

Section 02200**SITE PREPARATION****1.0 GENERAL****1.01 SECTION INCLUDES**

- A Removal of topsoil, stripping and stockpiling, clearing and grubbing.
- B Removal and disposal of waste materials, excess materials, debris and trash.
- C Removal of obstructions.
- D Excavation and fill.
- E Salvaging of designated item.
- F References to Technical Specifications:
 - 1. Section 01200 – Measurement and Payment Procedures
 - 2. Section 01350 – Submittals
 - 3. Section 01450 – Testing Laboratory Services
 - 4. Section 01500 – Temporary Facilities and Controls
 - 5. Section 02255 – Bedding, Backfill and Embankment Material
 - 6. Section 02330 – Embankment
 - 7. Section 01140 – Contractor’s Use of Premises
- G Referenced Standards:
 - 1. American Society for Testing and Materials (ASTM)
 - a. ASTM D 4318, “Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils”

1.02 MEASUREMENT AND PAYMENT

- A Unless indicated as a Bid Item, no separate payment will be made for Work performed under this Section. Include cost in Bid Items for which this Work is a component.
- B If Site Preparation is included as a Bid Item, measurement will be based on the Units shown in Section 00300 – Bid Proposal and in accordance with Section 01200 – Measurement and Payment Procedures.

1.03 SUBMITTALS

- A Make Submittals required by this Section under the provisions of Section 01350 – Submittals.
- B Submit embankment material sources and product quality information in accordance this Section.

1.04 TESTING

- A Testing and analysis of product quality, material sources, or field quality shall be performed by an independent testing laboratory provided by the Owner under the provisions of Section 01450 – Testing Laboratory Services and as specified in this Section.

1.05 PROTECTION OF PEOPLE AND PROPERTY

- A Contractor shall conduct all construction operations under this Contract in conformance with the practices described in Section 01500 – Temporary Facilities and Controls.

2.0 PRODUCTS**2.01 MATERIALS**

- A Contractor shall provide materials used as embedment, backfill, back-dressing, and embankment identified on the Plans in accordance with Section 02255 – Bedding, Backfill and Embankment Material.

3.0 EXECUTION**3.01 CLEARING AND GRUBBING.**

- A Clear Project Site of trees, shrubs, and other vegetation, except for those designated by Owner to be left standing.
- B Use only hand methods for grubbing inside drip line of trees designated to remain.
- C Completely remove stumps, roots, and other debris protruding through ground surface.
1. On areas required for roadway, channel, or structural excavation, remove stumps, 2" diameter or larger limbs and roots, to depth of 2 feet below lower elevation of excavation.
 2. On areas required for embankment construction, remove 2" diameter limbs, stumps and roots to depth of 2 feet below ground surface
 3. Trees and stumps may be cut off as close to natural ground as practicable on areas which are to be covered by at least 3 feet of embankment
- D Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
1. Place fill material in horizontal layers not exceeding 6 inches loose depth, and thoroughly compact to density equal to adjacent original ground.
- E Complete operations by bulldozing, blading, and grading so that prepared area is free of holes, unplanned ditches, abrupt changes in elevations and irregular contours, and preserve drainage of area.
1. Blade entire area to prevent ponding of water and to provide drainage, except in areas to be immediately excavated

3.02 TOPSOIL STRIPPING AND STOCKPILING

- A Obtain approval of topsoil quality before excavating and stockpiling.
- B Excavate topsoil for esplanades and areas to receive grass or landscaping from areas to be further excavated.
- C Topsoil Stripping:
 - 1. Remove growths of grass from areas before stripping.
 - 2. Topsoil is defined as surface soil found of depth of not less than 4 inches.
 - 3. Strip topsoil to depths encountered.
 - 4. Perform stripping in a manner to prevent intermingling of topsoil with underlying sterile subsoil and remove objectionable materials, including clay lumps, stones over 2 in. in diameter, weeds, roots, leaves, and debris.
 - 5. Where trees are designated by Owner to be left standing, stop topsoil stripping at extreme limits of tree drip line to prevent damage to main root system.
- D Topsoil Stockpiling:
 - 1. Stockpile in areas designated on Plans.
 - 2. Construct storage piles to freely drain surface water.
 - 3. Cover storage piles, if required to prevent wind-blown dust.
 - 4. Stockpile topsoil to depth not exceeding 8 feet. Stockpile in a manner to prevent erosion.

3.03 UNSUITABLE MATERIAL

- A Undercut, remove, and replace material which Engineer designates as unsuitable for subsequent construction.
- B Material used to replace unsuitable material shall be suitable material from site excavation or as indicated on Plans.

3.04 EXCAVATION AND FILL

- A Construction surveying shall be performed by qualified personnel under the direction of the contractor. Contractor shall be responsible for the accuracy and correctness of this work. In the event that the work consists of significant alteration of the topographic features of natural grade, contractor shall perform enough topographic survey to substantiate existing pre-construction elevations. No claim shall be made for additional excavation or grade adjustment in excess of quantities contained in the contract documents without demonstrable evidence that such conditions existed prior to start of the work
- B Depressed site areas shall be filled using material from high areas, insofar as practicable.

C When fill obtained from high areas is exhausted, fill to indicated rough grade elevations under roadways with “Structural Fill” and open areas not under structures or roadways with “General Fill”, or as indicated on Plans.

D Place and compact fill in accordance with Section 02330 – Embankment.

3.05 SALVAGEABLE ITEMS AND MATERIAL

A Items designated by Engineer to be salvaged are to be carefully removed, so as to cause no damage to the salvaged items and delivered to Owner’s storage yard.

3.06 CLEAN-UP AND RESTORATION

A Perform clean-up and restoration in and around construction zone in accordance with Section 01140 – Contractor’s Use of Premises.

END OF SECTION