

**PERFORMANCE WORK STATEMENT (PWS)
TABLE OF CONTENTS**

- I. Background
- II. Scope of Work
- III. Spring 2003 Control Treatment Goals
- IV. Projected Treatment Summary
- V. Host Trees for Treatment
- VI. Contractor Performance Requirements
- VII. Contractor Quality Control
- VIII. Record Keeping and Reporting
- IX. Timeline for Completion of Work Ordered
- X. Contract Work Hours
- XI. Post Award Preparation
- XII. Contractor Employee Identification Requirements
- XIII. Marking of Vehicles
- XIV. Condition of Equipment
- XV. Notification of the Public Prior to Treatment
- XVI. Treatment Protocol
- XVII. Access Issues Into Private Property
- XVIII. Call Back Work Orders
- XIX. Soil Injection – Approved Formulation, Application Method and Rate of Application
- XX. Kioritz Soil Injector
- XXI. Soil Drench Treatments
- XXII. Safeguarding Soil Injection Treatments
- XXIII. Trunk Injection With Mauget Capsules
- XXIV. Safeguarding Mauget Capsules
- XXV. Precautions/Public Relations
- XXVI. Contractor Qualification Requirements
- XXVII. Failure to Perform
- XXVIII. Incentive for Early Completion of Work Orders
- XXIX. Contractor Performance Standards
- XXX. USDA Quality Assurance
- XXXI. Contractor Liability
- XXXII. Attachments to Statement of Work/Specifications

BACKGROUND

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), in conjunction with the State of New York, is planning a program to apply a systemic insecticide (Imidacloprid), for the control of the Asian Longhorned Beetle (ALB), *Anoplophora glabripennis* (Motschulsky). The program is intended to reduce the potential for damage from this significant pest species. Three methods of chemical treatment will be applied during the 2003 treatment period in the New York City Areas – soil injection, trunk injection and soil drench. Trunk injection will be the only application method used on Long Island (Nassau and Suffolk Counties).

The ALB bores into and kills a variety of tree species including species of maple, elm, ash, horsechestnut, birch, poplar, and willow. This exotic beetle has the potential to spread across the United States and cause extensive loss to ornamental and commercial tree species. As a consequence, the Secretary of Agriculture has declared an emergency, committed resources to eliminate the ALB, and pledged to restore urban forests.

II. SCOPE OF WORK

APHIS anticipates awarding 5 firm, fixed price, requirements contract for ALB chemical injection treatment within the State of New York. The contracts covering New York City will use soil injection, trunk injection, and soil drench as methods of application 1) Manhattan, 2) Brooklyn, 3) West Queens, and 4) East Queens. The Contract covering Long Island will only use trunk injection: 5) Long Island. Contracts are for delivery of chemical treatments for ALB during Fiscal Year 2003. The contract effective period of performance shall be from date of award through September 30, 2003 unless extended in accordance with other terms and conditions specified herein.

III. SPRING 2003 CONTROL TREATMENT GOALS

It is anticipated that treatments of all the host trees identified within this PWS will be applied from May 19, 2003 to August 15, 2003. It will not be required to have all five contracts started, working, or finished at the same time. The goal is to maximum efficiency and resources so that all injection treatments are completed by August 15th. Additional applications may be requested on an as needed basis.

IV. PROJECTED TREATMENT SUMMARY

USDA, APHIS anticipates applying chemical treatments to an estimated 142,286 (+/- 20 %) trees at an estimated total DBH of 1,730,494 (+/- 20%) inches, with an average dbh of 12 inches. Maps and descriptions of each contract area are included as an attachment to this work statement. USDA reserves the right to add additional treatment areas as deemed necessary.

In no event shall the failure of the Contractor to visit these treatment areas and consider general and local site conditions prior to submitting their proposal be grounds for a claim or price adjustment after award (Refer to NOTE in Part I, Section B, The Schedule on Page 4 of this solicitation.

Region	Trunk Injection		Soil Injection		Soil Drench			TOTAL	
	Trees	dbh	Trees	dbh	Trees	Properties	dbh	Trees	dbh
(1) Manhattan	7,721	105,005	8,688	118,157	825	250	3,300	17,234	226,462
(2) Brooklyn	14,450	212,415	2,550	37,485	0	0	0	17,000	249,900
(3) West Queens	17,969	226,409	3,171	39,955	0	0	0	21,140	268,788
(4) East Queens	13,956	170,263	13,956	170,263	0	0	0	27,912	342,244
(5) Long Island	59,000	643,100	NA	NA	NA	NA	NA	59,000	643,100
TOTAL	113,096	1,357,192	28,365	365,860	825	250	3,300	142,286	1,730,494

V. HOST TREES FOR TREATMENT

The host trees to be treated under this contract include Elm, Maple, Birch, Willow, Box Elder, Horsechestnut, Buckeye, European Mountain Ash, Hackberry, Ash, Poplar (excluding cottonwood), London Plane Tree, Sycamore and Albizia. USDA reserves the right to add or subtract host trees listed for treatment.

VI. CONTRACTOR PERFORMANCE REQUIREMENTS

1. The Contractor shall provide all personnel, labor, supervision, management oversight, supplies, equipment, and materials required to apply pesticides for the control of ALB, in accordance with this performance work statement (PWS) and contract. Contract prices shall include all costs associated with the performance of all work ordered against this contract for the control of ALB in the State of New York, including but not limited to furnishing and transporting personnel and equipment, materials (including insecticides) necessary to chemically treat trees on public and private property, insurance, licenses, permits (including but not limited to City and State DOT, Railroad), certificates (Rail roadway worker protection certification), fees, tolls, general and administrative, and other such costs required to perform the services specified herein.
2. The Contractor shall comply with local, State, and Federal laws for the application of chemical treatments, storage and disposal of pesticide, pesticide containers, and pesticide reporting requirements.
3. Performance shall focus on quality with the objective of maximum efficiency and use of resources so that all injection treatments are completed by August 15, 2003.

4. An approved quality control inspection system, employee accountability, and a full 12 hour work day are mandatory for the control treatment days. Services shall be performed in a professional manner, as specified herein, and Contractor personnel shall display a positive image of USDA, APHIS and the State of New York at all times by ensuring favorable public relations. Damage to host trees due to soil or trunk injection treatment by the Contractor or their subcontractors shall be warranted for 1 year from the date of treatment, with the exception of trees that receive additional USDA ALB treatments by another Contractor within that one year period. Damaged trees shall be immediately removed, debris properly disposed of in compliance with ALB regulations, and replaced without additional cost to USDA, APHIS.
5. The Contractor shall designate a Project Manager and Field Supervisor(s) for each contract and define their respective roles, responsibilities, delegation of authority on the contract in their detailed work plan/quality control plan. These individuals, along with the certified pesticide applicators, shall be referred to as key personnel and are subject to the terms and conditions of the key personnel clause at Section H.4 of the contract.
6. The Project Manager and Field Supervisor(s) shall be present at the work site at all times work is being performed. They shall be available to the APHIS Contracting Officer's Representative (COR), Contracting Officer's Technical Representative (COTR) 24 hours a day by either cellular phone or pager, and maintain direct contact with their certified pesticide applicators during the period any work ordered by APHIS for treatment and control of ALB in progress or completed. State of New York guidelines regarding pesticide applicator supervision shall be followed.
7. Soil and trunk injection services to be furnished under this contract shall be ordered by issuance of a written work order by the Contracting Officer's Representative (COR) unless written delegation of authority for this purpose is delegated to the Contracting Officer's Technical Representative (COTR). Individual work orders will include specifics regarding treatment zones, locations of host trees, and number of trees, estimated total dbh, treatment area maps, and other pertinent information.
8. The Contractor shall notify the public of treatment through the distribution of printed notification to every property located within the treatment area. This notification shall be completed within a 24 hour period from receipt of the work order. Treatments shall begin 48 hours after notification is completed.
9. The Contractor shall treat all "accessible and allowable" host trees located within the treatment area. This includes all public trees (street and park trees.) It also includes all private trees for which USDA received a written "Treatment Release" from the property owner or authorized agent and for private trees which are physically accessible to the contractor (no fences or other physical barriers preventing access.) The Contractor shall receive a list of all the properties having a "Treatment Release" at the time the work order is issued. The Contractor shall also be obligated to treat any additional private property tree for which USDA receives a "Treatment Release" during the time period that the work order is still active for no additional expense. The Contractor shall also try to secure access from the property owner/resident through three separate attempts to tree the trees behind physical barriers.

10. There will be trees that the Contractor will not be able to treat at the time that the initial work order written for an area is active. These are trees for which USDA has not received a written “Treatment Release” from the property owner, and trees which are located behind physical barriers and cannot be treated unless the property owner schedules access to the tree by the Contractor. Trees that remain untreated due to these reasons at the time the work order is closed will be placed on a Call Back Work Order by the USDA COR/COTR.
11. The Contractor shall be required to meet New York State Department of Environmental Conservation regulations as it applies to the chemical treatment application for ALB.
12. The timeline begins upon receipt of a work order and ends upon acceptance of contract services by the COR for full compliance with the terms and conditions of this contract. The required completion date will be indicated on each order. Monetary incentives may be earned for early completion of a work order. Daily monetary penalties will be assessed for each day beyond the required completion date the Contractor requires to complete the work order in conformance with the terms and conditions of the contract. The Project Manager or authorized designee is required to sign and date all work orders issued under the contract. In no event shall work ordered deviate from the terms specified herein and the requirements of this contract.
13. The Contractor shall maintain complete and accurate records as specified herein.

VII. CONTRACTOR QUALITY CONTROL

The Contractor shall develop and implement a pro-active quality control and inspections system that will ensure management oversight and supervision, training to employees (including subcontractor employees), and strive for error-free work, early problem detection and corrective actions, increased productivity and efficiency, and superior public relations.

VIII. RECORD KEEPING AND REPORTING

ALB control treatments shall be documented by the Contractor and reports submitted daily to the USDA, APHIS COR or authorized COTR for all work orders issued under this contract no later than the start of the work day following the day the work was completed. Control treatments will not be allowed to begin until daily reporting requirements have been satisfied and the daily reports are approved by the COR or authorized COTR. Therefore, the Contractor shall ensure reports are complete, accurate, legible, and submitted timely.

USDA shall provide the contractor with the forms to be used in daily reporting. These forms will contain the tree information as well as property information. It is the Contractor’s responsibility to complete required fields on the form and all the treatment information about the tree and property. USDA will provide only one copy of the tree and property record to the Contractor.

The following information is required in the daily report:

Treated Tree Information:

Every treated tree shall be documented with the following information: House number, street, tree species, tree dbh, private, park, or public location, method of application, chemical applied, amount of chemical applied, date and time of application, name of pesticide applicator, treatment area unique identification name and number, and tree identification number. In addition, for soil injection trees include the number of the treatment vehicle and soil injection wand identification number.

At the end of each day, the Contractor shall total the number of trees treated, the total dbh treated (in inches), and the total amount of chemical applied by each application method, treatment area, zone, and work order.

Trees Not Treated:

Every host tree not treated in the treatment area shall be documented with the following information: Treatment Area unique identification name and number, house number, street, tree species, tree dbh, date and time of treatment attempt(s) and reason for not treating the host tree. At the end of each day, the Contractor shall total the number of trees not treated that treatment day and the total dbh (in inches) by treatment area, zone and work order. This report covers trees that were not treated in the specific areas that the contractor was working each day. The Contractor does not have to report the number of trees that are remaining on a work order still scheduled to be treated.

Meter Readings from the Soil Injection Wands:

The Contractor shall submit daily meter readings from each soil injection wand used. The lifetime reading on the soil injection wand's meter is to be recorded at the start of the day's treatment and again upon finishing the day's work. This meter reading will be compared to inches of tree treated to ensure proper treatment. The identification number specific to each wand shall be recorded and reported. Any changing of wands must be approved by USDA, APHIS COTR prior to use. Failure to obtain pre-approval of a soil injection wand is considered Contractor negligence and will result in non-payment plus a \$2,150 penalty for each host tree treated with the unapproved soil injection wand. Non-payment and the assessment of penalties may be prevented through proactive and effective quality control measures.

No Access Reports:

The Contractor shall submit daily written reports on trees for which the contractor could not access for treatment after three notification attempts to the property owner/resident. See the Sections XVII and XVIII in this PWS. This "No Access Report" shall include the property address, a description of the trees on the property not receiving treatment, area - zone – and unit number (if applicable), and the date and time documenting the three notification attempts. This report shall be completed by work order number.

IX. TIMELINE FOR COMPLETION OF WORK ORDERED

The timeline for work ordered under this contract shall begin upon the start date of the work order issued to the Contractor by the COR, or authorized COTR, and shall be completed by the completion date shown on

individual work orders. The Contractor’s Project Manager, or designated Field Supervisor, shall meet with the COR, or designated COTR regularly to prioritize and forecast scheduling of treatment zones and work orders. The timeline shall include all activities as specified herein, including but not limited to public notification, soil or trunk injection control treatments for all host trees identified on the work order, record keeping, etc. In no event shall the work order completion date (or timeline for completion) deviate from the allocated times specified herein for public notification and injection control treatments. Refer to Section I for contract terms and conditions on ordering, order limitations, and requirements contracts.

At the completion date of the work order, all trees covered by that work order (located in the area identified in the work order) will be treated. Trees not treated due to the following justified reasons, 1) no treatment release or 2) no access due to physical barriers and the property owner did not schedule an appointment with the Contractor for treatment, shall be placed on another work order once permission and/or access is obtained.

The following table represents the USDA, APHIS average daily expectations of the number of trees the Contractor would have to provide satisfactory control treatments to in order to complete the work order by the completion date. Public notification through the distribution of printed notices to every property located within the treatment area shall be completed within 24 hours after receipt of the work order by the Contractor. The Contractor shall notify USDA in writing of the time and date that public notification is completed. Treatments shall not begin before 48 hours have elapsed from time of completion of public notification. The Contractor will not be paid for any trees treated prior to the 48 hour lapse period.

Monetary incentives may be earned for performance efficiency and completing a work order ahead of schedule. However, failure to complete the work order by the completion date without excusable delay will result in a monetary penalty or other action authorized under this contract.

Contract Area	Trunk and Soil Injection Combined	Soil Drench*
Manhattan	600 trees/day	*
Brooklyn	600 trees/day	*
West Queens	700 trees/day	*
East Queens	900 trees/day	*
Long Island **	1200 trees/day	NA

*Soil Drench Applications – USDA shall consider the technical approach developed by the Contractor for the treatment of trees requiring soil drench application. See Section XX for application protocol.

**The Long Island Contract shall only use trunk injection as the application method. Thus 1200 trees per day are required by trunk injection.

X. CONTRACT WORK HOURS

All treatments shall be scheduled for Monday through Saturday, 0730 to 1930 hours. A full 12 hour work day is required for the control treatment days. The 12 hour work day shall begin at a designated staging area at a time mutually agreed to by the USDA, APHIS COR, or authorized COTR, and the Contractor’s Project

Manager, or authorized Field Supervisor. Work on Sunday and Federal holidays is not required. However, when considered by the COR to be in the best interest of the USDA, APHIS in attaining Spring 2003 control treatment goals, the CO may approve Contractor requests to extend work day(s) to work on Sunday or on Federal holidays on a situational basis.

The extension of a work order completion date shall only be considered if it was due to an excusable delay. For the purpose of this contract, excusable delay is defined as being caused by (1) acts of God or the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance, the failure or inability to perform must be beyond the control and without the fault or negligence of the Contractor. Excusable delays shall be referred through the COR, or authorized COTR, to the CO for consideration and approval. Refer to FAR 52.249-14 is Section I of this contract for complete contract terms and conditions with regard to excusable delay.

XI. POST AWARD PREPARATION

Post award preparation shall be completed before ALB control treatments can be started. These formalities, include but are not limited to, employee identification and uniforms, marking of vehicles, inspection and calibration of equipment, USDA, APHIS checks and inputs, recording of soil injection wand serial numbers, etc. USDA reserves the right to require additional calibrations, checks and inputs as required during the period of performance. Post award preparation shall be completed within 4 days following the post award conference; prior to the issuance of the first work order.

XII. CONTRACTOR EMPLOYEE IDENTIFICATION REQUIREMENTS

The Contractor shall require each employee (including subcontractor employees) to visually display a photographic identification badge. The badge placement on each person will be consistent and it will be readily visible to another individual. The badge shall be worn at all times during working hours. The badge shall display the Contractor's company name and phone number, "Asian Longhorned Beetle Treatment Project", and the employee's full name.

The Contractor shall also require all employees, as well as subcontractors, to wear a uniform clearly identifying them as working for the Contractor. The uniform shall be readily visible at all times to another individual. All employees working on this contract shall portray a positive image (in dress, mannerism, actions, and speech). Uniforms and ID Badges will be approved by USDA. The Contractor shall submit in their technical proposal a description of the uniform and a sample picture ID badge.

XIII. MARKING OF VEHICLES

The contractor will have 2 signs secured to every vehicle (one on each side of the vehicle) used during the performance of this contract. Signs will be clearly legible at 20 ft, with green lettering on a white background to read as follows:

ASIAN LONGHORNED BEETLE COOPERATIVE ERADICATION PROGRAM
USDA, ANIMAL AND PLANT HEALTH INSPECTION SERVICE
NY STATE DEPARTMENT OF AGRICULTURE AND MARKETS
CITY OF NY PARKS AND RECREATION
1-866-265-0301

The Contractor name, address and telephone number shall be legibly printed on both vehicle doors. Signs will be of professional quality.

XIV. CONDITION OF EQUIPMENT

The Contractor shall report with equipment in good working order. If equipment malfunctions during operation, the Contractor shall provide operational replacement equipment to the treatment site within 2 hours of receiving notification of equipment malfunction.

XV. NOTIFICATION OF THE PUBLIC PRIOR TO TREATMENT

USDA Notification Requirements:

The Contractor shall notify all residents and businesses in the treatment areas via a written notice approved by USDA, APHIS. The Contractor is responsible for reproduction and distribution of the written notice. All properties within the treatment area shall be notified of potential treatment regardless of the host status of the property. In addition to public notification, the Contractor shall notify all local government officials, hospitals, police, schools, etc. within the treatment area covered by the work order.

All USDA notification requirements shall be completed within 24 hours of the start date noted on the work order. The Contractor shall notify the COR, or designated COTR, in writing immediately upon completion of the treatment notice distribution and treatment notification required by a work order specifying the date and time of completion.

Control treatments shall not start until a minimum 48 hours has elapsed from the completion of public notification to all residents and businesses in the treatment areas. The Contractor will not be paid for any trees treated prior to the 48 hour lapse period.

New York State Department of Environmental Conservation Requirements:

The Contractor shall be required to meet New York State Department of Environmental Conservation (NYSDEC) regulations as it applies to the chemical treatment application for ALB. The Contractor shall submit to USDA in their technical proposal the protocol they will follow in meeting these requirements.

Questions About the ALB Program Received From the Public:

Do not attempt to answer questions received from the public. All questions received from the public shall be directed to USDA, APHIS personnel. Literature on ALB is available and will be provided to the Contractor for distribution to members of the public interested in the ALB and the USDA, APHIS control treatment program.

XVI. TREATMENT PROTOCOL

The Contractor shall apply a systemic insecticide, Imidacloprid, via soil injection, soil drench, or trunk injection, to all host trees within the treatment area(s) designated on work orders issued under this contract for the control of ALB. Treatment applications to host species trees shall be performed in an organized method that ensures treatment of 100% of host material, both public and private. The Contractor shall ensure 100% treatment of host material within each city block before proceeding to another city block. The Contractor shall ensure 100% treatment of the host material within each city block before the treatment team assigned to that location proceeds to another block. The Contractor shall assign their treatment teams such that all the teams working the same location will start from one central point and radiate outward from that point in order to secure complete coverage of that location.

USDA shall provide a list of host trees within treatment areas detailing the property address, tree species, tree dbh, and resident contact information, and area maps with each work order issued under the contract. Treatment sites include, but are not limited to, street trees, private property, medians, alleys, park district trees, and public schools. The Contractor is responsible for treating all host trees within the treatment areas. For the contracts identified with soil and trunk injection, soil injection will be applied only to the host trees meeting the criteria for treatment via soil injection. Trees which cannot receive soil injection treatment will be recorded on the daily record sheet as “Trunk Injection Required”. The Contractor shall maximize the number of trees that are treated with soil injection through out the New York City treatment areas. For those trees unable to receive soil treatment, the contractor shall ensure that all hosts trees requiring trunk injection are treated.

It is the Contractor’s responsibility to provide applicators with training to identify ALB host trees. Failure to demonstrate ability in identification of ALB host trees to USDA satisfaction will be referred to the CO and may result in removal of the applicator from list of authorized and approved contractor personnel.

Certified pesticide applicators shall wear required safety equipment as required by Federal, state, and local laws, regulations and statutes. Any failure to comply with appropriate regulations which are observed by USDA, APHIS or State program personnel will result in an immediate work stoppage of the offending applicator team until the infraction has been remedied.

Contractor personnel shall physically measure the diameter at breast height (dbh) (measured at 48 inches above the highest point of the soil line) of all host trees immediately prior to treatment and the proper amount of chemical will be applied in accordance with the contract. Multiple trunk growth will be treated as separate trees if there is no clearly common trunk divergence above the soil line. Multiple trunk trees with a clear trunk divergence above the soil line and below dbh will be treated by measuring the trunk diameter at the collar of the divergence or at the greatest diameter if there are multiple divergences. Suckering growth on stumps and blow downs will be treated by measuring the average diameter of the stump or the total diameter of the suckers and treating the lesser of the two. Treatment of independent suckers growing off of an otherwise dead blow down will be made using the dbh of the sucker if the dbh is 2 inches or greater. Visual estimates or guesses will not be accepted from either contractor or USDA. Injections will be monitored by USDA personnel.

The Contractor shall ensure that soil injection treatments will not result in contamination of groundwater or a water body. Trees located in such an area will not be treated via soil injection. These trees will be identified on

the daily report as “trunk injection required.”

An easily identifiable, non permanent mark shall be place by the Contractor on every treated tree (i.e. Chalk) once treatment has been applied. The mark will only be placed once a tree has been treated. Placing marks on trees ahead of treatment is prohibited. Marks shall be placed on the street side of parkway trees and on a side easily seen from the point of access for private property trees approximately 4 feet above soil line. Marks on signs and placards attached to trees are unacceptable. Marking apparatus shall consist of equipment similar to Forestry Suppliers chalk tree markers and must be approved by USDA, APHIS.

The Contractor shall place markers within or along the perimeter of the area where the pesticides were applied (per NYSDEC regulations). The markers are to be placed so as to be clearly visible to persons immediately outside the perimeter of the treatment area. The markers shall be posted at least twelve inches above ground and shall be at least four inches by five inches in size. The markers shall be in place on the day during which the pesticide is applied and shall instruct persons not to enter the property and not to remove the signs for a period of at least 24 hours. Such instructions shall be printed boldly in letters at lease 3/8 of an inch in height. The Contractor shall remove such markers from the treated properties within a time period of 24 to 48 hours after completion of the application.

XVII. ACCESS ISSUES INTO PRIVATE PROPERTY

USDA is responsible for obtaining a written release for all private trees requiring treatment. This “Treatment Release” may not be obtained for all private properties located within the treatment area at the start of treatments. The treatment list provided to the Contractor by USDA shall indicate which properties have a “Treatment Release” and the properties for which no release has been obtained. The Contractor shall not treat any property without a “Treatment Release”.

The Contractor shall be responsible for treating all street, park, and private host trees (with a “Treatment Release”). For private properties (with a “Treatment Release”), the Contractor shall acknowledge their presence to the property owner/resident. If the property owner/resident is not home and the Contractor can access the property, the Contractor shall treat the host trees located on that property. If the Contractor fails to complete treatment on a host tree without justified cause that tree will be considered a Missed Host Tree and the Contractor shall be penalized \$2,150 for every Missed Host Tree.

USDA will continue to receive “Treatment Releases” from property owners through out the treatment period. USDA shall provide an updated tree list to the Contractor showing the additional properties which are authorized for treatment. The Contractor shall be responsible for returning to the additional properties to treat the host trees at no additional expense provided that these trees are covered under a work order that is still active. Treatment Releases obtained by USDA after a work order is closed will be a “Late Treatment Release” and will be given to the Contractor under a Call Back Work Order (see the following section on Call Back Work Orders).

There are many private properties through out New York which are not accessible for entry due to physical barriers (locked gates, dogs, row houses, courtyards enclosed completely by buildings, etc.). USDA will have obtained “Treatment Releases” for many of these properties at the time of treatment or through out the treatment period. The Contractor shall be responsible to gain access into the property from the owner/resident to treat the

host trees located on the property.

The Contractor shall make three attempts to gain access from the resident/property owner to treat private host trees:

- 1) ALB Treatment Notice - delivered to the property/resident in advance of treatment. This notice shall be delivered to every property owner within the treatment area, regardless of host tree status. USDA shall provide the wording of the notice to the contractor. The contractor shall reproduce and distribute the notice. This advance notification will provide an opportunity for the property owner/resident to contact the Contractor to schedule an appointment for treatment if so desired.
- 2) Personal Contact the Day of Treatment – The Contractor shall knock on the doors of all property owners/residents for which a Treatment Release has been obtained.
 - a) If the property owner/resident is NOT HOME and the Contractor CAN access the tree(s), then the Contractor shall treat the host tree(s) on the property.
 - i) For properties under treatment without the property owner/resident at home, an “**ALB Treatment in Progress**” notice alerting the property owner/resident to the treatment in progress shall be left on the entrance door or gate of the property. The Contractor shall remove this notice at the end of treatment. The Contractor shall produce and distribute this notice. The language of the notice shall be reviewed and approved by USDA.
 - ii) Upon completion of the treatment, the Contractor shall leave a written “**ALB Treatment Completion**” notice for the property owner/resident. The Contractor shall produce and distribute this notice. The language of the notice shall be reviewed and approved by USDA.
 - b) If the property owner/resident is NOT HOME and the Contractor CAN NOT access the tree(s), then the Contractor shall leave a written “**Notice for ALB Treatment**” for the property owner/resident. The notice will provide the property owner/resident with the name and phone number of the Contractor in order to schedule an appointment for treatment. The Contractor shall reproduce and distribute this notice as required. The language of the notice shall be approved by USDA. The Contractor shall indicate on the treatment record sheet that the property was not treated due to “NO ACCESS”.
- 3) Phone Call to the Property Owner/Resident After Normal Working Hours – The Contractor shall call the property owner/resident after normal working hours to arrange for treatment of the host tree(s). This call shall be made between 6pm – 8pm Monday through Friday, or 9am – 7pm on Saturday. The phone call to the property owner shall be completed no later than the day following the treatment attempt by the Contractor (#2b above). If the Contractor does not receive a reply from the property owner/resident after 3 business days of placing the telephone call, the Contractor shall turn this property over to USDA to gain access. The Contractor shall submit a daily written report to USDA COR/COTR the list of properties and trees for which treatment was not performed after satisfying the three contact attempts. This “**No Access Report**” shall include the property address, a description of the trees on the property not receiving treatment, area - zone – and unit number (if applicable), and the date and time documenting the three notification attempts. This report shall be completed by work order number and submitted daily.

If the Contractor does receive a reply from the property owner/resident before reporting this property on the “No Access Report” to the USDA COR/COTR, the Contractor shall treat the trees on that property for no additional expense. The treated trees shall be reported on the daily treatment report.

- 4) The Contractor shall be aware and sensitive to the needs of predominantly ethnic and /or religious communities in the timely completion of the work.

XVIII. CALL BACK WORK ORDERS

If USDA is successful in gaining access from the property owner/resident for treatment on the “No Access Trees” or if USDA receives a “Late Treatment Release” on a property, these properties/trees will be given to the Contractor under a Call Back Work Order. The Contractor shall have three weeks to complete treatment on each call back work order. The Contractor shall meet all daily reporting requirements for Call Back Work Orders.

XIX. SOIL INJECTION – APPROVED FORMULATION, APPLICATION METHOD AND RATE OF APPLICATION

The Contractor shall apply a systemic insecticide, Imidicloprid, to control ALB, using soil injections to deliver the pesticide.

Approved Formulations:

Merit 75WP (EPA Registration No. 3125-421) and Merit 2 (EPA Registration No. 3125-418) and Merit 75WSP (EPA Registration No. 3125-439).

Application rate:

Merit 75WP and Merit75WSP:

1.89 grams of Merit in 0.5 gallon of water per inch of tree dbh. One injection hole per 1 inch of dbh.

Merit 2:

0.2 oz. of formulation in 1 quart of water per inch of tree dbh. One injection hole per 1 inch of dbh.

Soil Injection Technique:

The grid or circle injection hole pattern shall be used as per industry standards and practices and label directions. Soil injection may be used if up to three quarters of the injection area is restricted by paving, sidewalks, etc. (Refer to Figure 1 and 2 in Section J as a reference for circle injection hole pattern.)

Merit performs best when placed precisely in contact with fine roots. For either injection method, apply the chemical to a depth of 6 to 12 inches. In certain soil types or where compaction has occurred, application of ½ gallon of Merit 75WP or Merit 75WSP, or 1 quart of Merit 2 per hole may result in treatment mixture bubbling up to the surface and, thus, increased exposure to the public and environment. When this occurs, the applicator can apply ½ the volume of mixture per hole and double the number of holes per inch of dbh. Other options are applying deeper injections, up to 12 inches may be required, or the applicator should try moving the injection hole one foot in any direction of the original site to apply the rest of the dose to that hole.

Determination of Soil Injection Holes and Circles

DBH	INNER CIRCLE		2ND CIRCLE		3RD CIRCLE		4TH CIRCLE		
	HOLES	HOLES	RADIUS*	HOLES	RADIUS*	HOLES	RADIUS*	HOLES	RADIUS*
4	4	4	14	na	Na	na	na	na	na
6	6	4	15	2	38	na	na	na	na
8	8	4	16	4	40	na	na	na	na
10	10	4	17	6	41	na	na	na	na
12	12	4	18	8	42	na	na	na	na
14	14	4	19	9	43	1	67	na	na
16	16	4	20	9	44	3	68	na	na
18	18	5	21	9	45	4	69	na	na
20	20	5	22	10	46	5	70	na	na
22	22	5	23	10	47	7	71	na	na
24	24	5	24	10	48	9	72	na	na
26	26	5	25	10	49	11	73	na	na
28	28	5	26	10	50	13	74	na	na
30	30	5	27	11	51	14	75	na	na
32	32	5	28	11	52	16	76	na	na
34	34	5	29	11	53	16	77	2	101
36	36	5	30	11	54	16	78	4	102
38	38	5	31	12	55	17	79	4	103
40	40	5	32	12	56	17	80	6	104

* Radius of circle measured from the center of the trunk in inches.

Application equipment:

A power soil injector using 75-150 psi will be used. Constant agitation must be maintained during mixing and application. Screens will be removed from the system to prevent clogging. A flow meter at the control valve on the injector probe is required to ensure an accurate dosage rate. The injector tip should have a minimum of four opposing ports. An adequate means of calibrating the equipment must be provided. Prior to treatments, power equipment will be calibrated with water to determine proper delivery of the amount of material needed per hole. To maintain uniform application of the proper amount of treatment mixture, the contractor must periodically clear the wand’s vent holes.

Mixing of Chemical

The mixing of Merit and water shall be monitored by USDA personnel. The entire process of filling the truck tanks, from the opening of chemical packages to the filling of tanks with water and chemical, will be inspected. The timing of chemical mixing will be mutually agreed upon by both USDA and contractor. Merit has been shown to have insignificant degradation over long periods of time when kept sheltered from ultraviolet light. Therefore, chemical mixing may occur at the end of the treatment day and left overnight in preparation for the successive day’s treatment. However, any chemical mix left in tanks at the end of the treatment day must be evacuated before new chemical mixes are added. The monitoring and mixing of chemical may occur no more than 48 hours prior to treatment. Chemical may be stored for a maximum of 48 hours prior to treatment providing that contractor agitates the tank mix to completely re-suspend the mix once daily on off treatment days and at least 15 minutes before any treatment application. The mix must be completely re-suspended before

treatment application. All tanks used for ALB treatments will be triple rinsed prior to use in the ALB treatment application. If a tank is used for any other treatment application outside of this contract, then the tank will be triple rinsed prior to use again in the ALB treatment application. The Contractor shall notify USDA if tanks are used for other applications outside of the USDA contract during the performance of this contract.

Calibration of Injection Wands:

Calibration will consist of ½ gallon of chemical being dispensed into a suitable container. The injection wand's meter reading will be recorded. The liquid will be poured into a graduated cylinder with visible markings. The liquid's meniscus should be at the 64 ounce mark for a wand reading of .50. Acceptable readings are from 61 ounces to 67 ounces (+/- 5%). A liquid level below or above these marks is unacceptable. Liquid level within this range will define the injection wand as calibrated. Extreme pump pressure may cause foaming of the chemical and result in a wand failing the calibration procedure. This should be taken into consideration and pump pressure adjusted if foaming occurs and causes a wand to fail calibration.

Sufficient soil injection wands will be provided by the contractor for calibration to ensure enough equipment is available to continue treatment in the event of wand malfunction. Reserve soil injection wands will also be calibrated. Reserve wands may be stored at contractor's facility for possible use in future work. All injection wands, including reserve wands, will be calibrated before the initial start of contract work.

XX. KIORITZ SOIL INJECTOR

USDA approves the use of the Kioritz soil injector for soil treatment applications. This application device will enable the Contractor to treat trees located in enclosed areas or areas which are difficult to access by a tank truck for treatment.

The same directions for soil injection technique and mixing of the chemical shall be followed as described in the previous section under Soil Injection.

Any one of the three Merit Formulations may be used with the Kioritz Soil Injector. Enough water shall be added to the product used to achieve the maximum rate (1.418 a.i. per inch dbh) in 4 oz of product mixture. 4 oz of mixture shall be applied per injection hole, one hole per inch of tree dbh. As with the other treatment applications, tree diameters shall be measured with even diameters rounded down and odd diameters rounded up to the next even number.

Product	Amount of Product	Total Volume of Tank Mix
Merit 75 WSP	4 packets (1.6 oz each)	3 gallons
Merit 75 WP	302.4 grams	5 gallons
Merit 2F	32 ounces	5 gallons

The Kioritz Soil Injector units shall be test calibrated before, once mid-day, and after the work day, to ensure

the desired volume of liquid is being delivered out of the units. The Contractor shall provide to USDA the protocol that will be followed for calibration of the application units. USDA shall monitor the calibration of the application units during the treatment period. The Contractor shall certify to USDA in writing the results of each test calibration for each Kioritz unit.

Each Kioritz unit shall be identified with a unique number and the application unit number shall be recorded on the daily treatment records.

XXI. SOIL DRENCH TREATMENTS

Soil drench treatments shall be used on potted trees, and trees located on roof tops, and private balconies and patios. The Kioritz Soil Injector may also be used under these circumstances, if there is enough soil to support the application.

Rate of Application and Certification Requirements

Rate of use: 1.42 grams of active ingredient of Merit 75 WSP (EPA Reg. No. 3125-439 2 EE, labeled in New York) per inch of tree diameter. This is the maximum soil drench rate allowed by the label. At least one of the crew members will be a fully Certified Applicator in category 3A in New York State (not an apprentice or technician).

Mixing and Agitation

1. Mix 1 water soluble packet of Merit 75 WSP per 3.0 gallons of water under jet agitation.
2. The Merit 75 WSP will be mixed and agitated at the start of each treatment day. Any suspending agents used shall receive prior approval by USDA.

Treatment Scheduling and Hours of Work

1. USDA will provide the contractor with a list of roof top garden/ patio trees/ containerized trees, etc. requiring treatment by soil drench. The Contractor shall secure permission and schedule an appointed time for each treatment site. The contractor shall provide USDA with their appointment list at a minimum of 24 hours prior to treatment. The list will detail the following information: the property address, customer name and phone number, host trees on property and dbh of each tree, appointment time and date, and applicator name and phone number.
2. The Contractor shall not be required to post advance treatment notification to the property owner/resident for those trees scheduled for treatment by appointment.
3. The Contractor will make all the necessary arrangements with the property owner/resident that is required for the Contractor to complete the work. Examples of this are: securing permission to access the building if a security guard is present, and securing permission from the property owner/resident to use an electric outlet for treatment application (if needed).
4. The contractor shall schedule this work between 7:30 am to 7:30 pm, Monday through Saturday. The contractor shall maximize the number of treatments applied each day so that all the soil drench work is completed under a short time period. Work outside of this period shall be approved in advance by USDA.
5. The Contractor shall submit to USDA their technical proposal detailing how they intend to accomplish this work and the timeline for completion.

6. USDA requests proposals using this application method for the contract areas of Brooklyn, West Queens, and East Queens as well as Manhattan in the event that this application method is required to be utilized outside of Manhattan.

Equipment

1. The equipment used for the drench application shall be a portable, closed, self contained unit. It shall be capable of applying an even application of the chemical to the soil of the containerized/roof top garden/patio host tree. The Contractor shall provide USDA a description of the application units and the delivery method to be used on the contract. Each application unit shall be identified with a unique number and the application unit number shall be recorded on the daily treatment records.
2. Calibration of the application units shall be performed before the beginning of treatments each day, mid day of treatment, and at the end of each day to ensure the desired volume of liquid is being delivered out of the application units. The Contractor shall provide to USDA the protocol that will be followed for calibration of the application units. USDA shall monitor the calibration of the application units during the treatment period. The Contractor shall certify to USDA in writing the results of each test calibration for each pumping unit.

Access and Safeguard of the Treatment Sites

1. The Contractor shall take special care not to soil or damage the resident property during the treatment process.
2. The Contractor shall leave the property in the same condition as it was upon entry.
3. The Contractor shall have all necessary spill clean up materials readily accessible.
4. At least one crew member shall remain with the vehicle transporting the spray material at all times.

Treatment

1. The dbh of each tree will be measured. As with the other treatment applications, tree diameters shall be measured with even diameters rounded down and odd diameters rounded up to the next even number. Single stemmed and multiple-stemmed trees will be treated per the enclosed tables.
2. Before application, a layer of soil from around the stem will be loosened and pushed to the side to facilitate uptake; after application, the soil will be raked back, so as to protect the applied product from degradation from sunlight.
3. The treatment mixture shall be applied to the soil under the drip-line or the entire pot in which the tree is growing, whichever is smaller, so that the soil is soaked. In no case will material be allowed to puddle and run off-site or leach from the treated site (such as holes in potted trees). Any appearance of treated water moving from the site will halt the treatment. All spills will be properly and promptly cleaned up by treatment crews. The Contractor shall document all spills and remedial actions performed on the daily treatment record report to USDA.
4. After treatment, all data will be recorded on the USDA treatment data record and the completed treatment records will be submitted to USDA by 7:30 am the day following treatment application.
5. USDA does not require post marking of the treated trees, other than that required by NYSDEC.
6. The treatment site shall be posted per NYSDEC regulations. Removal of the marker will not be required by USDA.

Table to Calculate Rates for Single-Stemmed Potted Trees

Table 1 – Rates to Apply Merit 75WSP When Treating Potted Trees with 1 Main Stem

Stem Diameter	Amount of Merit 75WSP (solution pre-mixed, 3 gallons per 1.6 oz packet of product)
1"	2 cups (16 oz)
2"	1 quart (32 oz)
3"	1 ½ quarts (48 oz)
4"	2 quarts (64 oz)
5"	2 1/2 (80 oz)
6"	3 quarts (96 oz)
7"	3 1/2 (112 oz)
8"	4 quarts (128 oz)
9"	4 ½ quarts (144 oz)
10"	5 quarts (160 oz)
11"	5 ½ quarts (176 oz)
12"	6 quarts (192 oz)

Table to Calculate Rates for Multiple-Stemmed Potted Trees (DBH total x 0.75)

Table 2 – Rates to Apply Merit 75WSP When Treating Potted Trees with Multiple Stems

Adjusted Stem Diameter (Total x 0.75)	Amount of Merit 75WSP (solution pre-mixed, 3 gallons per 1.6 oz packet of product)
2"	1 quart (32 oz)
3"	1 ½ quarts (48 oz)
4"	2 quarts (64oz)
5"	2 ½ quarts (80 oz)
6"	3 quarts (96 oz)
7"	3 ½ quarts (112 oz)
8"	4 quarts (128 oz)
9"	4 ½ quarts (144 oz)
10"	5 quarts (160 oz)
11"	5 ½ quarts (176 oz)
12"	6 quarts (192 oz)
13"	6 ½ quarts (208 oz)
14"	7 quarts (224 oz)
15"	7 ½ quarts (240 oz)
16"	8 quarts (256 oz)
17"	8 ½ quarts (272 oz)
18"	9 quarts (288 oz)

19"	9 ½ quarts (304 oz)
20"	10 quarts (320 oz)
21"	10 ½ quarts (336 oz)
22"	11 quarts (352 oz)
23"	11 ½ quarts (368 oz)
24"	12 quarts (384 oz)
25"	12 ½ quarts (400 oz)

XXII. SAFEGUARDING SOIL TREATMENTS

The Contractor is responsible for safeguarding the treatment area during the treatment process, safeguarding the chemical at all times, and applying the chemical in accordance with label directions in order to eliminate exposure of people, pets, wildlife and the environment. Each applicator must carry a copy of all the required labels and MSDS for each pesticide applied under this contract and a pesticide application license in conjunction with NYSDEC pesticide laws.

The Contractor must provide adequate personnel and supervision to ensure that work performed under this contract is completed with maximum safeguard protections in place.

XXIII. TRUNK INJECTION WITH MAUGET CAPSULES

The Contractor will apply a systemic insecticide, Imidacloprid, to control ALB, using Mauget trunk injections to deliver the pesticide. The contractor will use Imicide capsules with the Mauget trunk micro-injection system to treat trees. The 4 ml capsule will contain a 10% formulation of Imidacloprid and will be applied at a rate of 1 capsule per 2 inches of dbh. The number of Mauget capsules to use per tree is determined by dividing the tree dbh by two. A tree with a dbh of 20 inches would require 10 Mauget capsules. Trees measuring an odd number dbh shall be rounded up to the next even number. For special situations and circumstances see the general "TREATMENT PROTOCOL" section XVI. Capsules must be left in trees for up to 4 hours. Capsules may be removed before 4 hours if said capsule is completely empty of product.

The Contractor is required to follow the label directions for the application of the Mauget capsules.

All Contractor applicators who apply Mauget trunk injections must be certified by the Mauget Company as qualified to inject trees. The Contractor must supply written documentation for each applicator showing this certification. Lack of written certification will preclude an applicator from participation in this contract's treatments.

The Contractor shall flag all treated trees with caution tape at least 1.5 inches wide. This flagging will be marked with the earliest time acceptable for capsule removal. Minimum time is defined as 4 hours from the time the last capsule is applied to the tree. Capsules may be removed before the 4 hour minimum if empty. Capsules must be disposed of according to the State of NYSDEC requirements.

A standardized numbering system shall be used for tracking trees treated with Mauget trunk injection. This numbering system will be approved by USDA prior to use. The tree ID number shall be placed on the flagging

along with the capsule removal time. The tree ID number shall also be placed on the daily treatment record.

APHIS requires all Mauget trunk injection treatments to be completed by 3:30 P.M. to ensure the 4 hour injection time is met before dark. Mauget capsules must be completely removed from all treated trees by 7:30 P.M. daily.

XXIV. SAFEGUARDING MAUGET CAPSULES

The Contractor is responsible for safeguarding the Mauget trunk injection units during treatment, watching or guarding treated trees at all times while the injectors are on the trees, removing the injectors, and properly disposing of injectors. Each applicator must carry a copy of the label and MSDS for Mauget Imicide, pesticide application license in conjunction with NYSDEC pesticide laws, and certification of completion of Mauget trunk injection treatment training.

The number of persons required to safeguard trees within each contract area will vary dependent on the location of the trees and their potential exposure to the public - people, children, pets, etc. In general, a safeguarder may be detailed to guard up to 10 trees each. All the trees under treatment must be in direct line of sight of the safeguarder and not exceed a 100 foot radius from the safeguarder. A safeguarder could potentially watch only 1 tree during the time the injectors are on the tree if all the parameters for safely guarding a tree are not met. Exceptions for a safeguarder to watch more trees may be made for forested areas or restricted access areas. Exceptions must be approved in writing on a case by case basis by the USDA, APHIS COR/COTR.

Throughout most of the treatment areas in New York, due to physical barriers and “No Treatment Release” secured by USDA, the number of trees available to each safeguarder to watch meeting the parameters above will be at reduced level – as much as 30% reduced. There are no issues with access to public and park trees. The access issues apply to the private trees.

There are areas where the safeguarder to tree ratio will be at a much greater level. Forested/wood lots will only require safeguarding the perimeters. Trees located along railroad tracks will require very few safeguarders, if any. Trees located on property which are secure from public access will only require the use of safeguarders at the entrance points or around the perimeter of the property. The USDA and Contractor shall agree to the number of safeguarder to be used within these areas.

The following locations in East Queens and West Queens shall require a reduced number of safeguarders. There may be additional locations in East Queens and West Queens which meet the reduced safeguard criteria as well.

Zone	Description	# of Trees
	<u>E. Queens</u>	
105	Hall of Science Parking Lot	314
272	Flushing Meadows-Corona Park	1685
361	Crocheron Park	2377
371	Cross Island Pkwy.	1055
372	Alley Pond Park	926
419	Alley Pond Park	2746

386	Oakland Park	1014
373	Railroad	278
TOTAL		10,395

W. Queens

999	Railroad	5,733
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The following locations in Long Island shall require a reduced number of safeguarders. There may be additional locations on Long Island which meet the reduced safeguard criteria as well.

zone-unit	House number or Number	Street Name or Location Name	Description of Location	Count Of Trees
130-0		INDIAN ISLAND	PARK	4,601
152-0	69	Bergen Ave		279
201-0		Brookville Ave	Wood Lot	474
201-0		Brookville Ave	Wood Lot	900
201-0		Brookville Ave	Wood Lot	125
201-0		Brookville Ave	Wood Lot	774
201-0		Brookville Ave	Wood Lot	272
201-0		Brookville Ave	Wood Lot	344
201-0		Brookville Ave	Wood Lot	116
208-0		Ironwood St	Wood Lot	254
208-0		Ironwood St	Wood Lot	111
208-0		Ironwood St	Wood Lot	125
208-0		Wilson Blvd	Creek edge	125
217-0		Sunrise Hwy Service Rd S	Woods	124
33-0	1	Sunrise Mall		157
35-0	400	Sunrise Hwy		2,376
49-0		Unqua Rd	Park	458
67-0		County Line Rd	Wood Lot	296
67-0		County Line Rd	Wood Lot	577
67-0		County Line Rd	Wood Lot	225
67-0		County Line Rd	Wood Lot	186
70-0		Mott St	Wood Lot	274
70-0		County Line Rd	Wood Lot	227
78-0		Locust Ave	Wood Lot	464
78-0		County Line Rd	Wood Lot	268
78-0		County Line Rd	baseball field	177
78-0		County Line Rd	Wood Lot	159
79-0		Harrison Ave	Wood Lot	105
79-0	30	Harrison Ave		195
79-0	30	Harrison Ave		202
79-0		Albany Ave	Wood Lot	121
79-0		Albany Ave	Wood Lot	297
80-0		Sunrise Highway	Entrance Ramp	107
81-0	400	Sunrise Hwy		435
82-0		Overland Ave	Wood Lot	101

82-0	Overland Ave	Wood Lot	101
82-0	Overland Ave	CREEK	136
86-0	Avon Pl	Wood Lot	202
86-0	Union Ave	35-41	102
88-0	Broadway/Rte 110	Wood Lot	108
88-0	282 Merrick Rd		352
94-0	111 S Bayview Ave		129
95-0	Harbor N	Snug Harbor	195
			17,356

In certain situations where access to children and pets is limited, such as properties with fences, physical barriers may be used by the Contractor instead of an individual safeguarder. The physical barrier must be at least three feet in height and encircle the tree in a manner that does not disturb the Mauget capsules. The barrier can be solid or with openings less than 2 inches in width. The barrier must be attached to the ground in a least one point.

The Contractor shall provide adequate personnel to ensure that all Mauget injectors are not disturbed by the public or animals at all times when the injectors are attached to the trees. The contractor shall, at a minimum, ensure the following safeguarding requirements are met:

1. Quality control oversight of personnel.
2. Dedicated supervision of safeguarder personnel. One supervisor is required for every 20 safeguarders.
3. Training to safeguarders and ensuring their understanding of their duties and responsibilities.
4. Safeguarding personnel are wearing an approved uniform and displaying photo identification visible to another person at all times while working the contract.
5. Safeguarder personnel have 2 forms of identification; one from their original employer and one from the Contractor which identifies the person to the ALB Treatment Program.
6. Safeguarding personnel are not occupying porches, decks, patio furniture, or other private property while performing duties.
7. Safeguarders properly dressed and prepared to work in all weather conditions.
8. As needed rest breaks are provided for safeguarders while still maintaining vigilance regarding injectors. The Contractor shall visit each safeguarder on an hourly basis.
9. Safeguarders are instructed and know to direct all questions regarding treatments to USDA personnel.
10. Safeguarders display a positive image of the US government, State, and local governments.

Safeguarders failing to properly monitor injections (i.e. sleeping, away from post, etc) will be immediately removed from the project and may not be used by the Contractor. The Project manager will be notified promptly of the incident and will be required to immediately replace the safeguarder.

Adjustments regarding the placement of safeguarders may be made upon mutual agreement between the Contractor and the USDA, APHIS COR/COTR.

XXV. PRECAUTIONS / PUBLIC RELATIONS

All work will be performed in a professional manner, in accordance with the most recent revision of the American National Standards for Tree Care Operations: Tree, Shrub, and other Woody Plant Maintenance and Standard Practices A-300-1995, published by the American National Standards Institute, and applicable Occupational Safety and Health Administration regulations. Precautions will be taken against injury to all contractor /subcontractor persons, the public, and property. Work will be completed without inconvenience or disruption to the general public and property owners. All work sites will be restored to original condition.

It is essential for all employees of the contractor and subcontractor to display a positive image of USDA and the State of New York by ensuring that their employees maintain favorable relations with the public. All personnel must be courteous in their dealings with property owners. The contractor will perform all work with due care, taking precautions against injury to persons, animals, or property. The contractor will make every effort to minimize interference with vehicular and pedestrian traffic. The contractor will protect against damage to any existing trees, plants, grass, vegetation, or other exterior fixtures. The contractor will restore to the condition existing prior to treatment operations all areas of paving, lawns, walkways, sidewalks, fixtures, fences, etc., that were damaged, dirtied, altered or displaced by treatment work. The contractor must be able to resolve employee conflict and other personal matters in a timely fashion.

XXVI. CONTRACTOR QUALIFICATION REQUIREMENTS

The Contractor shall meet the following minimum qualification and equipment requirements:

Minimum Skills and Experience

1. A valid pesticide applicator's license for the State of New York.
2. All licenses, registrations, and permits required by the State of New York to apply pesticides to soil, trees, etc.
3. Bonded and insured at the minimum levels established by the State of New York, or by the Federal Acquisition Regulation (FAR), whichever is higher. The minimum insurance levels of the FAR are contained elsewhere in this prospectus.
4. Minimum 5 years of arboriculture experience.
5. Prior commercial contracts in application of soil injection and/ or trunk injection treatments for trees and /or trunk injection treatments within the last 4 years (1999-2002) is required. Documentation will be provided to USDA demonstrating the size, scope, and success of prior soil injection tree treatments and /or trunk injection treatment contracts from this 4 year period.
6. At least one full time arborist certified by the International Society of Arboriculture, employed on a full time basis, and dedicated to work on site for the duration of the contract.
7. Applicators must be skilled in identification of ALB host material.
8. Personnel must be trained and certified in writing by the J.J. Mauget Company for the application of Mauget trunk micro injection treatments.

Contractor applicators must demonstrate knowledge of, and ability to, identify woody tree ALB host species in

New York. Surveyors must be able to identify host species trees by common name in both winter stage and foliated. A practical exam conducted by USDA, APHIS will be required. All applicators must pass this practical exam by a score of 80% or better. One retest will be allowed. Failure to pass the examination will preclude an employee from participating in contract treatments. The exam will consist of physically traveling to trees selected by USDA, APHIS and recording the identification of the tree in writing. Identification will consist of writing the common name of the species if it is an ALB host, or writing “non host” for trees that are not on the required treatment list. 50 trees will be selected for the examination. USDA, APHIS will grade all exams. There is no cost to the Contractor for the exam.

The field ID exam will be given during the period following the post award conference and prior to the issuance of the first work order. Employee time to take the exam shall be at the Contractor’s expense and “is not” billable to the contract.

XXVII. FAILURE TO PERFORM

Chemical treatment of host trees protects trees from becoming infested with ALB. Failure to properly treat 100% of the host trees within the USDA designated treatment areas provides host material for ALB populations to continue to survive and the time line for the eradication program to be extended by at least one additional year. Each year extended for the program requires additional resources applied toward survey, control, and regulatory activities and increases the potential for failing to eradicate this exotic insect from the United States.

An average dbh of 12 inches will be used for each host tree not treated or host trees not treated in accordance with contract and label requirements. A penalty of \$2,150 will be applied for each tree not treated and for any tree not treated in accordance with contract and label requirements.

This penalty is based on the following criteria:

COST CRITERIA	CALCULATION	TOTAL
Treatment	\$8.00/inch dbh x 12 inch avg. dbh	\$96.00
Removal and disposal	\$80.00/inch dbh x 12 inch avg. dbh	\$960.00
Tree replacement	\$500.00 avg replacement cost	\$500.00
Government Time	3 days @ \$200.00/day	\$600.00
TOTAL		\$2,150.00

XXVIII. INCENTIVE FOR EARLY COMPLETION OF WORK ORDERS

The Contractor may earn a monetary bonus for completing work orders early that issued under this contract provided all services (i.e. treatment applications, reporting, etc.) furnished on each work order are in full

compliance with the contract and there are no valid public relations incidents. An incentive bonus of \$1,000.00 will be given for each day for early completion of the work order. For example, if the ending date of the work order is May 20 and the Contractor completes the treatment application on May 19, the Contractor is eligible for a \$1,000.00 bonus for early completion if services provided fully comply with the contract.

Call Back Work Orders are not eligible for incentives.

XXVIX. CONTRACTOR PERFORMANCE STANDARDS

Contractor performance will be monitored throughout the effective period of the contract. The contractor will be measured based on the following criteria:

Performance Requirement	Performance Standard	Maximum Error Rate or Performance Requirement	Method of Surveillance	Monetary Penalties
Accurate and thorough treatment application.	100% of all host trees shall be treated accurately as specified per work order.	Zero Tolerance	Review of work reports and monitoring by USDA personnel	\$2,150 penalty for every host tree not treated and every host tree not accurately treated as designated on each work order.
Timely completion of work orders	Parameters of work order must be followed. All work identified under each work order shall be completed on or before the completion date of the work order.	Contractor shall not be late on more than 2 work orders issued per contract.	100% inspection by USDA	\$1,000 penalty for every day late.
Notification of treatments to the property owners, residents, businesses , and local officials located within the treatment area	100% of all properties will be notified of treatments a minimum of 48 hours prior to treatment start as designated per work order. Contractor shall provide written documentation to USDA declaring time and date of treatment notification completion.	1% error rate per work order.	USDA monitoring	\$100 penalty for each property not receiving notification. \$100 penalty for each host tree treated before the minimum 48 hour period elapsed.
Public Relations	Work must be completed without inconvenience or disruptions to general public and property	No more than 2 instances of disruption or inconvenience	Complaints received and USDA monitoring	\$500 penalty for each legitimate complaint beyond tolerance level

	Work sites must be restored to original condition upon completion of treatments	Zero tolerance	Complaints received and USDA monitoring	\$500 for each infraction
	Property damage is dealt with promptly. USDA notified immediately of damage. Insurance claim filed within 24 hours of incident.	Zero tolerance	Complaints received and USDA monitoring	\$1000 penalty for each infraction
	Employees are courteous and considerate to general public and property owners	No more than one instance	Complaints received and USDA monitoring	\$500 for each infraction beyond one.
Adherence to safety requirements directed by Federal or State Laws as well as specific pesticide label	Must comply with all safety regulations that pertain to the work performed and the specific label requirements	Zero Tolerance	100% inspection by USDA	Immediate halt to all contract work until rectified. Contractor will be held to original time period designated in work order

XXX. USDA QUALITY ASSURANCE

According to the Inspection of Services clause, FAR 52.246-4 INSPECTION OF SERVICES - FIXED PRICE (Aug. 1996), located in Section E. of this contract, the Government will evaluate the contractor's performance under any work order issued under this contract for treatment of ALB in the State of New York. For those tasks identified in the Contractor performance standards of this PWS, the COR, COTR, or other designated representative of APHIS will follow the methods of surveillance specified herein. Government personnel will record all surveillance observations. When an observation indicates defective performance, the COR, COTR, or designated APHIS representative will require the Contractor's project manager, or representative on site, to initial the observation. The initialing of the observation does not necessarily constitute concurrence with the observation, only acknowledgment that they have been made aware of the defective performance. Government surveillance of tasks not listed in the contractor performance standards of this PWS (such as provided for by the Inspection of Services clause) may occur during performance period of contracts awarded under this prospectus. Such surveillance will be done according to standard inspection procedures, or other contract provisions. Any action taken by the contracting officer, as a result of surveillance, will be in accordance with the terms of this contract.

When an observation indicates defective performance, the Contractor shall immediately incorporate corrective actions into their quality control system, provide training to the employee responsible for the defective performance, and or replace the employee. Refer to Section H for terms and conditions applicable to replacing key personnel.

XXXI. CONTRACTOR LIABILITY

The Contractor is liable for any damages, losses, or injuries to people, property, or animals which occur directly or indirectly from work performed by the Contractor and their subcontractor's under this contract. An example of indirect damage is any damage to physical property or damage to non-target plants as a result of the treatment. The Contractor shall have and maintain insurance at the minimum levels specified herein throughout the effective period of performance of the contract. A certificate of insurance shall be provided by the insurance company demonstrating proper insurance coverage for the contract and properly endorsed with USDA, APHIS as the certificate holder.

The Contractor shall immediately notify USDA COR, Contracting Officer of any damage, loss, or injury occurring during the effective period of performance of the contract. Each instance shall require an insurance claim, when in the judgement of the COR, corrective action can not be completed within 48 hours of the occurrence to the satisfaction of the COR and property owner or injured party. When in the judgement of the COR, an insurance company claim is to be filed, the Contractor shall file the claim within 24 hours of notification to file an insurance claim is received from the COR. Corrective action shall be completed within 2 weeks thereafter unless an extension of time is authorized by the COR and is acceptable to the property owner or injured party. The Contractor, or the Contractor's insurance company, shall provide a written notice to the COR explaining the corrective action and showing the property owner or injured parties acceptance of the corrective action taken. The notification shall be on letterhead and include the Contractor's policy number, claim number, Contractor's name and address, contract number, work order number, location, claimant's name and address, brief description of loss, damage, or injury, date of occurrence, corrective action taken, and acceptance by the property owner or injured party.

XXXII. ATTACHMENTS TO PERFORMANCE WORK STATEMENT (PWS)/ SPECIFICATIONS

The attachments to the PWS listed in Section J are hereby made a part of this solicitation and any resultant contract.