MassDOT Highway Construction Contract: 125317 Pavement Preservation and Related Work on I-90 MassDOT Board of Directors

April 16, 2024

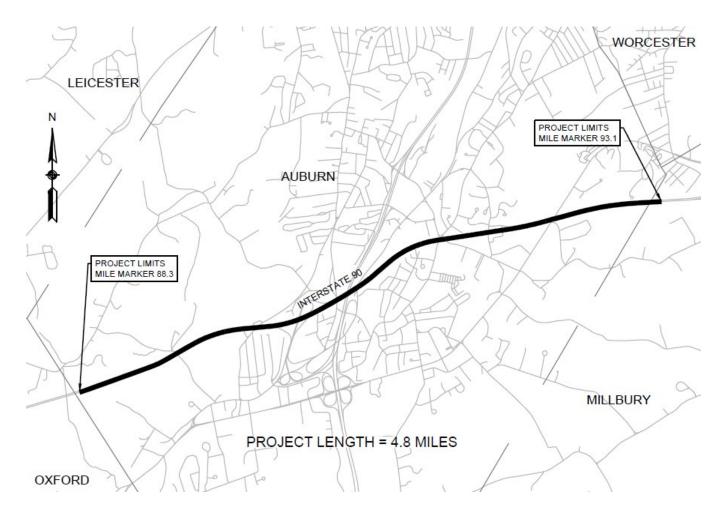


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Project Location Interstate 90 in Auburn / Millbury (Mile Marker 88.3 to Mile Marker 93.1)





Overview

Scope of Services

- Resurfacing a portion on Interstate 90 through Auburn and Millbury from *MM 88.3 to MM 93.1.
- Work primarily consists of milling and resurfacing the mainline, bridge decks, bridge deck transitions, including entry and exit ramps, pull offs, and turnarounds.
- Other related work includes bridge improvements; upgrading non-compliant guardrail and guard rail end treatments; tree clearing and removal; stormwater improvements including adjusting, rebuilding, and cleaning out drainage structures; replacing damaged frames and grates/covers, and upgrading non-compliant drainage structures within the traveled way with locking frames and grates/covers; resetting granite curb and granite edging; replacing hot mix asphalt berm; installing temporary and permanent pavement markings with new recessed polyurea pavement markings and recessed reflectors; installing milled rumble strips; and implementing all safety controls and signing required for the necessary work zones.

*MM-Mile Marker



Overview

Purpose & Need/Traffic Impacts

Purpose & Need

- Existing pavement has degraded to a poor level and requires resurfacing. Resurfacing will improve the pavement serviceability, condition, and roadway safety.
- Bridge superstructures and piers have deteriorated and require maintenance work.

<u>Traffic Impacts</u>

- Lane shifting will have minor impacts to the overall traffic pattern with one lane of traffic in each direction maintained at all times.
- The proposed schedule for nighttime operations shall be an 8-hour day, 5-day week conducted between 9:00 PM and 5:00 AM, Sunday evening through Friday morning, unless otherwise authorized by the Engineer and with certain exceptions for holidays.
- Construction will take approximately two years to complete.



Procurement and Budget

- Project Advertised February 24, 2024
- Engineer's Estimate was \$16,295,520.00
- Bid Opening was April 2, 2024
- Two (2) Bids were received:

PJ Keating Company \$17,872,384.50 JH Lynch & Sons Inc. \$19,496,846.46

Line Item	Budget
Bid Amount	\$17,872,384.50
Contingencies (10%)	\$1,787,238.45
Construction Engineering (5%)	\$893,619.22
Traffic Police	\$733,300.00
Engineering Services	\$100,000.00
Total	\$21,386,542.17

 Funding: (NFA) Non-Federal Aid-Tolls-Western Turnpike (WT)



Request of the MassDOT 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 125317 - Pavement Preservation and Related Work on I-90 with PJ Keating Company
 in the amount of \$ 17,872,384.50



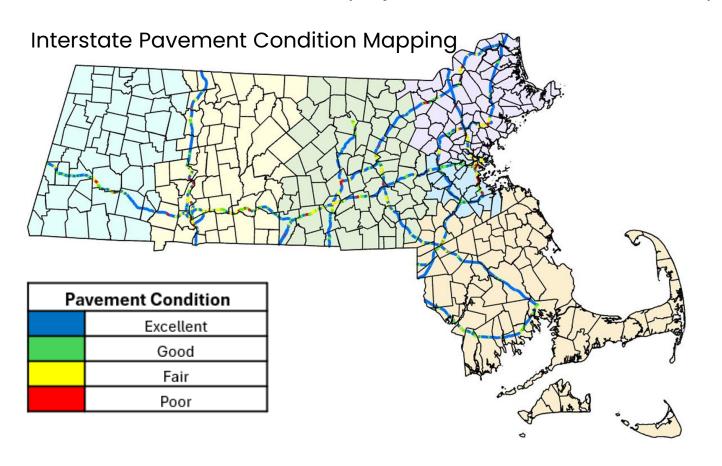
Thank You

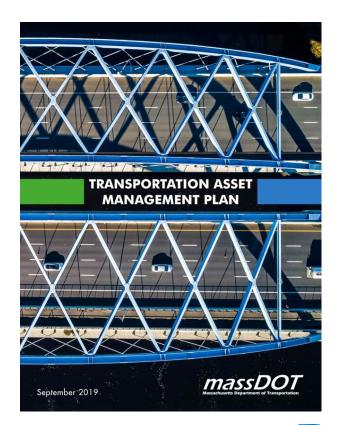




Questions received from Capital Programs Committee

• How does MassDOT initiate a project like this? Is it a result of inspection or observed deterioration?







Questions received from Capital Programs Committee

Pavement Condition Annual Testing

- · Pavement Ride Quality (IRI)
- · Laser Crack Detection
- · Pavement Rutting & Condition
- HD Video
- HD-LiDAR
- · GPS Location Services

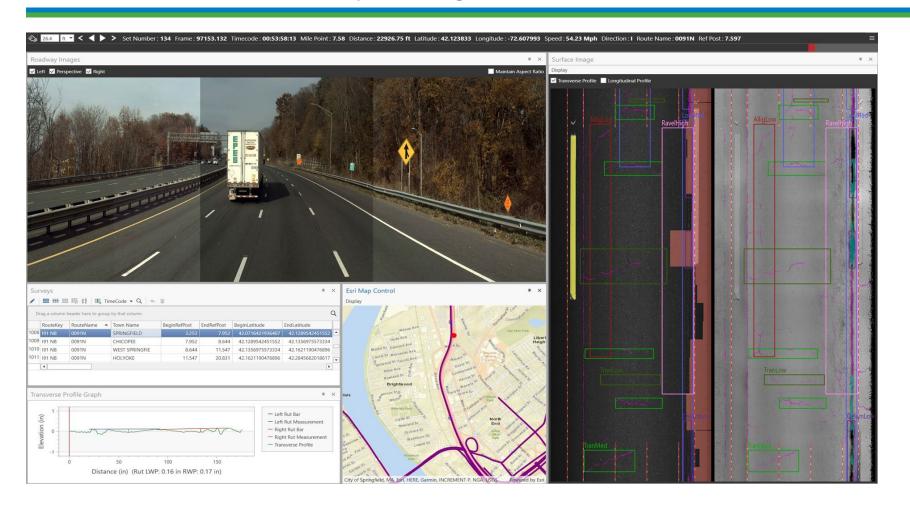




MassDOT's HICAMS
(Highway Inventory
Collection and
Monitoring System)
nicknamed the
"Pathrunner", was
originally purchased
in 2013.
New "Pathrunner"
was delivered to
Research & Materials
on April 10.



Questions received from Capital Programs Committee



The "Pathrunner" collects ride quality using lasers & 3D cameras to measure and quantify pavement cracking and rutting, HD video for imagery plus a LiDAR system to help develop a virtual model of the highway network.

