

Case Study

M6 EXTENSION, CARLISLE TO GUARDS MILL, TODHILLS & FLORISTON OVERBRIDGES

Client: Highways Agency

Contractor & Anchor Installer: [Carillion Construction Ltd](#)



PROJECT SPECIFICATION

To facilitate the widening of the motorway and positioning of an additional carriageway under these two bridges it was necessary to cut back the existing embankment forming a bridge abutment and wing walls. The exposed cut faces needed to be made safe in the short term to allow the construction of new reinforced foundations and concrete wall.

SOLUTION

Vertical sheet piling was used to form temporary wing walls on each side of the two bridges and anchors were installed to secure them into position and provide the additional restraining loads required to hold back the embankment. Once the anchors were loaded and the sheet piling secure, the ground in front could be safely excavated and removed to allow the casting of the foundations and concrete wall. The anchors were installed into four separate sections of sheet piling along the site. The ability to demonstrate immediate loads from the anchors meant that the excavation process was continuous reducing the construction time on site.

Anchor System: B06TC spheroidal graphite cast iron anchor c/w 10m of 16mm Ø galvanised steel wire tendon, 200mm x 200mm galvanised steel load plate & 16mm galvanised steel wedge grip.

Quantity: 19

Anchor Design Life: 5 yrs

Soil Type: Made ground

