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David H. Fasser, Director, Landscape Architecture Bureau		

This Engineering Instruction transmits revisions to Section 713-01 Topsoil, and supersedes Section 713-01 of the 1990 NYSDOT Standard Specifications.

The purpose of these revisions is to more clearly state that approved recycled and/or composted organic materials, that are commercially or municipally produced, may be used to amend the organic content of topsoil used on Department projects.

The revisions also allow contractors to correct deficiencies in organic content after the topsoil has been placed. This option only applies to topsoil that is used for turf and wildflower establishment or sodding. If this option is chosen by the Contractor, the topsoil must be retested and approved after it is amended.

Approved recycled and/or composted organic amendments may be derived from various organic wastes such as food, agricultural and other vegetative residue, animal manure and sewage sludge.

The New York State Department of Environmental Conservation (DEC) allows unregulated use of most non-hazardous vegetable wastes and manure. However, DEC regulates the use of domestic sewage under Title 6, NYCRR Part 360.

Composted domestic sewage sludge used to amend topsoil shall require a certificate, from a laboratory approved by DEC, verifying compliance with all applicable laws, rules and regulations. This certification shall be provided by the Contractor, at the Contractor's sole expense, and prior to delivering any composted sewage sludge, soil containing composted sewage sludge, or other such regulated material to the contract site.

All recycled and/or composted organic material must be approved before it may be used.

All samples taken from topsoil that has been amended with approved composted sewage sludge shall be clearly identified as such.

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Regional Landscape Architects are advised to become familiar with recycled organic amendments and the potential effect of their use on topsoil structure, plant growth and seed germination. In addition, Regional Landscape Architects are encouraged to recommend the consideration of approved recycled and/or composted products when providing advice regarding amending the organic content of topsoil.

The Landscape Architecture Bureau will continue to provide advice and other information regarding the expanding use and availability of recycled and/or composted organic materials as the information becomes available.

This Engineering Instruction will be effective with the letting of May 7, 1992.

Questions regarding this instruction may be directed to Mark Woods of the Landscape Architecture Bureau at (518) 457-4460.

Attachment

713-01 TOPSOIL

SCOPE. This specification covers the material requirements for topsoil for use in turf and wildflower establishment, sodding or planting.

MATERIAL REQUIREMENTS. Topsoil shall be the surface layer of soil and shall be free from refuse, material toxic or otherwise deleterious to plant growth, subsoil, woody vegetation, and stumps, roots, brush, stones, clay lumps or similar objects. Sod and herbaceous growth such as grass and weeds need not be removed but shall be thoroughly broken up and mixed with the soil during handling operations.

Topsoil shall meet the following requirements unless otherwise specifically stated in the contract documents or proposal:

1. The pH of the material shall be between 5.5 and 7.6.
2. The organic content shall be not less than 2% nor more than 20%.
3. Gradation:

Sieve Size	Percent Passing by Weight
2 inch	100
1 inch	85 to 100
1/4 inch	65 to 100
No. 200 mesh	20 to 80

4. The maximum size of objects other than stones shall be two inches.

The Contractor may amend topsoil with approved materials and by approved methods to meet the above specifications. Materials used to amend the organic content of topsoil may be, or may include, approved recycled or composted materials that are either commercially or municipally produced. Amendments shall not contain any material that is deleterious to soil structure, plant growth or seed germination. If composted sewage sludge is used to amend topsoil, it must meet all applicable New York State Department of Environmental Conservation (DEC) requirements.

STOCKPILING. Topsoil may be acquired from approved sites that are designated in the contract documents or in the proposal. If no sites are designated in the contract documents or in the proposal, material proposed for use as topsoil must be stockpiled, sampled and tested prior to its use. Topsoil deficient in organic content may be used prior to amending and retesting, when used for turf and wildflower establishment or sodding only.

Stockpiles shall contain not less than 200 cubic yards, or the minimum required for the contract, shall have a height of at least four feet, and shall be trimmed to uniform surfaces and slopes.

SAMPLING. Samples of the topsoil or soil mixture will be taken by a representative of the Department. Samples taken from topsoil that has been amended with approved composted sewage sludge shall be clearly identified as such. Topsoil containing foreign material may be rejected on the basis of a visual examination prior to testing. The topsoil sampling procedure shall be as required in the Department's "Sampling Procedures for Topsoil." Contractors may obtain copies of the procedures from the Engineer in Charge. Contractors who feel that an error was made in sampling the topsoil shall, within one work day, indicate the alleged error in writing to the Engineer in Charge.

TESTING. All material tests required by this section, except for the testing of composted sewage sludge, will be done by the Department in conformance with the procedures contained in the appropriate Departmental publications or test methods current on the date of advertisement for bids.

Composted sewage sludge used to amend topsoil shall require a certificate, from a laboratory approved by the DEC, verifying compliance with all applicable laws, rules and regulations. The certification shall be provided by the Contractor, at the Contractor's sole expense, and prior to delivery of any composted sewage sludge, soil containing composted sewage sludge or other such regulated material to the contract site. The material shall be approved before it is used. A copy of the specifications for the material shall be furnished to the laboratory by the Contractor.

The Contractor shall notify the Engineer of the intended source of the topsoil at least three weeks in advance of the scheduled use of the material to allow time for sampling, shipping of the sample and testing.

BASIS OF ACCEPTANCE. Acceptance of topsoil will be based on the test results unless otherwise specified. Tested topsoil must be approved in writing by the Engineer before any material is used, except that topsoil used for establishing turf and wildflowers or sodding may be placed, at the Contractor's option, prior to amending it to correct deficiencies in its organic content. Acceptance of topsoil placed prior to correcting organic content deficiencies will be based on retest results of samples taken after the placed topsoil has been amended.