ITEM 36

TOPSOIL

36.01 DESCRIPTION

Topsoil for planting shall consist of a rich friable soil conforming to the requirements and provisions set out in these Specifications, stipulated in special provisions, or as approved by the Engineer, and obtained from locations indicated on the Plans, stipulated in Special Provisions, or as approved by the Engineer. Topsoil shall be placed at the locations indicated on the Plans set out in the Specifications or as directed by the Engineer, and in conformity with the provisions and requirements set out in the Specifications or as required by the Engineer.

36.02 MATERIAL

Topsoil for planting shall be a rich friable loam containing a large amount of humus and shall be original surface sandy loam, topsoil of good, rich, uniform quality, free from any material such as hard clods, stiff clay, hardpan, partially disintegrated stone, pebbles larger than 1/2 inch in diameter, lime, cement, bricks, ashes, cinders, slag, concrete, bitumen or its residue, boards, sticks, chips, or other undesirable material harmful or unnecessary to plant growth. Topsoil shall be reasonably free from perennial weeds and perennial wood seeds, and shall not contain objectional plant material, toxic amounts of either acid or alkaline elements or vegetable debris undesirable or harmful to plant life. Bermuda grass roots in topsoil will not be accepted, unless otherwise approved by the Engineer.

Topsoil shall be natural topsoil without admixture of subsoil material and shall be classifiable as a loam, silt loam, clay loam, or a combination thereof. Topsoil shall contain not less than five percent nor more than 20 percent, by weight, of organic matter as determined by loss on ignition of oven-dried-dried samples. The ignition test shall be performed on samples which have been thoroughly oven-dried to constant weight at a temperature of 221 degrees F.

Topsoil shall be secured from areas from which topsoil has not been previously removed, either by erosion or mechanical methods. Topsoil shall not be removed to a depth in excess of the depth approved by the Engineer.

The area or areas from which topsoil is secured shall possess such uniformity of soil depth, color, texture, drainage and other characteristics as to offer assurance that, when removed in commercial quantities, the product will be homogeneous in nature and will conform to the requirements of these Specifications, or as required by the Engineer.

Topsoil may be secured, if approved by the Engineer, from areas which are, or have been, in cultivation within the past five years, and which are producing or have produced fair or good yield of staple farm or truck crops without usual fertilization, or topsoil may be secured from areas supplied with good normal drainage which is arable or suitable for cultivation.

36.03 EQUIPMENT

All equipment necessary for the proper removal, transportation, protection, and maintenance of topsoil must be available when required in first class working condition and shall have been approved by the Engineer before construction will be permitted to begin.

36.04 REQUIREMENTS

Topsoil, except that reserved within excavation areas on the project, shall not be stored for use but shall be excavated and placed directly into its final position.

All areas from which topsoil is to be secured, shall be cleaned of all sticks, boards, stones, lime, cement, ashes, cinders, slag, concrete, bitumen, or its residue and any other refuse which will hinder or prevent growth.

In securing topsoil from a designated pit, or elsewhere, should strata or seams of material occur which do not come under the requirements for topsoil, such materials shall be removed from the topsoil, or, if required by the Engineer, the pit shall be abandoned.

Before placing or depositing topsoil upon any areas, all improvement within the area shall be completed, unless otherwise approved by the Engineer.

The areas or pits into which topsoil is to be placed or incorporated shall be prepared before securing topsoil for use.

The depth to which topsoil is excavated in any pit, shall be subject to the direction of and be approved by the Engineer, and if during the excavation of the pit the Engineer decides to make changes in the depth in order to secure a more satisfactory material, the Contractor shall follow such instructions as may be issued by the Engineer.

Topsoil shall be transported in vehicles which will not lose or scatter the topsoil during transportation.

Topsoil shall be placed upon or incorporated into prepared areas or pits in accordance with the provisions and requirements set out in the sections of these Specifications covering the particular type or kind of planting or seeding with which topsoil is required.

36.05 MAINTENANCE

The Contractor shall maintain topsoil, at his own expense, in connection with any seeding or planting, or otherwise, until final completion of the project. Maintenance shall consist of preserving, protecting, replacing, and such other work as may be necessary to keep the project in a satisfactory condition.

36.06 FINAL CLEARING UP

Final clearing up shall consist of completely cleaning the area of all equipment, rubbish, excess material, and unused materials which will mar the appearance of the project, and disposing of same satisfactorily.

All pavements and structures shall be swept clean of all dirt or rubbish which may have become deposited upon them during construction.

In addition, final clearing up shall be performed in accordance with the provisions and requirements set out in Item 1.15 (b) of these Specifications.

36.07 MEASUREMENT AND PAYMENT (IF APPLICABLE)

The volume of topsoil for which payment will be allowed shall be expressed in cubic yards as computed from the topsoil in-place in the finished work.

Payment for topsoil in-place as required by the Plans or Specifications or as directed by the Engineer shall be made for the quantities determined in the manner specified above at the unit price bid per cubic yard of topsoil under Item 36 of the Contract Bid Schedule.

END OF DOCUMENT