



Parks and Urban Forestry Department
General Requirements and Specifications for
2016 Street Tree Planting

1.0 GENERAL SPECIFICATIONS:

These specifications describe the work to be performed by the winning BIDDER (CONTRACTOR) to provide all labor, materials, supervision, equipment, services, and expertise by one CONTRACTOR required to accomplish tree planting and guarantee for one year in the City of Bexley. It shall be the responsibility of the CONTRACTOR to perform all work applicable to their trade, whether or not specific mention is made of each item. This work is to be performed by a CONTRACTOR who derives its major income from landscape work and whose employees are properly trained. CONTRACTORS must utilize foremen who have valid industry certifications, (International Society of Arboriculture (ISA), Ohio Nursery Landscape Association (ONLA), etc.).

- The estimated number of trees to be planted with this contract is 140.
- All plant material shall meet ANSI Z60.1 Standards (American Standard for Nursery Stock).
- The CONTRACTOR is responsible for furnishing all labor, supervision, tools, vehicles, fuels, equipment and materials to perform contractual street tree planting. The CITY reserves the right to, at any time; use its own forces, equipment, tools, conveyances, and materials of those of another contractor to perform the work.
- The CONTRACTOR is responsible for maintaining a tally sheet for work accomplished, and shall contact the city's Parks and Urban Forestry Supervisor prior to the start of each work day.
- The CITY reserves the right to award all or part of this CONTRACT as it sees fit.
- Ohio Utilities Protection Service (OUPS) shall be notified by the CONTRACTOR 48 hours or two (2) working days prior to any digging. Reference numbers shall be presented to the CITY upon request.
- Payment for street tree planting will be made only after acceptance of requested reports and quality check of the work is completed. If after work is inspected corrections are needed, payment will be held until corrections have been made to the CITY'S satisfaction.
- The CONTRACTOR will proceed with the WORK at such rate of progress to ensure full completion by December 1, 2016 or a mutually agreed upon extension time. If the CONTRACTOR shall fail to complete the WORK by December 1, 2016 or a mutually agreed upon extension time, then the CONTRACTOR will pay the CITY liquidated damages, in the amount of \$1,000.00, for each calendar day that the CONTRACTOR shall be in default. The CONTRACTOR shall not be charged for liquidated damages due to unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR.
- All rework shall be done at the CONTRACTOR'S expense.
- The CONTRACT shall become effective upon the CITY issuing a valid Notice of Award/Notice to Proceed and signed agreement.

- Before any work begins, the CITY'S ARBORIST will meet with the CONTRACTOR'S representative to discuss the project. This meeting will occur at a place and time determined by the CITY ARBORIST and will cover the work required by the CITY under this CONTRACT.
- All work shall be performed by the CONTRACTOR unless a sub-contractor has been identified, and approved by the CITY ARBORIST prior to the awarding of this CONTRACT.

2.0 GENERAL REQUIREMENTS:

- The CONTRACTOR will be liable for damages to private property and facilities of the CITY, which includes but is not limited to flowers, plantings, fences, irrigation lines, downspout drainage, and structures. Proper respect for private property is to be displayed by the CONTRACTOR'S employees at all times.
- The CONTRACTOR should provide with their sealed bid a completed Experience Record Form, included herein, containing a list of no less than three (3) references of parties where tree planting has been performed within the last five (5) years. If not included with the sealed bid, a completed Experience Record Form shall be submitted to the CITY within two (2) business days of the BID opening.
- Working hours may be between 7:00 AM and 6:00 PM, Monday through Friday, excluding state and federal holidays.
- At no time shall the CONTRACTOR or their employees enter into any agreements that may be held against the CITY. There shall be no solicitation to residents of the CITY during this CONTRACT.

3.0 EQUIPMENT REQUIREMENTS:

- Equipment utilized shall be appropriate for the work to be performed and in safe proper working condition meeting all state and federal requirements. All vehicles shall be clearly marked with the company name.

4.0 MANPOWER REQUIREMENTS:

- The CONTRACTOR shall supply the CITY with the name and contact phone number for the person that will be responsible for the day-to-day activities with the CITY.
- The appearance of the CONTRACTOR work force reflects on the CITY. A professional appearance complete with a company issued uniform, in good condition will be required.
- On-site supervision by an industry certified foreman is required.

5.0 CLEANUP:

- All debris shall be removed from public rights-of-way, private roads, or lawns at the conclusion of each workday unless arrangements have been made with a representative of the CITY.
- All streets, sidewalks, or lawn areas will be swept clean of all debris each day prior to leaving any job site.

6.0 TRAFFIC CONTROL

- The CONTRACTOR must take measures to expedite safe public passage through or around the work area. Any questions shall be directed to the Police Department at 614-559-4444.
- The CONTRACTOR must give adequate warning to vehicles and pedestrians approaching the work zone. Adequate warning shall be signage or cones.
- Whenever the work zone restricts traffic, the CONTRACTOR must use the appropriate combination of safety devices as outlined in the Manual on Uniform Traffic Control Devices (OMUTCD), published by the Federal Highway Administration.
- All traffic control and safety measures must meet industry standards (ANSI Z133) and will be the responsibility of the CONTRACTOR.

7.0 DELIVERY

- The CONTRACTOR has the responsibility to:
 - Furnish, transport and plant specimen quality trees;
 - Coordinate any traffic control with the Bexley Police Department;
 - Keep work site safe at all times;
 - Furnish and place mulch;
 - Remove excess material and cleanup site;
 - Guarantee trees for one year and make appropriate replacement planting upon CITY notification;
 - Any work incidental to above.
 - Complete all work on or before the date specified by the CITY.

8.0 MINIMUM REQUIREMENTS

- Mention of any product name neither constitutes an endorsement of that product nor excludes the use of similar products meeting specifications.

Trees: All trees purchased for the CITY shall be healthy, vigorous and well-grown, showing evidence of proper root and top pruning, single trunked, high branched specimens suitable for use along streets. The root collar shall show at the top of the root ball. All tree shall be grown in a currently active nursery having the same climatic conditions as Bexley. All trees shall meet ANSI Z60.1 standards for top grade 2" caliper trees—specimen quality (10 – 12' tall for shade trees, and 8 – 10' tall for ornamental trees or conifers. Each tree should have eight (8) or more branches with good distribution within the tree's crown), in healthy condition (exhibiting near maximum growth rate for the previous three years), with a minimum 22 – 24" firm root ball. The CITY ARBORIST has final approval of species or variety used and nursery from which trees are obtained.

- **Root Balls and Burlap:** All trees are to be balled and burlapped with ball shape and size conforming to ANSI Z60.1 standards. The trunks shall show flaring where the root collar and root balls connect. Only natural burlap and rope are permitted. Root balls will be adequately protected at all times from sun, heat, freezing, and drying. The CITY ARBORIST will reject any cracked or manufactured root balls. The CITY ARBORIST reserves the right to determine ball size and depth based on the local soil planting conditions as so stated in the ANSI Z60.1.
- **Mulch:** Aged, double shredded, hardwood mulch (mulch derived from ground lumber scraps is unacceptable) shall be placed around all trees at a depth of 3" after settling.
- **Soil Amendments:** A grower's blend topsoil shall be used in situations where the existing medium is insufficient for proper tree growth. When amendment is necessary a 50/50 mix of growers blend and existing soil shall be used as backfill.
- **Work Procedures:**
 - Source of supply – The CONTRACTOR shall submit to the CITY ARBORIST, within ten (10) days after receipt of a purchase order, complete and detailed information concerning the source of supply for each item of plant material specified in the planting list.
 - Tree location – All planting sites shall be identified and marked by the CITY ARBORIST before planting begins. The CONTRACTOR shall notify the Ohio Utility Protection Services (OUPS) of planting site locations prior to digging (proof available upon request). The CONTRACTOR is responsible for checking sites and rectifying conflicts with utilities prior to planting. The CONTRACTOR is responsible for any damage to utilities during the planting process. Sites will be marked by a flag, stake, or paint (white). All trees shall be centered between the curb and sidewalk, at least 2' from the curb line unless otherwise specified by the CITY ARBORIST. If for any reason the location of the tree needs to be relocated more than 3' in any direction, the CITY ARBORIST shall be notified and a site inspection conducted prior to planting the tree. Locations changed without the CITY ARBORIST'S approval shall be subject to re-planting by the CONTRACTOR at no additional cost to the CITY.
 - Delivery – Trees shall be transported and handled with adequate protection. Trees shall be appropriately covered during transit or delivered in a closed truck. Trees in leaf shall be sprayed with an anti-desiccant before shipping.

- Temporary storage – Root balls of trees not immediately planted after delivery shall be adequately protected and watered until planting occurs. If agreed upon the CONTRACTOR may use the CITY yard at CONTRACTOR’S own risk.

- Planting holes – Holes shall be dug by hand or with equipment identified and approved by the CITY ARBORIST prior to planting. Holes shall be two–three times wider than the root ball; and dish shaped with tapered sides (Figure 1). Planting depth and whole width will be determined by the CITY ARBORIST to best accommodate growing conditions. Soil excavated from holes must be removed from site and disposed of by the CONTRACTOR. Holes can only be dug when soil is not saturated or frozen. Holes cannot remain open overnight. The CONTRACTOR is responsible for ensuring that all holes are safe until planted.

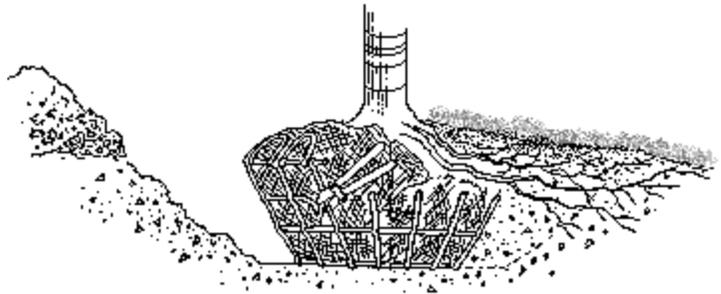


Figure 1: Planting whole illustration

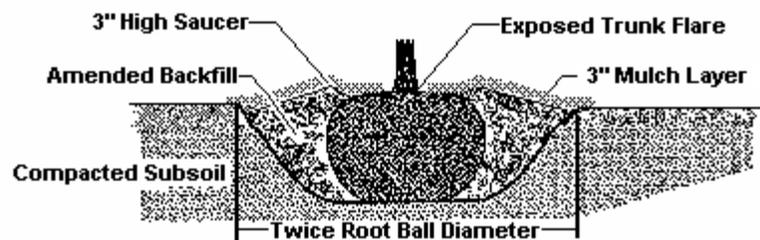


Figure 2: Planting illustration

- Planting – Balled and burlapped trees shall be set in the center of hole on solid subsoil with 2 – 3” of the root ball above original grade (Figure 2). After tree is positioned, remove wire cages and twine from upper two-thirds (2/3) of root ball (Figure 1) and roll burlap from ball to the bottom of the hole. Before backfilling, make sure tree’s trunk flare is exposed and above original grade (Figure 2).
- Root pruning – Ends of broken or damaged roots over ¼” in diameter shall be pruned with a clean cut, removing only injured portion.
- Backfill – Planting holes shall be backfilled with existing soil unless the existing medium is unsuitable for proper tree growth. In these instances a growers blend topsoil shall be provided by the CONTRACTOR and blended 50/50 with the existing soil. CONTRACTORS will incorporate mycorrhizal fungi in accordance with manufacturer’s recommendations. Tamp backfill with feet or other approved tamping device while backfilling. Fill hole with backfill to top of root ball and taper out to original grade. To facilitate water, use additional backfill and create a 3” high saucer the diameter of root ball on top of the mound (Figure 2).

Top pruning and wound treatment – Pruning to make trees shapely and typical of species shall be done according to recognized horticultural standards and instructions of the CITY ARBORIST. Trees shall be pruned to allow for pedestrians and vehicular access as much as possible. Accidental damage during planting not great enough to warrant branch removal or tree replacement should be promptly trimmed according to recognized horticultural practices.

- Mulching – Place mulch loosely around trees within twenty four (24) hours after planting and, to a uniform depth of 2". Spread mulch to 2" beyond the diameter of the planting hole. Mulch must not touch the trunk of the tree (Figure 2).
- Extra holes – Excess or improperly located planting holes shall be backfilled immediately and seeded with a turf-grass mix approved by the CITY ARBORIST, and covered with 2" inches of straw (tacked/crimped in place), at CONTRACTOR'S expense.
- Productivity – Work shall take place Monday through Friday between 7:00 AM and 6:00 PM. A production schedule with beginning and ending dates will be agreed upon in writing between the CONTRACTOR and the CITY ARBORIST prior to commencing work.
- Supervision – The CONTRACTOR's supervisor shall contact the CITY ARBORIST prior to the start of each work day. The CONTRACTOR shall have a competent person in charge of work at all times to whom the CITY ARBORIST or his designee may issue directions and who is authorized to accept and act upon such directives. This supervisor must fluently speak, read, and write English.
- Common Causes of Tree Failure – Excessive mulch, a layer of heavy backfill over the root ball, buried trunk flares, failing to remove wire and burlap from the upper two-thirds (2/3) of root ball, and using heavy soil for backfill can all contribute to tree failure (Figure 3). Any of these factors found during the guarantee period are considered defects in workmanship and will require correction at the CONTRACTOR'S expense.

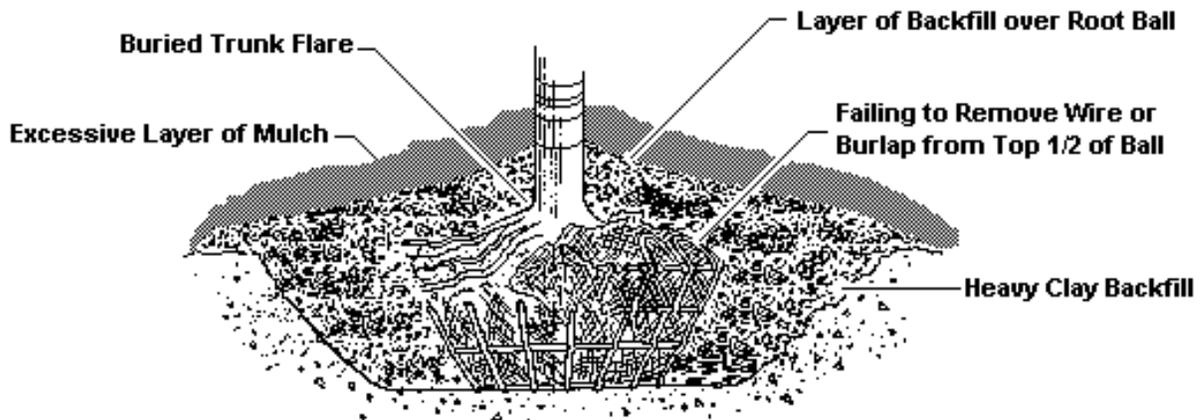


Figure 3: Common Causes of Tree Failure Illustration

- Substitutions – No substitutions shall be made regarding tree species or material used unless approved by the CITY ARBORIST.

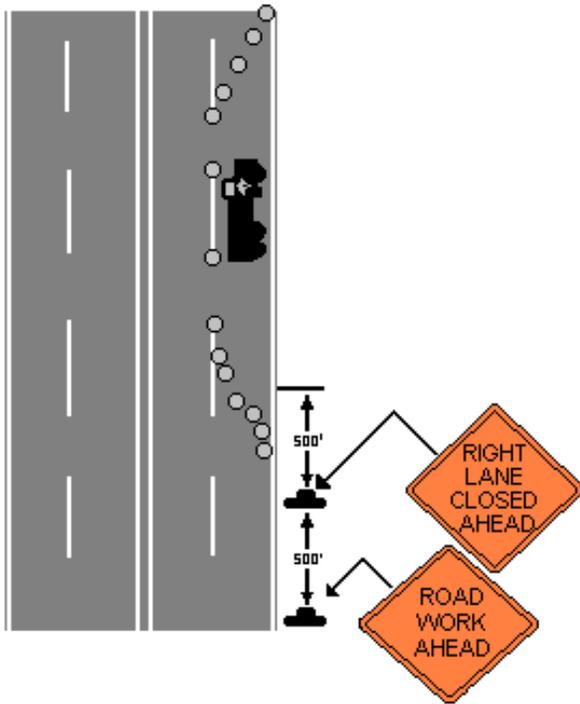


Figure 4: Traffic Control Illustration

- Traffic Control – Whenever the work zone restricts traffic, the CONTRACTOR must use the appropriate combination of safety devices as outlined in the Manual on Uniform Traffic Control Devices (OMUTCD), published by the Federal Highway Administration (Figure 4).

- **Inspections**

- Nursery inspection – The CITY ARBORIST, at his discretion, inspects nursery stock purchased under this contract before digging. The CONTRACTOR will pay all associated costs (meals, transportation, and housing) for the CITY ARBORIST to inspect if the nursery site is more than 100 miles from Bexley.

- Agency inspection – Federal, state and other authorities inspect all trees before removal from the nursery, as required by local law. Required certificates declaring trees free of all diseases and insects shall accompany each order or shipment of trees.

- Stock inspections – The CITY ARBORIST reserves the right to inspect trees before they are removed from delivery truck at work site. The CONTRACTOR will dispose of and replace any tree rejected by the CITY ARBORIST at the CONTRACTOR'S expense.
- Planting inspection – The CITY ARBORIST, at his discretion, inspects the progress of planting or temporarily stored trees to review the progress of the work and condition of trees.
- Guarantee period inspection – The CITY ARBORIST shall inspect planting work to verify completion and begin guarantee period. The CONTRACTOR shall request this inspection in writing at least ten (10) days before its scheduled date. After inspection, the CITY ARBORIST notifies the CONTRACTOR in writing beginning date of guarantee period or of deficiencies to correct before guarantee period begins.
- Correction inspection – Two weeks before end of guarantee period, the CITY ARBORIST shall inspect all previous work and notify the CONTRACTOR in writing of replacement and other corrections required to make the work acceptable. Trees that do not exhibit at least 2/3 of their branches with normal growth and leaf distribution during the first year after the trees were installed will be replaced at the CONTRACTOR'S expense.
- Final inspection – At end of the guarantee period, the CITY ARBORIST shall inspect all previous work to determine final acceptance. The CONTRACTOR shall request this inspection in writing at least ten (10) days before the scheduled date.

- Other inspections – The CITY ARBORIST reserves the right to inspect on-site work at any time without notice.

- **Guarantee:**

The CONTRACTOR shall guarantee that all trees remain alive and healthy until the end of a one (1) year guarantee period. The CONTRACTOR shall replace, as specified, and at his/her expense, any dead trees, and any trees that in the opinion of the CITY ARBORIST have become unhealthy or unsightly or have lost their natural shape due to dead branches, improper pruning or maintenance, or any other cause due to the CONTRACTOR'S negligence, or weather conditions bearing the entire cost.

Should any defects develop in aforesaid work, within the specified guarantee period, due to faults in materials and/or workmanship, the CONTRACTOR hereby agrees to make all repairs and do all necessary work to correct defective work to the CITY'S specifications without cost to the CITY. Such repairs and corrective work shall be done within twenty (20) days after written notice to the CONTRACTOR by the CITY. In case the CONTRACTOR fails to do work so ordered, the CITY may have work done and charge cost thereof to the CONTRACTOR. CONTRACTOR agrees to pay the CITY the cost of such work.

The CONTRACTOR shall, in the case of work performed by subcontractors, and where guarantees are required, be responsible for and guarantor of the subcontractors work. Any subcontractor must be identified and approved by the CITY ARBORIST prior to the beginning any work.

- **Estimate:**

The estimated cost of this project is \$33,000.00.

- **Bid Opening:**

Bids will be publicly open and read aloud on October 4th, 2016 at 11:00 AM at Bexley City Hall (2242 East Main Street)

EXPERIENCE RECORD

As part of the OWNER'S investigation to determine the lowest and best BID, the BIDDER is required to provide detailed information on the forms herein for evidence of the BIDDER'S responsibility, experience, and skill level. The OWNER may make other such investigations to determine the ability of the BIDDER to perform the WORK. BIDDERS are urged to include a completed Experience Record Form in their sealed BID. If not included with BIDDERS sealed BID, a completed Experience Record Form shall be submitted to the City within two (2) business days of the BID opening.

On site supervisor assigned to this project: _____

Site Supervisor's ISA/ONLA Certificate Number: _____

Site Supervisor's ISA/ONLA Certificate Expiration Date: _____

Contractor (BIDDER) will be required to provide proof of ISA/ONLA Certification.

List three projects of similar scope that your company has completed in the last five years.

Name of Project: _____

Project Location: _____

Project Description: _____

Project Start Date: _____ Project Completion Date: _____

Project Cost: _____

Project Contact: _____ Project Contact Phone: _____

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Name of Project: _____

Project Location: _____

Project Description: _____

Project Start Date: _____ Project Completion Date: _____

Project Cost: _____

Project Contact: _____ Project Contact Phone: _____

Name of Project: _____

Project Location: _____

Project Description: _____

Project Start Date: _____ Project Completion Date: _____

Project Cost: _____

Project Contact: _____ Project Contact Phone: _____

2016 STREET TREE PLANTING BID SHEET

The undersigned having carefully considered the General Requirements and Specifications of the Contract Documents relating to the City of Bexley's 2016 Street Tree Planting does hereby offer to perform such services on behalf of the City, of the type and quality in the manner described at the prices herein set forth. The City reserves the right to award any or all bids, as the interests of the City requires.

*** BIDDERS MUST SIGN THIS BID SHEET ***

Quantity	Common Name	Botanical Name	Equivalent	Size	Material Unit Cost	Labor Unit Cost	Total Cost
2	Golden Rain Tree	Koelreuteria paniculata		2"	\$	\$	\$
2	European Beech	Fagus sylvatica		2"	\$	\$	\$
1	London Planetree	Platanus acerifolia		2"	\$	\$	\$
1	Sycamore	Platanus occidentalis		2"	\$	\$	\$
0	'Valley Forge' Elm	Ulmus Americana 'Valley Forge'		2"	\$	\$	\$
0	Amur Corktree	Phellodendron amuren		2"	\$	\$	\$
1	Lacebark Elm	Ulmus parvifolia		2"	\$	\$	\$
0	Willow Oak	Quercus phellos		2"	\$	\$	\$
2	'Homestead' Elm	Ulmus pumila 'Homestead'		2"	\$	\$	\$
1	'Bonfire' Sugar Maple	Acer saccharum 'Bonfire'		2"	\$	\$	\$
3	Yellowwood	Cladrastis kentukea		2"	\$	\$	\$
0	Tulip Poplar	Liriodendron tulipifera		2"	\$	\$	\$
7	Littleleaf Linden	Tilia cordata		2"	\$	\$	\$
2	Ginko	Ginkgo biloba		2"	\$	\$	\$
0	'Commemoration' Sugar Maple	Acer saccharum 'Commemoration'		2"	\$	\$	\$
0	Red Maple	Acer rubrum		2"	\$	\$	\$
1	'Red Sunset' Maple	Acer rubrum 'Red Sunset'		2"	\$	\$	\$
10	'Green Mountain' Sugar Maple	Acer saccharum 'Green Mountain'		2"	\$	\$	\$
1	Hardy rubber tree	Eucommia ulmoides		2"	\$	\$	\$
0	'Cleveland Select' Callery Pear	Pyrus calleryana 'Cleveland Select'		2"	\$	\$	\$

Quantity	Common Name	Botanical Name	Equivalent	Size	Material Unit Cost	Labor Unit Cost	Total Cost
16	Tupelo	Nyssa sylvatica		2"	\$	\$	\$
10	'Sterling' Silver linden	Tilia tomentosa 'Sterling'		2"	\$	\$	\$
1	Red Oak	Quercus rubra		2"	\$	\$	\$
3	Shantung Maple	Acer truncatum		2"	\$	\$	\$
0	Hackberry	Celtis occidentalis		2'	\$	\$	\$
1	Kentucky Coffeetree	Gymnocladus dioicus		2'	\$	\$	\$
15	Tartarian Maple	Acer tataricum		2'	\$	\$	\$
5	Shingel Oak	Quercus imbricaria		2'	\$	\$	\$
4	'October glory' Red Maple	Acer rubrum 'October Glory'		2'	\$	\$	\$
1	White Oak	Quercus alba		2'	\$	\$	\$
2	Shumardii Oak	Quercus shumardii		2'	\$	\$	\$
3	Norway Maple	Acer platanoides		2'	\$	\$	\$
1	'Village Green' Zelkova	Zelkova serrata 'Village Green'		2'	\$	\$	\$
2	Pagodatree	Sophora japonica		2'	\$	\$	\$
2	Scarlet Oak	Quercus coccinea		2"	\$	\$	\$
100	Total						\$

Company Name: _____

Address: _____

City/State/Zip Code: _____

Signature (Owner or authorized representative for company): _____

Title: _____

Date: _____

Phone Number: _____ Fax Number: _____

Email: _____