

Construction Parking and Access Strategy

Western Harbour Tunnel and Warringah
Freeway Upgrade

Stage 1B Early and Enabling Works - Cammeray Golf
Course Adjustment Works

Transport for NSW

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Construction Parking and Access Strategy

Western Harbour Tunnel and Warringah Freeway Upgrade

Stage 1B Early and Enabling Works - Cammeray Golf Course Adjustment Works

December 2022

List of emergency and key contacts

Position	Name	Phone
North Sydney Council		(02) 9936 8100
24-hour community information line		1800 931 189
SPA Environmental Manager	Alyce Harrington	0409 633 908
SPA Community Manager	Amanda Muir	0499 542 816
SPA Project Manager	Jason Nisbet	0418 693 964
SPA Superintendent	John Cosgrave	0419 717 529
SPA Traffic Manager	David Lowe	
Environmental Representative	Maurice Pignatelli	0407 493 176
Transport for NSW Representative	Sam Schubert	
Transport for NSW Environmental Representative	Rob Owens	0435 578 294

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Document control

Approval

Title	Stage 1B Early and Enabling Works – Cammeray Golf Course Adjustment Works, Construction Parking and Access Strategy
Approved by SPA Environment Manager	Alyce Harrington
Signed	
Dated	4/10/2022
Approved by SPA Project Manager	Jason Nisbet
Signed	
Dated	4/10/2022

Version control

The below document status table is for tracking the revisions of the CPAS, while the project is in construction. The version control table is to be used to track CPAS revisions, including those incorporating changes following agency comments.

It may be modified where necessary to fit with requirements of the individual project.

Revision	Date	Description	Approval
0	20/12/2021	Draft for SPA review	J. Nisbet
1	24/01/2022	Draft for TfNSW review	J. Nisbet
2	17/02/2022	Issued for ER /Consultation review	J. Nisbet
3	06/04/2022	Issued for ER endorsement and DPE submission	AH
4	29/06/2022	Updated following DPE review	AH
5	04/10/2022	Updated for DPE submission	BD
6	21/11/2022	Updated following comments from DPE	BD
7	14/12/2022	Updated following feedback from TfNSW in regard to occupation of spaces on Warringah road. Approval sought for the extension of occupation for two spaces on Park ave only.	BD

Glossary / abbreviations

Abbreviation	Expanded text
CCS	Community Communication Strategy
CEMP	Construction Environmental Management Plan
CGC	Cammeray Golf Course Adjustment Works
CoA	Condition of Approval
CPAS	Construction Parking and Access Strategy
CUT	Critical utilities installation, relocation and protection
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
ITS	Intelligent Transport System
Project, the	Western Harbour Tunnel Warringah Freeway Upgrade
REMM	Revised Environmental Management Measures
ROL	Road Occupancy Licence
TfNSW	Transport for NSW
TTAMP	Traffic, Transport and Access Management Sub-plan
WFU	Warringah Freeway Upgrade
WFUEW	Warringah Freeway Upgrade Early Works
WFUMW	Warringah Freeway Upgrade Main Works
WHT	Western Harbour Tunnel
WHTWFU	Western Harbour Tunnel Warringah Freeway Upgrade

1 Introduction

1.1 Background

The Western Harbour Tunnel and Warringah Freeway Upgrade (WHTWUFU) is shown in Figure 1-1. The project comprises two main components:

- A new crossing of Sydney Harbour involving twin tolled motorway tunnels connecting the M4-M5 Link at Rozelle and the Warringah Freeway at North Sydney (the Western Harbour Tunnel)
- Upgrade and integration work along the existing Warringah Freeway, including infrastructure required for connections to the Beaches Link and Gore Hill Freeway Connection project. Reconfiguration works as part of the Warringah Freeway Upgrade would optimise the road corridor and improve the performance of the Sydney Harbour Tunnel, the Sydney Harbour Bridge and the Western Harbour Tunnel.

Due to its importance, the WHTWUFU project was declared to be Critical State Significant Infrastructure (CSSI) by the Minister for Planning and Public Space on 9 November 2020.

On 21 January 2021, the Department of Planning, Industry and Environment (DPIE) approved the construction and operation of the WHTWUFU project (SSI 8863).

A detailed description of the project is provided in Chapter 5 of the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement (EIS).

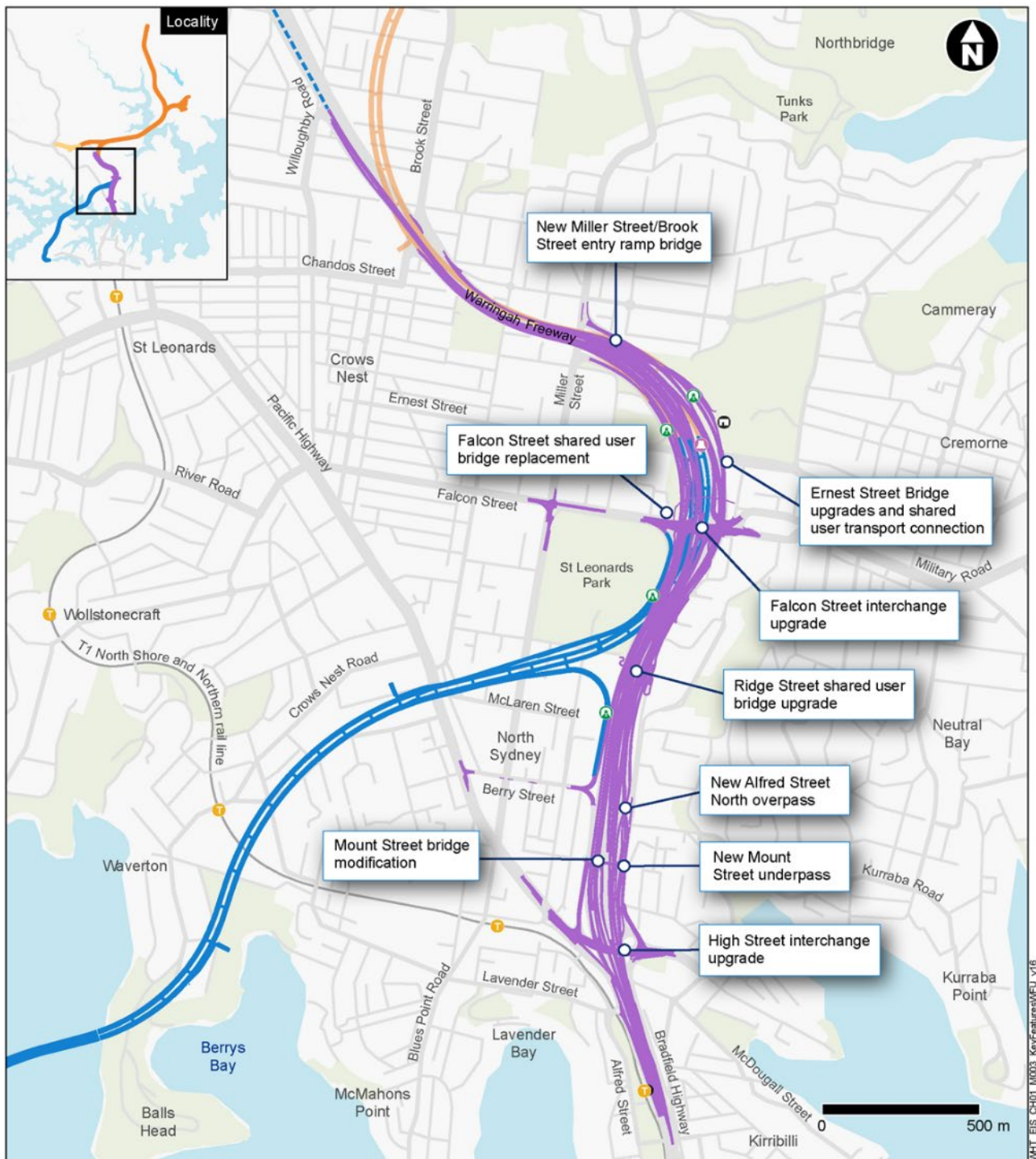
The WHTWUFU project will be delivered in numerous stages:

- Stage 1 - Early and enabling works:
 - Stage 1A - Critical utility installation, relocation and protection (CUT)
 - Stage 1B - Cammeray Golf Course adjustment works (CGC) (the subject of this CPAS)*
 - Stage 1C – Massey to Amherst noise wall (M2A)
 - Stage 1D – WHT construction power and utilities (WHTCP)
 - Stage 1E – Maritime Heritage – relocation of historic vessels M.V. Cape Don and Baragoola (MH)
- Stage 2 - Warringah Freeway Upgrade project (WFU)
- Stage 3 - Western Harbour Tunnel project (WHT).

Further detail on each stage is provided in the WHTWUFU project Staging Report.

This Construction Parking and Access Strategy (CPAS) applies only to Stage 1B Early and Enabling Works – Cammeray Golf Course Adjustment Works stage of the project (referred to herein as “the Cammeray Golf Course works” or ‘CGC’. The Cammeray Golf Course works will support the delivery of the wider WHTWUFU program of works by undertaking these works prior to the commencement of the Stage 2 and Stage 3.

*A Low Impacts Works Permit has been approved for the construction of the Active Transport Link (ATL) at Cammeray Golf Course.



Legend

Operational features

- Warringah Freeway Upgrade
- Western Harbour Tunnel
- Communications cable for motorway control centre
- Surface connection
- Permanent operational facility
- Ventilation outlet

Connecting projects

- Beaches Link

Existing rail network

- Heavy rail
- Train station

(Reference: Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement, Figure 1-3)

Figure 1-1 Key features of the Warringah Freeway Upgrade component of the project

1.2 Project description

The early and enabling works will support the delivery program of the Main Works of the project by undertaking these works prior to the commencement of the Main Works.

This CPAS applies only to the Cammeray Golf Course works package of the project (Stage 1B). These Cammeray Golf Course works are critical to an earlier start on site and will be undertaken as part of early and enabling works of the project as outlined in Table 1-1 and Figure 1-2. Table 1-1 provides an overview of the scope of works for the Cammeray Golf Course works.

The Cammeray Golf Course works will commence in early 2022 and be completed by late 2022. The program for the remaining stages of the WHTWUFU project is included in the WHTWUFU Project Staging Report.

Table 1-1 Cammeray Golf Course works

Areas	Key activities	Planned schedule for construction
Cammeray Golf Course	<ul style="list-style-type: none">• Adjustments to the golf course to maintain its viability• Removal of redundant paths and connection of existing paths into the Active Transport Link (delivered as low impact works)• Clearing and grubbing of vegetation• Construction of a 9-hole golf course• Relocation of existing maintenance buildings• Installation of a practice lesson putting green• Connection of existing car park and revised parking facilities to new maintenance buildings• Service location and adjustment/removal of services and utilities within the golf course• Utility protection and adjustment works.	Start: Q2 2022 End: Q2 2023
Stormwater Dam located inside CGC	<ul style="list-style-type: none">• Installation of a new permanent replacement storage dam and associated infrastructure prior to:<ul style="list-style-type: none">◦ Installation of a water treatment system and associated mechanical and electrical equipment, and connections to existing stormwater system.	Start: Q2 2022 End: Q2 2022



Figure 1-2 Location of Cammeray Golf Course works scope

1.3 Purpose and scope of this CPAS

This CPAS has been prepared to describe how the Contractor, during the Cammeray Golf Course works, will comply with the requirements of the NSW Minister for Planning and Public Space's Conditions of Approval (CoA) E139 and E140. The scope of the CPAS includes on- and off-street parking changes during the Cammeray Golf Course work that are located outside the approved CSSI footprint. Car parking requiring removal inside the approved CSSI footprint has been considered in the EIS and has already been approved under the Infrastructure Approval (SSI-8863). Notwithstanding, car parking spaces that will be removed during the Cammeray Golf Course work that are located outside the approved CSSI footprint have been assessed and identified.

The CPAS will be lodged to DPIE at least one month prior to the commencement of any work that will impact on parking. These works will not commence until the CPAS has been approved by DPIE.

The requirements of CoA E139 and E140 and where they are met in this CPAS are shown in Table 1-3. Additional CoA and Revised Environmental Management Measures (REMM) are presented in Appendix A3.

Table 1-2 CoA E139 and E140 compliance

CoA No.	Condition requirements	Where addressed in CPAS
E139	Vehicles (including light and heavy vehicles) associated with the CSSI must be managed to:	
	a. minimise parking on local roads	Section 5.2 Also refer to Traffic, Transport and Access Management Sub-Plan (TTAMP)
	b. minimise idling and queuing on state and regional roads	Section 5.2 Also refer to the TTAMP
	c. not carry out marshalling of construction vehicles near sensitive land user(s)	Section 5.2 Also refer to the TTAMP
	d. not block or disrupt access across pedestrian or shared user paths at any time	Section 5.2 Also refer to the TTAMP
	e. ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the Traffic, Transport and Access Management CEMP Sub-plan	The Stage 1B CGC works does not include spoil haulage (and associated vehicles). Given the cut-to-fill adjustments that are required to be completed by SPA to fulfil the final design requirements of the golf course redevelopment, SPA is planning to achieve an even balance of material won from the site and used elsewhere (within the site boundary) to achieve fill levels, with the assistance of information gained from the Detailed

CoA No.	Condition requirements	Where addressed in CPAS
		<p>Site Investigation already undertaken for the golf course.</p> <p>This is reflected in the Staging Report (Rev 3, March 2022) where the Stage 1B CGC works, as it does not include tunnel excavation or large bulk earthworks, CoA A47 is not applicable.</p>
E140	A Construction Parking and Access Strategy must be prepared to identify and mitigate impacts resulting from on- and off-street parking changes during construction of the CSSI. The Strategy must include, but not necessarily be limited to:	
	f. achieving the requirements of Condition E139	Table 1-3
	g. confirmation and timing of the removal of on- and off-street parking associated with construction of the CSSI	Section 4
	h. parking surveys of all parking spaces to be removed or occupied by the CSSI workforce to determine current demand during peak, off-peak, school drop-off and pick up, weekend periods and during special events	Section 3.1
	i. consultation with affected stakeholders utilising existing on- and off-street parking stock which will be impacted as a result of construction	Section 2
	j. assessment of the impacts of changes to on- and off-street parking stock taking into consideration, occupation by the CSSI workforce, outcomes of consultation with affected stakeholders and considering the impacts of special events	Section 4
	k. identification of mitigation measures to manage impacts to stakeholders as a result of on- and off-street parking	Section 5

CoA No.	Condition requirements	Where addressed in CPAS
	changes including, but not necessarily limited to, staged removal and replacement of parking, provision of alternative parking arrangements, managed staff parking arrangements and working with relevant council(s) to introduce parking restrictions adjacent to work sites and compounds or appropriate residential parking schemes	
	l. where residential parking schemes already exist, off-road parking facilities must be provided for the CSSI workforce	Section 4.1
	m. mechanisms for monitoring, over appropriate intervals, to determine the effectiveness of implemented mitigation measures	Section 6.1
	n. details of shuttle bus service(s) to transport the CSSI workforce to construction sites from public transport hubs and off-site car parking facilities (where these are provided) and between construction sites	Section 5
	o. provision of contingency measures should the results of mitigation or monitoring indicate implemented measures are ineffective	Section 6.4
	p. provision of reporting of monitoring results to the Planning Secretary and relevant council(s) at three monthly intervals	Section 6.3
	The Construction Parking and Access Strategy must be submitted to the Planning Secretary for approval at least one month before the commencement of any works that impact existing parking. The approved Strategy must be implemented before impacting on on-street parking.	Section 1.3

A rapid assessment of parking spaces that will be removed during the Cammeray Golf Course work is shown in Table 14.

Table 1-3 Rapid assessment of parking spaces to be removed

Assessment criteria	Park Avenue	Bells Avenue* / Warringa Road
Has the Roads Act 1993 been enacted or does TfNSW already own / control the land?	No	No
Is the parking located within the approved CSSI footprint?	No	No
Has sufficient off-streetcar parking been provided for the construction workforce?	Yes	Yes
How many parking spaces are proposed to be removed?	2 spaces (temporarily)	No longer required by SPA
Are there sufficient remaining car parking spaces to meet parking demand post-removal?	Yes	Yes
Where addressed in CPAS	Sections 3 and 4	Sections 3 and 4

*No Impacts to Bells Avenue is expected as part of the CGC works

2 Consultation, endorsement and approval

This CPAS has been accepted by the Contractor Project Manager, Contractor Environmental Manager and Transport for NSW (TfNSW) prior to lodgement to DPIE for approval. This CPAS has been prepared with consideration of consultation undertaken with North Sydney Council and stakeholders who will be affected by impacts to on and off-street parking.

Consultation was undertaken with affected stakeholders associated with temporary on-street car parking removal proposed on Warringa Road and temporary removal along Park Avenue, in accordance with CoA E140(d),(e) and (f). The intent of this consultation was to inform affected stakeholders, to assess impacts to affected stakeholders and to develop specific mitigation measures to manage the impacts to affected stakeholder. This consultation included the following:

- Letter box drops
- Door knocks
- Emails
- Phone calls
- Online Survey.

No specific mitigation measures were identified following the outcomes of stakeholder consultation associated with the removal of on-street car parking along Bells Avenue*/Warringa Road and Park Avenue. Therefore, no additional mitigation measures were developed beyond those presented in Section 5.3 of this CPAS.

In accordance with CoA A5, a consultation summary report has been prepared to document the consultation undertaken in the development of this plan as required by CoA E140(d), (e) and (f). This Consultation Summary will be lodged to DPIE along with this CPAS. Consultation with North Sydney Council about the impacted parking spaces has been addressed in the Stage 1B TTAMP CoA A5 Consultation Report. Consultation with other affected stakeholders, including residents and businesses, is included in the Stage 1B CPAS CoA A5 Consultation Report, appended to this document.

Ongoing consultation with stakeholders, including the surrounding community, will be conducted throughout works in accordance with the Community Communication Strategy (CCS).

* No Impacts to Bells Avenue is expected as part of the CGC works

3 Existing conditions

3.1 Parking surveys

3.1.1 Parking survey times and locations

In accordance with CoA E140(c), parking surveys have been undertaken at all locations where on-street parking spaces are proposed to be removed to determine existing parking demand during peak, off-peak, school drop-off and pick up, weekend periods and during special events.

The parking surveys were undertaken on the following days and times:

- Weekdays¹
 - 8.30 am (weekday morning peak / school drop-off)
 - 3 pm (school pick up)
 - 5 pm (weekday evening peak)
 - 10 pm (weekday evening off-peak)
- Weekends²
 - 12 pm (weekend day)
 - 11 pm (weekend evening)

These days do not coincide with public holidays or school holidays. The parking survey results can therefore be considered an accurate representation of a typical weekday and weekend.

The parking surveys were undertaken at the locations listed in Table 3-1.

Table 3-1 Parking survey locations

Location	Road segment
Park Avenue, Cammeray (refer to Figure 3-1)	Eastern and western sides, between Grasmere Road and Earle Street
Bells Avenue* / Warringa Road, Cammeray (refer to Figure 3-2)	Northern and southern sides, south of Amherst Street / Cammeray Road

* This plan references Bells Avenue /Warringa Road, as it was part of the footprint of the parking survey for the ATL and CGC works, however no impacts to Bells Avenue is expected as part of the CGC works

¹ Weekday surveys were undertaken on Thursday 11 November 2021, Friday 12 November 2021, Monday 15 November 2021, Tuesday 16 November 2021 and Wednesday 17 November 2021.

² Weekend surveys were undertaken on Saturday 13 November 2021 and Sunday 14 November 2021.



Figure 3-1 Parking survey locations – Park Avenue, Cammeray



Figure 3-2 Parking survey locations – Bells Avenue / Warringa Road, Cammeray

Parking survey methodology

All nominated locations subject to the parking survey were initially inspected to note existing capacity and existing parking restrictions (e.g., untimed, timed parking, loading zones). Where on-street parking spaces are not marked, the maximum number of parking spaces was determined in accordance with Australian Standard 2890.5-1993 Parking facilities Part 5: On-street parking.

On each day and time listed above, all nominated locations were surveyed by vehicle and the number of occupied spaces was documented.

3.1.2 Calculation of parking occupancy

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

$$\text{Parking occupancy (\%)} = \frac{\text{Number of occupied spaces}}{\text{Total number of available spaces}}$$

3.2 Park Avenue, Cammeray

3.2.1 Parking supply

There is a total of 21 parking spaces on the surveyed section of Park Avenue. These spaces are allocated as follows:

- Eastern side, between Grasmere Road and Earle Street – 10 spaces – 4P unmetered, 8.30 am to 6 pm, Monday to Friday (permit holders excepted)
- Western side, between Grasmere Road and Earle Street – 11 spaces – 4P unmetered, 8.30 am to 6 pm, Monday to Friday (permit holders excepted)

The allocation of parking spaces is shown spatially in Figure 3-4.



Figure 3-4 Existing parking supply – Park Avenue, Cammeray

3.2.2 Parking occupancy

Existing parking occupancies on Park Avenue during the various surveyed days and times are detailed in Table 3-2. The results show very low occupancies in all surveyed periods. Existing parking is likely associated with long-term resident / visitor parking servicing adjoining houses.

Table 3-2 Existing parking occupancy – Park Avenue, Cammeray

Day	Time period	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
Average weekday	8.30 am (weekday morning peak / school drop-off)	3	18	21	14%
	3 pm (school pick up)	5	16	21	24%
	5 pm (weekday evening peak)	2	19	21	10%
	10 pm (weekday evening off-peak)	4	17	21	19%
Average weekend	12 pm (weekend day)	6	15	21	29%
	11 pm (weekend evening)	4	17	21	19%

3.3 Bells Avenue / Warringa Road, Cammeray

3.3.1 Parking supply

There is a total of 41 parking spaces on the surveyed section of Bells Avenue / Warringa Road. These spaces are allocated as follows:

- Northern side, south of Amherst Street / Cammeray Road – 17 spaces – 8P unmetered, 8.30 am to 6 pm, Monday to Friday (permit holders excepted)
- Southern side, south of Amherst Street / Cammeray Road – 24 spaces – 8P unmetered, 8.30 am to 6 pm, Monday to Friday (permit holders excepted)

The allocation of parking spaces is shown spatially in Figure 3-5.

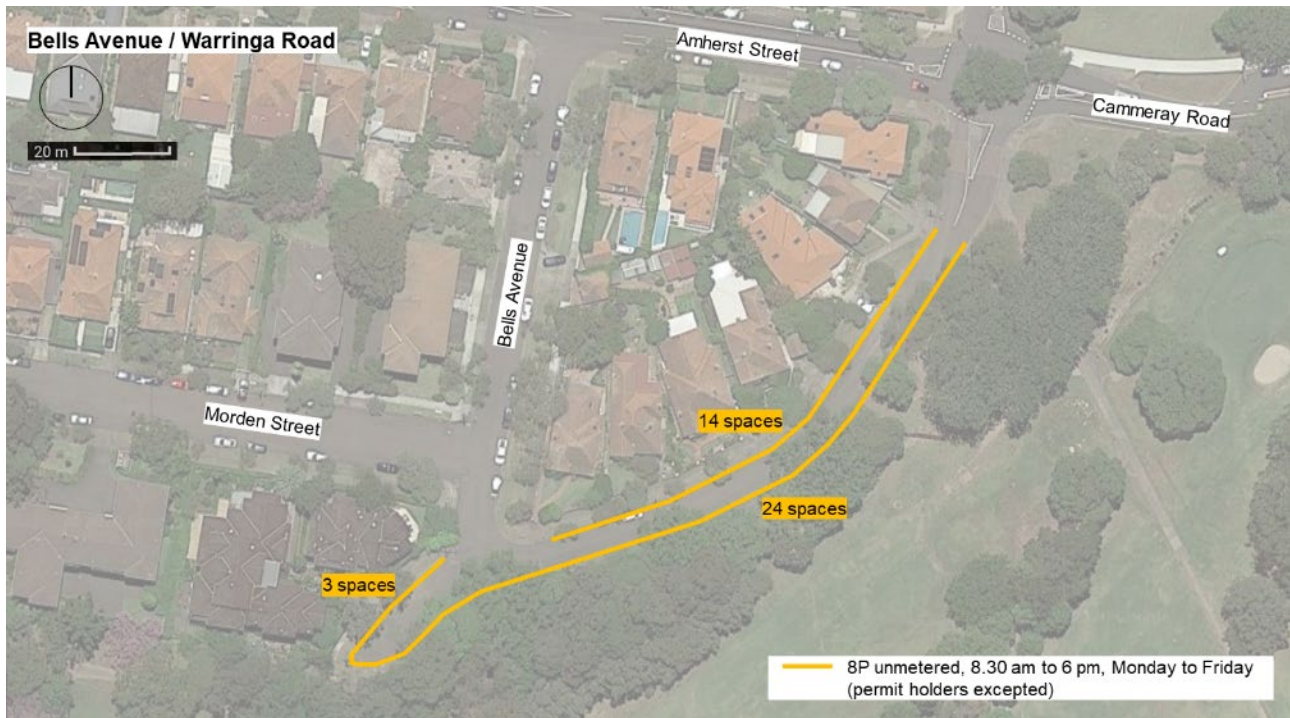


Figure 3-5 Existing parking supply – Bells Avenue / Warringa Road, Cammeray

3.3.2 Parking occupancy

Existing parking occupancies on Bells Avenue / Warringa Road during the various surveyed days and times are detailed in Table 3-3. The results show very low occupancies in all surveyed periods. Existing parking is likely associated with long-term resident / visitor parking servicing adjoining houses.

Table 3-3 Existing parking occupancy – Bells Avenue / Warringa Road, Cammeray

Day	Time period	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
Average weekday	8.30 am (weekday morning peak / school drop-off)	4	37	41	10%
	3 pm (school pick up)	6	35	41	15%
	5 pm (weekday evening peak)	5	36	41	12%
	10 pm (weekday evening off-peak)	6	35	41	15%
Average weekend	12 pm (weekend day)	7	34	41	12%
	11 pm (weekend evening)	6	35	41	15%

3.4 Public transport accessibility

Compounds and work sites associated with the Cammeray Golf Course works have good public transport accessibility, with bus services located in close proximity. These are detailed in Table

3-10 and shown in Figure 3-15. These bus services provide connections to several railway stations for Sydney Trains services to destinations across Greater Sydney.

Table 3-10 Bus services at each compound and work site

Location	Nearest bus stops	Distance from compound / worksite	Bus services	Connections to Sydney Trains services
Alfred Street North work site	Stop ID 208923 – Rawson Street at Eaton Street Stop ID 208921 – Montpelier Street before Rawson Street	400 m to 500 m	Route 263 – Crow’s Nest to City Bridge Street via Cremorne	North Sydney and Sydney CBD stations
	Stop ID 206048 – Miller Street at Ridge Street Stop ID 206018 – North Sydney Oval, Miller Street	400 m to 500 m	Routes 150X, 151, 154X, 168, 173, 188, 202-3, 207-9, 227-30, 245, 247 – services to Sydney CBD and various destinations across the North Shore and Northern Beaches	North Sydney, Milsons Point and Sydney CBD stations
	Stop ID 208947 – Military Road opposite Watson Street Stop ID 208911 and 208912 – Military Road after Watson Street	400 m to 500 m	Routes 143-4, 150X, 151, 154X, 165-6X, 168-9, 169X, 170X, 173, 176-7X, 178, 178-9X, 180, 188, 227-30, 243-9, 257, 430 – services to Sydney CBD, Sydenham and various destinations across the North Shore and Northern Beaches	North Sydney, Milsons Point, Sydney CBD, St Leonards, Chatswood, Newtown, Sydenham

Location	Nearest bus stops	Distance from compound / worksite	Bus services	Connections to Sydney Trains services
Ridge Street compound	Stop ID 206048 – Miller Street at Ridge Street Stop ID 206018 – North Sydney Oval, Miller Street	400 m to 500 m	Routes 150X, 151, 154X, 168, 173, 188, 202-3, 207-9, 227-30, 245, 247 – services to Sydney CBD and various destinations across the North Shore and Northern Beaches	North Sydney, Milsons Point and Sydney CBD stations
Cammeray Avenue work site	Stop ID 206216 – Miller Street before Ernest Street Stop ID 206215 – Miller Street before Ernest Street	400 m to 500 m	Routes 202-3, 207-9 – services to Sydney CBD and various destinations across the North Shore	North Sydney, Milsons Point and Sydney CBD stations
Rosalind Street compound	Stop ID 206217 – Miller Street at Rosalind Street Stop ID 206215 – Miller Street before Ernest Street	200 m	Routes 202-3, 207-9 – services to Sydney CBD and various destinations across the North Shore	North Sydney, Milsons Point and Sydney CBD stations
Cammeray Golf Course work site	Stop ID 209024 – Earle Street opposite Grafton Street Stop ID 209025 – Grafton Street at Fall Street Stop ID 209012 – Earle Street opposite View Street Stop ID 209011 – Grafton Street opposite Fall Street	400 m	Route 201 – Cremorne to City Bridge Street Route 263 – Crow's Nest to City Bridge Street via Cremorne	North Sydney and Sydney CBD stations

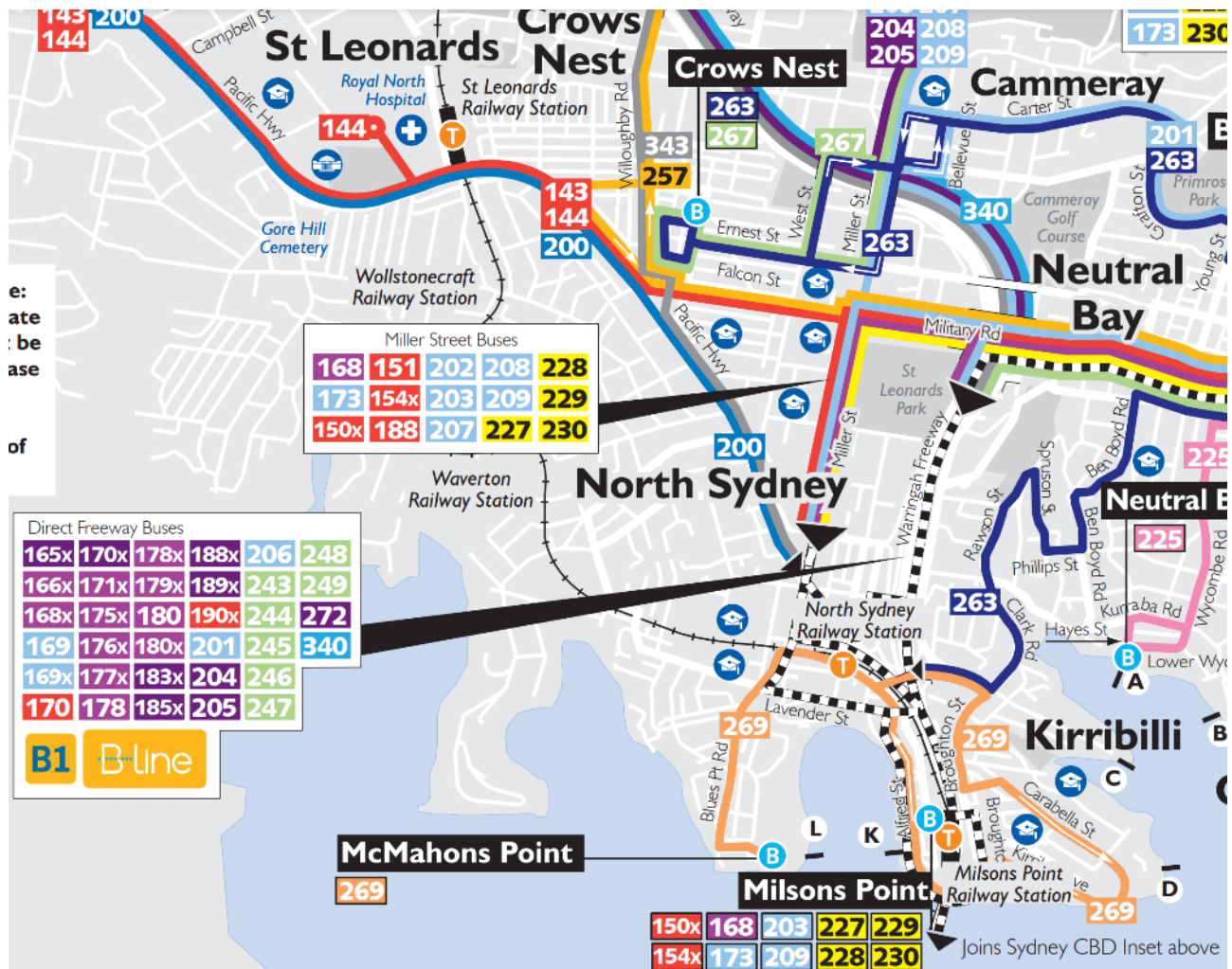


Figure 3-1 Bus network in Neutral Bay, North Sydney and Cammeray

4 Proposed parking and access changes and impacts

The temporary removal of on-street parking spaces during the Cammeray Golf Course work in locations that are outside the approved CSSI footprint is addressed in Section 4.2. Car parking requiring removal inside the approved CSSI footprint has been considered in the EIS and has already been approved under the Infrastructure Approval (SSI-8863). Notwithstanding, car parking spaces that will be removed during the Cammeray Golf Course works in locations that are within the approved CSSI footprint have been assessed and identified and are detailed in Section 4.3.

Throughout construction there may be occasional times when short term on-street car parking removal (i.e. for the period of one shift) will be required under a Road Occupancy Licence (ROL). In these cases any short term on-street car parking removed will be reinstated at the end of each shift following expiration of the ROL. There may also be other occasional times when short term car parking removal (i.e. for the period of one shift) may be required. In these cases any short term car parking removal will be reinstated at the end of each shift. Any such short term car parking removal will be managed in accordance with the TTAMP.

4.1 Construction workforce parking

The construction workforce will comprise of trades and construction personnel, and engineering, functional and administration staff. The size of the workforce will vary throughout the duration of the Cammeray Golf Course works program, with a reduction in personnel for evening and night shifts. The maximum size of the construction workforce is expected to be 50 people.

A total of 50 off-street parking spaces will be provided at the following location:

- The Cammeray Golf Course work site will include about 50 off-street parking spaces. This will serve as construction workforce parking.

Assuming a worst-case scenario where 100 per cent of the construction workforce travels to work by car and there is no carpooling, there would be demand for 50 parking spaces. Given there will be a total of 50 off-street parking spaces, construction workforce parking is expected to have a minimal impact on on-street parking.

Where practical, essential vehicles (i.e., vehicles carrying tools, plant and other equipment to facilitate works) will be contained within the footprint of each work site with no impact on adjacent on-street parking.

4.2 Locations outside the approved CSSI footprint

4.2.1 Park Avenue, Cammeray

Impact of parking changes

The Cammeray Golf Course works on Park Avenue will result in the long-term temporary removal of two on-street parking spaces at Park Avenue between March 2022 and June 2023 (refer to 4-1). The long-term temporary removal of these spaces is to facilitate the swept paths of the approaching and departing heavy vehicles during construction. Options to relocate the driveway to the south to utilise the existing 'no parking' area has been considered, however the location of an

existing power pole precludes this. Therefore, the minimum space required to provide safe entry and egress to vehicles equates to two parking spaces.

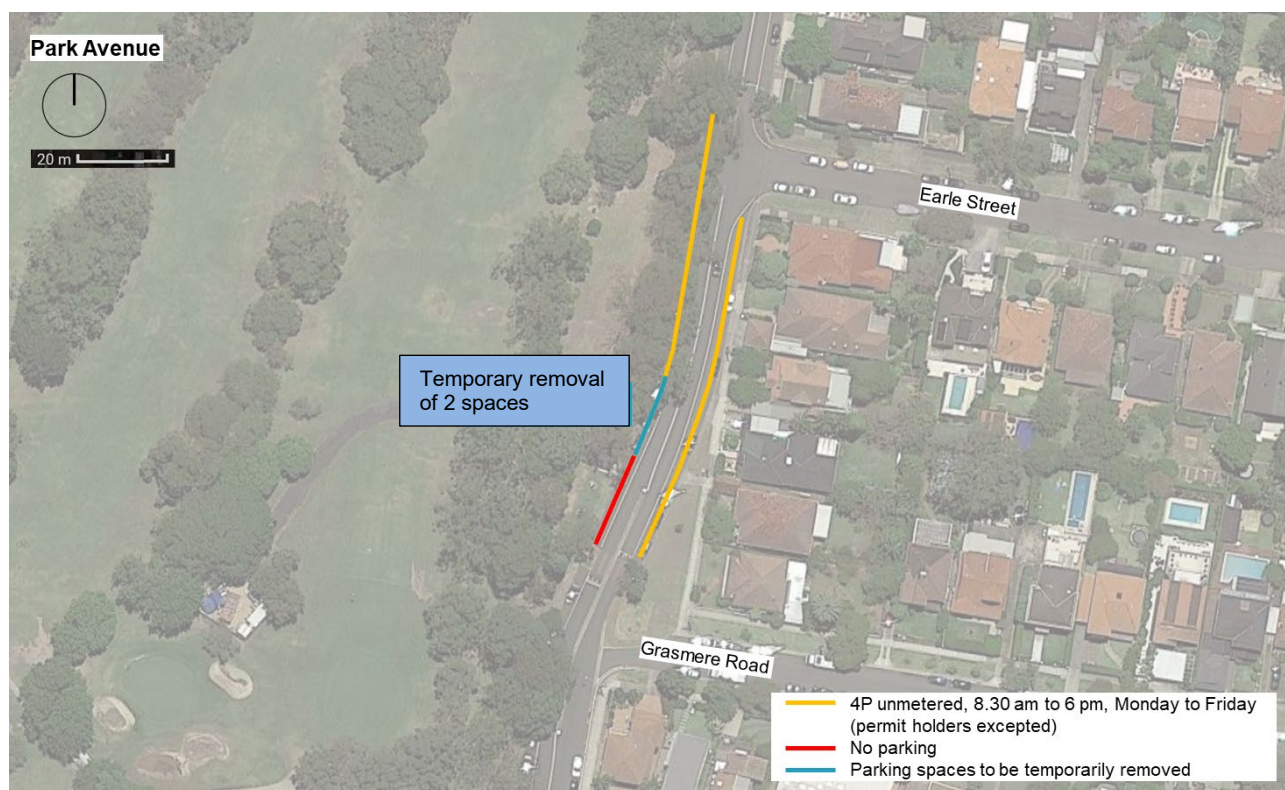


Figure 4-1 Long-term temporary removal of on-street parking – Park Avenue, Cammeray (indicative only – exact location subject to change)

Comparison of impacts assessed in the EIS

The WHTWUFU EIS did not assess the impact of parking changes on Park Avenue.

4.2.2 Bells Avenue / Warringa Road, Cammeray

Impact of parking changes

The Cammeray Golf Course works on Bells Avenue / Warringa Road resulted in the long-term removal of four on-street parking spaces along Bells* / Warringa Road between March 2022 and December 2022 (refer to Figure 4-2). The long-term temporary removal of these spaces was required to facilitate all key construction activities at Cammeray Golf Course.

The four spaces on Warringa Road were initially required as part of this CPAS for SPA to complete the ATL construction and associated works (now complete). Subsequent to the CPAS being approved, TfNSW submitted an application (March 2022) to NSC including the NSC traffic committee to acquire these four spaces as they are needed for adequate site distance where the ATL meets Warringa Road and to formalise the existing access to the existing gross pollutant trap.

*No impacts to parking in Bells Avenue as part of the CGC works



Figure 4-2 Permanent removal of on-street parking – Bells Avenue / Warringa Road, Cammeray (indicative only – exact location subject to change)

Comparison with impacts assessed in the EIS

The WHTWUFU EIS did not assess the impact of parking changes on Bells Avenue / Warringa Road.

5 Mitigation measures

5.1 Potential mitigation measures

Potential measures that were considered to mitigate the identified impacts of the long-term temporary removal of on-street parking include the following:

- Consultation with affected stakeholders of parking proposed to be removed
- Staging the removal of on-street parking
- Consideration of alternative parking locations and / or arrangements
- Provision of a shuttle bus service for the construction workforce
- Introduction of parking restrictions near compounds and work sites where they currently do not exist, or alteration of existing parking restrictions
- Daily workforce parking to be contained within the footprint of individual work sites
- Provision of parking at ancillary facilities
- Ancillary facility design to considered impacts to pedestrian and shared user paths
- Encouraging use of public transport
- Encouraging carpooling
- Ongoing communication with workforce on measures to reduce impacts to parking and access
- Parking demand reduction (through the use of other transport modes).

5.2 Construction workforce parking

As described in Section 4.1, construction workforce parking is expected to have a minimal impact on on-street parking given the provision of off-street parking at Cammeray Golf Course compound. In addition:

-
- Where practical, essential vehicles (i.e., vehicles carrying tools, plant and other equipment to facilitate works) will be contained within the footprint of each work site with no impact on adjacent on-street parking
- The provision of parking at the CGC ancillary facility means there will be no requirement to idle and queue on state and regional roads
- The provision of parking at the CGC ancillary facility, and the limited number of deliveries required at work sites, means there will be no requirement to marshal construction vehicles
- The ancillary facility has been designed so that construction vehicles will not block access across pedestrian or shared user paths at any time. Additional signage will be implemented to alert pedestrians and cyclists.
- The Project will consider special events.

However, the following measures will be in place for the construction workforce to reduce the potential for an unexpected impact to occur:

- Encouragement of the use of public transport – through the recruitment and onboarding process and site toolbox talks to reduce the number of private vehicles travelling to and from the compounds

- Encouragement of carpooling – site toolbox talks will be utilised to encourage the construction workforce on the same shifts to coordinate with others to carpool to / from similar locations
- Communication of parking restrictions to the construction workforce – parking restrictions around the compounds and work sites will be communicated to the construction workforce through site inductions where they will be supplied with a Project Worker Code of Conduct, site toolbox talks, and pre-start meetings as required. Where workers are impacting the amenity of adjacent residents, are not complying with the Project Worker Code of Conduct, or are repeatedly parking inappropriately, they may be required re-attend the site inductions. Stronger sanctions, up to and including dismissal, may be implemented for repeat offenders at the discretion of the Project Manager.

5.3 Park Avenue, Cammeray

As described in Section 4.2.1, the impact of the long-term temporary removal of on-street parking on Park Avenue is considered minor. Potential measures that have been considered to mitigate the identified impacts of the long-term temporary removal of on-street parking on Park Avenue are detailed in Table 5-1. As detailed in Section 2 of this CPAS, no additional mitigation measures were identified following consultation with affected stakeholders associated with the removal of on-street car parking at this location.

Table 5-1 Consideration of potential mitigation measures – Park Avenue, Cammeray

Potential mitigation measure	Applicability to location	Justification
Consultation with affected stakeholders	Yes	Consultation has occurred with affected stakeholders prior to the removal of car parking.
Staging the removal of on-street parking	No	Staging the removal of on-street parking is not practical due to site constraints and the desire to minimise the duration of works given the broader impacts of works on residents.
Consideration of alternative parking locations and / or arrangements	No	Alternative parking locations have not been considered given there is a minimum of 21 unoccupied spaces elsewhere on Park Avenue in all surveyed periods to accommodate the displacement of parking.

Potential mitigation measure	Applicability to location	Justification
Provision of a shuttle bus service for the construction workforce	No	<p>A shuttle bus service would not be practical given:</p> <ul style="list-style-type: none"> • There are sufficient off-street parking spaces to cater for the expected maximum size of the construction workforce • The scope of the Cammeray Golf Course works is tool and equipment-intensive rather than labour-intensive • The varied nature of the works means construction workforce numbers are highly variable.
Introduction of parking restrictions near compounds and work sites where they currently do not exist, or alteration of existing parking restrictions	No	Existing parking restrictions already provide priority to residents with permits.
Daily workforce parking to be contained within the footprint of individual work sites	No	The Park Avenue work site is contained within the on-street car parking spaces.
Provision of parking at ancillary facilities	Yes	Workforce car parking has been provided at the nearby Cammeray Golf Course ancillary facility.
Ancillary facility design to considered impacts to pedestrian and shared user paths	No	Park Avenue is a work site contained within on-street car parking spaces, not an ancillary facility.
Encouraging use of public transport	Yes	Workforce will be encouraged to use public transport throughout construction.
Encouraging carpooling	Yes	Workforce will be encouraged to carpool throughout construction. This will reduce the demand on workforce parking provided within ancillary facilities.
Ongoing communication with workforce on measures to reduce impacts to parking and access	Yes	Parking and access impacts will be communicated to the workforce throughout construction via inductions and toolbox talks.

Potential mitigation measure	Applicability to location	Justification
Parking demand reduction (through the use of other transport modes)	No	Parking demand reduction measures have not been considered given there is a minimum of 21 unoccupied spaces elsewhere on Park Avenue in all surveyed periods to accommodate the displacement of parking.

5.4 Bells Avenue / Warringa Road, Cammeray

As described in Section 4.2.2, the impact of the long-term temporary removal of on-street parking on Bells Avenue* / Warringa Road is no longer required by SPA and the spaces have been acquired by TfNSW in consultation with NSC. Potential measures that were considered when the spots were occupied by SPA to mitigate the identified impacts of the long-term temporary removal of on-street parking on Bells Avenue / Warringa Road are detailed in Table 5-2. As detailed in Section 2 of this CPAS, no additional mitigation measures were identified following consultation with affected stakeholders associated with the removal of on-street car parking at this location.

*No parking impacts to Bells Avenue as part of the CGC works

Table 5-2 Consideration of potential mitigation measures – Bells Avenue / Warringa Road, Cammeray

Potential mitigation measure	Applicability to location	Justification
Consultation with affected stakeholders	Yes	Consultation has occurred with affected stakeholders prior to the removal of car parking.
Staging the removal of on-street parking	No	Staging the removal of on-street parking is not practical due to site constraints and the desire to minimise the duration of works given the broader impacts of works on residents.
Consideration of alternative parking locations and / or arrangements	No	Alternative parking locations have not been considered given there is a minimum of 34 unoccupied spaces elsewhere on Bells Avenue / Warringa Road in all surveyed periods to accommodate the displacement of parking.

Potential mitigation measure	Applicability to location	Justification
Provision of a shuttle bus service for the construction workforce	No	<p>A shuttle bus service would not be practical given:</p> <ul style="list-style-type: none"> • There are sufficient off-street parking spaces to cater for the expected maximum size of the construction workforce • The scope of the Cammeray Golf Course works is tool and equipment-intensive rather than labour-intensive • The varied nature of the works means construction workforce numbers are highly variable.
Introduction of parking restrictions near compounds and work sites where they currently do not exist, or alteration of existing parking restrictions	No	Existing parking restrictions already provide priority to residents with permits.
Daily workforce parking to be contained within the footprint of individual work sites	No	The Bells Avenue / Warringa Road work site is contained within the on-street car parking spaces.
Provision of parking at ancillary facilities	Yes	Workforce car parking has been provided at the nearby Cammeray Golf Course ancillary facility.
Ancillary facility design to considered impacts to pedestrian and shared user paths	No	Bells Avenue / Warringa Road is a work site contained within on-street car parking spaces, not an ancillary facility.
Encouraging use of public transport	Yes	Workforce will be encouraged to use public transport throughout construction.
Encouraging carpooling	Yes	Workforce will be encouraged to carpool throughout construction. This will reduce the demand on workforce parking provided within ancillary facilities.
Ongoing communication with workforce on measures to reduce impacts to parking and access	Yes	Parking and access impacts will be communicated to the workforce throughout construction via inductions and toolbox talks.

Potential mitigation measure	Applicability to location	Justification
Parking demand reduction (through the use of other transport modes)	No	Parking demand reduction measures have not been considered given there is a minimum of 34 unoccupied spaces elsewhere on Bells Avenue / Warringa Road in all surveyed periods to accommodate the displacement of parking.

6 Monitoring and reporting

6.1 Monitoring of mitigation measures

Monitoring to assess the effectiveness of this CPAS will be undertaken on roads that have been impacted by the long-term temporary removal of on-street parking, i.e., Bells Avenue / Warringa Road, Cammeray; and Park Avenue, Cammeray.

Inspections will be undertaken at fortnightly intervals and will involve the following:

- Confirmation that where alternative parking arrangements have been provided, these are being implemented
- Monitoring the impacts of the removal of on-street parking on surrounding roads
- Inspections for the presence of construction workforce parking on local roads.

Inspections will be undertaken by project engineers. The Project Manager will be responsible for implementing the mitigation measures contained in this CPAS with support from the Traffic Manager.

6.2 Corrective actions

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

- Site toolbox talks
- Pre-start meetings
- Project alerts
- Investigation and implementation of alternative methods to reinforce this CPAS
- Investigation and implementation of other viable options for the construction workforce to use public transport
- Issue warning notices where the owner of an offending vehicle can be identified
- Documenting actions in weekly and monthly internal reports.

Refer to Section 3.8 of the Construction Environmental Management Plan (CEMP) for further detail on environmental non-conformances.

6.3 Reporting

A quarterly summary report will be provided to North Sydney Council, DPIE and TfNSW regarding the outcomes of the monitoring that has been undertaken in the preceding quarter. Details of non-conformances and corrective actions will be summarised.

6.4 Contingency measures

Contingency measures will depend on the issues / non-conformances identified during monitoring and the effectiveness of corrective actions that have been implemented as described in Sections 6.1 and 6.2, respectively.

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

- Investigating the potential to provide additional off-street parking for the construction workforce
- Revising site induction and site toolbox talk content to better encourage the use of public transport and communicate designated and prohibited locations for construction workforce parking
- Amending carpooling communications to encourage an increase in participation rates
- Implementing disciplinary processes for repeated non-conformances.

6.5 Update and amendment of this CPAS

Any revisions to this CPAS will be in accordance with the process outlined in Section 3.12 of the CEMP and will be provided to TfNSW for review and comment and forwarded to the Secretary of DPIE for approval.

A copy of the updated CPAS and record of changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure.

Appendix A1 Parking survey data

	Thursday 11 Nov				Friday 12 Nov				Monday 15 Nov				Tuesday 16 Nov				Wednesday 17 Nov				Saturday 13 Nov		Sunday 14 Nov	
	8.30am	3pm	5pm	10pm	8.30am	3pm	5pm	10pm	8.30am	3pm	5pm	10pm	8.30am	3pm	5pm	10pm	8.30am	3pm	5pm	10pm	12pm	11pm	12pm	11pm
Park Avenue	3	4	2	5	4	6	2	3	4	4	1	4	3	3	3	4	3	6	2	4	7	4	5	4
Bells Avenue / Warringa Road	5	7	4	6	4	6	7	6	4	6	5	5	3	4	4	5	5	5	4	6	7	6	6	5
	Average weekday																							
	8.30am	3pm	5pm	10pm																				
Park Avenue	3	5	2	4																				
Bells Avenue / Warringa Road	4	6	5	6																				
	Average weekend																							
	12pm	11pm																						
Park Avenue	6	4																						
Bells Avenue / Warringa Road	7	6																						

Appendix A2 Additional CoA and REMM compliance table

Additional CoA and REMM relevant to the development of the CUT CPAS are presented in Table A-6-5 below.

Table A-6-5 CoA and REMM relevant to the development of this CPAS

Source / Condition	Condition requirements	Where addressed in CPAS
CoA E141	During construction, all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected businesses and implemented prior to the disruption. Adequate signage and directions to businesses must be provided prior to, and for the duration of, any disruption.	Section 5 Also refer to the TTAMP
CoA E149	Where bus stops are required to be temporarily closed, such closure must not occur until relocated bus stops that comply with relevant standards, are functioning, have similar capacity and amenity and are relocated within a 400 metre walking distance of the existing bus stop. Closures and relocation of bus stops during construction must be undertaken in consultation with relevant council(s). Wayfinding signage must be provided directing commuters to adjacent or relocated bus stops. Footpaths and (where required) road crossing facilities must be provided to any relocated bus stops such that accessibility and safety standards are met.	N/A – No bus stops will be required to be closed as part of the CGC works subject to this CPAS.
CoA E150	Prior to the commencement of operation, all bus stops temporarily closed must be reinstated in a manner that complies with relevant standards, provides equal or improved capacity, amenity and accessibility (including footpaths and road crossings) in consultation with relevant council(s).	N/A – No bus stops will be required to be closed as part of the CGC works subject to this CPAS.
REMM CTT9	Where provision of construction on-site parking cannot accommodate the full construction workforce, feasible and reasonable management measures that minimise impacts on parking on local roads will be identified and implemented. Depending on the	Section 5 Also refer to the TTAMP

Source / Condition	Condition requirements	Where addressed in CPAS
	location, management measures may include workforce shuttle buses and the use of public transport.	
REMM CTT10	Any adjustments to existing bus stops will be determined in consultation with relevant stakeholders including other divisions of Transport for NSW and advanced notification will be provided to affected bus customers. Relocations will be as close as feasible and reasonable to their existing position.	N/A – No bus stops will be required to be closed as part of the CGC works subject to this CPAS.