

# BUREAU OF ENVIRONMENT CONFERENCE REPORT

**SUBJECT:** NHDOT Monthly Natural Resource Agency Coordination Meeting

**DATE OF CONFERENCE:** September 16, 2020

**LOCATION OF CONFERENCE:** John O. Morton Building

**ATTENDED BY:**

**NHDOT**

Matt Urban  
Andrew O'Sullivan  
Ron Crickard  
Mark Hemmerlein

**ACOE**

Mike Hicks

**EPA**

Jeanie Brochi

**NHDES**

Lori Sommer  
Karl Benedict

**NH Fish & Game**

Carol Henderson

**The Nature Conservancy**

Pete Steckler

**Consultants/ Public  
Participants**

Chris Fournier  
Tucker Gordon  
William McCloy  
Stephen Langevin

**PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:** *(minutes on subsequent pages)*

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*(When viewing these minutes online, click on a project to zoom to the minutes for that project.)*

**NOTES ON CONFERENCE:****Finalize Meeting Minutes**

Finalized and approved the August 19, 2020 meeting minutes.

**Wentworth, #40648 (LPA project)**

Tucker Gordon (HEB Engineers, Inc.) provided an overview of the Frescoln Road Bridge in Wentworth, NH. Frescoln Road is a 14-foot wide, gravel, two-way, dead-end, residential road. The Frescoln Road Bridge #108/070 carries Frescoln Road over Rocky Pond Brook. The bridge was originally constructed in 1985 and was reconstructed following the October 2017 Federally Declared Major Disaster. The bridge consists of two (2) 66-inch corrugated metal pipe (CMP) culverts with stacked stone headwalls. During the October 2017 storm event, the two culverts were washed downstream but remained intact. The Town was able to collect the culverts, reinstall them, reconstruct the stone headwalls, and reconstruct Frescoln Road. An after-the-fact report was filed with the NHDES Wetlands Bureau in January 2020. Prior to the washout, the bridge was on the Municipal Red List but was removed following the reconstruction. Despite not being on the Red List, the bridge is still in need of repair and is slated for rehabilitation/replacement in Fiscal Year 2022 through the NHDOT State Bridge Aid program. Rocky Pond Brook is a Tier 3 stream and USFWS IPaC system reported that the project is within the range of the northern long-eared bat.

T. Gordon explained that due to the nature of the current crossing, repair, or rehabilitation of the crossing is not being considered. T. Gordon then presented two (2) alternatives for replacing the bridge. (A): bridge replacement with a 17-foot span. The bridge would meet NHDOT and NHDES minimum hydraulic requirements for a Tier 3 stream. The bridge would have a precast concrete rigid frame superstructure and a precast concrete spread footing substructure. The roadway width, in the vicinity of the bridge, would be expanded from 16 to 22 feet. The construction timeframe would be 6-10 weeks and traffic control would be handled via a temporary off-alignment bridge. The estimated cost for this alternate is \$713,000. (B): bridge replacement with a 32-foot span. The bridge would meet NH Stream Crossing Guidelines for a Tier 3 stream. The bridge would have a precast concrete arch superstructure and a cast-in-place concrete spread footing substructure. The roadway width, in the vicinity of the bridge, would be expanded from 16 to 22 feet. The construction timeframe would be 8-12 weeks and traffic control would be handled via a temporary off-alignment bridge. The estimated cost for this alternate is \$845,000.

The Engineering Study has recently been submitted to the Town and no preferred alternate has been selected. The Town is in the process of securing FEMA Public Assistance and Hazard Mitigation funding, which would reimburse 75% of the total project cost; the NHDOT SBA program would cover 80% of the remaining portion of the cost. The current project schedule has Final Design being submitted to NHDOT in March 2021, an advertisement for bids in September 2021, Contractor selection in November 2021, and construction in the summer of 2022.

Karl Benedict (NHDES) relayed Tyler Davidson's comments which reflected his own. They questioned if both alternates were geomorphically compatible. T. Gordon clarified that only Alternate B is geomorphically compatible and that Alternate A would require an Alternative Design Request. K. Benedict asked if stream simulation material had been selected using on-site reference reaches. T. Gordon responded that HEB has been on-site and examined substrate material throughout reference reach, these observations have been used to develop a preliminary design of stream simulation material.

Lori Sommers (NHDES) stated that if Alternate B is selected, and the NH Stream Crossing Guidelines are met, that the project would likely satisfy the majority of mitigation needs. L. Sommers questioned if a wildlife shelf was incorporated into either design and stated that the inclusion of a shelf in Alternate B

would likely push the project to be completely self-mitigating. T. Gordon responded that no shelf is incorporated as of now but that is something that will be looked into.

Carol Henderson (NHF&G) agreed with previous commenters that Alternate B provides more room for a wildlife shelf and that Alternate B is preferable. C. Henderson noted that once the two funding sources are accounted for. The difference in cost to the Town is minimal between the two alternates.

Mike Hicks (USACE) agreed that Alternate B is a better option due to the span. M. Hicks asked if we have run the project by NHDHR. T. Gordon responded that that will part of the next steps of the project. M. Hicks stated that the original in-kind reconstruction could get a letter from USACE to satisfy any permitting needs. M. Hicks asked if coordination regarding the NLEB had been done yet. T. Gordon responded that the initial IPaC was done in preparation for this meeting but that follow-up coordination would be part of the next steps.

Matt Urban (NHDOT) asked Ron Crickard (NHDOT) if since FEMA was involved, that means the project does not qualify for Non-Federal Short Form but instead requires a Programmatic CE. R. Crickard responded that he believed it did. M. Hicks asked if FEMA would be the lead federal agency. Chris Fournier (HEB) stated that HEB has worked on several FEMA funded SBA projects and that FEMA typically does their own NEPA work and HEB simply follows the State process. It was decided that HEB, NHDOT, USACE, and FEMA would schedule a separate follow-up meeting to discuss.

M. Hicks asked if the USCG had been contacted to review the crossing. USCG has told USACE that they would like to review all water crossing projects. T. Gordon asked if USACE needed to see USCG correspondence for all wetlands permits. T. Gordon stated that this has been HEB's standard practice to only communicate with USCG as part of the Non-Federal Short Form process or the NEPA process. M. Hicks stated that any water crossing project that requires a USACE permit needs to have communication with USCG.

C. Henderson asked if there was tree cutting associated with either alternative and if required time of year restrictions with respect to NLEB would be adhered to. T. Gordon responded that yes tree cutting would be required for both alternatives and that time of year restrictions would be adhered to.

Pete Steckler (TNC) stated that a wildlife shelf that has a surface that mimics that of the floodplain would be preferred, and hopes to not see a "concrete sidewalk." T. Gordon responded that the velocities associated with high flow events require significant armoring of the wildlife shelves but that the washing in of fines or other methods of creating a more natural surface would be explored.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

### **Wentworth Cross Road Bridge (Town Project)**

Tucker Gordon (HEB Engineers, Inc.) provided an overview of Cross Road Bridge in Wentworth, NH. Cross Road is an 18-foot wide, gravel, two-way, residential road. The Cross Road Bridge #118/062 carries Cross Road over Rocky Pond Brook. The bridge was originally constructed in 1920 and was a 16-foot span steel stringer with a wood deck bridge. The bridge was washed out during the October 2017 Federally Declared Major Disaster and replaced with two (2) 7-foot diameter CMP culverts to restore access across the crossing. The crossing now features stacked stone headwalls and a cascading outlet condition. The current crossing is not suitable for NHDES Wetlands Bureau permit approval. The proposed project is not part of NHDOT programs, but NHDOT has offered to provide a technical and environmental review of the project to assist with FEMA review of the project. Rocky Pond Brook is a Tier 3 stream and USFWS IPaC system reported that the project is within the range of the northern long-eared bat.

T. Gordon explained that due to the nature of the current crossing, repair, or rehabilitation of the crossing is not being considered. T. Gordon then presented two (2) alternatives for replacing the bridge. (A): bridge replacement with an 18-foot span. The bridge would meet NHDOT and NHDES minimum hydraulic requirements for a Tier 3 stream. The bridge would have a precast concrete rigid frame superstructure and a precast concrete spread footing substructure. The roadway width, in the vicinity of the bridge, would be expanded from 18 to 23 feet. The construction timeframe would be 6-10 weeks and traffic control would be handled via a detour with a maximum distance of 3.1 miles. The estimated cost for this alternate is \$649,000. (B): bridge replacement with a 34-foot span. The bridge would meet NH Stream Crossing Guidelines for a Tier 3 stream. The bridge would have a precast concrete arch superstructure and a cast-in-place concrete spread footing substructure. The roadway width, in the vicinity of the bridge, would be expanded from 18 to 23 feet. The construction timeframe would be 8-12 weeks and traffic control would be handled via a detour with a maximum distance of 3.1 miles. The estimated cost for this alternate is \$783,000.

The Engineering Study has recently been submitted to the Town and no preferred alternate has been selected. The Town is in the process of securing FEMA Public Assistance and Hazard Mitigation funding, which would reimburse 75% of the total project cost. The current project schedule has Final Design being submitted to NHDOT in March 2021, the advertisement for bids in May 2021, Contractor selection in June 2021, and construction in Summer/Fall 2021.

Karl Benedict (NHDES) stated that he believes the project is on the right track and asked if the intent is to remove the perched outlet and restore the channel profile. T. Gordon responded that the profile would be restored as part of stream restoration work, and Chris Fournier (HEB) added that a step-pool system would be constructed similar to as is seen in the reference reach. K. Benedict noted that there appears to be residual material from the washout downstream of the crossing and suggested that its removal be considered as part of stream restoration work. K. Benedict asked what the plan was for stream diversion. C. Fournier responded that for Alternate B in both Cross Road and the previously presented Frescoln Road, stream diversion would be accomplished using a modified existing culvert. For the A alternates, the stream would likely need to be taken out of its existing channel during construction. K. Benedict stated that, similar to the Frescoln Road project, Alternate B, in this case, is a significantly more compliant crossing and that Alternate A would likely require an Alternative Design Request. C. Fournier responded that the FEMA funding being sought requires FEMA to pay for a crossing that meets minimum codes and standards. This would require the Town to prove to FEMA that Alternate A was not permissible before FEMA would consider the larger span option. T. Gordon noted that HEB would be interested in a follow-up meeting with NHDES to discuss the ability to approve Alternate A. K. Benedict responded that he thought that was a good idea and that Tyler Davidson (NHDES) should be involved. He asked that HEB come prepared with geomorphic information.

Lori Sommers (NHDES) stated that the incorporation of a wildlife shelf should be considered for this project. L. Sommers also stated that post-construction monitoring may be required for this project following the removal of the perched outlet. L. Sommers asked if the project would be presented again following the selection of a preferred alternate. T. Gordon responded that HEB would happily present the project again if the group thought it was necessary.

Carol Henderson (NHF&G) noted that both alternates, for both the Cross Road project and the previously presented Frescoln Road project, were big improvements. C. Henderson noted that there would be time of year restrictions on tree clearing due to the potential presence of NLEB. C. Henderson stated her desire to see a wildlife shelf incorporated into the design.

Mike Hicks (USACE) stated that he had the same comments for this project as he did for the previously presented Frescoln Road project. His comments for that project included: Alternate B is a better option due to span, asked if there had been an NHDHR review of the project yet, asked if NLEB coordination had been carried out, and asked that USCG be contacted. The same conversation regarding lead federal agency and NEPA compliance would apply to this project as well.

Pete Steckler (TNC) asked if HEB had considered if Wentworth falls into the small and impoverished community definition for FEMA. This would make the project eligible for 90% reimbursement. Matt Urban (NHDOT) stated that he had received an email from Amy Lamb (NHNHB) stating that she had concerns related to either the Cross Road project or the previously presented Frescoln Road project.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

### **Jackson, #40808 (LPA Project)**

Stephen Langevin (GPI) introduced the project team and summarized the existing bridge including when it was built, the bridge type, some of the structures more pressing deficiencies, and some of the older/historical details. Steve continued with a description of the purpose, need and goals of the project. The project will be funded with local and state contributions with the goal of removing the crossing from the Municipal Red List and providing a more durable, safe, and easier to maintain structure at the same location of the existing bridge. The proposed bridge will be slightly wider, yet remain a one way bridge per the Town's request. The bridge will include a curved downstream sidewalk with additional space to accommodate pedestrians who use the bridge for a unique perspective of the brook and the upstream approaches to the Jackson Falls area and the cascades and pools. The bridge will provide an 18-foot wide travel way, widened abutments and new concrete wingwalls to replace the existing stacked-block wingwalls. A stone veneer will be included on the new wingwalls and abutments to provide an aesthetically appealing look. The new design will allow for a slight increase in the structures hydraulic opening.

Bill McCloy (Normandeau) summarized known natural resources and other related facts about the project site. Wildcat River (also referred to as Wildcat Brook) is a "Wild and Scenic River" and the bridge marks the transition between the "Intervale Segment" and the "Jackson Falls Segment." The US Forest Service (USFS) maintains oversight of the river system in the context of the Wild and Scenic designation; however the Jackson Conservation Commission (JCC) will serve to review proposed impacts and actions within the river related to the project in coordination with the NHDES permitting process. Normandeau coordinated with the National Park Service (NPS)(as recommended by Michael Hicks) who indicated that the USFS was the overseeing federal agency.

Wetland, stream and RTE surveys were completed in August 2018. One wetland and one tributary stream were delineated in addition to Wildcat Brook. Field surveys confirmed the presence of three patches of the state-threatened dwarf blueberry and areas consistent with the acidic river outcrop natural community. At this time, it appears that the blueberry can be avoided; coordination with Amy Lamb is on-going. Review of the USFWS IPaC database indicated that the project falls within Canada lynx's range along with that of the northern long-eared bat (NLEB). A review of the bridge for roosting bats was negative and Normandeau will coordinate with USFWS under the 4(d)-rule context. Fisheries, hazardous materials (negative), water quality, floodplain, Wildlife Action Plan, conserved lands, and hydraulics were also presented; including a proposed 116 square foot increase in the hydraulic opening with the proposed

design. Wildcat Brook is a 3<sup>rd</sup> Order stream at the project site and meets the Tier 3 crossing criteria with a watershed area of 22.1 square miles.

The proposed permitting approach was discussed last, including a NHDES Standard Wetland Permit for the Tier 3 crossing and completion of the NHDOT Environmental Review Short Form for State Funded Projects. Shoreland permitting is not required due to the brooks 3<sup>rd</sup> order status.

The following questions and comments were made by participants in the meeting:

Karl Benedict (NHDES):

- Confirmed that the proposed/expected permitting approach would fall under the Tier 3 Repair rules/guidance.
- Inquired whether there were preliminary estimates of proposed impacts to the bed and banks from the abutments and wingwalls; impacts are TBD
- Recommended that project team take a close look at the proposed rip-rap to determine if it was necessary; if so, it may require mitigation as it would be new rip-rap; GPI/Normandeau will review need
- Recommended that the permit include a detailed construction sequence including diversion methods and include time-of-year (TOY) restrictions (fisheries and bats); GPI/Normandeau agree
- Indicated that sandbag coffer dams may be a good option for this site

Lori Sommer (NHDES):

- Concurred with Karl regarding the proposed permitting approach
- Reiterated that the proposed rip-rap should be minimized or eliminated if possible; GPI/Normandeau will review need
- If required, the linear feet of rip-rap will determine if mitigation is required and should be minimized and presented in any permitting documents
- Steve asked if covering the exposed rip-rap with loam would count for mitigation and Lori indicated that it could be considered; however monitoring of the area for erosion and success of vegetation would likely be required for a few years following installation

Carol Henderson (NHF&G):

- Requested that the terrace adjacent to the eastern abutment be maintained; Steve/Bill indicated that there would be no changes to that area and it would remain as a beneficial wildlife passage zone

Michael Hicks (USACE):

- Indicated that the Wild and Scenic coordination to date and approach seemed sufficient; GPI/Normandeau reiterated that NPS was contacted and had referred us to USFS and JCC.
- Asked about federal funding; ; GPI/Normandeau clarified that project is local/state funding only
- Indicated that while area may be technically within habitat of lynx; presence at the project site was unlikely given location, use, crowds and land use setting
- Indicated final 4(d) letter on bats be sent; GPI/Normandeau will review and complete
- Indicated that for tree removal, only trees larger than 3-inches DBH (diameter at breast height) are restricted; smaller trees can be removed at any time of the year;
- Asked about the project schedule; GPI indicated that final design, permitting, and bid over the winter/early spring, construction starting in the spring. We talked about tree removal in the winter and that it could be included in the specs to require non-summer removal.
- Recommended that US Coast Guard be contacted; GPI/Normandeau will review and complete
- Clarified that site not within essential fish habitat

Matt Urban (NHDOT):

- Stated that he wanted to confirm that coordination with Amy happens regarding the comments in her email; GPI/Normandeau confirmed that the correspondence is ongoing as recently as the morning of the meeting

Peter Steckler (TNC):

- Peter had no comments

Amy Lamb (NHNHB):

- Amy was not present at the meeting – but email coordination is on-going regarding RTE dwarf blueberry and the acidic river outcrop

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*