

BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting

DATE OF CONFERENCES: April 13, 2023

LOCATION OF CONFERENCE: Zoom Meeting

ATTENDED BY:

NHDOT

Jason Ayotte
Emma Bell
Sheila Charles
Jill Edelmann
Jon Evans
Wendy Johnson
Curtis Morrill
Dan Prehemo
Dillan Schmidt
Hans Weber
Trent Zanes

**Cowasuck Band of
Pennacook-Abenaki
People**
Denise & Paul Pouliot

City of Lebanon
Paul Coats
Rod Finley

Town of Derry
Dave Caron
Mike Fowler

**Derry Rail Trail
Alliance**
Mark Connors

**Friends of the
Northern Rail Trail**
Alexander Bernhard

**Granite State Rail
Trail**
Wayne Morris

NHDHR/NHDNCR

Laura Black
David Trubey

Stantec
Dave McNamara

NH Rail Trails Coalition
Dave Topham

FHWA

Jamie Sikora

VHB
Hannah Beato
Peter Clary
Quinn Stuart
Pete Walker

**Consulting & Interested
Parties**
Colleen Madden
Chris McCarthy
Alex Vogt

McFarland Johnson
Gene McCarthy

PROJECTS/PRESENTATIONS REVIEWED THIS MONTH:

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Belmont 43352, X-A005(083), R&C 13959

Participants: Jason Ayotte, Emma Bell, Dan Prehemo, Jon Evans, Dillan Schmidt, Hans Weber, Trent Zanes, NHDOT; Denise and Paul Pouliot, Cowasuck Band of Pennacook-Abenaki People; Dave Caron, Belmont resident; Alexander Bernhard, Friends of the Northern Rail Trail; Dave Topham, NH Rails and Trails Coalition

Initial review of alternatives for the intersection improvements with Route 140 and Main Street. While the project area is tightly constrained by the ROW, the goal is to determine appropriate inventory needs, if any.

The proposed project intends to address safety, capacity, and traffic flow concerns with the intersection of NH 140 and Main Street in the Town of Belmont, New Hampshire. The goal of this presentation is to discuss seven (7) potential design concepts that would address the intersection needs and to receive feedback from the cultural resource agencies in regard to future coordination efforts or requirements.

NH 140 is the primary east-west route through the project limits despite making up the western and northern intersection legs in an unconventional layout. Main Street acts as the southern leg of the intersection and a local road, Nelson Court, makes up the eastern intersection leg, though experiences very little traffic and is slightly offset from the opposing intersection leg. NH 140 is the larger roadway both functionally and in terms of traffic volume when compared to Main Street however the western leg of the intersection (NH 140/Depot Street) is stop controlled within the existing layout while Main Street/NH 140 (north) act as the uncontrolled through movement.

With increasing traffic volumes and poor sight conditions at the stop bar, traffic on Depot Street experiences queuing during peak afternoon commuting. The alternatives presented below have been focused to address the safety and capacity concerns at the intersection.

All-Way Stop

This modest alternative proposes to add stop signs to the northern, southern and eastern legs of the intersection. Due to the offset nature of Nelson Court, the stop bar for Main Street would need to be a distance back from the intersection; however, an all-way stop condition reduces the sight distance concerns from the existing layout and would improve the safety and operation of the intersection.

Adding a stop condition to each approach is reflected in the LOS by reducing both the 2027 and 2047 AM conditions to LOS B, but the 2047 PM condition is improved to LOS D for the PM condition; the 2027 PM condition remains LOS C. It is worth noting that this alternative will decrease the queues on Depot Street while introducing queues on the previously free flowing Main Street approaches.

This alternative could provide a low-cost solution with minimal ROW impacts.

Southbound (SB) Right Turn Lane

This alternative was originally conceived in the early 2000's after a full NH 140 bypass project was permanently shelved. The intent is to add a designated right turn lane in the NH 140 southbound direction such that the primary driver movement (westbound on NH 140) is more obvious to drivers on other approaches. In theory, this could reduce driver uncertainties and improve the operation of the intersection.

Assuming all rules of the road are followed, this alternative maintains an LOS of A in the 2027 and 2047 AM conditions and minimally improves the 2027 and 2047 PM conditions LOS to B and E, respectively, by reducing the queues on Depot Street.

This alternative would require roadway widening and would incur ROW impacts. More importantly, this layout is unconventional and could actually add to driver uncertainty. Additionally, the southbound right turn movements do not warrant the addition of a separate turn lane.

Signals

This alternative proposes a similar lane configuration as the all-way stop but would signalize the intersection.

This alternative would add delay to approaches that were previously free flowing but would improve safety and operations from Depot Street. This is reflected in the LOS by reducing the 2047 AM condition to LOS B (2027 AM remains LOS A) but improving the 2027 and 2047 PM conditions to LOS B and C, respectively. Queues would now be experienced on all legs during the peak windows of the day.

This alternative would be more costly and have increased ROW impacts over the all-way stop but offers improved operation and more intersection conspicuity.

Single-Lane Roundabout

When the Design team met with the Town in 2021, they were presented with a single-lane roundabout concept conceived by the Town. This alternative was explored further and adjusted to be consistent with Department design practices, resulting in the shown layout. Roundabouts are effective tools to safely and efficiently process traffic, especially in locations that experience similar traffic volumes on each approaching roadway.

This is shown by the results of the traffic modeling efforts, where all existing and future conditions are LOS A.

Despite the safety and capacity benefits, the plan view indicates several properties would need to be impacted and/or acquired. From a two-dimensional standpoint alone, the ROW impacts and associated costs would be much larger than other alternatives, and more than likely the approach work on Depot Street would require the bridge over the Tioga River to be pulled into the project scope.

Compact Roundabout

In the interest of capturing the benefits of a roundabout with a smaller footprint, the Design team explored a compact roundabout alternative. This option is less familiar to the Department, but the concept shows a reduced area of effect that could make the alternative more palatable.

Similar to the single-lane roundabout, the existing and future conditions are LOS A.

As expected, the ROW impacts and associated costs are predicted to be less than the single-lane roundabout. It is likely that the alternative would still affect the bridge over the Tioga River.

Mini Roundabout

One more roundabout alternative explored is the mini roundabout, which intends to offer the safety and capacity benefits of a roundabout but in an extremely reduced footprint. In this location, a 60' diameter mini roundabout appears to fit within the existing curb-to-curb area of the intersection.

A Department review of mini roundabout efficiencies shows a modest reduction in total capacity. It is our best projection that the alternative would still experience an LOS of A for all conditions, but there is an understanding that relying on drivers to correctly navigate the intersection could have unintended consequences.

While this alternative appears to have low ROW impacts and costs, more design research would need to be conducted to be confident that the reduced roundabout geometries would be adequate for the vehicles navigating through the area.

NH 140 Realignment

Recognizing that Main Street experiences less traffic than NH 140, an alternative was developed that involves softening the horizontal geometry of NH 140 for a continuous thru-movement and creating a stop-controlled T-intersection with Main Street.

This alternative maintains an LOS of A in both the AM and PM 2027 conditions and manages to keep a 2047 condition of LOS A and B for the AM and PM conditions, respectively. Queues would be reduced almost entirely on the NH 140 legs, shifted instead onto the Main Street traffic that now has to find gaps in the mainline to enter. This new stop location should have a better sight distance than what Depot Street experiences today, allowing for safer and more easily achieved turning movements.

This alternative has a very similar impact footprint to that of the compact roundabout. One major difference is that a preliminary review of the Depot Street profile indicates a possibility of tying into the roadway approach prior to the bridge. Even so, the ROW impacts are somewhat large and the driveways on Depot Street may be difficult to tie into with the grade adjustment.

Cultural Agency Comments:

Laura Black (NHDHR):

1. Update historic district form as it has been over 20 years since the last evaluation, and it may be missing information required for decisions and determinations.
2. Any individual properties with potential for historic 4(f) impacts (and is potentially NR-eligible) should be surveyed and looked at in more depth (complete individual area forms).

Jamie Sikora (FHWA):

1. The Penstock public park is a 6(f) resource and impacts to that area should be limited.

Lebanon 40794, X-A004(488), R&C 12278

Participants: Dave McNamara, Stantec; Paul Coats, Rod Finley, City of Lebanon; Julie Avenant, Jon Evans, NHDOT; Denise and Paul Pouliot, Cowasuck Band of Pennacook-Abenaki People Dave Caron, Belmont resident; Mark Connors, Derry Rail Trail Alliance; Dave Topham, NH Rails and Trails Coalition; Alexander Bernhard, Friends of the Northern Rail Trail; Gene McCarthy, McFarland Johnson

Consultation on the reconstruction of the Mechanic, Mascoma, and High streets intersection including mitigation discussion.

Stantec presented the project. The project is located west of the downtown square in Lebanon, at the intersection of High, Mascoma, and Mechanic Street. The location has several challenges, including a confusing layout, numerous potential conflict points, interaction with the Mascoma River Greenway, Right of Way, topography, historic resources, and traffic management during construction.

This is the first project resulting from the larger Mechanic Street corridor study completed by the City of Lebanon and Stantec. That study looked at Mechanic Street from the project location west to the Exit 19 ramps. The preferred alternative for the project location is single lane roundabout. This will provide traffic calming, improve the operations, and provide a new gateway into the downtown from the west. There have been several public participation opportunities to date, starting in 2013 with a Blank Slate public informational meeting and several walkabouts of the full corridor. Additional public informational meetings were held in 2014 and 2015 for the corridor. More specific meetings to the roundabout took place at the City Council in 2018 and 2021. A formal Public Hearing is scheduled for mid-May 2023.

Stantec summarized the recent Cultural Resource Coordination, which included the development of six Inventory Forms. The results of those forms were as follows:

- 9-11 Mechanic Street
 - Individually eligible as an historic resource.
- 35 Mascoma Street and 3-5 High Street
 - Not individually eligible, but they both contribute to the Young Street Hill District.
- 6 Mechanic Street
 - Not eligible.
- 18.5 Mechanic Street
 - Not individually eligible but contributes to the Mills District.
- The High Street Historic District
 - Part of the Young Street Hill District.

Following the review and concurrence of those Inventory Forms, Effects Tables were created for four potential historic resources. These have been reviewed by DOE, with concurrence on all four. Stantec provided detail on each resource and the basis for the effects determinations.

- 9-11 Mechanic Street
 - Recommended Finding – No Adverse Effect. There is minimal change proposed at this location, as it is at the westerly limit of work.
- Mill Historic District

- Recommended Finding – No Adverse Effect. The project setting is not a character-defining feature of the district, and for the district as a whole, the project will not diminish the setting.
- Young Street Hill Neighborhood
 - Recommended Finding – Adverse Effect. The project will require removal of the character-defining masonry wall, resetting of a historic fence post, land taking, and road and sidewalk widening.
- Northern Railroad
 - Recommended Finding – Adverse Effect. The project will require the taking of some land that contains part of the ROW and change the distance between the two sides of the ROW, making the diagonal less visually evident.

Stantec then presented several potential options to mitigate the adverse effects. The options included:

- Reconstruct the existing dry laid stone wall (225').
 - Mitigate adverse effect to the Young Street Hill Neighborhood. This will be accomplished through the requirement of a specialty subcontractor during construction.
- Interpretive Signage.
 - Mitigate the adverse effect to the Northern Railroad or Young Street Hill Neighborhood. There are a number of elements that could be featured. The signage would be located along the Mascoma River Greenway, and therefore easily accessible.
- Water Feature.
 - The city plans to install a water feature. Elements of the feature could be designed to provide historical context to the effected resources.
- Sculpture/Art Installation.
 - The city plans to solicit for the inclusion of public art into the project area. Elements of the feature could be designed to provide historical context to the effected resources. They were successful in adding several pieces of art along the Mascoma River Greenway, and plan to follow the same process.
- Visuals in the truck apron.
 - Mitigate the adverse effect to the Northern Railroad. This needs to be done in a way to not attract bikes or pedestrians through the middle of the roundabout.

Discussion:

Laura Black (NHDHR) – Laura noted that the mitigation needs to address the adverse effects. Additional art or water features are good, but don't necessarily mitigate adverse effects. She was in favor of the wall reconstruction. Signage has been very successful in other locations, and she agrees it can also benefit the rail trail. Signage could combine the trail with the neighborhood.

She has seen positive examples of the linear visual be constructed, including with rail embedded in the pavement or concrete. It could be combined with the sign as well, to note why it is there. Jill Edelman (NHDOT) – Jill asked the group if the mitigation as proposed, including the wall reconstruction, interpretive signage, and possibly some linear visual would satisfactorily mitigate the adverse effects. All agreed.

Derry-Londonderry 13065B, IM-0931(201), R&C 2772

Participants: Hannah Beato, Peter Clary, Quinn Stuart, Pete Walker, VHB; Gene McCarthy, MJ; David Caron, Mike Fowler, Town of Derry; Jon Evans, Wendy Johnson, Curtis Morrill, Dan Prehemo, NHDOT; Denise and Paul Pouliot, Cowasuck Band of Pennacook-Abenaki People; Mark Connors, Derry Rail Trail Alliance; Alexander Bernhard, Friends of the Northern Rail Trail; Wayne Morris, Granite State Rail Trail; Dave Topham, NH Rail Trails Coalition; Colleen Madden, Chris McCarthy, Wayne Morris, Alex Vogt, Consulting Parties, Derry property owners and concerned citizens

Continued consultation, including a review of the Shields Brook Rail Trail I-93 Exit 4A Alternative Technical Concept (ATC).

The following is a summary of the discussions that occurred during the Derry-Londonderry 13065, IM-0931(201), I-93 Exit 4A Contract B Cultural Resource Agency Meeting. Action items are represented in bold text. The presentation slides are included in Attachment A. Prior to the start of the presentation, Jamie Sikora (FHWA) verbally acknowledged Dave Topham's (NH Rail Trails Coalition) request for Consulting Party status.¹

Laura Black (NHDHR) asked Mr. Sikora whether the Section 106 process is re-opened due to the issuance of the new effect tables. Mr. Sikora confirmed that the Section 106 process is officially re-opened.

Jill Edelmann (NHDOT) and Quinn Stuart (VHB) provided an overview of the meeting intent. Discussions will primarily center on the cultural resource impacts to the Manchester & Lawrence Railroad (M&L) Historic District (ZMT-MLRR) with elimination of the tunnel and proposed new grade crossing. Prior to execution of the 2019 Memorandum of Agreement (MOA), effect determinations were documented in meeting minutes. In this instance, as part of their current review processes, the NH Division of Historical Resources (NHDHR) requests completion of effect review sheets. The left column of the tables codifies what constitutes adverse effects. NHDOT welcomes comments on the Derry-Londonderry 13065B effect tables. These materials were distributed to the Consulting Parties on March 27, 2023.² See Attachment B. The meeting presentation covered the content of the Derry-Londonderry 13065B effect tables. A

¹ Dave Topham's request and FHWA's response is documented via email correspondence dated April 13, 2023.

² The Consulting Parties as of March 27, 2023, included the following individuals: Denise and Paul Pouliot, Cowasuck Band of Pennacook-Abenaki People; David Caron, Town of Derry, and Mark Connors, Derry Rail Trail. These same individuals were identified in the 2019 MOA as Section 106 Consulting Parties.

few labels were added to the graphics to provide more detailed references.

Gene McCarthy (McFarland-Johnson) provided an overview of the Rail Trail: Proposed Alternative graphic, which depicts the existing rail trail alignment; the proposed in-corridor, gravel multi-use path with an at-grade crossing; the proposed meandering, paved, multi-use path with a grade-separated crossing; and previously approved tunnel multi-use path for context. The main revisions [since the September 22, 2022 Public Informational Meeting] include a closer alignment of the Rail Trail to the linear M&L Historic District corridor by creating a “Y” for where paved, multi-use path alignment splits to the east. This is the plan for the project and the design that NHDOT is advancing.

Mark Connors (Derry Rail Trail) requested information on grades, slopes and changes to the historical pieces, specifically the wing walls and the Abenaki People historical representation. Ms. Edelmann responded that the location for the interpretive panel proposed in Derry has not been determined yet (See the *2019 MOA, Stipulation I*). The NHDOT has talked with the Town of Derry about historical treatments, but the treatments did not go further than the headwalls. The 2019 MOA, as the legally binding document between FHWA and the Advisory Council on Historic Preservation, does not include representation of landscapes, trains, or the Abenaki People. The goal is to keep the rail trail on the linear M&L Historic District corridor alignment, to retain continuity of the line.

Mr. Connors understands that the Town of Derry is not fully committed to the gravel path, that the Town will remove the gravel path, and that the Town is concerned with the steep grade(s) of the winding paved multi-use path. Mr. Connors asked the Town of Derry to speak to this. Ms. Edelmann replied that FHWA has stated that the Town would be required to maintain the gravel path if it is constructed as part of the federally funded project.

Mr. Connors requested that a different color be used to distinguish the gravel surface on the Rail Trail: Proposed Alternative graphic. The consulting team will update all figures moving forward to reflect the material change.

Mr. McCarthy spoke to grades and slopes. The maximum grade is 4.96% on the section of the paved multi-use path next to Ferland Drive. Where the paved multi-use path goes down, around, and under the bridge, the grade is 4.71% up on northern side. The grade is 2.1% where the paved multi-use path is parallel to Folsom Road. Up along North High Street, the paved multi-use path grade is about 2.8% as you come from bottom, toward Folsom Road. Further south the grade is shallower, at 1.1-1.5% grade as it connects to the existing Rail Trail. The gravel multi-use path on either side of Folsom Road is steeper, at 4.3% grade south of Folsom Road and 3.9% grade north of Folsom Road. Ms. Stuart added that the proposed grade height of Folsom Road would be lower than what was previously approved because there is no need to accommodate the tunnel.

Ms. Stuart presented the aerial graphic, calling to attention the partial stonewalls. Two of the stonewalls, colored green and blue on the graphic, are proposed to be reconstructed. The wall reconstruction will involve the use of stones from the third stonewall, depicted in yellow. Ms. Stuart emphasized that the stonewalls are assumed to be features of the M&L Historic District.

An additional M&L Historic District feature is an extant telltale.

Ms. Stuart showed site photos of existing conditions, including the north side of Madden Road, the worn pedestrian footpath, the culvert, and the telltale. Historic maps identify the telltale on the south side of the trail. The railroad right of way in the project area is not continuous due to the overgrown vegetation in the path and the intervening realignment of North High Street. While there is a culvert at Madden Road, the culvert is not appropriate for pedestrian or bicycle passage. There is a worn, informal pedestrian footpath around the culvert which indicates that most trail users bypass the culvert.

Ms. Stuart reviewed the identified intact historic railroad features, including the stonewalls. Only two stonewalls will be re-introduced to landscape the area. The two stonewalls will be temporarily removed during construction, and reinstalled/reconstructed at or near their original locations, per the NHDOT Stonewall Policy. The telltale will need to be temporarily removed during construction. The reinstallation of the telltale could be added to the amended MOA stipulations. Ms. Black requested that the loss of the stonewall be incorporated into the adverse effect evaluation because it is another extant feature being lost and needs to be accounted for. This information will be included in documentation moving forward.

Pete Walker (VHB) reiterated that the Project Team is inferring that the stonewalls are associated with the railroad, but that there is no clear documentation. Ms. Stuart added that while no historic maps prove the association, we are being conservative in the effects evaluation.

Ms. Stuart presented the Criteria of Adverse Effect table, reminding attendees that the original Section 106 process did not include the effect table format because it is a recently implemented review format often required by NHDHR. Ms. Edelmans explained that the column on the left includes language directly from Section 106 regulations. The evaluation applies the regulations and identifies project effects. Statements (i), (ii), and (iv) apply. The other statements do not affect the resource, hence the N/A entries. The recommended finding is *Adverse Effect*.

Mr. Connors voiced disagreement with the statement for (iv) under the evaluation column, which reads that, *“The portion of the property included in the Project is currently not in use for rail-related purposes and is not continuous. The project will re-establish an open corridor, which does not currently exist, for use as a multi-use path.”* Ms. Edelmans responded that the statement is a finding and that the immediate area being impacted does not clearly resemble a historic railroad district. Ms. Stuart added that NHDOT and VHB intentionally used the term “open” rather than “non-existent” because the property is still there but does not read as an open historic corridor due to the overgrown nature. The project will still have an adverse effect on the M&L Historic District. Reconstruction of stonewalls is not a new development and has been carried through final design.

Ms. Stuart showed a graphic depicting the railroad right of way (which is also the boundary of the historic district) with call out boxes identifying the portions where the new gravel path would deviate from (yet remain adjacent to) then realign into the railroad corridor. Mr. Connors commented that the 50% portion that is going outside the railroad corridor seems misleading since the primary multi-use path is the Shields Brook path. Only a small percentage of the proposed alternative is within the railroad corridor. The gravel path should not be the only

project component considered in the percentage. The paved trail should be considered. Mr. Walker added that the intent was to compare what was approved in the [2020] Record of Decision (ROD) and [2019] MOA. The original tunnel also deviated from the railroad corridor. The new gravel pathway is more linear than the previous tunnel concept.

Ms. Black stated that the proposed alternative was previously an informal idea that seemed to meet the original thoughts and consultation feedback. It would be helpful to develop a rendering of what this area would look like (i.e., where the gravel path intersects with the roadway and where the paved trail deviates) to confirm that what NHDHR is envisioning will meet NHDHR's original thoughts/intent. The rendering may also help to clarify what is happening for Consulting Parties and other concerned parties.

Ms. Edlmann asked if rail could or other visual elements be put on the gravel path to help trail users visualize the railroad corridor, especially along road.

Mr. Connors wants to see the rendering include the trail width, gravel path, roadway, and six lane crossing, in contrast with what the tunnel would have looked like.

Mr. Sikora replied that under either option the gravel path was proposed and is in agreement that renderings would be helpful.

Mr. Walker brought to attention that Mr. Connors had asked about mitigation earlier in the meeting. The MOA has requirements to mitigate and offset effects. It would be helpful if we discuss mitigation and review what the existing MOA says and potential modifications to the MOA.

The 2019 MOA Stipulations I and II were reviewed. Stipulation I still applies. The details of the panels (e.g., size, location, content reviewers) can be developed further. Stipulations II may provide for visualization of the historic railroad corridor. Railroads had great signage and posts with flags, and the stipulation could consider incorporation of other aesthetic treatments along the corridor. Stone walls are covered under Stipulation III.

Mr. Connors stated that he would have wanted to be at the table before this point in the process. At this time in the meeting, Mr. Connors presented a testimony for the project record. Ms. Edlmann requested a copy of Mr. Connors' testimony, provided in Attachment C. Denise Pouliot (Cowasuck Band of Pennacook-Abenaki People) stated that the proposed alternative is a dramatic change from what was previously approved. Ms. Pouliot expressed that the reviews will need to start again, and their Council will need to approve the new design. Ms. Pouliot asked how long the Section 106 process would be open. When asked about the review timeline, Ms. Pouliot stated that the next Council meeting would be in 45 days. Ms. Pouliot will need more than 45 days to present comments and adequately review. Ms. Edlmann asked Ms. Pouliot to share the council meeting dates so that NHDOT can ensure material is shared before council meetings.

Dave Topham (NH Rail Trails Coalition) brought up that this project [Contract B] was scheduled to go out to bid in October 2023, but that the bid date is now March 2024. Mr. Topham voiced

opposition over the gravel path, noting that the gravel pathway does not meet the need of the overall project as it impedes motor vehicle traffic.

Ms. Edelman concluded the meeting by summarizing the next major steps, including working through Section 106 impacts and mitigation, and the NEPA written re-evaluation. Materials will go out to Consulting Parties.

Mr. Walker asked about DHR's concurrence with the effect finding. Ms. Black stated that NHDHR concurs with the *Adverse Effect*, as the overlay of the roadway on top of the railroad corridor results in an Adverse Effect and nothing would likely change the overall finding and has signed the effect tables cover sheet. However, NHDHR wants to review the details of the proposal. Mr. Sikora agreed and noted that a rendering would be helpful to re-evaluate the [Section 4(f)] net benefit.

Dave Trubey (NHDHR) voiced that as part of Section 106 process, all Consulting Parties should be provided ample opportunity to prepare and comment.