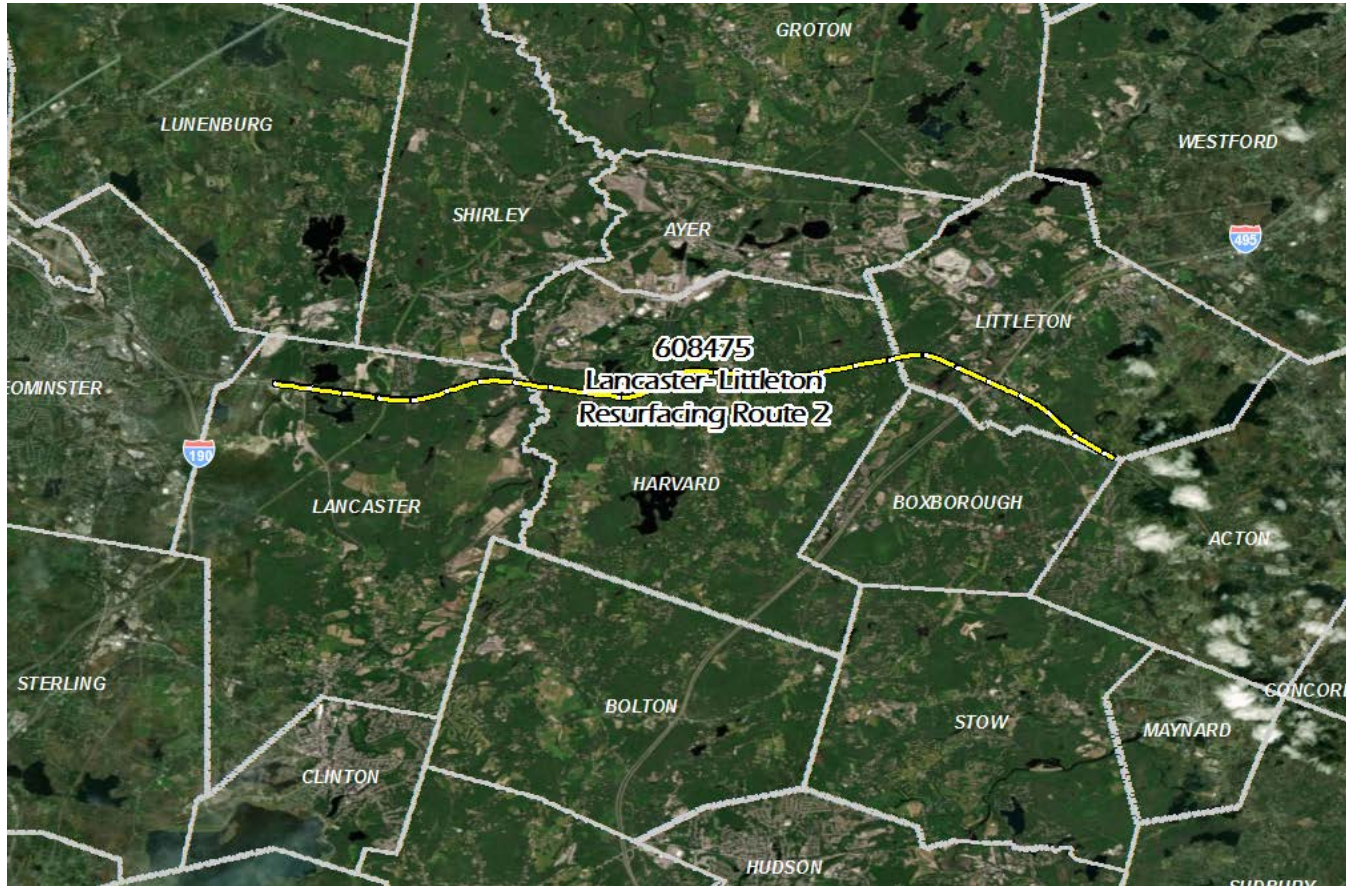




LANCASTER-HARVARD-LITTLETON
RESURFACING AND RELATED WORK ON ROUTE 2
FAP #NHP/NHS-003S(242)X
Project File No. 608475
Contract No. 106578

April 17, 2019

Project Locus



Overview and Project Need

- The purpose of this project is to improve the condition of non-interstate pavement and bridge state of good repair, specifically for 10.6 miles of Route 2 in Lancaster, Harvard, and Littleton.
- Project includes micromilling and resurfacing of the existing roadway and 6 exit ramps, in addition to resurfacing and repairs to 5 bridges.
- Low bidder for construction is PJ Keating at \$17,986,688
- Total project cost is \$21,890,611
- Originally programmed in CIP at \$19,688,000

Project Scope of Work

This project consists of resurfacing Route 2 in Lancaster, Harvard and Littleton between Interstate 190 and Interstate 495 in Northern Worcester County. More specifically, the western limit of this project is a pavement joint, located just east of Exit 34 in Lancaster (mm 103.0 +/-). The eastern limit of this project is the approach to Bridge L-13-017 (mm 113.6 +/-). The total length of this project is approximately 10.6 miles. The limits of work also include the ramps at Exits 35, 36, 37, 38, 39, and 40.

- Micromilling and resurfacing the existing mainline, bridge decks, and ramps.
- Work will also include: clearing and grubbing to re-establish clear zones; adjusting, rebuilding, and remodeling drainage structures; replacing all frames and grates with hook-lock frames and grates; resetting granite edging, granite curbing, and granite curb inlets; replacing HMA berm, replacing most of the existing substandard guardrail on the right side of the roadway; resetting existing salvageable guardrail at some locations in the median areas, replacing traffic data collection stations; bridge deck repairs; and bridge joint repairs.

This section of Route 2 was previously resurfaced in two separate contracts in 2008/2009.

Project Scope of Work

BRIDGE WORK:

- Repair, modification and/or full reconstruction of the barriers on the five bridge decks and wingwalls.
- Partial and/or full depth repair of the existing reinforced concrete decks where deterioration has occurred.
- Waterproofing membrane along curbs lines.
- Substructure concrete repairs to abutments, piers, backwalls, checkwalls and wingwalls.
- Elastomeric protective coating to bridge barriers, parapets, abutments, backwalls, beam end diaphragms, fascia beams, and areas within 5 feet from the concrete beam end, pier columns and pier caps.
- Replacement of all bridge railings.
- Other required work as directed by the Engineer and necessary for successful completion of the bridge repairs and other related work.

Project Scope of Work

Goal/Objective

- Improve Non-Interstate Pavements and Bridge SGR

Public Participation

- Three conservation commission meetings were held in the towns of Lancaster, Harvard and Littleton between November - December 2018. Negative determinations were issued for each.

Project Schedule

Construction Starts
Summer 2019



Full Beneficial Use
Spring 2021



Substantial Completion
Summer 2021



Contract Field Completion
Fall 2021



Total Project Cost

Bid Amount:	\$17,986,688.00
Traffic Control	\$1,120,067.00
Contingencies (10%)	\$1,828,519.00
<u>5% Construction Engineering</u>	<u>\$955,337.74</u>
Total	\$21,890,611.00

Design was performed in-house by District 3 Staff
Programmed Cost in the CIP - \$19,688,000

Bid Estimate Comparison

- Office Estimate: \$15,862,297.85
- PJ Keating: \$17,986,688.00 (13.39% Above Office Est.)
- Brox Industries: \$18,734,877.75 (18.11% Above Office Est.)
- JH Lynch: \$18,764,564.55 (18.30% Above Office Est.)
- Average of Bids: \$18,495,376.77 (16.59% Above Office Est.)
- Recommend award to the Low Bidder