



MEMORANDUM

TO: District Engineers

DATE: April 26, 2011

FROM: David P. Hohmann, P.E.

SUBJECT: Revised Retaining Wall Standard Drawings

Revised retaining wall standard drawings are posted on the TxDOT web site and are available for immediate use.

Key revisions to standard drawing **RW (MSE)** include:

- Two values for unit weight—105 pcf and 125 pcf—are now required to design the wall system due to potential variability in the compacted, in-place unit weight of backfills, especially coarser aggregate backfills. The lower unit weight, 105 pcf, is to be used for determining pullout, sliding, overturning and eccentricity and the higher unit weight, 125 pcf, is to be used for determining rupture. Utilizing this combination of unit weights will result in more efficient designs.
- Accounting for predicted section loss after a 75 year period in the earth reinforcement is no longer required in determining pullout capacity.
- Minimum length of earth reinforcement is now 70% of the design height or 8-feet, whichever is greater.
- Clarified that design parameters shown on this standard drawing are to be used unless stated elsewhere in the plans and clarified the definition of wall design height.

Key revisions to standard drawing **RW 2** include:

- Disallows use of crushed blast furnace slag, recycled crushed hydraulic cement concrete or combination thereof for the wall drainage system.
- The drainage system now requires Filter Fabric and defined the Filter Material as Type C.

These two revised standard drawings apply to construction projects beginning with the November 2011 letting. Prior use is at the option of each District.

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

For questions or comments concerning these standard drawings, please contact Marcus Galvan, P.E., at (512) 416-2224.

Note: Original Signed By David P. Hohmann

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