

VIRGINIA DEPARTMENT OF TRANSPORTATION

LOCATION AND DESIGN DIVISION

INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM

GENERAL SUBJECT: Roadway Safety Features	NUMBER: IIM-LD-259
SPECIFIC SUBJECT: NCHRP 350 Precast Traffic Barrier Concrete Service and Re-Directive Portable Impact Attenuators - Normal Service Life / Lifecycle	DATE: July 9, 2019
	SUPERSEDES:
APPROVAL:	Susan H. Keen, P.E. State Location and Design Engineer Approved July 9, 2019

EFFECTIVE DATE

- This memorandum is effective upon receipt.
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BACKGROUND

- The National Cooperative Highway Research Program (NCHRP) published "Recommended Procedures for the Safety Performance Evaluation of Highway Features" in NCHRP Report 350. As a result of that report, the FHWA issued a requirement that all permanent safety hardware systems included in Federal Aid projects after August 1998 meet NCHRP 350.
- In 2009, AASHTO adopted the updated performance criteria "Manual for Assessing Safety Hardware" (MASH) which superseded the NCHRP Report 350.
- AASHTO updated the performance criteria contained in MASH 2009 with MASH 2016. This document superseded MASH 2009 and NCHRP 350.

- On January 7, 2016, AASHTO and FHWA issued a Joint Implementation Agreement for MASH hardware. The sunset date for NCHRP 350 temporary work zone devices was established as December 31, 2019. According to this agreement “devices manufactured on or before this date, and successfully tested to NCHRP Report 350 or the 2009 edition of MASH, may continue to be used throughout their normal service life.”
 - The AASHTO / FHWA agreement allows individual states to establish policy on the normal service life.
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CONCRETE BARRIER / IMPACT ATTENUATORS

- The normal service life for NCHRP 350 compliant Precast Traffic Barrier Concrete Service (temporary concrete barrier) and Re-Directive Portable Impact Attenuators manufactured on or prior to December 31, 2019, will extend until December 31, 2029. The devices shall be from the VDOT NCHRP 350 Approved Products List and accepted for use by the Engineer. Any repairs to damaged Impact Attenuators shall be made using the original product specific components.
 - Note that all devices manufactured January 1, 2020 and later, must meet MASH 2016 (or its successor) and shall be from the VDOT Provisionally Approved Products List (or its successor).
 - Precast Traffic Barrier Concrete Service and Re-Directive Portable Impact Attenuators placed in service beginning January 1, 2030 must meet the criteria of MASH 2016 (or its successor). All devices shall be from the VDOT MASH Provisionally Approved Products List (or its successor).
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VDOT APPROVED PRODUCTS

- VDOT’s Approved Product List is available at:
<http://www.virginiadot.org/business/locdes/nchrp350-index.asp>
- VDOT’s Provisionally Approved MASH Product List is available at:
<http://www.virginiadot.org/business/locdes/nchrp350-index.asp>
- For information regarding VDOT’s NCHRP 350 Approved Products List, please contact Charles W. Patterson, P.E., Standards and Special Design Section Manager at Chuck.Patterson@VDOT.Virginia.gov or (804) 786-1805.