

**BUREAU OF ENVIRONMENT
CONFERENCE REPORT**

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: September 21, 2022

LOCATION OF CONFERENCE: Virtual meeting held via Zoom

ATTENDED BY:

NHDOT

Matt Urban
Andrew O’Sullivan
Jon Evans
Emily Kulig
Kerry Ryan
Arin Mills
Wendy Johnson
Dan Prehemo
Wayne Brooks

ACOE

Absent

EPA

Jean Brochi

NHDES

Karl Benedict
Lori Sommer

NHB

Sabrina Stanwood
Madeline Severance

NH Fish & Game

John Magee
Mike Dionne
Kevin Newton

Federal Highway

Absent

The Nature Conservancy

Absent

**Consultants/ Public
Participants**

Christine Perron
Brian Patinskas
Linda Greer
Lee Carboneau
Kristen Clarke
Ben Lundsted

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

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Finalize Meeting Minutes

Finalized and approved the August 17, 2022 meeting minutes.

Turnpike Drainage Rehab, 43303 (Non-Fed):

Kerry Ryan, NHDOT Environmental Manager, gave an overview of the location of the proposed state funded Turnpike drainage rehabilitation project, located on the Spaulding Turnpike Connector/US 202 Connector, in Rochester and stated the work will be completed by a Contractor. Photos and aerial maps were shown of the project area, showing work locations and access areas.

Emily Kulig, NHDOT Bureau of Turnpikes, described the project which proposes to rehabilitate/replace ten pipes along the 202 Connector, which range in size from 12” to 36”, five to be slip-lined and five to be replaced. Preliminary wetland impact plans, wetland impact table, construction sequence, and alternatives were described.

K. Ryan described the area as partially within the protected designated river buffer of the Coheco River and the FEMA 100-year floodplain; no previous wetland permits, conservation lands, or highest ranked habitat were identified; the Wetland Permit Planning Tool identified PRA’s within the project area but that the proposed project would not result in impacts to the PRA’s; wildlife corridors were identified in the project area; LRS and invasive plant species would be managed according the BMP’s; project is consistent with the Section 106 Programmatic Agreement and has been determined to have no potential to cause effects to cultural resources; coordination is in process for species identified on the IPaC; and the NHB report identified several grass species and a plant survey was recommended by NHB. The results of the plant survey were described (button sedge was observed in the project area) and proposed avoidance/minimization measures were discussed (foot traffic only near plants near 24121 and use of timber mats, or similar, and avoiding excavation for the access of pipes 12916 and 58122).

Karl Benedict, NHDES, commented/confirmed the cross pipes are for drainage and no stream crossings; proposed wetland impacts are mostly for access; project should consider erosion control and the possible need for water management; asked about time of year sequencing specifically if work can be completed in frozen conditions; if the area has been assessed for vernal pools; minimizing clearing is a key component for the access; LAC should be notified; confirmed no wetland impacts to the north side of the 36” pipe but BMP’s should be considered due to proximity to the marsh.

Andy O’Sullivan asked if this project could be classified as a minimum impact project since there are <3000sq ft of temporary impacts. K. Benedict said due to the rare species in the work area the project would be elevated to a major project.

Lori Sommer, NHDES, reiterated the need to assess the area for vernal pools and stated if there are no vernal pools mitigation would not be required.

John Magee, NHFG, asked if the 36" pipe would be perched after slip-lining, which would be a barrier to turtles. E. Kulig stated this is a cured in place liner and does not require a full concrete liner; she wasn't sure how thick the liner is but thought it was less than 1"*. She said the liner is pulled through, ballooned up, cured with heat, will conform to the pipe, and keep some of the existing corrugation.

Mike Dion, NHFG stated his questions, which were related to time of year (TOY) and the 36" pipe, were addressed by others.

A. O'Sullivan asked E. Kulig if she had a TOY of construction. She stated the project cannot be completed during frozen conditions because it would be too difficult to excavate the existing pipes. A. O'Sullivan recommended doing work in low flow conditions as feasible.

Mike Hicks, ACOE was not on the call.

Jean Brochi, reiterated the need to check for vernal pools and to make sure Section 106 consultation is completed.

Madeline (Maddie) Severance and Sabrina Stanwood, NHNHB. Sabrina stated that Maddy will send a rare plant reporting form to be filled out so the result can be verified and put into the database, asked that the species be flagged, and supports the use of sedimentation and erosion controls as button sedge is sensitive to changes in hydrology and runoff.

*The slip-liner information was confirmed post meeting and it varies depending on calculations and manufacturer however, the plastic slip liner pipe is typically between 1" and 2" thick with smaller pipes closer to 1" thick.

Manchester RAISE Project, (Fed # Not Known):

Linda Greer from Fuss & O'Neill introduced herself as the Project Manager for the RAISE Manchester, Connecting Communities Project for the City of Manchester and presented the project. Also present were Lee Carbonneau of Normandeau Associates and Kristen Clarke, City of Manchester Department of Public Works and Ben Lundsted, City of Manchester EPD. The consultant team for this project is Normandeau Associates for Environmental, HMMH for Noise and Air, GZA for Geotech, LM Preservation as the Historian, and Hartgen for Archaeology.

The project limits, bordered in white on slide 2, encompass what is called the Millyard shown in yellow, the South Millyard shown in pink and an area of the Downtown in blue. This area is the core economic area of the City, which has grown to near capacity. The project area is adjacent to the Downtown and to south is the Retail shopping area of South Willow Street. Currently the South Millyard from a transit standpoint is locked, as there is only one single access point into the area, which is the intersection of Granite Street and South Commercial. Within the South Millyard there is WMUR, Fisher Cat's stadium, SNHU University, multiple business, and the Riverwalk Condominiums. There is a real need for a second access point in and out of the South Millyard.

The purpose of this project is to improve safety, connectivity and mitigate congestion. The need is for east west modality options for vehicles, bicycles, and pedestrians to further revitalize the Millyard District as a whole. The proposed action is to provide new roadway and pedestrian infrastructure.

This project began back in March 2019 when the City decided to apply for the 2019 BUILD Grant. A one-day Charrette was held, with 80 participants. The Charette outcome was two project concepts which met the goals established for the project. Outreach continued with the following year Grant applications, through the City's outreach to stakeholders, organizations and City Official for letters of support. In 2019 and 2020 there were 45 letters of support and in the 2021 RAISE grant application there were 60 letters of support. Slides showing two concept visions from the Charrette were presented. The first resulted in the components proposed in the 2019 and 2020 BUILD Grant applications, with the extension of South Commercial Street, with an at grade railroad crossing and then connecting to Elm Street at the Market Basket signal. The second concept vision from the Charrette was included in the 2021 RAISE Grant application and shows the elements as currently proposed. With this Grant application the South Commercial Street has an above grade railroad crossing and connects to Elm Street at Gas Street. As the design evolved through the design process the overall components stayed true to the outcome of the Charrette.

Plan views and renderings were presented for the four Project Components that make up the RAISE Manchester: Connecting Communities project.

Component A – The South Commercial Street Extension takes the existing South Commercial Street, which ends today at the back of Fisher Cat's Stadium and continues a roadway with a multiuse sidewalk over the railroad and connects to Gas Street, thereby connecting the South Millyard to the Downtown via Elm Street. This proposed road provides reduced emergency response time and reduces traffic congestion at the Granite Street and Commercial Street Intersection.

Component B –The South Willow and Queen City Ave. existing ramp style intersection is replaced with a peanut shaped roundabout. This layout fits withing the existing intersection edge of pavement and provides areas of green space. This proposed layout is a safety improvement by reducing speed, which in turn reducing accidents. The removal of the signal reduces emissions.

Component C –The Gas Street Extension and Active Transportation Corridor (multi-use trail), connects the South Commercial Extension to Willow Street, and connects pedestrian and bicycles to South Willow.

Component D – The pedestrian bridge over Granite Street at Commercial Street improves pedestrian safety, improves the intersection delay and level of service, which in turn reduces emissions.

Lee Carbonneau presented environmental information. An environmental Phase 1 Site Assessment Report has been completed. Project components are located in Urban Fill; and there are oil or hazardous material records in and around the project area, and PFAS in groundwater. These will be handled appropriately. Site specific soil mapping was completed by Gove

Environmental Services. Geotechnical investigations are scheduled for October, and proper notifications are planned. Historic Properties will be addressed in a different meeting, but coordination with NH Division of Historical Resources has started. There are several historical features in the project area. A NH Natural Heritage Bureau (NHNHB) data request in 2021 revealed no records, and the 2022 IPaC species list included only the Candidate Species Monarch Butterfly. These data requests will be updated as needed. There is no Highest Ranked Habitat in the project area, but the Merrimack River is mapped as Highest Ranked Habitat in NH. There is no overlap with special flood hazard areas, and no Protected Shoreland impacts. There is a tie-in to the Riverwalk Trail within Manchester's Shoreland Urban Exemption area.

Wetlands were delineated by others and will soon expire. Normandeau will redelineate and assess wetlands this fall. Two wetlands are present, and both appear to be inadvertent detention features, in disturbed areas lower on the landscape than the surrounding developed areas. In project area A, South Commercial St. Extension, there is an isolated Phragmites dominated depression, which may be wetter due to a crushed culvert under the active railroad line. The project is estimated to impact approximately 3,000 sf of this wetland. The other wetland is within the abandoned rail corridor. The multi-use trail will impact approximately 25,000 sf. Impact minimization efforts will continue, but impacts will likely remain above the state and federal mitigation thresholds. The project team will follow up with NHDES regarding a mitigation strategy.

Stormwater drains through existing infrastructure to an existing outfall on the Merrimack River. The project met with NHDES to discuss stormwater on September 15, 2022. An Alteration of Terrain (AOT) Permit will be needed, as this is not a NHDOT project. Manchester is an MS4 Community, and the local requirements are similar to AOT requirements. Compliance will focus on treatment and matching pre- and post-conditions as much as possible. The project is aiming for 90% Treatment through BMPs, including detention basins, tree box filters, deep sumps and other green infrastructure.

Initial coordination with FHWA indicates that the project is expected to qualify as a Categorical Exclusion (CE) under NEPA, with all components addressed in one CE document.

Linda Greer shared the full project Schedule. What is important to note is that this project began with the Charette at the beginning of 2019 BUILD Grant application, and alternatives evolved further through the next two years of Grant work. With the award of the 2021 RAISE grant, we are bound by the NOFO requirements which is full funds obligated by September 2024 and construction complete by September 2029. In order to meet these requirements, we are hoping to have NEPA complete for all components by this coming January.

Andrew O'Sullivan asked for agency comments:

Karl Benedict (NHDES): Managing soils and groundwater will be important. Asked who the project met with at Alteration of Terrain? Linda responded that they met with Mike Hansen. Karl would like to coordinate AoT and wetland reviews. He also asked if we are planning on presenting this project at a future Natural Resource Agency meeting, particularly once the wetland information is updated, and we are happy to do so.

Lori Sommer (NHDES): Mentioned that she has been pushing for roundabouts since 2009 but was surprised to see a peanut roundabout. She encouraged the team to coordinate with the

Manchester Conservation Commission for potential wetland restoration projects in the Merrimack watershed, possibly in floodplain areas, to address wetland mitigation and offered to provide input as needed.

John Magee (NHFG) - no questions or comments, but he is also interested in mitigation.

Mike Dionne (NHFG)– Noted the plan calls for 90% treatment, and asked how much is treated now? Linda responded that aside from treatment associated with individual developments, like Market Basket and the Riverwalk, not much treatment takes place. Most drainage passes through the gravelly abandoned rail corridor.

Jean Brochi (USEPA)– would like to be included in the mitigation planning and looks forward to a future presentation.

Madeline Severance (NHNHB)– has no concerns as there are no NHB records.

Nashua-Merrimack-Bedford, 13761E (Non-Fed):

Christine Perron introduced the project, which proposes widening and associated improvements along the F.E. Everett Turnpike. As previously discussed at the August meeting, Contract E is located in Merrimack, just south of the Merrimack-Bedford town line between Exits 12 and 13. The project limits are just under one mile. An overview of the entire project was provided at the August meeting. The purpose of discussing the project this month was to review new information about Dumpling Brook.

Dumpling Brook is the only stream crossing in this contract. This is a Tier 2 crossing based on watershed size. The existing pipe is 36” diameter and about 450’ in length. Bankfull width is approximately 25 feet. At the previous meeting, it was noted that the design team was still analyzing whether to extend the existing pipe or replace it. A decision has now been made to replace the pipe with a 42” culvert.

Since the August meeting, it was determined that some drainage pipes from the days of the former NH Fish & Game fish hatchery are still in place today but were not picked up by survey. A 1950s plan from the construction of the Turnpike was shown to describe the locations of these pipes. The inlet of a 24” pipe is located in Dumpling Brook outside the existing right-of-way (ROW) and upstream from the inlet of the 36” Dumpling Brook culvert. The 24” pipe takes some flow from the brook and outlets into an artificial dammed area on the east side of the Turnpike. Stream flow was further split to supply water to the former hatchery via another pipe from the dammed area, with remaining flow going through a side channel and outletting into Dumpling Brook. Another pipe system that still exists under the Turnpike consists of 8” and 12” pipes with a manhole at the ROW line, inlet outside existing ROW, and outlet adjacent to the 24” pipe. These structures were also part of the hatchery system. The survey crew recently located these drainage pipes and they are now shown on project plans. When the wetland delineation was completed, the side channel at the outlet of the drainage pipe system was delineated as a stream. There is a delineated forested wetland in the vicinity of the 12” pipe but the delineation did not extend as far as the pipe inlet.

As part of the proposed project, the old drainage pipes will be abandoned by filling them. There is no benefit in keeping the pipes in place or replacing them. They are more than 70 years old and doing nothing would eventually create safety concerns as they deteriorate. Removing the pipes would benefit Dumpling Brook by keeping all flow in a single, upsized pipe.

Photos of the side channel were reviewed. There is typically only a trickle of water coming from the 24" pipe. There is a defined channel, although it still retains characteristics of an excavated channel. The channel also still has the concrete weir structures constructed for the hatchery.

The drainage pipes were added to the hydraulic analysis for the proposed project and it was determined that a backwater condition exists in the side channel since the elevation of Dumpling Brook is slightly higher than that of the side channel. For this reason, the side channel is not expected to go dry when the drainage pipes are abandoned.

The replacement of the 36" Dumpling Brook culvert with a 42" culvert on new alignment will result in approximately 170 LF of permanent channel impact at the inlet and outlet, as discussed last month. Because of the backwater condition at the side channel, this channel is expected to continue to retain water. It is also not a natural stream channel. For these reasons, no permanent impacts will be shown in this side channel on the wetland impact plans.

Karl Benedict noted that the backwater condition in the side channel should be described in the permit application. He also asked that the application address 1) whether or not there would be impacts to the wetland at the inlet of the 8"/12" pipe system when the pipes are abandoned, and 2) if a backwater condition exists at the inlet side of Dumpling Brook and, if so, if impacts to hydrology would be anticipated from the proposed fill in the stream channel.

K. Benedict asked if there is floodplain at Dumpling Brook. C. Perron replied that there is no mapped floodplain in this area. Karl also asked if the downstream dam type structure was classified as a dam. C. Perron clarified that the structure is a concrete weir and not a dam.

Lori Sommer asked if the 170 linear feet of stream impact included the banks and channel, and if impacts would be mitigated via an in-lieu fee. C. Perron replied that Dumpling Brook has no defined banks and the 170 linear feet of impact was measured along the thread of the channel. Mitigation would be via an in-lieu fee.

John Magee commented that he thought filling the drainage pipes was a good idea. He also asked about the wetland at the inlet of the 8"/12" pipe system. C. Perron noted that potential impacts to this wetland would be analyzed but there likely would be no impact given how little water this pipe carries and how large the wetland is.

J. Magee asked if the downstream weir could be removed for mitigation. C. Perron replied that the project team could look into removing it; however, it would not be removed for mitigation purposes.

J. Magee asked if the new Dumpling Brook culvert would be installed via directional boring. C. Perron replied that the pipe would be installed with open trench construction. J. Magee asked that a larger pipe be considered to improve aquatic organism passage (AOP) if the cost is not

much greater than the 42” pipe that’s proposed. C. Perron responded that the pipe size would be addressed in the permit application. Comments received at the August meeting indicated that the 42” pipe, despite its length, would provide some improvement to AOP since the slope is less than 1%.

Mike Hicks and Jean Brochi had no comments or questions.

Maddie from the Natural Heritage Bureau asked about the status of the rare plant coordination. C. Perron noted that Jessica had provided recommendations to incorporate into a transplanting plan, which will be completed prior to the project’s advertising date in February.