

New Jersey Department of Transportation

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



Baseline Document Change Announcement

ANNOUNCEMENT: BDC16D-01

DATE: September 29, 2016

SUBJECT: Release of the Standard Construction Details Roadway-Traffic Control-Bridge 2016

The 2016 edition of the Standard Construction Details Roadway-Traffic Control-Bridge booklet is hereby being released. This booklet incorporates all the BDC Announcements made in reference to the 2007 Standard Construction Details.

The following BDC announcements have been incorporated and are therefore superseded:

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| 1. BDC08D-01, dated February 18, 2009 | 11. BDC13D-02, dated November 22, 2013 |
| 2. BDC10D-01, dated March 30, 2010 | 12. BDC12D-05, dated January 21, 2015 |
| 3. BDC09D-02, dated April 8, 2010 | 13. BDC15D-01, dated March 31, 2015 |
| 4. BDC10D-03, dated July 15, 2010 | 14. BDC14D-04, dated May 21, 2015 |
| 5. BDC10D-02, dated November 15, 2010 | 15. BDC14D-01, dated October 26, 2015 |
| 6. BDC11D-01, dated August 18, 2011 | 16. BDC14D-03, dated October 27, 2015 |
| 7. BDC11D-05, dated January 18, 2012 | 17. BDC15D-04, dated October 29, 2015 |
| 8. BDC12D-01, dated December 18, 2012 | 18. BDC15D-03, dated November 24, 2015 |
| 9. BDC12D-04, dated February 14, 2013 | 19. BDC15D-05, dated November 30, 2015 |
| 10. BDC12D-02, dated July 31, 2013 | |

Some additional revisions have been summarized as follows:

General Changes

1. All the revisions (modifications, additions and deletions) made to the 12/20/2007 release of the Standard Roadway Construction, Traffic Control and Bridge Construction Details 2007 booklet have been incorporated in this (2016) booklet.
2. The notes contained on the detail sheets have been rewritten in active voice to match the Specifications style and some minor editorial changes have been made.
3. The Bridge Construction Details (BCDs) are organized by the corresponding Specifications section numbers. Also, some sheets have been corrected in accordance with the Bridge Design Manual.
4. The payment statements that were included on some detail sheets have been removed since they are incorporated in the Specifications.

Specific Changes

1. **CD-158-1 Soil Erosion and Sediment Control Measures**
 - **CD-158-1.3** Modified the Heavy Duty Silt Fence detail for the geotextile line to continue 90 degrees across bottom of trench and continue wire fabric line straight down to bottom of trench.
 - **CD-158-3.2** Deleted notes No. 1, 3, and 5 through 7 and added new note No. 3.

2. **CD-159-1 Traffic Control Devices**
 - **CD-159-1.3** Changed “9” min x 48” barricade rails” to “8” min x 48”” in accordance with the manufacturer’s and the MUTCD requirements.

3. **CD-203-1 I-9 Soil Aggregate and Embankment**
 - **CD-203-1.1** Added a note.
 - **CD-203-1.2** Replaced the term “Porous Backfill” with “I-9 Soil Aggregate” in accordance with the Specifications.
Removed methods of placing and compacting embankment backfill.

4. **CD-601-1 Underdrains**
 - **CD-601-1.4** Added note No. 4 to address trench backfill.

5. **CD-601-2 Pipe End Sections**
 - **CD-601-2.1** Renamed detail from “End Section for Aluminum Pipe” to “Corrugated Aluminum Alloy End Section”.
 - **CD-601-2.2** Renamed detail from “End Section for Concrete Pipe” to “Reinforced Concrete End Section”.
 - Stormwater Outfall Protection detail moved to CD-603-1.1.

6. **CD-602-1 Inlet General Details**
 - **CD-602-1.6** In note No. 9 changed “Class 30B cast iron only” to “Class 35B cast iron”.
 - **CD-602-1.8** Changed “Min. weight 325 lbs” to “Weight 300 ±15 lbs”.

7. **CD-602-2 Inlets, Type A, B & C**
 - **CD-602-2.4 & 2.6** Changed the weight of grate to 300 ±15 lbs and Class 35B.

8. **CD-602-4 Inlets, Type E, E1, E2 & ES**
 - **CD-602-4.3** Changed the weight of each grate to 300 ±15 lbs.

9. CD-602-5 Inlets, Type D1 & D2

- **CD-602-5.3** Added Note No. 2 and revised inlet and curb opening details to comply with NJPDES permit.

10. CD-608-1 Non-Vegetative Surface

- **CD-608-1.4** Added new detail “Leave Out for Non-Vegetative Surface, Hot Mix Asphalt Only”.
- **CD-608-1.7** Added new detail “Non-Vegetative Surface, Under Median Guide Rail”.
- **CD-608-1.10** Added note No. 3.

11. CD-609-5 Flared Guide Rail Terminal and Tangent Guide Rail Terminal

- **CD-609-5.2** Adjusted the shape of the Guide Rail Extruder.

12. CD-609-7 Median Guide Rail Treatment

- **CD-609-7.1, CD-609-7.2 & CD-609-7.3** Added Note: “Install high intensity sheeting on front face of TGRET”.
- **CD-609-7.5** Added “Approach & Trailing Traffic Arrows”.

13. CD-609-10 Grading and Roadside Recovery Area at Flared and Tangent Guide Rail Terminals

- **CD-609-10.1** Renamed Title “Standard Grading” to “Standard Grading for Flared and Tangent Terminals” and “Alternate Grading” to “Alternate Grading for Tangent Terminals Only”.

14. CD-609-11 Beam Guide Rail Attachments

- **CD-609-11.1** Added “Existing” to the title, added detail for 14” Blockout W6 x 15 steel post, made minor change to Note No. 1 and added Note No. 2.
- **CD-609-11.2** Added detail for 14” Blockout W6 x 9 or W6 x 8.5 steel post. Added “6.2” x 6” Steel = W6 x 20 Post” to Beam Guide Rail Section. Also made minor change to note.

15. CD-609-12 Beam Guide Rail Attachments

- **CD-609-12.1** Added “14” Blockout W6 x 9 or W6 x 8.5 steel post” detail.
- **CD-609-12.3** Added new detail “Modified Thrie Beam Guide Rail Attachment to Sidewalk”.

16. CD-609-14 through CD-609-17 Beam Guide Rail Attachments

- For Standard W-Beam Post and Blocking removed symbol for wood.
- In note No. 14 deleted the following: “Concrete lip curb may be omitted at underpass, where erosion control is not necessary”.

- **CD-609-15.1** Changed 8" dimension to 9" dimension for distance from top of curb to rubrail.

17. CD-609-18 Modified Thrie Beam Guide Rail

- **CD-609-18.2** Clarified Beam Guide Rail Anchorage and repositioned the posts.

18. CD-609-19 Modified Thrie Beam Guide Rail, Dual-Faced

- Added Thrie Beam End Section (Rounded) detail and Note No. 5.
- Removed buffer end section for Modified Thrie Beam Guide Rail, Dual-Faced detail and revised Note No. 3 accordingly.

19. CD-612-8 Breakaway Sign Supports for Ground Mounted Signs

- **CD-612-8.1** Corrected dimensions on Front View Breakaway Assemblies and added 2 3/4" dimension to the Steel Hinge Plate Detail according to the manufacturer's drawings.

Bridge Construction Details

20. BCD-504-1 Concrete Classes

- **BCD-504-1.1**
-In Concrete Class table: Revised third column title from "PAY ITEM" to "DESCRIPTION"; revised concrete class from "A" to "HPC-1" for concrete deck, concrete bridge sidewalk and concrete bridge parapet; revised concrete class from "A" to "P" for precast Concrete culvert and deleted fourth column "UNIT".
-In Typical section-Bridge deck, deleted "For two course conc. deck slab" since it is no longer used.

21. BCD-504-2 Typical Details

- **BCD-504-2.1** Revised gradient from "2%" to "5%" in Limit at Pier and Limit at Abutment.
- **BCD-504-2.2** Revised "see detail A" to "see BCD504-2.3" in contraction joint.

22. BCD-507-1 Date and Numeral Panel

- **BCD-507-1.2** In the Legend table the D dimension is revised to 2 7/8 in place of 2 5/8 in for the Year range 2012-2019 and 2021, 2031, 2041, 2051 to make total dimension 1' - 7" shown in the elevation.

23. BCD-507-3 2'-0" Parapet, Pedestrian and Traffic Railing, and 2'-10" Parapet

- Title revised
- **BCD-507-3.1**

-A leader note for high speed and low speed application has been added.

- **BCD-507-3.2**

-A traffic barrier separating pedestrian traffic has been added for high speed applications.

-Handrail detail added.

-A leader note for high speed and low speed application has been added.

- **BCD-507-3.3**

-Note No.11 has been revised according to AASHTO 2012, 13.8.1 & 13.9.2 as follows: “In considering the height of the parapet and railing combination, ensure the minimum height of the combination railing is 42” measured from the top of the walkway for pedestrians and the top of the bikeway surface for bicycle traffic.”

- **BCD-507-3.4** Added “contraction joint” and “open joint” in 2'-10” high parapet with barrier curb.

24. BCD-507-4 6'-6” and 2'-8” Parapet

- Additional sheet.
- A traffic barrier separating pedestrian traffic has been added for high speed applications.
- A leader note for high speed application has been added.

25. BCD-507-5 Concrete Bridge Decks

- **BCD-507-5.5** Revised title “Details of Parapet and Deck Scoring”
- **BCD-507-5.6** Deleted “Two course concrete deck slab” detail from bridge deck construction protective systems (New bridge decks). And revised “Class A” to “HPC-1” concrete.
- **BCD-507-5.7** Deleted “4”x4” size elastomeric compression sealer” from Table of Details of preformed elastomeric joint sealer.

Revised Note No.3 “Conform all preformed elastomeric compression seals to the material requirements of the NJDOT Standard Specifications for Road and Bridge Construction.”

26. BCD-507-7 Concrete Bridge Approach

- **BCD-507-7.1** Added “#19x36” long deformed tie bars @12” c to c typ.” in concrete bridge approach adjoining concrete pavement and HMA pavement.

27. BCD-507-8 4'-2” High Heavy Truck Parapet

- **BCD-507-8.1**

-Added horizontal dimensions 1'-4” & “1'-8” and vertical dimension 4'-4” for end pylon in parapet elevation view.

-Revised spacing of #16 reinforcement steel “A” @ 6” in section A-A and elevation view.

Deleted "see note 8" in elevation view.
-Added Test level 5.

28. BCD-507-9 3'-6" High F-Shape Parapet Details

- **BCD-507-9.1**
-Added Open Joint and Contruction Joint detail in section A-A.
-Added Test level 5.

29. BCD-507-10 Bridge Median Barrier

- Added Test level 4.

30. BCD-507-11 Steel 4-Bar Bridge Railing Typical Section and Elevations

- **BCD-507-11.1 & BCD-507-11.2**
-Added Test level 4.
-A traffic barrier separating pedestrian traffic has been added for high speed applications.
-A leader note for high speed applications has been added.

31. BCD-509-1 Chain Link Fence, Bridge 6'-3" High, Curved Top

- Added Test level 4.

32. BCD-509-2 Chain Link Fence, Bridge 6'-3" High

- Added Test level 4.

33. BCD-509-3 Wing For Chain Link Fence Straight and Curved Top

- Added Test level 4.

34. BCD-509-4 1-Rail Aluminum Railing

- A reference to 2'-10" high barrier parapet has been deleted.

35. BCD-509-5 2-Rail Aluminum Railing

- A reference to 2'-10" high barrier parapet has been deleted.

36. BCD-509-6 1-Rail Steel Railing

- Added Test level 4.

37. BCD-551-3 and BCD-551-4 Bridge Deck Rehabilitation Deck Joint Repair

- Revised limits of concrete overlay dimension from 1'-3" to 1'-4". Revised core drill 1 1/2" dia. hole depth from 4" (MIN.) to 5" (MIN.).

- **BCD-551-4.3** Deleted Note #3, "Use epoxy bonding compound between new and existing concrete. Refer to NJDOT Standard Specifications criteria."

38. BCD-602-1 Drainage Back of Wall

- **BCD-602-1.1** Changed "Perforated Corrugated Steel Underdrain Pipe" to "Perforated Plastic Underdrain Pipe". Replaced "porous fill" with "I-9 soil aggregate".

39. BCD-701-1 R.M.C. and Junction Box Details

- Title revised.
- **BCD-701-1.2** Revised "Galvanize bolts and washers according to ASTM A153."
- **BCD-701-1.3** Revised "Galvanize coupling, bolts and washers according to ASTM A153." And "Hot dip galvanize 1 1/4"x1 1/4"x1/4" angles according to ASTM A153 after fabrication."

Implementation Code R (ROUTINE)

Changes must be implemented in all applicable Department projects scheduled for Final Design Submission at least one month after the date of the BDC announcement. 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:



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FS:KS:YB