

VTrans Quechee Gorge Bridge Project Meeting
Hartford Town Hall, White River Junction
November 29, 2018

The public gathered at 6:30 pm on Thursday, November 29 in Hartford Town Hall in White River Junction. Jill Barrett introduced the night's meeting agenda and team members. Representatives from the team included VTrans Project Manager JB McCarthy, VTrans engineer Andrew Lemieux, engineers Amy Spera and Joe Gill of Gill Engineering, as well as public outreach staff Jill Barrett and Shawna Kitzman of Fitzgerald & Halliday, Inc (FHI).

JB McCarthy began the meeting with an overview of the project. He reviewed bridge history, capital program funding, and existing bridge conditions.

As US 4 is on the National Highway System, the amount of traffic at this site dictates 12-foot lanes and 8-foot shoulders per VT State Design Standards. These widths are simply not attainable without significant widening of the existing bridge which is outside the scope of this project. The existing curb to curb roadway width will remain at 30 feet. The sidewalks will be widened to 5-foot minimum clear width.

This rehabilitation project will address deteriorating elements of the bridge. These include joints, bridge abutment bearings, and weathered shale ledge disintegrating on bridge members. However, design to address shale ledge remediation are outside of Gill Engineering's existing project scope and will be addressed by a separate geotechnical consulting firm.

JB McCarthy reviewed the project schedule, including critical path and the next public meeting. The meeting is scheduled for March 2019 to review preliminary plan details. This meeting will be the last time the public will have input on bridge design.

Since the Quechee Gorge Bridge is on the National Historic Register, the rehabilitation will seek to minimize impacts to the historic bridge. No impacts to biological or archaeological elements are anticipated.

JB McCarthy displayed images of pedestrian barriers and netting options installed on bridges in the US and Canada. Steel netting installed 15-20 feet below the bridge would preserve gorge views, but there are many challenges with netting. The steel cables and protective coat are not manufactured in the US. VTrans is required by the Federal Highway Administration, who will provide 80% of the funding for this project, to purchase American-made products. A specialist designer would be required to design the netting. Additionally, lights, cameras and motion sensors would be needed and would require ongoing management and maintenance. Specialists would need to routinely inspect the netting, and inspections would be complex and costly endeavors. Advanced training to recover victims from the netting would be warranted. Furthermore, management of trash or debris caught in the nets would add ongoing management cost.

In light of the management challenges and additional costs, Mr. McCarthy said after considerable review, VTrans has decided it will not further pursue the netting option.

PJ Skehan, Executive Director at Hartford Area Chamber of Commerce, expressed surprise that netting is no longer considered an option. He thought this decision was made quickly and believes the historic groups would have something to say about a permanent fence on the bridge.

JB McCarthy welcomed community members to continue sharing their thoughts with VTrans during this public process.

Team engineer Amy Spera presented conceptual engineering plans for the bridge rehabilitation as well as construction phasing. She explained that during construction, trucks would be subject to a regional detour.

Ms. Spera showed several options of pedestrian safety barriers and encouraged people to comment on different designs that varied by color, shape of the top of the barrier and variations of steel design above and below the railing. Considerations include safety, with removable panels for emergency responders to easily reach victims or gorge hikers in distress, as well as aesthetics. Amy also showed curb railing and sidewalk design renderings.

Jill Barrett concluded the presentation and opened the floor to questions and concerns.

Questions and Comments

Pedestrian Barrier Design

While I'm disappointed with VTrans' decision against netting, a barrier that is curved at the top would be more preventive than an angled or straight option.

Strengthening the vertical steel bars and eliminating the top bar is a good idea.

It's easy to get used to the [temporary] fence. Green curved railing would most similarly mimic the temporary chain link fence, which we're getting used to.

There are considerations beyond the engineering. I recently witnessed four teenage boys stand on top of the bridge railing and hang over the sidewalk from the temporary chain link fence, as people drove by. There is no room for distracted driving on this bridge. The parents were present, but not paying attention, until we alerted them.

Did the fence hold the weight of the teenagers?

Yes

A curved rail would necessitate people to reach backwards, which is very difficult – this would be best prevention.

Can first responders still use the crane truck to reach victims with netting and fencing in place?

Officer Kasten: *The fence would allow us to use this equipment. The netting would require retractable features (similar to the solution in Ithaca, NY). Cold winter temperatures would present difficulty.*

Sidewalk Design

What's the height of pedestrian barrier adjacent to the roadway? If it's too short, people can trip backward into the roadway.

Twenty four inches. A larger, 5-foot wide sidewalk should help too.

The short pedestrian barrier is concerning; people fall off cliffs taking selfies.

Joe Gill: The higher (approximately 3-foot high pedestrian barrier) is still under consideration. Steel tubes, potentially galvanized, would negate the railing curving. The intention is to make the sidewalk as wide as possible.

Snow Removal

Sidewalk snow can build up and form natural leverage to reach over the railing. How is the state planning to manage snow removal with a sidewalk barrier?

JB McCarthy: VTrans would not be responsible for regular snow removal from the sidewalk, although the Town or area businesses could potentially secure a separate contract to manage snow removal.

You could install seasonal sidewalk barriers at each end of the bridge to keep pedestrians off the sidewalk when it has snow and ice on it.

Currently VTrans removes snow from the sidewalk when it builds up and interferes with plowing. This may be done a few times each year. With a year-round sidewalk barrier, snow removal cannot be done with a front loader.

Pedestrian Safety

Police Chief Kasten: Thank you, JB, for addressing the high crash rate on and around this bridge. Many of the crashes are pedestrian related, especially due to the high pedestrian volumes and minimal sidewalks. This project warrants more consideration of pedestrian safety. Speed and driver distraction are both issues. On the east side of the bridge the wide shoulder leading to the Visitor's Center becomes a de facto sidewalk. I would like the Hartford Police Department to work with VTrans on traffic calming measures.

It would be nice for a sidewalk to extend from the bridge to the Visitor's Center, and perhaps the pedestrian crossing could be moved away from the bridge. More sidewalks throughout the village are needed.

JB McCarthy: We will address the railing and other design elements as we proceed.

Utilities Over Bridge

Is anything changing with the municipal water system? Will there still be a water line on the bridge? Is there a possibility of installing a sewer line too? Now the sewer line ends on the west side of the bridge. The businesses in Quechee village are all on septic. Someday we hope to get sewers for the businesses and would want the rehabilitated bridge to be able to accommodate this.

JB McCarthy: No known changes planned regarding water. The design team would need to evaluate.

This also requires further evaluation with the water management facilities.

Jill Barrett: We can follow up with Hartford's Town Manager.

The meeting adjourned at 7:50 pm.