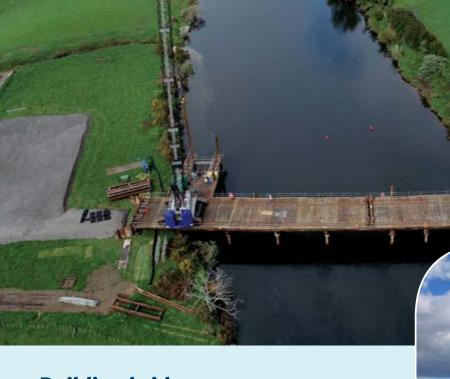
Aerial view of the construction bridge nearing completion, photo

taken September 2022

Contractor's newsletter Te karere a te kaikirimana Fulton Hogan/HEB Joint Venture



Building bridges

Great progress has been made to build a 145m construction bridge across the awa, Wairoa River.

Fingers will be added to the bridge to enable a crane to sit on, to build the permanent bridge. The temporary bridge will also be used for construction vehicles to haul materials across the river.

This temporary bridge was previously used in Māngere during the construction of Ngā Hau Māngere, the new walking and cycling connection across the Manukau Harbour.

Te Hanga Arawhiti

E pakari ana te haere o te hanga i tētahi arawhiti hanganga 145m te roa e whiti ana i te awa o Te Wairoa.

Ka tāpiritia he mati mō te hanganga o te Arawhiti hou o Te Awa o Te Wairoa, e āhei ai te rōpū ki te kawe taputapu ki tētahi taha o te awa.

He mea whakamahi tēnei arawhiti taupua i Māngere i te wā e hangaia ana a Ngā Hau Māngere, te ara hīkoi, pahikara hou e whiti ana i te Whanga o Manukau. A view of the bridge from the safety boat. The navigation span was increased to 11.9m, to allow for rowers and other river users to easily pass through for the duration of the bridge construction. The buoys are in place to guide the river users under the bridge safely.

He tirohanga o te arawhiti mai i te poti haumaru. He mea hiki te hōkaitanga ki te 11.9m e āhei ai ngā kaihoe me ētahi atu kaiwhakatere ki te haere mā raro hei te roanga o te wā e hangaia ana te arawhiti. Kua rite ngā kārewa ki te ārahi i ngā kaiwhakatere i runga o te awa kia haumaru te haere i raro i te arawhiti, mā te hōkaitanga whānui rawa o te arawhiti, otirā i whakawhānuitia ki te 11.9m kia pai ai mā ngā kaihoe









Wairoa Road Overbridge

The piles for the Wairoa Road Overbridge are complete and the next stage is to install the 66-tonne precast concrete beams that will support the bridge deck. From this we install the reinforcing steel and construct the abutments and the piers. This process will take around four months.

Te Arawhiti o Wairoa Road

Kua oti ngā pou tūāpapa mō Te Arawhiti o Wairoa Road, ā, ko te mahi ināianei he whakauru i ngā paepae raima hangarewa e 66-tana, ka noho hei taituarā mō te kāraho o te arawhiti. Mai i tēnei ka whakauru mātou i ngā turuki maitai me te hanga i ngā tauhōkai me ngā poutoko. Ka āhua whā marama te roa o tēnei mahi.



Cambridge Road Overbridge

Piling has recently started on the Cambridge Road Overbridge. If you are passing by you will see the steel pile casings ready to be driven into the ground. Piling is expected to take three months to complete. This timeframe may change depending on ground conditions and the weather.

On the right of the photo above you can see the construction of the new Harrison Road, which is expected to be open by December and the existing road closed.

Te Arawhiti o Cambridge Road

Kua tīmata te titi i ngā pou tūāpapa o te Arawhiti o Cambridge Road. Mēnā e hia ana koe ka kite i ngā kēhi pou maitai e rite ana kia poua ki te whenua. Ka āhua toru marama te roa o tēnei mahi. Ka rerekē pea tēnei wā i runga i te āhua o te whenua me te huarere.

I te matau o te whakaahua ka kite koe i te hanganga o te rori hou o Harrison, ka oti hei te Tīhema, ā, ka kati te rori o nāianei.

Te Rangituanehu / Minden Gully

A collection of bridges are being built across Te Hakao Minden Gully, the on ramp, off ramp and the main alignment are expected to take two years to complete. 129 piles will be driven into the ground ranging from depths of 13 metres to 35 metres - nearly 30% of the total piles across the whole project.

The 280-tonne crane is in place to start the bridge construction. On the right are the pile casings ready to start installation.

Te Rangituanehu

E hangaia ana ētahi arawhiti e whiti ana i a Te Hakao, te arapiki, te aratuku me te hāngaitanga matua, otirā ka rua tau te matapae o te wā ka oti. 129 ngā pou ka titia ki te whenua mai i te 13 ki te 35 mita te hōhonu - tata ki te 30% o ngā pou tūāpapa katoa o te kaupapa nei.

Kua tau te wakahiki 280-tane, ki te tīmata i te hanganga arawhiti. I te taha matau ko ngā kēhi pou e rite ana kia whakaurua ake.







Rangatahi check out career pathways in construction

Students from Tauranga Girls' and Aquinas College visited the Takitimu North Link site in August as part of a career's pathway initiative led by their respective schools. It was awesome to hear their questions about working in construction, and they were interested in the huge range of jobs and careers infrastructure projects can offer.

Ka tirohia e ngā rangatahi ngā aramahi i te mahi hanganga

I toro atu ngā ākonga o Te Kura Kōhine o Tauranga me te Kāreti o Aquinas ki Te Ara o Takitimu ki te Raki i te Ākuhata hei wāhanga o te kaupapa aramahi e ārahina ana e ō rātou kura.

He rawe ki te rongo i ā rātou pātai mō te mahi i te rāngai hanganga, me te hiakai ki te whānuitanga o ngā tūranga mahi kei ngā kaupapa tūāhanga.

Training on the job

This group of young men started on the project with minimal experience in the industry, or straight from school.

Since joining this year they have completed First Aid Training, Site Safe Training, Envirowise, Chemical Treatment Training and Erosion Settlement Control Training.

Takitimu Project Team Environmental Manager, Stephanie Kirk, has been impressed by their work ethic and positive attitude.

'These young men are building some really great environmental controls on site, they are not afraid of working in the wet and in the mud, never moan and have a really great culture among themselves. Their laughter and beaming smiles rub off on the rest of the team on site and they are a true reflection of having a keen, can-do work ethic and an awesome positive attitude to match'.

Part of our legacy on this project is to teach and upskill people, to set them up with further skills so they can continue their growth in an industry with so many opportunities.

When we asked the lads what they have learnt on the job the answer was 'hundreds of things!'

They enjoy the variety of mahi, working with a great team and look forward to continued learnings as the project progresses.

Ka rawe tīma!

Te Whakangungu i te wā e mahi ana

I tīmata tēnei tira tāne me ngā wheako iti nei i te rāngai mahi, i puta rānei i te kura.

Mai i te tūhonotanga mai i tēnei tau, kua oti ngā Whakangungu Awhina Tuatahi, te Haumaru Wāhi Mahi, te Environwise, te Whakahaere Matū, me te Whakahaere Ngāhorohoro Whenua.

I rawe ki a Stephanie Kirk, te Kaiwhakahaere Taiao o te Tira Mahi o Takitimu ki tā rātou tikanga mahi me te waiaro pai.

> 'E hanga ana ēnei tāne rangatahi i ētahi whakahaere taiao tino rawe, ā, kāore i mataku ki te mahi i te wā e mākū ana, e tapoko ana hoki, kāore e amuamu, otirā he wairua pai hoki tō rātou. Nā ō rātou katakata me ngā memene pīratarata i hiki ai te wairua o te tira i te wāhi mahi, ā, ka whakaaturia he tikanaa mahi hīkaka, me te wajaro mīharo hei kīnaki

hoki'.

Ko tētahi wāhanga o tō tātou waihotanga o tēnei kaupapa ko te whakaako i ngā tāngata, te whakangungu i ō rātou pūkenga kia pai ai te tipu haere i roto i te rāngai āheinga nui nei.

I te wā i pātai mātou ki ngā tāne nei he aha ngā mea i ako rātou, ko te whakautu 'inā te nui!'

He rawe ki a rātou te whānuitanga o ngā mahi, te mahi i roto i te ropū, otirā e tāria ana ngā akoranga hou i te wā e koke ana te kaupapa.

Ka rawe tīma!

L-R: Thomas, Tom, Campbell and

Daezharn started on the project this year



Construction snapshot: what's happening on-site Whakaahua hanganga: ngā whakanekeneke i te wāhi mahi



1. SH29 / Takitimu Drive Toll Road

- Reduced speed limit to 80km/h
- Services relocation works
- Environmental controls
- Kopurererua Valley Pathway a permanent closure to a section of this path remains in place. Another section of the pathway on the eastern side is temporarily closed until approximately end of October while power services are relocated. A detour is in place

2. Smiths Farm / Richard Way

- Construction of the haul road from SH29/Takitimu Drive Toll Road
- Carting materials from SH29 into Smith's farm

3. Cambridge Road / Harrison Road

- Earthworks for the new Harrison Road
- Service relocations
- Construction of the Cambridge Road Overbridge underway

4. Wairoa Road and Valley

- Piling work has been completed at the Wairoa Road Overbridge and beam construction has started
- Stop/Go traffic management in place for trucks crossing Wairoa Road
- With earthworks season starting mid-September there will be an increase in construction vehicles
- The Wairoa River construction bridge has reached the Eastern side, with 'fingers' next to be constructed

5. Te Mete Road area

 Construction of the temporary new access for Te Mete Road residents

6. Te Rangituanehu / Minden Road area

- Construction of the Te Hakao Minden Gully bridges has started.
 Piling is the first phase which will take approximately seven months to complete
- Environmental controls continue
- We have moved into our new project site office

TRAFFIC UPDATES

Temporary reduced speed limits are in place at several work sites

- 30km/h on Cambridge Road, Wairoa Road and Minden Road
- 80km/h on SH29 / Takitimu Drive Toll Road while service relocation work takes place

De-fishing waterways at **Wairoa East**

De-fishing is underway in the Wairoa East area, which is within the footprint of the new Takitimu North Link road.

De-fishing ensures that any creatures living in waterways have been relocated safely out of the way of construction. After the first week, more than 1000 fish including shortfin eels, longfin eels (tuna - an at risk-declining species only found in New Zealand), and inanga - one of the five native species which are collectively known as whitebait. Relocating these and looking after them is important to us to ensure we are looking after the taiao (natural environment). De-fishing is expected to take four weeks to complete.

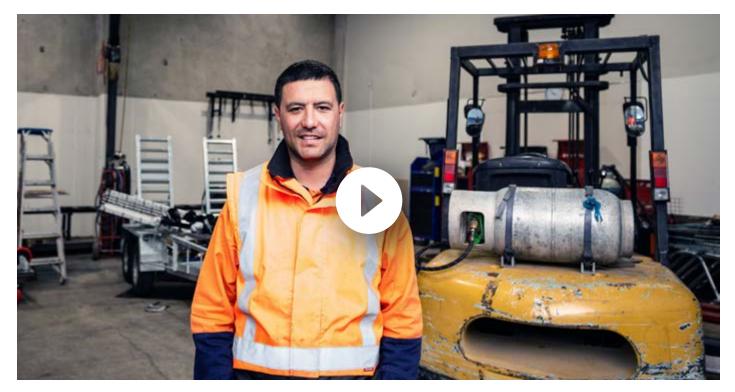
Te tango i ngā ika mai i ngā arawai i Wairoa ki te Raki

Kua tīmata te mahi tango i ngā ika i te rohe o Wairoa ki te Raki, kei roto i te tapuwae o te huarahi hou o Te Ara o Takitimu ki te Raki.

Ko te tikanga o te tango i ngā ika i te wai, kia pai ai te hari ki wāhi kē kia kore e tūkinotia e ngā mahi hanganga. I muri i te wiki tuatahi, neke atu i te 1000 ika, arā, he tuna poto, he tuna roa (he momo ika mokorea e kitea anake i Aotearoa) me te inanga - tētahi o ngā momo mārearea e rima. He mea nui ki a mātou te kimi kāinga hou me te tiaki i ngā ika nei, kia pai ai te tiaki i te taiao. Ka āhua whā wiki te roa o te kaupapa tango i ngā ika.







New business secures major welding contract through Takitimu North Link project

From employee to employer and business owner, Neihana Bennett from Wera Works has successfully secured his first major welding contract on the Takitimu North Link project, part of the NZ Upgrade Programme, which has projects worth \$2.1b under construction across the motu supporting local economies with opportunities for local people and businesses.

As a result of partnership working between Tāngata Whenua, Waka Kotahi, and Fulton Hogan/HEB Joint Venture, a mentoring pathways programme has been developed to support local people with the tools to take the next steps in the industry. We would like to acknowledge the Tāngata Whenua representation who continues to guide and support the development of these broader outcomes.

Find out more about his story in the video at nzta.govt.nz/takitimunorth

If you would like to know more about employment and business opportunities on the project contact info@takitimunorthlink.co.nz

Kua whiwhi tētahi pakihi hou i te kirimana hono maitai mā te kaupapa o te Ara o Takitimu ki te Raki

Mai i te kaimahi ki te kaituku mahi, ki te kaipakihi, kua whiwhi i a Neihana Bennett o Wera Works tana kirimana hono maitai nunui tuatahi i runga i Te Ara o Takitimu ki te Raki, he wāhanga o te Kaupapa Whakahou o Aotearoa, otirā he 2.1 piriona te wāriu o ngā hanganga puta noa i te motu e tautoko ana i ngā ōhanga ā-rohe me ngā āheinga mā te hapori me ngā pakihi. Ko te hua o te mahi ngātahi i waenga i ngā Tāngata Whenua, a Waka Kotahi, me Te Rangapūtanga Fulton Hogan/ HEB, kua whakawhanaketia he kaupapa whakaruruhau hei whakangungu i ngā tāngata paetata ki ngā taputapu e koke whakamua ai rātou i roto i te mahi nei. Me whakamihi ka tika ki ngā māngai Tāngata Whenua, e ārahi, e tautoko tonu nei i te whanaketanga o ēnei putanga ahuwhānui.

Rapua he kōrero anō mō tēnei kaupapa ki te ataata i

nzta.govt.nz/takitimunorth

Ki te hiahia kõrero atu anō koe mō ngā āheinga mahi, pakihi hoki e pā ana ki te kaupapa, whakapā ki info@takitimunorthlink.co.nz



The Environmental team were excited to spot the stunning, critical threatened Kōtuku / White heron during Conservation Week visiting the de-fishing site. This rare Kōtuku showed the team a thing or two about how to fish!

I hiamo te tira Taiao ki te kite i tētahi Kōtuku rerenga tahi i te Wiki Atawhai Taiao e toro atu ana ki te wāhi tango ika. Nā te manu nei i whakatauira ki te tira me pēhea te hopu ika!

What are the ponds for?

There are many controls we have in place to ensure we are treading lightly and taking care of the whenua (land). When it rains, our Sediment Retention Ponds (pictured) capture runoff from the site and treat it to help clear the water up before discharging it back out into the environment. You can see the water is filtered through the pond water in the forebay end which is then clean by the time it reaches the other end of the pond. There will be about 19 SRPs constructed across the project.

We use special equipment to check the clarity of water leaving our sediment retention ponds. The glass on the left shows the water quality leaving our sediment retention ponds compared to on the right the water coming into our sediment retention ponds.



He nui ngā whakahaere kua whakaritea kia māmā noa tā mātou takahi i te whenua, me te tiaki hoki i te whenua. Ki te ua, ka hopukia e ō mātou Hōpua Waipara (whakaahua) ngā waipara mai i te wāhi mahi, me te whakamā i te wai i mua o te tuku anō ki te taiao. Ka kite koe i te waipara i te pito o Forebay, kātahi ka whakamātia i mua o te taenga ki tētahi atu pito o te hōpua. Ka āhua 19 ngā hōpua ka hangaia mō te kaupapa nei.

Whakamahia ai ngā taputapu motuhake ki te tiro i te pūahoaho o te wai e puta ana i ngā hōpua waipara. E whakaatu ana te whakaahua i te taha mauī i te kounga o te wai e puta ana i ngā hōpua waipara, otirā i te taha matau ko te wai e kuhu atu ana ki ngā hōpua waipara.







For more information

Read more and sign up for updates about the project at: nzta.govt.nz/takitimunorth

Contractors Fulton Hogan/HEB Joint Venture are designing and constructing the project, with BBO the principal's advisor. The design of Takitimu North Link is being delivered by Beca, with Holmes Consultancy Limited Partnership as a subconsultant.

Takitimu North Link Stage One Project Team Te Tira Mahi o Te Ara o Tākitimu Wāhanga Tuatahi



phone - waea ki **0800 865 776**



email - *īmēra* info@takitimunorthlink.co.nz

website - paetukutuku nzta.govt.nz/takitimunorth

Mō ētahi atu kōrero

Pānui haere, ā, ka hono mai ki ētahi kōrero hou mō te kaupapa ki: nzta.govt.nz/takitimunorth

E hoahoa ana, e hanga ana hoki ngā kaikirimana a Fulton Hogan/HEB Mahi Tūhono i te kaupapa nei, otirā ko BBO ngā kaitohutohu a te tira. Ko te mahi hoahoa o Te Ara o Tākitimu ki te Raki he mea tuku nā Beca, i te taha o Holmes Consultancy Limited Partnership hei mātanga iti.





