RETAINing STRUCTURES

REINFORCED EARTH
SUSTAINABLE TECHNOLOGY

London 2012 Olympic Park Infrastructure
Bridge H07 Retaining Walls

Client
Olympic Delivery Authority (ODA)
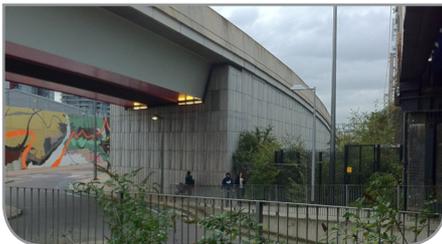
Contractor
BAM Nuttall

Consultant
ARUP

Works Completed
2011

Construction for the Olympic Park involved considerable redevelopment on a former industrial site in Stratford, East London. As well as the construction of Olympic sports venues, the 200 hectare site also required a complex arrangement of infrastructure to allow access during the games and hold a lasting sustainable legacy for the local population.

Pre Games – Prior to the London 2012 Olympic and Paralympic Games and during construction of the Olympic Park, Bridge H07 was used to carry construction traffic.

Games – During the Olympic stage, Bridge H07 formed part of the Loop Road around the Olympic Park which operated as a two lane, one way-system to deliver visitors to the venues. Bridge H07 was essential for the transportation and logistics during the Olympic stage.

Legacy – In legacy, Bridge H07 will form part of the local distributor road network operating with two way traffic as well as pedestrian traffic.

The northeast approach embankment for Bridge H07 is located between the existing embankments/viaduct of the Great Eastern Railway and the Stratford City Southern Access Road. Due to the close proximity of these structures, both sides of the approach embankment are supported by Reinforced Earth Retaining walls.

Reinforced Earth Co. Ltd. (RECo) were approached early in the design stage to develop a retaining solution for the bridge ramps, part of the solution involved building a system around the aesthetic requirements. A bespoke pattern was suggested and created by RECo to fit on the concrete facing panels.

The wall was built using BBA accredited GeoStrap soil reinforcing strips which consist of discrete channels of closely packed high tenacity polyester fibres encased in a polyethylene sheet, GeoStrap reinforcing strips do not impose any limitation on salt concentration within the backfill.

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