904.04 STEEL GIRDER BRIDGES

The effects of uplift and allowing a continuous pour should be considered when developing deck pour schedules for multi-span continuous steel girder bridges. The required rate of pour should be compared to the quantity of concrete to be placed and the potential for poured sections to set up and develop tensile stresses from pours in adjacent spans shall be considered when determining the need for construction joints. Consideration must be given to the potential for negative moment stresses in the deck due to placement of positive moment pours in adjacent spans.

Girder bridges will usually require details on the plans showing a plan view with joint locations, deck pour sequence and direction of pour, if required. Except where otherwise required, there should be a minimum of 12 hours between adjacent pours. Construction joints, where required, should be parallel to the centerline of the pier. Their location should be near the point of dead load counterflexure.

904.05 CAST-IN-PLACE BOX GIRDER BRIDGES

Box girder bridges made continuous over supports shall have transverse construction joints placed so that the webs undergo their positive moment falsework deflections prior to the final pour over the negative moment areas of the fixed piers or abutments if the superstructure formwork is supported on conventional falsework. The transverse construction joints may be omitted if the superstructure formwork is supported on earthen fill. The webs and all diaphragms should be poured concurrently with the bottom slab. Transverse construction joints where required should be parallel to the centerline of the pier. Their location near the inflection point is generally one-quarter of the span length from the pier if the adjacent spans are approximately equal length.