



Welcome!

Route 1 Viaduct Rehabilitation Project
Chelsea | Project File No. 605287



PUBLIC INFORMATION MEETING

Chelsea City Hall

November 8, 2017 | 6:30 p.m.

Agenda

- **Welcome & Introductions**
- **Project Overview**
 - Context
 - Need
 - Goals
 - Schedule
- **Anticipated Project Impacts**
- **Environmental Review and Public Outreach**
- **Discussion**

Project Team

MassDOT's Highway Division

Project Proponent

Federal Highway Administration

Responsible for Oversight and NEPA compliance

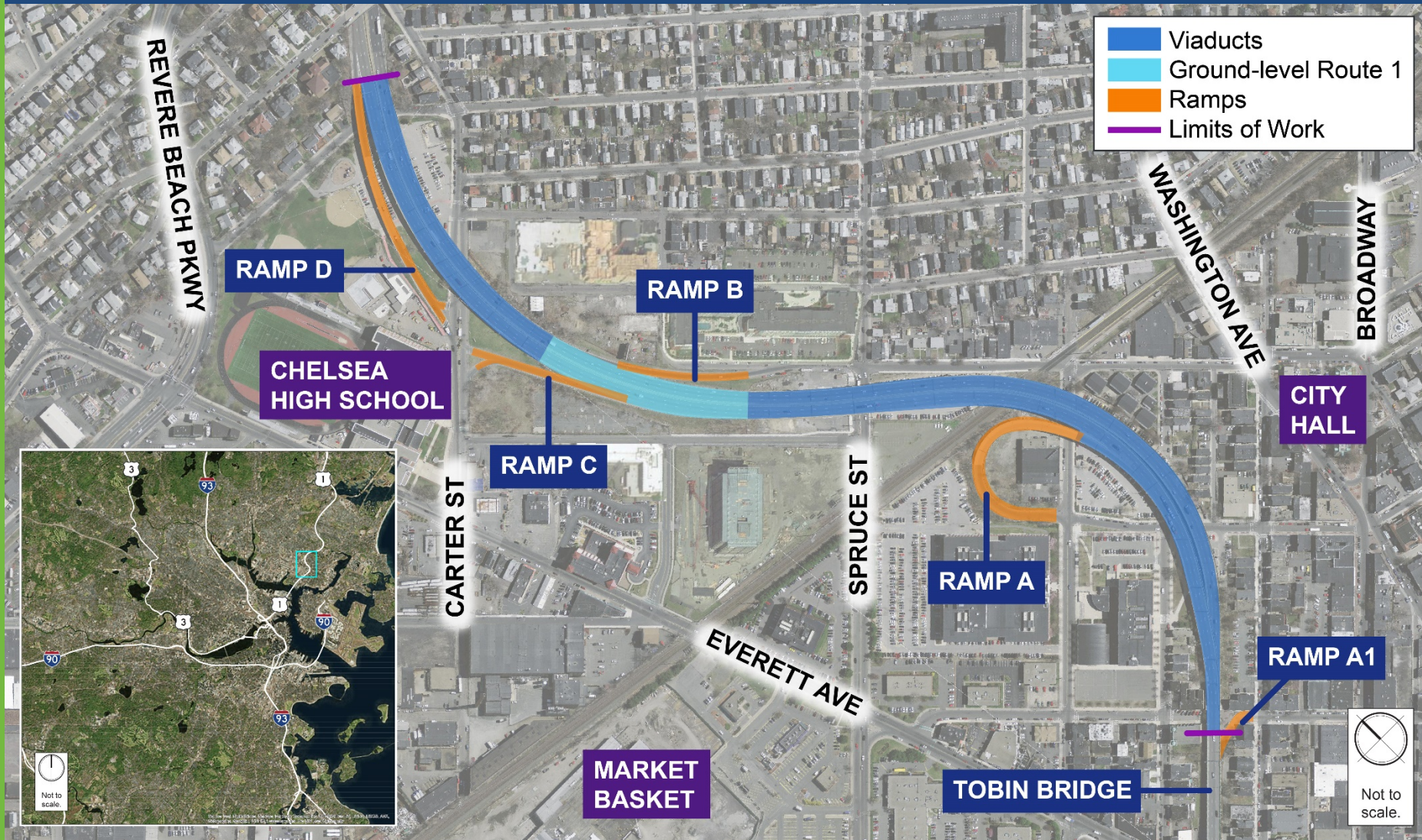
HNTB

Lead Consultant for team including Howard Stein Hudson, CME, VHB, Green International

City of Chelsea, MBTA

Coordination

Project Limits of Work



Chelsea Viaduct

- Carries US Route 1 through Chelsea from the County Road Overpass to the Tobin Bridge
- Designated evacuation route
- Constructed 1956 and 1957
- Southern Viaduct – 2,000 ft long
- Northern Viaduct – 1,000 ft long
- 75 spans
- Carries 62,000 vehicles per day
- Carries MBTA Bus 111 from Chelsea to Haymarket Station via Ramp A, and MBTA 426 and 428 from North Shore

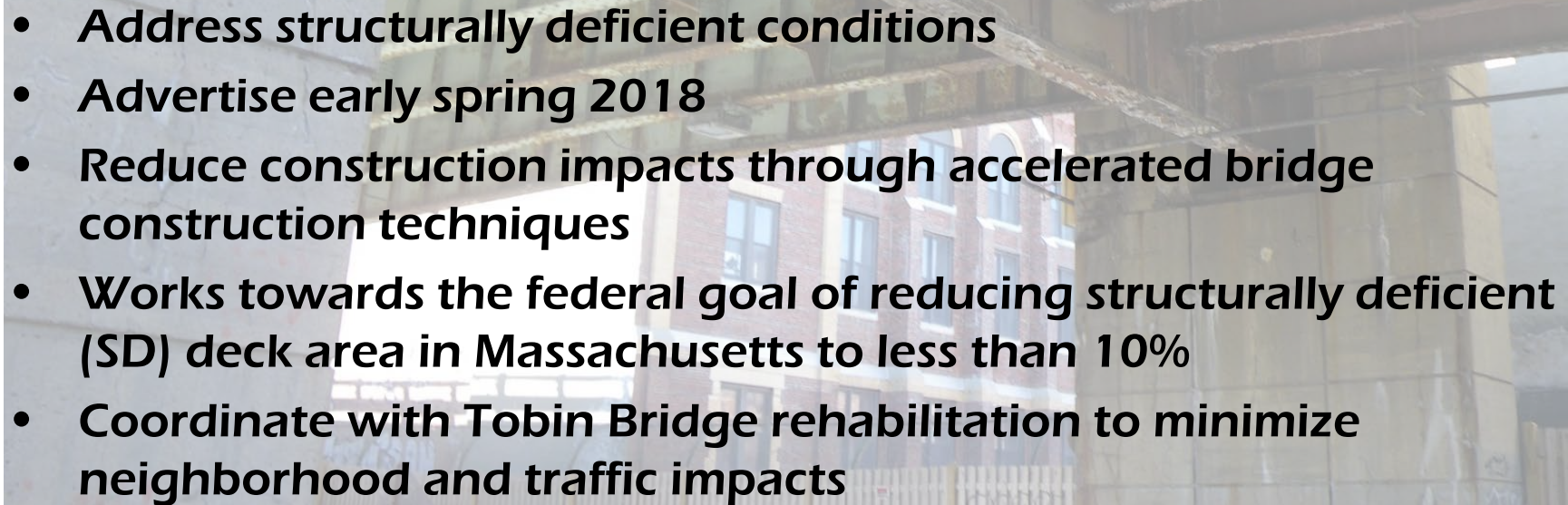


Existing Conditions

- Viaduct structurally deficient
- Substructure: poor condition
- Deck at bridge joints: poor to severe condition
- Superstructure/Beams: poor to severe condition
- Does not meet statutory load ratings for all legal vehicles



Project Goals

- 
- Address structurally deficient conditions
 - Advertise early spring 2018
 - Reduce construction impacts through accelerated bridge construction techniques
 - Works towards the federal goal of reducing structurally deficient (SD) deck area in Massachusetts to less than 10%
 - Coordinate with Tobin Bridge rehabilitation to minimize neighborhood and traffic impacts

Project Status

- Preliminary Structures Report completed
- Subsurface exploration completed
- Survey ongoing
- Currently in Preliminary Design
- Value Engineering study complete
- Approximate cost: \$110M



Design Schedule

**Preliminary Design
(25% Highway &
Bridge Sketch Plans)**

October 2017

**Final Design
December 2017**

**Advertisement
March 2018**

Design Public Hearing

November 2017

PS&E

January/February 2018

Design & TMP Development

Public Outreach

Scope of Work

- **Repair and Retrofit Substructure to support regulatory weight requirements and the new superstructure**
- **ABC Methods for Superstructure Rehabilitation:**
 - **Pre-Fabricated Bridge Units (PBU's) throughout majority of project**
 - **Use conventional repair methods at 6 isolated spans**
- **Provide new crash tested bridge barriers**
- **Provide new snow fence where applicable**
- **Replace Roadway Lighting and Bridge Drainage**
- **Rebuild existing parking lots under viaduct, and add new Carter Street lot**

Scope - Substructure



**VIEW OF TYPICAL
EXISTING SUPPORT**



**RENDERING OF TYPICAL
PROPOSED SUPPORT
RETROFIT**



Scope - Superstructure

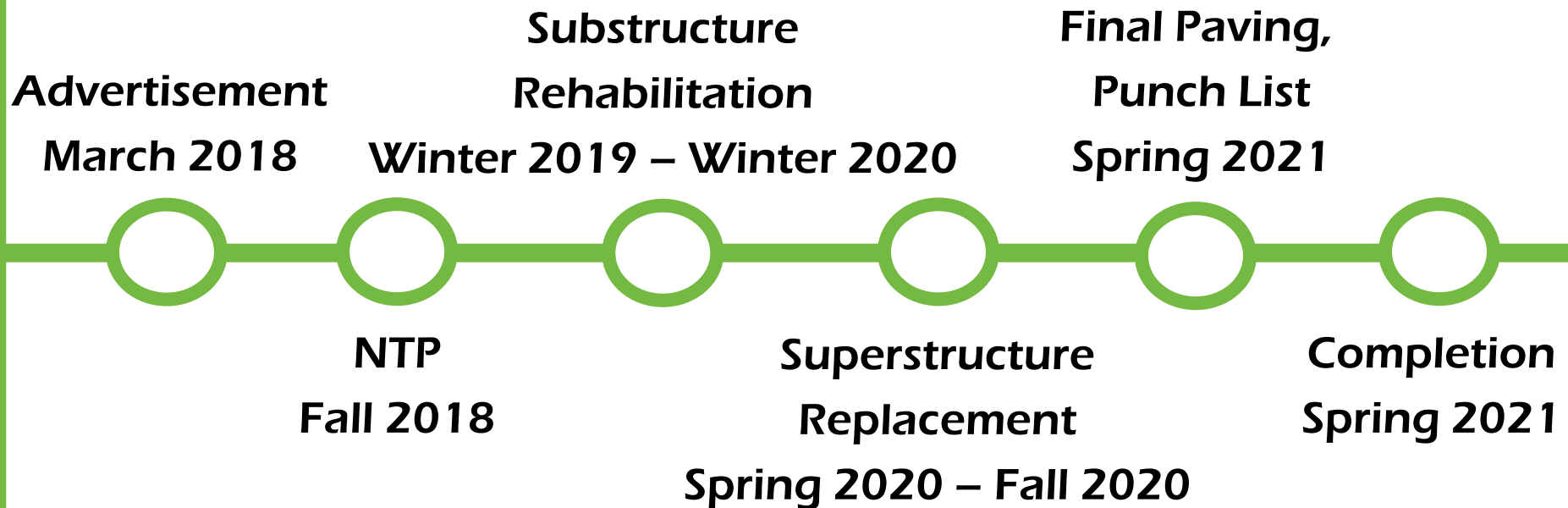
PREFABRICATED BRIDGE UNITS (PBUS)

Scope - Superstructure

- Isolated Spans will require conventional repair:
 - Rte 1 SB over Rte 1 NB (at Southern limits of work near 4th Street)
 - Span over Railroad
 - Work includes the removal of the existing deck, cleaning, strengthening and painting of the existing steel, and utilizing steel grid deck elements.



Construction Schedule



Coordination with
Tobin Deck Rehabilitation
2018 - 2020

Construction Impacts - Traffic

- Fall 2018 - Winter 2020: Substructure rehabilitation - *no traffic impacts on Route 1 during peak travel times*
- Spring to Winter 2020: NB/SB superstructure replacement
 - SB reduced from 3 lanes to 2 lanes
 - NB – Tobin work zone of 2 lanes to be extended within project limits
 - NB/SB reduced to 1 lane overnight for ABC construction
 - Interim ramp closures with local detours
 - Interim parking impacts
- Ramp A permanent closure under evaluation
- Extensive public outreach to ensure motorists and residents understand project impacts

Regional Traffic Analysis

- Comprehensive traffic analysis underway – complete mid-November 2017
- Will evaluate:
 - Regional and local traffic currently using the viaduct to be impacted
 - Potential traffic displacement due to the project
 - Impacts of displacement to local and regional roadways roadways/intersections
 - Cumulative impacts and potential mitigation related to this and other regional (North Shore) transportation improvement projects

Construction Impacts - Abutters

- We are in the process of evaluating the most appropriate measures to minimize construction impacts
- Dust and pollutant containment system will be used for mitigation
- Lead Paint Abatement Plan for Hazardous Materials Mitigation
- Temporary drainage will be provided to mitigate runoff
- Reallocation of temporary loss of parking
- Public outreach will help keep abutters and users informed of construction impacts



Construction Impacts - Parking

- **Fall 2018 - Spring 2020: Parking Lots Impacted during Substructure Rehabilitation**
- **2020 Full Year: Parking Lots Impacted During Demolition and Erection of Bridge Superstructure**
- **Net gain in parking spaces with the addition of a new lot at Carter Street**



Environmental Review

- Project requires NEPA review and approval by FHWA
 - Anticipated Categorical Exclusion (CE)
- Community engagement is integral to the NEPA Process – your input in this design process will be documented
- FHWA is a participant in project development and will determine adequacy of the public process
- Other environmental approvals:
 - Section 106 of the Historic Preservation Act
 - Section 4(f) of the DOT Act



Public Participation/Outreach Plan



- Project website
- Mass e-notification to North Shore E-Z pass holders
- Informational materials to be distributed
 - In community facilities – libraries, City Hall
 - On MBTA buses – Rtes. 111, 112, 114, 116, 117
- MassDOT 25% Design Public Hearing and evening public information meetings
- Door-to-door flyer distribution on immediately adjacent streets
- Pop-ups at community gathering places – libraries, supermarkets, community centers, etc
- Briefings upon request to local community organizations – Chelsea Green Roots, Chamber of Commerce, etc
- Coordination with MassPort at Logan Airport satellite parking facilities in Chelsea

Next Steps

- Design Public Hearing - November 2017
- Look for us in your neighborhood!

Final Design
December 2017

Advertisement
March 2018

PS&E

January/February 2018

NTP

Fall 2018

Design & TMP Development

Discussion



www.massdot.state.ma.us/highway/HighlightedProjects/ChelseaRoute1ViaductRehabilitationProject.aspx

Nathaniel Cabral-Curtis
Howard Stein Hudson
Public Involvement Specialist
ncabral-curtis@hshassoc.com
617-482-7080 x 236

Joseph A. Pavao, Jr., P.E.
MassDOT
Project Manager
Joseph.pavaojr@dot.state.ma.us

Fact sheets and mail-in comment sheets available



Thank You

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