

M734 Sustainable Vehicle and Equipment Fueling Infrastructure – Conely Terminal, Cruise Terminal, Fish Pier and East Boston Park Maintenance

> Consultant Briefing 10:00 AM, Thursday, July 13th, 2023

# The Port of Boston is vital to the regional economy

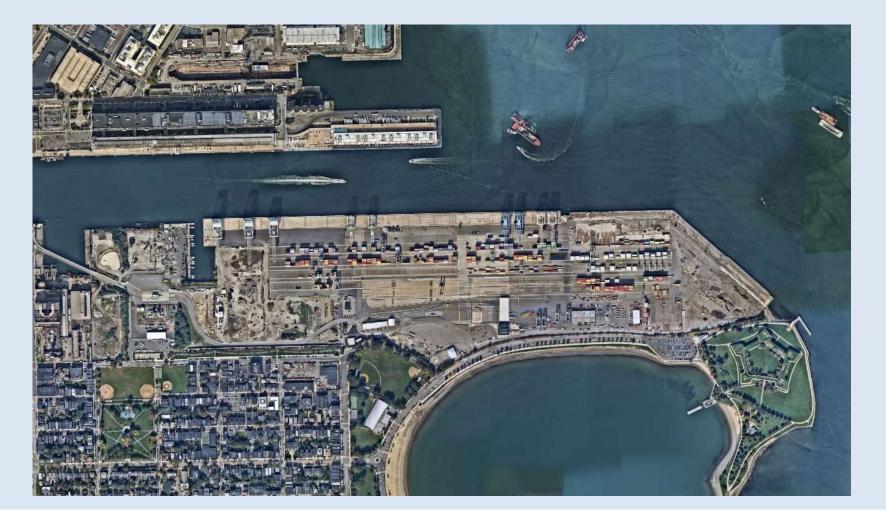
- \$4.6B economic impact
- 50,000 total jobs (7,000 direct jobs)
- Federal tax revenues of \$203M
- State & local tax revenues of \$136M
- 1,600 NE businesses use the port

The Port Compared to Boston's Largest Employers

| Entity                      | Employees |
|-----------------------------|-----------|
| Mass. General               | 14,752    |
| Brigham&Women's             | 11,229    |
| Boston University           | 9,783     |
| Children's Hospital         | 7,903     |
| State Street                | 7,800     |
| Port of Boston              | 7,091     |
| Beth Israel                 | 6,695     |
| Fidelity                    | 5,500     |
| Harvard Graduate<br>Schools | 5,132     |
| Northeastern                | 4,484     |



## **Conley Container Terminal**

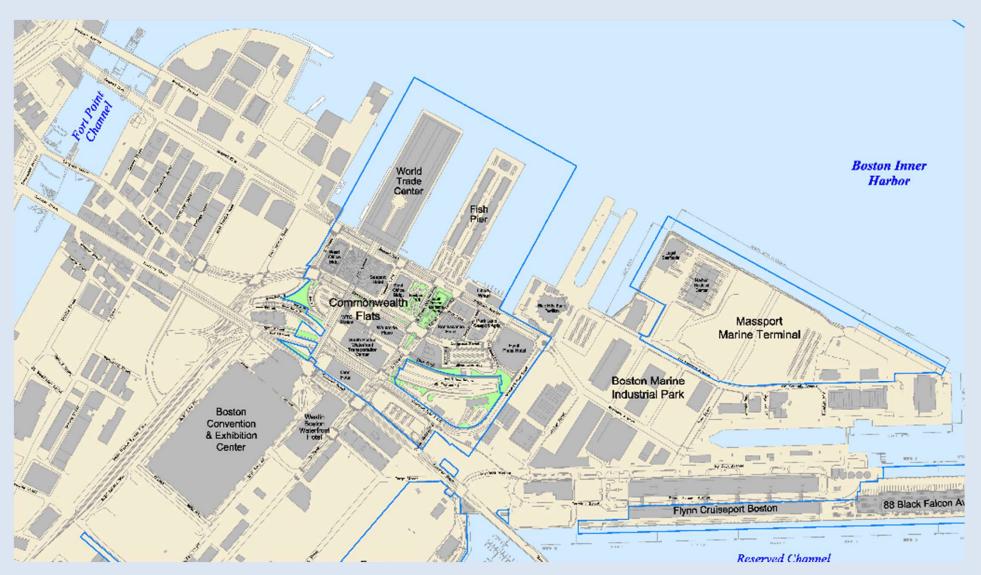


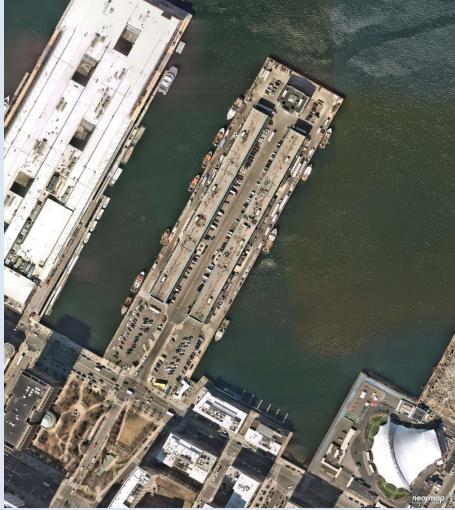
## Flynn Cruiseport

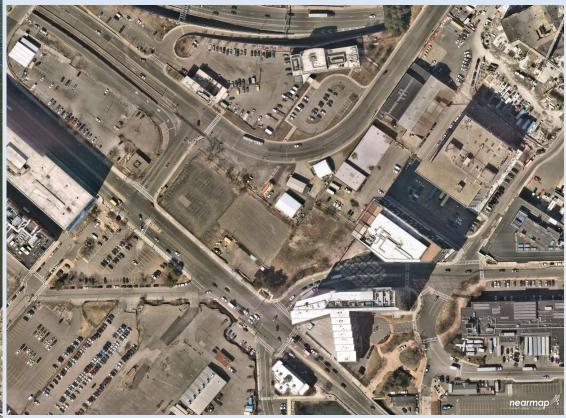










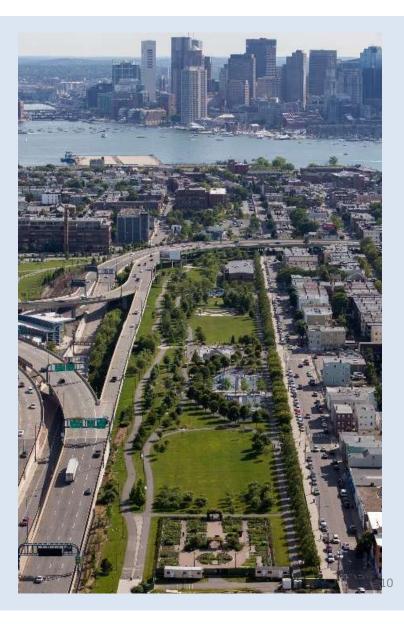












## Scope of Work

- Understand Massport's Net Zero Policy/Goals.
- Understand Massport's Maritime current vehicle and equipment fleet and its minimum operational requirements.
- Work in close coordination with related Massport efforts, including but not limited to: the Net Zero Program Management Office, the Current and Future Electrical Demand Study, the Utility Conditions Assessment Study, the Electrical Vehicle Fleet Assessment, and the Building Infrastructure Conditions Assessment Study.
- Assess future vehicle and equipment fleet composition.
- Identify the current and future vehicle and equipment fleet's fueling and related infrastructure needs.
- Evaluate different possible sustainable vehicle and equipment fuels and technologies.
- Evaluate possible "bridging" fuels that may serve a temporary function of allowing Massport to move closer to meeting its Net Zero goals for certain vehicles or equipment.
- Identify and evaluate vehicles and equipment capable of meeting the minimum operational needs and that best support Massport's Net Zero goals and timeframes.



### Scope of Work: Sustainable Fueling Infrastructure

- Identify overall facility-wide strategies that will allow for efficient operational and maintenance efforts, while aligning with Net Zero goals.
- Identify additional infrastructure requirements and implications for operations associated with different sustainable fuels and technology options.
- Document existence of a sustainable supply chain including local and sustainable suppliers of alternative fuel technologies.
- Determine efficiency of alternative fuel options for use in heavy duty equipment (e.g. what provides most range per unit cost or other comparison option).
- Identify the maintenance implications for alternative fueling strategies including implications for training of staff in new technology(ies).
- Identify the Environmental impact (e.g. what is greenhouse gas impact per fuel type; comparative environmental impacts/benefit for each alternative).
- Identify the future location of infrastructure needed to provide fuels necessary to consistently operate the future vehicle and equipment fleet at each location.
- Identify current and projected grant opportunities Massport would be eligible for to fund alternative fueling infrastructure and technology.
- Provide engineering, construction and resident engineer services for sustainable vehicle and equipment fueling infrastructure projects that align with our Net Zero goals.

## **Evaluation Criteria**

Submission shall be evaluated on the basis of the following equally weighted criteria:

- (1) Demonstrated experience and knowledge of the team for similar projects of similar size and complexity and it will be particularly important to demonstrate this for the proposed Project Manager. Highlight the experience and expertise for major sub-consultants and their assigned staff. Familiarity with MGL, including filed sub-bid experience, and
- (2) Project understanding and proposed technical approach including QA/QC process during document preparation, cost management and scheduling capabilities, construction oversight, ability to plan and perform work with minimal disruption to operations, and
- (3) Demonstrated experience in integrating and managing BIM/VDC in the planning, design and construction. Experience of utilizing Lean Design & Construction (Last Planner System<sup>®</sup>, Scrum or others tools) to increase the reliability and significantly improve projects and teams' performance, and



#### **Evaluation Criteria - Continued**

- (4) Demonstrated project experience in evaluation of and recommendations for phased implementation of clean fuel technologies for maritime vehicles and equipment and associated sustainable fueling infrastructure and technologies, including bridging strategies for areas where technology may be developing, if applicable. Additionally, relevant experience with resilient high performance building and infrastructure design and construction, including experience with low, net zero ready or net zero emissions, water, and waste, lifecycle analysis of projects including embodied carbon, and innovative renewable energy strategies. Firms are encouraged to demonstrate "outside of the box" thinking for examples of inclusion of sustainable practices and specify how those practices may be applied to this specific project proposal, and
- (5) Proposed approach to enhance diversity and inclusion of the proposed team to increase the pool of consultants working on the Authority's projects. It is currently anticipated that Federal Funding will be pursued as part of this project. For those DBE firms proposed, please describe type and/or category of work (i.e. architecture, structural, Lean, etc.); include the specific roles to be played by DBE, and the extent to which such DBE involvement is anticipated as of date of the proposal submission.



| EVENT   | DATE/TIME                              |
|---|--|
| Solicitation: Release Date                        | July 5th, 2023                         |
| Consultant Briefing                               | July 13th, 2023 at 10:00 AM            |
| Deadline for submission of written questions      | July 20th, 2023 at 12:00PM (noon)      |
| Official answers published<br>(Estimated)         | July 27th, 2023                        |
| Solicitation: Close Date /<br>Submission Deadline | August 17th, 2023 at 12:00PM<br>(noon) |

## **KEY DATES**

• Questions may be sent via email to <u>CPBidQuestions@massport.com</u> subject to the deadline for receipt stated in the timetable above.

