

Great Scotland Yard

Former Use: Police Offices and Archives
Client: Sansor Investment Limited
Value: £37,688
Location: London

Provectus completed a geotechnical and ground contamination site investigation at Great Scotland Yard, London. The site is being developed into a new 6 storey hotel with two new basement levels below the existing lower ground floor level.

The site is close to Downing Street and was historically used as an army recruitment centre during World War 1. It subsequently became the main archive for the Metropolitan Police and was subject to an IRA bomb in 1973.

The purpose of this investigation was to establish the ground conditions across the site and provide an engineering assessment on available options for foundations and the construction of a new double basement associated with the proposed development. The investigation also included undertaking a Type 3 Asbestos Survey to allow refurbishment works to be suitably designed.

The intrusive investigation comprised the hand excavation of twenty trial pits to expose the foundations in the basement. This had to be undertaken using artificial light to allow safe working conditions.

Using this technique allowed the Structural Engineer to fully understand the existing foundation conditions and thus allow the new design to be optimized.



To aid the design of the new double basement including any dewatering and the muck away assessment and requirements, two cable percussive boreholes were drilled within the lower ground floor of the building.

Due to the significant constraints including very low headroom (maximum 3m) and ventilation, Provectus utilized a fully cut down electric cable percussive rig. A three phase 415 Volt supply was connected directly into the buildings electric supply before the drilling commenced.

The two boreholes were then advanced to 30m depth with full in-situ testing and sampling. On completion a standpipe was installed in each location to allow for ongoing monitoring for both groundwater and soil gas conditions.