

## **DETAILED SPECIFICATIONS**

### **Landscape Ash Tree Removal for Emerald Ash Borer Eradication**

#### **Purpose:**

The Maryland Department of Agriculture, Plant Protection and Weed Management Section (the "Department"), has quarantined an area of Prince George's County known to be infested with the emerald ash borer (EAB), a dangerously injurious plant pest. The Department will be working to eradicate this pest and to prevent its spread into surrounding areas of Maryland and neighboring states. This landscape and Right of Way tree removal work described below must proceed at once, and to be effective, should be completed on or about April 1, 2007.

The initial phase of the Department's eradication effort consists of removing all landscape and naturally growing ash trees 1" in diameter or greater from the eradication zone. The eradication effort calls for the destruction of all such ash trees and branches by burning or grinding to chips no larger than 1" in two dimensions. The Department has designated an area adjacent to the MDA Cheltenham Tobacco Warehouse Facility ("Cheltenham Facility"), as the "Ash Tree Marshalling and Grinding Site," for the purpose of receiving, organizing, and stockpiling ash trees and wood removed from the eradication zone.

As described below, on or before April 1, 2007, the Contractor shall cut and remove all ash (*Fraxinus* species) trees one (1) inch or more in diameter designated by the Department located within the Eradication Zone, and transport all removed ash trees and branches to the Marshalling and Grinding site in Cheltenham, MD. These trees will be primarily, but not exclusively, on residential properties, County or municipal Rights of Way, and other developed private and public property.

#### **Minimum Contracted Work**

This is a requirements contract and no minimum amount of work is guaranteed. The work described herein is to be funded by Federal funds that have not been totally appropriated at this time. There is a limited bio-window of time during which work must be accomplished (see also "Contractor Performance, part 1 "Critical time period", p.7). The total number of trees to be felled and treated will depend upon total funding received, progress of work and availability of time in the bio-window, and is not predictable at this time. In addition, unforeseen legal actions, or inclement weather or other events outside the control of the Department may occur and severely curtail the work which can be performed.

## **Statement of Work: Responsibilities of the Contractor**

The Contractor shall obtain all necessary licenses, permits and certifications required in full performance of this contract. The Contractor shall further provide competent qualified supervision and all necessary labor, equipment, materials as necessary to perform the work as required. The Contractor shall take precautions necessary to protect persons or property against injury or damage and be responsible for any such damage, or injury that occurs as a result of their fault or negligence. The Contractor agrees to perform and successfully compete in a timely manner the following work:

### A. Location of Trees: Area of Work.

The Contractor shall perform the specified ash tree removal only in the designated Emerald Ash Borer Eradication Zone mapped as shown in Attachment A and only as directed by the MDA Representative or his/her designee. **Up to 6000-9000 trees are estimated to be cut under this contract.** Trees are located on public, private and commercially owned land that is developed to some degree. **Many trees (estimated 1000-1500) are in urban settings on residential sites surrounded by improvements.** Other environments are: Right of Ways, parks, agricultural sites, and small wood lots (<1 to approximately 20 acres), and so forth.

### B. Ash Tree Cutting and Removal Operations.

These operations shall consist of four sequential steps which are detailed separately below:

1. Location and verification of marked tree(s) to be cut on each property or location.
2. Preparation for safe felling of the tree(s), including establishing clear areas of work off limits to unauthorized persons and vehicles, determining electrical hazards, etc.
3. Felling and removing the tree and all brush and debris and clean-up.
4. Grinding the stump, or treating the stump, and restoring the area of the stump and operations, including any disturbance to lawns, drives, walks etc.

#### 1. Location and Verification of Marked Trees to be Cut

Because many marked trees will be located on private residential properties, great care shall be taken in this identification and verification procedure.

All trees designated for removal will be marked by the Department. The **Site Supervisor** for the Contractor will confirm the identification on site of each marked tree to be cut with the Representative from the Department (**MDA Representative**) BEFORE proceeding with any preparations to cut. The Department will provide for each area or location a detailed **Tree List and/or Site Map** which records each individual tree to be cut. The assignment to cut specific trees will be so marked by the MDA Representative on the Tree List or Site Map provided. See the section entitled "Key Personnel" below, p. 5, for additional information regarding the MDA Representative and the Site Supervisor for the Contractor.

## 2. Preparation for safe felling of the tree(s)

- a. The Contractor shall not proceed with the preparation for or the cutting of any tree without approval from the **MDA Representative**.
- b. All work shall be performed according to ANSI Z133.1-2006. Tree removal operations shall be performed according to the provisions of section 8.5, Tree Removal and 8.6, Brush Removal and Chipping.

The Contractor shall plan and prepare for the use and positioning of equipment so as to accomplish the safe, effective and efficient removal of trees and sections of trees while minimizing impact on improved property.

Whenever any tree, or large tree sections of a tree being removed may endanger people or property, an adequate area shall be cordoned off with tape or ropes and clearly marked to prohibit access by the public or other unauthorized persons.

- c. Traffic control shall be performed according to the provisions of ANSI Z133.1-2006 section 3.2, Traffic Control Around the Jobsite, in addition to the following provisions:

The Contractor shall be responsible for and provide for the safe and continuous maintenance of traffic throughout the work site while minimizing hazards and inconvenience to the traveling public.

Portable warning signs will be used on all work sites. All traffic control devices provided by the Contractor shall meet and be established in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), 1988 Edition, or latest revision. Devices include signs, lights, traffic cones, barrels, barricades, flagging and other safety and warning devices. Traffic cones, when used for traffic control, shall be 24" – 36" in height with the predominate color being orange in accordance with Section 6c-3 of the MUTCD. No substitutes will be accepted.

The Contractor shall use and maintain "Caution – Tree Work Ahead" signs at the initial and terminus points of each work area. All signs shall be 36" x 36" and have reflective background, standard color and letter sizes, as specified in the MUTCD. No substitutes will be accepted.

## 3. Felling and removing the tree and clean-up

- a. All tree removal work shall be accomplished in a safe manner employing accepted industry methods and procedures in accordance with ANSI Z133.1-2006.

An inspection shall be made by a qualified arborist to determine whether an **electrical hazard** exists before climbing, or otherwise entering, or performing work on or in a tree.

Only qualified line-clearance arborists or qualified line-clearance arborist trainees shall be assigned to work where an electrical hazard exists. Qualified line-clearance arborist trainees shall be under the direct supervision of qualified line-clearance arborists (see also the Section entitled "Required Personnel – Contractor" below on p. 6).

All work in proximity to electrical hazards shall be performed according to the provisions of ANSI Z133.1-2006 Section 4.2, Working in Proximity to Electrical Hazards.

- b. All removal work accomplished by this contract shall be done in accordance with the laws and regulations of the Department of Natural Resources, State of Maryland. The Contractor shall have at all times while work is being performed, an employee of the Contractor who is currently a Maryland Licensed Tree Expert.
  - c. No tree shall be removed in such a manner that safety is compromised. When work is being performed, all safety precautions shall be in place to protect the operators and the general public.
  - d. The Contractor shall furnish all necessary supervision, labor, vehicles and equipment, capable of effective and efficient removal of trees. In addition, the Contractor shall maintain on site, at all times work is being performed, an individual who represents the contractor and can adequately communicate in English, both orally and in writing, with the MDA Representative.
  - e. Trees removed will be cut as close to the ground as possible, but no more than six inches above grade level. Whenever large tree sections of a tree being removed endanger people or property, such sections shall be secured by ropes and lowered safely in a controlled manner.
  - f. All branches and small limbs shall be chipped, hauled to and dumped at the MDA Ash Tree Marshalling Yard ("MDA Marshalling Site") at Maryland Department of Agriculture, Cheltenham Warehouse, 11071 Crain Highway, Cheltenham, MD 20623. All wood too large to be chipped shall be loaded, hauled and dumped at the MDA Marshalling Site.
  - g. Under no conditions shall any accumulation of brush, limbs, logs or other debris be allowed in such a manner as to result in a hazard to motorists or pedestrians or to remain on location longer than the time work is performed on the site. Debris in the roadway surface, resulting from the work, shall be removed immediately to avoid possible hazardous conditions. The tree lawn and turf area shall be left in a "lawn raked clean" conditions upon completion of any work. Sidewalks, curbs, gutters and pavement areas will be left in a "broom cleaned" condition upon completion of work.
4. Stump grinding, removal or treatment, and restoration of the work area
- a. **Stump grinding** shall be performed according to the provisions of ANSI Z133.1-2006 sections 5.1, General and 5.5, Stump Cutters. No stumps should be ground without confirmation from the MDA representative. **Stump grinding is intended only for trees in urban/residential and commercial settings, but may be required on any tree, at the discretion of the Department.**
  - b. Contractor must contact "Miss Utility" 48 hours in advance to obtain clearance/location of utilities in the tree lawn area where trees are planned for removal and where stump grinding is planned or anticipated. MDA will provide the Contractor with an advance list of work/tree locations and addresses.

- c. Grinding of stumps by specialized equipment to a depth of 12” below existing grade or as needed to remove all exposed root material greater than one inch in diameter.
- d. All wood chips and debris generated by the grinding process are to be raked and removed from the stump location. Topsoil shall be placed and compacted as best possible until original ground level is reached. The disturbed areas shall be seeded and straw mulched. All surplus materials and chips are to be removed from the site and the site left in a neat and orderly condition. Sidewalk, curb, gutters and pavement areas adjacent to a removed stump will be left broom clean.
- e. Stump grinding is to proceed promptly following tree removal except when the Contractor’s Site Supervisor deems ground conditions or continuing tree removal activities warrant delay. If delay extends beyond the work day, the Contractor shall leave notice with the property owner or tenant as appropriate. Contractor shall return to perform when conditions are deemed suitable, but no later than 30 days following tree removal. Prompt notice will be provided to MDA of locations and date of completion for all delayed stump grinding work items.
- f. **Stump removal** may be performed instead of stump grinding on small caliper trees at the discretion and approval of the MDA Representative.
- g. **Stump treatment with herbicides may be prescribed instead of stump grinding at the discretion and direction of the MDA Representative.** Stump treatment will be primarily directed for stumps on rural or unimproved areas, woodlots and “buffer” areas, sites with excessive slope, areas with difficult access, and so forth. Stump treatment with herbicides shall be performed by the Contractor with a triclopyr herbicide formulation and only as approved by the Department. Application must be made in accordance with the laws and regulations of the Maryland Department of Agriculture, Pesticide Regulation Section.

## 5. Work Day and Work Week

- a. The Work day shall begin promptly at 7AM. The Contractor shall continue for a minimum of 8 hrs exclusive of meal break (for example 7 AM – 3:30 PM with ½ hour lunch). Under no circumstance shall Contractor begin work prior to 7AM.
- b. The work week shall be a minimum of 5 and a maximum of 6 days per week Monday through Saturday, unless curtailed by the Department (see paragraph “c” of this section, below). Saturdays will be worked only at the mutual agreement of the MDA Representative and the Site Supervisor for the Contractor.
- c. The Department will determine the start and stop work times each day. This will be communicated by the **MDA Representative** to the **Site Supervisor for the Contractor**. The Department may curtail the work day or the work week at it’s discretion without compensation to the Contractor. The work day may be **extended**

beyond 8 hours at the mutual agreement of the MDA Representative and the Site Supervisor for the Contractor.

### **Key Personnel:**

- **MDA Representative:** The Department will designate and arrange for an MDA Representative to be available during all operation hours and to whom the Contractor and its personnel and subcontractors may bring all matters for coordination and clarification. The MDA Representative for the Department will provide the **Tree List and/or Site Map** for the Contractor's reference and will approve the commencement of all tree cutting and removals.
- **Site Supervisor:** Likewise, the Contractor will designate a Site Supervisor and other Key Personnel (see Basic Agreement), at least one of whom will be on site at all times when work is being performed on this contract.

In so far as is practical, matters for coordination and clarification will be brought directly to the attention of the respective Site Supervisor or MDA Representative and Contractor, and not to other employees or agents of these parties.

### **Coordination by the Department**

The tree removal operations under this contract shall be conducted at the initiation and direction of the Department. The Department will make all advance contact with homeowners and residents on whose properties trees to be removed are located. The **MDA Representative** or their designee at the site will coordinate general matters of access and conflict between the Contractor and homeowners and residents whose property is involved in or near tree removal operations. Complaints, questions, concerns, etc., from homeowners, residents and other members of the public shall be directed to the **MDA Representative** or their designee. All matters of resolution and or mitigation will be mutually agreed upon by the Contractor and the Department prior to being offered or performed. The Contractor shall not unilaterally negotiate any agreement, resolution or mitigation with any homeowner or neighbor of a homeowner on whose land the operation is being conducted. Questions, discrepancies or disputes unable to be resolved in the field will be resolved by the Operations Team Leader, as needed.

### **Required Personnel - Contractor:**

The Contractor shall provide competent, trained and physically qualified tree removal and stump grinding personnel designed as follows:

The **Site Supervisor for the Contractor** shall have a minimum of three years tree and stump removal experience and must hold, at the time of award and for the duration of this contract, credentials of a **Maryland Licensed Tree Expert** as issued by the Maryland Department of Natural Resources. The **Site Supervisor for the Contractor** must be able to identify an ash tree by bark, buds, and or twigs; that is, in leaf-off condition.

The Working Crew Chief/Climber shall have a minimum of two years tree and stump removal experience, six months of which shall have been as a full time Crew Chief.

All Laborers – shall have a minimum of six months experience in the tree and stump removal industry.

The Contractor shall have available at least one employee who is a qualified line-clearance arborist and who is able to respond on short notice (within 24 hrs) and as needed to perform any and all line-clearance work, and to resolve questions regarding the need for line-clearance work. All qualified line-clearance arborists and qualified line-clearance arborist trainees shall meet the requirements of ANSI Z133.1-2006.

**The State reserves the right to request worker replacement, and the Contractor shall comply in a prompt and expedient manner.**

### **Contractor Performance –**

#### 1. Critical time period

This is an emergency response project: the State of Maryland and USDA Animal Plant Health Inspection Service have only a short period of time to accomplish successful and effective eradication of the Emerald Ash Borer. **The Contractor shall commit to:**

- Responding promptly by reporting for assignment within 5 calendar days of Contract award and receiving Notice to Proceed; and
- providing the required crew(s) and equipment for full work days each day, as described under “Statement of Work” item # 5 above (p.5); and
- providing the above full day work crews until April 15, or such time as the Department provides written notice of the completion of tree cutting and removal assignments, whichever comes first; and
- promptly returning to complete any stump grinding and stump removal assignments and yard restoration work assignments that remain after tree cutting operations have been completed at any given site or area.

#### 2. Continuation of Work

The Contractor shall promptly repair or replace any equipment lost from service due to breakdown or other mechanical failure, but not later than 24 hours from the time of loss of service. Likewise, the Contractor crew members lost through sickness or injury shall be promptly replaced by the Contractor as needed for the safe continuation of assigned work, and as specified under the Section above entitled “Required Personnel – Contractor” (p. 6), but no later than the beginning of the next work day. When repeated delays or interruptions of work due to equipment malfunction and breakdown, or loss of availability of personnel are deemed by the Department to be excessive or to endanger completion of all contracted work within the available biological time frame for effective eradication of the Emerald Ash Borer, the Contractor may be subject to Termination for Default (see Article XVI, Section One, General Terms and Conditions and item #3 below of this section entitled “Failure to Perform”).

### 3. Failure to Perform

Any Contractor who fails to comply with any of the above Contractor Performance items **or** who fails to perform contracted services **or** who fails to make progress so as to endanger completion of all contracted work within the available biological time frame for effective eradication of the Emerald Ash Borer, may be declared in default and shall be subject to the provisions of *Article XVI, Termination for Default (Section One, General Terms and Conditions)*. This paragraph does not preclude the Department from taking any other action because of the Contractor's failure to meet contract specifications or failure to perform as required

#### **Additional Work – Right of First Refusal:**

If the Department determines the need for an additional independent crew and equipment to remove trees, such work will be offered first to the Contractor who was the lowest responsive bidder. This offer will be made in writing by the Department to the Contractor, describing generally the time, duration and amount of crew and equipment needed. **If the Contractor who was the lowest responsive bidder replies in the negative, or fails to respond by 4:00 PM at the end of the second full business day after the day in which the offer was received**, the Department will make this same offer to second lowest responsive bidder. If the response is negative or untimely as above, then this same offer will be made to next lowest responsive bidder, and so on, until the needed additional crew and equipment can be provided.

#### **Invoices and Payment:**

##### 1. Payment

Payment will be made for each tree effectively removed, including all stump grinding, stump removal and stump treatment work and yard or land restoration as may be required when all such work has been completed according to the above specifications and to the satisfaction of the **MDA Representative**. Acceptance of completed work for each tree will be documented by the Department and provided to the Contractor. The Department will attempt to provide this documentation at the time of completion or at the beginning of the next work day following completion. Payment rate shall conform to the **price schedule** submitted by the Contractor with his bid.

#### Invoicing

Invoices may be submitted for entire contracted work or parts thereof at the option of the Contractor. Invoices for partial work completed shall be for daily personnel and equipment time at the "daily rate" stipulated in the "Basic Agreement" for days of actual operation by the Contractor. Invoices for partial days of operation and/or for reduced personnel or equipment from that committed to for the "daily rate" will be paid according to the schedule stipulated in the "Basic Agreement". All invoices shall be submitted to:

Maryland Department of Agriculture  
*The Wayne A. Cawley, Jr. Bldg.*  
Plant Protection and Weed Management  
50 Harry S. Truman Parkway  
Annapolis, MD 21401

Invoices must clearly state the dates and time periods each day along with a brief description of personnel and equipment provided for that period each day, and show the daily amount due, and total amount due for the invoice. The contractor's FID number must be included on all invoices.

**Insurance:**

1. The Contractor shall secure, pay the premiums for, and keep in force until the expiration of the contract, liability insurance covering all damage to life and property due to its activities or those of its agents or employees, in connection with its performance under this contract, including operation of equipment and vehicles. This insurance shall include the following coverages and minimum limits:
  - a. Comprehensive General Liability: \$1,000,000 single limit for each occurrence for bodily injury and property damage combined.
  - b. Automotive Liability: \$1,000,000 single limit for each occurrence for bodily injury and property damage combined.
  - c. Workers Compensation Insurance covering all the Contractor's employees who engage in any work under the contract, as may be required by the laws of the State of Maryland.
2. Subcontracts: The Contractor shall cause any subcontractor approved by the Department to perform work under this contract to secure, pay the premiums for, and keep in force until the expiration of the subcontract liability insurance covering all damage to life and property due to its activities or those of its agents or employees in connection with its performance under the subcontract. The Contractor may alternatively elect to have the subcontractor named as additional insured on all such insurance policies as are required of the Contractor.
3. Miscellaneous: The Department shall be named additional insured on all insurance coverage required by this contract .

The Contractor shall provide evidence that it has obtained the required insurance to the Department at or before the time it returns the signed contract. If work is sublet, the subcontractor shall file in the same manner and at the same time as required of the Contractor evidence showing that the subcontractor has obtained the required insurance or is named as additional insured on all relevant policies of the Contractor.

