

Acton Town to Ealing Common Cutting Stabilisation

Client
London Underground

Main Contractor
Cementation Skanska

Engineer
Mott MacDonald



Cementation Skanska were contracted by Metronet to design and construct earth structure remediation works to approximately 400m of the District Line and Piccadilly Line railway cuttings between Acton Town and Ealing Common stations.

This stretch of the District Line was originally constructed in 1879 and later widened to increase capacity of the railway corridor immediately to the west of Acton Town station serving the District Line and the important Piccadilly Line servicing Heathrow Airport.

The works involved the installation of some 3500 linear metres of piles, 80m of CemRailBeam® and was to be constructed utilising access from an adjacent disused playing field.

The piling works were carried out using two Klemm 702 piling rigs and a TD308 Piling Rig operating from earthworks access platforms using temporary guide walls, which in turn served as a solid base for the placement of the CemRailBeam® units.

As the geometry and ground conditions within

the cutting varied along its length, the design was tailored to suit the specific conditions to provide the most economic solution to Metronet. The design varied along the length of the cutting and the solutions included earthworks regrade, discrete spaced piles and a bored pile retaining wall utilising the CemRailBeam® system.

The project also involved management and removal of Japanese Knotweed and asbestos which was found to be located on this project.

