



Borders Rail Scotland

Client

ScotRail

Contractor

BAM

Consultant

Atkins/Fairhurst

Works Completed

2015



The Borders Railway is the longest new domestic railway to be built in the UK for over 100 years. Thirty miles of track now provide a reliable transport connection between Edinburgh through Midlothian and into the Scottish Borders for the first time in nearly 50 years.

Reinforced Earth Company (RECo) was asked to undertake the specialist design of the Reinforced Earth structures for ScotRail.

RECo provided structures using two types of soil reinforcing strips, high adherence galvanised steel and polymeric GeoStrap. Steel reinforcement was used on structures with high concentrated loads, i.e., the walls which carried the mainline track, whereas in the areas which were subject to normal loading conditions GeoStrap was used.

The GeoStrap soil reinforcing strips consist of discrete channels of closely packed high tenacity polyester fibres encased in a polyethylene sheet, GeoStrap reinforcing strips are compatible with all applications where the backfill pH is under 9, they do not impose any limitation on salt concentration within the backfill.

RECo designed and supplied over 20 significant walls to overbridges and underbridges, structure types varied from approach walls carrying full rail loads to slopes supporting footbridges, in total RECo supplied around 10,000 m² of concrete facing panels.

Thanks to RECo's commitment to the programme requirements, the track was opened as planned by Queen Elizabeth II in September 2015, before journeying on it in the Royal Train.