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


REQUIREMENTS

1. Structures Manual Introduction
   a. Section I.6.B.6 – Revise as follows:
   b. Section I.6.B.10 – Add the following:

   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 (AD) 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.


**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**

Sam Fallaha, P.E.
Assistant State Structures Design Engineer
Phone: (850) 414-4296, Fax: (850) 414-4955
E-mail: Sam.Fallaha@dot.state.fl.us