



Project

Memorial (Route 1) Bridge
Rehabilitation, Portsmouth,
NH and Kittery, ME

Project No.

BHF-X-T-0101(015), 13678

From

Addie Kim

Meeting Notes**Subject**

Public Meeting
May 29, 2008, 7 p.m.
Portsmouth City Hall

Presenters:

Robert Landry – NHDOT – Project Manager
Robert Juliano – NHDOT

Introduction

The purpose of this meeting was to present the plans for design and construction of the Memorial Bridge (U.S. Route 1) Rehabilitation Project to the general public, public officials from Portsmouth and Kittery, and state officials from New Hampshire and Maine. The meeting was held at Portsmouth City Hall in Portsmouth, NH at 7 p.m. on Thursday, May 29, 2008. More than 40 persons attended the meeting, which included representatives of the New Hampshire Executive Council, Maine Senate, Maine House of Representatives, the Portsmouth City Manager, Portsmouth City Council, Portsmouth Department of Public Works, the Kittery Town Manager, Kittery Town Council, Strafford Regional Planning Commission, Kittery Port Authority, Portsmouth Police Department, the New Hampshire Department of Transportation (NHDOT) and the Maine Department of Transportation (MaineDOT) (see attached sign-in sheet). The meeting was formatted as a PowerPoint presentation followed by a question and answer period.

Project Overview

Bob Landry, Project Manager, NHDOT opened the meeting by asking the elected officials to identify themselves, and he introduced the NHDOT, MaineDOT, and consultant team. Bob Landry reviewed the need for the project for the historic Memorial Bridge, which was constructed in 1923. The bridge lifts 4,000 times a year for navigation, accommodates 11,000 vehicles a day, and also accommodates heavy pedestrian and bicycle use. The project is the highest priority project on the NHDOT Bridge Priority Red List of structurally deficient bridges.

Bob Landry reviewed the project's impacts and outreach activities performed to date (including public meetings and surveys of stakeholders). He reviewed the advertising schedule for the summer of 2008, assuming that funding and outstanding issues can be resolved by mid-June.

Bridge Closures and Impacts on Traffic, Pedestrians, and Bicyclists

Bob Landry reviewed the construction staging and closures required during the two-year construction period. During the first construction season, there will be a nine-month (early March to late November), partial one-lane closure, with a detour in place for southbound traffic. One sidewalk would be open at all times. This closure is needed to accommodate painting activities and the enclosures and steel framing repairs and strengthening. The one-lane closure would maintain one travel lane (14 feet in width) for Portsmouth to Kittery traffic. The second season, a five-month complete closure (February to August) for both vehicular and pedestrian/bicycle traffic will be required to replace the Memorial Bridge lift span and the Scott Avenue Bridge. The work to be performed during this period would include deck replacement and work below the decks. The float-out and float-in of the lift span will each require a 3 to 5 day navigational closure.

Bob Landry indicated that construction would be scheduled from 7 a.m. to 7 p.m. Monday through Saturday, except for a 24-hour day work schedule during the float-out and float-in of the lift span.

Bob Landry indicated that the detours for the complete closure would be signed to direct traffic to I-95, although it is expected that local traffic will use the Sarah Long Bridge. The area under the Scott Avenue Bridge would be closed during the complete closure, but traffic would still be able to make a U-turn in the area of the Portsmouth bridge approach at the north end of the Wright Avenue parking lot. The Kittery traffic detour during the complete closure would maintain access to the Badger Island businesses, with a turnaround at the canvas shop on the Kittery approach.

Proposed Structural Improvements

Bob Juliano reviewed the three structures that comprise the Memorial Bridge project. The Scott Avenue Bridge comprises the Portsmouth Approach. The Memorial Bridge consists of three truss spans. The center lift span raises like an elevator and is counterbalanced by counterweights attached to two steel ropes that operate along the wheels, or "sheaves" in the two flanking fixed towers. The third structure is the Kittery Approach Spans. The operator for the Memorial Bridge lift span is located within the Machinery House on the lift span that raises with the bridge.

Bob Juliano indicated that structural deterioration includes wear of mechanical components, which necessitated replacement of three ropes this past April. Corrosion of the truss steel

framing, particularly the portion of the lift span underlying the steel grating that is corroded by wintertime de-icing, has resulted in a 20-ton weight restriction. There is a complete failure of the paint system. The project will relocate the operator to the south tower, will replace the open steel grid with a solid surface, and will also include repair of the piers and fendering.

Bob Juliano indicated that the project will replace the lift span and will rehabilitate the flanking towers/fixed spans. He indicated that the lift span replacement is being referred to as a “modified in-kind replacement,” as it involves replication of the old-style lacing and character-defining elements of the original lift span. The new lift span will have a solid roadway surface that will allow cyclists to ride on the roadway deck.

Bob Juliano indicated that the project will relocate the operator to a new control house to be located within the south tower to provide improved visibility, reliable access, and sanitary facilities. The gatetenders’ houses and storage houses, that now occupy the sidewalk, will be cantilevered to free up more room in the sidewalks.

Bob Juliano reviewed the rehabilitation of the flanking trusses, which will involve repair/strengthening of 40% of the truss members. All lead-bearing paint will be removed, and a three-coat high-performance paint will be applied to all steel. The painting will be performed within enclosures to protect the environment. This work will involve closure of half of the roadway at a time and work will be performed above the roadway level.

Bob Juliano indicated that, under the full roadway closure, work will be performed at and below the roadway level. The bridge decks and sidewalks will be demolished and replaced, and the floor system steel framing strengthened. Painting within full containment will continue. The towers will be strengthened and the tops of the towers reconstructed to accommodate the increased weight of the lift span. The towers will be painted while the lift span is being replaced (during the lift out), and the solid surface for the bridge deck and sidewalks will be installed. The Scott Avenue Bridge will be completely replaced during the full closure, and the new configuration will improve roadway geometry and visibility along Daniel Street under the bridge. Minor rehabilitation will be performed on the Kittery Approach Spans that will include railing and sidewalk replacement.

Cultural Resource Issues and Bridge Paint Colors

Bob Landry presented an overview of archaeological investigations performed to date and stated that archaeological monitoring will be performed during construction. Consultation with the City of Portsmouth has been performed in developing the proposed lighting design, and the globe lights requested by the city have been incorporated into the design. The project will include refurbishing historic plaques on the Memorial Bridge, and an interpretive sign will be installed in Prescott Park as mitigation.

Bob Landry also indicated that there are currently no plans to paint the Kittery Approach Spans, other than the railing, so the bridge girders will remain green. Both the Memorial

Bridge and the Scott Avenue Bridge will be painted in their entirety. The City of Portsmouth has expressed a preference for a black railing, so the Scott Avenue Bridge will incorporate green bridge girders with black railing. Bob Landry indicated that the NHDOT is looking for input from the public on the paint colors on the Memorial Bridge (e.g., whether to carry the black railing across the bridge or maintain the green railing color).

Bob Landry presented the breakdown of costs for the project, which total approximately \$46.6 million.

Discussion

The meeting was opened up for questions.

- **Will the replacement of the steel grating surface with a solid heavier deck be an issue with snow removal?**
Bob Juliano indicated that the towers will be strengthened to accommodate the solid heavier deck, which will provide a safer riding surface for cars and bicycles. The solid deck will also prevent salt from corroding the underlying steel of the lift span, and drainage scuppers will be installed on the bridge every 30 feet.
- **Will there be an issue on the lift span with snow piling up?**
Bob Juliano indicated that snow removal will be performed, similar to what is now being performed on the solid surfaces of the bridge approach roadways.
- **Under the one-lane construction closure, how will bicycles be allowed to access the bridge? What will be the speed limit on the bridge?**
Bob Landry indicated that the requirement that cyclists dismount and walk bicycles across the bridge will remain in place, in accordance with state law. The speed limit on the bridge during construction will remain the same, at 25 miles per hour.
- **Was consideration given to operating one lane of traffic with a traffic light and allowing alternating traffic across the bridge?**
Gene McCarthy indicated that two options were originally considered for the closures during bridge replacement: a shorter complete (5-month) bridge closure, and a longer closure (9 months) with alternating one-way traffic on the bridge. The operation of switching alternating traffic, combined with the time required for bridge lifts, was found to result in queues and delays that were considered to be unacceptable. The consensus reached through stakeholder surveys performed and in outreach meetings, was to close the bridge entirely during bridgework. Bob Landry added that during bridge lifts, no traffic is moving. Gene McCarthy indicated that it would take at least 40 seconds to clear the resulting queues after a lift, and traffic would not operate well.

- **What will be the permanent operation for bicycle access to the bridge after construction?**
Bob Landry replied that cyclists will either ride alongside the cars on the bridge deck or will be required to dismount and walk bicycles on the sidewalk. Gene McCarthy indicated that the new solid surface will be safer for narrower bicycle tires.
- **Riding across the bridge is scary, not only because of the grating but also because of the narrow bridge width. I not only bike across the bridge, I live next to the bridge site, and see lots of bicycle traffic on the bridge. Why not make the bridge wider to better accommodate bicycles?**
Bob Landry replied that consideration was given to making the sidewalk of the bridge wider, but considerations included structural improvements required to carry the additional weight and U.S. Coast Guard permitting requirements. The existing configuration of the truss bridge limits expansion of the bridge roadway width.
- **I read that during 2010, when the bridge is closed, a shuttle service would be provided.**
Bob Landry indicated that a shuttle would be provided that would operate on the hour from the Kittery side and on the half hour from Portsmouth. There have been inquiries from a private boat operator about operating a ferry boat service, but this would be part of the construction contractor's means and methods. Gene McCarthy added that, with a bus shuttle, a trailer would be provided to transport bicycles.
- **Would there be a charge to ride the shuttle?**
Bob Landry indicated that the shuttle would operate free of charge.
- **I commend the process that NHDOT has followed to keep the public informed through mailings and meetings, and had just a few comments. The shuttle option using a ferry boat would provide a great benefit to the community and for tourists. At the Scott Avenue overpass, cars may be racing around the curve with removal of the piers under the bridge. What speed control will be used under the Scott Avenue Bridge? Having a solid surface on the bridge will represent an improvement for bicycle traffic.**
Gene McCarthy replied that, underneath the Scott Avenue Bridge, sidewalks will be provided, which will improve pedestrian/bicycle safety under the bridge. This underpassing roadway will still be signed as a 15 to 20 mile per hour roadway.
- **I am Cliff Sinnott from the Strafford Regional Planning Council (RPC), and I concur with what Steve said about an excellent public process. This was also an excellent presentation on the structural components of the project. What is the status of electrical cable repairs on the Sarah Long Bridge?**
Bob Landry deferred the comment to Gene Sawyer, and introduced him as part of the NHDOT team that will be supervising construction. Gene Sawyer replied that work is

ongoing on the Sarah Long Bridge. A New Hampshire-Maine connection for a fiber optic cable spanning between the two bridge towers is being installed, along with an electrical connection to supply the operator's house. There is no need for a submarine cable, and the work is expected to be completed by October/November.

- **There are two tidal energy companies that are looking at sites that extend from General Sullivan's Bridge as far south as the Sarah Long Bridge. Has there been coordination with these projects?**

Bob Landry indicated that there has not been coordination with these other projects, but he would consult with the RPC to obtain information on these projects.

The meeting concluded at 8:00 PM.

cc: All Presenters
FILE 34437-DS-003-001

We believe these minutes accurately reflect what transpired at the meeting. If these minutes are not in accordance with your understanding, please contact the undersigned promptly; otherwise, we will assume that you concur with the accuracy of the above.