

Canal Bank Remediation

To provide remediation of approximately 400 metres of canal bank.

Salix was contacted by Marshall Construction to provide remediation of approximately 400 metres of canal bank on the Manchester Ship Canal at Irlam Wharf. The 400 metres was divided into six zones of varying levels of erosion requiring different solutions. The erosion issue appeared to have been caused by significant 'wave action' over a lengthy period of time, in what is a busy stretch of canal.

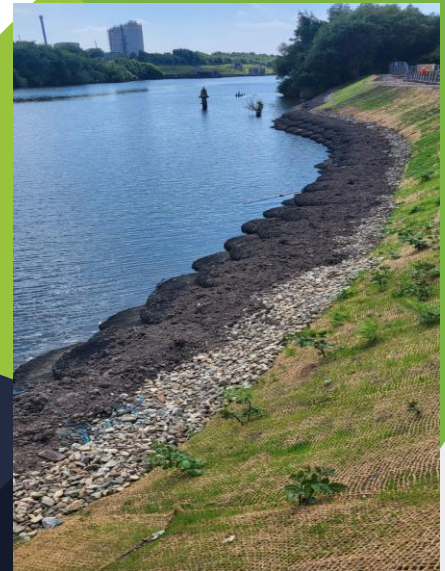


The client provided Salix with a basic outline design, drawn up by a 3rd party. Both our technical manager and project manager worked with Marshall Construction to create a value engineered, far more fit-for-purpose design. Utilising information that we had requested from the client in terms of bathymetric data and historic water level records, we devised a toe detail for the embankment to counteract 'wave action' and provide the relevant long term slope stability and toe protection. Our Bio-engineered solution also allowed the area to naturally vegetate, ensuring it was sympathetic to the environment.

Salix's in-house technical team drafted up some cross sections for our bio-engineered design, enabling the client to gain approval from the Canal and Rivers Trust.

Another challenge we were tasked with was dealing with the removal of invasive Himalayan Balsam. Our project management team worked with the client to take the project through the pre-construction phase, into the construction phase and delivered the programme of works over an 8-week period.

We deployed our specialist contracting team who were all water safety trained and kitted out with dry suits to ensure the works could be carried out safely and expertly.



Working from the top of the bank, using a JS220 15 m long reach excavator, we cleared vegetation from the full length of the bank, with off-site removal, in preparation for the installation work. We then set the line from the toe to the existing boundary.

In four of the zones, we used 164 2t and 80 1t aqua rock bags to fill the banks and used a clean granular fill behind the rock bags to bring the stone above the water level. This continued until the desired height was reached before we placed imported soil on top.

We devised a solution to fill the rock bags on site, reducing the number of loads, minimising our carbon footprint and saving a significant amount of haulage costs, this saving was passed on to the client.

Our experienced team worked collaboratively on site with the client and the feedback we had was extremely positive, with the client noting "Our site team had nothing but praise for Salix, also stating being a pleasure to work with yourselves, such a well organised, professional approach"