

CASE STUDY

Station Works - Design and Construct

LOCATION: Wangaratta and Benalla Stations
CLIENT: V/Line
DATE COMMISSIONED: January 2015



Introduction

Global Rail Australia successfully secured by competitive tender the design and construction of platform upgrade works at both Wangaratta and Benalla stations by V/Line – the government-owned corporation that operates the regional passenger train and coach services in Victoria, Australia.

Offering an innovative design solution for the works, Global Rail Australia's proposal, provided V/Line with a cost effective multi-disciplinary solution and a fully managed service that both minimized disruption and reduced the requirement for operational interface at each station.

This project to upgrade redundant platforms at Wangaratta and Benalla Stations, was necessitated by the increase in freight and passenger services and allowed these stations to be brought fully back into service.

The scope of the works which included tactile tile installation, augmentation of the existing CCTV and PA systems and associated access works at Wangaratta - including the upgrade of the platform ramp, adjacent landscaping, removal of sleepers, new signage and application of a non-slip coating – allowed Global Rail Australia to supply the full breadth of its in-house services across, M&E, civil engineering and general construction.

Operating in a live railway environment, Global Rail Australia – having worked on numerous railway projects – worked under the supervision of a Track Force Co-ordinator and Look-outs throughout the extent of the works.

The Deliverables

Global Rail Australia designed the solution and delivered, a fully project managed programme of works, co-ordinating with station staff and other outside parties to achieve compliance with all relevant standards, based on the following scope of activities:

- ① Full site survey, site investigation pre-works testing at each location
- ① Installation of new Close Circuit Television system (CCTV)
- ① Installation of new Public Address system (PA)
- ① Platform ramp upgrade works
- ① Tactile tile installation works to the platforms
- ① Provision of full as-built documentation, including records, programs and sketches

Challenges and Solutions

Knowing that the program was challenging provided Global Rail Australia with an opportunity to propose an alternative solution to the existing hard wired CCTV and PA system, a solution that minimised disruption to the existing installation and would also provide commercial benefits to V/Line in terms of time on site.

The installation of the upgraded CCTV system would require significant civil works in the station car park, which during installation would result in disruption to the public and patrons using the facility.

To reduce the level of disruption that a hard-wired system would bring, Global Rail Australia proposed an innovative solution utilising a wireless CCTV and PA system. By devising this solution, Global Rail Australia was able to offer V/Line and other project stakeholders a high quality installation that would reduce the need for operational interference at both stations.

This unique initiative, which cleverly removed the need for time consuming and costly excavation works, also removed the need for localised disruption at the adjacent car park, ensuring that timescales were shrunk significantly and that costs were reduced.

Having a project with multiple trade interfaces can also be challenging. Co-ordination of these disciplines for Global Rail Australia was simple, owing to the fact that these were all in-house operatives from within the multi-disciplinary organisation.

Working on or about the railway environment requires a clear understanding of the environment. Global Rail Australia meticulously planned each daily activity and worked closely with V/Line's Track Force Co-ordinator to ensure compliance. Their familiarity with this operational environment enabled the project to be delivered on time and to budget – completely defect free.

The Benefits

By appointing Global Rail Australia as a fully managed Design and Construct contractor, V/Line were able to comprehensively de-risk their activities by using Global Rail Australia's in-house project management capabilities and utilising in-house engineering staff, who were fully experienced in the impacts of working around live railway infrastructure.

During the works the interrelated disciplines of electrical engineering and civil engineering, allowed Global Rail Australia to fully plan and co-ordinate activities and where necessary call on their strong in-house engineering competence to provide the most comprehensive solution.

Having a contractor that can provide a one-stop in-house solution was also attractive to the client and allowed the project risks to be managed effectively by an organisation deep rooted in efficient railway engineering.

Global Rail Australia also have a strong pedigree in training and look to the future with local apprenticeships, using this project as a platform for mentoring and up-skilling their engineers of the future

The business also aligns closely with the communities in which they serve and provided a considerate, safe and secure environment for all staff and stakeholders during these works.