

## **ITEM 2020350—REMOVE (WOODY VEGETATION)**

### **Description:**

The work under this item includes the removal and disposal of existing woody vegetation within natural and/or landscaped project areas as identified by the contractor and evaluated by ADOT construction Professional Landscape Architect (PLA) with approval from the Engineer prior to removal. The work under this item shall not be covered/paid by Clearing and Grubbing. Invasive and non-native weed species shall be eradicated according to MISCELLANEOUS WORK (CONTROL OF NOXIOUS PLANTS) of these Special Provisions.

### **Construction Requirements:**

During the Advertisement for Bid and prior to Bid Opening, the contractor may field verify the quantity of ITEM 2020350—REMOVE (WOODY VEGETATION) as per the criteria established in these Special Provisions and/or project plans. The contractor is responsible for verifying the quantity and location of all WOODY VEGETATION to be removed as part of this project.

Before starting removal activities, the contractor shall coordinate with the Engineer at the pre-construction conference to obtain a permit from Arizona State Department of Agriculture (ASDOA) to transport/export removed woody vegetation away from the project site. If the contractor utilizes chipping methods for on-site disposal, as well as spreading of removed vegetation, no permit will be required from ASDOA. In that case, the contractor shall first coordinate with White Mountain Apache Tribe (WMAT) regarding the salvaging and sizing of firewood. All salvaged firewood shall be left on-site at a designated location for WMAT to pick up as approved by the Engineer. The remaining woody vegetation shall be chipped on-site as specified within these Special Provisions.

The contractor shall also coordinate with the Engineer, project stakeholders, as well as ADOT Construction PLA to ensure that vegetation removal will comply with the Arizona Native Plant Law, Clean Water Act (CWA) Section 404 regulations, Section 404 permit and project-specific stipulations.

If the contractor damages existing features, including guardrails and barrier walls, inlets and outlets of drainage facilities, flow paths of the inlets and outlets as well as other drainage facilities, they shall be repaired or replaced as directed by the Engineer and at no cost to the Department.

Woody vegetation is defined as trees, shrubs, bushes and other woody plant material. Cacti, succulents or other herbaceous vegetation shall not be considered as woody vegetation. Native low shrubs/subshrubs that include but not be limited to *Calliandra* spp., *Encelia* spp., *Ephedra* spp., *Ericameria* spp., *Larrea* sp., *Parthenium* sp., *Psilostrophe* spp., *Senna* spp., *Simmondsia* sp., and *Zinnia* spp., which will not impede safety and/or construction, shall be remained

on site. Woody vegetation that is deemed as a sight obstruction within the sight distance area shall be removed permanently as evaluated by ADOT PLA with approval from the Engineer.

In addition to what is shown in the plans and/or estimates, the contractor shall also coordinate with the Engineer to identify and tag the woody vegetation to be removed prior to construction. No work shall begin until the woody vegetation has been identified and tagged and that the removal techniques have been approved by the Engineer. All work shall occur within the traffic clear zone/recovery areas as defined in the ADOT Roadway Design Guidelines, Section 303.2 - *Roadside Recovery Area*. Identified woody vegetation within the sight triangle at roads/streets intersection shall be subject to removal. In areas where guardrails are present, identified woody vegetation (trees, shrubs, and bushes) behind new guardrails and new end sections shall be cleared a distance of twenty (20) feet, measured horizontally from the back of the guardrail post. Identified woody vegetation within twenty (20) feet of new barrierwalls measured horizontally from the back of barrierwalls, shall also be subject to removal. Woody vegetation to be removed beyond both traffic clear zone/recovery areas and twenty (20) feet outside of guardrails/barrierwalls shall be evaluated by ADOT construction PLA with approval from the Engineer.

Woody vegetation in highly erosive slopes or washes (Waters of the U. S.) shall be removed as close to natural ground as practical with minimal disturbance to the surrounding ground surface as directed by the Engineer. The contractor shall not disturb or remove vegetation outside the construction limits without written approval of the Engineer.

The contractor shall remove all woody vegetation within traffic clear zone/recovery areas, or as otherwise directed by the Engineer. The woody vegetation to be removed shall also include but not be limited to the approximate SR—XX project locations shown on the plan sheets and/or as listed below:

1. MP 314.61—XXXXXXXXXXXXXXXXXXXX
2. MP 314.64—XXXXXXXXXXXXXXXXXXXX
3. MP 314.85—XXXXXXXXXXXXXXXXXXXX
4. MP 316.80—XXXXXXXXXXXXXXXXXXXX
5. MP 316.88—XXXXXXXXXXXXXXXXXXXX
6. MP 322.6—XXXXXXXXXXXXXXXXXXXX

The contractor shall remove the identified woody vegetation to finished grade level without uprooting it (flush cutting). In order to stop stump regrowth, the applicable remaining stumps shall be promptly treated with suitable herbicide so the identified woody vegetation will not sprout new growth from the stumps. Herbicide stump treatment shall NOT be conducted to plant species such as common evergreen coniferous shrubs and trees, which will unlikely generate stump regrowth. Stump treatment process shall be also evaluated by ADOT construction PLA with approval from the Engineer.

The contractor shall properly dispose of all materials and debris generated from removal activities. The contractor may use chipping methods to spread out removed woody plant materials on-site if approved by the Engineer. Chipped wood material shall be spread on the surface of the disturbed soil area or designated project area with a thickness of no more than one inch ( $\leq 1$ " ).

The contractor shall avoid damaging vegetation that is to remain in place. If limbs or branches of vegetation that are intended to remain are broken or damaged during removal, the contractor shall first ensure that the plant will survive and then trim the damaged limbs or branches with clean, straight cuts. If a plant not intended for removal has been damaged and not expected to survive, the contractor shall replace the damaged plant as directed by the Engineer and at no cost to the Department.

The contractor shall keep the roadway pavement and shoulders clear at all times. Debris from removal activities shall be removed from the site immediately. If debris cannot be removed immediately, it shall be kept a minimum of 30 feet from the edge of pavement and removed at the end of each work day.

All disturbed areas shall be stabilized in accordance with the CWA Final Stabilization criteria, unless otherwise directed by the Engineer. Understory/underbrush area beneath the removed canopy shall also be hydraulically seeded without tillage and according to the SEEDING (CLASS II) of these Special Provisions.

Responsible herbicide applicator shall be licensed under the appropriate category as required by the State Law.

**Method of Measurement:**

REMOVE (WOODY VEGETATION) will be measured by the acre, to the nearest one acre of ground surface with all woody vegetation elements removed, chipped or disposed as specified herein. This item will be measured only in areas identified for removal of woody vegetation.

**Basis of Payment:**

During pre-construction meeting, the contractor in conjunction with Engineer shall verify and be in agreement with the quantity/acreage of woody vegetation to be removed as evaluated by ADOT Construction PLA. The quantity and location shall also be in compliance with environmental requirements.

REMOVE (WOODY VEGETATION), measured as provided above, will be paid for at the contract per acre unit price, which is for the complete removal, disposal as well as full compensation for the work described and specified herein, including herbicide treatment of the remaining stumps. If there are other areas that are designated for clearing and grubbing, this work will be paid under a separate item.

There will be no separate measurement or payment for chipping, spreading or removing the chips, and returning the disturbed area to pre-construction grades or unless otherwise called for in the plans or directed by the Engineer.

SAMPLE