Procurement #: 48734>

CITY OF PROVIDENCE, RHODE ISLAND

Department: Parks

RFP Title: Cunliff Lake Boardwalk at Roger Williams Park

Opening Date: 05/19/2025

Addendum #: 4

Issue Date: 05/02/2025

The purpose of this addendum is:

Revised technical specifications section and clarifications from consultant engineer and need to extend bid due date

Providence City Hall
25 Dorrance Street
Providence, RI 02903

WENDY NILSSON
Superintendent of Parks

BRETT P. SMILEY
Mayor

Addendum # 4

CUNLIFF LAKE BOARDWALK AT ROGER WILLIAMS PARK

MAY 2, 2025

Total Pages Including Cover (21 Pages)

Acknowledge Addenda on Bid Form

**** BID DUE DATE HAS BEEN EXTENDED UNTIL MONDAY, MAY 19, 2025 AT 2:15PM ****

Attachments:

1. Addendum Cover Sheet (1 page)
2. Updated Specification 31 62 23 – Composite Piles (14 pages)
3. Updated Supplemental Bid Form (6 pages)

Questions/Clarifications:

1.) **Q:** Items #23 and #24 and Add Alt 6 and 7 are for the same item. If the benches are included in the base bid, can the Engineer please clarify why they are also included as an Add Alternate?

A: The Add Alternates are always listed as LS total cost for the line item and the Unit price items are cost as indicated per each.

2.) **Q:** Are there any changes in the scope between Items #23 and #24 and Add Alt Items #6 and #7?
A: See answer above.

PROVIDENCE PARKS DEPARTMENT
1000 Elmwood Avenue, Providence, RI 02905
Phone: 401-680-7201

SECTION 31 62 23 - COMPOSITE PILES

PART 1 - GENERAL

1.1 SUMMARY

A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this Section.

C. Coordinate work with that of all other trades affecting or affected by work of this Section. Cooperate with such trades to assure the steady progress of all work under the Contract.

1.2 DESCRIPTION OF WORK

A. General

1. The work covered by this Section, without limiting the generality thereof, consists of furnishing all labor, equipment, and materials, and performing all operations in connection with the furnishing and installing at the locations and to the lines and grades shown on the Drawings, including installation in the sequence required by this specification:
2. Composite pipe piles driven to 25 – 30 feet below the top of pile caps (final pile length is location dependent). The composite piles have been designed to have an allowable vertical compressive capacity of 24 kips applied at the top of pile.
3. Prior to production pile installation, a static load test shall be performed on a production pile to determine verify the pile can support the anticipated loads. A verification load test shall occur on one (1) pile on site.
4. A vibratory hammer shall be utilized to continuously drive the pile, using false work.
5. The Contractor shall submit for approval the proposed methods and equipment for installing production piles.
6. Pile splices shall not be allowed.
7. The Contractor may elect to perform near surface pre-excavation and/or probing or spudding through the entire fill thickness at pile locations.
8. The Contractor shall manage any soil, fill, drilling fluids or muds in accordance with Section
9. Cutting-off of pile stick-ups to achieve the design cutoff elevation, following installation of piles to the bearing stratum and to the approved driving criteria, and removal from the site.
10. Provide and maintain survey control for layout of design pile locations, pile heave measurement, preparation of as-built sketches, and related survey control work.

11. Perform and sequence work and maintain equipment in good condition to minimize noise and vibration caused by pile installation activities.

B. Related Sections

1. Section 03 20 00 – Concrete Reinforcing
2. Section 03 30 00 – Cast-in-Place Concrete
3. Section 06 13 00 – Heavy Timber Construction

1.3 DEFINITIONS AND REFERENCE STANDARDS

A. Owner: City of Providence Parks Department.

B. Engineer: The Engineer is Pare Corporation, also referred to as the Designer.

C. Contractor: The Contractor is the person or organization identified in the Agreement as being responsible for the work under this Section. The term Contractor shall also refer to an authorized representative of the Contractor.

D. ASTM: Specifications of the American Society for Testing and Materials.

E. AWS: Standard Code for Welding in Building Construction, of the American Welding Society.

F. AISC: Specification of the American Institute of Steel Construction.

G. Code: Rhode Island State Building Code.

1.4 QUALITY ASSURANCE

A. Comply with all rules, regulations, laws and ordinances of the Rhode Island Department of Public Safety, City of Providence, State, Federal, and all other authorities having jurisdiction over the project site. All labor, materials, equipment and services necessary to make the work comply with such requirements shall be provided by the Contractor without additional cost to the Owner.

B. Field Monitoring and Testing

1. Full-time monitoring of pile driving operations will be provided by the Owner. No piles shall be driven except in the presence of an authorized representative of the Engineer.
2. Pile materials shall also be subject to on-site observation for conformance with specifications.

3. Approvals given by the Engineer or by testing agencies shall not relieve the Contractor of his responsibility for performing the work in accordance with the Contract Documents.

1.5 SUBMITTALS

A. General:

1. The Contractor shall conform to all submittal requirements of the Contract including submitting the information specified herein to the Engineer for review. All submittals shall be stamped by a Professional Engineer registered in the state of Rhode Island.
2. The Contractor shall adhere to the Submittal Schedule described in the Contract General Conditions and herein. The Contractor shall make every effort for timely submissions, leaving adequate time for the Owner's Representative to review, evaluate and respond to the Contractor. The Contractor is responsible for scheduling specified submittals and re-submittals so as to prevent delays in the Work.
3. The Contractor shall submit a driving plan and schedule for installation of the piles.
4. Unless otherwise noted, the Contractor shall forward submittals to the Owner's Representative a minimum of two weeks prior to any planned Work related to the Contractor's submittals. No Work shall be started until the necessary review and approvals have been given.

B. Shop Drawings:

1. Shop drawings showing sizes, tip or stinger details, pick up points and other items pertinent to pile manufacturing, design and handling. Drawings shall be stamped by a Registered Professional Engineer.
2. A scaled drawing indicating design pile locations relative to boardwalk column lines, with each pile labeled with a sequential designation proposed by the Contractor, scale 1 in. = 20 ft.
3. Shop drawings showing proposed static pile load test setup including details of all equipment and apparatus to be used for the static load test.

C. Pile Driving and Static Load Test Equipment:

1. Manufacturer's literature, including technical and performance literature for pile driving hammer, cushions, and other equipment for piles.

2. Details of equipment and procedures for pre-auguring, pre-excavation or spudding.
3. If a static pile load test is required –
   a. The static load test pressure gauge and hydraulic jack shall be calibrated within 30 days prior to the load test as a unit by an approved testing agency. A certificate of the calibration record shall be submitted to the Owner's Representative at least five days prior to the set-up of a load test.

b. Calibration certificates shall be supplied for the dial gauges (or other measuring devices).

D. Pile Design:

1. Pearson Pilings, 177 Riverside Avenue, Somerset, MA 02725 or approved equal composite pile manufacturer/supplier.
2. The manufacturer will provide product data sheets for the FRP piles that includes mechanical properties derived through laboratory and field testing.

E. Estimated Pile Lengths:

1. A tabular summary of anticipated pile lengths at each column location or other point of structure support.
2. Pile designation plan showing piles numbered sequentially (i.e., 1,2,3).

F. As-Driven Pile Location Data:

1. Submit sketch and tabular documentation of actual pile location in relation to the design location within one working day after each individual pile or pile cluster is completed.
2. Within seven days after the completion of all pile driving, submit to the Owner a final as-driven pile location drawing (1 in. = 20 ft), certified by a Registered Land Surveyor or Registered Professional Engineer.
3. All drawings and sketches shall include the following:
   a. Column lines, north arrow and graphical scale.
   b. Each pile identified by a separate number, designated by the Contractor and submitted prior to pile driving.
   c. Elevation of each top of pile prior to and after cutting, to nearest one-tenth (0.1) foot.
   d. Deviation in inches, to the nearest one-fourth (0.25) inch, from plan design location at cutoff elevation.

1.6 JOB CONDITIONS

A. Site and Subsurface Conditions

1. Subsurface information representing surficial geology can be found in Appendix C of the most recent Specifications. Prior to submitting his bid, the Contractor shall review and understand the information. The information is made available to the Contractor for information on factual data only and shall not be interpreted as a warranty of subsurface conditions whether interpreted from written text, boring logs, or other data.
2. The boring information is considered to represent the conditions at the locations of the test borings and at the time the test borings were made. Variations from the conditions

disclosed by the borings should be anticipated by the Contractor in planning and estimating the work.

3. The Contractor shall protect adjacent property, utilities, tunnels, buildings and structures, and completed work from damage associated with the pile driving operation. Damage due to pile driving shall be repaired by the Contractor at his own expense.

1.7 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. The Contractor shall deliver piles at times and in sequence to assure continuity of pile driving.

B. Piles shall be handled, transported, stacked and protected to prevent damage.

C. Lifting points shall be clearly marked on the piles by the manufacturer, and all handling and storage shall be undertaken with consideration for required support.

D. Piles shall be picked up into fixed leads at the top of the boom and to the crane at the bottom. No swinging leads are to be permitted.

E. Piles shall be clearly marked with the length of the pile prior to delivery.

1.8 LINES AND GRADES

A. The Contractor shall stake the pile locations and establish all elevations required. The Contractor shall be responsible for the maintenance and protection of the control point and benchmark, and all pile location stakes.

B. The Contractor shall employ a licensed Registered Land Surveyor or a Registered Civil Engineer, familiar with pile installation, who shall establish lines and levels. The Contractor shall be responsible for the correct location of piles, as well as keeping up-to-date records of the amount of uplift of individual piles, and establishing actual pile locations. Locations of the centers of as-driven piles shall be shown on a drawing in relation to the design location and submitted to the Engineer within 2 days after the individual pile or pile group is completed. Drawings shall include the following:

1. Column lines and north arrow.
2. Each pile identified by a separate number.
3. Elevation referenced to North American Vertical Datum of 1988 (NAVD 88) of each top of pile prior to cutting, to nearest 0.l ft.
4. Deviation in inches, to the nearest ¼ in., from plan location at cutoff elevation.

C. Within 2 weeks after the completion of all pile driving, the Contractor shall provide for the Engineer a plan, certified by said Surveyor or Engineer, showing the as-driven location of all piles.

PART 2 - PRODUCTS

2.1 GENERAL

A. Pile types and minimum dimensions shall be sufficient for static design capacity indicated on the Drawings and in accordance with the requirements herein and the Code. Whereas the allowable pile load capacity would equal the static design capacity.

B. Pile materials shall be new and of uniform quality. Manufactured or assembled pile materials shall be of sufficient strength and rigidity to withstand all handling and driving stresses.

C. Piles shall be furnished in sufficient lengths to meet specified driving and all other requirements.

2.2 COMPOSITE PILES

A. Fiber reinforced polymer (FRP) composite piles shall be manufactured by the vacuum infusion molding process (VARTM).

1. The tolerance of the outside diameter shall be plus or minus 3/8”.
2. The exterior surface shall be Quantum EMC Polyurethane topcoat or equal, a hydrolytically stable, ultraviolet light resistant paint system.
3. Materials:
   a. Crimp fabric – glass fibers shall be e-glass (electrical grade) with filament diameters between 18 and 26 microns. The glass fabric shall have a minimum dry weight of 123 oz. per square yard per ply. All layers in each ply shall be needled together with through-the-thickness glass fibers (z-axis) thus comprising a three-dimensional fiber architecture. Each ply shall consist of a minimum 50% axial glass fibers.
   b. Non-crimp fabric – The NCF fabric consists of one or more layers of long fibers, held in place by a secondary non-structural head. Filament diameters range from 17 to 25 microns. Each ply shall have a minimum areal weight of eighty-one point two five ounces per square yard (81.25 oz/CY).

B. Mechanical Properties – shall be characteristic values in accordance with ASTM D7290 and be established by full scale flexural testing per ASTM D6109.

12” O.D. x 0.375” WT			
Property	Test Method	Value	Tolerance
Bending Stiffness (EI) (psi)	ASTM 6109	1.06×10^9	±10%
Characteristic Bending Moment (ft-kips) (assuming a factory of safety = 2)	ASTM 6109	78	minimum

C. Dimensions & Tolerances

Design Dimensional Tolerances		
Measurement	Value	Tolerance
Outside Diameter (in.)	12.0	±3/8
Wall Thickness(in.)	0.375	±0.0625
Length (in.)	Per Contract Plans	±2.0
Weight (lbs/ft)	10	±5%

D. Composite pile sections shall be used as shown on the plans.

E. Deformations, defects, camber, sweep of piles placed in the leads of pile driving rigs shall be no more than allowed by ASTM A50.

F. Piles shall be furnished in sufficient lengths to meet specified driving requirements.

G. Once the piles have been driven to their required penetration depth corresponding to a predetermined ultimate capacity, sand shall be dumped into the pile up to a elevation corresponding to 5 ft below top of pile. The top 5 ft of the pile will be filled with concrete so pile caps can be fastened to the top of pile.

PART 3 - EXECUTION

3.1 SEQUENCE OF OPERATIONS AND EQUIPMENT REQUIREMENTS

A. The Contractor shall provide at least one fully equipped pile-driving rig in full-time operation at the site during the work, and shall mobilize additional equipment, if necessary, to complete the work on schedule.

B. The Contractor's attention is initially directed to the requirements of the static load test program. No production piles, other than the test piles, will be driven until the testing is completed and evaluated with satisfactory results.

C. The Contractor shall coordinate his pile driving operations with other work on the project.

3.2 EQUIPMENT

A. Piles may initially be installed with a vibratory hammer to the bearing stratum. The proposed pile installation equipment and methods shall be subject to the approval of the Engineer and approval shall be secured before the start of installation.

B. Piles shall be driven to final driving resistance with a hydraulic hammer able to deliver a variable amount of energy to the top of the pile. When the determination of the final driving resistance is being made, the hammer shall be operated at its rated speed and capacity.

C. Hammers used to drive permanent piles shall be of the same type and have the same rated energy as the hammer used to drive test piles for the pile load test program.

D. The use of followers will not be permitted.

3.3 INSTALLATION

A. Coatings

1. Application of pile coatings shall follow manufacturer recommendations.
2. The coating shall be completely cured before driving operations.
3. Sagging and fish eyeing of the coating will be grounds for rejection by the Engineer. The applicator shall take all precautions to apply an even, defect free coating.
4. Once the coating has been applied, the Contractor shall not drag the piles on the ground during handling.
5. If during storage, hauling, handling, or driving, the coating is damaged or removed from the pilings in excess of 1 square foot or greater than 5 linear feet, the Contractor shall reapply the coating according to manufacturers’ recommendations.

B. Obstruction Removal

1. It shall be the Contractor's responsibility to overcome obstructions.
2. Where obstructions make it impossible to install certain piles to the required depth, the Contractor shall remove or clear the obstruction by spudding or other technique selected by the Contractor and at their own expense. Obstructions are the responsibility of the Contractor.
3. Piles abandoned because of obstructions encountered shall be pulled out and the hole filled with sand.

C. Driving

1. As part of preparation for driving, each pile shall be marked at 1-ft intervals along the entire pile length. In addition, the footage shall be marked and designated at 5-ft intervals, starting from the tip of the pile.
2. All piles shall be driven at the locations and orientations shown on the Drawings. Pile location and orientation shall be checked during driving and appropriate measures taken, as necessary, to maintain the correct pile position.
3. Each pile shall be driven to bearing in compression.
4. Immediately after a pile is driven, the Contractor shall establish a reference point and its elevation on the pile for the purpose of checking uplift of the pile tip.
5. After all piles within the radius of uplift have been driven, the Contractor shall determine the elevation of the reference points on each of the piles in the group. If uplift of 0.04 ft or more has occurred, the pile shall be redriven to its original elevation, and deeper if necessary. After redriving each pile, the Contractor shall re-establish the elevation of the reference point. Redriving shall be repeated as often as necessary until the measured uplift on any pile is less than 0.04 ft.
6. The radius of uplift is defined as the maximum distance between piles such that pile driving causes uplift of 0.04 ft or more in the affected pile. Survey instruments used to establish the reference elevations shall be carefully checked and adjusted as necessary to insure accurate readings. Uplift measurements shall be submitted to the Engineer.

D. Cutting Off Piles

1. Pile tops shall be cut off square within 1 in. of the elevations shown on the drawings. The pile cutoffs shall become the property of the Contractor and shall be removed from the site.

3.4 TOLERANCES AND CRITERIA FOR ACCEPTANCE

A. A maximum lateral deviation from the correct location at cutoff elevation permitted will be 3 in., as measured at the cutoff elevation. A maximum deviation from design cutoff elevation equal to 1 in. will be permitted.

B. The plumbness of a driven pile, as measured on the projection of the pile above ground, shall not deviate by greater than 5 percent from the design alignment.

C. Piles that are damaged below cutoff elevation during driving will be rejected. Upon comparing pile performance during driving with that of other driven piles, and based on their knowledge of subsurface conditions, the Engineer determines that a pile has been unacceptably damaged, they may reject the pile.

D. Piles indicating sudden or peculiar decrease in penetration resistance during driving will be assumed to be broken and will be rejected unless the Engineer's review of available data indicates that sudden decrease in driving resistance is due to natural, subsurface conditions and continued acceptable driving behavior is observed.

E. Piles that are rejected because of damage, mislocation or misalignment, or failure to meet the driving criteria, shall be cut off below the limits of the structure and abandoned, and additional piles shall be driven as directed by the Engineer.

F. When otherwise acceptable, installed piles exceed the specified tolerances, the Contractor shall provide an accurate survey to the Engineer, as specified. The Engineer will then analytically determine the total loads on individual piles, based on this survey. If the load on any pile exceeds 110 percent of the specified load capacity, corrections shall be made in accordance with a design provided by the Engineer.

G. The installation of replacement piles and other corrective measures shall in all cases be in accordance with designs provided by the Engineer.

3.5 STATIC PILE LOAD TESTING

A. General

1. A compression load test shall be conducted in accordance with the Rhode Island State Building Code.
2. One pile shall be successfully load tested before driving any production piles.
3. The Contractor shall provide all labor, materials and equipment required to set up the load test, and shall provide qualified personnel during the entire test, to operate the hydraulic jack and all equipment necessary to vary load increments on the test pile. The Geotechnical Engineer will provide personnel and special instrumentation required to monitor the pile performance.
4. The test pile shall be installed by the specified methods and equipment specified for production piles and shall be load tested to at least 130% of the ultimate compressive design capacity.
5. The load test will be conducted on a pile selected by the Geotechnical Engineer.
6. Load testing shall be completed and accepted before remaining piles are installed. The Contractor should anticipate a period of at least 7 days between the completion of the successful load test and receipt of notice to proceed with production pile installation.

7. Load testing shall conform to the requirements set forth in this Specification, the Code, and ASTM D1143 - Standard Test Method for Piles under Static Axial Compressive Load.

B. Pile instrumentation

1. The Contractor shall furnish the instrumentation to monitor load and settlement data. The Geotechnical Engineer will install the instrumentation and observe and record load and settlement data and will provide personnel for this purpose. The Contractor shall cooperate with the Engineer during set-up and monitoring of the load test.

C. Test Procedure

1. The Contractor is solely responsible for conducting the test(s) in accordance with these specifications.
2. The load test shall begin no earlier than 10 working days after test pile installation.
3. Load shall be applied to the test pile by means of a hydraulic jack which reacts against a system of hold-down piles, or against a loaded box or test platform, which is supported by cribbing or temporary piles. The cribbing or pile support shall not be closer than 10 ft to the test pile. The load box or platform shall be centered on the test pile and loaded with approved material.
4. The hydraulic jack shall be of an approved make with a capacity of at least 1000-tons and a minimum travel distance of 6 in.
5. The top of the test pile shall be level and capped with a ½-in. thick plate equal to the area of the pile and fully welded to the web and flanges in such a manner as to produce a plane horizontal bearing surface. A steel billet shall be set on top of the pile to distribute the test load over the entire cross-section area of the test pile.
6. The hydraulic jack shall be interposed between the steel billet and the center of the underside of the reaction beam. The Contractor shall provide a total of 19 in. of clearance between the top of the ram and the underside of the reaction beam (or billet) for the placement of a load cell and "ball and socket" plate. A steel billet of suitable dimensions shall be centered on the load cell to distribute the load to the girder, or reaction beam. The connections of the girder to the load box and to the hydraulic jack shall be tight when the test load is applied.
7. As necessary to permit measurements, Contractor shall provide a load transfer assembly for the test. Assembly shall have capacity to transfer the maximum (twice design) test load from jack to top of pile. Load transfer assembly shall have a minimum of 16-in. square bearing plates top and bottom. The assembly shall be accessible to permit micrometer measurements to be made by hand on telltale rods inserted in the pile, as required.
8. The Contractor will furnish and install micrometer dial indicators, each having a minimum range of 2 in. and graduated to 0.001-in. divisions. They shall be spaced equally around the pile and at the telltale locations, and provisions shall be made for free vertical movement should it become necessary to reset the micrometer dials.

9. Micrometer dials will be mounted by the Engineer to one or more steel reference beams provided by the Contractor. The beam(s) shall be rigid and supported by helical piles driven at least 10 ft below the bottom of any organic soils, and to such depths as may be required by the Engineer, at a distance of at least 10 ft from the center of the test pile and at least 6 ft from cribbing or temporary pile supports. The reference beams shall be fixed at one end and shall be free to move horizontally at the other end to allow for expansion and contraction of the reference beam without vertical deflection at points where dials are mounted. Wood or other materials subject to variations in moisture content shall not be used in reference beams, crossbeams, shims, or for any other means of dial support.
10. The Engineer will also establish reference points on the pile and on each end, or at the center, of the reference beam supporting the micrometer dials. Elevations will be taken on these reference points by the Engineer using a level and rod, and a reliable benchmark installed on the site by the Owner.
11. In addition to micrometer dials and level readings, settlement of the test pile shall be determined by the Engineer by means of a taut piano wire drawn across the face of a mirror-mounted graduated scale. The scale shall be 6 in. in length, machine divided to 1/50 (0.02) in. and mounted to a new mirror 3 in. by 6 in. with metal and glass bonding adhesive or plastic electric tape. The mirror shall be mounted directly upon the test pile where feasible, or upon the hydraulic jack, or ram by the Engineer, and oriented such that the face is parallel with the reference wire and support cross beams. Space shall be provided such that the scale can be read on a horizontal line of sight. The piano wire shall be mounted between the ends of the micrometer dial support beam, fixed at one end and threaded over a smooth pulley at the other end with about a 5-pound weight to maintain uniform tension. The wire shall be level and within 3/4 in. of the mirror.
12. The Contractor shall protect the entire measuring apparatus against rain, wind, direct sunlight, frost and any other disturbances that may affect the reliability of the settlement observations. The Contractor shall provide suitable heaters, not emitting offensive exhausts, and suitable enclosures to maintain the temperature around the test apparatus at a minimum of 40 degrees Fahrenheit, and shall provide temporary electric lighting as necessary and required by the Engineer during the conduct of the test. Loading and unloading of the test pile shall not be performed except in the presence of the Engineer.

D. Load Test Acceptance Criteria

1. Pile acceptance criteria shall be per the latest edition of the Rhode Island State Building Code.
2. Test piles that are approved for the design load are acceptable as production piles if all other acceptance criteria are met.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

A. Piles will be measured for payment on the basis of length along the axis of the pile in place below the design cutoff elevation.

4.2 BASIS OF PAYMENT

A. Work included under this contract shall include the total price for installation of the estimated linear feet of piles. The work shall include obstruction removal, furnishing and driving the piles, splicing, and all work incidental thereto, and mobilization and demobilization, which shall include job setup, moving equipment including pile driving rigs on and off the project, establishing and dismantling the Contractor's field administration forces and equipment, and all other work incidental thereto.

B. Final payment shall be based upon the actual total aggregate footage of piles driven and accepted in accordance with this section, from pile tip to pile cut-off shown on Structural Drawings. If the total aggregate footage is over or under the base quantity, the additional footage shall be paid to the Contractor or the deducted footage shall be credited to the Owner on the basis of the unit prices quoted in the Bid Form. The "Add" unit price shall not be more than 20 percent greater than the unit price determined by dividing the base bid by the base footage. The "Deduct" unit price shall be at least 80 percent of the unit price determined by dividing the base bid by the base footage.

C. The total aggregate footage of foundation piles for payment shall be the sum of the lengths of piles below design cutoff grade actually driven, and accepted, whether or not the number of piles is more, equal to, or less than is shown on the Contract Drawings.

D. Piles rejected in accordance with the provisions of these Specifications will not be paid for. In such cases, the Contractor will be paid at the contract unit price per foot for one replacement pile installed and accepted, according to the provisions of these Specifications. If more than one replacement pile is required to compensate for a rejected pile, the Contractor will be paid at the contract unit price per foot for only the longer of the replacement piles. Additional piles required to compensate for production piles or replacement piles driven out of design location will be installed at no additional cost to the Owner.

E. Whenever misalignment or rejection of a pile or piles necessitates structural redesign, the cost of such redesign shall be deducted from sums otherwise due to the Contractor under the contract. If the redesigned pile cap requires greater quantities of concrete and reinforcing steel, as compared with the quantities required for the pile cap for as originally designed, the additional cost for pile cap concrete, reinforcing steel and formwork shall also be deducted from the contract price.

F. No payment will be made for pile splices and pile buildups. Pile cutoffs less than or equal to 5 ft per pile will be paid at the contract unit price per foot.

G. Payment for the load tests and additional tests, should they be required, shall be made as a unit price per test. The pile load test unit price shall include constructing and supporting the test load or reaction system, driving and removing temporary piles and supports, furnishing and operating jacks and gauges and related equipment, tools, personnel, and incidentals necessary for the proper execution of the pile load test as specified. If an additional load test is necessary because of an unacceptable load test made to confirm a final pile driving resistance less than that specified, then the cost of the additional load test shall be paid by the Contractor.

H. For unit price breakdown, refer to Bid Form

END OF SECTION

BID PACKAGE SPECIFICATIONS

Project Description:
With the goal of enhancing boating and fishing opportunities in historic Roger Williams Park, the City of Providence Parks Department is seeking qualified bidders to construct a new timber framed boardwalk with fishing overlook and to improve the existing boat ramp at the edge of Cunliff Lake. As the only location offering a public boat launch, Cunliff Lake is the largest water body within the 435 acre park. The boat ramps' current condition is subject to flooding and poses accessibility challenges. The work will also serve to redirect pedestrian circulation and improve safety between vehicles, bikers and pedestrians. In addition, improved stormwater management will be achieved by introducing additional native plantings to the existing bioretention area that to be protected from foot traffic via the boardwalk and timber guardrails. Site amenities including boardwalk lighting, site furnishings and additional permeable parking spaces are listed as add alternates.

BASE BID: The Base Bid scope of work for this project shall include, but not be limited to the following: Following regulations within the RIDEM Freshwaster Wetlands Permit, the scope includes furnish and install a heavy duty timber framed boardwalk and fishing overlook with composite decking and SS cable railings supported by fiber reinforced polymer (FRP) piles along the south western edge of Cunliff Lake; furnish and install an articulating concrete block system at the boat ramp and newly configured parking area; furnish and install concrete pavement with timber guard rails to meet existing path conditions; and furnish and install plantings in the existing bioretention area and adjacent to improved boat ramp and parking.

ADD ALTERNATES include:

- F&I Parking Lot Articulated Blocks (Southern Section)
- F&I Geogrid Reinforced Parking with granite cobble edge (Southern Middle and Northern Sections)
- F&I Solar Integrated Light Bollards
- F&I Solid curved benches with back rest
- F&I 6' Benches
- F&I 55 gallon trash receptacles with dome lid

In addition to stating the Total Base Bid, the bidder shall state Unit Prices for related work listed under each bid item which represents the work items included in the Total Base Bid. The Unit Prices are quoted for computing adjustments to the Base Bid prior to Contract award, as well as during the course of construction, based upon extra work ordered by the City or for work countermanded, reduced or omitted by the City in order to stay within the Project budget.

Base Bid Items and Unit prices are to be Completed prices to be added or deducted on the basis of quantities of work involved, for each item in place in the unit indicated.

All Work Included in this Project Shall be Completed for the lump sum of:

_____**Dollars**

($_____), TOTAL BASE BID

ALLOWANCE: $50,000.00

TOTAL BASE BID W/ ALLOWANCE: $_____Dollars

($_____), TOTAL BASE BID WITH ALLOWANCE

Please note that the list above is not intended to include all items required to complete the base bid scope of work but can and shall be used to adjust the contract prior to or after award – in the best interest of the City of Providence.

BIDDER: _____

ABBREVIATIONS

R&S	Remove & Stockpile	EA	Each
R&D	Remove & Dispose	LF	Linear Foot
D&I	Deliver & Install, owner provided	SF	Square Foot
F&I	Furnish & Install	CY	Cubic Yard
LS	Lump Sum	TN	Ton

ADD ALTERNATES:

1. **Add Alt #1 – F&I Parking Lot Articulated Blocks (Southern Section)- Complete - Per Lump Sum**

_____ **LS** **$**_____

price in writing

2. **Add Alt #2 – F&I Geogrid Reinforced Parking with granite cobble edge (Southern Section of main parking area)- Complete - Per Lump Sum**

_____ **LS** **$**_____

price in writing

3. **Add Alt #3 – F&I Geogrid Reinforced Parking with granite cobble edge (Middle and Northern Sections)- Complete - Per Lump Sum**

_____ **LS** **$**_____

price in writing

4. **Add Alt #4 – F&I Solar Integrated Light Bollards Complete - Per Lump Sum**

_____ **LS** **$**_____

price in writing

5. **Add Alt #5– F&I Solid curved benches with back rest (Surface Mount) - Per Lump Sum**

_____ **LS** **$**_____

price in writing

6. **Add Alt #6– F&I 6' Benches (Mount varies) - Per Lump Sum**

_____ **LS** **$**_____

price in writing

7. **Add Alt #7– F&I 55 gallon trash receptacles with dome lid - Per Lump Sum**

_____ **LS** **$**_____

price in writing

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BIDDER: _____

UNIT PRICES – BASE BID:

1. **Mobilization and Demobilization- Per Lump Sum**

_____ **LS** **$**_____

price in writing

2. **F&I Temporary Tree Protection, complete. – Per Linear Foot**

_____ **LF** **$**_____

price in writing

3. **F&I Erosion Control Silt Sock, complete. – Per Linear Foot**

_____ **LF** **$**_____

price in writing

4. **F&I Temporary inlet protection, complete. – Per Each**

_____ **EA** **$** _____

price in writing

5. **F&I Aqua Barrier Cofferdam complete. – Per Linear Foot**

_____ **LF** **$**_____

price in writing

6. **Sawcut Ex Asphalt pavement – Per Linear Foot**

_____ **LF** **$**_____

price in writing

7. **R &D cast in-place concrete curbing Per Linear Foot**

_____ **LF** **$**_____

price in writing

8. **Strip Turf & Remove Turf & Topsoil to +/- 16" Depth. – Per Cubic Yard**

_____ **CY** **$**_____

price in writing

9. **Rough Grading of Site per Grading Plan. – Per Cubic Yard**

_____ **CY** **$**_____

price in writing

10. **F&I Boardwalk – FRP Piles, complete. – Per Each**

_____ **EA** **$**_____

price in writing

11. **F&I Boardwalk – Superstructure, complete. – Per Square Foot**

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BIDDER: _____

_____ 6,610 SF $_____

price in writing

12. **F&I Boardwalk FRP Load Test –Complete. – Per EA**

_____ EA $_____

price in writing

13. **F&I Boardwalk – composite decking, complete. – Per Linear Foot**

_____ 5,642 LF $_____

price in writing

14. **F&I Boardwalk – Stainless Steel Railings, Complete. – Per Linear Foot**

_____ 871 LF $_____

price in writing

15. **F&I Wood curb mounted to Boardwalk, Complete. – Per Linear Foot**

_____ 871 LF $_____

price in writing

15. **F&I Solar Integrated Light Bollards Complete - Per Each**

_____ EA $_____

price in writing

16. **F&I 4" Permeable concrete walkway, complete. – Per Cubic Foot**

_____ 3,402 CF $_____

price in writing

17. **F&I Wood guard rail, complete. – Per Linear Foot**

_____ LF $_____

price in writing

18. **F&I Boat Ramp and ADA Parking, Articulated concrete block - complete. – Per Square Foot**

_____ SF $_____

price in writing

19. **F&I Southern Parking Area, articulated concrete block - complete. – Per Square Foot**

_____ SF $_____

price in writing

20. **F&I Southern Parking Area, ¾" crushed stone - complete. – Per CY**

_____ CY $_____

price in writing

21. **F&I Geogrid Reinforced Parking with granite cobble edge- Per Square Foot**

_____ SF $_____

price in writing

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BIDDER: _____

22. F&I 6' Dumor TMA Bench (Mount varies) - Per Lump Sum

_____ **EA** **$**_____

price in writing

23. F&I Solid curved benches with back rest (Surface Mount) - Per Lump Sum

_____ **LS** **$**_____

price in writing

24. F&I 55 gallon trash receptacle with dome lid - Per Each

_____ **EA** **$**_____

price in writing

25. Remove and reset existing boulders at boat ramp – Per Each

_____ **EA** **$**_____

price in writing

26. F&I Cornus sericea 'Cardinal' #5 - complete. – Per Each

_____ **EA** **$**_____

price in writing

27. F&I Ilex verticillate 'Afterglow' #5 - complete. – Per Each

_____ **EA** **$**_____

price in writing

28. F&I Rhododendron viscosum #5 - complete. – Per Each

_____ **EA** **$**_____

price in writing

29. F&I Viburnum dentatum #5 - complete. – Per Each

_____ **EA** **$**_____

price in writing

30. F&I Aster novi-beingii 'Professor Anton Kippenberg' #1- complete. – Per Each

_____ **EA** **$**_____

price in writing

31. F&I Carex stricta #1- complete. – Per Each

_____ **EA** **$**_____

price in writing

32. F&I Echinacea purpurea 'Pica Bella' #1- complete. – Per Each

_____ **EA** **$**_____

price in writing

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BIDDER: _____

33. F&I Iris veriscolor #1- complete. – Per Each

_____ **EA** **$**_____

price in writing

34. F&I Matteuccia struthiopteris #1- complete. – Per Each

_____ **EA** **$**_____

price in writing

35. F&I Panicum virgatum 'Shenandoah' #1- complete. – Per Each

_____ **EA** **$**_____

price in writing

36. F&I Sorghastrum nutans 'Indian Steel' #1- complete. – Per Each

_____ **EA** **$**_____

price in writing

37. Loam and Seed - complete – Per Square Foot

_____ **SF** **$**_____

price in writing

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BIDDER: _____