MassDOT Highway Construction Contract: 111312
Resurfacing and Related Work (Including 6 Bridge Decks and Ramps) along a Section of Route 24 (Fall River Expressway)

Joint Board Meeting
August 2020
ROUTE 24 RAYNHAM TO BROCKTON
PROJECT FILE NO. 608820

B-25-054
ROUTE 24 OVER
OAK STREET

END OF PROJECT
STA 189+900 BROCKTON
MILE MARKER 24.2

STA 236+5850 WEST
BRIDGEWATER (BACK) =
STA 189+900 BROCKTON (AHEAD)

B-25-049
ROUTE 24 OVER
CUMBY STREET

B-25-047 (QMS)
ROUTE 24 OVER
WEST CHESTNUT STREET

W-18-018 (QMS)
ROUTE 24 OVER
SOUTH ELMS STREET

W-19-056 (QMS)
ROUTE 24 OVER
WATER TOWN RIVER

STA 159+43.05 BRIDGEWATER (BACK) =
STA 9+20 WEST BRIDGEWATER (AHEAD)

STA 159+43.05 RAYNHAM (BACK) =
STA 0+00 BRIDGEWATER (AHEAD)

BEGINNING OF PROJECT
STA 189+900 RAYNHAM
MILE MARKER 24.2

NOT TO SCALE
Overview

• Resurfacing and Related Work along a Section of Route 24 (Fall River Expressway), including Ramps

• Resurfacing and Related Work on 6 Bridge Decks to address deterioration

• The project begins in Raynham (STA 120+50, MM 21.8) and continues north through Bridgewater, West Bridgewater, and ends in Brockton (STA 185+28.1, MM 34.0), a length of approx. 64,136 feet or 12.2 miles

• Requesting MassDOT Board approval of $15.7M contract with Aggregate Industries NE Region Inc.

• Construction will take approx. 3 years to complete; staged to maintain 1 lane of traffic in each direction at all times
Purpose and Need

• Existing pavement has degraded to a poor level and requires resurfacing. Use of Pavement Preservation resurfacing will improve the pavement serviceability, condition and roadway safety. Resurfacing at all ramps will be included except at the Route 24 / I-495 interchange.

• Superstructures of bridges have deteriorated and require routine maintenance work.

• Previous resurfacing of Route 24 in the Towns and Cities of Raynham to Brockton was advertised in 2009.
Purpose and Need (cont’d)
Purpose and Need (cont’d)
Construction Scope

Route 24 Mainline:

• Micromill and overlay with ¾ inch of Ultra Thin Bonded Overlay (UTBO) proposed surface treatment. Use of Hot Applied Asphaltic Crack Filler as surface preparation for the UTBO treatment
• Variable depth (0” – ¾”) micromilling for inlay adjacent to shoulders
• Fog seal of Route 24 roadway shoulders
• Micromill and overlay of Route 27, 123, 104, and 106 ramps with 2 inches of Superpave Hot Mix Asphalt.
• Micromill and overlay bridge approaches on Route 24 with 2 inches of Superpave Hot Mix Asphalt.
Construction Scope (cont’d)

Route 24 Mainline:

[Diagram of Route 24 Mainline construction scope]

TYPICAL SECTION
SURFACE PREPARATION

TYPICAL SECTION
SURFACE TREATMENT
Route 24 Bridges:

- Selective clearing and thinning
- Micromill and overlay of bridge decks with 1 ½” Superpave Hot Mix Asphalt
- Application of concrete protective coating to parapets, median barriers, coping walls, and endposts
- Full depth and partial depth concrete deck repairs to the 6 bridges
Construction Scope (cont’d)

Route 24 Bridges:
Construction Scope (cont’d)

• Proposed work also includes adjusting or rebuilding of drainage structures as required; removing and resetting curb, edging, and curb inlets as required; application of pavement markings; installation of reflectorized pavement markers; and other related work.

• Routine maintenance work on superstructures of bridges including: micro-milling; deck repair as required; resurfacing; sawing and sealing joint at abutments; application of concrete protective coating to parapets, medians, coping walls, end posts; and other related work.
Traffic Impacts

• Lane shifting will have minor impacts to the overall traffic pattern.

• One lane of traffic in each direction will be maintained at all times.

• All work under this contract shall be conducted between the hours of 9:00 PM and 5:00 AM unless otherwise authorized by the Engineer and with certain exceptions for holidays.
Traffic Impacts (cont’d)
Procurement

- Project was advertised May 9, 2020
- Engineers Estimate was $15,709,565.00
- Bid Opening was July 7, 2020
- Three (3) bids were received:
  - Aggregate Industries NE Region Inc. $15,387,893.85
  - J H Lynch & Sons Inc. $16,357,650.35
  - PJ Keating Company $18,924,399.00
Overall Project Budget

- Prog. Cost in the 2020 TIP: $18.6M, split 80/20% Fed/NFA
- CIP Cost: $19.4M, FY 21-$4.8M, Beyond FY21-$14.6M
- Cost above STIP programmed amount covered by EWO Account

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<th>Line Item</th>
<th>Budget</th>
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<tr>
<td>Bid Amount</td>
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<td>Contingencies</td>
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<td><strong>Total</strong></td>
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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 111312: Resurfacing and Related Work (Including 6 Bridge Decks and Ramps) along a Section of Route 24 (Fall River Expressway) with Aggregate Industries NE Region Inc. for an amount not to exceed $15,387,893.85.