



OCTOBER 2021

Completed excavation in the metro box.

Excavation complete for Central Station's new metro platforms

In a recent achievement, excavation for the new metro platforms at Central Station has been completed. This milestone marks the end of the excavation activities that began in February 2019 to make way for the new platforms. The final size of the metro station box is 230 metres long, 27 metres deep, and 22 metres wide.

During excavation, approximately 190,000 worker-hours were spent on labour and machinery operation. Additionally, around 11,000 truckloads of crushed rock from excavation have been removed from the site – enough material to fill about one million average sized bathtubs.

The internal rock walls of the metro box were made smooth with rock saws. The waterproofing of the metro box is complete. About 29,5000 square metres of material was used for the job. The concrete walls around the edge of the metro box are now being constructed and work is underway to prepare the area for services, track installation, and eventually, passengers.

About 4,800 tonnes of concrete was recently poured to construct the metro track slab, with the next stage of work underway including the installation of the precast metro platforms.

The new metro platforms at Central Station will be located below Platforms 13 and 14 when they are reinstated in the Sydney Trains network.

Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations at Martin Place, Pitt Street and Barangaroo and new metro platforms at Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

Laing O'Rourke is delivering the new Sydney Metro platforms under Central Station as well as the landmark Central Walk – a new underground pedestrian concourse to help customers get around Sydney's busiest railway station.



An artist's impression of the lower Northern Concourse, with the new cantilever slab on the left.

Building the new upper Northern Concourse

The Northern Concourse is receiving a substantial makeover as part of the works at Central Station. A cantilevered area, connecting Platforms 8-14, is being built under the new 2,000-square-metre curved roof.

The main forecourt in the upper Northern Concourse was completed in early 2021, and the remainder is now under construction. Once the second half is constructed, the finishes (including balustrades, services, tiles, wayfinding) will be completed along the whole concourse. The underside of the cantilevered walkway is visible from the lower Northern Concourse and features an architectural curve from the base up to the top edge, imitating the curve of the roof above. About 625 tonnes of concrete, 490 square metres of formwork, and 100 tonnes of reinforcing steel have been used to build the cantilevered slab.

Once the formwork is removed, the finishes teams will start their work across the area, and the new concourse will take shape for the public to use.



An artist's impression of the upper Northern Concourse.

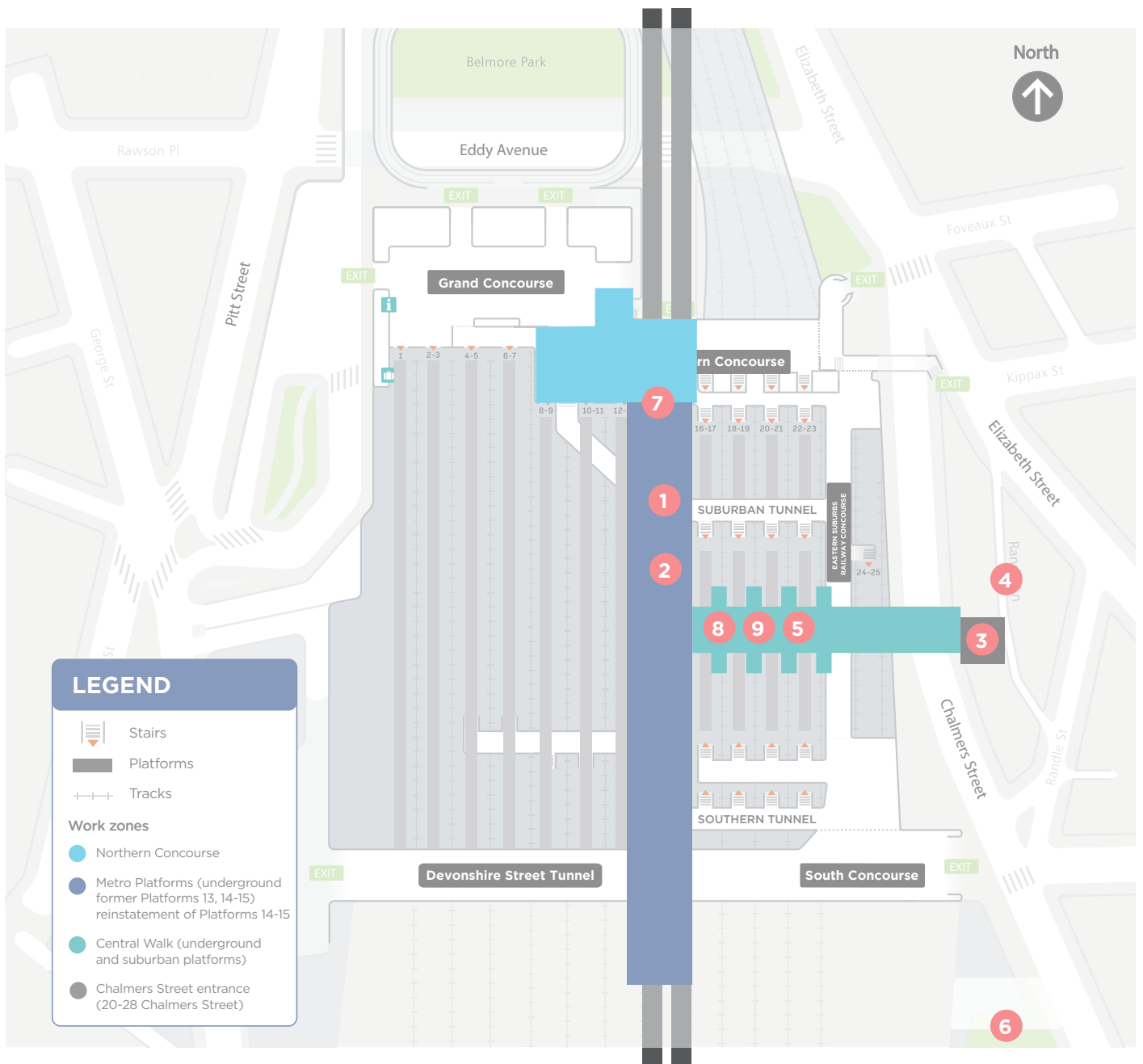
New escalators and lifts for Central

For the first time, there will be escalators to Platforms 16-23 at Central Station. These escalators will lead from Central Walk – a new landmark concourse from the Chalmers Street entrance to the new North-South Concourse. Nearly 1,000 lineal metres of escalators are being installed across the site as part of the Sydney Metro work at Central Station.

Across the station, there are also 14 new lifts being installed at Central. This includes lifts from the metro platforms to the North-South Concourse, from Central Walk to the suburban platforms - in the upper and lower Northern Concourse, at the new Chalmers Street entrance, and in the Eastern Suburbs Railway Concourse.



New escalators at Central.



Three-month lookahead

| Activity (subject to change) | October | November | December |
|---|---------|----------|----------|
| 1 Constructing concrete slabs within the metro site | ● | ● | |
| 2 Installing services in the Metro box | ● | ● | ● |
| 3 Building construction at 20-28 Chalmers Street | ● | ● | ● |
| 4 Services installation in Randle Lane | ● | ● | ● |
| 5 Excavating for Central Walk's northern escalators to Platforms 16-23 | ● | ● | ● |
| 6 Drilling underground from the Railway Institute Driveway | ● | ● | |
| 7 Tiling in the Northern Concourse | ● | ● | ● |
| 8 Platforms 16-23: Re-leveling, concreting, and retiling works | ● | ● | ● |
| 9 Platforms 16-23: Preparing and installing escalators, lifts and fitouts | ● | ● | ● |



About 50 kilometres of high voltage power cables have been installed across the site to power for the Sydney Trains assets.



In total, 6,500 tonnes of reinforcing steel will be used for the Sydney Metro works at Central Station.



An artist's impression of the new entrance to Central Station on Chalmers Street.

Sydney Metro's commitment to sustainability

Sydney Metro is committed to building and operating a sustainable transport system that delivers on our environment and social responsibilities. With this goal in mind, the new metro station being constructed at Central Station has recently achieved a 6-Star Green Star Design Review rating from the Green Building Council of Australia. This exceeded the original target of 5 stars, with a number of factors leading to this result.

This rating represents 'World Leadership' in sustainable building design. In line with Sydney Metro's sustainability goals, and using a road map from Green Star, environmentally and socially sustainable values, and innovative principles have been embedded into the design of the new metro station.

The work at Central Station also fits into Sydney Metro's broader sustainability strategy including 90% of construction waste being recycled, 100% of timber products being from reused, recycled or responsibly

managed sources, and 100% of the operational electricity needs for the projecting being offset with green energy.

The project's socially sustainable efforts include local workforce targets and leaving legacy improvements for local charities. A number of innovations were implemented for the metro station including, circadian lighting (follows a day/night pattern) public art installations, and a 99% reduction in potable water consumption compared to standard practice. Project wide there has been a 53% (to date) absolute replacement of general Portland cement in the concrete, and 72% of reinforcing steel has come from a process using Polymer Injection Technology.

We're on track for our overall 6-Star Green Star - Custom (Sydney Metro) certification as we continue to play our part in building a sustainable transport system for Sydney.

Want to stay in touch?

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 If you need an interpreter, contact TIS National on **131 450** and ask them to call **1800 171 386**