

Hamilton Section



Project newsletter Issue 07 | November 2017

The science behind traffic management

There's more to traffic management than cones and signs. There is science behind every traffic management plan.

We manage traffic at 17 sites around the city and site numbers will increase before the project ends.

Every activity on or near the road must have a traffic management plan. Designing these plans can take up to two weeks, depending on the size and complexity of each site. The traffic management plan is then sent to the road controlling authority (the District/City Council or the NZ Transport Agency) for approval. Each plan must meet the Code of Practice for Temporary Traffic Management.

The Alliance has four full-time qualified traffic management staff plus contracted crews at specific sites. Traffic manager Joseph Rosendaal works alongside a traffic planner at the project site office in Ruakura. Raewyn Nathan is out on the roads controlling the southern zone and Arvi Singh controls the northern zone.

Joseph has been working in the field for 10 years. He has been involved in traffic management for large events, ultra-fast broadband installation, the Transpower main power upgrade and numerous roading projects. Experience has taught him that planning well in advance is essential, and trials are useful to test how to reduce disruption to road users.

There is a thorough process behind the layout of cones and signs. It allows motorists to commute from A to B in the safest and most efficient way, and ensures road workers to go home safely after every shift.

Joseph loves the science behind traffic management. Understanding how a driver reacts to visual cues is part of the science. For instance, the way cones are arranged will affect how fast people drive.

The biggest site managed on this project is SH1 Cambridge Road at Tamahere. Statistics show that the Cambridge Road commute time has only slightly been affected by the project road works.



Joseph directing traffic on Ruakura Road.

Travel times on SH1 at Tamahere

	Northbound	Southbound
2017	Additional travel time (seconds)	Additional travel time (seconds)
January	0:00:09	0:00:05
February	0:00:26	0:00:00
March	0:00:25	0:00:12
April	0:00:26	0:00:14
May	0:00:50	0:00:06
June	0:00:07	0:00:09
July	0:00:34	0:00:27
August	0:00:18	0:00:22



Your name? Raewyn Nathan

Your role? Site Traffic Management Supervisor (STMS) for the project

What is special about your role? Being the eyes and ears at ground zero on the project brings its challenges.

Our people

What other projects have you worked on? I have worked in traffic management for the past eight years including the Rangiriri and Te Rapa sections of the Waikato Expressway.

What do you do when you're not at work? I work long hours, often from 6am to 6pm, along with doing weekend drive checks. So, when I do have down time, I do the housework and lawns.

A little unknown fact about Raewyn added by the author: Going the extra mile: Raewyn has gone above and beyond in her role on the project. Raewyn recently notified local police about a burglary taking place on a neighbouring property, and the offenders were arrested.



The first nine months of 2017 recorded the highest rainfall in Hamilton since records began in 1905. It is the highest recorded rainfall from January to September in 112 years.

Project construction update

1 Lake Road



We made good progress in October on the northern side of Lake Road with the expressway cut and are steadily working northwards towards the tie-in points with the existing Ngaruawahia section. Further progress was made topsoiling the run-off ponds along this section of the expressway.

2 Kay Road



The structures team completed all four bridge columns. The earthworks team have made good progress preparing for bulk filling south of the bridge.

3 Puketaha Road



Works started on Puketaha Road with widening of the current road to allow for installation of a dedicated right-turn lane. This will keep traffic flowing while the bridge foundations are being built.

4 Greenhill Road



Ground improvements continue in preparation for bridge foundation work.



5 Ruakura Rail Bridge



The bridge was opened for construction traffic. It is a critical part of the haul road allowing construction traffic to travel along the project.

6 Morrinsville Road Bridge



The bridge is in the final stages of construction. The permanent concrete bridge barriers have been installed and the pavement team moved in to complete the road works ready for the bridge to open to traffic in November.

7 Mangaharakeke/Mangaone Gully



Tracks have been cut into the gullies, to provide access for machines working along the stream banks.

8 Southern Interchange



With the bridge beams in place at the East West Link Bridge, preparations are under way for the concrete deck to be poured in November. The earthworks team have started building the retaining wall for the Southern Interchange.

Dampening down the dust

Summer is on the way, and the change of season brings new challenges for the project team.

Dust can be a nuisance to the project and our neighbours so we will be using water to reduce the dust caused by construction work. Our aim is to stop dust leaving our site using good site management and our fleet of water trucks.

Over summer, the project team will be monitoring wind and weather conditions and using trucks filled with water to wet the problem areas and prevent dust from forming.

Where do we get the water from to fill up the water trucks? It comes from one of our five water takes on the project. Each water take point is supplied by a bore or from the Waikato River.

The project team has been given permission to use the water supply by the Waikato Regional Council. The project has a daily water limit which ensures other users are unaffected.

Water is pumped into large holding ponds, then to our water trucks through a hose and tap system. The ponds and high capacity pumps and hose are designed to fill the water trucks quickly.

The project will have up to 14 water trucks on site during the summer earthworks. Each truck holds up to 40,000 litres which will spray about 3km of the construction haul road. Trucks transport up to 12 loads each day.



A water truck is filled from a holding pond.

Big beams delivered to East West Link Bridge

Some of the project's biggest beams have been delivered to the East West Link Bridge near SH1 at Tamahere.

Seventeen beams varying in length from 27m to 37m were delivered to site from Auckland in the early hours of the morning, arriving well before sunrise.

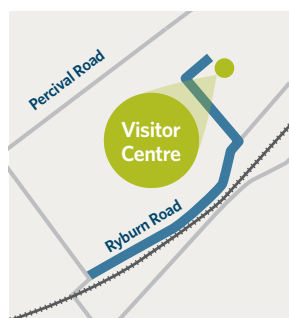
The beams were then placed onto the bridge crossheads by a 300 tonne crawler crane in late September and early October.

The transporter carrying the heavier, longer beams was 70m long. It consisted of two trucks - one at each end of the beam - operating in tandem.

The beam installation was finished on 5 October.



A 300-tonne crane lifts a beam into place at the East West Link Bridge



Visitor centre opening hours

NORMAL OPENING HOURS

Monday to Friday
9.00am to
3.00pm.

CHRISTMAS AND NEW YEAR

The Visitor Centre will close on 22 December 2017 and reopen Monday 8 January 2018.

FIRST SATURDAY OF EACH MONTH

The Visitor Centre is open on the first Saturday of each month (excluding January 2018), from 9.00am-12.00pm.

NEXT SATURDAY OPENINGS: 2 Dec 2017, 3 Feb and 3 Mar 2018



Any questions?



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