

Unity Way Hatfield

South Yorkshire

Client

Doncaster Metropolitan Borough Council

Contractor

Balfour Beatty

Consultant

Aecom

Works Completed

2020



Unity Way is a new stretch of road from Junction 5 of the M18 to Waggon Way next to the former Hatfield Colliery. This new road will provide an essential link to allow work to start on the Unity Project, one of the largest regeneration and infrastructure projects of its kind in the UK, delivering a mixed use development covering 250 hectares.

As part of this link road a new bridge was required to cross the Doncaster and Wrawby Junction Line. This road bridge would span five non-electrified mainline tracks and one colliery sidings making the overall span 42m.

As well as being a critical path programme for the Unity Project, the bridge will also be used during construction of a new 900MW IGCC power station on the old Hatfield Colliery site, the construction of this new facility will inevitably require the transportation of very heavy loads across the bridge.

Reinforced Earth Co. Ltd. (RECo) worked closely with the scheme designers (Aecom) to develop a solution for the reinforced soil bridge abutments which had to support high concentrated loads generated from Special Order vehicles with a maximum trailer weight of 350 tonnes.

With a 42m bridge span this is one of the longest semi-integral bridge structures supported on this form of technology in the country.

Reinforced Earth is often asked to design abutments which fully support the bridge reactions without the need for costly column supports or thick RC abutments. The precast concrete facings of the structure are only 140mm thick, therefore providing substantial cost, programme and environmental benefits.

The Reinforced Earth abutments were built by specialist contractor CT Construction using our BBA HAPAS accredited system utilising high adherence galvanised steel soil reinforcement and modular panels giving a simple and elegant appearance.