

## River Teme Riverbank Stabilisation Project



**PROJECT NAME :River Teme Riverbank Stabilisation**

**CLIENT : National Grid**

**LOCATION : River Teme**

**PROJECT CATEGORY : High Energy Rivers**

The River Teme is a sensitive SSSI and SAC river and over 150 metres of severe bank erosion was threatening a National Grid pipeline. Salix were the lead design and build contractor with a hybrid bank protection solution.

The toe of the eroded bank was stabilised with a graded rip rap below average water level and then extensive soft/bioengineering works above. The project represents one of the largest riverbank repair works ever undertaken by National Grid.



Salix undertook the works on a Design & Build basis. Innovative working methods included a submerged blockstone causeway that permitted fish movement and allowed access to the opposite bank to work.

The alternative to work on the opposite bank was a 2.2 km access track across wet ground involving importing and then removal to landfill of 2000 tonnes of imported haul road material. Thus over 2000 tonnes of aggregate was saved from the project.



We identified this significant cost and carbon/sustainability saving as part of our sustainability review procedures.

**Below: VMax P550 Shear Stress Turf being installed**



Trees limbs removed for access were reused as part of the soft engineering revetment. Salix grew in-house over 2000m<sup>2</sup> of reinforced grass/wildflower turf on 40m<sup>2</sup> large rolls to provide soft engineering protection above average low water level. The high erosion control performance of this turf meant that a soft solution could be used as a direct alternative to rock rip rap, saving over 1000 tonnes of imported material whilst creating a more sustainable and ecologically valuable solution.

The various soft engineering solutions presented by Salix represent a major cost saving over traditional hard revetments. Our Health & Safety risk assessment set maximum water levels and monitoring levels were installed at key working areas to determine safe working conditions.



A dive team were employed to assist the installation of a concrete plinth, supported on 12 “H” piles, to straddle the high pressure gas pipeline.

A blockstone retaining wall was installed above the straddled pipe 2.5m below the river level to 1m above average river level and above this a graded bank was created protected with Salix’s Rock Roll Mattresses.

Works were not helped by the wettest recorded year in English history and amazingly there were five out of the six largest flood events in recent history whilst were on site!





Post flood events, and just two months after practical completion the finished works are performing as designed.

#### 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](mailto:info@salixrw.com)

[www.salixrw.com](http://www.salixrw.com)

