



Florida Department of Transportation


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TO: District Design Engineers, District Structures and Facilities Engineers, District Structures Design Engineers

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

COPIES: Ananth Prasad, Lora Hollingsworth, Timothy Lattner, Larry Jones, Charles Boyd, Marcus Ansley, Andre Pavlov, Tom Andres, Jeffrey Ger (FHWA)

SUBJECT: Temporary Design Bulletin C08-01
Load Rating for Bridge Rehabilitation and Widening Projects

REQUIREMENTS (2)

1. In the Structures Design Guidelines, replace the first two sentences of Section 7.1.1.C with the following:

If the load rating at inventory level using **LRFR Appendix D.6** yields an inventory rating factor of less than 1.0, a revised load rating using one of the additional methods of analysis in C.1, C.2, C.3, or C.4 may be performed to obtain a satisfactory inventory rating. Submit a Design Variation for use of the additional methods of analysis or for an inventory load rating factor of less than 1.00 to the State Structures Design Engineer.

2. In Section 7.1 Commentary delete the following:

When LRFR Appendix D.6 is utilized, a rating factor of 1.25 may be required for short span bridges (excluding culverts) as noted in 7.1.1 Load Rating. The legal limit in Florida for a single unit truck (SU4) is heavier than the notional HS-20 load; therefore, FDOT designs for the effect of this heavier loading by requiring an increase in the notional load to HS-25 (1.25 rating factor). For these short span bridges a rating factor of less than 1.25 may be considered, however, a variation is required.

COMMENTARY

A load rating using LRFR Appendix D.6 that yields an inventory rating factor equal to or greater than 1.0 satisfies current AASHTO Load and Resistance Factor Rating criteria.

BACKGROUND

In Section 7.1.1.C, the phrases "*or less than 1.25 for cast-in-place and precast flat slab bridges.*" and "*(or 1.25 for cast-in-place and precast flat slab bridges).*" are deleted. The 1.25 criteria was a design criteria used for short span bridges last found in Section 4.1.2.B of the *2000 Structures LFD Metric Design Guidelines*. The 1.25 criterion was reintroduced in Temporary Design Bulletin C07-1 dated February 14, 2007 and incorporated into Section 7.1.1 of the *Structures Design Guidelines July 2007*. These provisions are now being removed since a 1.0 inventory rating meets the AASHTO Load and Resistance Factor Rating specifications and will not restrict FDOT permitting operations.

IMPLEMENTATION

Requirements are effective immediately.

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