



Florida Department of Transportation

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MIKE DEW
SECRETARY

ROADWAY DESIGN BULLETIN 18-06

(FHWA Approved: May 2, 2018)

DATE: May 3, 2018

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Construction Engineers, District Structures Design Engineers, District Maintenance Engineers, District Consultant Project Manager Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, District Program Management Engineers, District Materials Engineers

FROM: Michael Shepard, P.E., State Roadway Design Engineer

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Michael Shepard
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SUBJECT: **GFRP Reinforcing for Concrete Barriers Through Toll Sites**

This bulletin implements new policy for the use of Glass Fiber Reinforced Polymer (GFRP) reinforcing bars in Concrete Barriers through toll site facilities.

REQUIREMENTS

FY 2018-19 Standard Plans, Index 521-001 (Concrete Barriers), has been updated and released as *Standard Plans Interim Revision, IR521-001-01*. This update adds the following General Note to Sheet 1:

- 17. TOLL SITES: Where called for in the Plans, substitute the steel reinforcing bars shown herein with GFRP reinforcing bars of the same size. Construct GFRP reinforcing bars in accordance with Specification 932, and use a 4½” inner diameter for bar bends. Where required to fit pull boxes while maintaining bar spacing and concrete cover, trim GFRP bars as defined in the Plans.

At toll site locations, the use of Median Barriers on outside shoulders is permitted where called for in the Plans. Shoulder Pavement shown herein may be substituted with material for an alternate usage where defined in the Plans.

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BACKGROUND

Using GFRP reinforcing instead of steel reinforcing eliminates the potential for signal interference in toll systems, and this allows for reinforced Concrete Barriers to be placed through toll sites without impeding the performance of vehicle detection and classification equipment.

IMPLEMENTATION

Standard Plans Interim Revision, IR521-001-01, is now available for immediate implementation at the option of the Districts for all projects with applicable toll sites.

These updates will later be incorporated into the upcoming ***FY 2019-20 Standard Plans, Index 521-001 (Concrete Barriers)***, effective for all applicable projects Let on or after July 1st, 2019.

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