

# CENTRAL INTERCEPTOR

## Project background:

### Southern section of our tunnel is 'switched on'

Our CI project has passed a historic milestone with the southern half of the tunnel going live. This section, Blockhouse Bay east to May Road (Link Sewer C), then south to Māngere Wastewater Treatment Plant, is 10.8km long. We are now one step closer to the goal of cleaner inland waterways and open spaces for central Auckland.

We held a formal celebration event on 14 February in our new pump station at the treatment plant, attended by Minister for Local Government Simon Watts, Auckland Mayor Wayne Brown, local elected members and project teams. Around 200 guests lined the pump station shaft as Mayor Brown gave an order to start up the new giant pumps. These send wastewater flows from the tunnel to the treatment plant at a rate of 1,200 litres per second.

It was an historic moment as we recognised the accomplishments of the 600-strong Watercare and Ghella Abergeldie JV project teams which began construction in 2019.

Mayor Brown said that as an engineer himself, he appreciated the skills involved to achieve this outcome: "It's a significant milestone for Aucklanders and a huge engineering feat for the team who have been working for the past six years. I look forward to the Central Interceptor project being completed next year to fully realise the benefit, including a significant reduction in wet weather overflows and improved water quality."

We are hugely proud of the tenacity and dedication of our team in particular our construction partners Ghella Abergeldie JV. We didn't want to wait until the project was finished at the end of 2026 before getting the southern tunnel going. We've done that despite everything that's been thrown against us, including the COVID-19 pandemic, major storm events and unprecedented inflation for modern times."



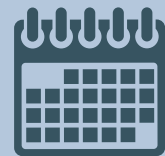
*The Mayor has great pleasure in pulling the chain for the first flush*



Completed Māngere Pump Station

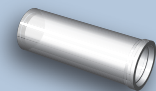
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  - How is our rescued moss doing?

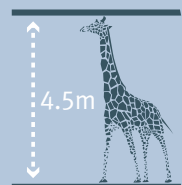


Project build  
**2019**  
to late-  
**2026**

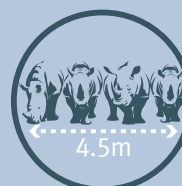
16.2 kilometres



**longest**  
wastewater  
tunnel in  
NZ



**high**  
enough  
to fit a  
giraffe



**wide**  
enough  
to fit four  
rhinos side  
by side





*Celebrating her final breakthrough March 2025*

# Hiwa-i-te-Rangi completes her epic journey

On 28 March, Auckland Mayor Wayne Brown gave the order for our TBM to start up for the last time to finish the final few centimetres of her 16.2km journey since being launched from Māngere Wastewater Treatment Plant in July 2021.

At a special celebration event, 250 guests gathered around the 30-metre-deep shaft to watch the action as it was livestreamed onto a large screen. Slowly, the 5.2m external diameter cutterhead emerged through billowing dust, chewing its way through the final centimetres of the concrete shaft wall – and into daylight.

Shayne Cunis, Watercare Chief Programme Delivery Officer says the breakthrough is a huge milestone and is testament to the skills of the tunnelling team provided by construction partners, Ghella Abergeldie Joint Venture: “The tunnellers have worked 24 hours per day, six days a week to build the tunnel. This is world class engineering, and it’s been completed safely, cost effectively and on time, which is rare for any major infrastructure project.

“The TBM has been through ten shafts, but breakthroughs never get old, and we’ll always remember this final one. I am incredibly proud of the 600 staff who’ve worked on this project. This is a very special day.”

Tunnellers have worked 24 hours per day, six days a week to build the tunnel. Hiwa-i-te-Rangi laid eight to 10 rings and travelled around 22 metres per day. The concrete rings are coated with a plastic liner to protect against the corrosive effects of wastewater, to ensure the tunnel lasts 100 years.

All 190 metres of Hiwa-i-te-Rangi have now been removed from the tunnel. Thermal welding on tunnel segment joins will ensure the tunnel is air-tight and services such as locomotive tracks will be removed. Elsewhere, the tunnel will continue to be connected to the existing wastewater network.

## Hiwa-i-te Rangi:



*Our TBM is named by neighbouring school students - Dec 2020*



*Deep underground Hiwa-i-te-Rangi moves relentlessly forward - Feb 2022*



*In the main CI tunnel, the electric spoil haulage locomotive is ready for its next trip - Aug 2022*



# a retrospective



Michele Invernizzi GAVJ TBM operator - Nov 2021



Hiwa-i-te-Rangi about to be lowered underground - Oct 2021



Hiwa-i-te-Rangi farewelled under the Manukau Harbour - Sep 2022



Six segments for just one ring makes a big load - Mar 2023

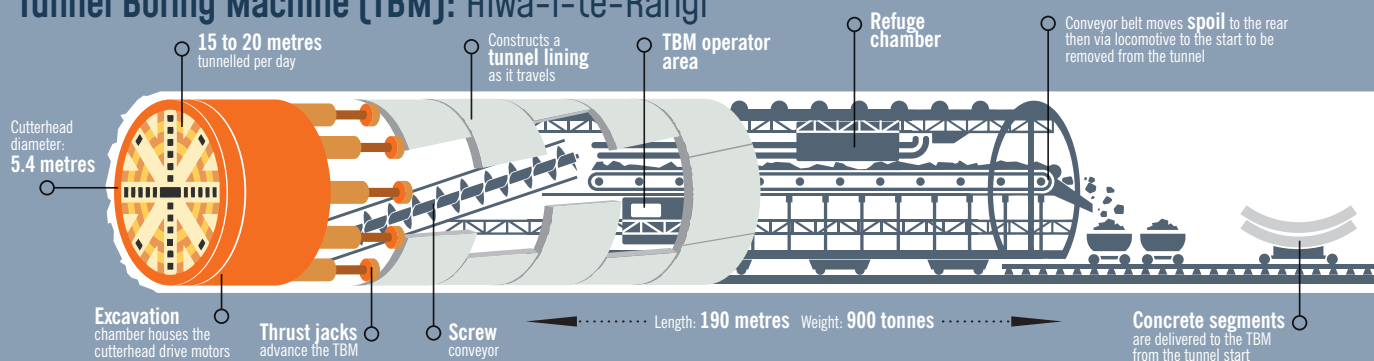


Southern section inspection team - Nov 2024



Showing the sheer size and complexity of the cutter head - Mar 2025

## Tunnel Boring Machine (TBM): Hiwa-i-te-Rangi







# The Central Interceptor is much more than a tunnel

## Blessing our first basalt sculpture

At dawn on Thursday, 27 March, Mana Whenua, the Māngere-Ōtāhuhu Local Board, Māngere College students and representatives from Watercare and the CI team gathered to unveil and bless this new taonga.

Throughout the ceremony, representatives from Mana Whenua, the local community, students and Watercare shared a speech followed by Waiata. The local board Chair, Tauanu'u Nanai Nick Bakulich and Māngere College Head Girl Manuia Fox-Romia, then unveiled this beautiful sculpture.

The guests were able to appreciate the area more, while looking through the hole of the sculpture which looks out to the maunga (Māngere Mountain)

Te Punga represents a waka anchor, acknowledging the cultural significance of Te Maanukanuka o Hoturoa (the Manukau



*CI Sustainability Advisor, Shaye Va, speaking at the blessing*

Harbour) to Waiohū iwi. Te Punga symbolises the numerous waka (canoes) that once anchored in these waters, serving as a link for people through transport, trade, and tradition.

This date was chosen to signify where the project and our TBM, Hiwa-i-te-rangi, began

their journeys in 2019. The day after the ceremony, Friday 28th March, was the TBM's final breakthrough at Point Erin Park.

Te Punga looks out to the maunga, as a reminder of where we've been, where we are and the shared path that lies ahead.

## Sustainability and environment:

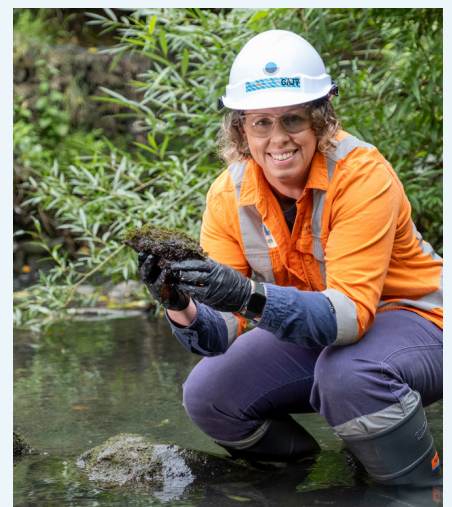
### Rare find thriving

In March last year we spent a day in Meola Stream, next to the site, carefully relocating a very rare moss. We moved the rocks that had the moss attached to them upstream away from our construction activity to enable it to thrive. Partnering with Ecology NZ we formed a modern 'chain gang' and manually relocated the moss upstream.

Partnering with Ecology NZ we also sent a few pieces of cobble covered in moss to the Auckland Botanic Gardens to try and seed a new population of moss. Until now the fern-like underwater moss, *Fissidens berteroi*, is known to exist in only three other places in New Zealand. This vulnerable and threatened aquatic moss was discovered by our environmental team in this new location. *F. berteroi* is an essential part of the eco-system, providing shelter, food source and filtration to an array of aquatic species.



*F. berteroi in Meola Creek*



*GAIJ Social Outcomes Manager, Sandra Edwards, is pleased with the new find*

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