

DOMAIN

COMMUNITY REFERENCE GROUP

24 March 2021





MELBOURNE AIRPORT RAIL PROJECT OVERVIEW



FUTURE ST KILDA ROAD LAYOUT

Transport and precinct integration



- St Kilda Road near Anzac Station will be a unique and heavily patronised transport hub with drivers, cyclists, pedestrians, train and tram passengers all needing to use the precinct safely
- 40,000 people a day will use the Anzac Station Precinct to get to business precincts and the growing residential areas on St Kilda Road, Kings Way and in South Melbourne
- A fully accessible tram super stop located in the middle of the road, connecting passengers to the underground station below, also allowing commuters to move safely between transport modes and safely cross into the Shrine Grounds and Albert Road Reserve
- Bicycles will be separated from this heavily patronised tram/train interchange
- Kerbside bike lanes will integrate with existing bike infrastructure (ie. the CoM temporary kerbside lanes already in place from north of Linlithgow Avenue) which means less transitions for cyclists.

New St Kilda Road layout overview (Anzac Station Precinct)



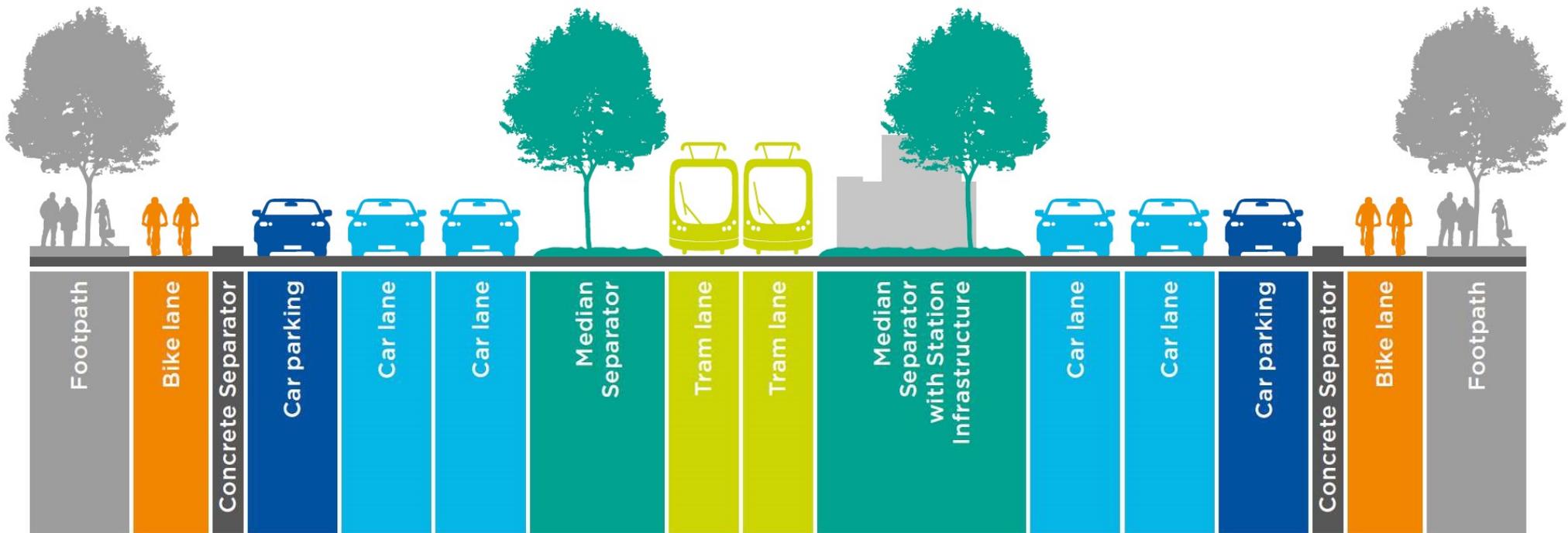
- Protected kerbside bike lanes to be built along St Kilda Road in each direction between Dorcas Street and Toorak Road (approx 1km)
- Cyclists can ride two abreast within the bike lanes, protected on the traffic side of the bike lane by a concrete separator
- A lane for parking spaces will be built alongside the concrete separator, adjacent to the two traffic lanes
- The new layout will make cycling safer by physically separating bike riders from live traffic and reducing the risk of car dooring.



Kerbside bike lane (example image only)



Indicative St Kilda Road bike and road lanes cross section (between Dorcas Street and Toorak Road)



St Kilda Road Bike Lanes Project



- The Victorian Government has committed to building new bike lanes that physically separate drivers and cyclists to make St Kilda Road safer for all road users
- The upgraded bike lanes will improve safety for the 300,000 people who travel on St Kilda Road each day
- As part of Business Case development, MRPV is working with DoT and RPV to ensure the cycling infrastructure proposed around the new Anzac Station is coordinated with the broader upgrades along the St Kilda Road corridor
- MRPV is currently exploring a number of options to provide safe and effective solutions for separated bike lanes between Linlithgow Avenue and Dorcas Street and Between Toorak Road and Carlisle Street
- CYP will build the bike lanes between Dorcas Street and Toorak Road as part of the Anzac Station Precinct and St Kilda Road reinstatement.

MRPV Business Case Development



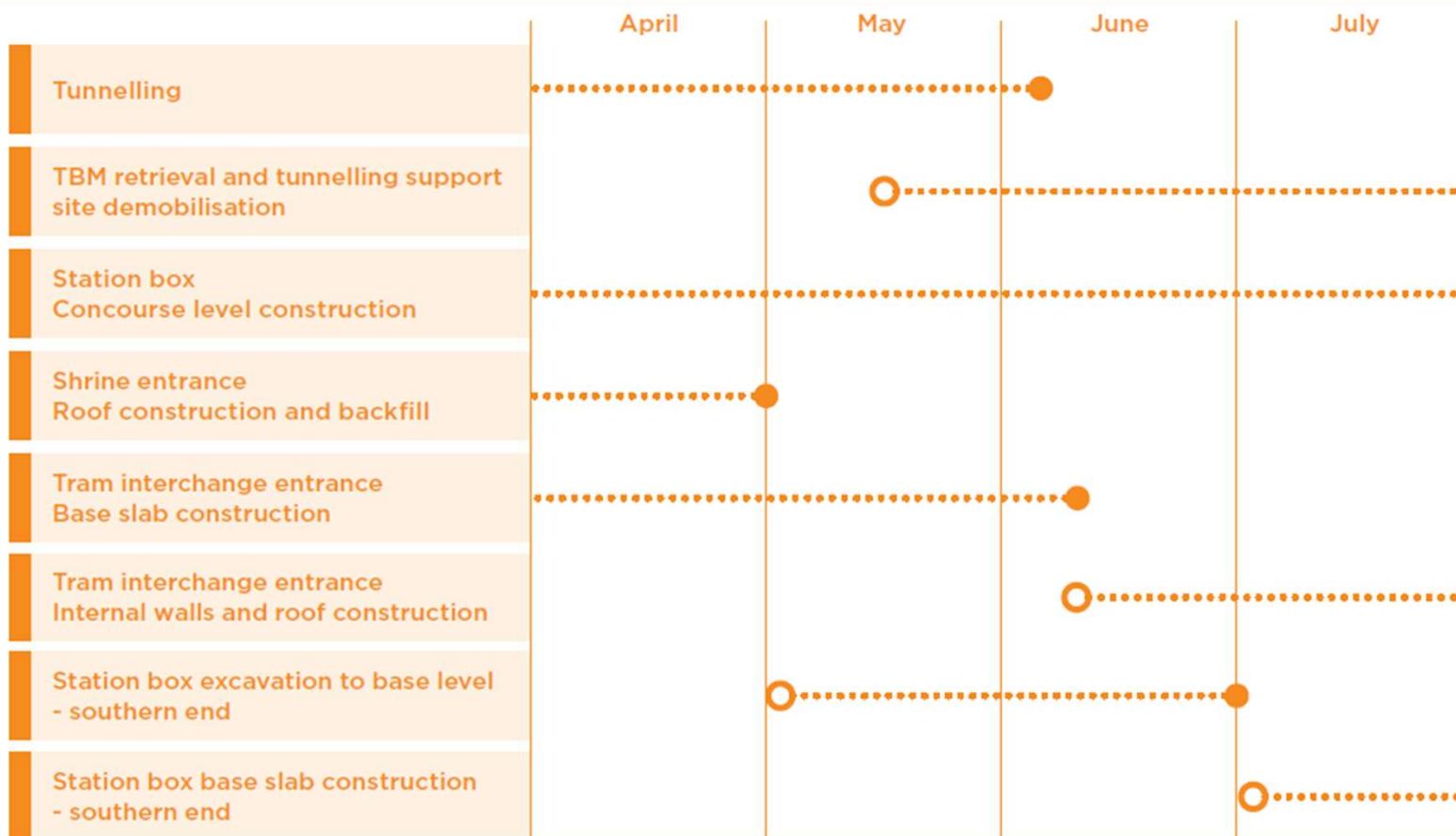
- MRPV has made progress via a range of activities, including:
 - **Investigations** into land use, environmental, planning, social impact, heritage, landscape and visual impact.
 - **Identification of the main services** that will require relocation and/or protection.
 - **Traffic modelling**, review of data on cycling, traffic, trams and parking to inform how St Kilda Road is used by vehicles, pedestrians, public transport users and cyclists.
 - **Progressed concept designs**. Working with DoT and RPV to ensure cycling infrastructure proposed around Anzac Station is coordinated with the broader upgrades along St Kilda Rd corridor and provides a consistent and safe experience.
- The Business Case will be submitted to government for consideration later this year.
- Subject to the approval of the Business Case, the St Kilda Road Bike Lanes project will be carried out in conjunction with the Metro Tunnel works to minimise disruption to road users and is scheduled to be completed by 2025.



CYP UPDATE

WORKS UPDATE

2021 LOOK AHEAD





WORKS UPDATE: TUNNELLING

WORKS UPDATE – TBM PROGRESS

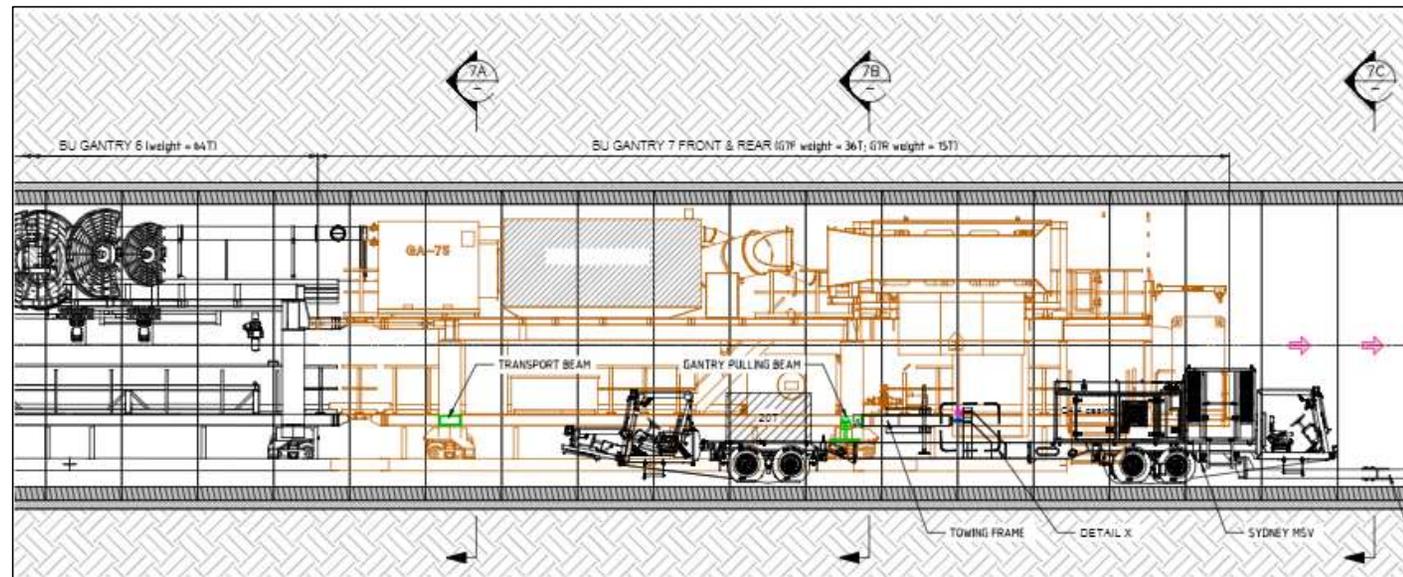


WORKS UPDATE

TUNNELLING



- Once the TBMs arrive at Town Hall Station the rear gantries will be detached and pulled back to Anzac Station
- The TBM pieces will be stored on top of the backfilled Shrine Entrance before being taken away for re-use on other projects



TBM gantry pieces will be pulled back to Anzac Station

WORKS UPDATE

CROSS PASSAGES



- Construction is continuing on the six cross passages between Anzac Station and Eastern Portal
- Excavation is complete on cross passages 23 and 24 and waterproofing has commenced
- Excavation is underway on cross passages 22 and 25.



Shotcreting cross passage excavation



WORKS UPDATE: STATION CONSTRUCTION

WORKS UPDATE

SOUTH BOX CONCOURSE CONSTRUCTION



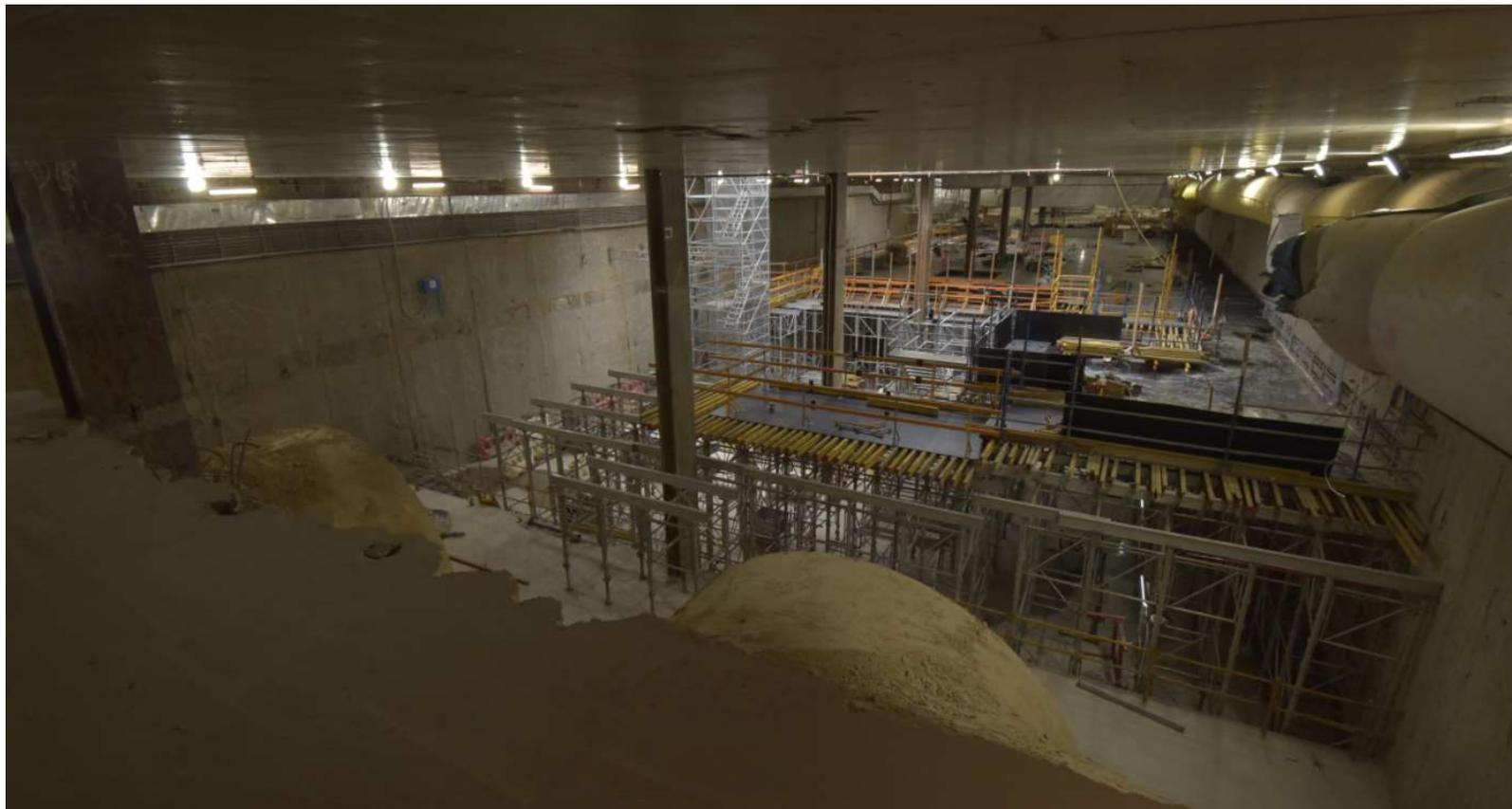
- The first stage of sacrificial tunnel excavation is now complete
- Construction of the falsework to support the concourse has commenced
- Steel fixing has commenced to tie the concourse into the D-walls before concrete is poured
- This work is expected to continue until mid April
- The steel fixing works will see periodic use of the crane up until 10pm to load in the steel reinforcement.



Stage one south box excavation complete

WORKS UPDATE

SOUTH BOX CONCOURSE CONSTRUCTION



Falsework to support the next stage of concourse construction

WORKS UPDATE

SOUTH BOX EXCAVATION AND SACRIFICIAL TUNNEL DEMOLITION



- Stage 1 excavation is now complete
- Concourse construction has now recommenced in the south box
- Stage 2 excavation is expected to commence in April 2021 and will go till the end of May 2021
- This will require periods of works until 10pm above ground and all night below ground
- During Stage 2 excavation the base slab works will commence and will continue until later this year.



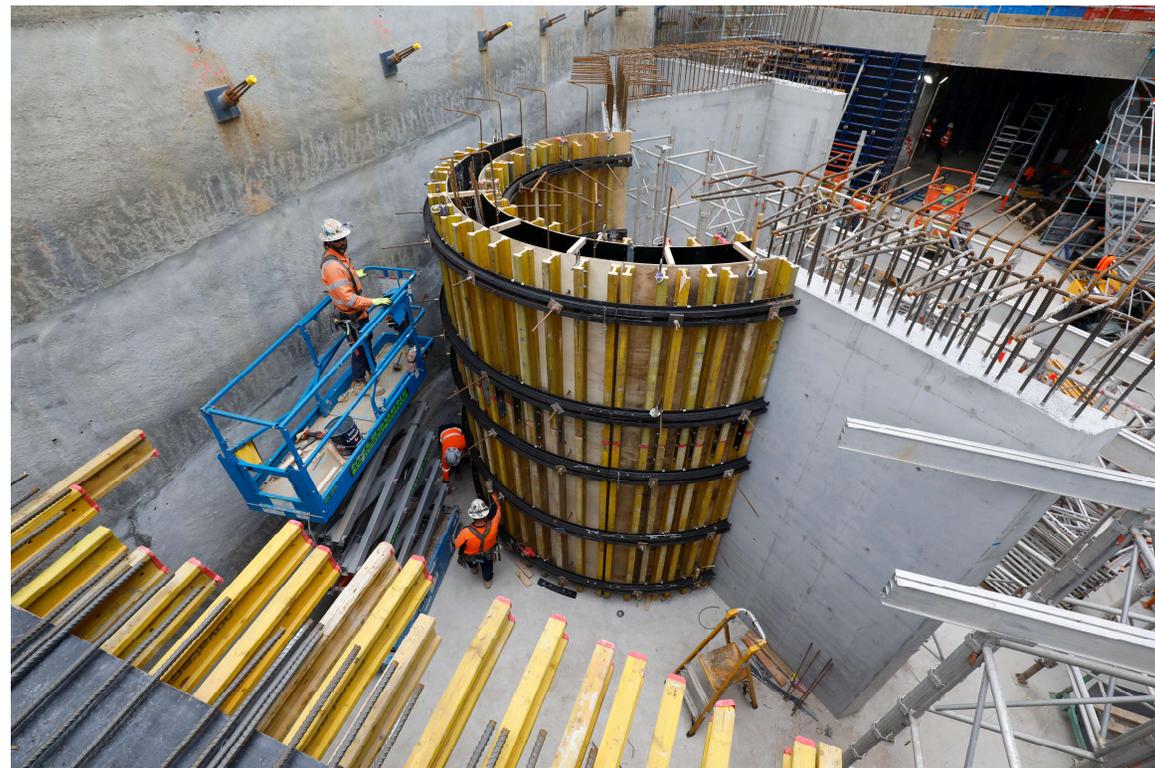
Stages of South Box Excavation

WORKS UPDATE

SHRINE STATION ENTRANCE



- The first section of the roof in the Shrine Entrance was poured earlier in March
- The second roof pour was completed on Friday 19 March.
- Following these pours there will be some minor pours on the upstand for the lift well at this station entrance
- There will be some pile breakback works and backfill work that started this week
- TBM pieces will then be stored on top of the backfilled roof prior to being removed from site.



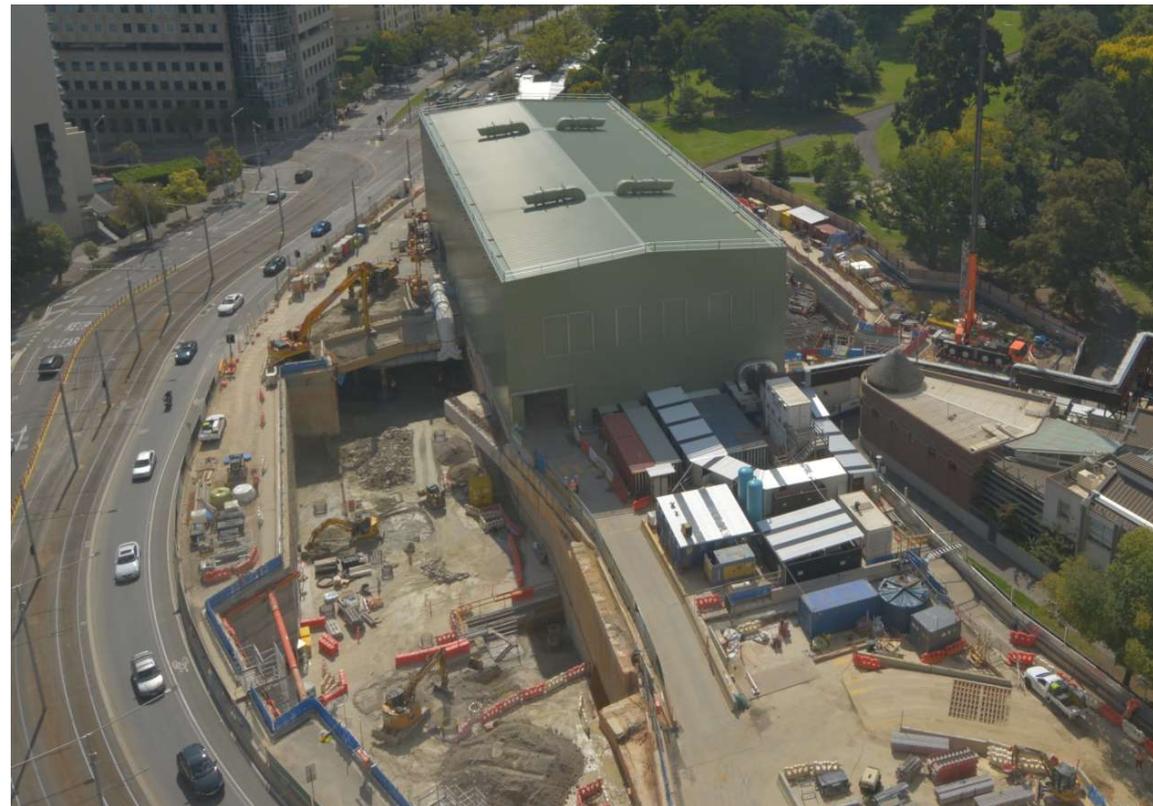
The lift well in the Shrine entrance prior to the final roof pour

WORKS UPDATE

TRAM INTERCHANGE



- Bored piles in the tram interchange are now complete
- Steel-fixing for the base slab has begun under the suspended slab
- In the open section, excavation of the pits and conduit trenches has been completed
- The blinding layer will be poured and waterproofing and steel-fixing will soon commence in the open area of excavation



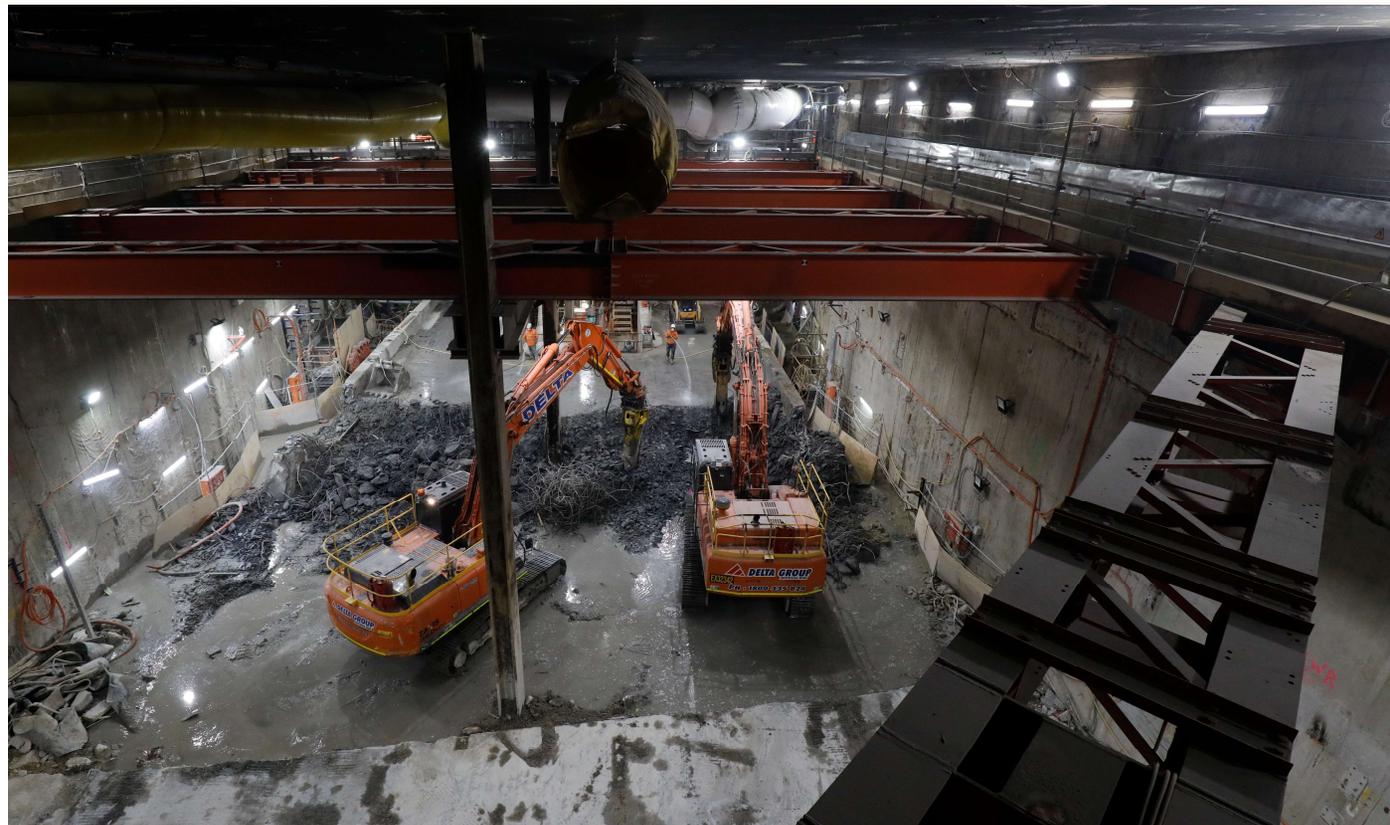
Excavation of pits and conduit trenches in the tram interchange

WORKS UPDATE

NORTH BOX (SOUTH END)



- At the southern end of the north box (under the acoustic shed) the TBM shifting way and thrust frame has been demolished
- Construction has now commenced on the concourse level.



TBM shifting way is now demolished

WORKS UPDATE

NORTH BOX (SOUTH END)



- Permanent internal columns have been formed up and poured
- Similar to the south box, formwork is now being installed that will provide the elevated platform to construct the concourse at the required height



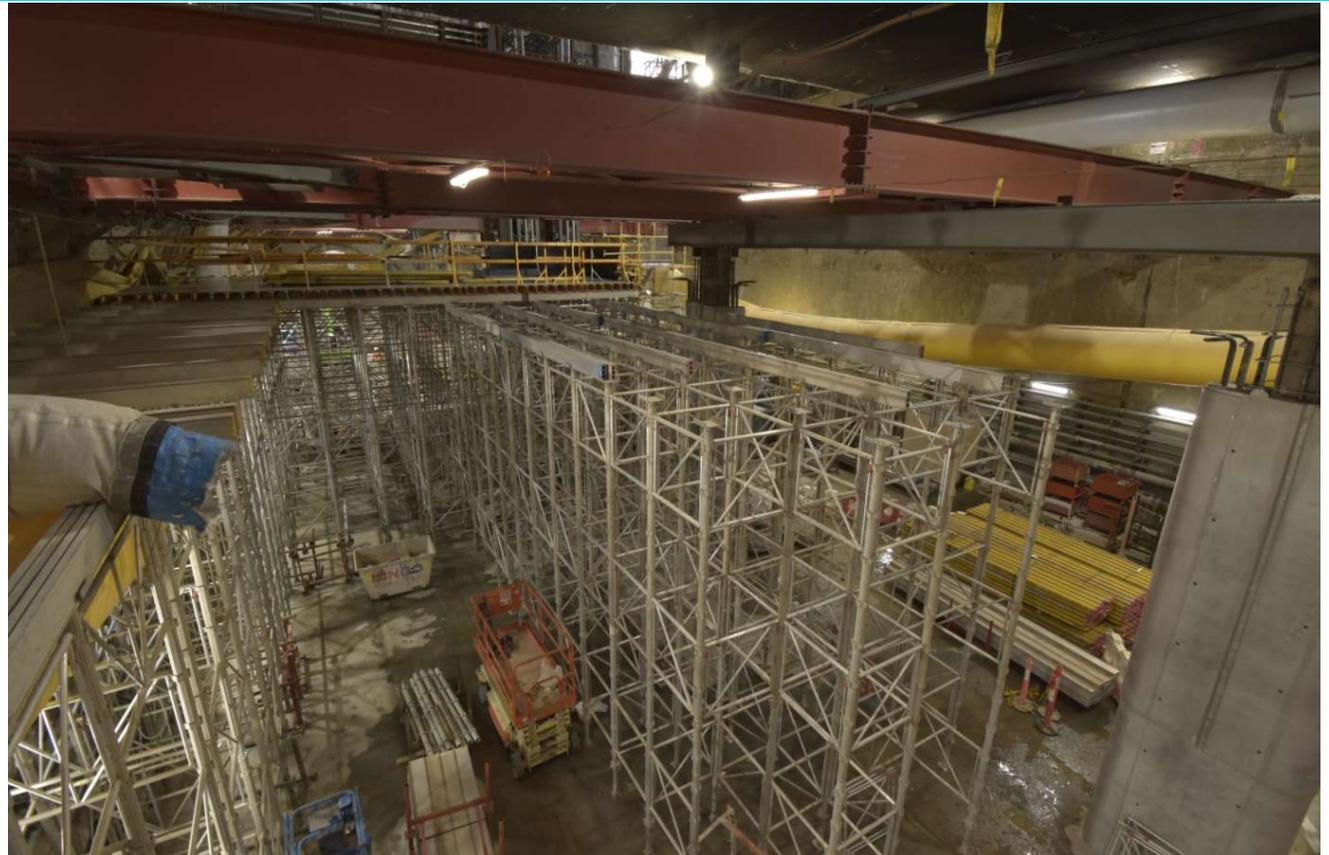
Start of falsework installation in the north box with formwork for internal columns

WORKS UPDATE

NORTH BOX (SOUTH END)



- Once the formwork is constructed, steel-fixing will begin
- As the concourse level is progressively poured, the red struts in the north box will be removed



Falsework installation in the north box with internal columns now poured



ENVIRONMENT UPDATE

ENVIRONMENT UPDATE

STP NOISE AND VIBRATION - TUNNELLING



- CYP have been monitoring the STP noise and vibration issue as the second drive to CBD is underway
- The higher risk period where both TBMs were in Melbourne Formation 1 type rock has now passed
- There have been some instances of vibration, however they have been less than experienced during the first TBM drive
- During each instances, both TBMs have been cutting, with Alice in harder material and Millie in soft material (with gravel present)

	2 nd Mar (1045-11:45pm)	9 th Mar (8:30-10:00pm)	10 th Mar (8:40-10:00am)	Comparative Data
16hz	90	89	89	86
20hz	75	74	74	71

Table 1: Max external low frequency noise at Botanica (dB)

ENVIRONMENT UPDATE

MODELLING – TRAM BOX STEEL FIXING (DAYTIME)



- There are no ongoing out-of-hours activities coming up in Domain
- Tram Box piling works 5-6 dBa below modelled
- Daytime steel-fixing in the tram interchange will be the most prominent activity in the coming weeks
- Modelling 5-6 dBa below recent piling works

Building	Unmitigated predicted noise level dBa LAeq(15min)
The Domain	70
The Botanica	56
Hallmark	68
Domain Hill	69



QUESTIONS?