

Refer to: HMHS

Dean L. Sicking, Ph.D., P.E.
Director, Midwest Roadside Safety Facility
Civil Engineering Department
P.O. Box 880601
Lincoln, NE 68588-0601

Dear Dr. Sicking:

In your March 12, 1999, letter to Mr. Richard Powers of my staff, you asked if a modification to two previously-accepted guardrail-to-bridge rail transition designs would be considered acceptable by the Federal Highway Administration (FHWA) without additional testing. Specifically, the modification consisted of attaching either one of the nested Thrie-beam designs accepted in my March 6, 1998, letter to Mr. Ron Faller of your staff directly to a vertical concrete parapet. The earlier designs incorporated a fabricated steel connector plate to allow a direct vertical-plane connection to a safety shaped parapet.

We have reviewed your proposal and noted that a Thrie-beam transition to a vertical concrete wall was the first priority of the State highway representatives participating in the FHWA-sponsored pooled fund study No. 2-134, "Testing of New Bridge Rail and Transition Designs." Since we believe your proposed modification will perform as well as the two accepted designs, and will be verified when testing is completed under the aforementioned pooled fund effort, we will consider your modification to be *conditionally* acceptable as a test level 3 transition pending successful completion of the anticipated pooled fund test(s). If any changes to your design are deemed necessary based on the outcome of our tests, we will notify you accordingly.

Our conditional acceptance is based on all other design aspects of the transitions remaining the same as noted in our March 6, 1998, acceptance letter, including the 100-mm high curb which we believe is needed to minimize the likelihood of wheel snagging on the end of the concrete wall. The enclosure shows the dimensions and reinforcing details of your modified design.

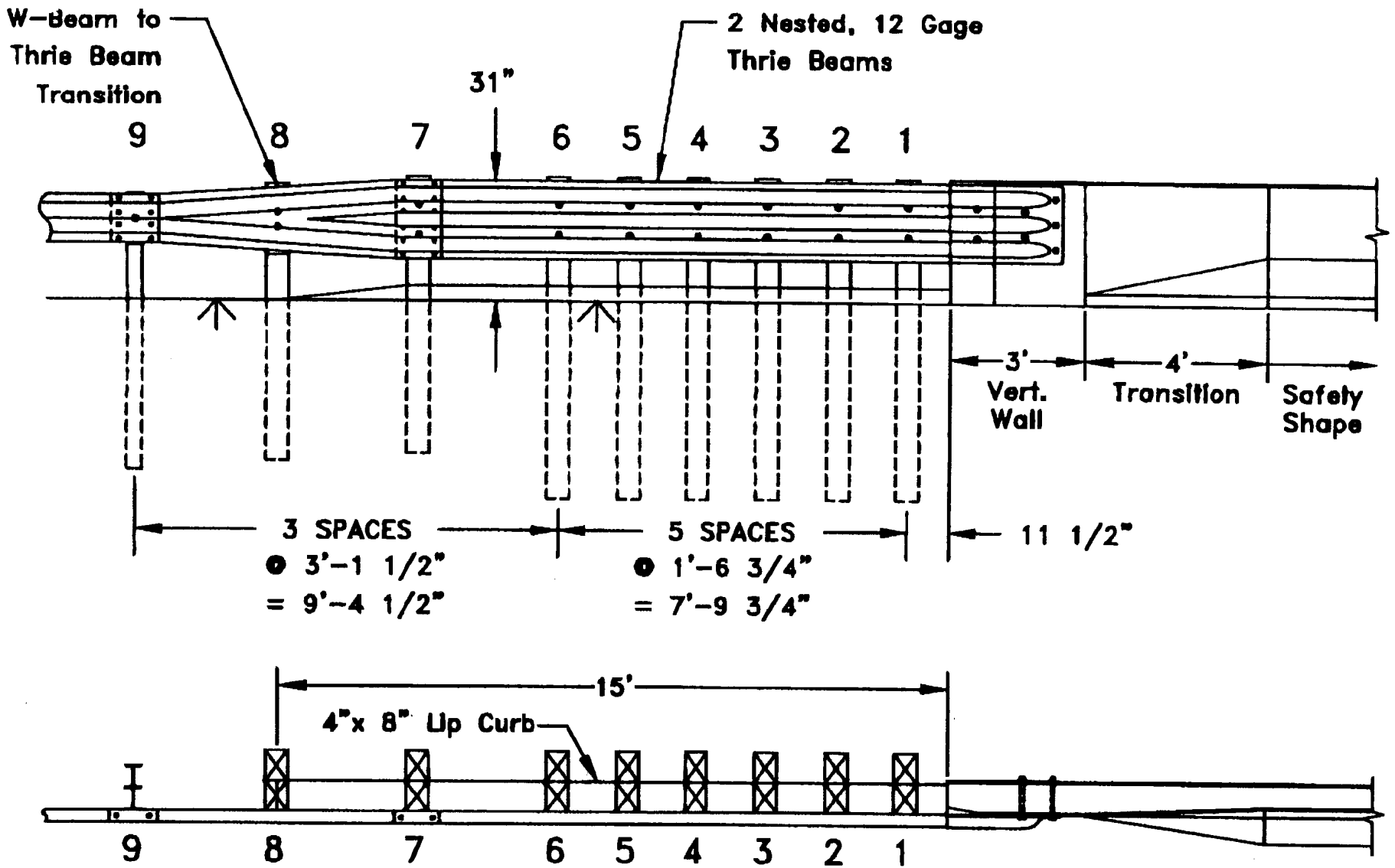
Dwight A. Horne
Director, Office of Highway Safety Infrastructure

Enclosure

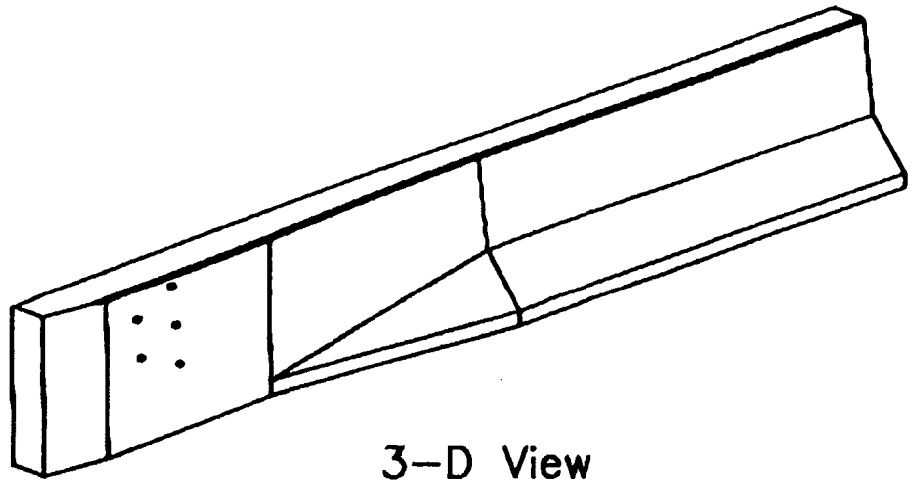
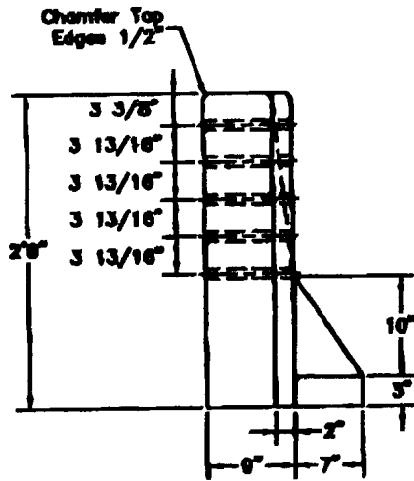
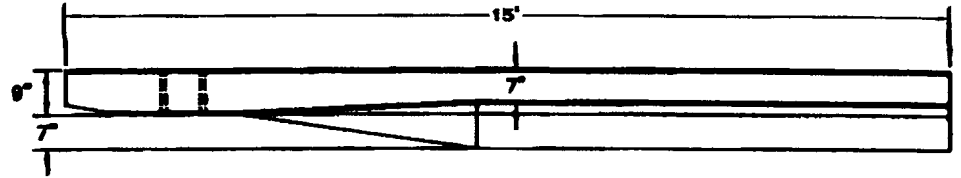
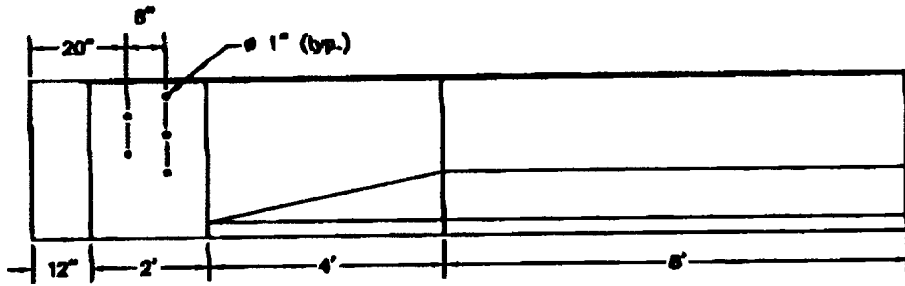
FHWA:HMHS:DPowers:db:x61320:5./25/99

cc: Reader - HMHS, Chron - HMHS
D. Powers - HMHS

File: B-47 (MOD-ITRAN)



MWRSF University of Nebraska C.E. Department	
ITRANS	
DATE: 5/28/00	
SCALE: none	
DRN: EAK	vw01103



MWRSF		University of Nebraska C.E. Department
ITRANS (Vertical Wall)		
DATE:	5/27/99	
SCALE:	none	
DRN:	FAK	vwall04