RICHMOND RETAINING WALL



REQUIREMENT

Anchor Systems (International) Ltd were contacted by Red Sky Property to provide a suitable stabilisation system to prevent a complete wall rebuild in Westleigh Avenue, Richmond. The failing wall had begun to bow most likely due to increased amounts of pressure from the earth and vegetation behind it. Elite Designers specified a 12kN/m load was required to resist further movement of the wall.

A G.P.R (Ground Penetrating Radar) scan was carried out to locate any buried services so that these could be avoided carrying out the project.

SOLUTION

After the G.P.R scan was carried out by Intersect Surveys, galvanised AS-20 Vulcan Earth Anchors were proposed at a 3m install depth based on the 12kN restoring force that needed to be met as well as the on sight conditions (London blue clay). The 19 Vulcan Earth Anchors were installed across the wall using an excavator fitted with a breaker attachment. The installation, loading and locking off the anchor systems were carried out over 4 days proving to be a more time-efficient operation, compared with other solutions such as a drilled and grouted system, resulting in minimal road/public path closures and a more cost-effective solution than alternative options such as a full wall rebuild.





Retaining Wall Stabilisation



LOCATION

Westleigh Avenue, Richmond

ANCHOR SYSTEM

19no. AS-20 Vulcan Earth Anchors

SUPPLIER

Anchor Systems International LTD

CLIENT

Red Sky Properties

INSTALLER

Hartmann Construction Ltd

DESIGN ENGINEER

Elite Designers







