



PROJECT

A14 Huntingdon Viaduct Strengthening

CLIENT

Highways Agency

COMPLETED

2013

MAIN CONTRACTOR

Costain

VALUE

£2.5m

TONNAGE

316 tonnes



PROJECT DESCRIPTION

A14 Huntingdon viaduct strengthening consisted of 38 steel I beams 1.75m deep arranged in a grillage formation, with 19 beams on each side of the viaduct. These beams replaced older box section beams to create a stiffer and more durable alternative load path to the structures half joint and actively support the existing concrete structure.

OUR ROLE

Cleveland Bridge were responsible for the fabrication of the structural steelwork, delivery and site assembly, removal and disposal of old steelwork and erection of new steelwork.

FABRICATION

The steelwork elements of the structure were fabricated in Cleveland Bridge's Darlington facility. The sizes of the elements were designed to allow them to be transported to site by road haulage.

INSTALLATION

The 38 new beams were installed as braced pairs weighing up to 25t. Prior to a new pair of beams an old pair of beams were removed then replaced with the new pair in the same shift. Because the beams span either busy road or live railway all of the work was completed at night with many lifts requiring railway possessions. The 19 beams on the north side were installed using SPMT's with a large capacity scissor lift installed on it to get the height needed. Beams on the south side were installed using a 37t capacity forklift fitted with a 5m high lifting frame.

COMPLETION

Cleveland Bridge commenced on site with the preparation works for replacing beams in March 2013. Beam replacement commenced in June 2013 with all beams replaced by October 2013. The replacement of all 38 beams was completed without the need for any traffic management on the A14 and with minimal disruption to east coast main line services.