Meeting Notes

Newington Dover Spaulding Turnpike Widening 11238

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Attendees:	NHDOT - C. Waszczuk, K. Cota, P. Salo, M. Laurin, S. Ireland VHB – P. Clary, N. Sanders CHA – R. Faulkner Newington residents Dover residents	Date/Time:	3/16/10 – 6:30 pm
		Project No.:	52012.01
Place:	Dover City Hall	Re:	Public Informational Meeting
		Notes taken by:	VHB/NHDOT

The New Hampshire Department of Transportation (NHDOT) held a Public Informational Meeting in Dover on March 16, 2010 to present an overall update of the entire project and the first construction contract and a roundabout alternative at the intersection of US Route 4 with Boston Harbor Road and Spur Road. Mr. Chris Waszczuk opened the meeting with the introduction of himself as the Administrator for the Bureau of Turnpikes, Keith Cota as the new Chief Project Manager for the NHDOT, Mr. Peter Salo as the Lead Consultant Reviewer for the NHDOT, Mr. Marc Laurin as the Lead Environmental contact, Mr. Peter Clary as the Project Manager for VHB, the Consultant design team, Mr. Rob Faulkner as the Lead Highway Designer for Dover and Mr. Nick Sanders as the Traffic Engineer presenting the roundabout simulations. The materials presented included a PowerPoint presentation, graphic boards displaying various project elements and plans that were displayed on the walls.

Mr. Waszczuk continued the presentation with a brief explanation of the project area which begins in Newington on the Spaulding Turnpike just north of the Exit 1 interchange and continues northerly approximately 3.5 miles to the project limits just south of the Dover Toll Plaza. The project purpose is to improve safety and transportation efficiency on this highly congested roadway by consolidating, reconfiguring and reconstructing the Spaulding Turnpike and the 5 interchanges within the project limits. The project need stems from limited capacity, poor levels of service during peak travel hours, geometric deficiencies, poor local connectivity and an accident history that creates long delays.

Mr. Waszczuk then presented the design specifics of the selected alternative which includes the expansion of the two lanes in each direction to three lanes in each direction for the entire corridor with the addition of an auxiliary lane between Exits 3 and 6 to address the high volume of merging and weaving traffic. Full access interchanges are being provided at Exits 3 and 6 while the interchanges at Exits 2 and 5 are being eliminated. The interchange at Exit 4 will be reconstructed with the configuration remaining the same as exists today. The Little Bay Bridges are being rehabilitated and widened to accommodate the future traffic projections for 2025. The historic General Sullivan Bridge is also being rehabilitated for use by pedestrian, bicycle and recreational uses. Soundwalls are proposed in Dover along both the NB and SB barrels from north of the Little Bay Bridges to Exit 6 and north of Exit 6, from the ramps, to approximately half a mile north of the Dover Toll Plaza.

The construction contract breakout graphic was presented that consisted of five individual construction contracts that ranged in cost from $26.8 - $58 million dollars. The number of construction contracts has been reduced from 8 contracts to 5 contracts over the past year based on a closer look of construction sequencing, schedules and cost savings opportunities. The overall construction cost is estimated to be $207.2M in 2010 dollars and $219.5M with inflation included over the course of the project which will start this year and conclude in 2018.

The project is primarily funded through the Turnpike Capital Program with approximately $31M in Federal earmarks for the project. Currently, there is $151M in Turnpike Capital Program funding in place for design, right-of-way and construction. The $65M of funding required for the major construction in Dover and the General Sullivan Bridge is not currently in place. However, HB391 has increased authorization to $275M for the project which provides the opportunity to raise the funding for Dover and the General Sullivan Bridge through bond revenue proceeds and increases in system wide toll increases.

In addition to these corridor improvements, the project includes park and ride projects in Dover, Rochester and Lee, improved intercity, express and local bus service in the seacoast area, increased Downeaster service from Portland to Boston and improved transit service through COAST, Wildcat and the Seacoast TMA.

Mr. Clary then presented the first construction project, Contract L. This contract is targeted to be advertised for construction in May 2010 and constructs the new SB barrel of the Little Bay Bridges, Hilton Drive beneath the Little Bay Bridges, the pedestrian and bicycle bridge structure from Hilton Park to the General Sullivan Bridge, the roadway approaches in Newington and Dover, exit 5 ramp reconstruction and approximately 800 feet of soundwalls along the SB barrel. The Dover approach work is primarily an interim connection into the existing turnpike just north of exit 5.

The bridge construction is the major component of construction as it is 1,600 feet long, approximately 75’ wide and has eight piers in river. The construction will consist of drilled shaft pier foundations which reduces the environmental and construction impacts as compared to the existing mass pier foundations. The contractor will bid on either steel or concrete superstructure design as these different designs are cost competitive and will increase competition during the bidding process. Construction on stone causeways and trestle type work platforms extending into the river are permitted to provide access, but the contractor will have the final decision on construction methodology. The proposed bridge is located between the existing Little Bay Bridge and the General Sullivan Bridge with clearances between 2’ and 15’ and in very difficult tidal river conditions.

The major traffic shifts will occur in 2013 when Hilton Drive is opened to two way traffic in May, SB traffic is shifted to the new bridge in August and the NB traffic is shifted in November. In addition to the major traffic shifts, the exit 5 ramps will be closed to reconstruct the ramps. It is anticipated that this will occur in August and September of 2013. Hilton Drive between the driveways to Hilton Park on the east and west sides of the Spaulding Turnpike will also be closed from approximately September 2010 to May 2013. This is necessary to construct the pedestrian bridge, the Little Bay Bridge, Hilton Drive, General Sullivan Bridge abutment modifications and the removal of the existing General Sullivan Bridge roadway approach. This is an extremely tight area with continuous construction activity occurring. The closure reduces construction constraints and difficulties which will reduce overall construction costs and time durations.

The closure of Hilton Drive requires traffic from the north, east and west wishing to access Wentworth Terrace and Hilton Park (east) to utilize the Spaulding Turnpike and Exit 4 to detour to Exit 5 to gain this access. A travel time study was conducted during the peak morning,

midday and evening hours to determine that the detour is approximately 2 miles longer and takes about 2 minutes longer to get to Wentworth Terrace or Hilton Park (east).

The Department is proposing an emergency access roadway be constructed along Pomeroy Cove between the NB Spaulding Turnpike and the existing pathway along Pomeroy Cove. This access connects Wentworth Terrace to the Dover Point Road/Cote Drive neighborhoods and will be designed to accommodate emergency vehicles. There will be removable bollards installed at the ends for the roadway to prevent public vehicular access.

The construction of the pedestrian bridge requires the closure of pedestrian traffic to connect the pedestrian bridge to the General Sullivan Bridge. This closure will occur from November 1, 2010 to May 1, 2011. Pedestrian access to the General Sullivan Bridge will be maintained from the Newington side. The sidewalk beneath the General Sullivan and Little Bay Bridges in Dover will be closed for the entire construction contract for safety reasons.

Mr. Waszczuk began the presentation of the roundabout alternative by explaining that the independent Value Engineering team identified the circuitous traffic movements in connecting the neighborhoods north and south of US Route 4 and a redesign of the intersection area could reduce costs and improve traffic movements. Mr. Faulkner began with a review of the selected alternative which consists of a connector road between Spur Road and Boston Harbor Road which requires another US Route 4 bridge over this connector road. The intersection of US Route 4 and Boston Harbor Road and Spur Road would include a raised median island to prevent left turning movements at this intersection.

The roundabout alternative would start with traffic calming elements to slow traffic prior to entering the roundabout. This elements would start on the west side of the Scammell Bridge where the travel ways would be reduced from 12′ to 11′ and the shoulders would be reduced from 10′ to 8′ respectively to allow for a 6′ wide painted median island.

Mr. Faulkner continued with an overview of roundabout components, differences between roundabouts and traffic circles, roundabout features, a comparison of traffic circles and roundabouts, safety benefits of roundabouts and some before and after photos where roundabouts have been constructed. The proposed roundabout is a two lane hybrid layout with two lanes being provided in the east and west directions with one lane in the north and south directions. This geometry is being proposed to address the heavy traffic in the east and west directions compared to the light traffic volumes approaching from the north and south. The roundabout alternative will reduce the US Route 4 profile approximately 10′ as it approaches the Spaulding Turnpike because the connector road bridge is no longer required.

Mr. Sanders presented three traffic simulations of the roundabout as described below:

1. Roundabout Alternative for 2025 AM Peak Hour with Pedestrian Crossing - The simulation shows the most congested two minute period in the projected peak hour traffic with a pedestrian crossing US Route 4 from the north to the south. The vehicular queue extends back to the limit of the two lanes (approximately 400') with the pedestrians having a minor affect on the queue as it lengthens during the crossing but recovers following the pedestrian completing the crossing.

2. Roundabout Alternative for 2025 PM Peak Hour – This simulation shows the most congested two minutes during the PM peak hour. Eastbound vehicles exiting the roundabout will merge from two lanes down to a single lane without any backups into the

roundabout due adequate separation from the roundabout (375 feet of two lanes) and gaps in the traffic stream created by the roundabout.

3. FEIS Selected Alternative 2025 AM Peak Hour – This simulation shows the most congested two minutes of the AM peak hour. This simulation shows free flow traffic conditions for US Route 4 traffic heading east.

Mr. Waszczuk closed the roundabout presentation by recapping that this alternative is a viable option that provides improved neighborhood connectivity, saves money and reduces environmental impacts.

Mr. Waszczuk concluded the presentation by stating that the NHDOT will schedule additional meetings with the communities and neighborhoods to coordinate the design and location of soundwalls. Additional communication vehicles on project information include posted information on the project website, project newsletters, press releases, the use of smart work zones during construction and email blasts.

Mr. Waszczuk concluded the presentation and opened up the meeting to questions and comments.

The following questions and answers arose after the presentation:

Question 1 – Margaret Trefethen – Is the proposed roundabout a one or two lane roundabout, because two lane roundabouts cause confusion with possible accidents in the crossover lane?

Answer: The proposed roundabout is a hybrid two lane roundabout where the eastbound and westbound traffic have two lanes and the northbound and southbound traffic enter the roundabout with two lanes before the paint striping merges the traffic into the inner lane. There will be period of time when the roundabout opens that drivers will educate themselves on properly driving a roundabout. The NHDOT website has documentation on driving roundabouts. Once vehicle operators drive the roundabout properly, the confusion and accidents should be reduced.

Question 2 – Why was the Weeks crossing roundabout removed in favor of a signalized intersection?

Answer: The Weeks crossing was a rotary with a larger outside radius which permitted higher speeds and a higher accident rate.

Question 3 – Will the truck movements to the DMV on Monday morning be problematic?

Answer: No, the roundabout is designed to accommodate truck traffic and they will yield properly to enter and exit the roundabout.

Question 4 – The highpoint of the Little Bay Bridge is a location where traffic slows to look at the vista, are there any plans to flatten the high point or modify the bridge? Also, is there any consideration for open road tolling with this project?

Answer: The existing bridge is designed for 60 MPH and the profile will be maintained as the posted speed is 50 MPH. Open road tolling may be considered in the future but is not part of this project.

Question 5 – England uses roundabouts very effectively and they result in cost savings. Why isn't the toll plaza located in Newington?

Answer: The locations of and use of toll facilities is not within the scope of this project.

Question 6 – Is the project considering the suggestion that sea level may rise upwards of 5'?

Answer: The project is raising Hilton Drive approximately 2-3' to get it above the 100 year flood elevation. The vertical clearance beneath the Little Bay Bridge and General Sullivan Bridge is being maintained.

Question 7 – Art Burke – I am able to avoid the toll booth in the existing condition, will I still be able to do this after the project? Also, are there any statistics on safety improvements with the increase in the shoulder widths on the Little Bay Bridge?

Answer: The toll plaza will not be relocated and the surrounding traffic patterns will be retained. There are many FHWA studies that show that increased shoulder widths provide safety improvements. The Little Bay Bridge area has a very high accident rate and the proposed improvements will provide a much safer facility.

Question 8 – There are many cyclists that utilize the General Sullivan Bridge and they will have concerns with traversing through the proposed roundabout. The use of jake brakes at the roundabout will increase as all traffic will need to slow. There is rubber necking that occurs on the Scammell Bridge and introducing a roundabout will cause more problems. I'm not a supporter of the roundabout.

Question 9 – Are there ways to minimize the risks of passing on the right in the roundabout as there are problems at the Portsmouth Traffic Circle?

Answer: The Portsmouth Traffic Circle has a 500' radius where speeds are much higher and the roadway is wider. The proposed roundabout will be traversed at much slower speeds and is much narrower which will significantly reduce passing on the right.

Question 10 – As a Dover Point Road resident, I feel my house vibrate due to the truck traffic. Can the toll plaza be relocated into Newington and will traffic be diverted onto Dover Point Road during construction?

Answer: This project is not addressing toll plaza relocations and traffic patterns should remain during construction so Dover Point Road traffic should remain unchanged.

Question 11 – Can the traffic calming proposed (lane and shoulder width reductions) on the Scammell Bridge be retained with the selected alternative or the roundabout alternative? Also, are there visualizations available for the project corridor?

Answer: Yes, the traffic calming proposed will be considered with either alternative. The project website has visualizations and simulations of the project. The plans presented tonight will also be posted on the website.

Question 12 – Could the General Sullivan Bridge be considered for slow moving vehicles such as electric cars and mopeds? Also, was a one lane roundabout considered?

Answer: The General Sullivan Bridge is being proposed to be rehabilitated to address pedestrian and recreational uses only. There would be significant increases in cost to provide vehicular access and this was dismissed previously during the project

development process. A one lane roundabout was considered and dismissed as the heavy volume of traffic resulted in an unacceptable level of service.

Question 13 – Why is a two lane roundabout required when all of the approaches only have a single lane?

Answer: The approach is similar to a signalized intersection, as additional lanes are required to process the traffic through the intersection or in this case the roundabout.

Question 14 – Truck noise has increased over the years, which alternative creates more noise?

Answer: This will be evaluated for the upcoming noise wall meeting.

Question 15 – The width of the proposed shoulders on the Little Bay Bridges is much wider than some bridges on I-95 and on some of the new bridges in Boston. Why do we need to spend additional money on these wide shoulders?

Answer: The implementation of four through lanes requires the use of wider shoulders for breakdown refuge areas. During the FEIS process, a reduced the median shoulder width was discussed. The FHWA requested that the shoulder be full width.

Question 16 – Tom Fargo – Did the roundabout simulations account for the signalized intersection at exit 6 and the signal west of the Scammell Bridge?

Answer: Yes, the exit 6 signals were included within the simulations, but the signal west of the Scammell Bridge is far enough away that it wouldn't affect the roundabout operation.

Question 17 – Brian Short – Why is the NB southerly limit of the proposed soundwall 300' north of the Little Bay Bridge and the SB soundwall extends all the way to the Little Bay Bridge ?

Answer: The limits of the proposed noise walls were based on the noise modeling of area.

Question 18 – Tom Keegan – Are there proposed sidewalks on the Little Bay Bridges? Also, are there additional property impacts with the roundabout alternative?

Answer: No, the General Sullivan Bridge will provide pedestrian and recreational access across the river. The roundabout was designed to minimize property impacts and has resulted in additional Right-of-Way impacts of approximately 0.3 acres to Bayview Park.

Question 19 – Will Dover residents be affected by the funding concerns?

Answer: No, the turnpike bonding does not affect local taxes or the state highway fund.

Question 20 – This resident has concerns with the bicycle safety with the roundabout. What is the durability of the transparent soundwall? Will the soundwalls channelize the noise towards the toll plaza?

Answer: That question will be addressed by the noise experts at the upcoming meeting

Question 21 – Following the meeting a resident indicated that the closure of Hilton Drive will impact the bus routes for the school district and COAST

Answer: The Department will make the necessary contacts to address this concern.

Meeting Notes Completed
And Submitted By:

Peter A. Clary, P.E. (VHB)

Noted By: P. Salo & C. Waszczuk

Cc: B. Cass
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