Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JOSÉ ABREU
SECRETARY

June 1, 2005

Mr. Donald Davis
Program Operations Engineer
Federal Highway Administration
545 John Knox Road
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 400
Proposed Specification: 4001102

Dear Mr. Davis:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Concrete and Bearing Surfaces-Finishing of Bearing Surfaces.

This change was proposed by Robert Robertson of the Structures Design Office to specify tolerances for the final condition of bearing surfaces.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965DB or duane.brautigam@dot.state.fl.us.

If you have any questions relating to this specification change, please call Duane F. Brautigam, State Specifications Engineer at 414-4110.

Sincerely,

Signature on file

Duane F. Brautigam, P.E.
State Specifications Engineer

DFB/jf
Attachment
cc: General Counsel
Florida Transportation Builders' Assoc.
State Construction Engineer

CONTACT AND BEARING SURFACES-FINISHING OF BEARING SURFACES.
(REV 4-25-05)

SUBARTICLE 400-11.2 (Page 350) is deleted and the following substituted:

~~**400-11.2 Finishing of Bearing Surfaces:** Pay special attention to bearing areas supporting shoes, bearing pads, or the ends of beams or slabs. In general, float-finish such areas, and grind them to true planes with carborundum. If precast, they may be cast against true metal surfaces. Check all such areas for accuracy with a steel straightedge prior to the setting of shoes, bearing pads or superstructure elements.~~

400-11.2 Finishing of Bearing Surfaces: *Construct bearings surfaces (areas) to the tolerances as specified herein and in the other parts of the Contract Documents. When using neoprene bearing pads, finish the concrete surface to a uniform 'rough' texture using a burlap drag, fine bristle broom or float. For metal or high load rotational bearings, fill minor depressions, 1/8-inch [3.2 mm] maximum, caused by finishing, bush hammering, or grinding with a low-viscosity epoxy meeting the requirements of 926-1, Type F-2, applied by the use of a squeegee. Bearing surfaces may be ground to final position with carborundum. Check all bearing surfaces with a metallic straightedge prior to setting bearings or neoprene pads.*

400-11.2.1 Deviation from Specified Elevations for Steel Beam Superstructures: *Construct to the elevation shown on the plans plus or minus 0.01 feet [3 mm] and do not exceed a 0.01 feet [3 mm] difference between specified elevations of bearing areas of adjacent bearings measured between the centerlines of bearing areas.*

400-11.2.2 Deviation from Specified Elevations for Concrete Beam Superstructures: *Construct to the elevation shown on the plans plus or minus 0.02 feet [6 mm].*

400-11.2.3 Projecting Irregularities: *Projecting irregularities will not exceed 1/16-inch [1.6 mm].*

400-11.2.4 Variations in Flatness for Neoprene Pads: *In any direction, the pad is to be flat to within 1/16-inch [1.5 mm]. Pads designated to be sloped are not to deviate from the theoretical slope by the same amount.*

400-11.2.5 Variations in Flatness for Metal or High Load Rotational Bearings: *Construct the bearing area to the tolerance indicated for the measured length along the orthogonal axes.*

Bearing area length up to 30 inches [750 mm] long to plus or minus 1/16-inch [1.6 mm].

Bearing area length over 30 inches [750 mm] up to 45 inches [1,150 mm] long to plus or minus 3/32-inch [2.5 mm].

Bearing area length over 45 inches [1,150 mm] long to plus or minus 1/8-inch [3.2 mm].

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