

Glencarse Bridge Repair

Following a bridge strike on the a90 glencarse overbridge, we were called upon to provide bespoke end-to-end solutions for the essential repair works, by our clients Amey Ne. Our teams of experts provided support in a wide range of areas within the wider bridge project. This included the manufacturing of specialised structural components, including the T-piece beam to replace the damaged section, bespoke propping, temporary works and bearings.

EKSPAN SUPPORT

We offered support across the £840,000 project including temporary works solutions, compliancy checks, repairs and restoration, and treatment and protections. Our experts also designed and installed the bearings to support the bridge structure.

EKSPAN developed the comprehensive temporary works designs, including a bespoke jacking arrangement to facilitate controlled bridge lifting. We also designed and implemented the transverse restraints needed to prevent lateral movement during structural interventions.

We executed Category II (CAT II) independent design checks to make sure all solutions were compliant with the relevant standards and specifications using. Our experts also prepared and submitted the approved Type P forms, confirming structural adequacy and design conformity with industry regulations. The team further coordinated the procurement and off-site fabrication for all temporary works and permanent structural elements, in our facility in Sheffield.

The EKSPAN team executed the hydro-demolition techniques needed to remove the deteriorated concrete and facilitated the damaged bearing's extraction with minimal structural impact. We also handled the concrete restoration around the bearing seats and the new beam interface, restoring the original strength and durability of the structure.

The team installed the on-site temporary works propping systems to ensure structural stability throughout the repair and bearing replacement process. On-site assembly and installation of temporary works, including the jacking and propping systems, to facilitate safe structural intervention.

Our involvement in the project also saw us replacing the damaged bridge beams with a newly engineered T-piece section, improving structural integrity and load distribution. We also installed new permanent bearings, ensuring proper load transfer and tolerance for thermal expansion and contraction.

The project also involved the execution of a full paint refurbishment on all bridge beams along the carriageway, including surface preparation through abrasive blasting to remove existing coatings and corrosion. We applied a protective coating system to extend the service life of the bridge and protect against future environmental degradation.



HOW EKSPAN CAN HELP YOUR PROJECT

Our 35 years of experience make us a trusted partner for bridge solutions. We operate from our Sheffield facility, in compliance with UK manufacturing standards including EN1337. Our products and services are designed to support and made to last, so you can be reassured that your project will be durable and long lasting. Read more about our early contractor involvement service [here](#) or check out our full product ranges [here](#).

Use the contact form below to speak to our experts on we can assist in your civil, mechanical or structural engineering project today.

Head Office, UK & Export Sales

Ekspan Limited Unit 3, Arundel Business Park, Clay Wheels Lane, Sheffield, S6 1LZ, UK

Tel: +44 (0) 114 2611126 Fax: +44 (0) 114 2611165

Email: enquiry@ekspan.co.uk Website: www.ekspan.com

