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**Meeting Date:** February 24, 2010

**MassHighway Project Name:** Fore River Bridge Replacement, Quincy-Weymouth  
Bridge No. Q-01-001= W-32-001

**MassHighway Contract No.:** 50281

**MassHighway District:** 6

**Designer:** STV Incorporated

**Minutes Prepared By:** Nathaniel Cabral-Curtis, Howard/Stein-Hudson

**Meeting Place:** Hingham Town Hall, 210 Central Street, Hingham MA

**Persons in attendance:** Meeting attendance lists have been removed to protect the privacy of audience members.

**Purpose:** The design team held a public information meeting at the Hingham Town Hall at the request of state Senator Robert Hedlund. This meeting was intended to reach a combined audience consisting of those who live in the communities on either side of the bridge and those who live in the broader area and rely on the bridge as part of their daily commute. Outreach for this meeting was coordinated through the Senator's office and advertisements were run in local newspapers including the Quincy Patriot-Ledger.

## **Items Discussed:**

Mike O'Dowd (MassDOT) opened the meeting by welcoming the audience and explaining his role as project manager for the Fore River Bridge. This bridge carries Route 3A over the Fore River between Quincy and Weymouth, Massachusetts. He noted that the meeting was being conducted at the request of local state Senator Robert Hedlund who had suggested that it would be useful to reach out to residents of communities beyond the project area who, while not in the two municipalities where the bridge is located, will be impacted by construction.

Here, Mike paused to recognize local State Representative Garrett Bradley. Representative Bradley remarked that this would be the first of several meetings that state senators and representatives for the project area would request MassDOT to hold for local residents and commuters. He noted that there were many representatives of state and local government in the room and that attendees should feel free to pose questions to



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them either at the meeting or in the following days. Representative Bradley also reminded the audience of an email list maintained by himself and Senator Hedlund the purpose of which is to send email alerts to recipients when the Fore River Bridge is set to open. He concluded his remarks by thanking the audience for their presence.

Following Representative Bradley's remarks, Mike introduced the panel members for the night's presentation. These included Michael Sheehan (MassDOT Right-of-Way), and Mark Ennis, Mark Pelletier and Nikole Bulger (all of STV). At this point, Michael Sheehan read the official meeting notice.<sup>1</sup> The notice read, Mike explained that the replacement of the Fore River Bridge is being funded through the Commonwealth of Massachusetts' Accelerated Bridge Program (ABP). Approximately 200 other bridges throughout the Commonwealth are being repaired, rehabilitated or replaced through this program. With these projects, speed of construction is essential to success given that funding under the ABP expires in 2016. The Fore River Bridge will be replaced with a combination of ABP funding and funds provided by the Federal Highway Administration. The total project cost will be roughly \$255 million. Design of the project will be completed by 2011 at which point a design/build package will be created. The value of the design/build approach is that it allows the Commonwealth of Massachusetts to begin the permitting, early design, and coordination with the United States Coast Guard (USCG) prior to beginning construction. The design/build entity that receives the complete design/build package will be a contractor-led team that will take the 25% design created by STV and bring it to final design while beginning elements of the construction. Mike concluded his remarks by requesting that members of the audience hold their questions until after STV had concluded its presentation.

## Highlights of the Presentation<sup>2</sup>

Mark Pelletier, Nikole Bulger and Mark Ennis (STV) briefed the group on the current phase of the project, as follows:

- The Fore River Bridge carries Route 3A and connects Quincy in the west to Weymouth in the east. The approximate limits of the project are the rotary on the Quincy side and the intersection of Bridge Street and Monatiquot Street on the Weymouth side. The goal of the Fore River Bridge replacement project is to replace the current temporary bridge with a permanent movable span.
- The Fore River Bridge is being replaced under the Accelerated Bridge Program (ABP), the goal of which is to reduce the number of structurally deficient bridges in the Commonwealth. The ABP commits a total of \$3 billion to be spent on bridge construction by 2016 when funding runs out. Techniques associated with the ABP include:

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<sup>1</sup> A copy of this notice is included as Appendix A.

<sup>2</sup> This presentation can be viewed at [www.mass.gov/massdot/foreriverbridge/documents.html](http://www.mass.gov/massdot/foreriverbridge/documents.html)



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- Faster construction techniques, including design/build;
  - Advanced project scheduling and estimating;
  - Streamlining of the environmental process; and
  - Innovative delivery mechanisms such as design/build and single-phase construction. The innovative technique most closely associated with the Fore River Bridge project is design/build.
- The Fore River Bridge will be replaced using design/build methods. The current team will be responsible for the project up to the end of the 25% design phase, at which point STV will create a design/build package and MassHighway will put the job out to bid to engage a contractor to build the new bridge.
    - The design/build package will contain instructions for how the contractor should carry the work forward. These instructions will be drawn in part from input gathered at community briefings.
- Members of the Fore River Bridge Replacement Design Team include:
    - **STV:** project management, structural engineering, electrical and mechanical, and civil/drainage. STV has had a Boston office for roughly 30 years and has extensive experience with similar complex projects. STV is also familiar with the area and its concerns based on its successful work on the Greenbush Commuter Rail Line and other projects;
    - **AECOM:** environmental and structural;
    - **TRC:** environmental;
    - **Howard/Stein-Hudson Associates:** public involvement and traffic management;
    - **Rosales + Partners:** bridge aesthetics and architecture;
    - **ASEC:** survey;
    - **Domingo-Gonzalez Associates:** bridge lighting; and
    - **Pressley Associates:** landscape architecture.
- The scope of work includes:
    - Coordination with stakeholders and agencies. The meeting summarized herein, represents the seventh such informational meeting held by the MassDOT team as part of the coordination phase.;
    - Evaluation of the movable span and approach structure types;
    - Selection of a preferred alternative;
    - Preparation of the Environmental Assessments (EA), National Environmental Policy Act (NEPA) filing;
    - Establishment of permitting requirements;
    - Advance design, construction staging, and traffic management plans to the 25% level; and
    - Preparation of the design/build procurement package.



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- Key milestones in the project include the following:
  - Notice to proceed (NTP) – October 29, 2009.
  - Basic design – Fall 2008 to Winter 2009/2010. This is the current phase, which has brought the new bridge to roughly 10% design, and includes:
    - Project development and environmental assessment.
    - Basic highway design.
    - The functional design report.
    - Bridge type study and review of the type study by MassDOT.
  - 25% Design – Spring 2010 to Spring 2011, including:
    - Federal and state permit filings.
    - Highway plans
    - Bridge sketch plans.
    - Review by MassDOT.
  - Design build procurement package including bridge and highway plans, specifications and a final cost estimate – Spring 2010 to Spring 2011.
- Key issues with regard to the project include:
  - Obtaining and incorporating to the greatest extent possible community input.
  - Understanding and addressing environmental concerns.
  - Channel clearances – subject to state and federal approvals.
  - Selection of the most appropriate bridge type for the Fore River.
  - Accommodating vehicular, bicycle, pedestrian and marine traffic during and after construction.
  - Construction staging to minimize community impacts.
  - Aesthetics of the new bridge.
  - Capital, maintenance and lifecycle costs.
- The Fore River Bridge project permitting process is partially defined by Section 32 of Chapter 86 of the Acts of 2008, also known as the Transportation Bond Bill. This act applies to replacement bridges which can be shown to be “footprint bridges”—that is, along a similar alignment to the structure to be replaced and with the same number of travel lanes. Under this act, footprint bridges are exempt from:
  - MEPA.
  - Chapter 91 licensing.
  - The Massachusetts Wetlands Protection Act.
- While exempt from many Massachusetts environmental regulations, the Fore River Bridge project still must pass through a NEPA review. Within this context, the Federal Highway Administration is the lead federal agency with the USCG as a coordinating agency. To obtain the NEPA review, the project team will file an Environmental Assessment (EA). This document:
  - Analyzes alternatives.



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- Assesses existing conditions.
- Identifies potential impacts.
- Proposes mitigations if requires.
- Documents public outreach.

The EA process also includes a public comment period after the document has been filed. At the end of the process, FHWA issues a Finding of No Significant Impact (FONSI). In addition, the project must obtain the following approvals.

- U.S. Coast Guard Bridge Permit
  - MassDEP 401 Water Quality Certificate
  - U.S. Army Corps Section 404 Permit
  - MA CZM Consistency Determination
  - U.S. EPA NPDES Permit
  - National Historic Preservation Act (MOA signed before demolition)
- 
- The area around the Fore River Bridge is both industrial and residential. While surrounded by neighborhoods on both sides, major industrial structures are situated immediately adjacent to the span including the Fore River Shipyard, Twin Rivers Technologies, an MWRA pumping station and a large power station.
    - Public amenities located adjacent to the power station are already under agreement to be restored following construction.
  
  - In developing their designs for the new span, the project team has had four major concerns:
    - Providing for a 40 miles per hour design speed.
    - Ensuring that the bridge has no more than a 5% maximum grade to ensure ADA compliance.
    - Maximizing the closed position elevation of the roadway to minimize bridge openings.
    - Ensuring that the Quincy Rotary and homes on the Weymouth side of the River are not permanently disturbed by construction.With these concerns in mind, the project team has determined that the new Fore River Bridge can have a roadway deck 15 feet higher than the deck of the 1936 span. A typical cross-section of the new bridge will include two 12-foot travel lanes in both directions, a 5-foot bicycle accommodating shoulder in both directions and a 6.5-foot sidewalk in both directions.
  
  - A detailed traffic management plan will be developed as part of the design/build package. Construction methods will be chosen on their ability to reduce duration and intensity of traffic impacts. STV is currently reviewing the traffic management plan used to create the temporary bridge and updating it with new count data. The public will be updated on traffic management throughout construction.



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- The project team welcomes residents and commuters to share their experiences with the temporary bridge construction regarding traffic to inform the current process.
- Construction sequencing for the new bridge will begin by constructing most of the new bridge and its approaches along the 1936 alignment “off-line” that is without impacting the temporary structure. Some, “possibly significant” traffic management will be required during the shift from the temporary bridge to the permanent structure. Alternatives are being evaluated during the Type Study phase and will be presented to the community in the future. Following full operation of the new bridge, the temporary span will be demolished.
- The project team is currently approaching the end of the type study. The type study addresses both the type of bridge to be constructed as well as the approach spans to that bridge. The purpose of the type study is to determine which bridge type is most appropriate for the crossing of the Fore River.
  - The approach spans, there will be three to four spans of approach ramp on either side of the movable span, will either use steel I-beams to support a concrete road deck or concrete beams to support a concrete deck. Either approach will rest on deep piles capped with concrete.
  - The project team is considering two bridge types: a vertical lift and a bascule bridge. The bascule bridge is generally used for shorter river crossings and has unlimited vertical clearance when open. A bascule bridge over the Fore River would have four leaves and is only available if the acceptable channel width is 225 feet or less. The vertical lift option would have a single lift span and would be suited to a channel width of 225 feet or greater.
- Route 3A is a vital link in the South Shore’s roadway network and carries roughly 32,000 vehicles each week day. Alternate routes are difficult at this location as the route most available goes through residential and local business districts and is already heavily traveled. As such two major goals of the project team are:
  - Reducing the frequency of bridge openings.
  - Reducing the duration of bridge openings when they do occur.
- The Fore River Shipyard remains a designated port area as defined by the Massachusetts Office of Coastal Zone Management. The river provides access to several marinas, the shipyard and the Citgo oil terminal.
  - The current major use of the river is by recreational craft and Citgo oil tankers.
  - The current channel width of 175 feet is not acceptable in that it causes frequent collisions with the bridge fender system and delays as ships “thread the needle” through the narrow bridge opening.



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- Mariners, who have had meetings with the project team facilitated by the USCG, would prefer a wider channel opening, as much as 250-300 feet. Mariners see 225 feet as the absolute minimum channel opening they would be willing to consider. This is especially true in light of the upcoming debut of wider, longer Post-Panamax oil tankers.
- Improving marine access is also a stated goal of this project.
  
- A bascule bridge consists of cantilevered spans that rotate around an access known as a trunnion. The spans are balanced by the counterweight which swings down as the bridge opens. If a bascule bridge were built at Fore River with a vertical clearance of 225 feet, it would be the largest bascule bridge in the United States. As a result, this bridge would:
  - Be more susceptible to high winds given the pressure of the wind on the deck during openings. This pressure would be transferred to the gears and bridge machinery increasing wear and tear.
  - Require massive bridge machinery to raise and lower the leaves.
  - Have massive foundations and supports to accommodate the large counterweights.
  - Cause scour issues in the channel and present a challenge to small craft mariners given the speed of water moving past the large supports.
  - Possibly present a great visual intrusion in the view-shed because of the large supports and heavy road deck.
  
- A vertical lift bridge consists of a single span between two towers. The bridge is raised by cables attached to either end of the movable span. These cables pass over the top of the towers where the lifting machinery is located and are attached to a counterweight. A vertical lift bridge at the Fore River would:
  - Be able to span a 250 foot channel that could speed the transit of ships, thereby reducing the duration of openings.
  - Be more stable in high winds.
  - Have a shallower road deck, with most of the support structure above the deck, providing greater vertical clearance in the closed position
  - Be able to be built with either steel or concrete towers that would be less massive than the supports of the bascule bridge. A key advantage of steel towers would be a lighter overall structure resulting in less expensive bridge foundations.
  
- A new vertical lift bridge would be significantly different from the current structure. A permanent bridge would be substantially more robust and would not require the “erector set” look of the temporary structure. Other advantages of a permanent vertical lift bridge over the temporary span are shown by this reproduced table from the presentation.



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Criteria	Temporary Structure	Permanent Vertical Lift Bridge
Design life	15 years	75 years
Basis for mechanical design	Crane construction	AASHTO specifications
Operation in high winds	No	Yes
Wire rope lubrication	Constant maintenance requiring daily off-peak closures	Minimal maintenance, 50 year life.
Navigation channel width	175 feet	250 feet
Ease of ship transit through the bridge	Difficult	Easier
Deck system	Steel (loud)	Concrete (quiet)
Average opening time	21 minutes	13 minutes (est.)

- From the standpoint of reducing openings, the vertical lift bridge presents an advantage over the bascule bridge as is shown by this table:

Bridge	Vertical Clearance above MHW at Fenderline	Navigation Channel Width	Number of Annual Openings	Approx. change in # of openings/year	Approximate average weekly change in summertime openings
1936 Bridge	33 feet	175 feet	646 (2002)	-	-
Temporary Bridge	55 feet	175 feet	587 (2007)	-	-
Proposed Bascule Bridge	43 feet	225 feet	612 (interpolated)	+25 as compared to temporary bridge	+1.6 as compared to temporary bridge
Proposed Vertical Lift Bridge	58.5 feet	250 feet	560 (2007)	-27 as compared to temporary bridge	-1.7 as compared to temporary bridge

- On the basis of this information, STV is recommending that MassDOT proceed with design and construction of a vertical lift structure. As compared to each other:
  - The cost to build each bridge is roughly the same - \$255 million.
  - The construction schedule is the same.
  - The vertical lift bridge has fewer construction impacts on the channel.
  - The vertical lift bridge represents an easier construction since it can make better use of the channel to deliver materials, equipment and possibly even the lift span of the bridge which could be built off-site and barged into place.
  - Lifecycle costs are roughly equivalent.





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- The number of bridge openings would be reduced from the current temporary structure by the vertical lift, but the bascule bridge would require more openings as compared to current conditions.
- The vertical lift would have a slightly faster opening cycle time due to improved navigation that is expected to reduce the time required for vessel passage.
- Ease of navigation would be improved by the vertical lift bridge.
- Permitting through federal agencies would be smoother with the vertical lift bridge.

## Question and Answer Session

Mike O'Dowd began the Q&A session by thanking STV for their presentation and noting that the project has currently achieved roughly 10% design. MassDOT is still going through its review of STV's recommendations and has not decided which type to pursue. MassDOT is eager to hear from the community and is actively seeking input. Mike concluded his remarks by asking that any public officials in the audience be allowed to speak first.

**Q = Question**

**A = Answer**

**C = Comment**

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**Q. Victor Pap (VP):** Thank you for coming out to brief us again this evening. Has the Coast Guard come back to you with a mandatory channel width? I recall that when we last met the team was still waiting on that.

**A. Mike O'Dowd (MOD):** The Coast Guard has yet to give us an answer. Once MassDOT makes its recommendation and prepares an application, USCG will go out to the mariner community with a notice of intent. We are in communication with USCG and they know we are evaluating the alternatives.

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**Q. Alan Riddell AR:** Who is the person who decides that the bridge can go up on a weekday in the middle of rush hour? Is it the master of the vessel, the bridge tender, MassDOT?

**A. MOD:** I understand that this is a concern since the bridge recently went up during the morning rush hour. The individual responsible is supposed to report the opening to MassDOT so it can go onto VMS boards and be reported to SmarTraveler. The federal regulations are that anyone approaching the bridge on a boat has the right to make a request for an opening from the tender. The bridge tender may have some discretion as to whether he opens the bridge right away and he may need to call back to his supervisor in some cases.



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C. VP: The vessels have the legal right to pass at will. I believe the people actually flipping the switch are the harbor pilots. We are working with them to develop a system that provides more up-to-the-minute information. Our hands are tied a bit because the ships have the right of way.

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Q. Name not given: Will the approaches to the bridge be changed, what are the limits of work?

A. Mark Pelletier (MP): We were very careful with regard to that. When we determined which profile to pursue we made sure that there would be no permanent impacts to the rotary in Quincy or the homes in Weymouth.

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Q. Name not given: So is it fair to say this contract is already let?

A. MOD: This contract has not been advertised or let to any firm. The team you see in front of you this evening is the design consultant under contract to MassDOT.

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Q. Bill Reardon (BR): You emphasized your goal of reducing the number and duration of bridge openings and how that changes between the two types. Does some of that have to do with the channel?

A. Mark Ennis (ME): There are two parts to that. The vertical lift bridge allows us to have a wider channel opening and so the ships don't have the "thread the needle" of the narrow space between the bridge piers. Also, were we to install a new bascule bridge, the massiveness of the bridge piers would potentially speed up the water flow through the bridge which could present a challenge to smaller vessels.

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Q. Lou Gainer (LG): I use the roadway as a commuter and the river as a boater. I worry about making the channel available for bigger ships. Doesn't that mean an opportunity for bigger spills or even worse for there to be LNG ships in the river? I think you also need to check the depth of the river. I don't know if it can accept larger ships than what's using the river today.

A. MOD: In our meetings with the USCG, the mariner community has requested that we have a navigation channel in excess of 225 feet. With regard to larger ships, the post-Panamax class will have a beam of 135 feet. Citgo has told us that in the future they'll be using these larger ships throughout the world. Right now the Fore River has a depth of 35 feet. Bringing in post-Panamax ships could require additional dredging from the Army Corps of Engineers, but these ships can also partially offload at another facility before going to CITGO, so they would require less draft.



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- Q. Norraine Weylomas (NW) What proportion of bridge openings are triggered by Citgo tankers versus private sail boats?
- A. MP: We do know that data, but don't have it here with us tonight. We'll get back to you on that.
- Q. NW: Another question: will the oil company kick in for this project since its their enterprise that's causing you to build a larger bridge?
- A. MOD: The short answer to that question is no. The fact is this is our bridge and we need to replace it now.
- C. NW: But if there were no tankers, we could get a much smaller, cheaper bridge. Why can't they just build a pipeline?
- A. MOD: The Fore River Shipyard is a designated port area and we cannot preclude future development in it. Getting it unlisted as a port area would be very difficult. With regard to the pipeline, that's a good comment, thank you.
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- Q. Michael Lang (ML): I'm from Braintree. I'm concerned about the use of design/build methods. I think design/build means doing things quick and cheap. It also takes leverage away from the impacted communities because it takes some of the permitting steps out of the process and that permitting steps are where we can ask for mitigations.
- A. MP: STV is the designer of record for the Greenbush Line and I'm not sure what you mean about it being quick and cheap. It was designed, built and permitted in five years. It saved the Commonwealth money and got benefits to the community faster to have it built quickly. The design and construction were done to Federal Railway Administration standards and this job will be built to AASHTO standards. We will write the design/build package to conform to AASHTO and MassDOT will enforce them. I live in Norwell and my wife uses this bridge every day to get to work so I understand how critical it is. We will put in a quality structure.
- C. ML: There's some mitigation involved when you build these structures. Usually, the way it goes is that when you go through permitting, we have some leverage to demand mitigations. This is an ugly structure and we're asking that you make it a little nicer. What level of mitigation can people get on this project?
- A. MOD: Mitigation is measured many ways. This topic comes up frequently of how MassDOT is going to provide mitigation to impacted groups. ABP does not give out cash as mitigation for any project. We do offer the public every opportunity to bring



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their concerns to us and tell us how we can work with the community to make the construction phase less painful. We want to know your concerns. That is why we're holding our seventh meeting. This has an impact on design. Write your concerns on the comment sheet and send them to us. We will be working with all the towns in the area, including Braintree to mitigate traffic during construction. We will try to maintain all traffic in the corridor so we don't divert traffic into the neighborhoods. People will divert, we can't stop them, but we will try to accommodate existing traffic to the best of our abilities. If we need a detour, we'll work with you. We think a lot about how emergency services might be impacted. There will be an area of impact, but we will work with you to lessen that impact.

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- Q. Name not given: You mentioned the depth of the channel. Does the channel need to be changed before you can work on the bridge? Will you need greater traffic carrying capacity on the new bridge? Right now it's very difficult to get from Quincy Point to Hingham Shipyard because the lights aren't coordinated. Sometimes you breeze through and sometimes it takes 45 minutes.
- A. MOD: Let me respond to those two items. The federal navigation channel in the Fore River is 300 feet wide. In 2007, the Army Corps dredged it down to 35 to just east of the existing bridge structure. We may have to do some very limited dredging, but the Army Corps will come in and finish what they started. We cannot just change the lights in Quincy or Weymouth as a state agency as that's a locally controlled thing, but we will work with Quincy and Weymouth to keep traffic moving.

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- Q. Paul Goodman (PG): I own the first house on the Weymouth side. I am concerned about impacts to my property. Also, I'd prefer a bascule bridge, but if it has to be a vertical lift bridge, I'd prefer the concrete towers.
- A. Nikole Bulger (NB): We actually used your home as one of the constraints. We know exactly where your front steps are and we have set the roadway profile to accommodate them. We will need to work with you on a temporary construction easement, but we are not going to take your home.

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- Q. Sandra Peters (SP): I can hear the bridge from my home. I was wondering if there would be a difference between the two bridge types in terms of construction noise. Which one would require more drilling or night work?
- A. ME: The super structures would not have big differences in terms of construction noise. The bascule bridge would require greater drilling in the river for foundations since it's a heavier bridge, but that wouldn't be too noisy. We don't anticipate blasting.



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Q. SP: Will there be a lot of noisy night time work?

A. MP: We will try to limit night time noise. We have done a baseline noise assessment of the area and we know what it is today both day and night. Our specifications to the contractor will require that he not exceed baseline levels by more than 5 decibels.

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Q. Alice Fulton (AF): Concerning the vertical lift bridge is there any loss of strength or durability from removing the cross-brace? Would a concrete structure be durable?

A. ME: We think a concrete structure could be very durable. We've been building concrete structures similar to this at STV for 100 years. Properly constructed, concrete doesn't present a durability issue. The temporary bridge is just that: temporary and it needs the cross-brace to hold up the towers. New vertical lift towers would be much stronger and self-supporting.

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Q. No name given: Are you anticipating a paved or grid surface for the new bridge?

A. MOD: Which ever bridge type we select, it will have concrete running surface that should be quieter than the 1936 bridge or the temporary structure.

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Q. Frank Singleton (FS): I represent the Fore River Watershed Association and I really like the idea of floating in steel structures. That would be great for us. I think it would really help to mitigate some of the pain of construction. Can you tell us if you might use the former coal pile site as your staging area?

A. MOD: One of the keys of the ABP is the use of more innovative, efficient methods of construction. We have the benefit of the Fore River channel to barge equipment and prefabricated elements into the area. We will stress use of the channel to the contractor. If there are staging areas that present themselves, we will try to secure them, even though that is generally left to the contractor.

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Q. Christine Galvin (CG): Thank you for explaining that you close down one side of the temporary bridge to lubricate its cables, that really makes us feel better about it. The current bridge has a 15 year lifespan, are you sure the new bridge will be ready in time? Also, will you need to take additional land to widen the channel?

A. MOD: We need to complete this job by 2016 or the funding runs out so we need to keep moving; the bridge will have to be ready in time to replace the temporary



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structure. There will be minor dredging, but we won't need to expand the navigation channel horizontally.

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Q. Barry Hass (BH): What percentage of the bridge openings is scheduled?

A. MOD: Mariners have the federal right to priority when it comes to opening the bridge. I don't have a specific answer beyond that, but I can get back to you.

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Q. BR: Have you thought about the pressure on the MBTA ferries and commuter rail during construction? I hope the MBTA will think of the ferry boat system and the Hingham Parking Lot and coordinate appropriately. I'd urge careful coordination with the MBTA.

A. MOD: Fortunately, all of the state's transportation agencies are together under MassDOT which makes coordination easier. There was additional ferry service when the temporary bridge went in and I anticipate having that additional service again to ease construction.

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Q. Sandy Gildea (SG): Regarding demolition and construction truck traffic, will there be a designated or mandated truck route? 3A is a state highway, but the side streets around it are not. Weymouth doesn't want to absorb wear and tear on our streets and sidewalks.

A. MOD: We can meet at the local level to determine which streets cannot have construction vehicles on them unless there's a legitimate construction reason for them to be there. When a design/build team is selected, we would discuss that with them and local officials.

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Q. John Curran (JC): Is there any further thoughts regarding a tunnel?

A. MOD: The tunnel is off the table. There was a 2002 report by Vollmer which discussed a tunnel, but the impacts on the community and cost would be too great. That's why we're looking at two possible movable bridges.

Q. JC: So will you be compensating the neighbors for their aggravation on this project? Can you complete it on time and on budget?

A. MOD: We will minimize impacts to abutters. As far as a cash payment, no. One condition we place in the design/build package as a basis for submitting the bid is the



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timeframe of completing the project. We can impose liquidated damages against the contractor if he doesn't finish on time.

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Q. Steve McCluskey (SM): Aesthetically, I think people living near the bridge would like a bascule structure, but if we need a vertical lift, what would the dimensions of the towers be?

A. ME: The towers would be roughly the same height as the smokestack on the power plant. A new vertical lift bridge would look very different. There would be many fewer, but much structure supporting members. We could also put a cladding on the steel towers to give them a solid appearance.

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Q. Jim Hayes (JH): The tankers come in at high tide when there's not much of a current. Why are you concerned about the speed of water moving under the bridge?

A. MP: The tankers probably wouldn't have much of a problem with the current, but we are concerned for smaller craft which make up a big portion of summer time boat traffic.

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C. Rick Collins (RC): This isn't the last public meeting but we are getting to a stage in the process where some decisions will be made and its important for you to get your comments in to us in an official manner. You can contact any of your local elected officials for more information and comments.

A. MOD: Thank you for those comments, Rick. All of the information you see here tonight will be posted to our website. That's [www.mass.gov/massdot/foreriverbridge](http://www.mass.gov/massdot/foreriverbridge).

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Q. Gary Peters (GP): Will you remove the temporary bridge as part of this job?

A. MOD: Yes, demolition of the temporary structure will be the final stage.

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Q. BH: Will the new bridge be required to meet certain standards of reliability before you remove it?

A. MOD: Yes, the public needs to have full use of the new bridge before we can remove the old one. There will be a period, measured in months, and open/close cycles of testing the new bridge before we move traffic.



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Q. **No name given:** It seems interesting that this is a state project, built with state funds, but the private oil company gets to say when the bridge opens. In the past, Congressman Studs worked with Citgo to time their use of the bridge so as to avoid interfering with the commuters. It seems like you could work with Delahunt on this. One other thought: has there been an analysis of lost productivity or wasted time or gas associated with bridge openings?

A. **MOD:** The short answer is that STV has conducted a lifecycle cost analysis that takes into account the costs associated with user delays.

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Q. **Peg Kelly (PK):** With larger ships coming into the Fore River, has anyone thought to look at the condition of the sea walls near the Wessagusset Yacht Club?

A. **MOD:** I'm afraid that is outside of our scope.

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Q. **George Graham (GG):** I pulled up a 35 year-old study that indicated that the vertical lift bridge was the best option. This seems like it was decided a long time ago.

A. **MOD:** STV's recommendation to MassDOT was not prejudiced by any former studies.

A. **ME:** STV has been hired by MassDOT to study this issue. The document we'll provide to MassDOT is the type study. We recommend, given all the available information, that the vertical lift bridge is the best solution. MassDOT can reject that conclusion if they want to.

A. **MOD:** Right, it's not predetermined by the designer how MassDOT will make its decision. We evaluate what they give us, review and make comments for them to address. In the end, we can take or leave their recommendations. MassDOT evaluates type on the basis of service to all consumers. That's you: cyclists, pedestrians, mariners, motorists, you're all the consumers. We factor in schedule, cost, aesthetics; maintenance. That's just a short list of factors in making our decision and when we make that decision we will bring it back to you and be able to tell you exactly how and why we made it.

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Q. **Christine Galvin (CG):** Will you evaluate other ways for people to get to work? The only detour is through Weymouth Landing and it would be nice if you could pull people off the road by offering reduced price MBTA passes.





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A. MOD: Evaluation of travel alternatives is part of our traffic management exercise. I'm glad you mentioned the MBTA passes because ABP has tossed that idea around and is discussing ways to ease the commute with the MBTA and other providers. One thing we will consider in the EA document is user costs based on delays due to construction.

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Q. Rebecca Hoffman (RH): If the vertical lift bridge is approved, how long will construction be? Will you restrict second or third shift construction?

A. MOD: We anticipate four years of construction for either bridge type. That's the whole job including demolition of the temporary structure. As we mentioned earlier, we have baseline noise data for the neighborhoods surrounding the bridge and we will evaluate what would happen with second or third shifts based on that. We want to use longer construction hours to shorten the construction but not at the expense of the residents. We can only add an additional 5 decibels on top of existing background noise. If the contractor wants to make more noise than that, he needs to enclose the work area.

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Q. No name given: My home directly abuts the bridge and we're concerned about the noise. We went through a living hell with the MWRA construction and the power plant. We couldn't sleep at night and we went to countless meetings. The people building these projects don't live in the neighborhood. There need to be rules to ensure quality of life is not impacted.

Q. RH: What do you mean by 5 decibels of noise?

A. Joann Haracz (JH): We have done a noise assessment of the neighborhood and then what we do is to project the expected noise of the project on the existing background noises. Noise is logarithmic, that is, if you have a lot of noise already, the additional noise doesn't seem like much, but in a quiet environment a little extra noise feels really intrusive. So you know, we already project a 10 decibel penalty onto night work because it happens at night. I'm not the noise engineer, but we can get one in here at a later meeting to speak with you.

Q. No name given: So are you saying there will be 24/7 work?

A. Joann Haracz (JH): That's not decided at this point, we're still analyzing that.

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Q. Jim Watson (JW): In the last study, the slight increase in the bridge's height resulted in fewer openings, how can we get the fewest possible openings?



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A. ME: The temporary bridge has a closed position vertical clearance of 55 feet. The bascule structure would give you 43 feet and the vertical lift bridge would give you 58.5 feet. With a new vertical lift bridge you would have 27 fewer openings each year. With a new bascule bridge, you would have 25 more openings per year.

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Q. GP: The noise is our biggest concern, how will you enforce noise limits?

A. MOD: Our director of construction or resident engineer has the power to shut down construction immediately if noise limits are exceeded. Before any construction starts we would introduce the design/build team to the community and give you their contact information.

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Q. No name given: You mentioned environmental impacts. Do you anticipate encountering hazardous materials on the site? There use to be a big coal fired power plant here.

A. JH: We're looking into hazardous materials and we have done soil borings looking for contaminants. If we find something, we will build taking care of it into the design/build package.

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Q. Sean Gallagher (SG): We're going to spend all this money on a bridge. Could we please have a better signage and ITS system down into Hingham and up into Quincy so people will know when the bridge is going up. It would be great to have these alerts on twitter or sent to iPhones.

A. MOD: Thank you for those comments. We are looking into improved communications on this project and after it's been completed.

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Q. No Name Given: Is there a difference in construction times between the two bridge types?

A. MOD: The timeframes are similar, but construction tactics that make use of the channel for heavy lifts would only be available for the vertical lift bridge.

A. MP: The piers for the bascule bridge would require much more construction due to the width of those piers. The bascule bridge also has to be built in the horizontal position so that limits the use of the channel.



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Q. Mike Boynton (MB): Is the funding for this guaranteed? In 2016, what happens if the contactor you hire goes out of business? Who would pick up the tab?

A. MOD: I can't anticipate what happens if the contract goes beyond 2016. As part of this program we have been directed not to let it run past 2016. We have independent review, schedulers and estimators in place to ensure that what the designer presents to us can actually be done.

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Q. No name given: Would a new bascule bridge be noisy like the old one?

A. MOD: The 1936 bridge had an open grid deck. Either new bridge would have a concrete deck so it would be much quieter.

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Q. No name given: Does the bascule bridge have a lower clearance in the closed position because the bridge would need to avoid land takings and a 5% ADA-compliant gradient?

A. MOD: Yes. It has to do with the depth of the bridge deck and the roadway profile. With a bascule bridge, the support structure for the road is underneath the roadway. With a vertical lift bridge the roadway's support structure is over it.

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Q. BH: With a vertical lift bridge, is there an advantage in having two independent spans from a reliability or maintenance perspective?

A. ME: We did think of that approach in an early phase of the work, but we've since come away from that. It's much more expensive because it requires everything to be doubled. The tower system becomes much more involved and intrusive because it forces the two spans away from each other.

A. MOD: Thank you for coming everyone. This isn't our last meeting. We look forward to seeing you all again as this process moves ahead.

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## Next Steps

The next public involvement milestone will be a similar public information meeting for the residents of Representative Mariano's district. This meeting is tentatively scheduled for April 5<sup>th</sup>, 2010 at the Fore River Club House.



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## Appendix A: Official Meeting Notice as read by Michael Sheehan (MassDOT)

COMMONWEALTH OF MASSACHUSETTS  
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION-HIGHWAY DIVISION

NOTICE OF PUBLIC INFORMATION MEETING

Quincy-Weymouth: Proposed Fore River Bridge Replacement  
Project File No. 604382

A Public Information Meeting will be held by MassDOT-Highway Division to discuss the proposed Fore River Bridge Replacement Project in Quincy, and Weymouth MA.

**WHERE:** Hingham Town Hall - Auditorium  
210 Central Street  
Hingham, MA 02043

**WHEN:** Wednesday, February 24, 2010 @ 7:30 PM

**PURPOSE:** The purpose of this meeting is to provide the public with the opportunity to become fully acquainted with the proposed bridge replacement alternatives of Bridge No. Q-01-001=W-32-001 Route 3A over Fore River. Following the presentation, MassDOT staff will lead a discussion to answer questions and gather public comment on the alternatives. All views and comments received at the meeting will be carefully reviewed and considered to the maximum extent possible.

**PROPOSAL:** The project involves the replacement of the Fore River Bridge, Route 3A over the Fore River. The proposed Fore River Bridge structure will have two travel lanes, a bicycle accommodating shoulder, and sidewalks in each direction. When completed, the project will replace the existing temporary ACROW moveable lift bridge completed and placed into service in 2005.

A secure right-of-way is necessary for this project. Acquisitions in fee and permanent or temporary easements may be required. The Commonwealth of Massachusetts is responsible for acquiring all needed rights in private or public lands. MassDOT's policy concerning land acquisitions will be discussed at this meeting.

Written views received by MassDOT subsequent to the date of this notice and up to five (5) days prior to the date of the meeting shall be displayed for public inspection and copying at the time and date listed above. Plans will be on display one-half hour before the meeting begins, with an engineer in attendance to answer questions regarding this project. A project handout will be made available on the MassDOT website listed below.

The community has declared that this facility is accessible to all in compliance with the ADA / Title II. However, persons in need of ADA / Title II accommodations should contact Angela Rudikoff by phone at (617) 973-7005 or email to [angela.rudikoff@state.ma.us](mailto:angela.rudikoff@state.ma.us). Requests must be made at least 10 days prior to the date of the public meeting.

In case of inclement weather, meeting cancellation announcements will be posted on the internet at <http://www.massdot.state.ma.us/Highway/>

LUISA PAIEWONSKY  
HIGHWAY DIVISION ADMINISTRATOR

FRANK A. TRAMONTOZZI, P.E.  
CHIEF ENGINEER

Boston, Massachusetts



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File STV No. 20

## End of Meeting

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**Note to the Reader:** the materials made available through this section of the website have been developed by the project team to support the public involvement process. As the materials cover roughly a year's worth of meetings, the reader should assume that all materials reflect the project team's best understanding of the project at the time prepared. Later materials offer the reader a deeper and clearer look at the project and should be assumed to supersede earlier materials.

These minutes are a close representation of what transpired at the meeting summarized herein, but should not be considered a verbatim transcript. Contact information provided by meeting attendees has been removed to protect their privacy.

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