

# Baswich Bridge Slide

**Client:** Railtrack

**Consulting Engineer:** W.S.Atkins

**Main Contractor:** Miller Civil Engineering



[www.fagiolipsc.com](http://www.fagiolipsc.com)

CIVIL 37



This project involved the replacement of the existing Baswich Rail Viaduct with a new structure. To minimise disruption to this busy section of the rail network, it was decided to build the new structure as complete as possible alongside and, during a special track possession period, to remove the old deck and slide the new one into position. Only 48 hours possession were allowed for the replacement operation.

The viaduct is 112 metres long, weighed 2700 tonnes and was to be supported on the original 7 piers and 2 abutments.

Fagioli PSC were contracted by Miller Civil Engineering to design a suitable method to perform the sliding operation and to supply and operate the required equipment.

The new structure was built on temporary piers in-line with the originals. Fagioli PSC rails were mounted on top of these

piers and Fagioli PSC jackable roller skates set up on top of these, between the bearings. Once the 48 hour period commenced, the old structure was removed, the old pier tops and abutments prepared and additional rails fitted on top of these in-line with those on the temporary piers.

Fagioli PSC L15 strand jacks were clipped onto the end of the rails and connected to a multi line power pack. This ensured an equal amount of movement at each of the nine positions. The skate jacks were raised, thus lifting the structure from the temporary supports and the deck pulled 9 metres into place and lowered into its final position by releasing the skate jacks. The slide in operation, including load transfer at start and end was completed in less than 1 hour.