



**Client** Carillion for Network Rail

**Project Description** Stockley Flyover was a surface works project for Crossrail to allow trains between London and Heathrow Airport to pass over the Great Western Main Line. The new flyover is a two span through truss single-track railway bridge which carries the line on a curved alignment between a western approach embankment and a viaduct on the north side which is inclined down to the main track level. The elevated flyover structure comprises two long simply supported Warren girder spans fabricated using weathering steel and with an insitu reinforced concrete deck slab with ballast retaining upstands. The steel trusses were preassembled on the western approach and then launched around the curve over the main lines.

**Cass Hayward Role(s)**

- Independent checking of the design of the bridge launch erection scheme
- Technical support to management of the steelwork sub-contract

**Project Statistics**

- Completed May 2014
- Value £90m
- Bridge approx. 118m long with spans of 40.4m and 77.4m
- Bridge and track curvature radius 310m

**Special Features**

- The two spans were temporarily coupled to create a full length structurally continuous bridge suitable for launching and then decoupled once in position
- Bridge supported on rail mounted bogie and launched around the curve by strand jacking and with a total weight of 1190 tonnes
- Maximum leading cantilever of the bridge launch 77m utilising 28m long launch nose and 7m long tail
- Launch completed during two 52 hour railway possessions

**Awards**

- British Construction Industry Awards Civil Engineering Project of the Year (£10m to £50m) - shortlisted