

RHYNDASTON TUNNEL

Date: 2026

Principal: TasRail

Project Value: \$1.5M

TASK

The track in the Rhyndaston Tunnel is some of the steepest in the TasRail network, Geometry recordings were showing this particular section of track to be the roughest on Tasrail's main line network and as a result of this was in need of replacement. Shaw was engaged to complete the replacement of approximately 950m of track within the Rhyndaston Tunnel – which had been built in the mid 1800s.

CHALLENGES

The project was completed in a tunnel environment which generated confined space conditions. The presence of natural and mechanical dusts meant that environmental control was a major consideration. Shaw engaged an Occupational Hygienist who provided advice to Shaw on how to manage the Health and Safety of workers. Shaw subsequently deployed these strategies including periodic testing of materials. Management of ventilation in the tunnel was a key strategy in minimising potential for harm. Shaw also innovated by testing alternate weld kits and gas products to minimise the introduction of noxious gases.

The tunnel remained active throughout the works. Track replacement included track and ballast removal, foundation preparation then track reinstatement within a shift. Shaw worked up a methodology based on 20m panel replacement which was conservative, repeatable and dependable to ensure train movements were not impeded. This repeatability also improved worker safety.

The track replacement generated significant volumes of excess spoil. Together with TasRail, Shaw developed a strategy to utilise the spoil in the generation of hardstands which not only minimised the need to engage material disposal costs, but also generated useful assets for TasRail into the future.

OUTCOMES

Utilising our experience in trackworks as well as working in difficult environments, Shaw was able to complete this complex project maintaining high quality outcomes not only for track production but also meeting the environmental and safety challenges the project presented.

