

South East Railway Ground Investigations

Client :
Network Rail

Designers :
Donaldson Associates
Scott Wilson
Tony Gee & Partners
White Young Green

Main Contractor :
BAM Nuttall Ltd

Location :
South East England

Date :
2001 - 2003



BAM Ritchies has undertaken numerous ground investigations for the railway infrastructure around the country. Details of some of these works in the South East are as follows:

Nine Elms Viaduct, Covent Garden, London

6 cable percussion boreholes with sampling and installation of monitoring wells down to 30.5m, laboratory testing and reporting.

Hertford Loop, Hertford

14 continuously sampled holes to 10m depth and 8 cable percussion boreholes to 15m depth. 9 holes with piezometers installed. SPTs and sampling in all holes, laboratory testing and report to inform the design and specification of the embankment stabilisation.

Silwood Street, London

2 cable percussion boreholes to approximately 15m depth, with SPTs and sampling, laboratory testing and reporting, for the design of remedial work to the settlement of the viaduct. Holes were taken 5m into chalk to prove the quality of the material. Also 4 trial pits to expose the foundations of the piers.

Farnham CET Facility, Farnham

4 cable percussion boreholes to approximately 10m depth in sand fill and natural sand to verify ground conditions for a cantilevered sheet pile wall.

Strood Tunnel, Strood

8 rotary open holes with air flush (water flush not permitted) through 11m head deposits then chalk to approximately 30m depth at approximately 150mm diameter, complete with HDPE casings to enable 3D Seismic Tomography to investigate a collapsed shaft.

Camberwell Grove, London

One continuous sampling hole into London Clay to 10m depth, using mechanical hand augering, to investigate the stability of the bridge wingwall and abutment. Work carried out during railway possession.

Chadwick Road Bridge, London

Investigation and trial anchors to 5 - 6 metres depth into London Clay with investigation coring of brick wing walls, testing and reporting.

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