## RETAINing STRUCTURES



## A6 Manchester Airport Relief Road (MARR)

Manchester

## Client

Stockport Borough Council

**Contractor** Morgan Sindall

Consultant AECOM / SWECO

Works Completed 2018







The A6 to Manchester Airport Relief Road (A6 MARR) will provide six miles of new two lane dual-carriageway on an east-west route from the A6 near Hazel Grove (south east Stockport) via the existing A555 to Manchester Airport and the link road to the M56.

The scheme bypasses heavily-congested districts and local centres, including Bramhall, Cheadle Hulme, Hazel Grove, Handforth, Poynton, Wythenshawe, Gatley and Heald Green and will provide much-needed connectivity for key strategic routes into the North West and to Manchester Airport, including traffic from the A6, A523 and A34 - all of which are key routes for business, leisure travel and freight from Cheshire, Derbyshire, Staffordshire and beyond.

Reinforced Earth Co Ltd (RECo) was employed to design and supply the materials for retaining walls and bridge abutments ranging from rail to foot bridges.

Particular structures close to the airport had to be built in heavily congested areas. An 11m high Reinforced Earth true bridge abutment was constructed at the intersection with Styal Road which supported a semi integral bridge over the existing electrified railway line.

In total over 3700m<sup>2</sup> of precast concrete facing panels with a feature finish were supplied together with concrete coping units which were also designed and manufactured by RECo.

The structures were designed using two types of soil reinforcing strips, high adherence galvanized steel and GeoStrap, a polymeric reinforcing strip. Steel reinforcing strips were used in the design for structures with high concentrated loads such as bridge abutments while polymeric soil reinforcement was used on structures that are subject to normal loading conditions.

The retaining walls were constructed by CT Construction, specialist in Reinforced Earth retaining wall construction.

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