

BRIGSTEER ROAD, KENDAL
KENDAL, CUMBRIA, UNITED KINGDOM**Slope Protection****Problem**

Maccaferri was contacted by Story Homes to assess a rock face at the entrance to their Brigsteer rise housing site in Kendal, Cumbria. The consulting engineer for the scheme was RSK.

The client's goal was to achieve a vegetated slope over the rock face to give a more welcoming entrance for the residents.

The slope had a maximum angle of 45 degrees with a maximum height of 5m from crest to toe.

Solution

In order to achieve vegetation growth along the slope, topsoil was required and due to the gradient, any unsupported topsoil would be washed down to the toe during rainfall events.

The topsoil had to be contained and this was done by installing 1850m² of Macweb Geosynthetic 3D cellular containment system of HDPE strips ultrasonically bonded together.

The face of the slope was regularised to avoid creating voids under the Macweb, into which the topsoil could fall. To secure the Macweb in place, pins were unable to be used due to the hard rock face making it impossible to penetrate with a standard pin. To counter this, Maccaferri's Double Twist rockfall netting was used with a 500 mm x 500 mm toe and anchor trench securing it back tight against the rockface.

The MacWeb was attached to the rockfall netting by means of minimum 4 No, 8mm minimum width, black nylon cable ties per square meter, inserted through the holes in the MacWeb cell side walls and around the wire mesh and pulled tight enough to sit the Macweb onto the surface of the mesh.

Client: Story Homes**Designer / Consultant:** RSK**Contractor:** Story Homes**Products used (Qty.)**

- Macweb

1850m²**Date of construction:** 11/2022 - 06/2023[Google Maps](#)[Google Earth](#)**MacWeb® and DT Mesh Installation****Slope at 45° with MacWeb® and DT Mesh Installed**



Vegetation growth on a earlier section



Green Vegetation on slope



Green Vegetation appearing on slope