



## Threads of Conservation

Social fabric • Fabric and place • Conserving fabric

Australia ICOMOS Conference  
5-8 November 2015  
Adelaide Australia



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Lucy is a registered architect with post-graduate qualifications in heritage conservation. Her role as Conservation Manager for the Port Arthur Historic Sites follows 10 years in the NSW Public Service including positions at the NSW Heritage Branch, Government Architects Office and as Heritage Architect with the Sydney Harbour Foreshore Authority.

In her current role Lucy is responsible for the care and management of built items across three of the 11 sites forming the Australian Convict Sites World Heritage property. This requires balancing the operational needs of an international tourism destination with growing visitation while conserving the Outstanding Universal Values of the places in a values-based management and best practice conservation framework.

### Port Arthur Penitentiary Precinct Conservation Project

#### Paper Abstract

The Port Arthur Historic Site is the most intact 19<sup>th</sup> century convict settlement in Australia. Its Penitentiary is widely recognised as a symbol of Port Arthur, Tasmania and now as a symbol of the Australian Convict Sites World Heritage listing. Since devastating fires in 1897 the structure has been conserved as a standing ruin within the historic landscape of the Site. It was last subject to a major program of conservation works in the 1980s.

That conservation program installed a stabilisation structure, which although progressive for its time, was recognised by 2010 as being inadequate as a structural support system. Reports commissioned following a major seawater inundation event in 2011 identified that the extant walls were at risk of collapse and required further stabilisation. The walls were found to have:

- limited foundation and ground conditions with little bearing capacity,
- extremely low strength brickwork, and
- extensive voids within walls likely to be caused by water erosion of lime mortar and low temperature firing of clay bricks.

The Penitentiary Precinct Conservation Project sought to stabilise the ruin with minimal intervention to heritage fabric and the values of the place. The opportunity was also taken to improve accessibility, provide protection from inundation of sea water from future storm surge threats, undertake a programme of archaeological research and to commence a staged program of interpretation. The developed solution included grout-injected anchors, a steel top-plate, steel columns, and helibar rod in a progressive structural design which stands as an exemplar project and one that PAHSMA is proud to showcase.