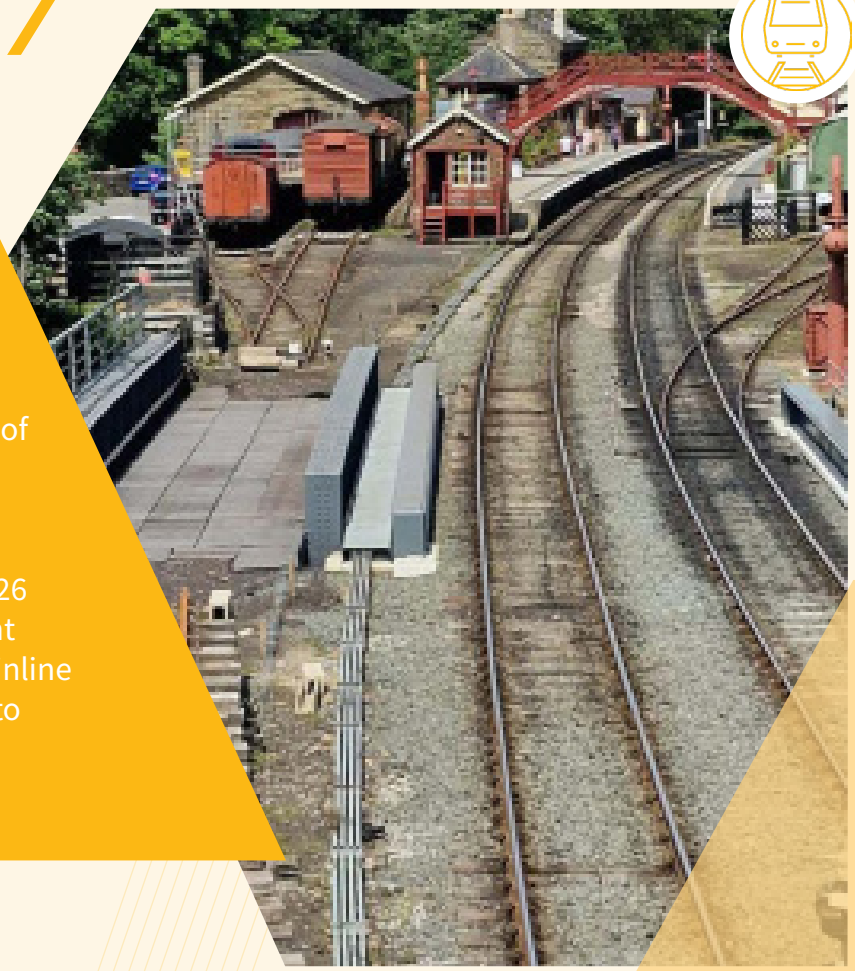
VolkerLaser

Great Central Railway



VolkerLaser has successfully completed a number of heritage rail projects on behalf of client, Great Central Railway.

Our specialist team was awarded a £1m contract to demolish and replace Bridge 326 for Great Central Railway. This replacement enabled both the track to the midland mainline chord and the future line from GCR south to pass over the newly constructed bridge.

The two tracks over the bridge are essential to secure a future connection with the mainline. This project represented another major step in the reunification of the Great Central Railway Loughborough with the northern section which leads to Ruddington in Nottinghamshire. Each new bridge is made of steel, weighs 40t and spans 15m. They will carry the railway over the Eller Beck river near Goathland, replacing the 150-year-old bridge that previously stood there.

Following these successful works, we were awarded major works on Bridges 340 and 343. The structures were in poor condition and needed to be removed due to significant section loss and corrosion, with both structures being subject to a speed restriction.

Once the bridges had been removed, the abutments were surveyed and the bearing core hole locations marked. The core holes were then drilled and cores removed, readying the structures for new bearing installation. Our team then set the bearings into position, ready to accept the bridges.

Sister business unit, VolkerRail successfully installed the new bridge precast concrete decks and edge beams with the use of a Kirow crane in a joint team operation between VolkerLaser, a 130-tonne mobile crane contractor and GCR's rail wagons. Following the successful installation of the precast units, the team completed further works to the bridge deck by installing the bridging joint plate, and filling sections with concrete to form the bridge deck.

Our team then applied a Wolfin waterproofing system, followed by a double layer of protection boards to the deck and drainage system to the excavations which was then backfilled by GCR, before finally reinstalling the ballast and track.