## METROTUNNEL

## ARDEN AND PARKVILLE COMMUNITY REFERENCE GROUP

MEETING 16
26 March 2021

## AGENDA

1. Introductions and welcome
2. Melbourne Airport Rail Update
3. Project wide construction update
4. Parkville construction update
5. North Melbourne construction update
6. Tunnelling update
7. Stakeholder and communications update
8. Metro Tunnel Creative Program update
9. General feedback and items for future discussion
10. Meeting close
(4)

## MELBOURNE

 AIRPORT RAIL
## Melbourne Airport Rail Update

Vito Trantino, Director Development and Delivery, Melbourne Airport Rail
March 2021

## Airport Travel Context

Most airport travellers originate
from home, even when travelling
for business


Travel times are not defined by journey time to and from the city, but from people's origin and

Frequency, reliability and
number of transfers as
important as travel time

Need a solution that
benefits the most
Victorians


## Connecting through The Metro Tunnel

10-minute turn
up and go services

Continuous journey into the heart of Melbourne's CBD in under

30
minutes

Connectivity to the entire rail network

Provides direct
access to
Melbourne's key
business, tourism,
health and education precincts

Consistent with the
findings of previous rail studies

## Connecting through The Metro Tunnel

Significant capacity
for airport trains and allows future
network expansion
for the growing west
and regions

Uses the most modern,
highest capacity and passenger friendly trains on the network

No mixing of
regional and
airport services, consistent with modern metro
systems

Existing
investments ensure
value for money,
less disruption and earlier
deliverability


## Melbourne <br> Airport Rail <br> connectivity

- Integrates with the entire network
- 30 stations on the Cranbourne / Pakenham line with direct access to Melbourne Airport
- Single interchange for all other metropolitan lines
- Single interchange for Ballarat, Bendigo, Geelong and Gippsland regional services



## Airport to Sunshine indicative works

Terminal


## Legend

MAR stations
MAR indicative alignment

## Major roads

Airport to Sharps Road works
Sharps Road to Albion Junction works
Sunshine to Albion Junction works

M80 Ring Road, Tullamarine / Airport West



Key elements of the project



* Impression for reference only - not final design
turn-up-and go services from Melbourne Airport

Melbourne Airport

## 1

Direct access from 30 metropolitan stations to Melbourne Airport, single change for most other metropolitan and regional lines


Target opening date 2029

Up to 8000 jobs supported during construction, including more than one million hours of work done by apprentices, trainees and cadets

-Enhanced connectivity to key health, research, education, business and employment precincts



## Engagement program

- Meetings with Council officers
- Online survey
- Virtual community information sessions
- Postcards and newsletters to properties inviting participation in the survey and information sessions
- airportrail.vic.gov.au
- Meetings with community groups
- Social media campaign



## Engagement statistics (phase 1)

- 33,000 postcards letterbox dropped to locals along corridor
- 300,000 newsletters distributed across wider Melbourne
- 2,792 e-newsletter recipients
- Social media posts on Facebook and Linkedln
- Surveys completed = 1045
- Comments on interactive map = 214
- Virtual engagement room visitors $=1802$
- Individual comments received = 3000+



## Questions

## CONSTRUCTION UPDATE - PROJECT WIDE

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## STATE LIBRARY STATION

- TBM 2 (Meg) broke through into the State Library Station on 11 February 2021
- TBM 2 was relaunched from State Library Station earlier this week
- Works to construct an underground pedestrian connection between the Little La Trobe Street and La Trobe Street sites has commenced
- Excavation, formwork installation and concrete pours are continuing for the top-down construction of the La Trobe Street shaft.

$M$ Design \&
Construction


## TOWN HALL STATION

- The central cavern continues to transform as the structures and lining team install tie beams and columns in preparation for the commencement of excavation
- Rail tunnel excavation will commence in late March. Rail tunnels are located either side of the central cavern
- In early March, there was a breakthrough between the Flinders Link and the Flinders Quarter site
- Station build out works have commenced in the City Square site.


Structures and lining works within the central cavern


Flinders Quarter to Flinders Link breakthrough

Presenter: Danielle STmits

## ANZAC STATION

- TBM 3 (Millie) has now passed beneath the Yarra River. TBM 4 (Alice) is approximately halfway through her drive. She has now tunnelled beneath CityLink
- The Shrine of Remembrance station entrance roof is complete
- Some permanent features of the Shrine entrance are also complete, including a lift well to the concourse level
- The next sections of the station's concourse level are being constructed in the northern and southern ends of the station box
- Cross passage excavation continues from the Eastern Portal. Permanent works are now underway at cross passages 23 and 24 , with excavation underway at 22 and 25.


Shrine of Remembrance lift well falsework
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Construction

## CONSTRUCTION UPDATE - PARKVILLE

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## GRATTAN STREET EAST

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## PARKVILLE STATION SITE

## 6 MONTH PROGRAM

| Works | Mar | Apr | May | Jun | Jul | Aug |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Permanent structure works |  |  |  |  |  |  |
| Royal Parade station entrance (structure) |  |  |  |  |  |  |
| Retail area (structure) |  |  |  |  |  |  |
| North-east emergency exit area (staged excavation) |  |  |  |  |  |  |
| Staged pile removal (retail/Royal Pde entrance/main box) |  |  |  |  |  |  |
| TVS east / goods lift (service relocations/excavation) |  |  |  |  |  |  |
| Chiller plant (strengthening works in car park) |  |  |  |  |  |  |
| TVS west (piling and excavation) |  |  |  |  |  |  |
| Station box fit out |  |  |  |  |  |  |
| Royal Parade pedestrian underpass construction |  |  |  |  |  |  |

Indicative only
( Design \& Design \&
Construction

Presenter: Martine Watine

## PERMANENT STRUCTURE WORKS

- B3 suspended slab completed
- B2 suspended slab expected to be complete end of April
- B1 suspended slab expected to be complete end of June
- Roof slab works commenced in late February. First section to be poured in late March.


Construction partner:


## STATION FIT-OUT WORKS

- Works on internal walls are ongoing on B3 suspended slab
- Preparatory works for station platforms have commenced on B4
- Back of house blockwork installation is ongoing on B3 (fan rooms, staff facilities, etc.)
- Mechanical, electrical, plumbing (MEP) services installation commencing from mid-April 2021.

(4) Design \&
Onstruction


## SECONDARY BOXES

- Royal Parade station entrance:
- Excavation and associated works complete
- Structure works have commenced
- Base slab pour anticipated late March.
- Retail area:
- Excavation and associated works complete
- Structure works are ongoing.
- North-east emergency exit area:
- Excavation will resume once adjacent roof slabs sections have been completed (anticipated in early May).




## TUNNEL VENTILATION SHAFT (TVS) EAST \& GOODS LIFT

- Piling completed in late February 2021
- Gas capping works anticipated in late March/early April
- Excavation and associated works will commence following gas capping works.

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## TVS WEST \& CHILLER PLANT

- Site establishment works will commence from early-April 2021
- Barry Street pedestrian crossing will be relocated around 50 metres south
- Works in the University Square Car Park will require the occupation of parking spaces.

(1) $\begin{gathered}\text { Design \& } \\ \text { construction }\end{gathered}$


## UNIVERSITY SQUARE CAR PARK WORKS

- Access is required to build the TVS East and chiller plant
- Works for TVS East will be staged from levels B5-B1
- Works for the chiller plant will take place on level B1.
(1) $\begin{gathered}\text { Design } 2 \\ \text { construction }\end{gathered}$



## ROYAL PARADE UNDERPASS

- Construction of the Royal Parade underpass is scheduled to commence in late June
- Works will be staged from the Grattan Street east site to Grattan Street west from the B2 slab
- A roadheader will be used to complete the mined excavation.


Royal Parade underpass
(1) Design \&


## GRATTAN STREET WEST

## 6 MONTH PROGRAM

| Works | Mar | Apr | May | Jun | Jul | Aug |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service relocations |  |  |  |  |  |  |
| Site establishment |  |  |  |  |  |  |
| Piling |  |  |  |  |  |  |
| Excavation |  |  |  |  |  |  |
| Structure works |  |  |  |  |  |  |

Indicative only

Presenter: Martine Watine

## PREPARATORY WORKS

- Services works (relocation and removal of redundant services) - ongoing
- Pedestrian crossing works
- Grattan Street mid-block crossing - late March/early April
- North-south pedestrian crossing - complete
- Removal and relocation of street furniture - complete
- Constructing a future site access point on Royal Parade - April/May.


Indicative only

(1) Design | Construction |
| :---: |

## STAGE 2 NORTH ENTRANCE WORKS

- Preparatory works, including service relocations, are ongoing
- Piling works to commence in April 2021, continuing until late May 2021
- 66 piles and 7 king posts will be installed in total.


Piling at Grattan Street. June 2020

## SITE BOUNDARIES AND TRAFFIC ARRANGEMENTS



Presenter: Martine Watine

## PEDESTRIAN ACCESS DURING PILING - SHORT TERM



Design \&

Presenter: Martine Watine

## CONSTRUCTION UPDATE - NORTH MELBOURNE

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## NORTH MELBOURNE PROGRAM

| Activity | Mar | Apr | May | Jun | Jul | Aug |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Roof slab construction |  |  |  |  |  |  |
| Driven piling (foundation reinforcement) |  |  |  |  |  |  |
| Service proving (Laurens Street) |  |  |  |  |  |  |
| West (services building) construction - structure only |  |  |  |  |  |  |
| East (station entrance) construction |  |  |  |  |  |  |
| Brick arch installation |  |  |  |  |  |  |
| Over Track Exhaust (OTE) and platform construction |  |  |  |  |  |  |
| Intake substation construction |  |  |  |  |  |  |
| Cross passage construction |  |  |  |  |  |  |

(4)

## ROOF SLAB CONSTRUCTION

- Ten out of 11 bays have been now been poured
- The final pour (underneath the gantry crane shed) will occur around September/October.


Roof slab construction continues

## DRIVEN PILING (FOUNDATION REINFORCEMENT)

- Piles will reinforce the station building foundation (where the building access points sit outside of the station box footprint)
- Driven piling commenced on Friday 19 March
- 22 of the 38 driven piles have now been installed
- Driven piling works are being undertaken during normal construction hours (7am-6pm Monday to Friday and 7am to 1pm Saturday, as required).


Driven piling underway in the south east corner of the station box
(4)

Presenter: Stef Calati

## SERVICES BUILDING CONSTRUCTION

- Lower ground level slab is complete
- Lower ground and ground floor core walls are complete
- Work on the second stage upstand wall is ongoing
- First ground floor slab was poured on 20 March
- Ventilation shaft works are ongoing
- Preparation for façade panel installation is ongoing with installation due end of April
- Structural steel fabrication commenced this week in preparation for installation mid-May.


Construction of the services building upstand walls

## STATION ENTRANCE CONSTRUCTION

- Upstand beam construction has commenced
- First lower ground support wall was poured on 19 March
- D-wall trimming to commence in April to allow for service relocation around the southern end of the station entrance
- 7 brick arches have now been cast with the first units to be transported to the storage facility in Deer Park in coming weeks (pending concrete finish approval)
- Columns and arches will be stored at Deer Park prior to their arrival at Arden for installation
- First columns to arrive at Arden late April early May (subject to program)
- First segments to be installed in the ground end July - early August (subject to program).



## OTE (OVER TRACK EXHAUST) AND PLATFORM CONSTRUCTION

- 95 out of 100 OTE segments have now been installed in the west box
- Works to install OTE segments in the east box will commence mid year and take approximately three months
- 133 out of 285 platform segments have now been installed in the west box
- First platform concrete pour completed on 18 March.


Installed OTE and platform segments (west box)

Presenter: Stef Calati

## INTAKE SUBSTATION CONSTRUCTION

- Foundation slab completed
- Building works commenced early March
- Under creek bore works ( 66 kV in from the West Melbourne Terminal Station to ISS) scheduled for June 2021)
- Under track bore works (22kV out from the ISS to Arden Station) scheduled for September 2021.


ISS building construction underway

## LAURENS STREET REALIGNMENT

- Laurens Street, between Queensberry and Arden streets, rescheduled for late April. Works will include:
- Installing a pedestrian crossing on Laurens Street, south of Queensberry Street
- Closing the western footpath on Laurens Street (between Arden and Queensberry streets)
- Closing on-street parking spaces on both sides of Laurens Street, from Arden Street to just south of Queensberry Street
- Installing concrete barriers on the western side of Laurens Street to delineate the site footprint
- Realigning traffic and bicycle lanes around the concrete barriers
- Reducing the speed limit on Laurens Street to $40 \mathrm{~km} / \mathrm{h}$
- The Project team is working closely with CitiPower to coordinate zone substation decommissioning works at the Laurens Street substation
- CitiPower will schedule these works to commence after implementation of the Laurens Street realignment.


Laurens Street changed traffic conditions

Presenter: Stef Calati

## TUNNELLING

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## TBM PROGRESS

## TBM Joan

- Relaunched from State Library Station 9 February 2021
- Has currently completed 498 (of 672m).


## TBM Meg

- Relaunched from State Library Station 23 March 2021.
victoria


## CROSS PASSAGE CONSTRUCTION

- Cross passage 5 (Lothian Street) - finishing works in progress
- Cross passage 6 (Hotham Gardens) - finishing works in progress
- Cross passage 7 (corner of Errol and O'Shanassy streets) - FRP lining works in progress
- Cross passage 8 (Villiers Street) - FRP lining works in progress
- Cross passage 9 (Flemington Road) - FRP lining works in progress
- Cross passage 10 (Church Street) - excavation complete and waterproofing ongoing
- Cross passage 11 (Canada Lane) - excavation complete and waterproofing underway.


## TUNNEL INTERNAL STRUCTURES

- Currently pouring the flat form section (invert/floor) of the tunnel
- 900 m of invert poured to date
- Works to occur in the westbound tunnel between the Western Portal (Kensington) and Arden Station between mid-February and mid-March
- Works to occur in the eastbound tunnel between the Western Portal (Kensington) and Arden between midMarch and mid-April.


The screeding gantry used when pouring the tunnel invert

## STAKEHOLDER AND COMMUNICATIONS UPDATE

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## ENGAGEMENT AND COMMUNICATIONS UPDATE

## NORTH MELBOURNE AND PARKVILLE

## Notifications and communications

- North Melbourne - February/March Construction Update (8 February)
- North Melbourne - Laurens Street realignment works Bicycle Network Victoria e-newsletter and website article ( 25 February)
- North Melbourne - Driven piling commencement notification (11 March)
- Parkville - Construction Update - February and March (13 February)
- Parkville - Grattan Street west station entrance construction (26 February)
- Parkville - weekly update to key stakeholders (ongoing).


## ENGAGEMENT AND COMMUNICATIONS UPDATE

## NORTH MELBOURNE AND PARKVILLE

## Door knocks, meetings, briefings and events

- North Melbourne - fortnightly meetings with City of Melbourne (17 February, 3 March, 17 March )
- North Melbourne - Mauri ANZ (George Weston Foods) monthly briefings (11 February, 11 March)
- North Melbourne - cross passages 10 and 12 stakeholder health check drop-ins and phone calls (10 February, 24 February, 9 March)
- North Melbourne - meetings with North Melbourne Football Club to discuss the North Network Arden Business Membership (2 March, 10 March, 23 March)
- North Melbourne - meeting with North West Melbourne Association to discuss the Arden Station hoarding update (12 March)
- North Melbourne - phone calls/emails to site adjacent residents and businesses to confirm the commencement of driven piling (12 March)
- North Melbourne - on-site meeting with CitiPower to discuss planned Laurens Street substation decommissioning works (19 March)
- Parkville - fortnightly meetings with Peter MacCallum Cancer Centre, Melbourne Health, University of Melbourne, City of Melbourne; monthly meetings with Graduate House
- Parkville - business engagement (December and January check-ins).

Presenters: Kim Norton \& Danielle Smits

## ENGAGEMENT AND COMMUNICATIONS UPDATE

## NORTH MELBOURNE AND PARKVILLE

Community issues and enquiries or key stakeholder engagement

- Queensberry Street - impact on local parking following Laurens Street realignment
- Grattan Street west station entrance construction
- Grattan Street east - Goods lift, tunnel ventilation shaft and chiller plant works.


## Upcoming engagement

- Laurens Street realignment
- Cross passage construction updates (ongoing).


## METRO TUNNEL CREATIVE PROGRAM UPDATE

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## ARDEN STATION HOARDING UPDATE

- Collaboration between Metro Tunnel Creative Program and North West Melbourne Association (Hotham History Project)
- A large scale illustrated timeline depicting the history of North Melbourne - from pre-colonial to today
- NWMA to collate significant points of history to lead framework design.


## QUESTIONS?

## NEXT MEETING

Friday 21 May 2021


