DIVISION 31 – EARTHWORK

31 10 00 - SITE CLEARING

A. Erosion Control:

- 1. For contractor erosion control responsibilities, see Division 1 General Conditions.
- 2. Pre- and post-construction video inspection of storm sewer systems shall be required for all projects that will disturb soil within a 50-yard radius of a storm sewer. Post-construction video evidence shall demonstrate that zero additional debris was introduced into the system. The contractor shall be responsible for abatement of any debris washed into the system during the term of the construction contract.
- 3. For Temporary Facilities and Controls, see Division 01 General Requirements.
- 4. For Sanitary Sewage and Storm Drainage Utilities, see Division 33 Utilities.

B. Site Protection:

- Trees: Prior to construction all trees to be saved shall have a properly constructed chain-link or Facilities Management approved barricade which protects the total area within the dripline. The dripline is defined as the area on ground covered by spread of branches. If there is limited space on a site, and passage beside a tree is mandatory, a bridge is to be constructed over the root zone, and boards used to protect the tree trunk. Refer to the Drawing Appendix. No equipment or materials, including excavated soil shall be parked or stored within the dripline of a tree.
- 2. Turf: No equipment or materials shall be parked or stored on existing turf areas without prior approval from Facilities Management. If parking occurs on landscaped areas, the Contractor shall be responsible for repairing soil compaction, repair of irrigation systems and replacement of sod or other damaged plant material. If the construction site directs pedestrian, bicycle, or vehicle traffic through turf areas, the Contractor shall be responsible for protecting these turf areas and repairing soil compaction, repair of irrigation systems, and replacement of sod or other damaged plant material. Turf Mats may be available through F.M.-Outdoor Services for temporary use if needed.
- 3. For Landscape and Irrigation System Damage, see Division 32 Exterior Improvements.

C. Top Soil:

- 1. Top soil is a valuable commodity. Top soil shall be stripped to a depth of approximately 6 to 8 inches from all areas to be graded, excavated or filled. Top soil shall be separately stockpiled for replacement around the building at the completion of the job or otherwise disposed as directed by the Owner.
- 2. The condition of the top soil shall be evaluated by the Facilities Management-Outdoor Services through the University Project Manager/Representative prior to reuse.

D. Subsoil:

1. Subsoil designated for export to other locations on CSU property shall be cleaned by the contractor of any trash, pipe and concrete, and rocks over approximately 4 inches in diameter.

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E. Trash Removal:

- 1. The contractor shall be responsible for removal of all trash, sand, gravel, road base, concrete, asphalt paving, pipe, cable, trench insulation, plant material, etc. during construction and at closeout.
- F. Hazardous Waste Removal:
 - 1. Removal of hazardous waste is the responsibility of the Contractor.
 - 2. Plans and procedures for removal of hazardous waste shall conform to applicable codes and be submitted to the University Project Manager/Representative for approval by Environmental Health Services prior to removal of such materials.

31 20 00 - EARTHWORK

- A. Excavations:
 - 1. Excavations deeper than 4 feet shall be shored or shelved per OSHA Standards.
 - 2. Any open excavation shall be fenced or barricaded. Any open excavation on a hard surface (sidewalk or street) left overnight shall be fenced or barricaded and shall include flashing lights.
 - Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, contact the University Project Manager/Representative immediately for direction. Cooperate with the University Project Manager/Representative in keeping respective services and facilities in operation. Damaged utilities must be repaired to the satisfaction of the University Project Manager/Representative.
- B. Backfilling:
 - 1. Excavations should be backfilled as promptly as work permits, but not until completion of inspection, testing, approval, and GPS location recording of underground utilities.
 - 2. For information on acceptable bedding material for utilities see Division 33.
 - 3. Concrete tailings and other construction debris are not permitted in trenches.