



U.S. Department  
of Transportation

**Federal Highway  
Administration**

**JUN 30 2011**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

In Reply Refer To: HOTO-1

Janelle Anderson, P.E.  
Tort Claims and Traffic Standards Engineer  
Office of Traffic, Safety, and Technology  
1500 West County Road B-2  
Roseville, MN 55113

Dear Ms. Anderson:

Thank you for your April 4 letter requesting approval to experiment with enhanced delineation of crest vertical curves through the use of vertical chevron signs at several vertical curve locations in Washington County, Minnesota that exhibit a history of excessive speeds for the existing site distance despite the use of traditional signing measures.

The proposed experimental treatment consists using a modified version of the W1-8 chevron sign, with the chevron pointing downwards rather than to the side. These chevrons will be posted at a uniform spacing and height, providing at least three Vertical Chevrons visible with the intent that drivers will be better able to recognize the severity of the vertical curve and adjust their speed accordingly.

We have reviewed your revised proposal dated May 16, 2011 and we concur with it. Your experimentation is approved for a period of up to 2 years after installation of the signs. We have assigned this matter the following experiment number and title: "2(09)-14(E) - Vertical Chevrons for Vertical Curves-Washington Co MN". Please refer to this number in any future correspondence. We look forward to receiving your periodic interim and final reports on this experiment. If there are any further questions, please feel free to contact Mr. Eric Ferron of our MUTCD Team at [eric.ferron@dot.gov](mailto:eric.ferron@dot.gov) or by telephone at 720-963-3206.

Thank you for your interest in traffic operations and safety.

Sincerely yours,

Mark R. Kehrli  
Director, Office of Transportation  
Operations