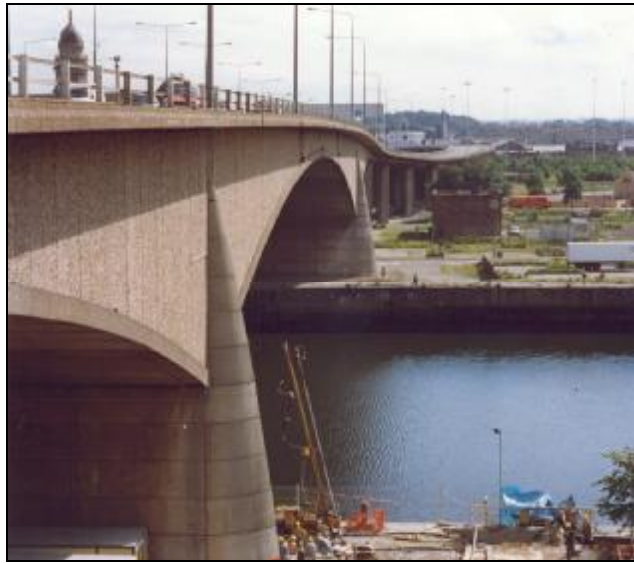


M8 Kingston Bridge, Glasgow – Enabling Works



Kingston Bridge carries one of Europe's busiest Motorways

Enabling Works

The Kingston Bridge in Glasgow carries the M8, reputed to be one of Europe's busiest motorways, over the River Clyde.

Routine monitoring of the structure revealed that the deck was sagging mid-span and rotation of the southern bridge pier was occurring.

Contingency works were commissioned and temporary kentledge was applied at the endmost position on the cantilevered end spans of the twinned bridges and lane closures were formed to accommodate the concrete blocks.

Balvac were awarded a contract to develop and install temporary tie-downs using post-tensioning techniques to connect the ends of the cantilever spans to the foundations of the approach structure columns at the joint locations.

The teamwork approach to these initial works developed with further negotiated phases of work to remove spalling concrete from the string-courses of the bridge and approach spans and effect concrete repairs at other locations.

Client	Strathclyde Regional Council
Consulting Engineers	Giffords Consulting
Sub-consultants	Tony Gee & Partners
Principal Contractors	Balvac
Value	£1.2 million
Programme	1995 - 1998



Temporary tie downs at the cantilevered end spans

Works Processes Include

- Vacuum assisted resin injection of cracks
- Plate bonding within movement joints to prevent concrete crushing
- Installation of temporary jacking
- Monitoring of loads
- Bearing replacement at half joints