# New Jersey Department of Transportation

1035 Parkway Avenue, PO Box 600, Trenton, New Jersey 08625-0600



# Baseline Document Change Announcement

ANNOUNCEMENT: BDC17MR-05

DATE: November 29, 2017

**SUBJECT:** Curb Face Reduction at GR Terminal & Miscellaneous Changes

- Revision to "Section 8 - Guide Rail and Median Barriers" of

the Roadway Design Manual 2015.

**REFERENCE:** Curb Face Reduction at GR Terminal

- Revision to CD-607-1 thru 3, CD-607-6, CD-609-2 thru 5 and CD-609-19 of the Standard Construction Details 2016, Roadway

**BDC17D-10 dated November 28, 2017** 

The "Section 8-Guide Rail and Median Barriers" of the 2015 Roadway Design Manual has been revised.

NJDOT certifies that all changes are in conformance to the following:

- Current guidance and research (simulation, crash testing, consultations, etc.) for the MASH 31" High Midwest Guide Rail System (MGS).
- Update to AASHTO Roadside Design Guide (RDG), 4th Edition 2011
- MASH implementation for guide rail and concrete barrier curb

## **Roadway Design Manual Section 8 Changes:**

#### **DESCRIPTION OF THE CHANGES:**

- 1. Changed "4 feet from back of the rail element" to "4 feet from face of the rail element" in Section 8.2.4B.1. Trees.
- 2. Changed height of curb and curb treatment at flared and tangent guide rail terminals and beam guide rail anchorages in the Roadway Design Manual Section 8.3.1 B.1, 8.3.2 A.2, 8.3.2 B.5, 8.3.2 C.5, and Figures 8-X and 8-Y.
- 3. Changed "beam guide rail end anchorage" to "beam guide rail anchorage" throughout Section 8.
- 4. Changed "truck volume" to "traffic volume" in Section 8.4.2: 2nd paragraph No. 4 and 4th paragraph No. 3.

#### **REASON FOR THE CHANGES:**

- 1. MASH guide rail deflections are measured from face of rail element, not back of rail element.
- 2. After consultation with Midwest Roadside Safety Facility on treatment of flared and tangent guide rail terminals and beam guide rail anchorages with curb, the above changes are being made based on the current knowledge we have to date on MASH terminals with curb. We are changing our standard from using 4 inch curb at GR terminals to 2 inch curb at GR terminals.
- 3. Changed term to match pay item name.
- 4. Correction.

This revision must be read in conjunction with the referenced BDC Announcement.

## Implementation Code S (SPECIAL)

These BDC changes must be implemented in all Department projects that have a project letting date after December 31, 2017. The letting date is the receipt and opening of bids - "Activity 5040 Receive bids". This will allow designers to make necessary plan, specifications, and estimate/proposal changes without requiring the need for an addenda or postponement of advertisement or receipt of bids.

Recommended By:

Paul F. Schneider

Director

Capital Program Support

Approved By:

Eli D. Lambert III, P.E.

**Assistant Commissioner** 

Capital Program Management and State Transportation Engineer

Attachment: 2015 Roadway Design Manual: Section 8 Pages 8-5 thru 8-28 and 8-55 thru 8-56.

PS: KS: YK