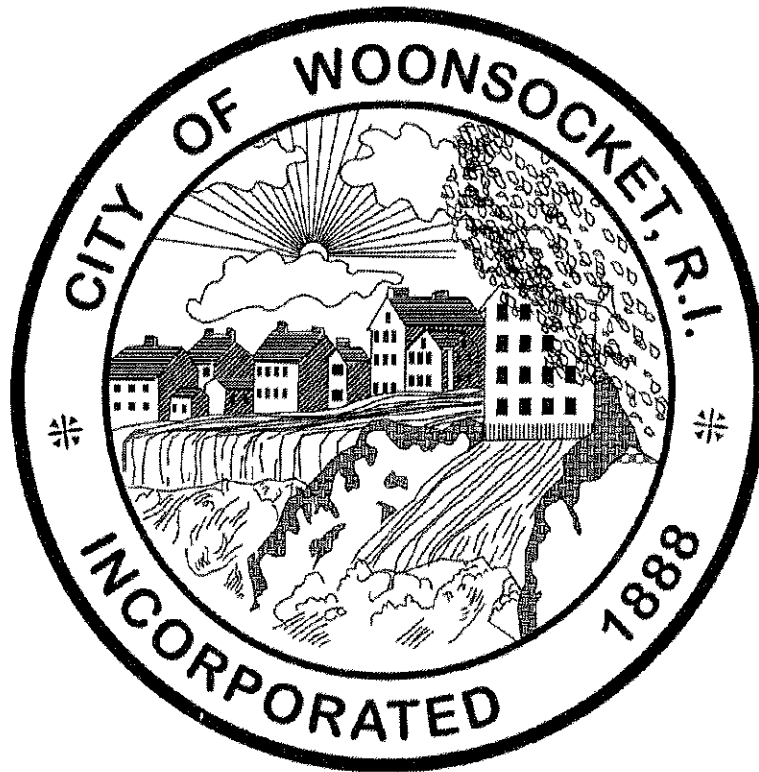


City of Woonsocket



WASTEWATER TREATMENT PLANT PLANTED BUFFER REQUEST FOR PROPOSALS

BID No. 6145

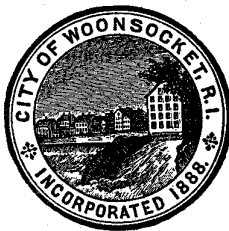
Contract Specifications

Prepared By: City of Woonsocket

Department of Public Works

Engineering Division

May 2023



CITY OF WOONSOCKET, RHODE ISLAND

REQUEST FOR PROPOSALS FOR: “WASTEWATER TREATMENT PLANT PLANTED BUFFER” BID 6145

FOR THE DEPARTMENT OF PUBLIC WORKS

Sealed proposals must be received, and date/time stamped by the City of Woonsocket, in the Finance Department, **Office of Purchasing**, City Hall, 169 Main Street, Woonsocket, Rhode Island no later than **2:00pm on Tuesday, June 13, 2023**. Then, at the aforementioned date and time, on-time proposals will be publicly opened and read aloud in the **2nd Floor Conference room**, City Hall, 169 Main Street, Woonsocket, Rhode Island.

The work shall include, but not be limited to preparing a complete planting plan for the entire site, purchasing and installing mature plants and landscape materials as specified. Plantings must provide a year-round vegetative screen for the disturbed area as shown on the site plan, and all other incidentals necessary to complete the work of this contract.

ALL PROPOSALS MUST BE SUBMITTED IN DUPLICATE COPY IN A SEALED ENVELOPE PLAINLY MARKED ON THE OUTSIDE “WASTEWATER TREATMENT PLANT PLANTED BUFFER – BID #6145”.

BID SURETY IN THE FORM OF A CERTIFIED CHECK OR BID BOND IN THE AMOUNT OF 5% OF SUCH BID IS REQUIRED.

In accordance with RI General Law 37-13-7 contracts in excess of \$1,000 shall require compensation based on prevailing wages for construction, alteration and/or repair, painting and decorating.

In accordance with Rhode Island General Law 44-1-6, nonresident contractors are subject to a 3% withholding of the contract price to secure payment of any sales tax, use tax, and/or income tax withheld that may be due the State of Rhode Island. WBE, MBE and Section 3 contractors are encouraged to bid.

Individuals requesting interpreter services for the hearing impaired should call the Finance Director at 401-762-6400 seventy-two (72) hours in advance of the bid opening.

Unless otherwise specified, the City reserves the right to accept or reject Proposals in whole or in part, and to waive any informalities or irregularities not affecting substantial rights. as may be in the best interest of the City.

No bidder may withdraw its bid within sixty (60) days after the actual time and date of the bid opening thereof.

Deadline to submit questions is **Wednesday, June 7, 2023**. Questions should be submitted in writing to Ken Allaire, Woonsocket Purchasing Agent at kaallaire@woonsocketri.org

Published: May 21, 2023

Cindy Johnston
Finance Director

INFORMATION TO BIDDERS

CITY OF WOONSOCKET

FINANCE DEPARTMENT, OFFICE OF PURCHASING

(401) 762-6400

1. RECEIPT AND OPENING OF PROPOSALS

Sealed bids/proposals will be accepted and time stamped upon receipt in the Finance Department, Office of Purchasing, City of Woonsocket, 169 Main Street, Woonsocket, Rhode Island, 02895. Bids will be accepted up until the time indicated on the attached Invitation to Bid, for the commodities, equipment or services listed in the specifications after which time will be publicly opened and read aloud.

2. FORM OF BID

Proposals must be submitted in duplicate. Supplemental information, such as drawings, warranties, literature and materials you intend to provide with your bid, must be on the bidder's own forms.

3. SUBMISSION OF BIDS

Envelopes containing bids must be sealed and addressed as per Section 1. In addition to that requirement, all bid envelopes must also be clearly marked with the bid name, the bid number and the name and address of the firm submitting the bid.

Telephone bids, faxed bids or emailed bids will not be accepted and automatically rejected. At the discretion of the Purchasing Agent, those bidders may be subject to being disqualified from further participating in the bidding process.

The Purchasing Agent will decide when the specified time has arrived to open bids and no bid thereafter will be considered.

Any bidder may withdraw his bid by written request at any time prior to the advertised time for opening.

Unless otherwise specified, no bid may be withdrawn for a period of sixty (60) days from the time of bid opening.

Negligence on the part of the bidder in preparing the bid confers no rights for the withdrawal of the bid after it has been opened.

Proposals received prior to the time of opening will be securely kept unopened. No responsibility will be attached to an officer or person for the premature opening of a proposal not properly addressed and identified.

Any deviation from the Specifications **MUST BE NOTED IN WRITING AND ATTACHED AS PART OF THE BID PROPOSAL**. The bidder will indicate how the bid will deviate from Specifications.

4. RHODE ISLAND SALES TAX

The City is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph 1, as amended.

5. FEDERAL EXCISE TAXES

The City is exempt from the payment of any excise tax or federal transportation taxes. The price of the bid must be exclusive of taxes and will be so constructed.

6. QUALIFICATION OF BIDDERS

The City will make investigations, as it deems necessary, to determine the ability of the bidder to perform the work. The bidder will furnish the City with all such information and data for the purpose as may be requested. Insurance certificates listing other subcontracting or related firms other than the actual bidder are not acceptable. At the time the bid is submitted to the City all bidders must provide insurance certificates listing the actual bidder as the insured party. The City of Woonsocket must be listed as an additionally insured party and as a certificate holder. The minimum amounts of insurance coverage must be listed as \$2,000,000.00 for general liability and \$1,000,000.00 for automobile liability. Workers' compensation insurance must be provided per RI general law (see Table A).

7. ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Plans, Specifications or other Contract Document will be made to any bidder orally. Every request for such interpretations should be in writing, addressed to the Purchasing Agent at kaallaire@woonsocketri.org. To be given consideration those questions must be received by the deadline as specified in the Invitation to Bid. If no deadline is specified, then requests must be received by the Purchasing Agent at least seven (7) days prior to the bid opening deadline.

Any and all interpretations and supplemental instructions, which if issued, will be posted as addenda with the effective date. All addenda so issued will become part of the Contract Document.

It is the responsibility of each prospective bidder to download, print and read all bid documents for review and to verify the completeness of those documents before submitting a bid. It is the responsibility of each prospective bidder to check the website postings regularly up until the bid opening deadline for any applicable addenda or updates. Information regarding this bid may change without notice to prospective bidders. The City of Woonsocket does not assume any liability or responsibility for bid proposals based on outdated information, nor based on any defective or incomplete copying, excerpting, scanning, faxing, downloading or printing of the bid documents.

8. DELIVERY

All bids must be based on Incoterms DDP (Delivered Duty Paid) Woonsocket, RI. Delivery locations will be identified on the Purchase Order once the bid has been awarded.

The Bidder will assume all costs, risks, and obligations, including import duties, taxes, clearance fees etc., if applicable, up to the destination point. At the destination point the

loading or unloading the shipment is as set forth in the in the Contract, otherwise it will be at the discretion of the Department Director.to be supplied with the Purchase Order.

No extra charges for delivery, handling or other services will be honored. Only inside delivery and set-up, where required, will be accepted. **TAILGATE DELIVERIES WILL BE REFUSED.** The vendor must notify the City of Woonsocket 24 hours prior to delivery. All claims for damage in transit will be the responsibility of the successful bidder. The City will not make payment on damaged goods, they must be replaced, or adjustments made at the option of the City. The City of Woonsocket is represented by the Purchasing Agent or the Finance Director in these matters. They are the only representatives of the City authorized to negotiate any settlements. Deliveries must be made during normal working hours.

9. Bid price is to include the cost of uncrating and setting in place where noted.
10. Bid price is to include installation where noted.
11. Bidder must comply with all State Labor Laws for Public Works projects.
12. The successful bidder must have all current taxes paid which are owed to the City of Woonsocket.
13. In accordance with Rhode Island General Law 37-13-7, contracts in *excess of \$1,000.00* will require compensation based on *prevailing wages* for construction, alteration and/or repair, painting and decorating. The rates are available from the Rhode Island Department of Labor at (401) 457-1800.
14. In accordance with Rhode Island General Law 37-13-14, bidders for public works/building contracts in *excess of \$50,000.00* will furnish a performance bond, upon conditional award of the contract, at 100% of the contract price, conditioned upon faithful performance of the contract. A Labor and Materials Bond, at full contract value, is required upon conditional award of the contract.

CONTRACT FORMS

CITY OF WOONSOCKET

RHODE ISLAND

FINANCE DEPARTMENT

PURCHASING DIVISION

THE OFFICER OF THIS COMPANY, HEREBY, CERTIFIES THAT THIS COMPANY IS IN GOOD STANDING WITH THE STATE OF RHODE ISLAND AND ALL THE REQUIRED RECORDS HAVE BEEN FILED WITH THE STATE.

NAME:	
CORPORATION NAME:	
BY:	TITLE:
STREET ADDRESS.	
CITY:	STATE:
WITNESS:	DATE:

CONTRACTOR'S APPLICATION FOR PAYMENT

TO: City of Woonsocket, 169 Main Street, Woonsocket, RI 02895	
PROJECT:	
FROM:	
PROJECT #	APPLICATION #

Application is made for payment as shown below:

1. ORIGINAL CONTRACT SUM \$ _____
2. PENDING CHANGE ORDERS \$ _____
3. CONTRACT SUM TO DATE..... \$ _____
4. TOTAL COMPLETED TO DATE..... \$ _____
5. RETAINAGE (10% of Completed Work) \$ _____
6. TOTAL EARNED LESS RETAINAGE \$ _____
7. LESS PREVIOUS PAYMENTS..... \$ _____
8. CURRENT PAYMENT \$ _____
9. BALANCE TO FINISH INCLUDING RETAINAGE \$ _____

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for work for which previous certificates for payment were issued and payment received from the City of Woonsocket, and that current payment shown is now due.

Contractor:	
Amount Certified:	
By:	Date:
State:	County:
Subscribed and sworn to before me this _____ day of _____	
Notary Public:	My Commission expires:
Authorized for Payment:	Date:

GENERAL CONDITIONS

GENERAL CONDITIONS TABLE OF CONTENTS

Title	Page
1. Scope of Work.....	GC-1
2. Obligation and Liability of Contractor	GC-1
3. Insurance Requirements	GC-1
4. Control by the Engineer.....	GC-2
5. Commencement Prosecution and Completion	GC-2
6. Public Safety.....	GC-2
7. Cleaning Up.....	GC-2
8. Correction of Work before Final Payment	GC-3
9. Invoices	GC-3
10. Payments.....	GC-3
11. Payment Withheld	GC-3
TABLE A.....	GC-4
EXHIBIT A.....	PG-17

1. SCOPE OF WORK

The work will include, but not be limited to, designing a planting plan for the 70,500-sf site adjacent to the Woonsocket Wastewater Treatment Plant and purchasing, and installing landscape materials as specified. The desire is to implement a landscape design that will provide a year-round visual screen for the wastewater plant from Cumberland Hill Road. The project will include the purchase and planting of mature trees, bushes, and plants for the disturbed area, and all other incidentals necessary to complete the work of this contract.

The city will remove all structures, asphalt, concrete, and other materials from the area to be planted. The city will provide a uniformly sloped site covered with six (6) inch layer of loam. The Contractor shall provide a professionally designed site-specific landscape plan for the entire site that includes mature plants to provide year-round foliage and visual interest. Once an acceptable plan is provided, the Contractor shall supply all equipment, labor, and materials to implement the plan including all soil erosion and sediment control.

Proposals must include the following minimum requirements:

1. A written description of the scope of work to be provided that demonstrates understanding of the project.
2. A complete planting plan prepared by a Landscape Architect registered in Rhode Island.
3. An itemized plant listing with all plants to be supplied for the project.
4. A breakdown of all anticipated costs that comprise the total cost proposed for the project.
5. Firm's experience and past performance with similar projects.
6. Qualifications and experience of the Contractor's personnel.
7. Evidence of the Contractor's reputation/references

The Contractor will provide at his own expense all necessary Bonds, Social Security, Unemployment and Cash Sickness Benefits, Taxes, Workman's Compensation, Public Liability and Property Damage Insurance, and other necessary items. He will obtain all licenses and permits as required by law or ordinance. He will give all notices and comply with all local, state, and federal rules, regulations, laws and/or ordinances for the conduct of the work.

2. OBLIGATIONS AND LIABILITY OF CONTRACTOR

The Contractor will take responsibility for the work done under this contract, for the protection of all the work, and for preventing injuries and damage to property or utilities on or about the work. He will in no way be relieved of his responsibility by any right of the Engineer to give permission or issue orders, relating to any part of the work, or by any such permission given or orders issued, or by failure of the Engineer to give such permission or issue such orders. The Contractor will bear all losses sustained by him or by the City on account of the quality or character of the work, because the nature of the land differs from that which was estimated or expected, or on account of the weather, conditions, or other causes. The Contractor will assume the defense of all claims, regardless of Character against the contractor or the City. He will indemnify and hold harmless the City, its officers or agents, against all claims for injuries to persons, corporations or property arising out of the work done under this contract; or groundless, false, or fraudulent claims or claims relating to labor and materials furnished for the work.

3. INSURANCE REQUIREMENTS

The Contractor will not commence work under this contract until he has obtained all insurance required under this section. Work will not commence until the City has approved such insurance. The Contractor will not allow any subcontractor to commence work on his subcontract until all similar insurance has been so obtained and approved. The amounts of such insurance will be as defined in **TABLE A**.

The Contractor and his subcontractors will also obtain insurance "Riders" to cover special hazards, such as blasting, hazardous waste removal, etc., to be encountered in the work required under this contract. The coverage for such riders will be the same as that specified above for Public Liability and Property Damage. The Contractor and subcontractors, if any, will also obtain any and all other insurance as may be required by law, including but not limited to, Workmen's Compensation Insurance.

The Contractor will provide the City's Engineering Division with satisfactory proof of the insurance required. This proof will consist of two (2) certificates from each insurer insuring the Contractor or any subcontractor under this contract. These certificates will contain the name and address of the insured, the policy number, the limits of liability, the expiration date of the policy, a statement that the insurance of the type afforded by the policy applies to all the Contractor's operations on or at the site of the work, a statement which refers to this contract and insurance specification and states that such insurance is as required by this contract, and a statement as to exclusions and methods of cancellation.

4. CONTROL BY THE ENGINEER

The Engineer will have general supervision and direction of the work. The Contractor will abide by all orders, directions and requirements, and will perform all work to the satisfaction of the Engineer.

The Engineer will have the authority to reject all materials which do not conform to the contract; to approve the methods, manner, and sequence of all work; to determine the amount, quality, acceptability, and fitness of all parts of the work; and will interpret the plans, specifications, and other contract documents, issue any extra work orders and give final approval to the complete work.

The Engineer will decide upon all questions in connection with the work and will within a reasonable time after presentation to him of such questions, make decision, in writing, relating to the execution and progress of the work or the interpretation of the contract documents.

The Engineer will have the authority to make minor changes in the work, not involving extra cost, providing such changes are consistent with the purpose of the work. No extra work will be authorized without a written order from the Engineer, except in an emergency that is endangering life or property. No claim for an addition to the contract sum will be valid unless so ordered.

5. COMMENCEMENT PROSECUTION AND COMPLETION

The Contractor will be required to commence work under this contract within the time limit specified therein after the date of the notice to proceed, to prosecute the work with faithfulness and energy, and to complete the entire work under this contract by the limit stipulated. The completion time is specified in **TABLE A** at the end of this section. The completion time stipulated above will include final cleanup of the premises.

6. PUBLIC SAFETY

The Contractor will provide, erect, and maintain continually, seven day per week and twenty-four hours per day, all necessary barricades, reflective signs, signals, flashing lights, etc., and take all necessary precautions for the protection of the work and the safety of the public. The City will coordinate and assume the expenses for the necessary Police Details and necessary police cruisers and Flag Persons.

7. CLEANING UP

The Contractor will always keep the construction area clean from accumulation of waste material or rubbish, including storage areas used by him. He will remove any rubbish, tools, scaffolding, equipment and materials from and about the premises, which do not belong to the City, prior to completion of the work. The Contractor will leave the work and premises, following the completion of work, in a clean and workmanlike condition satisfactory to the Engineer.

8. CORRECTION OF WORK BEFORE FINAL PAYMENT

If the Contractor does not remove such condemned work and materials within a reasonable time, fixed by the Engineer and/or by written notice, the City may remove them and may store the material at the expense of the Contractor. If the Contractor does not pay the expense of such removal within ten (10) days' time thereafter, the City may, following an additional ten (10) days written notice, sell such materials at auction or at private sale. The City will keep an account of the net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor.

9. INVOICES

The Contractor will invoice the total amount for the job under one invoice after the work is completed.

10. PAYMENTS

The total price bid will include all costs for purchasing and installing landscape design materials as specified. Plantings to be laid out under supervision of the Rhode Island Department of Environmental management, Office of Compliance & Inspection, for the disturbed area as shown on the site plan, and all other incidentals necessary to complete the work of this contract and furnishing all materials, performing all the work, and furnishing all the tools, equipment, overhead items, and incidentals necessary to complete the work. The payment will be based upon the contract price except that the City may deduct and retain various amounts to cover damages or claims.

11. PAYMENT WITHHELD

The City may withhold from final payment such payment as deemed necessary by the Engineer to protect against loss of:

- a. Defective work not remedied.
- b. Claims filed or reasonable and probable evidence of claims to be filed.
- c. Failure of the Contractor to properly make payments to subcontractors.
- d. Damage to another Contractor.

Payment will be made in the amount withheld when the above grounds are removed.

TABLE A

General Conditions Reference	Item	Minimum Limits
3	Worker's Compensation and Employer's Liability Insurance	As required by law in the State of Rhode Island Employer's Liability Limits: \$100,000 Each Accident \$500,000 Disease - Policy Limit
3	General Liability, including Contractor's Protective, Products and Completed Operations and Contractual Liability	\$2,000,000 General Aggregate \$2,000,000 Products and Completed Operations – Aggregate \$1,000,000 Personal Injury \$1,000,000 Each Occurrence Limit \$50,000 Fire Damage Limit \$5,000 Medical Payments

(C.U.* Collapse and Underground coverage to be included. Blasting and explosion coverage required if there will be blasting under the contract.)

3	Automobile Liability	\$1,000,000 Combined Single Limit for Bodily Injury and Property Damage
3	Owner's Protective Liability	\$1,000,000 Each Occurrence \$2,000,000 Aggregate, Bodily Injury and Property Damage
3	Builder's Risk and Installation Floater Coverage	Limit equal to the total insurable Value of all Materials and Equipment to be built and / or installed.

Carrier Requirements

All carriers used must have a Financial Performance Rating from A.M. Best Company of at least "A".

Bid Bonds, supply bonds and performance bonds will be required as necessary.

5	Time of Completion	<u>Work must commence within two weeks of the award of the contract.</u> Work must be completed within 30 calendar days
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PROPOSAL

The undersigned bidder has carefully examined the site of the work described herein/ has become familiar with local conditions and the character and extent of the work/ has carefully examined the site location.

The undersigned bidder has determined the quality and quantity of equipment and materials required, has investigated the location, and determined the sources of supply of materials required, has investigated labor conditions, and has arranged for the continuous prosecution of the work herein described.

The undersigned bidder hereby agrees to be bound by the award of the contract and if awarded the contract on this proposal to execute within fourteen (14) days after notice of award the required contract agreement and the required contract bond, of which contract this proposal, the plans for the work, and the specifications as above indicated, will be a part.

The undersigned bidder further agrees to provide all necessary equipment, tools, labor, incidentals and other means of construction to do all the work and furnish all materials of the specified requirements which are necessary to complete the work in accordance with the proposal, the plans and the specifications and agrees to accept therefore, as payment in full, the unit prices for the various items described in the specifications and set forth in the proposal. Any "extra" or "force account work" will be paid for, differing site conditions, changes, extra work and force account work/ of the standard specifications and the undersigned bidder hereby agrees to accept payment therefore as stated herein.

The undersigned bidder declares that this Proposal is made without connection with any other person or persons making proposals for the same work and is in all respects fair and without collusion or fraud. The undersigned bidder submits herewith, a proposal guarantee in the form of a bid bond in favor of the City of Woonsocket in the amount of 5% of the total or gross sum of the bid and agrees and consents that the proposal guarantee will be forfeited to the City of Woonsocket as liquidated damages if the required contract agreement and contract bond are not executed within two (2) days of the notice of award. All surety companies must be listed with The Department of the Treasury, Fiscal Services, Circular 570, (Latest Revision published by The Federal Register). The City of Woonsocket reserves the right to retain the surety of all bidders until the successful bidder enters into the Contract or until such time as the award or cancellation of the Contract is announced at which point Sureties will be returned to all bidders by the City of Woonsocket, Finance Department.

Whoever, being an officer, agent, or employee of the United States, or of any State, or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false person as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the costs thereof in connection with the submission of plans, maps, specifications, contracts, or

costs of construction of any highway or related project submitted for approval to the Secretary of Transportation; or Whoever, knowingly makes any false statement, false representation, false report, or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or Whoever, knowingly makes any false statement or false representation as to a material fact in any statement, certificate, or report submitted pursuant to the provisions of the Federal-aid Road Act approved July 11, 1916 (39 Stat. 355), as amended and supplemented. Will be fined not more than \$10,000 or imprisoned not more than five years, or both. By signing here, the signee agrees that the disk submitted is the same as the paper submitted and that any discrepancies may result in disqualification of the bid.

PROPOSAL

BEING EITHER A (INDIVIDUAL, PARTNERSHIP, OR CORPORATION INCORPORATED) UNDER THE LAWS OF ANY STATE IN THE UNITED STATES OF AMERICA.

Contractor:
Address:
COMPOSED OF OFFICERS, PARTNERS OR OWNERS AS FOLLOWS:
President:
Vice - President:
Secretary:
Treasurer:

CERTIFICATION SUMMARY: I hereby certify that I have read all the above requirements and understand that it affects the acceptability of my bid(s).

Name of Signatory and Title:	Date:
Total Bid Price for All Items Written in Words:	
Total Bid Price for All Items Written in Numbers:	

EXHIBIT A

LANDSCAPING SPECIFICATIONS

Part 1 – GENERAL

1.1 DESCRIPTION

- A. Work Included: Landscape installation required for this work, in general, includes all planting and other groundcover installation throughout the Work.
- B. Review the General Conditions, which contain information and requirements that apply to this section.

1.2 QUALITY ASSURANCE

A. Qualifications of workmen:

- 1. Provide at least one person/foreman who shall be present at all times during execution of this portion of the Work and who shall be thoroughly familiar with the type of materials, design methods, details, etc. being installed and the best methods for their installation and who shall direct all work performed under this Section.
- 2. This designated person/foreman shall be present at all landscape pertinent pre-construction meetings, scope review meetings, Owner Architect Contractor (OAC) meetings, and on-site throughout the duration of the landscape portion of the project. This designated individual is the main point of contact between all parties involved as it relates to his/her construction procedure.
- 3. This designated person/foreman shall also be the main point of contact for all submittals, samples and project notifications as outlined herein.
- 4. This designated person/foreman shall be familiar with all Specifications included in the Contract Documents to ensure continuity for the project and provide clear direction for all consultants involved.

B. Experience Requirement:

- 1. The person/foreman outlined above must meet the following requirements for approval as the main point of contact for the project:
 - a. Minimum of 5 years of successful and continuous experience on projects of this type.
 - b. Minimum of 5 successful project types of this size and scope including cost.
 - c. Contractor to provide proof of the above requirements including project examples.
 - d. If applicable demonstrate previous successful project installations
- 2. For tree planting the contractor shall meet the following qualifications:
 - a. Certified arborist consultant available for guidance on the project
 - b. Local representation and offices in the State, or an adjoining State, where the work is to be performed.
 - c. Minimum of 5 years of experience planting and stabling trees of the same size, species, and quantity

C. Codes, Regulations and Standards:

1. All plants and planting material shall meet or exceed the Specifications of Federal, State, and local laws requiring inspection for disease and insect control.
2. Quality and Size:
 - a. General: Quality and size shall conform to the current edition of 'Horticultural Standards' for number one grade nursery stock as adopted by the American Association of Nurserymen.
 - b. Deciduous Trees: Deciduous trees will measure in units of an average caliper at point 6-12 inches above the ground.
 - c. Evergreen trees will measure in units of average height in feet above the ground.
 - d. Plant stock: Each ball shall be of sufficient size to insure successful fibrous feeding roots necessary to insure successful recovery and development of the plant.
 - e. Topsoil shall conform to ASTM D 5268-92.

D. Work Scheduling:

1. All work included in this section shall be in coordination and in strict compliance with the project benchmark dates.
 - a. Proceed with the work as rapidly as the site becomes available, consistent with normal seasonal limitations for planting work.
 - b. Coordinate planting schedule with the Owner in order to ensure plant material is installed under the most optimum conditions.

1.3 SUBMITTALS

A. Plant Material List: Submit to the Owner a complete list of nurseries where plants are to be obtained and any substitutions proposed to be installed.

1. Include complete data on source location, size, quality, and photos of plant material listed on company/nursery letterhead as an official document. No email messages or informal notes will be accepted. The document shall list, at a minimum, the nursery location including address, telephone, fax, and email and contact name.
2. Demonstrate complete conformance with the requirements of this section.
3. This shall in no way be construed as permitting for specific items described in the drawings or these specifications unless the substitution has been approved in advance.
4. Trees and shrubs will be tagged by the Owner's Representative at the tree grower nursery prior to purchase, digging and delivery to the site if required by the Owner.
5. The Owner's Representative reserves the right to reject any plant material delivered to the site that is not in conformance with the requirements of this section. Remove rejected trees or shrubs immediately from the Project site.

B. Certificates

1. Submit certificates of inspection required by law for transportation of each shipment of plants along with proper invoicing and State certification.
2. Upon completion of the installation, deliver all certificates to the Owner.
3. File copies of certificates after acceptance of material. Inspection and approval at source does not preclude rejection of plants at the project site.

4. Plant material tags/labels shall remain fixed to all plantings until final approval. Once final approval has been made, Contractor shall remove plant material tags/labels at the direction of the Owner.

C. Plant Measurement:

1. Measure according to ANSI Z60.1. Spread, height or container sizes shown on the Drawings are minimum acceptable sizes. Do not prune to obtain required sizes. If range of sizes is given, no plant shall be less than minimum size, and at least 50 percent (50%) of plants shall be as large as upper half of range specified.

a. Trees and Shrubs: Measure with branches and trunks or canes in their normal position. Take height measurements from at or near the top of the root flare for field stock grown and container grown stock. Measure main body of tree or shrub for height and spread. Do not measure branches or root tip to tip. Take caliper measurements 6 inches above the root flare for trees up to 4-inch caliper size, and 12 inches above the root flare for larger trees.

b. Other Plants: Measure with stems, petioles, and foliage in their normal position.

1.4 PRODUCT HANDLING

A. Delivery:

1. Balled and Burlapped Stock: Care should be taken at all times so as to not damage the bark or branches. Damage to the bark will result in rejection of the plant materials. Plants shall be only lifted and handled from the bottom or sides of the ball as much as possible in order to prevent damage to the plant or root ball.

2. Plant stock to be delivered B&B shall be moved with a compact ball of earth so firmly wrapped in burlap that upon delivery the soil in the ball is still firm and compacted about the small feeding roots.

3. Deliver all materials in sealed containers. Materials which become damaged and unsuitable for use shall be replaced.

4. All seed shall be labeled in accordance with U.S. Department of Agriculture Rules and Regulations. All seed shall be delivered in sealed containers.

B. Temporary Storage and Protection:

1. Protect plants at all times from sun and drying winds.

2. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected with soil, shredded hardwood mulch, straw, or other acceptable material, and shall be kept well-watered.

C. Replacements: In the event of damage, immediately make all repairs and replacements necessary at no additional expense to the Owner.

1.5 PRODUCT SAMPLES

A. Samples

Items to be submitted prior to installation for approval by the Landscape Architect include, but are not limited to the following items:

1. Tree and Shrub Planting Fertilizer: Tablets or Granules
2. Hardwood Bark Mulch: One (1) Pint
3. Root Barrier: Two (2) Panel samples
4. Tree Earth Anchor System: Two (2) earth Anchors with Cable Attachments
5. Root Ball Tension Strap: Two (2) Nylon Straps and Ratchets
6. Topsoil Planting Mix: One (1) Pint
7. Any Additional Specific Items (Section 2.1 Materials)

1.6 SELECTION, TAGGING AND ORDERING PLANT MATERIAL

A. Documentation:

Submit documentation that all plant materials have been located. Arrange procedure for review of plant material at the time of submission. The Owner's Representative is to review plant material at source if required by the Owner.

B. Review:

Request for a review of plant materials and quantities at place of growth or from nursery shipment site at least 7 days in advance of shipping to the project site. Right is reserved to refuse review at this time, if Owner's Representative judgment, a sufficient quantity of plants is not available.

C. Transportation

Contractor shall accompany Owner to all review(s) of plant materials before any purchasing or digging of materials. The Owner's Representative will review and tag plants at place of growth and upon delivery for conformity to specifications.

D. Distant Material:

Submit photographs with a person adjacent to plants for preliminary review prior to on- site review at place of growth. Such review shall not impair the right of review and rejection during progress of the work. Plant materials shall be selected from the same geographic region as the project site experiencing similar growing conditions as the project site. This includes regions encompassing Zone 6 according to the USDA Plant Hardiness Zone Map.

E. Unavailable Material:

If proof is submitted that any plant specified is not attainable, a proposal will be considered for use of the nearest equivalent size or variety with the corresponding adjustment of Contract price. Size substitution increases from the size specified greater than one inch (1") caliper size or two feet (2') height for evergreen trees will not be allowed. Substantiate such proof in writing no later than 20 days after award of contract. Late substitutions are at the sole approval of the Owner.

1.7 ANALYSIS OF SAMPLES AND TESTS

A. Sampling:

The right is reserved to take and analyze samples of materials for conformity to specifications at any time. Furnish samples upon request.

B. Rejected Materials:

Remove rejected materials immediately from the site at Contractor's expense. Pay cost of testing of

materials not meeting specifications.

C. Leave all nursery marking tags on a sampling of each plant material.

PART 2- PRODUCTS

2.1 MATERIAL

A. Plants:

1. Trees, shrubs, and herbaceous plants:

- a. All trees, shrubs and herbaceous plants, deciduous plants or evergreens shall be sound, healthy, vigorous, first class, freshly dug, nursery grown in a climate similar to or more severe than northern Rhode Island.
- b. All plant material should be free of insects, their eggs and larvae.
- c. Plants shall be free of mechanical or cultural injury by rodents, and free of noticeable aftereffects, borers and other pests.
- d. Plants shall be true to scientific names. The names used are those of 'Standardized Plant Names'.

B. Mulch: All mulch shall be triple shredded hardwood bark dark brown in color. A 3-inch maximum thickness in all planting beds and tree rings. No soil is to cover the root flare of any tree or shrubs.

C. Fertilizer For Planting:

- a. Each tree planting to receive Granular (18-6-12) fertilizer. Apply $\frac{1}{4}$ pound per one-inch trunk diameter to the top of the root ball and extend to past the drip line. Fertilizer to be mixed in with the topsoil backfill mix around each plant.
- b. Each tree and shrub to receive (3-0-3) granular fertilizer. Apply 4 ounces per one inch trunk diameter or 1 foot of root ball and extend past the drip line. Apply 16 ounces per 100 square feet (sq. ft.) of shrub and planting bed area. Fertilizer to be mixed in with the topsoil backfill mix.
- c. Shrub and Groundcover beds to receive slow-release fertilizer with an application rate of 2 lbs. of Nitrogen per every 1000 square feet of bed area at the time of installation. Fertilizer to be mixed in with the topsoil backfill mix.
- d. Wrapping: Tree wrap tape not less than four (4) inches wide, designed to prevent bore damage and winter freezing.
- e. Stake and Ties: Provide stakes of sound new hardwood, treated softwood, or redwood, free of knotholes and other defects. Tie stakes to tree trunks with flat woven polypropylene ties: Arborite Green or approved equal. Install in accordance with manufacturer's Instructions.

PART 3- EXECUTION

3.1 SURFACE CONDITIONS

A. Inspection: Prior to all work in this section, carefully inspect the installed work of all other trades, and verify that all such work is complete to the point where this installation may properly commence.

1. Verify that all topsoil installation methods and approvals have been completed in accordance with this section.
2. Verify that all proposed work areas are free of weeds and rocks 3/4 inch in diameter or larger.
3. Verify percentage of compaction of existing subsoil and topsoil installation is acceptable for healthy, plant growth and root establishment with appropriate percentages of soil particles, water, and air per cubic foot.
4. Verify that topsoil installation has been approved.

B. Discrepancies:

1. In the event of any discrepancies, immediately notify the Owner.
2. Do not proceed with the installation in the areas of discrepancies until such discrepancies have been fully resolved.
3. If quantities listed in Plant Material List do not correlate with plantings indicated on plan, the quantities on the plan shall govern.

3.2 LAYOUT

- A. Shrubs and trees shall be installed within 1'-0" and groundcover shall be installed within 6" of plant location on the plan.

B. Fertilizing: See Section 2.1-B for materials.

3.3 PLANTING

A. General:

1. All planting operations shall be performed between the dates of March 1 and November
2. All plantings to be performed between the dates of June 1 and August 1 to be wilt proofed with anti-desiccant (or equal) and a watering schedule shall be maintained by the Contractor until acceptance by the Owner.
3. The depth of planting areas is the depth below the finished grade.

B. Shrubs:

1. General:

- a. Planting areas shall have a backfill soil mixture minimum depth of 6" for all plants.
- b. Remove all twine, wires, and burlap from the top 1/3rd of root ball.
- c. On the bottom of all plant areas, add and lightly tamp a layer of planting backfill soil mixture at least six inches (6") thick or as much as necessary so that the ball or roots will rest thereon when the plant is set to the required grade.
- d. Set all plants so that when they are settled, they will bear the same relation to the required grade as they bore to the natural grade before being transplanted. Make adjustment of position where necessary or as directed.
- e. Plant in topsoil backfill mix. Remove all non-treated or non-rot-proofed burlap, ropes, stave, etc., off sides and tops of balls and remove from the pit before it is filled in. Completely remove all treated or polypropylene burlap or ropes from the planting pits.

- f. Do not mat roots of bare rooted together but arrange in their natural state and work topsoil in among them. Use no soil in a frozen or muddy condition for backfilling. Do not fill around trunks or stems. Properly cut off all broken or frayed roots.
- g. Each shrub to receive (3-0-3) Granular fertilizer. Fertilizer to be mixed in with the topsoil backfill mix.
- h. Set shrubs to allow sufficient depth. Properly set the crown of plant at the finished surface of the bed.
- i. Backfill topsoil and fertilizer mix about the roots and thoroughly settle by watering.

C. Trees:

1. Tree pits:

- a. Remove all twine, wires, and burlap from the top 1/3rd of root ball to expose the root flare of the tree.
- b. Depth of the pits-deep enough as is necessary to accommodate the ball or roots and to permit the required preparation of the bottom of the pit so that when the tree is settled in the pit, it will not be necessary to raise or lower the tree. The top of the root flare should be at the top of the tree pit.
- c. Width of the pits-2 times greater in diameter than their ball of earth or spread of the roots.
- d. Plant trees in topsoil backfill mix in the center of the pit unless otherwise specified or shown on the Drawings. Remove all non- treated or non-ort proofed burlap, ropes, staves, etc., off sides and tops of balls and remove from the pit before it is filled in. Completely remove all treated or polypropylene burlap or ropes from the planting pits.

2. Fertilizer:

- a. When the tree has been properly set, backfill tree pit halfway and place specified fertilizer beside root ball about 1" from the root tips. Do not place in bottom of hole. Backfill tree pit the rest of the way with backfill planting soil mixture.
 - b. Each tree planting to receive (3-0-3) Granular fertilizer. Apply ¼ pound per one-inch trunk diameter to the top of the root ball and extend to edge of tree pit.
 - c. Thoroughly tamp and water during and after backfilling.
3. All trees are to be wrapped and receive underground stabilization as detailed and specified within.
4. Dress all tree pits with a uniform 3" layer of triple shredded hardwood bark. No soil is to cover the root flare of any tree.

D. Pruning:

- 1. Prune all new trees and shrubs in accordance with acceptable standard practices. In the same manner prune any existing trees, which are to remain if indicated on the landscape plan. Pay close attention to any branches that may have been damaged by equipment during construction.

E. Protection:

- 1. Protect all planting areas and plants from damage. If any plants are injured, treat and replace as required. Execute no work in or over prepared planting areas, or adjacent to planting

without proper safeguards and protection.

F. Maintenance during Installation:

1. Maintain immediately following the accomplishment of planting operations of any plant unit. Owner to supply water for planting, Contractor to supply all labor and equipment for the watering operation until final acceptance. Contractor to supply landscape watering for maintenance whether a permanent irrigation system is installed or not.
2. Soak root balls and spray foliage on all trees and shrubs with water, where required, during the evening after sundown or otherwise as directed. Watering for seeded or sodded lawns shall occur 3 times per day for the first 2 weeks after installation. Seeded lawns need to be watered this way until germination of the seed takes place. Sodded lawns watering need to be in place until roots take hold into the soil, then watering amounts should be reduced. Keep all plantings in a healthy, growing condition by watering, weeding, cultivating, pruning, spraying, trimming and by performing any other necessary operations of maintenance.
3. The Contractor is responsible to clean the site of all mulching materials and other debris prior to the final inspection.
4. Maintain trees, shrubs, and other plants until final acceptance, but in no case less than 60 days after substantial completion of planting.
5. Maintain trees, shrubs and other plants by pruning, fertilizing, spraying, cultivating, watering, and weeding as required for healthy growth. Restore planting saucers. Tighten and repair the underground staking system and rest trees and shrubs to proper grades and vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free from insects and diseases.

3.4 CLEAN UP

- A. Upon completion of the planting, all excess soil, stones and debris, which has not previously been cleaned up, shall be removed from the site or disposed of as directed by the Owner.
- B. Power wash all sidewalks, curbs and paved areas that have topsoil or other material stains that would affect the aesthetic appearance of the installed elements. Power washing must adhere to the new EPA regulations for the National Pollution Discharge Elimination System.
- C. Any soil, peat or similar material which has been brought onto paved areas by hauling operations or otherwise, shall be removed promptly, keeping these areas clean at all times.
- D. Protect landscape work and materials from damage due to landscape operations, contractors and trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.

3.5 ACCEPTANCE

A. Final Inspection:

1. Inspection: At the conclusion of the contract work, exclusive of maintenance and replacement, one inspection will be made by the Owner. Written notice to the Owner requesting such an inspection shall be submitted by the Contractor at least ten (10) days prior to the anticipated date.
2. The purpose of this inspection will be determined whether the Contractor has completed all the work of the contract meeting all specifications outlined herein
3. The condition of the trees and shrubs will be noted, and determination made by the Owner whether maintenance shall continue in any part as specified under Section 3.4-G above.

B. Acceptance Inspection:

1. At the conclusion of the maintenance period, an inspection will be made by the Owner's Representative. Written notice requesting the inspection shall be submitted by the Contractor at least ten (10) working days prior to the anticipated date.
2. The purpose of the inspection shall be for the acceptance of the contract work including maintenance, but exclusive of replacements.
3. After the inspection, the Contractor shall be notified in writing of acceptance of all the work. If there are any deficiencies in the maintenance, the Contractor will be notified of these deficiencies in writing and the work shall be subject to re-inspection before acceptance.

C. Guarantee Period:

1. The guarantee period shall begin at the issuance of the Certificate of Completion, or the completion date set by the project design team and shall extend exactly one year from that date.
2. At the conclusion of the guarantee period, a final inspection of the work will be made to determine the condition of the plant material. All plant material not in a healthy or 40% defoliated growing condition will be noted.
3. Remove the materials so noted from the site at the direction of the landscape Architect and replace during the following planting season with the materials of like kind and size and in a manner specified by the original planting at no extra cost.
4. The guarantee period also applies to replaced material.



Planted Buffer Area

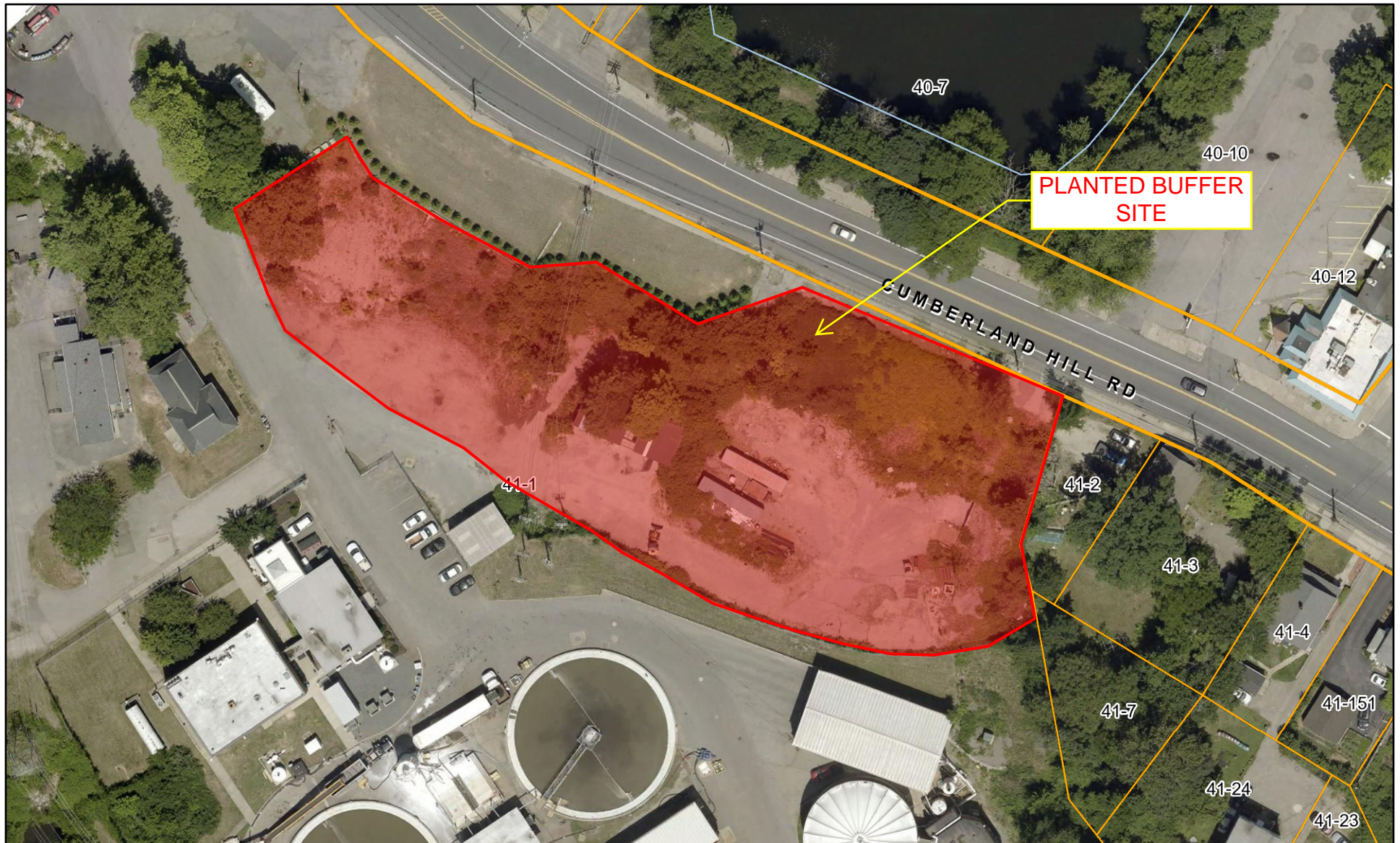
Woonsocket, RI

1 inch = 80 Feet



May 17, 2023

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