

To: Tim Timberman

From: Josephine Schuster, P.E.

Date: December 21, 2016

Re: Alternative 4 Addendum to Memorandum of Preliminary Hydraulic Findings
Replacement of Bridge No. 04575, Main Street Bridge over the Tankerhoosen
River, Vernon, Connecticut
State Project No. 146-199

This memorandum serves as an addendum to the preliminary hydraulic findings memorandum submitted on December 15, 2016. Subsequent to that submission, an additional alternative was investigated.

Alternative 4 is the reconstruction of the bridge at its existing location with an 11' lane and a 4' shoulder. This option retains the existing trusses on the existing masonry abutments. The proposed structure is built on stub abutments placed behind the existing abutments.

Because the existing trusses are retained, along with the transverse floor beams, the proposed low chords in this alternative must match the existing low chords. Since low chords match the existing, and the abutments are kept at the same location, this option is essentially the existing condition. The only change from the existing condition is a slight increase of the vertical profile, which would not have an impact on the model, since none of the design flows overtop the roadway. Therefore, a hydraulic analysis of this alternative is not necessary. The proposed water surface elevations for this alternative are the same as the existing. For a summary of water surface elevations, refer to the Existing Condition columns of data on tables 3 through 8 and tables 24 and 25 of the preliminary hydraulic findings memorandum.