

# Newington-Dover

## Improvements to NH Rte. 16 / Spaulding Turnpike / General Sullivan Bridge

Public Information Meeting  
September 5, 2018



# Meeting Agenda

- Introduction and Overview
- Alternative Screening Results
- Review of Alternatives
  - Reasonable Range of Alternatives
  - Preliminary Cost Estimates
- Bike/Ped Construction Access
- GSB - Next Steps
- Contract Q Construction Update



# Meeting Goals

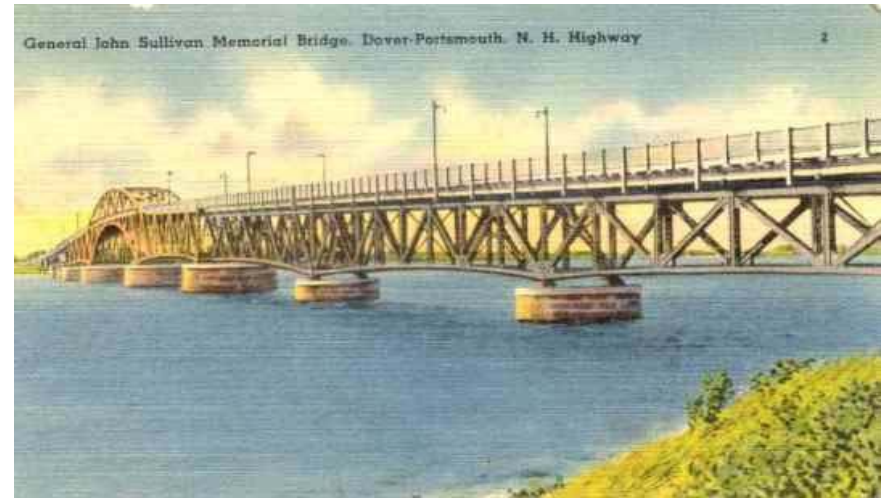
- Obtain public feedback on range of alternatives
- Solicit public opinion on construction phase bike/ped access
- Explain SEIS next steps
- Provide Dover roadway construction status update (11238Q)

# **GSB - Developing and Screening Alternatives**



# GSB is a Historic Structure

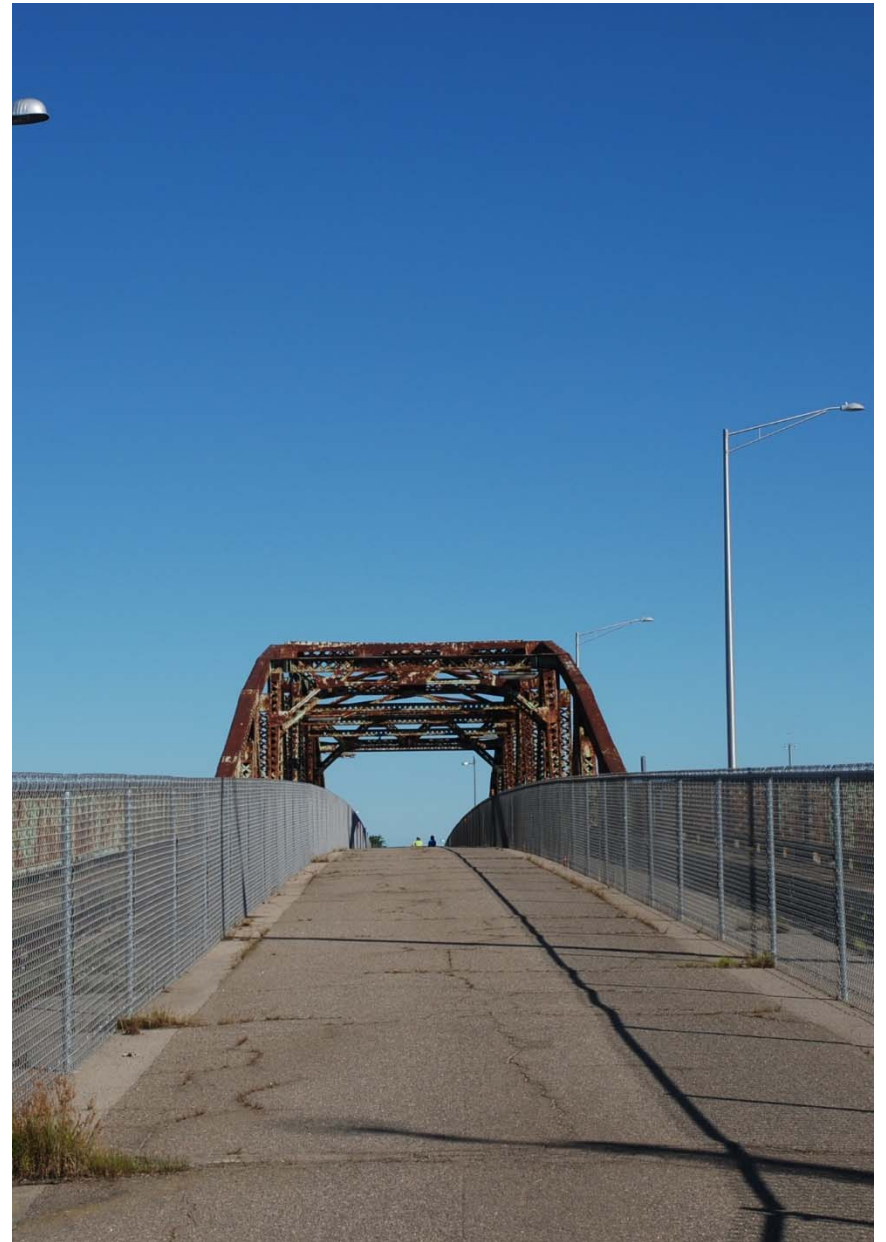
- **Eligible** for listing on the **National Register of Historic Places**
- Significant at both the state and national levels
- Protection under federal law for eligible properties are:
  - **Section 106** of the National Historic Preservation Act
  - **Section 4(f)** of the USDOT Act
- Historic Preservation under NH Law:
  - **RSA 227-C:9** Directive for Cooperation in the Protection of Historic Resources



# Supplemental EIS Project Purpose

## ***Project Purpose***

*“To provide access and connectivity between Newington and Dover, across Little Bay, for non-motorized use.”*



# Range of Evaluated Alternatives

- Alt 1: Rehabilitation of General Sullivan Bridge
- Alt 2: Superstructure Replacement – Truss Alternative
- Alt 3: Partial Rehabilitation
- Alt 4: Complete Replacement
- Alt 5: Reconfigure Southbound Little Bay Bridge
- Alt 6: Southbound Little Bay Bridge - Widened Deck on Pier Extension
- Alt 7: Southbound Little Bay Bridge - Independent Deck on Pier Extension
- Alt 9: Superstructure Replacement – Girder Alternative

# Screening Criteria

- **Purpose and Need:** Alternative meets the project Purpose and Need - To provide bicycle and pedestrian access between Dover and Newington. This criterion also considers how well the alternative meets the project Purpose and Need.
- **Feasibility:** Alternative is reasonable and practical from a technical standpoint. Alternative can be implemented using existing techniques and materials, within a practical duration, and without excessive impacts on the environment or the transportation network.
- **Cost:** Alternative has construction and life cycle costs that are not excessive in comparison with other reasonable alternatives.



# Screening Criteria

- **Safety - User Safety:** Alternative provides a safe and efficient crossing for vehicular and non-motorized travel across the span, minimizing deviations from the design standards for roadways and bridges.
- **Safety – Inspection and Emergency Access:** Alternative provides safe means for inspection, maintenance, and emergency vehicle access.
- **Transportation Capacity:** Alternative maintains or improves existing vehicle capacity across the Little Bay Bridge, with no decrease in the number or width of travel lanes or shoulders.
- **Cultural Resource Impacts:** Alternative preserves some or all of the GSB.

# Screening Matrix

Alternative	Screening Criteria							Advances to Detailed Study in SEIS?
	Purpose and Need	Feasibility	Estimated Costs - DRAFT (Initial Capital Costs/Life Cycle Cost, 2018 Dollars)	Safety – User Safety	Safety - Inspection and Emergency Access	Transportation Capacity	Cultural Resource Impacts	
Alternative 1C: Rehabilitation – 12' Wide Path	●	●	\$39.0M/\$70.0M	●	●	●	●	N
Alternative 1D: Rehabilitation – 16' Wide Path	●	●	\$39.75M/\$70.75M	●	●	●	●	Y
Alternative 2D: Superstructure Replacement - Truss Alternative – 12' Wide Path	●	●	\$32.0M/\$38.25M	●	●	●	●	N
Alternative 2E: Superstructure Replacement - Truss Alternative – 16' Wide Path	●	●	\$32.75M/\$39.0M	●	●	●	●	N
Alternative 3C: Partial Rehabilitation- 16' Wide Path	●	●	\$37.0M/\$56.5M	●	●	●	●	N
Alternative 4C: Complete Replacement – 16' Wide Path	●	●	\$31.0M/\$31.0M	●	●	●	○	N
Alternative 5: Reconfigure Southbound Little Bay Bridge	○	●	-	○	○	●	●	N
Alternative 6A: Southbound Little Bay Bridge - Widened Deck on Pier Extension (Minimum Roadway/Minimum Path)	●	●	-	●	●	○	●	N
Alternative 6B: Southbound Little Bay Bridge - Widened Deck on Pier Extension (Desirable Roadway/Minimum Path)	●	●	\$22.5M/\$25.75M	●	●	●	●	N
Alternative 6C: Southbound Little Bay Bridge - Widened Deck on Pier Extension (Desirable Roadway/Desirable Path)	●	●	\$23.0M/\$26.5M	●	●	●	●	Y
Alternative 7B: Southbound Little Bay Bridge - Independent Deck on Pier Extension – 16' Wide Path	●	●	\$24.75/\$27.75M	●	●	●	●	Y
Alternative 9B: Superstructure Replacement – Girder Alternative – 16' Wide Path	●	●	\$23.5M/\$26.5M	●	●	●	●	Y

○ Does not perform well   ● Performs adequately   ● Performance exceeds other reasonable alternatives

# Review of Alternatives

# Alternative 1 – Rehabilitation of General Sullivan Bridge

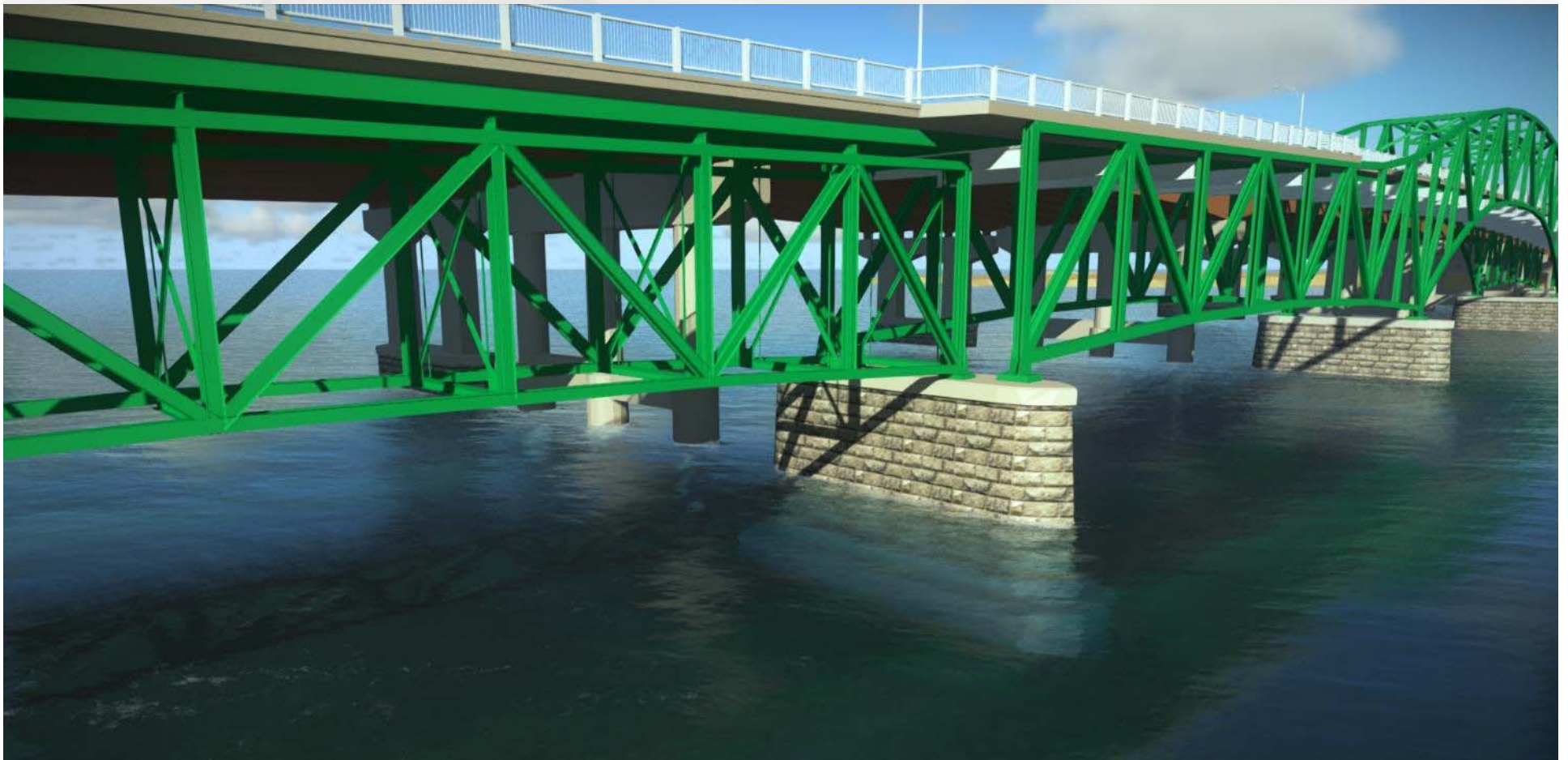




# Alternative 1 – Rehabilitation of General Sullivan Bridge



# Alternative 1 – Rehabilitation of General Sullivan Bridge



# Alternative 1 – Rehabilitation of General Sullivan Bridge





## Alternative 6 – Southbound Little Bay Bridge – Widened Deck on Pier Extension





# Alternative 6 – Southbound Little Bay Bridge – Widened Deck on Pier Extension



## Alternative 6 – Southbound Little Bay Bridge – Widened Deck on Pier Extension



# Alternative 6 – Southbound Little Bay Bridge – Widened Deck on Pier Extension





# Alternative 7 – Southbound Little Bay Bridge – Independent Deck on Pier Extension





## Alternative 7 – Southbound Little Bay Bridge – Independent Deck on Pier Extension



# Alternative 7 – Southbound Little Bay Bridge – Independent Deck on Pier Extension



# Alternative 7 – Southbound Little Bay Bridge – Independent Deck on Pier Extension





# Alternative 9 – Superstructure Replacement – Girder Alternative (Haunch)





# Alternative 9 – Superstructure Replacement – Girder Alternative (Haunch)



# Alternative 9 – Superstructure Replacement – Girder Alternative (Haunch)



# Alternative 9 – Superstructure Replacement – Girder Alternative (Haunch)





# Alternative 9 – Superstructure Replacement – Girder Alternative (V-Frame)





# Alternative 9 – Superstructure Replacement – Girder Alternative (V-Frame)



# Alternative 9 – Superstructure Replacement – Girder Alternative (V-Frame)



# Alternative 9 – Superstructure Replacement – Girder Alternative (V-Frame)



# Cost Estimates



# Conceptual Cost Estimating

- **Cost Estimates**
  - Initial Capital and Life Cycle maintenance costs were developed for Alternatives 1, 2, 3, 4, 6, 7 and 9.
  - Under each alternative, costs for a 12' wide and a 16' wide multi-use path width were developed for comparison.
- **Initial Capital Cost**
  - This is initial construction cost to bring the alternative into service.
- **Life Cycle Cost**
  - Reflects the entire capital investment required for each alternative. It is the summation of Initial Capital Cost, and cost of maintaining the structure through the assumed 75 year planning horizon.

### General Sullivan Bridge - Alternative Initial Capital and Life Cycle Cost Estimate Summary

SEIS Cost Estimates:				
Alt:	Description:	Initial Capital Cost	Life Cycle Cost (Constant Value)	Width Increase
1C	Rehabilitation of the GSB - 12' Wide Path	\$39,000,000	\$70,000,000	1.7%
1D	Rehabilitation of the GSB - 16' Wide Path	\$39,750,000	\$70,750,000	1.7%
2D	Superstructure Replacement – Truss Alternative - 12' Wide Path	\$32,000,000	\$38,250,000	2.6%
2E	Superstructure Replacement – Truss Alternative - 16' Wide Path	\$32,750,000	\$39,000,000	2.6%
3B	Partial Rehabilitation - 12' Wide Path	\$36,000,000	\$55,250,000	2.5%
3C	Partial Rehabilitation - 16' Wide Path	\$37,000,000	\$56,500,000	2.5%
4B	Complete Replacement - 12' Wide Path	\$30,750,000	\$30,750,000	0.8%
4C	Complete Replacement - 16' Wide Path	\$31,000,000	\$31,000,000	0.8%
6B	Southbound LBB – Widened Deck on Pier Extension - 12' Wide Path	\$22,500,000	\$25,750,000	2.1%
6C	Southbound LBB – Widened Deck on Pier Extension - 16' Wide Path	\$23,000,000	\$26,500,000	2.1%
7A	Southbound LBB – Independent Deck on Pier Extension - 12' Wide Path	\$24,500,000	\$27,250,000	1.0%
7B	Southbound LBB – Independent Deck on Pier Extension - 16' Wide Path	\$24,750,000	\$27,750,000	1.0%
9A	Superstructure Replacement – Girder Alternative - 12' Wide Path	\$23,250,000	\$26,250,000	1.0%
9B	Superstructure Replacement – Girder Alternative - 16' Wide Path	\$23,500,000	\$26,500,000	1.0%

= Alternatives for Further SEIS Evaluation

= Screened Out

# **Bicycle/Pedestrian Construction Access**

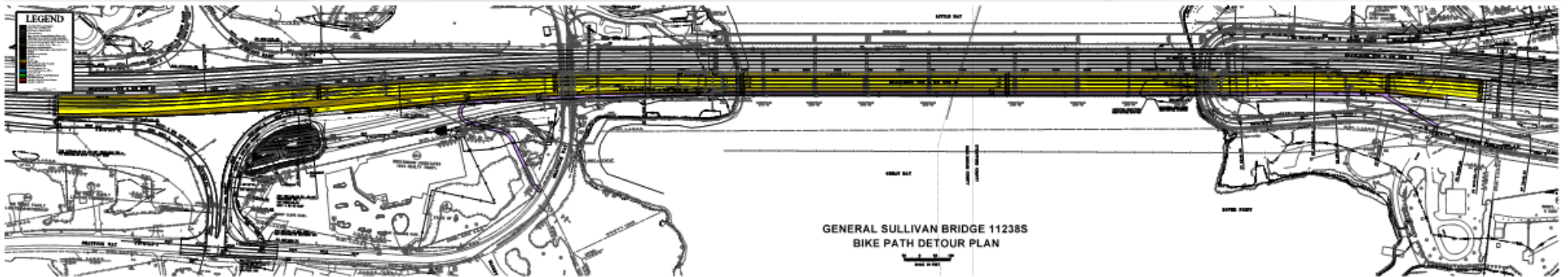
# Bike/Ped. Access Option 1: Shuttle Bus

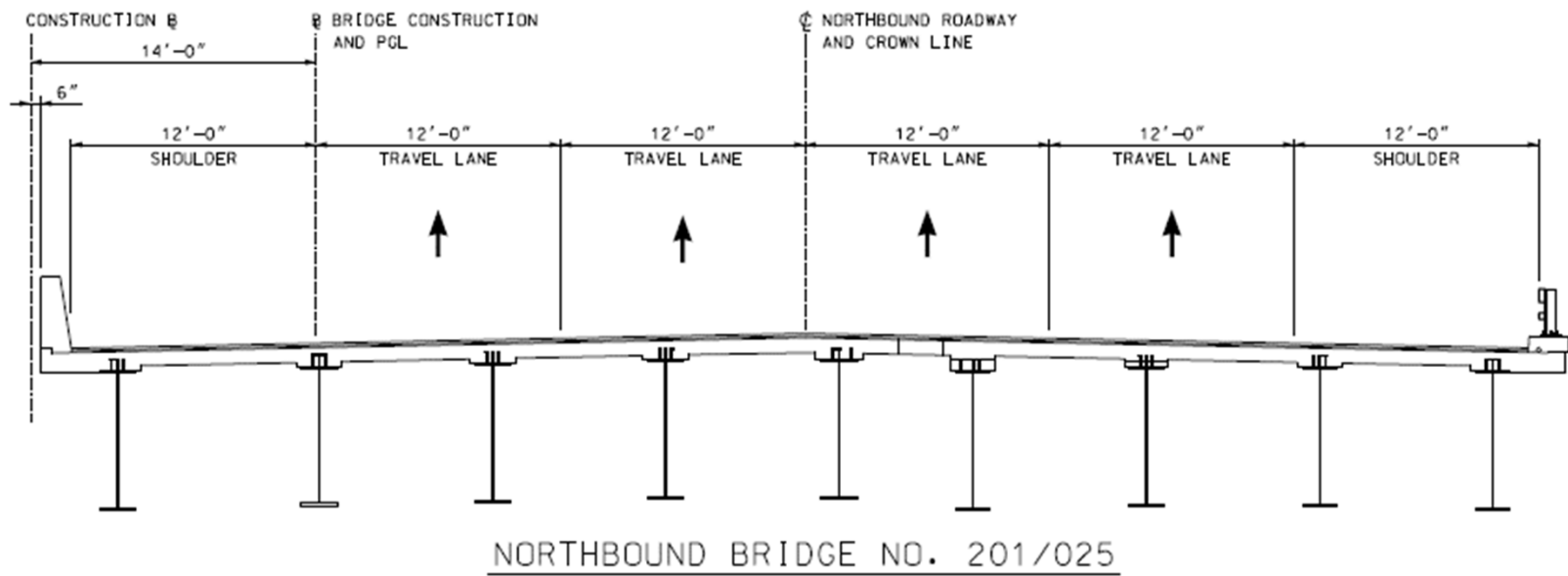
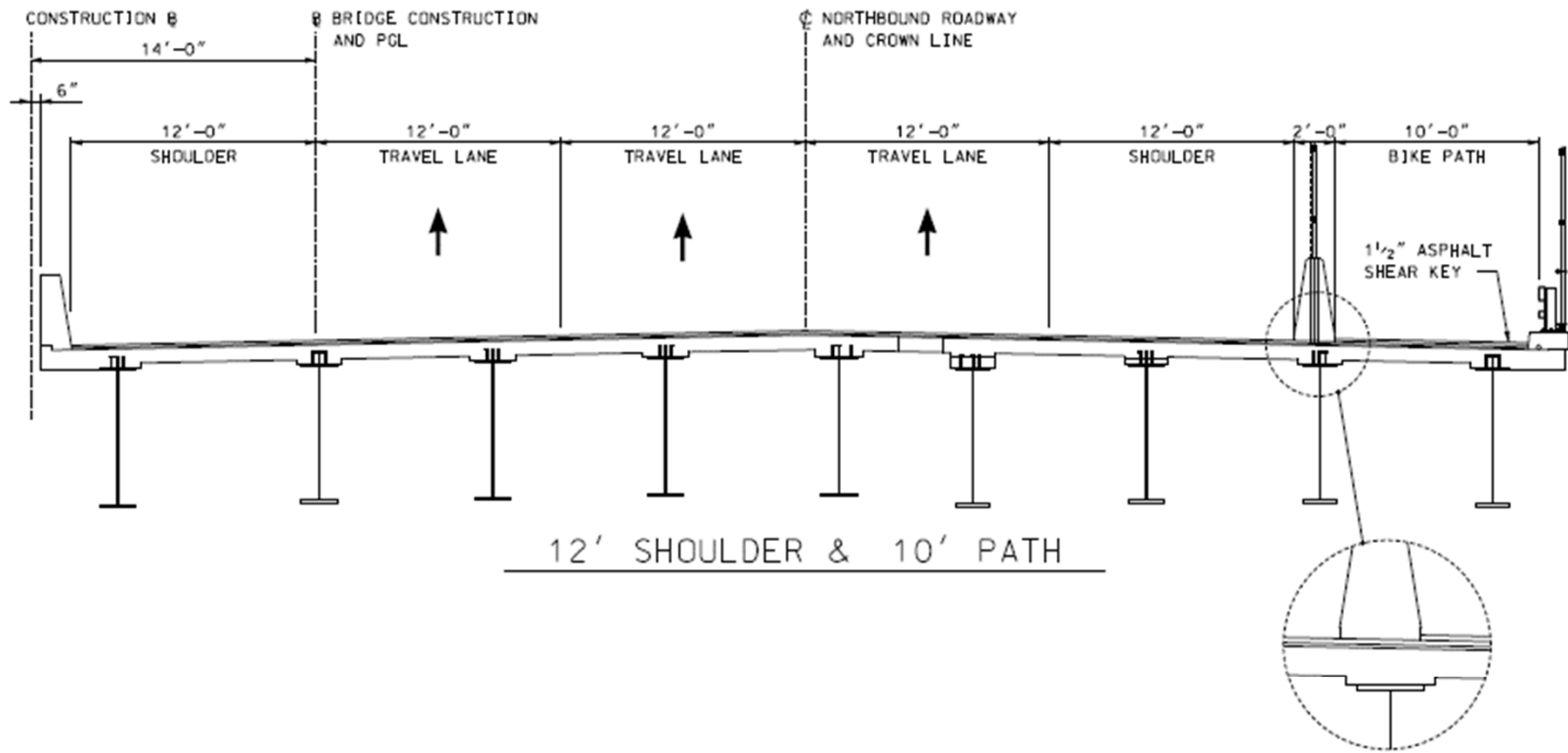




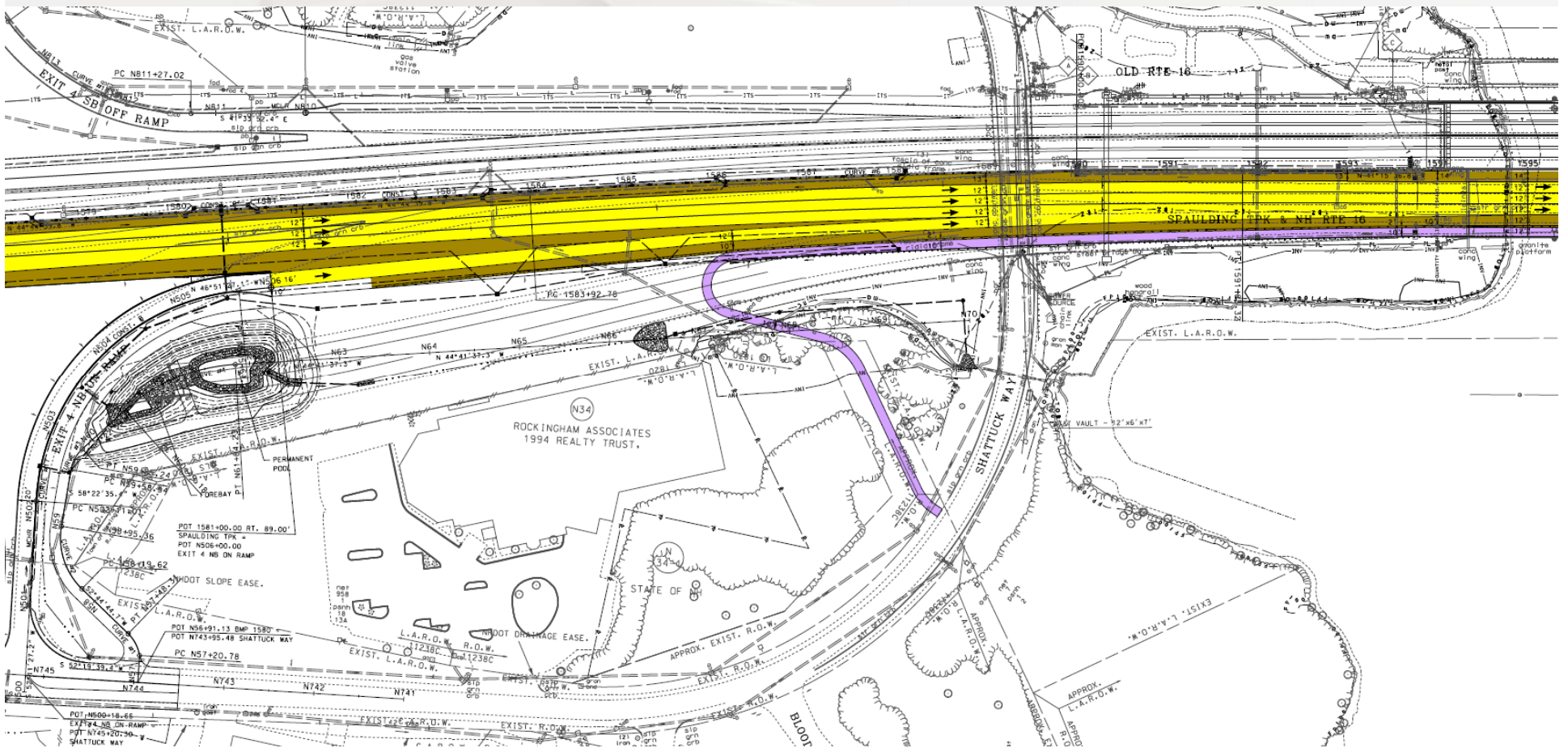
# Bike/Ped. Access Option 2: NB LBB Multi-Use Path Detour

- **Construct & Remove**
  - 10-foot Multi-Use Path
  - Barrier/Fencing
  - Temporary Approaches
  - Signing and pavement marking modifications

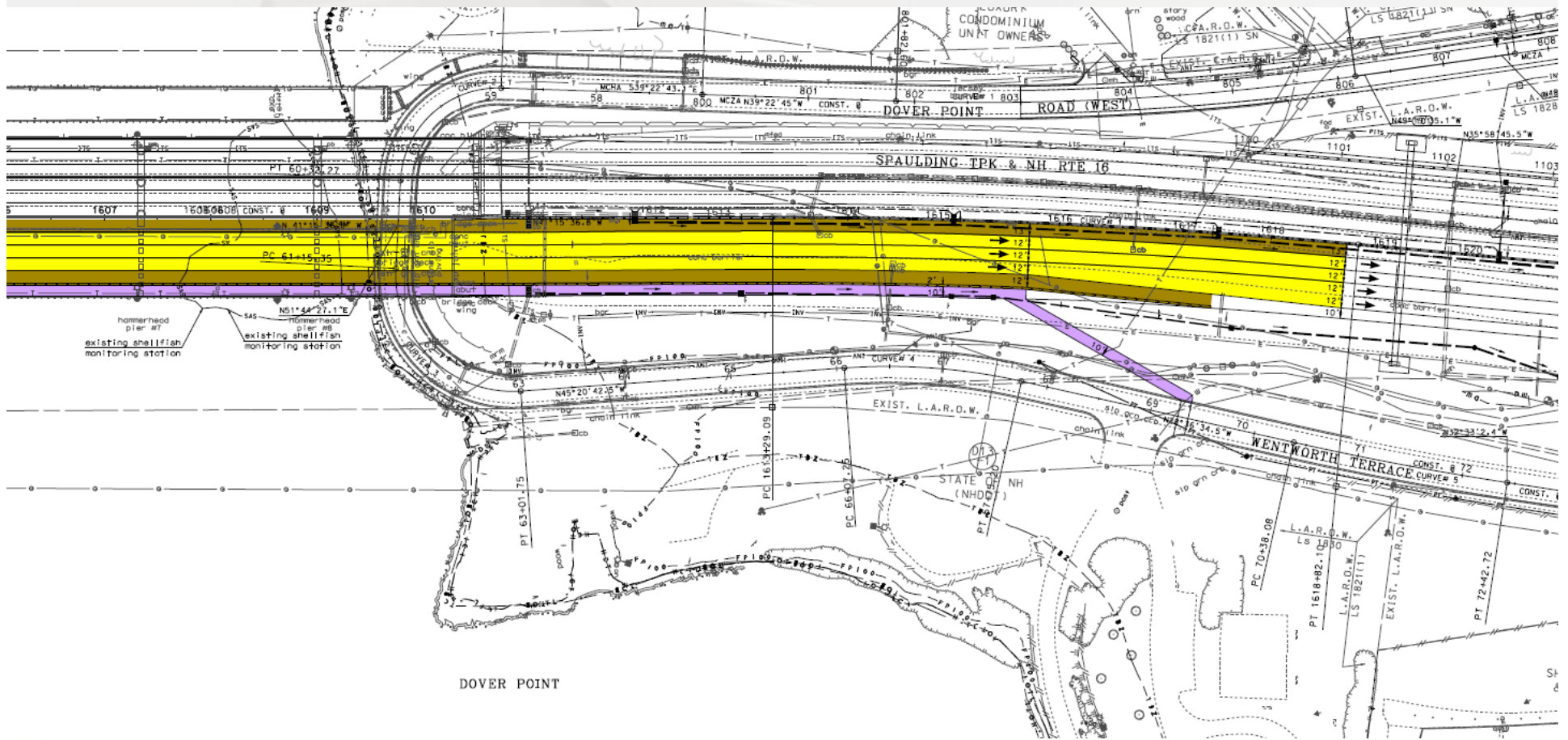




# Bike/Ped. Access Option 2: NB LBB Multi-Use Path Detour



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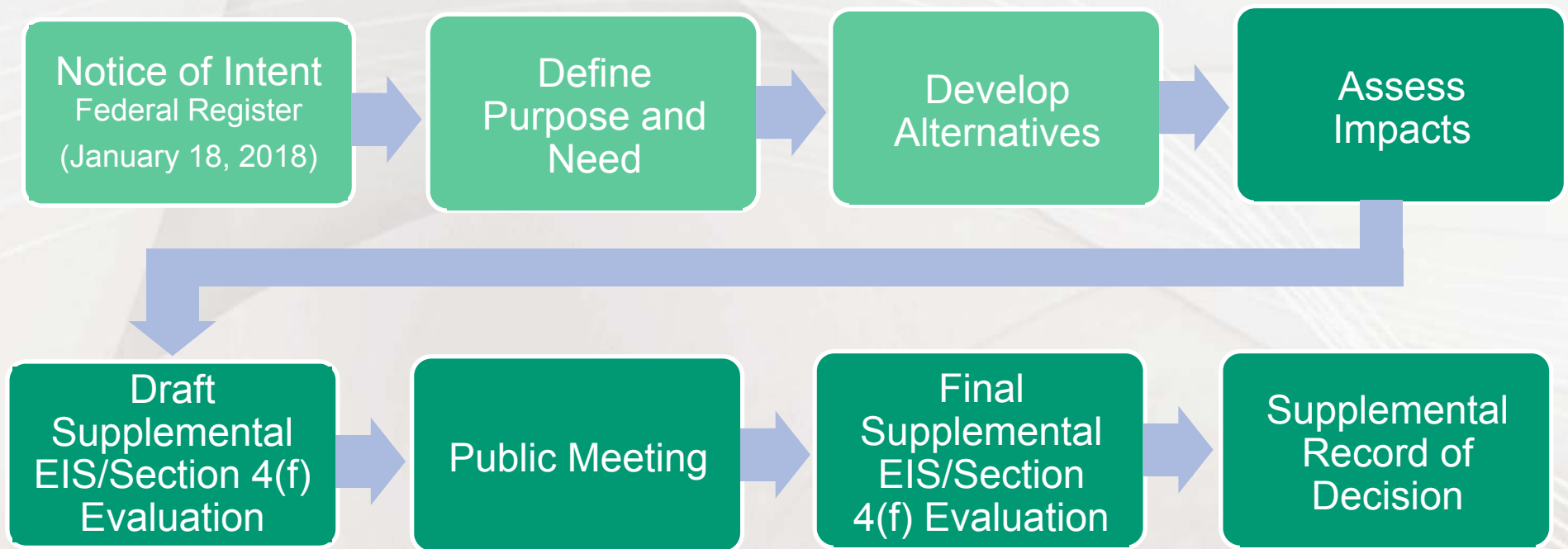


DOVER POINT



# **General Sullivan Bridge Next Steps**

# Supplemental EIS



# National Historic Preservation Act

## Section 106 – Consulting Parties

Interested persons or organizations may request **Consulting Party** status from FHWA:

Jamie Sikora  
Environmental Program Manager  
Federal Highway Administration  
NH Division Office  
53 Pleasant Street, Suite 200  
Concord, NH 03301  
Jamie.Sikora@fhwa.dot.gov



**SECTION 106  
CONSULTING PARTY  
PROCESS  
IN NEW HAMPSHIRE**

In the National Historic Preservation Act (NHPA), Congress established a comprehensive program to preserve the historical and cultural foundations of the Nation as a living part of community life. Section 106 of NHPA is crucial to that program, because it requires consideration of historic preservation in the multitude of Federal actions that take place nationwide and throughout New Hampshire.

Section 106 requires Federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on Federal projects prior to implementation.

For more information on how you can become a consulting party contact:

Jamie Sikora  
Environmental Program Manager  
Federal Highway Administration  
NH Division Office  
53 Pleasant Street, Suite 2200  
Concord, NH 03301  
Jamie.Sikora@fhwa dot gov



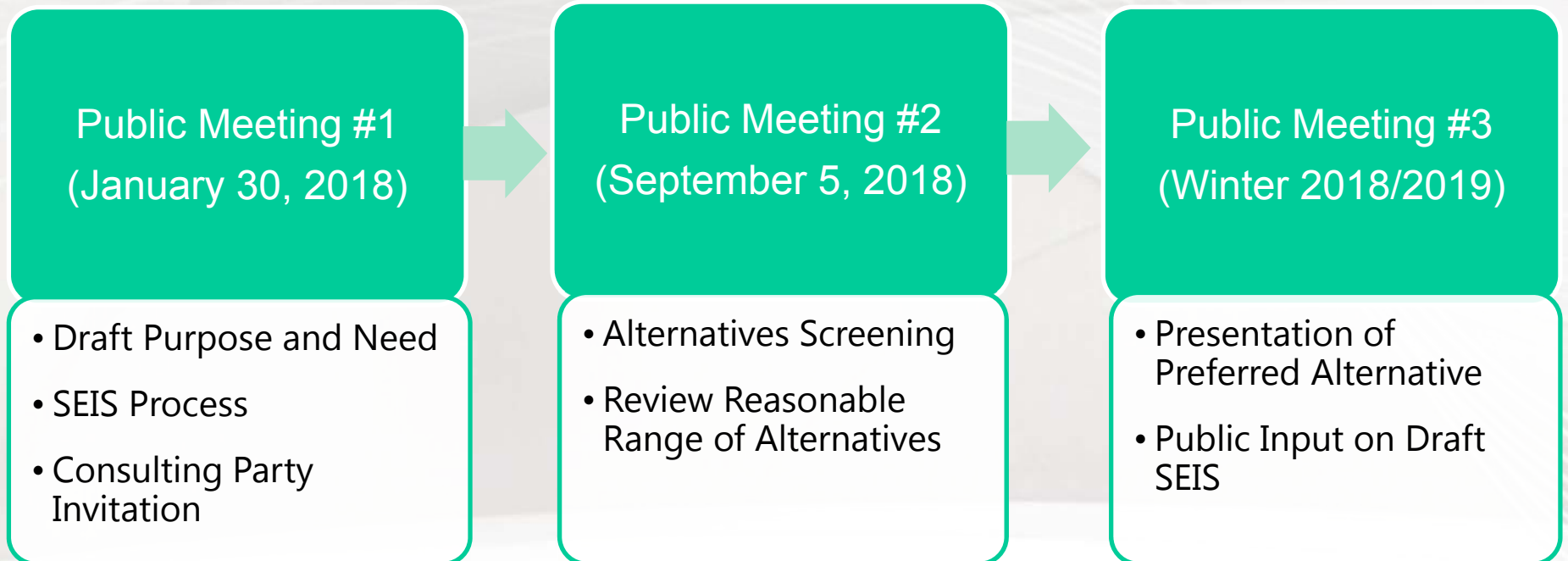
Historic properties should be managed.

More Information:

<https://www.nh.gov/dot/org/projectdevelopment/environment/units/program-management/cultural.htm>

# Supplemental EIS – Public Participation

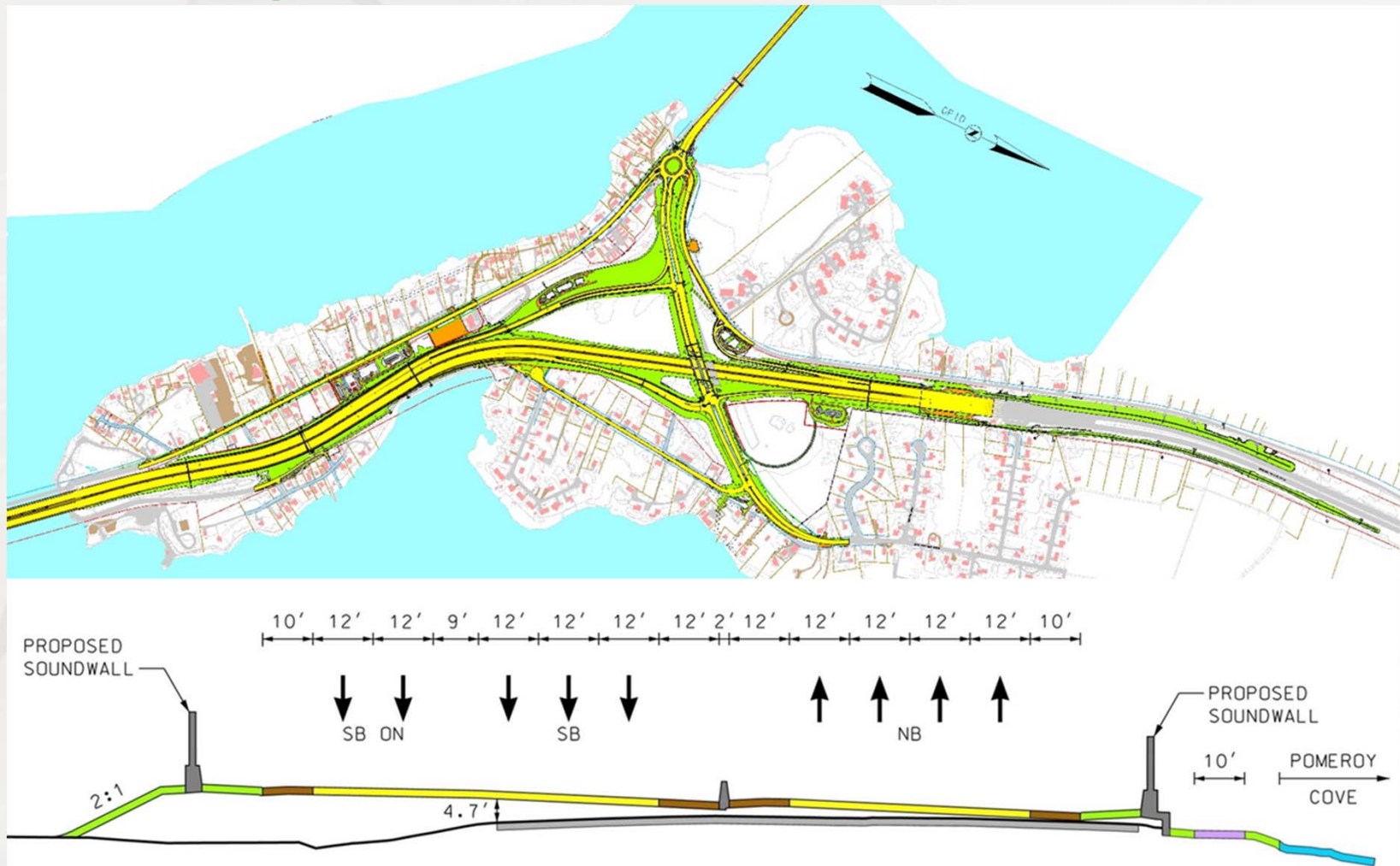
Public Participation is critical to the NEPA (SEIS) process, and required by Section 106 and Section 4(f)





# **Contract Q Construction Update**

# Newington-Dover 11238Q



## September 2018 Project Update

# Work Ongoing - Northbound Spaulding Tpk. Newington

Construction of southern approach to Little Bay Bridge continues  
Anticipated to be in service November 2018





# Work Ongoing - Northbound **Spaulding Tpk. Dover**

**Surcharge Waiting Periods are complete.  
This allows for permanent roadway construction  
Roadway to be in service November 2018.**





# Work Ongoing - Exit 6 Northbound Off Ramp

The new ramp will be put into service November 2018.

Existing Exit 6W Loop Ramp will close at that time.



# Work Ongoing - New Route 4 Bridge at Exit 6

Bridge was put into service August 30th





## Work Ongoing - Soundwalls

# Work continues on the Soundwalls south of Exit 6

### **Soundwall 1 –**

West Side of Spaulding Turnpike.  
South of Exit 6

*Completion in 2020*

### **Soundwall 2 –**

East Side of Spaulding Turnpike.  
South of Exit 6

*Completion in 2019*

### **Soundwall 3 –**

West Side of Spaulding Turnpike.  
North of Exit 6

*Complete*

### **Soundwall 4 –**

East Side of Spaulding Turnpike.  
North of Exit 6

*Complete*



# Work Ongoing – Dover Point Road (West) Reconstruction

Sidewalk and Driveway Work continues.  
Anticipated completion in fall of 2018.





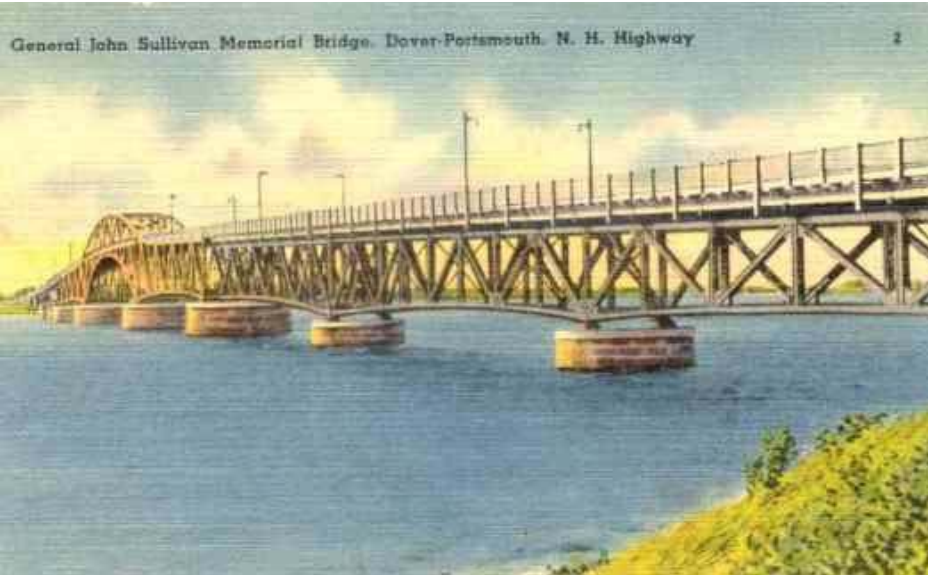
## **Upcoming Work -**

**Demo of Existing Exit 6 Bridge – Requires Nighttime Work and Traffic Detours**

**Closure of Exit 5 Northbound On Ramp – Scheduled for Sept 11. Traffic will be detoured to Exit 4 to access Northbound**

**Construction of Exit 6 Northbound On Ramp – To be opened in November 2018**

**Traffic shift onto Northbound Little Bay Bridge – anticipated 2 lanes onto bridge in November 2018.**



# Thank You!

## Questions/Comments?

<http://www.newington-dover.com/>

