



**MEETING 7** 

1 NOVEMBER 2019







### **AGENDA**

- 1. Introductions and welcome
- 2. Construction update Parkville
- 3. Construction update North Melbourne
- 4. Cross passage ground improvement works (CP5)
- 5. Tunnelling update
- 6. Engagement and communications update
- 7. Intake Substation Development Plan & Early Works Plan amendment
- 8. Questions
- 9. Meeting close







# **CONSTRUCTION UPDATE - PARKVILLE**







# **PARKVILLE 2019/2020 TIMELINE**

Activity	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020
Grattan St east / Stage 2 - closed excavation - trucks removing material under deck															
Grattan St east / Retail and entrances excavation															
Grattan St west / service relocations															
Grattan St east / Stage 3- closed excavation - gantry cranes															
Grattan St east / base slab															
Grattan St west / Station entrance construction															

Dates are indicative and subject to change

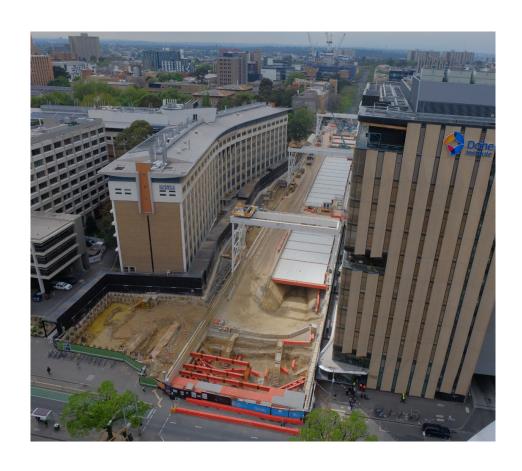






### WHAT'S HAPPENING AT GRATTAN ST EAST

- Phase 2 excavation underway
- Phase 3 excavation November 2019
- Station box bulk excavation scheduled for completion
  - Q1 2020
- Strut and ground anchor installation ongoing
- Works underway on the northern side of the box to relocate services, install struts, commence excavation.

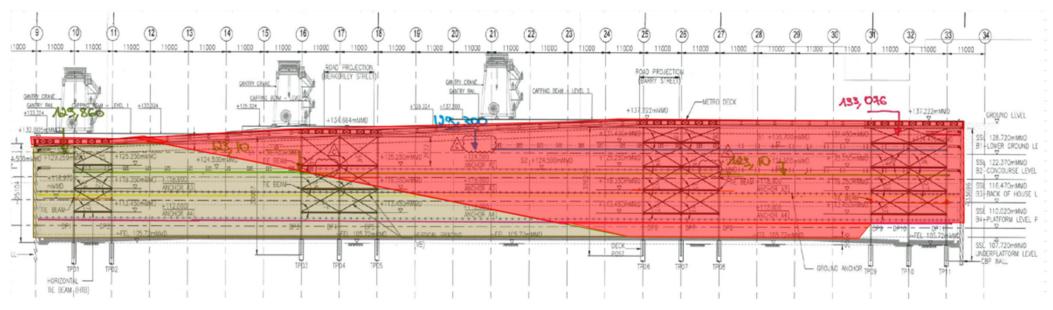


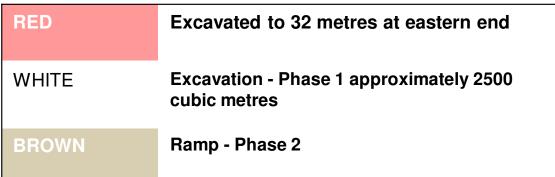






### **EXCAVATION PROGRESS**

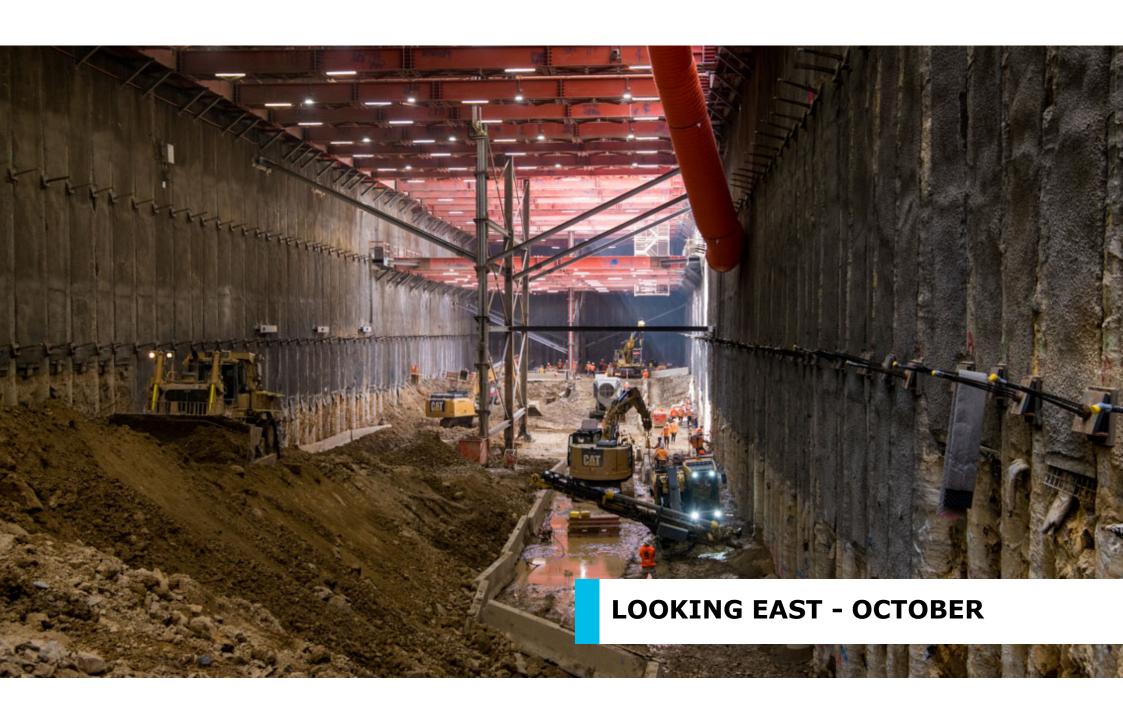


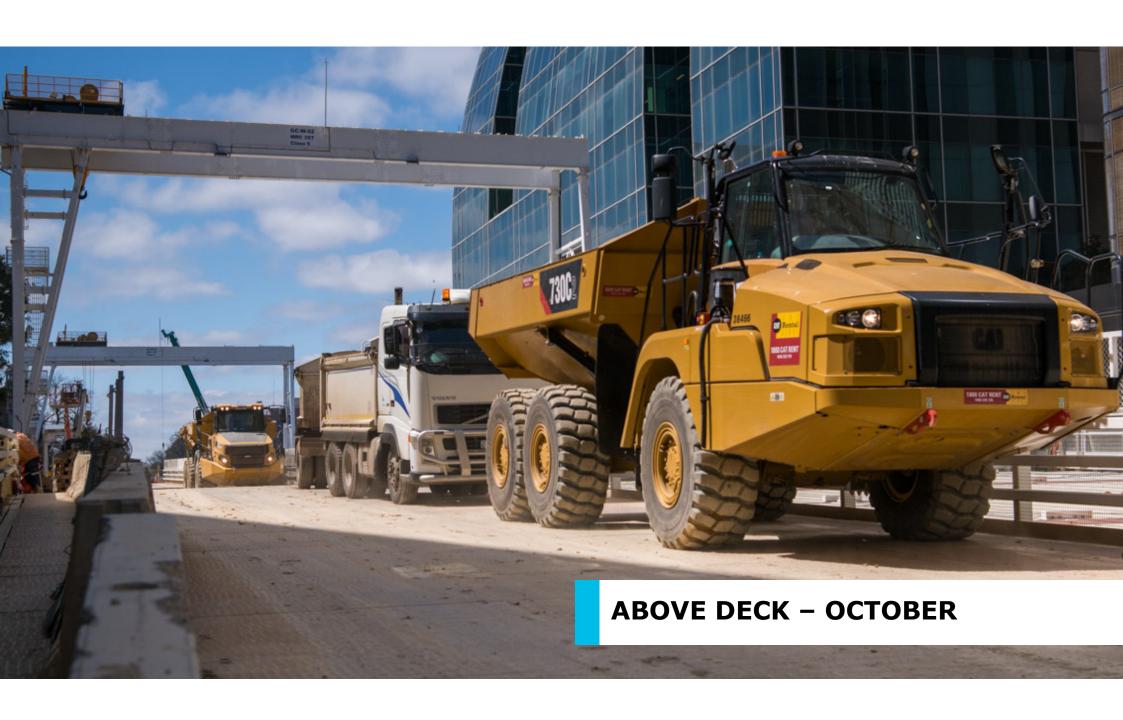


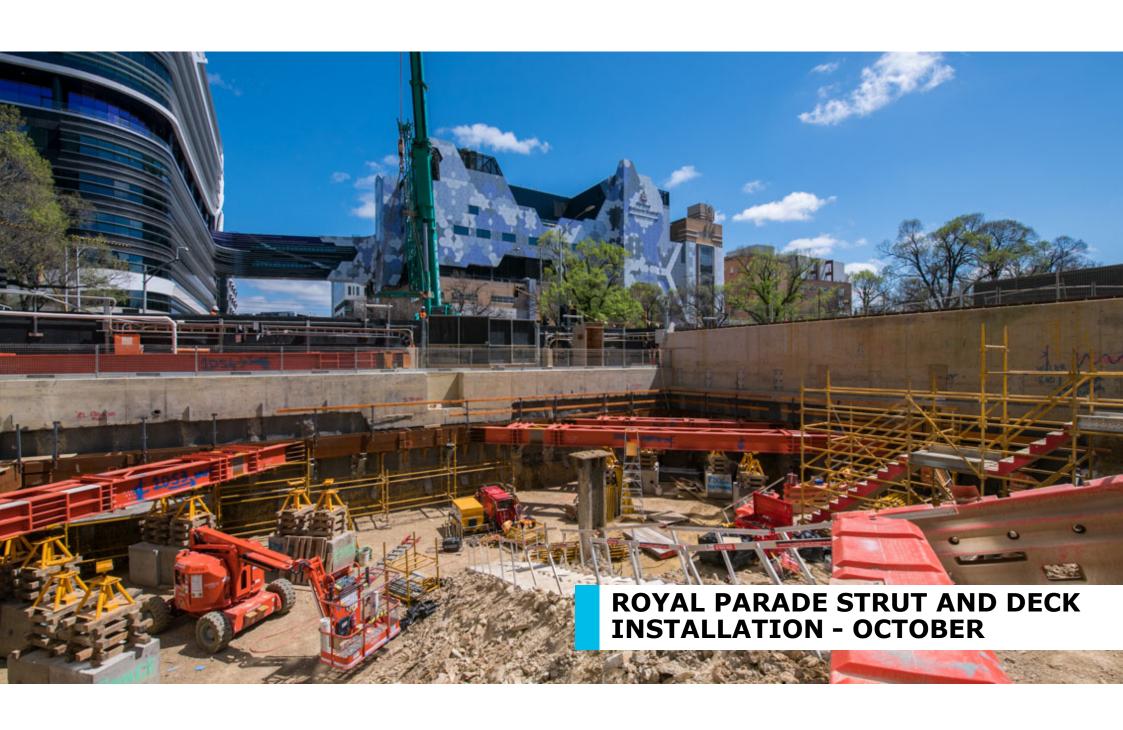






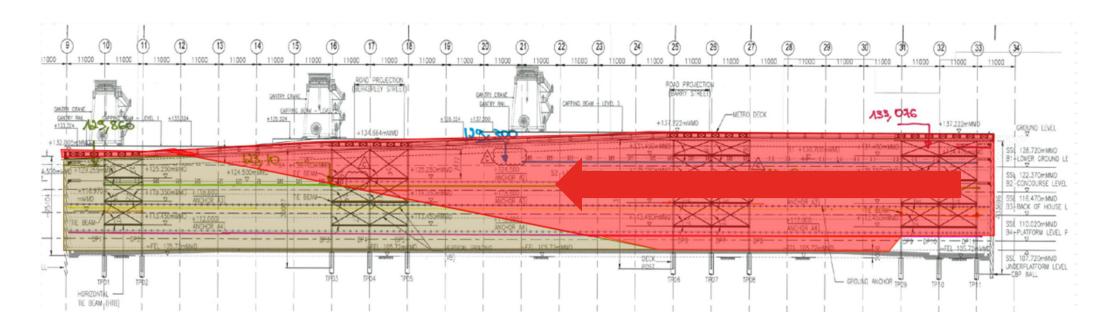






## **PERMANENT STRUCTURE WORKS**

### From November 2019





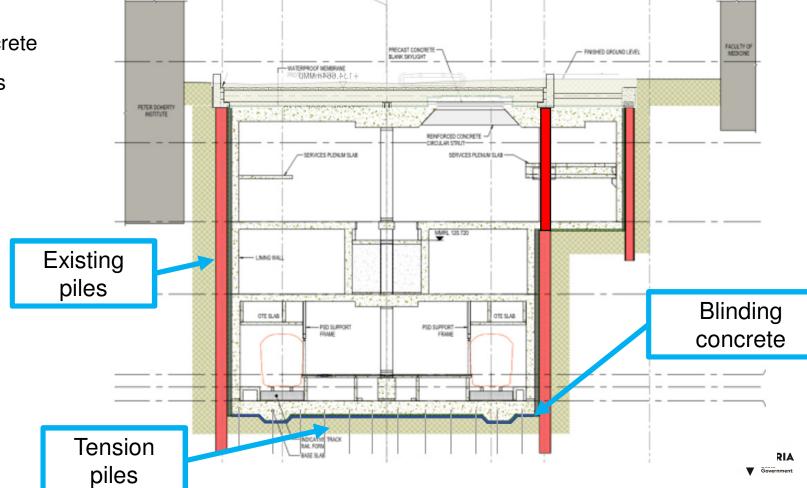




## **PERMANENT STRUCTURE – Q4 2019**

### Stage 1:

- Pour blinding concrete
- Install tension piles



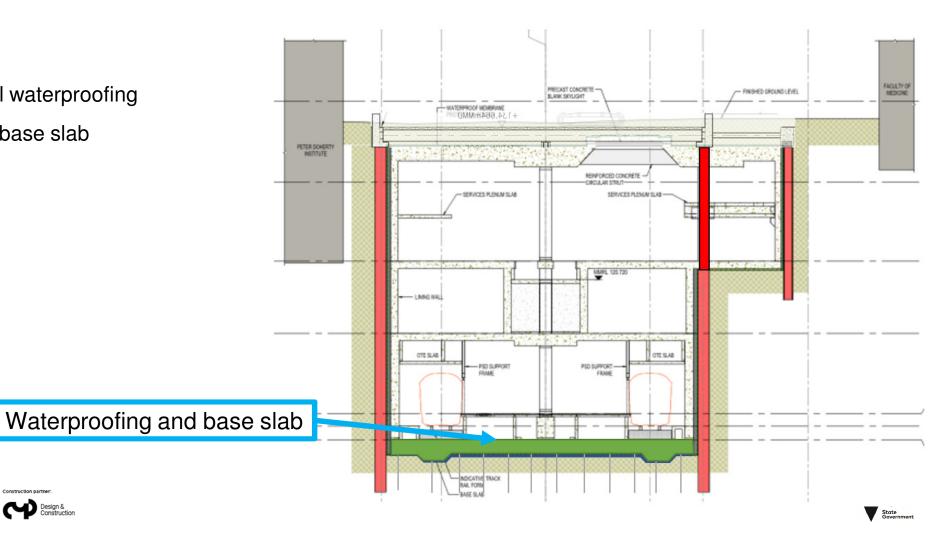




## **PERMANENT STRUCTURE – Q4 2019**

### Stage 2:

- Install waterproofing
- Pour base slab





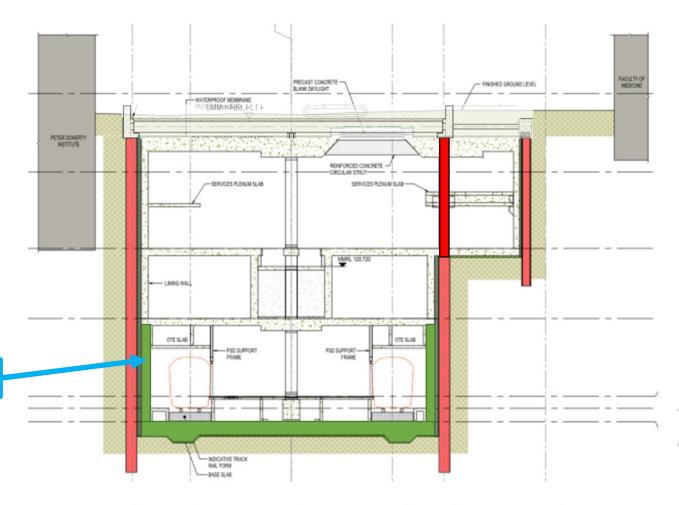


## **PERMANENT STRUCTURE - Q4 2019**

Lining walls

### Stage 3:

Pour lining walls





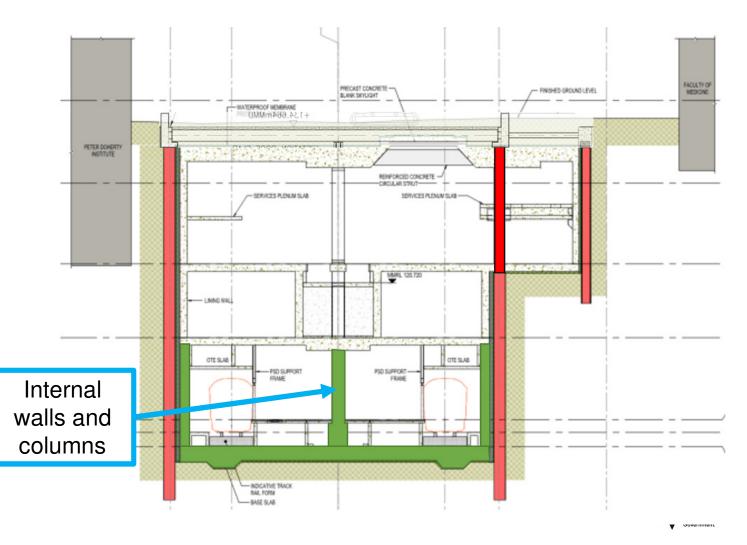




## **PERMANENT STRUCTURE - Q1 2020**

### Stage 4:

Pour internal walls and columns







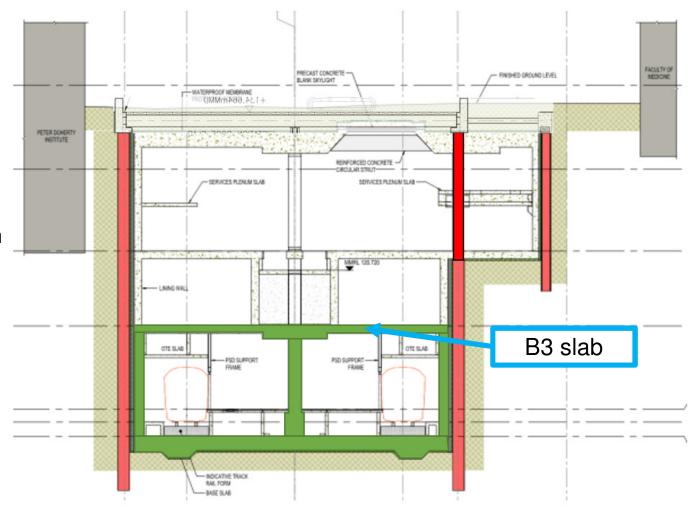
## **PERMANENT STRUCTURE - Q2 2020**

### Stage 5:

Pour B3 slab

### Next steps:

- TBM arrival Q3 2020
- Permanent structure construction







### **GRATTAN ST WEST - CURRENT WORKS**

### **Grattan Street southern footpath**

 Sewer and telecommunications relocations: underway until mid November (night works)

### Elizabeth Street/Royal Parade northbound lanes

- Sewer, water, gas decommissioning: underway until Friday 1 November (night works)
- Irrigation and installation of northern cut through to facilitate cyclist merge: underway until Friday 1 November (day works)









### **UPCOMING WORKS**

### **Elizabeth Street/Royal Parade northbound service lane closure**

- 24/7 from Friday 8 November for approximately 4 weeks
- Work hours:
  - 7am to 6pm, Monday to Friday
  - 24 hours, from 7pm Fridays to 7am Mondays
- Scope of works:
  - Relocating underground services
  - Median modification to the Elizabeth Street median strip

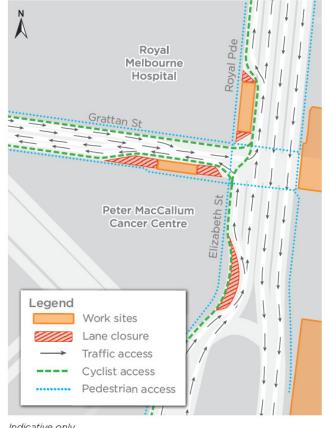




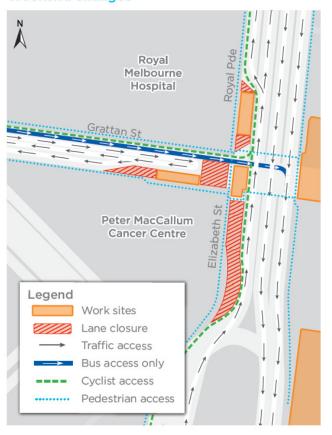


# TRAFFIC, CYCLIST AND PEDESTRIAN CHANGES

### Weekday changes



### Weekend changes



Indicative only

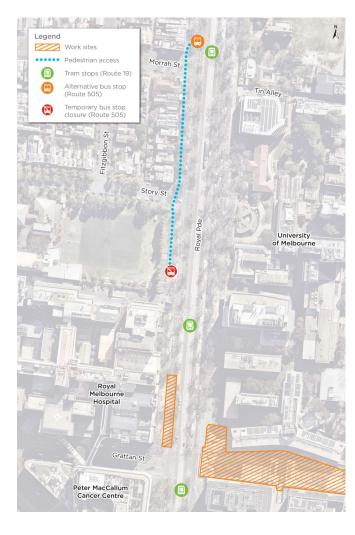






### **PUBLIC TRANSPORT CHANGES**

- No changes to Yarra Trams services during the works
- Bus route 505 will not service The Royal Melbourne Hospital/Royal Parade stop
- Passengers are advised to use the alternative bus stop at Morrah Street/Royal Parade, located 250 metres north on Royal Parade
- There will be no changes to the 401, 402, 403, 501, and 546 bus services.

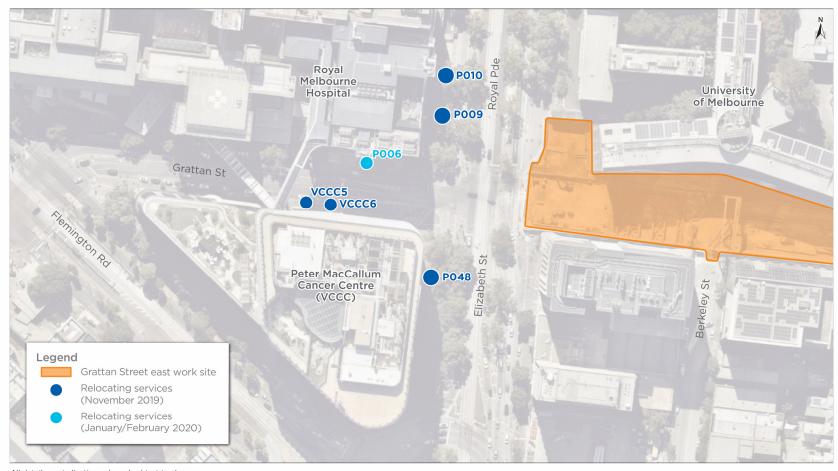


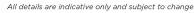






## **GRATTAN STREET WEST TREE REMOVAL**









## **CONSTRUCTION UPDATE – NORTH MELBOURNE**







## **CONSTRUCTION PROGRAM**

Activity	Nov	Dec	Jan	Feb	Mar	Apr
East box base slab construction						
East box wall construction						
Cross passage ground improvement - Lothian St (CP5)						
Concourse slab construction						

Program is indicative and subject to change







### WHAT'S HAPPENING IN NORTH MELBOURNE

### **Out of hours works**

- 6pm –10pm (evening works), Monday to Friday
  - Over-size equipment deliveries to and from site and use of a crawler crane to unload deliveries
  - Base slab, inner wall and concourse slab construction, and strut removal (east box)
- 10pm 7am (night works), Monday to Friday
  - Over-size equipment deliveries to and from site and use of a crawler crane to unload deliveries
  - Base slab and inner wall construction, and strut removal (east box)
  - Concrete deliveries for base and concourse slab construction.
  - Road cleaning on Arden and Laurens streets as required
  - After 6pm, construction vehicles will enter and exit via Arden Street wherever possible
- 24 hours, seven days a week
  - TBM assembly, tunnelling, slurry treatment plant, grout pump and segment facility operation.







# CROSS PASSAGE GROUND IMPROVEMENT WORKS (CP5 – LOTHIAN STREET)







## **WORK SITE – LOTHIAN STREET**









### **CROSS PASSAGE GROUND IMPROVEMENT WORKS**

- NDD service proving complete and underground services confirmed
- Site establishment: from 10 September (complete)
- Jet grout trials: 17 25 October (complete)
- Production jet grouting: from 30 October (up to 7 months)
- Completed communication and engagement:
  - Health check door knocks/meetings with directly impacted residents (Lothian Street, between Arden and Queensberry, Little Dryburgh Street N and Little Lothian Street N) – 15 October
  - Health check door knocks/meetings with directly impacted businesses (Lothian Street, between Arden and Queensberry, Little Dryburgh Street N and Little Lothian Street N) – 15 October
  - Ongoing 1:1 stakeholder meetings and provision of works notifications.







# **TUNNELLING**







## **TUNNELLING TIMELINE**

Indicative timing	Activity			
Remainder of 2019	TBM 1 & 2 tunnelling North Melbourne to Western Portal			
Q1 2020	TBM 1 & 2 retrieved and transported back to North Melbourne			
Q2 2020 – Q4 2020	TBM 1 & 2 tunnelling North Melbourne to Parkville			

Program is indicative and subject to change







## **TUNNELLING PROGRESS**

- TBM Joan has crossed the boundary of the project's Arden construction site. Joan has travelled approximately 250m and installed more than 140 rings
- TBM Meg has commenced tunnelling within the Arden construction site. Meg has travelled approximately 50 metres and installed more than 20 rings
- Tunnel depth and alignment maps have been uploaded onto the Metro Tunnel website and registered stakeholders advised
- https://metrotunnel.vic.gov.au/construction/building-the-tunnels-and-stations/tunnel-boring-machines







# **TUNNELLING PROGRESS**







Looking into the first tunnel entrance via the steel bell

# **TUNNELLING PROGRESS**





The first tunnel

# STAKEHOLDER AND COMMUNICATIONS UPDATE







### **ENGAGEMENT & COMMUNICATIONS UPDATE**

#### NORTH MELBOURNE AND PARKVILLE

### **Notifications and communications**

- Advice of confirmed timing of tree removals in Lothian Street (18 September)
- North Melbourne Advice of over-sized deliveries to Lothian Street (1 October)
- Parkville October-November Construction Update (5 October)
- North Melbourne October November Construction Update (7 October)
- Parkville Grattan Street west construction notification (8 October)
- Parkville Grattan Street west Royal Parade works notification (w/c 28 October).

### Door knocks, meetings, briefings and events

- City of Melbourne fortnightly progress meetings
- Ongoing fortnightly meetings with Peter Mac, Melbourne Health, UoM, Graduate House, CoM
- MAURI ANZ monthly works interface meeting (19 September)
- Meeting with Chep (23 September)
- Arden site visit by the Dutch Prime Minister (11 October)
- Site tour for Institute of Civil Engineers (14 October)
- Lothian Street businesses site establishment health check door knock (15 October)
- Residents of Lothian Street site establishment health check door knock (15 October).







### **ENGAGEMENT & COMMUNICATIONS UPDATE**

### NORTH MELBOURNE AND PARKVILLE

### **Community issues/enquiries**

Tunnel alignment enquiries and property condition survey requests

### **Upcoming engagement**

- Ongoing cross passage ground improvement notifications, meetings and health checks with residents and businesses
- Meeting with North Melbourne Primary School to discuss community support opportunities
- Ongoing meetings with businesses and stakeholders about Grattan Street west works.







# **INTAKE SUBSTATION DEVELOPMENT PLAN**







## **INTAKE SUBSTATION**

- Electrical substation that will connect the new North Melbourne Station to the West Melbourne Terminal Station, to power the station and tunnels
- Early works, including some tree removal and demolition, are anticipated to start in the coming months, following approval of amended Early Works Plan (originally approved in January 2018)
- Early works activities may include:
  - Demolition of existing infrastructure (disused MTM building)
  - Site preparation, clearing and installation of hoarding / temp fence
  - Utilities service connection, (directional boring under the Moonee Ponds Creek and the existing train tracks to install cable routes)
  - Ground excavation and grading
  - Piling
- Main construction expected to commence in March/April 2020, following approval of the Development Plan (targeted approval early March 2020)
  - Four months of external construction, followed by internal/electrical fit out
- Tree removals will be required, subject to approvals. Number of trees to be removed is to be confirmed and reinstatement will be undertaken in consultation with City of Melbourne.

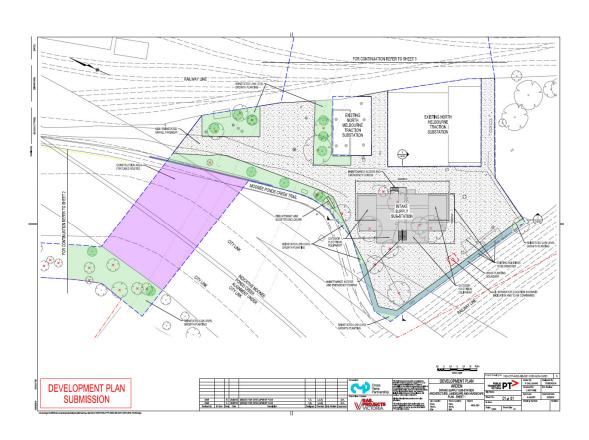






# **INTAKE SUBSTATION**











# **EXISTING CONDITIONS**











## **NEXT STEPS**

- Draft Development Plan October 2019
- Stakeholder consultation ongoing
- Development Plan Public Display period 18 November to 6 December 2019
  - CRG members will be emailed a link to the Development Plan when it is released for public display.







# **LEGACY ARTWORK UPDATE**

## LEGACY ARTWORK PROGRAM UPDATE

- Line-wide artist selection process underway. Public announcement anticipated in the coming weeks
- Shortlisting process underway for North Melbourne and State Library stations (expression of interest) and Parkville and Anzac stations (direct invitation)
- Five artists will be shortlisted for each station commission in late 2019
- Shortlisted artists will be briefed and develop their concepts in early 2020 for assessment by the Metro Tunnel Arts Advisory Panel and government
- Stakeholders are invited to provide location-specific information for the shortlisted artists to consider when developing their concepts via an online submission form on the Metro Tunnel website.









# METRO TUNNEL CREATIVE PROGRAM UPDATE



# METROTUNNEL METRO TUNNEL CREATIVE PROGRAM **UPDATE**





# **QUESTIONS?**







## **NEXT MEETING**

• Friday 13 December 2019







