ACCEPTANCE

Acceptance shall be based on inspection, upon delivery, by the Engineer for compliance with the materials requirements and applicable certification of compliance with 6 NYCRR Part 360."

Under 713-08 MATERIALS FOR PROTECTION OF PLANTS

-- add "STAKES" after the paragraph "Rodent Guards" and above the subparagraph "1. Above Ground Support."

-- eliminate the indentations for "Deadmen and Guy stakes", "Wire", "Bracing", "Materials", "Jute Burlap", "Hose", "Twine", and "Paper."

-- after "Anti-Desiccants ... to permit transpiration." add the following:

BASIS OF ACCEPTANCE. Acceptance shall be based on inspection by the Engineer for compliance with these materials requirements."

Page 7-110

Delete in their entireties 713-09 STAKES FOR PEGGING SOD, JUTE MESH OR OTHER APPROVED EROSION CONTROL MATERIALS and 713-10 WIRE STAPLES FOR SOD AND APPROVED EROSION CONTROL MATERIALS.

Page 7-111

Under 713-11 WOOD FIBER, MATERIAL REQUIREMENTS, add the following after "Wood Fiber" in the first sentence:

"shall be an approved first generation wood derivative and"

Under 713-13 PESTICIDES, MATERIAL REQUIREMENTS, delete the second paragraph "Pesticides shall be ... or supplemental labels."

Page 7-112

Under 713-15 (vacant) delete "(vacant)" and add the following:

#### "713-15 ORGANIC MATERIAL

SCOPE: This specification covers the material requirements for organic material used in conjunction with amending topsoil.

#### MATERIAL REQUIREMENTS

##### ° HUMUS OR PEAT

The material shall be natural humus or peat from freshwater sources and can contain sedge peat, sphagnum peat or reed peat. The material shall be free from hard lumps, roots, stones and other objectionable materials. There shall be no admixture of refuse or material toxic to plant growth. It shall be in a shredded or granular form able to pass through a 1/2" sieve. According to the methods of testing of A.O.A.C. in effect on the letting date, the acidity shall be not less than 3.5 pH and the organic matter shall be not less than 85% as determined by loss on ignition. The minimum water holding capacity shall be 200% by weight on an oven-dry basis.

° PEAT MOSS

Peat moss shall be composed of the partly decomposed stems and leaves of any or several species of sphagnum moss. It shall be free from wood, decomposed colloidal residue and other foreign matter. It shall have an acidity range of 3.5 pH to 5.5 pH as determined in accordance with the methods of testing of A.O.A.C. in effect on the date of the invitation of bids. Its water absorbing ability shall be a minimum of 1100% by weight on an oven-dry basis.

° RECYCLED AND/OR COMPOSTED ORGANICS

Recycled and/or composted organic materials may be commercially or municipally produced and may be derived from organic wastes such as food, agricultural and other vegetative residue, rotten animal manure, or sewage sludge. Non-hazardous vegetable waste and animal manure shall not contain any material that may be deleterious to the soil structure, plant growth or seed germination. Manure shall be well decayed, reasonably free from firefang, free from sticks, stones and foreign substances injurious to plant growth. Composted sewage sludge is regulated by the New York State Department of Environmental Conservation (DEC) and must meet all applicable regulatory requirements.

TESTING. Composted sewage sludge shall require an approved laboratory's certificate of acceptability provided by the source of the compost. The certificate shall verify compliance with all applicable laws, rules and regulations. Only facilities permitted to compost sewage sludge under 6 NYCRR Part 360, SOLID WASTE MANAGEMENT FACILITIES, shall be allowed to furnish finished compost for use in topsoil.

The certification shall be provided prior to delivery of any composted sewage sludge, soil containing composted sewage sludge or other such DEC regulated material to the contract site. The sludge shall be tested and approved prior to its use.

BASIS OF ACCEPTANCE

Acceptance of humus, peat and peat moss shall be the Manufacturer's label or certificate of analysis by an approved laboratory indicating compliance with the material requirements.

Acceptance of recycled and/or composted organics (except sewage sludge) shall be based on an upon delivery inspection by the Engineer to assure compliance with the material requirements.

Acceptance of recycled and/or composted sewage sludge shall be based on certification by an approved laboratory indicating compliance with the material requirements and all applicable regulations."

**Delete 713-16 HUMUS OR PEAT and 713-17 ROTTED MANURE in their entireties and replace with "713-16 and 713-17 (VACANT)."**

**Delete 713-20 PEAT MOSS in its entirety and replace with "713-20 (VACANT)."**