



MassDOT Highway Construction Contract: 121047
Electrical Upgrades and Safety Improvements, F-02-058+S-16-008,
I-195 Over the Taunton River (Braga Bridge)

Board of Directors

April 27, 2023

Project Location



Overview



- Full Aesthetic Bridge Lighting Installation. Truss Section, inboard and outboard flood lighting. New supporting electrical, control equipment and wiring.
- Full replacement of Highway Lighting Assemblies and anchor/haunch replacement. Barrier handhole repairs.
- Full replacement of existing electrical system and load center. Installation of new load center maintenance access platform with ship ladder and lighting.
- Replacement of Navigation and Aviation Lighting systems, including electrical.
- Installation of a temporary electrical service to support construction.
- Overhead sign MUTCD compliant replacement with supporting haunch and barrier reconstruction.
- Requesting MassDOT Board approval of \$16.8M contract with Coviello Electric.
- Construction will take approx. 3 years to complete.

Purpose and Need

- Existing highway lighting installation is past its useful life. Light pole anchorages set in 1986 Deck Replacement Contract. Grouted bases expedite anchorage corrosion and cross section reduction.
- Aviation beacons are only intermittently functional, despise maintenance troubleshooting.
- Electrical wiring is 35+ years old and nearing end of expected useful life, and barrier hand holes are currently only protected by improvised covers.
- One overhead sign structure has already been removed due to signs of eventual failure. The other sign was also set in the 1986 Deck Replacement Contract.
- Current condition for Load Center access is unsafe and hazardous, this work will rectify this. Internal components show advanced wear and housing have progressive corrosion.
- Navigation lighting is past its useful life.
- Aesthetic lighting was at the request of local government and city officials.

Purpose and Need (cont'd)



Load Center condition, location and access

Purpose and Need (cont'd)



Aesthetic Lighting (Render)

Construction Scope



- Reconstruction of all light pole haunch anchorages.
- Reconstruction of barriers and haunches supporting overhead signs.
- New complete light standards, remove and dispose of existing.
- Removal and replacement of all existing wiring. Repair and replace all barrier handhole frames and covers.
- Temporary electrical service installation, replacement of existing load center, construction of new access platform.
- Replacement of existing navigation and aviation lighting and associated controls.
- Construction of access platform or other means to safely install new aesthetic lighting fixtures, wiring, control and power boxes underdeck and outboard of truss section.
- Fabrication and installation of aesthetic lighting support arms and bracketry. Fastening to bridge truss members utilizing rivet locations.

Traffic Impacts

- Lane closures will take the EB and WB right lane and shoulders.
- Work under this contract shall be conducted between the hours of 9:00 PM and 4:00 AM unless otherwise authorized by the District 5.

Procurement



- Project was advertised December 31, 2022
- Engineers Estimate was \$11,223,398
- Bid Opening was March 7, 2023
- Three (3) bids were received:
 - **Coviello Electric** **\$16,844,346**
 - J.F. White Contracting **\$17,825,755**
 - Dagle Electric **\$24,444,442**

Overall Project Budget



Line Item	Budget
Bid Amount	\$16,844,346.00
Contingencies	\$ 2,526,651.90
Construction Engineering	\$ 480,000.00
Total	\$19,850,997.90

Request of the Board

- Staff request that the MassDOT Board authorize the Secretary of the Massachusetts Department of Transportation, or her designee, to award and execute MassDOT Construction Contract 121047: Electrical Upgrades and Safety Improvements, F-02-058+S-16-008, I-195 Over the Taunton River (Braga Bridge) with Coviello Electric in the amount of \$16,844,346.00.