



Baypark to Bayfair Link Project



Ground improvements underway near Bayfair roundabout

Significant ground improvement works are underway inside and around the Bayfair roundabout with the installation of lattice piling framework. These works are a key milestone for the Bay Link project to progress the new underpass and construction of the SH2 flyover bridge.

Ground strengthening work is a major part of the project, given the nature of sandy soils, sub-surface material and the high-water table in the area. Around 5600 stone columns have already been installed throughout the site to help densify the ground, limiting any potential liquefaction during an earthquake.

The original plan for ground densification under the flyover bridge over the Maunganui-Girven intersection included stone columns.

In late 2019, following the installation of stone columns, testing indicated a variable layer of pumice was present which did not respond as anticipated to stone column ground improvements. Additional investigations by the universities of Auckland and Canterbury, and an international expert, confirmed the unusual behaviour and complexity of this layer and concluded a revised design methodology was required.

The modified approach to ground improvements around Bayfair is a lattice piling framework that will help limit settlement and provide further stability. This approach involves constructing a network of overlapping concrete columns, arranged in a square lattice. The primary piles are augered, concrete pumped through the auger and the auger slowly extracted, replacing displaced ground with concrete. At completion of the primary piles, secondary piles are installed which overlap the two adjacent piles, creating a sealed wall.

To install the lattice piles, two giant Continuous Flight Auger drilling rigs are located on-site for around six months while the works are underway. Weighing approximately 72 tonnes each and up to 25 metres high, the first rig is located next to the former underpass and the second rig is located within the Bayfair roundabout.

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The lattice piles are being installed around each of the five supports for the flyover bridge. As part of the ground improvements work, the Bayfair roundabout has been enlarged to accommodate construction.

Undertaking the works and operating the rigs safely in such a confined area presents some logistical challenges, including working closely with Tauranga Airport to ensure the height of the rigs' masts don't intrude on the flight path. Working alongside live traffic lanes also means

the safety of motorists, members of the public and road workers is paramount.

As part of the works, it's estimated that 9000m³ concrete will be poured (equalling more than 21,600 tonne). This will be delivered by around 1800 truck movements.

It's anticipated the lattice piling works will mainly occur during the day. While the Bay Link project team endeavours to minimise any disturbance to local residents, the ground improvements work may generate some noise and vibration.

Southern wetland area thriving

A significant development on the Bay Link site in recent months is the southern wetland.

The wetland, which isn't visible to local motorists, is located beyond Titoki Place, near the rail line which runs adjacent to SH29A.

Wetlands have the ability to act as the 'kidneys of the earth', cleaning the water that flows into them, trapping sediment and soils, filtering out nutrients and removing contaminants. They help to maintain water tables and also return nitrogen to the atmosphere.

The southern wetland plays an important role, treating water collected off the road network. The channel of water through the wetland allows sediments to settle, improving the water quality as it flows towards the outlet, a process which is assisted by wetland planting.

The southern wetland covers approximately 8000m² and features around 35,000 plants.

In association with local tangata whenua, plants are chosen for their tolerance to the local environment,

weather conditions and their suitability for providing appropriate habitat opportunities for insects and animals.

In the shallow water (up to 30cm deep), vegetation consists of purei (tussock forming sedge), sharp spike sedge, twig rush, tussock swamp twig rush, water milfoil and kapungawha (soft stem bulrush). In the deeper water (between 30cm and 1m deep) kuta (tall spikerush), twig rush, red pond weed/manihi, and kapungawha are more suitable.

Plants are eco-sourced and harvested from local vegetation. This helps protect the biodiversity of the native vegetation within this ecological area.

The southern wetland is not the only wetland across the Bay Link project site, with the northern wetland located next to Matapihi Road.

Including the vegetation planted at the wetlands, it's anticipated more than 120,000 plants will be added site-wide by the end of the project.



Plan ahead to minimise delays these summer holidays



Waka Kotahi is anticipating high volumes of traffic on state highways and local roads across the Bay of Plenty throughout the Christmas/New Year period.

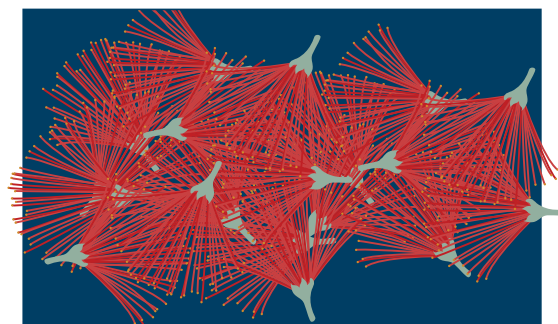
Travel is predicted to be busier than usual this year.

While most road work stops prior to busy holiday travel periods, motorists in the Bay of Plenty should allow extra time if travelling through the Te Maunga intersection near Baypark where there have been recent delays following the change to a signalised intersection.

In the wider Bay of Plenty, motorists should be prepared for heavy traffic volumes over the Kaimai Range, on SH2 between Paeroa and Waihi, and also between Katikati and Tauranga.

Please take extra care when travelling during the holiday period. Consider travelling outside of peak times when traffic is lighter, allow plenty of time and take regular breaks.

Motorists are encouraged to plan ahead with the help of the Waka Kotahi journey planner at journeys.nzta.govt.nz



BAY LINK CHRISTMAS SHUTDOWN

The Bay Link project team would like to thank you for your ongoing patience throughout the construction period.

We would like to wish you a safe and happy holiday season and remind you to take care on the roads, whether you're travelling near or far.

The Bay Link construction site will be closed from 12pm Wednesday 23 December 2020 until 9am Tuesday 5 January 2021.

Temporary speed restrictions remain in place throughout the site during this time.

The Bay Link contact number **0508 222 4636** remains operational over the Christmas/New Year period.

Bay Dreams traffic management

As part of Bay Dreams 2021, there will be extensive traffic management in place on Sunday 3 January 2021 around Baypark Arena and the surrounding area.

Temporary road and lane closures will be in place on SH2 between Bayfair and Sandhurst Drive. Motorists are advised to use alternative routes where possible or plan their travel outside of festival hours to avoid potential delays and detours.

Around 15,000 people are anticipated to attend the main event, which starts at 11am and finishes at 10.30pm on 3 January 2021.

For more information about Bay Dreams visit the event website at baydreams.co.nz/the-mount

For up to date information on traffic, detours and delays, motorists are encouraged to visit the Waka Kotahi Journey Planner website at journeys.nzta.govt.nz

Getting out in the community

The Bay Link team was fortunate to be hosted by members of Ocean Shores Retirement Village and the Marlin Friendship Club recently. Our Project Manager provided an overview of milestones and challenges, and what's coming up for the project.

After the challenges of COVID-19 this year, the project team is looking forward to getting back out in the community in 2021. If your community group is interested in having the team along to provide a project update please contact baylink@nzta.govt.nz

Arataki Community Liaison Group


Tauranga City Council recently established the Arataki Community Liaison Group (ACLG). The group was formed as a response to the local community expressing a desire to have more input on matters impacting upon their neighbourhood.


The ACLG group will meet regularly to discuss projects and topics affecting the Arataki area. For more information visit tauranga.govt.nz/aclg



Keeping you up to date

As part of our no surprises approach, we want to keep the community and road users as up to date as possible.

 0508 222 4636

 nzta.govt.nz/baylink

 NZTAWaikatoBoP

 NZTAWaibop

To see our weekly traffic notices, project overview, and to sign up to our regular newsletters go to www.nzta.govt.nz/baylink

To receive the regular newsletters by post, please call 0508 222 4636