

MEDIA RELEASE

28 March 2014

Auckland's "Alice" cautiously creates Waterview's rabbit hole

The Aveng Group has a reputation for taking on significant infrastructure projects that have the potential to create substantial positive change in the areas in which they are operating. Australian-based McConnell Dowell's current project to build the Waterview Connection Alliance in Auckland, New Zealand is no exception. As the largest infrastructure project in New Zealand's history, estimated at NZ\$1.4 billion, the Waterview Connection project is one of the most important infrastructure developments ever to take place in New Zealand. The motorway ring route around the city will combat regional congestion and create a direct, time-saving link between the International Airport and CBD.

The project is one of seven Roads of National Significance, identified by the New Zealand Transport Agency in 2009, as being vital to the country's economic prosperity. Kobus Verster, Chief Executive Officer of the Aveng Group said of the project: *"We are very pleased to be associated with such an enormous project. The completion of this motorway will unlock Auckland's potential to become a truly world class city, and we are proud to be a part of that. This project is an example of how investment in infrastructure has the ability to unlock the potential of not only individual cities, but entire countries as evidenced in a number of projects that have been undertaken in the past. The Aveng Group remains available to offer its extensive infrastructure development capabilities to similarly unlock economic potential in other territories in which we operate."*

To complete the project McConnell Dowell and its partners, Fletcher and Obayashi, together known as The Well Connected Alliance, are using Alice, New Zealand's biggest and the world's tenth biggest Tunnel Boring Machine ("TBM").

Tunnel boring machines are used as an alternative to drilling and blasting methods in rock and conventional "hand mining" in soil. Whilst TBMs are expensive to construct and can be difficult to transport the alliance used them due to their efficiency and resultant shorter lead times. As modern tunnels become longer, the cost of tunnel boring machines versus drill and blast reduces. Another advantage of using TBMs is that they limit the disturbance to the surrounding ground while producing a smooth tunnel wall. This significantly reduces the cost of lining the tunnel, and makes them suitable to use in heavily urbanised areas.

The alliance has focussed on caution rather than speed in this particular project. Accordingly, whilst having begun in November 2013, as at 13 February 2014 the tunnel was 350m into the first of parallel 2.4km-long drives for the six-lane Waterview highway connection in Auckland. David Robinson, Chief executive officer of McConnell Dowell said, *"We have implemented deliberate delays on this project as part of a wider strategy. More challenging underground conditions are expected when the*

scheduled first breakthrough at the project's northern portal takes place in September and the focus of the Connected Alliance is to test all-round machine capability and systems well in advance. ”

Caution and quality are such a priority that even though milestone targets have been set, there are no time penalties in the contract for late completion. In fact, Alice is currently taking a three week break to allow workers to get ready for the next stage of the massive motorway project.

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Notes to editors

Photograph's of Alice's progress can be found through the following link;
<https://jeffsmithphotography.exposure.so/life-underground>

Interesting time lapse photos;

<http://www.nzta.govt.nz/projects/waterviewconnection/video-timelapse-201401.html>