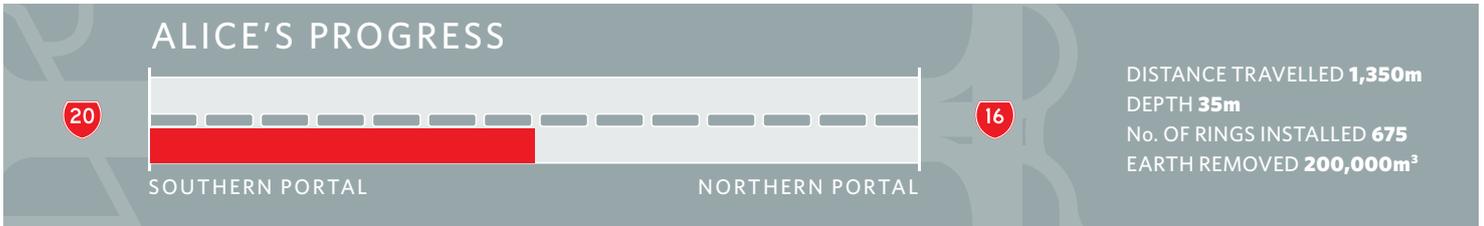


PROJECT UPDATE



Halfway to Waterview!

If you've ever seen a marathon runner halfway through a race, you'll know it's a big moment.

Crossing the halfway mark means you're halfway home, and if it's not all downhill from there, it's certainly easier than before. So it was a pretty special day for our team when Alice passed the halfway mark on her marathon journey to Waterview in mid-June.

The giant tunnel boring machine has now constructed more than 1.2km of the first of the 2.4km-long tunnels to connect the city's Southwestern and Northwestern motorways.

Alice has been unstoppable since her restart following the two-week maintenance shut-down in May. She is making progress well beyond the 10m expected per day, averaging 15-20m. On her best day, she progressed over 28m.

Alice remains on schedule to breakthrough at Waterview in late September, where she will be



turned around over three months, ready to begin building the second (northbound) tunnel early next year. Construction of the two tunnels plus 16 cross passages - one every 150m connecting them - will be completed at the end of 2015. The tunnels will then be fitted out with the services needed to operate them. These include ventilation fans, communication systems and fire protection. The world's tenth largest tunnel boring machine is now 32.5m below the surface. Over her 1.2km journey, Alice will have:

- Installed 602 tunnel lining rings
- Removed 198,000 cubic metres of spoil
- Run up monthly bills of around \$90,000 for power and \$55,000 for water



How things change! Just eight months ago in October 2013, Alice was waiting patiently in the Southern Approach Trench ready to launch and now she has built over 1.2km of tunnel – and how impressive does it look?

TELL US HOW WE'RE DOING

The Waterview Connection project has been underway for almost two and a half years now and we'd like to know what you think. Please take a few moments to complete the short survey inside this project update.

Send it back to us by 15 August and you will go in the draw to win a ticket to Alice's big breakthrough at Waterview in September. The only way to get a place at this once-in-a-lifetime event is to win one!

Shared path open days

Find out about improved cycle and pedestrian access in Waterview at Auckland Transport's Shared Path open days.

The Auckland Transport Waterview Shared Path project will provide a high quality connection for pedestrians and cyclists between Waterview and Mt Albert. Auckland Transport is designing the path, to be delivered as part of the Waterview Connection project. Two open days will be held in July, so head along and find out how the path will improve walking and cycling in your area. This is an opportunity to meet Auckland Transport's project team, view the designs, and learn more about Auckland's growing cycling and shared path network.

Review dates:

- Wednesday 23 July, 3pm to 7pm, Metro Football Club, Phyllis Street Reserve, Phyllis Street, Mt Albert
- Thursday 24 July, 3pm to 7pm, Avondale Baptist Church, 1288 New North Road, Avondale

For more information visit www.at.govt.nz or phone 09 355 3553



Dennis is making rapid progress on Ramp 3, which will take traffic travelling along SH16 from the west into the tunnels. Dennis will be working overhead during July, so please take care when travelling along SH16.

Temporary closure of Ernie Pinches bridge from August

Please note that we will be closing the Ernie Pinches footbridge for around three months from mid September. The footbridge needs to be widened to allow for an additional northbound lane to be constructed on the South Western motorway (SH20) between Dominion Road and Maoro Street. Pedestrians will be directed to detours across May Road bridge or Maoro bridge. Further detail about these works will be provided in the August Project Update.

No cause for alarm

The nation's readiness for an underground emergency on a scale similar to the Pike River mine disaster will be tested on 10 July at the Waterview Connection project.

It will be a major inter-agency exercise involving the Police, Fire Service, Mines Rescue and WorkSafe NZ.

The exercise will have all the appearances of a real incident when the emergency services arrive and Police cordons are put in place around the site. However, there will be no cause for alarm. It will be just an exercise, and the Waterview Connection project is providing the venue for it. In reality, emergency services will be waiting close by the site until called upon, and will arrive in accordance with national protocols, with no sirens or lights.

At some stage during the exercise residents may notice smoke coming from the construction site. This will be artificial, non-toxic smoke being used to test safety equipment in the tunnel.

The exercise tests the underground mines emergency protocol which was developed in response to recommendation 14 of the Royal Commission on the Pike River Coal Mine tragedy - that the management of emergencies in relation to underground mines be reviewed urgently, and the incident controller be an expert in underground mining. The protocol also covers tunnels under construction.

Trade Me winners enjoy a date with Alice

We hosted some very special guests on Saturday 14 June when the winners of our Trade Me Auction came to site. In late 2013, we auctioned four tickets for a once-in-a-lifetime tour of Alice and our lengthening tunnel to raise money for the Red Cross' Haiyan Typhoon appeal. The highest bidders were treated to a full tour of our project, meeting both big Alice and our giant yellow gantry crane Dennis. Highlights of the day included 6.30am warm up stretches with our tunnel crew and a delicious breakfast courtesy of The Landing! Thanks to our tunnel and health and safety teams for making the day such a success.



Our Trade Me winners outside the tunnel, with tunnel construction manager Iain Simmons, tunnel health and safety manager Andy Schmidt, superintendent Grant Myocevich and Claire Cooney from the communications team. Through the Trade Me auction we raised \$3,823 for the Red Cross's Haiyan Typhoon appeal.

Spoil handling building keeps pace with Alice

Alice has had some big days lately - averaging 15-20m of progress a day, well ahead of the anticipated 10m. But as Alice speeds up, all her critical support operations must keep pace. The faster Alice moves forward, the more ring segments our precast factory must produce, and the more spoil our Wiri Quarry must be ready for.

Indeed, managing the huge volume of spoil created by the tunnelling is a major logistical challenge for our project. By the time Alice has finished her job, she will have brought out of the ground enough earth to fill 320 Olympic size swimming pools, around 800 00m³ in total! That's over 8,500m³ of tunnel spoil per day that we must store and process.

As Alice moves forward the spoil is taken up a 1.2km long conveyor to the spoil handling building, which is essentially a large "muck bin" on our southern site. Both the spoil handling building and the conveyor are heavily sound proofed to enable us to work 24 hours a day, six days per week. The spoil is very wet and sloppy as it comes out of the TBM so it remains in the bin for 24 hours to allow excess water to drain away, before being transported to the disused Wiri Quarry 18km away. There, it is being used as clean fill to rehabilitate the quarry for future industrial and commercial development.

About 300 truckloads of spoil are delivered to Wiri each day when Alice is working at full capacity. The trucks travel to and from our site via a site access point at the Maoro Street Interchange with State Highway 20 - meaning they do not need to use local roads.

As Alice hits the halfway mark on her first tunnel journey, our truck and trailer units have made about 15,000 trips and travelled around 500,000km - more than 12 times around the Earth!



A 1.2km long aerial conveyor carries spoil from the TBM to the spoil handling building. When working at maximum capacity, the conveyor is capable of shipping 3,500 tonnes of spoil per hour and runs at 3.6 metres a second.

Southern ventilation building coming to life

There's a flurry of activity happening in the Southern Approach Trench at the moment and it has nothing to do with Alice. The growing concrete and piles in the SAT are the foundations for our southern ventilation structure, which will house the services and ventilation systems for the tunnels at the Owairaka (southern) end.

The southern ventilation structure comprises two parts - a main ventilation building which will house the mechanical and electrical gear to operate the tunnels, water tanks for the tunnel sprinkler system and an extraction system for air leaving the southbound tunnel - and a ventilation stack which will disperse vehicle emissions in a controlled manner.

The ventilation structure has been designed by a specialist team of architects, urban designers and engineers to be visually attractive as well as efficient and functional. There has also been extensive consultation with community representatives and Auckland Council.

The ventilation stack will be situated in the middle of the motorway, between the entry and exit portals and will rise 15 metres above surface level. This means 15 metres of the shaft will be visible from the surrounding area but will be designed and landscaped to look and feel part of the Alan Wood Reserve.

Our team is currently building a sump at the base of the Southern Approach Trench, which will provide drainage for the tunnel. With the sump complete, they will begin constructing the main ventilation building in mid-September, with a target completion date of June 2015. Constructing the new ventilation building will require us to reopen Site Access Point 10 (located on Hendon Ave) meaning there will be an increase in trucks and other vehicles in the Hendon Avenue area. We appreciate your understanding while these works are carried out.



Artists impression of the Southern Ventilation Structure.

Community Survey

QUESTIONS

STRONGLY AGREE AGREE NEITHER AGREE OR DISAGREE DISAGREE STRONGLY DISAGREE

I receive timely information and have opportunities to comment on work that affects me.

I believe the Well-Connected Alliance genuinely wants to work with the community to deliver the Waterview Connection project.

I believe the Well-Connected Alliance will deliver an outstanding result for the Waterview Connection project.

Alliance personnel have responded appropriately to any question or query I have raised. (If you have not raised any then please leave blank.)

Where do you get most of your information about the project? (Please tick the box after your preferred options.)

Newsletters Direct mail Open day Website Project hotline
 Email News articles Staff Attendance at meetings Drop in centre

Which of the following organisations is investing in this project? (Tick one)

Auckland Council Ministry of Transport The Automobile Association
 Auckland Transport NZ Transport Agency The Well-Connected Alliance

Who do you identify as delivering this project?

What area are you from?

Before the project started what did you think its impact would be on the local area? No impact Positive impact Negative impact

Now that the project is halfway to completion has your opinion changed? If so what has changed it?

Do you have any other comments on the project?

Places at Alice's breakthrough at Waterview in September are extremely limited. Return this survey for a chance to win a ticket to this once-in-a-lifetime event. Don't forget to provide your name and contact details so that we can get in touch with you if you win!

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WELL-CONNECTED
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DELIVERING

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