Project Factsheet August 2016

VERMONT
AGENCY OF TRANSPORTATION

Richford, VT- Sutton, PQ

VT 105A, Bridge 3

Richford-Sutton Bridge 3 – BHF 0814(1)

Project Location: Bridge 3 is located on VT 105A over the Missisquoi River directly on the United States and Canadian border between Richford, VT in Franklin Country and Sutton, Province of Quebec.

The Richford-Sutton Bridge 3 project will rehabilitate the existing bridge over the Missisquoi River, which has deteriorating components in the deck, superstructure, and substructure elements. The existing bridge is a two-span structure built in 1929, with the first span being a 51-ft steel rolled beam structure and the second span being a 151-ft steel truss. The bridge spans over the border between the United States and Canada, with approximately 80% in the United States and 20% in Canada. The existing approach span has substantial corrosion to the metal grid deck, rusting of the beams, and concrete cracking in the skeletal abutment. The truss span also has significant deterioration of the metal grid deck, as well as truss components with section loss in need of repair or replacement. Currently the bridge is posted for a weight limit of 5 tons.

VTrans evaluated alternatives for rehabilitation or replacement of the bridge in an engineering study completed in October 2015. The study assessed the proposed design criteria for the bridge and roadway alignment, right of way impacts, hydraulics and historical and archaeological resources. Several alternatives were considered for this project including no action, deck replacement, superstructure replacement, and full bridge replacement both on and off alignment. Given the historical significance of the truss and the limited truck traffic utilizing the structure, the engineering study recommended a bridge rehabilitation project preserving the existing truss span.

The rehabilitation project will consist of the replacement of the entire approach span with a new partial-filled grid deck system supported by new steel rolled beams. A new abutment on piles will also be installed at the south end of the bridge. The existing truss span will be rehabilitated with a new partial-filled grid deck system and new steel members will replace significantly deteriorated members. The remaining truss will be cleaned and painted. The rehabilitation will also include substructure repair work to the existing pier and abutment at the north end of the bridge. The bridge will have two, ten-foot travel lanes with new bridge rail to improve the safety on the bridge.

It is anticipated that the bridge will be constructed in the summer of 2018. During construction the bridge will be closed to traffic and detoured around the project.

PROJECT MILESTONES

Preliminary Plans
October 2015

Permitting
April 2017

Final Design
April 2017

Bid Advertisement
November 2017

Contract Award
December 2017

Target Construction Schedule
April 2018- October 2018

Existing Bridge Elevation View

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Target Construction Schedule: Construction activities will take place during the 2018 construction season (approximately April to October). During construction the road will be closed and the Canadian Border Station will undergo repairs, but it is anticipated that the United States Border Station will remain open during construction.

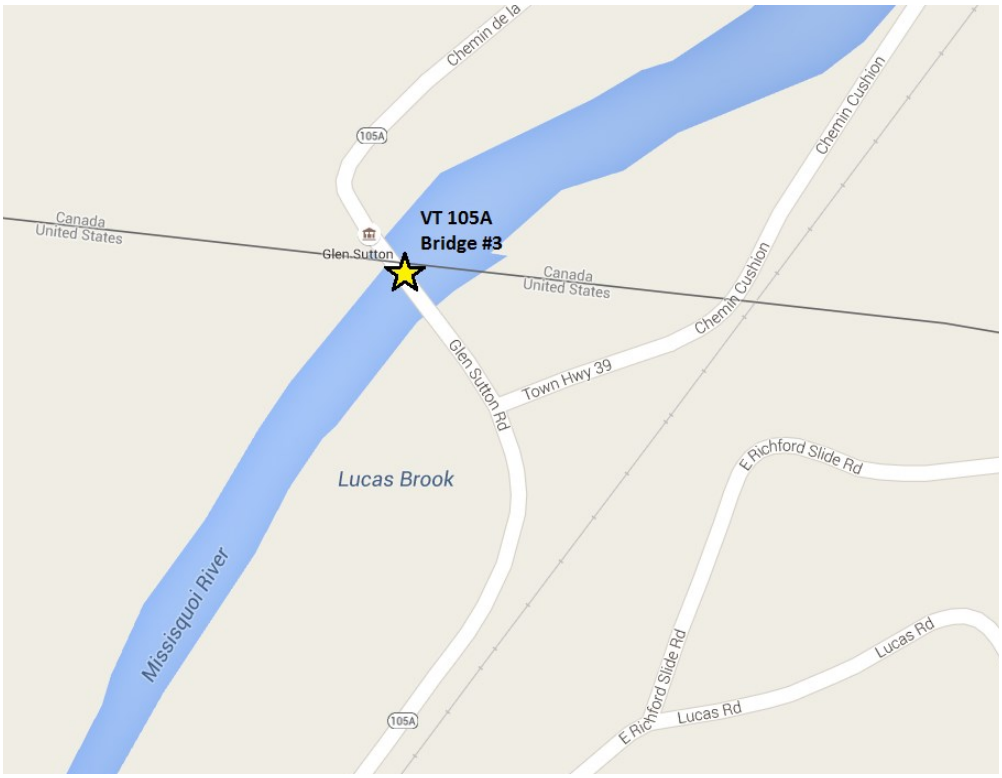
Contractor: TBD

Estimated Total Project Cost: TBD

VTrans Project Manager: Carolyn W. Carlson, P.E.

VTrans Resident Engineer: TBD

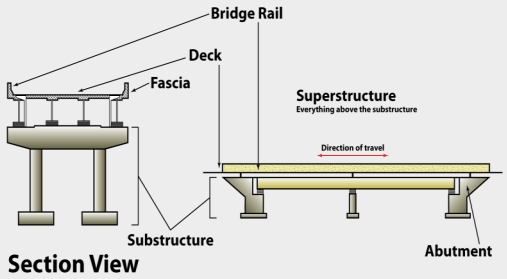
Detour Route: During construction the U.S. Border Station will continue to operate for traffic utilizing Town Highway 39 adjacent to the bridge. The contractor will be required to sign a detour utilizing state owned roads that will direct traffic to utilize VT 105 and VT 139 to the Richford-Abercorn border crossing in Richford, VT on VT 139.



Bridge Location Map

Poor Condition of Abutment #1

Deterioration of the Approach Span Beams



Generic Bridge Element Description

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For more details, click here.