

IOWA DEPARTMENT OF TRANSPORTATION

To Office Bridges and Structures

Date July 1, 2008

Attention All Employees

Ref No. 521.1

From Gary Novey

Office Bridges and Structures

Subject Method's Memo No. 182 (LRFD Live Load Distribution for Skewed Bridges with Non-standard rolled Steel Beams, Non-standard Prestressed Beams or Welded Plate Girders)
Bridge Design Manual Article 5.5.2.2.2

When beam and girder bridges meet the requirements of Article 4.6.2.2.1 of the current 2007 AASHTO LRFD Bridge Design Specifications, 4th Edition, the distribution of live load specified in Articles 4.6.2.2.2 for moment and 4.6.2.2.3 for shear should be used for design. The optional moment reduction in Article 4.6.2.2.2e shall not be used for skewed bridges.

The skew correction factor in Article 4.6.2.2.3c for shear at an end reaction only (e.g. – abutment or support under slab expansion joint), shall be used, which increases the shear live load distribution factor.

The policies above will apply to all non-standard prestressed beam, nonstandard rolled steel beam or welded girder bridges.

If you have any questions, please check with Dean Bierwagen or me. This policy should be used on any new projects that have not been completed.

GAN/jtn/bj