Gloucester Business Park

KEY DETAILS

PROJECT NAME : Gloucester Business Park
CLIENT : Moss Construction
LOCATION : Gloucester
PROJECT CATEGORY : Lakes, ponds and shorelines

A new warehouse complex required a large balancing pond to take surface runoff water. The pond had steep sides which required some form of ground stabilisation.

Initial designs looked at using gabion baskets in three tiers up the bank to create 1m high steps with 1m wide ledges in between each row of gabions. As an initial cost saving exercise, Salix proposed the solution of a Willow spiling technique. This solution also provided a more aesthetically pleasing and environmentally sustainable alternative to stone filled gabions.

Willow spiling involves the use of large upright live Willow stakes, approximately 100mm in diameter and over 2 metres in length, driven into the ground, with 800mm exposed above ground to create the lift. Live withies (Willow branches) are then weaved in between the upright Willow stakes to create a living wall. A biodegradable coir blanket, NAG C125 is placed behind and then backfilled with free draining soil to create the 1m wide ledge.
Over 750 metres of Willow spiling was installed. The cost saving over the gabion option was significant. The site is now home to a multitude of flora and fauna including dragonfly. The roots of the Willow continue to reinforce the soil. If the growth of the Willow becomes an issue, the area can be coppiced every five years.