

Craigie Drawbridge Rehabilitation Project



Massachusetts Department of Transportation

- The Massachusetts Department of Transportation, MassDOT, is the unified transportation organization serving the residents and visitors of Massachusetts with a focus on public safety, customer service and efficiency.
- MassDOT is governed by a five member board, managed by a Secretary/CEO, and includes four divisions: Highway, Rail & Transit, Registry of Motor Vehicles, and Aeronautics.
- MassDOT was created on November 1, 2009, the result of a historic transportation reform law signed into law by Governor Deval Patrick in June 2009.

Patrick-Murray Accelerated Bridge Program

■ Authorization:

- Chapter 233 of the Acts of 2008
- Project must be complete by 2016



■ Program Goals:

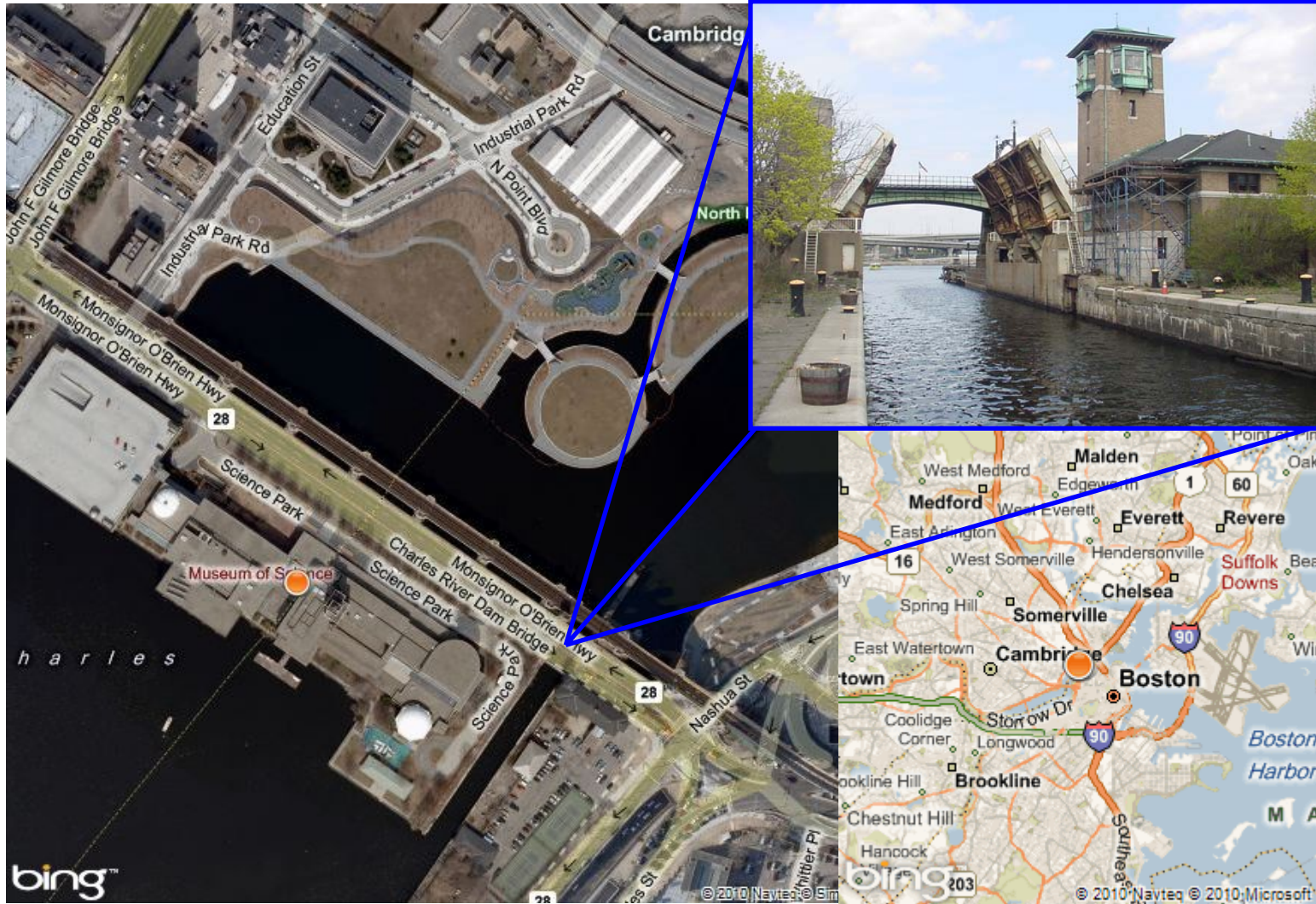
- Improve the Condition of the Commonwealth's Bridges
- Stimulate Economic Development and Job Creation
- Save Money by Completing Projects Sooner
- Complete Projects Efficiently and Innovatively
- Provide Access and Opportunity for all
- Manage with Transparency and Accountability

Accelerated Bridge Program Overview

- \$2.984B Accelerated Bridge Program Funds Allotted
- 8 Year Program ending in 2016
- 166 Site-Specific Projects are planned to repair or replace 283 structures
- 39 Preservation & Maintenance Projects will repair and improve the safety of numerous additional structures throughout the Commonwealth



Craigie Drawbridge Rehabilitation Project



Craigie Drawbridge - History and Description

- Originally constructed in 1910 and replaced in 1962
- Approximately 45,000 ADT
- Twin Double-Leaf Bascule Bridge
 - 45 ft. span over navigation channel
 - 3 “Boston Bound” traffic lanes
 - 2 “Cambridge Bound” traffic lanes
 - Sidewalks on each side
 - Abutted by the MBTA Green Line and the Museum of Science



Craigie Drawbridge Rehabilitation Project

Consultant Design Team:

Hardesty & Hanover, LLP
Howard/Stein-Hudson
Associates, Inc.

Contractor:

J. F. White Contracting
Company

Project Type:

Deck and Substructure repairs
and full replacement

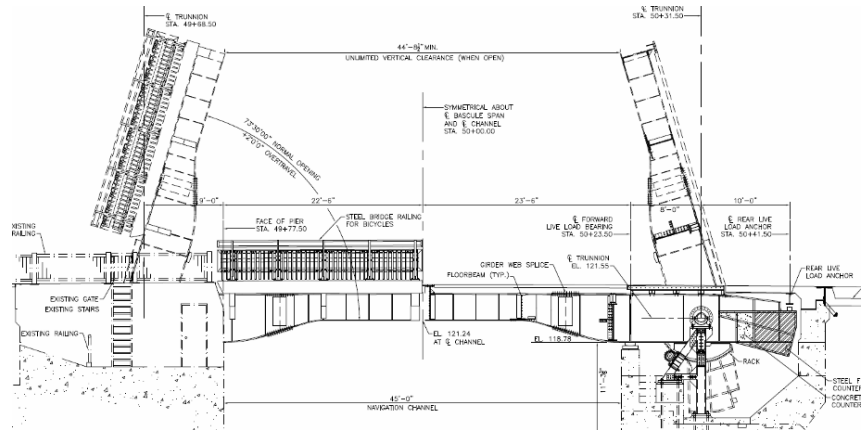
Construction Cost:

\$42.8 M with Incentive/
Disincentive



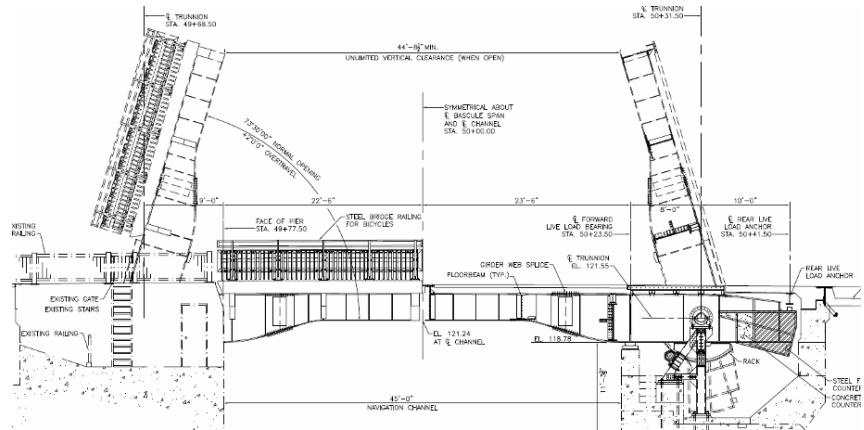
Craigie Project – Completed to-date

- Started in summer 2009
- Total project approximately 50% complete and entering final stages
- Dam bridge rehabilitation – Completed January 2010
- Highway improvements -Ongoing
- Sidewalk replacement



Craigie Drawbridge Phase Scope

- Demolish the existing superstructure
- Provide a temporary bridge structure to carry traffic
- Repair substructure and modify as required to accept new superstructure
- Install new superstructure and solid bridge deck, which will provide better weathering protection for machinery and comfort of vehicular and pedestrian traffic
- Replace all machinery components and electrical components

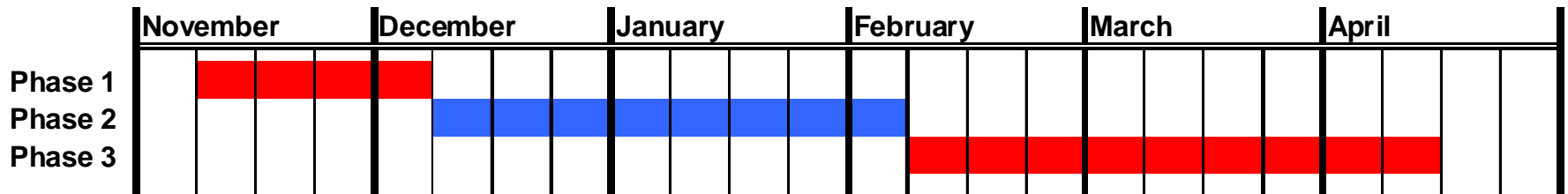


Drawbridge Replacement Phases

The Craigie Drawbridge is regulated by the US Coast Guard which provided a waiver from the operating permit. This waiver allows the bridge and channel to remain closed to navigation from November to April except for on-call and emergency access.

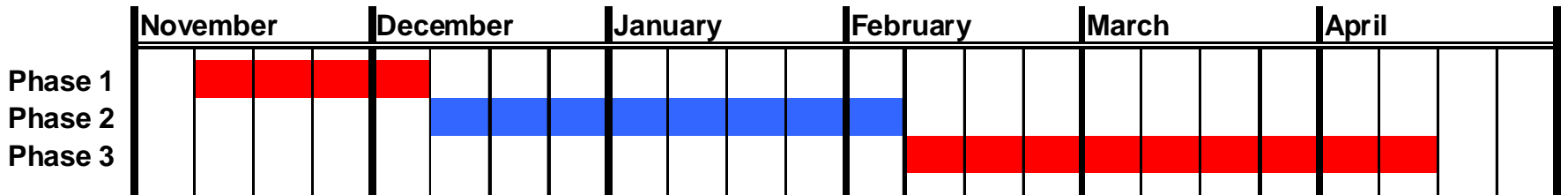
Starting in November 6, 2010 through April 2011, contractor will start a 24/7 rapid replacement which will occur in 3 Major Phases:

1. Contractor will install temporary bridges over the existing bridge
2. Contractor will demolish the existing bridge and make repairs to the bridge substructure
3. Contractor will install a new pre-fabricated bridge.



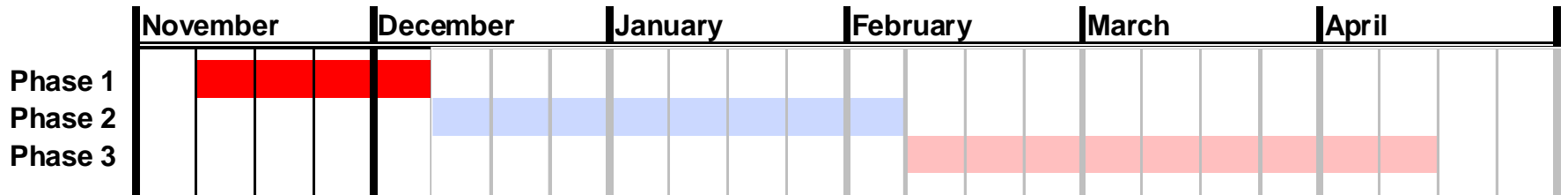
Overall schedule is subject to changes based on actual productivity, weather conditions, or unanticipated site conditions

Phase 1 – 2 lanes - outbound traffic only



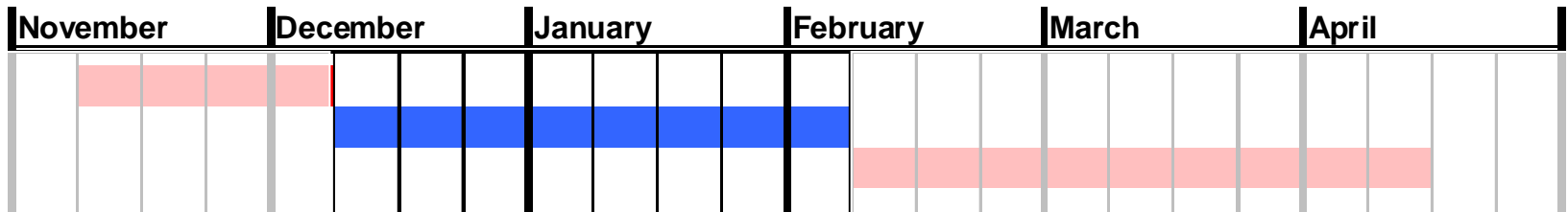
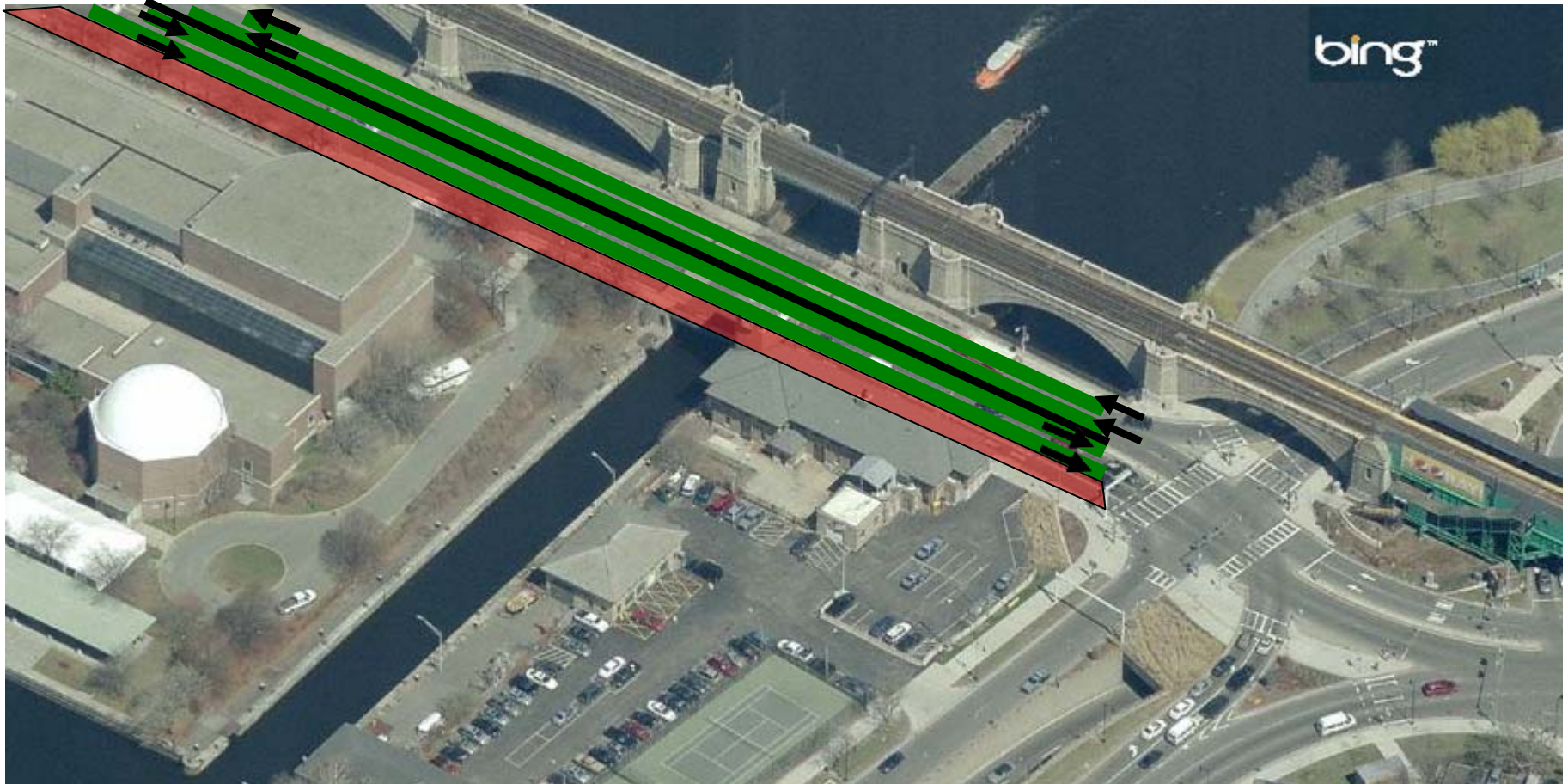
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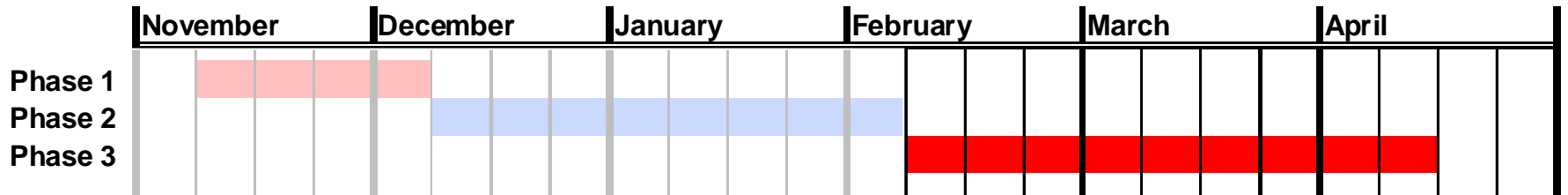
11/6/2010 - 12/4/2010

Phase 2 – 4 lanes - outbound and inbound



12/5/2010 - 2/7/2011

Phase 3 – 2 lanes - outbound traffic only



Traffic Management

- Leverett Circle operation is retained
- Bikes and pedestrians will not be detoured. One sidewalk will be maintained at all times and signalized mid-block crosswalk with a crossing guard will be provided.
- Inbound traffic travelling from Cambridge to Boston will be directed to signed alternate routes.
- Access to the Museum of Science will not be restricted but patrons are advised to approach the Museum from the Boston side to avoid anticipated traffic congestion on the Cambridge side of the project.
- Signed alternate routes will be in place to direct inbound traffic to Logan International Airport, 93, and Storrow Drive and to area hospitals and points West.

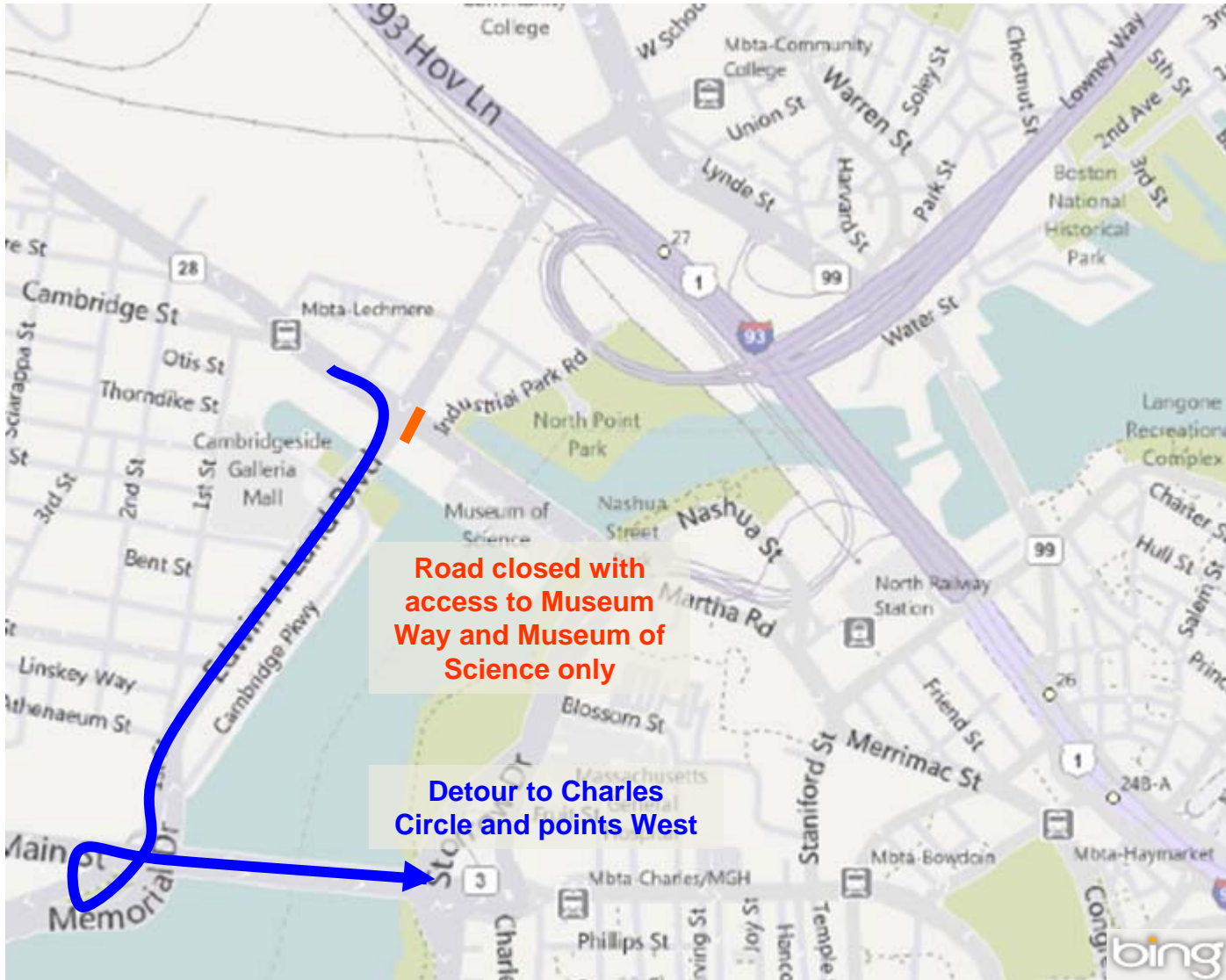
Detour Routes Advanced Signage



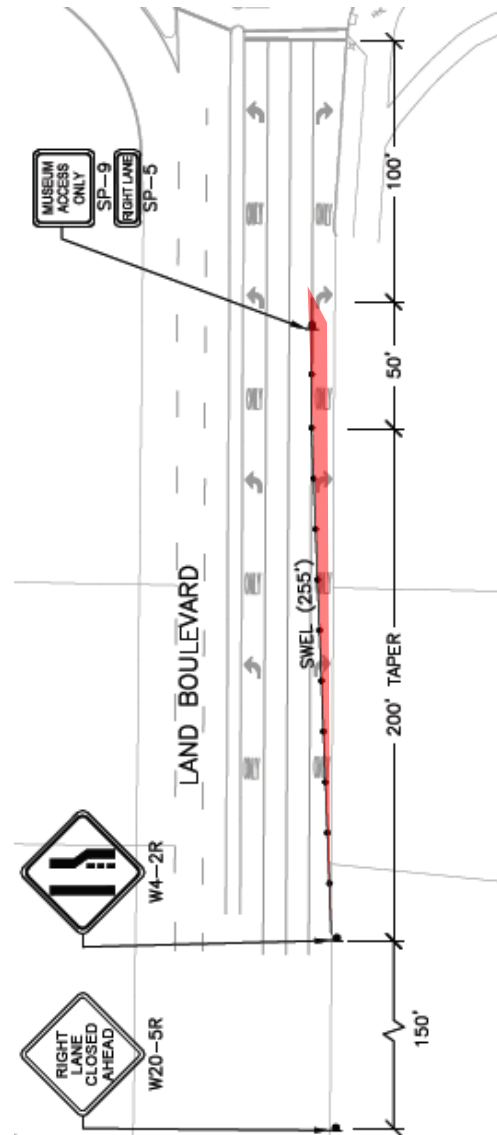
MassDOT's goal is to intercept as much traffic as possible before they approach the work zone



Detour Routes to Hospitals and Points West



Land Boulevard Intersection



A bump out approaching O'Brien from the South on Land Blvd funnels the traffic straight to the 93 detour route or towards the O'Brien West. Museum patrons will be directed to take a right hand turn at the intersection towards the museum.

Bike and Pedestrians



Bikes and pedestrians will not be detoured away from the site. A mid-block signalized crosswalk will be in place.

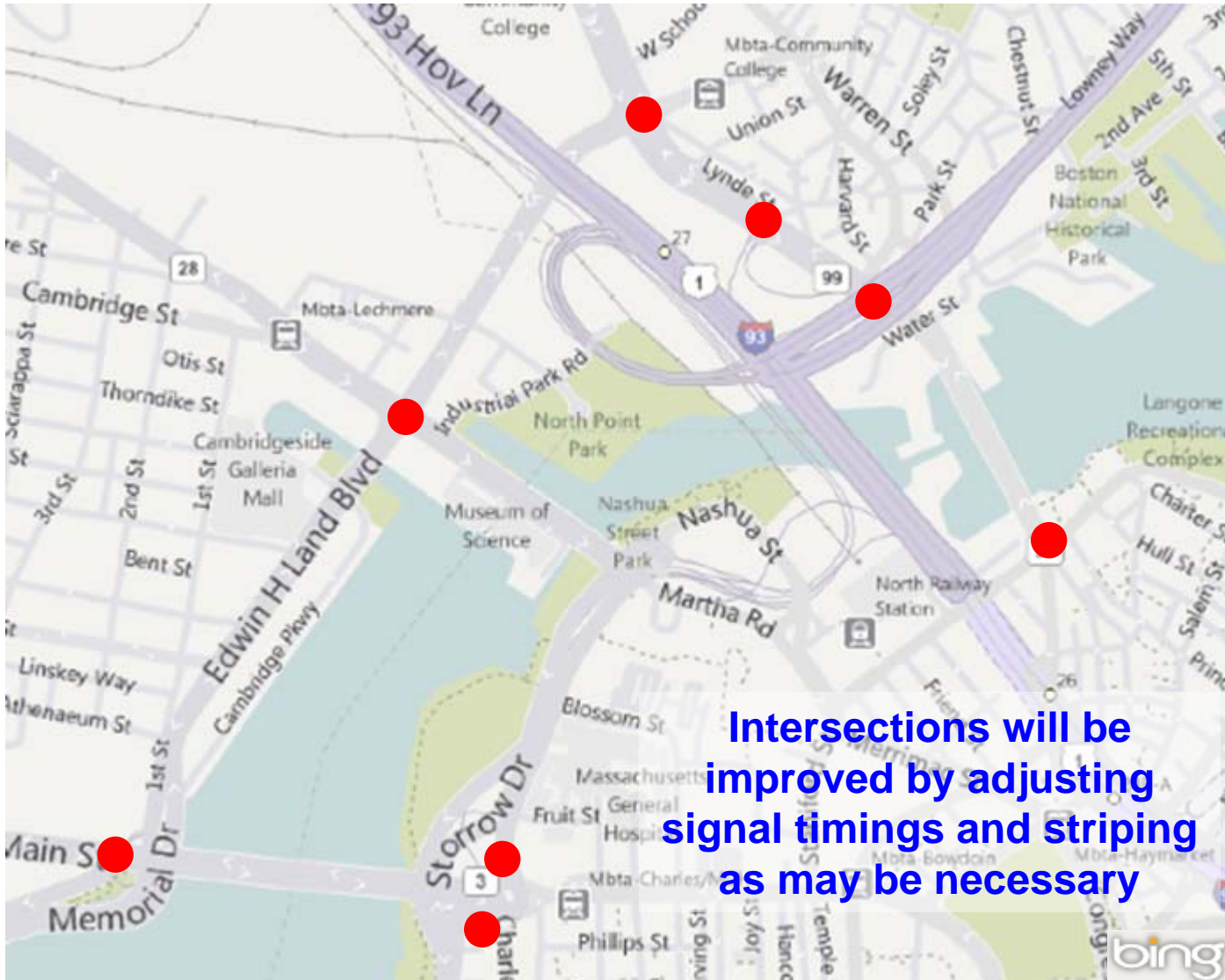
Bike and Pedestrians



Shared lane markings and bike signage will remain in place during all phases of construction

When approaching the bridge during the two-lane phases, If the approach side is closed, bikes and pedestrians **MUST** cross to the open side at a designated crosswalk

Key intersection improvements

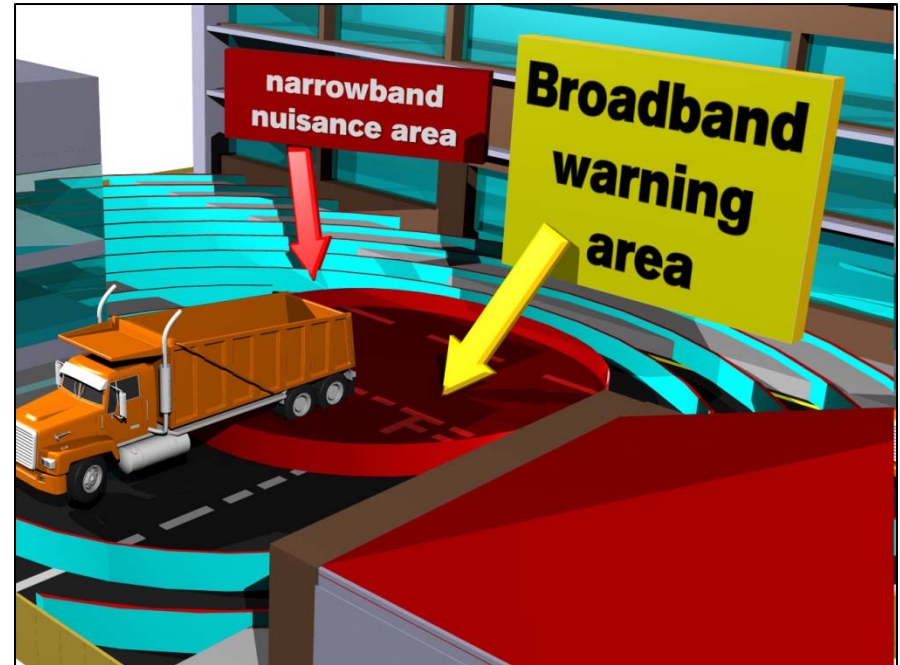




Noise Abatement Measures

Specification developed to minimize construction noise.

- Successfully implemented on recent basin projects
- Requires use of equipment with efficient noise-suppression devices
- Restricts idling
- All construction vehicles retrofitted with ambient noise-sensitive back-up warning devices



Brigade Electronics bbs-tek white sound alarm

MassDOT measures during construction

- Camera deployment at key locations
- Extensive on-site monitoring
- HOC 24/7 coordination
- Command Center established at City of Boston Traffic Management Center
- Coordination with other projects

Communication Plan

- Install and activate VMS Boards
- Partner with area stakeholders
- Launch Project website
- Issue traffic advisories
- Direct outreach with business groups

Craigie Public Meetings

- November 17, 2008
Museum of Science general public meetings
- January 27, 2009
Boston University general public meeting
- June 11, 2009
MIT, Cambridge general public meeting
- Wednesday September 29, 2010 6PM
East Cambridge neighborhood meeting hosted by Rep Toomey
- **Wednesday October 7, 2010 5PM**
Museum of Science general public meeting
- Thursday October 26, 2010 6PM
Somerville neighborhood meeting hosted by Somerville Delegation

More Information

Information on Charles River Bridge Projects

www.mass.gov/MassDOT/CharlesRiverBridges

To be added to project distribution lists please contact
Stephanie Boundy, MassDOT Public Outreach
Coordinator at [617-973-8049](tel:617-973-8049) or
Stephanie.Boundy@state.ma.us

For 24/7 Site Issues Contact the MassDOT Highway
Operations Center [617-946-3150](tel:617-946-3150)



MassDOT encourages auto commuters to consider taking advantage of alternative transportation opportunities during the Craigie Drawbridge Rehabilitation Project to avoid traffic and increased commuting times.

For additional information on alternative commuter options please see www.mbta.com or contact the MBTA Customer Support Services Center at [617-222-3200](tel:617-222-3200) or TTY [617-222-5146](tel:617-222-5146)

MBTA Customer Service representatives are available Monday-Friday 6:30 AM - 8:00 PM and Saturday-Sunday from 7:30 AM - 6:00 PM

Questions



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