



Putney

US Route 5

Bridge 15 over Sacketts Brook

PROJECT MILESTONES

- Permitting
Fall 2015
- Final Design Complete
Fall 2016
- Right-of-Way Complete
Not Applicable
- Bid Advertisement
Winter 2017
- Contract Award
Spring 2017
- Target Construction Schedule
Summer 2017

Putney STP DECK (38)

Project Location: Town of Putney in Windham County on US Route 5 over Sacketts Brook. The bridge is located near the intersection of US route 5 and Kimball Hill.

The Putney STP DECK(38) project will replace the existing bridge deck, which has non-crash tested bridge and approach rail, with a new bridge deck that meets current design standards. The existing structure is a single span cast-in-place deck on rolled beams constructed in 1954. It is approximately 54 feet in length and 32 feet wide. It features concrete parapets with a metal handrail along with an adjoining sidewalk. The bridge deck is in ‘fair’ condition while the superstructure and substructure are in ‘good’ condition. VTrans bridge inspectors have observed areas of heavy saturation, cracking, and efflorescence in the deck which is evidence of significant concrete deterioration. The bridge is owned and maintained by the State of Vermont.

VTrans evaluated several alternatives to preserve and extend the service life of the Putney US Route 5 Bridge 15 in an engineering study completed in January 2016. The study assessed the proposed design criteria for lane and shoulder widths, safety criteria and historic requirements. Several alternatives were considered including, no action, concrete deck patching and a deck replacement. The study also considered a number of traffic maintenance options such as a short term bridge closure and phased construction. The engineering study recommends replacing the existing bridge deck and bridge approach rails while traffic is maintained on an offsite detour for a 10 day short term road closure. This innovative approach will minimize impacts to right-of-way, utilities and environmental resources as well as minimize traffic disruptions while increasing the safety of the traveling public and construction workers.

The new bridge deck will be constructed using prefabricated bridge components to facilitate rapid replacement. The new bridge deck will be the same width, provide a greater load carrying capacity and feature a historic bridge rail that meets safety criteria and ties into the surrounding environment. By applying this cost-effective treatment at the right time, the useful life of the structure will be extended another 30 to 40 years. This provides the largest benefit for the lowest cost when compared to the other bridge treatment alternatives.



Looking South Over Bridge

Target Construction Schedule: It is anticipated that this project will take place in 2017. The allowable bridge closure period will be 10 days to be coordinated with the Town of Putney, local businesses and other key stakeholders.

Contractor: TBD

Estimated Total Project Cost: TBD

VTrans Project Manager: Jennifer Fitch, P.E. (Project Initiation); Rob Young, P.E. (Design and Construction)

VTrans Resident Engineer: TBD

Maintenance of Traffic: The bridge will be closed for 10 days, and traffic will be maintained on an offsite detour. The detour for this project location, shown below, has an end-to-end distance of 22.30 miles which is approximately 27 minutes. The State of Vermont will be responsible for signing the detour route.

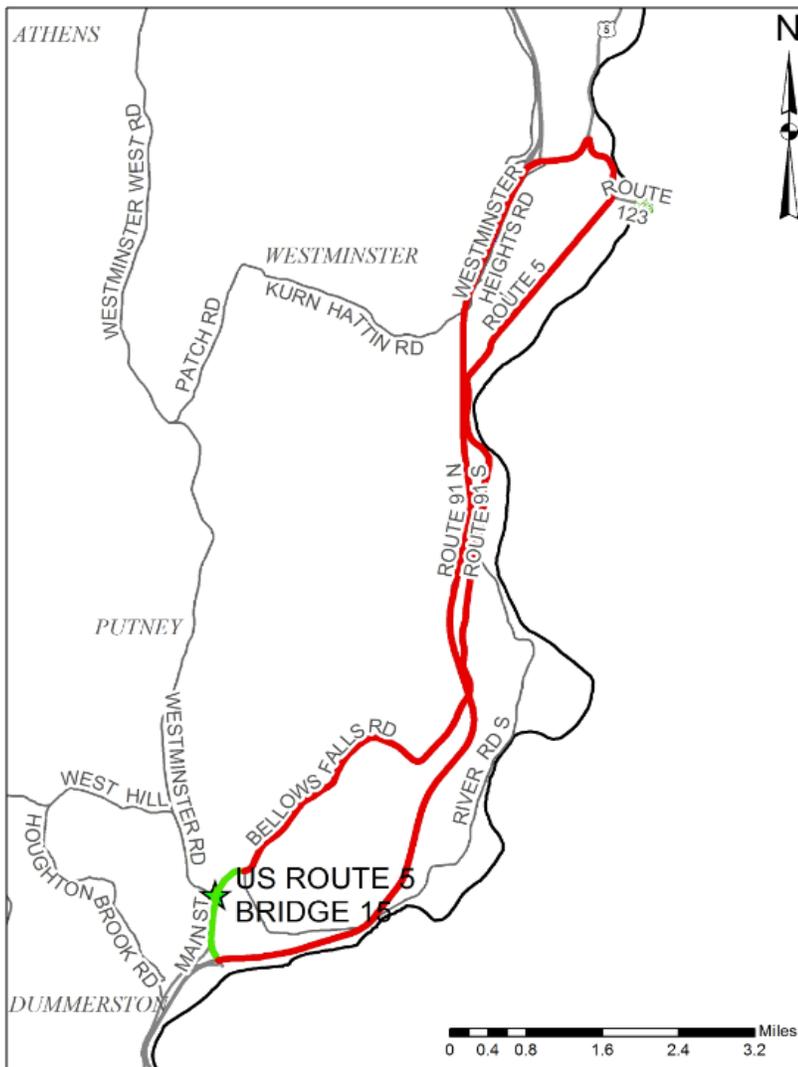
A potential local bypass will be coordinated with the Town of Putney.



Deterioration in Bridge deck 2015



Most significant deterioration



Bridge Location/ Detour Map



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