### **CAUSEWAY NEWS**

#### 27 FEBRUARY 2014



### **Bridge widening**

The existing bridge over the Whau River on SH16 near Te Atatu is being widened as part of the Causeway Upgrade Project. The construction process goes like this:

- 1. Ensure 90,000+ daily motorway users, project workers, boaties, kayakers and rowers are safe at all times.
- 2. Build a temporary staging platform where the workers, cranes and trucks can operate from.
- 3. Create seven vertical piers (piles) for the new bridge to be built on. Each pier has eight truckloads of concrete.

- 4. Clamp a steel platform to the pier to hold timber formwork moulds, place hundreds of steel reinforcing bars by hand to form a maze-like structure (see photo below), pour concrete into it and allow it to set/harden.
- 5. Place precast concrete bridge beams by crane on top of the crossheads and install new barriers.
- 6. Construct the new deck (motorway base layer) on top of the beams, lay tarmac, complete line markings and have the structure inspected and passed.
- 7. Open the new lanes for use.
- 8. Celebrate.

Voilà!

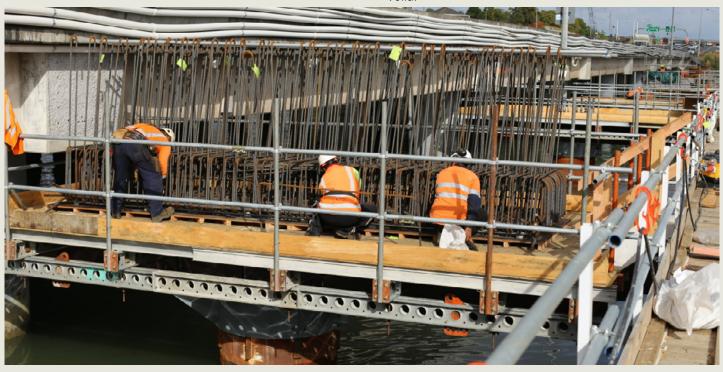


Photo by Colin Battley shows the temporary staging platform (right) for workers, SH16 eastbound on the left behind the barrier, and Causeway Alliance workers placing steel reinforcing bars to create the inside structure of the first of seven vertical crossheads.

# Cycleway knee-deep in water

The unusually high king tide on the Waitemata Harbour during the morning of Sunday 2 February flooded the northwestern cycleway and created a water lane for quick-thinking kayakers. Our programme of work to raise the causeway and cycleway 1.5m will help to ensure they will remain flood-free and clear of tidal debris in the years ahead.



Photo: Greg Kempthorne

## **Eastbound reclamation on State Highway 16**

The preload (fill) which has been laid on top of wick drains described in our last issue will remain in place for several more months while the marine mud underneath it consolidates and settles. The height of the fill compared to the existing motorway beside it gives an idea of the finished height that the causeway section of State Highway 16 will be in 2017.



### **Great North Road** on-ramp work

Work is in progress on our construction of the new motorway on-ramp from Great North Road westbound to SH16.

New ducts underneath the ramp will be installed during the nights of 11, 12 and 13 March. Some noise will be inevitable and will be monitored to ensure it remains within Auckland Council limits.

### Some project quantities at a glance

- 21,000 or 250,000 linear metres of wick drains.
- 36.000 truck and trailer loads.
- 100,000 tonnes of coastal rock.
- 550,000 cubic metres 1.1 million tonnes of earthworks material. That would fill 200 olympic-sized swimming pools.

### **Community Liaison Group**

Thank you to the CLG members who attended our quarterly meeting earlier this month and provided input to a lively discussion. A copy of the presentation from that meeting and the minutes will soon be available on our website, www.nzta.govt.nz/projects/sh16causeway, under the Community Engagement tab.

#### Happy 50th Birthday Flanshaw Road School

Greg Kempthorne and his camera just happened to be taking aerial photos on the first day of Term 1 when Flanshaw Road School in Te Atatu South were celebrating their special birthday. All the children stood in a 50 formation in the school grounds.



Photo: Greg Kempthorne

#### More information

nzta.govt.nz/projects/sh16causeway elizabeth.collins@sh16causeway.co.nz 0800 444 449 (state highways info line)



About 1000 Godwits and Oystercatchers gathered on the mudflats beside the project at dawn on 26 February. The gathering will soon begin their migration to Alaska. Photos by Jeremy Painting.



