

From: Mark Richardson [mailto:MRichardson@dot.state.nh.us]

Sent: Friday, December 13, 2013 8:59 AM

To: 'John Meade'; carol.friedrich@leg.state.nh.us

Cc: Catherine Stover; Donna King; Leslie Nelson; Baxter Engineering; Nancy Shedrick; 'Liz.sheil@leg.state.nh.us'; 'Jeanie.Forrester@leg.state.nh.us'

Subject: RE: Wentworth Common Bridge (Br. No. 148/121 - NHDOT Project 26903)

Hello, everyone –

Since the full closure of this bridge I have received several emails and inquiries, and I thought perhaps it would be helpful to reply to most everyone in an effort to keep all parties informed about all issues involving this bridge. The following information, not in any particular order, is provided with that purpose in mind, and to specifically respond to the questions conveyed in recent emails. I do not have a specific solution to propose, but hope that this email will be informative and will convey the extreme difficulties now faced by the Department.

Through previous correspondence (December 18, 2012), the Town requested that the Department either remove this bridge, which is currently closed, or repair and maintain it. The Department's response (February 12, 2013) indicated that we would initiate a project to "review issues, assess the historic benefit of the bridge, evaluate costs, and locate funding for repairs or demolition".

Through subsequent meetings, emails, and discussions, the Town was informed that the Department is struggling with the severe financial constraints under which we are currently operating. In an effort to respond to the concerns of the Selectmen regarding public safety, the Department committed, at that time, to pursuing a project to remove/demolish this bridge, and programmed funds in FY 2014 for this effort.

I attended the Selectmen's meeting on July 16, 2013, at which the bridge was discussed. The Selectmen clearly expressed their strong preference that, due to its historic nature, this bridge be retained and rehabilitated for use as a local crossing for Town residents to access the Town Common area. Subsequent to that meeting, the Selectmen prepared an application, co-executed by the Department, requesting LCHIP funds to restore/rehabilitate this historic bridge. Although the results of the LCHIP application are not yet known, the Department recognizes the concerns of the Selectmen regarding the safe use of the bridge.

The Department is currently discussing and evaluating the issues and options regarding this bridge, the primary issue being how any engineering and rehabilitation efforts might be funded. Again, the Department is facing some very difficult financial decisions which will have impacts for many years. Consequently, with transportation system needs greatly exceeding all funding sources, it is difficult to justify the expenditure of funds for a bridge that no longer carries any highway traffic. This is not a judgment on the merits or benefits of the bridge's rehabilitation, but is simply a statement of fact.

Due to its severely deteriorated condition, this bridge was restricted/posted for a 6-Ton load limit in 1972. It was further restricted to 3-Tons/Passenger Cars Only in 1980. At that time, it was estimated that the stringer and floorbeam connections had lost up to 50% of their steel cross section and the bottom chords (lowest longitudinal

truss members) and connections had lost up to 75% of their steel cross section. The bridge continued to deteriorate until its closure in 1987 when it was no longer considered safe for public use.

Bridge elements are rated on a scale of 0 – 9, with “9” being “Excellent” and “0” being “Closed/Failed”. When any major structural element (deck, major steel member, abutment, or pier) of a bridge reaches a condition rating of “4-Poor” or less, the bridge is added to the Red List (state or municipal). This does not mean that a bridge on the Red List is in danger of collapse, but that it clearly needs attention to be able to safely support all legal loads on a continuous basis without restriction. Since this Wentworth bridge is closed due to its inability to safely support highway traffic, the bridge is coded as “1-Closed/Failing”, as it is no longer considered safe for public use.

It is recognized that closure of this bridge to pedestrians and/or recreational vehicles will cause some difficulties and inconvenience to local residents. However, I ask that you also recognize the Department’s responsibility to ensure public safety regarding the use of bridges. The action to fully close this bridge was not arbitrary – it was done to ensure that no member of the public would be injured due to failure of the timber deck on the bridge and sidewalk (which has areas of extensive decay) or due to failure of the entire bridge itself (which is severely corroded) from loads exceeding its remaining limited capacity, potentially resulting in collapse of the bridge. In the absence of in-depth inspection data, refined engineering analysis results, and revised load ratings based on this information, the bridge will remain closed.

The NHDOT Bridge Maintenance Bureau has performed very little work on this bridge since 1980. Their work has been limited to replacing the timber planks on the sidewalk in 2008. Although this timber surface may be in satisfactory condition, the primary concern is the condition of the steel members and connections that support the sidewalk on the bridge. As noted above, these member connections are severely deteriorated and could potentially break off from the side of the bridge. Without in-depth inspection and analysis efforts, we cannot determine whether it is safe to use the sidewalk. For this reason, the sidewalk will remain closed.

The Town prepared the LCHIP Grant Application, which I reviewed and on which I provided comments and suggested language/descriptions. Although this was a worthwhile effort, I do not know the likelihood of the application being approved, nor do I know of where any required matching funds might be found. The LCHIP Program is very competitive and I expect has received more grant applications than it has funds available.

As part of the previous federal highway funding bill, a Transportation Enhancement (TE) Program was established to fund work on projects such as this to restore/provide community access and connectivity. Many projects in NH were funded using this program, but unfortunately, the most recent federal highway funding bill (Moving Ahead for Progress in the 21st Century – MAP-21) eliminated that program, and there are no funds remaining for use on this bridge. Other similar federal programs were also eliminated. This has resulted in even more demands being placed on the limited funding available to the Department for transportation projects. For this reason it will be very difficult to justify allocating any funds toward rehabilitation of this bridge.

I realize that this response does not provide the information and commitments which many of you hoped to receive. I expect that there will be many more discussions on this subject once the Department’s formal response is finalized and received by the Town. Until then, you are welcome to ask further questions, recognizing that I may not have any further information to provide.

Sincerely, Mark R.

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