



## Case Study

# Loyn Bridge, Lancashire

<b>Client</b>	Lancashire County Council
<b>Contractor</b>	LCC Operations
<b>Gripple Terra-Lock™ System</b>	TL-100 & TL-A3 - Installed with Gripple Petrol Driver and JackJaw™. TL-P1 Installed With Drill & Chuck.
<b>Application</b>	Securing HPTRM for Slope Reinforcement
<b>No. of Systems</b>	150 TL systems, TL-100 & TL-A3 and 600 TL-P1
<b>Start to Completion</b>	March 2015

Loyn Bridge, a three span narrow masonry arch bridging the river Lune between Hornby and Gressingham was at risk of damage due to erosion of the bank of the River Lune upstream.

To armour the bank and ensure the continued structural integrity of the bridge whilst providing a finish in keeping with the stunning natural environment, the Terra-Lock™ System was installed by LCC Operations in conjunction with an erosion control geotextile. This was secured by an anchor trench at the crest of the slope and rock rolls at its toe. Cuttings from willow trees further upstream were planted through the geotextile to complete the installation.

The Terra-Lock™ Anchor was installed quickly and easily using the Gripple Petrol Driver, and then instantly load-locked by the JackJaw™. The erosion control geotextile was secured in place with the integral TL-100 top termination, specifically selected as vegetation re-growth was a primary objective.

Using the Terra-Lock™ System eliminated the need to crimp at the surface to secure the mat in place, reducing the contractor's time on site.

To improve intimacy between the geotextile and the newly seeded soil below, as well as to further aid re-establishment of natural vegetation, the patented TL-P1 high load pins were specified and deployed around the anchors. These were installed with a general purpose 18v combi-drill and bespoke chuck in less than half the time normally taken to install rebar pins or stakes, and provided superior pull-out loads.

