

NEWINGTON-DOVER

Improvements to Spaulding Turnpike / Little Bay Bridges

WELCOME

Public Informational Meeting

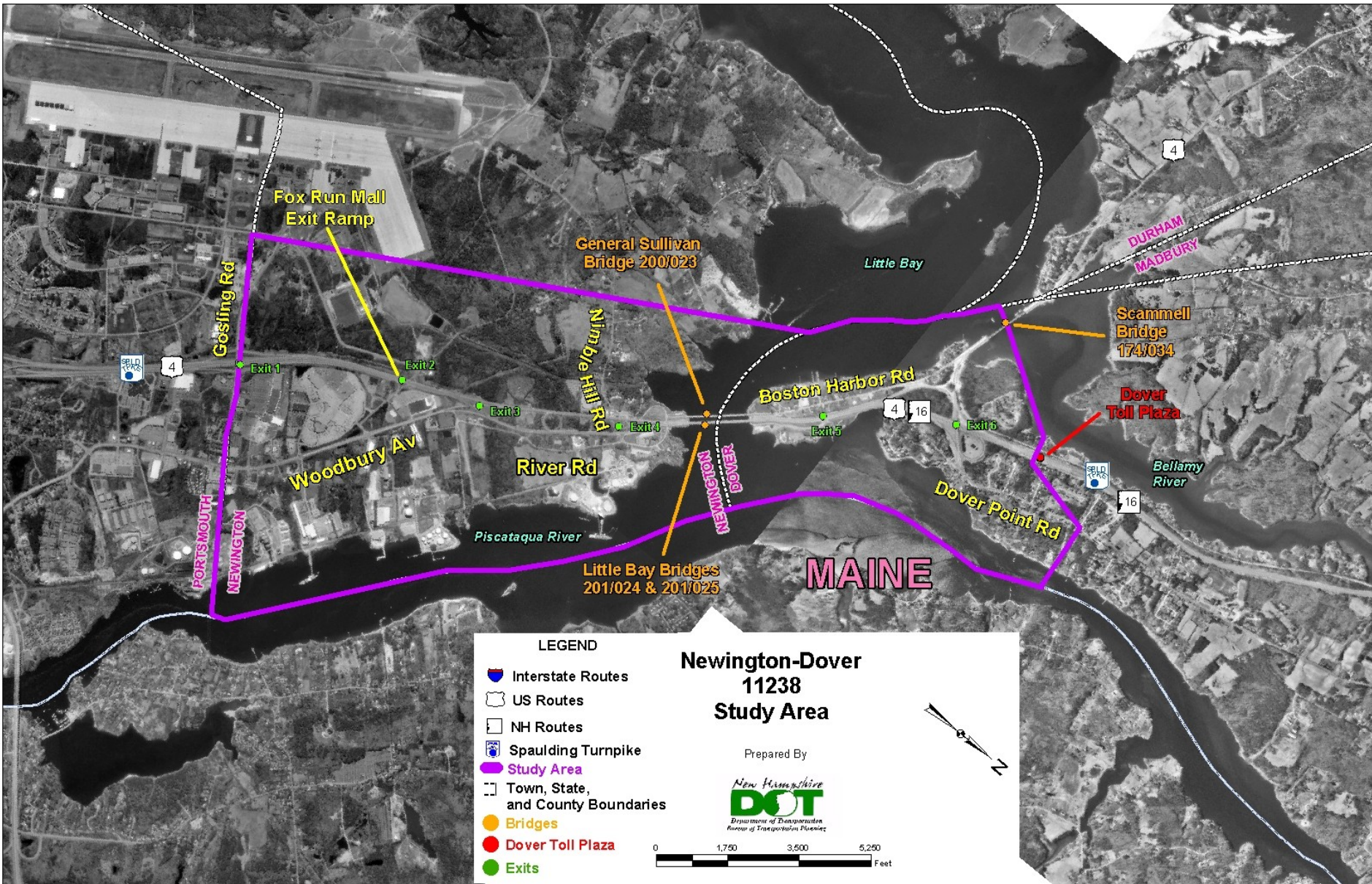
August 6, 2014 - 7:00 PM

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



LEGEND

- Interstate Routes
- US Routes
- NH Routes
- Spaulding Turnpike
- Study Area
- Town, State, and County Boundaries
- Bridges
- Dover Toll Plaza
- Exits

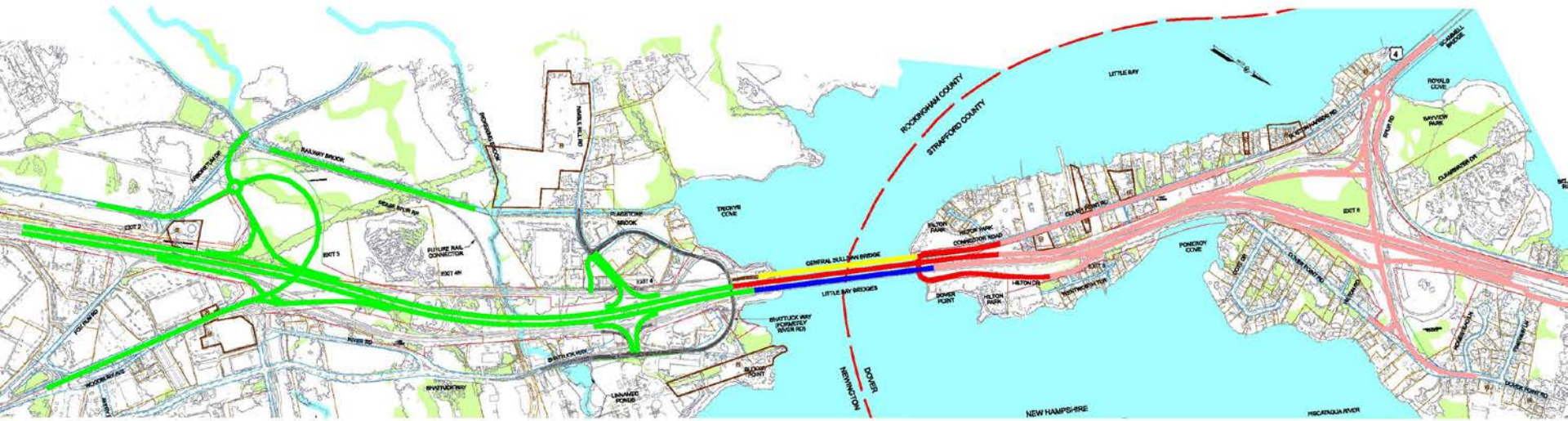
**Newington-Dover
11238
Study Area**

Prepared By

 Department of Transportation
 Bureau of Transportation Planning

0 1,750 3,500 5,250 Feet

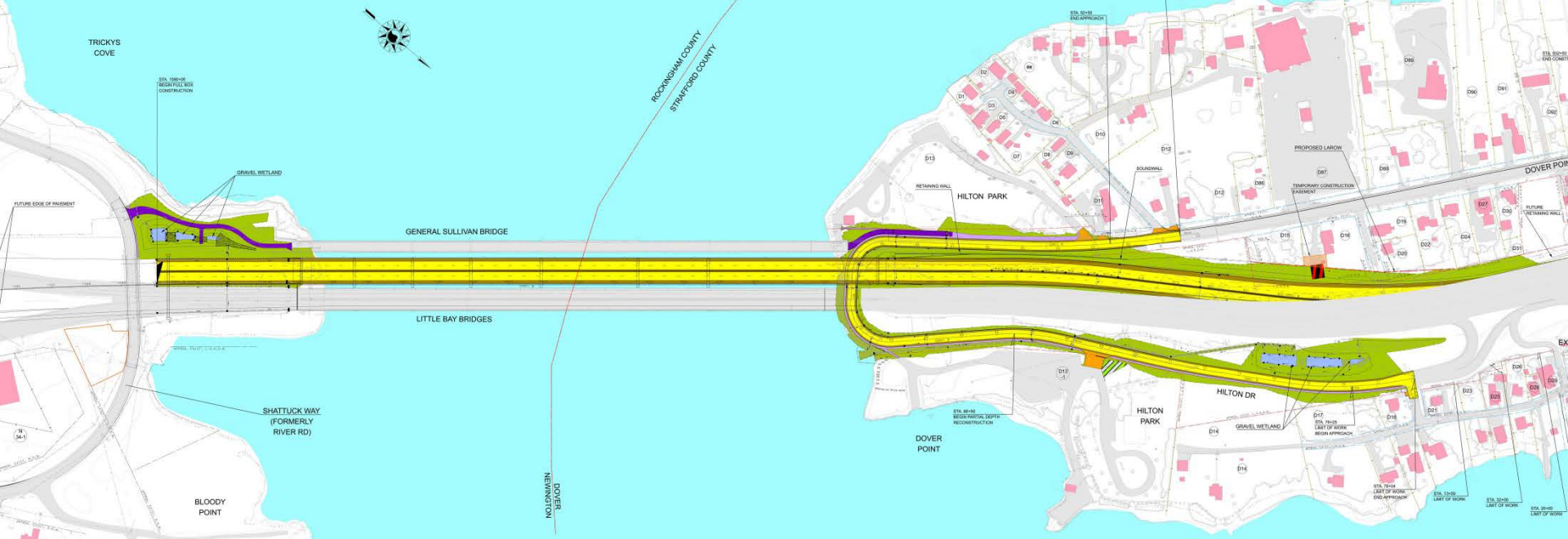
Current Contract Breakout & Schedule



CONSTRUCTION SCHEDULE

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
CONTRACT L	[Red bar from 2010 to 2014]					\$54.1 M						
CONTRACT M			[Green bar from 2012 to 2015]			\$48.8 M						
CONTRACT O					[Blue bar from 2014 to 2017]			\$34.0 M*				
CONTRACT Q							[Pink bar from 2016 to 2021]					\$49.2 M*
CONTRACT S									[Yellow bar from 2018 to 2021]			\$31.7 M*

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



Contract L - SB New Little Bay Bridge Construction

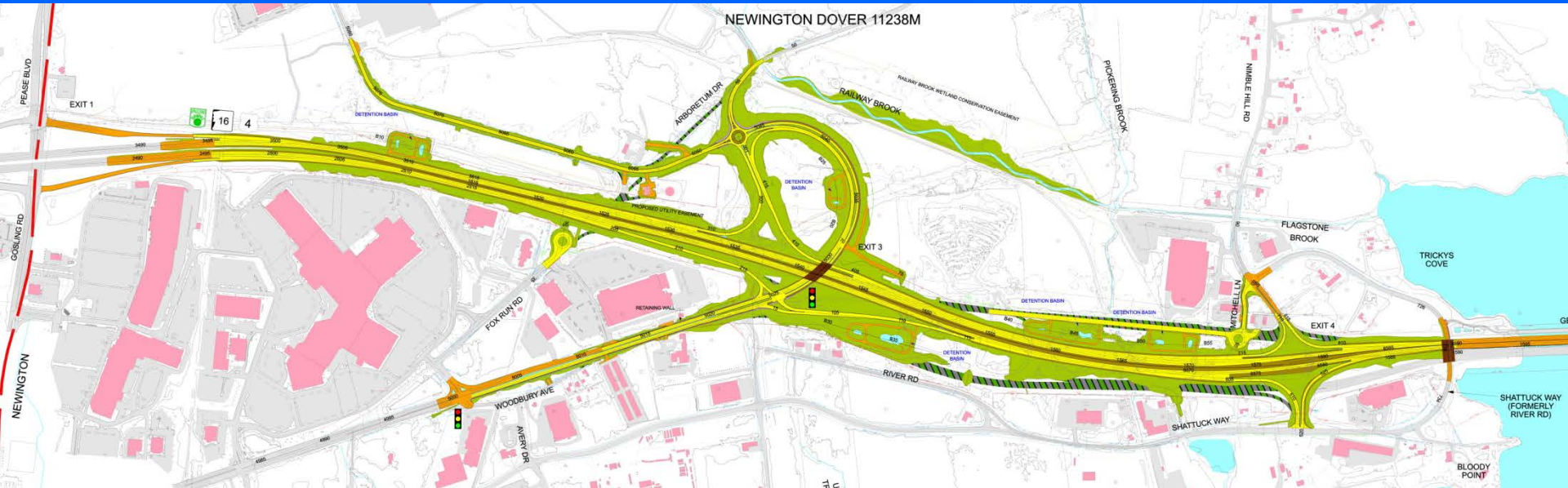
- Construction Initiated in 2010 Completed in Fall 2013
- Spaulding Turnpike Dover Approach Work
- Spaulding Turnpike Newington Roadway Approach
- Wentworth Terrace Opened for Two-way Traffic
- Pedestrian & Bicycle Structure (Approach to GSB)
- General Sullivan Bridge Dover Abutment for New Ped/Bike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

Contract L Complete

New Little Bay Bridge



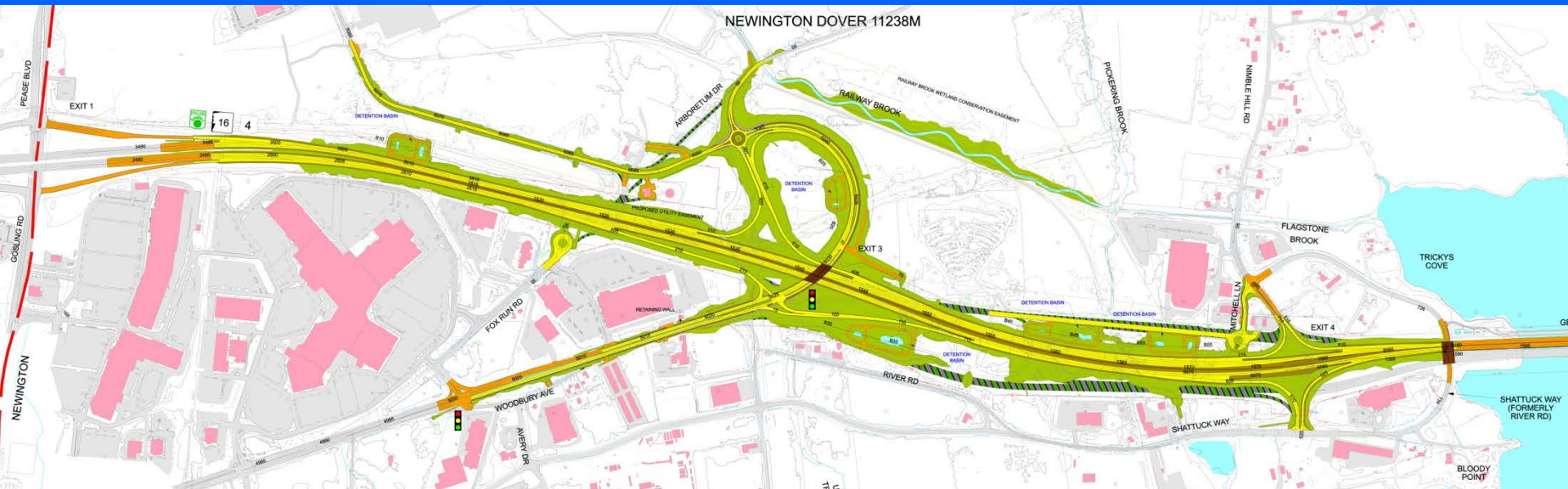
Contract M



Contract M Construction

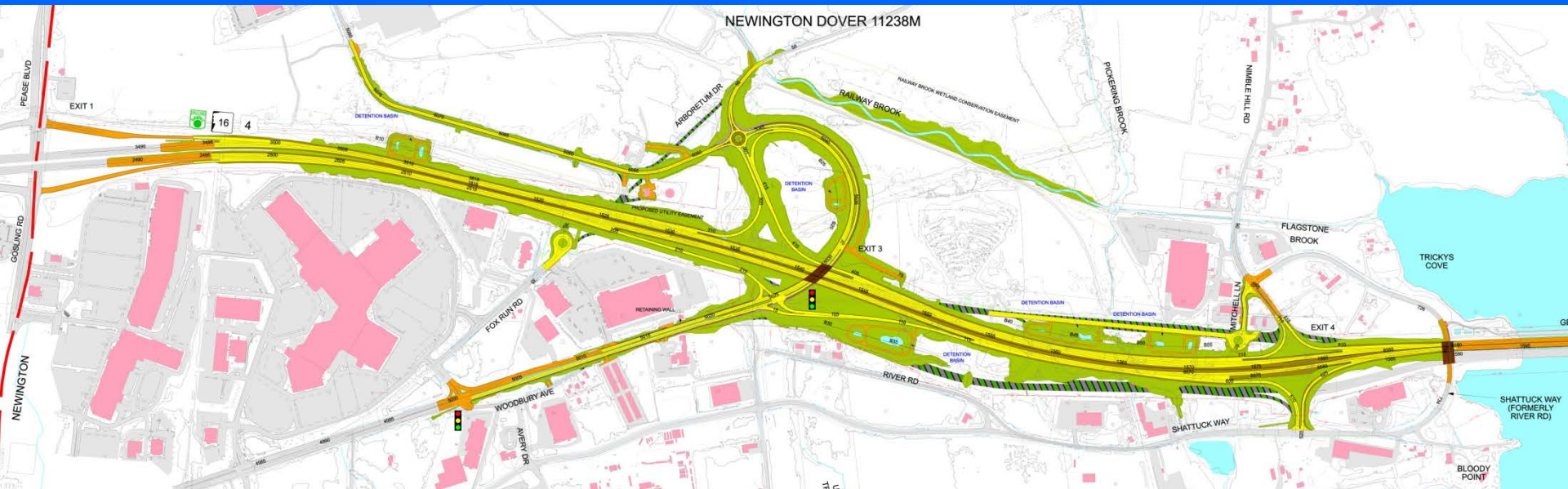
- Contractor: A. J. Coleman
- Construction Duration: 2012 – 2015

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)

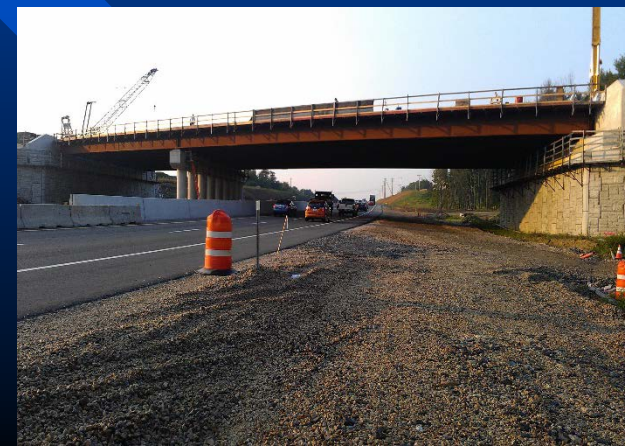


- **Exit 4 Reconstruction**
- **Roadwork Extends into Dover to Match into Existing Spaulding Turnpike**
- **Shifts SB and NB Traffic onto SB LBB (Contract L Bridge)**
- **Railway Brook Restoration**
- **Stormwater Detention Basins for Water Quality Treatment**

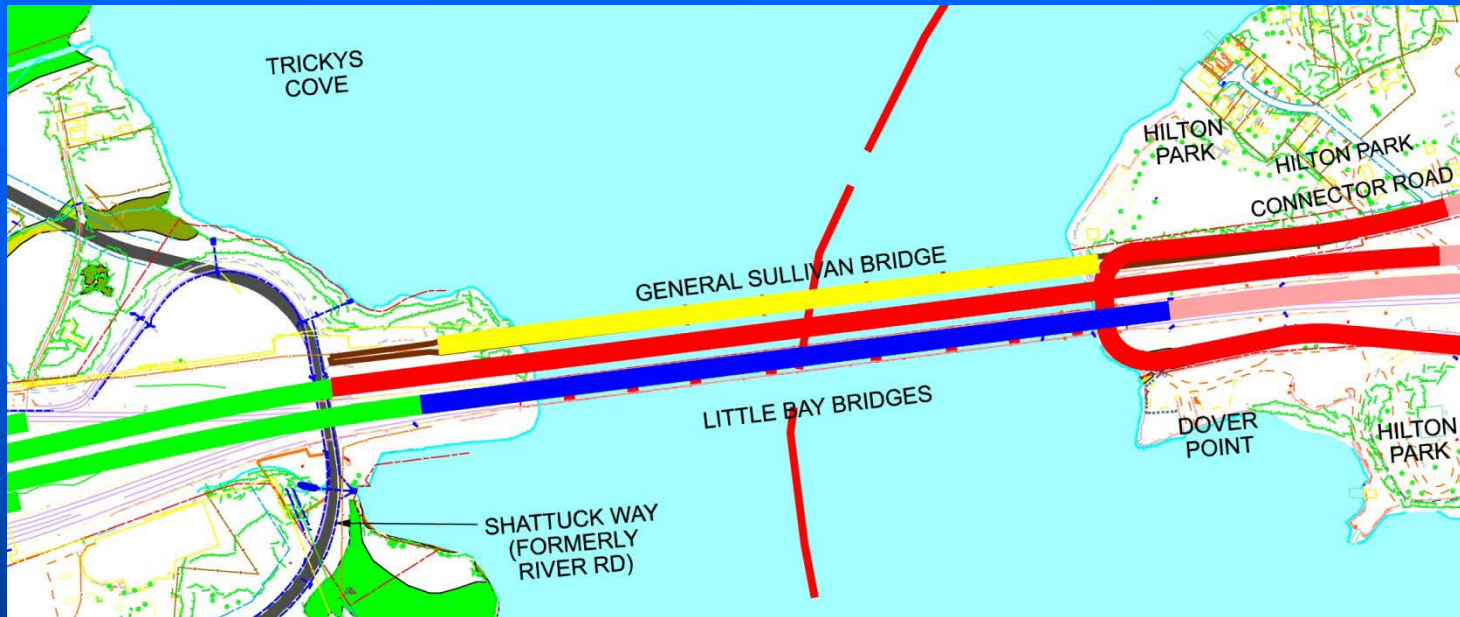
Construction – Contract M

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

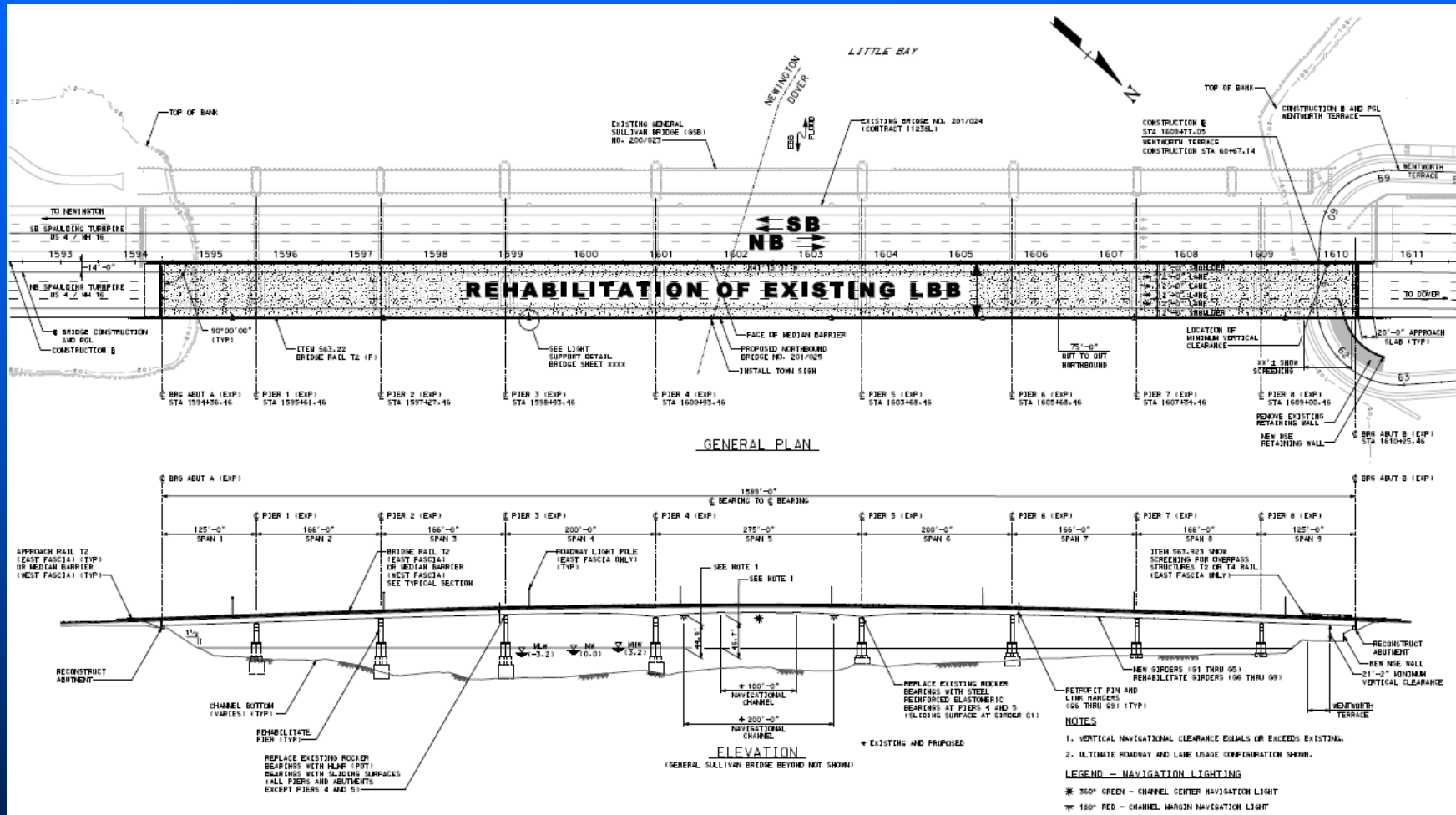


General
Sullivan Bridge
Rehabilitation
Contract S

New Little Bay Bridge
Contract L

Existing Little
Bay Bridges
Rehabilitation
Contract O

Contract O (continued)



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

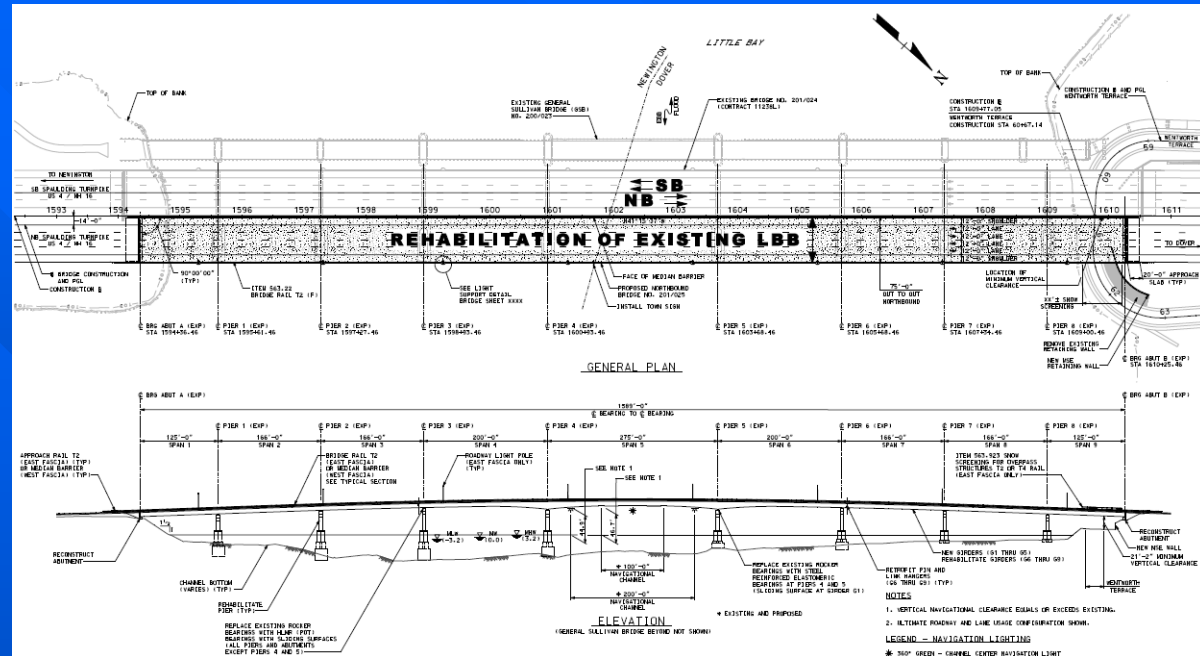
Contract O (continued)

- Original Construction Completed in 1964 for NB Traffic with SB Traffic on General Sullivan Bridge

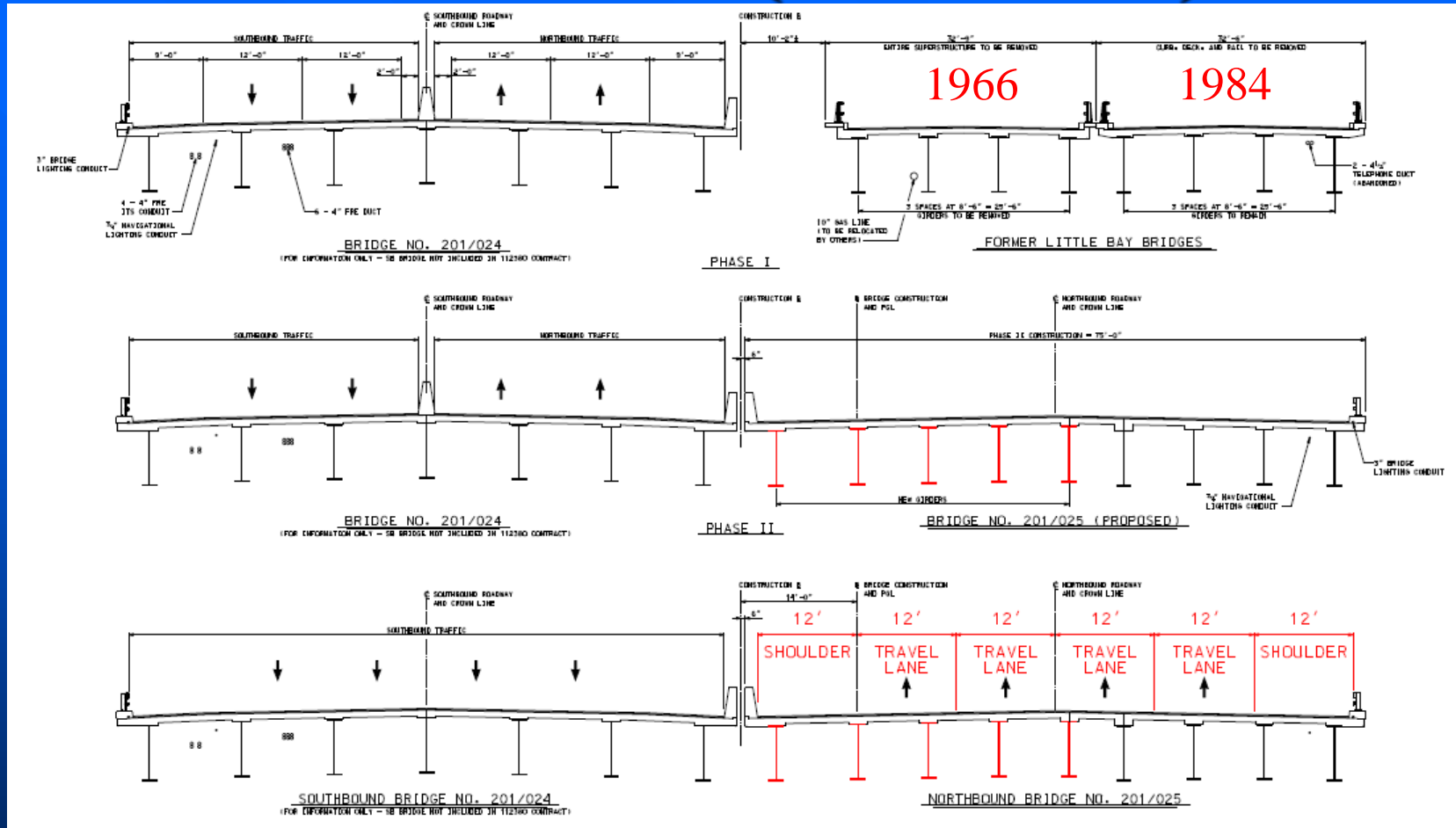
- Easterly Half of Bridge Construction Completed in 1982 for NB Traffic and General Sullivan Bridge Closed to Vehicular Traffic

- Abutment Reconstruction

- Minor Pier Repair Work



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

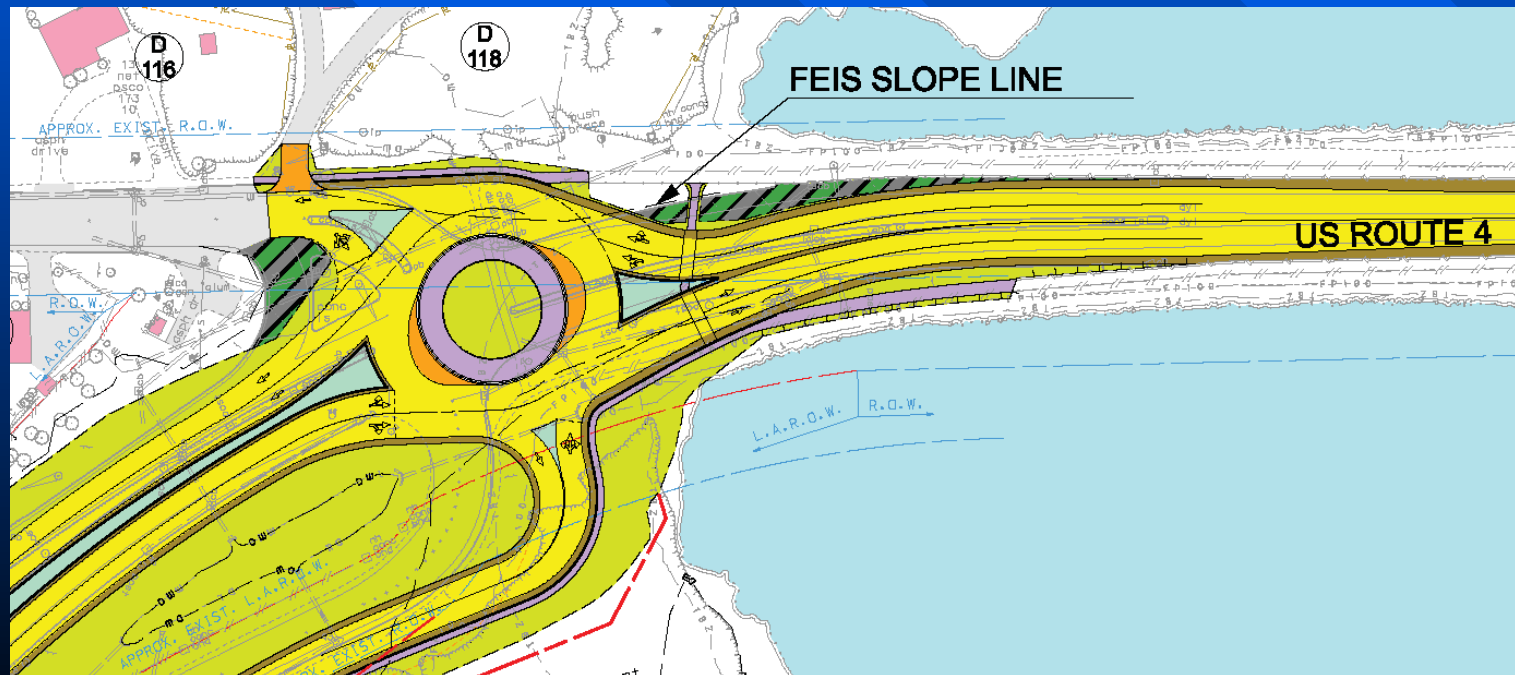
Contract Q (continued)



- 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

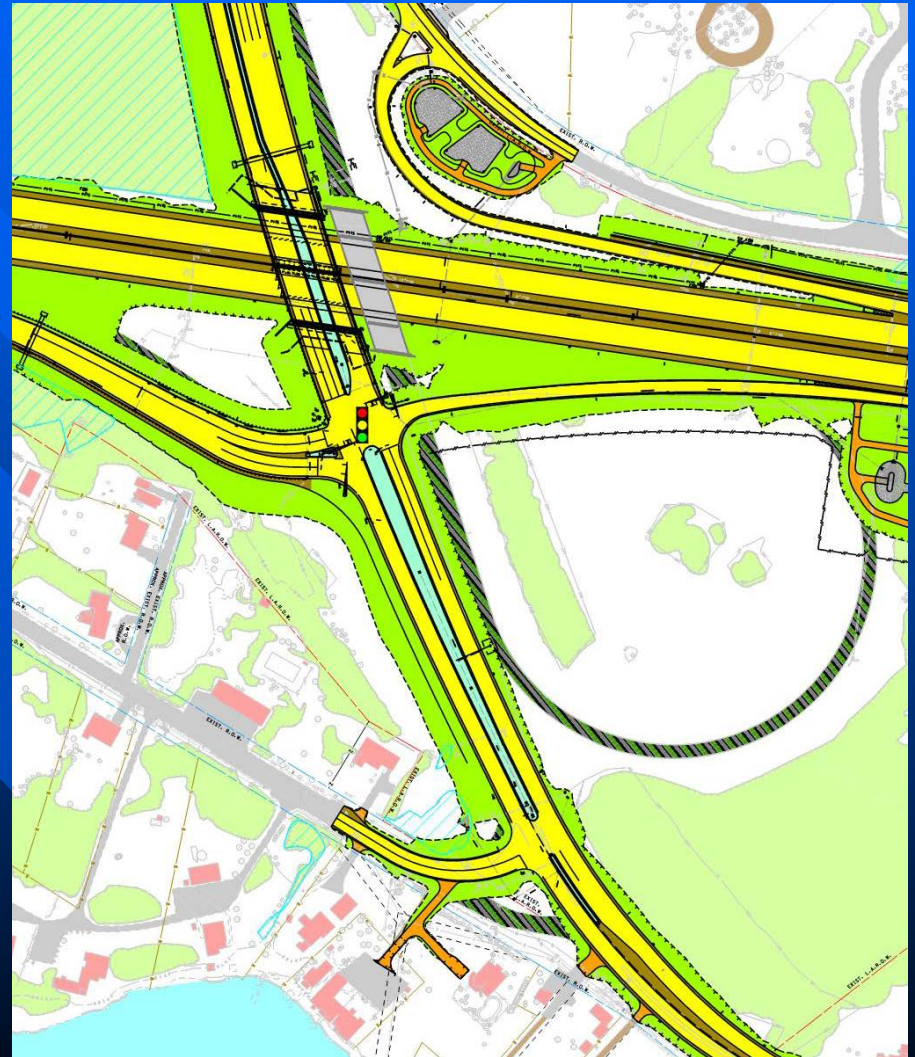
Contract Q – Boston Harbor Rd.

- 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



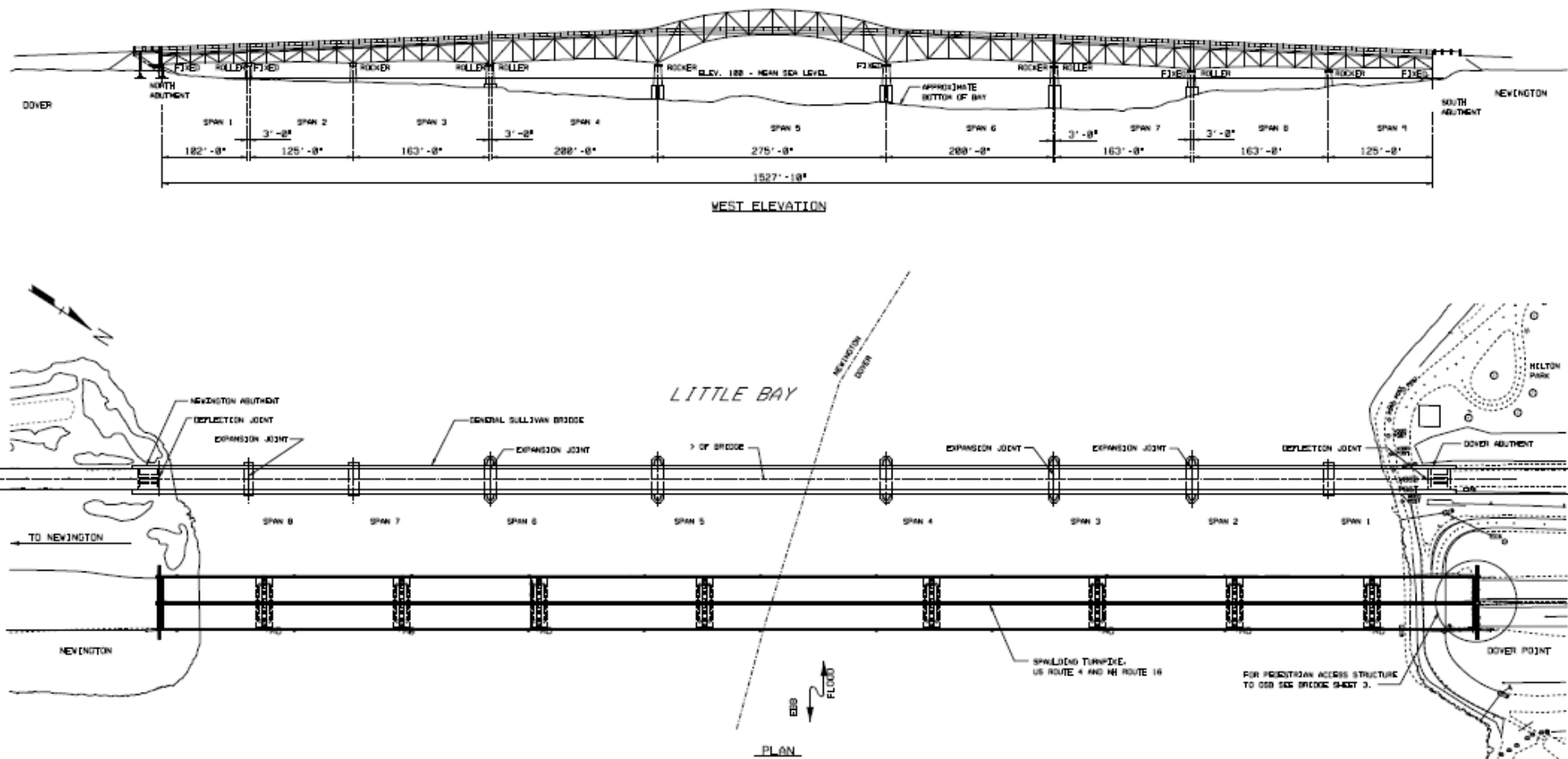
Contract S



Contract S – General Sullivan Bridge Rehabilitation

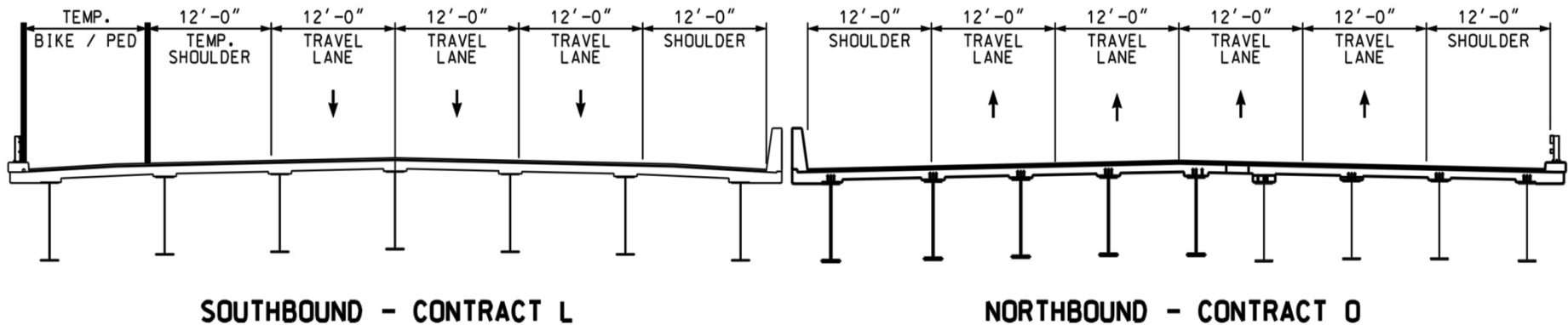
- Tentative Advertising Date: Late 2018
- Tentative Construction: 2018 – 2021
- Concurrent Construction with Contract Q

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)

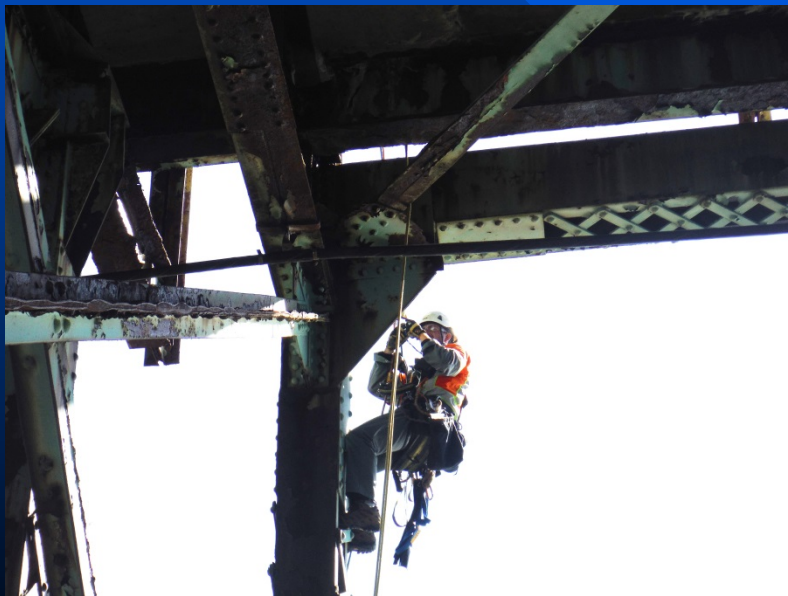
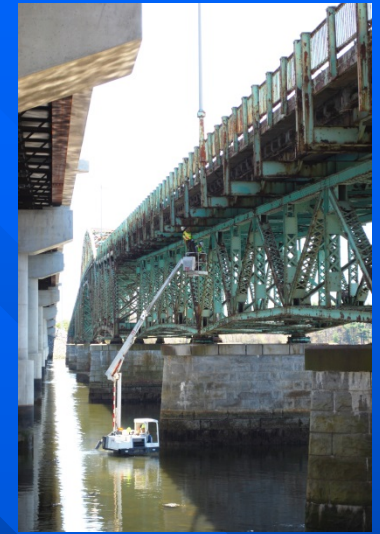
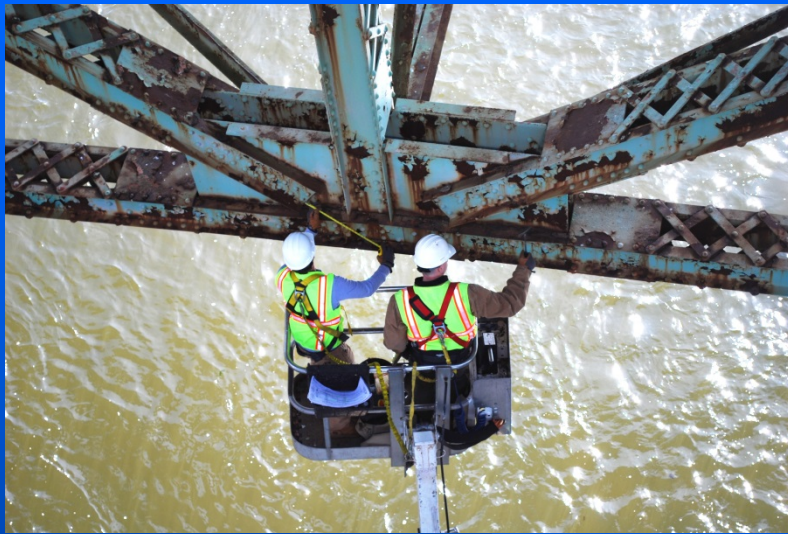


Spans 4-5-6 (Center Spans)

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