





Crows Nest Station site from the air (looking East over Hume Street)

# Crows Nest Station nearing street level

July 2022

A W Edwards has progressed a considerable amount of work at Crows Nest Station over the last six months, despite the challenges resulting from the wet weather events earlier in the year.

Key activities have included installing waterproofing and concrete pouring to build perimeter walls, station floors, staircases, and dividing walls. The platforms and plant rooms in the lower levels of the station were built, along with the over track exhaust structures. Installation also started on the brick inlay precast panels that surround the station concourse.

Over the next few months, the station will be built up to and beyond ground level. As this happens, work on site will become more visible to the community. Scaffolding will also start appearing around the site.

The key elements of the next stage of work will involve the demolition of Hume Street bridge, interior works on each station level such as installation of escalators, lifts and electrical fittings. Internal walls and panels that will form the above ground station will also commence.

## 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, with new CBD metro railway stations at Martin Place, Pitt Street and Barangaroo and new metro platforms at Central.

By 2030, Sydney will have a network of four metro lines, 46 stations and 113km of new metro rail.

A W Edwards is building the new Crows Nest Station. Rail track installation is complete, and work to build the station structure is progressing.

#### Key milestones

### Forming the perimeter walls and internal structure

A peek behind the hoarding shows the bright yellow layer of waterproofing is disappearing behind walls of steel reinforcement and concrete. Concrete is poured with the help of 10-metre-tall 'A-frame shaped' formwork structures, which allows large volumes of concrete to be poured in place.

The building of perimeter walls are nearing completion, marking an important milestone for the overall site structure. This work involved creating a concrete wall, up to 1.2 metres thick, around the station box perimeter.

The north internal stairwell and escalator shafts have also been completed during the first half of the year in preparation for the delivery and fit out of station escalators.



The precast beams and planks form the platforms, plant room and concourse levels of the station. These heavy structures are made offsite and delivered at night to minimise traffic disruption and ensure public safety. More than 70 percent of precast concrete beams and planks have been installed. A single beam can weigh up to 70 tonnes.

## Work started on the future Clarke Street station entrance (Site C)

In early 2022, work commenced on Site C on the corner of Clarke Street and Clarke Lane, which will form the future Clarke Street station entrance. Work has included formwork, reinforcement installation, welding, waterproofing and concrete pouring.

#### Clarke Lane demolition

Work to remove existing road infrastructure on Clarke Lane is now complete. Hume Street demolition is due to start in late July. The temporary bridges were in place to provide safe access for workers above the site prior to the station build reaching street level and to support utility services to the station box.



Bright yellow layer of water proofing that sits behind the perimeter



Building of the perimeter wall (waterproofing covered by steel reinforcement prior to concrete being poured to create the wall)



A-frame formwork structure used to build concrete walls



First section of brick inlay panel



Structural pre-cast beams that make up the concourse level of the station



Kids from a local childcare centre on their first construction site visit

## Community events at Crows Nest Station

The Crows Nest Station site has been opening its doors to the wider community in recent months to give visitors a glimpse of a major infrastructure project from the inside.

## The community's first look behind the hoarding

The wider public had their first chance to see Crows Nest Station being built in real time during a community open day held on Sunday 20 March. Visitors were taken on a raised platform above the site where they could view the station box through a series of panels, guided by team leaders and storyboard material.

A W Edwards' project team interacted with community members and heard their questions and feedback about the project. More than 75 people attended to learn about the work taking place and the future operation of the station. Thank you to all who attended.

#### Student site visits

Students from the NRL's school to work (S2W) program came to the project office in April for an introduction to major construction projects, which included educational presentations and conversations with a range of industry professionals.

The visit was focused on inspiring young minds about the construction industry and the diversity of career pathways available to them.

The NRL S2W program provides young Indigenous Australians with work experience, mentoring and leadership opportunities in broad range of industries and professions.

#### Kids day out on site

The Crows Nest site hosted a day out for 12 children and six teachers and guardians from a local childcare centre on Wednesday 20 April.

The youngsters were officially site inducted by our Safety Manager before taking part in the action during a fun and interesting site tour run by our Community Place Manager. The cranes and trucks were the main attractions and the children enjoyed wearing their miniature safety outfits for the day.

Lots of smiles were shared in the office and some great questions were raised.

## Next generation of construction superstars

In late May, the Crows Nest project team welcomed two students from Abbotsleigh School to take part in an onsite work experience for one week with site teams and head office staff.

The week was designed to give young people in our community a taste of work on a major infrastructure project and gain an understanding of the different career paths that exist in construction including design, sustainability, and community engagement.

The students were taken on a walk through the entire site and had the chance to shadow subject matter experts from AW Edwards to learn more about the work we do and the paths they might aspire to follow to reach their career goals.

#### Six-month look ahead

The future station will really start to take shape over the coming months. Massive trusses that will form the main structure of the building are being delivered and installed in late July and early August. Following that, concrete pours will take place to make up the levels that will form the route over the main concourse level, as well as forming the ground floor station entrance, before building up two floors to reveal the above ground station.

Later this year, the southern tower crane (named Giraffe) will be decommissioned and replaced with a smaller crane. The northern tower crane (named Muscles) is expected to be replaced in early 2023.

As construction hits ground level, the capping beams around the perimeter of the site will be removed. More information on the capping beam removal including sequencing and timing will be provided separately once confirmed.

#### Above ground station

Works to build the above ground station will start in the second half of 2022.

Construction of the two-level above ground station and retail space will include:

- · installation of support beams and columns
- construction of supporting walls and roof
- installation of station services, equipment, fixtures, fittings and finishes
- station fit out
- installation of lifts, elevators, mechanical and electrical components
- external façade work.

As works start progressing above ground, scaffolding will be placed around the perimeter of the site.

You can see how the station will look when built in the images below. More information will be provided as we get closer to this part of construction.

#### Crows Nest Station at a glance



- Station entrances will be located on Pacific Highway and Clarke Street.
- Two 37.5-metre-long escalators will connect concourse and platform levels. That is equivalent to a 11-storey building.
- More than 80,000 bricks will be used to cover the external facade and certain interior walls and columns.
- One kilometre of pipes, housing services, have been laid below the platform level. That's enough pipe to cover the length of Bondi Beach.

An artist's impression of station exterior along Pacific Highway



An artist's impression of station concourse



An artist's impression of station platform



Artist impression of the over station development on Clark Street

#### Public domain works

In addition to building the station, work will also take place on surrounding streets to create a revitalised precinct for people who live and work and play in the Crows Nest area.

This means upgrades to footpaths and roads, the planting of street trees and installation of new lighting and street furniture.

Work will also include underground service relocations and upgrades.

Initial investigative works started in July which will be followed by utility infrastructure upgrades commencing in August. Work will then be completed progressively over the coming months.

Noise levels may increase during this work and there may be temporary changes to walking and cycling access at various times. A W Edwards will ensure access to all businesses along the route remains open during trading hours. Noise and dust mitigation measures as well as respite periods will also be in place.

#### Clarke Lane and Hume Street rebuild

As part of the construction site, temporary roadways (or bridges) were created on Clarke Lane and Hume Street to provide safe access for workers above the site prior to the station reaching street level.

The demolition of Clarke Lane is complete and the Hume Street section is starting soon.

The demolished areas of Clarke Lane and Hume Street will be rebuilt on top of the station perimeter walls. Before the rebuild can commence, the station structure will first need to be built up to just below street level.

Work to rebuild this section of road will involve building formwork around the new structure, concrete pouring and road surfacing, line marking and signage installation and reinstating traffic lights.

Clarke Lane and Hume Street will reopen in 2023.

## Crows Nest Site C over station development

In May 2022, A W Edwards was awarded the contract to build the over station development on the corner of Clarke Street and Hume Street. The area known as Site C will also include an entrance to the metro station from Clarke Street.

As part of the Crows Nest Station project, there are three separate planned over station developments.

Site C will be a nine-storey commercial building with a rooftop terrace.

Building will commence once the above ground station levels are complete.

More information will be provided on the over station development for Site C when we are closer to commencing construction.

You can find more about the other over station developments at: <a href="www.sydneymetro.info/integrated-station-development">www.sydneymetro.info/integrated-station-development</a>

Activity *	Jul	Aug	Sep	Oct	Nov	Dec
Building below ground station levels up to street level	•	•	•			
Commencement of above ground station build (in stages)		•	•	•	•	•
Demolition of Hume Street Bridge	•	•				
Rebuild of Clarke Lane and Hume Street		•	•	•	•	•
Piling works and water proofing at Site C	•	•	•	•		
Removal of the steel and concrete capping beam along the perimeter of the station (staged removal)	•	•	•	•	•	
Decommissioning of the southern tower crane. This will be replaced with a smaller crane to complete the above ground build		•	•			
Extension of the northern tower crane		•	•	•	•	•
Continued excavation, formwork, reinforcement installation, welding, concrete pouring and movement of plant, equipment, and materials on site	•	•	•	•	•	•
Delivery and installation of precast beams, trusses and planks	•	•	•	•	•	•
Public domain works	•	•	•	•	•	•

<sup>\*</sup>activities and duration are indicative and subject to change

#### Work inside the tunnels

Track construction along both platforms of Crows Nest Station and in the twin tunnels to the north and south of the station, has been completed.

The track constructed alongside the station platforms has been installed on large concrete slabs, each weighing 3.4 tonnes and mounted on thick rubber blocks, to cushion noise from moving trains.

In the tunnels to the immediate north and south station, 8.6 km of track has been laid, using more than 12,000 sleepers in total.

With the trackway through Crows Nest Station now completed, the mechanical and electrical installations of the equipment needed to operate the driverless metro train system is in full swing.

The installations include all the things needed to turn the tunnels and tracks into a working railway such as fire mains, walkways and brackets supporting cable trays containing high and low voltage cabling, signalling and communication systems, and the overhead wire used to power the trains.

#### Extended work hours

Extended working hours for limited activities will continue to be in place at Crows Nest Station subject to ongoing approvals.

Standard hours: Monday to Friday 7am to 6pm and Saturday 8am to 6pm

#### **Extended hours:**

6am to 7am and 6pm to 12am Monday to Friday, 6am to 8am and 1pm to 10pm Saturday and 7am to 10pm Sunday.



Scan here to subscribe to receive our weekly e-news.

#### **Contact us**

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

1800 171 386 Community infoline open 24 hours www.facebook.com/SydneyMetro crowsnestmetrostation@transport.nsw.gov.au

**Sydney Metro City & Southwest** 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 171 386.

© Sydney Metro 2022. sydneymetro.info