sydneymetro.info



Tunnel boring machine (TBM) Betty's cutterhead, back on the surface at Westmead.

# Farewell to TBMs Betty and Dorothy

The NSW Government is delivering Sydney Metro West –a new underground metro railway which will double rail capacity between Parramatta and the Sydney CBD, link new communities to rail services and support employment growth and housing supply.

Sydney Metro West stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont, and Hunter Street in the Sydney CBD.

The Gamuda and Laing O'Rourke Consortium (GLC) is delivering the Western Tunnelling Package. The project involves nine kilometres of twin metro rail tunnels between Westmead and Sydney Olympic Park, excavation for two new metro stations, a stabling and maintenance facility at Clyde and a precast facility at Eastern Creek.

#### Westmead construction update

Tunnel boring machine Dorothy has joined her counterpart Betty at Westmead, marking the end of a two-year tunnelling journey between Sydney Olympic Park and Westmead and the completion of GLC's tunnel excavation work.

Throughout their nine-kilometre journey, TBMs Betty and Dorothy excavated a grand total of 1.6 million tonnes of sandstone and shale and installed around 60,000 precast concrete segments to line the tunnels.

With the tunnels now complete, the tunnelling team has shifted its attention to dismantling and retrieving the 1200-tonne TBMs from the station box. Within the rail crossover cavern, the Westmead team is continuing with structural work.





## Westmead Public School students make their mark



The artists admiring their handy work.

Sydney Metro stations are known for their design excellence and critically acclaimed artwork. It's no wonder, then, that when the final concrete segment used to line the metro tunnels arrived at Clyde, student leaders from Westmead Public School were invited to transform the once plain segment into something a little more special.

As well as making their mark on the project, the students toured the project's Tunnelling and Infrastructure Academy (TIA), where they enjoyed a behind-the-scenes look at our TBM simulator and learnt how a TBM works.

Future TBM operators in our cabin simulator.

In recognition of the important relationship between the project and the school — which has been involved in several learning and engagement activities — the brightly decorated, four-tonne segment is now in



Students inside the TIA showing their excitement for the project.

#### Did you know?

Producing tens of thousands of concrete segments took more than 500 pairs of hands and two years. Decorating the segment took about 30 pairs of hands and just 30 minutes!



The making of the best-looking segment in the west.



Nice Form. The formwork is being dismantled and removed from the box, along with the TBMs.

## All hands on deck for TBM retrieval

With their mission now accomplished, our tunnelling superstars are moving on from Westmead. It's a complex operation that sees the two 170-metre-long mega-borers cut into over 500 pieces and lifted from 30-metres below ground to the surface.

Some of the heaviest components are already on their way out, including the 100-tonne cutterheads which were lifted out with a 750-tonne crane. Once at the surface, the cutterheads were cleaned, and will soon be cut up and made ready for recycling.

The main drive systems that powered the cutterheads are scheduled to ship out in early 2026.

These vital TBM parts will be refurbished and reused on other tunnelling projects.

### Did you know?

The cutterhead sits at the front of the TBM—a rock-chewing powerhouse armed with razor-sharp teeth to grind through sandstone and shale.



The cutterhead is lowered face-first to the ground.

# Westmead reaches new heights with engineering marvel

To line the tallest station cavern in the Sydney Metro network, which soars to an impressive 26 metres high, the team at Westmead first had to lift and move a seven-storey giant. This massive temporary formwork system, weighing 315 tonnes and standing 21 metres tall, was carefully lifted 86 metres through the station box and into the cavern.

In a tightly coordinated 82-hour operation, crews used a synchronised jacking and winching system to guide the formwork into position. With the task executed with precision, the station cavern is now fully lined and the formwork has been dismantled.

Almost 2,000 tonnes of concrete was used to line the cavern.



TBM Betty's cutterhead back on the surface.



Westmead site team after a hard day's lift

Six-month look ahead and out-of-hours work activities							
Activity	Noise impact	December 2025	January 2026	February 2026	March 2026	April 2026	May 2026
Removal of large TBM components.	Low to medium	•	•	•	•	•	
Delivery of machinery, materials, and equipment.	Low to medium	•	•	•	•	•	•
Installing/demobilising formwork, steel fixing and concrete pouring.	Low to medium	•	•	•	•	•	•
Surveying, decommissioning and monitoring survey devices in local steets and onsite.	Low	•	•	•	•	•	•
Acoustic shed demolition.	Low to medium			•	•	•	•
Partial site demobilisation.	Low					•	•

Standard construction hours
24 hour work activities
Up to 10 nights per month
Out-of-hours work

### Are you signed up for e-news?

Subscribe to our mailing list at metrotunnelsGLC@transport.nsw. gov.au to stay in the know about what's coming up on the project. You'll receive regular notifications about upcoming work, as well as newsletters and invites to our upcoming community open days—those you won't want to miss!



Community open day, August 2025.

#### Contact us

If you have any questions or would like more information please contact our project team:

1800 612 173 Community infoline open 24 hours metrotunnelsGLC@transport.nsw.gov.au Sydney Metro West PO Box K659, Haymarket NSW 1240



#### Translating and interpreting service

If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 612 173.



 ${\tt Access\ information\ in\ over\ 100\ languages.}$ 

Download **Sydney Metro Connect** from the App store or get it on Google Play.

