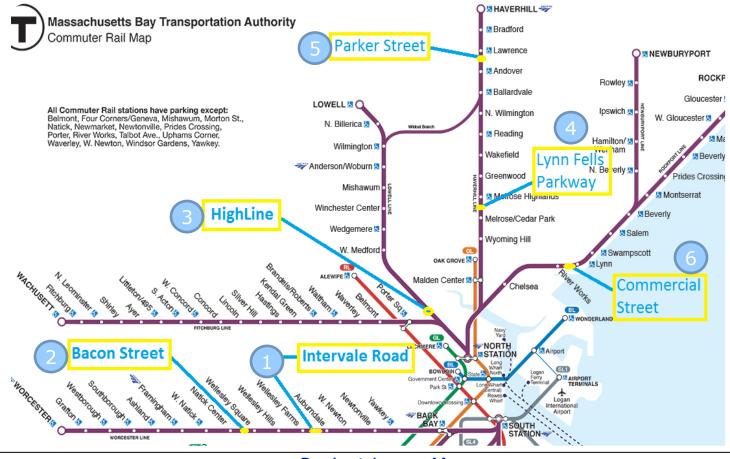


# MBTA Contract No. H91CN01: Rail Bridge Replacements Design Build Project

May 20, 2019

## **OVERVIEW**

 Today's board action will allow for the replacement of six commuter rail bridges under a single Design-Build contract.







## **Construction Scope**

The Rail Bridge Replacement Design-Build Project Scope Includes:

- Full design and construction of the following bridges:
  - 1. Bridge W-29-016, Weston, carries Framingham/Worcester Line over Intervale Road
  - 2. Bridge W-13-011, Wellesley, carries Framingham/Worcester Line over Bacon Street
  - 3. Bridge S-17-043, Somerville, carries Lowell Line over an access road, High Line and the Railroad Yard.
  - 4. Bridge M-14-001, Melrose, carries Haverhill Line over Lynn Fells Parkway
  - 5. Bridge L-04-033, Lawrence, carries the Haverhill Line over Parker Street.
  - 6. Bridge L-18-001, Lynn, carries Newburyport/Rockport Line over Commercial Street.
- All associated bridge, railroad, utility and roadway work for the replacement of the six bridges.



## **Project Benefits**

Project Benefits include:

- Addresses MBTA Capital Needs
- Improved safety and performance
- Use of accelerated bridge construction (ABC) techniques to limit impacts to service
- The existing stone abutments will be retained to maintain the aesthetics at several of the sites.
- At Intervale Rd and Bacon St on the Worcester Line, the new structures will be constructed to accommodate a future third track
- Design Build type contract:
  - Reduces design and construction time
  - Improves communication between Contractor & Designer
  - Single point of responsibility & contact



## **Operations During Construction**

- Weekend outages (9 total inclusive of all 6 bridges)
- Single track operation on weekends and weeknights (additional 5 10 minutes to trip times can be anticipated)
- Temporary roadway closures and local detours will be required for weekend outages and possible weekday nighttime closures to support work activities

#### **Design Build Procurement**

- The Engineer's Estimate was \$102,000,000
- Request for Letters of Interest and Request for Qualification were issued and seven (7) teams submitted Statements of Qualifications which were evaluated by the Selection Committee
- Three (3) teams were shortlisted and issued a Request for Proposal: Barletta Heavy Division, Inc., J.F. White and SPS-RCC a Joint Venture
- Three proposals consisting of separately sealed Technical Proposals and Price Proposals were received on April 4, 2019
- The Technical Proposals were reviewed and a Technical Proposal Score for each Proposal was determined by the Selection Committee



#### **Project Procurement**

 On May 7, 2019 a public Price Proposal opening was held to determine the successful proposer. The basis for determining the successful proposed is best value as expressed through the "lowest price per quality score point" or Overall Value Rating using the following formula:

Overall Value Rating = Lump Sum Amount / Technical Proposal Score

• The following is a summary of the results

| Proposer                         | Lump Sum<br>Price | Technical<br>Proposal<br>Score | Allowances   | Contract Price | Overall<br>Value Rating |
|----------------------------------|-------------------|--------------------------------|--------------|----------------|-------------------------|
| Barletta Heavy<br>Division, Inc. | \$79,826,000      | 909.25                         | \$11,170,000 | \$90,996,000   | 87,793                  |
| J.F. White                       | \$81,607,000      | 804.50                         | \$11,170,000 | \$92,777,000   | 101,438                 |
| SPS-RCC, a Joint<br>Venture      | \$96,320,000      | 844.25                         | \$11,170,000 | \$107,490,000  | 114,089                 |



## **Request of the Fiscal and Management Control Board**

Staff request that the Fiscal and Management Control Board authorize the MBTA General Manager, or his designee, to execute MBTA Contract No. H91CN01: Rail Bridge Replacements Design Build Project with Barletta Heavy Division for an amount not to exceed \$90,996,000.



# APPENDIX: Rail Bridge Replacements Design Build Project

May 20, 2019



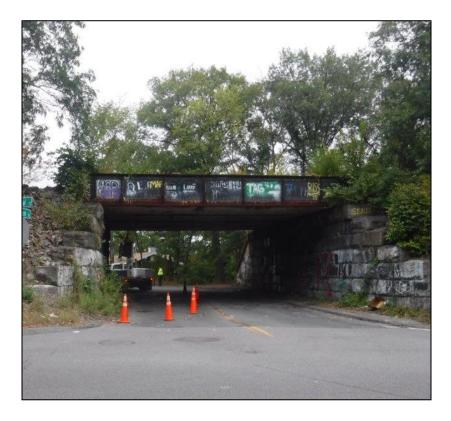
# 1. Intervale Road Bridge – Bridge No. W-29-016 (A66)



Location: Weston, MA Carries: Framingham/Worcester Line Age: 1914 Number of Spans: 1 Span Length: 21'-9"± (existing) 42'-0"± (proposed)



# 2. Bacon Street Bridge – Bridge No. W-13-011 (893)



Location: Wellesley, MA Carries: Framingham/Worcester Line Age: 1911 Number of Spans: 1 Span Length: 39'-3"± (existing) 58'-0"± (proposed)



## 3. High Line Bridge – Bridge No. S-17-043 (A2M)



Location: Somerville, MA Carries: Lowell Line, High Line & Rail Yard Age: 1927 Number of Spans: 2 Span 1 Length: 152'-0"± (existing truss) 86'-8"± (proposed) Span 2 Length: 76'-9"± (existing) 101'-0"± (proposed)



# 4. Lynn Fells Parkway Bridge – Bridge No. M-14-001 (931)



Location: Melrose, MA Carries: Haverhill Line Age: 1929 Number of Spans: 1 Span Length: 60'-0"± (existing) 75'-0"± (proposed)



# 5. Parker Street Bridge – Bridge No. L-04-033 (8JB)



Location: Lawrence, MA Carries: Haverhill Line Age: 1930 Number of Spans: 1 Span Length: 70'-0"± (existing) 90'-0"± (proposed)



# 6. Commercial Street Bridge – Bridge No. L-18-001 (8JQ)



Location: Lynn, MA Carries: Newburyport/Rockport Line Age: 1913 Number of Spans: 1 Span Length: 55'-0"± (existing) 73'-6"± (proposed)