

SSSI SITE — RIVER SEVERN ESTUARY RIVER SEVERN, GLOUCESTERSHIRE, UNITED KINGDOM

Revetment Protection

Problem

A 200m stretch of the river Severn in Gloucestershire had suffered acute erosion along the high tide line. This flood bank had already been protected with stone cladding, which unfortunately had not offered sufficient erosion protection. The mud flats in front of the flood bank are designated a SSSI which meant that engineered solutions required special consideration.

Solution

As the erosion was acute, there would be no way that a soil-bioengineering solution alone (coir logs, root balls, riparian wattles etc) would offer sufficient erosion protection. Therefore, Maccaferri Ltd proposed an integrated design using stone filled Reno mattress base units made from double twisted hexagonal wire mesh. These units were laced together and filled with suitable stone. To accelerate the growth of vegetation, soil was then brushed in to fill the voids and to hide the stone surface this solution is also called Geomac.

Client: THE ENVIRONMENT AGENCY

Designer / Consultant: Environment Agency (Tewkesbury)

Contractor: The Environment Agency

Products used (Qty.)

Date of construction: 10/1997 - 01/1998

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Existing scour line



Newly installed Reno mattress / Geomac



SSSI established in the Geomac