



# **BRIDGE DESIGN MANUAL**

## **Summary of Changes**

**Revision 12/19**

**2003 Edition**

**(U.S. Customary Units)**

**State of Connecticut  
Department of Transportation**

The purpose of this document is to highlight changes made to the BDM and not all changes will be documented within this summary.

## **Revision 12/19**

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### **EDITORIAL CHANGES**

This version of the BDM incorporates minor editorial changes to the manual.

### **GUIDE SHEETS**

Sections of this version of the BDM have been written in conjunction with the development of the following guide sheets:

- 42 inch single slope concrete parapet (TL-4)
- 42 inch F-shape concrete parapet (TL-4)
- 42 inch vertical shape concrete parapet (TL-4)
- 36 inch vertical shape concrete parapet at sidewalk (TL-3)
- 42 inch curb mounted bridge railing (TL-4)

**SECTION 1 GENERAL DESIGN REQUIREMENTS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
1.1.2	1.1.2	Added AASHTO Manual for Assessing Safety Hardware.
1.2	1.2	Included MASH in abbreviated references.
1.3.1	1.3.1	Revised scope of work categories.
1.3.3	1.3.3	Revised condition factor value.
1.3.7	1.3.7	Updated language to address all limit states.

**SECTION 2 DESIGN SUBMISSIONS & CONTRACT DOCUMENTS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
2.1.11	2.1.11	Revised Load Rating Computation to Load Rating Package.
2.2.2	2.2.2	Revised restriction for the use of “by others”.

**SECTION 3 LOADS AND LOAD FACTORS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
3.5.1	3.5.1	Revised phrasing of section.

**SECTION 4 STRUCTURAL ANALYSIS AND EVALUATION**

No policy changes noted.

**SECTION 5 ABUTMENTS, PIERS AND WALLS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
5.13.2.1.1	5.13.2.1.1	Updated requirements to LRFD.
5.13.2.2.2	5.13.2.2.2	Updated requirements to LRFD.
-	5.13.2.2.3	Created Inverted Wall System article.

**SECTION 6 CONCRETE STRUCTURES**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
-	6.1.1.4	Created Rapid Setting Concrete article.
-	6.1.1.5	Created Ultra High Performance Concrete article.
-	6.1.1.6	Created Lightweight Concrete article.



**SECTION 7 STEEL STRUCTURES**

No policy changes noted.

**SECTION 8 DECKS AND DECK PROTECTIVE SYSTEMS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
8.1.2.2	8.1.2.2	Updated deck overhang design to be in accordance with <b>BDM</b> [12].

**SECTION 9 BEARINGS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
-	9.1	Removed Standard Practice of using stainless steel anchor bolts.
9.2.1	9.2.1	Restricted the use of anchor bolts at elastomeric bearings.

**SECTION 10 DECK JOINTS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
-	10.2.2.2.1	Created guidance for Thermal Movement Ranges up to ½ inch.

**SECTION 11 SURFACE DRAINAGE**

No policy changes noted.

**SECTION 12 BRIDGE RAILS AND BARRIERS**

The use of “protective fence” was changed to “fence”.

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
12.1	12.1	Updated to meet MASH requirements.
-	12.1.6	Created Deck Overhang Design article.
12.2	12.2	Revised entire article.

**SECTION 13 BURIED STRUCTURES**

<b>Rev. 04/19 Article</b>	<b>Rev. 012/19 Article</b>	<b>Description of Change</b>
13.1	13.1	Included frames in article.
13.1.3.5	13.1.3.5	Included frames in article.
13.1.3.6	13.1.3.6	Included frames in article.
13.1.4	13.1.4	Revised the responsibilities of the designer.
-	13.1.6	Created Precast Concrete Frames article.

**SECTION 14 SIGN SUPPORTS**

No policy changes noted.



**SECTION 15 UTILITY INSTALLATIONS**

No policy changes noted.

**SECTION 16 BRIDGE REPAIR AND REHABILITATION**

No policy changes noted.

**SECTION 17 POST DESIGN RESPONSIBILITIES**

No policy changes noted.

**DIVISION 2 CONTRACT PLAN NOTES, TABLES & NOTICES**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
A.1	A.1	Revised note G5.
A.1	A.1	Added note G17.
A.1	A.1	Added note G18.

**DIVISION 3 DESIGN AIDS**

<b>Rev. 04/19 Article</b>	<b>Rev. 12/19 Article</b>	<b>Description of Change</b>
3.4.12	3.4.12	Revised note 2 for LRFD.
6.2	6.2	Bridge Plate 6.2.1 through 6.2.4 removed.
6.2	6.2	Bridge Plates 6.2.6a through 6.2.8c removed.
8.3	8.3	Bridge Plates 8.3.2 through 8.3.3d removed.
8.3	8.3	Bridge Plates 8.3.5a through 8.3.8 removed.
8.3	8.3	Bridge Plates 8.3.9a through 8.3.9d removed.