



**Salix**  
Official Distributionpartner  
for iGG in UK

## CASE STUDY

# PROTECTING AN EXPOSED GAS PIPE ON RIVER AVON - UK



### INTRODUCTION & PROBLEM STATEMENT

A main high-pressure gas pipeline on the River Avon was exposed due to severe bank erosion. The gas pipeline supplies around 80,000 households and businesses and represents essential infrastructure for the region. **AquaRockBags** were laid as part of a major project to minimise the risk of collision with ships travelling over the pipeline.

### THE CHALLENGE

The exposed gas pipeline was located in a section of river that is actively used by barges and leisure boats. This situation harbours considerable risks: a collision with the gas pipeline could cause a catastrophic explosion. In addition, erosion in this area had created a deep basin up to 5 m deep, making access and stabilisation even more difficult. As the site is also ecologically sensitive, measures had to be taken to ensure both the protection of the infrastructure and the preservation of the ecosystem.

### THE SOLUTION

As this is an ecologically sensitive area, the use of conventional, permanently constructed bank protection was not an option. Instead, biotechnological constructions were favoured.

**AquaRockBag**® was used, stacked up to 9 layers high and moulded into a very gently sloping headland. This construction does not cause any erosion in the river bed and at the same time provides sufficient protection for the gas pipeline. The bags were also covered with soil so that they could be planted and fully integrated into the natural bank.

This solution was not only technically effective, but also protected the sensitive ecosystem of the area. It also minimised the risk of future erosion further destabilising the riverbed and exposing the gas pipeline elsewhere.

### ADVANTAGES

**AquaRockBag**® reduce the water flow by absorbing the water energy. Hard cover layers such as boulders have a reflective effect and would divert erosion further downstream.

The installation of **AquaRockBag**® in deep basins (as required in this project) is very easy using the integrated, central one-point lifting eye and a quick-release clamp.

By using smaller stones, the **AquaRockBag**® act like artificial reefs and provide a habitat for flora and fauna.



### PROJEKTORT

The River Avon is a 121 km long river in the south-west of England. The nearest cities are Bristol and Bath.

### RESULT & CONCLUSION

Thanks to the successful implementation of the **AquaRockBag**® measures, the safety of the gas pipeline was guaranteed, potential risks to people and the environment were eliminated and the ecological character of the region was preserved.

This project is an example of the successful handling of complex technical and ecological challenges.



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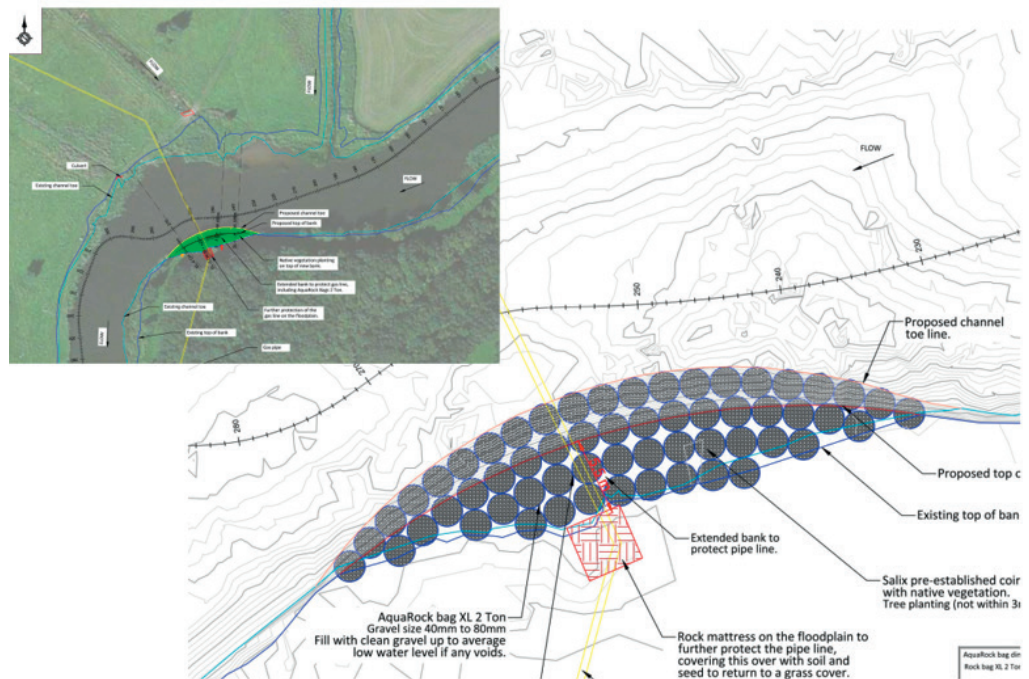
**ABOUT AQUAROCKBAG**

**AquaRockBag®** is made of robust HDPE or polyester mesh and promotes the colonisation of plants, quickly creating natural habitats.

The flexible structure adapts to uneven surfaces, avoids time-consuming ground preparation and thus reduces project costs.

The environmentally friendly design minimises interference with the habitat and the risk of environmental damage.

**AquaRockBag®** is reusable and easy to install. **AquaRockBag®** also offers high abrasion resistance and UV resistance - ideal for sustainable construction projects.



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