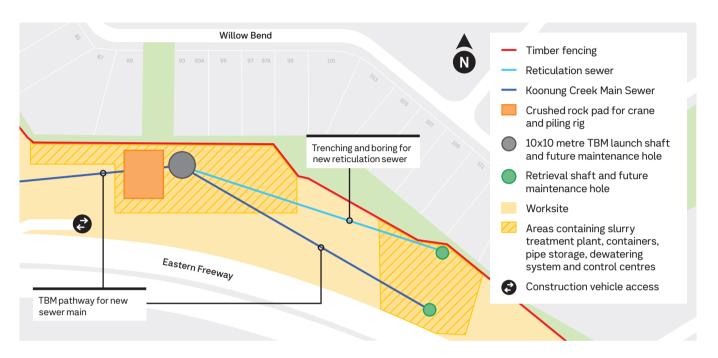
# Critical sewer works for the Eastern Freeway Upgrades



Fact Sheet November 2024



# Relocating the Koonung Creek Main Sewer

To make room for new lanes on the Eastern Freeway, sections of Melbourne's sewer network, including the Koonung Creek Main Sewer, need to be relocated. This sewer, which runs alongside and across the freeway, services thousands of homes and businesses in Melbourne's east.

We'll build around 1km of new sewer north of the freeway, between Bulleen and Doncaster roads, and install new reticulation sewers which are smaller pipes that will connect nearby homes to the new Koonung Creek Sewer main.

From late 2024 we'll be working in the reserve behind Willow Bend to relocate this essential infrastructure. The works will include, bored piling and excavation to build tunnel shafts and future maintenance holes, and using a mini tunnel boring machine (TBM) to dig a new sewer main.

# Works behind Willow Bend

We'll start by building a temporary launch shaft for the mini TBM. This involves digging a 10x10 metre hole. We'll use a piling rig to dig deep holes around the perimeter, which will be filled with concrete and reinforcements to create the vertical walls of the shaft. The piles are interlocked to ensure the shaft is secure, an excavator will then remove the material from inside the shaft.

The mini TBM, about 1.5 metres in diameter, will begin tunnelling near Estelle Street. It will be retrieved at the launch shaft and then relaunched to tunnel 148 metres east to another retrieval shaft, building the new section of the main sewer.

We'll also relocate the existing reticulation sewer using both tunnelling and trenching methods to keep it connected to the main network.

# When we'll be working

We'll carry out most of our works during the day, although some extended hours and night works may be required.

We'll let you know ahead of time if we need to work at night. We'll have strict controls in place to manage potential construction impacts during night works.

If you have concerns about construction impacts, call us 24/7 on 1800 105 105.





# What to expect

We'll be working behind Willow Bend from November 2024 until late 2026. You'll notice workers and construction vehicles in the area

We'll build an access road directly from the freeway into our worksite to keep construction vehicles off local streets.

During sewer works, machinery including an excavator, a piling rig, a TBM and a crane are anticipated to generate increased levels of noise, dust and vibration at times near the worksite.

We'll also have equipment on site such as a slurry treatment plant to temporarily store and treat slurry from tunnelling boring activities, a dewatering system to manage ground and surface water during construction, and a control centre and generator to operate the TBM. This equipment will also generate increased levels of noise when they're operating.

Excavated material will be temporarily stockpiled on site before being transported to an approved disposal facility in sealed tip trucks via the freeway.

# How we'll manage impacts

As with all construction projects, there will be some noise, dust and vibration impacts to the community. These impacts will be closely managed and must comply with the project's strict Environmental Performance Requirements (EPRs).

We'll work closely with impacted residents to provide additional information on works, timing and how we propose to manage the expected disruptions.

Odour monitoring will be conducted on a weekly basis to identify and manage any potential odour travelling offsite. We'll manage impacts by sealing areas with insulating foam to prevent odour escaping from the source, and utilising odour suppressants if required.

# **Construction Timeline**

Late 2024

Earthworks to level the site and build concrete and crushed rock hardstands for machinery and equipment to prepare the site for sewer construction

**Early 2025** 

Piling and concrete works to construct the 10m sewer shaft Excavation to dig out material for the shaft construction

Mid 2025

TBM retrieval from Estelle Street and re-launch to next retrieval shaft

Trenching works to construct the reticulation sewer

Maintenance hole construction for the reticulation sewer

Connect reticulation sewer to existing sewer

# **Late 2025**

Sewer main maintenance hole construction, in the location of the 10m shaft

Connect new sewer to existing sewer main

Commence reinstating work areas

Mid - late 2026

Decommission section of old sewer

Sewer works complete

# Keeping you up to date

To sign up for project updates, scan the QR code below or go to bigbuild.vic.gov.au/projects/ roads/email-and-sms-updates.



# **Fast Facts**

## What is bored piling?

Bored piling is a way to build concrete columns in the ground called piles. A piling rig drills holes into the ground using a corkscrew shaped drill. Once the desired depth is reached, a reinforcement steel cage is lowered into the hole, concrete is then poured into the hole to set the pile structure.

# What is a Tunnel Boring Machine (TBM)?

A TBM is a machine that excavates soil and rock from the ground to create a tunnel. They can operate 24/7 while making little disturbance above ground.

### What is a maintenance hole?

A maintenance hole, also known as a manhole, is a deep pit that provides safe access to the sewer for maintenance purposes.

### What is slurry?

Slurry is made up of bentonite (clay) mixed with water. It's used as a fluid-assisted excavation technique to improve tunnel boring effectiveness as well as preventing the tunnel from collapsing.

# What is a slurry treatment plant (STP)?

The STP treats excavated material carried from the TBM via slurry and separates it into mud water and soil. The soil is left out to dry in storage tanks before being disposed of offsite by a slurry tanker containing fluids.

### What is a dewatering system?

Ground and surface water from tunnel boring and other construction activities in the area are collected by a large container on site. The water is then carried by pipes from the container back into the sewer network.

## Will there be any disruption to my service?

There will be no disruption to your water or sewerage services during our works. If you experience any issues with your services, please contact Yarra Valley Water on 1300 304 688.

# bigbuild.vic.gov.au/roads

contact@bigbuild.vic.gov.au











1800 105 105 (call anytime)

For languages other than

English please call 9209 0147

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