BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: April 20, 2022
LOCATION OF CONFERENCE: Virtual meeting held via Zoom

ATTENDED BY:

NHDOT
Andrew O'Sullivan
Matt Urban
Jon Evans
Joshua Brown
Mark Hemmerlein
Meli Dube
Kirk Mudgett
Chris Carucci
Kerry Ryan
Tim Boodey
Joseph Jorgens
Arin Mills
Carol Niewola
Richard Dyment

ACOE
Richard Kristoff

EPA
Absent

NHDES
Karl Benedict
Lori Sommer
Maryann Tilton
Christian Williams
Eben Lewis
Kevin Lucey

NHB
Amy Lamb

NH Fish & Game
John Magee

Federal Highway
Absent

The Nature Conservancy
Pete Steckler

Consultants/ Public Participants
Brenda Bhatti
Carl Gross
Pamela Hunt
Gregg Cohen
Bill Straub
Nick Messina

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

Table of Contents:

Finalize Meeting Minutes
Finalized and approved the March 16, 2022 meeting minutes.

Rye, 43002 (X-A005(008)):

Rye Culvert

William Straub, CMA Engineers, Inc., presented on project. The project includes replacement of a 3.5' wide tidally influenced box culvert on Route 1A (Ocean Boulevard) in Rye. Funding for the alternatives analysis (completed in 2021), and preliminary design (ongoing) was provided by the Nature Conservancy. The culvert is identified as Crossing 46 and was evaluated as part of the Resilient Tidal Crossings project published 2019, and the culvert received moderate replacement priority due to low geomorphic compatibility, high erosion, and restriction on salt marsh migration. This culvert is also a high priority for NHDOT because it is failing structurally. The site was screened for natural and cultural resources. NHB database results include the marsh elder and saltmarsh agalinis. Granite blocks from the original structure remain and could carry historical significance. The culvert replacement will have minimal impacts on the site, wetlands, and roadway runoff because widening of the road is not proposed. Hydraulic modeling for the site was performed in Surface-Water Modeling System (SMS) by Streamworks, PLLC in Phase 1 of the project, completed in 2021. The Int-High Projection from NHDES guidance on sea level rise (SLR) was selected for analysis, and several freshwater and tidal scenarios in 2020 and 2100 were simulated. Four culvert alternatives were modeled, including 3.5' (existing), 9' (matching the width of an upstream culvert on Locke Road), 15' (bankfull-width, or BFW), and 18' (1.2 BFW). Alternatives were evaluated with respect to hydraulics, flow velocities, aquatic organism passage (AOP), roadway flooding, and salt marsh migration potential. The preferred alternative after analysis is a 15' wide three-sided box culvert. Similar hydraulics were achieved between the 9, 15, and 18' alternatives. There were modest improvements in AOP and salt marsh migration from 9' to 15', and negligible improvements from 15' to 18'. The roadway overtopped by tidal and stormwater events due to predicted SLR in most future scenarios, regardless of the size of the replacement culvert. Consequently, future decisions regarding elevating the roadway will be critical at a later date. The decision for the project at this time is to design the new structure and associated site work to accommodate a future possible 2' increase in roadway elevation at an undetermined time. The project is anticipated to be advertised for construction in November 2023.

Karl Benedict (NHDES): Defers to Eben Lewis.

Eben Lewis (NHDES): Key concerns include ensuring abutters at 2000 Ocean Boulevard aren't impacted adversely and addressing riprap on southern bank. Eben stated he would forward along relevant applicable rules, including performing Vulnerability and Functional Assessments.

Lori Sommer (NHDES): Noted project is likely Minimum Impact restoration project and will not require mitigation. Eben concurs, project and application must comply with standard application.

John Magee (NH F&G): No comments.

Amy Lamb (NHB): NHB previously recommended survey for target species and is concerned with accelerated timeline since this survey has not been performed. Bill states will be addressed.

Pete Steckler (TNC) clarifies only draft permits are being prepared as part of this phase, not final.

Rick Kristoff (ACOE): No comment.

Pete Steckler (TNC): recuses himself.

Stratham, 43001 (Non-Fed):

Stratham Culverts

William Straub, CMA Engineers, Inc., presented on project. The project includes replacement of two tidally influenced 18" culverts on Squamscott Road in Stratham. The Funding for the ongoing alternatives analysis and preliminary design was provided by The Nature Conservancy. The eastern culvert was identified as Crossing 113, the western culvert was identified as Crossing 114, and were evaluated as part of the Resilient Tidal Crossings project published 2019, and the culvert received high replacement priority due tidal restrictions and erosion. The site was screened for natural and cultural resources. NHB database results include the horned-pondweed and tundra alkali grass. The culvert replacement will have minimal impacts on the site, wetlands, and roadway runoff because widening of the road is not proposed. Hydraulic modeling for the site was performed in HEC-RAS by Streamworks, PLLC and completed in 2021. The Int-Low Projection from NHDES guidance on sea level rise (SLR) was selected for analysis, and several freshwater and tidal scenarios in 2021 and 2100 were simulated. Four culvert alternatives were modeled at each site, including 18" (existing), 8 and 12' (1.2 BFW), 14 and 21' (2.2 BFW), and 6' with removal of a downstream log at the eastern culvert that impedes tidal flow. Alternatives were evaluated with respect to hydraulics, flow velocities, aquatic organism passage (AOP), roadway flooding, and salt marsh migration potential. The preferred alternatives after analysis are 8' embedded, four-sided boxes at both sites with removal of the downstream log. Similar hydraulics were achieved between all three alternatives, and poor subsurface conditions (clay conditions) necessitate the four-sided box for foundation. There were significant improvements in AOP with removal of the log. With similar hydraulic performance between all three alternatives, 8' was selected to achieve BFW at one location and comes close at the other while remaining under the 10-foot width to be considered a bridge, in keeping with DOT's preference to not maintain bridges where not necessary. The roadway only overtops in 2100 tidal scenarios and raising the roadway elevation was not considered in this analysis due to its infrequency. Raising the roadway would be costly here due to the poor subsurface conditions. The project does not have a timeline for going construction.

Karl Benedict (NHDES): Defers to Eben Lewis.

Eben Lewis (NHDES): Repeats concern that abutters will not be adversely impacted and this project does not require mitigation.

Lori Sommer (NHDES): Lori notes these projects would otherwise be good candidates for ARM funding, and these projects serve as good models for DOT tidal crossings. Lori asked about the material used to embed culvert. Bill responds CMA has not developed that yet, but will consult with Streamworks, PLLC and it will likely be similar to existing marsh material.

John Magee (NH F&G): John noted nearby fishing data in Jewel Hill Brook includes american eel, sea lamprey, and wild brook trout. These species will likely also see benefits from the project.

Amy Lamb (NHB): There are two rare plant species identified in the NHB DataCheck. Horned pondweed occurs in brackish water and could be adversely impacted, if present, due to an increase in salinity from opening up the crossing. However, the overall benefits of the project will outweigh impacts. Amy recommends a survey for horned pondweed in upstream reaches. The tundra alkali grass is found in salt marshes and NHB recommends surveys in areas of direct impact around the crossing.

Rick Kristoff (ACOE): No comment.

Pete Steckler (TNC): recuses himself.

Bedford, 43138 (X-A005(049)):

43138 Bedford, 24" Pipe Outlet Repair – 4/20/2022 NRA Meeting Minutes

Chris Carucci, NHDOT Highway Design, gave an overview of the proposed federally funded repair work to a 24" culvert outlet located on NH Route 114 at approximately 775' north of New Boston Road.

Bedford 43138 is a federal funded project initiated to rehabilitate a 72" pipe carrying Bowman Brook under NH Route 114 at 475' north of New Boston Road. Permit #2021-03569. The project advertised on March 8, 2022, with construction anticipated in the summer of 2022.

Subsequent to finalizing the design for the 72" pipe rehabilitation, significant erosion at an adjacent 24" pipe outlet was found. As of the last field review on 4/13/22, the erosion was about 20' from the edge of NH 114 and getting progressively worse.

Repair of the erosion is not related to the 72" pipe rehabilitation work and is not necessary to complete the 72" pipe work. Due to the close proximity, similar nature of work, and risk to the NH 114 embankment, NHDOT is proposing to add the 24" outlet repair to the 72" pipe rehabilitation contract.

The subject pipe is a 24" concrete culvert originally constructed in 1965. Original length was about 103', at about 1.36 % slope. The inlet side has a mortared stone headwall. The outlet side had no end treatment. The crossing would be Tier 1 based solely on drainage area. Streamstats mapping was not accurate for this crossing. Drainage boundary from LIDAR is 46.8 acres.

NHDOT District 5 Maintenance reports no history of flooding related to this culvert. The eroded area was delineated and surveyed by NHDOT in February of 2022 and last field reviewed on 4/13/2022. Height of the outlet perch was about 5'. Native soil in the area is very fine and erodible. Significant undercutting is occurring in several areas adjacent to and downstream of the pipe outlet. There was no sign of a sediment deposit downstream that would need to be removed. It is likely that the erosion has been ongoing for years, with cycles of erosion and revegetation. There is no perch or erosion issue at the inlet end.

The stream was delineated as intermittent (R4SBC) and there are delineated wetlands adjacent to the outlet channel (PFO1Ex). These wetlands were created by the original construction of the NH 114 embankment or by cycles of erosion and revegetation, but are now considered jurisdictional. Original construction also relocated the inlet channel to be parallel to NH 114 in the vicinity of the crossing. The 24" pipe outlet channel drains to Bowman Brook, a ponded floodplain wetland connected to the 72" pipe crossing. The erosion area is within the Bowman Brook floodplain (Zone AE).

The previously completed NEPA documentation for the 72" pipe rehabilitation project included the proposed 24" pipe outlet work. The environmental review identified the potential presence of one threatened species (the Northern Long-eared Bat), invasive plant species, limited re-use soils (LRS), and coordination required for Section 106, water quality requirements, and Alteration of Terrain (AOT) requirements. Protected shoreland buffer, prime wetlands, designated rivers, impaired waters, contamination, and conservation lands were not identified.

Hydrologic and hydraulic analysis finds the existing 24" culvert can accommodate the 50-year storm without bypass. Flows greater than 50-year would bypass overland to the 72" pipe outlet. The potential bypass area is within the existing ROW and no damage to public or private infrastructure would be expected from a bypass event. Upsizing of the culvert or hydraulic improvements to the crossing are not considered necessary. Repair of the outlet channel will be based on the hydraulic capacity of the 24" culvert.

Several repair options were considered. All practicable repair options include resetting the fallen pipe sections and adding a metal end section such that existing pipe length is restored and repairing erosion within the NH 114 embankment area. Temporary access impacts would be the same for all options. Options for matching the pipe end to the existing stream channel include the following: (1) Large riprap on a 2:1 slope - this would be the least cost and least impact option, but it would not restore connectivity or benefit AOP. (2) Rock weirs / step pools with a relatively steep average slope - this option would be the most costly due to the labor intensive nature of placing boulders to grade and filling voids to keep streamflow on the surface. (3) Simulated streambed channel at slope necessary to match within the ROW – This option has a match length of about 73' and slope of 7.7%. Channel section would have a 4' wide V shaped bottom with an impermeable membrane below the simulated streambed material. The simulated streambed material gradation can be designed to be stable at this slope. (4) Simulated

streambed channel at maximum length – This option would reduce the slope to 6.7% and extend the length of the match to 90'. This is not a significant reduction in slope and would require some temporary impact to the Bowman Brook floodplain wetland for erosion controls. Option 3 provides the best balance considering constructability, costs, impacts, and streambed stability.

The proposed design will reset the fallen pipe sections and add a metal end section such that existing pipe length is restored. Erosion within the NH 114 embankment area will be repaired to re-establish original topography. A simulated streambed channel will be constructed to match the end of the culvert to the existing stream channel within the existing ROW. Channel section will have a 4' wide V shaped bottom with an impermeable membrane below the simulated streambed material.

Total duration of the work is expected to be 10 to 15 work days. Much of the work can be completed concurrently with the 72' pipe rehabilitation work. The Contract completion date is October 28, 2022, including the proposed 24" pipe repair work. The contract price for the work is $96,680 based on bids received on 3/31/2022.

The proposed repair will restore connectivity. There will be no effect on the frequency of flooding, or sediment transport. There will be no effect on the 100-year floodplain elevation. There will be no impact to or permanent effect on the floodplain wetlands adjacent to Bowman Brook. All work will be within the existing ROW. A temporary access road is required for access to the culvert outlet. Clearing will be required, but no grubbing / stump removal is anticipated. Clearing will be minimized to the maximum extent practicable. Temporary impacts to jurisdictional areas will be restored to existing conditions. Access through the guardrail was considered but is not practical due to the steep slope and traffic impacts that would be necessary for dump trucks to back down into the work area.

If there is flow in the stream, it can be pumped to the 72" pipe outlet area. Setting the pump and routing the hose would not require any significant ground disturbance or any additional clearing of trees over 3" dbh. The Contractor's water diversion plan will address specific means and methods for managing water.

Proposed wetland impacts are as follows:

Inlet – Intermittent Stream (R4SBC)	Temporary	113 SF	20 LF
Outlet Repair - Intermittent Stream (R4SBC)	Permanent	457 SF	86 LF
Wetland (PFO1Ex)	Permanent	312 SF	
Outlet Access – Wetland (PFO1Ex)	Temporary	312 SF	

Total Impacts: Permanent 838 sf / 86 LF, Temporary 425 sf / 20 LF Total 1,263 sf
The 72" pipe work and 24" pipe work combined will be under the 1 acre threshold for earth disturbance for CGP coverage. Total disturbed area is estimated at 31,025 SF (0.71 acres). No disturbance to existing paved areas.

Concurrence was requested for project consistency under 904.08 which includes Repair of a Tier 1 Legal Crossing and that there is no required mitigation. Based on comments below, a waiver will be requested to downgrade the crossing from Tier 3 to Tier 1 based on drainage area.

Karl Benedict, NHDES Wetlands Bureau, agreed that a separate permit application would be appropriate and that the work appears to qualify as a minor impact project. Any of the match options would be acceptable from a wetland impact perspective. He also noted that the crossing would be classified as Tier 3 due to being in a 100-year floodplain and that a request a downgrade to Tier 1 could be made. If approved, the work should qualify under 904.08 for Repair of a Tier 1 Legal Crossing. The waiver request will need to address floodplain mitigation requirements under Rules 800 and 527.04. The application will need to address restoration of temporary access areas and consider plantings in the newly graded areas at the outlet.

Lori Sommer, NHDES Wetlands Bureau, asked about the details of the impermeable membrane and asked if the large stone in the simulated streambed could be covered with material and seeded and vegetated. She also noted that based on the classification and linear feet of proposed impacts no mitigation would be required. C. Carucci responded that the membrane would extend the full length of the channel and would be keyed in around the edges. The simulated streambed will include a range of particle sizes intermixed with the large stones. Seeding the channel may not be successful due the intermittent flow. Organic material would not be used as it would likely wash out. The intent is to create a channel similar to the upstream reach, as shown in the photo on Slide 5 with no vegetation in the bed.

John Magee, Fish & Game, asked about the slope of the proposed match. C. Carucci showed the profile with the proposed streambed at 7.7% slope. J. Magee agreed with previous comments regarding intermixing fines in the new streambed and trying to keep water on the surface as much as possible to promote AOP. He noted that if the flow is intermittent, the chance of fish using the crossing is pretty small and that natural revegetation of the channel would be likely over time. C. Carucci noted that a wetland seed mix would be preferred instead of plantings to promote revegetation.

Richard Kristoff, ACOE, No comments

Peter Steckler, The Nature Conservancy, asked about the amount of clearing and referenced the photo on Slide 9. He noted that leaving as many trees as possible would reduce the need for restoration and be a benefit to terrestrial wildlife connectivity and that the 24” pipe might be the primary under-road passage for small animals such as mink, otter, and racoon. C. Carucci responded that the limits of work and clearing areas presented are based on typical methods and equipment. The Contract language requires clearing to minimized to the maximum extent practical, clearing area be approved by the

NHDOT Engineer, and there is no separate payment for clearing, so the Contractor has an incentive to avoid unnecessary tree removal.

Colebrook, 43899 (Non-Fed):

Kerry Ryan, NHDOT Environmental Manager, gave an overview of the location of the proposed state funded bridge maintenance project, bridge 184/085, which carries Diamond Pond Road over an unnamed perennial stream in Colebrook. The existing structure is a 15' wide x 8' high reinforced concrete slab bridge supported on concrete abutments with wingwalls. The surrounding area is rural/undeveloped and is a Tier 3 crossing. Photos were shown of the project area and the existing crossing.

Tim Boodey, NHDOT Bridge Maintenance Senior Engineer, described the proposed project which will include protecting the existing southern abutment from scour by installing a concrete toe wall along the southern abutment, installing rip rap in front of the proposed concrete toe wall, repositioning some of the existing built-up material from within the channel and placing it on top of the proposed rip rap, and removing some of the channel material in order to move the thalweg of the stream towards the middle of the stream and away from the south abutment.

T. Boodey described the preliminary wetland impact plans, wetland impact table, longitudinal profile, channel cross sections, and construction sequence which include perimeter controls, cofferdams, sediment basin, clean water bypass pipe, and revegetation of access and staging areas. There is no history of flooding at the crossing and hydraulic analysis determined the existing structure passes the 100-year storm event with some free board under the deck and the proposed project will not appreciably change the hydraulic opening or the ability of the structure to pass the 100-year storm event.

K. Ryan described the area as rural with no conservation land in the area, remaining within the State right-of-way, not within a designated river buffer, a tier 3 crossing, no previous permits identified, a PRA upstream and downstream which is not proposed to be impacted, is a predicted coldwater fishery, no species present as per NH Natural Heritage Bureau, not essential fish habitat, not anticipated to impact northern long-eared bat or Canada lynx, has no potential to cause effects to cultural resources as per the Section 106 Programmatic Agreement, and is within the FEMA 100-year floodplain.

Karl Benedict, NHDES, asked what was quantified for impact totals and the wetland impact summary slide was reshown. T. Boodey stated all of the aggregated material being moved will not be able to be reused in the project and what is used will match the gradation of the stream. K. Benedict stated if material is being relocated and there is a change to the grade, it is a permanent impact and agrees with the reuse of the material that matches the gradation of the stream. A. O'Sullivan asked if we should show abutment to abutment as permanent. T. Boodey clarified the impact plan which shows permanent impacts along the south abutment and temporary impacts along the north abutment and that all the material along the north abutment will not be moved but will be used for a temporary sandbag cofferdam and bypass pipe. T. Boodey referenced the impact table identifying the permanent and temporary channel impacts

and stated the entire channel is not being dredged. A. O'Sullivan clarified the work is not going from abutment to abutment. K. Benedict summarized the hatched section would be not be changing in grade and will be used for a placement of a cofferdam.

K. Benedict asked how the reference reach geomorphic conditions compare to this proposed project through the crossing and how that compares to 904.09 which says maintain or enhance hydraulic capacity, AOP, and geomorphic compatibility and recognized the proposed project will pass the 100-year storm. A. O'Sullivan stated this is rehabilitation which is the toe wall, rip rap and asked if we should remove more material. K. Benedict stated no and what is needed is the certification the project maintains hydraulic capacity. T. Boodey stated just installation of a toe wall and rip rap alone would reduce hydraulic capacity but material will also be removed as a part of the project and asked if existing and proposed cross sections were included in the application, would that help in determining if hydraulic capacity is maintained. K. Benedict said yes, the balance needs to be shown.

L. Sommer stated it wasn't clear if light repositioning by hand was going to maintain AOP. A. O'Sullivan stated the project will move the thalweg away from the south abutment and AOP will be maintained. L. Sommer stated she is concerned because Tim will not be doing the work. T. Boodey stated the project will be constructed by his bridge maintenance crews and will not be handed off to a contractor. L. Sommer stated the channel and bank impacts may require mitigation and she would like to see the final plan addressing Karl's issues to make that final determination. A. O'Sullivan stated having a cross section with the thalweg with a discussion on the material that is going in should be included in the application. K. Benedict and L. Sommer agreed.

John Magee, NHFG, said it all seemed good to him and asked what time of year the work will take place. T. Boodey stated fall, September to October, and will take approximately 4-5 weeks to complete.

J. Magee asked if the work could be completed before October 1st because in this area brook trout typically start to spawn Oct 1st and they move around a lot before that. T. Boodey asked if there will be a restriction or a permit condition relative to time of year. J. Magee recommends doing work before 10/1 and referred to DES regarding wetland requirements. K. Benedict said DES rules indicate the same time frame based on the species present.

J. Magee asked if the project would pump around or use sandbag barrier. T. Boodey stated sandbag cofferdams and bypass pipe will be used which is the best way to move the stream through the work area, due to the small size work area.

T. Boodey asked what is the other side of 10/1, towards winter. J. Magee said after Nov 1st.. A. O'Sullivan reiterated that for this project, the TOY restriction is September 15th to October 31st and construction is recommend on one side of that window or the other to which J. Magee agreed.

K. Benedict stated to summarize the TOY recommendations in the application which will eliminate the need for a waiver since the rules have been addressed. A. O'Sullivan said the

minutes would be used in the application and the construction sequence. K. Benedict stated may also want to include time frames in the species coordination section of the application.
Amy Lamb, NH Natural Heritage Bureau-no concerns
Rick Kristoff, ACOE-no comments
Pete Steckler, TNC stated the location has a great wildlife shelf there already and glad some of it will remain.

Francestown, 42837 (Non-Fed):

Project: Francestown #42837
Presenters: Tim Boodey, Arin Mills
Date: April 20, 2022

The Francestown Bridge Maintenance project #42837 is to repair bridge 139/102 which carries NH 136 over Whiting Brook. Arin showed a map depicting Whiting Brook which flows approx. 2.5 miles from a mainly undeveloped land to crossing. The Brook further flows from the crossing 0.6 miles to Haunting Lake, and this is the only road crossing of the stream. The bridge was constructed in 1946, and the superstructure has been replaced while the substructure is original stone abutment and wings of unknown age. The surrounding landscape is rural and residential, photos were shown of the structure as well as Whiting Brook.

Tim described the project work to include repointing of existing stone abutments, resetting of the existing stone wing walls and possible installation of a toe wall. Tim further explained once the cofferdams are in place for sub-structure work the abutments will be evaluated for the need of toe wall placement for structure protection. If toe walls are determined necessary they will be installed at grade with the existing streambed elevation as to not reduce the hydraulic capacity of the structure. Tim showed draft impact plans and impact table which includes 51 SF/36 LF of permanent impact for toe wall construction, and 1257 SF of temporary impact for access and installation of erosion control measures. Tim described the basic construction sequence to include installation of perimeter control, sediment basin and sandbag cofferdam along one abutment. The stone abutments will be repointed, wing walls reset and installation of toe wall (if necessary). Work will then switch to opposing abutment. The sandbag cofferdam will be removed, and the access and staging areas will be revegetated as needed.

Tim stated there is no history of overtopping at the structure, and the current structure passes the 50-year storm event. He will look at the hydraulics modeling a bit closer ahead of application submission, which will be included. The proposed work will not alter the ability of the structure to convey the flow of Whiting Brook.

Arin provided an overview of the environmental resources identified in and surrounding the site to include: stream at crossing is a 2nd order stream (no SWQPA), Tier 3 crossing (2,341 ac), no designated river and no previous permits identified. The ARM Mapper determined full geomorphic compatibility and reduced aquatic organism passage- although it is not clear what is reducing AOP in the existing structure as this is a natural bottom structure. Whiting Brook is a predicted warmwater stream with no species of concern, NHB22-0378 had no recorded occurrences, no PRA predicted and no FEMA floodplain. USFWS species list identified potential Northern long-eared bat and was determined to be consistent with the 4(d) rule.

Section 106 is concluded with no concerns as it qualifies under the Appendix B of the Programmatic Agreement with no recoded properties in EMMIT.

Karl B asked to include a cross section for the toe wall to justify the project qualifies under Env-Wt 904.09 and maintain hydraulic capacity post construction. Karl asked if the crossing can accommodate an 100-year storm and Tim said likely not but he would look at the hydraulics more closely ahead of submission. Karl stated warmwater so no time-of-year restrictions anticipated. Andy O asked if the project cold qualify for a PBN and Karl said they could discuss offline.

Lorie S asked if the toe wall would go into the channel and Tim said yes. Lorie questioned if there was an opportunity for enhanced AOP without reducing hydraulic capacity. Tim stated AOP would be maintained with a sub-grade toe wall.

John M said he does not anticipate the sub grade toe walls to negatively impact AOP at this location.

No comments from Amy L, Pete S or Rick K.

Lebanon Municipal Airport, 3-33-0010-065-2021:

D&K PRESENTATION MEETING MINUTES
Lebanon Municipal Airport
NEPA EA – Runway Safety Improvements
11:05 Scheduled; Actual ~11:50-12:20 w/Q/A thru ~12:45*

11:50-12:20* Karl Benedict from NHDES opened up the presentation on behalf of the NHDOT agency review team. Brenda Bhatti, Sr. Environmental Planner, presented the Powerpoint slideshow on behalf of DuBois & King. Other attendees affiliated with the project present for the program were Carl Gross, Airport Manager, and Gregg Cohen from Stantec.

Brenda provided an overview of the project and updates from the previous presentation to NRAC on December 15, 2021. She described that D&K's role is to develop the NEPA Environmental Assessment (EA). The timeline began in June 2021, and they are targeting June 18, 2022, as the final date for the EA completion. Brenda presented 15 slides that provided a high-level overview of the proposed airport runway safety improvements to Runway 18-36 and the Taxiway A extension. She also mentioned that there had been at least five NRAC meetings between 2008-2011 as part of earlier efforts that included extending Taxiway A (a project that has been in the works since at least 1994 and has yet to be completed due in part to more recent ILS/localizer placement concerns by the FAA). An updated project area graphic identified the wetlands that had been re-delineated within the project area. Areas that were previously delineated in earlier efforts (circa <2012) but not currently proposed for improvements had not been more recently re-delineated (*e.g.*, immediately east of Runway 18-36). Natural resource concerns that include rare species and wetlands impacts were identified and information regarding the efforts to avoid creating additional

wildlife hazards were described. The obstacle clearing to comply with FAA requirements would require removal of hazard trees that penetrate the approach surface south of the Runway 36 end. Mitigation options were posed that included replacement of the existing constructed stormwater conveyance ditches in the location of the proposed Taxiway A extension that would be offset from the new taxiway. There is a ~28.5-acre conservation easement at the southern end of the property south of Runway 18-36 that was previously put into conservation to mitigate for the Taxiway A extension that has not yet been built. The intent is to utilize that easement as part of the proposed mitigation.

~12:20 **Q/A Session**

Karl Benedict – NHDES

Karl asked about updates to the wetland impacts and mitigation and Brenda indicated that Stantec had completed the 30% design and the wetlands impacts and mitigation were being calculated based on that. He pointed out that the description of wetland impacts and mitigation should be sent to NHDES and addressed to him. Also, regarding the isolated wetlands, the location of any vernal pools [to be impacted] would need to be confirmed [in the field]. Brenda indicated that the small isolated wetland ["Wetland A"] southeast of the Airport on the abutting property may be a wetland. The plan is to mark the wetlands boundaries and City-jurisdictional 100' buffers in the vicinity of tree clearing to demarcate where the contractors need to avoid resource areas. Karl further noted that there needs to be a description of access, impacts, avoidance, and minimization methods regarding the obstruction removal. He reminded that an Alteration of Terrain permit would be required for the project. The documentation should include more information specifically detailing the impacts and mitigation.

Lori Sommer – NHDES

Lori started by addressing Brenda's question regarding the NHDES requirements for wetland mitigation for the stormwater conveyance ditches. She indicated the west side wetlands (Taxiway A extension) should be mitigated 1.5:1. NHDES wetland mitigation ratios did not change but USACE and other agency's mitigation ratios may have changed. Obstruction clearing must consider vernal pools in the impact description. Brenda also described the higher valued wetlands in the southeastern portion of the property and abutting property. The City includes a 100' buffer around wetlands identified in the City's Natural Resource Inventory (NRI) as "High Value" and "Very High Value" wetlands (the buffers are showing on the graphic/figure on the Slides 7 and 10). Lori indicated that the change in wetland types from forested to [other type] needs to be discussed [in the EA/permit/mitigation discussion]. Regarding the conservation easement at the south end of the property, Lori recalled the existence of the easement and thought it was used to mitigate other work. If so, that would be considered an existing condition and could not be used for the mitigation for this project. Brenda added that this was an easement specifically for the Taxiway A extension project that was never built, but is the subject of the currently proposed project. That easement would be intended to be used as part of the required mitigation.

John Magee – NH Fish & Game

John reminded Brenda to get in touch with Kim Tuttle (and Melissa) at Fish and Game regarding threatened and endangered species. Brenda mentioned that she had completed the NH Natural Heritage review and would follow up with Kim.

Pam Hunt – Audubon & NH Fish & Game (contracted grassland bird expert)

Brenda mentioned that Pam had provided a draft report of bird observations. Pam suggested that part of the mitigation should be the coordination of the mowing schedule to minimize impact to bird species. Pam was also there as a representative of NH Fish and Game (per confirmation of Kim Tuttle).

Amy Lamb (in for Jessica Bouchard) – New Hampshire Natural Heritage Bureau

Amy asked if the rare species survey timeframes had been coordinated through Jessica Bouchard. Brenda indicated they were completed in July through October. Amy mentioned the previous meeting in December and that Jessica had asked to be provided with plans where impacts would occur. Brenda mentioned that her botanist had submitted the findings of the newly observed species. Brenda will also provide Jessica with the full report if her botanist had not yet done so. As part of the avoidance and impact minimization efforts, Brenda described the plan to demarcate areas in the vicinity of tree clearing and other activities so contractors would avoid impacting rare species. Also, she mentioned that part of the proposed plans include harvesting rare plant seeds along the west side wetlands and replanted in suitable locations pending input by NHNHB. Amy reminded Brenda that any coordination of rare plant impact avoidance and mitigation must go through Jessica Bouchard of NHB for review and approval.

Richard Kristoff – USACE

Rick commented that the USACE prefers In Lieu Fees as mitigation. He commented that even though the easement that was previously put in place for the Taxiway A extension has not been built, if USACE permits had not been involved, it would be treated as an existing condition and not used for this extension project. Rick Dyment said that he believes USACE [and NHDES] permits were granted involving the easement. Brenda said she had not yet found the easement in the County Registry of Deeds, but would continue to seek it out, and any information that others may have from previous efforts would be helpful.

Pete Steckler – The Nature Conservancy

No additional Comments

Brenda provided additional information regarding the anticipated status change of the Northern Long-eared bat from federally Threatened to federally Endangered. The USFWS has proposed this change and indicates the change will occur in November with an effective date of December. Based on her attendance at two recent public information sessions, Brenda indicated that the

USFWS has said that any projects that have not yet been constructed by the time the status change occurs would not be grandfathered into the 4(d) rule. The current understanding from USFWS is that the project(s) would need to come back to USFWS for additional coordination under any new requirements for NLEB under an Endangered status.

12:20* D&K Presentation End

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*Times Approximate