REQUEST FOR PROPOSALS

For Construction and Engineering Services for:

Repair Pier and Wave Screen on Spectacle Island
Boston Harbor Islands National and State Park

RFP Issue Date: October 20, 2017
RFP Due Date: November 3, 2017

Questions:	Questions from potential bidders should be submitted in writing by 5:00PM EST on October 30, 2017 to Jack Murray jmurray@bostonharbornow.org and will be answered in writing with follow-up calls scheduled as needed.
Pre-Bid Site Visit:	A pre-bid site visit to review project locations and needs will be required. Pre-bid will occur on October 27, 2017, 9:00 – 11:00 AM. Boat will depart from Hewitt's Cove. RSVP required to Susan Kane, 617-438-4194, susan.kane@state.ma.us
Interviews:	Interviews anticipated the week of November 6 – 10, 2017

Boston Harbor Now
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Boston, MA 02109
BostonHarborNow.org

REPAIR PIER AND WAVE SCREEN AT SPECTACLE ISLAND

1.0 GENERAL INFORMATION

1.1 Location

This project is located in the Boston Harbor Islands National and State Park, Boston, Massachusetts. The project encompasses repairs to the dock and wave screen on the west side of Spectacle Island (42°19'16.5"N+70°59'19.8"W).

1.2 Background

The scope of this contract is to complete high priority deferred maintenance repairs of docks and piers on Spectacle Island (SI). Based upon an assessment by Bourne Consulting (BCE) started in November 2015, the immediate repairs covered by this project are needed in the next year to maintain essential operation of visitor facilities and improve health/safety conditions. Repairs replacement in-kind to include new cleats, wear pads and transition plates.

Spectacle Island is in Boston, MA, and is owned, operated, and maintained by Massachusetts Department of Conservation and Recreation (DCR). The pier is L-shaped, and composed of two sections, the approach Pier and the Main Pier. The Approach Pier measures approximately 500’ x 40’ and connects the island to the Main Pier. The Main Pier measures approximately 270’ x 50’ and is connected to the Approach Pier at the northeast corner. The pier is concrete pile supported, with concrete pile caps and deck.

The superstructure of the pier is constructed of reinforced concrete pile caps running parallel to each bent, and precast concrete double-t deck plans with cast-in-place concrete topping.

The fender system consists of timber fender piles typically spaced at approximately 6’-3” OC along the entire west face and for a length of 175’ on the north face. Behind each fender pile is a circular rubber pad and two chains securing the top of each pile to the pier. The fender system also has an upper wale and choke. Fender piles are located on the west face and a portion of the north face.

The wave fence runs along the east face of the Main Pier and the south face of the Approach Pier. It consists of vertical timber boards bolted to steel angles and channels which are bolted to the steel mooring piles. Several sections of wave fence need to be repaired and reinforced.

On the inshore side of the pier, there is an embayment area which has steel barge with a passenger access system as well as a system of concrete floats for private watercraft. The steel barge is made up of two adjacent 16’ x 100’ barges that are connected by

steel angles and pins. The passenger access from the barge to the pier consists of four aluminum 30' gangways, ramps and platforms.

Wind and waves come predominantly from the north and from the west, while wakes from boats and commuter ferries through the channel typically come from the west.

1.3 Schedule

Pre-bid Site Visit:

A pre-bid site visit to review project locations and needs will be required. Pre-bid will occur on October 27, 2017, 9:00 – 11:00 AM. Boat will depart from Hewitt's Cove. RSVP required.

Construction:

Construction shall not begin until the Contracting Officer (CO) has issued the Start Work Notice. No on-site work shall occur from one week prior to Memorial Day through Labor Day.
Construction completed no later than December 15, 2017

As-Constructed Drawings:

As-Constructed Drawings requested identifying method and hardware to be used to attach and reinforce wave screen.

1.4 Information

Points of Contact:

Contractual:

Contracting Officer (CO): Jack Murray, 617-223-8530, jmurray@bostonharbornow.org

Technical:

Project Manager (PM) Susan Kane, 617-438-4194, susan.kane@state.ma.us

2.0 REQUIREMENTS

2.1 Scope of Work and Project Summary/Requirements

This project is for the installation of critical safety and operation components at Spectacle Island within the Boston Harbor Islands National and State Park. Contract work includes the mobilization for and repair/replacement of dock/pier components as specified below:

- Provide and replace/install (1) LS of aluminum decking on the gangways,
- Provide and replace/install (8) UHMW wear pads on the gangways,
- Provide and replace/install transition plate at ramp,
- Repair and relocate (2) ladders along the pier,

- Remove (16) vertical rubber fenders from the pier and provide/replace in designated locations, and
- Repair the timber wave fence at the Spectacle Marina
    - Remove sections from the east end; and,
    - Repair lower connections along 90% of the wave screen between the lower channel and the support piles which has failed

The project will include, but not be limited to, the following:

- A pre-bid site visit to review project locations and needs
- Submit list of and obtain required permits for construction.
- Provide schedule of construction work.
- Secure work area.
- Perform materials testing/mockups prior to installation.
- Construct project
- Provide as-constructed drawings.

The following documents will be provided to the contractor:

- Spectacle Island Final Report dated February 2016
- Map of Boston Harbor Islands
- BHI NPS Pre-Design Report

The proposal must be in detail with itemized lists of equipment, materials, labor, overhead, profit, and bond markup per item. Each item must be listed at its estimated cost to you. Labor must be itemized by craft and hourly rate paid. If the costs of fringe benefits are not itemized, it is assumed that there are none or that they are included in the hourly rate shown. Additionally, mobilization shall be broken down to items/activities included and not as a percentage or lump sum.

2.2 Project Meetings

Preconstruction Meeting: The following deliverables shall be submitted a minimum of one week prior to the Preconstruction Meeting.

- Letter designating your Project Superintendent
- Project Schedule with construction portion fully developed
- Schedule of Values
- Accident Prevention Program
- A list of subcontractors for this project (must be same as in your proposal)
- Written statements from subcontractors certifying compliance with applicable labor standard clauses
- Evidence of liability insurance coverage and workmen's compensation for the contractor and all subcontractors
- Waste Management Plan
- Quality Control Plan
- Storm Water Pollution Prevention Plan Submittal process

- List of required permits

Progress Meetings: The Contractor shall participate in weekly telephone conference calls with the Contracting Officer, and other project team members to update them on the following meeting agenda items:

- Approval of minutes of previous meetings
- Submittal status
- Review of off-site fabrication and delivery
- Requests for Information (RFI's) and issues
- Work in progress and projected
- Status of Project Record Drawings and O&M Manuals

2.3 Project Schedule

General: The Contractor shall provide two (2) color copies of the project schedule after award and before the design meeting. The schedule shall include a detailed design phase with design deliverable submission dates, review periods as well as a summary construction schedule with important milestones included for both phases.

Purpose: The purpose of the project schedule is to ensure adequate planning, coordination, scheduling, and reporting during execution of design and construction activities. The project schedule will assist the Contractor and the Contracting Officer in monitoring the progress of the work, evaluating proposed changes, and processing the progress payment requests.

Schedule Development: The project schedule shall cover the entire contract period. The late finish date of the project schedule shall be the same date as the established completion date of the contract.

The Contractor shall use the Critical Path Method (CPM) with limited use of lead or lag durations between schedule activities. The Contractor's project schedule shall consist of procurement activities (including mobilization, submittal, and the fabrication and delivery of key and long-lead procurement items) and construction activities.

In developing the project schedule, the Contractor shall be responsible for ensuring that subcontractor work at all tiers, as well as its own work, is included in the project schedule.

The project schedule shall show the sequence and interdependence of activities required for complete performance of the work. It shall be cost and resource loaded. The Contractor shall be responsible for ensuring all work sequences are logical and the project schedule shows a coordinated work plan. Proposed durations assigned to each activity shall be the Contractor's best estimate of time required to complete the activity considering the scope and resources planned for the activity. Resource loading of each activity shall list all personnel by labor category and equipment type and capacity

proposed to complete the activity in the duration shown. Include permit requirements and constraints. Seasonal weather conditions shall be considered and included in the planning and scheduling of all work influenced by high or low ambient temperatures, wind and/or precipitation to ensure completion of all work within the contract time.

2.4 Construction Requirements

Environmental and Sustainability Requirements: Specific sustainability requirements generated in design will dictate more stringent environmental requirements for this project. The following are general requirements:

- Site Disturbance: Minimize the construction limits of the project to reduce the project's impact on the site.

- Toxic Chemicals: Avoid materials that can leach toxic chemicals into the ground water. Do not allow toxic chemicals to enter sewers or storm drains or contaminate land or any body of water.

- Habitats: Protect natural habitats and ecological systems on facility site (as identified in the Environmental Assessment).

- Noise: Minimize noise generation during construction. Operate power equipment in accordance with local noise restrictions.

- Waste Management: Employ processes that ensure the generation of as little waste as possible. Waste disposal in landfills shall be minimized.

The Contractor shall designate an on-site party (or parties) responsible for instructing workers and overseeing the environmental and sustainability requirements of this project. Distribute copies of the environmental and sustainability requirements to the Job Site Foreman and each Subcontractor.

Construction Zones (Protection of Public): Fence, barricade, or otherwise block off the immediate work area to prevent unauthorized entry. Erect and maintain fencing, barricades, lights, signals, and warning signs in accordance with the most current version of the Manual on Uniform Traffic Control Devices (MUTCD).

2.5 Construction Submittals

Action Submittals: Written, graphic information, and physical samples that require Government's responsive action.

- Product Data: Collect information into a single submittal for each element of construction and type of product or equipment
- Shop Drawings: Prepare Project-specific information, drawn accurately to scale.

- Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
- Construction Materials: The Contractor is encouraged to submit for approval products made out of recycled or environmentally responsible material.

Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Review them for legibility, accuracy, completeness, and compliance with Contract Documents.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
2. Partial submittals are not acceptable, will be considered non-responsive, and will be returned without review.

Processing Time: Allow enough time for submittal review, including time for re-submittals. Time for review shall commence when an e-mail notification is received by the Contracting Officer. When the Contracting Officer has completed their review, an e-mail notification will be sent to the Contractor indicating the submittal has been processed. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including re-submittals.

1. Action Submittals: Allow 30 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required.
2. Informational submittals: Allow 10 days for review of each submittal.

2.6 Digital Images

Provide ***25*** existing condition images, and ***10*** images per week documenting construction. Take appropriate digital images documenting construction progress and problems, such as capturing items that will not be seen later, etc. Post digital images on a weekly basis, or as directed by Contracting Officer, of each work activity.

2.7 Quality Control

The quality of all work shall be the responsibility of the Contractor. Testing shall be the responsibility of an independent testing laboratory. Inspect and test all work as needed to ensure that the quality of materials, workmanship, construction, finish, and functional performance is in compliance with applicable specifications and drawings.

Quality Control Staff: The Contractor's designated Quality Control Supervisor shall be on the project site whenever contract work is in progress.

The Contractor's job supervisory staff may be used to assist the Quality Control Supervisor supplemented, as necessary, by additional certified testing technicians.

Off-Site-Control: Items that are fabricated or assembled off-site shall be inspected for quality control at the place of fabrication.

Documentation: Maintain Quality Control Daily Reports, Daily Test Report Information Sheets, and Accessibility Inspection Reports of quality control activities and tests.

Quality Control Daily Reports may not be substituted for other written reports required under clauses of the contract, such as Disputes, Differing Site Conditions, or Changes.

Enforcement: The Contractor shall stop work on any item or feature pending satisfactory correction of any deficiency noted by the quality control staff or the Contracting Officer.

Working Hour Restrictions: All work and deliveries shall be limited to the weekday hours of 7:00 am to 5:00 pm unless otherwise approved by the Contracting Officer. No work shall occur on State of Federal holidays or weekends without prior approval.

Seasonal Restrictions: No on-site work shall occur from one week prior to Memorial Day through Labor Day.

Fire Protection Equipment: Observe and enforce standards of fire prevention. No open fires shall be allowed.

Vehicles and Equipment: Provide one fire extinguisher on each vehicle or piece of equipment. Extinguishers shall have a minimum UL rating of 2-A:10-B:C. A capable and qualified person shall be placed in charge of fire protection. The responsibilities shall include locating and maintaining fire protective equipment and establishing and maintaining safe torch cutting and welding procedures.

Sanitary Facilities: Provide and maintain temporary toilet facilities in accordance with State Health Department and National Park Service regulations. Enclosures shall be weatherproof, sight proof and of sturdy construction. Completely remove sanitary facilities on completion of work.

Access: Coordinate construction efforts with the Contracting Officer such that there is minimal impact to the work of the DSC, BHN, and NPS personnel and the visiting public. During construction of the scheduled facilities, the Contractor shall have continuous access to the site.

2.8 Accident Prevention

Accident Prevention Program: Prior to the Preconstruction Meeting submit an accident prevention program. The program must be accepted by the NPS before any on site work can begin. The program shall comply with OSHA and project requirements. Include the following:

Name of responsible supervisor to carry out the program; monthly safety meetings; first aid procedures; outline of each phase of work, hazards associated with each phase and methods proposed to ensure property protection, and safety of the public, staff and Contractor employees; training; planning for possible emergency situations; housekeeping and fire protection.

Accident Reporting: Reportable accidents, defined as death, occupational disease, traumatic injury to contractor's personnel, government personnel, or the public, property damage of any accident in excess of $100 and fires, must be reported within seven days

Accident Prevention Products: Provide the following:

- First aid facilities.
- Personnel protective equipment: Meet requirements of NIOSH and MSHA.
- Emergency instructions, including telephone numbers and reporting instruction for ambulance, physician, hospital, fire department and park police. Place in conspicuous locations at the worksite.
- Adequate egress at all times in accordance with the Standard for Safeguarding Construction, Alteration, and Demolition Operations (NFPA 241).

Training: Provide training for first aid and hazardous material handling and storage.

2.9 Project Close-out

As-Constructed Drawings: Provide as-constructed drawings incorporating contract modifications; and other applicable shop drawings, sketches, and data.

Provide as-constructed drawings in the following formats:

- 4 half-size paper copies (2-DCR, 2-NPS)
- 2 CD-ROMS, each with drawing files in both PDF and AutoCAD formats)
- 1 full-size 20 pound bond paper copy

Posted Operating Instructions: Furnish operating instruction attached to or posted adjacent to equipment. Include wiring diagrams, control diagrams, control sequence, start-up adjustment, operation, lubrication, shutdown, safety precautions, procedures in case of equipment failure and other items of instruction recommended by manufacturer.

Cleaning: Before scheduling the final inspection, remove all tools, equipment, surplus materials, and rubbish. Restore or refinish surfaces that are damaged due to work of this contract to original condition. Remove grease, dirt, stains, foreign materials, and labels from finished surfaces. Thoroughly clean building interiors. Pick up and remove all construction debris from the site. At time of final inspection, project shall be thoroughly clean and ready for use.

Before submitting a request for final inspection, submit the following:

- Project Record Drawings and As-Constructed Drawings: As specified above.
- Guarantees and Bonds: As specified in Performance Requirements and Specifications.
- Spare Parts and Materials: As specified in Performance Requirements and Specifications
- Operation and Maintenance Data: As specified below and in Performance Requirements and Specifications.
- Special Tools: One set of special tools required to operate, adjust, dismantle, or repair equipment. Special tools are those not normally found in possession of mechanics or maintenance personnel.

Operation and Maintenance Data: Provide three sets of 3-ring binders with operation and maintenance data, to the Contacting Officer for review, prior to the final inspection. Data shall include manufacturer's standard literature, equipment data sheets, vendor-furnished as-built drawings; custom written data not included in manufacturer's standard literature; schedules, warranties, parts lists, test results, and subcontractor list.

2.10 Substantial Completion and Final Inspection

Submit written certification to the CO that the project, or designated portion of project, is substantially complete, and request a final inspection. Upon receipt of written request that project is substantially complete, the Contracting Officer will proceed with inspection within 10 days of receipt of request or will advise the Contractor of items that prevent the project from being designated as substantially complete.

When work is determined to be substantially complete, the Contracting Officer will prepare a list of deficiencies ("Punch List") to be corrected before final acceptance. The Contracting Officer will issue a Letter of Substantial Completion. If work is not determined to be substantially complete, the Contracting Officer will notify the Contractor in writing. After completing work, the Contractor shall resubmit certification and request a new final inspection.

Acceptance of the work: After all deficiencies have been corrected, the Contracting Officer will issue a Letter of Final Acceptance.

ATTACHMENT 1 – SITE INSPECTIONS PHOTOS

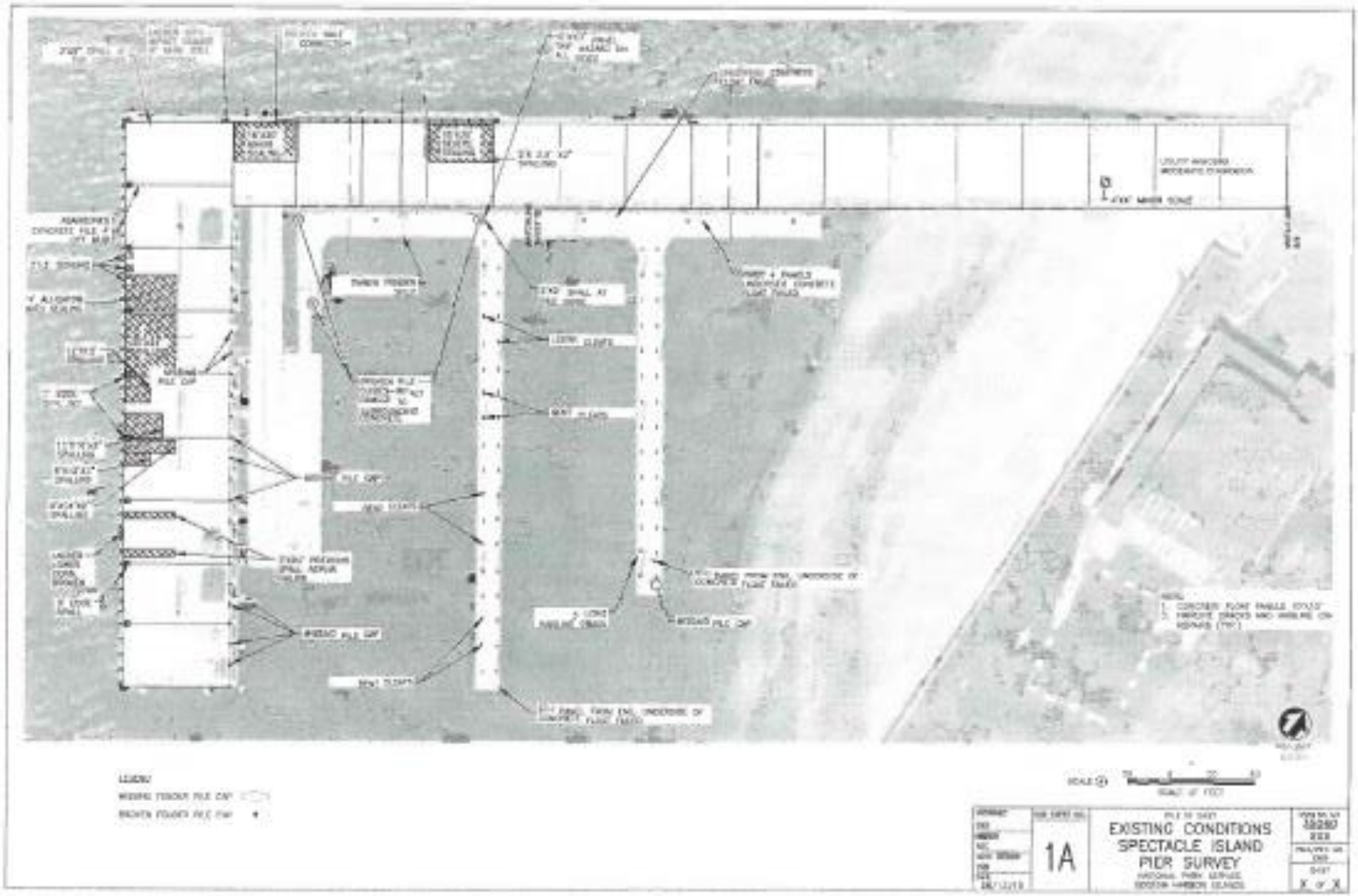
Damage to wave fence

Damage to wave fence, held together with ratchet straps

Neoprene circular pad connection failure due to scaling concrete

Impact damage to ladder with moderate corrosion

ATTACHMENT 2 – SITE PLAN



ATTACHMENT 3 – BOSTON HARBOR ISLANDS MAP

Boston Harbor Islands

Repair Pier and Wave Screen

- Spectacle Island
- Spectacle Island (Pier)
- Pemberton Point
- Hingham Shipyard