



# ARDEN AND PARKVILLE COMMUNITY REFERENCE GROUP

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MEETING 10

3 April 2020



Construction partner:



# AGENDA

1. Introductions and welcome
2. Construction update – Parkville
3. Construction update – North Melbourne
4. Tunnelling
5. Stakeholder and communications
6. Parkville Storytelling Project
7. Questions
8. Meeting close

# THE METRO TUNNEL PROJECT: HEALTH AND SAFETY

The health and safety of our workers is our key priority as we continue to deliver the Metro Tunnel Project, as is supporting social distancing measure in line with current health advice.

We have strict protocols in place to protect the safety of our construction workforce, including enhanced industrial cleaning arrangements, provision of personal protective equipment and measures to reduce staff contact, including staggered shifts.

For more information and advice about the outbreak of Coronavirus, please visit **[coronavirus.vic.gov.au](https://coronavirus.vic.gov.au)**

# CONSTRUCTION UPDATE - PARKVILLE



# PARKVILLE 2020 PROGRAM

Activity	Apr	May	Jun	Jul	Aug	Sep
Grattan Street east: stage 3 excavation	Dark Grey	Light Blue				
Grattan Street east: permanent structure works	Light Grey					
Grattan Street east: Royal Parade entrance and retail area excavation	Dark Grey					

*Dates are indicative and subject to change*

# CONSTRUCTION UPDATE – GRATTAN STREET EAST

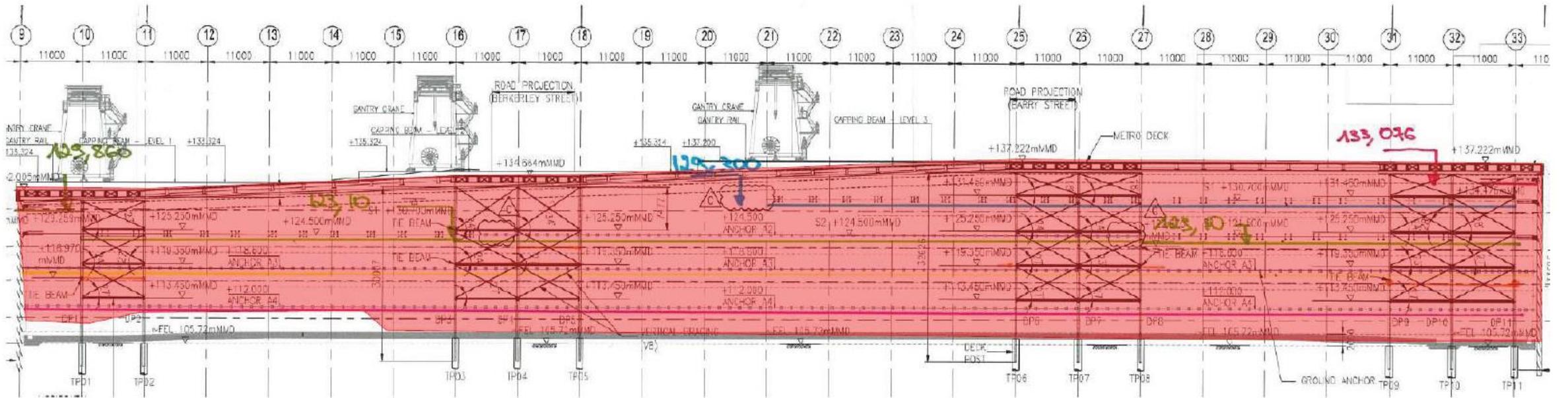


# WHAT'S HAPPENING AT GRATTAN ST EAST

- Station box bulk excavation will be completed by mid-April 2020
- Tension pile works ongoing
- Permanent structure works continue, including concrete pours to construct the base slab and station walls
- Commencing Royal Parade station entrance and retail area excavation and associated activities.

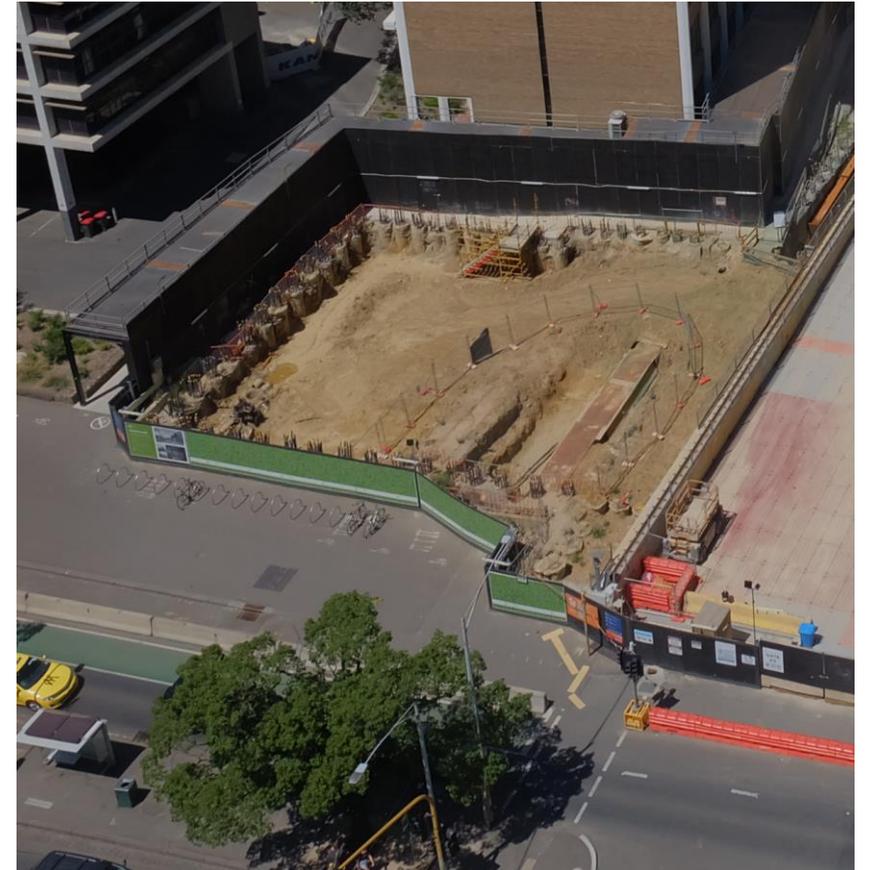


# EXCAVATION PROGRESS

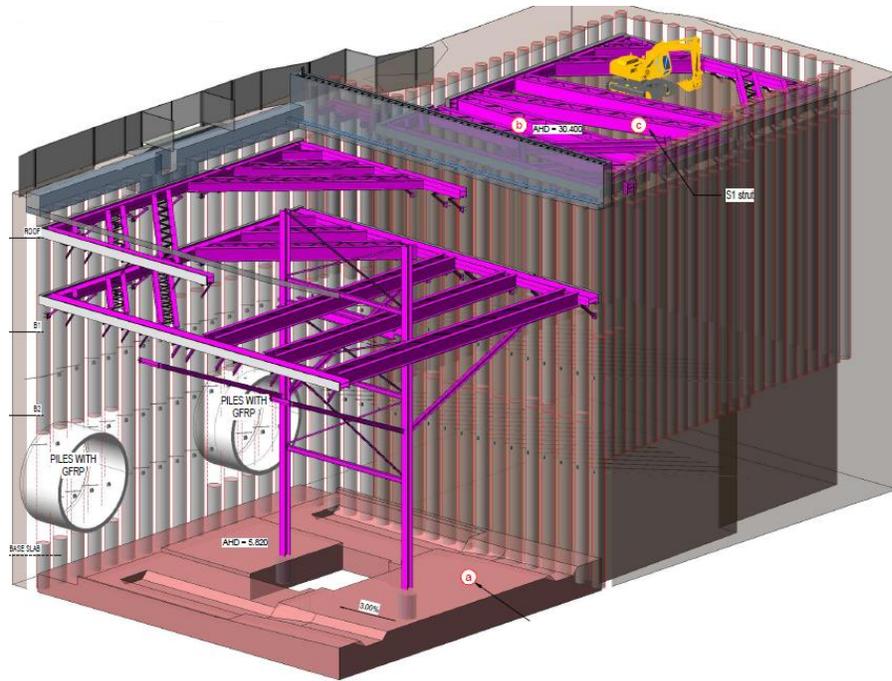


# ROYAL PARADE STATION ENTRANCE EXCAVATION

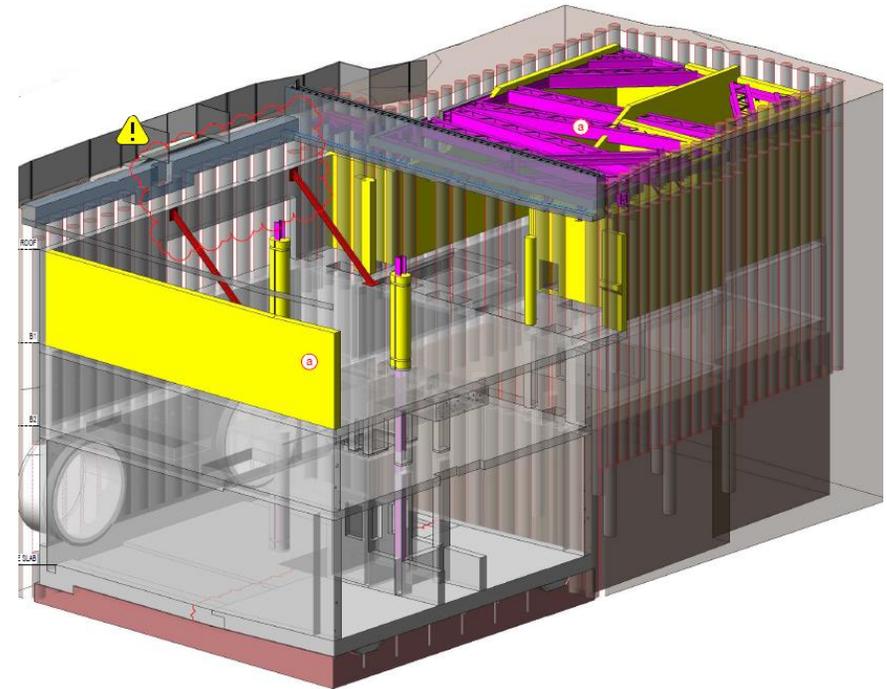
- Works to commence in late April to excavate the station entrance
- Construction sequencing involves staging of excavation, strutting, shotcrete and tension piles
- Total excavation depth approximately 20 metres
- Excavation and associated works ongoing until mid-late 2021
- Following excavation and associated works, station entrance construction will continue with permanent structure works.



# ROYAL PARADE STATION ENTRANCE EXCAVATION



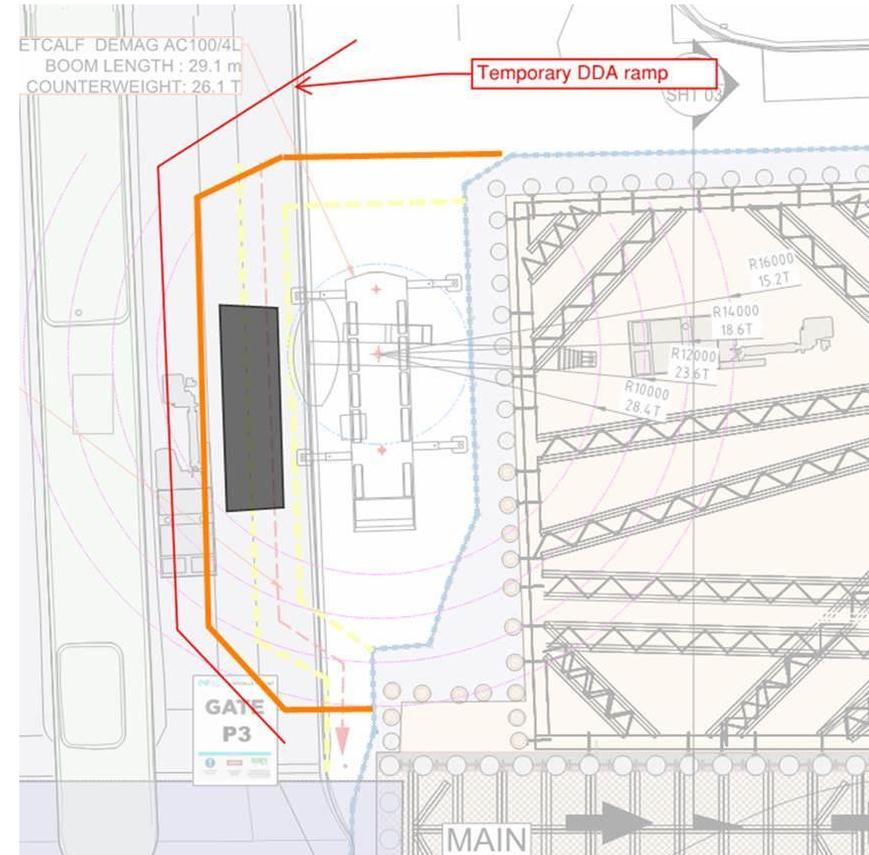
April 2020



Late 2021

# ROYAL PARADE ENTRANCE EXTERNAL SITE ACCESS

- At times, the Royal Parade eastern footpath may be utilised to lift machinery into the area or when using a long-reach excavator
- This will require the Royal Parade southbound service lane to be closed to divert pedestrians around the worksite.





**GRATTAN STREET EAST**



**GRATTAN STREET EAST**



**GRATTAN STREET EAST**

# CONSTRUCTION UPDATE – GRATTAN STREET WEST



# GRATTAN STREET WEST

The Metro Tunnel Project has made the decision to demobilise its construction site on Grattan Street and temporarily cease station entrance construction activities between Flemington Road and Elizabeth Street/Royal Parade, to allow The Royal Melbourne Hospital to focus on emergency operations during this time.

## Service relocations

- Grattan Street west service relocations works – completed late March 2020
- Telecommunications relocations ongoing until mid-April

## Station entrance construction

- Timing for station entrance construction on Grattan Street, adjacent to The Royal Melbourne Hospital and the Peter MacCallum Cancer Centre, will be provided well in advance of works commencing.



**GRATTAN STREET WEST**





**GRATTAN STREET WEST**

# CONSTRUCTION UPDATE – NORTH MELBOURNE



# NORTH MELBOURNE PROGRAM

Activity	Mar	Apr	May	Jun	Jul	Aug
TBM retrieval, transport and reassembly						
Cross passage ground improvement, Lothian St (CP5)						
East box concourse slab construction						
West box inner wall construction						
Tunnelling (Arden to Parkville)						
Intake substation early works and construction						

*Program is indicative and subject to change*

# WHAT'S HAPPENING IN NORTH MELBOURNE

## Arden Station site

- Inner wall construction
- Strut removal activities
- Operation of concrete batching plant (including transport of concrete to other Metro Tunnel sites)
- Site maintenance activities
- Service proving
- Survey and monitoring activities

## Cross passage 5 (Lothian Street)

- Production jet grouting and rock grouting - complete
- Site demobilisation and reinstatement

## North Melbourne electrical (intake) substation

- Service investigations
- Site establishment
- Development Plan approved 27 March 2020 (major construction scheduled to commence in mid-2020)

# WHAT'S HAPPENING AT ARDEN STATION

## Out of hours works (Arden Station site)

- 6pm –10pm (evening works), Monday to Friday
  - Inner wall construction, including concrete deliveries
  - Strut removal, above concourse slab
- 10pm – 7am (night works), Monday to Friday
  - Over-size equipment deliveries to and from site and use of a crawler crane to unload deliveries
  - Inner wall construction including concrete deliveries
  - 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 part transport, cleaning and assembly
  - Tunnelling, slurry treatment plant, grout pump and segment facility operation
  - Over-size TBM part deliveries to site and use of a crawler crane to unload parts.



**CONCOURSE & INNER WALL CONSTRUCTION**

# CONCOURSE CONSTRUCTION





**EAST BOX PREPARATION FOR  
TBM RETURN AND REASSEMBLY**



## **EAST BOX PREPARATION FOR TBM REASSEMBLY**

# TUNNELLING



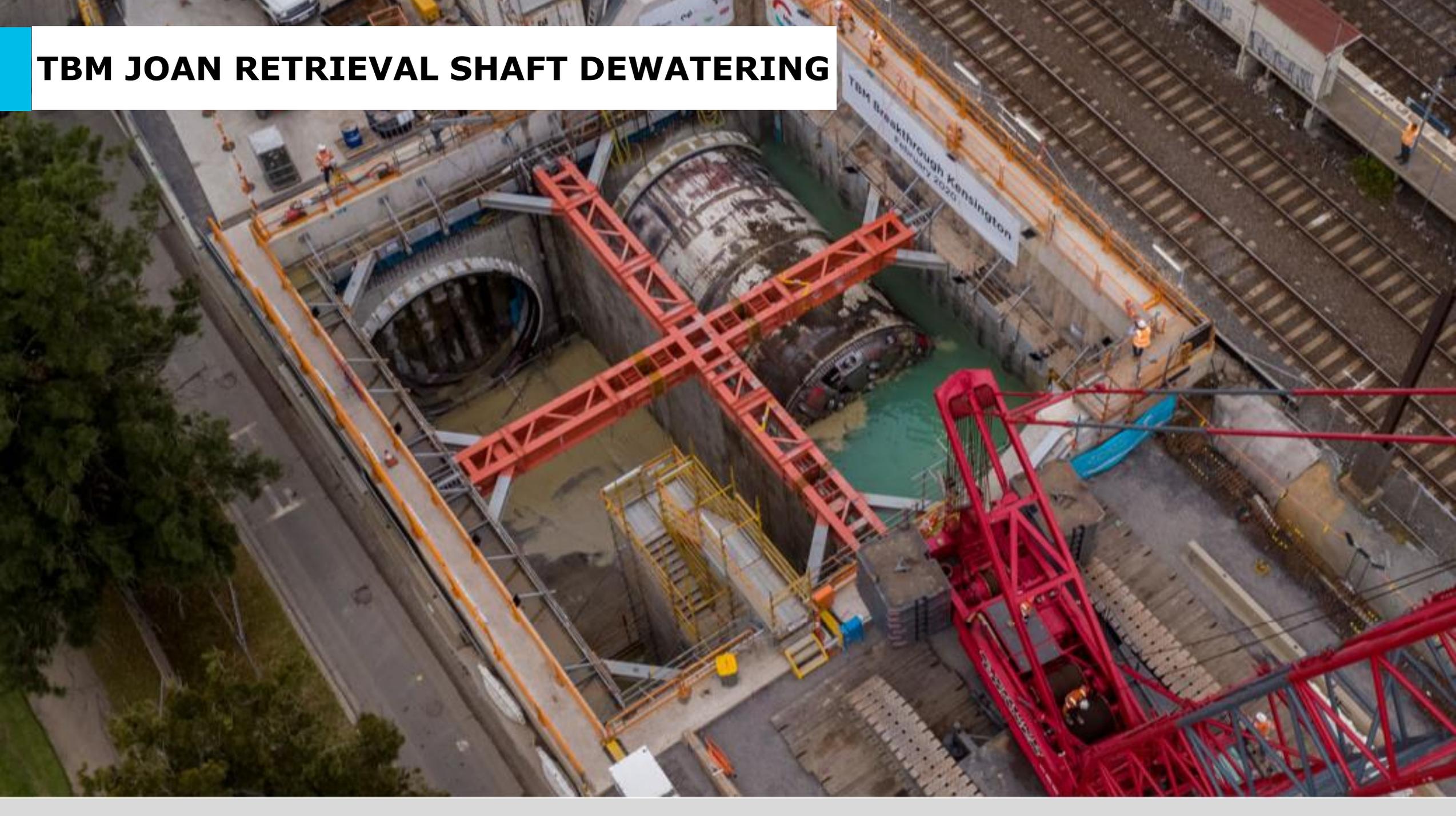
# TUNNELLING TIMELINE

Indicative timing	Activity
February – May 2020	TBM 1 and 2 retrieved and transported back to North Melbourne
May – late 2020	TBM 1 and 2 tunnelling North Melbourne to Parkville

*Program is indicative and subject to change*

- TBM Joan breakthrough at Western Portal – 18 February 2020
- TBM Meg breakthrough at Western Portal – 14 March 2020

# TBM JOAN RETRIEVAL SHAFT DEWATERING





## TBM RETRIEVAL SHAFT DEWATERING

# RETRIEVAL SHAFT FLOODING & TBM DISASSEMBLY



# TBM MEG BREAKTHROUGH



# TBM RETRIEVAL PROGRESS

## TBM Joan

- Cutterhead, front and middle shields, tailskin and 5 gantries retrieved

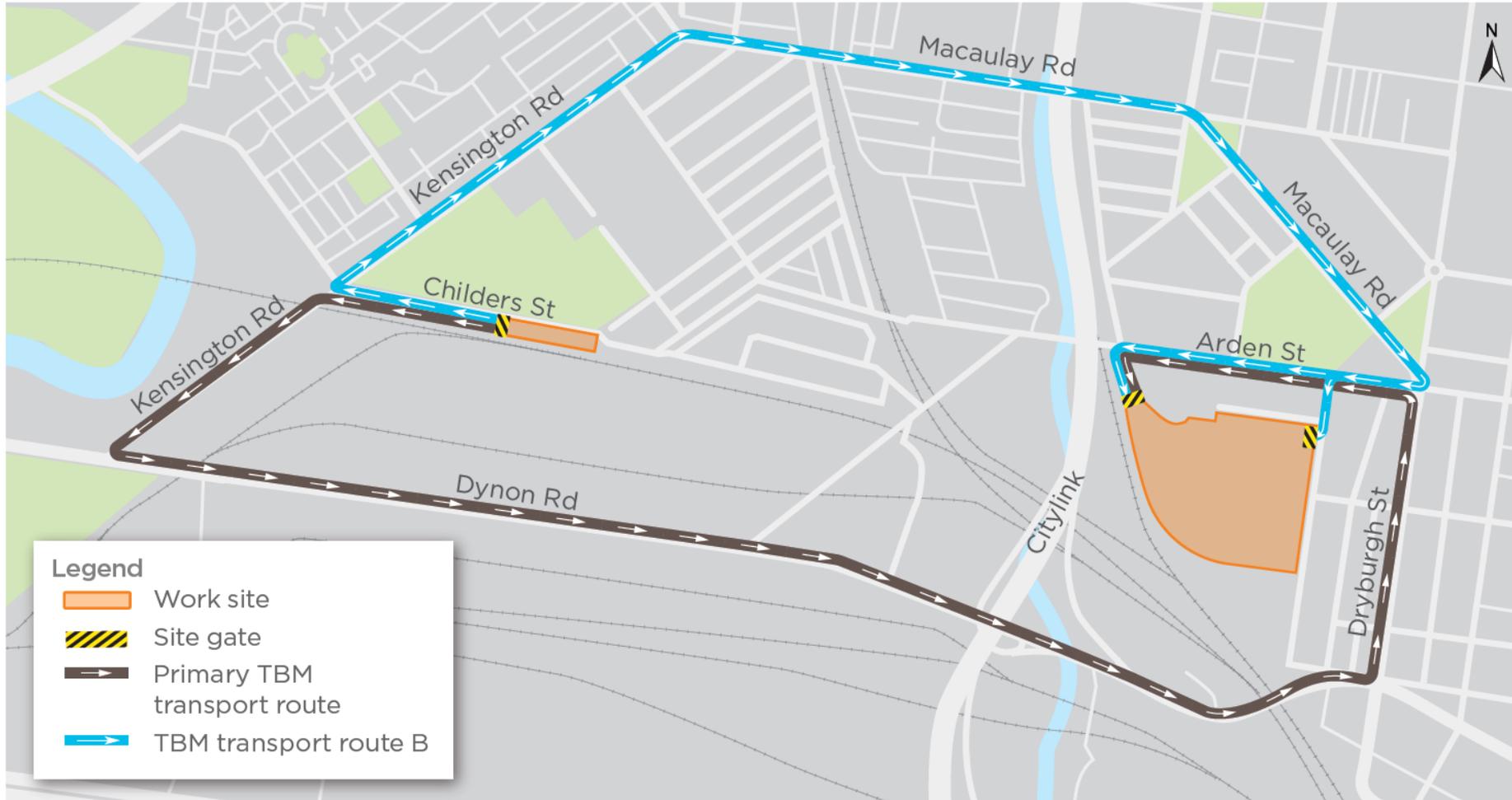
## TBM Meg

- Front and middle shields retrieved

# TBM JOAN CUTTERHEAD RETRIEVAL



# TBM RETRIEVAL – TRANSPORT ROUTES

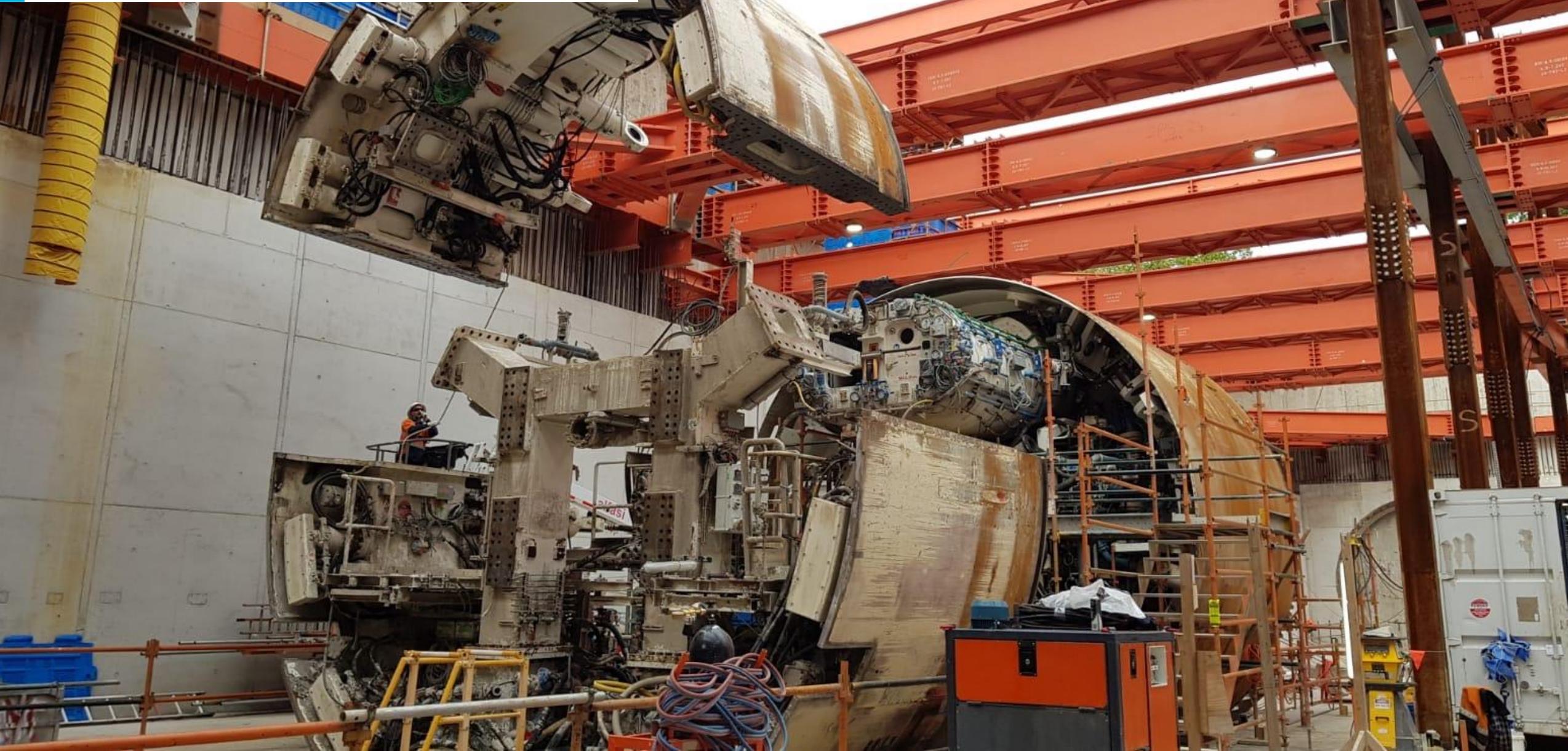


TBM delivery transport routes. Indicative only

# STEEL BELL REASSEMBLY



# TBM JOAN REASSEMBLY



# ENVIRONMENTAL MANAGEMENT

- Overview of Arden to Western Portal noise and vibration monitoring results

# PROPERTY CONDITION SURVEYS

- Distribution of property pre-condition survey invitation between North Melbourne and Parkville commenced on 17 February
- Letters are being distributed in stages, starting from adjacent to the site of the new Arden Station and progressing towards Parkville
- 748 survey offers sent to date (from Laurens Street to Mary Street)

# TUNNELLING COMMUNICATIONS AND ENGAGEMENT

## Communications to potentially impacted properties

- TBM arrival four-week-out letters
- On-line tunnelling information sessions (TBC)
- Telephone calls, videoconference briefings
- TBM 1 arrival letter
- TBM 2 arrival letter

# STAKEHOLDER AND COMMUNICATIONS UPDATE



# ENGAGEMENT AND COMMUNICATIONS UPDATE

## NORTH MELBOURNE AND PARKVILLE

### Notifications and communications

- Arden – April 2020 Construction Update (3 April)
- Parkville – April/May 2020 Construction Update (w/c 6 April)

### Door knocks, meetings, briefings and events

- Parkville - fortnightly meetings with Peter MacCallum Cancer Centre, Melbourne Health, University of Melbourne, City of Melbourne and Graduate House
- Parkville – pop-up information stand at The Royal Melbourne Hospital (11 February)
- Parkville Precinct Reference Group (10 March)
- Arden – CP5 resident health check phone calls (25 & 26 March)
- Arden – fortnightly meetings with City of Melbourne (19 February, 4, 18 March, 1 April)

# ENGAGEMENT AND COMMUNICATIONS UPDATE

## NORTH MELBOURNE AND PARKVILLE

### Community issues and enquiries

- Tunnel alignment, strata divestment and property condition survey enquiries

### Upcoming engagement

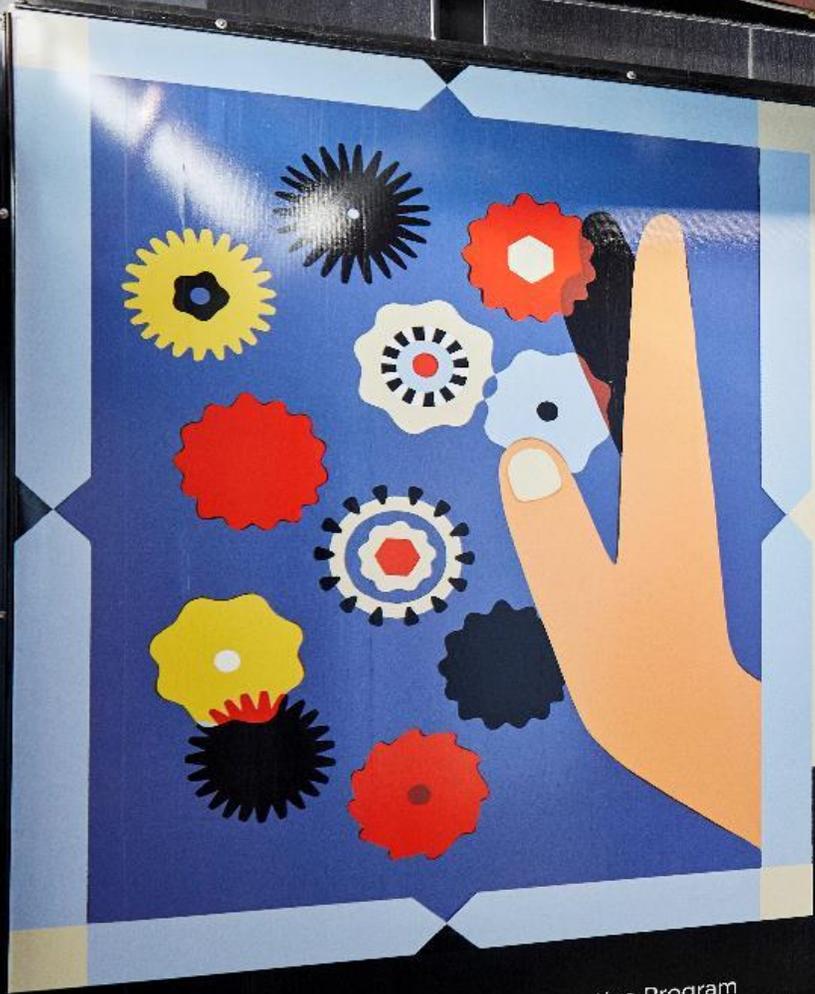
- Ongoing cross passage ground improvement notifications and health checks with residents and businesses
- Commencement of tunnelling health communication with North Melbourne residents and businesses
- Royal Parade station entrance excavation with key stakeholders

# PARKVILLE STORYTELLING UPDATE



# PARKVILLE STORYTELLING PROJECT





Laureate Professor Peter Doherty  
Nobel Prize winner 1996 and Australian of the Year 1997  
The Peter Doherty Institute for Infection and Immunity  
Illustrated by Antra Švarcs

Commissioned by the Metro Tunnel Creative Program  
Read the story at [metrotunnel.vic.gov.au/parkvillestories](http://metrotunnel.vic.gov.au/parkvillestories)

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Dr. MacCallum (1885-1974)  
Doctor and Pathologist  
Peter MacCallum Cancer Centre  
Illustrated by Antra Svare

Sir Peter MacCallum (1885-1974)  
Doctor and Pathologist  
Peter MacCallum Cancer Centre  
Illustrated by Antra Svare



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The Royal Children's Hospital Melbourne  
Illustrated by Mark Conlan



The Royal Children's Hospital Melbourne  
Illustrated by Mark Conlan



Commissioned by the Metro Tamed Creative Program  
Read the story at [metroline.ca/corruption/1123018](http://metroline.ca/corruption/1123018)

Michaela Malcolm and Sarah Wells  
Mobile Intensive Care Ambulance (MICA) Flight Paramedics  
Ambulance Victoria  
Illustrated by Janelle Barone



Commissioned by the Metro Tunnel Creative Program  
Read the story at [metro.tunnel.vic.gov.au/parkville/stories](https://metro.tunnel.vic.gov.au/parkville/stories)

Associate Professor Kylie Mason  
Blood Cancer and Blood Disease Specialist  
The University of Melbourne, Royal Melbourne Hospital and Peter MacCallum Cancer Centre  
Illustrated by Alice Lindstrom

# QUESTIONS?



# NEXT MEETING

Friday 29 May 2020





**Western Portal**

South Kensington

**Arden**

**Parkville**

North Melbourne

**State Library**

Melbourne Central

Parliament

Flagstaff

**Town Hall**

Southern Cross

Flinders Street

Richmond

**Anzac**

South Yarra

**Eastern Portal**

Cranbourne / Pakenham Line

Sunbury Line