Huntly project update

Rolling out the new highway

The Huntly project team is in full swing building the layers of rock to support the four-lane highway.

That involves bringing in 300,000 tonnes of aggregate, sourced from various Waikato quarries, using the Hi-lab pavement design process. And then 42,000 tonnes of Stone Mastic Asphalt (SMA) which is getting rolled out ahead of opening to traffic early next year.

“The massive earthworks involving 4.4 million cubic metres is about finished, and so is the drainage work which is no mean feat on this site which has both marshy lowland sections and a steep range to climb over,” says Fulton Hogan-HEB joint venture project director Tony Adams.

“Now it’s all about pavement – building up what that final surface will sit on.”

A special surface called SMA will be laid rather than the usual chipseal surface which needs to bed in for up to a year before a quieter seal can be applied.

“With SMA in place when we open, we won’t need to go back in 12 months to lay the final surface.”

SMA is a mixture of chip, lime and bitumen, among other things, prepped at a bitumen plant and transported to site. This is laid in a 50mm thick mat, at a constant speed to reduce the number of joins. It takes approximately 8-10 hours to lay 1km of a single lane width and will result in a better road surface

The project recently clocked up 2 million man-hours since construction began in late 2015. During this time more than 3500 staff have been inducted on to the site, which at the earthworks peak was crawling with 150 machines.

The last of the four local road overbridges, at Orini Road, will open to traffic in mid-July. This will allow the last of the local road diversions to be completed and the last link of the road to connect up for drainage and pavement construction.

“Our ecological and restoration planting is also nearing completion as we push to get the last of the 1.25 million plants in the ground by September this year, and we are currently on target to achieve this,” says Tony.

The “huglekultures” that were built in the first season, as a better way to utilise discarded vegetation, have really taken off and the plants are well established. The stumperies are becoming their own little ecosystems and have been of great interest to the local school children who have come to view them.

But it’s not all about challenging terrain and ecological and environmental work.

“We also continue to work closely with iwi to ensure that they are heard,” says Tony.

“A good strong working relationship has been developed between iwi and the project team culminating in an impressive Cultural Symbolism Plan that is well under way in its development, implementation and construction.”

This will add to the interest for all those travelling on this spectacular piece of SH1 early next year.

With the end in sight, the project team and partners are starting to think about how they will celebrate the completion and showcase the project to the public.

The details are being worked on and as usual the public will get a day to walk, run, cycle or bus on the new route before it opens to traffic. We will share all the details when we have the date nailed down.
What's been happening over summer

Concrete barriers are being installed under the Main Trunk railway bridge.

The final step in pavement works is laying the thick asphalt surface.

Hugelkultures and plantings very well established near Te Irego Lagoon.

The Southern Interchange ramps are well established.

A flood pump station is being built at Kimihia.

The Hi-lab pavement design being stabilised.

Planters working hard on slopes.

Orini Road Bridge is almost ready to open to traffic.
Expressway overview
The Waikato Expressway will improve safety and reliability, and reduce travel times and congestion on State Highway 1 by delivering a four-lane highway from the Bombay Hills to south of Cambridge. The Expressway is being built in seven sections.

What’s left to be done
• 50 per cent of Hi-lab road base left to be stabilised
• 10 per cent of SMA surfacing completed
• Approximately 350,000 plants to be planted
• 15 per cent of the 45,000 lineal metres of traffic barriers completed
• Installation of cultural features along the route start over the next few months

Wildlife flocking to new wetland
The Huntly project team are very proud of the 4ha wetland created at the southern end of Lake Kimihia.

It’s designed to be a haven for wildlife and native plants, and a big improvement on a degraded swamp area that had been grazed by stock for many years.

The wetland off Evans Road, 500m from the expressway, adjoins the southern end of Lake Kimihia. The work required digging out 30,000 cubic metres of clay to form the open water area and the planting of 50,000 wetland plants.

Auckland-Waikato Fish & Game has been assisting throughout the transformation and will also be caretaker of the completed wetland.

The wetland has several zones that can all cope with varying degrees of flooding.

The largest part of the wetland is open water to encourage ducks and other wetland bird species to make it their permanent home. This main body of water is about 3.7ha and the remaining 0.3ha consists of differing zones of planting that can be on both dry land during the summer and have wet feet during the winter.

A weir keeps the wetland above the normal level of Lake Kimihia. This is to keep pest fish species out of the wetland and assist water quality. A gate allows for it to be drained to undertake maintenance and pest control if any pest fish species enter the wetland during large floods.

Before construction ecologists carried out intensive fishing of the old stream that needed to be diverted and native fish species were caught and transferred. Pest species, including 98 carp, were destroyed, and a large number of eels were transferred to a safer area.

The work is part of an ecological plan developed by the NZ Transport Agency in collaboration with Fish and Game.