

Muswellbrook Junction and Passing Loop- Stage 1 Construction

The Muswellbrook Junction and Passing Loop project is part of the Muswellbrook to Antiene duplication project which forms part of ARTC's \$389 million Hunter Valley Coal Network Improvement Strategy (HVCNCIS).

Scope of the Project -Delivery of Loop Extension and Crossover

- Extension of the existing Down loop to 1800m in length in the Up direction to accommodate a full length coal train of approximately 1550m to join the main line
- Install a new 1 in 18.5 bi directional crossover between the Main Line and Down Loop on the Up Side of the station
- Install a new 1 in 12 turnout
- Maintain minimum 100 metres of the existing goods siding
- Earthworks including embankment, stabilisation and cutting excavation to accommodate new track alignment at 4.5m centres.
- Drainage
- Installation of new cables
- Provision of new LED signals
- Diversion of Main Cable route and Railcorp fibre optic to allow civil works
- Relocation of a number of signals, signal equipment housings and track circuits
- Installation of Axle counters

Project Delivery Key Dates are:

March 2007 Delivery of stage 1 track and civil infrastructure

May 2007 Signalling infrastructure delivery

June 2007 Commissioning

Related works:

- Muswellbrook to St Heliers duplication will follow directly after the Muswellbrook Junction and loop extension
- There will be 80kph running on completion of Stage2 Muswellbrook Yard rationalisation.

The project will be project managed by ARTC. The signalling works will be delivered by the Hunter Valley and Northern signalling alliance partner Union Switch & signal. Track and civil works will be constructed by a contractor directly engaged by ARTC on the basis of tenders recently called.

Customer Benefits

- Provision of capacity for the forecast increases in coal traffic from the Ulan and Main North
- Reduction in running times on the longest single track section by 8 minutes

- Provision of the crossing loop will reduce associated delays to trains on both the Main North and Ulan Lines
- Will improve track geometry over the length of the works minimising long term maintenance costs

Objectives of Project

Stage 1

- To provide a crossing facility for Ulan and Main North (Werris Creek) coal trains at Muswellbrook to reduce conflicts
- To reduce the journey time between Sandy Hollow and St Heliers

Stage 2

Rationalisation of the line for

- Increasing through line speed
- operational flexibility
- a reliable signalling system

Project Cost of Stage I

\$10,353,000

Conclusion: Principal benefits of the project will be to provide capacity for the forecast in coal traffic, reduced running times on the longest single track section from 61 to 53 minutes and to provide a 1800 metre Down Loop for standing coal trains of 1550 metres in length in the yard.