

## **SECTION 162 PREPARED SOIL LAYER**

### **162-1 Description.**

**162-1.1 Finish Soil Layer:** Unless otherwise called for in the Plans, prepare a 6 inch thick layer of existing soil mixed with imported material, if necessary, to achieve the pH and organic matter levels required in Section 987, that is favorable to turf and ground cover growth over areas of the project which are to be seeded, seeded and mulched, or planted, by mixing in an organic material, compost, or commercially available soil amendments. Prepare finish soil layer in areas to be sodded, when called for in the Plans.

**162-1.2 Organic Soil Layer:** When required by a permit, prepare a 6 inch thick layer of organic soil, at locations shown in the Plans.

**162-1.3 Blanket Material:** When required by a permit, place a layer of blanket material at the locations and to the depth shown in the Plans.

### **162-2 Materials.**

**162-2.1 Finish Soil Layer and Organic Soil Layer:** Meet the requirements of Section 987.

**162-2.2 Blanket Material:** Meet the material classification shown in the Plans and Standard Plans, Index 120-001.

### **162-3 Ownership of Surplus Materials.**

The Department will retain ownership of all materials suitable for construction of the prepared soil layer until the final job requirements have been fulfilled. Unless otherwise shown in the Contract Documents, upon final acceptance, Contractor shall take ownership of any surplus materials and dispose of in accordance with 120-5.

Where temporary storage of apparent surplus materials within the right-of-way may be impractical, the materials may be stockpiled outside the right-of-way in areas provided by the Contractor until needed on the project or declared surplus. With the Engineer's written approval, the Contractor may dispose of excess material with the stipulation that any portion required to fulfill job requirements will be replaced with equally suitable material at no cost to the Department.

No extra compensation is allowed for any rehandling involved under the provisions of this Subarticle.

### **162-4 Construction Methods.**

Construct the surface of the earthwork to such lines and elevations that will provide a surface conforming to the plan lines and elevations upon completion of the prepared soil operations. Leave the surface of the earthwork in a roughened and loose condition. Prevent contamination of the materials by other construction operations. Remove and replace all materials which fail to meet the required soil classification or become contaminated after placement, and correct any slippage of this material at no cost to the Department. Spread the appropriate material uniformly over areas to receive treatment.

**162-4.1 Finish Soil Layer:** After spreading, mix the material with the underlying soil to a combined depth of 6 inches, unless otherwise called for in the Plans. Continue mixing to provide a uniform finish soil layer true to line and grade.

**162-4.2 Organic Soil Layer:** Spread materials to the depth of 6 inches.

**162-4.3 Blanket Material:** Place the blanket material to the depth shown in the plans.

**162-5 Acceptance Testing.**

The Engineer reserves the right to waive or reduce testing requirements for shoulder treatment projects as defined in Standard Plans, Index 570-010.

Immediately after completion of construction operations, sample and test the prepared soil layer at a testing laboratory qualified under 105-6. A LOT is defined as 0.5 shoulder miles. Take random quality control (QC) samples at a minimum of one sample per LOT of prepared surface. When the source of added material changes, the Engineer will require an additional sample. Average four sequential LOTs representing 2.0 shoulder miles to determine compliance with Section 987. Raise the organic matter content of any individual LOT with an organic matter content below 1.5% to at least 1.5%. The Engineer will take a Verification sample at a minimum frequency of one sample per 4 LOTs. If the Verification sample fails (below 1.5% for organics), but the QC sample taken in the corresponding LOT passes, the Engineer will obtain a resolution sample within the same LOT to resolve the non comparison. The Engineer reserves the right to take and test additional samples to determine specification compliance. For failing samples, take and test additional samples, as directed by the Engineer, to delineate areas that need re-treatment. Perform re-treatment at no additional cost to the Department. Perform additional testing of retreated areas, at locations directed by the Engineer, to determine specification compliance. Submit all test results to the Engineer.

**162-5.1 Finish Soil Layer:** Test sampled material for organic matter content, pH, primary macronutrients (N, P K) and secondary macronutrients (S, Ca, Mg) content. Acquire from the soil testing laboratory fertilizer recommendations for the specific plants to be grown in the area. Do not seed, seed and mulch, or place sod until acceptable values for organic content and pH are obtained in accordance with the requirements of 987-1.

**162-5.2 Organic Soil Layer:** Test sampled material for organic matter content in accordance with the requirements of 987-1.

**162-5.3 Blanket Material:** Test blanket material for depth in accordance with the Plans and for soil classification in accordance with AASHTO M145. Add materials as necessary to achieve the required depth.

**162-5.4 Disposition of Defective Materials:** Assume responsibility for removing and replacing all defective material, as defined in Section 6.

Alternately, submit an Engineering Analysis Scope in accordance with 6-4 to determine the disposition of the material.

**162-6 Method of Measurement.**

The quantities to be paid for will be the plan quantity for the following items meeting the requirements of this Section, completed and accepted:

1. The area, in square yards, of finish soil layer.
2. The area, in square yards, of organic soil layer.
3. The area, in square yards, of blanket material.

**162-7 Basis of Payment.**

Prices and payments will be full compensation for completing all work specified in this Section, including furnishing, hauling, and placing materials to the lines and grades shown in the Plans.

Payment will be made under:

Item No. 162- 1- Prepared Soil Layer - per square yard.