



# PFC Ralph T. Basiliere Bridge Replacement

*Public Meeting 2*

Haverhill | November 15 2023 | 6:00 PM

Project File No. 605304





# Agenda

1. Welcome & Overview
2. Why was this project initiated?
3. How has our design progressed?
4. How will we keep you informed?
5. Questions & Discussion





# Welcome and Meeting Overview:

- 30-minute presentation
  - Eamon Kernan, Project Manager, Massachusetts Department of Transportation (MassDOT)
  - ETTY Padmodipoetro, Urban Idea Lab, Bridge Architecture
  - Nathaniel Cabral-Curtis, Communications and Public Involvement
  - Rich Lenox, Project Management/Bridge Engineering, WSP
  
- Q&A Period
  - Eamon Kernan, Project Manager, Massachusetts Department of Transportation (MassDOT)
  - Rich Lenox, Project Management/Bridge Engineering, WSP
  - Andy Benkert, Bridge Engineering, WSP
  - Erik Maki, Traffic, WSP
  - ETTY Padmodipoetro, Urban Idea Lab, Bridge Architecture
  - Nathaniel Cabral-Curtis, Communications and Public Involvement

## Language Translation Speakers

- **Portuguese**
  - Katia Morris
  
- **Spanish**
  - Maria Rosario De Vargas

## Notice of MassDOT / MBTA Policy Diversity and Civil Rights

All MassDOT / MBTA activities, including public meetings, are free of discrimination. The MassDOT / MBTA complies with all federal and state civil rights requirements, preventing discrimination on the basis of race, color, national origin, limited English proficiency, and additional protected characteristics. We welcome the diversity from across our entire service area. If you have any questions or concerns, please visit:

[www.mass.gov/nondiscrimination-in-transportation-program](http://www.mass.gov/nondiscrimination-in-transportation-program) / [www.mbta.com/titlevi](http://www.mbta.com/titlevi) to reach the Office of Diversity and Civil Rights.

*All questions and comments are welcome and appreciated.*

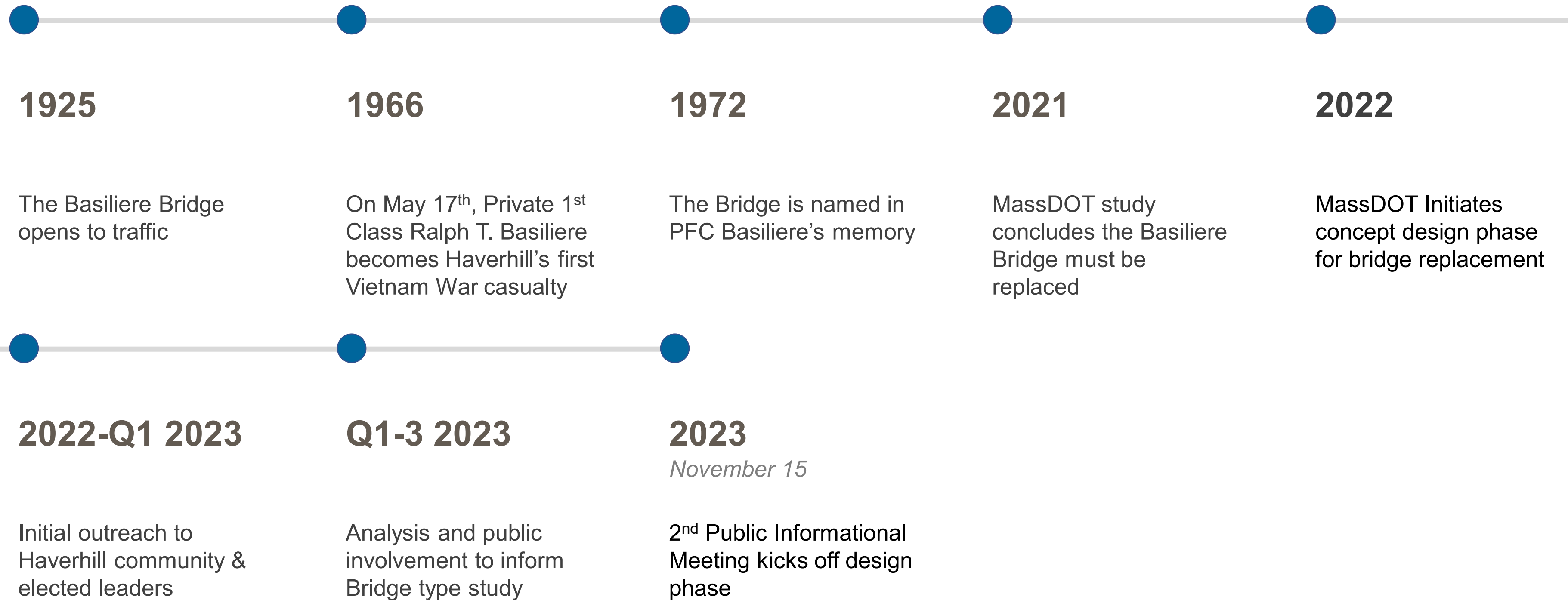
*Please refrain from any disrespectful comments.*



## How to Participate

- Listen and view the 30-minute presentation
- Ask questions to project team during question-and-answer period
- Submit comments into the comment box at the sign-in table
- Representatives of the media can direct media inquiries to [Jacquelyn.Goddard@dot.state.ma.us](mailto:Jacquelyn.Goddard@dot.state.ma.us)

# How did we get here?





# Public Information Meeting - Advertisement

## MassDOT Email Burst

- Mass email to stakeholder database – 10/23/23, 10/26/23, 11/14/23

## Mass Media

- *Haverhill Gazette* – 11/2/23 and 11/9/23
- *Lawrence Eagle Tribune* 11/1/23 and 11/8/23
- *Rumbo (Spanish)* – 11/1/23 and 11/8/23
- HCTV – Weeks of 10/30/23, 11/6/23, and 11/13/23
- WHAV – Weeks of 10/30/23, 11/6/23, and 11/13/23

## Social Media

- Facebook
- Twitter



# Public Information Meeting – Flyer Drops and Staffed Tables

## Staffed Tables:

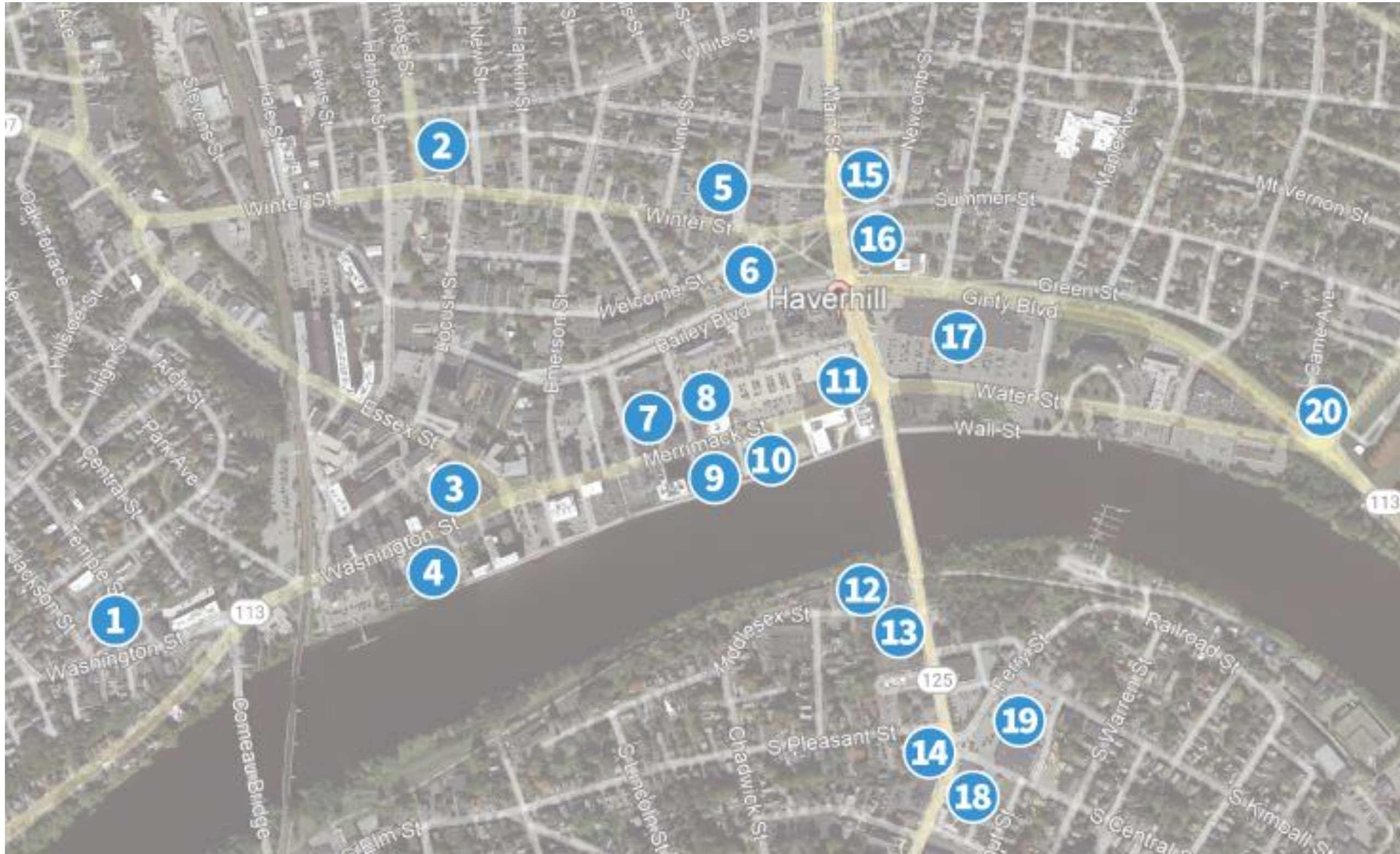
- Haverhill Public Library
- Water Street Market Basket

Flyer Drops at 20 locations in downtown and Bradford





# Flyer Drop Locations



1. Smart Bike
2. Saint James Parish
3. Battle Grounds Coffee Co.
4. MVRTA Washington Square
5. Haverhill YMCA
6. Haverhill Citizen Center
7. TD Bank
8. La Pizza di Forno
9. Salvation Army Thrift Store
10. A-1 Deli
11. Pentucket Bank
12. Dunkin Donuts
13. Wendy's
14. A Sweet Affair
15. Haverhill City Hall
16. Haverhill Public Library
17. Market Basket
18. Nouria Shell Station
19. The Fix 2 (barbershop)
20. Riverside Cycle



# Thank You To Those Who Shared Our Flyers

## State and Municipal:

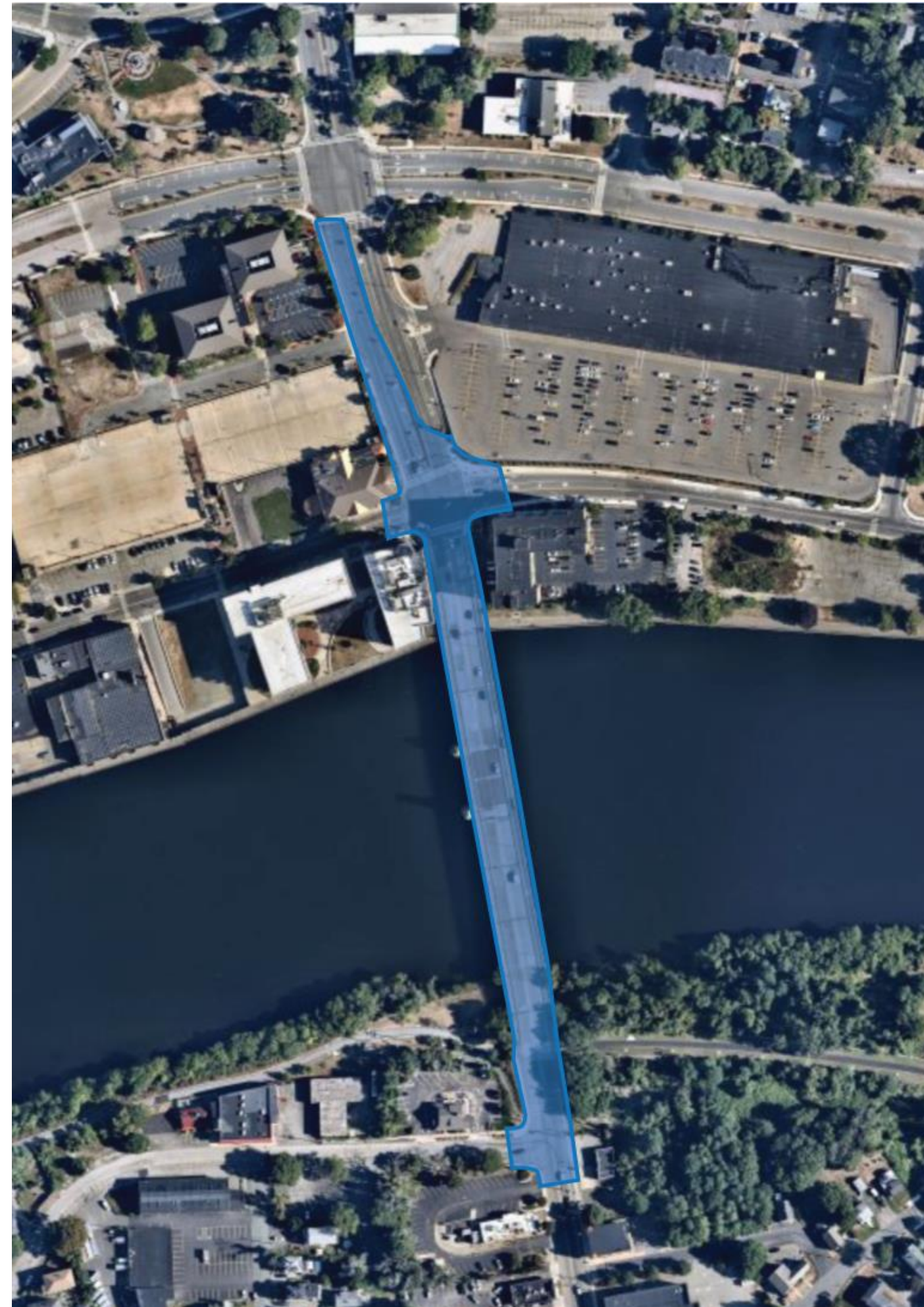
- State Delegation for Haverhill
- Office of Mayor James J. Fiorentini
- Haverhill City Council
- Council on Aging
- Disability Commission
- Planning & Economic Development via “News You Can Use” newsletter

Local community organizations, medical providers, schools, and social service providers



## Current Limits of Work

- In the north:
  - The Main Street/Water Street/Merrimack Street intersection
  - A portion of Main Street as far north as Bailey Boulevard
- In the south:
  - Just past the S. Main Street/Middlesex Street intersection
- Includes short stretches of intersection approaches







**Why was this project initiated?**



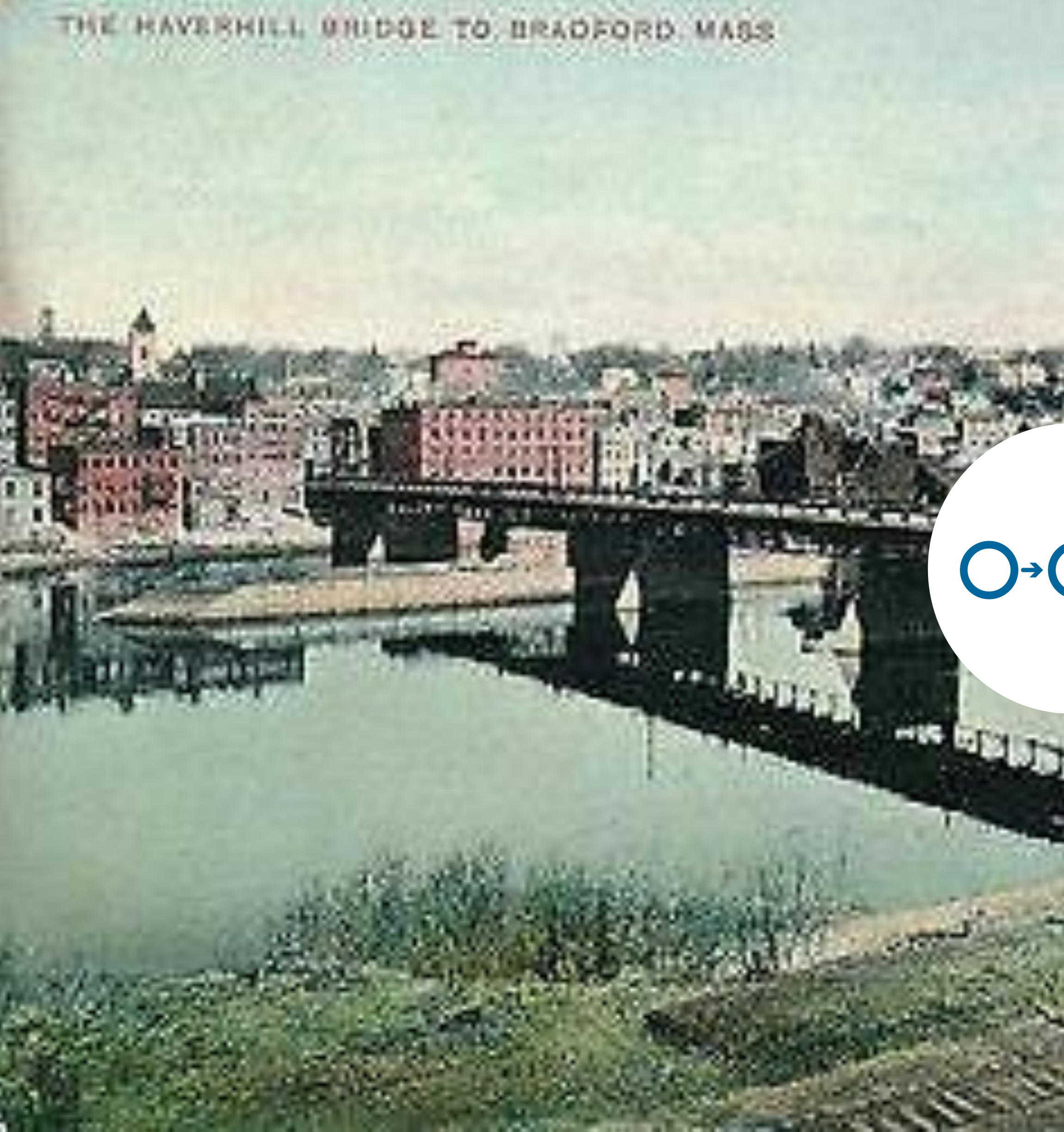
## PFC Ralph T. Basiliere Bridge: Key Facts

- The existing bridge opened 1925 and replaced an older crossing.
- The Basiliere is technically two bridges with elements of the pre-1925 structure mixed into today's bridge
- Total length – roughly 800 feet
- Bridge width – roughly 68 feet
- Carries 20,000+ vehicles per day
  - 4% heavy vehicles including MEVA buses
- At the end of its useful lifespan with general deterioration including foundations
- ***Remains safe for all users***





THE HAVERHILL BRIDGE TO BRADFORD MASS



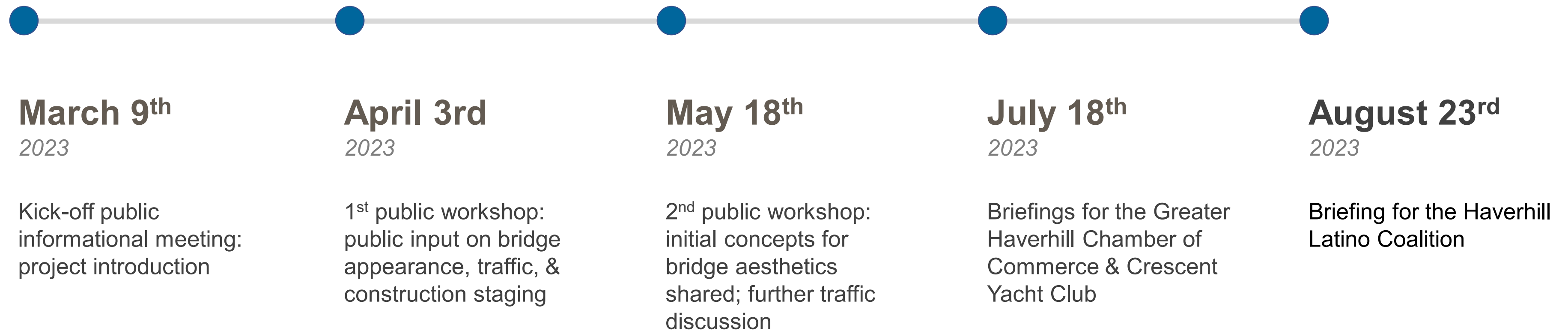
**How has our  
design  
progressed?**



## Concept Design Phase – March-October 2023

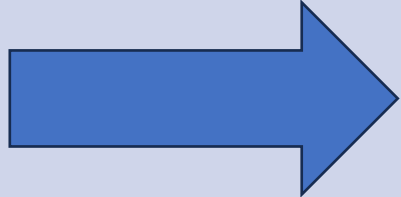



- Questions we wanted to answer – with your help:
  - What type of bridge will replace the current structure?
  - What will the new bridge look like?
  - What will the lane configuration be on the new bridge?
  - How will the new bridge accommodate cyclists and pedestrians?
  - How will the new bridge provide connections to the Bradford Rail Trail and Dempsey Boardwalk?

# Robust Public Involvement





# Consistent Community Input

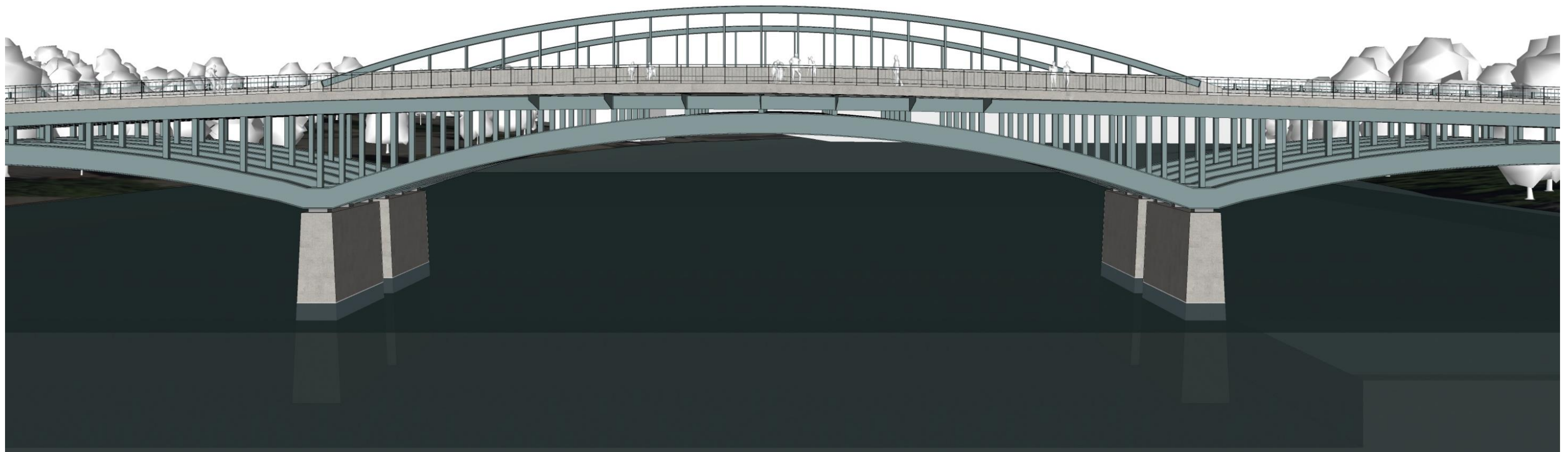
Key Question		Community Input
What will the new bridge look like?		<p>The new bridge should:</p> <ul style="list-style-type: none"> <li>• Avoid being a modern copy of what exists today</li> <li>• Maintain an arched appearance, even as arches become longer/shallower with fewer spans</li> <li>• Connect the modern look of downtown Haverhill and the more traditional appearance of Bradford</li> <li>• Offer opportunities for distinctive lighting</li> <li>• Provide vertical elements above the deck to add character</li> <li>• Provide places to rest and enjoy the view</li> </ul>
What will the lane configuration be on the new bridge?		<p>Four, formalized lanes preferred:</p> <ul style="list-style-type: none"> <li>• Addresses emergency response concerns from Haverhill 1<sup>st</sup> responders and community members</li> <li>• Provides reserve capacity for projected traffic associated with planned development</li> </ul>
How will the new bridge accommodate cyclists and pedestrians?		<p>The new bridge should:</p> <ul style="list-style-type: none"> <li>• Physically separate motorized &amp; non-motorized users</li> <li>• Have comfortable sidewalks for pedestrians young and old, using mobility aids, towing grocery carts</li> <li>• Provide directional facilities to avoid confusion at the intersections</li> <li>• Recognize that confident “sport” cyclists may opt to remain with mixed traffic</li> </ul>
How will the new bridge provide connections to Bradford Rail Trail and Dempsey Board Walk		<p>The new bridge should:</p> <ul style="list-style-type: none"> <li>• Have an easier connection to the Bradford Rail Trail</li> <li>• Not preclude a future connection between the Dempsey Boardwalk and Wall Street</li> <li>• Open up views to the Merrimack</li> </ul>

# Precast Concrete Open Spandrel Arch

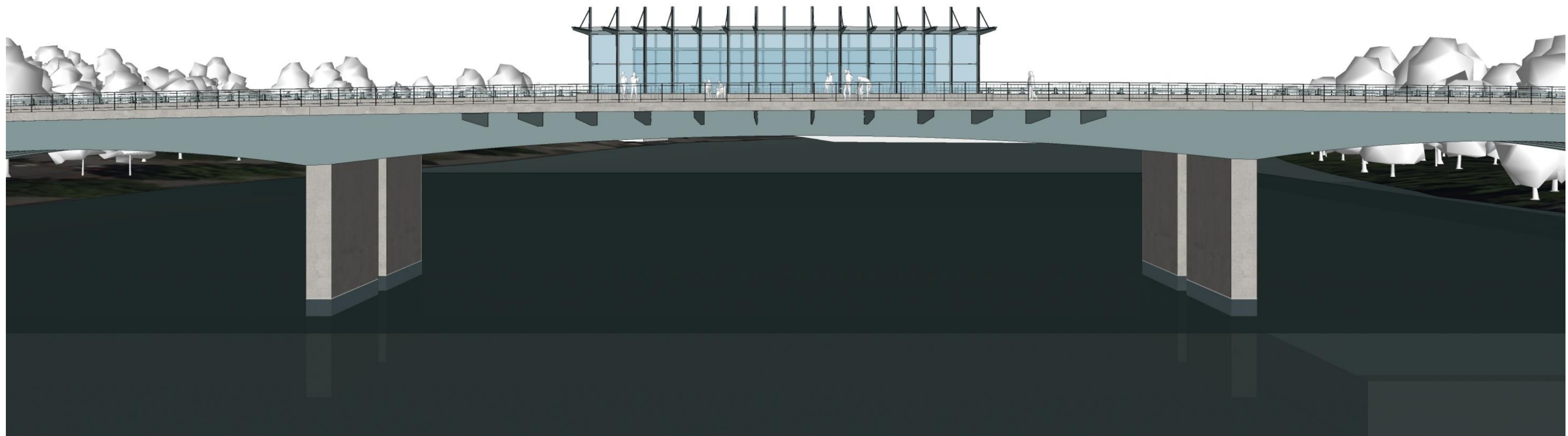




# Post-Tensioned Steel Deck Arch



# Arched Steel Plate Girder Bridge





# Type Study Recommendation

Type	Anticipated Construction Cost	Anticipated Life Cycle Cost	Constructability Challenges	Ease of Accommodating Concealed Utilities	Partially Submerged Members During Flood Event	Public Input
Precast Concrete Open Spandrel Arch	Medium	Low	High	Medium	Yes	High
Post-Tensioned Steel Deck Arch	High	Medium	High	Medium	Yes	Medium
Arched Steel Plate Girder Bridge	Low	Medium	Low	High	No	Low

*Alternative 1 “Precast Concrete Open Spandrel Arch” is recommended for the proposed construction. This alternative provides a replacement bridge structure which best respects the history and significance of the existing Basiliere Bridge...the increase in construction cost with this alternative as compared to Alternative 3 is considered justifiable.*

# Precast Concrete Open Spandrel Arch – Close-up

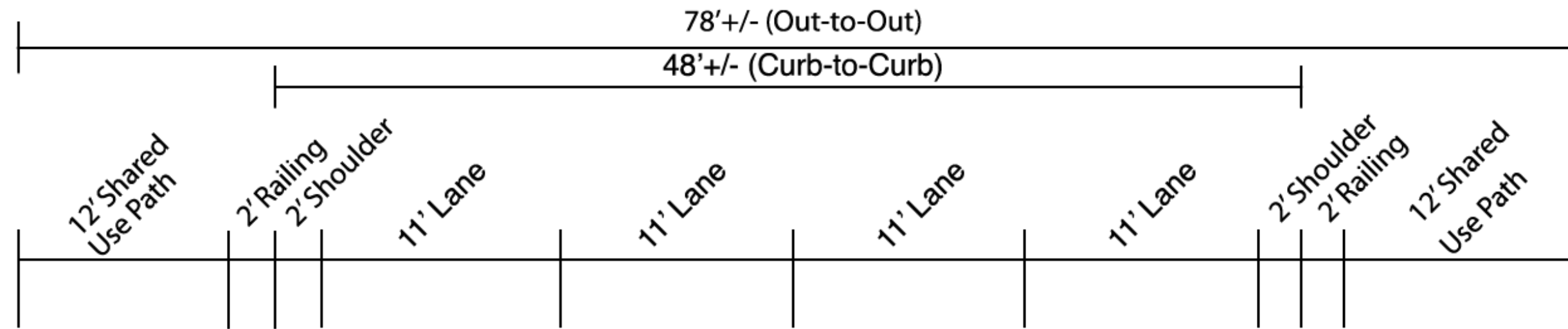




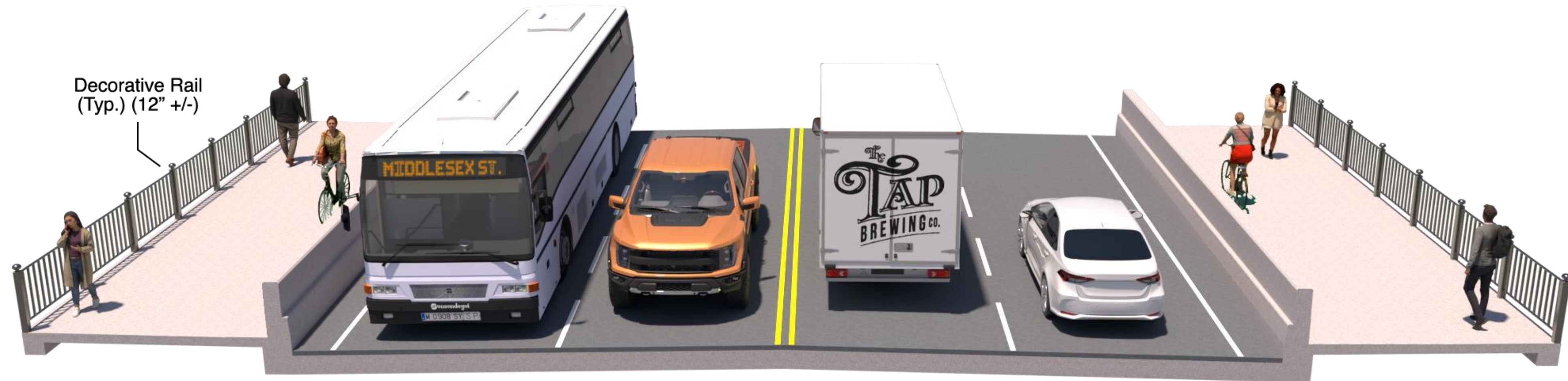
# Precast Concrete Open Spandrel Arch – Center Span



# Cross-Section



Decorative Rail  
(Typ.) (12" +/-)

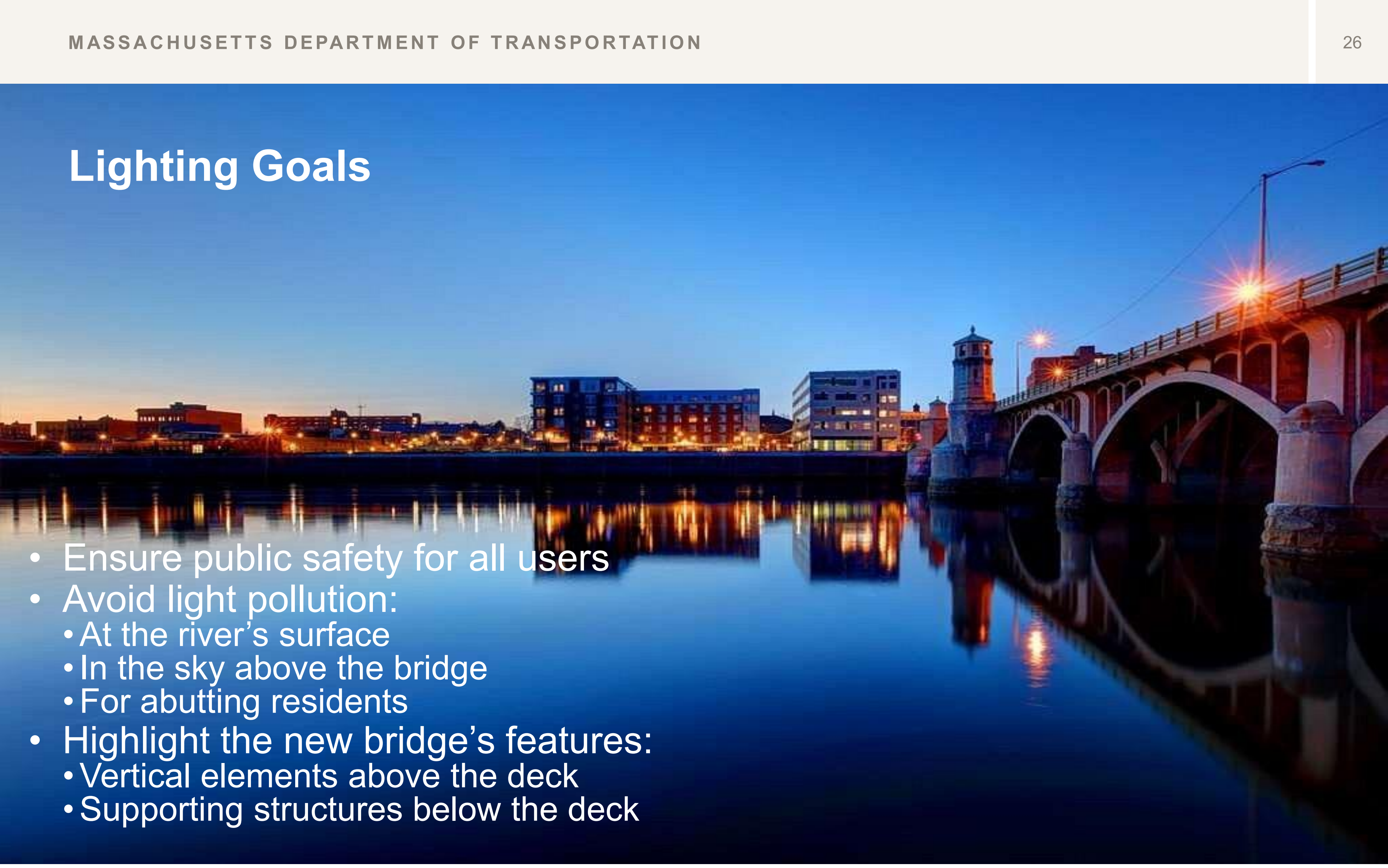




## 25% Design Phase – November 2023-February/March 2024

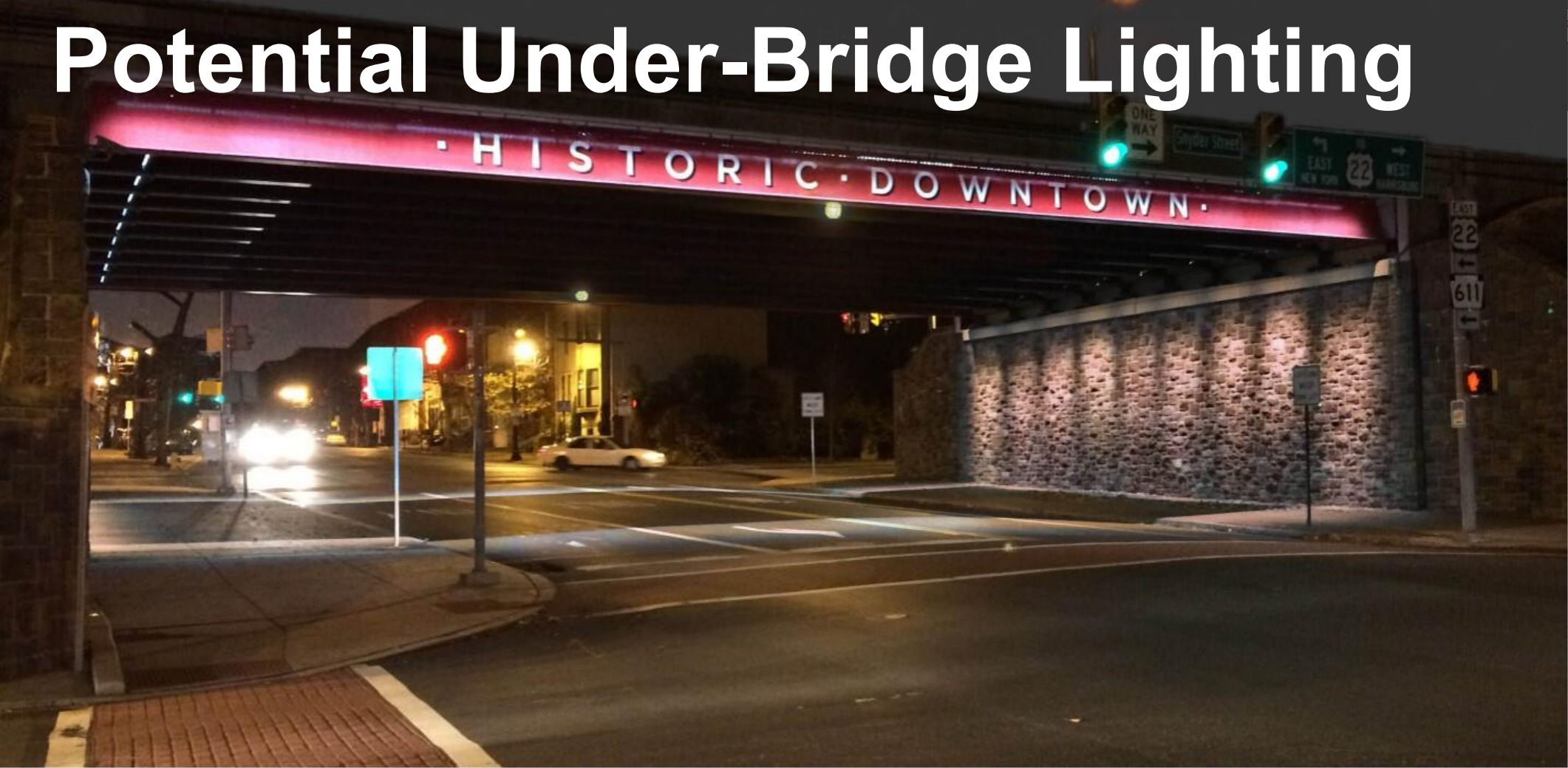
- Develop concept towards the 25% design level:
  - Refine cost and schedule estimates
  - Advance environmental permitting
  - Refine constructability
  - Establish right-of-way impacts and initiate ROW process
- Questions we want to answer – with your help:
  - What sort of lighting, railings, and seating should the new bridge have?
  - Which vertical element(s) seem most attractive/appropriate?
  - What more can be done at the Bradford Rail Trail connection?

# Lighting Goals

- Ensure public safety for all users
  - Avoid light pollution:
    - At the river's surface
    - In the sky above the bridge
    - For abutting residents
  - Highlight the new bridge's features:
    - Vertical elements above the deck
    - Supporting structures below the deck
- 
- A photograph of a large stone arch bridge at dusk, with city buildings and lights reflected in the water below. The bridge features several large arches and a central tower-like structure. The sky is a deep blue, and the city lights are visible in the background, reflecting on the water's surface.



# Potential Under-Bridge Lighting





# Sample Navigational Lighting – Whittier Bridge



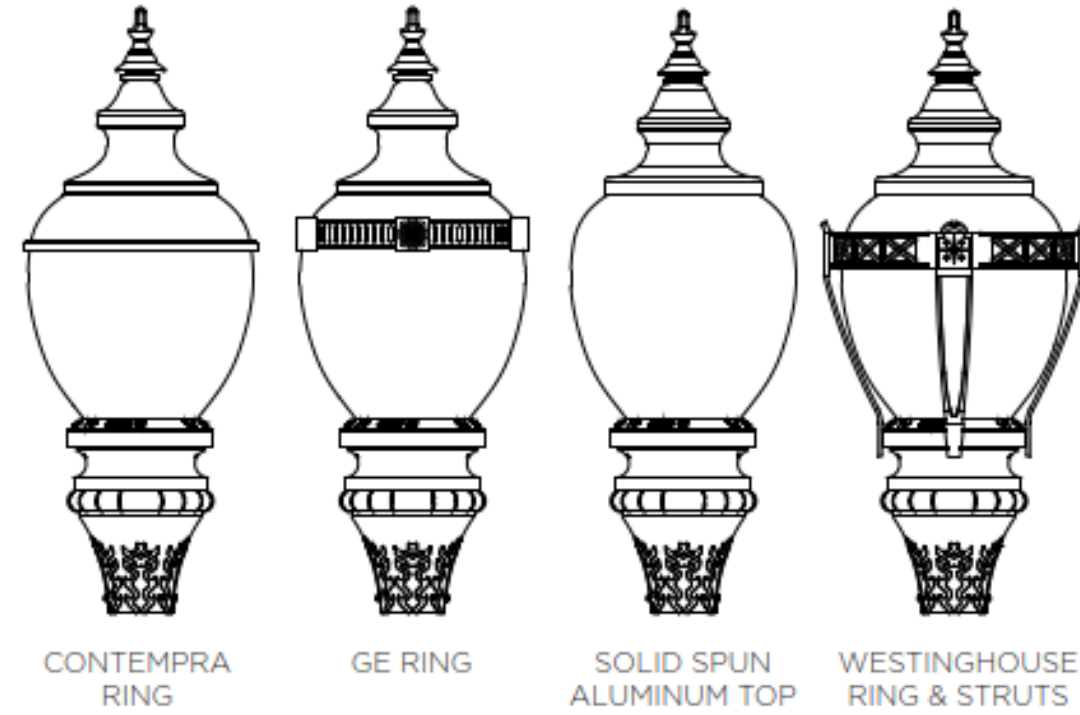


# Potential Deck Lighting





# Lighting Examples to Match Downtown





# Modern Lighting Examples





# Traditional Lighting Examples



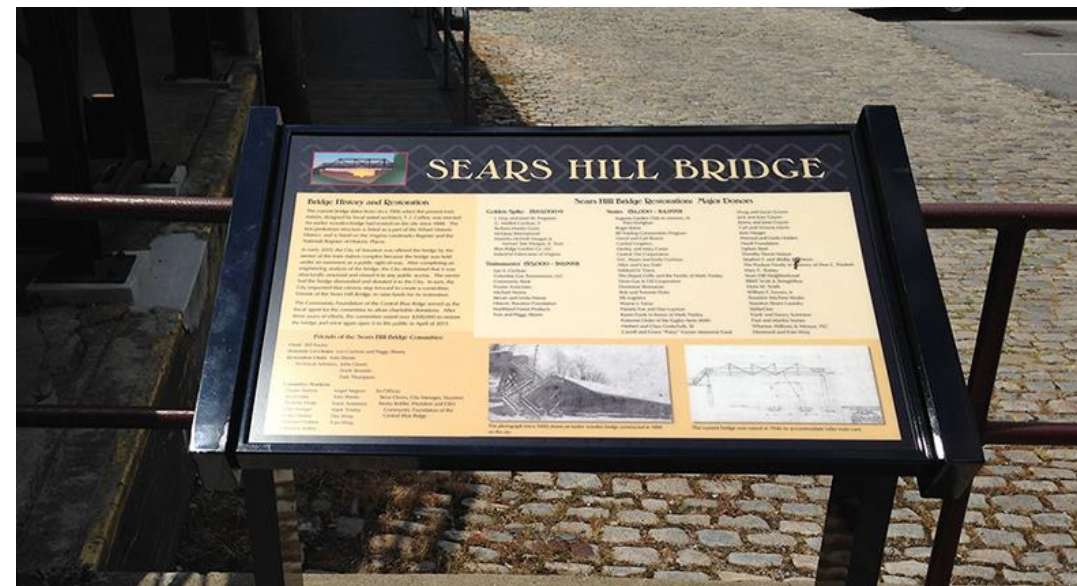
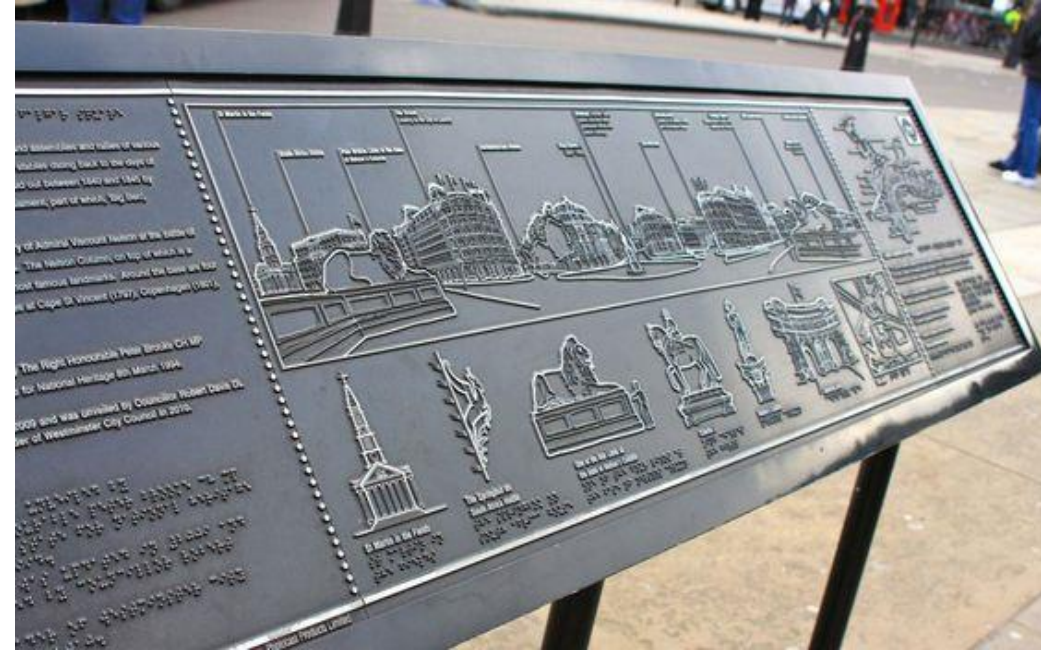
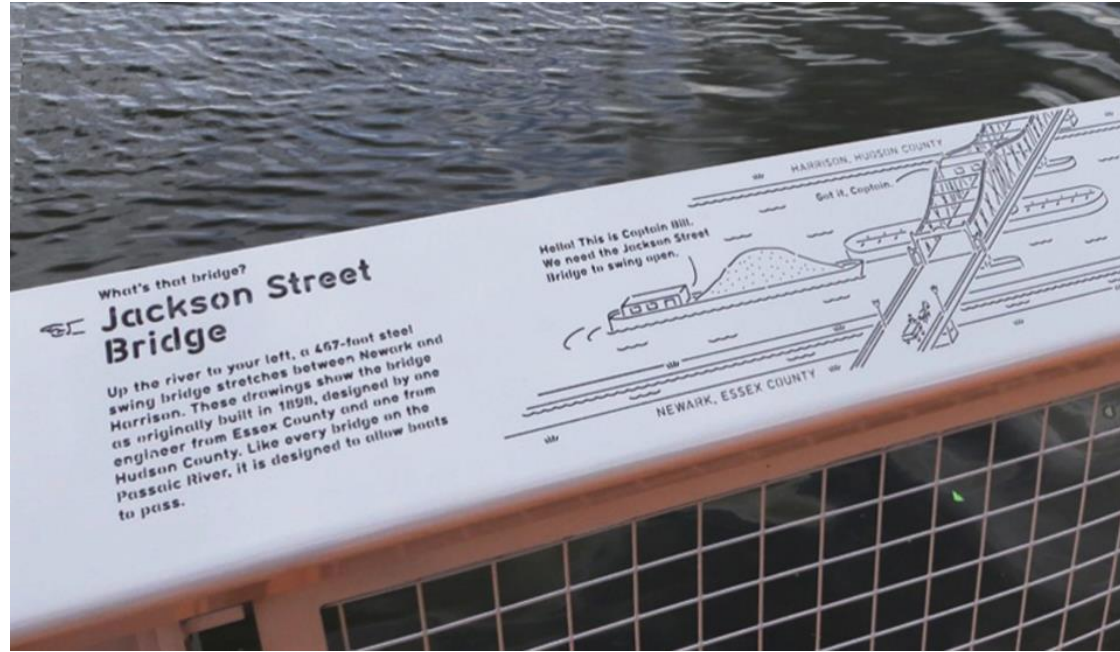


# Decorative Railing Examples



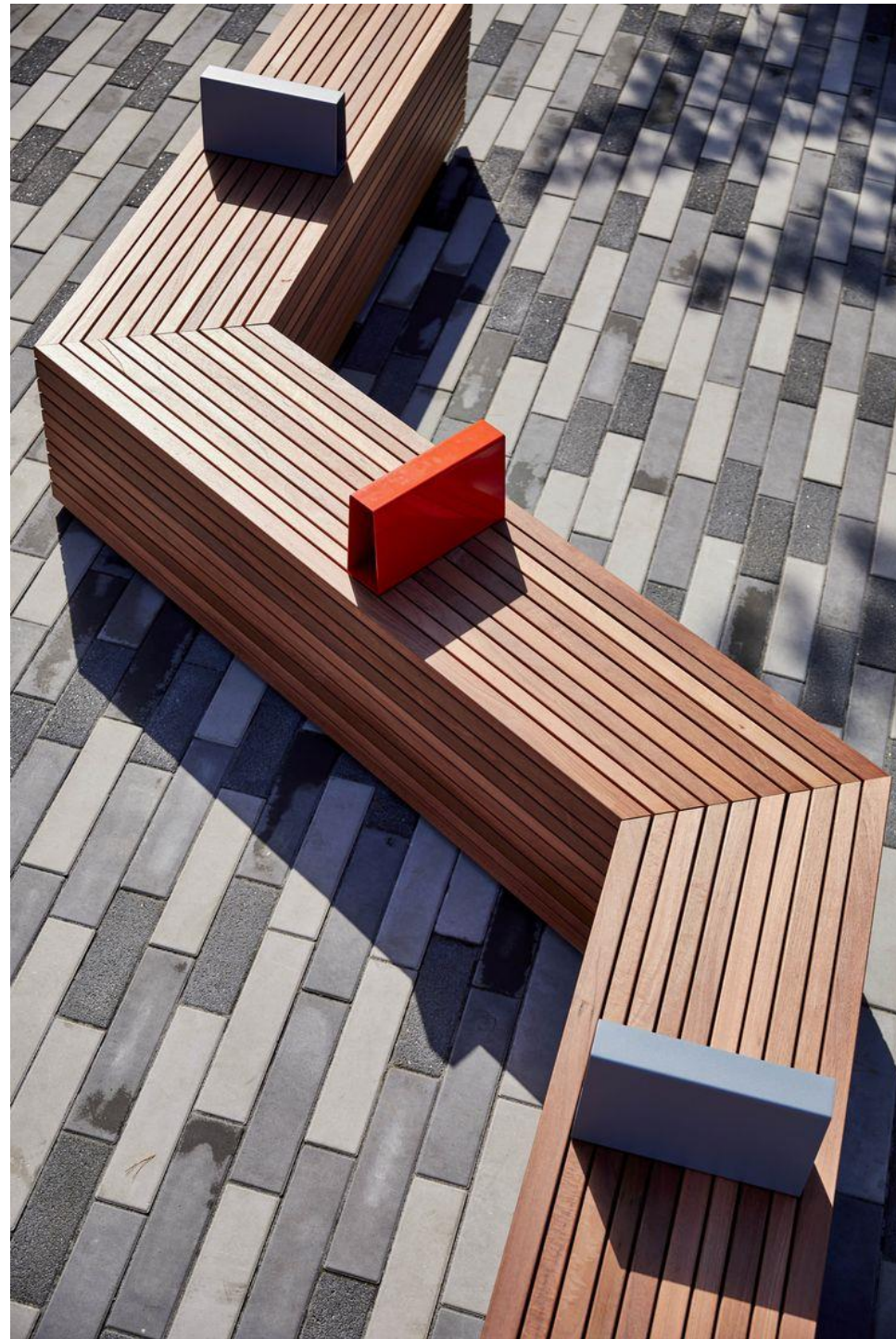


# Examples of Interpretive Signage





## Examples of Artful Seating



- Distinctive
- Continuous
- Defining spaces
- Establish activity separation



# More Examples of Artful Seating



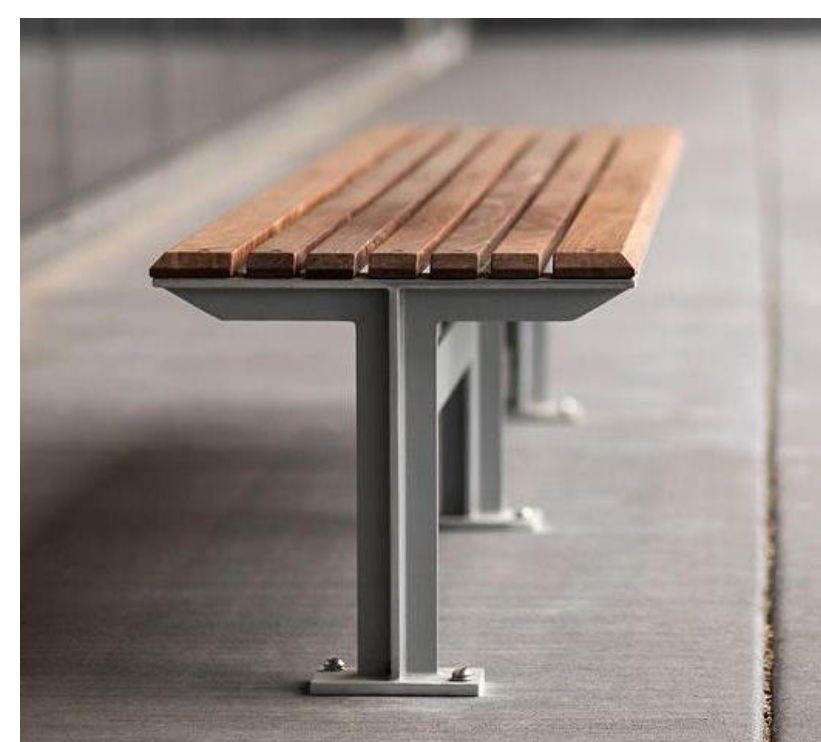
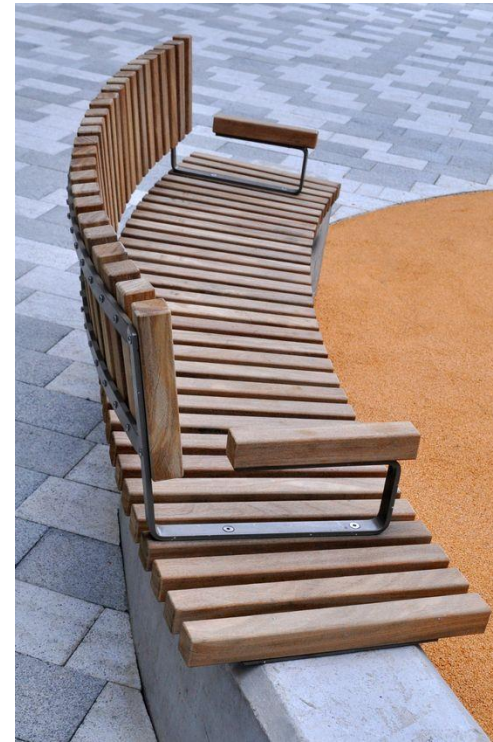


# Examples of Benches





# More Examples of Benches



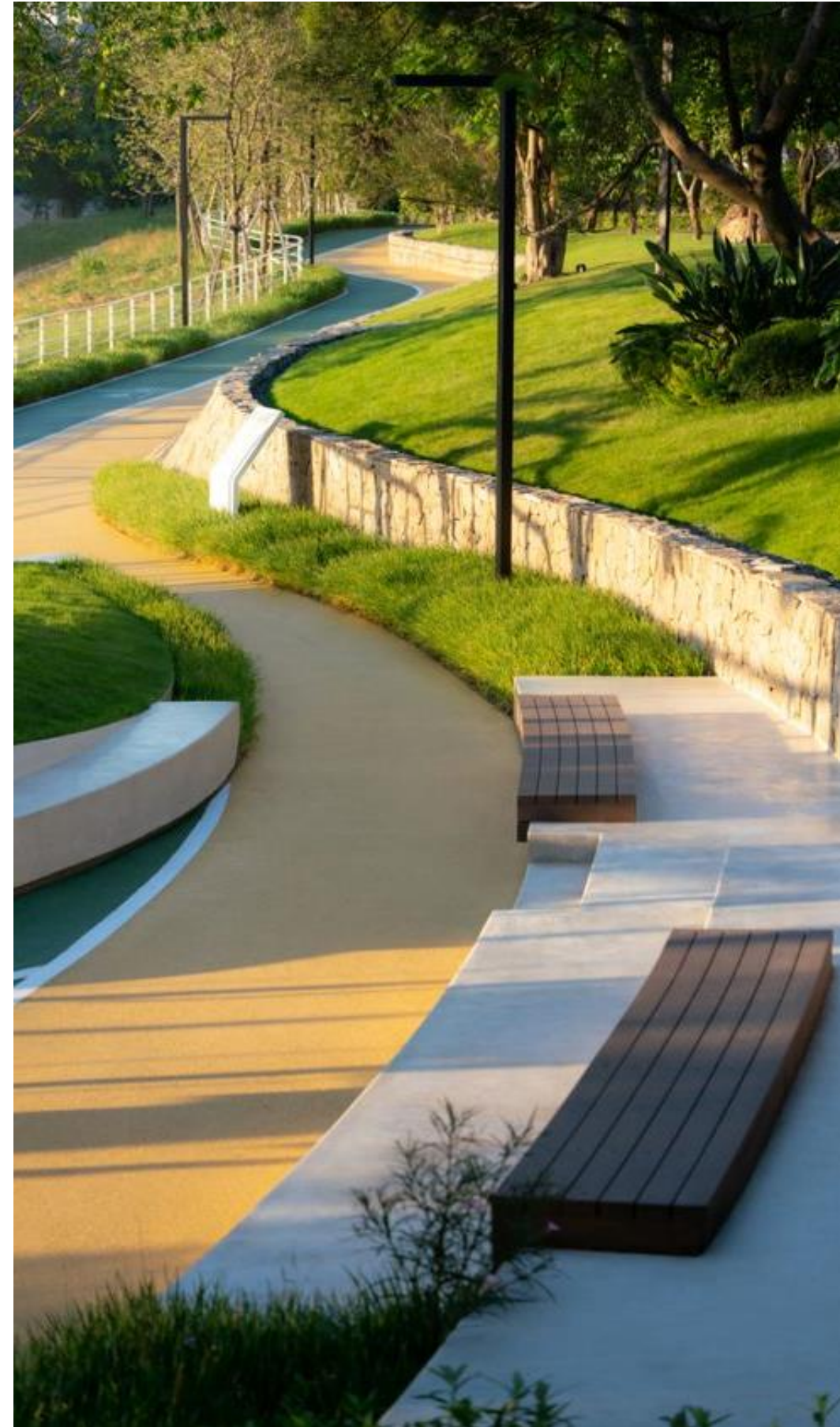


# Examples of Trail Connections





# More Examples of Trail Connections



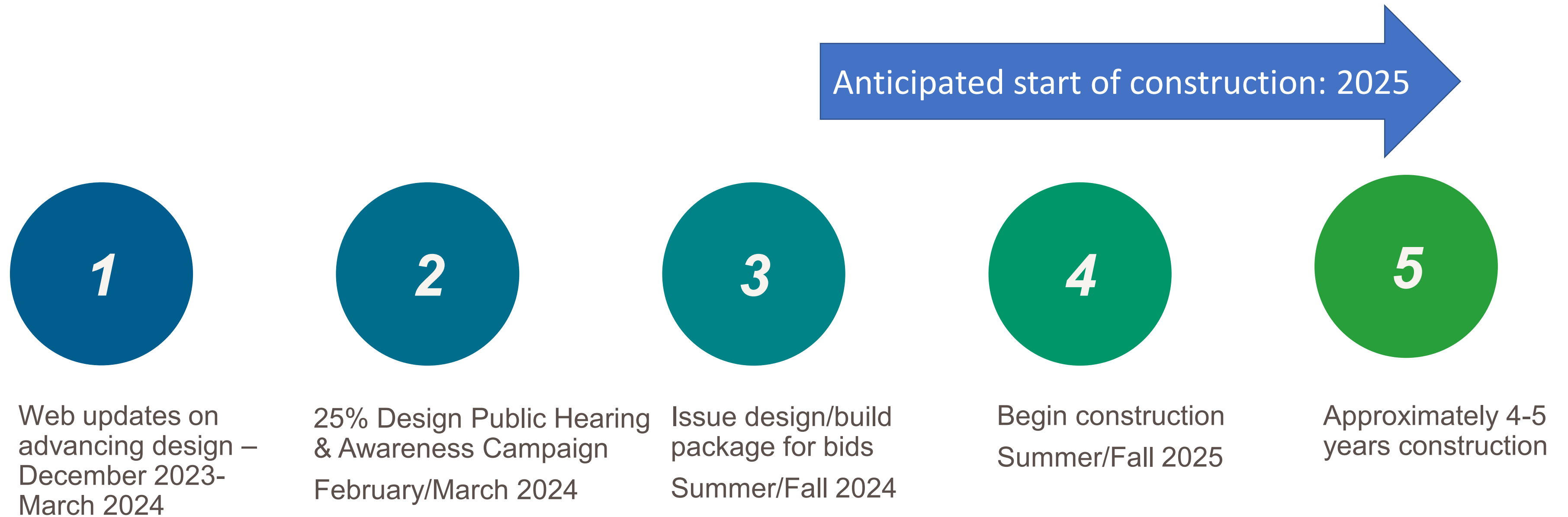


# Example Historic Monument





# Our next steps







**How will we  
keep you  
informed?**



## Upcoming public outreach

- December 2024-February 2025
  - Email and website updates
- February/March 2024
  - Pre-25% Design Public Hearing awareness campaign
  - 25% Design Public Hearing
- Spring 2024
  - Response to 25% Design comments





## How to reach us?

- Submit written comments to:  
Carrie Lavallee, P.E., Chief Engineer  
MassDOT  
10 Park Plaza  
Boston, MA 02116  
Attention: BRIDGE SECTION, PROJECT FILE NO. 605304
- Submit email comments to:  
[haverhillbasilierebridge@dot.state.ma.us](mailto:haverhillbasilierebridge@dot.state.ma.us)
- Visit the project website at:  
[www.mass.gov/basiliere-bridge-project-haverhill](http://www.mass.gov/basiliere-bridge-project-haverhill)





# Questions and discussion





# *Thank You*

*PFC Ralph T. Basiliere*

*Bridge Replacement*

*Public Meeting 2*

Haverhill | November 15, 2023 | 6:00PM

Project File No. 605304

Eamon Kernan - [Eamon.kernan@dot.state.ma.us](mailto:Eamon.kernan@dot.state.ma.us)

