

#### **MassDOT Highway Construction Contract: 114227**

Resurfacing and Related Work (Including Bridge Deck Repair, Replacement of Bridge Rail, and routine maintenance work) on a Section of Route 28 (Msgr. O'Brien Highway / Hon. McGrath Highway) in Cambridge and Somerville

Joint Board Meeting June 21, 2021

# Project Location





## Overview



- Resurfacing and Related Work along a Section of Route 28 (Msgr. O'Brien Highway / Hon. McGrath Highway)
- Resurfacing and Related Work on Bridge Decks to address deterioration, replacement of bridge rail, and routine maintenance work
- The project begins in Cambridge (STA 12+32.75, MM 124.4) and continues north and ends in Somerville (STA 82+60.30, MM 125.9), a length of approx. 7,904 feet or 1.5 miles
- Requesting MassDOT Board approval of \$15,033,542.65 contract with SPS New England Inc.
- Construction will take approx. 2.5 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.
- Superstructures of bridges have deteriorated and require routine maintenance work.
- Route 28 is identified as having a High Potential of Walkable and for Everyday Biking.

















## **Construction Scope**



Route 28 (Msgr. O'Brien Highway/Hon. McGrath Highway) Civil:

- 2" fine mill and overlay with 2 inch Superpave Surface Course 12.5 Polymer (SSC – 12.5 – P).
- Reconstruct cement concrete sidewalk and driveways in select locations.
- Install 2 floating bus stops at the Rufo Road/Route 28 Intersection.
- Reconstruct the cement concrete island between Third Avenue and Rufo Road.





### **Typical Route 28 Cross Section:**



# Construction Scope (cont'd)



## Route 28 Bridges:

- Full and partial depth bridge deck repair.
- Bridge pavement milling and paving with 2 <sup>1</sup>/<sub>2</sub>" Superpave Waterproofing Course -12.5.
- Replacement of deteriorated bridge rails.
- Repair and reconstruct existing bridge joints.
- Relocate bridge scuppers.
- Bridge wall repairs.
- Safety walk repair.
- Temporary shielding over railroads.

# Construction Scope (cont'd)



### Route 28 Traffic:

- Reconfigure Route 28 typical section from 3 lanes to 2 lanes.
- Install a buffered bike lane from the Third Street intersection to the Broadway intersection with flex posts at various locations.
- Reconstruct traffic signals at the Broadway, Pearl Street, Medford Street, Somerville Avenue, and Rufo Road Intersections.

# 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: bridge milling; deck repair as required; resurfacing; joint repair and reconstruction; bridge rail replacement, installation of MASH impact attenuators, concrete wall repair, scupper relocation; and other related work.





- 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 AM and 3:00 PM unless otherwise authorized by the Engineer and with certain exceptions for holidays.

# Municipal and Public Outreach



- Both host municipalities provided written support for the project and participated in the project development and design process.
- An informational website (StoryMap) and comment form was published on February 22, 2021 to present the design, its benefits and potential impacts, with a two week comment period that ended on March 8, 2021.
- 1,360 "stakeholders" registered with the site and 207 comments were received; Of those, 141 comments were "In Favor" of the project
- The majority of the comments supported the project and requested additional protection be provided for the bicycle lanes; allowance for such protection is included in the final bid documents.

## Procurement



- Project was advertised March 27, 2021
- Engineers Estimate was \$11,647,763.25
- Bid Opening was May 11, 2021
- Two (2) bids were received:
  - SPS New England Inc.
  - Newport Construction Corp.

**\$15,033,542.65** \$16,977,748.20

# **Overall Project Budget**



Line Item	Budget
Bid Amount	\$15,033,542.65
Contingencies	\$ 1,742,214.18
<b>Construction Engineering</b>	\$ 528,150.00
Total	\$17,303,906.83

- 80% Federal funding, 20% State funding
- Programmed Cost in the 2021 CIP: \$7.8M

# **Request of the Board**



### VOTED:

To authorize the Secretary, or his designee, to award and execute MassDOT Construction Contract 114227: Resurfacing and Related Work (Including Bridge Superstructure and Routine Maintenance Work) on a Section of Route 28 (Msgr. O'Brien Highway / Hon. McGrath Highway) with SPS New England Inc., in a form approved by the General Counsel, in the amount of \$15,033,542.65.