New Castle-Rye Bridge Project
Summary of Meeting
Public Advisory Committee (PAC)
July 23, 2013, 4 p.m.

Attendees:

PAC members

Dave McGuckin, Selectman, Town of New Castle
Don White, Chief of Police, Town of New Castle
Thomas Keane, Attorney, Wentworth by the Sea
Gary Rumph, Manager, Wentworth Homeowners Association
Jim Cerny, Board Member, New Castle Historical Society
Mike Magnant, Town Administrator
John Habig, Rye Abutter
Dick Gordon, Portsmouth Harbormaster
David Blanding, Fire Chief & Emergency Management Director, Town of New Castle
David Walker, Rockingham Planning Commission
Bill Stewart, New Castle Conservation Commission

Other public attendees
David Borden, State Representative
Patty Cohen, Selectwoman, Town of New Castle
Stephen Skoglung, Rye Abutter

New Hampshire Department of Transportation (NHDOT)
Victoria Chase, Project Manager
Robert Landry, Bureau of Bridge Design
Marc Laurin, Senior Environmental Manager
Sheila Charles, Cultural Resources Assistant

HDR Consultant Team
Jim Murphy, Project Engineer
Jill Barrett, Public Involvement
Stephanie Dyer-Carroll, Historic Resources

The second meeting of the Public Advisory Committee for the New Castle-Rye Bridge Project was held on Tuesday, July 23, 2013 in the Macomber Room of the New Castle, NH, Library.

Attendees introduced themselves and Jill Barrett of the HDR consultant team moderated the remainder of the meeting. She introduced Victoria Chase, the new NHDOT Project Manager, who has replaced Alex Vogt. Meeting participants were encouraged to ask questions throughout the presentation.

Stephanie Dyer-Carroll, a Planner and Cultural Resources Specialist with FHI, updated the PAC on progress to date in the areas of Natural, Historical, and Archaeological Resources. In the spring, coordination letters were sent to the US Fish and Wildlife Service, the National Oceanographic and

Atmospheric Administration, the US Coast Guard (USCG), New Hampshire Natural Heritage Bureau, and New Hampshire Fish and Game. In addition, a coordination meeting to introduce the project to environmental resource agencies was held in March 2013 at NHDOT. Field survey and coordination has identified the Little Harbor, three wetland areas, an eelgrass bed, and threatened and endangered species in the vicinity of the bridge. These species include both the Atlantic and Shortnose Sturgeon. In addition, the Marsh Elder and Bald Eagle have been identified just outside of the project area. The bridge design will seek to avoid or minimize impacts to the wetlands and eelgrass beds. In addition, construction will seek to avoid disrupting Sturgeon habitat, specifically during the spawning season.

In order to initiate consultation with the NH State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act, NHDOT prepared a Request for Project Review form and submitted it to the SHPO in January 2013. The form defined an Area of Potential Effect (APE) for the project; the area was defined based on the potential for visual impacts to surrounding properties from the improvements to the bridge. At the direction of the NH SHPO, an Individual Inventory Form was prepared for the bridge in order to evaluate its eligibility for listing in the National Register of Historic Places. NHDOT determined that the bridge is eligible under Criterion A for its association with the defense of Portsmouth Harbor in World War II, and under Criterion C as one of two remaining bascule bridges in the State of New Hampshire. In addition, fieldwork has been completed for a Phase 1A Archaeological Study and a report is underway. The survey identified the abutments from the 1874 bridge within the APE.

Jim Murphy, a project engineer with HDR gave a brief presentation on the bridge and the alternatives currently under consideration for its rehabilitation or replacement. He explained that a bridge inspection was undertaken in 2011 that determined the bridge has structural deficiencies including advanced section loss in the pier caps and piles, the stringers and bascule girders, and the approach span stringers. Additional deficiencies include the fact that the bascule machinery doesn't meet code, the sidewalks and shoulders are narrow, and the open deck is noisy and a hazard to bicyclists. Furthermore, there are safety issues as pedestrians must cross the road on the north roadway approach to use the bridge's sidewalk.

The following alternatives were outlined as potential options for the rehabilitation or replacement of the bridge:

- Alternative 1 – Existing Horizontal Alignment/Existing Profile (Rehabilitation)
- Alternative 2 – Existing Horizontal Alignment/Raised Profile, Fixed Bridge (Replacement)
- Alternative 3 – Shifted Horizontal Alignment (Replacement)
- Alternative 4 – Offline Horizontal Alignment (Replacement)

Rehabilitation under Alternative 1 would require the strengthening of the deck, the approach stringers, the bascule span floorbeams, the bascule girders, the pier caps, and the pier piles. In addition, the bridge railings require replacement, an approach slab may be necessary at the abutments, and the electrical systems require replacement. New mechanical components would be required to meet modern standards and the machinery and trunnion may not allow for a solid deck.

This alternative would match the existing bridge in its alignment and profile, and would not align the north approach sidewalk with the bridge sidewalk. The paved roadway shoulder width would be increased from 1 to 2 feet and the sidewalk width would be increased from 4 to 5 feet. A full bridge

closure and off-site detour would be required during the 6-8 month period of construction, however the feasibility of alternating one lane of traffic will be investigated during the construction of the approach superstructure. The estimated cost of this option is $17M and the expected life of the bridge would be 30-40 years. NHDOT has determined that they will continue to evaluate the rehabilitation option.

Alternative 2 would construct a new bridge, raising the existing profile 6'-3" to allow for a fixed span. The profile increase is based on the minimum requirement of active US Coast Guard vessels. This alternative would require significant driveway tie-ins, new retaining walls up to 13 feet in height, and additional work in the water. It also could impact the Amurcork tree and would require full bridge closure and a detour during construction. Due to the magnitude of site disturbance, NHDOT will likely eliminate this alternative from further consideration.

Under Alternative 3, a new bridge would be constructed that matches the vertical geometry of the existing roadway. It would widen the approach area to the bridge by 1'-9" on the west side, and shift the centerline of the roadway 6'-9" to the west. This would allow for wider roadway shoulders and the relocation of the sidewalk to the east side of the bridge. This alternative would require a full bridge closure and off-site detour during the 3-4 month construction period. The estimated cost of this alternative is $20M and the expected life of the bridge is 75 years. NHDOT intends to continue to evaluate this replacement option.

Under Alternative 4, a new bridge would be constructed that would be located 17'-5" to the west of the existing alignment. This alternative would have the greatest environmental impacts to the harbor and stonewalls, as well as the Amurcork tree. The bridge would remain open with one lane of traffic during the majority of construction, however the construction period would be substantially longer than Alternative 3. Due to the potential environmental impacts, NHDOT will likely eliminate this alternative from further consideration.

HDR indicated that construction on the bridge will begin in 2015, not before the Sagamore Bridge is reopened. The detour during construction will add approximately 15 minutes of travel time and 6 miles. NHDOT will seek to limit the bridge closure period and schedule construction to minimize impacts to mobility, environmental resources, marine navigation, and area businesses.

At the closure of the meeting, the consultant team identified key next steps in process, including a public information meeting to be held on August 14th, 2013, the completion of the Type, Size and Location Study in December 2013, and the review of this study at a PAC meeting in January 2014.

Throughout the meeting, PAC members asked questions and offered information or concerns. They are noted below in italics with responses made by NHDOT or the consultant team members.

Historic Resources

Q. How do you define the resource area?
A. It depends on what the resource is and what construction methods will be used.

Q. When you say that the bridge has qualities that would make it eligible for the National Historic Register, does this mean that nobody has pursued eligibility?
A. Yes.

Q. What is the benefit of being on the Register?
A. A Register listing provides certain protections according to Section 106 of the National Historic Preservation Act. When federal dollars are involved it requires there be consultation between the State Historic Preservation Office and the lead federal agency.

Q. If the bridge were on the Register, does that mandate a new bridge would have to be a bascule bridge?
A. All that is mandated is there is a dialogue about the project. It does not stop changes to a resource.

Q. In the private sector there are financial benefits from an historic listing but in a public project there doesn't seem to be any benefit, especially if it affects the timeline in which a project is completed. Will this bridge be placed on the Register?
A. NHDOT will not pursue listing the bridge on the National Register. However, since it has been determined eligible, any effects will have to be evaluated through the Section 106 process.

Design Alternatives

Q. Under Alternative 4, would you be able to maintain traffic flow? Also, do Alternatives 2 and 3 allow passage over the bridge during construction?
A. Alternative 4 would allow passage over the bridge during construction, but Alternatives 2 and 3 would not. HDR is investigating whether traffic could be maintained during the approach stringer rehabilitation.

Q. Under Alternative 1, what would the retaining wall look like?
A. It would not be very high and could resemble a back granite curb that you would see in a parking lot.

Q. Would the deck be solid under Alternative 3? There is a lot of bicycle and pedestrian traffic during the summer.
A. It could be a filled grid deck and would be pedestrian friendly.

Q. There is a need to slow cars traveling south on the bridge. Could speed bumps or rumble strips be considered?
A. Since it is a state road, this is unlikely. However, other traffic calming measures such as flashing lights could be considered.

Q. Would there be a railing between the roadway and the sidewalk in Alternative 3?
A. No, but the sidewalk would be 7" higher.

Q. Can the design take into consideration the large number of people taking photos from the bridge?
A. Bump-outs on the bridge will be investigated.

Q. Under Alternative 1, what percentage of the steel would be replaced?
A. Approximately 90% of the material would require replacement.

Q. Is there any way to shore up the existing bridge so businesses can recover from the Sagamore Bridge replacement? Work on the New Castle-Rye Bridge will impact the same businesses. Is it possible to delay construction so businesses get a break between bridge closures?
A. The Sagamore Bridge will be closed in 2014 and the New Castle-Rye Bridge will likely not close until 2016.

Q. Would dredging be required by the Army Corps of Engineers?
A. No.

Q. Would the bridge have to be closed during foundation work and could the work potentially be spread over 2 years?
A. The engineering team is looking at doing the drilled shafts before closure. They will also continue to investigate project staging. In order to keep contractors on schedule, penalties could be imposed for exceeding the stated construction duration. There is more flexibility with contractor management under the replacement options than under rehabilitation as NHDOT can develop financial incentives and disincentives for the contractor.

Q. Would the river be open during construction?
A. The river would have to be closed for a very small portion of the construction period.

Q. Are historic concerns the only reason to consider rehabilitation?
A. Historic concerns are the primary reason.

Additional comments included the following:

- NHDOT should consult further with the Army Corps of Engineers and the Coast Guard to determine if a fixed bridge is viable.
- An abutter does not support Alternative 2.
- Pedestrians often cross the road south of bridge to get to the sidewalk on the bridge's west side. This is an extremely dangerous spot because of the sharp curve that reduces visibility to motorists.
- Bump-outs should be considered on the bridge to accommodate people taking pictures.
- A representative from the Wentworth by the Sea Hotel said that construction during January, February and March would likely have the least impact on their business, although he wants to check the occupancy numbers for these months.
- Several members of the PAC expressed a preference for Alternative 3, one of the primary reasons being improved safety due to the relocation of the sidewalk. In addition, the committee expressed a preference for winter construction.

The meeting adjourned at 5:30 p.m.