

ENGINEERING DIVISION
Phone 405.366.5452
Fax 405.366.5418

February 9, 2015

Griffis Tree Farm 10155 Little River Drive Norman, OK 73026

Re: Request for Written Quotes for Tree Planting and a 2 Year Maintenance Agreement on Brookhaven Creek, Project DR0010

Dear Mr. Griffis:

Please find enclosed an information packet concerning a project for planting trees and maintaining them for 2 year along a section of Brookhaven Creek between Cross Roads Boulevard and Rock Creek Road and in the park on the northwest corner of I-35 and Rock Creek Road between Christian Brothers Automotive and an adjacent pond to the west of the business.

Please submit a quote to my office by February 20, 2015, referencing Project DR0010. Any questions should be submitted by email to <u>Aaron.Milligan@normanOK.gov</u>. All questions and answers will be sent to every bidder. Thank you for your interest in this project. Should you need to reach me by phone, my number is (405) 366-5435.

Sincerely,

Aaron Milligan Storm Water Pollution Specialist

cc. Joe Willingham, P.E., Storm Water Engineer

Encls.

Bid Proposal Form FYE 2010 BROOKHAVEN CREEK IMPROVEMENT PROJECT – PHASE 2 Base Bid

Item	Description		Size	Qty	Unit	Unit Price	Total Price
	Scientific Name	Common Name	(caliper)			(numerals)	
1	Platanus occidentalis	American Sycamore	≥2"	10	EA		
2	Taxodium distichum	Bald Cypress	≥2"	15	EA		
3	Celtis occidentalis	Hackberry	≥2"	6	EA		
4	Quercus macrocarpa	Burr Oak	≥2"	8	EA		
5	Juglans nigra	Black Walnut	≥2"	8	EA		
		Subtotal					
11	2-year Maintenance Agreement		N/A	N/A	EA*		
		Subtotal					

	Total Base Bid	
Total Base Bid in Words \$		

Notes:

- 1) Planting location for each tree shall be provided by the City of Norman.
- 2) All required work or costs such as insurance, mobilization, etc., that are not listed on the "Bid Proposal Form" shall be considered incidental and the expense for this work shall be included in the Items shown on the Bid Proposal Form.
- 3) All plants and trees must be nursery grown stock.
- 4) All plants must be inoculated with mycorrhizal fungi prior to planting.
- 5) Contractor must have at least three years' experience with tree plantings, said experience shall be listed in the "Qualifications Statement".
- 6) The contractor shall be paid monthly for the work performed during the 2-year maintenance agreement period. The contractor will not be paid for work not performed.

^{*} A unit in regards to the 2-year maintenance agreement is one round of watering for all trees.

TREE QUALITY SPECIFICATIONS

OUALITY ASSURANCE

Contractors are required to obtain nursery grown trees indigenous to the of State of Oklahoma. All trees shall be shipped with certificates of inspection as required by governmental authorities. The City of Norman retains the right to inspect all trees on nursery premises or city property and reject all trees, which do not meet written specifications.

Substitutions will only be accepted with written approval of the City of Norman.

All trees specified shall be container grown or balled and burlapped in a recognized nursery in accordance with good horticultural practices. Provide healthy, vigorous stock grown under climatic conditions similar to those in Norman, OK and free of disease, insects, eggs, larvae injury, and defects such as abrasions or disfigurement. Trees should be free of sunscald and freeze damage. The size of the rootball or container should be appropriate to the stem caliper of the tree. Plant materials shall comply with the recommendations and requirements of ANSI Z60.1-1996, "American Standard Nursery Stock."

Trees of the sizes specified shall be provided. All trees must be uniform in size and shape.

PRODUCT DELIVERY, STORAGE AND HANDLING

All trees shall be delivered from the growing site to the planting site in a covered vehicle.

The bidder shall maintain all trees in a first class condition until the trees are delivered and final acceptance is granted.

GUARANTEE AND REPLACEMENT

All trees south of Rock Creek Road shall be guaranteed for two (2) years, after installation and acceptance of work, to be alive and in satisfactory condition at the end of the guarantee period (three (3) years if Add Alternate No. 1 is accepted). Such guarantee excludes vandalism, animal damage and unforeseen weather events (such as tornadoes, floods, etc.). At any time during the guarantee period, if any tree is found dead or not in satisfactory health as determined by a representative of the City of Norman Parks Department, Forestry Division, it will be upon request of said department, immediately removed from the site and replaced as soon as conditions permit during the normal planting season. All replacements shall be of the same kind and size as specified in the plant list. Replacement costs shall be borne by the Contractor. Any exceptions or substitutions to the above must be approved in writing by a representative of the City of Norman.

PLANT SPECIFICATIONS

Plant Materials

Provide trees and shrubs true to name and variety established by American Joint Committee on Horticultural Nomenclature "Standardized Plant Names."

Provide trees and shrubs complying with recommendations and requirements of ANSI Z60.1-2004, "American Standard for Nursery Stock."

Trunks and Branches - Trees

- Co-dominant stems are not acceptable.
- Single, straight trunk, well formed and sturdy. Multi-trunked specimens acceptable only if specified.
- Lateral branching plentiful and uniformly distributed with the crown beginning no lower than four (4) feet above the ground on a 1.5 inch caliper deciduous tree. At least half the trunk should have lateral branches. Variations due to site requirements may be allowed but must be submitted in writing and authorized by City of Norman Forestry Division prior to planting.
- Crotches shall not have included bark.
- Sprouts cleanly removed.
- Pruning scars clean cut leaving no protrusion from the trunk or branch.
- Trees shall be free of cold injury and sunscald.
- Caliper of trunk shall be taken six (6) inches above the ground up to and included four (4) inche caliper size twelve (12) inches above the ground for larger size.
- No wounding to the tree trunk and branches.

Trunks and Branches

- Sprouts cleanly removed.
- Pruning scars clean cut.
- · Shrubs shall be free of cold injury and sunscald.

Foliage - Trees and Wetland Plants

- Trees and shrubs densely supplied with healthy, vigorous leaves of normal size, shape, texture and deep color appropriate to the species.
- No chlorosis present.
- · Pest and mechanical injury not to affect more than 5% of total foliage.

Root system - Trees and Wetland Plants

- Shall be sturdily established in contained.
- Shall not be excessively root bound.
- Shall have no kinked or circling roots.
- Shall have no large roots growing out of container.
- Rooting medium shall be weed free.
- If balled and burlapped, the rootball will not be cracked or broken prior to delivery or during installation.
- The size of the rootball shall be in proportion to the stem caliper as outline in ANSI Z60.1-2004, "American Standard for Nursery Stock."

Stakes

Metal T posts shall be used to stake all trees.

Beaver Guards

Protect trees from beavers using cylinders of 2 x 2-inch or 2 x 3-inch by 3-foot tall galvanized, welded wire. Cylinders should be large enough in diameter to encircle the trees with at least 6-12 inches of space between wire and trunk. Secure cylinder to prevent truck damage. (Other methods are allowed upon approval from the City of Norman.)

TREE PLANTING SPECIFICATIONS

1) Dig a large planting hole.

The planting hole should be dug as deep as the rootball, but no deeper. The hole should be two (2) to three (3) times as wide as the diameter of the top of the rootball.

2) Prune sparingly.

Examine the tree closely for injury to roots or branches. If any roots are crushed, cut them at a point just in front of the break. On the top, prune only broken branches, making sure to leave the branch collar (swollen area where one branch meets another) intact.

3) Prepare the hole and soil.

While some newly transplanted trees may benefit from an applicant of plant food, it is best not to use fertilizer until the tree or shrub is well-established. Native soil placed in the hole is usually adequate. Never apply high nitrogen fertilizer at planting time. It may burn tender roots.

4) Place the tree at the proper height.

To avoid damage when setting the tree in the hole, always lift the tree by the rootball. Never lift or carry the tree by the trunk. Add a sufficient amount of soil to the planting hole to bring the tree or shrub to its original growing level. This level is indicated by a dark stain on the trunk, which marks the difference between root and trunk bark (root collar). Keep in mind that on balled and burlapped trees or shrubs, the point at which the burlap is tied can be much higher than the original soil line. In heavy, clay soils, the rootball may be planted slightly higher than the surrounding ground level, but soil must be added to slope from the top of the rootball to the ground level. Not more than ¼ of the rootball may be ground level.

5) Fill the hole firmly but gently.

If the tree is balled and burlapped, cut and remove the string and remove all burlap on the top of the rootball. A minimum of the top ½ of the burlap must be removed from the sides of the rootball. No burlap may be exposed to direct air contact. Completely remove of all containers, peat pots, and root control bags. A minimum of ½ of the wire basket must be removed from the rootball after the tree is set in the hole.

Fill the hole by gently firming the ground around the tree as the hole is backfilled after tree placement to hold it in place and to eliminate air pockets. Settle the soil around the roots with water and add soil to the hole until the tree is firmly positioned. Do not excessively tamp around the tree base. This compacts the soil and may inhibit the spread of roots. Rake a ridge of soil around the margin of the hole (outside the root area) to create a 3-inch deep reservoir when watering.

6) Stake the tree.

All trees shall be staked for one (1) year. After one (1) year all stakes shall be removed by the contractor. Nylon webbing or strapping must be used if the staking material comes in contact with the main trunk.

7) Water the tree.

Saturate the fresh backfill around the tree with water in an amount that will insure the entire rootball becomes wet. If the soil used to backfill the planting hole settles or creates an air gap, then contractor must add soil to the gap/settled area and allow this soil to settle. Re-saturate and check for futher air gaps in soil and backfill and remedy as stated. Repeat until no gaps remain.