

Bridge Design Public Meeting Questions

This document provides answers to questions asked at the June 18, 2025, Bridge Design Public Meeting regarding MassDOT's Powder Point Bridge Replacement Project. These answers were provided by MassDOT and the Contractor to proactively address the concerns of the community. If you have a concern that is not addressed by these answers, please visit the project website: https://www.mass.gov/powder-point-bridge-replacement-project or email the project team: powderpointbridgereplacement@dot.state.ma.us

What is the current historical determination of the Powder Point Bridge?

MassDOT initiated the Section 106 federal review process, on behalf of FHWA, with the submittal of an updated Historic Bridge Inventory form and a National Register Not Eligible recommendation to the State Historic Preservation Officer (SHPO) at MHC for the current Powder Point Bridge. SHPO concurred with MassDOT's recommendation that the current timber bridge, built in 1986, is Not Eligible for listing in the National Register of Historic Places on December 20, 2024.

Can traffic calming measures be incorporated to help with speeding?

The project team is investigating various traffic calming measures. This will be discussed with the community at future design workshops.

Can concrete be colored, stamped, and offset to look, feel, and have a traffic calming effect like wood?

Form lining and the related options are being investigated. A series of workshops will be held where this is discussed with the community.

Is there a graphic showing the location of the proposed bridge and any impacts to the parking lot?

Location options are being evaluated. Minimizing parking impacts is a priority in the decision-making process. MassDOT will show the developed design and any parking impacts at future meetings.

What is the difference in height between the current and proposed railings?

The existing bridge railing is 42 inches in height. The project team is evaluating the heights of the railing. The minimum height is 42 inches, but the proposed railing may need to be higher to accommodate bicycle use.



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Can timber railing be added on the outside of the Manual for Assessing Safety Hardware (MASH) compliant railing?

Possible options are being investigated. These will be presented at future design workshops.

Is lighting one of the requirements that must be met?

Lighting is not a known requirement of the bridge and therefore is not being pursued.

Will access to boats and moorings be maintained throughout the entire process?

This project is very early in the design process. Traditionally, access to the channel is maintained. Channel access will be discussed with the marine community and the United States Coast Guard.

Is a bicycle and/or pedestrian ferry system possible during the busy summer months?

Construction duration is still being evaluated. Once duration has been determined, the project team will be better able to discuss mitigation measures.

What is the projected economic impact on the area if the Powder Point Bridge is closed?

Given that the bridge must be replaced, MassDOT did not do an economic projection because there are no alternatives to closing the bridge. Economic projections are not typically done when there is no alternative option.

How will construction impact the water quality of the bay?

This will be determined as a part of the coordination with environmental agencies.

Can a design exception be submitted for the approval of a narrower shared use path?

Through the public meeting process MassDOT will determine with the community whether exceptions are necessary.



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Can bikes share the roadway instead of the sidewalk?

The project team will coordinate with MassDOT Complete Streets staff to determine context sensitive solutions to provide bicycle access over the replacement bridge.

Can the piles be sheathed with PVC to prevent ice and borer worm damage?

Pile sheathing options will be investigated in subsequent design phases.

Can the piles be replaced with more durable materials as needed instead of replacing the entire bridge?

MassDOT has determined that the bridge should be completely replaced. Replacing only the substructure would not meet all the goals of the project which include meeting current load capacities, service life requirements, and safety requirements for all users.

Can the timber piles be replaced with synthetic piles using the existing structure below the mudline as a caisson?

Using the existing piles as a support for new synthetic piles would cause significant environmental impacts. Excavating underwater would trigger additional environmental permitting and would likely not be consistent with pursuing the most practical and least damaging option to the environment. This is one of the reasons MassDOT has determined that the bridge should be replaced. Additionally, replacing only the substructure would not meet all the goals of the project which include meeting current load capacities, service life requirements, and safety requirements for all users.

Does the bridge meet the standard for the 100-year service life requirement if the lower portion is replaced with steel and the top timber portion is maintained?

MassDOT has determined that the bridge should be completely replaced. Replacing only the substructure would not meet all the goals of the project which include meeting current load capacities, service life requirements, and safety requirements for all users.



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Is it possible to replace the bridge entirely with timber?

MassDOT must comply with federal regulations to construct bridges with a lifespan of at least 75 years. Standards enforced by MassDOT require a 100-year lifespan. With these legal and organizational obligations, an entirely timber structure is not possible because of its inability to withstand the effects of a coastal marine environment for long periods of time. Timber as a driving surface and structure has a poor life and cost cycle. The current timber bridge is less than forty years old and will continue needing routine maintenance.

It is federally required that all bridge railings must be crash tested in accordance with the Manual for Assessing Safety Hardware (MASH). There are no MASH compliant timber railings, but there are options that allow for the use of timber railing if it is combined with other measures. MassDOT is currently exploring examples of timber use on newer bridges (e.g. Mitchell River Bridge in Chatham, MA) to determine how some context appropriate elements can be applied to the Powder Point Bridge.

Can you provide more renderings from different perspectives?

Renderings will be shared at the next public information meeting.

How can I find out more?

Please visit the project website below for more details, to sign up for update and email alerts, and to view the latest resources on the Powder Point Bridge Replacement Project.

Project website https://www.mass.gov/powder-point-bridge-replacement-project
Project email powder-point-bridge-replacement-project
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