



# Case Study

## MARKSHALL FARM ROAD CUTTING, NORFOLK

**Client:** Network Rail  
**Consultant:** Byrne Looby Partners  
**Contractor:** B & M McHugh  
**Approved Installer:** Aspin Group



### PROJECT SPECIFICATION

The faces of the cutting had been subject to gradual movement and analysis revealed the factor of safety was unacceptably low. Any remedial work had to be able to be carried out while the line from Norwich to London remained open, using lightweight hand-held equipment.

### SOLUTION

Consultants Byrne Looby Partners recognised that the Platipus S06 and S08 earth anchors would achieve high loads in the medium dense sand of the cutting and anchor spacings were determined through detailed stability analysis of the various slope conditions. A diamond grid was selected for the anchors with 1.5m vertical and 2.0m horizontal spacing. The slope was first covered with Maccaferri MacMatR, secured in an anchor trench at the crest. The anchors were then driven through the material, with the load plates bearing onto the MacMatR over the face of the slope. Installation was carried out by IRATA trained rope access teams from Aspin Group, who, thanks to a combination of their skill and the simplicity of the system achieved an average installation rate of 80 anchors per day. The result was a cost effective, long lasting answer to the stability problems.

**Anchor System:** S06EB & S08EB aluminium bronze c/w 4m of 8mm Ø stainless steel wire tendon, 200mm x 200mm stainless steel load plate & recessed wedge grip.

**Quantity:** S06:1850, S08:1069      **Anchor Design Life:** 120 yrs      **Soil Type:** Sand

