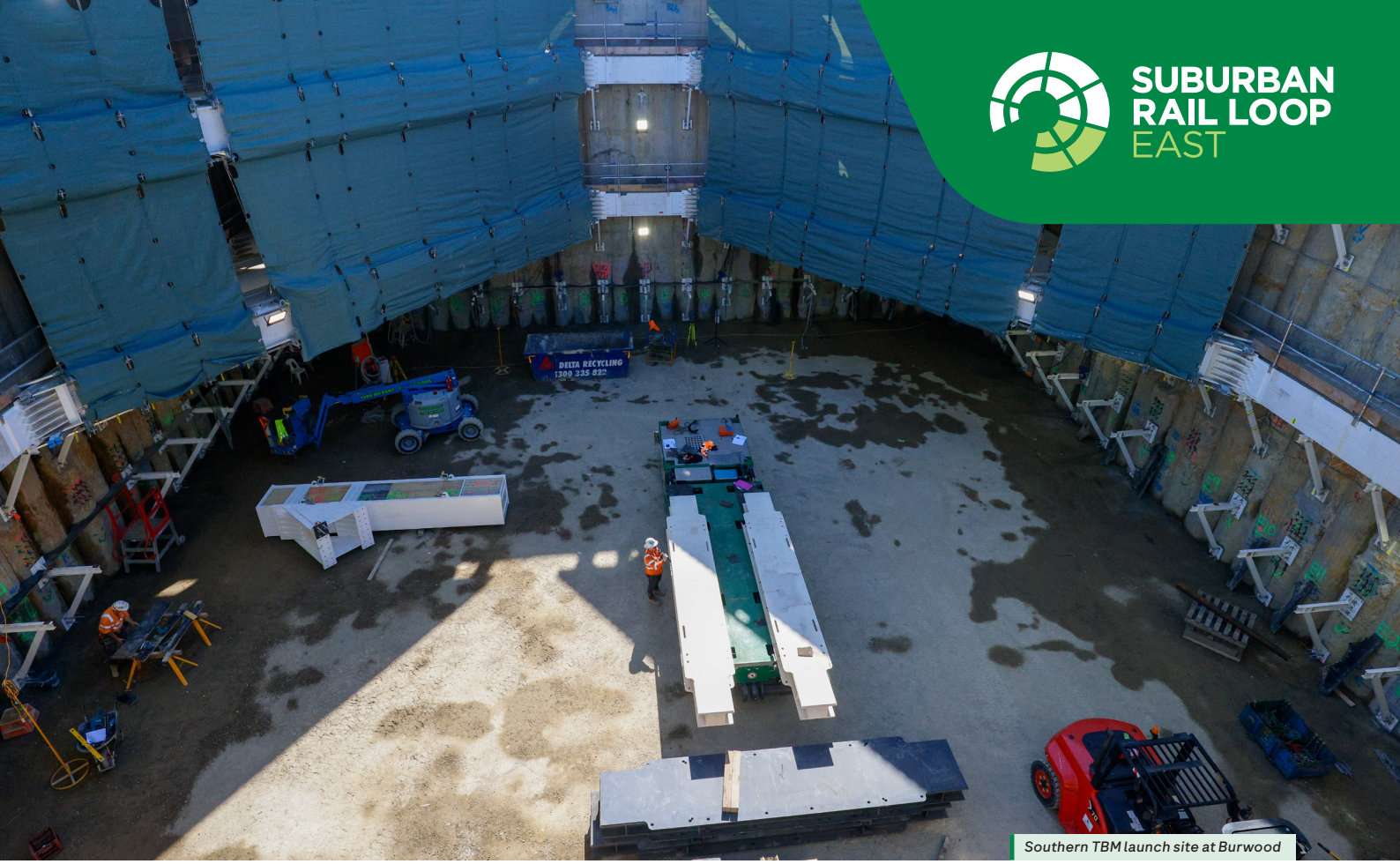

Southern TBM launch site at Burwood

SUBURBAN RAIL LOOP EAST

SRL East tunnelling: Glen Waverley to Box Hill

Suburban Rail Loop (SRL) will deliver a 90-kilometre orbital rail line connecting Melbourne's middle suburbs, linking every major train service from the Frankston line to the Werribee line via Melbourne Airport and transforming our public transport network.

SRL East is moving into its next major phase of construction, with preparations underway to launch tunnel boring machines (TBMs) that will construct twin underground tunnels between Glen Waverley and Box Hill — including the deepest rail tunnels ever built in Melbourne.

The TBMs will be launched from Burwood, first tunnelling towards Glen Waverley, then towards Box Hill.

The TBMs will start to arrive by the end of this year in Melbourne by ship. They will be transported to Burwood, where they will be assembled on site. Each one is about 110 metres long and has a huge rotating front piece (called a cutterhead) that's 7.28 metres wide.

As they dig, the machines will move deep underground, far below homes and streets. Similar methods have been used safety in cities around the world.

The soil they remove will travel along a covered conveyor belt system, into an acoustic shed, and then be safely trucked off site.

What is being built

- 10 kilometres of twin tunnels between Glen Waverley and Box Hill
- Two TBM launch sites at Burwood
- 39 underground cross passages between the tunnels for safety and emergency access
- Two new underground station boxes at Glen Waverley and Burwood
- An emergency support facility at Mount Waverley

More information
suburbanrailloop.vic.gov.au

VICTORIA'S BIG BUILD

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Fast facts

Each TBM weighs about 1000 tonnes, heavier than 150 elephants

SRL East tunnels will travel up to 65 metres below ground — the height of the central dome on the Royal Exhibition Building

TBMs are named after inspirational women, a tunnelling tradition

Frequently asked questions

How do the TBMs get to site?

The TBMs will arrive in Melbourne in parts by ship later this year and will be transported to the Burwood site for assembly.

How do TBMs work?

TBMs operate like moving underground factories, using their giant cutterheads to grind and excavate rock and soil. As each TBM moves forward, it installs concrete segments forming the permanent lining of the tunnel.

What are cross passages?

A cross passage is a walkway that connects the two main rail tunnels. They are located every 200-300 metres and are an important safety feature that allows people to move between tunnels in case of an emergency.

How are the tunnel walls lined?

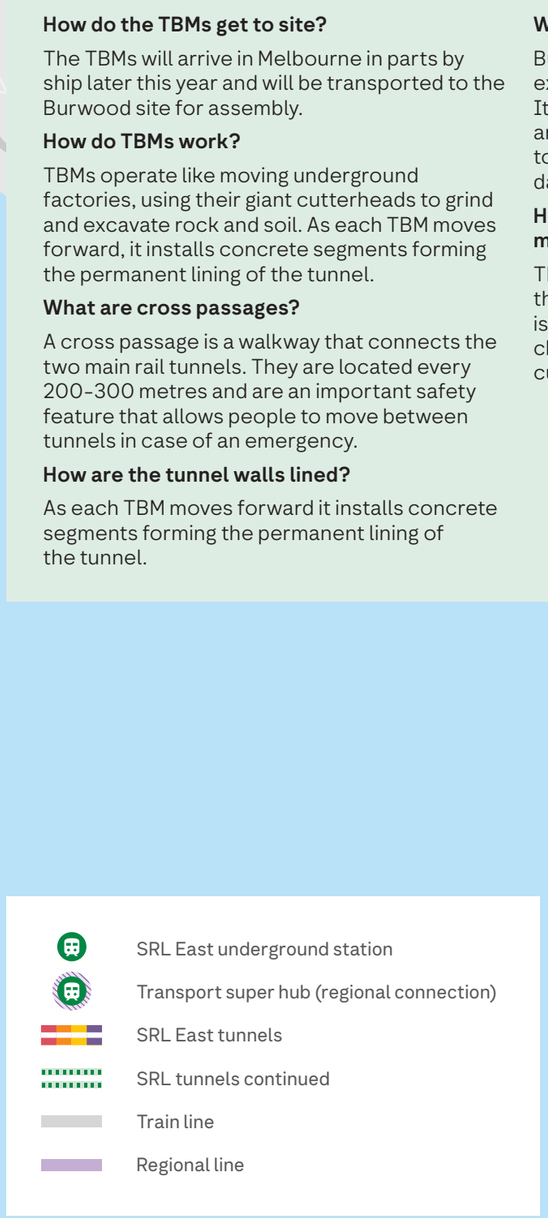
As each TBM moves forward it installs concrete segments forming the permanent lining of the tunnel.

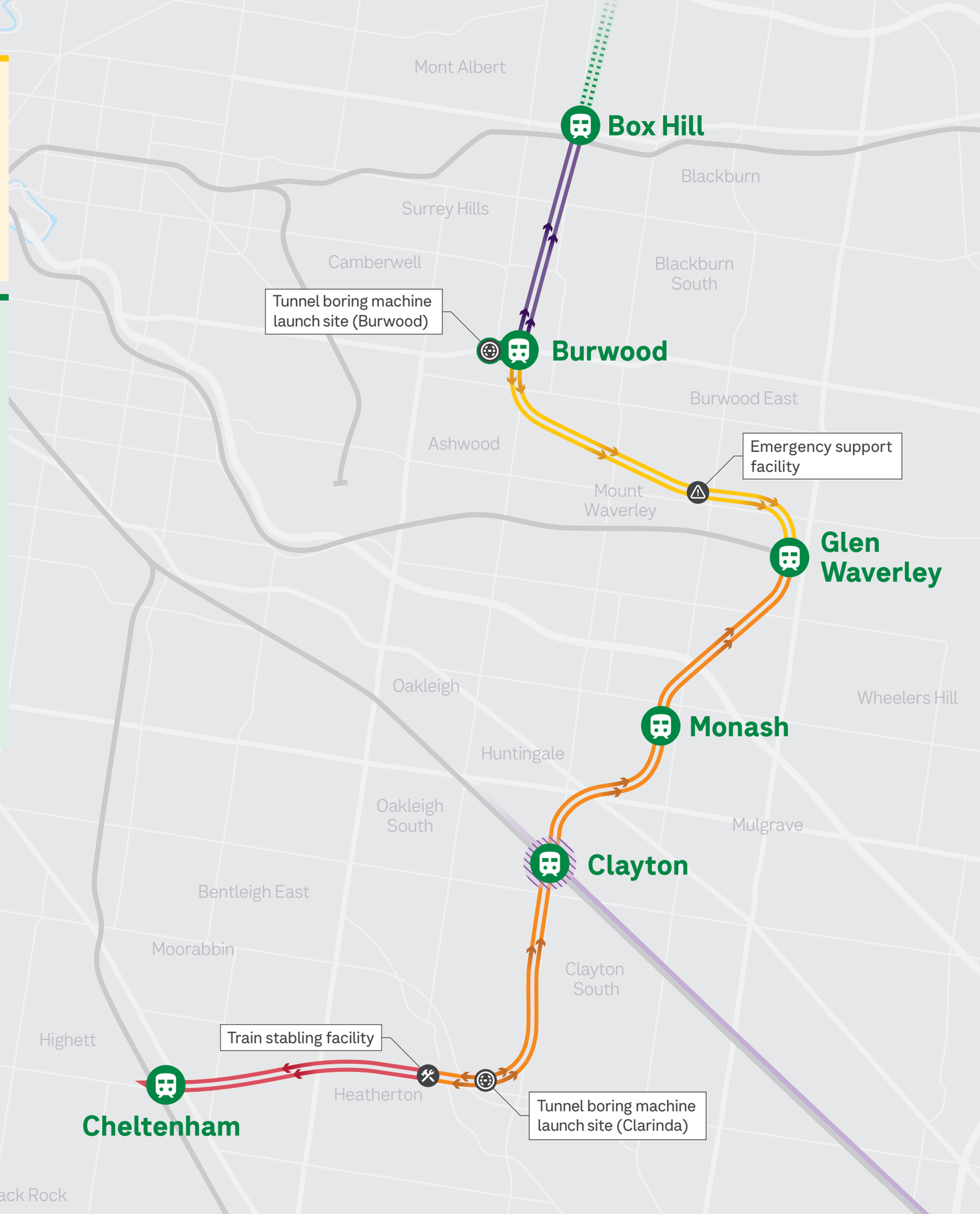
Why are tunnels built so deep underground?

Building tunnels deep underground helps avoid existing infrastructure, utilities and foundations. It also reduces disruption to homes, businesses and roads above ground, allowing construction to continue safely with minimal impact on daily life.

How are unexpected ground conditions managed?

TBMs have built-in sensors that monitor how the machine is performing and how the ground is reacting in real time. If the soil or water levels change, operators adjust speed, pressure, and cutterhead settings to maintain safety.





Managing impacts

We are dedicated to reducing impacts on residents, businesses and the environment throughout construction.

Before works start, we will notify and engage nearby residents and businesses about activities planned in their area, what to expect and how any disruptions will be managed.

To manage vibration and potential ground movement during tunnelling we will:

- Complete inspections of properties before and after construction
- Monitor ground movement and vibration at all times using environmental monitoring devices
- Meet strict requirements set for the project to manage vibration and minimise disruption caused by tunnelling.

At the Burwood site, additional measures will be in place to reduce noise, dust and vibration – including the construction of acoustic sheds over each of the TBM launch sites and another to contain soil removed from the tunnels before it is trucked off site.

Activities to support tunnelling will take place both during the day and at night. These activities will be in accordance with the Project's Environmental Performance Requirements (EPRs) determined through our extensive Environmental Effects Statement (EES) process.

Underground rail systems are regularly built in busy urban areas across the world, including right here in Melbourne with the Metro Tunnel. With thousands of tunnels operating safely beneath cities and millions of people living above them without disruption, tunnelling can be carried out safely and without impacting buildings or daily life above ground.

Emergency support facility

Like other metro systems around the world, SRL East requires a range of supporting infrastructure, including an emergency support facility at Mount Waverley.

The emergency support facility will house important infrastructure, essential to the safe operation of SRL East, including an intervention and ventilation facility and backup control centre.

The intervention and ventilation facility will provide air ventilation and emergency service access, including an emergency exit point for passengers from the rail tunnels to the surface.

The backup control centre will be ready to become operational should there be an incident that prevents the main operational control centre from functioning.

These facilities are critical to keep the rail network moving and need to be located at this point due to the length of the twin tunnels in this section.

Scan the QR code or visit **bigbuild.vic.gov.au/projects/suburban-rail-loop/subscribe** to sign up for updates

contact@srla.vic.gov.au | 1800 105 105 (call anytime)
suburbanrailloop.vic.gov.au

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Please contact us if you would like this information in an accessible format.
If you need assistance due to a hearing or speech impairment, please visit **relayservice.gov.au**

For languages other than English please call 9209 0147 | 如需非英语信息，请拨打 9209 0147 | 如需使用英語以外的其他語言，請致電 9209 0147 | अंग्रेज़ी के अलावा अन्य भाषाओं के लिए कृपया 9209 0147 पर कॉल करें

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