



CASE STUDY

PROJECT:	The Jackhouse Reservoir Trials Oswaldtwistle, Lancashire, England
CLIENT:	Construction Industry Research and Information Association (CIRIA)
ENGINEER:	Salford Civil Engineering Limited
CONTRACTOR:	Tarmac Construction Limited
SUB-CONTRACTOR:	Chantry Construction Limited
SYSTEM:	GRASSCRETE GC2 (150mm thick)
CONSTRUCTED:	1986





GRASSCRETE under test with tail water observation

As a pre-cursor to the publication “The Design of steep grassed waterways” a field trial was undertaken. This involved the construction of a series of trapezoidal channels down the 1 in 2 slopes of an abandoned reservoir. A water supplying flume was connected to the head of each channel, through which water was discharged at variable flow rates.

The trial was successful in benchmarking the capabilities of various armouring systems, as well as identifying the characteristic performance of grass itself under high flow conditions.

From the data provided, it was possible to identify GRASSCRETE as being able to exceed the 8 metres per second limit of the trial, without structural damage. This compared to lesser flow rates achieved by geotextiles and hand laid pre-cast block systems