



## Heritage-listed Albert Bridge, Adelaide

In early 2015, the City of Adelaide Council sought to restore the Albert Bridge to its former glory. The bridge, located over the River Torrens on Frome Road was opened in 1879 and is the oldest, large road bridge in the Adelaide city area.

The scope consisted of cleaning and painting the above deck areas of the bridge, stonework repairs, masonry restoration and the removal of graffiti.

### Problem

This state-heritage listed bridge required extensive remediation to restore it to its original state.

Detailed specifications were put together by council which had to be strictly adhered to in order to maintain the bridge's heritage listing.

### Solution

By carefully reading the tender request with its detailed architectural/painting specifications, we had a thorough understanding of the work required to remediate the bridge.

We submitted our solution to council and were duly selected to carry out the work.

### Result

Upon being awarded the project, inspection and test plans were documented in line with the specifications and our solution.

All work was carried out and signed-off by Swart and the council as conforming to the specification.

## The project scope

The project required a wide range of specialised skills:

- High pressure water clean and bristle blast to prepare surfaces and remove graffiti
- Repair stonework on abutments, piers and walls
- Restore and strengthen masonry to original condition, including salt removal, raking and repointing
- Remove existing and reinstate new plastic repairs including crack repairs and rendering
- Replace missing cast iron mouldings
- Apply protective and decorative coatings to existing painted cast and wrought iron metalwork above the line of the underside of the cornice of the pedestrian walkways, steel barriers separating roadways/walkways and metal post and rail fencing
- All coatings were applied by hand and carried out in strict accordance with the specifications provided to ensure the bridge retained its heritage status.

## Access and containment

A cantilevered scaffold was suspended from the bridge to access the work area and create a work platform, whilst still allowing access for road users during the work.

One side of the bridge was completed prior to the scaffold being relocated to the other side.

The scaffold was lined and contained to capture debris and protect the River Torrens and parklands below.



**Work in progress inside the containment; cleaning and surface preparation to prepare metalwork for application of new coatings**



**Bridge metalwork hand-painted in heritage colours as detailed in the painting specification**



**Restoration of the City of Adelaide Council's coat of arms on the southern side of the bridge**

## Service checklist

These services were utilised in the planning and implementation of this project:

### Passive fire protection

- ☐ Fire-rated sealouts
- ☐ Fire-rated ductwork
- ☐ Petrochemical fire-proofing
- ☐ Fire sprays

### Concrete repairs

- ☐ Building maintenance
- ☒ Coating and protection for concrete structures
- ☐ Epoxy injection
- ☐ Slabjacking
- ☒ Concrete repair

### Waterproofing

- ☐ Water seepage control
- ☐ Torch-on membranes
- ☐ Liquid membranes
- ☐ Water-reactive polyurethane injection
- ☐ Hyperlon membranes

### Floor treatments

- ☐ Floor sealants
- ☐ Epoxy-based coatings

### Other services

- ☐ Industrial grouting
- ☒ Abrasive blasting
- ☒ Specialty protective coatings
- ☒ Heritage restoration