



**Project:** Polsloe Rail Station, Exeter

**Client:** Network Rail

**Main Contractor:** CentreGreat

**Date:** March 2022—July 2022

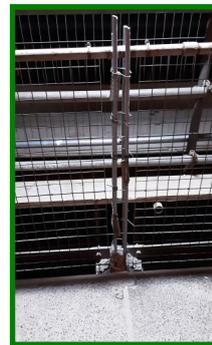


## The Problem

Polsloe Bridge is a suburban railway station that serves the Polsloe, Hamlin, Mount Pleasant and Whipton areas of Exeter. It was found that the rail station had defective concrete across the handrail columns, also on the main support trestles to underside of the walkway platform slab sections, the joints in-between these sections were also defective.

Network Rail assigned CentreGreat as the main contractor who then appointed SWCR to complete the works. The works would include, strengthening the trackside columns, traditional concrete repairs including galvanic anodes, protective coatings and joint renewal.

The site itself had difficult terrain where access to the platform was incredibly steep; a scaffold was provided to gain access up to the track and 2 lifts running across the outside edge of the platform. Lights were erected along the scaffold to illuminate the site as all works were to be conducted at night.



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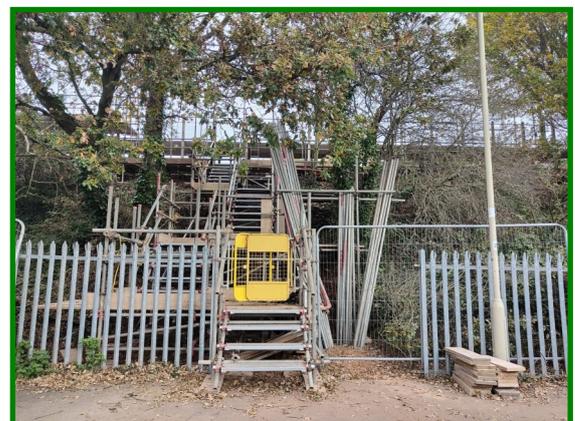
## The Solution

All defective concrete was removed and the reinforcing steel cleaned anodes were then tied onto the steel and currents recorded before treating the steel with anti corrosion paint, shuttering the area, and then repairing with Fosroc's Renderoc HB45.

To strengthen the columns that were supporting the platform, SWCR dug out ballast and cast a plinth around the insitu column. We then broke out defective concrete, scabbled the substrate, cleaned, then resin fixed dowels into the columns, followed by tying steel rings around the columns and tying a mesh to the circular ring. A circular shutter was then erected around each column and poured with Fosroc's Renderoc LA55.

SWCR also cleaned, primed and painted all concrete surfaces with anti-carbonation paint (DekGuard –A-Plus) for prolonged life.

The last element of works was to renew the joints between the platform decks. The existing was ground out, substrate cleaned, primed and backing rod inserted. The adjacent areas were taped and then Sikaflex Pro 3–SL sealant used to fill the joints.



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Case Study