CENTRAL BULLETIN

Māngere Pump Station site, Greenwood Rd, Māngere

We're building the Central Interceptor, a super-sized wastewater tunnel to reduce overflows, creating a better environment for you to enjoy.

Site update

Our Tunnel Boring Machine (TBM) Hiwa-i-te-Rangi is making good progress as she tunnels her way towards Kiwi Esplanade in Māngere Bridge before crossing under the Manukau Harbour in late August. By the end of July, we had tunnelled nearly 2000m and installed 1200 concrete rings to line the tunnel. A special dawn blessing will be held on the shore before she crosses to our Pump Station #23 in Frederick St, Hillsborough.

The tunnel is progressing steadily with the TBM digging away, the locomotives bringing all the spoil back to the shaft and our teams maintaining the various services such as ventilation, power and water. Coloured LED lights in the tunnel look cheerful and pretty but they are there for safety. Each colour (see photo below) represents a different stopping point depending on how much spoil the locomotives are transporting out of the tunnel and indicates where our locomotive drivers need to stop.

The Mangere Pump Station launch shaft is used only by the TBM crew and it's where the spoil from the tunnelling is lifted from the shaft and stored in the spoil shed. When it's dry, it's trucked to Puketutu Island using the haul road parallel to the coastal walkway.



Pretty and safe

Our MPS (Mangere Pump Station) site is a hive of activity as we work in five separate areas. The inlet shaft is used during tunnelling and will receive the wastewater when the CI is operating. The adjoining Pump Station shaft will be the final storage for wastewater before pumping to the Wastewater Treatment Plant (WWTP). The Pump Station building will contain all the electrical equipment required to operate the Pump Station.

The twin rising main works are constructing twin pipes that will carry the sewage from the Pump Station shaft to the confluence chamber. This underground chamber is the single connection point within the WWTP that takes the flow from all Interceptors before starting the treatment process. The Pump Station shaft has been fully lined with concrete following 11 pours. Work continues on the internal walls.



Lining the pump station shaft with concrete

Construction on the new Pump Station Building is tracking well with the foundations nearly complete. The twin rising main works, the two large pipes which will connect the new Pump Station to the Wastewater Treatment Plant, is progressing well with ongoing trench excavation and storm water construction. The service diversions within the WWTP are now complete, enabling the works for the confluence chamber to commence.



Central Interceptor



Our people

As you may know, the Central Interceptor project stretches across 16 sites from Māngere to Grey Lynn. Each of these sites has a team of people working on various activities and construction stages. We have incredible people with different skills, backgrounds, experience and qualifications. In this regular feature we're going to find out a little about some of them. It's a great way to get to know your neighbours. This edition features Surveyor Simon Poulton who is also a keen photographer. We hope you like his bird's eye view of the site.

Name: Simon Poulton

Position: Tunnel-TBM-Engineering Surveyor **Role on sites:**

- Part of the Survey Team supporting the main TBM tunnel guidance and excavation and the civil construction at the Mängere Pump Station site.
- UAV (Drone) pilot, aerial photogrammetry, and aerial video on all sites.

Background: Born and bred hill country farmer in Southern Hawkes Bay farming sheep and cattle. University study for farm management in the late 1970s and early 1980s. Sheep and cattle farming in the King Country of the Central North Island and Taranaki.

Tunnel progress

Check out our website which now has a weekly update of the TBM's progress. https://www. watercare.co.nz/Central-interceptor/Constructingthe-Central-Interceptor.

You can also follow us on Facebook, or Instagram.



As a second career I returned to University to study Surveying at Otago University as a mature student from 2002 to 2005.

Previous jobs: Graduate survey work as a cadastral surveyor (defining and marking property boundaries) in NZ followed by eight years working all over Australia

- Open cast and underground coal mines in Queensland
- Open cast iron ore mines in Western Australia
- Desert pipeline construction in the Tanami Desert in the Northern Territory
- Water infrastructure surveys in the desert in South Australia.

Most memorable work moment: Living and working in the deserts in the middle of Australia and helping to successfully launch the main TBM at Mangere.

Outside of work: Married to Julie for 32 years, one daughter, all back in Whanganui, I fly home once a month. It's better now that I am in the same time zone after FIFO (fly in fly out) to Australia.

My hobbies include flying gliders, flying radio control airplanes, and sailing radio control yachts. Recreational tennis, and amateur theatre, and I am a coast guard volunteer.



Simon hard at work at the bottom of the shaft



Different perspective - from the bottom up

Any questions?

For up to date information please see our website:
www.centralinterceptor.co.nz
You can also email us at:
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Or phone:

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We encourage you to receive these updates electronically - send us your email, your current mailing address and quote "Sign me up: Māngere site bulletin" to ciproject@water.co.nz

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