

SECTION 02920
SOIL PREPARATION

PART I - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Ripping**
- 2. Fertilizer**
- 3. Soil Conditioner**
- 4. Fine Grading**

B. Related Sections:

- 1. SECTION 02815 - Irrigation Systems**
- 2. SECTION 02931 – Native Grasses Seeding**
- 3. SECTION 02930 – Perennial Rye Grass Seeding**

1.2 SUBMITTALS

A. Quality Control Submittals:

- 1. Certificates:** State, federal and other inspection certificates shall accompany invoice for materials showing source or origin. Submit to Owner prior to acceptance of material.

1.3 DELIVERY, STORAGE AND HANDLING

A. General: Comply with Section 01600

B. Fertilizer: Deliver inorganic or chemical fertilizer to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark and conformance to state law, bearing name and warranty of producer.

C. Notify Owner of delivery schedule in advance so material can be inspected upon arrival at project site. Immediately remove unacceptable material from project site.

1.4 PROJECT/SITE CONDITIONS

A. General: Do not perform work when climate and existing site conditions will not provide satisfactory results.

B. Vehicular accessibility on site shall be as directed by the Landscape Architect. Repair

damage to prepared ground and surface caused by vehicular movement during work under this section to original condition at no additional cost to the Owner. Coordinate access with the University of Colorado Project Manager.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. Topsoil: Strip, existing 4" of topsoil in all proposed sod areas. Stockpile on-site for future distribution in new sod areas 4" deep.
- B. Soil Conditioner: **A-1 Premium 3 Organic Compost** or equal to be aged organic matter, meeting the following minimum requirements:
 - 1. Minimum Requirements:
 - a. Organic matter: 45% minimum.
 - b. Salt content: 4.0 mmhos/cm maximum.
 - c. pH range: 4.3 - 7.5.
 - 2. Organic material may be:
 - a. Aged sawdust or other nitrogen-treated, decomposing wood products
 - b. Dried, pulverized poultry manure
 - c. **Humus**
 - d. **Compost**
 - e. Aged, treated, pulverized manure
 - f. Treated sewage sludge
 - g. Other organic material as approved by the Project Manager
 - 3. Aspen humus will not be accepted.
 - 4. Mountain Peat shall not be allowed as a soil improvement.
- C. First Application Fertilizer to all landscape areas: Inorganic mixture with the following chemical composition: Before sodding, incorporate 4 lbs. of diammonium phosphate (18-46-0) per 1000 sq. ft. tilled into a depth of 6".

PART 3 - EXECUTION

3.1 EXAMINATION

- A. General: Verify that existing site conditions are as specified and indicated before beginning work under this Section.
 - 1. Grades: Inspect to verify rough grading is within +0.1 foot of grades indicated and specified.
 - 2. Damaged Earth: Inspect to verify that earth rendered unfit to receive planting due to concrete, water, mortar, limewater or any other contaminant dumped on it has been removed and replaced with clean earth from a source approved by the Landscape Architect.

- B. Unsatisfactory Conditions: Report in writing to General Contractor with copy to Owner.
- C. Acceptance: Beginning of installation means acceptance of existing conditions by installer.

3.2 PREPARATION

A. Protection:

1. Contractor shall locate sewer, water, irrigation, gas, electric, phone and other pipelines, conduits or utilities prior to commencing work.
2. Contractor shall be responsible for proper repair to landscape, utilities, walls, pavements and other existing site improvements damaged by operations under this section.

- B. Weed Control: Remove annual weeds by tilling. Remove perennial weeds by applying herbicide 1 week before soil preparation and as needed, but no sooner than two weeks before soil preparation is to begin.
- C. Surface Grade: Remove weeds, debris, clods and rocks larger than 1/2". Dispose of accumulated debris at direction of Landscape Architect.
- D. Runoff: Take measures and furnish equipment and labor necessary to control the flow, drainage, and accumulation of water. Insure that all water will run off the grades.
- E. Erosion Control: Take measures and furnish equipment and labor necessary to control and prevent soil erosion, blowing soil and accumulation of wind-deposited material on the site throughout duration of work.

3.3 INSTALLATION

A. Soil Amendment:

1. Evenly distribute aged organic matter, and first application of fertilizer in landscaped areas at the following rates:
 - a. Aged organic matter at the rate of 3 cu. yds. per 1,000 sq. ft. to sod and seed areas.
 - b. Fertilizer Application:
 - 1) First application is specified under Section 02920, 2.1 C.
2. After applying soil conditioner and fertilizer, thoroughly till area to depth of 6" minimum by plowing, harrowing, or disking until soil is well pulverized and thoroughly mixed.

B. Fine Grading in all Landscape Areas:

1. Do fine grading for areas prior to planting.
2. For ground surface areas surrounding buildings to be landscaped, maintain required positive drainage away from buildings.

3. Establish finish grades to within 0.04 foot of grades indicated.
 - a. Sodded areas: Allow 3/4" for sod.
4. Noxious weeds or parts thereof shall not be present in the surface grade prior to landscaping.
5. Prior to acceptance of grades, hand rake to smooth, even surface free of debris, clods, rocks, and vegetable matter greater than 1/2".

3.4 NOTIFICATION AND INSPECTION

- A. Inspection: Provide notice to Landscape Architect requesting inspection at least 7 days prior to anticipated date of completion.
- B. Deficiencies: Landscape Architect will specify deficiencies to Contractor who shall make satisfactory adjustments and shall again notify Landscape Architect for final inspection.

3.5 CLEANING

- A. General: Remove debris and excess materials from site. Clean out drainage inlet structures. Clean paved and finished surfaces soiled as a result of work under this Section, in accordance with direction given by Landscape Architect.

3.6 PROTECTION

- A. General: Provide and install barriers as required and as directed by Landscape Architect to protect completed areas against damage from pedestrian and vehicular traffic until acceptance by Owner. Contractor is not responsible for malicious destruction caused by Others.

END OF SECTION 02920