



MEMO

March 21, 2016

To: District Engineers

From: Gregg A. Freeby, P.E.
Division Director, Bridge Division

Subject: New and Revised Bridge Railing and Railing Anchorage Standard Drawings

New and revised bridge railing and railing anchorage standard drawings, with issue and revision dates of March 2016, are posted on the TxDOT web site and available for immediate use.

New bridge railing, **Type T221P**, is a precast version of the T221 vertical parapet railing, which can be used as retrofit on existing decks, as temporary barrier, or as permanent railing on new construction. The nominal 30-ft. precast railing pieces attach to the bridge deck with cast-in anchor plates and through-bolts. This railing is best suited for tangent bridges with straight grade. The T221P is issued as a guide drawing, which must be adapted for each installation and sealed and signed by a Professional Engineer.

New bridge railing **Type T224** is 42 in. tall and is approved for use at test level (TL) 5. This railing is intended for interstate highways, state highways, and other routes where large trucks make up a significant portion of traffic, or where a specific facility adjacent to the roadway needs protection from large vehicles. Because of the railing's size and weight, standard bridge designs cannot be used; bridge slab and beam details must be evaluated for the T224.

Various revisions have been made to numerous railing and railing anchorage (PSBRA, BBRAS, DSBRA, and CGRAD) standards, which include: updating the approved crash test level (TL); removing shop drawing requirements; updating epoxy adhesive options in accordance with DMS-6100; providing installation details for railing on culverts; and editorial revisions.

These new and revised standard drawings apply to construction projects beginning with the September 2016 letting. Prior use is at the option of each District.

These and other bridge standard drawings are available on the Bridge Standards web page in MicroStation® "dgn" and Adobe® Acrobat® "pdf" formats. See <http://www.dot.state.tx.us/business/standardplanfiles.htm>.

For questions or comments concerning this standard drawing, please contact Jamie Farris, P.E. at 512/416-2433 or Jon T. Ries, at 512/416-2191.

Note: Original Signed By Gregg A. Freeby

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Administration

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