

Guardrail Committee Minutes

June 21, 2006

10:30 AM

Roadway Design Conference Room

I. Follow up to NCHRP Report 537 "Recommended Guidelines for Curb and Curb-Barrier Installations"

Based on findings from this report, should the Department's utility pole placement guidelines and the Roadway Design Manual be revised for curb and gutter sections posted less than 45 mph? (A copy of the Utility Pole Placement letter dated December 10, 2005, and section 1-7D (w/figure 4) from the Roadway Design Manual were attached as Attachment No. 1)

Action: Mr. Roger Worthington with the Utilities Section was invited to attend this meeting and provide his comments in regards to the new recommended guidance for utility pole placement. A lengthy discussion was held to discuss what changes need to be made to the Roadway Design Manual and if the December 10, 2003, letter concerning Utility Pole Placement needed to be revised. Mr. Worthington questioned the statement "All utility poles that are placed closer than 12 feet shall be breakaway poles." He thought the requirement for the use breakaway poles should have been based upon utility poles placed in within the clear zone with posted speeds of 45 MPH or less. Furthermore, he suggested that the letter concerning Utility Pole Placement not change and allow the Utilities Section to coordinate with the utility companies on a project by project basis. The Roadway Design Manual will not be revised at this time.

II. Weathered Guardrail Concerns

Review the letter titled "Discontinued Usage of Weathered Steel Beam Guardrail" that went out June 6, 2006. Also, review the Draft Project Special Provision for Steel Beam Guardrail (Painted Galvanized Steel). (A copy of the June 6, 2006 letter to PDEA and copy of the Draft Project Special Provision were attached as Attachment No. 2)

Action: The Guardrail Committee reviewed the June 6, 2006, letter addressing the discontinued usage of weathered steel beam guardrail. No comments were received. Concerning the Draft Project Special Provision for Steel Beam Guardrail (Painted Galvanized Steel), there were some recommendations/questions from the Guardrail Committee. Mr. Garry Lee has compiled a list of the comments and questions from the Guardrail Committee. He will forward these comments and questions to the Specifications Engineer, Ms. Norma Smith.

Follow-up: A meeting was held on August 2, 2006, between representatives from Roadway Design, Project Services, Materials and Test, FHWA, and Construction, to discuss concerns with the special provision for painted steel beam guardrail. Norma Smith is in the process of revising the special provision based upon the comments received. The latest version of the special provision will be provided at the next Guardrail Committee Meeting.

III. B-77 Updated

Review the letter sent out under Jay's signature and the Draft Roadway Design Manual update, which addresses the usage requirements for the Guardrail Anchor Units B-77, B-83 and Type III. (The June 15, 2006, letter for the Use of Guardrail Anchor Units (GRAU) B-77, B-83, and Type III and the Draft Roadway Design Manual update were attached as Attachment No. 3)

Action: *The Guardrail Committee Members reviewed both the Letter and the Draft Roadway Design Manual Update.*

IV. Follow up to Vegetative Maintenance Concerns

Discuss the current status (Memo to file dated May 8, 2006). Review the draft detail for Guardrail Placement at Median Sign Supports. Also, discuss Pavement Management's findings on how best to address adding pavement in front, beneath and behind guardrail. (The Memo to file dated May 8, 2008, the draft detail for Guardrail Placement at Median Sign Supports, three inset proposed typical section designs for paved shoulders, and copy of an email dated May 22, 2006, from David Harris to Ron Allen in regards WeedEnder Matting were attached as Attachment No. 4)

Action: *The Guardrail Committee reviewed the information on U-Teck's website for WeedEnder Matting. It was noted that the cost of this product was relatively expensive. It averages around \$22 per square Yard. Dennis Jernigan is familiar with this product and noted that the installation was difficult. Furthermore, he noted that the product did not look good after it had been installed for an extended period of time. Weeds still pop out around the holes made for installation.*

Roger Thomas has contacted Mr. Clark Morrison in regards to getting recommendations on what type of pavement design can be used beneath guardrail. Clark has discussed this issue with the Pavement Technical Committee. They could not come to a consensus on the type of asphalt treatment to use. A meeting has been scheduled for August 23, 2006, to allow members of the Guardrail Committee and the Pavement Technical Committee to discuss this issue further.

V. Depressed Median Guardrail Issues with Divided Highways of 6 Lanes or more.

Ms. Virginia Mabry discussed median guardrail placement issues that have been brought to her attention on design build projects (TIP projects R-2641 and R-2547BB and CC). Projects with a 46-foot median and 12-foot paved shoulders create areas of concern when a horizontal curve is introduced. Slopes in the median on the high side of the horizontal curves appear to exceed 6:1. The placement of guardrail with dual structures and a 46-foot median with 12-foot paved shoulders also needs to be addressed. The current standard (STD. 862.01) does not appear to address the length of need for this type of guardrail placement.

Action: *After some general discussion, the Guardrail Committee requested that Virginia Mabry and Garry Lee investigate what possible measures could be taken to address this issue. They will report back to the committee with their findings.*

VIII. Miscellaneous

- It was noted that the AASHTO Sub-Committee on design met with the southeastern states. There still is no answer to addressing the vegetative maintenance areas that are created with the placement to guardrail.

Guardrail Committee Agenda

June 21, 2006

Page 3

- Based on the Turner Fairbanks Committee's findings, the cable guiderail placement from the centerline of the median should be eight to ten feet. We will continue to monitor the research and testing in regards to cable guiderail placement. Once chapter 6 of the Roadside Design Guide is updated and finalized, we will investigate if any changes to our cable guiderail placement standards are warranted.
- As an alternate to address areas where there is a vegetative maintenance concern, we may want to take into consideration the usage of a high-tension cable. It can be placed eight feet from centerline of the median; however, the preference is a placement of ten feet from the centerline of the median and no closer than four feet to the shoulder break point.
- The Guardrail Committee would like to welcome Virginia Mabry and Bobby Lewis as new members. Virginia is the Alternative Contracts Project Engineer. Bobby is the Division 4 Maintenance Engineer.

Minutes prepared by Roger Thomas, PE

Minutes approved by Ron Allen, PE

ARCHIVED
FOR REFERENCE ONLY