

Canterbury Growth Scheme Ground Investigation

BACKGROUND

Southern Testing were awarded the Contract by 4Delivery for the initial ground investigation works in connection with the Canterbury Growth Phase 2 wastewater investment scheme. This multi-million scheme includes new and upgraded Storm Storage Chambers, Pumping Station Chambers, Storm Tanks, Sludge Storage and associated shallow structures and new pipelines across the network.

Geological records indicated the site to be underlain by River Alluvium and Head Gravel over Thanet Beds, underlain by Upper Chalk.

GROUND INVESTIGATION

Our work involved intrusive investigations at four separate sites located in and around the floodplain of the Great Stour River, to the northeast of Canterbury, and the A28 Sturry Road. These included a large hard-surfaced parking area bounded by light industrial areas, the Great Stour River, and ecologically sensitive grass / reed land; open ground again bounded by the Great Stour River; within a local industrial and commercial park; and within the main Sturry Road Waste Water Treatment Works.

Site investigation works comprised 11 boreholes drilled using shell and auger techniques with 3 of the boreholes extended using rotary drilling. In addition the contract included 16 shallow boreholes, drilled using our track mounted, windowless sampler drilling rig together with resistivity testing at each location. A variety of groundwater and land gas monitoring wells were installed along the route.

In situ field tests included Standard Penetration Test, Hand Penetrometer, Shear Vane, Variable Head Permeability, Determination of Redox Potential and Resistivity, with follow up soil gas and groundwater monitoring visits.

Disturbed and undisturbed soil samples and water samples were taken for a comprehensive suite of laboratory geotechnical and chemical tests, with all reports presented in AGS format.

