



GROUND INVESTIGATION SERVICES FOR THE RAIL INDUSTRY

Geotechnical Engineering Ltd has carried out a wide variety of projects on Network Rail infrastructure across the UK on cuttings, embankments, stations and on track. The use of our in-house designed slope climbing rigs means that boreholes can now be formed safely on slopes previously only accessible using expensive scaffold platforms and cranes.



We have a fleet of dual-purpose, tracked 'Pioneer' drilling rigs for work on flat ground. They can be fitted with a 10" diameter concrete coring attachment for intrusive works on station platforms and car parks. In addition, we have a fleet of Terrier rigs for shallow ground investigations on sites where access can be an issue. The Terrier mast can be detached from the main body to drill in normally inaccessible positions when required, and hand held window sampling can be used in the most extreme cases.

The 'P45' is a dynamic sampling rig with the added capability of dynamic probing. The 'P60' is a dual purpose rig which can be used for continuous dynamic sampling and rotary coring, meaning there is no longer the requirement for conventional shell and auger with rotary follow on. Both rigs are operated by radio remote control with a number of additional safety features and, if required, can be tethered into position using an on board winching system and ground anchors.



All of the rigs (with the exception of hand held) are capable of carrying out SPTs and CPTs and taking 70mm diameter samples. We can also install a range of instruments in the boreholes including inclinometers, extensometers, standpipes and piezometers (BAT, VW and standard).



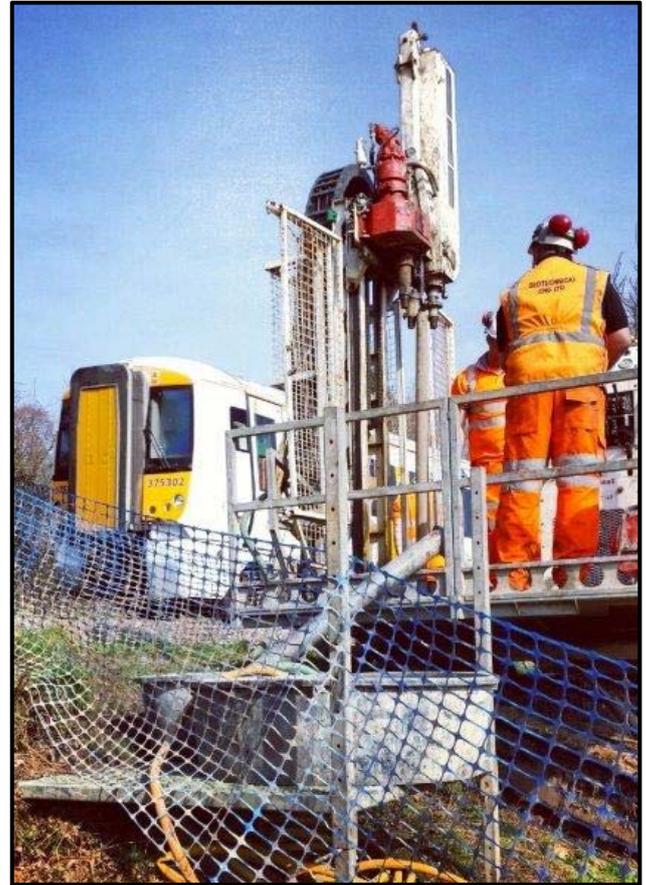


In addition we also have a dedicated team of IWA trained monitoring technicians who can read the instruments and feed the data back in a variety of formats. This team also carries out in situ CBRs and plate bearing tests.

GEL has a team of geotechnical and geo-environmental PTS trained engineers for all your supervisory and reporting needs. We also have an in-house UKAS accredited laboratory offering a range of geotechnical tests with a large number of triaxial cells for all total and effective stress requirements.

We currently have around 75 PTS staff for all our rigs and operations, many of whom are working towards, or have gained their NVQ Level 2 accreditation in Land Drilling. We are RISQS approved, (no. 059909), as Ground Investigation Contractors and are members of the BDA and AGS. We can also offer rail certified and trained CAT operators along with rail certified vegetation clearance.

The table below gives a summary of our rigs' capabilities: If you would like to know more please contact us and we will be happy to discuss your project with you.



Rig Type	Strata	Ground	Average Depth	Max. Diameter
P45	Soils	Slope & Flat	10m	113mm
P60	Soil & Rock	Slope & Flat	45m	128mm
Pioneer	Soil & Rock	Flat	80m	143mm
Terrier	Soil	Flat	8-10m	113mm

