

SECTION - 329119.16 - TOPSOIL

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. This section specifies all soil material designated as "Existing Topsoil", "Imported Topsoil", "Over-Structure Soil", & "Structural Soil" on the drawings or in the specifications.

1.2 DEFINITIONS

- A. Existing Topsoil shall be considered to mean the original (indigenous soils) typical of the area capable of supporting native plant growth.
- B. Imported Topsoil shall be considered to mean imported soils not originating on site and intended for use on-grade.
- C. Over-Structure soil shall be considered to mean imported soils not originating on site and intended for use over-structure.
- D. Structural Soil shall be considered to mean imported soils specifically engineered and manufactured to support hardscape surfaces and intended for use on-grade or over-structure.

1.3 SUBMITTALS:

A. Submittals for Review:

1. Submit (3) 1-quart samples for Imported Topsoil & Imported Sand Fill soil product data, test results, estimated quantities required for the project a minimum of 30 days prior to ordering materials.
2. Each sample to be a composite of five to seven (5-7) sub-samples taken the full depth of proposed source. On stockpiles, discard upper 6 inches of soil before sampling.
3. Place samples in plastic bags, seal, and place in second paper bag, and label.
4. Do not order materials until approved submittals have been received back from Architect.
5. Materials not meeting specified requirements will be rejected.
6. Architect has final approval of materials submitted.
7. Delivered materials shall closely match approved samples.

B. Test Reports for Soils

1. Collect (3) soil samples from each location specified on the drawings and submit to Texas Agrilife Extension Service following their required procedures.
2. Submit test results and corrective recommendations to Architect a minimum of 30 days prior to any bed prep or planting.
3. Costs of all tests to be borne by the Contractor.
4. Evidence must be provided that the compost portion of the soil blend must reach a Solvita® Compost Maturity Index Value of 7 or higher.
5. In addition to the samples of the topsoil, a separate sample of the compost portion of the topsoil must be provided, as well as a fresh unused Solvita Compost Maturity Test Kit, so that the Architect can independently verify the compost maturity level of the submittal.

1.4 QUALITY ASSURANCE:

A. All soil samples and testing shall comply with procedures specified in:

1. U.S.D.A. Ag. Handbook 60: Diagnosis and Improvement of Saline and Alkali Soils.

B. Testing Laboratories

1. Certified facilities normally engaged in agronomic soil testing shall be utilized.
2. Approval by the Owner's representative.

- B. Required Topsoil Tests
 - 1. Chemical analysis indicating:
 - a. Fertility: pH, nitrate nitrogen, ammonia nitrogen, phosphate phosphorous, potassium, calcium, magnesium, zinc, iron, and manganese.
 - b. Suitability: total salinity, boron, sodium, potassium, calcium, magnesium, chloride, and sulfate.
 - 2. Physical properties include:
 - a. Organic content
 - b. Particle size distribution

PART 2 - PRODUCTS

2.1 EXISTING TOPSOIL:

- A. Topsoil for the work shall conform to the requirements included in this Section
 - 1. A natural, friable, loamy soil, typical of local topsoil, which produces heavy vegetative growth, free from subsoil, weeds, sods, stiff clay, stones larger than ½ inch, toxic substances, debris, or other substances, which may be harmful to plant growth.
 - 2. The pH range shall be 6.5 to 7.5.
- B. Grading Analysis: Two-inch sieve, 100 percent passing. Number 4 sieves, 90 percent minimum passing. Number 10 sieves, 80 percent minimum passing.
- C. All topsoil shall be free from all herbicides and insecticides which may adversely affect growth of lawn or planting, or which may contain toxic materials.
- D. The Contractor shall not use materials, which do not conform to these criteria. At the discretion of the Landscape Architect, such material can either be amended to meet these requirements or will be removed from the site and replaced with suitable material as specified.

2.2 IMPORTED TOPSOIL:

- A. Enriched Topsoil
- B. pH: 7.5-8.7
- C. Grading Analysis:
 - 98.5% will pass through a 1/2" screen
 - 99% will pass through a 3/4" screen
- D. Composition Ratio:
 - 25% Professional Compost
 - 75% Soil & Sand
- E. Material shall be free of treated lumber, pallets, pine bark, raw manure, mushroom compost waste or herbicides.
- F. Supplier: Soil Building Systems; www.soilbuildingsystems.com; (972) 831.8181.
- G. No substitutions allowed.

2.3 OVER-STRUCTURE PLANTING SOIL:

- A. Over Structure Soil Mix
- B. pH: 7.4-8.4
- C. Grading Analysis:
 - 98.5% will pass through a 1/2" screen
 - 99% will pass through a 3/4" screen
- D. Composition Ratio:
 - 20% pH Balanced Compost
 - 40% Expanded Shale
 - 40% Native Soil
- E. Material shall be free of treated lumber, pallets, pine park, raw manure, mushroom compost waste or herbicides.
- F. Supplier: Soil Building Systems; www.soilbuildingsystems.com; (972) 831.8181
- G. No substitutions allowed.

PART 3 - EXECUTION

Not Used

END OF SECTION