



# Florida Department of Transportation

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## STRUCTURES DESIGN BULLETIN C10-07

DATE: September 3, 2010

TO: District Directors of Production, District Design Engineers, District Structures Design Engineers

FROM: Robert Robertson, P.E., State Structures Design Engineer

COPIES: Brian Blanchard, Jeffrey Ger (FHWA)

SUBJECT: Adoption of 2010 AASHTO LRFD Bridge Design Specifications

This Structures Design Bulletin (SDB) adopts the AASHTO LRFD Bridge Design Specifications, Fifth Edition (2010) and AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges (2009) with the revisions contained herein.

## REQUIREMENTS

### 1. Structures Manual Introduction

- a. Section I.6.B.6 – Revise as follows:  
LRFD Bridge Design Specifications, Fifth Edition (2010) ~~4th Edition (2007) with 2009 Interims~~
- b. Section I.6.B.10 – Add the following:  
LRFD Guide Specifications for the Design of Pedestrian Bridges (2009)

### 2. Structures Manual Volume 1: Structures Design Guidelines

- a. Table I.11-1 – Add the following:

LRFD	SDG	DESCRIPTION
5.14.2.3.4B	2.12.D	Substructure Load Combination

- b. Section 2.12.D – Add the following:  
For substructures of segmental bridges built in balanced cantilever, Construction Strength load combinations are to be determined from LRFD Equations 5.14.2.3.4a-1 and 5.14.2.3.4a-2. The dynamic response or dynamic allowance (AI) must be applied to substructure elements above ground only.

- c. Section 10.4.A - Revise as follows:  
Design all engineered and proprietary pedestrian bridge structures in accordance with the ***LRFD***, the ***PPM***, and the ***FDOT Structures Manual*** following:
- AASHTO LRFD Bridge Design Specifications (AASHTO)
  - AASHTO Guide Specifications for the Design of Pedestrian Bridges (Guide Spec.)
  - FDOT Plans Preparation Manual (PPM)
  - FDOT Structures Manual
- d. Section 10.4.E - Revise the first sentence as follows:  
Camber DL/LL Deflections – ~~Expand ***LRFD*** [2.5.2.6.2] as follows:~~ Contrary to Guide Spec. [5] use the following to determine maximum deflections for pedestrian bridges:
- e. Sections 10.5.A, 10.5.B, 10.5.C and 10.5.E - Delete these sections.
- f. Section 10.5.D – Change section to 10.5.A and revise the first sentence as follows:  
~~Modify ***LRFD*** [3.8.1.2] as follows~~ Loading shall be as specified in Guide Spec. [3] with the following exceptions:
- g. Section 10.7.E – Replace the current language with the following:  
Limits on vibration shall be as specified in Guide Spec [6]. Vibration frequency shall be checked under temporary construction conditions.
- h. Sections 10.7.F, 10.7.G and 10.7.H – Delete these sections.

## **IMPLEMENTATION**

Requirements are effective on projects not yet executed. Projects already underway should incorporate the new requirements where deemed appropriate and where there is minimal revision to the existing design necessary.

## **CONTACT**

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