

# TBM tunnelling Watsonia to Bulleen

Fact Sheet  
January 2024



**We're building North East Link from Watsonia to Bulleen, taking traffic and trucks under instead of through your suburbs.**

Digging the new 6.5km long twin tunnels requires specialist equipment – our two 4000-tonne tunnel boring machines (TBMs) will make their underground journey from Watsonia through to Bulleen.

The TBM tunnelling technique offers significant benefits because construction takes place entirely underground. This reduces noise, dust and vibration at the surface.

This fact sheet explains how we'll build this section of the tunnels as people continue to live and work above.

Visit the project team  
**Watsonia Hub, 17 Watsonia Road**

## North East Link in your area



**15,000**  
cars and trucks off  
local roads a day



**2km**  
boulevard for  
Greensborough Road



**5 MCGs**  
of community parklands



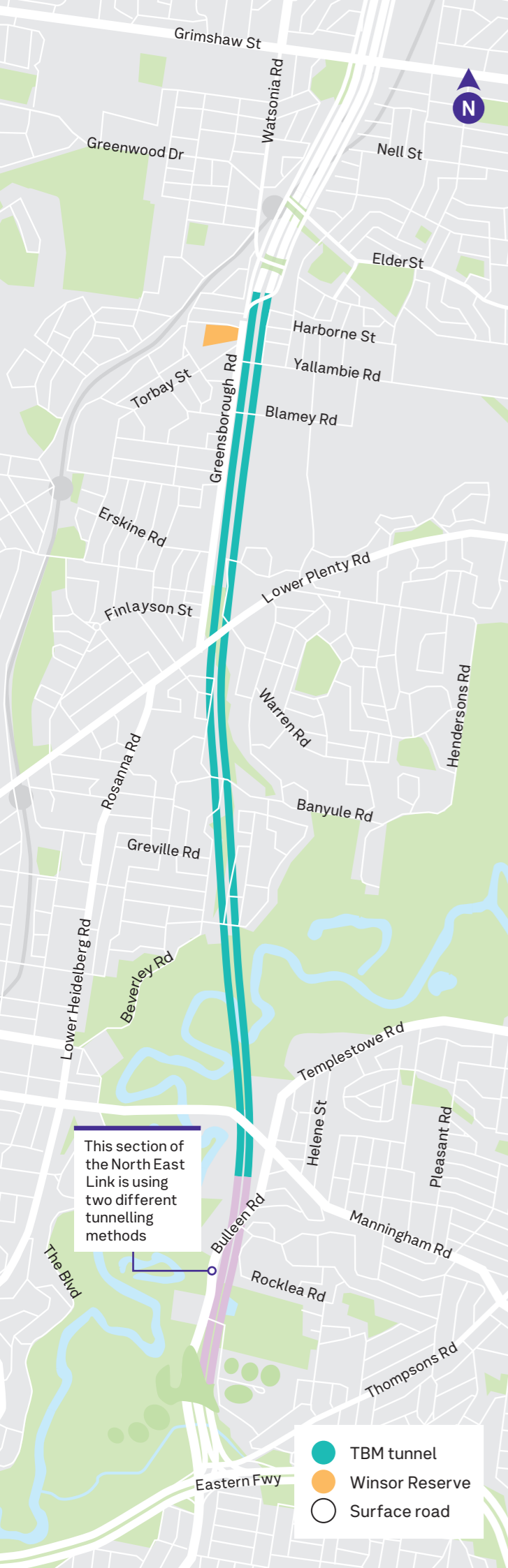
**1950+**  
new trees planted



**34km**  
of new and upgraded  
walking and cycling  
paths linked across  
North East Link

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## Designing better tunnels

The North East Link tunnels have been carefully designed to pass deep under local suburbs, protecting homes and the Yarra River flats and wetlands.

In response to community feedback, we've improved the design of the tunnels by building a longer TBM tunnel, creating more space for a new Greensborough Road boulevard and new parklands. We've also straightened the route of the tunnels and made them deeper underground. After extensive geological testing, it was determined that this revised route would deliver the best ground conditions for continuous TBM tunnelling.

To protect Banksia Park, the TBMs will now travel further south passing under Manningham Road, and will be retrieved at the old Bulleen Drive-In site.

Once the TBMs are out of the ground, the site will be used to build the new Manningham Road interchange and motorway control centre, alongside a large new cultural wetlands along the Yarra.

### Will I feel the TBMs going under my house?

The TBMs will pass under most properties at a substantial depth, up to 45m in some locations. In some circumstances, some properties close to works or directly above the TBMs may experience minimal vibrations.

Electronic monitors at the surface will be used during construction to help manage works underground. Extensive testing has also been done to better understand any impacts. From this we know the likelihood of any property damage is minimal. However, for peace of mind for property owners, property condition surveys will be offered ahead of tunnel construction.

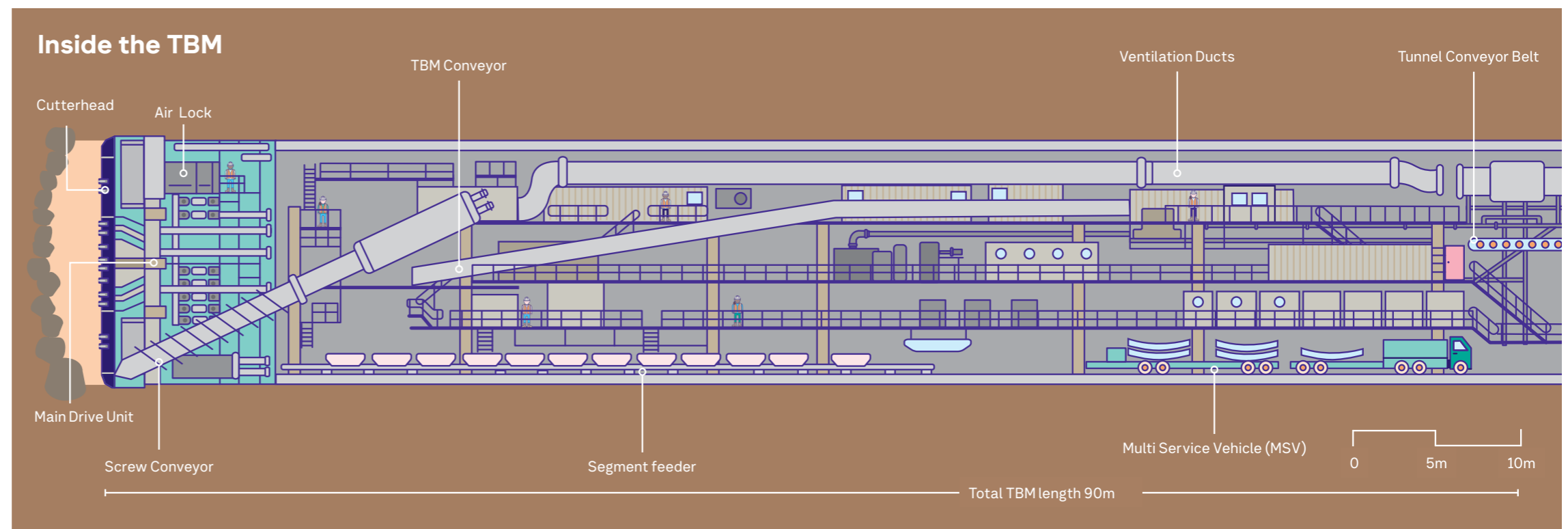
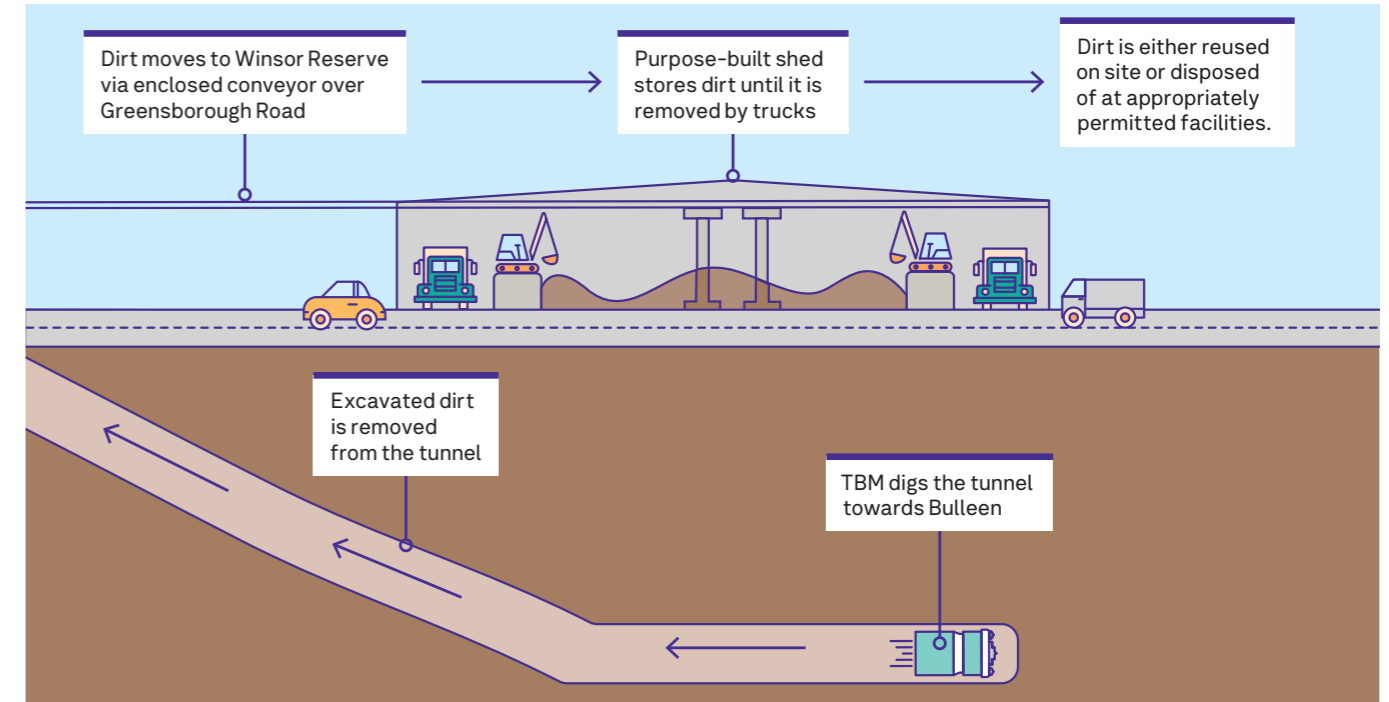
## Building the tunnels

Our TBMs will dig up to 15m of tunnel per day as they travel from Watsonia through to Bulleen.

TBMs are used to build tunnels in Australia and around the world in places where buildings or other areas above ground need to be protected.

As the TBM progressively excavates underground, it simultaneously places concrete segments using mechanical arms to form the new tunnels, repeating the process until it reaches its destination.

Once the TBMs start working deep underground, each TBM will dig 24/7 without stopping and move around 15 metres each day.





TBM launch box Watsonia

## Can I still build on my property?

If your property is above or near the North East Link tunnels, you will continue to use your land as you do now. If you are thinking about building on your property, an additional step in the planning permit process may be needed for certain works.

### Protecting the tunnels from certain types of works above ground

If you plan to develop your property, the usual approvals through your local council will still apply, with a step to check what is planned won't affect the tunnels. Most general renovations, such as adding an extra storey or pool will likely be able to go ahead. A major new development, like multi-level units with a significant basement car park structure would require extra consideration.

To include the extra step in the planning permit process, the area covered by design and development overlays in your local planning scheme will be adjusted to align with the new tunnel route.

The overlays protect the tunnels from potentially damaging works

above ground and were approved in December 2019 after the project's Environment Effects Statement (EES).

Once we have finalised the tunnel design, we'll be in touch with residents to confirm where the overlay is required.

If you're in the area where the tunnels will be built, or are planning to build on your property and have questions, please get in touch.

### Underground land divestment

With thousands of tunnels operating around the world and millions of people living above them with no impact on their daily lives, we know tunnels can be built safely and without affecting buildings and properties above ground.

Before we start work to build the TBM tunnels, North East Link needs to divest land deep underground.

This is called underground land divestment and does not affect ownership of land at the surface.

Land at a depth of 15 metres below ground will be divested towards the end of 2024.

If land beneath your property is required, we'll be in contact to let you know before the underground land divestment process starts. Underground land divestment will take place in accordance with the *Major Transport Projects Facilitation Act 2009*.

Where land is divested at a depth of 15 metres or more below ground, compensation is not available. This is consistent with what we know about modern tunnelling, with people above tunnels being able to continue to use the land at the surface as they do now.

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