



Vertical Technology Ltd  
 INDUSTRIAL ROPE ACCESS SPECIALISTS  
 Unit 15  
 The Wren Centre  
 Westbourne Road  
 Emsworth  
 Hampshire PO10 7SU  
 Company Reg No: 2881894  
 T: 01243 377599  
 F: 01243 377227  
 E: enquiry@vertical-technology.com  
 W: www.vertical-technology.com

## Shanklin, Isle of Wight

### The problem

A 20m section of the popular coast route that traverses the cliff top between Sandown and Shanklin had collapsed as the result of a slope failure in the cliff. The cliffs here comprise weak sandstone and much of these have been previously protected from erosion using a system of anchored timber boards. The working space was incredibly tight with only 1m width of coast route remaining intact.



The collapsed cliff top and failed old timber revetment

### The solution

Working with the Engineers Mott McDonald, Vertical Technology used their previous experience working on these cliffs to arrive at a suitable engineering solution.

- Cut away failed timber boarding
- Re-profile the slip surface
- Install a grid of 6.0m anchors with a terram and rock netting revetment to stabilise the slope
- Install a grid of 6.0m fin drains
- From concrete footings build up a new timber wall dovetailed into the remaining wall and anchor with 2.0m x 25mm anchors.
- Backfill with lightweight fill





With no room behind the worksite for anchors to secure operatives and drilling equipment everything was suspended from tensioned steel cables secured to multiple load tested ground anchors located either side.

This contract made the front cover of Ground Engineering in 2008.



The slope stabilised with 6.0m anchors, the super lightweight DTH rig drilling Fin Drains



Completed timber shutter wall prior to back filling with lightweight fill.

