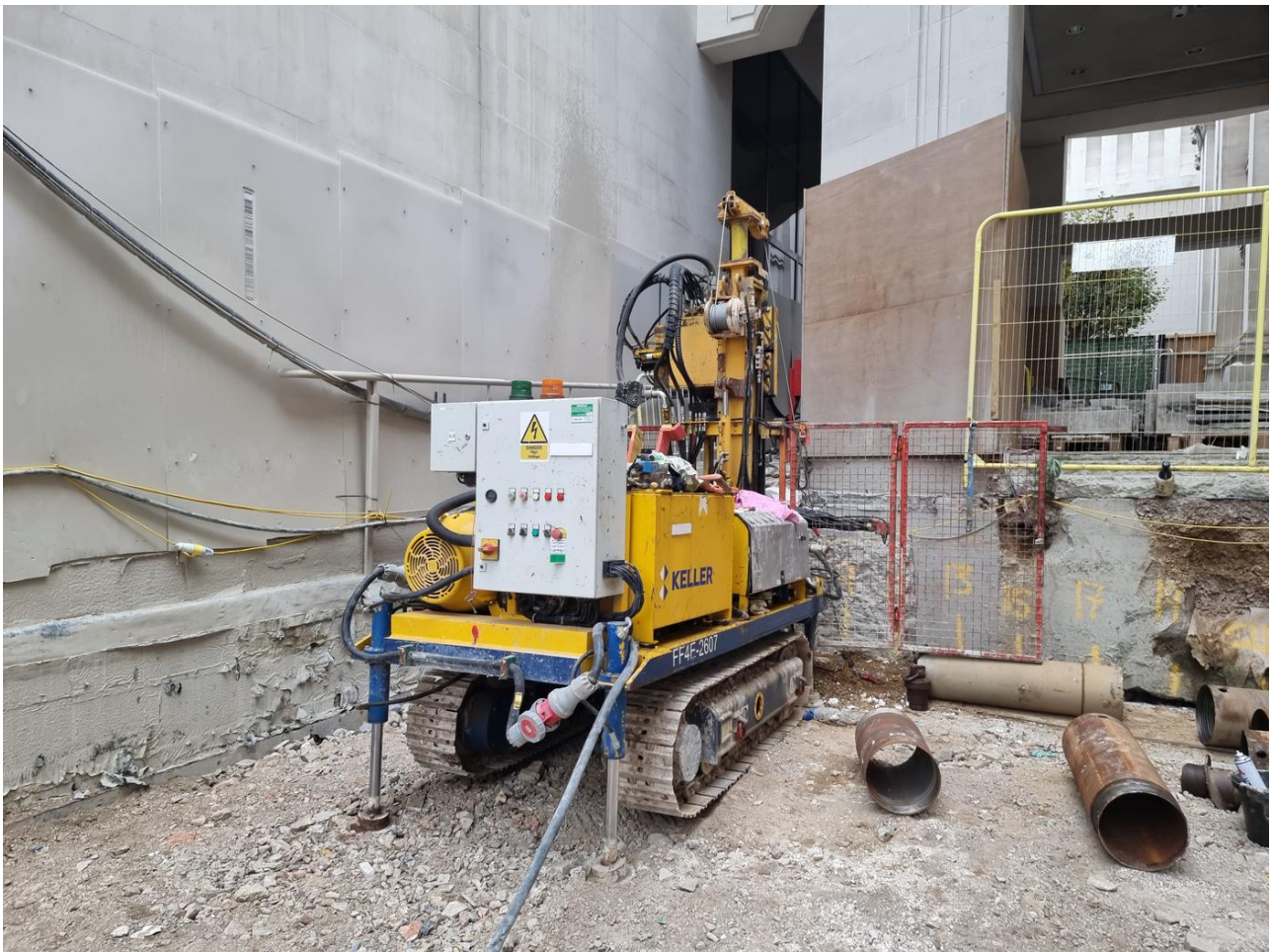


National Gallery

London

The National Gallery in Trafalgar Square, is one of London's most iconic buildings and is a major tourist attraction. It underwent a £41m renovation to coincide with its bicentenary in 2024.



The project

The work on the Grade I listed site featured a new entrance at the Venturi, Scott Brown and Associated (VSBA)-designed Sainsbury Wing. As part of this work a new basement link between the Wilkins Wing and the Sainsbury Wing was needed. Keller helped achieve this by installing a Secant mini piled wall on three elevations in very restricted working conditions

The challenge

Keller were challenged by Careys and Arup to provide restricted access piling and grouting systems and assist in reducing the ingress of water to facilitate the construction of a new connecting underpass between the fully operational Wilkins Wing and the Sainsbury Wing of the museum. The work was carried out in a very restricted space.

The solution

To install a 340/300mm diameter rotary bored hard/soft Secant piled wall and link this to an existing Secant piled wall to the East Elevation of the Sainsburys Wing with a length of load-bearing wall to the West Elevation of the Wilkins Wing. Keller also installed TAMs (Tube a Manchettes) and injecting a Sodium Silicate chemical grout along the East Elevation, coring through existing foundations to aid with the underpinning of the current foundation. Keller also installing TAMs along the interface between the existing Secant piled wall and the newly installed Secant wall. to provide a seal. All the work was carried out using fully electric plant and equipment to reduce noise and vibration.

Project facts

Owner(s)

National Gallery

Keller business unit(s)

Keller UK

Main contractor(s)

Careys
Sir Robert McAlpine

Solutions

Groundwater control

Markets

Institutional/public

Techniques

Secant pile walls
Permeation grouting

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