

# Forth River Rail Bridge Replacement



Client: TasRail  
Value: \$5.29M  
Completed: April 2014

THE FORTH RIVER RAIL BRIDGE REPLACEMENT IS BEING UNDERTAKEN ON THE WESTERN LINE AS PART OF THE \$20M 'FOUR NORTH WEST BRIDGES' REHABILITATION AND REPLACEMENT PROJECTS CONTRACTED OUT BY TASMANIAN RAILWAY (TASRAIL). THE BRIDGE IS LOCATED ON THE FORTH RIVER AND IS APPROXIMATELY 1 KM SOUTH OF THE RIVER'S ENTRANCE TO BASS STRAIT.

## THE PROJECT

The original eight span bridge was constructed in 1885. It comprises of a timber ballast deck which is supported by two 1900mm deep wrought-iron girders with lateral and diagonal cross-bracing noted at regular intervals. On analysis of options it was recommended to completely replace the existing structure on a new southern alignment.

The works included the design and construction of a new 135 metre, 4 span reinforced concrete bridge with new concrete sleepers and a full length walkway together with 490 metres of new rail approaches with improved curvature.

The benefits of the new bridge is increased load capacity to 300LA, improved rail alignment, a 100 year maintenance-free structure and the potential to re-purpose the heritage listed original rail bridge.

Due to a serious incident piling occurring (non VEC related) within the construction industry, VEC took the proactive steps to design a piling support mechanism that would prevent such an occurrence happening again. Workplace Standards inspected our innovation and were impressed with VEC's solution. This innovation was nominated for an award at the Worksafe Tasmania Awards.

Due to incorporating all lessons learnt from the Blythe, Don and Leven River Rail Bridge projects, this project was completed on budget and three months ahead of schedule.

