

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF RAIL AND TRANSIT**

FIELD REVIEW REPORT

DATE OF FIELD REVIEW: October 10, 2013

LOCATION OF REVIEW: Proposed Warner Rail Trail – Bagley Field to I-89 Exit 9 Interchange



For more, See <https://www.facebook.com/CLSRT/>

PARTICIPANTS:



Photo by Bob Lapree See updated pictures page 11

Left to Right:

John Dabuliewicz - Warner Conservation Commission

Larry Keniston - NH DOT

Darren Blood - Warner Energy Committee

Erik Paddleford - NH DOT Bike/ Ped Tech.

Mike Lambert - Wetlands Soils Scientist, Rail Trail Development of Henniker Branch of the Concord - Claremont Line

Greg Bakos - VHB, board member of Bike Walk Alliance of NH

Tim Blagden – Field Review Coordinator, Executive Director of the Bike Walk Alliance of NH, Member of the Friends of the Concord-Lake Sunapee Rail Trail, Warner Resident

Rich Radwanski - NH DOT District 5 Engineer

Nancy Martin - Chair, Warner Conservation Commission

Sue Hemingway - Warner Energy Committee, Friends of Concord-Lake Sunapee Rail Trail, Central NH Bike Coalition, Concord Area Wellness Coalition

Craig Tufts - Central NH Regional Planning Commission

Peter Ladd - Landowner, Timber frame builder, Warner Resident

Leigh Levine - Federal Highway Administration, Planning and Development - NH Division

David Russell - Engineer, Warner Resident

Lynn Madigan - Warner Youth Sports Association Board member

Clyde Carson - NH Representative, Warner Selectman

Kristen Riley - Friends of the Concord-Lake Sunapee Rail Trail, Warner Resident

Katherine Riley Blagden - Warner resident, trail user.

Bob Lapree (taking photo) - Hopkinton Open Space Committee, Hopkinton Conservation Committee

SUBJECT: Proposed Warner Rail Trail Field Walk and Review

PURPOSE: To obtain consensus regarding the routing of a multi-user trail linking Bagley Field with Riverside Park, Downtown Warner, and the Exit 9 commercial area in Warner.

NOTES ON FIELD REVIEW:

On Thursday October 10 2013, Tim Blagden, led a field review group along the route shown on the above map, which follows the former Concord and Claremont Railroad corridor. This report was written to document current site conditions, discussions, and other information obtained during the field review. Google map links are provided throughout the report to as a visual reference to the various trail areas reviewed.

Start Location – Bagley Field

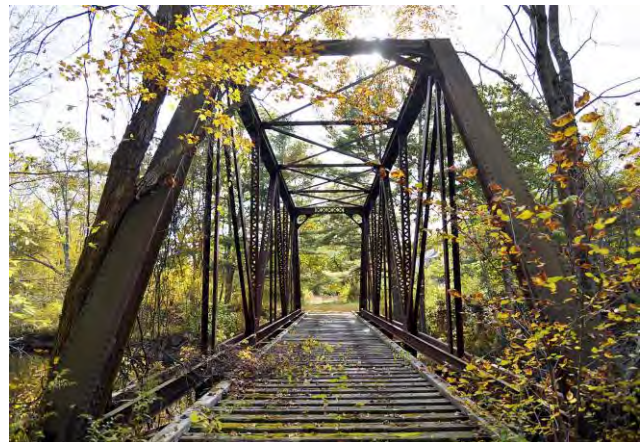
Bagley Field located off of Route 103 in Warner, NH served as the starting point for this field review. Bagley field is one of two playing field locations (the other being Riverside Park) in the town, used heavily by children's athletics. Following group introductions, Tim Blagden briefed the group on the route of the approximately 3.5 mile segment of proposed rail trail from Bagley field to the I-89 Exit 9 area via large printed maps of the proposed route on display. Tim explained that the

highest priority is to link Bagley field with Riverside Park, which is located approximately 2.5 miles to the northwest. Both Bagley field and Riverside Park are important destinations for town residents for their athletic fields and recreational space. Linking these priority areas by a multi use trail would allow adults and children the option of using non-motorized transportation through town while being separated from the motorized traffic on Route 103. Several town citizens, who are parents with children that use the park's playing fields, were among those present for the field review to show support for the trail's development. Beyond linking the two parks, a connection to the I-89 Exit 9 Interchange area further north would provide non-motorized access to other destinations important to town residents, including grocery and convenience stores and eventually link with the Town of Bradford and Lake Sunapee in the Town of Newbury. South of Warner, the proposed trail would link to Hopkinton and the village of Contoocook, and eventually to Concord.

Bagley Field to Trestle Over the Warner River

The group started the walking review by traveling on the former rail bed northwest toward a trestle crossing the Warner River. This segment is relatively clear of overgrowth as it traverses town owned property prior to reaching the trestle, which is currently not suitable for safe non-motorized travel. Warner Town Administrator, Jim Bingham, has submitted a grant application to the New Hampshire Bicycle and Pedestrian Grant Program to make safety improvements to the trestle to allow for bicycle and pedestrian traffic and to perform clearing work on the former rail bed. In addition to the possible grant funding, the Nancy Sibley Wilkins Town of Warner Trust has also made a donation in support of this project.

See updated pictures page 11



I-89 Southbound Bridge, looking northwest

Trestle to I-89 Southbound Bridge over Warner River

The group continued over the trestle along the former rail bed, which is now overgrown with brush and trees but still readily visible. The rail bed is easily followed all the way to its intersection with the Warner River. The river was relocated in the area during construction of I-89 and so the proposed rail trail route diverges from the rail corridor and continues along

the northeast side of the river. The proposed trail route would cross beneath the Southbound I-89 bridge. "Benching" the proposed trail into the riprap slope under the bridge may be the most cost

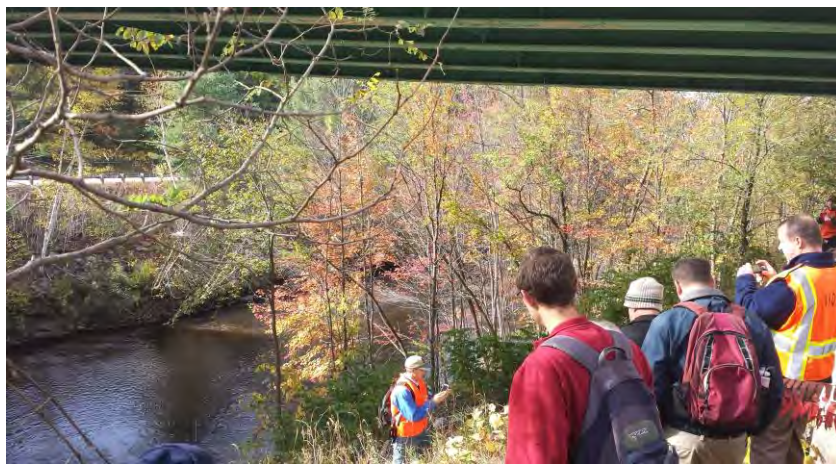
effective option for constructing a trail. Photos of a similar situations where trails were retrofitted, within existing bridge infrastructure is included at the end of this document.

I-89 Southbound Bridge Over Warner River to Route 103 Bridge Over Warner River

Passing under the bridge, the trail route enters the median of I-89, and continues north towards the I-89 northbound lanes. Approaching the northbound lanes, the river meanders northwest in relatively close proximity to the highway, creating limited space for trail construction through this area.



I-89 Northbound Bridge



Route 103 Bridge, looking west

Route 103 Bridge Over Warner River to I-89 northbound Bridge Over Warner River

Continuing in the I-89 median, to the west of route 103 are steep slopes adjacent to a cemetery and south of the I-89 northbound travel lanes. The former rail bed was not evident, since it was used for the development of I-89 here. No rail corridor and the steep slope



From here, the proposed trail would continue west, within the I-89 median, through a wooded section between the river and the highway towards Route 103. The trail would be routed beneath the Route 103 bridge that spans the river and the southbound lanes of I-89. The trail would be constructed along the riprap slope under the bridge, similar to the bridge discussed previously.

and overgrowth in this area made walking difficult. Due to the steep slope and the potential difficulty and cost of constructing a trail into the slope, field review participants felt the most logical and cost effective location for trail construction is at the base of the slope. Trail construction at the base of the slope would also likely involve impacting wetlands and therefore, require [permitting](#) through the Department of Environmental Services (DES).

Participants continued west along the sloped wooded area for approximately 0.5 miles to the I-89 northbound bridge over the Warner River. The trail would, again be routed under the bridge along the slope. After crossing beneath I-89, continuing northwest, and exiting the I-89 median area, the former rail bed becomes intact.

Town Owned Parcel to Depot Street

Participants walked toward a Town owned parcel, which may be the potential future location of the Warner Fire Department.

A privately owned parcel exists northwest of the town-owned parcel. The rail corridor continues along the north side of this private parcel adjacent to a field. Crossing this parcel leads to West Joppa road where proper signage and road and trail



Privately Owned Parcel - looking east from W. Joppa Rd.

markings should be used to identify an appropriate crossing of West Joppa Road. Continuing west of West Joppa Road, a trail exists that is not located on the former rail corridor, and is privately maintained and used by town citizens for transportation and recreation. This trail is south of the former rail corridor, but eventually connects to the corridor roughly 0.10 miles west of West Joppa Road and intersects with Depot Street near the former depot building, now repurposed as an apartment building.



Looking west from W. Joppa Rd. See updated pictures page 11

Riverside Park is located on the south bank of the Warner River, across the river from the former depot. In order to make this priority connection

happen, the town is interested in installing a pedestrian bridge over the river somewhere in this area to provide a connection from the proposed trail to the park.

Depot Street/ Chemical Lane to I-89 Bridges Near Exit 9

Located just west of the former depot and east of the North Village Road bridge over the Warner River is a dilapidated bridge. While the bridge is currently accessible by bicycle and pedestrian traffic, the business operator located on the property at the north end of the bridge is reluctant to allow use of the bridge for liability reasons. Estimates to upgrade the bridge have been cost prohibitive, making the likelihood of this bridge being incorporated into the proposed rail trail system unlikely.



Former Motor Vehicle Bridge

Beyond the former Depot, the former rail corridor is occupied by Depot St./ North Village Road/ Chemical Lane to the point where the road turns to the north. The proposed rail trail route would follow the road until linking back up with the rail bed further to the northwest. Bicycle route signage and possibly sharrows could be installed on this on-road segment to direct trail users to the next trail segment as they enter the roadway.



Clear Trail from Willey Lane to River at Exit 9

Continuing west-northwest, Chemical Lane crosses the Warner River. The proposed trail runs north, where the former rail bed can be picked up again on the west side of the road. At this point, the rail bed runs adjacent to a private residence.

After Chemical Lane crosses over the Warner River, it turns to the right and becomes unpaved. After the right turn, a left turn into a private residence provides a physical route back to the rail corridor. The rail bed continues northwest adjacent to privately owned property southwest of Willey Lane. This segment of trail from the area of Willey Lane to the I-89 northbound ROW and the Warner River near the I-89 exit 9 interchange is clear of overgrowth.

A pedestrian bridge over the river would be needed in the vicinity of the I-89 bridges over the Warner River in order to continue to follow the rail corridor west. A bridge location just downstream of the I-89 bridge and upstream of Stevens Brook, a tributary feeding the Warner River from the North, appeared to be the best location a bridge. A short trail segment connecting the main trail to



I-89 Bridges Near Exit 9 – looking downstream

Route 103 here would allow trail users access to nearby destinations including grocery and convenience stores and restaurants. A park and ride facility is also located across Route 103. A traffic-calming project is currently being designed for the intersection of Route 103 and the business driveways. A roundabout option is being considered, which would calm traffic and improve safety for bicyclists and pedestrians. There are currently no sidewalks or crosswalks along Route 103 near these destinations, creating a hostile environment for non motorized transportation.

Once across the north side of the river the former rail corridor runs roughly west. The proposed rail trail would intersect with and use Waterloo Street as an on-road trail segment through this area. The use of way-finding signage would be helpful to direct trail users to the next trail segment. The field review concluded at the end of Waterloo Street.

COMMENTS:

Leigh Levine, of FHWA had the following comments:

Keep the NHDOT Bridge Bureau staff involved in further discussions, be familiar with and follow all applicable New Hampshire law and consider all other available alternatives. FHWA would need to approve any access break/moving Control of Access lines/fencing.

Some other considerations as follows:

- Trail/pedestrians/users cannot negatively impact the Interstate.
- Implementation must address highway traffic safety as well as trail user safety.
- Trail access should be revocable if warranted due to Interstate needs.
- Trail access should not set up future [Section 4\(f\) issues](#) (trail should be identified as a bike/pedestrian transportation facility).
- The trail should have positive separation (fencing?) between Interstate traffic and trail users (motorized or non-motorized?).

Warner trail friends should communicate closely with NHDOT planning and project development. This project could involve complex environmental permitting and right-of-way acquisition (public and private property) in addition to the considerations related to accessing the Interstate and other items listed above. Funding for trail development projects in New Hampshire is competitive. Next steps may involve a more detailed assessment of the trail and highway traffic safety needs, natural and cultural resources and potential impacts, permitting needs, ROW needs, design options, estimated costs, etc. Considering the scope of the potential trail, a phased approach will be needed. Project sponsors may be interested in pursuing funding through the TA or RTP programs.

FHWA offers guidance on shared use paths along or near freeways, etc. that may be useful:
https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/freeways.cfm

Mark Richardson of the NHDOT Bridge Design Bureau had the following comments:

1. Any alterations to the riprap and embankment under the bridge to accommodate a recreational trail should be designed by a licensed professional engineer/engineering firm with appropriate experience to ensure that all potential concerns and issues are addressed.
2. Bridge Design Staff may provide guidance. However, there may be different solutions developed by others that would work as well and might be less costly than initial concepts.
3. Bridge Design must review any proposed changes to the embankment and riprap in the vicinity of the bridge resulting from construction of this trail.
4. The designer should ensure that all slopes (currently riprapped or not) are adequately protected from scour action and erosion, whether from a flood event affecting the river or from roadway runoff from regular or extreme precipitation.
5. The designer should also ensure that there is sufficient vertical clearance between the riding surface of the trail and the bottom of the lowest structural steel of the bridge. If snowmobilers use this trail during the winter season, the designer should include provisions for large snow grading vehicles as well.
6. The proposed work should follow best management practices for erosion control measures, etc. during construction as required by NHDDES.
7. There should be some type of MOA between the NHDOT and the Town to ensure that the Town accepts all responsibility and liability regarding its use and maintenance.

Richard Radwanski, NHDOT Highway District 5 Engineer had the following comments:

It appears that the conceptual crossings under I-89 SB, NH 103 and I-89 NB beneath the respective Warner River bridges along the north bank of the river may be feasible. Positive fencing would be required where the trail is otherwise easily accessible to the I-89 barrels and natural barriers such as

steep slopes and walls do not exist. Request approval from the Commissioner by approaching District with the plans for review, then District will distribute through Rail and Transit to Highway Design, Bridge Design, Right of Way and FHWA for review and comment.

MULTI-USE TRAIL EXAMPLES:

Below are examples of other trail locations that may be similar to what could be constructed in Warner.

Pictures 1 and 2 show the Souhegan River in Merrimack, NH under the Everett Turnpike. Both slopes along the river were retrofitted with trails benched into the riprap slope. Merrimack was able to purchase the bridge from the City of Portsmouth for \$10k. The horizontal clearance on the bridge is 6 feet. The contractor for the highway rehabilitation project was a local resident who volunteered to transport the bridge and place it while working on the Turnpike bridge project.

Picture 3 shows a trail constructed adjacent to 393 in Concord, NH, similar to what would be needed in the area of limited space between the I-89 and the Warner River in Warner.

Pictures 4 and 5 show a trail constructed beneath I-91 in Newbury, VT. The slope was retrofitted with a trail into the riprap slope.



1. Souhegan River, Merrimack



2. Trail along Souhegan River, Merrimack



3. Trail in close proximity to 393, Concord , NH



4. Trail Under I-91 in Newbury, VT.



5. Trail Under I-91 in Newbury, VT.



6. Trail located in Springfield, VT.

Support Letters from Simonds School, Warner Energy Committee, Warner Youth Sports Association (WYSA), Rural Heritage Connection (RHC) of Bradford – See <https://www.nh.gov/dot/programs/bikeped/documents/WarnerSupportLetters.pdf>

Additional pictures – November 9, 2017 Report Update of Progress. Continued on next page.

Submitted by

\s\ Erik H. Paddleford

cc (email):

S:\Rail-Transit\BikePedProgram\Rail Trails\Warner Rail Trail\REPORT Warner Rail Trail Review\DRAFT_Warner_RailTrail_Review.doc

Additional pictures – November 9, 2017 Report Update of Progress – Pictures taken from East to West along improved sections of trail



Looking west toward Bagley Field



Looking east from new parking lot



Left - Looking east from just east of the newly re-decked Warner River Railroad Bridge - shown Right. See 2013 pictures on pages 1 and 3



Looking east toward West Joppa Road from just east of Depot Street. See 2013 picture Page 5