

Project update

August 2017

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Nothing New

We have been working in very wet conditions this winter but history tells us there is nothing new about that. The first mention of the name Winters Road in the news speaks of wet conditions.

Winters Road was named after Thomas 'Tom' Bassell Winter (1805 - 1875). Winter was a member of the East Avon Road Board from 1864.

Winter's Road is first mentioned in the Press of 1871 when the contractor engaged to metal it complained to the Avon Road Board about the problems he was having doing the work.

With thanks to the Papanui Heritage Group.

A letter from Mr Philpot, a member of the Board, was read, stating through illness he would be unable to attend the meeting that day.

The contractor for metalling Winter's road requested the Board to allow a different arrangement in carrying out his contract, as a portion of the road was very swampy, and he could not cart over it. He was informed that 75 per cent. on the completed portion of the work would be paid him, and as soon as the part of the road complained of was fit he undertakes to complete the contract when called upon to do so.

Source: The Press, 13 November 1871 notes from the Avon Road Board: wet conditions on Winters Road were challenging the contractor to complete the works.



Progress in the area

Work has been ramping up. On our Winters Road site we have finished the relocation of underground services like power, telecommunication, water and storm water. We will continue piling work soon to complete the foundation for the Winters Road Subway and we have been bringing in fill material to allow work to continue on the motorway.

Our work on QEII Drive has started and you will have noticed the different panorama now the trees and vegetation has been removed. We are progressing well with bringing in fill, however we are battling (like everyone else in Christchurch at the moment) with the wet ground conditions.

QEII DRIVE

On the north side of QEII Drive we are building the main embankment: 136,000m³ of imported bulk fill material will go into this embankment. This is more than 12 thousand truck and trailer loads. You will notice a growing mountain of gravel, at its highest point it will be 12.25m from existing ground level. And then we do nothing with it for awhile. We allow it to settle and we expect it to 'sink' about 1.8m. This takes around seven months from when we complete the bulk filling. The design height will eventually be 8.7m above existing ground levels.

Last bit of piling

We are about to start the last bit of piling on our Winters Road site. We hear many people are using our

piling machine as an external clock: time to get to work or get out of bed in the morning when our piling rig starts hammering in the timber piles. We would like to reassure you we don't have long to go now. The 416 remaining piles for the Winters Road Subway will start going in midweek. For the next 21 days you will hear us again hammering away: on average we can install twenty piles a day. The piling noise on this site will then stop for good and we will be able to start building the walls of the subway. These will be pre-cast units fabricated off-site. During the urban design planning stage we have changed the design for the subway walls so we had to reschedule the build and possible completion date. We now hope to open the subway in autumn 2018.



Left: Wick drains installed on alignment next to QEII Drive. Below: Twin mandrel rig used to install wick drains.



Wicked solution to drain water

Driving along QEII Drive and looking onto our project site you may have wondered what those strange grey floppy things are sticking out of the ground. They are wick drains and we install them to help remove water from the ground and so reduce the settlement time.

The drains are around 10cm wide by 5mm thick and consist of a corrugated plastic strip wrapped in a filter fabric, they act a bit like a flattened drinking straw. The wick drains relieve groundwater pressure that increases when you put fill (weight) on top of the ground.

The drains are pushed vertically into the ground to a depth of about seven metres. In total we will be installing just over 100km of wick drain material for the new motorway between Winters Road, QEII Drive and Prestons Road.

Why does settlement take so long?

When a structure or embankment is built on soft ground, the load on the soft soil is initially supported by the incompressible water in the soil. Over time water slowly drains out from within the soil, the load is then transferred to the soil, the soil consolidates and settlement occurs. For this reason the process of settlement takes a long time.

To reduce the settlement time the CNC Alliance project team are using two techniques: an extra 1 to 3 metre layer of fill material called a surcharge is used to temporarily weigh down the embankments and installing wick drains. The time required for this surcharge to compress the ground can be shortened by installing wick drains.

The drains give the water a shorter drainage path and allow the consolidation to take place in months instead of years. Wick drains are installed vertically into soft ground.

Go to www.nzta.govt.nz/cnc for the video on wick drains where site engineer Tom Belworthy is explaining the operations



Piece of wick drain close up



Building the Grimseys Road subway December 1994 – photo supplied by Helen who lives on Grimseys Road.

Story Competition

We wrote earlier about our story competition, our request to have narratives about the area. You can still send us your stories, anecdotes, photos and other information that reflects on the history of the land.

Local resident Louise McGregor shares her memories of moving to the local area back in the 1980s

We moved into this area May 1985. At the time Grimseys Road was shingle and went from Winters Road south to Farquhars Road north with farmland beyond. Winters Road started at Main North Road. It was a long straight road finishing at Hills Road.

In Winters Road at the end of Grimseys Road there was a phone box, a post box, a bus stop and a vegie/fruit shop. Papanui School was further along and is still there. A walking track went from Winters Road through to Cranford Street. There were many farms in the area and it was a pleasure to feed horses, view cows and go out walking.

A coal-yard was situated in Grimseys Road at the Winters Road end many years earlier, when driving down Grimseys Road. You would cross over a small bridge approximately where QEII Drive is now. It went over a ditch I remember that a body was found there one day. Not long after we moved into the area Grimseys Road was tar sealed and footpaths were formed. It was extended past Farquhars Road to form a new housing block at that end named Redwood Springs.

Near the railway bridge there is an area where spring water is bubbling up from under the ground. Cycling the length of Grimseys Road on an old Raleigh 20 took 1 hour return and a lot of energy. I have seen a lot of changes in this area in the last 33 years with the development of many homes, QEII Drive and now the Northern Corridor.

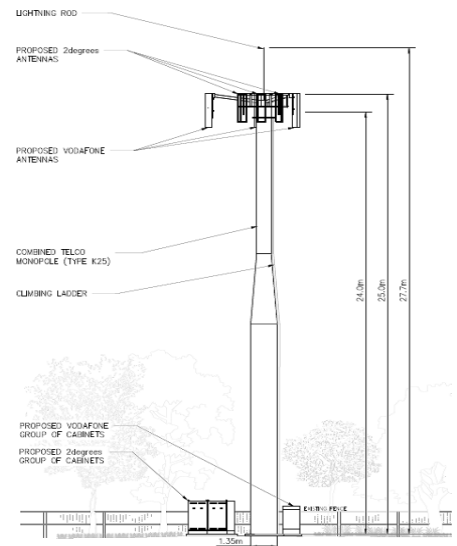
WHAT'S HAPPENING AT THE FRASER STREET AND CRANFORD STREET INTERSECTION?

You will have noticed that the flexi-posts installed near the new traffic island have disappeared. They improve the right turn from Fraser Street onto Cranford Street as it stops early merging on Cranford Street by traffic wanting to turn right at the Main North Road traffic lights. We would like to improve the right turn at this intersection and place the flexi-posts back however they seem to only have 24 hour life span. Together with the Council we are currently investigating other measures to improve this right turn. We will let you know what we have come up with in the next update.

BIG BOX - CULVERT COMPLETE

We are about to complete the installation of the Winters Road culvert: a 107m long concrete box to drain the water from the Winters Road drain. We will divert the existing drain to and through the culvert as we are building over part of the, now former, drain channel. With the completion of the culvert we can start the remaining piling work for the subway. The culvert is 2 by 2m inside, in total there are 69 concrete box sections to form the culvert.





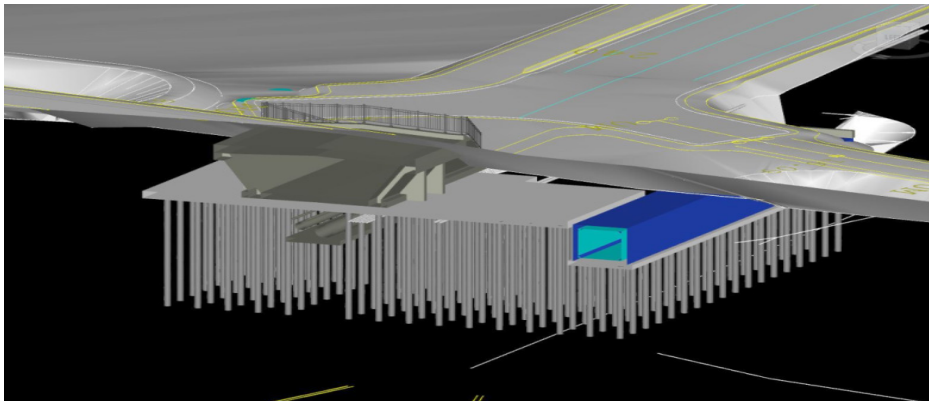
The map shows the locations of the existing two cell towers (red circles), the trench area to install new cables (in green) and the new cell tower location (blue triangle). On the right and below concept design and photomontage of the new cell tower.

CELL TOWER RELOCATION

The cell phone towers near QEII Drive/Grimseys Road are moving location. Both towers are in the way of the new upgrade so will have to be moved.

Work will start this week and will take about a month till late September. Both Vodafone and 2degrees services will be provided from one new tower that will be installed. Once the new tower is operational the two existing towers will be decommissioned.

Work will involve diggers, a crane and concrete trucks. These machines and trucks will enter the work site from Grimseys Road south so please be aware of the extra traffic to this area for four weeks. See map for tower locations and trench area.



3D image of the Winters Road Subway with the piles underground and the motorway on top (blue box is the culvert). Winters Road will be divided by the new motorway. There will be no vehicle access between the two sections of Winters Road. Pedestrians and cyclists will have access via a subway under the motorway. For more images, a project overview map and videos please go online to our website: www.nzta.govt.nz/CNC

OUR CONTACT DETAILS

We will keep you informed and further updates will be provided when work may impact you. This may include one-on-one or public meetings with directly affected property owners and businesses. General project information is available through the NZ Transport Agency and Christchurch City Council's websites. We encourage people to share our information with anyone who may be interested.

Sign up to receive email updates on this project by emailing info@cncalliance.co.nz or online at www.nzta.govt.nz/cnc

Contact us at: free phone **0800 262 200** or via info@cncalliance.co.nz

Our project site office is at 145 Winters Road (access via QEII Drive), we're happy to meet with you, so either drop in at our project site office or call us at 0800 CNC 200 to arrange an appointment.