

# CENTRAL INTERCEPTOR BULLETIN

Lyon Avenue site, Roy Clements Treeway, Mount Albert

**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 Lyon Avenue construction site, located in the Roy Clements Treeway, has had a busy year so far. The team recently reached an important milestone, completing the caisson shaft excavation to its final depth of 47m!



One challenge the team faces is sharing plant, equipment and specialised manpower across the other 15 Central Interceptor construction sites. Careful planning and logistics for construction activities across the project is necessary to complete tasks efficiently and effectively and keep the project on track.

## What's next for Lyon Ave

Our team is moving its focus to the permanent lining of the shaft, in preparation for the arrival of the Tunnel Boring Machine (TBM), Hiwa-i-te-Rangi, in April 2024.

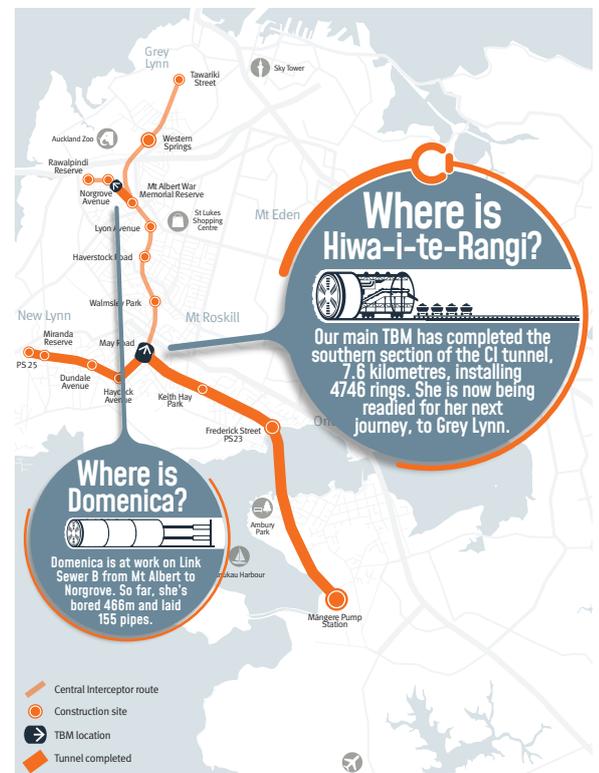
This means we will be constructing the in-situ wall lining and the eleven cascade shelves inside the shaft. These shelves create a mini waterfall effect, which reduces the energy of the falling wastewater as it enters the shaft on its way into the tunnel. Our neighbours may notice an increase in the number of concrete trucks entering the site in order to complete the cascade shelf construction.



## Tunnel progress

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

You can also follow us on Facebook, or Instagram.



**TELL US HOW YOU REALLY FEEL**

Take the online survey at: [www.watercare.co.nz/aucklandprojects](http://www.watercare.co.nz/aucklandprojects) or scan the QR code

## Behind the Blue Gate Open Day

Thank you to everyone who popped down to see us at our open day held in June 2023. We had more than 150 of our closest neighbours visit the site to see what we've been up to and to look into the 47m deep shaft. We hope that you enjoyed the behind-the-scenes access and learning more about the project.



## Lyon Avenue's one-of-a-kind shaft

The Lyon Avenue construction site is the only site on the project to have its shaft built by the cast in-situ concrete caisson sinking method, unlike many of our other shafts which use the method of secant-bored-piling. This method was used due to the challenging below ground conditions and has proved to be the most effective.

In-situ means building the concrete rings in position using circular steel formwork two metres high. Once the concrete is cured, these rings are pushed into the ground using a combination of excavation from inside the shaft and jacking pressure from hydraulic rams (gallows) above the ground. Gallows are installed to both steer the shaft and assist the vertical force in addition to the self-weight of the concrete, letting gravity sink the rings into the ground forming the shaft lining.

### Any questions?

For up to date information please see our website:

 [www.centralinterceptor.co.nz](http://www.centralinterceptor.co.nz)

You can also email us at:

 [ciproject@gajv.com](mailto:ciproject@gajv.com)

Or phone:

 **0800 GAJV 02 (0800425802)**

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## Who it takes to build the Central Interceptor

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. There are numerous jobs on this project, each requiring different skills, backgrounds, experience and qualifications. This regular feature will give some insight into one of the many important roles on the project.

### Technical Engineer

#### What is a technical engineer?

A technical engineer is responsible for coordinating and managing the completion and delivery of designs that are required for the entire duration of a construction project. The designs need to be completed on time and need to take into consideration a wide array of factors as constructability, cost, geology and other site constraints to name a few.

#### What are the daily activities of this role?

A technical engineer is responsible for coordinating and managing the completion and delivery of designs that are required for the entire duration of a construction project. The designs need to be completed on time and need to take into consideration a wide array of factors such as constructability, cost, geology and other site constraints to name a few. A typical day includes liaising with the construction team, the Client, subcontractors and CAD drafters in order to facilitate a smooth design process and to produce coordinated designs that work and satisfy the needs of all parties. Design changes and technical queries are also managed by the technical engineer.

#### What qualifications do you need?

A Bachelor of Engineering (Honours) degree.

#### What is one of the challenges of being a technical engineer on the project?

Due to the size of this project and having all 16 sites open now, it can mean juggling up to 20 different designs in parallel, all of which will be at different stages of design, with different complexities of their own and competing demands.

#### Is there anything about the job that might surprise people?

Construction is such a dynamic and fast-paced environment, so sometimes you turn up to work and end up doing something completely different than what you had planned due to urgent and unforeseen work that comes your way.



*Joey Tong, Assistant Design Manager for CI project*



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