

ORIGINATION FORM

THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR (The person who receives or originates the issue and needs to forward the issue for action.)

Specification: Specification Number, 544

Subject: CRASH CUSHIONS (*NOTE: Name changed from Vehicular Impact Attentators*)

Origination date: 06/08/10

Originator: Cheryl Adams
Office/Phone: Roadway Design / (850) 414-4327

Problem statement: This specification is updated to reflect the current name change from vehicular impact attenuators to crash cushions, incorporating the new AASHTO Manual for Assessing Safety Hardware (MASH) for crashworthiness of devices, and deleting separate payment for restoring/replacing damaged crash cushions.

Proposed solution: The proposed changes will keep our specification current with industry practices and standards.

Information source: Maintenance of Traffic Committee.

Recommended Usage Note: All Jobs

Estimated fiscal impact, if implemented:

Implementation of these changes, if and when approved, will begin with the January 2011 letting.



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

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STEPHANIE KOPELOUSOS
SECRETARY

MEMORANDUM

DATE: July 1, 2010
TO: Specification Review Distribution List
FROM: Rudy Powell, Jr., P.E., State Specifications Engineer
SUBJECT: Proposed Specification: **5440000 Crash Cushions.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Cheryl Adams of the State Roadway Design Office to update Section 544 for consistency with current industry practices and standards and to include payment for restoring and replacing damaged crash cushions in the cost of the crash cushion, as well as for general cleanup and formatting.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at ST986RP or rudy.powell@dot.state.fl.us. Comments received after **July 30, 2010**, may not be considered. Your input is encouraged.

RP/dt
Attachment

~~CRASH CUSHIONS~~ ~~VEHICULAR IMPACT ATTENUATORS.~~
(REV 6-178-10)

SECTION 544 (Pages 678 – 679) is deleted and the following substituted:

SECTION 544
~~VEHICULAR IMPACT ATTENUATORS~~ ~~CRASH CUSHIONS~~

544-1 Description.

Install redirective and non-redirective ~~vehicular impact attenuators~~ *crash cushions* (VIA) of the sizes and types designated in the plans. Redirective *crash cushions* VIAs are safety devices with capabilities to redirect the impacting vehicle over the full length of the device. Non-redirective ~~VIAs~~ *crash cushions* allow controlled penetration of the impacting vehicle over the full length of the device.

544-2 Qualified Products List (QPL).

Use ~~Vehicle Impact Attenuators~~ *crash cushions* listed on the QPL. Manufacturers seeking evaluation of their ~~VIAs~~ *crash cushions* shall furnish certified test reports showing that their products meet all test requirements of NCHRP 350 *or the Manual for Assessing Safety Hardware 2009 (MASH)*.

544-3 Construction.

Handle and install manufactured materials or articles in accordance with the manufacturer's instructions and the Design Standards.

Use attenuators delineated with a Type I Object Marker specified in Section 705 *or sheeting*.

Perform repairs necessary due to defective material, work, or operations without additional cost to the Department.

Restore the attenuator damaged by the traveling public after the installation is completed, accepted and serving its intended purpose on an open section of bridge or roadway within 24 hours.

544-4 Compensation.

Price and payment will be full compensation for the complete system or module in place and accepted, including object marker *or sheeting, and restoration of damaged attenuators*. ~~Payment for restoring damaged attenuators will be at the manufacturer's/distributor's invoice price for the new materials or parts plus 20% markup. The 20% markup is compensation for all necessary work, including but not limited to labor, equipment, supplies and profit, as authorized by the Engineer.~~

Relocation of an existing attenuator system to a permanent location called for in the plans shall be paid for at the Contract unit price for relocating existing systems. Price and payment will be full compensation for relocating and reinstalling the system in accordance with the manufacturer's instructions and the Design Standards.

Payment will be made under:

Item No. 544- 74- *Relocate Crash Cushion* ~~Vehicle Impact Attenuator,~~
~~Relocate Existing~~— each.

5440000

All Jobs

Item No. 544- 75- *Crash Cushion* Vehicular Impact Attenuator-- each.