



Presentation to the Board

*Roadway Reconstruction and Related Work
(Including Replacement of Bridge Nos. C-06-023
& O-06-002) on a Section of Route 20*

Charlton - Oxford

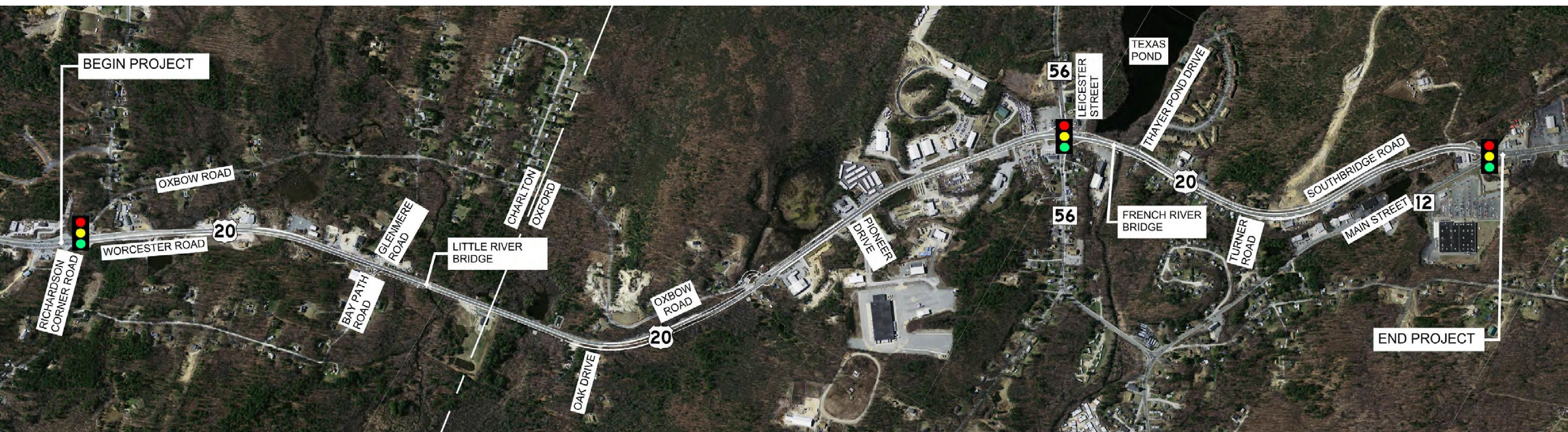
September 21, 2022

Project File No. 602659



Overview

- Reconstruction of the Route 20 roadway from Richardson Corner Rd in Charlton to Main Street (Route 12) in Oxford
- Replace two bridge structures within the project limits
- Traffic signal improvements and roundabout construction





Project Purpose

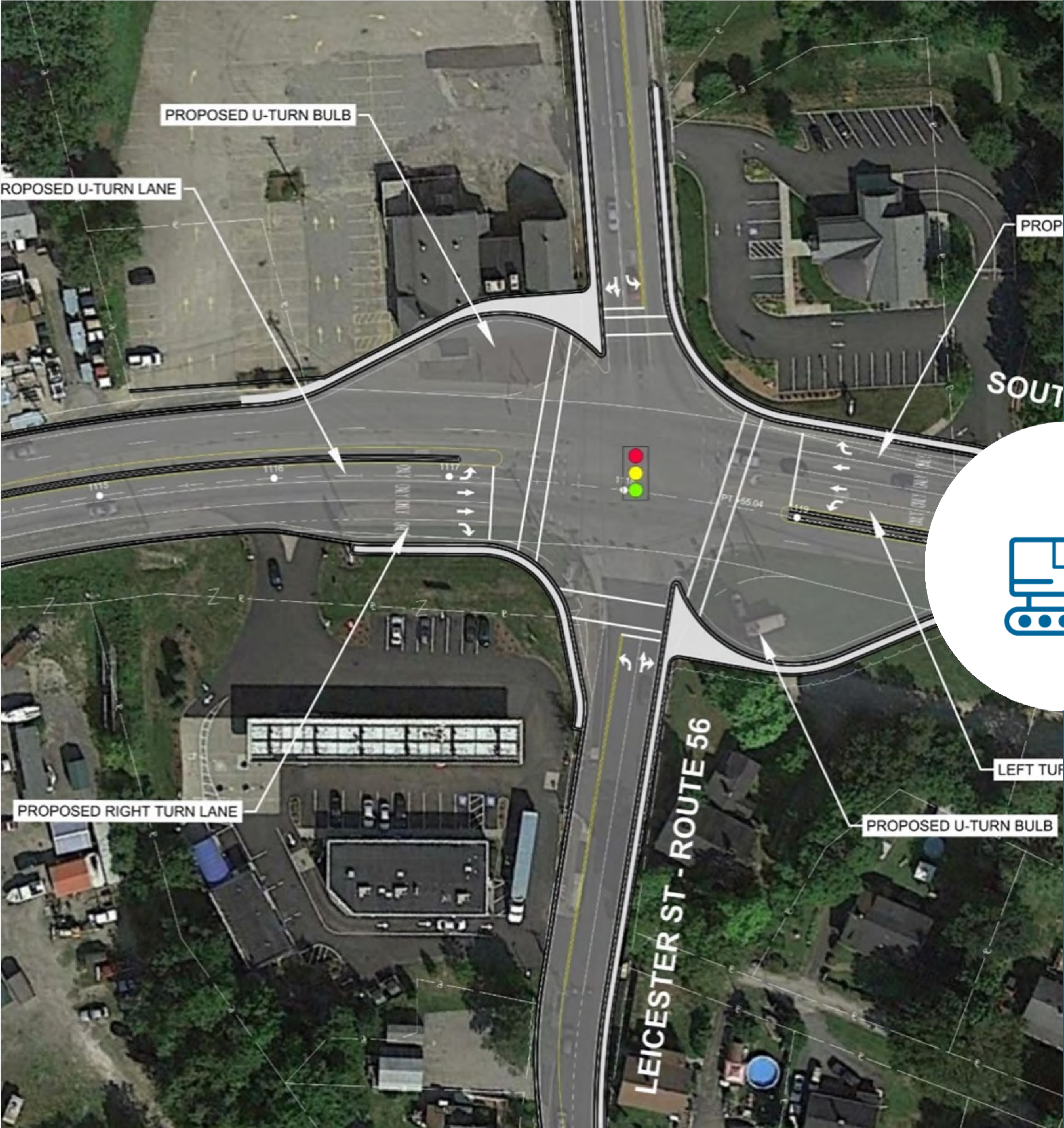
Purpose and Need

Purpose

- Improve safety and traffic operations in the project corridor by reconstructing the roadway cross section, modifying select areas of the alignment, and improving substandard intersections

Need

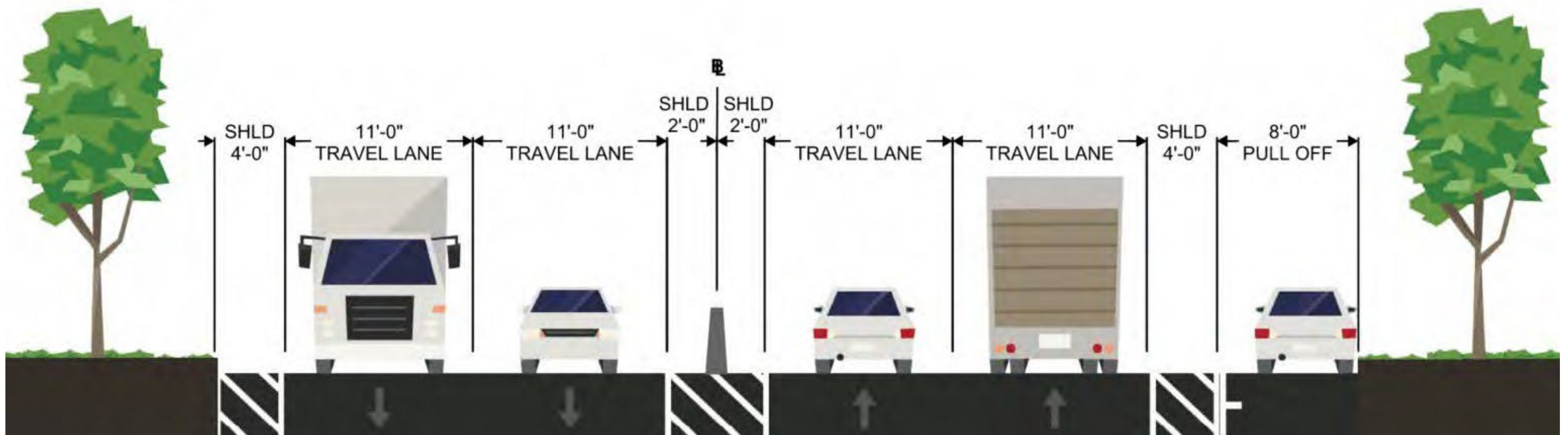
- The roadway and intersections experience a high number of crashes
- The roadway has substandard shoulder widths
- The bridges are functionally obsolete
- The intersections do not meet current and future traffic demands



Construction Scope

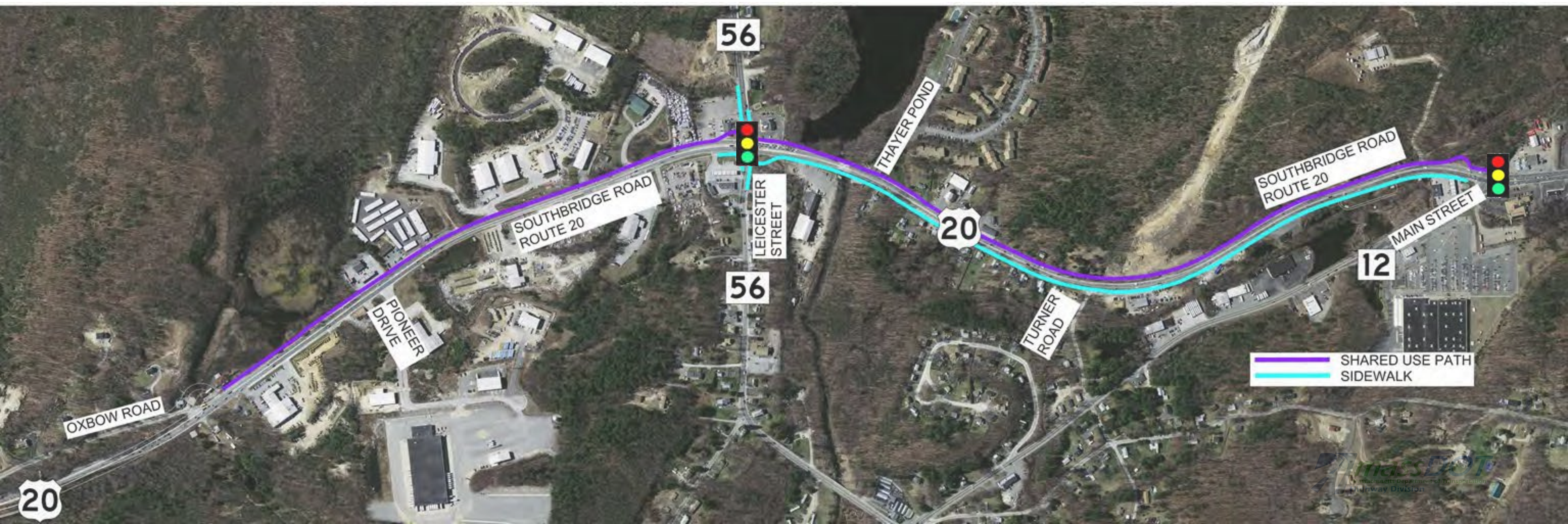
Route 20 Roadway Improvements

- Combination of pavement resurfacing and full-depth reconstruction/box widening
- Two 11-foot wide travel lanes with 2-foot median shoulders and 4-foot curbside shoulders
- Concrete median barrier from Richardson Corner Road to Route 56
- Variable width raised concrete median island from Route 56 to Route 12
- Select locations, an additional 8' provided on the curbside shoulder



Route 20 Roadway Improvements

- Shared use path on the north side of Route 20 from Oxbow Road (Oxford) to Route 12
- Sidewalk on the south side of Route 20 from Route 56 to Route 12
- Sidewalks along Route 56
- New roundabout at Oxbow Road
- Reconstructed traffic signals at Richardson Corner Road, Rte. 56 and Rte. 12



Project Elements

- Bridge over the Little River in Charlton (C-06-023) will be replaced.
- Bridge over the French River in Oxford (O-06-002) will be replaced.
- Seven culverts will be replaced, three will meet Massachusetts River and Stream Crossing Standards
- Retaining walls
- Stormwater Management – new collection and treatment system
- Roadside design elements - guardrail, end treatments, curb, and clear-zone side slopes
- Signs and pavement markings
- Wetland replication
- Streambank realignment and restoration
- Compensatory flood storage areas

Coordination with other Owners

Private Utilities

- Utility Pole Relocations (Ngrid, Crown Castle, Charter, Verizon)
- Town of Oxford Water (Aquarion Water Company)

Public Utilities

- Town of Charlton Water
- Town of Oxford Sanitary Sewer

Private Developers

Traffic Impacts

Traffic will be maintained throughout construction

- Three-lane section (Richardson Corner Road to Pioneer Drive)
- Four-lane section (Pioneer Drive to Thayer Pond Drive)
- Three-lane section (Thayer Pond Drive to Route 12)
- Additional lane reductions during off peak hours
- Select, short-term overnight closures with temporary detours

Mitigation Measures

- Contractor to prepare Temporary Traffic Control Plans
- Real Time Traffic Management
- Public outreach program



Public Process

Public Outreach - MassDOT

General Public

- Project Information Meetings
- Design Public Hearing

Municipalities

- Elected officials
- DPW
- Emergency responders

Local Conservation Commissions

Business owners meeting

Abutter meetings

Project Website

Emails to stakeholder database

Public Outreach - MassDOT

Project Information Meetings

- February 22, 2016
- February 1, 2017
- January 29, 2020

Design Public Hearing

- Virtual Meeting May 13, 2021

Charlton Conservation Commission

- 4 Meetings (September 2021 – January 2022)

Oxford Conservation Commission

- 3 Meetings (September 2021- December 2021)

Public Outreach – Design Builder

Public Involvement

- Public Participation (Outreach) Plan
- Coordination meetings with MassDOT, FHWA, State Police, Local Municipalities and their Emergency Services departments, local elected officials, the community, utility owners, state and local commissions
- Provide content for MassDOT Project Website

Public Information Meetings

- One meeting after MassDOT acceptance of 75% Highway Design
- 30 days prior to commencement of any construction activities
- 30 days prior to completion of major milestones and traffic phase changes
- 7 days prior to short duration closures
- 14 days prior to long term partial or complete closures



Environmental Permitting

Environmental Considerations

- Vegetated wetlands
- Land under water
- Floodplain
- Rare and endangered habitat



Environmental Approvals/Clearances

Provided by MassDOT

- National Environmental Policy Act (NEPA) – Individual Categorical Exclusion
- Section 7 Federal Endangered Species Act
- Section 106 Historic Preservation Act
- Section 404 of the Clean Water Act – Individual Permit
- Massachusetts Environmental Policy Act (MEPA) – Environmental Impact Report
- Massachusetts Wetlands Protection Act (MA WPA) – Orders of Conditions
- 401 Water Quality Certification (WQC) – Major Fill and Excavation Project
- 401 Water Quality Certification (WQC) – Major Dredge Certification
- Massachusetts Endangered Species Act – Conservation and Management Permit

Design-Builder Responsibilities

- Construction Permits (NPDES – RGP/SWPPP/CPPP)
- All aspects of environmental permit compliance; including but not limited to permit amendments, reporting, inspection, mitigation, and monitoring

Environmental Impacts

Permanent Impacts

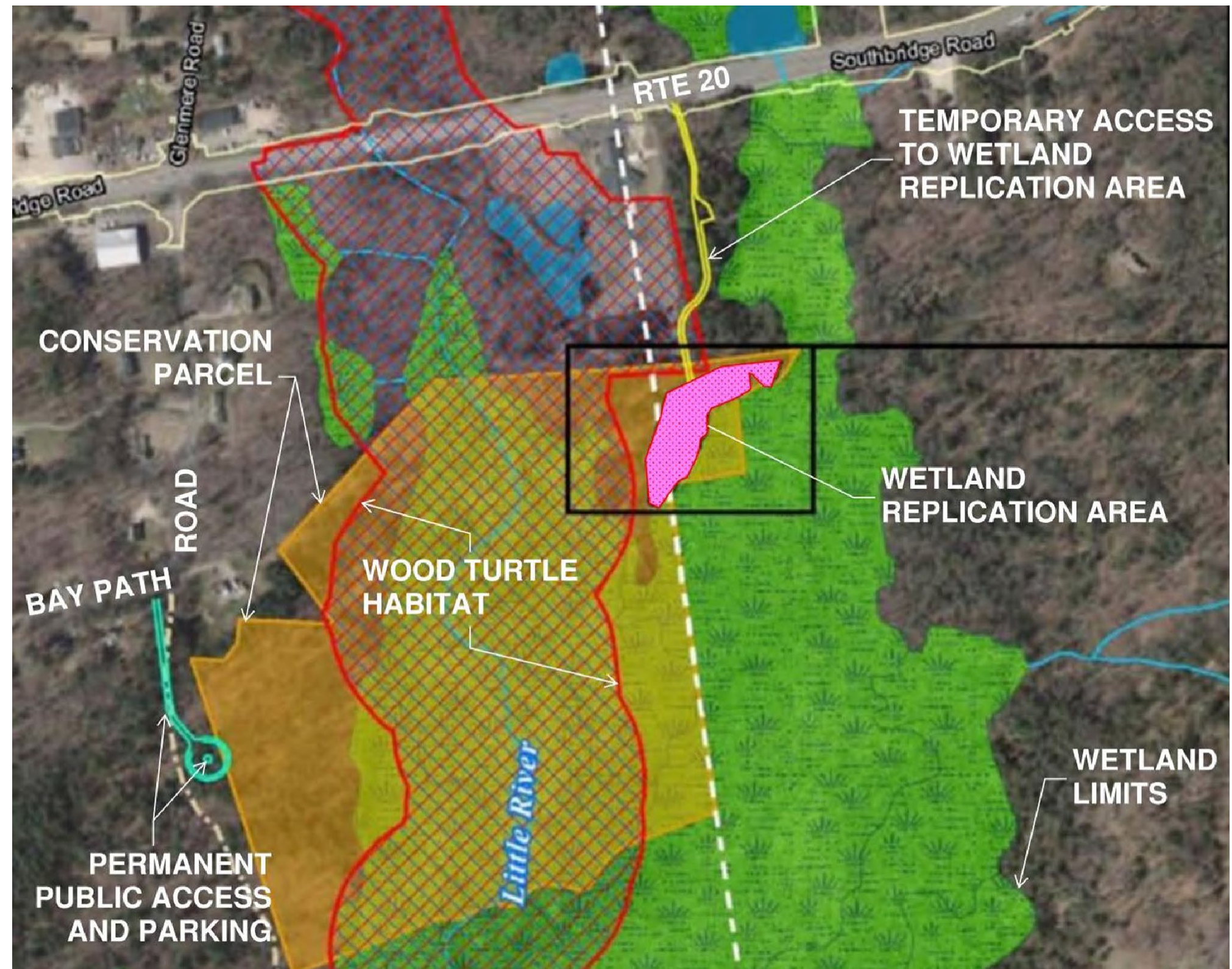
- 1.36 acres of federal and state jurisdictional Vegetated Wetlands including Isolated Vegetated Wetlands
- 16,612 SF of federal and state water Below Ordinary High Water (OHW) associated with freshwater ponds, rivers, and streams

Temporary Impacts

- 0.67 acres of federal and state jurisdictional Vegetated Wetland including Isolated Vegetated Wetlands
- 1,150 SF of federal and state water Below Ordinary High Water (OHW) associated with freshwater ponds, rivers, and streams

Environmental Mitigation

- 42-Acre Conservation Parcel
- 1.6 Acre Wetland Replication
- Restoration of temporarily disturbed wetland areas
- Streambank realignment and restoration
- Compensatory flood storage





Adjacent Projects

Coordination with Other Projects

Active Projects

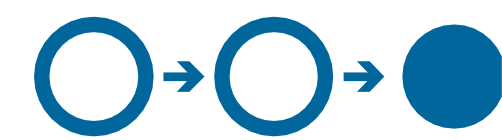
- Resurfacing and Related Work on a Section of Interstate 90

Anticipated Projects

- Bridge Replacement (A-17-038) US 20-WB (Washington Street) over I-395 in Auburn
- Pavement Preservation and Related Work on I-90
- Resurfacing and Related Work on I-290 and I-395
- Bridge Replacement (C-06-019) US 20 (Sturbridge Road) over Cady Brook in Charlton
- Roadway Rehabilitation on Route 12 (Main Street) in Oxford
- Bridge Replacement (O-06-030) ST 56 (Leicester Road) over French River in Oxford
- Interstate Maintenance and Related Work on I-90

Private Development Projects

- Charlton – Amazon Fulfillment Center
- Oxford - Eastland Partners Mixed-use Development



Procurement

Schedule of Events

EVENT	DATE
Request for Letters of Interest	11/20/2021
Letters of Interest Due	1/3/2022
Request for Qualifications	1/5/2022
Statements of Qualifications Due	2/9/2022
Design-Builders Short-Listed	3/21/2022
Final RFP Issued to Short-Listed Design-Builders	4/27/2022
Technical & Price Proposals Due	7/27/2022
Oral Presentations	8/11/2022
Public Price Proposal Opening Date	8/31/2022
Anticipated Award Date	TBD
Anticipated Notice to Proceed	11/2/2022

Best Value Calculation

PRICE OPENING/BEST VALUE DETERMINATION

WEDNESDAY – AUGUST 31, 2022

Best Value is lowest price per quality score point

Federal Aid No. CMQ-0035(196), NHP(NHS)-0035(196) & STP-0035(196)
Roadway Reconstruction and Related Work
(Including Replacement of Bridge Nos. C-06-023 & O-06-002)
on a Section of Route 20
(DBE 16% construction / 16% design and OJT 5)

PROJECT VALUE: \$63,000,000.00



CHARLTON-OXFORD 602659-117832	Design - Builders				STEP
	BARLETTA-LYNCH CHARLTON JV	D W WHITE CONSTRUCTION INC	MCCOURT CONSTRUCTION CO INC	THE MIDDLESEX CORP	
TECHNICAL SCORE	89.47	84.09	85.28	85.61	1 Pre-Entered by MassDOT
SEALED PRICE PROPOSAL	\$127,339,000.00	\$95,584,000.00	\$102,502,425.00	\$120,835,395.00	2 Transferred from Bid-Express
OVERALL VALUE RATING = SEALED PRICE PROPOSAL / TECHNICAL SCORE	1,423,259.19	1,136,686.88	1,201,951.51	1,411,463.56	3 Calculated by MassDOT (step 2 / step 1)
		↑			Apparent Winning DB Entity

Overall Project Budget

LINE ITEM	BUDGET
Bid Amount	\$95,584,000.00
Contingencies	\$9,346,549.80
Construction Engineering	\$4,952,650.00
Traffic Police	\$3,465,000.00
Trainees	\$4,000.00
Total	\$113,352,199.80

Proposed Vote

To authorize the Secretary of the Massachusetts Department of Transportation, or **his** designee, to award and execute MassDOT Construction Contract No. 1 17832: Roadway Reconstruction and Related Work (Including Replacement of Bridge Nos. C-06-023 & O-06-002) on a Section of Route 20, with DW White **Construction Inc.**, in a form approved by the General Counsel, in the amount of \$95,584,000.00.



Thank You

Presentation to the Board

September 21, 2022

MassDOT #602659

Project Website: [Route 20 Reconstruction Project in Charlton & Oxford | Mass.gov](https://www.mass.gov/info-details/route-20-reconstruction-project-in-charlton-and-oxford)

