

NEWINGTON-DOVER

Spaulding Turnpike / Little Bay Bridge Improvements

WELCOME

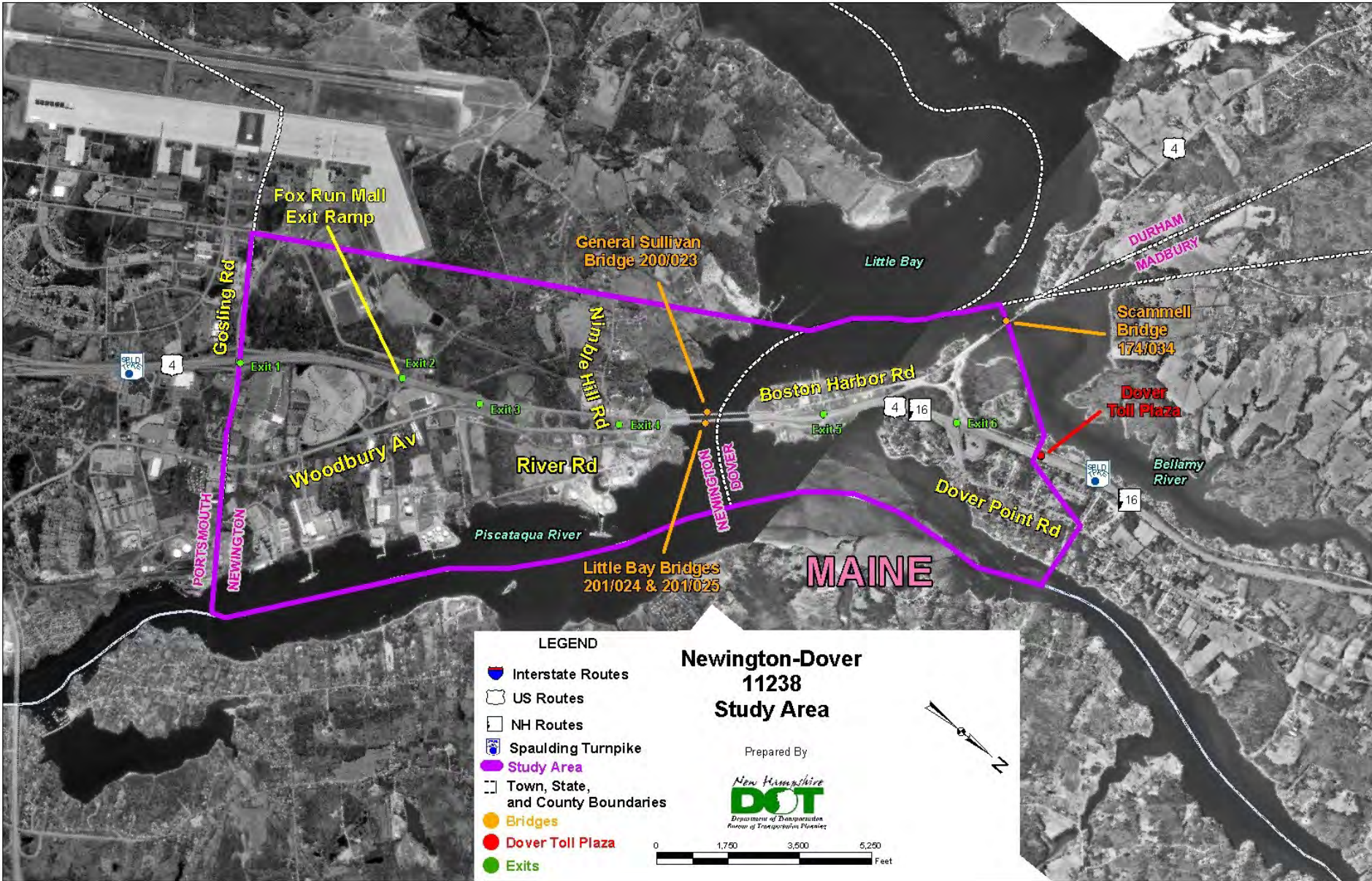
Dover City Council Workshop

April 3, 2013

Meeting Agenda

- Introductions
- Project Overview
- Contract Q – The Dover Contract
 - Contract Overview
 - City Utility Impacts and Relocations
 - Soundwalls

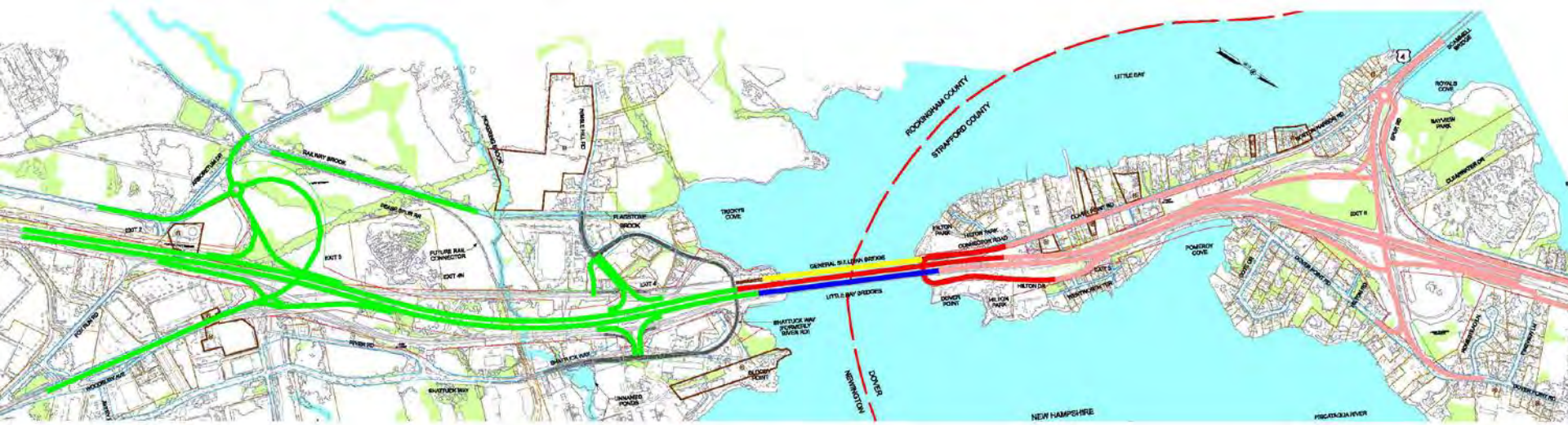
Project Area



Newington-Dover Selected Alternative



- Reconstructs & Widens Turnpike
 - 8 Lanes – Exit 3 to Exit 6
 - 6 Lanes south of Exit 3 (match into 6 lanes at Exit 1)
 - 6 Lanes north of Exit 6 (match into width at Toll Plaza)
- Consolidates & Reconfigures the Interchanges
 - Eliminate Exit 2 (Fox Run Road ramps)
 - Reconstruct Exit 3 (Full service interchange with northern access into Pease)
 - Maintain Exit 4 Ramps (Nimble Hill Road & Shattuck Way)
 - Eliminate Exit 5 (Hilton Park & Wentworth Terrace)
 - Reconstruct Exit 6 (Full service interchange with US 4 & Dover Point Road)

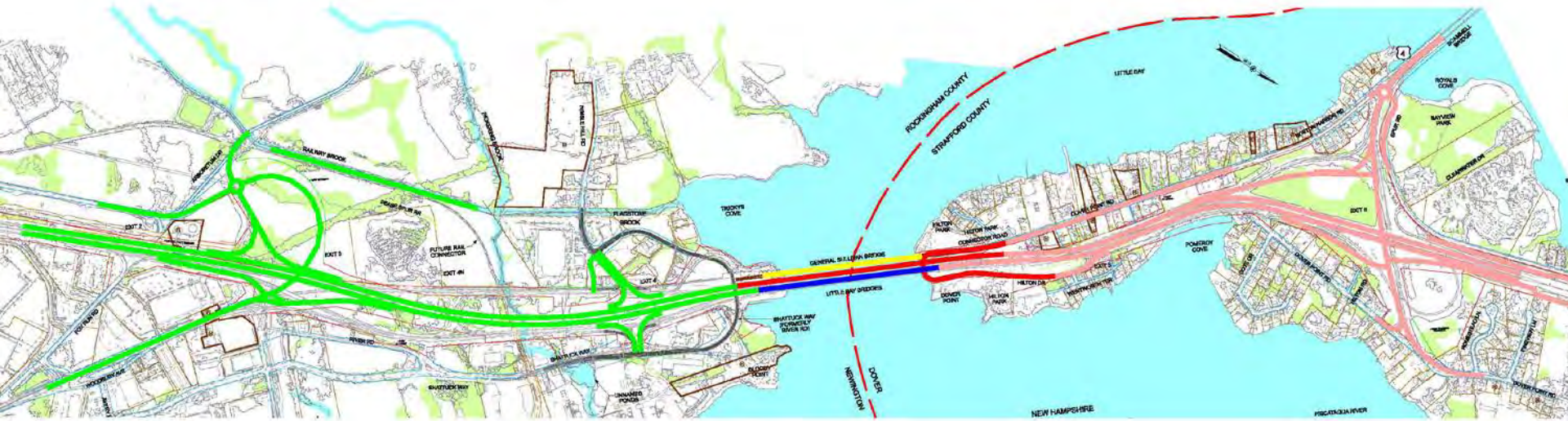


■ Construction Contract Breakouts

- Contract L – SB Little Bay Bridge - \$54.1M - Anticipated Construction Completion Fall 2013
- Contract M – Exits 3 & 4 - \$48.7M - Anticipated Construction Completion Summer 2015
- Contract O – Existing LBB Rehabilitation - \$34.0M – Design Ongoing
- Contract Q – Exit 6, Dover Mainline & Soundwalls - \$49.2M - Design Ongoing
- Contract S – GSB Rehabilitation - \$26.8 M - Design Ongoing

Total Construction Cost = \$212.8M (2012 Dollars)

Current Contract Breakout & Schedule



CONSTRUCTION SCHEDULE										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
CONTRACT L	[Red bar]				\$54.1 M					
CONTRACT O					[Blue bar]					
CONTRACT M			[Green bar]			\$48.7 M				
CONTRACT Q						[Pink bar]				
CONTRACT S								[Yellow bar]		\$26.8 M

* Contract Q & O schedules subject to change

Contract Q



- Provides a Full Service Interchange at Exit 6
- Eliminates Exit 5
- Provides Two-way Connection via Wentworth Terrace
- Introduces 2 Signalized Intersections for Exit 6 Ramps
- Roundabout Replaces Signalized Intersection at Boston Harbor Road
- Constructs 4 Sections of Soundwall – North and South of Exit 6

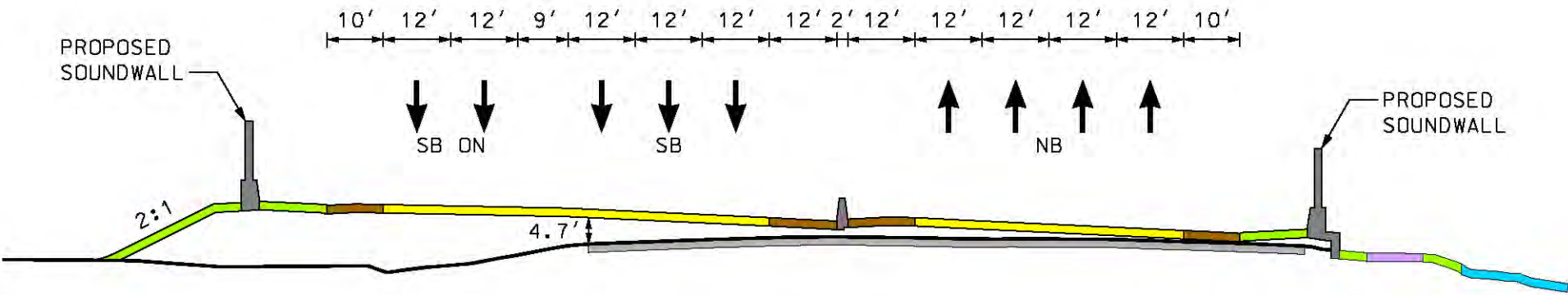
Contract Q

Contract Q- Dover- \$49.2 M

- Tentative Advertising Date: July 2014
- Tentative Construction: 2014 - 2017
- Completes and Opens All Spaulding Turnpike Improvements
- Municipal Agreement to be executed & address
 - Sidewalk Maintenance
 - Dover Point Road (East) Reclassification
 - Municipal Workzone Agreement

Contract Q

Spaulding Turnpike Cross Section



- 40' of Spaulding Turnpike Widening
- SB Raise in Elevation
- Soundwalls along NB and SB
- Pomeroy Cove Paved Pathway (Paved and 10' wide) is Maintained

Dover Point Road (West) Sidewalk Extension Meeting April 9, 2013



LEGEND

- Travel Way of Proposed Roadway
- Shaded Area of Proposed Roadway
- Proposed Island Traffic Islands
- Proposed Island
- Access Points to Proposed Roadway (Driveway, etc.)
- Approximate Limit of Street Work and Landscaping
- Material of Existing Pavement Outside of Street Work
- Existing Pavement (Driveway, Sidewalk, etc.)
- Existing Gravel Surface (Driveway, Paths, etc.)
- Existing Top and Finish Line
- Water (Ocean, Stream, Lake, Pond, Swamp, etc.)
- Buildings
- Buildings to be Demolished
- Bridge Retained
- Wetlands
- Property Lines
- State, County, City and Street Lines
- Existing Easement Line
- Proposed Easement Line
- Existing L.A.R.C.W. (Right-of-Way)
- Proposed R.O.W.
- Existing L.A.R.C.W. (Controlled Access)
- Proposed L.A.R.C.W.
- Existing L.A.R.C.W. (Controlled Access)
- Proposed L.A.R.C.W.
- Proposed Sidewalk Walk

SCALE IN FEET

COLOR PLAN
NEWINGTON - DOVER
DOVER POINT ROAD WEST
11238 Q
APRIL 2013

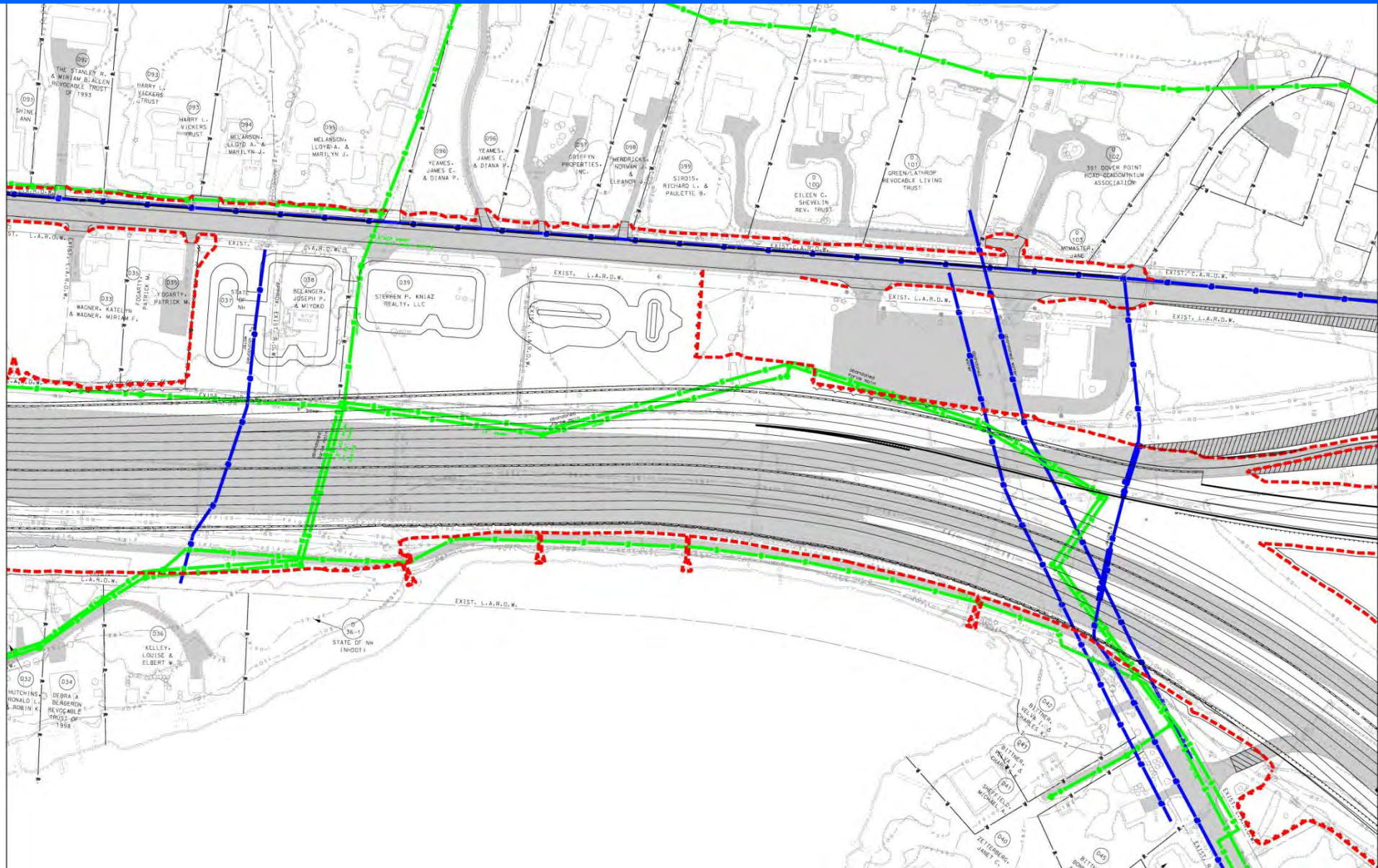
PRELIMINARY
PLAN PERIOD FOR CHANGE
CHA

Contract Q

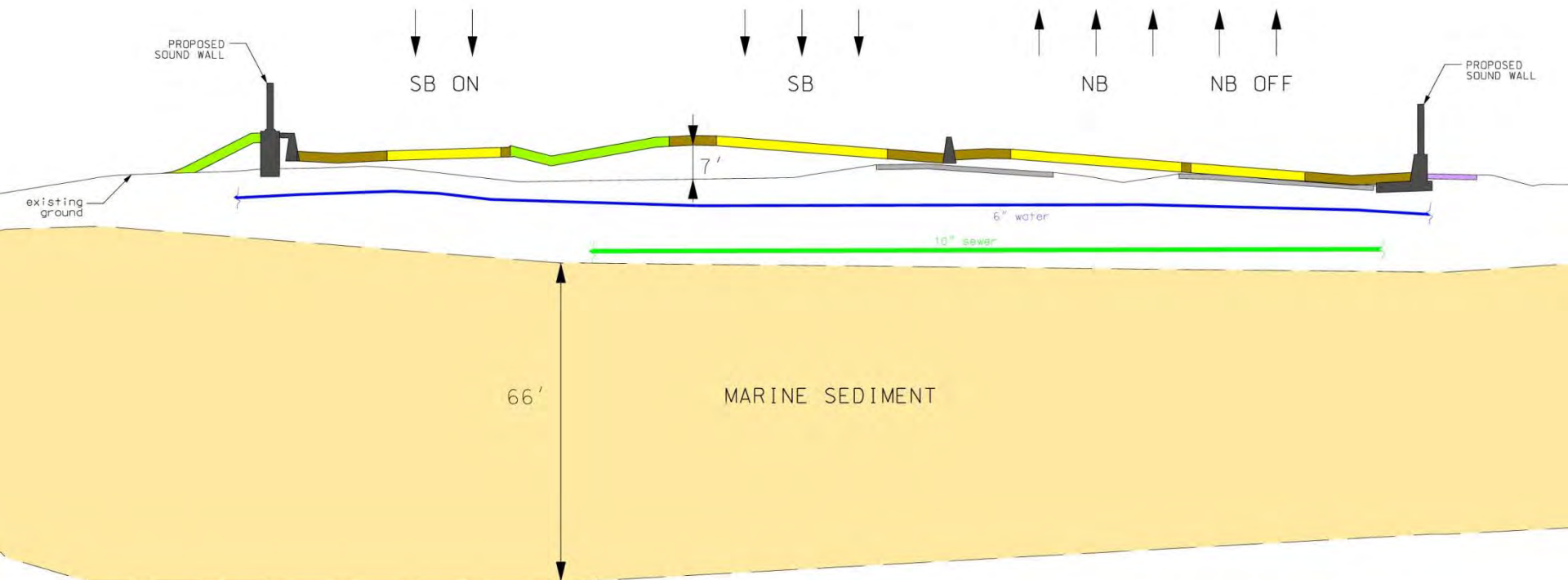
City Water & Sewer Utilities



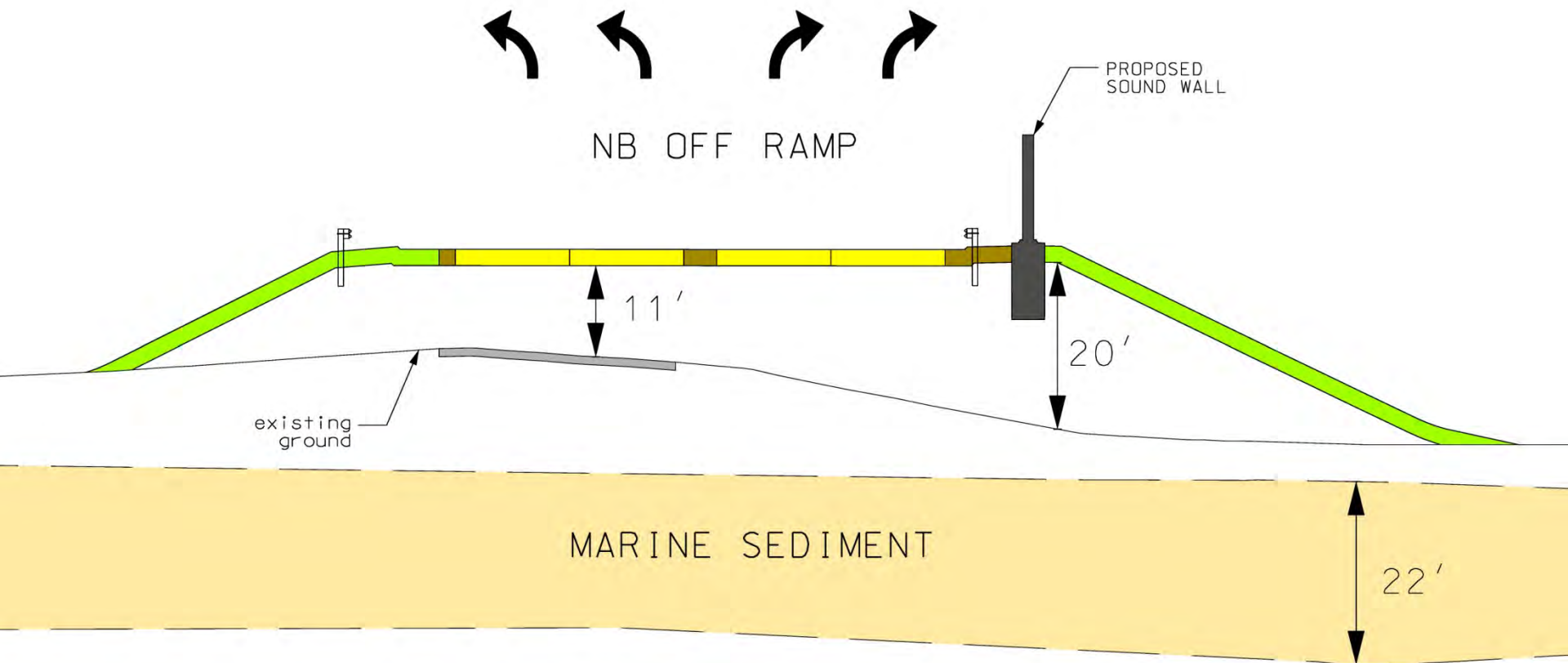
City Utility Impact Plan



Cross Section Just North of Pomeroy Cove



Cross Section NB Off Ramp



Utility Design Process

WATER AND SEWER – Evaluation completed to date

- NHDOT determine existing pipe locations, sizes & type
- City review and confirm
- Review existing locations with proposed roadway design
- Modify roadway design to minimize impacts
- NHDOT request utility relocation designs to be 60% complete by August 1, 2013

Utility Design Process (cont'd)

WATER AND SEWER – Remaining efforts

- NHDOT & City confirm reimbursement
- Anticipated Water & Sewer Relocation Design Process
 - Design Study of options
 - Receive geotechnical settlement and lateral movement information from NHDOT
 - Review of options with NHDOT and other utilities
 - Select preferred option
 - Final design and geotechnical engineering
 - Coordination with NHDOT and complete design

Utility Construction

WATER & SEWER

- OPTION 1 - City hires contractor directly to construct in coordination with NHDOT contractor
 - Encroachment Agreement necessary
- OPTION 2 - City requests water and sewer construction to be included within NHDOT construction contract
- Use and Occupancy Permit required for final location of water & sewer

Utility Reimbursement Process

WATER & SEWER

- CASE 1 - City utilities within City owned right-of-way, utility easement or pre-dating state roadway - Full design and construction reimbursement
- CASE 2 - City utilities within NHDOT right-of-way through sufferance – No design and limited construction reimbursement
- Force Account Agreements for engineering and construction shall be signed prior to services being eligible for reimbursement

Contract Q Soundwall Locations

Southbound

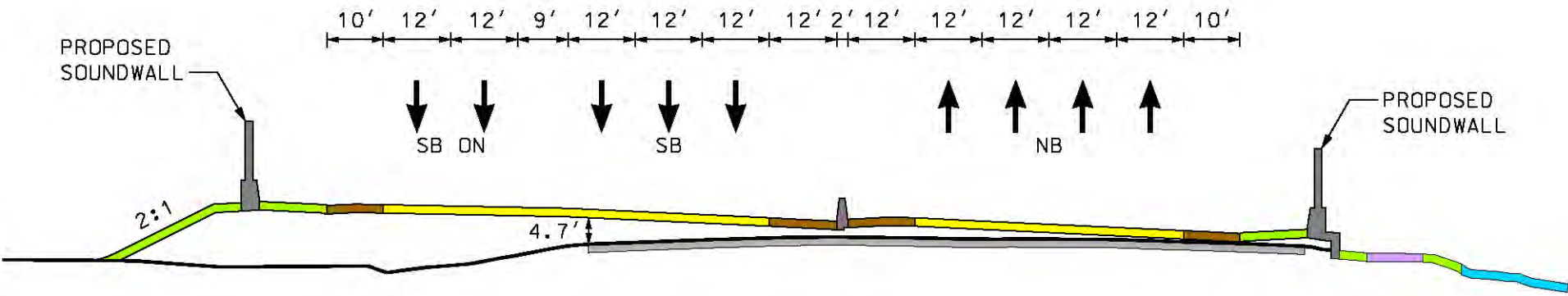
- Begins 0.5 miles north of Dover Toll Plaza and ends at Exit 6 SB off ramp
- Begins at the roundabout and continues to Exit 6 SB on ramp and SB turnpike to the Little Bay Bridge

Northbound

- Begins 1,200' north of Little Bay Bridge and continues along NB and Exit 6 NB off ramp to the intersection of Dover Point Road (East)
- Begins at the Exit 6 NB on ramp and ends 0.5 miles north of the Dover Toll Plaza

Contract Q

Spaulding Turnpike Cross Section

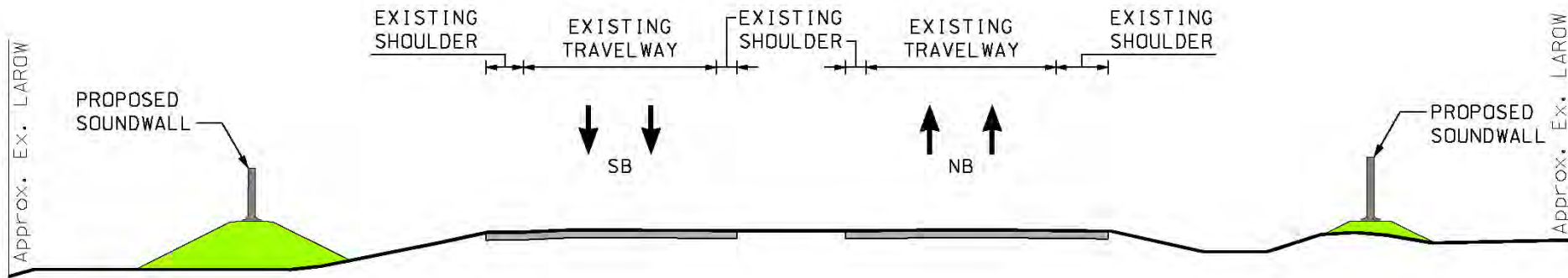


- 40' of Spaulding Turnpike Widening
- SB Raise in Elevation
- Soundwalls along NB and SB
- Pomeroy Cove Pathway (Paved and 10' wide) is Maintained

Contract Q

Soundwalls North of Dover

Toll Plaza



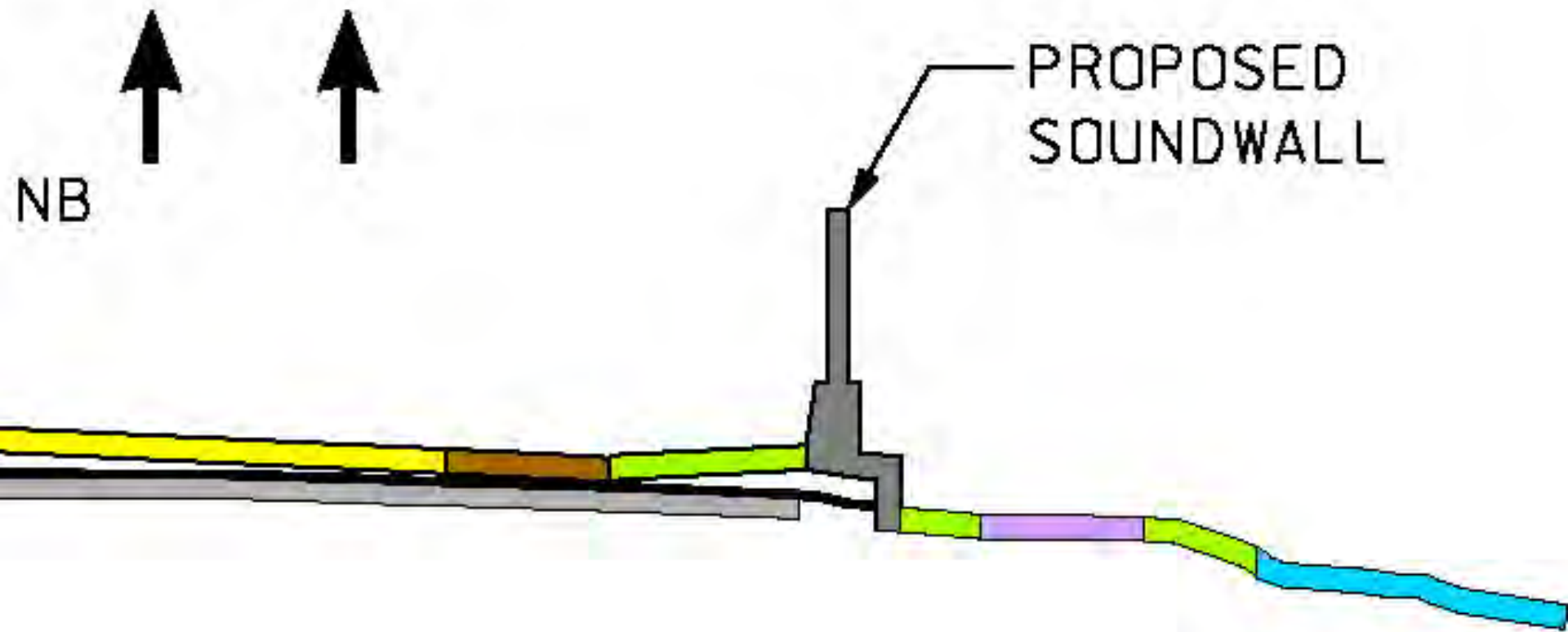
- No Spaulding Turnpike Work Proposed
- Soundwalls Located Near Right-of-Way to Accommodate Potential Third Lane

Contract Q

Soundwall with Ivy



Pomeroy Cove Cross Section



Contract Q

Translucent Soundwall



Pomeroy Cove - Looking Northwest from Exit 5 On-Ramp



Pomeroy Cove - Looking East from Exit 6 On-Ramp



Looking North Adjacent to Pomeroy Cove



Pomeroy Cove - Looking East from Exit 6 On-Ramp

Contract Q Soundwall

Soundwall Type Study Completed in 2009

- Wood soundwall is NHDOT standard at a cost of approximately \$23/sf
- Transparent soundwall costs approximately double the cost of wood at \$46/sf

Neighborhood Soundwall Meeting in March 2010

- Transparent soundwall considered along Pomeroy Cove only (1,000 lf)
- Concerns raised include: Headlight glare, graffiti, birds, and discoloration
- Wentworth Terrace residents support wood soundwall

Contract Q Soundwall

2012 Additional Study and Design

- Transparent wall types vary in safety performance and cost
- Department supports high level of safety to protect pedestrians and bicyclists along Pomeroy Cove
- Soundwall with Integrated Fragment Retention System retains fragments from falling
- Crashworthy transparent soundwall costs approximately \$115/sf compared to the \$30/sf for wood – resulting in an increased cost of \$850,000 (\$1,150,000 vs \$300,000)

Crashworthy Soundwall



Contract Q Soundwall

Selection Considerations

- Safety concern
- Cost differential for crashworthy transparent wall is almost 4 times that of wood
- Wentworth Terrace Neighborhood supports wood soundwall
- NHDOT currently supporting wood soundwall

Upcoming Meetings

- Dover Point Road (West) Sidewalk Extention Meeting – April 9th
 - Start Time: 4:30
 - Location: Newick's Restaurant
- Public Informational Meeting – May, 2013
 - Start Time: TBD
 - Location: Dover City Hall

Contact Information

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THANK YOU

Questions/Comments