NEWINGTON-DOVER Improvements to Spaulding Turnpike / Little Bay Bridges

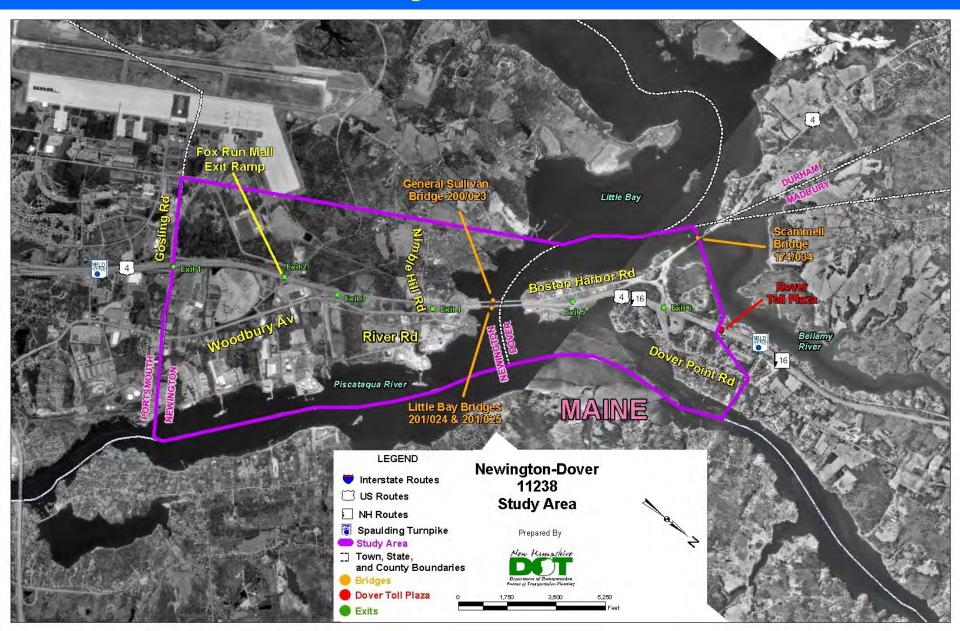
WELCOME

Public Informational Meeting
August 6, 2014 - 7:00 PM
Dover City Auditorium

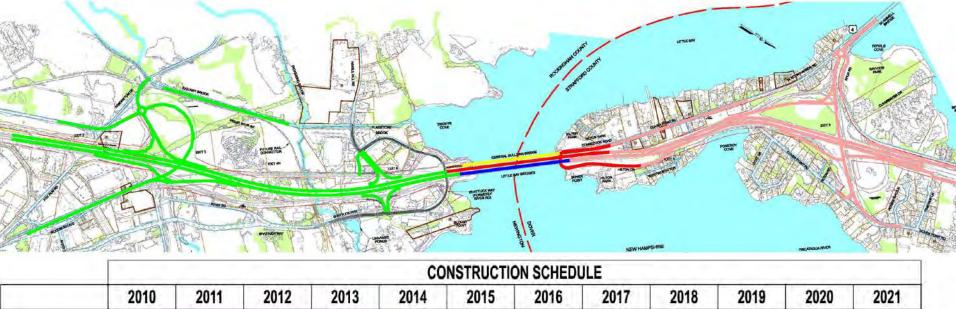
Meeting Agenda

- Project Overview
- Status of Newington-Dover, 11238 Contracts
 - **➤ Contract L New Little Bay Bridge SB**
 - Contract M Newington
 - ➤ Contract O Little Bay Bridge NB Rehabilitation
 - **≻** Contract Q Dover
 - ➤ Contract S General Sullivan Bridge Rehabilitation
- Condition & Status General Sullivan Bridge

Project Area



Current Contract Breakout & Schedule





* Contracts O, Q, & S schedules subject to change



Contract L - SB New Little Bay Bridge Construction

- Construction Initiated in 2010 Completed in Fall 2013
- Spaulding Turnpike Dover Approach Work
- Spaulding Turnpike Newington Roadway Approach
- Wentworth Terrace Opened for Two-way Traffic
- Pedestrian & Bicycle Structure (Approach to GSB)
- General Sullivan Bridge Dover Abutment for New Ped/Bike Bridge
- Exit 5 Ramp Reconstruction Shifted to Contract M during Construction

Contract L Complete New Little Bay Bridge



Contract M



Contract M Construction

- Contractor: A. J. Coleman
- Construction Duration: 2012 2015

Contract M (continued)



- Discontinues Exit 2 and Replaces it with Cul-de-Sac
- Provides a Full Service Interchange at Exit 3 and Reconstructs Woodbury Avenue
- Provides Additional Access into Pease
- Provides Future Consideration for Railroad Spur
- Eliminates Maintenance and Incident Management Reverse Direction Ramps Between Exits 3 and 4

Contract M (continued)



- Exit 4 Reconstruction
- Roadwork Extends into Dover to Match into Existing Spaulding Turnpike
- Shifts SB and NB Traffic onto SB LBB (Contract L Bridge)
- Railway Brook Restoration
- Stormwater Detention Basins for Water Quality Treatment

Construction — Contract M

Construction Operations for 2014/2015:

- Exit 3 and Woodbury Avenue Bridge
- Exit 4 Ramp Construction
- Stormwater Detention Basin & Railway Brook Construction
- Dover Turnpike and Exit 5
- Summer 2015 Traffic Shift to New LBB
- Newington Turnpike Construction







Contract O



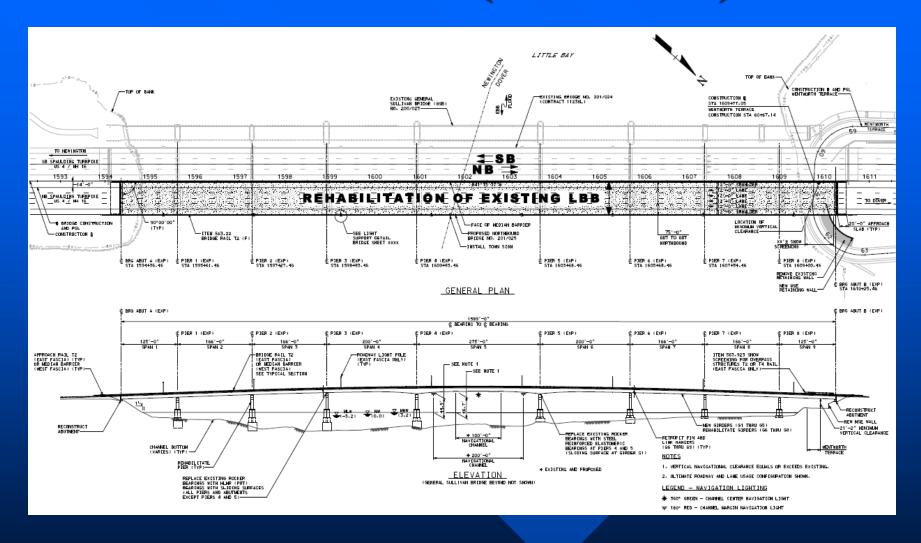
Contract O – Existing Little Bay Bridges Rehabilitation

- Tentative Advertising Date: Fall 2014
- Tentative Construction: 2015 2017
- Concurrent Construction with Contracts M and Q

Little Bay Bridges Contracts L, O, & S



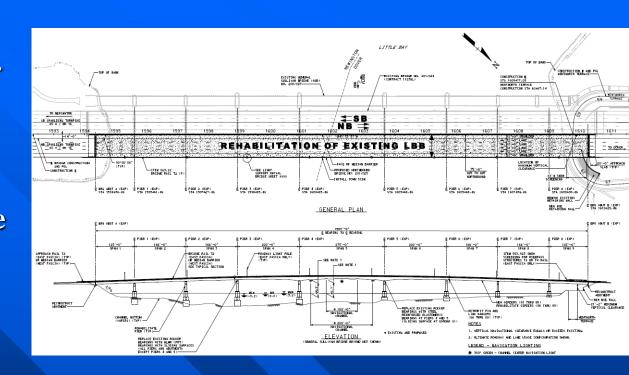
Contract O (continued)



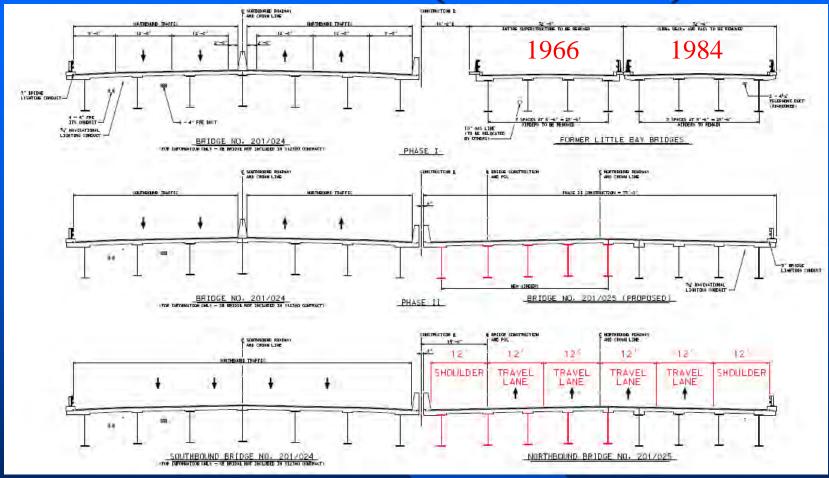
Rehabilitates Existing 9 Span 1,589' Little Bay Bridges to provide Four Lanes of NB Traffic

Contract O (continued)

- Original Construction
 Completed in 1964 for
 NB Traffic with SB
 Traffic on General
 Sullivan Bridge
- Easterly Half of Bridge
 Construction
 Completed in 1982 for
 NB Traffic and
 General Sullivan
 Bridge Closed to
 Vehicular Traffic
- AbutmentReconstruction
- Minor Pier RepairWork



Contract O (continued)



- Older Structural Steel Members being Replaced to Meet Current Standards
- Utilize 1984 Superstructure as Work Platform to Replace 1966 Beams & Deck
- Utilize New Beams & Concrete Deck as Work Platform to Replace 1984 Deck

Contract Q



Contract Q - Dover

- Tentative Advertising Date: September 2016
- Tentative Construction: 2017 2020
- Completes and Opens All Spaulding Turnpike Improvements
- Concurrent Construction with Contracts O and S

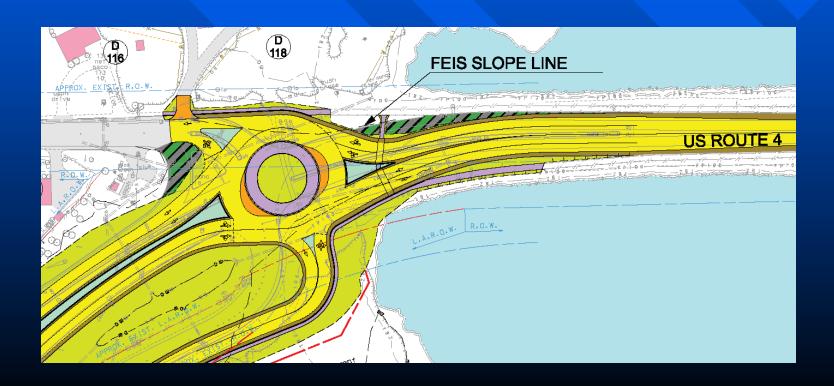
Contract Q (continued)



- Provides a Full Service Interchange at Exit 6
- Eliminates Exit 5
- Introduces 2 Signalized Intersections for Exit 6 Ramps
- Roundabout Replaces Signalized Intersection at Boston Harbor Rd.
- Constructs 4 Sections of Soundwall North and South of Exit 6 and Dover Toll Plaza

Contract Q – Boston Harbor Rd.

- Roundabout Replaces Signalized Intersection at Boston Harbor Rd.
- Two-Lane Hybrid Roundabout



Contract Q - Exit 6

- New Bridge South of Existing
- Signalized Intersection at Exit 6 NB Ramps



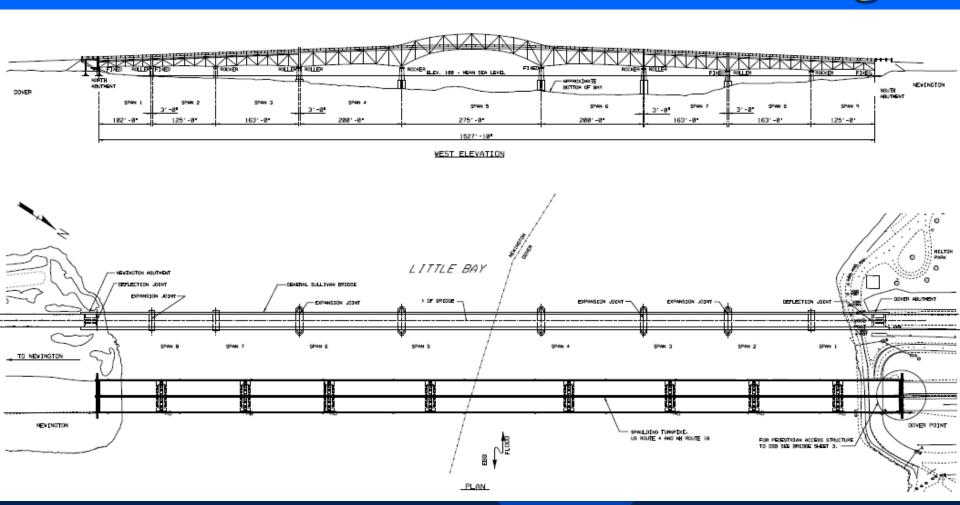
Contract S



Contract S – General Sullivan Bridge Rehabilitation

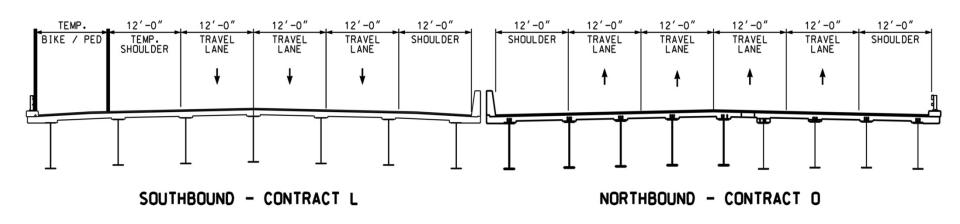
- Tentative Advertising Date: Late 2018
- Tentative Construction: 2018 2021
- Concurrent Construction with Contract Q

Contract S - General Sullivan Bridge



Rehabilitates Existing 9-Span General Sullivan Bridge for Pedestrian and Bicycle Use

Contract S - General Sullivan Bridge



Temporary Relocation of Pedestrians and Bicycles on New Little Bay Bridge during GSB Rehabilitation

General Sullivan Bridge - Work To Date



- **Initial Detailed Inspection Completed in 2009**
- Underwater Inspection Completed in 2011
- New Dover Approach Bridge with Contract L (2013)
- Dover Abutment Rehabilitated with Contract L (2013)
- In-Depth, Hands-On Inspection Completed in May 2014
- Capacity Load Rating June-Sept. 2014 (ongoing)





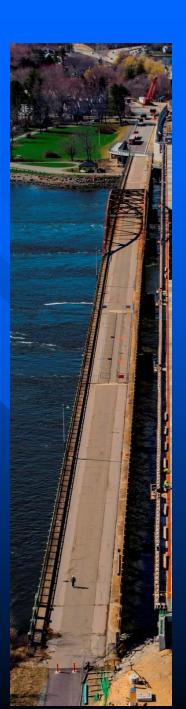


General Sullivan Bridge – Preliminary Results from 2014 Inspection





- Deterioration Continues Worse than 5 Years Ago
- Deck Concrete Significantly Spalled on Underside
- Outside Stringers Critically Deteriorated
- Interior Stringers (3 lines) Fair to Good
- Floor Beams Fair to Poor
- Span 7 (currently fenced) Truss Not Full Capacity
- Trusses for All Other Spans Being Evaluated



General Sullivan Bridge - Overview



Spans 1-2-3 (Dover)



Spans 7-8-9 (Newington)



Spans 4-5-6 (Center Spans)

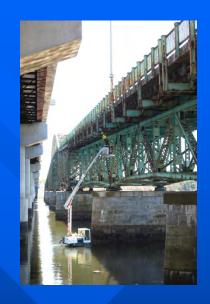
General Sullivan Bridge 2014 Inspection Overview



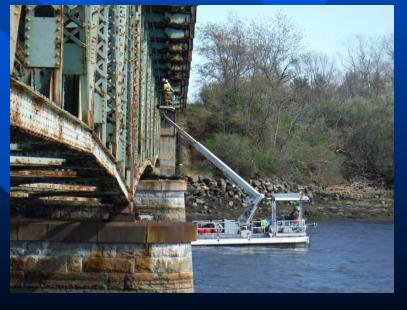
General Sullivan Bridge 2014 Inspection Overview











General Sullivan Bridge 2014 Inspection Piers and Bearings













General Sullivan Bridge 2014 Inspection Deck











General Sullivan Bridge 2014 Inspection Stringers













General Sullivan Bridge 2014 Inspection Floor Beams









General Sullivan Bridge 2014 Inspection Truss Members













General Sullivan Bridge - Next Steps



Re-Evaluate/Re-Analyze Span 7

General Sullivan Bridge - Next Steps







Install 15' Wide Fencing Full Length of Bridge

General Sullivan Bridge - Next Steps

- Fence Entire Deck to 15'+/- wide (2014/2015)
- Detailed Structural Analysis & Rating Continues – Completion in Sept. 2014
- Review and remove if necessary any loose deck spalls over navigable channel
- Evaluate Environmental Document (Historic) Conformance 2014/2015
- Assess Rehabilitation & Replacement Options 2015-2016
- Develop Rehabilitation or Replacement Plans 2015-2016
- **Follow-up Inspection in 2016**
- Tentative Advertising Date: Late 2018
- **Tentative Construction: 2018 2021**



Specific Request for Public Input

With the entire length of the General Sullivan Bridge fenced to a 15' width, what are:

- Pedestrian Considerations
- Bicycle Considerations
- Fishing Considerations
- Other Use Considerations









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THANK YOU

Questions/Comments