MassDOT Highway Construction Contract: 124025 Rehabilitation of Mount Auburn Street MassDOT Board of Directors

January 17, 2024

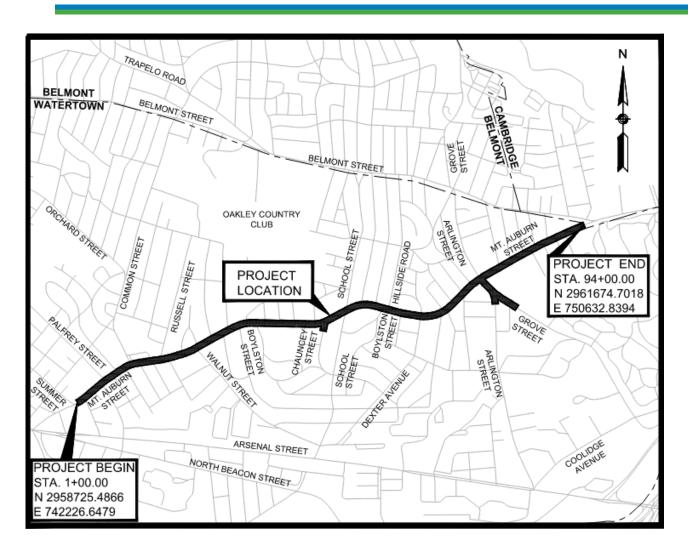


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Project Location

Mount Auburn Street in Watertown



Project Limits

 Mount Auburn Street corridor from Patten Street to the Cambridge city line.

Major Roadways Affected

- Mount Auburn Street
- School Street
- Arlington Street
- Common Street

Total Project Length

• 1.761 Miles (Mount Auburn Street)

Construction will take approximately four years from NTP.

Overview

Scope of Services/Purpose & Need

Scope of Services

- Full depth reconstruction throughout the corridor to improve the condition and safety of the roadway. Implement road diet via reallocation of available Right of Way.
- Removal of MBTA Overhead Catenary System (OCS) along Mount Auburn Street.
- Traffic signals will be replaced to meet current standards, implement Transit Signal Priority.
- Rectangular rapid flashing beacons proposed to improve crossings with ADA compliant sidewalks and pedestrian curb ramps. Curb extensions will be included to shorten crossing distance and safety.
- On road dedicated bicycle accommodations, both directions, to comply w/MassDOT complete streets.
- Utility work to upgrade drainage system. Infiltration trenches to promote groundwater recharge.

Purpose and Need

- General pavement degradation and deterioration with utility trenches, potholes, and reflective cracking.
- Wide travel lanes promote higher prevailing speeds in combination with outdated signal equipment.
- Sidewalk conditions are fair to poor and lack ADA compliant curb ramps and crossings.
- Lack of bicycle facilities pose safety concerns.



Procurement and Budget

• Project Advertised September 9, 2023

• Engineer's Estimate was \$26,819,150.00

• Bid Opening was November 21, 2023

• Five (5) Bids were received:

Newport Construction Corp.	\$26,661,000.00
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Albanese D & S, Inc. \$31,735,865.00

McCourt Construction Co. Inc. \$32,984,044.00

J H Lynch & Sons Inc. \$33,603,752.10

P Gioioso & Sons Inc. \$37,077,935.00

Line Item	Budget
Bid Amount	\$26,661,000.00
Contingencies (10%)	\$2,666,100.00
5% Construction Engineering	\$1,333,050.00
Traffic Police	\$1,170,000.00
Trainees	\$4,000.00
Specialty Services	\$30,000.00
Utilities	\$371,801.00
Total	\$32,235,951.00

- \$30,905,706.00 cost for this construction contract is funded with combination of Federal and State funds.
- Programmed in the 2023 STIP
- \$1,415,990.00 Funded by the City of Watertown (Non-Participating)



Request of the MassDOT Board

 Staff request that the MassDOT Board of Directors authorize the Secretary of the Massachusetts Department of Transportation, or their designee, to award and execute MassDOT Construction Contract 124025 – Rehabilitation of Mount Auburn Street with Newport Construction Corp. in the amount of \$26,661,000.00.



Thank You

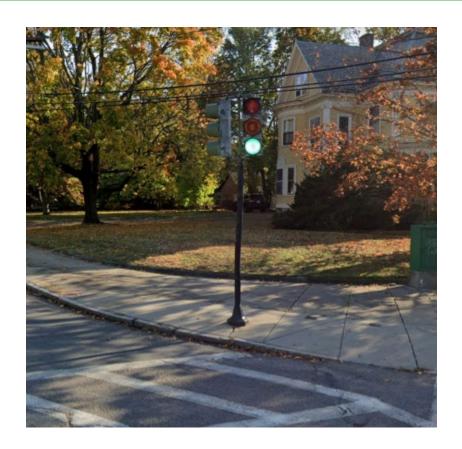


Appendix



Traffic and Safety Concerns

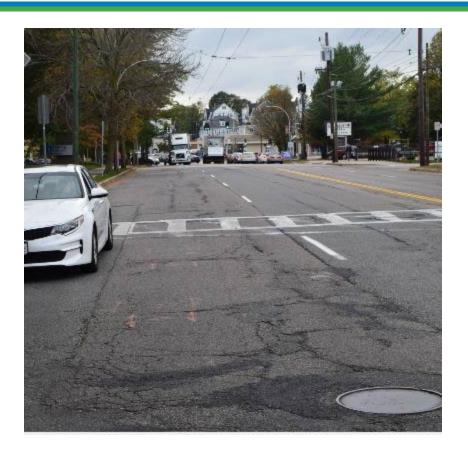
- Wide travel lanes promote higher prevailing speeds
- 18,600 vehicles per day (2018)
- Outdated signal equipment
- Pavement markings are non-standard / faded
- Transit delay along the corridor





Poor Pavement Condition

- General pavement degradation and deterioration
- Utility trenches, potholes, crack sealing
- Limited opportunities for pavement preservation
 - Overhead catenary system
- Mill and overlay not a feasible alternative
 - Pavement beyond service life





<u>Substandard Pedestrian Accommodations</u>

- Lack of bicycle facilities
- Fair to poor sidewalk condition in many locations
- Lack of ADA compliant pedestrian curb ramps and crossings
- Outdated pedestrian equipment





<u>Design Recommendations from Public Process</u>

- Maintain location of existing curb lines
- Incorporate road diet
- Retain existing tree canopy
- Maintain parking in business districts
- Improve operational efficiency
- Enhance bus service
- Improve pedestrian safety
- Provide benefits for all users (balance)
- Streetscape amenities





Construction Scope

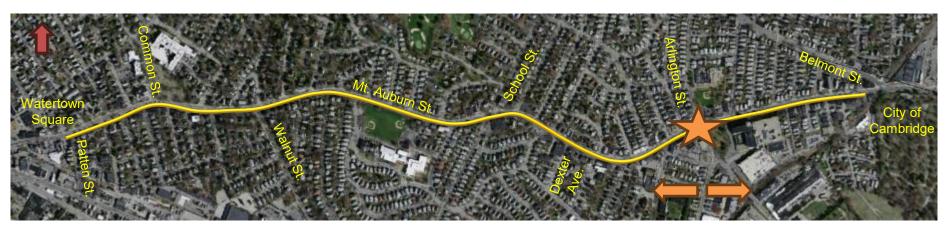
Proposed Improvements

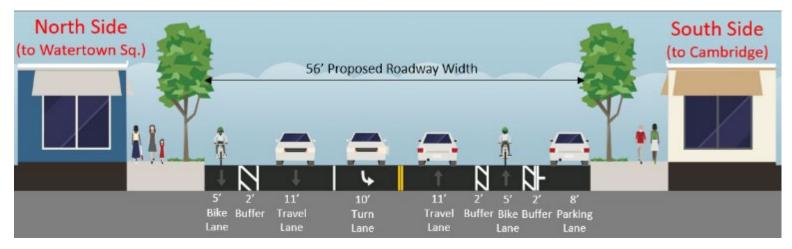
- Implement complete streets initiatives via "road diet"
- Operational improvements / traffic signal upgrades
- Improve transit services
- Enhance pedestrian crossings / ADA compliance with more visible crossings
 - Rectangular Rapid Flashing Beacons (RRFB's)
- Pavement reconstruction
- Provide on-street buffered bicycle lanes
- New cement concrete sidewalks and pedestrian curb ramps
 - Curb extensions at crosswalks
- Drainage system modifications / installation of stormwater infiltration trenches
- Streetscape / landscape enhancements corridor wide



Proposed Improvements West of Coolidge Square

- Full depth pavement reconstruction
- Sidewalks in each direction with grass planting strip
- 8-ft parking lane on the south side
- 5-ft bike lanes in each direction (2-ft painted buffers)
- 11-ft travel lanes in each direction
- 10-ft turn lanes at signals & major side streets
- New ADA compliant concrete pedestrian curb ramps

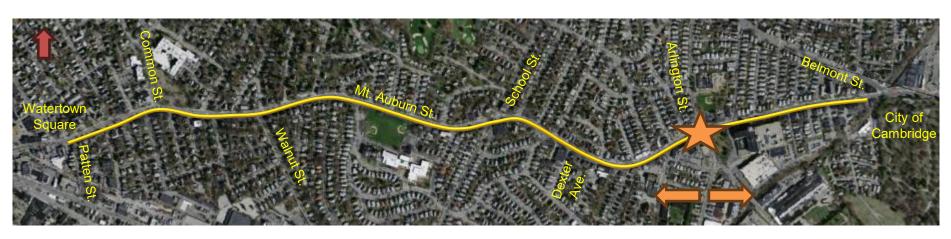


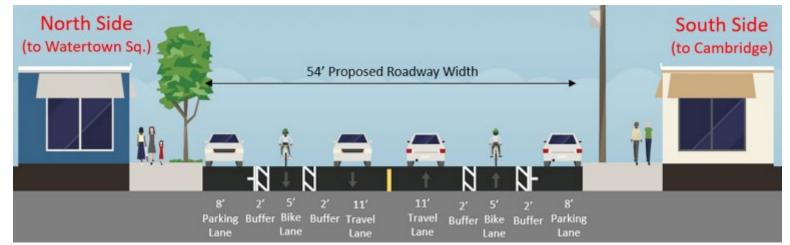




<u>Proposed Improvements</u> East of Coolidge Square

- Full depth pavement reconstruction
- Sidewalks in each direction with grass planting strip
- 8-ft parking lanes on each side of the corridor
- 5-ft bike lanes in each direction (2-ft painted buffers)
- 11-ft travel lanes in each direction
- 10-ft turn lanes at signals & major side streets
- New ADA compliant concrete pedestrian curb ramps







<u>Proposed Improvements</u> Pedestrians

- New ADA sidewalks and pedestrian curb ramps
- Traffic signals with audible pushbuttons and standardized crossing times
- Curb extensions at crosswalks adjacent to on-street parking
- Rectangular Rapid Flashing Beacons (RRFB's) at select crosswalk locations







<u>Proposed Improvements</u> Bicycles

- Buffered / non-buffered bicycle lanes to the extent feasible
- Shared bus / bicycle lanes where space is constricted
- Bicycle racks at placemaking areas along the corridor



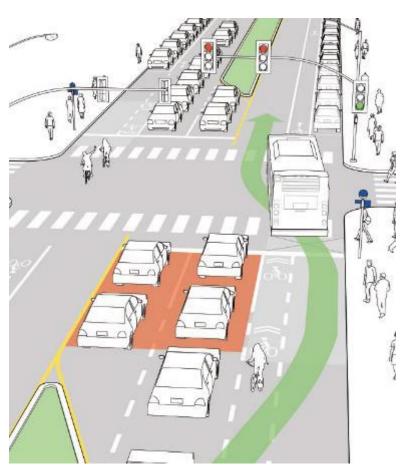






<u>Proposed Improvements</u> Transit

- Location of bus stops will improve safety for all users
- ADA accessible bus stops
- Shelters at stops based on boarding data
- Marked bus stops (as space permits)
- Improve transit operations
- Transit signal priority (TSP)
- Queue jump lanes
- Shared bus / bike lanes







<u>Traffic Impacts</u>

- Pavement reconstruction in most greas
- Temporary shifting of traffic using signage and police details
- Short-Term temporary road closures may be anticipated
- Temporary pedestrian detours will ensure accessible routes throughout the duration of construction



