SECTION 11
CLEARING AND GRUBBING

11-1 General

11-1.01 Scope
This section describes the requirements for clearing and grubbing all areas necessary to perform the work as a whole, including demolition of structures and disposal of debris resulting from these operations. The work as a whole may include, but not be limited to, clearing and grubbing areas to contain pipelines and appurtenances, roadways, canals, reservoirs, dams, buildings, and other structures, all as described on the plans and in the Contract.

11-1.02 Description of Work
Work under this section shall include, but not be limited to, controlling dust, clearing, grubbing, trimming of trees, demolition and disposal of all trees and structures marked on the plans and in the field to be removed, and all brush, rubbish, and other objectionable materials in the work area, all as designated on the plans and in these specifications.

11-1.03 Commencement of Work
Work under this section shall not commence until all control stakes have been set and all trees and structures that are to be removed have been marked and the Contractor has attended a field inspection with the District Engineer.

11-1.04 Restrictions on Cutting of Trees
The Contractor may cut only those trees that are marked to be cut, all as specified in this section. All other trees shall remain regardless of their location with respect to the work.

11-1.05 Limits of Work
In no case shall clearing take place beyond the established right of way limits, or beyond those working limits or clearing limits shown on the plans, unless approved, in writing, by the District Engineer.

11-1.06 Preservation of Vegetation and Property
Every reasonable effort shall be made to preserve and protect all trees, natural vegetation, landscaping, structures, fences, and natural barriers that are not in conflict with the completion of work under this contract. Such features that are damaged by the Contractor's activities shall be replaced, patched, mended or otherwise repaired in a manner meeting the approval of the District Engineer.

Acceptance by the District Engineer of the Contractor's operations or methods of clearing, grubbing, demolition, or disposal shall not relieve the Contractor of his responsibility for the protection of the work and adjacent properties. In addition, while performing work under this section, the Contractor shall comply with the terms and conditions concerning preservation of property as described in the General Conditions of this Contract.
The provisions of this Section shall not relieve the Contractor of his responsibilities for trees and vegetation as provided for under encroachment permits, or other agreements affecting work under this Contract.

The Contractor's attention is directed to the Special Conditions of this Contract for provision regarding fence, yard and pasture removal and restoration and other provisions for clearing and grubbing.

11-2 Prosecution of Work

11-2.01 Clearing
Clearing shall include the cutting of only those native trees, including but not limited to pine, cedar, oak, and madrone, that have been specifically marked for removal; cutting or removing only specifically marked ornamental trees and bushes, removing dead and down trees, and removing stumps, brush, rubbish, and other vegetation and objectionable material, all as necessary for orderly performance of the work. The Contractor shall also clear those areas or features specifically shown on the plans to be cleared.

Native trees less than 5" in diameter, or a circumference of less than 16", measured 4 feet above average surrounding ground elevation, shall be considered brush unless specifically marked on the plans to be saved.

Clearing shall not include the unnecessary removal of trees, grass, turf, brush, or landscaping or similar ground covers or other vegetation.

The Contractor shall not remove any artificial landscape features marked on the plans to remain, including but not limited to, fences, retaining walls, planters, curbs, and walkways. All other such features removed or damaged by the Contractor shall be restored to original condition.

The Contractor shall not conduct any clearing operations outside the limits specified, unless approved by the District Engineer.

The Contractor shall cut only those trees that have been specifically marked to be cut. Trees shown on the plan and marked in the field to be removed shall be cut and their stumps removed, as specified in this section.

Trees located on or near private property and shown on the plans and marked in the field for clearing may, from time to time, be removed by the property owner prior to removal by the Contractor. The Contractor shall remove the stumps of trees so removed, all as specified in this section. The Contractor shall have no claim to timber from trees removed by the property owner.

11-2.02 Tree Trimming
Trimming of trees to accommodate the movement of equipment and materials shall be kept to a minimum and shall be done only with express approval of the District Engineer. Limbs or portions of limbs to be removed shall be cut neatly and cleanly at growth collars. Clubbing of limbs shall not be allowed.
11-2.03 Grubbing
Grubbing shall consist of the removal of all stumps and roots of trees fallen within the work area, either pre-existing or having been left by the Contractor's clearing operations. All depressions created below the original ground surface by removal of the stumps and roots shall be backfilled and properly compacted to a level of the ground surface unless the grubbed area is to be subsequently excavated.

11-2.04 Demolition
Demolition shall consist of the removal and disposal of all existing structures and utilities in conflict with the work and shown on the plans to be removed. All debris resulting from demolition shall be removed from the site of work and disposed of in a manner approved by the District Engineer.

11-2.05 Disposal
All cellulose debris not burned, and all other debris created by the Contractor's activities shall be disposed of in conformance with all federal, state, and local laws and regulations.

All cellulose debris resulting from clearing, grubbing, and demolition shall be piled and burned to ash, or otherwise removed from the site of work. Burning shall be conducted in a manner conforming to all local regulations and so as to eliminate the risk of damage to adjacent property and to minimize the amount of smoke created. All burn piles shall be as free from dirt as practicable. All remnants and evidence of burn piles shall be completely removed from the site. It shall be the Contractor's responsibility to obtain all burning and air pollution control permits required by law.

Disposal of materials on private property will require a signed release from the owner on a form meeting the approval of the District Engineer. The release shall relieve the District of any further responsibility or liability, and shall be received by the District Engineer prior to the disposition of the materials. An example of a release for District contracts is located on the district website.

Removal of merchantable timber and cordwood may require a Timber Harvest Plan. The Contractor's attention is directed to the General and Special Conditions of this Contract.

11-3 Measurement and Payment

11-3.01 Measurement
Measurement for clearing and grubbing shall be made as a percentage of the contract lump sum price. The percentage shall be calculated as the estimated area completed, divided by the estimated total area requiring clearing and grubbing. Areas cleared outside the limits shown on the plans (such action requires prior approval from the District Engineer) for the convenience of the Contractor shall not be included in the estimated area of work completed and shall be cleared at the sole expense of the Contractor.

11-3.02 Payment
The contract lump sum price shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work necessary to accomplish clearing and
grubbing as described in these specifications. A description of the work is included at the head of this section. Any work associated herewith, but not included in other bid items, shall be deemed as included in the work described in this section.