

CASE STUDY

Afon Gwydol River Embankment Protection



KEY DETAILS

PROJECT NAME: Afon Gwydol river embankment protection

CLIENT: Carillion Rail for Network Rail

LOCATION: Abergwydol, Mid Wales

PROJECT CATEGORY: High energy rivers, Rail

Works were required to repair an eroding railway embankment adjacent to the river. This resulted in the embankment encroaching into the river, causing erosion problems on the opposite bank belonging to a local farmer.

Difficult site access created problems for using large blockstone. Salix replaced part of the blockstone armouring with North American Green (NAG) P550. The NAG P550 is the highest performing composite Turf Reinforcement Mat (TRM) in the UK. Compared to blockstone armouring it is also a more environmentally sustainable, cost effective solution that was easier to install. It also blended in better with the environment. Anchor trenches were dug at the toe and the top of the slope to ensure the NAG P550 was not washed away during the winter floods. Under Salix supervision, Carillion Rail dug the trenches and formed the slope ready for Salix site operatives to seed the area with a specialist river mix and manually install the NAG P550. The area was also over planted with some wetland plants.

The works were carried out at the end of October, which meant that the NAG P550 remained only partially vegetated throughout the winter months of frequent flooding. By the end of the following Spring, there was no soil erosion and a good rate of vegetation establishment.



NAG P550 over seeded and prepared surface



Blockstone toe with NAG above replacing blockstone



November one month later



June the following year

CONTACT DETAILS

Salix River & Wetland Services Limited Salix, Croxton Park, Thetford, Norfolk IP24 1LS Telephone 0870 350 1851 Fax 0870 350 1852 Email info@salixrw.com

