



WEST KALGOORLIE TURNOUT RENEWAL PROGRAM

Detailed Scope Overview

RMC Rail was engaged by Aurizon to conduct the following works as part of the FY14 / 15 Capital Renewal Program at West Kalgoorlie:

- Replacement of 7 x 47Kg 1 in 8 Standard Gauge Timber Turnouts with New 47kg 1 in 8 Turnouts supplied by Vossloh Cogifer
- Completion of minor ladder re-alignment works and installation of sleeper transitions to tie into the existing plain line track
- Full ballast replacement with New 50mm ballast
- Resurfacing using XYD-2N Mini Tamper
- Installation of New National Switch stands, replacing existing WAGR Design "Little David" Levers

Project Challenges

West Kalgoorlie turnout renewal program posed significant challenges for both RMC Rail and Aurizon as the Yard Operator.

Critical to the success of the project was the development of schedule and construction staging to facilitate the continual operation of the yard with little to no impact.

Other key challenges included:

- Number of quality issues were encountered with fabricated turnouts as a result of bespoke design solution
- Commercial negotiations were conducted with Brookfield Rail in order to facilitate approvals for installation of #36 Points (Mainline Connecting Infrastructure)
- Complex Track alignment including a Contra-Flexure turnout was carefully managed through in-house QA procedures and close collaboration with client engineers



Innovative Delivery

RMC Rail worked collaboratively with Aurizon to facilitate off site construction of Turnouts some 1800m away from the install site. Flat top wagons and Shunt Loco supplied by the client were used to transfer the constructed turnouts adjacent to the worksite to allow them to be lifted into place.

This innovation and collaborative working arrangement reduced the closure requirements from 21 Days (Total) to 9 Days with final completion works being facilitated between train operations.

The reduction in closure period from 3 Days to 1 for install of turnout meant that works could be conducted between 1800 – 0400 Daily, minimizing impact on shunting operations for Aurizon.



Value Adding

- Commercial agreement transferred from Lump Sum to Schedule of Rates facilitating a collaborative working arrangement for planning and execution
- Cost Reduction of \$0.57M as a result of delivery innovation and shared risk arrangement

PROJECT PROFILE

FAST FACTS

\$1.85m

Project Value

8 Turnouts

Scope Achieved

\$0.57M (24%) Saving

Cost Reduction through collaborative delivery

0 Train Cancellations

Full Scope delivered without impact to train services through collaborative planning approach

CLIENT REFERENCE

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