

Case Study

STOREFORTH LANE BRIDGE, CHESTERFIELD

Client: Network Rail
Consultant: Owen Williams
Main Contractor: Works Infrastructure
Approved Installer: APB Construction (UK) Ltd



PROJECT SPECIFICATION

The brickwork of this bridge's South East wing wall was exhibiting an increasing number of stress cracks and was also beginning to bulge. The bridge structure was subsequently identified as requiring some remedial works to stabilise the wall from further rotational movement and prevent possible collapse which would lead to the closing of the four rail lines being carried.

SOLUTION

125mm \varnothing core holes were cut through the wall on calculated centres at 30° below the horizontal. Mechanical anchors were then installed to a driven depth of 8m, proof loaded and locked off against the facing wall using an inverted patress plate. These patress plates were used to provide an aesthetically pleasing finish in keeping with the heritage of the structure. Importantly all works were completed well within a single working day.

Anchor System: S10TB aluminium bronze anchor c/w 8m of 20mm \varnothing stainless steel threaded rod, 330mm \varnothing aluminium bronze inverted patress plate, hemispherical washer and stainless steel load nut.

Quantity: 5

Anchor Design Life: 120 yrs

Soil Type: Made ground

