

Vegetated Retaining Wall



Vegetated retaining wall designed as part of the national cycle way project to form cycle path down steep slope.

The Westfield Pill Link forms part of National Cycle Network Route 4 (Celtic Trail) and links two existing Shared Use paths, the Brunel Trail and the Milford Haven to Pembroke route. The project was part funded by the European Regional Development Fund (EDRF) through the Welsh Government and is a component element of the Countryside Council for Wales Communities and Nature strategic project.

As with other sections of the route the site posed a particular set of circumstances for the design in that impact on the environment needed to be as minimal as possible and finish of the wall had to have minimal impact on the environment

ABG's in house Technical Team proposed a design incorporating a Webwall fascia reinforced using Trigrid and with structural drainage achieved using Fildrain.



During construction phase

Key Project Information

Designer	ABG Ltd
Contractor	Evan Pritchard
Client	Pembrokeshire County Council
Products	<ul style="list-style-type: none"> • Webwall GW250 Retaining Wall System • Fildrain 7DW Drainage Geocomposite • Trigrid EX30/30 Reinforcement Geogrid
Benefits	<ul style="list-style-type: none"> • Speed of installation • Re-use of site won materials • Vegetated finish to soften visual impact

Webwall is a three dimensional cellular confinement system designed specifically for building and facing reinforced earth systems. It's cellular design allows site won materials to be used as backfill reducing the requirement to import expensive structural fill.

Trigrid EX is an innovative high performance geogrid combining fibre-reinforced polymer strips within a woven structure. Its junctions are high-strength welded which helps create an interlocking structure from a powerful combination of hybrid materials and is ideal for use in earth reinforcement applications.

Fildrain drainage geocomposite is a cost effective alternative to traditional stone drainage. It collects and channels liquids and gases to a carrier pipe for transportation to a suitable discharge point. In this project it was used in strips behind the structure to



allow for drainage of groundwater.

Close collaboration between the ABG Technical Team and consulting engineer resulted in a design based on the site conditions; ultimately adopted for the project and then installed by main contractor Evan Pritchard.

Following construction the wall was planted with plants selected for local environment and to provide coverage for the wall facia. The young plants are planted in the facing cells which are filled with top soil during the construction process.

Contact ABG to discover how Webwall could help you deliver a sustainable, cost efficient and carbon neutral solution.

About ABG

ABG are a market leading developer of high performance geosynthetic solutions for use in a wide range of civil, environmental and building applications.

Established for 25 years and based in the UK ABG pride themselves of delivering outstanding customer service along with innovative solutions.



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