

## Case Study

# John Sisk & Son Ltd Major Projects

## Location: Bournemouth Development: New hotel

ListersGeo were asked to price for a site investigation for a new multi-storey hotel in Bournemouth. The original specification for the investigation included deep rotary boreholes, however ListersGeo identified that it would be possible to use the more cost effective cable percussive technique, thus saving the project several thousands of pounds on investigation costs.

The project included a reduction in ground levels across the site that involved the removal of more than 50,000m<sup>3</sup> of waste soils from the site, and the installation of a retaining wall along one of the site's boundaries.

The desk study indicated the site's previous history of development and local current and historic industrial land uses were potential sources of contamination for the site. However, through chemical testing and subsequent environmental risk assessment ListersGeo were able to prove the contamination existing on the site was not a significant risk to the end users of the site or the underlying Bedrock Secondary A Aquifer, thus avoiding the need for costly remedial measures.

The intrusive investigations found the site to be underlain by mainly very dense medium sand (Boscombe Sand Formation) containing some thin bands of clay. In addition, between 2.0m and 6.0m below the formation level for the site an approximately 3.0m thick band of clay was identified.

From the site and geotechnical laboratory works ListersGeo were able to provide parameters to aid the retaining wall design and show the site was suitable for the preferred foundation option, i.e., a raft. In addition, from the laboratory testing and analysis ListersGeo were able to classify most of the soil due to be removed from site as inert, which is the most cost effective waste soil classification.

This was a challenging and rewarding site investigation, which through close liaison with the client and their representatives and the sub-contractors ListersGeo were able to provide cost effective geoenvironmental and geotechnical engineering solutions saving the client a considerable sum of money.



Please call us for any ground investigation or related advice on

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