

**From:** [Debra M. Beckwith](#)  
**To:** [BR](#)  
**Subject:** Bridge Advertisement (DSI 19-011) Reinforcing Steel  
**Date:** Wednesday, March 27, 2024 2:02:22 PM

The [EPG](#) & [Bridge Standard Drawings](#) have been updated as described below:

**Implementation Statement: Effective immediately for bill of reinforcing steel not started.**

*(The Implementation Statement is a recommendation by the Development Section. The SPM is responsible for the level of implementation for any particular job.)*

Revision Date	Items Revised	Description of Change
<a href="#">Mar. 2024</a>	EPG: <b>751.5</b> ; 751.11; 751.12; 751.22; 751.31; 751.32; 751.35	<p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>- Updated bar sizes to align with allowable bar sizes of EPG 751.5.9.2.3 (removed #3 and added #18).</li> <li>- Incorporated galvanized bars into bending data.</li> <li>- Added data for stirrup 180° hooks.</li> <li>- Made minimal changes in some hook dimensions due to revised rounding criteria.</li> <li>- Stirrup pin bend shapes are now designated with an "S" after the shape number.</li> </ul> <p><b>Revisions to the EPG:</b></p> <ul style="list-style-type: none"> <li>- <a href="#">EPG 751.5.9.2.1.2 Bend Shapes</a>: New article under the general information for reinforcing steel explaining MoDOT's bent bar shapes used in structures.</li> <li>- <a href="#">EPG 751.5.9.2.7 Length Calculations</a>: Clarified calculations for hook dimensions and bend deductions.</li> <li>- <a href="#">EPG 751.11.3.5</a>, <a href="#">751.12.1.3-6</a>, <a href="#">751.22.3.4.1</a> and <a href="#">751.31,32&amp;35</a>: Revised references to stirrup pin bend shapes. Revised bar shape dimensions or shape numbers in accordance with revisions to the bill of reinforcing standard drawing.</li> <li>- Since standard dimensions shown for barriers in EPG 751.12 have changed, a marked-up copy of the previous EPG will be stored in Instructions &amp; Tips for reference (in the <i>Barbill in Geopak</i> folder). <a href="#">751.12 Revisions</a></li> </ul> <p><b>Bill of Reinforcing Standard Drawings:</b></p> <ul style="list-style-type: none"> <li>- For use with the new Barbill Program (being released within the next couple weeks), there are now two sheets, BILL01 and BILL02. Barbill_i.dgn will still be available for a while, until we are fully converted to the new program.</li> </ul>
	Bridge Standard Drawings: BILL (new); <a href="#">PSI</a> ; <a href="#">PSBXB</a>	
	MicroStation Cells: NA	
	Std. Specifications: NA	
	Standard Plans: NA	
	Bridge Special Provisions: NA	

- BILL01 shows bending diagrams and bending data. A new reinforcing steel totals table will be generated by the new Barbill Program, and placed in BILL01. Empty tables will be available as alternate details for use by consultants who do not use our Barbill Program. This table replaces the existing totals that were provided at the end of the old bill of reinforcing table.
  - o Revised and made improvements to bending diagrams.
  - o Simplified and condensed how bar coatings, shape/stirrup and varied bars are specified. The new coating format will accommodate galvanized bars.
  - o Removed the need to specify if the bars were in the substructure. The substructure heading used in the table is sufficient for this.
  - o See [\\_Bill of Reinforcing Revisions.docx](#) for more details.
  - o A reference sheet has been created, showing all the bar shapes and their dimensions. This is stored in Instructions & Tips in the Barbill\_Program\_ORD folder. [\\_BarShapesRefSheet.pdf](#)
- BILL02 consists of seven sheets with table heading of bill of reinforcing steel tables at the top and simplified notes at the bottom. The actual tabulated data will be placed from the new Barbill Program spreadsheet. The new format provides thirty more rows per sheet.
- BILL03 is the same as BILL02, except it contains the grid lines, for use by consultants who won't be using our internal Barbill Program.

**Revisions to PSI & PSBXB Standard Drawings:**

- Revised references to stirrup pin bend shapes.
- On the PSBXB drawings, corrected the location of the void drain hole and added the void vent hole at the midspan in the half elevation detail. Added both of these holes to the grouped diaphragm details.

Follow links above for more information, or to view more details about this (or any) revision, use the [Revision Index Database](#), located under Completed Revisions on Development's Sharepoint page.

Instructions:

Under Tables (left-hand side) double-click on RevisionRecords.

Click on the link under the Effective Date to access documentation for the completed revision.

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