
MEDWAY VALLEY CROSSING

KENT



The Medway Valley Crossing development represents a significant investment in Kent's infrastructure, including a new stretch of road, a road bridge and a rail bridge over the River Medway to link the A228 on the west bank to the proposed Peters Village site on the east bank. It will also provide up to 1,000 new homes at Peters Village - at least a quarter being affordable homes.

The extensive highway improvements will significantly improve access to both sides of the River Medway, bringing local communities access to wider benefits such as employment opportunities, schools, shopping, recreation and housing. These include a road bridge over the River Medway and an adjacent rail bridge.

Our early involvement with this project led to a significant value engineering input from ourselves. In conjunction with our design partners, Byrne Looby & Partners, we took over the preliminary design work and developed a final piling scheme.

Piling was specified for the main bridge over the River Medway and a bridge over the adjacent railway line.

Main bridge piling comprised a total of 46 No 900mm diameter rotary bored & cased piles located in the piers and abutments on each side of the river.

CLIENT

Trenport Limited

CONSULTING ENGINEERS

Halcrow Group Limited

MAIN CONTRACTOR

Bam Nuttall

ROLE

P J Edwards & Co (UK) Ltd acted as Piling Contractor

SPECIFICATION

Specification for Highway Works

EQUIPMENT

Mait HR260 Piling Rig

CONTRACT PERIOD

April - July 2015

CONTRACT VALUE

£895k

CASE STUDY

A further 53 No 900mm diameter piles were required for the railway bridge.

Access to the river piers was achieved by sheet piled jetties and cofferdams out into the river. The cofferdams were excavated down to pile cut off level with temporary casings extending back up to jetty level.

Pile depths extended down to 44.5m below jetty level for the pier piles and 33.5m below ground level for the abutment piles. At these depths the piles penetrated the founding stratum of mudstones and hard clays of the Gault Clay formation.

Design verification was achieved with a proof load test on an abutment pile which was successfully load tested to a maximum load of 4,945 kN.

