

## MANCUNIAN WAY FLYOVER - REMOVAL & INSTALLATION OF GUIDE BEARINGS



### Project Brief

Supply and installation of 2 no. guide bearings

### Project Team

**Client:** Manchester City Council  
**Main Contractor:** USL Ekspan

### Background Information

The Mancunian Way, approximately 2 miles long, was designed and constructed in two stages during the 1960's to ease city center congestion. This enabled traffic to be carried between the industrial areas of the east side through to Manchester Docks and Trafford Park in the west. The first stage was the construction of the dual carriageway east of the A6, and the second was the construction of a motorway with an elevated section between the A6 and A56.

The Flyover was built the same time Mancunian Way was extended east in 1992, and over time vehicular impact on this heavily used structure has caused considerable wear on the bearings which consequently have required periodic scheduled maintenance / replacement.

Manchester City Council employed USL Ekspan to carry out works, overdue at the time, on the remaining 2 bearings located on the underside in the abutment chamber.



*Existing bearing showing delamination and corrosion before removal*

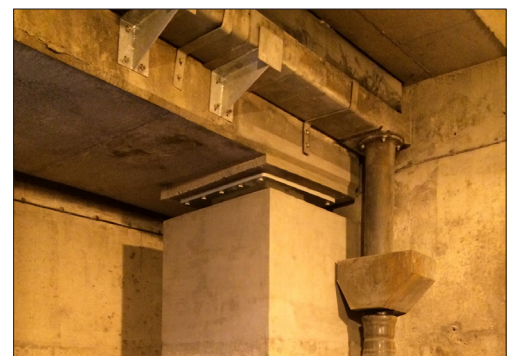
### USL Ekspan's Workscope

USL Ekspan were instructed to remove the 2 damaged bearings identified and replace these with 2 new guide bearings.

Pre-works operations involved establishment and setup of a fully enclosed site compound with fencing panels to enable vehicle access within the working area; delivery and positioning of welfare unit; delivery and offloading of equipment and materials; scaffold installation to enable bearing access; preparation of specialist jacking system and hydraulic equipment to enable bridge jacking/ de-jacking; and the setup of hydro-demolition equipment for bearing removal.

As jacking points were not present on the bridge additional specialist jacking had to be implemented using a propping system with temporary bearings. Without these removal and installation of the bearings would not have been possible.

All work procedures were completed safely and on time within the restraints of the project's restricted access and working in a confined space.



*New guide bearing installed*

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