



# STATE LIBRARY STATION COMMUNITY REFERENCE GROUP

CROSS YARRA PARTNERSHIP  
FRIDAY 24 APRIL 2020



Construction partner:





## STATE LIBRARY STATION COMMUNITY REFERENCE GROUP

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Construction partner:



# AGENDA

1. Actions
2. State Library Station update
3. General feedback and items for future discussion

# STATE LIBRARY STATION UPDATE

Completed top heading under City Loop

Roadheaders recommence early June to finish tunnelling

Future Melbourne Central passenger connection

MELBOURNE CITY BATHS

25/50 steel columns installed

Multi purpose gantry assembled and commissioned

STATE LIBRARY





This architectural rendering illustrates the proposed Melbourne Metro City Loop station, showing its integration with the city's existing infrastructure. The scene is divided into three horizontal layers. The top layer shows a city street with modern buildings, including a prominent one with a golden-brown facade, and a tram. The middle layer is a dark, solid black plane representing the ground level. The bottom layer is a cutaway view of the underground station, depicted in translucent blue. A light blue and white train is shown on tracks within this underground space. The station's internal structure, including stairs and platforms, is visible through the blue walls. Two pedestrian icons are placed on the right side of the cutaway, indicating entry and exit points. The text 'City Loop' is written in a large, white, sans-serif font on the left side of the underground section, and 'Melbourne Metro' is written in a similar font on the right side.

**City Loop**



**Melbourne  
Metro**





SECTION IN AT COLUMNS

SECTION IN BETWEEN COLUMNS

CBN-EB

CBN-CL

CBN-WB

SIDE PANELS

(TIE BEAM  
REBAR TIE IN)

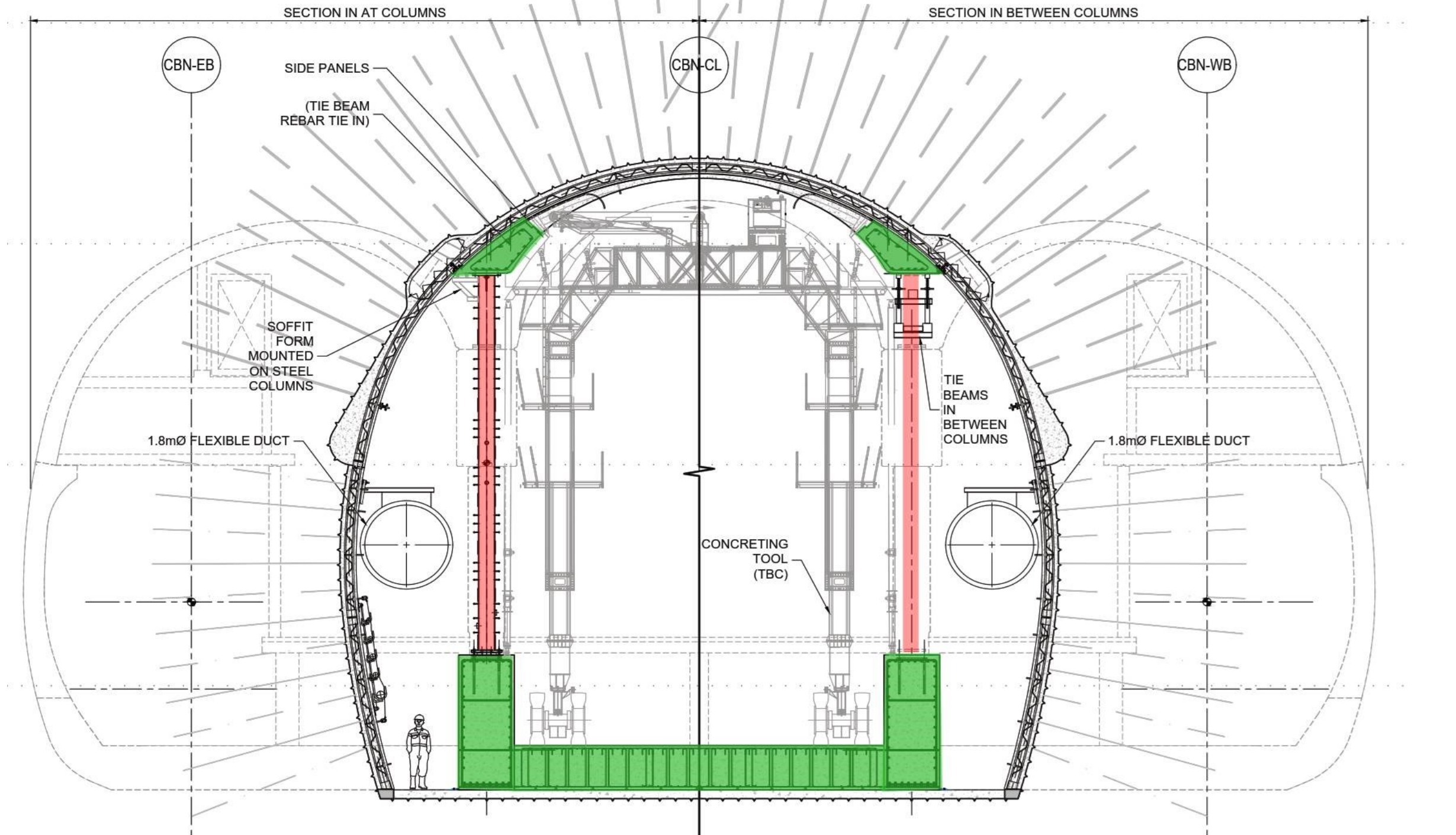
SOFFIT  
FORM  
MOUNTED  
ON STEEL  
COLUMNS

1.8mØ FLEXIBLE DUCT

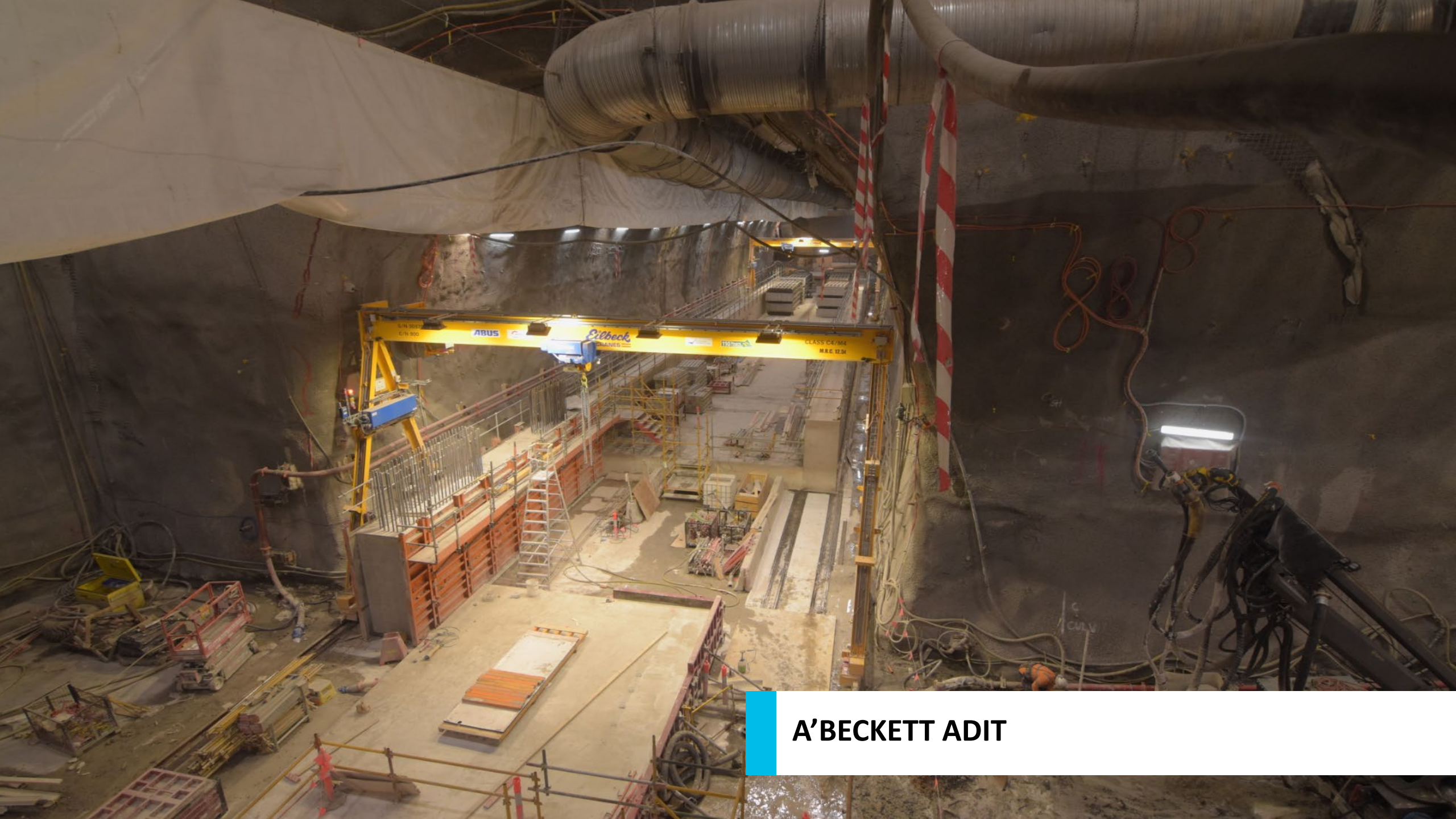
TIE BEAMS  
IN  
BETWEEN  
COLUMNS

1.8mØ FLEXIBLE DUCT

CONCRETING  
TOOL  
(TBC)







**A'BECKETT ADIT**



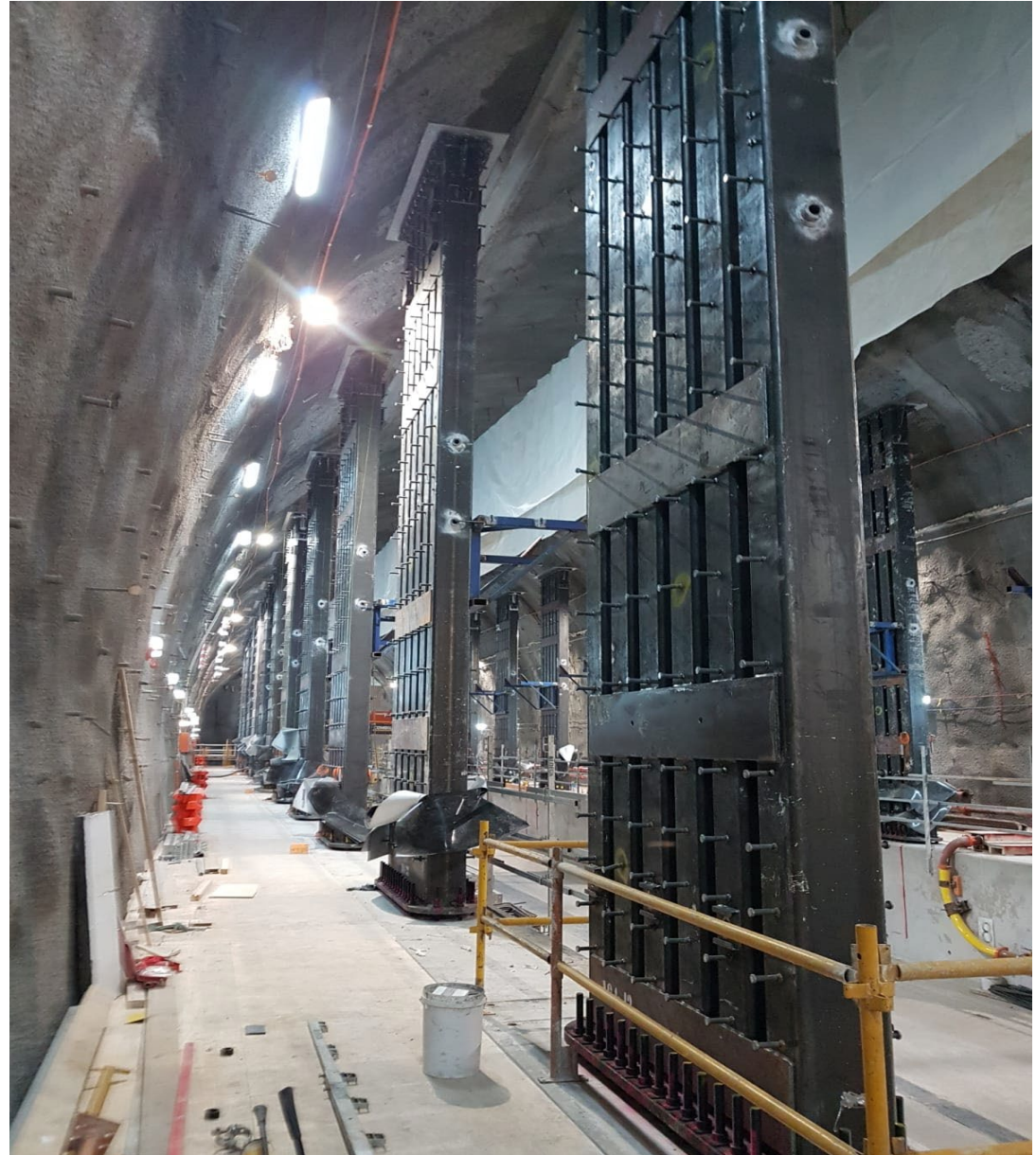
# STEEL COLUMN INSTALLATION PROGRESS

50 steel columns will support  
the span of the cavern

8.5 metres tall

Weigh nearly 10 tonnes

Carefully lifted into place using  
a forklift with a purpose-built  
rotator attachment









# MULTI- PURPOSE GANTRY





# QUESTIONS?

## **A'Beckett Street site**

Tunnelling works

- 24/7

A banner frame will be installed on the A'Beckett Street acoustic shed week commencing 4 May 2020 and will require partial footpath closures

## **Franklin Street East site**

Tunnelling works

- 24/7

The Franklin Street East site is continuing construction of the underground station platform, this involves delivery of steel and concrete to the site using trucks.



**FRANKLIN STREET WEST UPDATE**



# FRANKLIN STREET WEST SITE UPDATE

Activity	Location	April	May	June	July	August	September
Shaft construction	Site						
Tunnelling support works and commencement of permanent structure build							





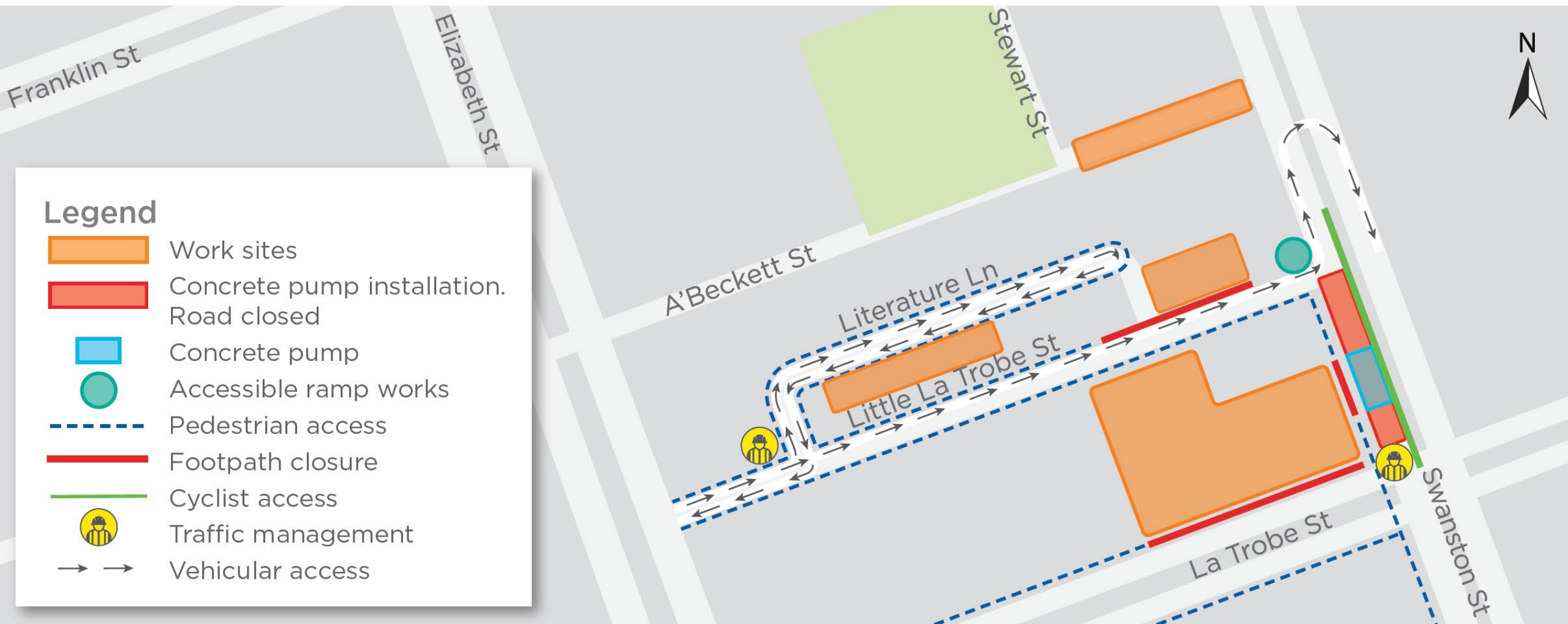


**LA TROBE STREET UPDATE**

# LA TROBE STREET SITE UPDATE

Activity	Location	April	May	June	July	August	September
Perimeter piling and plunge column installation	Site						
Swanston Street concrete pump installation	Swanston Street						
Slab works	Site						
Excavation	Site						





## SWANSTON STREET CONCRETE PUMP

# LA TROBE STREET SITE HOURS

## **Piling and plunge column installation**

- Monday to Fridays, 7am to 10pm
- Saturdays 7am to 6pm

## **Oversized deliveries**

- 10pm to 7am, as required

# PILING AND PLUNGE COLUMN PROGRESS

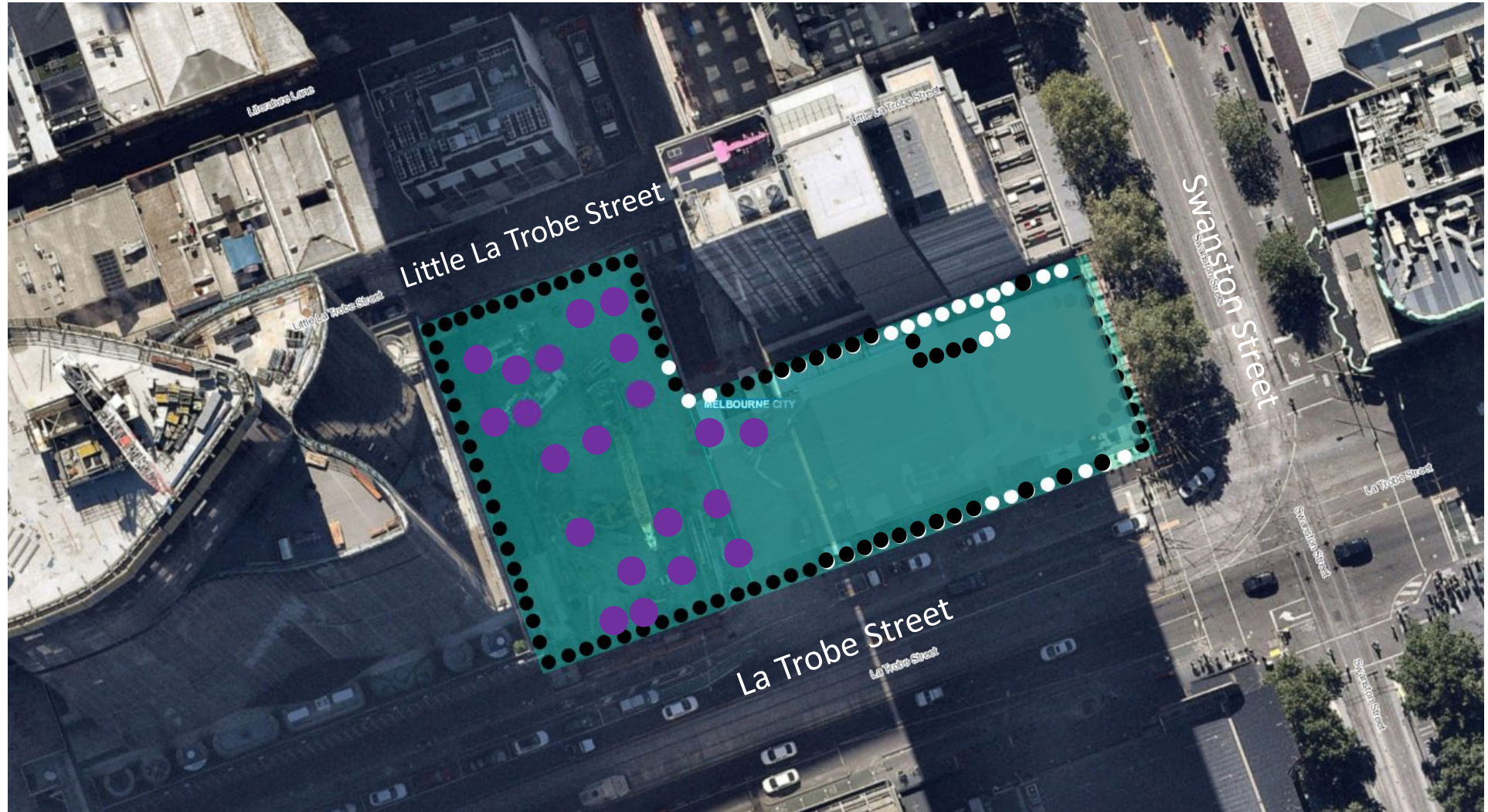
## Perimeter piling

- 131 of 172 complete



## Plunge columns

- 30 of 56 complete







**LITTLE LA TROBE STREET UPDATE**





**PLUNGE COLUMNS LITTLE LA TROBE**



# LITTLE LA TROBE STREET SITE UPDATE

Activity	April	May	June	July	August	September
Plunge column installations						
Capping beam						
Slab and excavation works						

## Stages of piling

1

### SETTING UP THE RIG

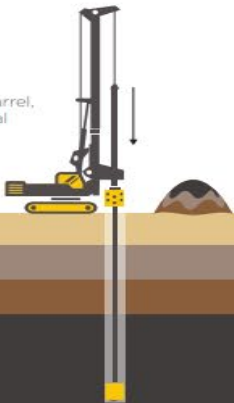
Deliver the rig to site and move it into position



2

### DRILLING

Drilling holes into the ground using a core barrel, and excavating material



3

### STEEL REINFORCEMENT

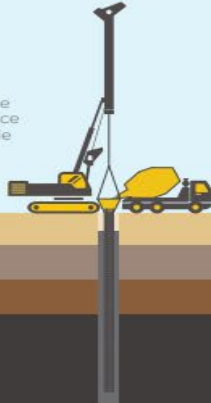
Removing the material and inserting a prefabricated steel reinforcement cage into the hole



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.



Start of the pile top removal process



# LITTLE LA TROBE STREET SITE PILING

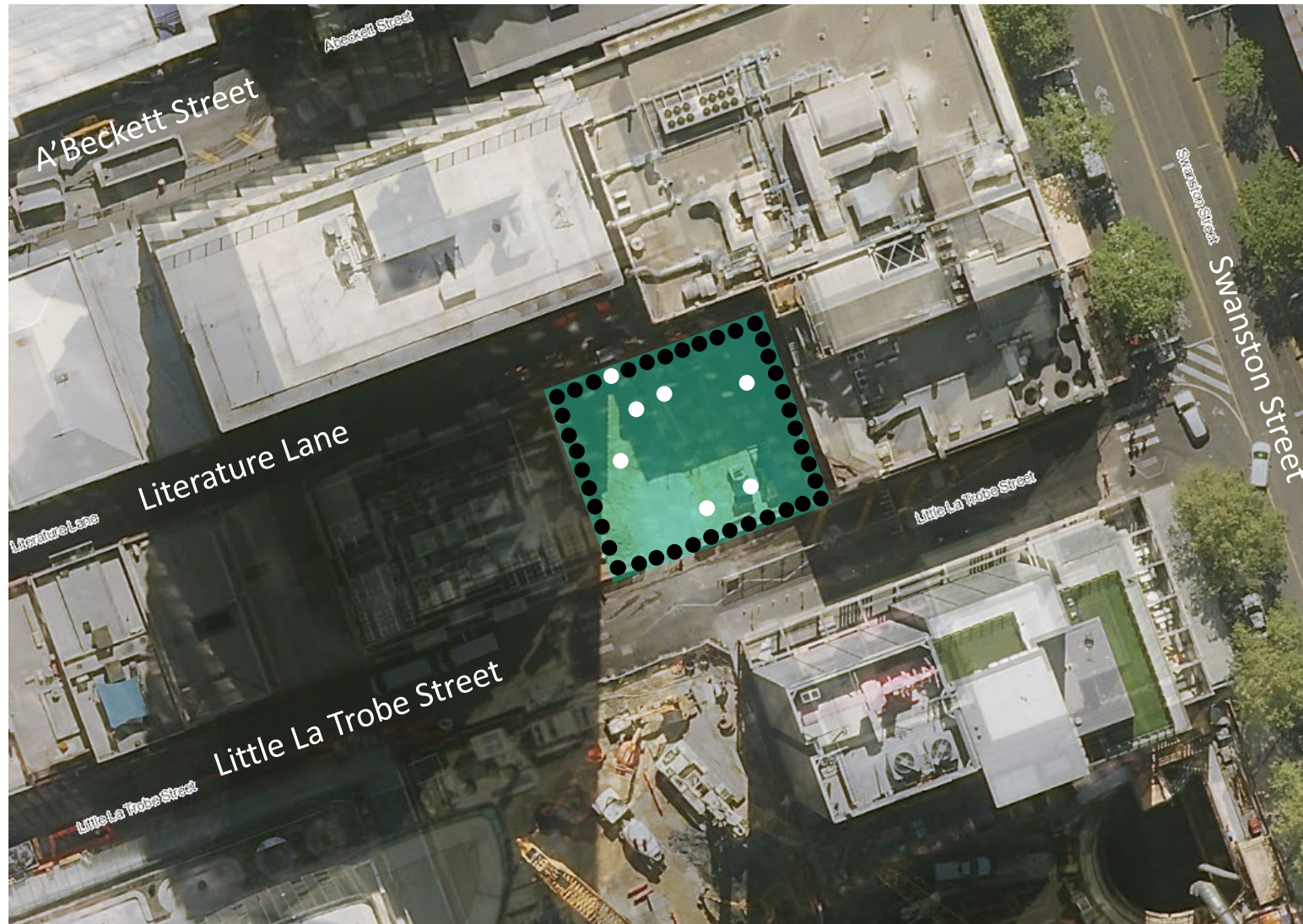
## Perimeter piling

- 66 of 67 complete



## Plunge columns

- 0 of 5 complete
- 4 of 5 drilled



Indicative only

## **Plunge column works**

- Monday to Saturdays, 7am to 6pm
- Concrete pours and other activities which generate low noise levels 6pm to 10pm on weeknights (as required).

## **Pile break back and capping beam works**

- Monday to Saturdays, 7am to 6pm
- Commencement mid-May 2020



# TOWER CRANE INSTALLATION TIME-LAPSE



# QUESTIONS?