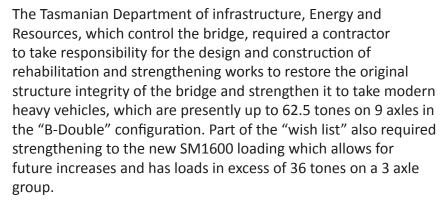
Case History



Red Bridge, Campbell Town, Tasmania, Australia

The "Red Bridge" across the Elizabeth River at Campbell Town in Tasmania is the oldest surviving brick arch bridge in Australia. It consists of three segmental arch spans of 7.6 meters (25 feet) and was built by convict labour between 1936 and 1838 using red clay bricks made on site (hence its name). It rests on a basalt stone substructure and uses sandstone for the piers, abutments and capping.

The bridge was originally built wide enough to take two modern traffic lanes, plus footways, and lies on the main highway between the Tasmanian capital of Hobart and the principle northern city of Launceston. There is presently no convenient alternative route, nor is one planned in the near future.



An alliance was formed by Cintec Australasia with Van Ek Contracting of Tasmania, a firm known for its expertise in conservation of old bridges and buildings of new ones. When expressions of interest were called from all over Australia for a design and construct contract, only the Cintec alliance using the Archtec process was able to satisfy the Department and a contract was negotiated without further tendering.

Analysis by the Archtec consultants, Gifford and partners of England, showed that the bridge could be strengthened to the required SM1600 Loading. The project required 54-30mm diam. X 5m long anchors which were installed in late April to early May,2000 Expertise from within the world wide Cintec organization was also utilized in conserving the masonry which required cleaning, reappointing and grouting. Bill Jordan, who heads Cintec Australia, advised on the masonry conservation in his capacity as a consulting Structural Engineer specializing in conservation, with the help of Peter Sobek,the Cintec grout expert from Germany. Specially formulated lime grouts and mortars were used to ensure that the bridge meets the requirements of 100 years future life without major repairs.



View from the west.



Centre Span.



Damage to wingfall – note coloured cement render from 1930's and salt deposition caused by it.

