REQUEST FOR QUALIFICATIONS

M524-D1 – BERTHS 11 & 12 PILES, BULKHEAD & APRON REPAIRS

SUPPLEMENTAL INFORMATION PACKAGE
LEGAL NOTICE
REQUEST FOR QUALIFICATIONS

The MASSACHUSETTS PORT AUTHORITY (Authority) is soliciting consulting services for **MPA CONTRACT NO. M524-D1, BERTHS 11 & 12 PILES, BULKHEAD & APRON REPAIRS, CONLEY CONTAINER TERMINAL, SOUTH BOSTON, MASSACHUSETTS**. The Authority is seeking qualified multidiscipline consulting firms/teams, with proven experience to provide professional services including planning, design, construction and resident inspection related services. The Consultant must be able to work closely with the Authority and other interested parties in order to provide such services in a timely and effective manner.

A Supplemental Information Package will be available starting **March 23, 2016 at 10:00 AM** on the Capital Bid Opportunities webpage of Massport [http://www.massport.com/doing-business/_layouts/CapitalPrograms/default.aspx](http://www.massport.com/doing-business/_layouts/CapitalPrograms/default.aspx) as an attachment to the original Legal Notice, on COMMBUYS ([www.combuys.com](http://www.combuys.com)) in the listings for this project. If you have problems finding it, please contact Susan Brace at Capital Programs [SBrace@massport.com](mailto:SBrace@massport.com). The Supplemental Information Package will provide detailed information about the Scope of Work, Selection Criteria and Submission Requirements.

In recognition of the unique nature of the project and the services required to support it, the Authority has scheduled a **Consultant Briefing to be held at 10:00 AM on March, 31, 2016** at the Capital Programs Department, Suite 209S, Logan Office Center, One Harborside Drive, East Boston, Massachusetts 02128. At this session, an overview of the project will be provided, the services requested by the Authority will be described, and questions will be answered.

By responding to this solicitation, consultants agree to accept the terms and conditions of Massport’s standard work order agreement, a copy of the Authority’s standard agreement can be found on the Authority’s web page at [www.massport.com](http://www.massport.com). The Consultant shall specify in its cover letter that it has the ability to obtain requisite insurance coverage.

This submission, including the litigation and legal proceedings history in a separate sealed envelope as required shall be addressed to Houssam H. Sleiman, PE, CCM, Director of Capital Programs and Environmental Affairs and received no later than 12:00 Noon on **Thursday, April 21, 2016** at the Massachusetts Port Authority, Logan Office Center, One Harborside Drive, Suite 209S, Logan International Airport, East Boston, MA 02128-2909. Any information provided to the Authority in any Proposal or other written or oral communication between the Proposer and the Authority will not be, or deemed to have been, proprietary or confidential, although the Authority will use reasonable efforts not to disclose such information to persons who are not employees or consultants retained by the Authority except as may be required by M.G.L. c.66.

MASSACHUSETTS PORT AUTHORITY
THOMAS P. GLYNN
CEO AND EXECUTIVE DIRECTOR
Background:

The Paul W. Conley Container Terminal (Conley Terminal) in South Boston, MA, operated by the Massachusetts Port Authority (Massport) is a vital transportation and economic resource in New England. Conley Terminal is the region’s only full service container terminal with the only deep-water access capable of serving large ships in the Port of Boston. The terminal facilitates the movement of goods to New England’s markets with speed and efficiency, ensuring that the region’s 14 million consumers have the products they need, when they need them. There are currently 2,700 jobs associated with Conley Terminal, which provides access to three waterborne trade lanes and serves six of the world’s top 10 container shipping lines. The 101-acre facility is expected to process nearly 220,000 twenty-foot equivalent units (TEU) in FY2015. The Terminal is located less than two miles from major interstate highways serving all inland directions. A dedicated freight corridor (DFC) that will separate trucks from local traffic to alleviate congestion and reduce impacts to the local neighborhood is currently under construction by Massport. Berth 11 and Berth 12 are the only two currently active berths at Conley Terminal. The rehabilitation of Berths 11 and 12 as part of this project will optimize the terminal and accommodate new growth.

Conley Terminal handles nearly 1.5 million metric tons of cargo each year. Of the approximately 100 acres at the terminal, 60 acres are used for containerized cargo and 40 acres are set aside for facilities, equipment repair and storage, Customs and Border Patrol, and roadways. Key containerized cargo moving through Conley Terminal includes: seafood; beer and wine; footwear; apparel; furniture; waste paper; and scrap metal. A recent inspection report conducted in 2013 of Berths 11 and 12 is included as Appendix A.

FIGURE 1: Location Map – Existing Conditions
Conley Terminal features approximately 2,000 feet of continuous berth (Berths 11-12) served by six (6) low-profile ship-to-shore (STS) cranes. On the backland, the Terminal is served by 12 rubber tire gantry cranes and houses 400 reefer outlets. The Terminal also includes a 10-lane gate facility with average truck turn-times of approximately 30 minutes. At present, Berth 11 has limited use due to the deterioration of the pier and apron. The current dredge depth at Berth 11 is -35 feet Mean Lower Low Water (MLLW), which is not deep enough to handle many of the ships that call today and will not support the larger ships expected to call in the future. Current operations are primarily limited to one active berth (Berth 12, dredged to -45 feet MLLW).

Ongoing investments in equipment, dock improvements and a more than $350 million federal and state investment in Harbor dredging will ensure that Conley Terminal remains competitive into the future. The Boston Harbor Deep Draft Navigation Improvements Project is currently in design, with construction expected to start in late 2016 and completion anticipated in late 2018. This federal dredging project, managed by the US Army Corps of Engineers and partially funded by Massport, will deepen the North Entrance Channel from -45 feet to -51 feet and the Main Channel from -40 feet to -47 feet. The Harbor dredging and berth improvements at Berths 11 will ultimately create a 50 foot deep berth at Conley Terminal, allowing the terminal to serve the larger container vessels that will be calling the East Coast after completion of the Panama Canal expansion.

The Panama Canal widening is significantly changing the shipping industry, including the
transition to increasingly larger container vessels. The proposed repairs are required to ensure continued relevance of the Port of Boston in light of these changes, and to leverage the investments made to date and the planned Boston Harbor Dredging.

Significant rehabilitation of Berth 11 is necessary to accommodate and efficiently process ships calling on the Port, today and in the future. Updates to Berth 11 include rehabilitation of the existing pier apron and bulkhead, which are in poor condition, as well as installation of a new cut-off wall to support the deeper draft required by future vessels.

**Berth 11 Description:**

Berth 11 is one of the two active container handling berths at the Conley Terminal facility. The berth is 1000 feet in length and can accommodate Panamax container ships up to 1000 feet long with a beam of 110 feet and a draft up to 35 feet. The pier supports three low profile ship to shore (STS) container handling cranes for loading and unloading the ships, but can accommodate adjacent cranes from Berth 12, which can be moved via the existing crane rail system as needed.

The pier was originally constructed in 1942 and a new concrete deck and beams were added in 1980 over the original timber piles. New crane rail foundations were also added in 1980 consisting of steel pipe piles with concrete beams to allow the use of larger STS cranes. A major rehabilitation was performed in 2000 to repair deteriorated timber piles and provide additional stability to the structure but no major pile replacement was performed and the majority of the piles remain as the 1942 timber piles.

A recent inspection in 2013 found a number of defects on the pier structure including the following:

- Hairline cracking and minor spalls along the deck
- Continued settlement at previously repaired area of the deck
• Deteriorated joint filler
• Missing 90% of the cross bracing
• Marine borer damage in 20% of the timber piles
• 50%-100% section loss in 5% of the timber piles

Overall, the concrete deck structure was rated to be in satisfactory condition but the timber piles were rated to be in fair to poor condition. There are a total of approximately 2,800 timber piles supporting the pier deck and, based on the 2013 inspection findings, up to 20% (560 piles) have damage due to marine borers. 5% of the timber piles are noted to have up to 100% section loss i.e. they are missing completely. The missing and deteriorated piles have a major impact on load capacity of the deck and will ultimately impact the safety of trucks and container handling equipment using the pier.

A timber bulkhead is present along the shoreward edge of the pier deck and this bulkhead supports the filled and paved landside container handling area. The same inspection in 2013 found a number of defects on the structure including the following:

• Voids in timber sheetpile bulkhead with exposed geotextile, and
• Rotted sheetpile support members.

Overall, the bulkhead was rated to be in poor condition. The bulkhead retains the fill material inshore of the pier deck and the holes in the bulkhead are now allowing fill material to leak away. The poor condition of the bulkhead also impacts the allowable load capacity on the inshore apron. The end result is settlement and development of sinkholes and potholes in the container handling area behind the pier with potential safety impacts for operators of any equipment in this area. The reduced load capacity results in restrictions on terminal operations and impacts on terminal efficiency.
Proposed repairs to address the poor condition of the timber piles will include cutting holes in the existing deck structure, driving new piles and construction of new concrete cap beams to transfer support from the new piles to the deck. Completion of these repairs will restore load capacity and ensure the ongoing safety of all pier operations.

Proposed repairs to address the poor condition of the timber bulkhead will include driving new steel sheetpiles inshore of the existing bulkhead to restore load capacity and prevent any further fill loss.

The existing berth cross section consists of a pile supported concrete pier deck with a riprap slope extending down from the inshore edge of the pier to the full berth depth at the outshore edge of the pier. Timber piles are driven into the slope below the pier and the steel crane support piles extend down to approximately 50 feet below MLLW.

The existing Berth 11 limiting depth is approximately 35 feet. This limiting depth requires that most ships currently using the terminal are only partly loaded to avoid exceeding available depth and the risk of vessel grounding. Current construction of Berth 11 is unable to support the planned increase in depth to -50 MLLW without rehabilitation.

Berth 12 Description:
Berth 12 was designed in the early 1940’s to accommodate the export of military equipment and material and was constructed between 1942 and 1945 as part of an overall area development. In 1993, the original timber wharf construction was replaced with a steel pile supported concrete wharf. Berth 12 is approximately 950 linear feet long with a width of 115 feet along the eastern portion of the
wharf and 119 feet along the western portion of the wharf. The pier supports three low profile ship to shore (STS) container handling cranes for loading and unloading the ships, but can accommodate adjacent cranes from Berth 11, which can be moved via the existing crane rail system as needed. A steel sheet pile bulkhead extends along the landside edge (south) of the wharf.

The wharf consists of a 24-inch deep, two-way reinforced concrete deck; concrete crane beams along the north and south fascia; and steel pipe piles. The pipe piles are 24-inch diameter with wall thickness of 0.5 inches from the top of the pile to below mudline, 0.375 inches below the mudline to 8 feet above the pile toe, and 0.5 inches for the bottom 8 feet. Pile bents are spaced at 20 feet on center with piles at 16 feet on center within each bent. Along both crane beams, piles are spaced at 6 feet-8 inches on center. Internal wiring connecting all the piles is in place for an impressed cathodic protection system. However, the full impressed current system installation was deferred during the 1993 construction.

Riprap stone provides slope protection beneath the wharf. The slope extends at an approximate 2:1 slope (horizontal:vertical) from the landside crane beam towards the water, to Pile Row B, where it terminates with a precast concrete toe protection.

Mooring hardware along Berth 12 consists of 80-ton single bitt bollards spaced 60 feet on center and through-bolted to the waterside (north) crane beam. Fender units are spaced 40 feet on
center along the north carne beam/fascia and are comprised of mounting hardware and chains, rubber fenders and a frontal frame with low-friction facing panels.

Scope Of Work:
The consultant-specific services will include: design services for the rehabilitation of the existing Berth 11 bulkhead, deck, and pilings at Conley Container Terminal in South Boston, design of new fender systems for Berths 11 and 12, design of maintenance dredging to -50 MLLW for Berth 11, repairs to the existing gantry crane rail, survey, inspection, including underwater inspection, permitting, preparation of inspection reports, studies and cost estimates, development of contract bid documents, oversight of construction activities, and resident engineering services during construction. The location of work will be at the Conley Container Terminal in South Boston, Massachusetts.


Multiple projects will be undergoing design at Conley Container Terminal concurrent with the work of the consultant on this project. Such projects include: geotechnical investigations for other potential rehabilitation or construction projects in the vicinity of Conley Container Terminal and expansion or rehabilitation of electrical infrastructure in the vicinity of Conley Container Terminal. Seamless coordination and/or integration of the work of consultants on those adjacent projects is of primary importance. Experience on similar projects and understanding of the work involved in the rehabilitation of Berths 11 and 12 is of significant importance, as is a local presence since the Consultant must be able to work closely with the Authority and other interested parties in order to provide services in a timely and effective manner. Finally, ability to design to a fixed available budget is a critical aspect of the work.

In recognition of the unique nature of the project and the services required to support it, the Authority has scheduled a Consultant Briefing to be held at 10:00 AM on Thursday, March 31, 2016 at the Capital Programs, Suite 209S, Logan Office Center, One Harborside Drive, East Boston, Massachusetts 02128. At this session, an overview of the project will be provided, the services requested by the Authority will be described, and questions will be answered.

Submissions Requirements:
Each submission shall include a Statement of Qualifications that provides detailed information in response to the evaluation criteria set forth below and include Architect/Engineer & Related Services questionnaires SF 330 (www.gsa.gov/portal/forms/download/116486) with the appropriate number of Part IIs. DBE Certification of the prime and subconsultants shall be current at the time of submittal and the Consultant shall provide a copy of the DBE certification.
letter from the Supplier Diversity Office, formerly known as State Office of Minority and Women Business Assistance (SOMWBA) within its submittal. The Consultant shall also provide an (1) original and nine (9) copies of litigation and legal proceedings information, **signed under the pains and penalties of perjury**, in a separate sealed envelope entitled “Litigation and Legal Proceedings”. See [http://www.massport.com/business-with-massport/capital-improvements/resource-center](http://www.massport.com/business-with-massport/capital-improvements/resource-center) for more details on litigation and legal proceedings history submittal requirements.

*The Authority may reject any application if any of the required information is not provided: Cover Letter, Insurance Requirements, Litigation and Legal proceedings, and SF330 Part IIIs for the Prime and every sub-consultant. The above-mentioned information shall be highlighted in the Cover Letter.*

The submission shall be evaluated on basis of:

1. current level of experience and knowledge of the team for similar projects, particularly the Project Manager,
2. geographic location and availability of the Project Manager, resident inspectors and other key personnel to be assigned to the project,
3. experience and expertise of subconsultants,
4. demonstrated ability to perform work with minimal disruption to facility operations,
5. familiarity with Massachusetts public bid laws
6. cost management and scheduling capabilities,
7. DBE and affirmative action efforts, please indicate the proposed % of DBE participation
8. current level of work and past performance with the Authority,
9. experience with sustainable design concepts and resiliency, and
10. project understanding and technical approach to this project.

The selection shall involve a two-step process including the shortlisting of a minimum of three firms based on an evaluation of the Statements of Qualifications received in response to this solicitation, followed immediately by a final selection of the consultant by the Authority. The Authority reserves the right to interview the firms prior to final selection, if deemed appropriate.

By responding to this solicitation, consultants agree to accept the terms and conditions of Massport’s standard work order agreement, a copy of the Authority’s standard agreement can be found on the Authority’s web page at [www.massport.com](http://www.massport.com). The Consultant shall specify in its cover letter that it has the ability to obtain requisite insurance coverage.

Submissions shall be printed on both sides of the sheet (8 1/2" x 11"), no acetate covers. an (1) original and nine (9) copies of a bound document and one PDF version on a disc each limited to:

1. an SF 330 including the appropriate number of Part IIIs,
2. resumes of key individuals only each limited to one (1) page under SF 330, Section E,
3. no more than ten (10) projects each limited to one (1) page under SF 330, Section F,
4) no more than 3 sheets (6 pages) of information contained under SF 330 Section H addressing the evaluation items (except for the litigation and legal proceedings history), and

5) no more than 2 sheets (4 pages) of other relevant material not including a 2 page (max.) cover letter, SDO certification letters, covers, dividers, and other required information.

By responding to this solicitation, consultants agree to accept the terms and conditions of Massport’s standard work order agreement, a copy of the Authority’s standard agreement can be found on the Authority’s web page at www.massport.com. The Consultant shall specify in its cover letter that it has the ability to obtain requisite insurance coverage.

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The procurement process for these services will proceed according to the following anticipated schedule:

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<th>EVENT</th>
<th>DATE/TIME</th>
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<tr>
<td>Solicitation: Release Date</td>
<td>3/23/16 @ 10:00 AM</td>
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<tr>
<td>Consultant Briefing</td>
<td>3/31/16 @ 10:00 AM</td>
</tr>
<tr>
<td>Deadline for submission of written questions</td>
<td>4/6/16 @ 5:00 PM</td>
</tr>
<tr>
<td>Official answers published (Estimated)</td>
<td>4/8/16 @ 5:00 PM</td>
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<tr>
<td>Solicitation: Close Date / Submission Deadline</td>
<td>4/21/16 @ 12:00 PM</td>
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Times are Eastern Standard Time (US).

Questions may be sent via email to CPBidQuestions@massport.com subject to the deadline for receipt stated in the timetable above. In the subject lines of your email, please reference the MPA Project Name and Number. Questions and their responses will be posted on Capital Bid Opportunities webpage of Massport http://www.massport.com/doing-
business/_layouts/CapitalPrograms/default.aspx as an attachment to the original Legal Notice and on COMMBUYS (www.commbuys.com) in the listings for this project.

MASSACHUSETTS PORT AUTHORITY
THOMAS P. GLYNN
CEO AND EXECUTIVE DIRECTOR
APPENDIX A
Inspection Findings Report
Conley Terminal, Berth 11-12
September 2013