

**Delaware Center for Horticulture, Inc.**

**SPRING 2020 STREET TREE PROGRAM  
COMMUNITY DEVELOPMENT BLOCK GRANT  
SUBCONTRACTOR BID PACKAGE**

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**SPRING 2020 STREET TREE PROGRAM  
COMMUNITY DEVELOPMENT BLOCK GRANT  
BID PACKAGE**

**PART I**

- A. INVITATION TO QUALIFIED BIDDERS

The Delaware Center for Horticulture, Inc., a nonprofit organization located at 1810 North Dupont Street, Wilmington, Delaware, 19806-3308, hereinafter referred to as Contractor, is accepting

bids only from qualified, ISA-certified landscape/arborist contractors for tree procurement, concrete/brick cutting and removal for creation or expansion of thirty-seven (37) tree pits, installation of specified-type root barrier, delivery and planting of one-hundred and thirty-six (136) street trees, removal of twenty-five (25) dead or deteriorated trees and stumps, and the grinding of five (5) stumps only as contracted with the Department of Real Estate and Housing, City of Wilmington, Delaware.

This Subcontract involves street tree plantings, removals/stump grinding in city blocks/neighborhoods (which may or may not include concrete/brick cutting and removal of existing tree and stump removal), and adding topsoil as needed. Bid results will be made available at Close of Business (5:00 p.m. EST) on Monday, June 1, 2020 by email request to Renee Frith, DCH Director of Greening Programs, at [rfrith@thedch.org](mailto:rfrith@thedch.org).

Attention is called to the fact that all firms submitting Subcontract bids must meet certain requirements in the Contractor's agreement with the City of Wilmington, including verification that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin. Qualified subcontractors must have an ISA certified arborist supervising tree pruning and removal and inspecting tree planting. **Copy of this certification must accompany bid.** Qualified bidders must have no outstanding work that is past due with The Delaware Center for Horticulture. All work is to conform to ANSI Z133.1 Safety Standards and ANSI A300 Tree Care & Planting standards.

Bids may be held by the Delaware Center for Horticulture, Inc., for a period not to exceed fourteen (14) days from the bid date for the purpose of review and investigation of the bidder's qualifications. The successful bidder must have personnel, equipment and materials ready for notice to proceed on the tentative start date of June 8, 2020. The subcontract will expire on June 30, 2020 unless Contractor (DCH) secures its own contract extension due to extenuating circumstances.

**SPRING 2020 STREET TREE PROGRAM  
COMMUNITY DEVELOPMENT BLOCK GRANT  
BID PACKAGE**

**PART I**

**B. INSTRUCTIONS TO BIDDERS**

**1. Examination of Documents**

The bidder shall thoroughly examine the attached bidding and specification documents including Street Tree Program Specifications and Scope of Work. The successful bidder, by the execution of the subcontract, shall in no way be relieved of any obligation under it due to failure to examine any form or document.

**2. Bid Information**

Bids must be submitted on the attached bid sheets and be printed in ink or typewritten and include the following information:

- a) Firm  
Name  
Federal EIN  
Business address (including city, state, and zip code)
- b) Principals  
Name  
Social Security number  
Home address (including city, state, and zip code)
- c) ISA Certified Arborist supervising  
Name  
Certification number  
Certified since  
Expiration Date
- d) Proof of Workers' Compensation and G/L Insurance
- e) Proof of license to work in City of Wilmington
- f) Type of equipment to be used in concrete/brick cutting
- g) Disposal of concrete/brick location(s)
- h) Cost of concrete/brick cutting work on a per linear foot basis; cost of concrete removal on a square foot basis; cost of root barrier installation on a per linear foot basis; and cost of brick removal on a

square foot basis; for a typical eight foot by four foot (8' x 4') planting hole (based on standard single thickness concrete. In the event an 8' x 4' pit is not feasible, pit shall equal 32 square feet. Removal of additional materials beyond normal conditions shall constitute reason for change in contract work as per general terms and conditions.) Root barrier should be installed to a depth of 18" and with a width of 2.5 times the width of the rootball at the interface of the planting site and sidewalk.

Note: It is assumed for an eight foot by four foot (8' x 4') planting hole adjacent to the street curbing unless otherwise specified on location and details list. In most cases, an eight linear foot (8') concrete/brick cut is not required along the seam created between the concrete/brick pavement and the street curbing. It is also assumed that a concrete/brick cut is not required in the remaining three (3) sides (other than the side where the pavement abuts the street curbing) if either a construction joint, expansion joint, or other physical separation is visibly evident. This does not include crack prevention lines/joints. All crack prevention lines/joints are to be cut. Concrete cuts must be deep enough to prevent breakage of remaining sidewalk when debris is removed. Subcontractor is responsible for correction and repair of any breakage of remaining concrete caused by pit creation process.

- i) Cost and availability of procuring two inch to two and one half inch (2 – 2.5") caliper, twelve to fourteen foot tall (12 - 14'), unless other size indicated, balled and burlapped trees which shall be suitable for street tree applications (limbed up to at least six feet (6') clearance above ground level, four feet (4') clearance for smaller types\*) for the following species:

Species	Common	# New trees	Cost	Total
<i>Nyssa sylvatica</i>	Black Tupelo	31		
<i>Quercus lyrata</i>	Overcup Oak	11		
<i>Cercis canadensis</i>	Redbud	7		
<i>Quercus alba</i>	White Oak	2		
<i>Taxodium distichum</i>	Bald Cypress	15		
<i>Ginkgo biloba</i> (male)	Ginkgo	10		
<i>Carpinus betulus 'Fastigiata'</i>	European Hornbeam	22		
<i>Gleditsia tricanthos inermis 'Sunburst'</i>	Honey Locust	3		
<i>Liquidambar styraciflua</i>	Sweetgum	2		
<i>Quercus bicolor</i>	Swamp White Oak	9		
<i>Liriodendron tulipifera</i>	Tulip Poplar	1		

<i>Robinia x margaretta</i> 'Pink Cascade'	Black Locust	13		
<i>Acer rubrum</i>	Red Maple	3		
<i>Cotinus coggygria</i>	Smoke Tree	1		
<i>Quercus imbricaria</i>	Shingle Oak	1		
<i>Tilia cordata</i> 'Greenspire'	Littleleaf Linden	2		
<i>Syringa reticulata</i> 'Ivory Silk'	Japanese Lilac Tree	3		

Note: Please indicate the quantities of each at your disposal, then, quote *either* individual prices for each species *or* one unit price for all of the above. If the successful bidder has quoted prices for each individual species, then the successful bidder will be paid the quoted price for each species supplied, not the averaged price used only for comparative purposes.

The Delaware Center for Horticulture, Inc., has the right to examine trees prior to installation and reject those that do not appear of good health, form, or size (see Planting Specifications).

The successful bidder must provide a one (1) year reasonable guarantee on trees planted, considering proper watering and care by the individuals involved.

- j) Cost per tree for delivery and planting including back fill top soil (clean, sandy loam) for tree pit, two (2) - eight foot (8') hardwood stakes and ties, four inch (4") depth of shredded hardwood mulch to cover tree pit and 20 gallon *TreeGator™* or *approved equivalent* (does not include the cost of tree).
- k) Lump sum cost of concrete and tree work based on Location and Details of Work.
- l) In addition, the selected bidder must provide the Contractor with proof of liability insurance listing the Delaware Center for Horticulture, Inc., as Additionally Insured within the City of Wilmington.
- m) Subcontractor must also be licensed to work in the City of Wilmington DE.
- n) Subcontractor is responsible for securing blanket (project) permit approval for street tree removals and plantings from the Urban Forest Administrator, Department of Public Works, City of Wilmington, as required by city vegetation code and tree ordinance prior to proceeding with work.

**3. Bid Due Date**

Mail or deliver to the Delaware Center for Horticulture, Inc., 1810 North Dupont Street, Wilmington, DE 19806-3308, by 12:00 p.m. (noon) EST on Monday, June 1, 2020. If delivering directly to DCH, please place in secure, black mailbox/dropbox located on porch. If mailed, bids must be received (i.e. not postmarked) by this deadline.

**4. Award of Contract and Rejection of Bids**

- a) The subcontract will be awarded by the Delaware Center for Horticulture, Inc. to the lowest qualifying bidder complying with the conditions of the Invitation to Bidders, providing such bid is reasonable and acceptable to the interests of the Delaware Center for Horticulture, Inc. and the City of Wilmington.
- b) The Delaware Center for Horticulture, Inc. reserves the right to reject any and all bids. The contract will require the completion of work according to the contract documents.
- c) Bid results will be announced and can be requested starting at 5:00 p.m. EST on Monday, June 1, 2020 by email at [rfrith@thedch.org](mailto:rfrith@thedch.org). The bidder to whom the award is made will be notified at the earliest possible date and time.

Delaware Center for Horticulture, Inc.

SPRING 2020 CDBG STREET TREE PROGRAM

PART I, Continued.

C. CONTRACTOR'S BID FORMS

1. Legal name of firm: \_\_\_\_\_

Legal business address: \_\_\_\_\_

\_\_\_\_\_

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Telephone Contact Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Federal EIN: \_\_\_\_\_

2. Name, title, Social Security number and address of the owner, partners, or officers:

	Name Title	Address	SS#
a.	_____	_____	_____
	_____	_____	
b.	_____	_____	_____
	_____	_____	
c.	_____	_____	_____
	_____	_____	

3. Name of ISA Certified Arborist: \_\_\_\_\_

Certification Number: \_\_\_\_\_ Certified Since: \_\_\_\_\_

Expiration Date: \_\_\_\_\_



4. Workman's compensation and employers' liability insurance carrier (please also see Part 1, Section 2, item (k) above):

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5. City of Wilmington Contractor License # \_\_\_\_\_

6. Equipment used for concrete/brick cutting and removal (please indicate diameter of concrete saw):

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7. Concrete/brick disposal location (include complete address if different than business address):

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8. Cost of concrete/brick cutting per linear foot: \_\_\_\_\_/ft.

9. Cost of concrete removal per square foot: \_\_\_\_\_/sq. ft.

10. Cost of brick removal per square foot: \_\_\_\_\_/sq. ft.

11. Cost of 18" root barrier installation per linear foot: \_\_\_\_\_/ft.

12. Cost of removal and disposal of metal tree grate: \_\_\_\_\_/ea.

13. Hourly rate for crew and equipment for removal of extenuating obstructions from planting pits (rock or concrete beyond normal conditions, indicate composition of crew):

Crew: \_\_\_\_\_/hour

14. Tree availability and cost (see attached worksheet):

15. Installation cost only, including delivery, clean up cost per tree (includes: back fill top soil (clean, sandy loam) for tree pit, 20 gallon *TreeGator*<sup>™</sup> or approved equivalent, two (2) – eight foot (8') hardwood stakes and ties, and four inch (4") depth of shredded hardwood mulch to cover tree pit:

Unit installation cost (does not include cost of tree): \_\_\_\_\_/tree

16. Lump sum cost of contract work based on Location and Details of Work:  
(remove **25 trees** and stumps and **5** stumps only, cut or expand **37** tree pits,  
plant **136** trees):

remove 25 trees and stumps and 5 stumps only: \$ \_\_\_\_\_  
tree pit cutting and expansion (37 pits)  
lump sum cutting (line 8 x \_\_\_\_\_ ft.) \$ \_\_\_\_\_  
lump sum removal (line 9 x \_\_\_\_\_ sq. ft.) \$ \_\_\_\_\_  
lump sum root barrier (line 11 x \_\_\_\_\_ ft.) \$ \_\_\_\_\_  
installation only (line 16) x (136 trees) \$ \_\_\_\_\_  
tree costs total (from page 11) \$ \_\_\_\_\_

Replacement of brick edge retainers, grate(s) or brick pavers \$ \_\_\_\_\_

18. Lump sum price: \$ \_\_\_\_\_

19. Additional watering alternate price: Ten (10) time  
follow-up watering of all 136 trees, 20 gallons each \$ \_\_\_\_\_  
(initial watering incidental to lump sum planting)

TREE AVAILABILITY AND COST WORKSHEET:

Cost and availability of procuring two inch to two and one half inch (2 – 2 1/2”) caliper, twelve to fourteen foot tall (12 – 14’) (unless other size indicated), balled and burlapped trees which shall be suitable for street tree applications (limbed up to at least six feet (6’) above ground level, (four feet (4’) clearance for smaller types\*) for the following species (**does not include installation costs**):

Species	Common	# New trees	Cost	Total
<i>Nyssa sylvatica</i>	Black Tupelo	31		
<i>Quercus lyrata</i>	Overcup Oak	11		
<i>Cercis canadensis</i>	Redbud	7		
<i>Quercus alba</i>	White Oak	2		
<i>Taxodium distichum</i>	Bald Cypress	15		
<i>Ginkgo biloba</i> (male)	Ginkgo	10		
<i>Carpinus betulus</i> ‘Fastigiata’	European Hornbeam	22		
<i>Gleditsia tricanthos inermis</i> ‘Sunburst’	Honey Locust	3		
<i>Liquidambar styraciflua</i>	Sweetgum	2		
<i>Quercus bicolor</i>	Swamp White Oak	9		
<i>Liriodendron tulipifera</i>	Tulip Poplar	1		
<i>Robinia x margaretta</i> ‘Pink Cascade’	Black Locust	13		
<i>Acer rubrum</i>	Red Maple	3		
<i>Cotinus coggygria</i>	Smoke Tree	1		
<i>Quercus imbricaria</i>	Shingle Oak	1		
<i>Tilia cordata</i> ‘Greenspire’	Littleleaf Linden	2		
<i>Syringa reticulata</i> ‘Ivory Silk’	Japanese Lilac Tree	3		

Total tree cost \_\_\_\_\_  
 (does not include installation costs) (enter page 10)

Note: Please indicate the quantities of each at your disposal. At your option, quote *either* individual prices for each species *or* one unit price for all of the above. If the successful bidder has quoted prices for each individual species, then the successful bidder will be paid the quoted price for each species supplied, not the averaged price used for comparative purposes only. If substituting a different suitable cultivar, please note. Please consider ultimate size and growth habit when selecting alternate cultivars.

Record the unit cost per tree in the spaces provided above

**AND/OR**

Optional unit cost per tree regardless of species supplied: \_\_\_\_\_/tree (x 136 trees)

TOTAL cost of trees \$ \_\_\_\_\_(enter page 10)

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Acknowledgement of Prevailing Wage Rates

As a Bidder responding to the Request for Proposal for the Spring 2020 Community Development Block Grant Street Tree Program,

I understand that we must abide by the terms and conditions for Community Development Block Grants and provisions of the Federal Labor Standards, and that all workers employed to complete this subcontract will be compensated according to prevailing wage rates outlined in General Wage Decision Number DE2018005, modification #6 (or other most recent modification) of 11/02/2018.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
Bidder's representative

Print or type: \_\_\_\_\_  
Name

Title: \_\_\_\_\_

**SPRING 2020 STREET TREE PROGRAM  
COMMUNITY DEVELOPMENT BLOCK GRANT BID PACKAGE**

**PART II**

**D. STREET TREE PROGRAM SPECIFICATIONS AND SCOPE OF WORK**

**1. Delaware Center for Horticulture, Inc., Scope of Work and Services**

- a) The Delaware Center for Horticulture, Inc. will coordinate with property owners and Subcontractor, the planting of approximately one hundred thirty-six (136) trees on/in city blocks and neighborhoods in Wilmington, Delaware.
- b) Responsibilities of The Delaware Center for Horticulture, Inc., include: public information dissemination, selecting tree types and verifying planting locations, placing tree orders with the Subcontractor, marking planting locations, supervising concrete/brick cutting and removal and supervising tree installation.

**2. Subcontract Scope of Work**

- a) Planting of approximately one hundred thirty-six (136) trees in various locations in blocks/neighborhoods throughout the City of Wilmington including, but not limited to, locations listed in Location and Details of Work. Trees will be planted in concrete/brick sidewalks and existing tree “pits” along with root barrier or soil “tree lawns” depending upon the location. Existing tree “pits” which contain trees or stumps to be removed will be indicated by Contractor or Contractor’s agent. Not all planting sites will require concrete/brick cutting and removal or tree and stump removal.
- b) **Utility Precaution - Attention is directed to the fact that there are active utilities located within the limits of work. Before commencing any work required under the Subcontract, the Subcontractor shall find the location of all utilities, subsurface drainage, and underground construction so that proper precautions may be taken not to disturb or damage any subsurface improvements. The Subcontractor shall be held responsible for making, at their own expense, repairs to damaged utilities resulting from the work covered by this subcontract.**
- c) Planting holes must be a minimum of eight foot by four-foot (8' x 4') and maximum eight foot by five-foot (8' x 5'), allowing for a three-

foot (3') pedestrian right-of-way, unless otherwise specified due to space limitations or allowances. Concrete/brick cutting will be made with a diamond cutting blade concrete saw. All cuts must be complete, true, and clean; cuts must not disturb the curbing. Any damages caused by tree work will be repaired by Subcontractor to meet or exceed original conditions, at Subcontractor's expense.

- d) All concrete/bricks must be completely removed at the time of concrete/brick break-up and shall be disposed of at an approved disposal site. The planting space, "hole", must then be immediately filled with shredded, hardwood mulch at the end of each work day to prevent creation of pedestrian hazards. Any spaces left unplanted overnight must be protected from public access with appropriate safety barricades/markings. In no event shall a hole be left unplanted for a period greater than two weeks.
- e) Tree and Stump Removal
  - (1) Removal of trees designated for removal shall be completed according to arboriculturally approved practices and work will conform to ANSI Z133.1 Tree Care Safety Standards. All debris shall be removed from the work site by the end of the day and properly disposed of.
  - (2) **Stumps and associated root material shall be removed to a minimum depth of 24" to allow for future planting.** All stump grindings shall be removed from site and replaced with new top soil.

### 3. Planting Specifications

- a) Subcontractor Qualifications

The Subcontractor must be a landscape/nursery company with a documented history of tree installation in the State of Delaware and employ an ISA-certified arborist to oversee and/or inspect planting methods.

- b) Nomenclature

The scientific and common names used for the plants required under this Subcontract are generally in conformity with the approved names given in the *Standardized Plant Names* published by the American Joint Committee on Horticultural Nomenclature. The names of varieties not included therein are to be generally in conformity with names accepted in the nursery trade.
- c) Plant Protection

Plants transported to the project in open vehicles shall be covered with tarpaulins or other suitable covers securely fastened to the body of the vehicle to prevent injury to the plants. Closed vehicles shall be adequately ventilated to prevent overheating of the plants. Evidences of inadequate protection following digging, carelessness while in transit, or improper handling or storage shall be cause for rejection. All plants shall be kept moist, fresh, and protected. Such protection shall encompass the entire period during which the plants are in transit, being handled, or are in temporary storage.

d) Quality of Plants

- (1) Plants shall in all cases conform with requirements of the American Standard for Nursery Stock latest version of rules and grading adopted by the American Association of Nurserymen, Inc., but upgraded to meet the following additional requirements.
- (2) All plants shall be of selected specimen quality, exceptionally heavy, symmetrical, tightly knit, so trained or favored in their development an appearance as to be superior in form, number of branches, compactness and symmetry. All plants shall be sound, healthy, and vigorous with well-developed and appropriately fibrous root systems.
- (3) Plants shall be free of disease, insect pests, eggs and larvae.
- (4) Trees with abrasion of the bark, sunscalds, disfiguring knots or fresh cuts of limbs over one and one-fourth inches (1-1/4") which have not completely callused shall be rejected.
- (5) All plants shall be typical of their species and/or variety and shall have a normal habit of growth and be legibly tagged with the proper name.
- (6) All plants designated ball and burlap (B&B) must be moved with the root systems as solid units with balls of earth firmly wrapped with hemp burlap. The diameter and depth of the balls of earth must meet American Standard for Nursery Stock recommendations for ball size. No plant shall be accepted if the ball of earth surrounding its roots has been badly cracked or broken prior to or during the process of planting.
- (7) The trunk of each tree shall be a single trunk unless otherwise noted, growing from a single un-mutilated crown of roots. No part of the trunk shall be conspicuously crooked as compared with normal trees of the same variety.
- (8) Caliper measurements shall be taken at a point on the trunk six inches (6") above the natural ground line for trees up to four inches (4") in caliper, and at a point 12 inches (12") above the natural ground line for trees exceeding four inches (4") in caliper.

- (9) Unless otherwise noted, trees should be two inch to two and one half inch (2-2.5") caliper, twelve to fourteen feet tall (12-14") balled and burlapped trees which shall be suitable for street tree applications (limbed up to at least six feet (6') above ground level, four feet (4') clearance for smaller types\*).
  
- e) Review and Inspections
  - (10) At least five (5) days prior to the expected use of any material, the Contractor shall be notified of the source of the material proposed for use in the project.
  - (11) All planting stock shall be available for review prior to installation. The Subcontractor shall furnish the Contractor complete and detailed information concerning the source of supply for each item of plant materials within one (1) week following the award of the Subcontract. The Subcontractor shall also provide a schedule of delivery and planting dates which shall be subject to review of the Contractor.
  - (12) The Subcontractor is to submit certification tags from trees and shrubs verifying type, species, and variety upon delivery to site.
  
- f) Handling of Plants
  - (13) Plants shall not be pruned before delivery.
  - (14) All balled and burlapped or bare root plants that cannot be planted immediately upon delivery must be heeled-in by setting in the ground and covering the balls with soil or acceptable mulch material and then watering.
  - (15) Roots or balls of all plants shall be kept moist and adequately protected at all times from the sun and from drying winds.
  
- g) Planting Coordination
  - (16) The Subcontractor shall inform the Contractor of the date when the planting shall commence and of the anticipated delivery date of the material. Schedule shall be provided within three weeks of award of contract.
  - (17) Planting shall be performed within normal planting seasons: Spring (March 15 through July 15) or Fall (August 15 through November 15). Exceptions to these seasons will be determined on an individual basis and allowed **only** with written approval. Work must be carried out only when climatic and soil conditions are favorable to landscape construction and to the health and welfare of plants. The



suitability of such weather conditions shall be determined by the Contractor.

- (18) Failure to notify the Contractor in advance of order to arrange proper scheduling may result in loss of time or rejection of a plant or plants not installed as specified or directed.
- (19) Subcontractor shall receive final approval from Contractor for tree locations before commencing work. All final planting locations shall be confirmed and approved by resident or property owner through Contractor's representative.
- (20) Planting operations shall be performed at a steady rate of work unless weather conditions make it impossible to work. No plant material shall be planted in frozen ground.

h) Planting Procedure

- (21) The plants shall be planted in the center of the pits and set on undisturbed or compacted soil to such depth that the plant shall sit, after settlement, with the base of the trunk and the beginning of the roots known as the "trunk flare" level with the soil grade, which shall be below the sidewalk grade. If the top of the root-ball is not consistent with this area, soil will be added or removed below the root-ball to make it so, and the depth of the planting site adjusted accordingly. All trees must be straight, vertical, plumb at time of planting, at acceptance and at the end of the guarantee period.
- (22) If rock or other underground obstruction is encountered, the Contractor may require plant pits to be relocated, the pits enlarged, or the plants deleted from the contract.
- (23) Whenever planting an existing and empty tree pit, holes will be backfilled with the same soil taken from the hole. Locations containing unsuitable soil shall require importation of clean backfill soil. Unsuitable soil shall include compositions containing ash/gravel, high clay content, rock, or disproportionately high existence of rock or other extraneous material.
- (24) Platforms, wire, and binding materials shall be removed completely before backfilling.
- (25) Loam shall be backfilled in layers of not more than six inches (6") taking care to eliminate air pockets before the next layer is put in place. Enough topsoil shall be used to bring the surfaces to finish grade when settled.
- (26) All tree locations agreed upon under this contract must be satisfactorily planted no later than June 30, 2020 unless otherwise extended and agreed in writing by both parties.

i) Shredded Hardwood Bark Mulch

- (27) Shredded hardwood bark mulch or approved equal shall be used as a three to four inch deep (3-4") top dressing in all plant beds and round all trees planted by landscape Subcontractor. Single trees or shrubs shall be mulched to the outside edge of the saucer or planting pit with mulch pulled away from the tree trunk.
- j) Staking Materials
- (28) Trees shall be staked according to planting detail using two (2) - eight foot (8") hardwood stakes and 'ArborTie' or equivalent (soft-sided tree tie).
- k) Water
- (29) On-site water shall be furnished by the City of Wilmington or the property owner and will be arranged by the Contractor. Hose and other watering equipment shall be furnished by the Subcontractor.
- (30) Plants shall be soaked with water within twenty-four (24) hours of planting. Water shall be applied with low pressure so as to soak in thoroughly to the full extent of excavation without dislodging the topsoil. Initial watering is incidental to contract work.
- (31) Follow-up waterings can be requested by Contractor and compensated on a per event basis.
- (32) One 20-gallon *TreeGator™* or *approved equivalent* is to be installed on every newly planted tree within one (1) week of planting.
- l) Guarantee
- (33) The condition of all new plant materials is the responsibility of the Subcontractor and shall be approved by the Contractor.
- (34) Plants shall be guaranteed for a period of one (1) year after inspection and provisional acceptance.
- (35) Until final approval, any replacement of plant materials that may be necessary shall be at the expense of the Subcontractor. Replacements resulting from removal, loss, or damage due to residents, vandalism, physical damage by animals, vehicles, etc., and losses due to curtailment of water by local authorities will not be the financial responsibility of the Subcontractor.
- (36) In addition to other standard provisions, the Subcontractor's bid amount shall also provide for replacement in kind, or with a substitute acceptable to the Contractor and the City of Wilmington, of all plant materials not in a healthy growing condition or that has died back to the crown or beyond normal pruning limits at the end of the one (1) year guarantee period.

m) **Right of Rejection**

The Contractor reserves the right to inspect and reject plants at any time and at any place.

**4. Paving Specifications**

- a) **General.** Where there are required tree pit cuts in loose brick or paver sidewalks, the sub-contractor shall install new edging to accommodate the required straight line edges and grades in conformance with the Paver Details attached.

Subcontractor shall adjust all existing water valve box covers, water meter covers, and sanitary sewer cleanouts to finished grade before placing brick. Subcontractor shall perform such adjustments in accordance with the City of Wilmington requirements. Subcontractor shall arrange and coordinate to have electric and gas valve box covers adjusted by each respective utility owner as required. All covers and cleanouts shall be adjusted so that they are flush with the finished brick surface.

When a pit is cut in concrete or blacktop, no further preparation is required.

- b) **Preparation of Foundation.** If a cut is made in brick or pavers the sub-contractor shall prepare the subgrade adjacent the cut edge to be level and compacted to a firm, unyielding surface which parallels the finished brick sidewalk lines, grades and slopes. All heaved and high areas shall be excavated to finished subgrade and excess material removed and disposed off the site.
- c) **Installing edging:** Using whole bricks that were removed from the pit area, place them lengthwise parallel to the cut. The completed finish grade of the edging brick pavers shall generally match the finish grades of the existing sidewalks, unless otherwise directed by the Contractor. All sidewalks shall slope away from buildings and toward the street. Using material specified in the Paver Details install the brick retainer edging to secure the bricks.

Brick pavers along the tree pit edge shall be placed whole and, whenever necessary, they shall be cut to size with a masonry saw or double-blade splitter.

**d)Border Materials.** The Subcontractor shall be responsible for resetting any existing sidewalk border materials including walls, fences, steps, stones, edging, bricks, handrails, etc. which may be present along the new sidewalk construction and which are disturbed by the Subcontractor during construction. Any borders and handrails which are damaged by the Subcontractor shall be replaced by him at no cost to the Contractor or the City.

**5. Location and Details of Work**

**ATTACHED Part III Section F**

**Summary 25 tree and stump removals and 5 stumps only removals; 37 tree pit expansions or creation; 136 tree installations.**

**PART II, continued.**

E. GENERAL TERMS AND CONDITIONS

**THE CONTRACTOR AND SUBCONTRACTOR AGREE AS FOLLOWS:**

**1. THE SUBCONTRACT**

The Subcontract Documents consist of (1) this Agreement; (2) the Prime Contract, consisting of the Agreement between the City and Contractor and the other Contract Documents enumerated, including Conditions of the Contract, Specifications, Addenda, Drawings, and Modifications, and (3) Modifications to this Subcontract issued after execution of this Agreement. The Subcontract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral.

**2. COMMUNICATION**

The Contractor shall promptly make available to the Subcontractor information which affects this Subcontract and which becomes available to the Contractor subsequent to execution of this Subcontract.

**3. EXECUTION OF CONTRACT**

Execution of the contract by the Subcontractor is a representation that the Subcontractor has visited the site, become familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

The Subcontractor shall carefully study and compare the Subcontract Documents with each other and with information furnished by the Contractor. Before commencing activities, the Subcontractor shall: (1) verify field conditions; (2) carefully compare this and other information known to the Subcontractor with the Contract Documents; and (3) promptly report errors, inconsistencies or omissions discovered to the Contractor.

**4. SUPERVISION AND CONSTRUCTION PROCEDURES**

The Subcontractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Subcontractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work to assure compliance with specifications.

The Subcontractor, within three weeks after award of the Contract, shall furnish in writing to the Contractor the names of suppliers or agents of the Subcontractor for each portion of the Work. The Contractor will promptly reply to the Subcontractor in writing if there exists reasonable objection to the suppliers or agents listed.

## **5. LABOR AND MATERIALS**

Unless otherwise provided in the Contract Documents, the Subcontractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work.

The Subcontractor shall deliver, handle, store and install materials in accordance with manufacturers' instructions and the Specifications included with this contract.

## **6. WARRANTY**

The Subcontractor warrants to the Contractor and the City that (1) materials and equipment furnished under the contract will be new and of good quality unless otherwise required or permitted by the Contract Documents; (2) the Work will be free from defects not inherent in the quality required or permitted; and (3) the Work will conform to the requirements of the Contract Documents.

## **7. TAXES**

The Subcontractor shall pay, if applicable, sales, consumer, use, city wage, and similar taxes that are legally required when the Contract is executed.

## **8. SUBMITTALS**

The Subcontractor shall promptly review, approve in writing and submit to the Contractor Product Data, Samples and similar submittals required by the Contract Documents.

## **9. USE OF SITE**

The Subcontractor shall confine operations at the site to areas permitted by law, ordinances, permits, the Contract Documents, and the City.

## **10. CLEANING UP**

The Subcontractor shall keep the premises and surrounding area free from accumulation of debris and trash related to the Work.

## **11. INSURANCE COVERAGE**

The Subcontractor shall provide insurance coverage for itself and all of its employees used in connection with this Agreement. Such policies shall be issued by a financially sound carrier and/or carriers and shall be subject to the reasonable approval of the Contractor. Copies of certificates of insurance naming the City and the Contractor as additional insured shall be provided to the Contractor prior to commencement of any Subcontract work. Such insurance coverage shall hold the Contractor and the City harmless from all claims of bodily injury, including death, and property damage, including loss of use, by the Subcontractor, its employees, agents, or subcontractors. This will include Workman's Compensation Insurance as required by law; Comprehensive General Liability and Bodily Injury Insurance, and Property Damage Insurance in the amount of one million dollars (\$1,000,000.00); and Professional Liability Insurance in the amount of one million dollars (\$1,000,000.00). In addition, the Subcontractor will provide proof of the Delaware Center for Horticulture as Additional Insured at prevailing minimum coverage rates. The Subcontractor will incur any expenses related to listing the Contractor as Additional Insured due their insurance provider.

## **12. HOLD HARMLESS**

The Subcontractor agrees that it shall indemnify and hold harmless the City, Contractor, and agents and employees of each from and against any and all claims, losses, and expenses including but not limited to, attorney's fees arising out of or resulting from performance of the Subcontractor's work under this Subcontract due to negligent or willfully wrongful acts or omissions of the Subcontractor, its employees, agents or subcontractors.

## **13. CHANGES IN THE WORK**

Unless directed by the Contractor, the Subcontractor shall not thereafter order materials or perform Work which would be inconsistent with the changes made by the Modifications to the Prime Contract.

The Subcontractor may be ordered in writing by the Contractor, without invalidating this Subcontract, to make changes in the Work within the general scope of this Subcontract consisting of additions, deletions or other revisions, including those required by Modifications to the Prime Contract issued subsequent to the execution of this Agreement, the Subcontract Sum and the Subcontract Time being adjusted accordingly. The Subcontractor, prior to the commencement of such changed or revised Work, shall submit promptly to the Contractor written copies of a claim for adjustment to the Subcontract Sum and Subcontract Time for such revised Work in a manner consistent with requirements of the Subcontract Documents. This agreement may not be changed orally, but only by written notice signed by both parties.

The Subcontractor shall make claims promptly to the contractor for reasonable and necessary changes requiring additional cost, extensions of time and damages for delays or other causes in accordance with the Subcontract Documents.

## 14. SAFETY PRECAUTIONS

The Subcontractor shall take reasonable safety precautions with respect to performance of this Subcontract, shall comply with safety measures initiated by the Contractor and with applicable laws, ordinances, rules, regulations and orders of public authorities for the safety of persons or property in accordance with the requirements of the Prime Contract. The Subcontractor shall report to the Contractor, within three days, any injury to an employee or agent of the Subcontractor which occurred at any site of work.

If hazardous substances of a type which an employer is required by law to notify its employees are being used on the site by the Subcontractor, the Subcontractor's subcontractors or anyone directly or indirectly employed by them, the Subcontractor shall, prior to harmful exposure of any employees on the site to such substance, give written notice of chemical composition thereof to the Contractor in sufficient detail and time to permit compliance with such laws by the Contractor.

**The Subcontractor shall comply with all active Local, State, and Federal guidelines regarding safety protocols related to COVID-19. It is the sole responsibility of the Subcontractor to ensure compliance.**

## 15. CORRECTION OF WORK

The Subcontractor shall promptly correct Work rejected by the Contractor or the City as failing to conform to the requirements of the Contract Documents. The Subcontractor shall bear the cost of correcting such rejected Work.

In addition to the Subcontractor's other obligations including warranties under the Contract, the Subcontractor shall, for a period of one year after Substantial Completion, correct work not conforming to the requirements of the Contract Documents. Payment may be withheld as specified in retainage in section 16 of this contract until warranty obligations and other work corrections have been completed.

If the Subcontractor fails to correct non-conforming Work within a reasonable time, the Contractor may correct it and deduct the cost of correction from the retainage amount or the Subcontractor shall reimburse the Contractor for the cost of the correction

## 16. SUBSTANTIAL COMPLETION

When the subcontractor's work or a designated portion thereof is substantially complete and in accordance with the requirements of the Prime Contract, the Contractor shall, upon application by the Subcontractor, make prompt application for payment for such Work. Within 30 days following issuance of payment by the City covering such substantially completed Work, the Contractor shall make payment to the Subcontractor, deducting a retainage or portion of the funds up to five (5) percent of the total payment for the Subcontractor's Work withheld to cover costs of items to be completed or corrected by the Subcontractor. Such payment to the Subcontractor shall be the entire unpaid balance of the Subcontract Sum with a full release of retainage upon assurance that warranty obligations and project substantial completion provisions have been satisfied.



**SPRING 2020 STREET TREE PROGRAM  
COMMUNITY DEVELOPMENT BLOCK GRANT BID PACKAGE**

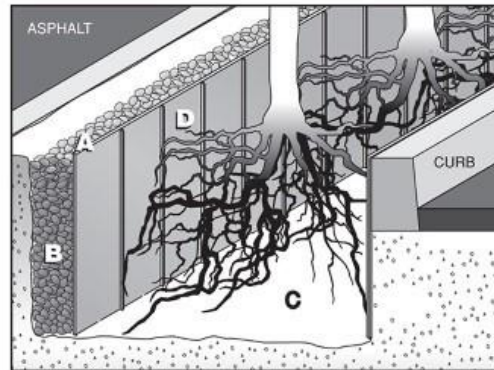
**PART III**

Detailed Scope of Work for CDBG 2020  
Root Barrier Specifications

**ROOT BARRIER SHEET MATERIAL**

**Root Barrier Sheet Material** Manufactured from durable HDPE, Root Barrier Sheet Material creates a water and root barrier to prevent costly damage to pavements, roads, and building foundations caused by water and roots. The 20-foot-long sheets of material are ideal for linear style planting applications, and are equally suited for individual tree planting use.

Root Barrier Sheet Material is available in 12", 18", and 24" depths to meet a variety of applications.



A - Finished Grade                      C - Amended Soil  
B - 3"-4" of 3/4" Gravel                D - Sheet Material

**Specifications:** Material shall be Root Barrier Sheet Material by NDS. Material must be manufactured from up to 50% recycled HDPE with U.V. inhibitors and have a thickness of 0.040 - 0.060". Barrier shall have vertically integrated & flared molded 90° root-deflecting ribs protruding 1/2" from wall and placed 6-8" apart. A root impervious molded end provides easy assembly using staples or a sealant designed to bind to HDPE (a dual-sided solvent-based tape).



Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class
SM-1220	12" x 20 ft. Roll	Black	1	10.00	50SM
SM-1820	18" x 20 ft. Roll	Black	1	14.00	50SM
SM-2420	24" x 20 ft. Roll	Black	1	18.00	50SM

<b>ASTM SPECIFICATIONS Root Barrier Sheet Material</b>				
Properties	Tensile Stress	Yield Elongation	Flexural Modulus	Rockwell Hardness
ASTM Test Units	D638	D638	D790A	D286 (in lbs.)
Values MD	2950	603%	155,000	68
Values Td	3463	676%		

MD = Machine Direction    TD = Transverse Direction

**RECOMMENDED INSTALLATIONS**

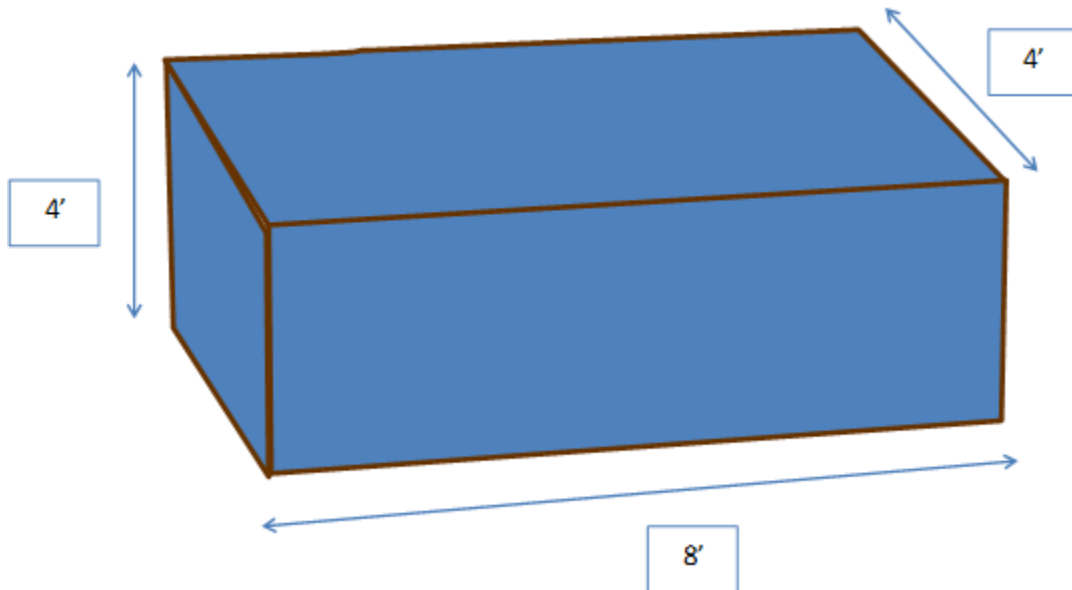
See page 9-10 for diagrams and additional details.

- Linear/Root Pruning Application:**      Cut desired length of molded roll material and install directly adjacent to hardscape being protected
- Surround Application:**                      Cut desired length of molded roll material. Connect the ends by overlapping two 6" sections with the leading rib cut directly down the middle. If using a sealant to seal the ends, utilize a dual-sided solvent-based tape (like that sold by Tuff Industries, Inc.). Install by placing the Sheet Material around root ball at a sufficient distance to allow proper backfill – the vertical integrated root-deflecting ribs should always be facing the root ball.

### Tree Box Expansion:

The primary limiting factor for the growth and development of trees within the streetscape is the lack of available rooting space. In Wilmington tree boxes/planting areas come in all different dimensions. The UFA goal is to standardize shape and size dimensions of newly created tree box/planting areas and also to enlarge the boxes of existing trees that have outgrown the space allotted.

The ideal tree box/planting area size is 4'w x 8'Lx4'D which provides 108 cubic feet of soil volume. The prevailing research indicates that this is only enough space for the development of a 4 inch diameter tree. In order for a tree to grow larger than this size, it must be able to obtain below ground resources such as water and nutrients beyond the confines of the tree box.



When there is tree related damage to grey infrastructure it is usually because tree roots have grown beyond their tree box and beneath the sidewalk and streets causing damage via infiltration into sewer, sidewalk and streets.. Expanding the size of existing tree boxes creates desirable rooting space. This space will encourage tree root growth into areas other than that beneath sidewalks. The added permeable surface will also divert additional stormwater away from sewers and instead to tree roots.

### Tree Box Creation:

In many locations across the City of Wilmington, there are significant portions of the streetscape without any tree canopy and without any tree boxes/planting areas. Public Works wants to increase the amount of green infrastructure in these locations. The addition of new tree boxes/planting areas where there is currently none will provide environmental, aesthetic and economic benefits and thus greatly enhance the quality of the public space.

**Standard Tree Box/Planting Area:** ideal dimensions are 4'w x 8'Lx4'D and shall:

- provide 108 cubic feet of soil volume
- Have a concrete curbing to 14" depth or **plastic root barriers** (see product information below) protecting ADA compliant walking surfaces from root infiltration.

- Be back filled with top soil or amended excavation spoils

**Site Specific Adjustments:** can be made to the dimensions and shall allot:

- Maximum possible cubic footage of soil volume for tree roots
- ADA compliant walking surface of 3.5'

**Existing Street Trees tree box/planting area Expansions:**

The presence of existing street trees determines the extent to which paving can be excavated during Tree box/planting area enlargement.

**When trees within the tree box/planting area are retained:**

- Remove heaved, damaged and otherwise specified paving or grates and
- Bring the soil surface back to grade using amended excavation spoils, topsoil, triple ground hardwood mulch, wood chips, sod or some other UFA and Transportation Department approved material.

When existing tree is removed:

- Replace exiting fill with new top soil to a 3-4' depth

When the tree box/planting areas does not contain a tree:

- Amend and replace the existing fill or replace exiting fill with new top soil to a 3-4' depth.

TERMS AND CONDITIONS FOR USE OF COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS, INCLUDING FEDERAL LABOR STANDARDS PROVISIONS

U.S. DEPT OF LABOR, GENERAL WAGE DECISION NO. DE20180015 11/02/2018  
<https://beta.sam.gov/wage-determination/DE20180015/6>

U.S. DEPARTMENT OF HUD FORM HUD-4720 (05/2019) PROJECT WAGE RATE SHEET A-6:  
[https://www.hud.gov/program\\_offices/davis\\_bacon\\_and\\_labor\\_standards/olrform](https://www.hud.gov/program_offices/davis_bacon_and_labor_standards/olrform)

U.S. DEPARTMENT OF LABOR, WAGE AND HOUR DIVISION FORM WH-347 A-5  
: <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf>

For comprehensive information, resources and forms for compliance with federal/HUD labor requirements, please visit

[https://www.hud.gov/program\\_offices/davis\\_bacon\\_and\\_labor\\_standards/olrform](https://www.hud.gov/program_offices/davis_bacon_and_labor_standards/olrform)