



FAIRLIE GABION WALL

LGS2

The Project

The Fairlie site consists of a steep soil embankment on sidelong ground. Remote slope monitoring had been in place since 2012 which was showing progressive movement requiring remedial intervention. Further ground investigations confirmed poor quality of underlying ground makeup with rockhead at varying levels between 1.5m and 3.5m below ground level provided a challenge for installing a suitable foundation for the designed gabion basket remedial solution.

Scope of works

Working with our designer QTS were able to engineer a mass concrete foundation solution down to rockhead for the gabion wall toe retention that allowed for all preparatory works to be carried out during disruptive possession. Maximising day-shift working to install 3m high gabion wall and bulk rockfill blanket (with trains running) contributed to minimising costs and reduced the safety risk to both our operatives and the operational railway.

Location: Fairlie

Principal Contractor: QTS Group

Client: Network Rail IP

Principal Designer: Fairhurst

Project Value: £450k

Timescale: 8 Weeks



Work Carried Out

- Installed mass concrete foundation removing requirement for operatives to access deep excavations
- Utilised disruptive access to install 220m of concrete wall foundation
- Utilised 12 m walking floor trailer lorries to deliver concrete meaning 50% less lorries on the road and 50% less lorries accessing and egressing the site from the main road, reducing the risk of accidents at that pollution

QTS In-House Services

- QTS Labour
- QTS Plant / Machinery

“Fairlie was a great example of value engineering and working with the supply chain to provide an engineering solution to a difficult ground related issue. Utilising the walking floor lorries provided both a safety and environmental benefit to the project.”

Mark Wilson

Project Manager, Network Rail, IP

Delivered in
8 Weeks

Reduced Traffic accessing
/ egressing site

Zero accidents
or incidents