

Facelift for Australia's most Iconic Bridge



THE New South Wales State Government's Roads and Maritime Services commissioned this important maintenance project, which also included asphalt resurfacing. It was the first time in 80 years that the bridge deck road surface has been stripped back and waterproofing applied.

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Concrete Remedial Services was engaged as the principal contractor to apply the waterproofing, which in simple terms, involved the application of a primer and a Poly Urea waterproof membrane. This process was followed by an application of an epoxy adhesive and pellet bonder. These areas were then resurfaced with asphalt. The month of January was chosen as traffic volumes are at their lowest, with about 30,000 fewer vehicles per day than other months. The \$3.5 million project was straight forward and involved applying a waterproof membrane under a new asphalt surface to promote longevity of the bridge deck and reduce the risk of corrosion.

An extensive media campaign was initiated to ensure that motorists, who would normally use the bridge on the weekend, take alternative routes to avoid delays. This campaign extended to local, interstate and international media to ensure that as many people as possible were aware of the closures. Coverage across print and broadcast media was extensive and captured an estimated audience of around 25 million across the three month campaign. The basic messages were to leave the car at home and catch a bus or a train. While some delays were experienced for traffic heading into the Sydney Harbour Tunnel, most people changed their travel habits and avoided the Bridge during the work period of 2 weekends or 4-days.



It had been more than 20 years since the last major resurfacing of the Bridge had been carried out, and it was the first time, in the Bridge's 80-year history, that it was stripped back to the original concrete deck.

Work was planned for two weekends; January 13 to 16 and January 20 to 23 2012. Despite heavy rain across both weekends causing delays in the progress of the work, the teams on site pulled together to complete the project 10 hours ahead of schedule, with the Bridge opening to traffic around 7pm on the Sunday night January 22. On each weekend more than 450 workers were inducted to the worksite from a variety of industry partners including; three asphalt profiling companies, two asphalt suppliers, two asphalt paving organizations, bituminous sealing crews, traffic management crews, suppliers and applicators for the polymer based waterproofing material.



The specification required a dry surface prior to water-proofing, two road heaters were utilized to dry the deck as efficiently as possible. Concrete Remedial Services was engaged as the principal contractor to apply the waterproofing, which involved; the application of a primer, followed by Polyurea waterproof membrane, followed by the application of an epoxy adhesive and pellet bonder. These areas were then resurfaced with asphalt.

Concrete Remedial Solutions was a key part of an overall effort by a combined group of companies, which combined with the fast cure properties of the Polyurea, allowed for completion of the project over two weekends, instead of the expected three weekends. This level of efficiency was achieved by all involved, despite the wet weather that prevailed at the time.