Spring 2020



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Next Meeting: The upcoming Spring TF13 meeting will be held in Lincoln, NE April 15 to 17.

LOCATION: Embassy Suites Lincoln 1040 P Street, Lincoln, Nebraska, 68508 402-474-1111

Telephone, if calling use "Task Force 13 Meeting" Group Code: TAS

Group rate expires 3/25/20 or when sold out. \$129/night plus tax

1. Long Guardrail Post Update

Over the years long quardrail posts have been used for special installations. A few states that used the long post had a standard for marking the posts but the problem was they were all different. Last year at the Spring Task Force 13 (TF13) meeting at Lincoln, NE a project was initiated to see if we could develop a single standard for the marking that would work for all of the manufacturers and the states would accept. A stamping size and location was developed and agreed upon by all of the manufacturers then presented for comments to those states that had a stamping policy. There were no objections from them to what was proposed, so the marking drawing is now part of the TF13 drawings. It's drawing PWE14. All of the states were notified of the drawing and we requested that if they implemented a standard for marking the long posts, they would follow the drawing. We also requested the TF13 drawing be mentioned in the upcoming rewrite of the Roadside Design Guide. We thank Don Gripne for all his efforts in completing this project.

Another issue with having long posts in place is the states would require replacement posts every once in a while. When they went to replace these posts they found they were not readily available. The big reason for this was many states had their own hole pattern and it was not practical for manufacturers or distributors to keep a supply of each of these posts, not knowing when they were going to be able to turn them over. What happens is the state would place an order for a few of the long posts and a manufacturer wants to work them in, which they do. The state never knows when they will receive them.

What is hoped for is in addition to the standardized marking of the post length, a standardized hole pattern for long posts for replacement can be agreed to by the manufacturers and the states. These same posts could be used for new installations if a state desired, but the main purpose is to have this post in their standard for replacement.

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1. Long Guardrail Post (continued)

If the states do this, it will make it easier for a manufacturer or distributor to justify having an inventory of the long posts because they should turnover in a short period of time.

The post pattern has been sent out to the manufacturers for comments. This subject will be on the agenda for the Spring 2020 TF13 meeting in Lincoln, NE. If the idea gets a go from the group, the next step would go to all of the states for a commitment. When enough states commit to having this long post in their standards, the manufacturers could commit to start having them readily available.

2. Hardware Guide Updates

Since last reported, there have been a number of updates to the TF13 Roadside Hardware Guide, including drawing revisions, new systems & components added, and functional improvements. Highlights are below:

Drawing Revisions

FCA01, Cable Anchor Assembly

FPA01, Guardrail Anchor Bracket

PWE14, Extra Long Wide-Flange Guardrail Post Labeling

RTE01b, Thrie-Beam Terminal Connector

New Systems & Components Added to the Guide

Bridge Railings

SBB48e, PennDOT PA Bridge Barrier

SBB49e, Three-Rail Steel Bridge Rail with Curb

SBC67d, MDTA Chesapeake Bay Bridge Concrete Rail System

SBM04d, AIMS Liferail Retrofit Bridge Rail

Crash Cushions

SCI11c, ABSORB-M, MASH TL-3

SCI32a, CrashGard Sand Barrel System - MASH

SCI38a, Universal TAU-M Crash Cushion, MASH TL-2

SCI38b, Universal TAU-M Crash Cushion, MASH TL-3

SCI39a, Hercules Crash Cushion

End Treatments/Terminals

SEO01c, SLED mini to Sentry II Water Cable Barrier

SEO02a, SLED to MGS Guardrail

SEW14c, MFLEAT Terminal

Longitudinal Barriers

SGR33e, Nu-Guard-31 Roadside Barrier, 5-lb Post

SGR67, RamShield W-Beam Barrier System

For those on LinkedIn, be sure to join the TF13 group. Contact Eric Perry at eric.perry@atssa.com for more information.

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2. Hardware Guide Updates (continued)

Sign Support Systems

SST01a, Crosswalk Pedestal Station

SST01b, Pedestrian Signal Pole

Transition Systems

STG08b, QMB - Concrete Reactive-Tension System - Fiber Barrier Transition STG09, BG800 to HighwayGuard LDS Transition

Work Zone Systems

SWC01d, QuickChange Moveable Barrier Concrete Reactive-Tension System - Fiber Series

SWS26, HighwayGuard LDS

SWT01a, Scorpion II Truck-Mounted Attenuator

SWT01b, Scorpion II Trailer Attenuator

SWT02, TTMA-200 Trailer-Mounted Attenuator

SWT03, Verdegro BLADE TMA

Components (26)

Guide Functional Improvements

Added capability to search for Systems with and without FHWA Eligibility Letters. This feature was added to allow users to differentiate between hardware systems that have been evaluated by FHWA and issued an Eligibility Letter, and those that have not. Historically, only FHWA-eligible systems are included in the TF13 Guide. However, as state DOT "self-certified" hardware becomes more common, TF13 is in the process of establishing criteria to allow Systems and their Components that have not been subjected to an FHWA crashworthiness review to be included in the Guide. It is expected that the TF13 criteria will match those adopted by the 2 prominent DOT roadside safety pooled-fund groups and other state DOT-sponsored programs.

The TF13 Roadside Hardware Guide is located at http://tf13.org/Guides/ All are invited to submit additions, corrections, or suggested improvements to Eric Lohrey, P.E., TF13 Guide Manager at GuideManager@TF13.org

3. Development of Training Course for Review of Safety Hardware Crashworthiness

For over 40 years the Federal Highway Administration has reviewed crash tests of roadside hardware and issued letters concurring that the devices were tested

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and evaluated in compliance with current criteria. For years these letters have been valuable to hardware manufacturers, highway contractors, and highway agencies across the nation and around the world. With the adoption of the Manual for Assessing Safety Hardware (MASH) by AASHTO, FHWA is looking to end this service to the roadside design community. Because it is uncertain if any organization will be performing this service in the future, some states are looking to gain expertise on reviewing crashworthy safety hardware according to MASH.

Mr. Nick Artimovich has developed a one-day training course for state DOTs on the review of safety hardware crash tests conducted under the AASHTO MASH as followed by the FHWA Office of Safety Technologies.

The one-day course covers the procedures used at the FHWA to review and evaluate the crash test reports, videos, and drawings submitted by hardware manufacturers, crash test laboratories, and others in support of their safety devices. The goal of this training is to prepare course participants to review the materials submitted by anyone asking for state DOT approval, assess the completeness of the submission, and determine if the device has been completely and correctly tested to MASH. The course offers guidance on how to handle variations that were slightly outside of the test parameters.

Mr. Artimovich has worked in the Federal Highway Administration Offices of Engineering and Safety for 27 years reviewing crash tests conducted under NCHRP Report 230, NCHRP Report 350, and the AASHTO Manual for Assessing Safety Hardware – 2009, and MASH 2016. nick@centerline-associatesllc.com or 443-415-2389.

4. Roadside Design Guide Update

The AASHTO Technical Committee on Roadside Safety (TCRS) is the custodian of the Roadside Design Guide, but in the summer of 2016, most of its membership had been on special assignment for the past few years. Even with the volunteer writing staff largely unavailable, AASHTO leadership realized the importance of providing guidance for safe roadsides in the United States. This, coupled with a desire to reorganize the Guide into a more logical format, led to the execution of an NCHRP 20-07 project to review and update the Roadside Design Guide. While the State DOT staff on the TCRS would still be responsible for writing its content, the project was to provide a number of supporting services.

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4. Roadside Design Guide Update (continued)

So far, it has done just that. The research team physically reassembled the Guide into the reorganized format, moving with it all tables, figures and reference notes. They performed a literature review to determine the current state of roadside safety design practice that should be included within the Guide, and examined the validity of the hundreds of sources upon which the current edition is based. Drawing upon the contributions of dozens of practitioners nationwide, the project team identified areas in which the Guide is silent, or could give better advice. Upon completion of that work, the principal investigator conducted a 2-day workshop in which the TCRS reviewed the hundreds of findings and reached consensus on the manner in which each would be implemented.

The bulk of work remaining involves the actual writing. Within the structure of the TCRS, each chapter is written by a volunteer team of State practitioners. At this time, these teams are writing their chapter updates with the goal of completion by the summer 2020 meeting.

Following the rewritten draft, the 20-07 research team will comb the entire publication to validate references to State-specific roadway departure practices, and web links. They will also perform a tort liability assessment of the entire Guide, and restructure high-risk areas accordingly. Finally, the team will technically edit the entire document to give it a single voice before submitting the final draft to AASHTO in late 2020.

The TCRS has confirmed that TF13 will continue to be referenced as the repository of the standard system and component drawings in the 5th Edition AASHTO Roadside Design Guide. TF13 looks forward to the opportunity!

5. New AASHTO MASH Q&A

On November 19, 2019, the American Association of State Highway and Transportation Officials (AASHTO) released *Clarifications on Implementing the AASHTO Manual for Assessing Safety Hardware, 2016.* The clarifications address frequently asked questions in reference to test vehicles, testing parameters, implementation, temporary traffic control devices, and barriers. To learn more about the document, follow this link.