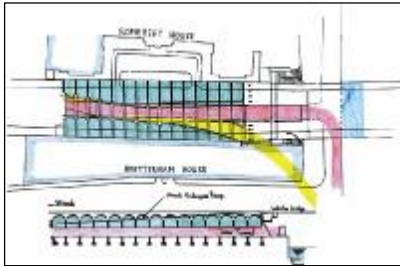


## Lancaster Place Vaults, Westminster



The listed structure dates to 1815



Managing London traffic was a challenge



Access was down through a narrow gap



The arches were lined with RC concrete



The space is used for parking and storage



The project was partnered and won awards

19<sup>th</sup> century viaduct strengthened and extensively refurbished in complex design and build contract.

Client	City of Westminster
Consultant	High Point Rendel
Principal Contractor	Balvac
Contract Value	£ 4.5m
Programme	2 years
Completion	December 1998

Lancaster Place Vaults is a fifteen arch brickwork viaduct that forms the northern approach to Waterloo Bridge, just off The Strand in Central London. The arches are part of the original Waterloo Bridge constructed by John Rennie circa 1815. Since then the arches have been extensively modified to accommodate construction of the Kingsway Tram Tunnel (1906–1910), and construction of the New Waterloo Bridge (1937-1944). The space within the arches is used for car parking and storage by occupants of the adjoining offices which includes Somerset House. The vaults are an English Heritage listed structure containing original timber facades.

Access to the site was severely restricted by the close proximity of adjacent buildings. Just a 2.0m wide opening extended along one side of the vaults and all materials and arisings were moved through this gap by a busy gantry crane.

The contract was carried out on a design and construct basis after a rigorous selection process. A partnered approach was adopted at an early stage to face the significant structural and technical challenges as a team.

Works processes included:

- Design and installation of temporary ties
- Monitoring of structural movement
- Demolition of existing internal structures
- Construction of reinforced in-situ and sprayed concrete linings
- Installation of sub-surface drainage system
- Waterproofing brickwork by resin injection
- Refurbishment of listed timber facades
- Cleaning of exposed brickwork faces
- Corrosion protection to steel beams
- Consolidation grouting for abutment
- Spandrel wall strengthening and wing wall to abutment ties

## Balvac

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