Unless you have already developed drainage details and quantities, please use the new SD Drawings for all projects involving RCB culverts. Also note the applicable SD drawings must be included in your plan set as described below.

Please forward to your design personnel and consultants. The new box culvert summary sheets are now available on the Roadway Design website. Designers using the new CBC summary sheets - be sure to utilize the revised Structural Excavation and Structure Backfill payment limits for calculating quantities.


Please forward to designers, project managers and resident engineers in your Group/District.

The reinforced concrete box culverts are designed in accordance with AASHTO LRFD Bridge Design Specifications. The new drawings include details for single barrel to six barrel box culverts, culvert extensions, structural excavation and structure backfill, equipment pass, headwalls and aprons. The pay items remain the same as previously used with the B-Standards, however, the payment limits for structural excavation and structure backfill have changed.

The Project Plans shall include drawings SD 6.01 (1 to 5) plus drawings for the selected box culvert type, headwall type and aprons (when used). The Reinforced Concrete Box Culvert and Box Culvert Extension Summary Sheets (templates) will be updated to reference the new SD drawings by Roadway Engineering Group.
Current projects that are substantially developed may continue to reference the previous B-Standard Drawings at the discretion of the designer. If the B-Standard Drawings are used, an older version of the 1D drawing will be required for the plans to reference the correct standards.

The reinforced concrete box culverts Structure Detail Drawings SD 6.01 (1 to 5), SD 6.02 (1 to 2), SD 6.03 (1 to 2), SD 6.04 (1 to 2), SD 6.05 (1 to 2), SD 6.06 (1 to 2), SD 6.07, SD 6.08 (1 to 8), SD 6.09 (1 to 3), SD 6.10 (1 to 2), and SD 6.11 (1 to 4) can be viewed and downloaded from the following web page:

http://www.azdot.gov/Highways/bridge/DetailDwg/Drainage.asp