





## CONSTRUCTIONUPDATE

## 2018 - It's a wrap!

The project is now over two years into a five-year construction programme. This year has been busy, with plenty of progress made.

Here's a snapshot of what's been achieved in 2018:

- Works on the two southern viaducts have commenced and good progress has been made
- The first structure, an underpass west of Perry Road, has been completed
- The 'big kit' has been brought in to help move up to 4 million cubic metres this earthworks season
- All harvesting of the pine forest has been completed
- All spoil disposal sites, which receive excess material from the bulk cut excavations are in place and working well
- All major environmental controls are in place to facilitate the bulk earthworks
- Safely carried out over 20 blasts to date, each producing 15-20,000m<sup>3</sup> of rock with the biggest blast producing 74,000m<sup>3</sup> of rock for earthworks operations
- Two of the significant 'cuts' in the Central Zone near to completion
- Over 350 subcontractors and suppliers have been working on the project, many from the Rodney area
- Over 60 community events/ presentations hosted or attended by the project team





#### **Top tips from the Traffic Management Team**

It's that time of year when State Highway 1 (SH1) starts getting busier, particularly on Friday afternoons and weekends. With the holiday season fast approaching, the NX2 Traffic Team have shared some top tips for everyone who uses SH1.

- Drive mindfully and stay vigilant

   don't be distracted by what's
   happening on the side of the road
- Maintain a safe speed and distance from other vehicles
- Be prepared for delays and remain patient

Please remember, when traveling between 80-100km/h, a 2 second distraction could mean you travel almost 50 metres blind.

### KEEPING SAFE

Some construction activities will be visible from the roadside and may look rather interesting, but please don't get distracted when driving past.



# Roadside views

We're now working across the extent of the project and works have become more visible from the roadside. We would like to remind everyone, that with the work now highly visible, it's important that you don't get distracted when driving past. Here's a snapshot of some intriguing areas of construction.



Work on the new section of Woodcocks Road and Carran Road is in the final stages and soon local traffic will be switched to the new road layout.



In December, the girders will arrive on site. These will connect the abutments on the eastern and western sides of the bridge.

NORTHERN ROUNDABOUT

Warkworth



Earthworks and ground improvements have started at the northern most part of the project, known as the 'Northern Connection'. Excavation has started south of the roundabout location. Early in the new year, preloading will start as part of the ground improvement works. Wick drains will also be installed further north.



This is the point where Arawhiti ki Puhoi (Pūhoi Viaduct) will join into the motorway alignment. In the next few months you will see the piling team in this area preparing for the abutment to be poured. Once completed the bridge will pass over Pūhoi Road at approximately 6 metres above the current road level.



Over the past few months, the team have been placing fill in this area, and there's still another 140,000m³ of fill to go. To help with the drying process, a tractor with discs on the back is used to drive over the materials, aerating materials as it goes.

Pūhoi

JOHNSTONE'S HILL TUNNELS



The team have started excavating the hill just north of the Pūhoi site compound. This will be a 30m 'cut' below the current height of the hill. This will also be the location where the motorway will connect to Arawhiti ki Pūhoi (Pūhoi viaduct).

### Whakawātea for structures

An important dawn ceremony was held in October to facilitate a successful start to structural work for Arawhiti ki Ōkahu. The Hōkai Nuku Cultural Advisors laid a mauri stone beneath the pile caps and spoke karakia (incantations) to mark the significance of creating a structure that crosses the Ōkahu Inlet. The rock is part of a group of mauri stones that have been carefully selected from Te Akeake near Wenderholm, as this is where water from the Pūhoi catchment meets the sea. The stones themselves connect the water and whenua (land) to Arawhiti ki Ōkahu which helps to ground the structure in the landscape. Tracy Davis, the Ngāti Rango representative for Hōkai Nuku, said he was pleased with how the ceremony went, "The morning was a representation of the partnership that has formed between Hōkai Nuku, NZ Transport Agency and NX2". Similar events will take place for all of the significant structures as the project progresses.

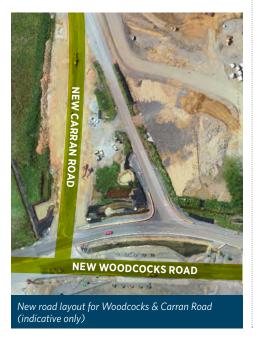




## Woodcocks & Carran Road realignment

The realignment of Woodcocks and Carran Road is in the final stags. Chip sealing and new road markings will be completed early-mid December. Once completed, local traffic will then be switched to the new road layout. Excavation of the old roads will then progress. Early next year the Structures Team will begin works on the southern abutment of the Woodcocks Road Bridge.

As construction continues to be close to the roadside, barriers will be in place separating live traffic from the construction activities. Stop/Go traffic management will be required for specific activities making sure everyone passes through the area safely. Thank you for your ongoing patience.



## The 'big kit' has been named!

Introducing "Chewbacca" (or "Chewy" for short) the 120 tonne Komatsu excavator and "Optimus", "Megatron" and "Bumble" the 60 tonne dump trucks. The excavator was named through a community naming competition and the dump trucks named in a staff competition.

These machines are the largest equipment on the project and some of the most expensive, but – they're certainly proving their worth! Over the past couple of months, production has significantly increased in the Central Zone where the machines have been positioned.

The machines will work hard this earthworks season, helping to move around 2.3 million cubic metres in the Central Zone. Here are some key stats about the machines and production so far:

- Big kit moves on average: 6000m³ of earth per day
- The excavator and dump trucks work on a continuous rotation
- · Total cost of the big kit: Approx. \$7 million
- Average quantity of earth moved in the Central Zone per day: 15,000m<sup>3</sup>
- Record day (to date) of earth moved in the Central Zone: 23,000m<sup>3</sup>

If you missed the recent coverage on TVNZ's Seven Sharp, check out the clip and hear from Anna Voice, one of our star dump truck drivers <a href="https://www.nzherald.co.nz/nz/news/article.cfm?c">https://www.nzherald.co.nz/nz/news/article.cfm?c</a> id=1&objectid=12157462





## Sunday works notification

As we've mentioned before, wet weather is no good for earthworks. If days have been lost due to rainfall, we may need to work seven days. Works notifications are sent to our closest neighbours. If you'd like to receive Sunday works notifications, please email us your name and physical address, to: info@nx2group.com.

## Out & about in the community

There's been plenty of community engagement over the past few months, keeping the NX2 Stakeholder & Communications Team on their toes. Some highlights included:

- The project neighbour days where those living closest to the project heard from the construction team about the works this earthworks season.
- The 'Wild West' themed Kowhai Festival, with over 100 people visiting the project stand throughout the day.
- Warkworth Primary School visits in November, sharing insights into how such a large group of people work together on the project to achieve a common goal of building a world class motorway by 2021; and rewarding students, teachers and parents on completion of this year's

walk-a-thon event with frozen juices, kindly donated by Warkworth Countdown.

The team are now starting to plan the next big event – the public open day – which will be held late March 2019. Tickets will be available early February and will be advertised in our next Construction Update, on our website, Facebook Page and local newspapers. We're looking forward to once again taking you 'behind-the-scenes'!





Comment from Warkworth Primary School Teacher: The Social Science topic "working as part of team" presentation was excellent. It was relevant to all ages and especially the Year 6s who are about to make the big move to Mahurangi College. Teachers gave really positive feedback about your big ideas, vocabulary and humour!

### What's coming up?

In the south (Johnstone's Hill Tunnels to Watson Road):

- Pouring first columns at Arawhiti ki Ōkahu (Ōkahu Viaduct)
- Continuing to place fill on the S1 fill embankment, south of Pūhoi Road
- Earthworks underway on the hillside, north of Pūhoi Road
- Cut and fill activities opening up in new areas between SAP8 and the area opposite Mahurangi West Road

In the central section (Southern end of Moir Hill to Arawhiti Pua Ngahere - Kauri Eco Viaduct):

- Continue rock blasting in various locations
- Excavation and completion of two major cuts

- Arrival and installation of girders to Tapuwae o Kahumatamoemoe (Moir Hill Bridge)
- Continue rock bolting and mesh on rock cuts

In the north (Arawhiti Pua Ngahere - Kauri Eco Viaduct to Northern Roundabout):

- Culvert installation various locations
- Commence rock bolting and mesh on rock cut, east of Wyllie Road
- Excavation and ground improvements, northern side of Woodcocks Road
- Earthworks and ground improvements commence at the Northern Connection

Bulk earthworks continue across the length of the project.

### **Project Timeline**



✓ OCTOBER 2017
Start of bulk earthworks

JANUARY 2018
Start of structures

#### **NOVEMBER 2019**

Start of pavement works

#### **NOVEMBER 2020**

Earthworks completed

#### **OCTOBER 2020**

Structures completed

#### **SEPTEMBER 2021**

Pavements completed

#### **OCTOBER 2021**

Works completed

#### **LATE 2021**

Motorway open to traffic

#### **Holiday shut-down**

Most of the team will be taking a short break over the festive period with work only continuing through in some critical areas (on non-stat days). From 6pm Thursday 20 December all trucks will be off the road. Works will start back up on 3 January 2019.

Reminder: no unauthorised person may enter the project area. The site will be managed by our 24/7 security team and we have been working closely with NZ Police to ensure appropriate measures are in place, including surveillance cameras. If you see anything suspicious, please call 111. For all other queries about the project please call 0508 P2WK INFO (0508 7295 4636) or email info@nx2group.com.

From all the project team, have a safe and happy Christmas. We look forward to bringing you more project updates in 2019.

