

Princes Highway - Conjola Mountain Realignment Stage 2



Location

Conjola Mountain, New South Wales

Client

Roads and Maritime Services (previously Roads and Traffic Authority)

Commencement Date

September 2008

Completion Date

April 2010

Contract Value

\$41 million

Faced with a steep, narrow, winding construction zone, the team developed a number of solutions that overcame multiple issues arising from constrained site conditions.

Overview

The project was jointly funded by the New South Wales Government and the Australian Government under the Auslink Strategic Regional Program. The new alignment has improved safety, traffic flow, and access for local residents.

Project Scope

The section of the highway realigned was approximately 2.3km in length with steep and winding descents from the north to the existing narrow bridge at Conjola Creek.

BMD Constructions' key deliverables involved:

- Construction of 2.3km of new road;
- Construction of a 120m long pre-tensioned Super-T bridge structure;
- Construction of two underpasses Bebo Arch Structure, RCBC Structure;
- Construction of four reinforced soil walls of heights between 2m and 22m;
- Approximately 275,000m³ of bulk earthworks including blasting;
- Treated 82,000m³ of PASR as part of the 275,000m³ bulk earthworks.

Reflecting best practice, BMD developed a complex staging plan which split the works into three work zones, involved 26 traffic switches, and multiple concurrent works along the alignment.

Outcomes

Developed a design alternative for REWall No. 1 (pictured) to overcome foundation issues and deliver one of the largest earth walls in Australia.

Established strict environmental and construction controls to undertake two major earthwork cuttings within steep terrain alongside the highway.

Utilised two cranes through multiple set-ups to enable jinkers to safely deliver and unload Super-T girders.

Winner: Master Builders Association, NSW 2010 Excellence in Civil Engineering for Projects up to \$50m.

'BMD constantly went beyond the RTA's requirements regarding environmental management on the project.' Laura Beaupeurt, Beaucon Services Pty Ltd