VolkerLaser

Cleethorpes Road Overbridge

Utilising industry-leading innovative solutions, VolkerLaser provided vital refurbishment to this fundamental transport link, which sees over 20,000 vehicles pass over the structure every day.

Opening in 1968, Cleethorpes Road Overbridge comprises 17 twin concrete spans supported on concrete piers. During an initial inspection undertaken, considerable decay and dilapidation to the bridge was discovered, particularly to its elastomeric bridge bearings.

We are regularly involved in the Prior to the works, the bearings were constraining the movement of the bridge, it was therefore deemed necessary for a refurbishment to be undertaken in order to expand the lifespan of the structure and prevent expensive ongoing maintenance issues.

Situated on the busy A180, over the main Grimsby to Cleethorpes railway line, the bridge is a valuable infrastructure asset to local communities and businesses, providing essential access to the seaside town of Cleethorpes and the Grimsby Docks. To ensure that the bridge remained open for the entirety of works, carefully planned contra flow traffic management arrangements were implemented on evenings, ensuring disruption to local residents and businesses was kept to an absolute minimum.

As an alternative solution that enabled a competitive tender submission, our expert team proposed constructing reinforced concrete corbels, stitched to the existing piers, to serve as jacking points for the bridge.

The corbels were designed to provide support to the jacking system to lift the deck during the bearing replacement operation, thus eliminating the need for any works at ground level.

We were able to find practical efficiencies by the repetitive nature of the innovative scheme which also offered significant time and cost savings. The client was able to divert these cost savings to provide further enhancement works to the structure, whilst still remaining below their original budget for the scheme.

The project showcased our structural capabilities, utilising in-house skills to deal with the corrosion of steel and repair through cathodic protection, carbon fibre wrapping, as well as structural repair and brick stitching techniques. Continual communication and problem solving between designers, contractors, client and consultants ensured the contract's delivery within budget and time constraints.