

CONSTRUCTION SPECIFICATION

2. CLEARING AND GRUBBING

1. SCOPE

The work shall consist of clearing and grubbing and disposal of trees, snags, logs, brush, stumps, shrubs and rubbish from the designated areas.

2. PROTECTION OF EXISTING VEGETATION

Trees and other vegetation designated to remain undisturbed shall be protected from damage throughout the duration of the construction period. Any damages resulting from the Contractor's operations or neglect shall be repaired by the Contractor.

Earthfill, stockpiling of materials, vehicular parking, and excessive foot or vehicular traffic shall not be allowed within the drip line of vegetation designated to remain in place. Vegetation damaged by any of these or similar actions shall be replaced with viable vegetation of the same species, similar condition, and like size unless otherwise approved by the Contracting Officer.

Any cuts, skins, scrapes or bruises to the bark of the vegetation shall be carefully trimmed and local nursery accepted procedures utilized to seal damaged bark.

Any limbs or branches one-half (1/2) inch or greater in diameter which are broken, severed or otherwise seriously damaged during construction shall be cut off at the base of the damaged limb or branch flush with the adjacent limb or tree trunk.

All roots one (1) inch or greater in diameter which are cut, broken or otherwise severed during construction operations shall have the end smoothly cut perpendicular to the root. Roots exposed during excavation or other operations shall be covered with moist earth and/or backfilled as soon as possible to prevent the roots from drying out.

3. MARKING

The limits of the area(s) to be cleared and grubbed will be marked by means of stakes, flags, tree markings or other suitable methods. Trees to be left standing and uninjured will be designated by special markings placed on the trunk about six (6) feet above the ground surface.

4. CLEARING AND GRUBBING

All trees not marked for preservation and all snags, logs, brush, stumps, shrubs, rubbish and similar materials shall be cleared from within the limits of the designated areas. Unless otherwise specified, all stumps, roots and root clusters having a diameter of one (1) inch or larger shall be grubbed out to a depth of at least two (2) feet below subgrade for concrete structures and one (1) foot below the ground surface at embankment sites and other designated areas.

5. DISPOSAL

All materials cleared and grubbed from the designated areas shall be disposed of at locations shown on the drawings or in a manner specified in Section 7. The Contractor is responsible for complying with all local rules and regulations and the payment of any and all fees that may result from disposal at locations away from the project site.

6. MEASUREMENT AND PAYMENT

Method 1 For items of work for which specific units prices are established in the contract, the cleared and grubbed area will be measured to the nearest 0.1 acre. Payment for clearing and grubbing will be made for the total area within the designated limits at the contract unit price. Such payment will constitute full compensation for all labor, equipment, tools and all other items necessary and incidental to the completion of the work.

Method 2 For items of work for which specific unit prices are established in the contract, the length of the cleared and grubbed area will be measured to the nearest full station (100 feet) along the line designated on the drawing or identified in the specifications. Payment for clearing and grubbing will be made for the total length within the designated limits at the contract unit price. Such payment will constitute full compensation for all labor, equipment, tools and all other items necessary and incidental to the completion of the work.

Method 3 For items of work for which specific unit prices are established in the contract, each tree, stump and snag having a diameter of four (4) inches or greater and each log having a diameter of four (4) inches or greater and a length of ten (10) feet will be measured prior to removal. The size of each tree and snag will be determined by measuring its trunk at breast height above the natural ground surface. The size of each log will be determined by measuring the butt and by measuring its length from butt to tip. The size of each stump will be measured at the top. Diameter shall be determined by dividing the measured circumference by 3.14.

Payment for clearing and grubbing of each tree, stump and snag having a diameter of four (4) inches or greater and each log having a diameter of four (4) inches or greater and a length of ten (10) feet or greater will be made at the contract unit price for its size designation as determined by the following schedule:

Measured Diameter (in.)	Size Designation (in.)
4 to 8	6
8 to 12	10
12 to 24	18
24 to 36	30
36 to 60	48
Over 60	60

The sum of such payments shall constitute full compensation for clearing and grubbing; including the clearing and grubbing of smaller trees, stumps, snags, logs, brush, shrubs, roots, applicable permits and associated fees, and rubbish removal. Such payment shall constitute full compensation for all labor, equipment, tools and all other items necessary and incidental to the completion of the work.

Method 4 For items of work for which specific lump sum prices are established in the contract, payment for clearing and grubbing will be made at the contract lump sum price. Such payment shall constitute full compensation for all labor, equipment, tools and all other items necessary and incidental to the completion of the work.

All Methods The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section 7.