

# Construction Parking and Access Strategy – Preliminary construction

Project Name: M6 Stage 1

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## Table of Contents

1. Introduction .....	3
1.1. Context .....	3
1.2. Project scope .....	3
1.3. Scope of the Strategy .....	5
1.4. Purpose .....	5
1.5. Objectives .....	5
1.6. Review and distribution .....	5
1.6.1. Update and amendment of this Strategy .....	5
2. Requirements .....	6
2.1. Minister's Conditions of Approval .....	6
2.2. Revised Environmental Management Measures .....	7
2.3. Construction Management Plan .....	8
2.4. Consultation .....	8
2.4.1. Bayside Council .....	8
2.4.2. Traffic Control Group .....	8
2.4.3. Other stakeholders .....	8
2.4.4. Communicating changes .....	9
3. Preliminary construction works .....	10
4. Parking survey methodology .....	11
4.1. Survey location .....	11
4.2. Existing conditions .....	14
4.3. Calculating parking occupancy .....	15
4.4. Summary of survey results .....	15
5. Workforce parking .....	17
6. Mitigation measures during preliminary works .....	18
6.1. Sub-contractor obligations .....	18
6.2. Demand Reduction .....	18
6.3. Tools of trade .....	18
6.4. Sustainable transport options .....	18
6.4.1. Car pooling .....	18
6.4.2. Active transport .....	18
6.4.3. Public transport .....	19
7. Mitigation measures to be further developed for the Construction Phase of the works .....	22
7.1. Staged removal of parking .....	22
7.2. Alternative parking arrangements .....	22

7.3. Shuttle bus service .....	22
7.4. Communicate parking restrictions to workers.....	22
7.5. Dedicated off-site parking .....	23
8. Monitoring and Reporting.....	24
8.1. Monitoring.....	24
8.2. Reporting.....	24
8.3. Contingency measures .....	24

## Table of Tables

Table 1: Relevant Ministerial Conditions of Approval .....	6
Table 2: Relevant REMMs .....	7
Table 3: CMP requirements .....	8
Table 4 Proposed staging timeframe.....	10
Table-5: Occupancy rate comparison.....	15
Table 6:Personnel and parking on site .....	17
Table 7 Expected peak travel times of personnel .....	17
Table 8: Other MCoA and REMMs.....	25

## Table of Figures

Figure 1: Project location and alignment .....	4
Figure 2: Bicentennial Northern Car park changes.....	9
Figure 3: Preliminary construction survey extent.....	12
Figure 4: Car park locations .....	13
Figure 5: Northern car park .....	14
Figure 6: Bicentennial Park South car park .....	15
Figure 7: Cycle routes and shared paths.....	19
Figure 8: Bus routes connecting to transport interchanges.....	20
Figure 9: Train network .....	21
Figure 10: Travelling outside your LGA .....	28
Figure 11: Data from Guardian Australia on trips planned during Lockdowns .....	29
Figure 12: Quote from Guardian 15 July 2021 .....	30
Figure 13: Traffic congestion.....	30

## Table of Appendices

Appendix A	Other MCoA and REMMs relevant to this Strategy .....	25
Appendix B	Parking survey data (summary) .....	26
Appendix C	COVID-19 Restrictions.....	27

## Glossary/Abbreviations

AM Peak	The four-hour period between 6.00am and 10.00am Monday to Friday
AS	Australian Standards
Austroroads	Austroroads is the collective of the Australian and New Zealand transport agencies, representing all levels of government. Austroroads publishes a range of Guides which cover the design, construction, maintenance and operation of the road network in Australia and New Zealand.
BC	Bayside Council
CEMP	Construction Environmental Management Plan
CGU JV	CPB Contractors, Ghella and UGL Joint Venture
CPAS	Construction Parking and Access Strategy (this document)
CMP	Construction Management Plan
CSSI	Critical State Significant Infrastructure (SSI-8931)
Heavy Vehicle	Defined in the Heavy Vehicle National Law (HVNL) as a vehicle that has a gross vehicle mass (GVM) or aggregate trailer mass (ATM) of more than 4.5 tonnes. The GVM of a vehicle is the maximum it can weigh when fully loaded, as specified by the manufacturer.
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
GRC	Georges River Council
Local Road	Local Roads comprise those roads not classified under the Roads Act 1993. These roads are the responsibility of Local Government authorities.
PM Peak	The four-hour period between 3.00pm and 7.00pm Monday to Friday
PMP	Pedestrian Movement Plan
Project	The M6 Stage 1 tunnel and surface works
REMM	Revised environmental management measures
RMS	TfNSW formerly Roads and Maritime Service
ROL	Road Occupancy License
RPS	Resident Parking Scheme
PIR	Preferred Infrastructure Report
School zone times	The 1.5 hour periods between 8am-9.30am and 2.3pm-4pm Monday to Friday
TfNSW	Transport for NSW
TTAMP	Traffic, Transport and Access Management Plan (sub plan of the CEMP)
TTLG	Traffic and Transport Liaison Group

VMS	Variable Message Sign

# 1. Introduction

## 1.1. Context

This Construction Parking and Access Strategy (CPAS or Strategy) has been prepared for the M6 Stage 1 (the Project) to address the requirements of the Minister's Conditions of Approval (MCoA), the M6 Stage 1 Environmental Impact Statement (EIS), the Revised Environmental Management Measures (REMMs) and all applicable legislation.

## 1.2. Project scope

The scope of works for the design and construction of the Project will include:

- Mainline tunnels approximately 3.0km in length, sized for three lanes of traffic and line marked for two lanes on opening of the motorway
- Entry and exit ramp tunnels approximately 1.5km in length and a tunnel portal connecting the tunnels to a surface intersection with President Avenue
- Provision of a new intersection at President Avenue including the widening and raising of President Avenue at this location
- Upgrade of the President Avenue and Princes Highway intersection to improve capacity and network integration
- Provision of a new shared cycle and pedestrian pathways
- Mainline tunnel stubs for a future connection to extend the Project to the south
- Two motorway operation complexes (MOCs) as follows:
  - ▶ Arncliffe: including mechanical and electrical fit-out of the ventilation facility built by the M8 Motorway project, and provision of a new water treatment plant and substation
  - ▶ Rockdale (south): including a ventilation building, Disaster Recover Site (DRS), substation and power supply.
- A tunnel ventilation system, including ventilation facilities located at Marsh Street, Arncliffe and West Botany Street, Rockdale, and in-tunnel ventilation systems, including jet fans and ventilation ducts
- New Utility Services, and modifications and connections to existing Utility Services
- A permanent power supply connection to the Rockdale Ventilation Facility Site MOC from Ausgrid's Canterbury Sub-Transmission Substation
- Emergency access and evacuation facilities, including pedestrian and vehicular cross, long passages, fire and safety life systems
- Ancillary infrastructure for motorway operations including operations management and control systems, permanent power supply, communications, lighting, electronic toll collection system, toll gantries and traffic control and signage (both fixed and variable signage)
- Drainage infrastructure to collect surface water and groundwater inflows for treatment
- Reinstatement of Bicentennial Park and recreation facilities
- Reinstatement and rehabilitation of construction leased areas within the Arncliffe Site
- Minor adjustments to local roads in the Project area
- Development and implementation of systems integration and operating procedures with WestConnex Motorways to ensure safe operation of the interfaces between the Project and the WestConnex Motorways
- Any other works as required under the D&C Deed and the SWTC.



Figure 1 shows the project location and alignment.

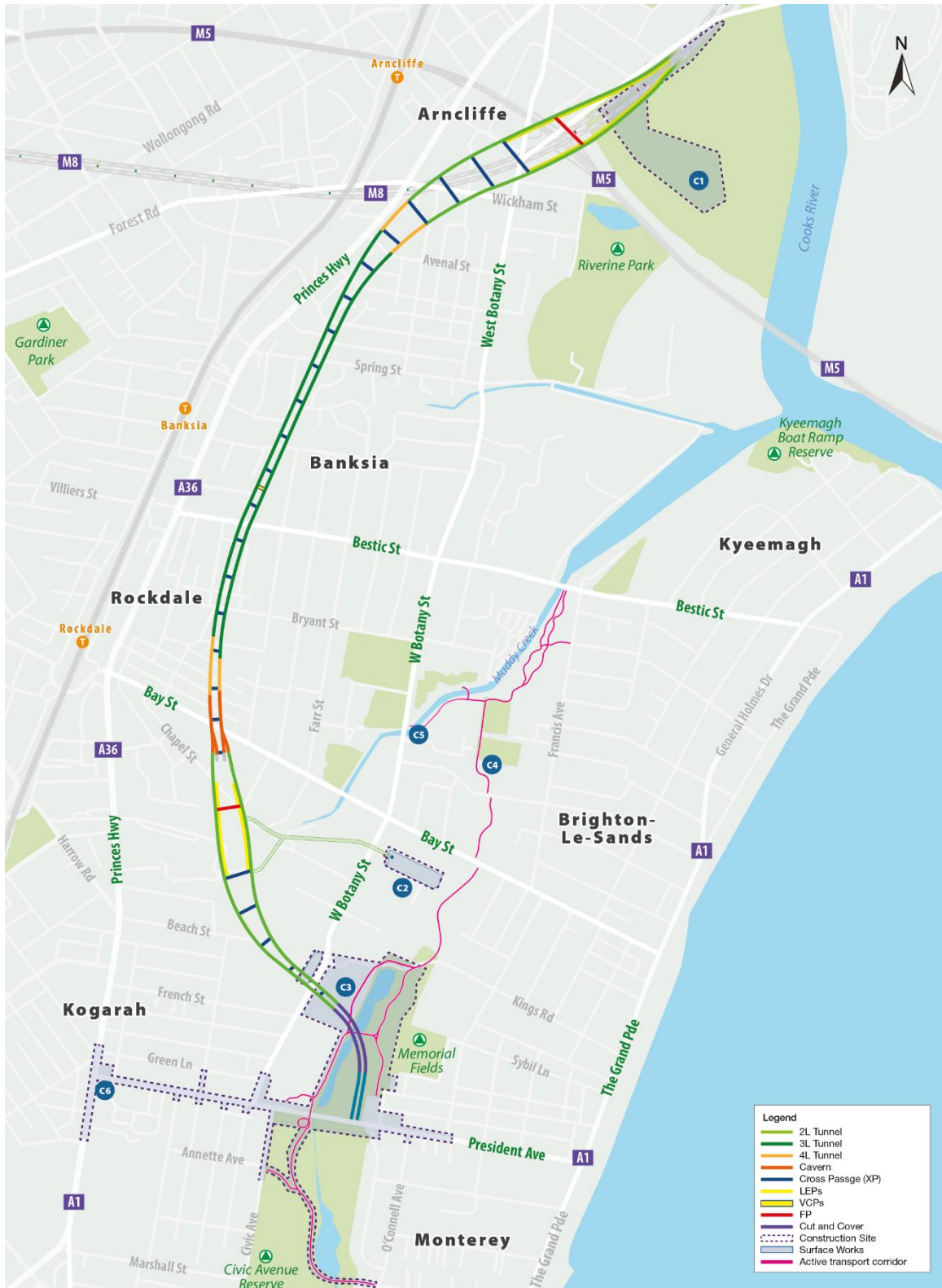


Figure 1: Project location and alignment

### 1.3. Scope of the Strategy

The scope of this Strategy is to describe how CPB Contractors, Ghella and United Group Limited Joint Venture (CGU JV) will mitigate impacts resulting from removal of off-street parking changes during the preliminary construction works (site establishment works). This document will be further developed to include the impacts of the construction phase of the works. The scope of this Strategy is prescribed by the Minister's Conditions of Approval (MCoA), the M6 Stage 1 Environmental Impact Statement (EIS), the Revised Environmental Management Measures (REMMs) and the Project Plan requirements for the Construction Management Plan.

### 1.4. Purpose

The purpose of this Strategy is to identify and mitigate impacts resulting from parking changes during the Preliminary construction phase of the Project. This Strategy will be further developed to capture the construction phase of the Project.

### 1.5. Objectives

The objectives of this strategy are to:

- Determine the existing off-street parking capacity in the area surrounding the Project's compounds required for preliminary construction works,
- Identify off-street parking required to be removed as part of the Preliminary construction phase of the Project (long term temporary and permanent)
- Identify the demand for preliminary construction and workforce parking, and how this demand could be met to minimise impacts to the surrounding community,
- Outline measures to reduce the demand for workforce parking by encouraging the uptake of public transport, carpooling (once COVID-19 restrictions are removed) and active transport, and
- Describe how monitoring and any corrective actions would be implemented to assess the effectiveness of management measures

### 1.6. Review and distribution

This Strategy has been provided to Bayside Council for review for the Preliminary construction phase of the Project.

The Construction Parking and Access Strategy has been submitted to the Planning Secretary for information prior to the commencement of any works that impact parking

This Strategy will be further developed to provide details on the Construction phase of the project.

#### 1.6.1. Update and amendment of this Strategy

Any revisions to this Strategy will be in accordance with the process outlined in Section 3.1.3 of the CEMP and as required, be provided to TfNSW and other relevant stakeholders for review and comment and forwarded to the Secretary of DPIE for information.

A copy of the updated Strategy and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure (refer to Section 3.1.3 of the CEMP).

## 2. Requirements

### 2.1. Minister's Conditions of Approval

The Ministers Conditions of Approval (MCoA) relevant to this Strategy are listed in Table 1 below. A cross reference is also included to indicate where the condition is addressed in this Strategy.

Table 1: Relevant Ministerial Conditions of Approval

MCoA #	Requirement	How addressed	Strategy reference
E130	A Construction Parking and Access Strategy must be prepared and implemented to identify and mitigate impacts resulting from on- and off-street parking changes during construction. The Strategy must include, but not necessarily be limited to:	This Strategy has been prepared in accordance with this condition and describes how CGU JV will mitigate impacts resulting from on- and off-street parking changes.	This document
E130 (a)	confirmation and timing of the removal of on- and off-street parking associated with construction (including during site establishment when access to off-street parking at construction ancillary facilities has yet to be established)	Dates provided for commencement of site establishment phase of the project	Section 3
E130 (b)	parking accumulation surveys (consistent with Austroads requirements) of parking spaces to be removed to determine current demand during peak, off-peak, school drop off and pickup, and weekend periods;	Parking accumulation surveys were unable to be conducted due to the COVID-19 Stay at Home Orders. Another survey methodology is provided	Section 4 and Appendix B
E130 (c)	consultation with affected stakeholders, including property occupants with driveway access along President Avenue between Civic Avenue and Princes Highway, utilising existing on- and off-street parking stock which will be impacted as a result of construction and impacted by the introduction of temporary clearways on President Avenue	Consultation undertaken with Bayside Council, PetO and UFC	MCoA A5 document
E130(d)	Review of the impacts of changes to on and off street parking stock taking into consideration outcomes of consultation with affected stakeholders	Consultation undertaken with Bayside Council, PetO and UFC	Evidence of Consultation document
E130 (e)	identification of mitigation measures to manage impacts to stakeholders as a result of on- and off-street parking changes including, but not necessarily limited to, staged removal and replacement of parking and provision of alternative parking arrangements	Mitigation measures included	Section 7
E130 (f)	strategies to address shortfalls in car parking spaces at individual construction ancillary facilities and disincentivising	Not applicable to the Preliminary construction phase of works	Section 6

MCoA #	Requirement	How addressed	Strategy reference
	construction personnel from parking on the street near work sites instead of further afield at a different construction ancillary facility where car spaces are available, including managed staff parking arrangements and working with relevant council(s) to introduce parking restrictions adjacent to work sites and compounds		
E130 (g)	provision of a shuttle bus service(s) to transport workers to site(s) and details of the shuttle bus service(s), including service timing and frequency	Not applicable to the Preliminary construction phase of works	Section 7
E130 (h)	mechanisms for monitoring, over appropriate intervals, to determine the effectiveness of implemented mitigation measures	Monitoring and reporting requirements detailed in this plan	Section 8
E130 (i)	provision of contingency measures should the results of mitigation monitoring indicate implemented measures are ineffective; and	Contingency measures detailed in this plan	Section 8.3
E130 (j)	provision of reporting of monitoring results to the Planning Secretary and relevant council(s) at three (3) monthly intervals.	Monitoring and reporting requirements detailed in this plan	Section 8
E130	The Construction Parking and Access Strategy must be submitted to the Planning Secretary for information prior to the commencement of any works that impact parking	Distribution requirements included in relevant section	Section 1.6

## 2.2. Revised Environmental Management Measures

The Revised Environmental Management Measures (REMMs) relevant to this Strategy are listed in Table 2 below. A cross reference is also included to indicate where the requirement is addressed in this Strategy.

Table 2: Relevant REMMs

REMM #	Requirement	How addressed	Strategy reference
TT1	A Construction Traffic and Access Management Plan (CTAMP) will be prepared as part of the Construction Environmental Management Plan. The CTAMP will detail processes to minimise delays and disruptions and identify and respond to changes in road safety as a result of project construction works. The CTAMP will be prepared in accordance with applicable guidelines and relevant standards, guides and manuals. The CTAMP will:	Construction Traffic and Access Management plan currently under development	NA

REMM #	Requirement	How addressed	Strategy reference
	<ul style="list-style-type: none"> <li>Propose a car parking strategy for construction staff at the various worksites, prepared in consultation with local council stakeholders associated with any facilities adjacent to the project site</li> </ul>		
	The CTAMP will: <ul style="list-style-type: none"> <li>Minimise the loss of on-road parking for local residents</li> </ul>	Construction Traffic and Access Management plan currently under development	NA

## 2.3. Construction Management Plan

The Construction Management Plan (CMP) also requires the development of a Construction Parking and Access Strategy as an appendix.

Table 3: CMP requirements

Project Plan#	Requirement	How addressed	Strategy reference
6 k)	The Construction Management Plan must include: A. a construction parking and access strategy including the measures to minimise impacts on local roads, minimise impacts of on-street parking around construction compounds, strategies to address workforce parking and transport to and between construction sites and	CPAS developed at present to focus on site establishment phase of works. Will be further developed for Construction phase	This plan

## 2.4. Consultation

Consultation on this strategy will be undertaken with the following stakeholders. The outcomes of that consultation are included in Evidence of Consultation document.

### 2.4.1. Bayside Council

Consultation has been undertaken with Bayside Council (BC) in accordance with CoA E130 (d) and REMM TT1. The consultation is to provide an overview of the outcomes of the parking surveys undertaken for the C3 worksite and to discuss the proposed management and mitigation measures to reduce impacts to stakeholders because of the off-street parking changes.

### 2.4.2. Traffic Control Group

Consultation will be undertaken with the Traffic Control Group (TCG) to provide details on the outcomes of the Nearmap parking surveys and to discuss management and mitigation measures, where required.

### 2.4.3. Other stakeholders

Consultation was undertaken with the following stakeholders during the development of this strategy:

1. PetO - 466 West Botany Street, Rockdale - requested that options be explored to increase the amount of car parking spaces available at the northern car park



2. UFC - 466 West Botany Street, Rockdale - requested that options be explored to increase the amount of car parking spaces available at the northern car park

3. Rockdale Ilinden Sports Centre 468 West Botany Street, Rockdale - noted that the removal of the northern car park would have little impact to their operations

CGU, Bayside Council and TfNSW have agreed on the provision of 26 parking spaces to be made available to the community in the existing northern car park. These spaces are proposed to be time restricted as noted on Figure 2 - 7 spots as 30 minute parking between 7AM and 6PM and then revert to 2P to 10PM All days. The other remaining spots are to be 2P 7AM-10PM all days.

## Bicentennial Park north carpark timed park



CGU-JV – M6 Motorway Stage 1 – Commercial in Confidence

Figure 2: Bicentennial Northern Car park changes

### 2.4.4. Communicating changes

CGU JV acknowledges that impacts on parking availability are a concern to the community surrounding the Project. Changes to parking associated with construction of the Project will be communicated to affected stakeholders (e.g. residents and business owners) as outlined in the Communication Strategy. Communication tools will include (but not be limited to):

- Letterbox drops regarding permanent/long term temporary parking removal, construction updates/newsletters,
- Door-knocking,
- Community information sessions,
- Email updates and provision of information on Project website, and
- Variable Message Signage (VMS) and static signage.

A summary of consultation and how key issues have been addressed in this document is included in Evidence of Consultation required under MCoA A.5

### 3. Preliminary construction works

The construction compound of C3 (West Botany Street) will be established during the Stage 1 Preliminary construction (site establishment phase) of the Project. This phase is expected to commence in October 2021 and will continue through to the start of the construction phase.

The proposed timeframe for staging of the Project is provided in Table 4.

Table 4 Proposed staging timeframe

Indicative Construction Staging and Operations Program		
	Start	End
Stage 1 Preliminary Construction	October 2021	December 2021
Stage 2 Construction	December 2021	November 2025
Motorway Operations	August 2025	Ongoing

Activities to be undertaken during the Preliminary construction include:

- Utility disconnections and relocations
- Demolition
- Fencing
- Construction of temporary site facilities such as:
  - ▶ Clearing and grubbing
  - ▶ Offices
  - ▶ Welfare facilities
  - ▶ Internal site roads & hard stands
  - ▶ Water treatment plants
  - ▶ Environmental controls
- Ground improvement activities

Access/ egress to and from the construction compound will be via the existing driveway.

These works will require the Council car park at the northern end of Bicentennial Park to be amalgamated into site, other than twenty six (26) parking spaces which will be made available to the public during the works.

## 4. Parking survey methodology

We were unable to undertake the surveys in accordance with MCoA E130 parking accumulation surveys (consistent with AustRoads) due to the COVID-19 restrictions that were in place, refer to Appendix C. We were also unable to determine the current demand during peak, off-peak, school drop off and pickup and weekend periods. Surveys will be undertaken for the construction phase of the works to aid in the further development of this CPAS.

### 4.1. Survey location

The original survey locations included the following:

- West Botany Street between President Avenue and Bay Street
- Bermill Street
- Lindsay Street
- French Street between West Botany Street and Cross Street
- French Lane between West Botany Street and Cross Street
- Green Street between West Botany Street and Cross Street
- Green Lane between West Botany Street and Cross Street
- Rockdale Ilinden Sports Centre parking area within Bicentennial Park
- Bicentennial Park South parking area
- Council car park located at the northern end of Bicentennial Park adjacent to Pet O and
- Multi storey car park corner of West Botany Street and Lindsay Street



The original survey extent is shown on Figure 3 below.



Figure 3: Preliminary construction survey extent

The Request for Quotation was sent to 3 companies:

1. [Austraflow](#)
2. [Bitzios Consulting](#)
3. [The Transport Planning Partnership](#)

All quotes were received, however, as noted by the companies, the parking surveys would need to occur post the removal of the lockdown and would likely not be representative until at least a month or so after the lockdown removal.

Given the low rates of mobility during the mid-year COVID-19 lockdown, alternative surveys were undertaken using Nearmap to understand the capacity of the existing Council car park at the northern end of Bicentennial Park South and alternate parking areas for those that would be displaced during the Preliminary construction activities. This method included reviewing the car



park occupancy rates over a number of different days of the week and over an extended period of time.

As the Council car park is not time restricted, the car park is available for all day parking. Approximately 200m to the south, the existing Bicentennial Park South parking area is shown to be the alternative parking area, refer to Figure 4. Similar to the northern car park, this parking area is unrestricted.

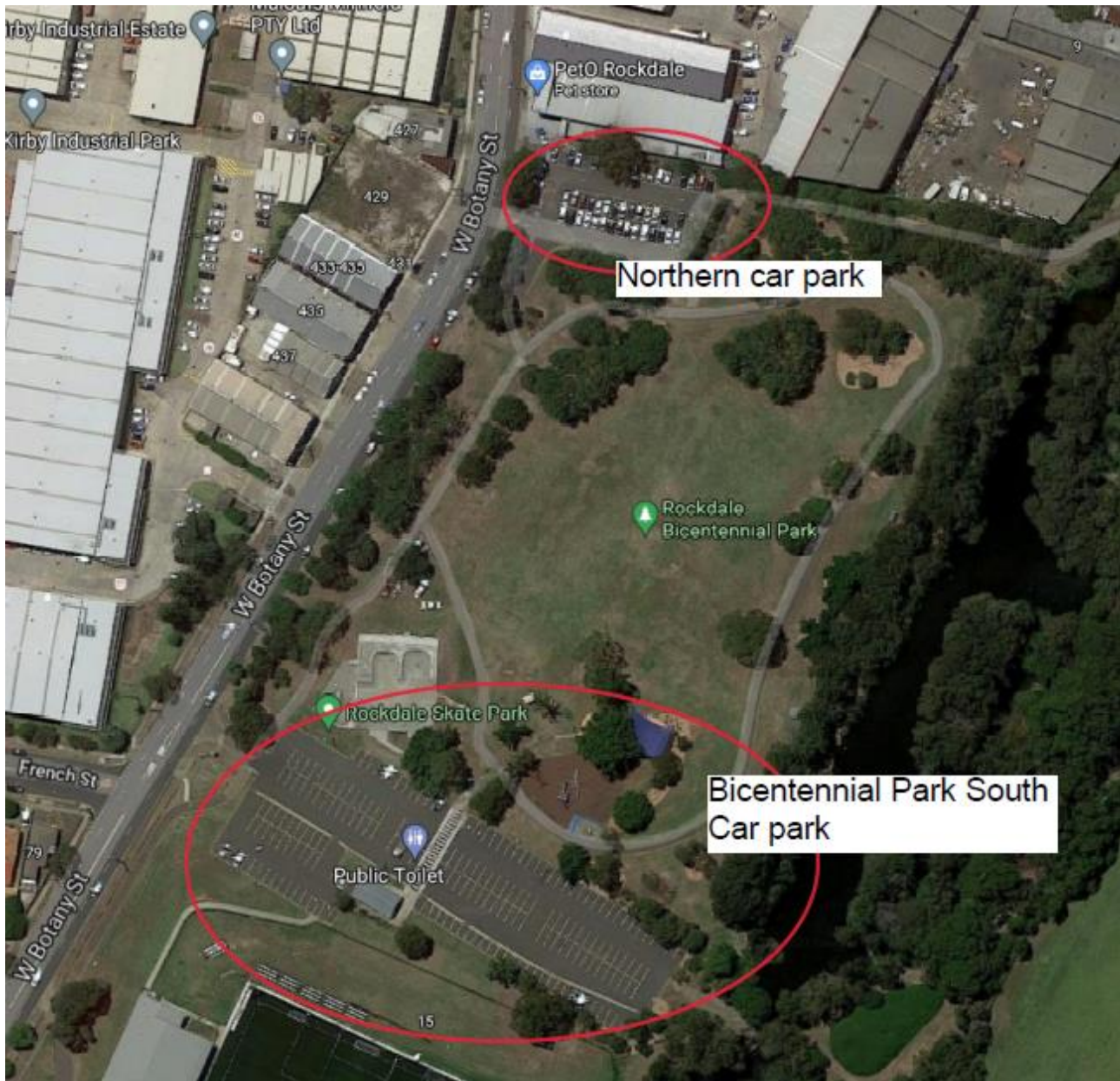


Figure 4: Car park locations

## 4.2. Existing conditions

To ascertain the impact of removal of the current off-street parking areas within the Northern Council car park, the existing parking restriction and use have been identified and included below.

The Council northern car park is not time restricted providing all day parking with 63 spaces unrestricted and 2 disabled parking spots, refer to Figure 5, below.

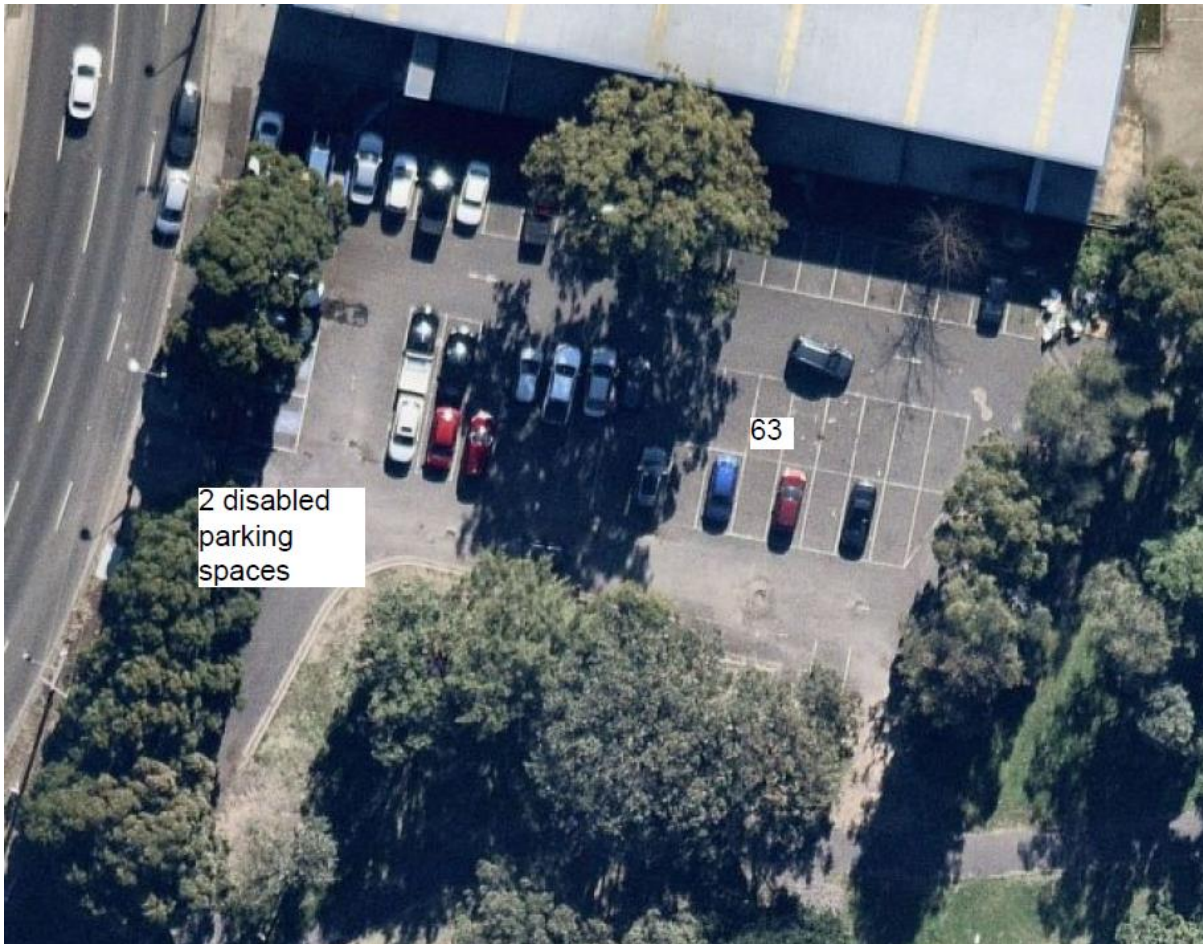


Figure 5: Northern car park



The Bicentennial Park South car park is not time restricted providing all day parking with 183 spaces unrestricted and 2 disabled parking spots, refer to Figure 6, below.



Figure 6: Bicentennial Park South car park

### 4.3. Calculating parking occupancy

Parking occupancy is defined as the ratio of number of occupied car spaces to the total number of spaces available.

To determine the number of spaces available at each parking area, the number of vehicles occupying parking spaces was counted. Where spaces were obscured on the aerial photography by overhanging vegetation, to be conservative, these spaces were assumed to be occupied.

$\text{Parking occupancy (\%)} = \frac{\text{number of parked cars}}{\text{number of parking spaces}}$
--

### 4.4. Summary of survey results

Off-street parking surveys were undertaken to calculate the parking occupancy on the parking areas identified previously. Table-5 summarises the parking occupancy across the area on different days of the week (sans Friday) over a number of months/ years.

Table-5: Occupancy rate comparison

Day	Date	Occupation Rate Northern car park	Occupation Rate Bicentennial Park South car park
Tuesday	22 October 2019	64%	5%
Wednesday	22 January 2020	86%	2%

Day	Date	Occupation Rate Northern car park	Occupation Rate Bicentennial Park South car park
Saturday	26 September 2020	32%	38%
Monday	7 December 2020	95%	1.6%
Sunday	24 January 2021	19%	2.2%
Monday	1 March 2021	76%	3.3%
Sunday	16 May 2021	59%	4.4%
Thursday	17 June 2021	49%	.05%

It is noted that occupancy rates of the Northern car park are highest during weekday periods, whereas the Bicentennial South car park experiences its highest occupancy rates on weekends, specifically Saturdays.

## 5. Workforce parking

Worker parking on local streets is a key issue resulting from construction activities. Reduced unoccupied street parking spaces, because of parking demand generated by the Project, can impact local residents. The Project will identify and implement reasonable and feasible strategies to lessen this impact.

The workforce will comprise of trades personnel, subcontracted personnel and engineering, functional and administrative staff. The size of the workforce will vary across the duration of the preliminary construction works. The EIS did not include the proposed preliminary construction workforce numbers. However, based on CGU proposed activities, it is anticipated that there would be on average 95 number of personnel on site.

CGU analysed the induction records of 20,915 personnel from the M4 East Project and M8 Project, including details on the mode of transport utilised to travel to work, with:

- 61.7% of personnel using public transport (12,904 people),
- 0.1% of personnel walking to work (23 people), and
- 38.2% of personnel using their own private vehicle (7,988 people).

CGU anticipates the level of accessibility to public transport to be the same. Based on this large data set the M6 Stage 1 Project has forecast 39% of personnel will use private vehicles to travel to work. As 39% of the Project's staff and labour force are forecasted to drive to the site compounds, they would therefore require parking, although it is noted that the number of construction personnel requiring parking would vary over the duration of the project

Table 6 provides a breakdown per site for personnel anticipated to be on site during the preliminary construction phase of the works and the amount of onsite parking available.

Table 6: Personnel and parking on site

Site	Location	Average #	On Site Parking	39% of average	Difference
C1	Arncliffe	40	140	16	+124
C2	TfNSW depot West Botany Street	25	40	10	+30
C3/ MOC3	West Botany Street	30	10	12	-2

Expected peak travel periods for the preliminary construction workforce are outlined in Table 7.

Table 7 Expected peak travel times of personnel

Activity	Hours	Shift times	Expected peak travel periods
Preliminary construction	7.00am and 6.00pm Monday to Friday  8.00am and 1.00pm on Saturdays.	6.45am or 7am – 5pm Monday to Friday  7.45am or 8am – 1pm Saturdays	6.00am-7.00am and 5.00pm-6pm Monday to Friday  7.00am-8.00am and 1.00pm-2.00pm Saturdays

## 6. Mitigation measures during preliminary works

A number of mitigation measures will be adopted during the preliminary works (site establishment) phase of the project including the provision of 26 parking spaces at the northern car park for the general public.

Further mitigation measures are listed below:

### 6.1. Sub-contractor obligations

CGU will require sub-contractors to provide employee transport strategies as part of the procurement process.

### 6.2. Demand Reduction

The Project is basing all personnel not required to be located at the preliminary construction site in offices away from the works area.

### 6.3. Tools of trade

The sites will allow for storage areas for workers who require tools of trade. By providing this space, the number of vehicles required to bring these tools to site every day will be minimised.

### 6.4. Sustainable transport options

#### 6.4.1. Car pooling

During the current COVID-19 restrictions, carpooling was specifically prohibited under the Public Health Orders in place. As these restrictions are lifted and the government advice is changed to reflect that carpooling is allowed, carpooling will be strongly encouraged by the Project for providing sustainability and community benefits.

Site toolboxes will be utilised to encourage Project personnel on the same shifts to coordinate with personnel comfortable with carpooling from similar locations. Those who demonstrate a commitment to carpooling will be provided with a permit to park on the construction compound sites for the day, where capacity allows. This permit will be awarded at the site gates by the security personnel, the vehicle will be required to have more than 60% occupancy to enter the site.

#### 6.4.2. Active transport

CGU will encourage the workforce to use active methods of transport such as walking and cycling to reduce the use of private vehicles. Bicycle parking facilities would be provided at each construction site and end-of-trip facilities would be provided within the northern site of Bicentennial Park (C3).



The local area surrounding the Project has a well-established walking and cycling network with dedicated cycle lanes and footpaths in the surrounding local roads, adjoined to shared paths along major arterial roads (General Holmes Drive). Figure 7 below shows cycle routes/ shared paths near the Project, including:

1. The shared path within Bicentennial Park
2. The shared path along General Holmes Drive
3. The on road cycle route along O'Connell Street/ Crawford Road linking the Sutherland Shire to the City of Sydney council areas.

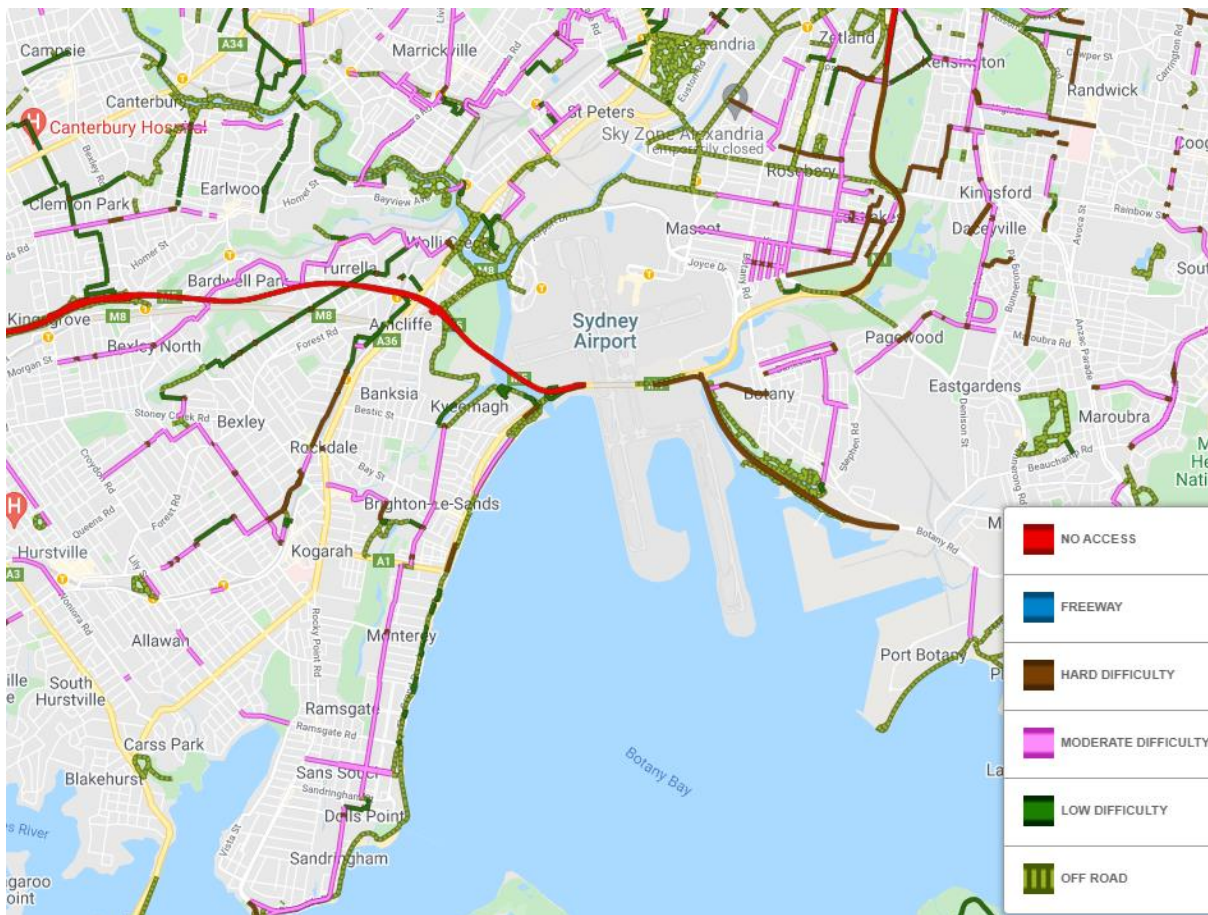


Figure 7: Cycle routes and shared paths

### 6.4.3. Public transport

CGU will encourage the workforce to use public transport through the recruitment and onboarding process, as well as through toolbox talks, to reduce the number of private vehicles travelling to and from the Project.

Bus services connecting the site to major transport interchanges include:

- **Route 455:** this route connects Kingsgrove rail station to Rockdale Plaza Drive bus interchange, via Kogarah rail station. The service operates between the hours of 6AM-7PM Monday to Friday (30 minute frequency) and 8AM-6PM (30 minute frequency). Bus stops are located on Kensington Street, Kogarah and within Rockdale Plaza Drive (limited service only)
- **Route 478** this route connects Rockdale rail station to Bay Street at West Botany Street and Miranda. The service operates between the hours of 530AM-midnight Monday to Friday (10-15 minute frequency) and 630AM-midnight (20 minute frequency)



- **Route 479** this route operates as a loop service connecting Rockdale to Kyeemagh. This service operates between the hours of 630AM-630PM Monday to Friday (10 minute frequency) and 8AM -6PM (40 minute frequency) Saturdays
- **Route 947:** this route connects Hurstville rail station to President Avenue via Dolls Point. The service operates between the hours of 6AM and 930PM Monday to Friday (30 minute frequency) and from 8AM to 9PM Saturdays (40 minute frequency). Bus stops are located on President Avenue and O'Connell Street.
- **Route 958:** this route connects Hurstville rail station to Kogarah rail station and onto Rockdale Plaza. This service operates between the hours of 6AM and 930PM Monday to Friday (30 minute frequency) and from 730 and 4PM Saturday (hourly frequency). Bus stop is located on Rockdale Plaza Drive.

Refer to Figure 8 below.

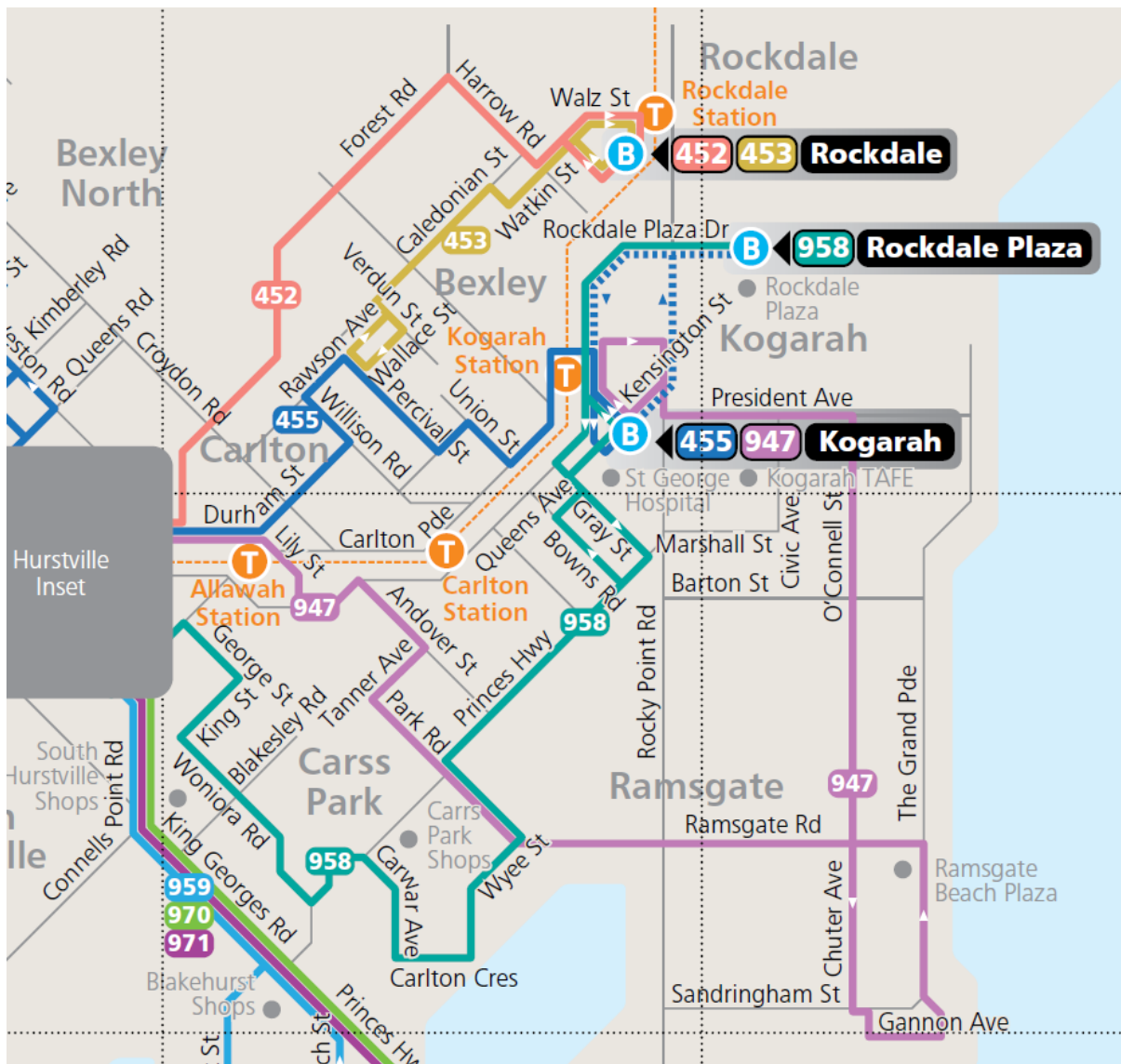


Figure 8: Bus routes connecting to transport interchanges

Train services allowing connections to the site, refer to Figure 9 include:

- **Kogarah** rail station is located 1.4km walk from the C3 site (approximately 17 minutes). Kogarah is serviced by the T4 line linking Cronulla to the Eastern Suburbs. Services start at 4AM until after midnight (all times) with services typically operating every 10 minutes during peak periods.
- **Wolli Creek** rail station is a station providing interchange between the T8 line Airport/ City/ Macarthur and Kogarah rail station
- **Rockdale** rail station is located 1.7km walk from the C2 site (approximately 17 minutes) Rockdale is serviced by the T4 line linking Cronulla to the Eastern Suburbs. Services start at 4AM until after midnight (all times) with services typically operating every 10 minutes during peak periods.



Figure 9: Train network

## 7. Mitigation measures to be further developed for the Construction Phase of the works

For the preliminary construction phase of the works, it is proposed to provide parking on site for 190 personnel. For construction works, post preliminary construction, several mitigation measures will be reviewed including:

### 7.1. Staged removal of parking

Planning for any works that require long-term temporary or permanent parking removal will consider and implement staged removal of parking, where practicable and feasible. This will involve assessing the minimum area that is required for each stage of the works and adjusting the worksite footprint accordingly.

### 7.2. Alternative parking arrangements

Stakeholders to be directly affected by the long-term temporary loss of on-street parking would be identified prior to the removal of parking, and potential alternative parking arrangements would be developed in consultation with the affected stakeholder considering local available options. This would occur at least five days prior to the removal of parking.

### 7.3. Shuttle bus service

Prior to the start of the construction phase, CGU will investigate the use of a shuttle bus to provide transport between the sites from a main public transport interchange, possibly Hurstville Station. A timetable will be developed in consultation with the construction team if the shuttle bus service is adopted.

### 7.4. Communicate parking restrictions to workers

Parking restrictions around construction sites will be communicated to construction workforce personnel through site inductions where they will be supplied with the Project Worker Code of Conduct, toolbox talks, and pre-start meetings as required. In addition, the following rules will be communicated to staff:

- Arrive and depart construction sites quietly and drive respectfully when travelling to and from the Project,
- Always check street signs for parking restrictions before leaving your vehicle, and
- If approached by a member of the public, be respectful and refer them to the Community Information Line.

Parking exclusions zones (i.e., "no parking areas") around construction sites will be clearly shown on maps provided at site offices, and on flyers to be issued at the induction as needed.

Educational initiatives will be provided to workers during inductions, pre-start meetings and toolbox talks, advising workers of carpooling incentives, and the availability of public transport and the shuttle bus service.

Where workers are impacting the amenity of residents, not complying with the Project Worker Code of Conduct, or repeatedly behaving or parking inappropriately they may be required to re-attend the Project induction which will include detail on the alternative parking options. Stronger sanctions, up to and including dismissal, may be implemented for repeat offenders at the discretion of the Project Manager.

## 7.5. Dedicated off-site parking

CGU will continue to investigate off-street car parking opportunities and any successful locations will be included in any subsequent revisions of this Strategy. Project dedicated parking outside the EIS listed ancillary facilities that utilises a site not already zoned to operate as a parking facility may be subject to a modification application to the Planning Approval requiring the Planning Ministers approval.

## 8. Monitoring and Reporting

### 8.1. Monitoring

Monitoring to assess the effectiveness of this Strategy will be carried out by daily inspections of the use of the Bicentennial South car park capacity to ascertain the impact of the Northern Car park closure. Surveys will also be conducted at pre-start meetings to ascertain and confirm the previous assumptions on travel modes, refer to section 5.

Where monitoring or community complaints identify non-conformances with this strategy, corrective actions shall be undertaken through the Project's non-conformance works procedure. Corrective actions would be documented as per the procedure. Where practicable, non-conformances and corresponding corrective actions would be communicated to the workforce and reinforced through various communications including but not limited to:

- Project toolbox and pre-start meetings,
- Project alerts,
- Investigation and implementation of alternative methods to reinforce the parking strategy,
- Investigation and implementation of other viable options for staff to use public transport,
- Where the owner of an offending vehicle can be identified, issuing warning notices,
- Reassessment and planning of works to further minimise site vehicles on affected streets, and
- Documenting actions in weekly and monthly internal reports.

### 8.2. Reporting

A summary report for each quarter will be provided to Bayside Council, TfNSW and DPIE regarding the outcomes of the monitoring undertaken for the preceding quarter. This report will also provide details of non-conformances and corrective actions taken.

### 8.3. Contingency measures

Contingency measures would be dependent upon the issues/non-conformances identified during monitoring, and the effectiveness of corrective actions implemented, as per section 8.1.

Contingency measures would be investigated if it is determined that the corrective actions implemented are ineffective, and may include:

- Investigating additional off-site parking for the workforce,
- Revising site induction and toolbox talk content to better encourage the use of active and public transport and communicate designated and prohibited locations for workforce parking,
- Amending carpooling communications to encourage an increase in participation rates, and
- Implementing disciplinary process for repeated non-conformance.

## Appendix A Other MCoA and REMMs relevant to this Strategy

Table 8: Other MCoA and REMMs

REMM #	Requirement	How addressed	Strategy reference
SE1	A Preliminary construction Management Plan will be prepared prior to construction and will have regard to the amenity of adjacent areas and minimising impacts to adjacent sensitive receivers, including potential noise, dust, traffic, visual, lighting and overshadowing and overlooking impacts during the establishment phase.	This strategy complements the Staging Report and Preliminary construction Management Plan	This strategy

## Appendix B      Parking survey data (summary)



## Nearmap car park survey

Day	Date	Occupation rate %	
		Northern car park	Bicentennial Park South
Tuesday	22 October 2019	64	5
Wednesday	22 January 2020	86	2
Saturday	26 September 2020	32	38
Monday	7 December 2020	95	1.6
Sunday	24 January 2021	19	2.2
Monday	1 March 2021	76	3.3
Sunday	16 May 2021	59	4.4
Thursday	17 June 2021	49	.05

Both car parks are provided by Bayside Council and are unrestricted parking.

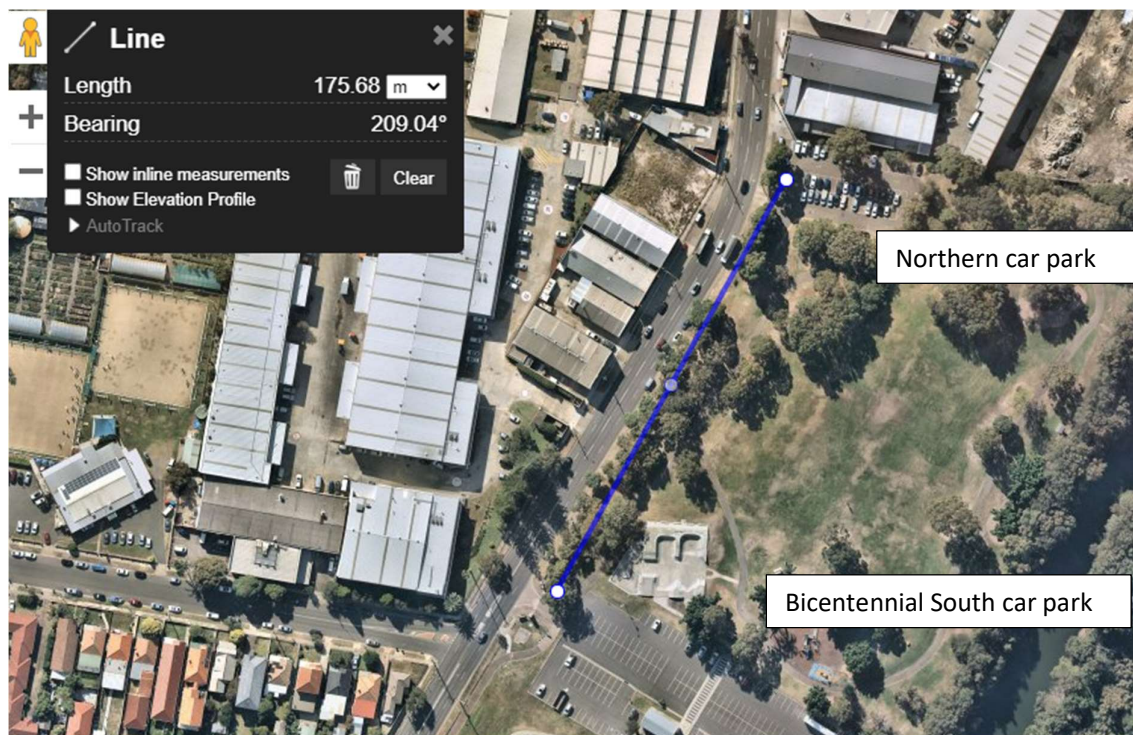
Northern car park contains 63 spaces

Bicentennial Park south contains 183 spaces

### Assumptions:

1. Where trees obscure parking spaces, it is assumed that a vehicle is parked

The distance between the Northern car park and Bicentennial South car park is approximately 180m





Tuesday 22 October 2019

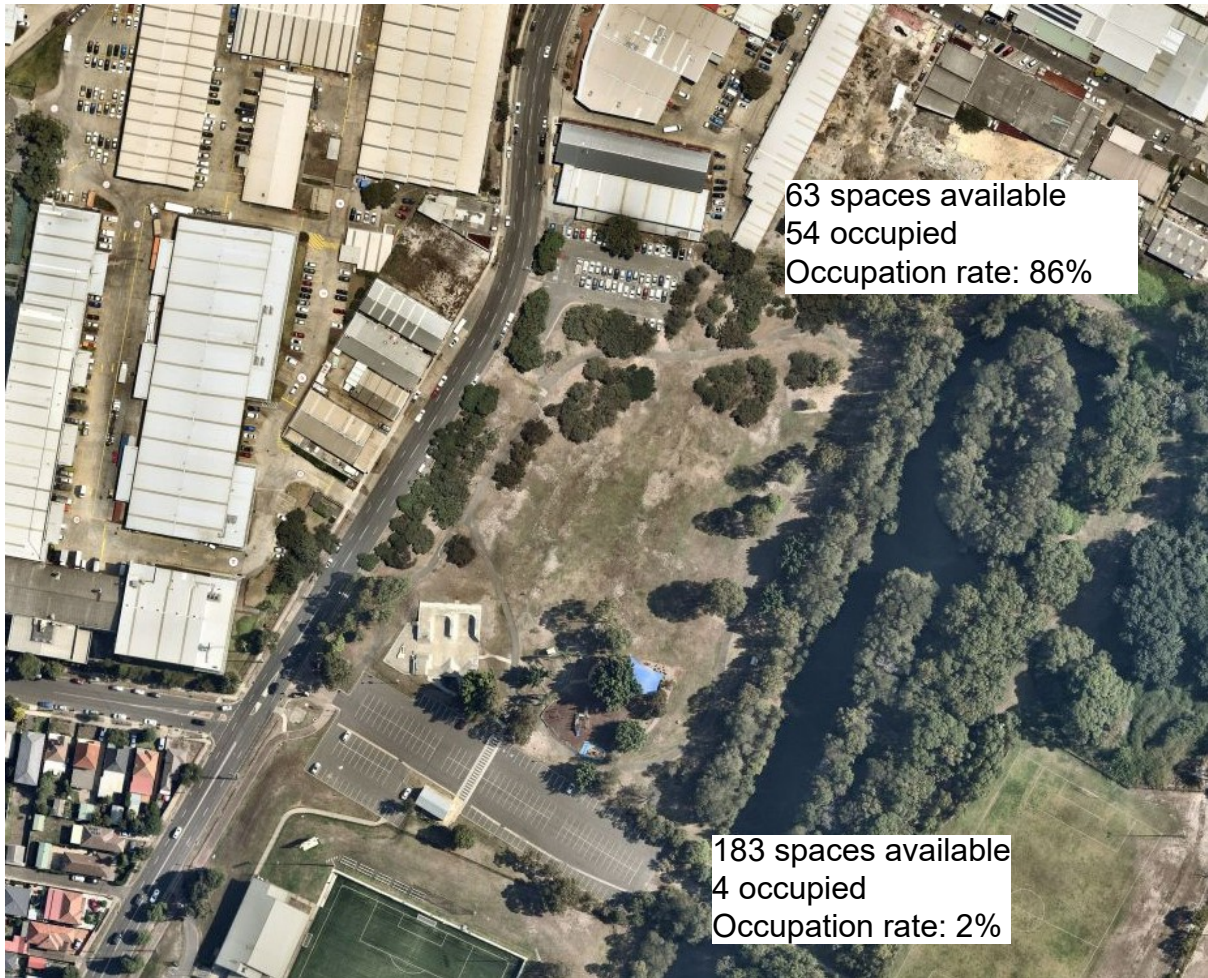


63 spaces available  
40 occupied  
Occupation rate: 64%

183 spaces available  
10 occupied  
Occupation rate: 5%

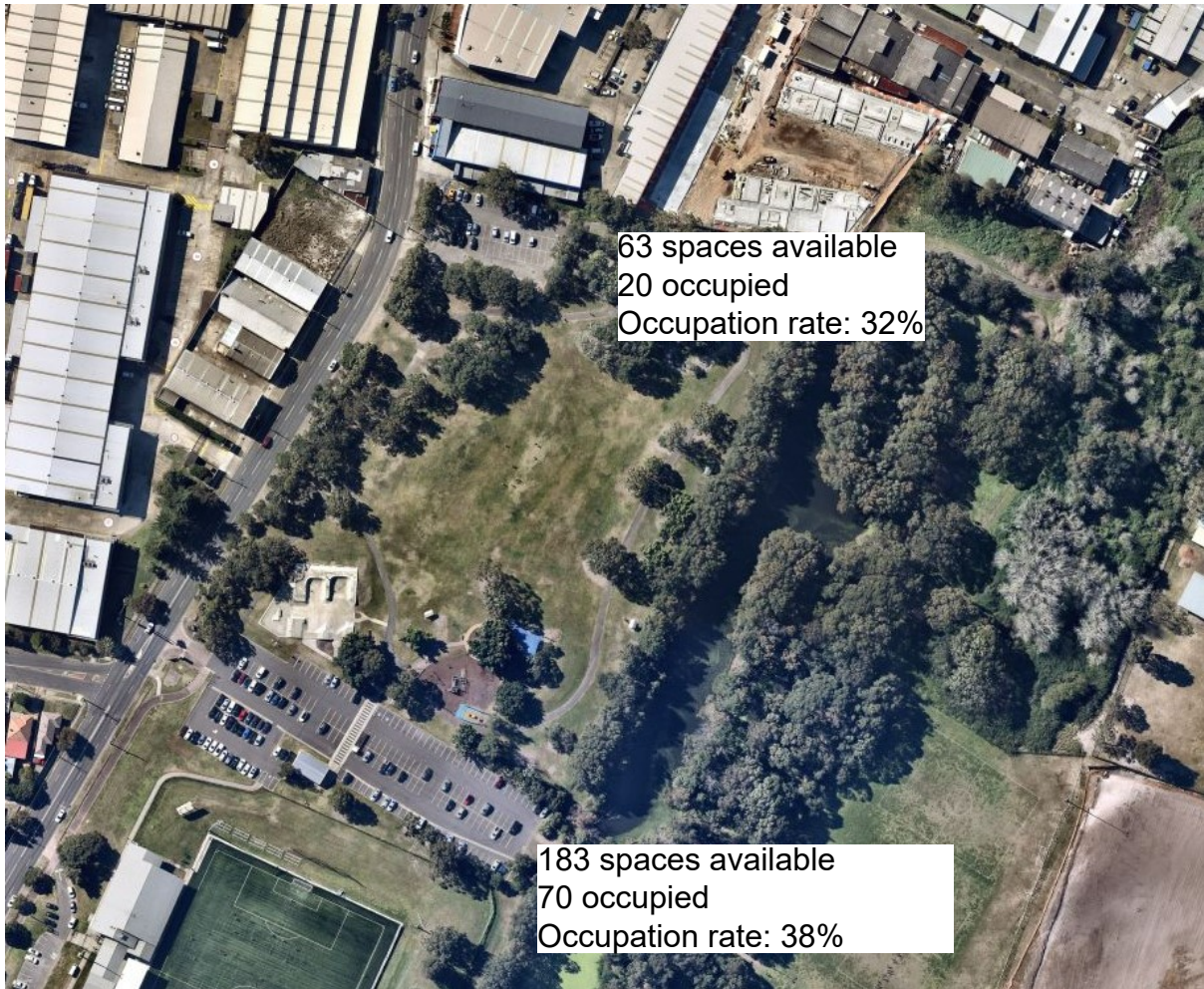


Wednesday 22 January 2020



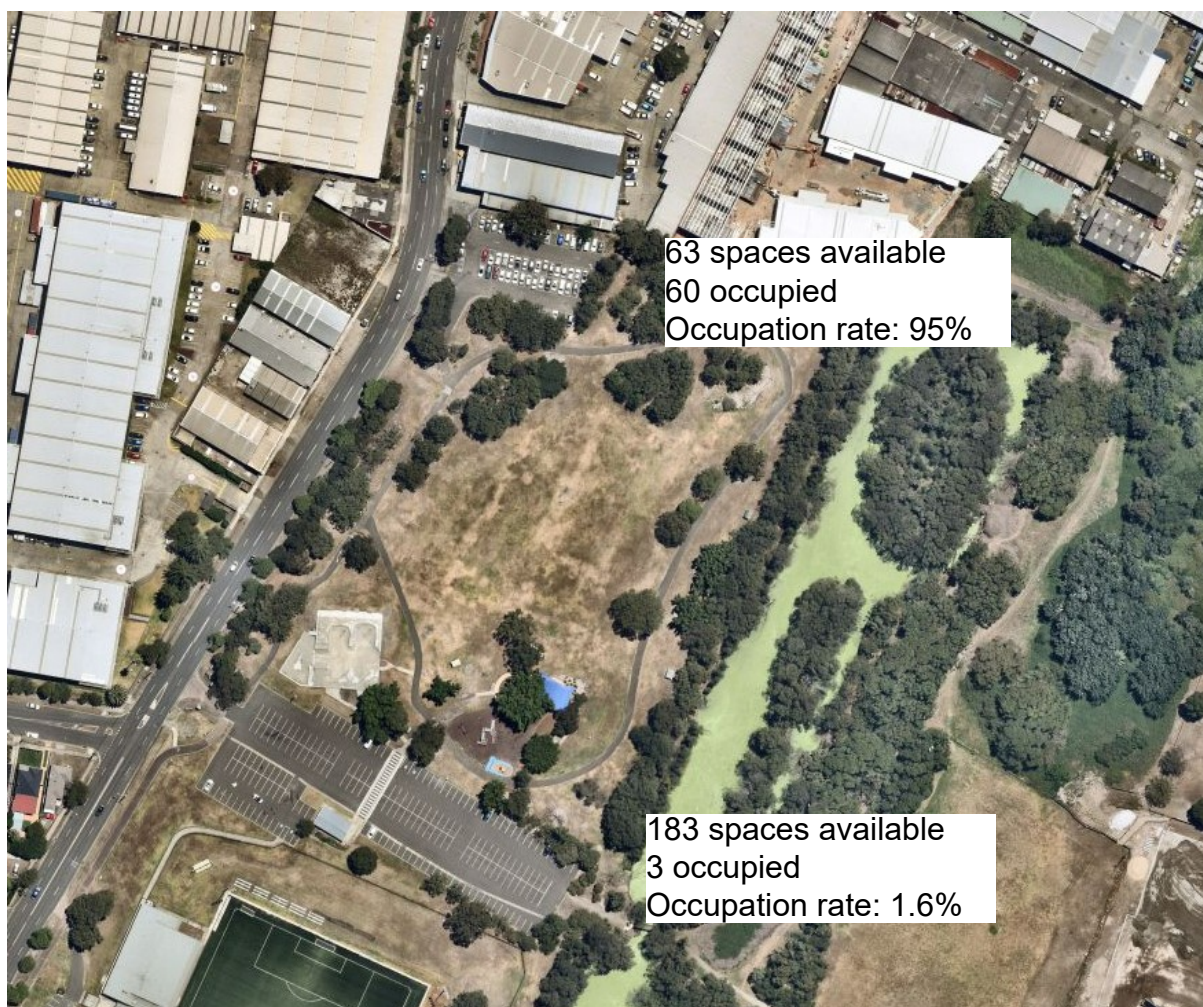


Saturday 26 September 2020





Monday 7 December 2020



Sunday 24 January 2021





Monday 1 March 2021



63 spaces available  
48 occupied  
Occupation rate: 76%

183 spaces available  
6 occupied  
Occupation rate: 3.3%



Sunday 16 May 2021





Thursday 17 June 2021





## Appendix C COVID-19 Restrictions

The award of the contract for the M6 Stage 1 works occurred in late May 2021. The surveys were originally scheduled to occur post the June school holiday period (26<sup>th</sup> June to 12<sup>th</sup> July 2021). Due to the COVID-19 pandemic, the Greater Sydney area was in lockdown from the 26<sup>th</sup> June 2021. The duration of the lockdown was originally estimated to end on the 9<sup>th</sup> July 2021. The initial "Public Health Order" required residents of the Greater Sydney Area to only leave their residents for a small number of reasons:

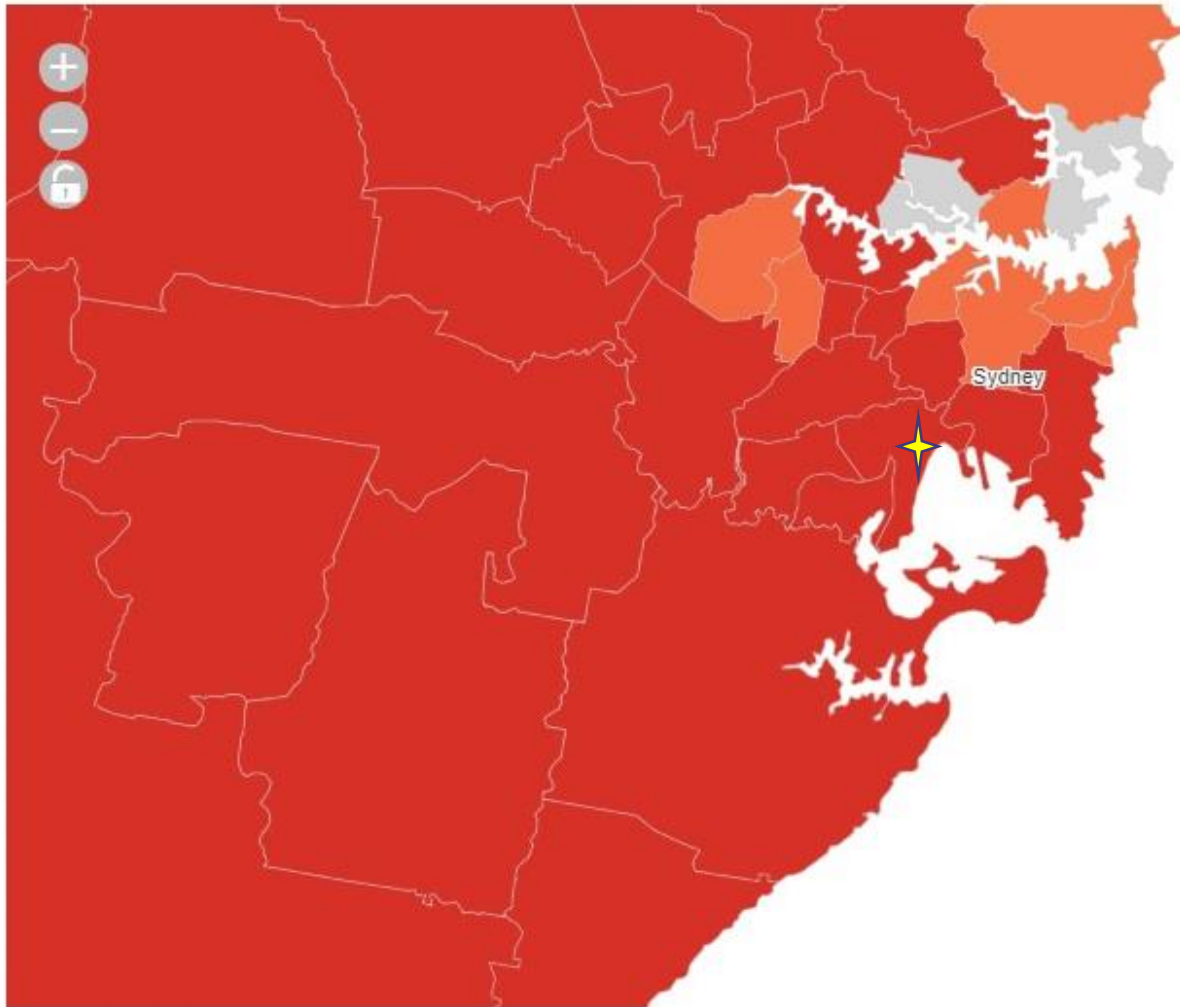
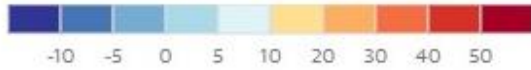
- Shopping for essential goods, exercise,
- If unable to work from home or
- To get the COVID-19 vaccine or other medical services.

The lockdown was further extended on the 9<sup>th</sup> July to 30<sup>th</sup> July 2021. On the 17<sup>th</sup> July further restrictions were put in place to limit the spread of the COVID-19 virus, with all non-essential work places closed and residents from three Local Government Areas (LGA) forbidden to leave their LGA, unless they were deemed health and emergency service workers. With the introduction of the Public Health Orders, the *Guardian Australia* media outlet, reviewed the mobility data for the 2021 mid-year lockdown. This review showed that nearly half of local government area residents stayed within their local government area compared to Pre-COVID-19 times, refer to Figure 10.

## People in Sydney are staying put

% change in people staying within their local government area compared to February 2020

% change



Source: Facebook

Figure 10: Travelling outside your LGA

Movement in Sydney was also compared to pre and during lockdowns for both Melbourne and Sydney showing a significant drop of movement for all public transport, taxis and walking trips during the lockdowns, refer to Figure 11, below.

## Walking, taking public transport or taxis are all down in Sydney

Showing the number of trips planned using the Citymapper app as a percentage of Jan-Feb 2020 levels. Does not include driving personal cars.



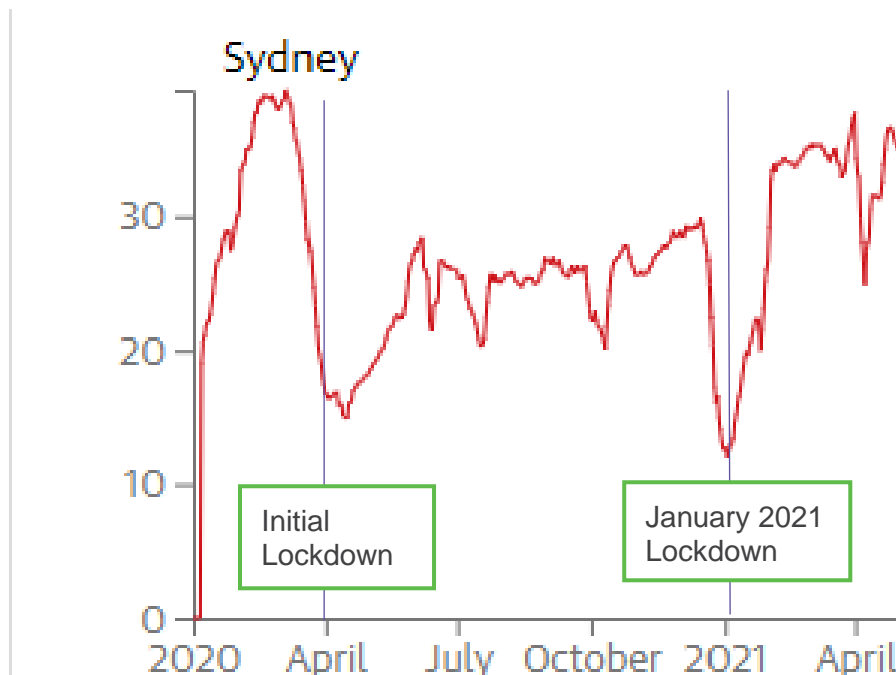
Figure 11: Data from Guardian Australia on trips planned during Lockdowns

As noted in the article, movement and public transport patronage tends to take an extended time to bounce back to pre-lockdown levels, refer to Figure 12,

It can take months for movement and public transport patronage to recover after an extended lockdown. Victoria was still operating at just more than half of its pre-Covid levels in May, more than six months after its extended lockdown.

Figure 12: Quote from Guardian 15 July 2021

However, traffic congestion does tend to recoup relatively quickly, once the lockdown is removed, but the vehicle numbers still tend to be lower than pre-COVID-19, refer to Figure 13 below.



7 day rolling average of traffic congestion.

Guardian graphic | Source: TomTom Traffic Index congestion

Figure 13: Traffic congestion

Read the full *Guardian Australia* article [here](#)

The *Sydney Morning Herald* (SMH) noted in an article dated 13<sup>th</sup> July 2021 that:

Road traffic has declined by about 30 per cent in just over a month, with 71 million car movements recorded on Monday, compared to 108 million movements on June 7, which was higher than pre-pandemic levels.

The SMH article can be found [here](#).

Based on the above information, undertaking the parking surveys during COVID-19 restrictions and immediately post the lifting of restrictions, would likely provide a very skewed result and would likely not be acceptable to stakeholders.