



CBD COMMUNITY REFERENCE GROUP

MEETING NO.9
18 MAY 2018



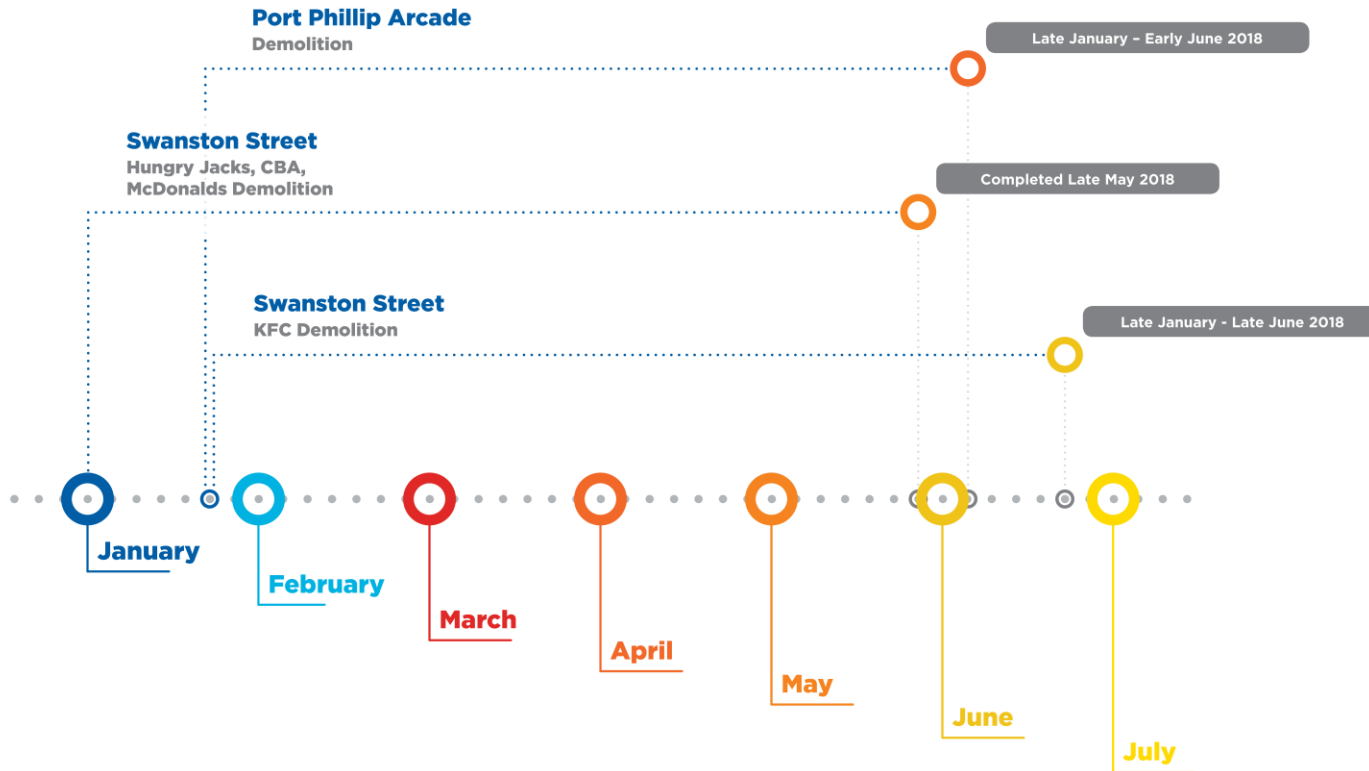
JOHN HOLLAND MANAGING CONTRACTOR - EARLY WORKS

METRO TUNNEL EARLY WORKS

TOWN HALL STATION UPDATE



TOWN HALL STATION TIMELINE – EARLY WORKS



Indicative timeline only

KFC DEMOLITION

- Internal strip out of Souvenir shop - **8 June**
- Demolition of building level 3 to the ground level - **21 June**
- Amenities relocation – **mid-June**
- Basement wall construction – **30 June**





SWANSTON STREET BUILDING DEMOLITION



PORT PHILLIP ARCADE DEMOLITION

- Neptune sculpture façade tile removal – **18 May**
- Building demolition – **30 May**

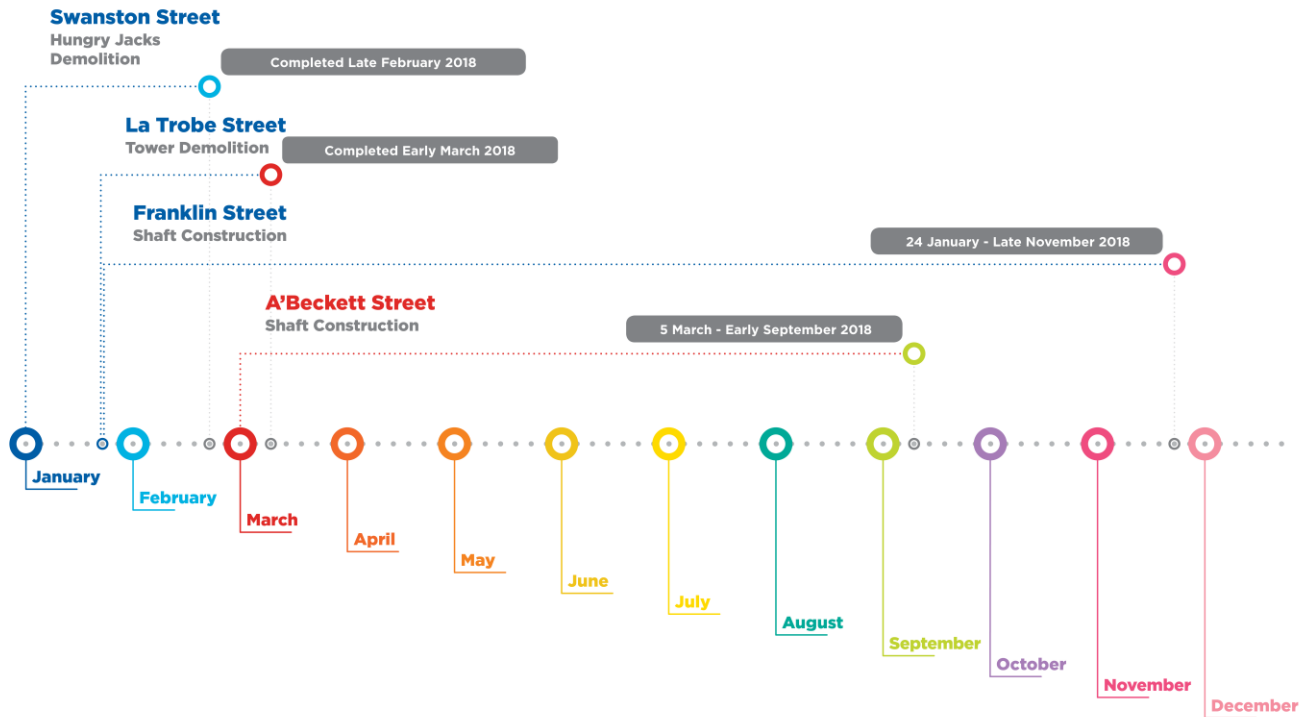


METRO TUNNEL EARLY WORKS

STATE LIBRARY STATION UPDATE



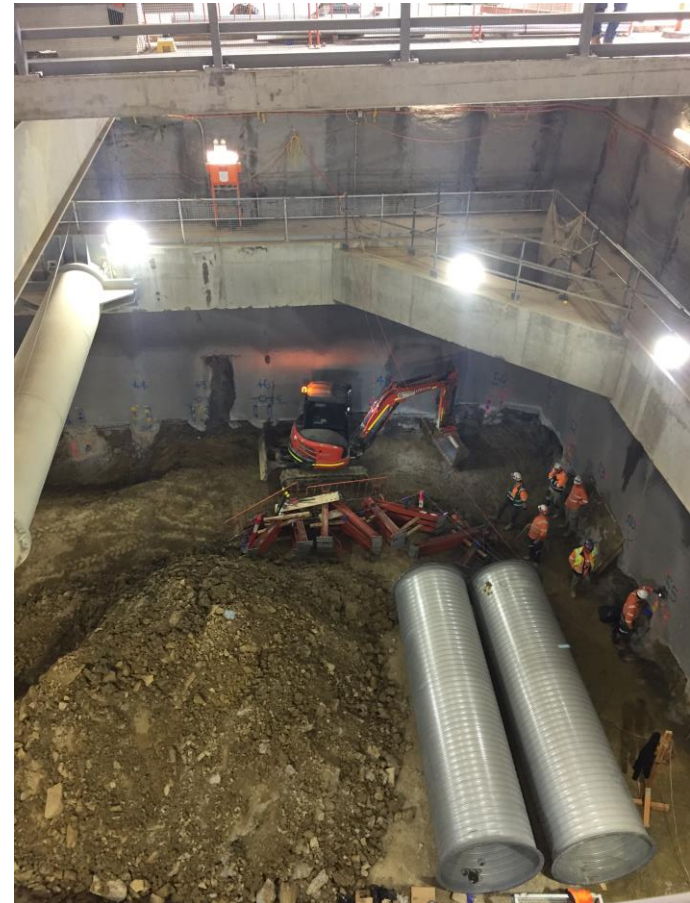
STATE LIBRARY STATION TIMELINE – EARLY WORKS



Indicative timeline only

FRANKLIN STREET & A'BECKETT STREET SHAFT UPDATE

- 24 hour works are now underway at both shaft sites within the acoustic sheds
- Deliveries of props, beams and materials 24 hours a day being prioritised to occur in early evenings from remote locations
- Doors to be closed for all night works





FRANKLIN STREET & A'BECKETT STREET SHAFT UPDATE



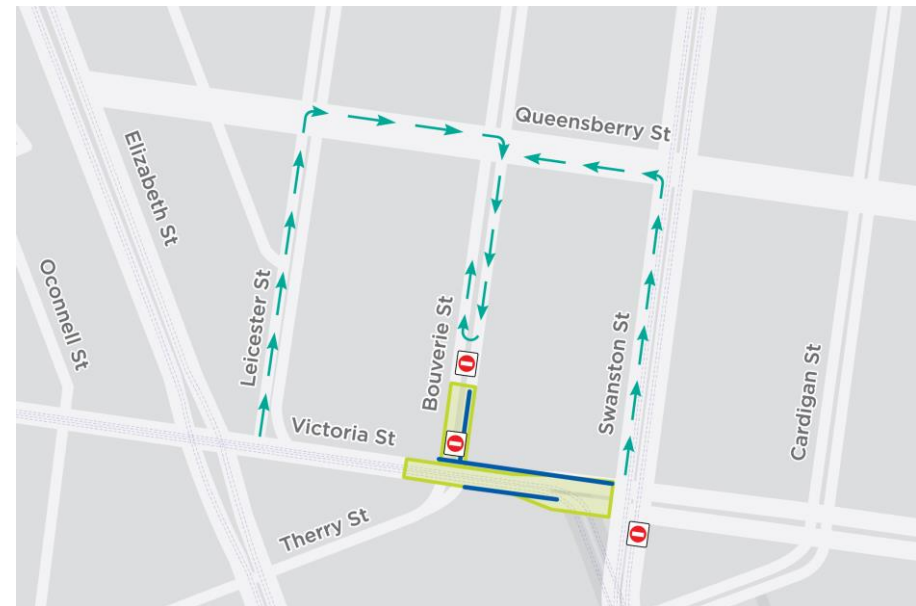


FRANKLIN STREET WEST SERVICE RELOCATION UPDATE

- Franklin Street utility relocation works, between Swanston Street and Stewart Street, are now complete
- Franklin Street south side footpath has been re-opened, may require short term closures to complete reinstatement works
- Franklin St West has reopened for vehicle access in one eastbound and westbound lane. Vehicle access is anticipated to be closed in September 2018 (TBC) for shaft construction.
- Ongoing reinstatement works taking place
- Weekend closures of Franklin Street required for inspection of recently completed drainage works until the end of May

GROUNDWATER MONITORING UPDATE

- Ongoing works on north and south side of Victoria Street requiring a combination of both day and night works
- We have completed all but 15 bore holes, with low level periods of noise at night for works moving forward
- Next phase of works to commence connecting boreholes on the northeast side of Victoria Street has begun with 4 pits installed.
- Pit and pipe works will be staged to run in the northbound lanes on Victoria Street from Swanston St working back towards Elizabeth Street





GROUNDWATER MONITORING UPDATE

- CYP will undertake works to activate groundwater management systems through the development of boreholes in early June
- Works are anticipated to generate low levels of noise
- These groundwater monitoring works will require a lane closure on the south side of Victoria St
- All CYP groundwater monitoring works will be undertaken at night time
- The community will be given written notice of these works, once dates are confirmed.



QUESTIONS



CROSS YARRA PARTNERSHIP UPDATE

Agenda

1. Program overview
2. Piling process
3. Archaeology update
4. Environmental performance monitoring sites
5. Property condition surveys
6. Pedestrian modelling - CBD South

Program overview



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Partnership

KEY CONSTRUCTION DATES - DEMOLITION

Station	Site	CYP indicative start	Indicative end
State Library Station	Little La Trobe	August 2018	December 2018
Town Hall Station	Federation Square	September 2018	December 2018

All demolition work will be carried out during standard construction hours (Monday to Friday 7am – 6pm and Saturday 7am - 1pm)

KEY CONSTRUCTION DATES – BORED PILING

Station	Site	CYP indicative start	Indicative end
Town Hall Station	City Square	Mid-2018	End 2018
	Flinders Quarter	Mid-2018	End 2018
	Federation Square	Start-2019	Mid 2019
State Library Station	La Trobe Street	Mid - July 2018	End 2018
	Little La Trobe	Late 2018	Early 2019
	Franklin Street West	Late 2018	Early 2019

All piling work will be carried out during standard construction hours (Monday to Friday 7am – 6pm and Saturday 7am - 1pm)

KEY CONSTRUCTION DATES – EXCAVATION

Station	Site	CYP indicative start	Indicative end
Town Hall Station	City Square	Mid-2019	End 2021
	Federation Square	Mid-2019	End 2021
	Flinders Quarter	Mid-2019	End 2021
State Library Station	La Trobe Street	Late 2018	End 2021
	Franklin Street East	End 2018	End 2021
	Franklin Street West	Start 2019	End 2021
	A'Beckett Street	End 2018	Early 2022
	Little La Trobe Street	Mid 2019	End 2020

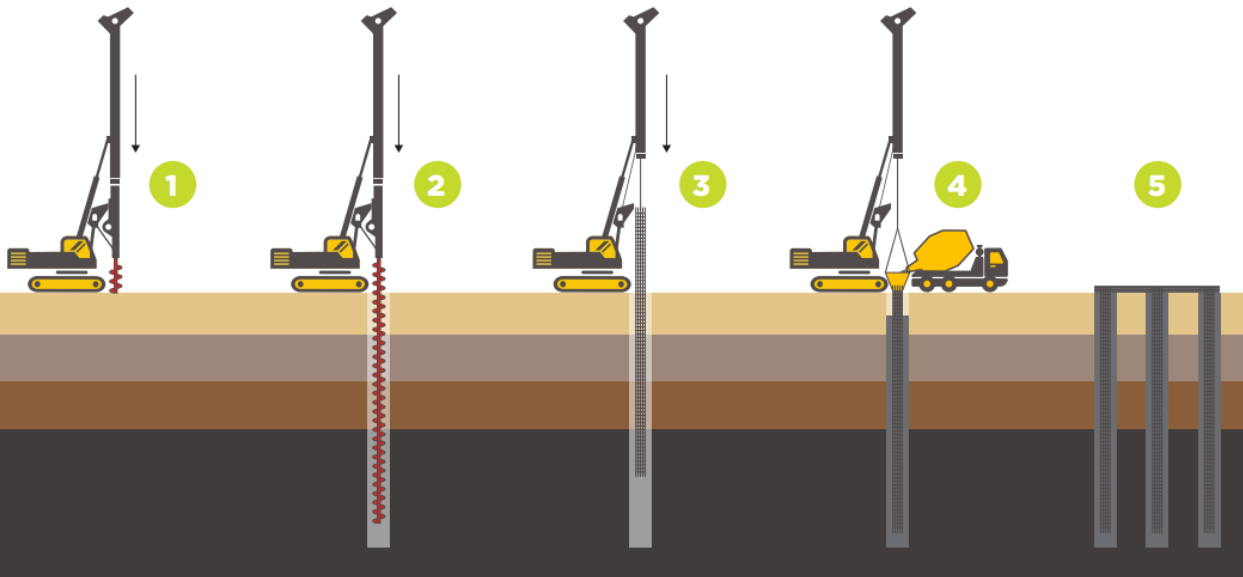
All excavation work will be carried out during standard construction hours (Monday to Friday 7am – 6pm and Saturday 7am - 1pm)

Piling process



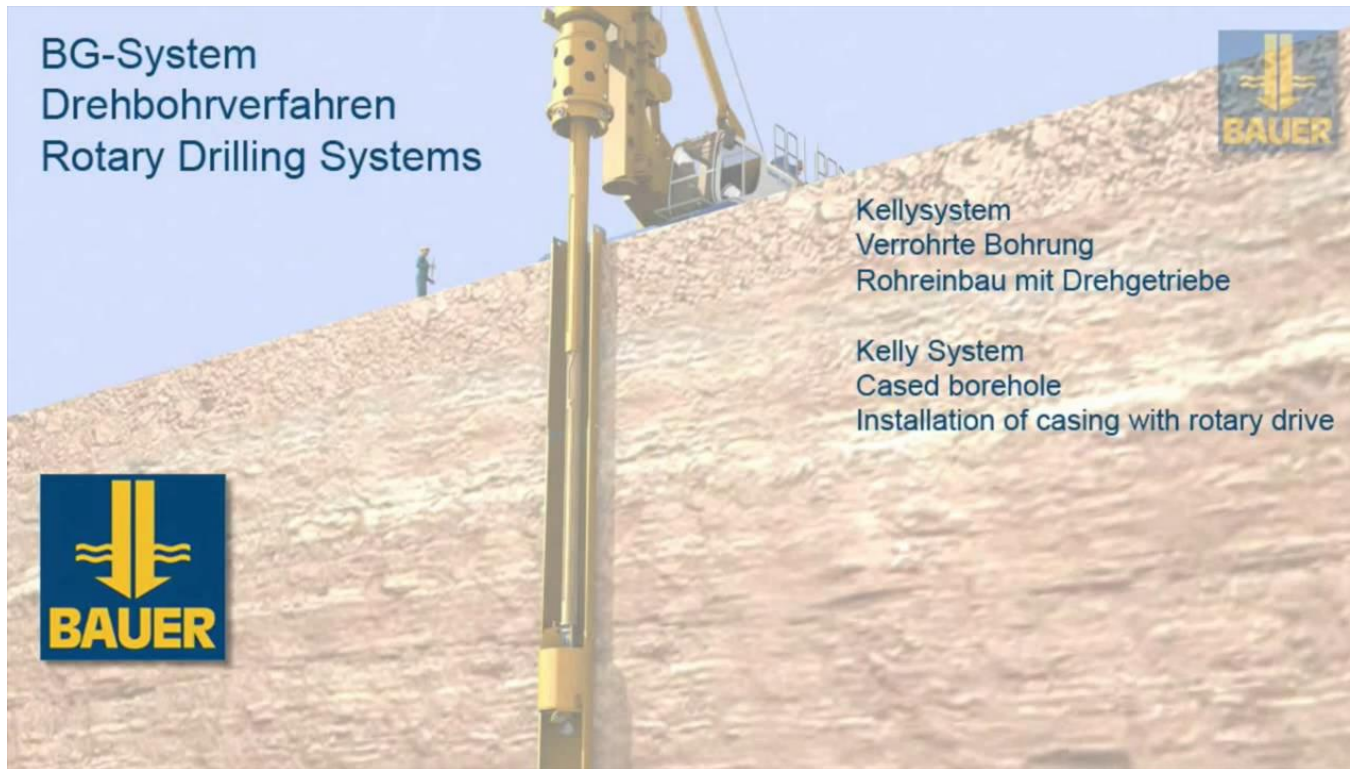
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BORED PILING



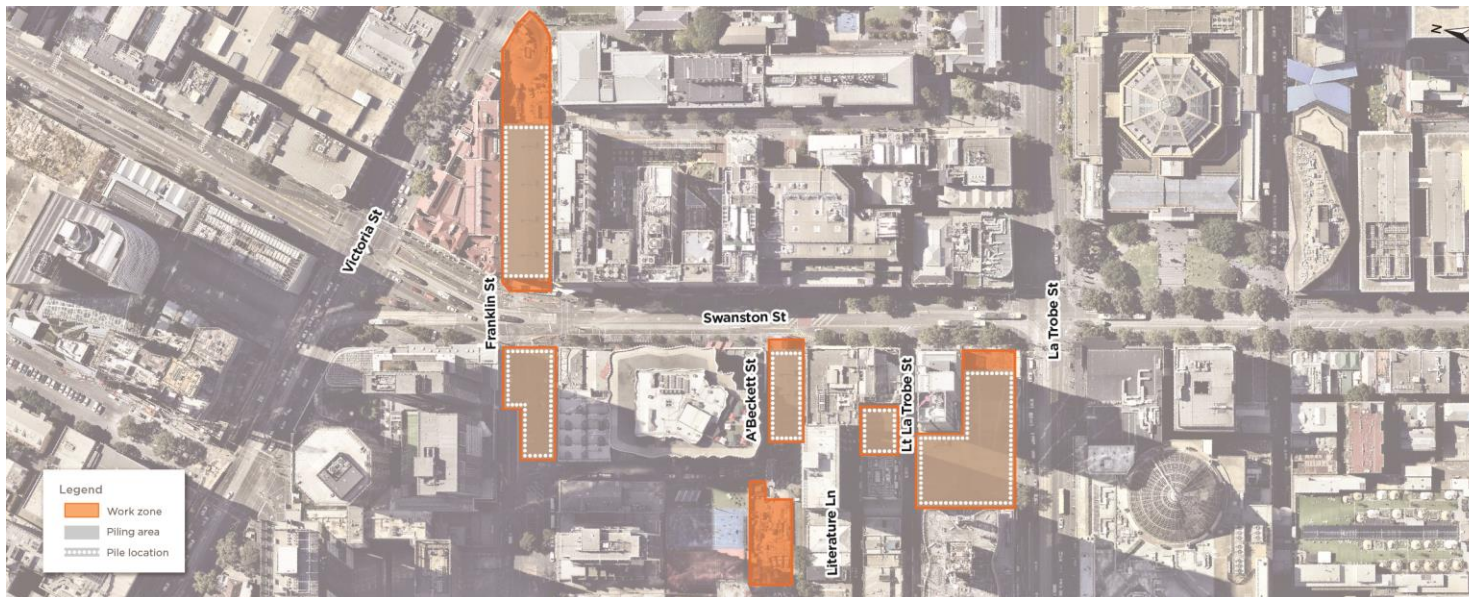
- 1 SETTING UP THE RIG**
Deliver the rig to site and move it into position.
- 2 DRILLING**
Drilling holes into the ground using an auger (drill bit with rotating blade) and excavating material.
- 3 STEEL REINFORCEMENT**
Removing the material and inserting a prefabricated steel reinforcement cage into the hole.
- 4 CONCRETE POURING WITH TREMIE PIPE**
Pouring concrete into the hole to form the pile. Once the concrete sets, the pile is complete.
- 5 CAPPING THE PILES**
Once the piles are constructed, the top layer of concrete is removed and topped by a capping beam to prevent lateral displacement.

BORED PILING



<https://www.youtube.com/watch?v=z8OtgGrfDrA>

BORED PILING State Library Station



Franklin Street West site: 98 piles @ approx. 30 m

La Trobe site: 163 piles @ approx. 40 m

Little La Trobe site: 49 piles @ approx. 20 m

Length of Piles varies according to depth of each shaft

Approx. 2-3 piles per day

Franklin Street East and A'Beckett completed by EWMC

BORED PILING Town Hall Station



City Square site: 148 piles @ approx. 32 m

Federation Square site: 102 piles @ approx. 24 m

Flinders Quarter site: 258 piles @ approx. 38 m

Depth variation can occur due to ground conditions

Approx. 2-3 piles per day

Archaeology update



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State Library (CBD North)

Timing

- CBD North 3 x Latrobe Street sites: Early-May 2018
- CBD North 3 x Little Latrobe Street sites: July 2018



State Library (CBD North)

- Stage 2 commenced
- 19th century artefacts have been uncovered
- Single storey stone buildings occupied by merchants, butchers, fishmongers, carpenters and printers
- Forgery (1868) - Boden Brothers
- Examples of light industry in the 20th Century



Town Hall (CBD South)



Timing

- CBD South 2 x southern sites: Late-May
- CBD South 2 x northern sites: Mid-July

Town Hall (CBD South)

- Stage 1 commenced
- Indigenous Heritage - Yarra (the Birrarung) very significant
- 1838: Miss Cooke's Seminary for Ladies
- Corner of Flinders and Swanston Streets - purchased by Melbourne's founder John Batman for £100
- 1850s gold rush: brick and timber buildings occupied by an ironmonger, a wine and spirits merchant, a hotel and solicitor



Viewing windows



CBD South proposed hoarding



CBD North proposed hoarding

Participation opportunities

- Call out for volunteers closed Thursday 17 May
- CRG members still have the opportunity to apply
- Site tours will also be offered in the coming weeks



Environmental performance monitoring sites



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Monitoring – State Library

Franklin West

- Site mobilisation
- Piling

Swanston/La Trobe St site

- Archaeology
- Piling
- Excavation

Little La Trobe

- Demolition
- Archaeology
- Piling



Monitoring – Town Hall

City Square

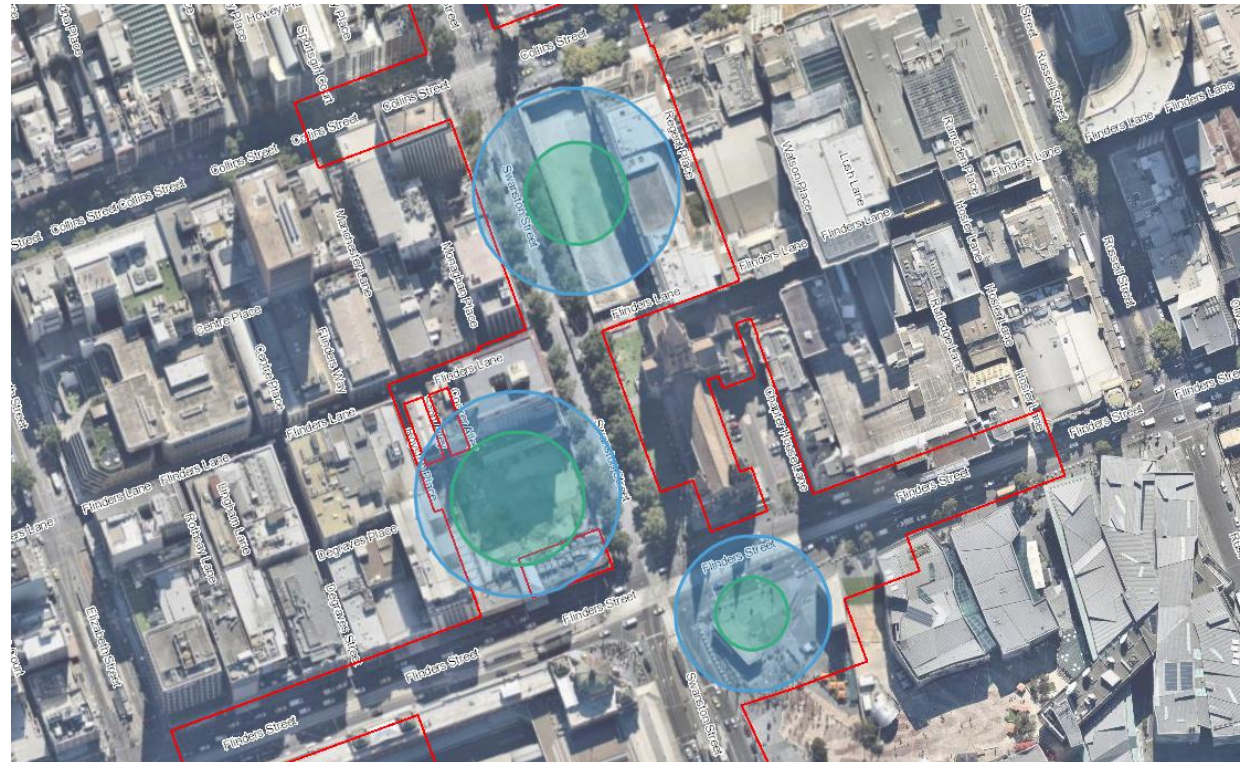
- Piling
- Excavation

Swanston St site

- Archaeology
- Piling

Fed Square

- Demolition



Property condition surveys



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Property condition surveys

Property condition surveys will be completed on:

- Properties adjacent to buildings which are being demolished within one month prior to works starting.
- Properties within a 50m radius of City Square prior to piling taking place (anticipated for July 2018). Detailed surveys will be carried out on the following buildings:
 - Manchester Unity Building
 - St Paul's Cathedral
 - The Westin Melbourne
 - Melbourne Town Hall
 - Nicholas Building
- Properties within a 50m radius of Flinders Quarter prior to piling taking place (anticipated for September 2018)
- Properties identified as potentially impacted by ground settlement modelling within one month of excavation works starting (late 2018 for State Library sites).
- Properties along the tunnel alignment as the tunnel progresses.



Property condition surveys

Property condition survey process – standard

1. CYP will identify properties within the works zone of influence. These are properties with the potential to be affected by vibration or minor ground settlement
2. Identify property owners and issue letters requesting permission to inspect property
3. Once permission is gained, a visual inspection is carried out and defects are recorded. Defects can include: cracks, damp areas or spalling. Only accessible areas will be inspected.
4. A property condition report is sent to the property owner for written confirmation that it's a true record of the condition of the property at the time of inspection.
5. CYP will amend the report if necessary and keep a copy. Access will be restricted for privacy.
6. Post-condition surveys are carried out once work is complete and reports will be compared with pre-condition surveys.

The property owner may request a more detailed property condition assessment at any stage and CYP will decide if this is necessary on a case-by-case basis.

Property owners may report changes to the condition of their property, or raise questions or concerns by contacting a CYP property coordinator via email or phone.



Property condition surveys

Property condition survey process - detailed

1. CYP will identify properties that may require further investigation such as heritage buildings or other structures that have higher potential to be affected by construction activities.
2. It may also be decided that properties require a more detailed inspection following a standard inspection.
3. A detailed inspection will be carried out by a heritage and/or a structural engineer. The inspection will include a more in depth analysis of cracking and pay consideration to the structural elements of the building. Structural scanning may be necessary.
4. A property condition report is sent to the property owner for written confirmation that it's a true record of the condition of the property at the time of inspection.
5. CYP will amend the report if necessary and keep a copy. Access will be restricted for privacy.
6. Post-condition surveys are carried out once work is complete and reports will be compared with pre-condition surveys.

Property owners may be asked to provide architectural and/or structural drawings to assist with investigations.

Pedestrian modelling – CBD South



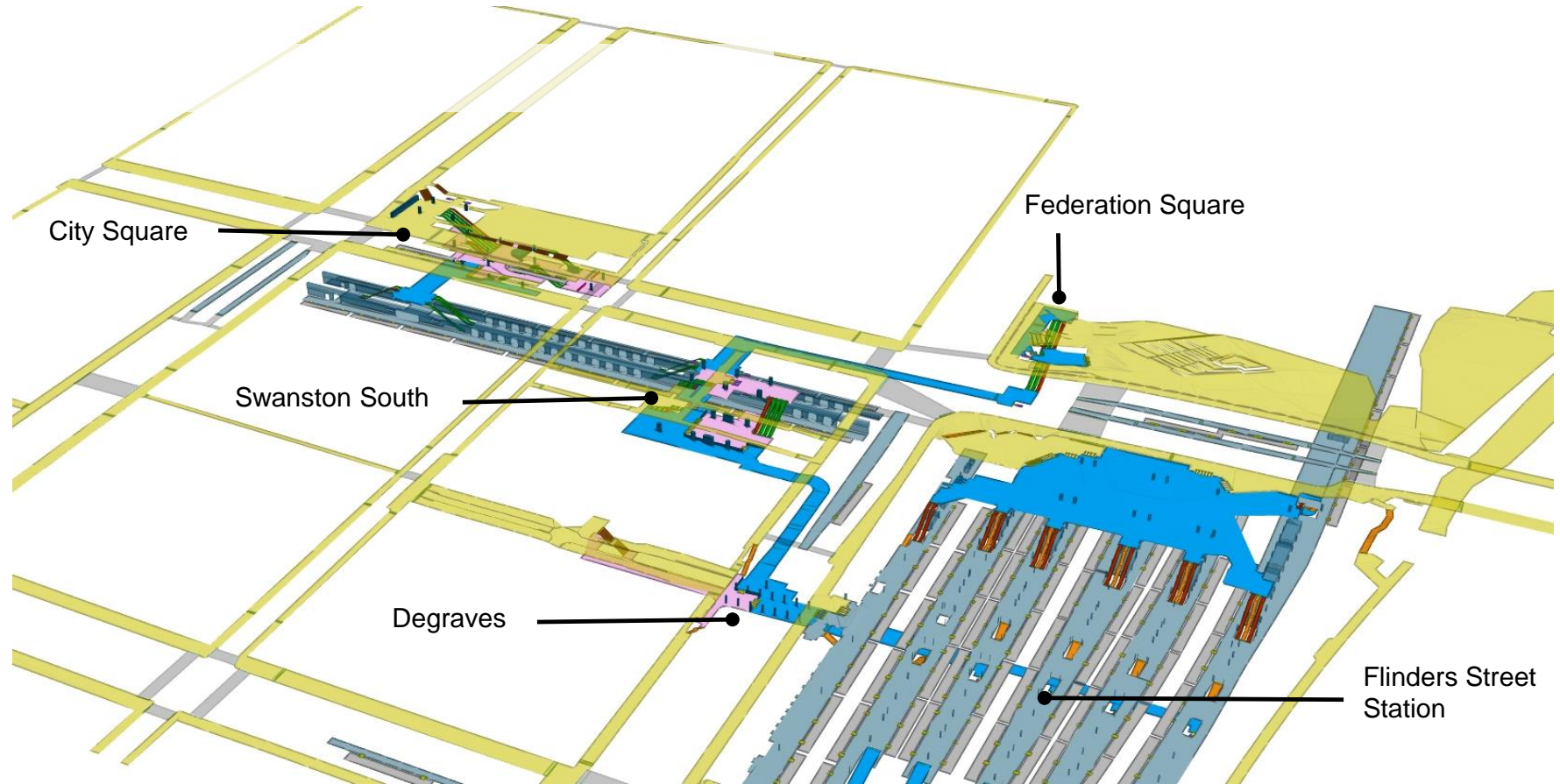
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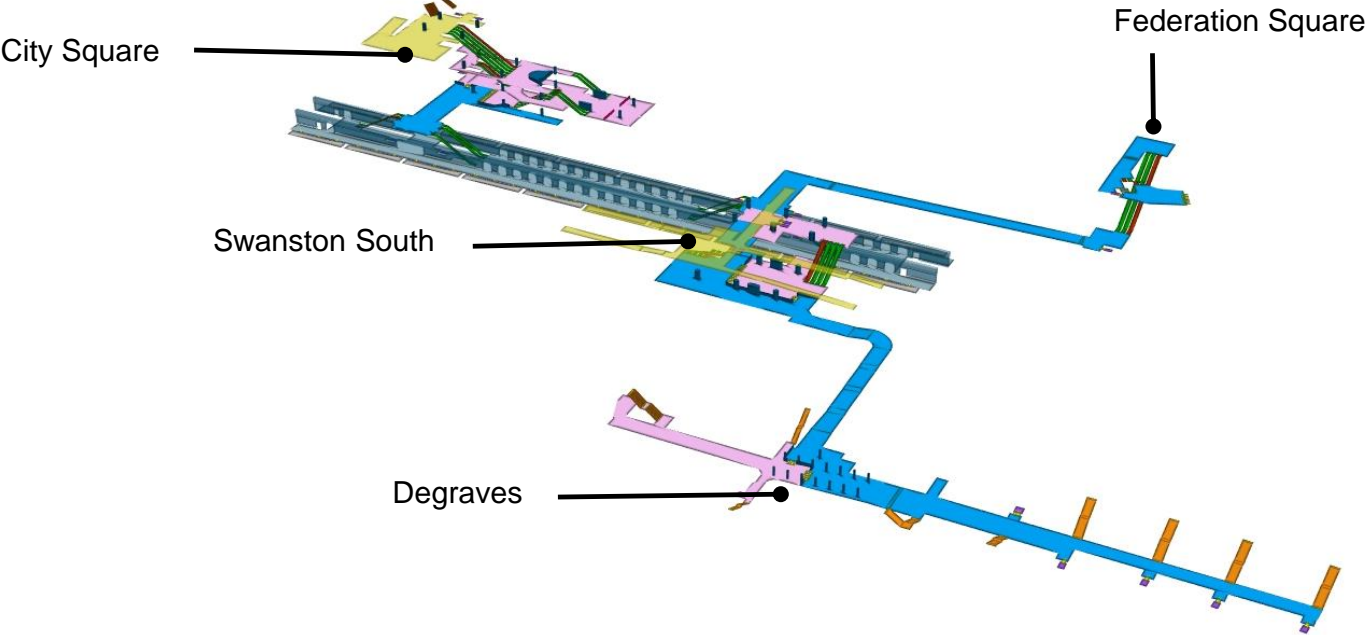
Pedestrian modelling

- Pedestrian analysis has been undertaken to understand and achieve the pedestrian performance criteria outlined in the PS&TR requirements
- Both static analysis and dynamic pedestrian modelling have been used during this process to inform and test the design of the station
- Pedestrian modelling has been undertaken to align to PS&TR requirements, considerations include:
 - Station user movements from platform level to street level, including lift users
 - Commuter movements during the AM and PM peak period scenarios
 - Future case demand scenario 2046+25%
- Street level analysis is currently being undertaken for a 2031 demand scenario by Surface Transport, with a focus on key intersections along Swanston Street

Pedestrian model (CBD South)



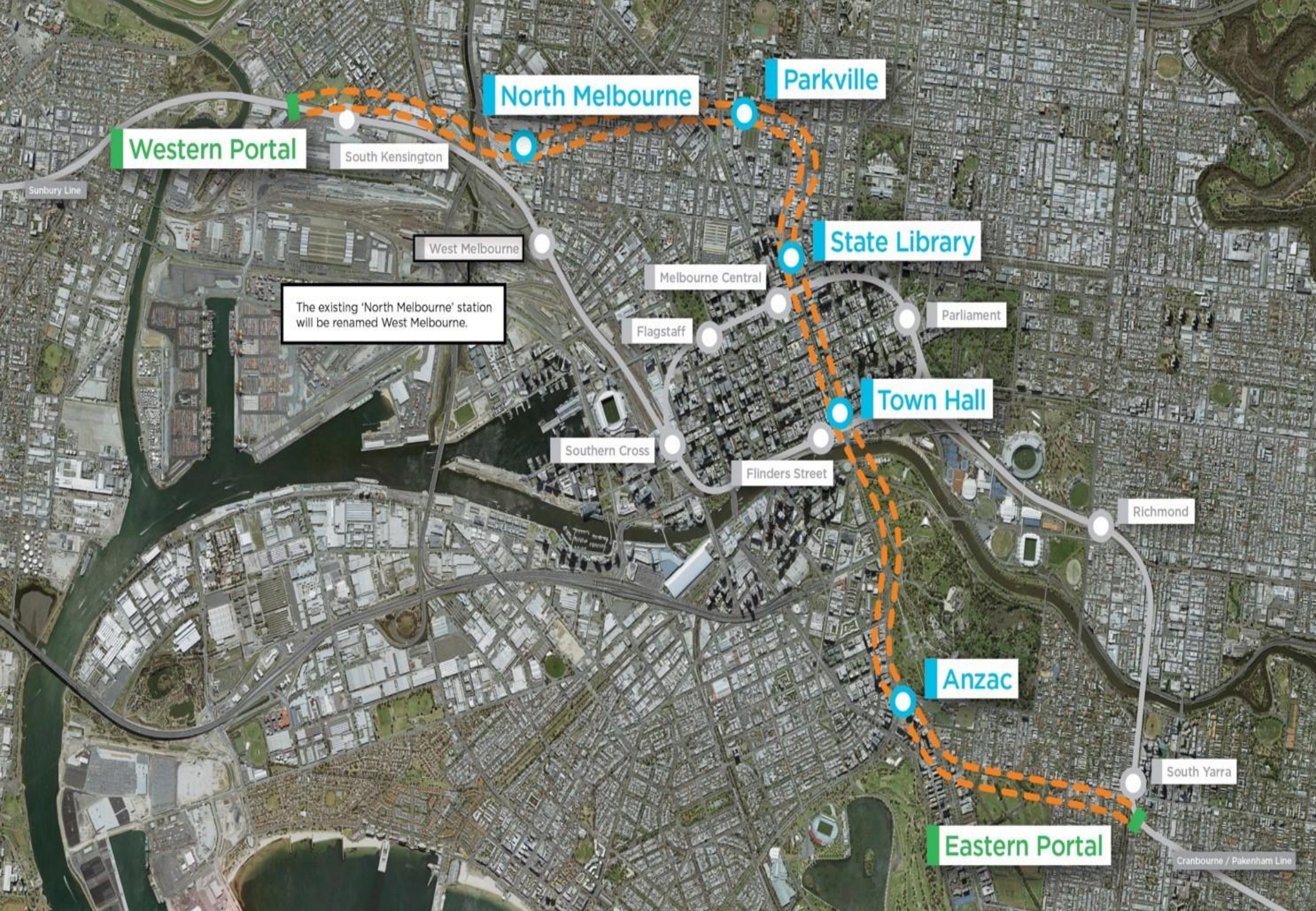
Pedestrian model (CBD South)



Questions



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Western Portal

North Melbourne

Parkville

South Kensington

West Melbourne

State Library

Melbourne Central

Parliament

Flagstaff

Town Hall

Southern Cross

Flinders Street

Richmond

Anzac

South Yarra

Eastern Portal

The existing 'North Melbourne' station will be renamed West Melbourne.

Sunbury Line

Cranbourne / Pakenham Line