

SECTION 02110

CLEARING AND GRUBBING

PART ONE - GENERAL

1.1 DESCRIPTION

- A. Work included: Perform all clearing and grubbing as specified herein. Such work includes but is not limited to the following:
1. Perform all clearing and grubbing necessary and required
 2. Site Clearing
 3. Tree and shrub removal and/or replacement
- B. Related work specified elsewhere:
1. Erosion and Sediment Control – Section 02270
 1. Water Distribution Lines - Section 02665
 2. Seeding and Mulching - Section 02900

1.2 PROTECTION

Streets, roads, adjacent property and other works to remain shall be protected throughout the work as defined in the General Conditions.

1.3 REQUIREMENTS OF REGULATORY AGENCIES

State and local code requirements shall control the disposal of trees and shrubs.

PART TWO - PRODUCTS

2.1 MATERIALS

Materials shall be at the CONTRACTOR'S option.

PART 3 - EXECUTION

3.1 CLEARING

- A. CONTRACTOR is requested to limit his clearing to the area actually needed for construction and wherever possible to avoid clearing large trees.
- B. Limits of clearing shall be within the right-of-way, or easements obtained by the OWNER.

- C. Individual trees, groups of trees and other vegetation, which may be designated to be salvaged shall be left standing and uninjured.
- D. Remove trees, saplings, shrubs, bushes, vines and undergrowth within the limits of clearing to the heights above ground given in the following table:
 - 1. Trees over 6-inches in diameter: 12 inches
 - 2. Shrubs, bushes and trees under 6-inches in diameter: 3 inches
 - 3. Vines and undergrowth: 2 inches

3.2 GRUBBING

- A. Limits of grubbing shall coincide with the limits of clearing.
- B. Remove all stumps, roots over 4-inches in diameter, and matted roots within the limits of grubbing to a depth of 24-inches below existing ground surface. Engineering requirements shall control removal of stumps smaller than 4-inches in diameter under fills, foundations, or any construction in contact with the stumps.

3.3 TRIMMING OF TREES

When required, with the ENGINEER'S approval, trees shall be trimmed to remove branches or roots, which interfere with construction or traffic. Paint all cut branches and roots.

3.4 SALVAGE

- A. It shall be understood and agreed upon by the CONTRACTOR that only those trees, which directly interfere with the construction of this Project shall be removed. Within the limits of clearing all trees 4-inches in diameter and smaller may be removed. No tree 5-inches or larger in diameter, which does not directly interfere with the construction of this Project shall be removed without the express written approval of the ENGINEER.
- B. Material which is to be salvaged, as a result of the CONTRACTOR'S clearing operations, shall include the following items which are to be turned over to the property Owner if the OWNER so desires:
 - 1. Logs over 12-inches, butt diameter
 - 2. Branches over 6-inches, butt diameter
 - 3. Parts suitable for use as mulch
 - 4. Live plants suitable for replanting
- C. All ornamental trees and shrubs within temporary construction easements shall be carefully uprooted, stored, and replanted after construction is complete, unless

otherwise directed. Ornamental trees and shrubs, which do not survive for a period of at least one (1) year, shall be replaced at the Contractor's expense. Unless clearly indicated on the plan, CONTRACTOR should only clear trees necessary to perform the work within the easement noted. Trees should not be removed from the temporary easement area unless it is necessary for performance of the work or when the root structure of the tree would be damaged by the work.

- D. All salvageable material not desired by the property owner shall be removed at CONTRACTOR'S expense. Any desirable top-soil should be stock piled for possible use during Seeding and Mulching.

3.5 DISPOSAL

- A. Burning: Burning of materials on the site by the CONTRACTOR will not be permitted until all applicable permits have been obtained and copies of all permits are filed with the ENGINEER.
- B. Removal:
 - 1. Material to be removed shall be removed from the site daily as it accumulates.
 - 2. Should the CONTRACTOR elect to continue work beyond normal working hours, material to be removed shall not be allowed to accumulate for more than 48-hours.
 - 3. Prior to depositing surplus material at any off site location, the CONTRACTOR shall obtain a written agreement with the Owner of the property on which the disposal is proposed. The agreement shall state that the Owner of the property gives permission for the CONTRACTOR to enter and deposit the material at no expense to the OWNER. A copy of the agreement shall be furnished to the OWNER.

3.6 MEASUREMENT AND PAYMENT

No separate measurement and payment will be made for clearing and grubbing as they are considered incidental items to the work to which they are related and the costs, therefore, shall be included in the values bid for the appropriate items.

- END OF SECTION -

