

New River Bridge, Hoddesdon

Retaining Walls and Copings

Client

Hertfordshire County Council

Contractor

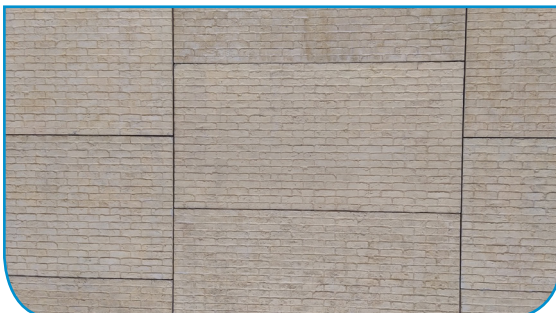
Osborne

Consultant

WSP

Works Completed

2021



Hertfordshire County Council needed a new bridge structure to cross New River on the only route into Hoddesdon Business Park. The mixed-use park generates over 5000 jobs and is a significant contributor to the local economy, but the existing bridge was too narrow for HGVs to pass, so a wider structure was needed along with a safe cycleway and improved pedestrian access.

Reinforced Earth Co. Ltd. (RECo) was engaged during a collaborative ECI stage to develop a retaining solution for the bridge ramps, part of the solution involved designing a system around the use of backfill material from a wide range of sources including recycled concrete.

A pumping station is located close to the site, therefore it was important that the finish on the new structure was sympathetic to the appearance of the listed building. RECo, together with our casting partners Macrete designed and manufactured bespoke coloured walls panels with a brickwork pattern and texture similar to the pumping station. The versatility of RECo's systems allow many different wall finishes to be created at little extra cost.

The wall was built using PVA EcoStrap soil reinforcing strips, which consist of discrete channels of closely packed high tenacity polyvinyl alcohol fibres encased in a polyethylene sheet. EcoStrap reinforcing strips are not affected by the pH, sulphate or chloride levels in the backfill material making it the perfect solution for using site won or reclaimed materials.

As part of our package, RECo also designed and supplied the vehicle parapet copings and support slabs.