BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: March 16, 2022

LOCATION OF CONFERENCE: Virtual meeting held via Zoom

ATTENDED BY:

NHDOT ACOE **Federal Highway** Jamie Sikora Andrew O'Sullivan Mike Hicks Matt Urban Jon Evans **EPA The Nature Conservancy** Pete Steckler Joshua Brown Jean Brochi Julie Avenant Margaret Baldwin **NHDES Consultants/ Public** Michael Mozer Karl Benedict **Participants** David McNamara Jennifer Reczek Lori Sommer Meli Dube **Christian Williams** Lee Carbonneau Jason Ayotte Stephen Hoffman Gerard Bedard Sam White **NHB** John Stockton Jessica Bouchard Evan Lowell Anthony Weatherbee Christine Perron Hannah Gibson NH Fish & Game Brian Gargan

John Magee

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

Table of Contents:

Jason Tremblay

Finalize Meeting Minutes	2
Portsmouth, #29640 (X-A004(221)):	
Tamworth, #41434 (X-A004(636)):	
Claremont, #27691 (Non-Fed):	
Londonderry, #41715 (X-A004(724)):	

Finalize Meeting Minutes

Finalized and approved the February 16, 2022 meeting minutes.

Portsmouth, #29640 (X-A004(221)):

Dave McNamara (Stantec) introduced the Route 1 Improvement Project which extends from Ocean Boulevard to Wilson Road in Portsmouth, NH. Route 1 has been the focus of planning efforts and feasibility studies since 1984 and public informational meetings are ongoing. Current traffic volume is about 20,000 vehicles per day, with a 35 mph speed limit. There is only about 2,000 LF of sidewalk along almost 2 miles of roadway, and sidewalk connectivity is poor. There are also about 70 abutting parcels on this segment of road. The right-of way is only 66 feet wide, and there are aerial and underground utilities, both public and private. Contaminated soils and groundwater, air quality, and noise are also concerns in this corridor.

The project purpose and need is to improve safety; improve traffic flow and turning movements; minimize bypass traffic to local roads, such as Banfield Road; create pedestrian and bicycle facilities; provide transit opportunities; improve aesthetics; and improve resiliency and stormwater treatment / management.

Lee Carbonneau (Normandeau) provided an overview of natural resource outreach and existing conditions. Most of the original agency outreach was conducted in December of 2019 and will be updated before the NEPA document is submitted. The IPaC and NH Natural Heritage coordination was last updated in April 2021 and will be updated again. Northern Long-eared bat is listed as potentially present. The NHB report noted an element occurrence with no impact expected. There are non-tidal wetlands and water quality impairments. Tree cutting is likely to be necessary, but no impact assessments have been completed. The project is in the NH Coastal Zone, but there are no tidal resources, stream crossings, protected Shoreland, highest ranked wildlife habitats or conservation lands in the corridor. Portsmouth Prime Wetland #2 associated with Berry's Brook is mapped close to the project area and is known to contain Atlantic white cedar stands. Six non-tidal wetlands were field-delineated within 100 feet of the edge of pavement and in several potential stormwater BMP locations further from Route 1. Wetland R1-W3 is likely contiguous to the Prime Wetland. Invasive species Types I and II were also identified and mapped along the corridor.

Although there are no parks, wildlife refuges, public recreation lands, LCIP properties, or LCHIP properties along this part of the Route 1 corridor, there are historical resources, so Section 4(f) issues are expected. The Urban Forestry Center is a 6(f) Land and Water Conservation Fund property but lies approximately 750 feet north of the project and will not be directly impacted. There are two small areas of undeveloped Pennichuck Channery prime farmland soil that will not be impacted, and several areas of Hoosic soil (statewide importance) and Squamscott soil (local importance). These are mostly developed and not in current agricultural use but could be partially impacted by the project. Lee Carbonneau presented a map of the three HUC12 watersheds in the project area, all of which are rated severe for aquatic life and swimming and poor for fish consumption. The Pickering Brook watershed is also chloride-impaired.

Dave McNamara noted that the citizenry currently favors a minimal buildout alternative as opposed to Alternatives 1 and 2 from the Corridor Study, which each included five travel lanes. The preferred design has three travel lanes in most locations, some additional turning lanes, a 5-foot shoulder and separated bicycle and pedestrian lanes. A fifth Public Advisory Committee meeting is planned for spring/summer 2022. The schedule also calls for alternatives analysis in summer 2022, environmental evaluation through winter 2022-2023, and a public hearing in spring 2023. NEPA compliance will be finalized in Summer 2023, and final design and permitting to follow from 2023 to 2025. Construction would begin in 2027.

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

Karl Benedict (NHDES) stated that Wetland R1-W3 near the prime wetland will need to be field checked for continuity with the Prime wetland and recommended maximum wetland avoidance and impact minimization. Karl concurred with Lee Carbonneau that there are no coastal wetlands present, but the project is within the Coastal Zone. He recommended that stormwater BMPs avoid wetland R1-W2 and stormwater discharge be directed away from any Atlantic white cedar stands. He expects an Invasive Species Management Plan will be necessary.

Lori Sommer (NHDES) echoed Karl Benedict's emphasis on impact avoidance and minimization and stated there have been several ARM fund grants for the Berry's Brook watershed, underscoring its importance. She requested that the project review potential dry passage opportunities to allow wildlife movements across this project area.

Christian Williams (NHDES Coastal) had no specific comments but answered Lee Carbonneau's question about Coastal Zone Consistency documentation, saying if the project is covered under a federal general permit, then an individual consistency determination should not be needed.

John Magee (NHFG) is aware of turtle occurrences in the Berry's Brook wetland system and noted that the NHB reports should be updated and turtles protected. He also noted the sensitivity of Atlantic white cedar to stormwater inputs.

Michael Hicks (USACOE) asked if wetland impacts had been quantified (they have not), and said if an Individual Permit is needed, to let him know as soon as possible.

Jeanie Brochi (USEPA) had no comments.

Peter Steckler (The Nature Conservancy) noted that TNC has identified flood zones in this area and stormwater management will need to consider this as the area is very flat.

Jonathan Evans (NHDOT) responded to Lee Carbonneau's question about the need for a Farmland Conversion worksheet. He recommended that the CE document include a discussion of why the complete form was determined to be unnecessary.

Tamworth, #41434 (X-A004(636)):

NOTES ON MEETING:

Stephen Hoffmann reintroduced the Tamworth 41434 project involving the replacement of the superstructure of the NH Route 113A Bridge over the Swift River (Bridge No. 061/091) in Tamworth, New Hampshire. The project was previously discussed at the October 20, 2021, resource agency meeting. The proposed bridge rehabilitation project involves the replacement of the existing bridge superstructure, abutment beam seats, backwalls, and wingwalls, minor modifications to the pier caps, installation of new bridge bearings and minor modifications to the existing roadway approaches including the installation of new approach guardrail. The proposed project will also include the installation of partially grouted riprap (PGR) around the two existing bridge piers and the rehabilitation/replacement of an existing drainage outfall on the southern bank. The proposed project is anticipated to be completed utilizing Accelerated Bridge Construction (ABC) techniques and is anticipated to require an approximate one to two month road/bridge closure.

At the location of the NH Route 113A bridge, the Swift River is a perennial, fourth order stream, with a watershed size of 25.3 square miles. Based on the watershed size, the stream crossing is classified as a Tier 3 crossing under the NHDES stream crossing rules. This segment of the Swift River is also subject to jurisdiction under the NHDES Shoreland Water Quality Protection Act. There are no Priority Resource Areas mapped in the vicinity of the bridge, and there are no mapped FEMA 100-year floodplain or regulatory floodway associated with the Swift River. At the location of the proposed project the Swift River is identified as a cold water fishery as well as an eastern brook trout water. Mr. Hoffmann clarified that no dredging or in-water work will occur between October 1 and March 31 in order to comply with Env-Wt 307.10 (g)(1).

The NHB DataCheck Results Letter indicated that the proposed project is not anticipated to impact any state listed rare species or natural communities. Consultation with the USFWS regarding northern long-eared bat has been completed under the FHWA programmatic biological opinion.

Hemenway State Forest is located adjacent to the project area on both the east and west sides of NH Route 113A. Preliminary coordination with DNCR has occurred and the primary concern was ensuring that the public and local residents received adequate notification of the proposed project and impacts on surrounding areas. At the time of the October 20, 2021, it was assumed that ROW impacts would not be required. However, impacts outside the ROW may be required on DNCR lands in the northwest bridge quadrant for a temporary construction easement. If impacts are required additional coordination with DNCR will occur.

The scour countermeasures originally proposed at the October 20, 2021 meeting consisted of A-Jacks concrete armor units installed at existing grade. Comments from the resource agencies at the previous meeting requested that the design team evaluate the possibility of embedding the A-Jacks to avoid constricting the channel. The design team reevaluated the proposed scour countermeasures and determined that PGR was a more appropriate material for the specific site conditions given the existing substrate and channel velocities. The footprint of the PGR is similar to that required for the A-Jacks, and the PGR addressed the durability concerns regarding

the use of A-Jacks for this site. The PGR will extend approximately six feet from the face of the existing piers on the channel side, and approximately 7'-6" on the bank side. The proposed PGR will also be embedded so that the final grade will roughly match the existing grade.

The proposed project is anticipated to result in the following permanent impacts:

	Permanent (SF/LF)	Temporary (SF/LF)
Channel	493 / 46	3,181 / 82
Right Bank (Northern)	245 / 35	658 / 95
Left Bank (Southern)	362 / 44	1,024 / 90
	1,100 / 125	4,863 / 267

Permanent impacts are associated with the installation of the PGR around the existing bridge piers as well as the replacement of the existing drainage outlet and installation of a stone outlet pad. Temporary impacts are associated with construction access and temporary water diversion structures associated with the PGR installation. Due to ROW limitations and existing grades, the contractor will likely access the project area via the SE bridge quadrant. As previously discussed at the October 20, 2021 meeting, it is anticipated that the contractor will cross the Swift River using timber crane mats to access the northern pier. Water diversion will likely consist of temporary sandbag cofferdams (or similar) installed around the proposed footprint of the PGR. In-water work will be completed during low flow conditions likely between late June 2023 – early August 2023. With the water diversion in place, approximately 17'-6" or 33% of the channel will remain open to maintain flow and aquatic organism passage.

Based on the current project schedule, permitting is anticipated to be completed in the Spring of 2022 with final contract plans and advertising in October 2022. Construction would likely begin in Spring 2023. The project will be permitted as a Standard Dredge and Fill Permit with a Major Impact Project classification. Based on prior discussions with NHDES, it is assumed that the project qualifies as maintenance or repairs to protect existing infrastructure and therefore, it is assumed that no mitigation will be required for the proposed impacts.

Discussion / Agency Comments:

Karl Benedict requested that the permit application provide details on the use of crane mats for crossing the channel to access the northern pier, including a description of the sequencing and erosion controls. Mr. Benedict concurred with the permitting approach, Major classification, Tier 3 stream crossing, and that the work is considered repairs/rehabilitation to an existing structure.

Lori Sommer confirmed that no mitigation would be required since the project involves the protection of existing infrastructure. Ms. Sommer added that if DNCR lands in the NW bridge quadrant are impacted during construction, DES would like to see a restoration plan detailing how this area would be restored.

John Magee asked for confirmation that the proposed PGR would be installed to match existing grades. Mr. Hoffmann confirmed that this material will be embedded, and final grades will approximately match the existing grades with minor deviations due to the larger substrate size.

Mike Hicks asked about USCG coordination and Section 106 consultation. Mr. Hoffmann explained that NHDOT was coordinating with the USCG and that Section 106 Consultation had been completed under DOT's Programmatic Agreement.

Jessica Bouchard confirmed that a NHB occurrence was located in the vicinity, but no impacts were anticipated from the proposed project.

Pete Steckler and Jeannie Brochi had no additional comments.

Jon Evans added that he wanted to discuss the proposed project with Darrell Elliot and the Bureau of Construction to talk about the constructability of the project. Mr. Evans also added that potential impacts to the State Forest lands would require additional coordination with FHWA regarding 4(f) as this was not discussed in the initial review. Mr. Hoffmann explained that the potential ROW impacts had recently been identified and have not been finalized at this time. However, additional coordination with DNCR and FHWA will occur if impacts are required. Jamie Sikora concurred with this approach, and Christine Perron asked if the entire state forest would be considered a Section 4(f) Resource. Mr. Sikora confirmed that the State Forest is multi-use public land that would not necessarily be protected under Section 4(f) and that only specific components of the State Forest such as trails and parking areas could potentially be considered a protected resource.

Submitted by:

Stephen Hoffmann McFarland Johnson, Inc.

Claremont, #27691 (Non-Fed):

Christine Perron from McFarland Johnson provided an overview of the project area and resources identified to date. This project will address Bridge 072/127, which carries NH Route 12A over the Sugar River in Claremont. The project is a non-federal bridge rehabilitation and scour protection project. The bridge is a 1967 three-span steel girder bridge with a concrete deck. It is on the NHDOT red list of bridges due to the poor condition of the deck, and the bridge is also rated as scour critical during floods.

The Sugar River is subject to the NH Shoreland Water Quality Protection Act, and the need for a Shoreland permit is anticipated. The bridge is considered a Tier 3 steam crossing under the NHDES stream crossing rules. The river is not considered a navigable water for the purposes of US Coast Guard jurisdiction. A delineation was completed and the only jurisdictional areas within the project are the bank and channel of the river. There are no Priority Resource Areas in the project area. The Sugar River is a FEMA-mapped regulatory floodway with a 100-year floodplain (Zone AE) on both sides of the river.

The NH Natural Heritage Bureau review from 2020 noted two state-listed plant species south of the bridge. Through coordination at that time, it was determined that potentially suitable habitat for these species does occur near the bridge, and it was agreed that a plant survey would be completed this spring within areas of potential impact. Continued coordination with the Natural Heritage Bureau will occur.

NHDOT staff completed an acoustic presence/absence survey for bat species of concern. Based on survey results, the federally listed northern long-eared bat can be assumed absent from the site and consultation with the USFWS on this species will fall under the 4(d) rule. The acoustic survey also determined that the state-listed little brown bat was likely present at the site. However, there is no suitable roosting sites for this species in the project area and impacts to this species are not anticipated.

When the project was initiated, NH Fish & Game asked that a mussel survey be completed for the project. The survey was completed by Biodrawversity in 2020 and found generally poor mussel habitat within the project area with no live mussels, mussel shells, or shell fragments. The report was forwarded to NH Fish & Game and USFWS.

The Sugar River is classified as a warmwater fishery according to the NHDES Wetland Permit Planning Tool. It is also designated as Essential Fish Habitat for Atlantic salmon; however, the National Marine Fisheries Services is not currently consulting on projects located within the Connecticut River watershed and an EFH Assessment is not required. Coordination with John Magee and the regional fisheries biologist at NH Fish & Game in 2020 indicated that there were no concerns regarding fisheries.

An overview of proposed work was provided. The rehabilitation will include replacing the bridge superstructure and bridge bearings, as well as placing scour protection in the river at the northern pier. The proposed scour protection method is now partially embedded riprap, which will extend approximately 1 foot above the existing channel. Based on the hydraulic analysis completed by TranSystems, the proposed riprap will not result in an increase in base flood elevation within the floodway. The riprap placement will be completed within a cofferdam and a portion of the channel will remain unimpeded during construction. Construction access will require a temporary bulkhead off the bank of the river in one quadrant of the bridge, most likely in the northeast quadrant, and a temporary work trestle from the bulkhead.

Proposed impacts from the riprap placement will consist of approximately 1,134 sq ft / 61 linear feet of permanent channel impact. Impact calculations are still considered preliminary and temporary impacts have not yet been quantified.

Karl Benedict noted that the timing of the mussel survey so far in advance of construction should be reviewed with NH Fish & Game. He also noted that a detailed construction sequence should be provided in the permit application and should especially describe the temporary bulkhead.

Lori Sommer confirmed that the proposed riprap entailed protection of existing infrastructure and no mitigation would be required.

John Magee asked for more information on the temporary trestle. C. Perron responded that it would consist of a work platform atop temporary piles driven into the channel.

John also asked if the proposed riprap would impact water velocities, noting that his concern would be that additional erosion/scour could occur given that the fine sediments in the channel are very erodible, although he also added that any change was likely to be minimal. Evan Lowell responded that maximum velocities without riprap are 3.7 feet per second (fps), and 3.71 fps with riprap. Although these numbers are based only on the average cross-sectional velocities, John agreed that any effect on velocities would likely be a non-issue.

John added that he would follow up regarding the timing of the mussel survey, noting that the survey did conclude that the habitat in the project area was poor for mussels.

Mike Hicks confirmed that, as a non-federally funded project requiring Army Corps authorization, the Army Corps would be the lead federal agency.

Jessie Bouchard noted that further consideration should be given to the timing of the plant survey since one species is best identified when in fruit in mid to late July. If a spring survey is completed, it would only be possible to identify that species to the Genus level. The second species could be identified vegetatively in spring or summer. Christine commented that she would review the project schedule to determine the best approach for the plant survey.

Jeannie Brochi and Pete Steckler did not have any comments on the project.

Jon Evans asked that the project team schedule a meeting to discuss constructability with the Bureau of Construction and BOE Environmental Coordinator.

Submitted by:

Christine Perron McFarland Johnson, Inc

Londonderry, #41715 (X-A004(724)):

Gerard Bedard introduced the project, explaining that this is the first time it is being presented at the Natural Resource Agency Coordination meeting. The project is in Londonderry at the intersection of Stonehenge Road with NH Route 28. Traffic on Stonehenge Road has difficulty turning onto NH 28 and experiences long delays during peak times requiring intersection control to improve operations and safety. Environmental resource data collection has begun, with wetland delineations and stream assessments planned for this spring and a Nuttall's reed grass survey planned for late summer. Two improvement concepts are being consider – signalized intersection and roundabout. One signalizes the intersection and widens NH 28 to add a northbound left turn lane, and a short southbound right turn lane, and the second option considers a roundabout requiring auxiliary lanes for the NH 28 southbound and Stonehenge roadway approaches.

Karl Benedict, NHDES, noted the importance of the wetland and vernal pool delineations occurring in the spring. K. Benedict recognized the design is early and is interested in the stream crossing design. He asked if any prime wetlands or priority resource areas were identified. Jon Evans responded that current NHDES maps do not show prime wetlands in the area, but that the wetlands will be fully evaluated when delineations are done this spring. K. Benedict also asked if the proposed Exit 4A traffic impacts were included in the project. G. Bedard explained that the traffic impacts associated with the Exit 4A project were considered and anticipated for NH Route 28, and that coordination with the Department's Bureau of Traffic regarding the refinement of the assumptions for traffic reductions on NH Route 28 is ongoing.

Jamie Sikora, FHWA, recognized the independent utility of this project with his understanding of the I-93 Exit 4A EIS. J. Sikora's assumption that a public hearing is needed due to property acquisitions was confirmed by Jason Ayotte. J. Sikora asked about the nearby rail trail corridor, to which G. Bedard responded that the rail trail is east of the project, well outside the project area limits, and that the current paved portion of the trail ends at NH 28 south of this project.

Lori Sommer, NHDES, stressed the importance of the vernal pool survey and stream assessments. Also, the functions and value of the wetlands needs to be identified as it may restrict the use of the adjacent uplands for water quality treatment. If wetland impact mitigation is required, Lori suggested that the Londonderry Conservation Commission be contacted. A. O'Sullivan responded the Functions & Values were included in the wetland consultant's scope of work.

John Magee, NHF&G, stated an onsite meeting with the Department's Bureau of Environment was held early in the process and echoed K. Benedict's and L. Sommer's comments. No additional comments were suggested.

Mike Hicks, ACOE, asked that if vernal pools are identified that the Department coordinate early with the ACOE.

Jean Brochi, USEPA, reiterated others' comments about the importance of the vernal pool survey, and for early coordination if wetland mitigation is proposed.

Jessica Bouchard, NHB, stressed that the Nuttall's reed grass survey be between late August and early October when fruit is present. She also indicated that the NHB website, under Rare Plants, contains a list of recommended qualifications for botanists completing rare plant surveys. A. O'Sullivan responded a consultant had not been selected yet to perform the Nuttall's reed grass survey, because of the late summer survey necessity.

Pete Steckler, TNC, indicated the project is within a wildlife corridor and hopes the preferred alternative has the smallest footprint. He is also interested in the stream assessments, proposed stream crossing design's hydraulic capacity and potential as a wildlife crossing.