



AquaRockBag® project report: Protecting exposed gas pipe on River Avon

Initial situation pre AquaRockBag®

Severe bank erosion exposed a main high pressure gas pipe at River Avon (UK)

- Gas pipe supplies 80,000 houses and businesses
- Active navigation of barges and pleasure boats → Risk of collision that would result in big explosion
- Erosion and scour created a very deep pool – up to 5 metres deep
- Ecologically sensitive site

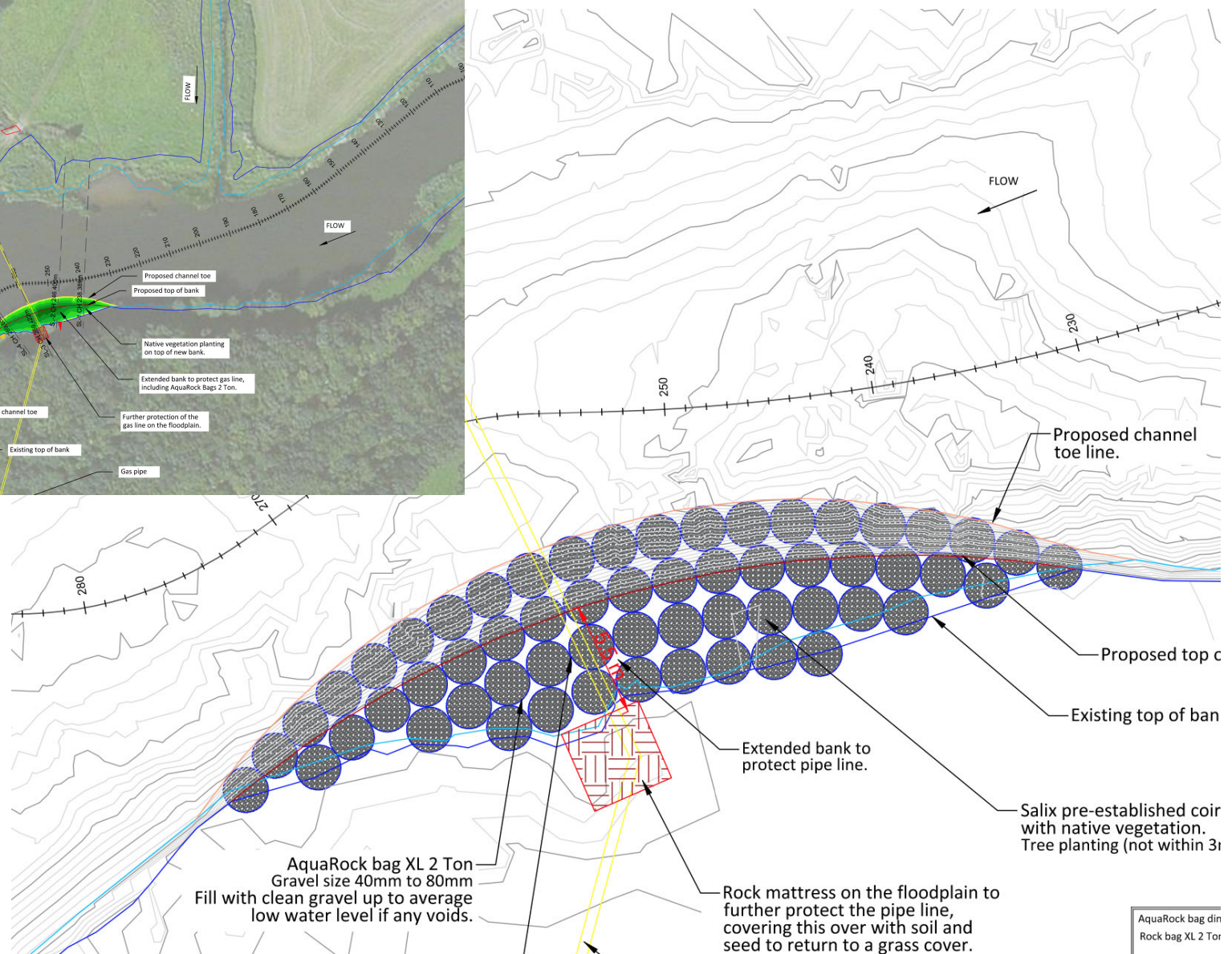
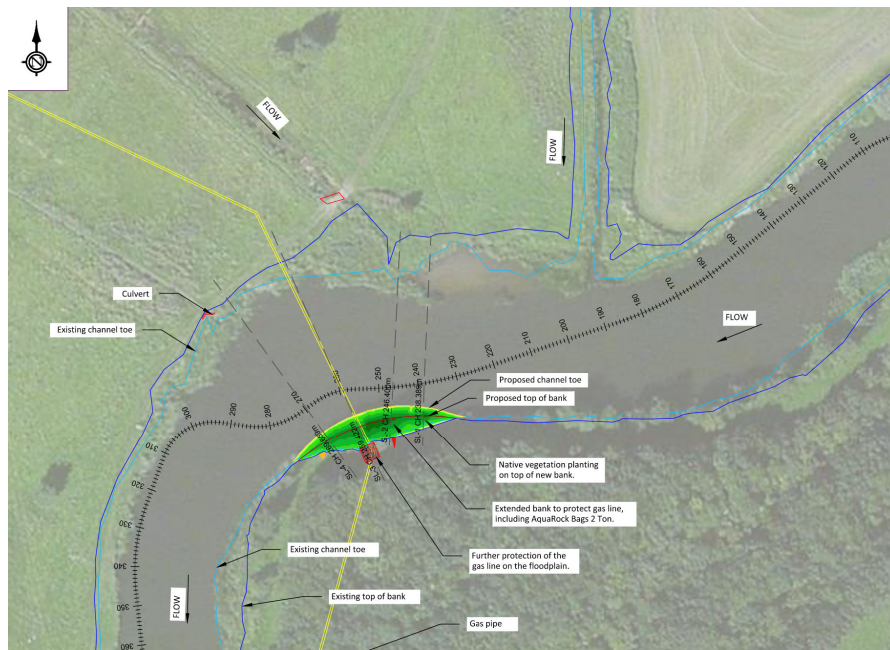


Solution

As an ecologically sensitive site the use of traditional hard engineered bank protection was not an option and bioengineered designs were favoured. The bags were covered with soil to be able to vegetate them and fully integrate them into the natural bank. In addition, headland would cause erosion in the river bed and consequently expose the gas pipe elsewhere.

Thus, AquaRockBags® were used, stacked up to 9 layers deep and formed as a very gradual headland. The new revetment does not cause erosion in the river bed while providing sufficient protection to the gas pipe.





Reasons for choosing AquaRockBag®

- AquaRockBags® are able to reduce currents by absorbing water energy. Hard revetments such as block stones are reflecting in nature and would redirect the erosion further downstream.
- Installation of AquaRockBags® into deep pools (as needed in this project) is very easy due to the attached central single-point lifting eye and use of quick hitch.
- Due to the use of small stone sizes the AquaRockBags® act as artificial reefs helping provide habitat for flora and fauna.





Internationale Geotextil GmbH

Am Bahnhof 54

D-27239 Twistringen

Telefon +49 (0)4243 9288-0

Fax +49 (0) 4243 9288-79

s.roess@roessgroup.com

