



APRIL 2021

Multiple machines work together to clear 230m of tunnel lining.

Reaching the depths of the metro box

Construction at Central Station is different from other metro stations being delivered as part of the Sydney Metro City & Southwest project. The new metro platforms at Central are being built from the top down, rather than bottom up. That means space is available at ground level for a critical logistics deck, allowing delivery and removal of equipment and machinery while directly below, the dig continues.

The 27-metre deep excavation beneath Central has already connected to the two metro tunnels which run from Chatswood through to Sydenham.

The first section of tunnel was reached at Central in late December 2020, with the remainder of excavation nearing completion. More than 280,000 tonnes of crushed rock has been removed from the station box, enough to fill around 46 Olympic swimming pools.

The next stage of works will involve construction of the new metro track slab, precast metro platforms, waterproofing and back of house structures within the station box.

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 66km 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.



Sunlight enters the station from the Chalmers Street construction site.

Linking Central Walk to Surry Hills

Major progress has been made on the new Chalmers Street entrance into Central Station. The first sections of the 24-metre-wide entrance to the new Central Walk were recently removed, allowing sunlight to enter the Eastern Suburbs Railway back of house area for the first time in decades. Central Walk is a 19-metre-wide, 80-metre-long underground concourse connecting the station to the new Sydney Metro platforms, and to the new Chalmers Street entrance.

Excavation at the Chalmers Street site is nearing the final depth of 16 metres, where the team has made another breakthrough into the old ghost platforms - built last century as part of the Eastern Suburbs Railway line for Bondi and the Illawarra but never completed.

Meanwhile on the suburban platforms, work is underway below the platform surface to install the new escalators and lifts that will give customers direct access from Central Walk, providing better connections throughout the station.



Preparations underneath the suburban platforms to link to Central Walk.

New look Northern Concourse roof

The Central Station skyline has forever changed with the installation of the new feature roof in the Northern Concourse as part of Sydney Metro works. Over the last year, we've progressively removed 21,000 square metres of the former canopy and installed the new 330-tonne roof. All up, 58 roof sections were installed, each weighing around five tonnes, with the largest being 16 metres long and 4.5 metres wide. Eight 'hockey stick' roof girders frame the structure, with sunlight filtering through the 21 skylights to light up the concourse.

More than 500 louvres are now being installed on the eastern, northern and western ends of the roof, with services, lighting, glazing and cladding progressing well.



Louvre installation underway.



Three-month lookahead

Activity (subject to change)		April	May	June
1	Excavating within the metro site	●	●	
2	Installation of precast metro platforms		●	●
3	Excavating at 20-28 Chalmers Street	●		
4	Excavating and concreting work within hoardings on Platforms 16-23 for Central Walk's escalator and lift works	●	●	●
5	Excavating for Central Walk	●	●	●
6	Building structure for the new entrance's building at 20-28 Chalmers Street		●	●
7	Tiling in the Northern Concourse	●	●	●
8	Services installation in the Eastern Suburbs Railway	●	●	●
9	Platforms 16-23 releveling and retiling works	●	●	●
10	Building new Customer Service Attendant and stand-by guard rooms on Platforms 16-23	●	●	●

7 kilometres of high voltage cable has been installed to connect the new substations in the ghost platforms to the existing Sydney Trains 11kV network.



Excavation at 20-28 Chalmers Street is currently around **8 metres** below Chalmers Street level.



Powering through to a new Metro

In order to run the new metro, a traction power system is needed between Chatswood and Bankstown. This includes six new substations and three high voltage cable routes between the existing Ausgrid substations and new traction substations.

Systems Connect, a joint venture between CPB Contractors and UGL Limited, is delivering traction power for the Sydney Metro City & Southwest.

One of the high voltage cable routes travels from the Ausgrid substation off Little Albion Street, Surry Hills to Central Station. The power cable will travel through Frog Hollow Reserve, across Albion Street, Bellevue Street, Albion Way, Belmore Street, Foveaux Street, Elizabeth Street and then down Randle Lane into the new Metro tunnel.

Work commenced with a 24-hour work period between Christmas and New Year's Eve, and then continued with day work at Belmore Street and Albion Way. More than 40 per cent of the 700-metre route has already been completed.

The work involves cutting into the road, excavating a trench, laying conduit, into which the cables will be placed, and then backfilling and restoring the road. Working in busy Sydney city streets has its challenges. Since work started in late December 2020, more than 120 services such as gas, electric, water and internet have already been crossed. In order to protect this existing infrastructure, trenches that go as deep as four metres need to be dug.

More than 400 residents and businesses directly face the route, and many more motorists and pedestrians use it daily. This means that a large coordination effort is needed to ensure work scheduling reduces impacts where possible, while enabling delivery of this important work that will energise the expanded Sydney Metro.



Compacting the ground at the corner of Albion Way and Bellevue Street.

If you want to know more about the work, and how it might impact you, call **1800 171 386** and ask for Grace, or email **LinewidthMetro@transport.nsw.gov.au**.

Want to stay in touch?



1800 171 386 Community information line open 24 hours



sydneymetro@transport.nsw.gov.au



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