



# Duxbury

## VT Route 100 Bridge C193

### Duxbury BF 013-4(47)

#### PROJECT MILESTONES

- Permitting  
Spring 2016
- Final Design Complete  
Spring 2016
- Right-of-Way Complete  
Spring 2016
- Bid Advertisement  
Spring 2016
- Contract Award  
Summer 2016
- Target Construction Schedule  
Anticipated to Begin July  
2016 through November  
2016

**Project Location: Town of Duxbury in Washington County on VT Route 100 over Crossett Brook. The bridge is located approximately 0.7 miles south of the intersection of VT Route 100 and VT Route 2.**

The Duxbury VT Route 100 Bridge C193 project will replace the existing bridge, which does not meet state stream equilibrium standards for bankfull width and has started to fail, with a new bridge that meets current design standards. The existing bridge is a multi plate metal pipe arch constructed in 1977.

VTrans evaluated alternatives for replacement of Duxbury VT Route 100 Bridge C193 and has considered the following criteria: Right-of-Way impacts, hydraulics, aquatic organism passage (AOP), traffic impacts, and constructability. Several alternatives were considered such as full replacement with a precast reinforced concrete box, full replacement with an integral abutment bridge, and full replacement with a 3 sided open bottom rigid frame/ arch. Given the site constraints and accelerated project schedule, an open bottom concrete frame was selected.

The new culvert will be a 28-foot by 8-foot precast concrete frame. The new precast frame will be wider with a natural stream bottom making it more resilient to larger storm events and provide aquatic organism passage (AOP). The culvert will be founded on spread footings 6 feet below streambed and pedestal walls to protect the structure from scour, otherwise known as the removal of sediment around the foundation during larger storm events. This new structure will be hydraulically adequate and meet state stream equilibrium standards.

Construction to replace the bridge will begin in July 2016 and continue through November 2016. Two way traffic will be maintained along a two lane temporary bridge. VT 100 will be reopened to traffic in November 2016. Site restoration and final paving will take place in the spring of 2017.



*Looking North Over Bridge*

**Target Construction Schedule:** It is anticipated that construction activities will begin in July 2016 and continue through November 2016.

**Contractor:** TBD

**Estimated Total Project Cost:** TBD

**VTrans Project Manager:** Kristin Higgins, P.E.

**VTrans Resident Engineer:** Tom Mancini

**Project Information Officer:** Francine Perkins, 802-479-6994

**Traffic Control:** During construction, traffic will be maintained on a two way temporary bridge off-alignment. VT 100 will be reopened to traffic in November 2016. Site restoration and final paving will take place in the spring of 2017.



Bridge Location Map



Roadway Settlement



Failing Invert

### LEARN MORE

**Project Information Officer:**  
Francine Perkins, 802-479-6994

<http://watp.vtransprojects.vermont.gov/>

Please refer to the project website for weekly construction updates. Register on the website to receive construction updates by email.



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