

University College Hospitals

London

University College London Hospitals were building a new proton beam therapy cancer treatment centre in central London.



The project

GEO-Instruments deployed a comprehensive structural and environmental monitoring solution right from the start throughout the whole job duration. Monitoring was required during demolition and the excavation of a 4000m², 20m deep basement. The basement was constructed using diaphragm walls with a perimeter of 310m and a 30m depth.

The challenge

The specification was demanding with data processing such as noise hourly and daily averaging required, but also calculating horizontal tensile strain, deflection ratio and slopes of adjacent structures. Noisy works and potential movements of the existing structures and roads required alarm thresholds to be flagged up by email immediately to allow the works to be modified accordingly. Comprehensive noise and air quality monitoring was also required due to the surrounding residential buildings.

The solution

GEO-Instruments' own Quickview web viewer was provided for viewing the data from different sources for the project. GEO worked closely with the client to add new features to assist with the reporting requirements. Our recommendation was based on good value, good advice and a desire to help the engineering team to get a workable solution.

Project facts

Owner(s)

NHS

Keller business unit(s)

GEO-Instruments

Main contractor(s)

Bouygues

Services

Software/web-based data presentation

Automated monitoring

Excavation support

Markets

Buildings

Technologies

QuickView

Dust monitors

Automated Total Stations (ATS)

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