



Powder Point Bridge Replacement Project

Public Information Meeting

Duxbury Performing Arts Center

July 29, 2026

Project File No. 612006



Notice of MassDOT's policy on diversity and civil rights

- All MassDOT activities, including public meetings, are free of discrimination.
- MassDOT complies with all federal and state civil rights requirements preventing discrimination based on sex, race, color, ancestry, national origin (limited English proficiency), religion, creed, gender, sexual orientation, gender identity or expression, or veteran's status.
- We welcome the diversity from across our entire service area. If you have any questions or concerns, please visit <https://www.mass.gov/nondiscrimination-in-transportation-program> to reach the Office of Diversity and Civil Rights.

Thank you for joining our meeting. We appreciate your participation!

Agenda

- 01** Introductions
- 02** Project Background
- 03** How We Got Here
- 04** Current Design
- 05** Right of Way
- 06** Timeline
- 07** Maintenance Expectations
- 08** Question and Answer



Introductions

MassDOT Highway Division Team

- Dan Racicot: Legislative Liaison
- Marco Pereira: Project Manager
- Jeff Shrimpton: Program Engineer for Design, Environmental Section
- Kurt Jergensen: Historic Bridge Specialist
- George Batchelor: State Highway Landscape Architect
- Pedro Hernandez: Design Architect
- Shane Sousa: District 5 Bridge
- Craig Sheehan: Right of Way

Bridge Design Team

- Peter Wu: HDR Project Manager
- Tony Santoro: HDR Deputy Project Manager
- Jeff Toussaint: HDR Roadway Lead
- Ben Holsapple: HDR Structural Lead
- Jim Potter: HDR Scheduler
- Etty Padmodipoetro: Urban Idea Lab Architectural Lead
- Tanner Halkyard and Leng Woo: Urban Idea Lab Design Team



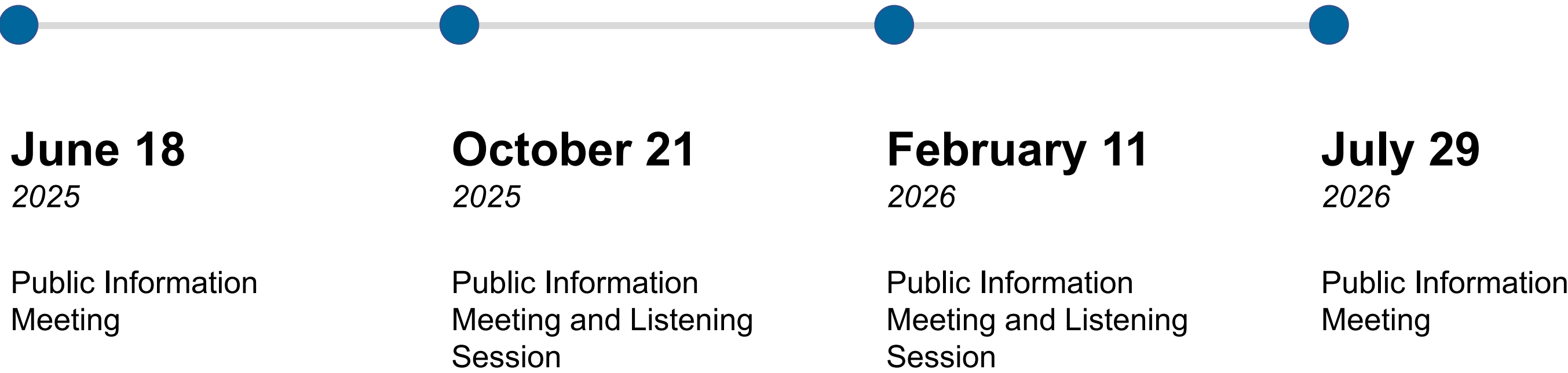
Project Background

Background

- Original structure damaged by fire in 1985
- Replacement bridge constructed in 1986
- Repairs are frequent, costly, and increasing
- Harsh marine environment



How did we get here?





MassDOT & Design Team Goals

- Construct replacement bridge with structurally sound materials that meet current bridge design standards, and improve safety and connectivity for roadway users throughout the service life of replacement structure.
- Current MassDOT and FHWA bridge requirements, including 100-year service life.
- Incorporate design elements to create a context-sensitive bridge design.



**Current
Design**

Current Design

- Honor iconic character
- Provide modern, safe, and durable features
- Protected sidewalk on roadway
- Maintain the acoustic profile
- Use similar materials, scale, and rhythm in railing design
- Respect visual cadence of pile spacing
- Use high-quality timber or marine treated wood



On the Bridge Experience



View From the Water



View From the Water



Beach View



Protected Sidewalk



Pedestrian Crossing



Bridge Underside Experience



Pile Coating Color Palette



PILE COLOR - 01 (HAZE GREY)



WOOD RAILING SYSTEM
TBD

FASTENERS + CONNECTIONS
STAINLESS STEEL

GIRDERS
DOUGLAS FIR GLULAM
PC WOODFORCE
COLOR: HATTERAS GRAY WF-12

CONCRETE PIER CAP
TBD

PIERS
EXPXY COATED CONCRETE
ENCASED STEEL

COLOR NAME- HAZE GREY (U.S. NAVY)
HEX - #BBB8B4
RGB - 187,184,180



HAZE GREY	HIGH RISE	COOL GREY 7-C	COOL GREY 9-C	425-C	LAVA SMOKE
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PILE COLOR - 02 (HIGH RISE)



WOOD RAILING SYSTEM
TBD

FASTENERS + CONNECTIONS
STAINLESS STEEL

GIRDERS
DOUGLAS FIR GLULAM
PC WOODFORCE
COLOR: HATTERAS GRAY WF-12

CONCRETE PIER CAP
TBD

PIERS
EXPXY COATED CONCRETE
ENCASED STEEL

PANTONE- HIGH RISE
HEX - #aeb2b5
RGB - 174,178,181



HAZE GREY	HIGH RISE	COOL GREY 7-C	COOL GREY 9-C	425-C	LAVA SMOKE
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PILE COLOR - 03 (COOL GREY 7-C)



WOOD RAILING SYSTEM
TBD

FASTENERS + CONNECTIONS
STAINLESS STEEL

GIRDERS
DOUGLAS FIR GLULAM
PC WOODFORCE
COLOR: HATTERAS GRAY WF-12

CONCRETE PIER CAP
TBD

PIERS
EXPXY COATED CONCRETE
ENCASED STEEL

PANTONE- COOL GREY 7-C
HEX - #97999c
RGB - 151,153,156



HAZE GREY	HIGH RISE	COOL GREY 7-C	COOL GREY 9-C	425-C	LAVA SMOKE
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PILE COLOR - 04 (COOL GREY 9-C)



WOOD RAILING SYSTEM
TBD

FASTENERS + CONNECTIONS
STAINLESS STEEL

GIRDERS
DOUGLAS FIR GLULAM
PC WOODFORCE
COLOR: HATTERAS GRAY WF-12

CONCRETE PIER CAP
TBD

PIERS
EXPXY COATED CONCRETE
ENCASED STEEL

PANTONE- COOL GREY 9-C
HEX - #75787b
RGB - 117,120,123



HAZE GREY	HIGH RISE	COOL GREY 7-C	COOL GREY 9-C	425-C	LAVA SMOKE
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PILE COLOR - 05 (425-C)



WOOD RAILING SYSTEM
TBD

FASTENERS + CONNECTIONS
STAINLESS STEEL

GIRDERS
DOUGLAS FIR GLULAM
PC WOODFORCE
COLOR: HATTERAS GRAY WF-12

CONCRETE PIER CAP
TBD

PIERS
EXPXY COATED CONCRETE
ENCASED STEEL

PANTONE - 425-C
HEX - #545859
RGB - 84,88,89



HAZE GREY	HIGH RISE	COOL GREY 7-C	COOL GREY 9-C	425-C	LAVA SMOKE
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PILE COLOR - 06 (LAVA SMOKE)



WOOD RAILING SYSTEM
TBD

FASTENERS + CONNECTIONS
STAINLESS STEEL

GIRDERS
DOUGLAS FIR GLULAM
PC WOODFORCE
COLOR: HATTERAS GRAY WF-12

CONCRETE PIER CAP
TBD

PIERS
EXPXY COATED CONCRETE
ENCASED STEEL

PANTONE - LAVA SMOKE
HEX - #525b62
RGB - 82,91,98



HAZE GREY	HIGH RISE	COOL GREY 7-C	COOL GREY 9-C	425-C	LAVA SMOKE
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PILE COLOR - COMPARISON



HAZE GREY	HIGH RISE	COOL GREY 7-C	COOL GREY 9-C	425-C	LAVA SMOKE
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Approach Design - West Approach

- Realigned King Caesar approach into 'T' intersections
 - Provides better sight lines
 - Controlled movements
 - Departing beach traffic continues to move freely
- Optimizes existing footprint while enhancing safety for all users
 - Adds walkway from lot to bridge
 - Marked crosswalk to north side of bridge
 - Reduced pavement at intersection
- Parking Lot Improvements
 - Striped parking spaces
 - Relocated accessible spaces



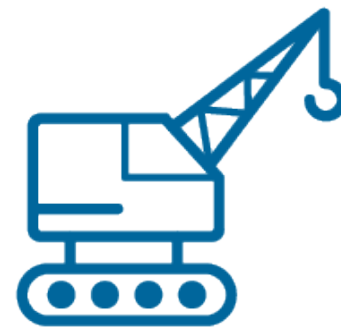
Proposed plan; not final

Approach Design - East Approach

- 6-ft Sidewalk on either side to beach path and boardwalk
- Shortened crossings throughout
- Relocated guard shack
- Revised grading to prevent ponding
- Parking spaces maintained in Lot



Proposed plan; not final



Anticipated Construction Impacts

Anticipated Construction Impacts

- Bridge will close to pedestrians and vehicles
- Beach access with reduced parking available on eastern side
- Detour Route:
 - Data collected at all intersections along detour route
 - Evaluating mitigation needs for increased traffic





**How will your
property be
impacted?**

Preliminary Right of Way (ROW) discussion

- The Town of Duxbury is responsible for acquiring all necessary rights in public land for design, construction, and implementation of this project.
 - Temporary construction easements may be required.
 - Only two properties are anticipated to be affected: 370 Powder Point Avenue and Duxbury Beach Reservation
- Affected property owners will be contacted by personnel from the Town of Duxbury or consultants representing the responsible agency.
 - Property owners are protected under Massachusetts General Laws, primarily Chapter 79.
- Preliminary Right of Way plans will be available for viewing at Town Hall.

At this stage of design, the Right of Way process has not been finalized. This meeting is an opportunity for the public to comment on any impacts to properties.



Construction Timelines

Required Permits

Regulatory Agency	Permit/Coordination
FHWA	National Environmental Policy Act (NEPA)
USACE	CWA Section 10/404 Permit (USACE Nationwide Permit [NWP]) 15 - US Coast Guard Approved Bridges
MassDEP	CWA Section 401 - Water Quality Certification (VVQC)
USFWS	Endangered Species Act, Section 7
NOAA/National Merine Fisheries Service (NMFS)	ESA Section 7 Endangered Species Coordination for marine species Essential Fish Habitat
Massachusetts Office of Coastal Zone Management	Coastal Zone Management (CZM) Federal Consistency Review
State Historic Preservation Officer	Section 106 of the National Historic Preservation Act
U.S. Coast Guard	Advance Approval received by MassDOT on October 17, 2025
Massachusetts Division of Fish and Wildlife (MassWildlife)	Natural Heritage & Endangered Species Program (NHESP) Estimated or Priority Habitat
FHWA	Section 4(f) of the USDOT Act

Anticipated Environmental Restrictions

(Based on current information. May change as permitting proceeds)

- Piping Plover
 - No in water work / driving piles from April 1st to August 31st on the east side of the project.
 - This affects initial construction of the trestle on the east side (building from east to west), in addition to pile installation for the first 900 feet from the east approach.
- In water restrictions
 - No in water work from February 1st to June 30th.
 - This helps to account for specific in-water species including
 - Winter flounder
 - Shellfish (several species)
 - Atlantic cod
 - Long finned and short finned squid

All of these are being evaluated within vicinity of the project.

Construction Timeline: Best Case Environmental Restrictions

(Based on current information. Could be longer based on Environmental Restrictions)



LEGEND

Theoretical no restrictions schedule (For Reference Only)

Best-case scenario schedule outlook (Based on Current Information)

Best-case scenario restriction periods (including time-of-year restrictions)



Maintenance Expectations

Maintenance Expectations

- Inspections will continue to be conducted and funded by MassDOT.
- Maintenance will be the responsibility of the Town as the owner of the bridge.
- Maintenance requirements are inherently difficult to accurately estimate since they depend on a wide variety of factors.
- No bridge components are anticipated to require major maintenance during the first 25 years of service.

Maintenance Expectations

- In general, we would expect the main elements may require maintenance on the approximate schedule below:
 - Steel pile coating systems (about \$300 - \$500 / sq. ft.)
 - Spot or maintenance recoating after 25-50 years of service, depending on the system selected
 - Wood pedestrian walkways and railings (Similar cost to existing bridge)
 - Isolated deck board replacements starting at approximately 15-25 years of service
 - After approximately 40 years, more significant maintenance involving replacement of significant portions of the deck boards, and repair or replacement of some timber beams
 - Expansion joints (about \$400 / linear ft.)
 - Repairs or isolated replacements after approximately 40 years
 - Bearings (about \$25k / bearing)
 - Isolated replacements after approximately 40 years
 - Deck surfaces (about \$250 / cubic ft.)
 - Isolated concrete repairs after approximately 30 years of service
 - It would be prudent to anticipate isolated concrete repairs about every 10-20 years thereafter
- No bridge components are anticipated to require major maintenance during the first 25 years of service.



**How will we
keep you
informed?**

Stay Informed

- Visit the project website at:
<https://www.mass.gov/powder-point-bridge-replacement-project>
- Submit email comments to:
powderpointbridgereplacement@dot.state.ma.us



Scan QR code to visit the project website



Questions and answers



Thank You

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