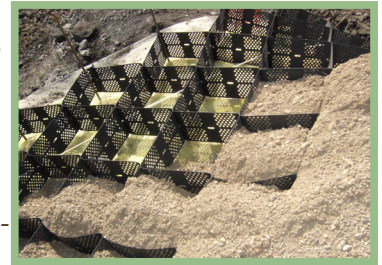


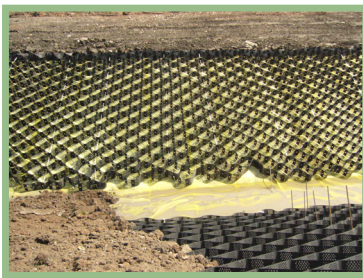
Case Study: Channel Protection, Access 18, Avonmouth

Access 18 is a strategically located industrial and distribution site in Avonmouth close to the edge of Bristol. During the redevelopment of a new logistics warehouse for St Modwen, a drainage channel and collection pond were designed to prevent flooding on site.

During construction, the client was concerned about potential contamination from the soil surrounding the site so with this in mind the channel was lined with an impermeable, self-sealing Geosynthetic Clay Liner.



To ensure that a vegetated green finish was still achieved in areas where the GCL had been installed the Geoweb® Slope Stabilisation System was specified. The three-dimensional geocell system allows for soils or aggregates to be held in place on steep slopes as the individual cells confine the fill material.



Due to the degree of slope, large cell Geoweb panels were selected. Large cell panels otherwise known as GW40V are suitable for slopes up to 45 degrees.

As the Geoweb was to be installed over a GCL, the panels were installed using Atra® Tendon Clips and Tendons. The Tendon was securely anchored at the crest of the slope using the Atra Anchors beyond the line of the GCL to prevent any damage. Once securely anchored the tendon was threaded through the I-Slot® within the Geoweb panels with the panels then expanded down the slope and secured at the toe of the slope. Atra Tendon clips were used to secure the tendon and the panels together. The patented Atra Tendon Clips function as a load transfer device to ensure that the load is distributed evenly across the tendon and the panels.

Once fully installed, site won material was used to infill the Geoweb and a layer of Greenfix GeoJute™ was laid on top to protect seeds during germination and early establishment.

The channel and pond have now been functional for almost 20 years and maintain a pleasant appearance and welcomed habitat in an otherwise commercial landscape.



Product
Geoweb Slope Protection
& GeoJute™



Contractor
Dean Dyball Civil Engineering