



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

August 11, 2010

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 544
Proposed Specification: **5440000 Crash Cushions.**

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

These changes were 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 review and transmit your comments, if any, within two weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/dt

Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

~~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 ~~VIA~~*crash cushions* are safety devices with capabilities to redirect the impacting vehicle over the full length of the device. Non-redirective ~~VIA~~*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 ~~VIA~~*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 in accordance* ^[dt1]*with 990-2*.

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.

CRASH CUSHIONS.
(REV 6-17-10)

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

SECTION 544
CRASH CUSHIONS

544-1 Description.

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

544-2 Qualified Products List (QPL).

Use crash cushions listed on the QPL. Manufacturers seeking evaluation of their 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 in accordance [dt2]with 990-2.

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.

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, - each. |
| Item No. 544- 75- | Crash Cushion - each. |