

SECTION 02110 - SITE CLEARING & DEMOLITION

PART 1 - GENERAL

1.01 SUMMARY

A. THIS SECTION INCLUDES:

1. Protection of existing trees to remain.
2. Removal of surface debris, trees, and other vegetation not designated to remain.
3. Topsoil excavation.
4. Clearing and grubbing.
5. Demolition
6. Disposal of waste materials.

1.02 RELATED DOCUMENTS / SECTIONS

- ##### A.
- Contract documents and drawings, geotechnical soils engineering report. Refer to appropriate related sections as applicable.

1.03 REGULATORY REQUIREMENTS

- ##### A.
- Verify and conform to all Federal, State, County or local requirements concerning site clearing and related activities.
- ##### B.
- Coordinate and obtain approval for all clearing and demolition work with all appropriate utility companies prior to start of construction.

- ##### C.
- WARNING:
NO PERSON(S) SHALL ENTER MANHOLES, CONFINED SPACES, OR OTHER UNDERGROUND STRUCTURES, TRENCHES, OR EXCAVATIONS WITHOUT PROTECTIVE BREATHING APPARATUS AND AT LEAST ONE OTHER PERSON PRESENT FOR SAFETY AND ABOVE GROUND MONITORING AT ALL TIMES. CONTRACTOR SHALL PROVIDE AND ENSURE USE OF SAFETY KITS, HELMETS, GLOVES, EMERGENCY OXYGEN RESUSCITATOR KITS, AND AIR QUALITY AND GAS DETECTORS FOR VOLATILE, TOXIC, OR EXPLOSIVE GASES OR SUBSTANCES. VERIFY SAFE OXYGEN CONTENT PRIOR TO ENTERING MANHOLES, CONFINED SPACES, OR OTHER UNDERGROUND STRUCTURES.**

1.04 DESCRIPTION

- A. This work shall consist of clearing, grubbing, removal and disposal of all vegetation and debris (not designated to remain) within the limits of construction.

PART 2 - EXECUTION

2.01 PREPARATION / PROTECTION

- A. Traffic: Do not close or obstruct streets, walks, or other occupied or used facilities without written permission from Owners or authorities having jurisdiction.
- B. Existing improvements: Provide measures necessary to protect adjoining properties and Owner's property from damage during site clearing. Damaged improvements shall be restored by the Contractor to their original condition, as acceptable to property owners.
- C. The contractor shall coordinate with the all utility authorities the location, size and material, origin, identification, and verification of all existing utilities onsite. Utilities which are to remain shall be protected from damage during construction.
- D. Existing trees, shrubs, or other vegetation designated to remain shall be protected and clearly delineated or marked for visual identification. The contractor shall coordinate with the Architect on protection measures to ensure that any necessary cutting, grading, or other work in close proximity to trees or other vegetation is done in a manner which will minimize potential damage.
- E. The contractor shall protect bench marks and existing structures from damage or displacement.

2.03 CLEARING

- A. Definition: Clearing consists of the removal from the site and proper disposal of all exposed objectionable matter such as trees, brush, logs, grass, weeds, roots, decayed vegetable matter, poles, stubs, rubbish, refuse dumps, sawdust piles, loose boulders of one cubic yard or less outside of construction limits, and other debris resting on or protruding through the ground surface, or appearing on the site.
- B. Clearing also includes the removal and proper disposal of all obstructions not to be retained.

- C. Clearing may be done by any legal method the contractor elects to use provided no damage is done to the property, trees or vegetation to be retained, in or outside of the site.
- D. Remove any remaining pavement, curbing, or other site improvement or obstruction necessary to facilitate the proposed construction as shown on the contract documents and drawings.

2.04 GRUBBING

- A. Definition: Grubbing consists of the removal from the site and proper disposal of objectionable matter defined above under CLEARING, which is imbedded in the underlying soil.
- B. Use only hand methods for grubbing inside drip lines of trees designated to remain.
- C. Objectionable Roots: Objectionable roots are defined as (1) matted trees and brush roots regardless of the size of the roots; (2) individual roots more than 3/4 inch diameter; (3) individual roots more than 36 inches long regardless of the size; (4) large quantities of lesser size roots present in the top 12 inches of the finished subgrade.
- D. When these items are removed as clearing and grubbing, they shall be removed to the following depths:
 - (1) Under pavements: Remove to a depth of 3.0 feet minimum below finish subgrade.
 - (2) Beneath other structures: Remove to a depth of 3.0 feet minimum below finish subgrade.
 - (3) Elsewhere on the site: Remove to a depth of 3.0 feet minimum below the finished surface for slopes and shoulders, 1.0 feet below natural ground outside construction limits.

2.05 TOPSOIL EXCAVATION

- A. Definition: Topsoil is defined as friable clay loam surface soil found in varying depths onsite. Satisfactory topsoil is reasonably free of subsoil, clay lumps, stones, and other objects over 2 inches in diameter, without weeds, roots, or other objectionable material as defined in section 2.03 (A.)
- B. Topsoil excavation: Excavate topsoil to depths encountered in a manner which will minimize intermingling with underlying subsoil or

objectionable material. Stockpile topsoil in storage piles to provide free drainage of surface water. Cover storage piles, if necessary, to prevent wind or water erosion. Dispose of unsuitable or excess topsoil as specified for disposal of waste materials. Do not excavate wet topsoil.

2.06 DEMOLITION

- A. **THE CONTRACTOR IS FULLY AND COMPLETELY RESPONSIBLE FOR LOCATION, VERIFICATION, PROTECTION, STORAGE, MAINTENANCE, DEMOLITION, REMOVAL, RELOCATION OR ALTERATION OF ALL EXISTING SITE UTILITIES, SITE IMPROVEMENTS, STRUCTURES, OR CONSTRUCTION ELEMENTS AS REQUIRED TO COMPLETE THE WORK, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING IMPROVEMENTS, UTILITIES, AND SITE CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION.**

2.07 DISPOSAL OF WASTE MATERIALS

- A. Contractor shall dispose of all waste material offsite in a legal manner.
- B. Burning: Burning will be permitted only by legally authorized permit, subject to permit requirements.
- C. Burying onsite is prohibited.

END OF SECTION 02110