MEMORANDUM

TO: District Engineers

FROM: William R. Cox, P.E.

SUBJECT: Revised Elastomeric Bearing Standard Drawings (English)

The Bridge Division has revised all standard drawings detailing tapered elastomeric bearings with a revision date of April 2005. Affected standard drawings are IBB, IBEB, BBEB, UBB, SBEB, PSBEB, DTBMD-S, and DTBMD-O. These revised standard drawings are available for immediate use.

Significant revisions to these standard drawings include adding a fabrication tolerance on bearing pad taper and requiring shop drawing submittals for approval. These revisions ensure plan beam slope is accounted for with an appropriate taper increment (taper increments are multiples of 0.125 in.) on shop drawings, and uniform contact between beams and elastomeric bearings is achieved. These revisions address recent fabrication/construction instances of beams lacking uniform contact with bearings.

To assist beam fabricators, bearing fabricators, and shop drawing reviewers, the Bridge Division recommends that designers provide beam slope information in bridge plans when beam slope is not readily discernible. Examples include bridges within a vertical curve, bridges within a cross-slope transition, and bridges with flaring beams. Beam slope data should be provided in tabular format on the span details or framing plan, precluding the need for additional plan sheets. Prestressed concrete U-beam bridge plans are currently being provided with bearing pad taper information.

These revised standard drawings apply to all construction projects beginning with the October 2005 letting. Prior application is at the option of each district.

These revised standard drawings and other standard drawings are available on the web at (http://www.dot.state.tx.us/insdtddot/ogchart/cmd/cserve/standard/bridge-e.htm) in MicroStation® “dgn” and Adobe® Acrobat® “pdf” formats. Please distribute this information to the appropriate district staff and area offices as well as consulting engineers working on TxDOT projects.

If you have questions or comments concerning these standard drawings, please contact John M. Holt, P.E., at (512) 416-2212, or Jon T. Ries at (512) 416-2191. For questions on shop drawings, please contact Jeff Cotham, P.E., at (512) 416-2187.

Note: Original signed by William R. Cox

cc: Federal Highway Administration
    Bridge Design Consultants
    Administration
    Division and Office Directors
    Directors of Transportation Planning and Development
    District Bridge Engineers
    Bridge Division Employees