Appendix B

Traffic, Transport and Access Management Sub-plan

Western Harbour Tunnel

September 2024

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Document control

Approval and authorisation

Approved on behalf of ACCIONA by	[redacted]
Signed	[redacted]
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5.4	28/08/2024	Updated to include Ernest St site and removal of Berrys Bay. Berrys Bay to be reincorporated at a later revision. For ER approval	[redacted]
5.5	02/09/2024	Updated following ER review.	[redacted]

Contents

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Figures

Glossary / Abbreviations

Abbreviation	Expanded text
Ancillary facility	A temporary facility for construction of the CSSI including an office and amenities compound, construction compound, material crushing and screening plant, materials storage compound, maintenance workshop, testing laboratory, material stockpile area and car parking facilities. *Note: where an approved management plan contains a stockpile management protocol, a material stockpile area located within the construction boundary is not considered to be an ancillary facility*
CEMP	Construction Environmental Management Plan
CJP	Customer Journey Planning
CPAS	Construction Parking and Access Strategy
CSSI	Critical State Significant Infrastructure
DPHI	NSW Department of Planning, Housing and Infrastructure
EIS	Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement (January 2020)
EPA	NSW Environment Protection Authority
ER	Environmental Representative
MCAF	Minor Construction Ancillary Facility
MCoA	Minister's Condition of Approval
MOD2	Western Harbour Tunnel and Warringah Freeway Upgrade TBM solution of crossing Sydney Harbour – Modification 2
Project, the	Western Harbour Tunnel project, a component of the Western Harbour Tunnel and Warringah Freeway Upgrade project
REMM	Revised Environmental Management Measure
ROL	Road Occupancy Licence
RtS	Response to Submissions Report
SMART	Specific, Measurable, Achievable, Realistic and Time-based
SZA	Speed Zone Authorisation
TGS	Traffic Guidance Scheme
TMC	Traffic Management Centre

Abbreviation	Expanded text
TMP	Traffic Management Plan
TSD	Traffic Staging Drawing
TfNSW	Transport for New South Wales
TTAMP	Traffic, Transport and Access Management Sub-plan (this document)
VMP	Vehicle Movement Plan
VMS	Variable message sign
WFU	Warringah Freeway Upgrade
WHT	Western Harbour Tunnel

1 Introduction

1.1 Context

This Traffic, Transport and Access Management Sub-plan (TTAMP or Plan) forms part of the Construction Environmental Management Plan (CEMP) for the Western Harbour Tunnel (WHT) (the Project), a component of the Western Harbour Tunnel and Warringah Freeway Upgrade project.

This TTAMP has been prepared to address the traffic and transport requirements of the Minister's Conditions of Approval (MCoA) for the Western Harbour Tunnel and Warringah Freeway Upgrade project (SSI #8863), the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement dated January 2020 (the EIS), the Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions report dated September 2020 (the RtS), Western Harbour Tunnel and Warringah Freeway Upgrade TBM solution of crossing Sydney Harbour – Modification 2 (MOD2) and applicable guidelines and legislation.

This Plan describes how ACCIONA proposes to manage potential traffic impacts during the construction of the Project.

1.2 Background and project description

The Western Harbour Tunnel and Warringah Freeway Upgrade project comprises a new motorway tunnel connection across Sydney Harbour, and an upgrade of the Warringah Freeway to integrate the new motorway infrastructure with the existing road network and to enable the future connection of the Gore Hill Freeway Connection project.

The Project will connect the M4-M5 Link in Rozelle to the Warringah Freeway at North Sydney/Cammeray. The Project will traverse from Rozelle to Cammeray, comprising twin 6.5-kilometre bored/excavated tunnels with a crossing of Sydney Harbour, supported by surface based ancillary facilities.

The EIS was prepared to assess the impacts of construction and operation of the Western Harbour Tunnel and Warringah Freeway Upgrade project. As part of the EIS development, a detailed construction and operational traffic and transport assessment was prepared and included in the EIS as Appendix F (Technical working paper: Traffic and transport as *Western Harbour Tunnel and Warringah Freeway Upgrade Technical working paper: Traffic and Transport* (January 2020). The findings of the technical working paper relating to construction traffic are summarised in Chapter 8 (Construction traffic and transport) of the EIS.

A Response to Submissions Report (RtS) was prepared in response to submissions received on the EIS. The RtS includes clarifications as well as further detail relating to traffic issues of the Project. The EIS environmental management measures were revised and included in Part D of the RtS.

The Western Harbour Tunnel and Warringah Freeway Upgrade project was declared to be Critical State Significant Infrastructure (CSSI) by the Minister for Planning and Public Spaces (the Minister) on 9 November 2020 and approved by the Minister on 21 January 2021.

The MOD2 application proposed to modify the construction methodology across Sydney Harbour from an immersed tube tunnel (IMT) design with transition structures at both ends of the harbour crossing, to a tunnel boring machine (TBM) methodology and to include an additional construction ancillary site at Emu Plains. The MOD2 report was lodged on 14 July 2023 and was approved by the Minister of Planning and Public Space on 27 January 2024. The RtS environmental management measures were revised and included in Section 12 of the MOD2 report, with specific traffic and transport measures contained in this Plan.

This Plan covers management of potential impacts on traffic, transport and access associated with construction of the Project identified within the Planning Approval Documents.

The documents listed in the planning approval concluded that the construction phase of the Project could potentially impact on traffic, transport and access. The measures and management requirements to minimise impacts are detailed within this Plan.

1.3 Scope and staging

The scope of this TTAMP is to describe how ACCIONA will manage potential traffic, worker parking, transport and access impacts during construction of the Project.

As described in Transport for New South Wales (TfNSW) Staging Report, this Project will be managed in stages with the CEMP. This document applies to the WHT Package 3B and 3C which includes the following scope:

Stage 3B – WHT Northern Tunnelling and Integration works

- Excavation of twin mainline tunnels about 2.5 kilometres long and each accommodating three lanes of traffic in each direction, connecting portals adjacent to the Cammeray Golf Course to the Harbour Crossing section of the tunnel at Berrys Bay.
- Excavation of Falcon Street off-ramp tunnel.
- Excavation of Berry Street on-ramp tunnel.
- Cut and cover infrastructure surface construction at the Ridge Street North construction support site (WHT9), Berry Street and the Warringah Freeway portals.
- Integration works including Mechanical and Electrical (M&E) fit out for the Southern and Northern tunnelling sections, paving, surface connections, ventilation cavern fitout, integration and fitout of the Motorway Operation Centre (MOC) and Motorway Control Centre (MCC)
- Establishment and operation of White Bay (WHT3 – southern portion. The northern portion of WHT3 as described in the EIS will not be used); Ridge Street North (WHT9), and Cammeray Golf Course (WHT10) construction support sites.
- Operation of the City West Link Portal tunnelling support site (WHT12) after the completion of Stage 3A.
- Installation of acoustic structures.
- Utilities connections including but not limited to power, potable water, sewerage.
- Carrying out of surveys, test drilling, test excavations, geotechnical or contamination investigations or other tests or surveys, sampling or investigation.

Stage 3C – WHT Sydney Harbour Crossing

- Excavation of about 1.8 km of twin mainline tunnels using Tunnel Boring Machine (TBM) methodology.
- Construction of launch chambers beneath Birchgrove, and receival chambers and burial beneath the Waverton Peninsula.
- Establishment and operation of an underground slurry treatment plant within an existing ventilation cavern (constructed by the Stage 3A contractor).
- Establishment and operation of an underground Water Treatment Plant.
- Establishment and operation of an underground grout batching plant.
- Access and egress via City West Link Portal (WHT12) for:
    - Spoil removal.
    - Materials and equipment delivery, including concrete tunnel segments and box culverts.
- Use of Ridge Street North (WHT9) as a tunnelling support site, including the construction of an acoustic shed.

- Construction and operation of an additional construction ancillary site at Emu Plains (WHT13), primarily for the prefabrication and storage of tunnel lining segments, box culverts and other pre-cast concrete elements.

Requirements triggered by the 3B and 3C scope of works are identified Table **3-1** and Table **3-2**.

For more details on staging refer to the Staging Report, which has been prepared in accordance with MCoA A10.

1.4 Interface with other planning documents

This Plan is a component of a suite of documents, prepared as part of the implementation of the Project's Environmental Management System. The Environmental Management System overview is described in Section 4 of the CEMP.

The key documents that interface with the TTAMP are outlined in Table 1-1.

Table 1-1 Key interfaces with the TTAMP

Plan	Interface
Construction Environmental Management Plan	▪ Provides details on overall Project staging, interactions between Sub-Plans of the CEMP, and management of cumulative impacts ▪ Provides a framework for how the construction works will be managed ▪ Identifies procedures, processes and management systems that will apply in relation to construction activities ▪ Provides environmental planning and controls for construction including environmental risk assessment, regulatory requirements, protection measures and sustainability requirements
Community Consultation Strategy and Complaints Management System	▪ Describes how community and stakeholder engagement will be managed and facilitates communication about construction of the project with the community as well as relevant councils and agencies ▪ Specifies the process for receiving, addressing, resolving and recording complaints as well as outlines the process required in the escalation of a complaint to an independent mediator
Construction Parking and Access Strategy	▪ Provides the parking strategy for worker parking on the project ▪ Provides the strategy and impacts around removal of on-street parking as a result of project works and permanent works ▪ Specifies mitigation measures for removal of on-street parking as a result of project and permanent works

2 Purpose and objectives

2.1 Purpose

The purpose of this TTAMP is to describe how ACCIONA will safely manage vehicular, cyclist and pedestrian traffic and minimise disruptions during construction of the Project.

This TTAMP has been prepared to address the applicable statutory requirements and aims to ensure that the commitments in the planning approval are met with regard to construction traffic, transport and access impacts.

2.2 Objectives

The key objective of the TTAMP is to ensure that traffic impacts during construction are minimised and are within the scope permitted by the planning approval. This includes minimising delays, ensuring consideration is given to the needs of all road and active transport users and maintaining safety for both workers and the general public.

To achieve these objectives, the Project will undertake the following:

- Ensure appropriate controls and procedures are implemented during construction activities to address potential traffic impacts along the Project corridor, as well as manage risks from analysis of relevant construction activities as per MCoA C2(d)(ii)
- Ensure appropriate measures are implemented to address the relevant MCoA outlined in Table **3**-**1** and the environmental management measures detailed in the MOD2 report, as outlined in Table **3**-**2**.
- Ensure appropriate measures are implemented to comply with all relevant legislation and other requirements as described in Section 3.1 of this Plan.

Furthermore, ACCIONA will meet the performance outcomes from Table 28-4 of the EIS that are applicable to traffic and transport impacts, as required by MCoA C2(d)(i), as identified in Table **2**-**1** below.

Table 2-1 Performance outcomes identified in the EIS relevant to this Plan

Performance outcome	How performance outcome will be addressed	Records
• Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts • The safety of transport system customers is maintained • Impacts on network capacity and the level of service are effectively managed	Minimise impacts to local streets from loss of parking, road closures and heavy vehicle movements during construction • Utilise the heavy vehicle routes outlined in section 6.5. • Implement measures to minimise impacts resulting from loss of parking, road closures and heavy vehicles movements outlined in Section 6. • Undertake training, inspections, auditing and recording in accordance with Section 7.3 and 7.4 and Section 5.9 and 5.13 of the CEMP.	Heavy vehicle routes Complaints register Weekly traffic inspection record

Performance outcome	How performance outcome will be addressed	Records
• Works are compatible with existing infrastructure and future transport corridors.	Minimise impacts to road network efficiency during construction • Implement the processes and mitigation measures identified in Section 6. • Undertake training, inspections, auditing and recording in accordance with Section 7.	Site Specific Traffic Management Plans Complaints register
	Enable access to properties to be maintained during construction • Property access will be maintained through the implementation of the processes and mitigation measures identified in Section 6.13. • Undertake training, inspections, auditing and recording in accordance with Section 7.2 and 7.3 and Section 5.9 and 5.13 of the CEMP.	Site Specific Traffic Management Plans Complaints register
	Maintain pedestrian and cyclist safety along surface roads near the project • Section 6.11 outlines processes and mitigation measures which will be implemented. • Undertake training, inspections, auditing and recording in accordance with 7.2 and 7.3 and Section 5.9 and 5.13of the CEMP.	Site Specific Traffic Management Plans Complaints register

2.3 Targets

The following targets have been established for the management of traffic, transport and access impacts during the Project construction activities:

- Ensure full compliance with the relevant legislative requirements, MCoA and revised environmental management measures (REMMs)
- Manage construction traffic and movements to and from construction support sites to ensure pedestrian, cyclist and motorist safety
- Minimise disruptions on the road network in the vicinity of the construction support sites.

3 Environmental requirements

3.1 Relevant legislation and guidelines

3.1.1 Legislation and regulatory requirements

Legislation and regulatory requirements relevant to traffic, transport and access for this Project include:

- *Roads Act 1993* (NSW)
- *Road Transport Act 2013*
- Australian Road Rules
- *Environmental Planning and Assessment Act 1979*

all legislation relevant for the Project is included in Appendix A1 of the CEMP.

3.1.2 Licences and permits

Licencing and permit requirements relevant to traffic, transport and access for this project include:

- Approved and valid Road Occupancy Licences (ROL)
- Approved relevant Speed Zone Authorisations (SZA)

3.1.3 Guidelines

The main guidelines, specifications and policy documents relevant to this plan include:

- AS1742.3: Manual of Uniform Traffic Control Devices – Part 3: Traffic Control for Works on Roads
- AS1743:2018 - Road Sign and Traffic Signals
- AUSTROADS Cycling Aspects of Austroads Guides, 2017
- AUSTROADS Guide to Traffic Management, 2020 – Parts 1-13
- AUSTROADS Guide to Road Design, 2021 – Parts 1-7
- AUSTROADS Guide to Road Safety, 2021 – Parts 1-7
- TfNSW Truck and Plant Requirements: Specification (2020)
- Roads & Traffic Authority NSW Guide to Traffic Generating Developments, 2002
- TfNSW Supplement to Australian Standard AS 1742.9:2018, Manual of Uniform Traffic Control Devices
- TfNSW QA Specification G10 – Traffic Management
- TfNSW QA Specification R141 – Pavement Markings
- TfNSW QA Specification R142 – Raised Reflective Pavement Markers
- TfNSW QA Specification R143 – Sign Posting
- TfNSW Traffic Control at Worksites Manual (Version 6.1, 2022)
- TfNSW – Safety Barrier Acceptance
- TfNSW – Variable Message Signs (VMS) Guidelines
- TfNSW – Delineation Manual
- TfNSW – Traffic Modelling Guidelines

- TfNSW – Technical Direction (TDT 2009/07) Speed Enforcement on Worksites
- Transport Management Centre – Road Occupancy Manual
- TfNSW Road User Space Allocation Policy and Procedure
- Council's Integrated Transport Strategy
- TfNSW Walking Space Guide

3.2 Ministers Conditions of Approval

The MCoA relevant to this Plan are listed in Table **3**-**1**. A cross reference is also included to indicate where and how the conditions are addressed in this Plan or other Project management documents.

3.3 Environmental Management Measures

Relevant Revised Environmental Management Measures (REMMs), as identified in Section 12 of the MOD2 report, are listed in Table **3**-**2** below. A cross reference is also included to indicate where and how the REMMs are addressed in this Plan or other Project management documents.

Table 3-1: Ministers Conditions of Approval relevant to the TTAMP

MCoA No.	Condition Requirements	Document reference	How addressed
General			
A5	Where the terms of this approval require a document or monitoring program to be prepared or a review to be undertaken in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Planning Secretary with the document. The evidence must include: (a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval; (b) a log of the dates of engagement or attempted engagement with the identified party; (c) documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations; (d) outline of the issues raised by the identified party and how they have been addressed; and (e) a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed.	Section 4	Evidence of consultation will be submitted to the Planning Secretary with this document.

<table>
<tr><th>MCoA No.</th><th>Condition Requirements</th><th>Document reference</th><th>How addressed</th></tr>
<tr><td colspan="4">Identification of workforce and compounds</td></tr>
<tr><td>A47</td><td>All heavy vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and CSSI application number to enable immediate identification by a person viewing the heavy vehicle. Details of the project identification markings must be submitted to the Planning Secretary for approval prior to the heavy vehicles used for spoil haulage being utilised for the CSSI.</td><td>Section 6.3
Table 6-4 - TTAMP23</td><td>Heavy vehicles used by the Project for spoil haulage will be clearly marked as required by the condition, with details of the project identification markings submitted to the Planning Secretary for approval prior to use of the heavy vehicles. Details are provided in Section 6.3.</td></tr>
<tr><td colspan="4">Construction Environmental Management Plan</td></tr>
<tr><td>C4</td><td>CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP Sub-plan, including copies of all correspondence from those agencies as required by Condition A5.
<table>
<tr><th></th><th>Required CEMP Sub-plan</th><th>Relevant government agencies to be consulted for each CEMP Sub-plan</th></tr>
<tr><td>(a)</td><td>Traffic, transport and access</td><td>Relevant council(s)</td></tr>
</table></td><td>Section 4</td><td>This TTAMP has been prepared in consultation with the relevant councils identified in this condition.
Evidence of consultation will be submitted to the Planning Secretary with this document.</td></tr>
<tr><td>C5</td><td>The CEMP Sub-plans must state how:</td><td>-</td><td>-</td></tr>
</table>

MCoA No.	Condition Requirements	Document reference	How addressed
	(a) the environmental performance outcomes identified in the documents listed in Condition A1 will be achieved;	Section 3	This TTAMP was prepared in accordance with the environmental performance outcomes identified in the EIS, RtS and MOD2 report as outlined in Section 3.
	(b) the mitigation measures identified in the documents listed in Condition A1 will be implemented;	Table **3-2** Table **6-4**	Relevant environmental management measures identified in the EIS and MOD2 report relating to traffic, transport and access are detailed in Table **3-2** and Table **6-4** including where and how they are addressed in this Plan. Measures to achieve these requirements are detailed in Section 6 of this Plan.
	(c) the relevant terms of this approval will be complied with; and	Table **3-1**	Details regarding how the Project will comply with the relevant terms of approval are listed in this Table, including references to the relevant sections of this TTAMP.
	(d) issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART principles.	Section 6.1 - Table **6-4** Environmental Risk Assessment Workshop (Section 5.1 of the CEMP)	Traffic and transport issues requiring management during construction of the Project have been identified through the EIS, RtS, MOD2 report and Environmental Risk Assessment Workshops. These issues, including cumulative impacts, have been outlined in Appendix A2 of the CEMP. Environmental risk analysis will be ongoing and regularly reviewed in accordance with Section 5.1 of the CEMP.

MCoA No.	Condition Requirements	Document reference	How addressed
C9	The CEMP Sub-plans must be submitted to the Planning Secretary for approval along with, or subsequent to, the submission of the CEMP but in any event, no later than one month before construction.	Section 2 of the CEMP	The CEMP Sub-plans will be submitted for approval to the planning secretary with or subsequent to the final submissions of the CEMP no later than one month before construction.
C10	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved, unless otherwise agreed by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of construction. Where construction of the CSSI is staged, construction of a stage must not commence until the CEMP and sub-plans for that stage have been endorsed by the ER and approved by the Planning Secretary.	Section 2 of the CEMP	Construction of the Project will not commence until the CEMP and applicable Sub-plan as per the Staging Report have been approved, unless it is otherwise agreed by the Planning Secretary. The CEMP and CEMP Sub-plans will be implemented for the duration of construction
Construction Traffic Management			
E128	Access to all utilities and properties must be maintained during construction, where practicable, unless otherwise agreed with the relevant utility owner, landowner or occupier.	Section 6.13 Table **6-4** - TTAMP02	Access will be maintained to all utilities and properties during construction unless otherwise agreed with the relevant utility owner, landowner or occupier, as detailed in Section 6.13. Where impacts to private property access is unavoidable during construction, property owners will be consulted in advance to develop appropriate alternative access arrangements.
E129	Any property access physically affected by the CSSI must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier.	Section 6.13 Table **6-4** - TTAMP02	Any property access affected by Project works will be reinstated to pre-construction standard, unless otherwise agreed by the landowner or occupier, as detailed in Section 6.13.

MCoA No.	Condition Requirements	Document reference	How addressed
E130	Access to the ancillary facility WHT3 construction support site at White Bay by construction vehicles (including light vehicles) must only be via The Crescent/City West Link and James Craig Road. No vehicle associated with the CSSI is permitted to access the site via Robert Street, Rozelle, unless required in the event of an emergency.	Section 6.5 Table **6-4** - TTAMP03	Section 6.5 outlines the access arranges for each construction support site including the White Bay construction support site (WHT3). Access to the White Bay construction support site (WHT3) will only be via The Crescent/City West Link and James Craig Road noting that access via Robert Street, Rozelle will not be used, unless required in the event of an emergency.
E132	Local roads proposed to be used by heavy vehicles to directly access the construction boundary and ancillary facilities that are not shown in Figure 5-7 to 5-22 inclusive of Appendix F of the EIS and in Figure 9.2 of Modification 2 must be approved by the Planning Secretary and included in the Traffic, Transport and Access Management CEMP Sub-plan.	Section 6.5.1 Table **6-4** – TTAMP10	The roads to be used by Project heavy vehicles are outlined in Section 6.5 and Section 6.5.1. These routes do not include any local roads not already identified in the EIS. If during construction the need for additional local road use by heavy vehicles is required a submission to the planning secretary will be developed to address condition E133 prior to the use.
E133	All requests to the Planning Secretary under Condition E132 must include the following: a) a swept path analysis; b) demonstration that the use of local roads by heavy vehicles for the CSSI will not compromise the safety of pedestrians and cyclists or the safety of two-way traffic flow on two-way roadways; c) provide details as to the date of completion of the road dilapidation surveys for the subject local roads;	Section 6.5.1 Table **6-4** – TTAMP10	The Project may make requests to the Planning Secretary for the use of local roads by heavy vehicles which include the content as required by this condition.

MCoA No.	Condition Requirements	Document reference	How addressed
	d) measures that will be implemented to avoid where practicable the use of roads past schools, aged care facilities and child care facilities during their peak operation times; and e) written advice from an appropriately qualified professional on the suitability of the proposed heavy vehicle route which takes into consideration items (a), (b), (c), and (d) of this condition.		
E135	The locations of all heavy vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one year following the completion of construction. *Note: Refer to Condition A47 in relation to vehicle identification.*	Section 6.3 Table **6-4** - TTAMP09	Spoil heavy vehicles used by the project will be monitored in real time as outlined in Section 6.4. Records will be made available electronically to the Planning Secretary and the EPA, upon request, for a period of up to one year following the completion of construction.
E135A	The number of spoil haulage trucks and concrete trucks exiting from the Ridge Street construction ancillary facility (WHT9) between the hours of 10:00 pm and 7:00 am, Monday to Sunday and travelling westbound along Falcon Street, is limited to a total of 100 vehicles per night unless an alternative number of vehicle movements is permitted through an Environment Protection Licence. Measures must be put in place to monitor the number of spoil and concrete trucks making this movement. Details on the number of movements must be provided to the EPA and the Planning Secretary on request, within one week of the EPA and the Planning Secretary making the request.	Table **6-1** Table **6-4** - TTAMP05 Section 6.36.2.5	Number of spoil haulage trucks and concrete trucks exiting from the Ridge Street (WHT9) construction support site between 10:00 pm and 7:00 am (Monday to Sunday) and are travelling westbound along Falcon Street is limited to 100 vehicles, unless otherwise permitted through an Environment Protection Licence.

MCoA No.	Condition Requirements	Document reference	How addressed
Road Dilapidation			
E136	Before any local road is used by a heavy vehicle for the purposes of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the relevant council within three weeks of completion of the survey and no later than one month prior to the road being used by heavy vehicles associated with the CSSI.	Section 6.6 Table **6**-**4** - TTAMP11	Road dilapidation surveys will be undertaken in consultation with relevant councils and road owners prior to commencement of use of the local road by heavy vehicles for the works. A Road Dilapidation Report will be provided to relevant agencies in accordance with this condition. Details regarding the road dilapidation surveys are outlined in Section 6.6.
E137	If damage to roads occurs as a result of the CSSI, the Proponent must either (at the relevant road authority's discretion): a) compensate the relevant road authority for the damage so caused; or b) rectify the damage to restore the road to at least the condition it was in pre-works as identified in the Road Dilapidation Report(s).	Section 6.6 Table **6**-**4** - TTAMP12	If damage to roads occurs as a result of construction of the works, The Project will rectify the damage. At the relevant road authority's discretion, the Project will either compensate the landowner for the damage caused or rectify the damage to restore the road to at least the condition it was pre-works as identified in the survey, as detailed in Section 6.6.

MCoA No.	Condition Requirements	Document reference	How addressed
Pedestrian and Cyclist Access			
E138	Safe pedestrian and cyclist access must be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternative route which complies with relevant standards, unless otherwise endorsed by an independent, appropriately qualified and experienced person, must be provided (including signposting) prior to the restriction or removal of the impacted access.	Section 6.11 Table **6-4** - TTAMP13	Safe pedestrian and cyclist access will be maintained around work sites during the works, as detailed in Section 6.11.
Construction Parking Management			
E139	Vehicles (including light and heavy vehicles) associated with the CSSI must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive land user(s); (d) not block or disrupt access across pedestrian or shared user paths at any time; and (e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the Traffic, Transport and Access Management CEMP Sub-plan.	Sections 6.3, 6.4 and 6.5 Table **6-4** - TTAMP14, TTAMP15, TTAMP16, TTAMP17	Construction vehicles will be managed in accordance with the measures in Section 6.3 and 6.4, to minimise impacts on parking, roads in the vicinity of the construction support sites, pedestrians and cyclists. Spoil haulage routes are included in Section 6.5 of this Plan.
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: a) achieving the requirements of Condition E139;	Section 6.14 Appendix B1 Table **6-4** - TTAMP17	The Construction Parking and Access Strategy (CPAS) have been developed and submitted to the Planning Secretary for approval one month prior to commencement of construction that reduces availability of

MCoA No.	Condition Requirements	Document reference	How addressed
	b) confirmation and timing of the removal of on- and off-street parking associated with construction of the CSSI; c) 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 pickup, weekend periods and during special events; d) consultation with affected stakeholders utilising existing on- and off-street parking stock which will be impacted as a result of construction; e) assessment of the impacts 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; f) 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, 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; g) where residential parking schemes already exist, off-road parking facilities must be provided for the CSSI workforce; h) mechanisms for monitoring, over appropriate intervals, to determine the effectiveness of implemented mitigation measures; i) details of shuttle bus service(s) to transport the CSSI workforce to construction sites from public transport hubs		existing parking. The CPAS is provided in Appendix B1 of this plan. In the event additional CPAS are required, the CPAS will be provided in Appendix B1 as they are approved by the Planning Secretary

MCoA No.	Condition Requirements	Document reference	How addressed
	and off-site car parking facilities (where these are provided) and between construction sites; j) provision of contingency measures should the results of mitigation or monitoring indicate implemented measures are ineffective; and k) provision of reporting of monitoring results to the Planning Secretary and relevant council(s) at three monthly intervals. The Construction Parking and Access Strategy must be submitted to the Planning Secretary for approval at least one month before the commencement of any construction that reduces the availability of existing parking. The approved Strategy must be implemented before impacting on on-street parking and incorporated into the Traffic, Transport and Access Management CEMP Sub-plan.		
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 6.13 Table **6-4** - TTAMP02	All reasonably practical measures will be implemented to maintain pedestrian and vehicle access to, and parking in the vicinity of, business and affected properties. Measures which will be applied to mitigate impacts where disruptions cannot be minimised are provided in Section 6.13.

MCoA No.	Condition Requirements	Document reference	How addressed
E142	The Proponent must mitigate the loss of on-street parking in Alfred Street North (specifically between Wyagdon Street and Whaling Road), Neutral Bay during construction and operation of the CSSI, with the objective of having no impact to resident parking during operation, by: confirming existing capacity and the parking requirements of the residents by survey; investigating options to mitigate the loss of on-street parking that meet the parking needs of the residents of Alfred Street North and adjacent streets; consulting with the residents at locations where on-street parking would be lost to confirm the preferred parking options; and identifying the parking measures to be implemented. A report on the outcomes of this condition must be documented and submitted to the Planning Secretary for approval within six months of construction commencing.	N/A	Stage 3B and 3C has no impacts on parking in Alfred Street North and/or Neutral Bay as part of construction; these areas were impacted by the Warringah Freeway Upgrade portion of works.
E143	The parking measures identified by Condition E142, must be delivered prior to impact, unless otherwise agreed by the Planning Secretary.	N/A	Stage 3B and 3C has no impacts on parking in Alfred Street North and/or Neutral Bay as part of construction; these areas were impacted by the Warringah Freeway Upgrade portion of works.
Road Safety			
E144	The CSSI must be designed to meet relevant design, engineering and safety guidelines, including the Austroads Guide to Traffic Management for new or modified local roads, parking, pedestrian and cycle infrastructure.	Section 6.7 Table **6-4** - TTAMP18	The Project will be designed in accordance with the relevant standards/guidelines, for new and modified local roads, parking, pedestrian and cycle infrastructure, including the Austroads Guide to Traffic Management

MCoA No.	Condition Requirements	Document reference	How addressed
E145	An independent Road Safety Audit must be undertaken to assess the safety performance of new or modified local road, parking, pedestrian and cycle infrastructure provided as part of the CSSI (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management. The audit must be undertaken by an appropriately qualified and experienced person during detailed design development (audit of plans) and prior to opening (pre-opening audit). The audit findings and recommendations of the detailed design plans (audit of the plans) must be actioned prior to construction of the relevant infrastructure. The pre-opening audit findings and recommendations must be actioned prior to the relevant infrastructure being made available for use.	Section 7.4 Table **6-4** - TTAMP19	Independent Road Safety Audits will be undertaken to assess the safety performance of new and modified local roads, parking and pedestrian and cyclist infrastructure provided as part of the Project as outlined in section 7.4.
Access from Mount Street Interchange to Alfred Street North			
E146	Direct vehicular access must be provided from Mount Street, North Sydney to Alfred Street North, Neutral Bay. Access must be provided in both directions.	N/A	Stage 3B and 3C has no impacts vehicle access between Mount Street, North Sydney to Alfred Street North, Neutral Bay.

MCoA No.	Condition Requirements	Document reference	How addressed
Public Transport - Construction			
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.	Section 6.12 Table **6**-**4** - TTAMP20	Where bus stops are relocated, the Project will ensure alternative stops of a similar capacity and amenity are provided within a 400-metre walking distance, as outlined in Section 6.12. The new bus stop will be established in accordance with this condition, and in consultation with relevant councils prior to the affected stop being closed.
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).	Section 6.12 Table **6**-**4** - TTAMP21	Where bus stops are closed or relocated for the Project they will be reinstated to comply with relevant standards, provide equal or improved capacity, amenity and accessibility (including footpaths and road crossings) in consultation with relevant council(s).

Table 3-2: Revised Environmental Management Measures relevant to this TTAMP

Ref #	Commitment	Document reference	How Addressed
CNV5	Where feasible and reasonable, unless compliance with the relevant traffic noise criteria can be achieved, or alternative arrangements have been agreed with affected receivers, construction vehicle movements will not occur on local roads beyond those required for direct access to construction sites.	Section 6.5.1	Additional local roads (beyond those already approved) will require approval by DPHI.
CTT1	A road dilapidation report will be prepared, in consultation with relevant councils and road owners, identifying existing conditions of local roads and mechanisms to repair damage to the road network caused by heavy vehicle movements associated with the project.	Section 6.6 Table **6-4** - TTAMP11	Road dilapidation surveys will be undertaken in consultation with relevant councils and road owners prior to commencement of use of the local road by heavy vehicles for the works. A Road Dilapidation Report will be provided to relevant agencies in accordance with this condition. Details regarding the road dilapidation surveys are outlined in Section 6.6.
CTT4	Ongoing consultation will be carried out with (as relevant to the location) Transport Coordination within Transport for NSW, the Port Authority of NSW, local councils, emergency services and bus operators to minimise traffic and transport impacts during construction.	Section 4 Community consultation strategy	A Traffic and Transport Liaison Group will be formed including senior representatives from relevant stakeholders. Ongoing consultation will be carried out through this forum to minimise construction traffic and transport impacts.
CTT5	The community will be notified in advance of proposed transport network changes, and maritime restrictions through appropriate media and other appropriate forms of community liaison.	Sections 4, 6.3, 6.12 and 7.2 Community Consultation Strategy Table **6-4** – TTAMP22	The community will be notified in advance of proposed changes and restrictions through appropriate media and other appropriate forms of community liaison, as detailed in the Project Community Consultation Strategy.

Ref #	Commitment	Document reference	How Addressed
CTT6	Construction road traffic will be managed to minimise movements during peak periods.	Section 6.2 Table **6-4** - TTAMP04	Construction road traffic will be managed to minimise movements during peak periods. Spoil heavy vehicles used by the project will be monitored in real time as outlined in Section 6.4, which will enable monitoring of driver behaviour to minimise movements during peak periods.
CTT7	Vehicle movements to and from construction sites will be managed to ensure pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic signals and modifications to existing signals or, on occasion, police presence	Sections 6.3 and 6.4 Table **6-4** - TTAMP06	Vehicle movements to and from construction sites will be managed to ensure pedestrian, cyclist and motorist safety. Site specific Traffic Management Plans (TMPs) will be developed for work sites and construction support sites. The TMPs will specify the road safety measures to be applied while undertaking construction works to ensure pedestrian, cyclist and motorist safety.
CTT8	Directional signage, barriers and/or line marking will be used as required to direct and guide drivers, cyclists and pedestrians past construction sites and on the surrounding network. This will be supplemented by Variable Message Signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternative routes.	Section 6.3, 6.10 Table **6-4** - TTAMP07	Drivers, cyclists and pedestrians will be directed safely past construction sites and on the surrounding network. Site specific TMPs will be developed for work sites and construction support sites. The TMPs will specify the road safety measures to be applied while undertaking construction works to ensure pedestrian, cyclist and motorist safety, including signage, barriers and/or line marking as required.

Ref #	Commitment	Document reference	How Addressed
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 location, management measures may include workforce shuttle buses and the use of public transport.	Section 6.14 Appendix B1 Table **6-4** - TTAMP17	A Construction Parking and Access Strategy has been prepared for the Project and submitted to DPHI one month prior to impacting parking. The Project will minimise parking impacts by maximising on-site parking arrangements. Facilitate access to public transport. The Project will consult with local councils to identify parking areas which may be leased.
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.	Section 6.12 Table **6-4** - TTAMP20	Where bus stops are relocated, the Project will ensure alternative stops of a similar capacity and amenity are provided within a 400 metre walking distance. The new stops will be established prior to the affected bus stop being closed in accordance with MCoA E149.
CTT11	Truck marshalling areas will be identified and used where feasible and reasonable, to minimise potential queueing and traffic and access disruptions in the vicinity of construction support sites.	Section 6.4 Table **6-4** - TTAMP15 Table **6-4** – TTAMP16	Construction vehicles will be managed to minimise impacts in the vicinity of construction support sites, including the identification of truck marshalling areas to minimise idling and queuing.
CTT12	Activities requiring partial and full road closures will occur outside of peak periods and/or during night-time to minimise the impact of these activities on the road network where feasible and reasonable.	Section 6.3 Section 6.86.7 Table **6-4** - TTAMP08	Activities requiring partial or full road closures will be scheduled to occur outside of peak periods to minimise the impact of these activities on the road network.

Ref #	Commitment	Document reference	How Addressed
CTT19	Direct impacts to existing shared user paths will be minimised where reasonable and feasible. Any detours and adjustments will be designed with consideration of user safety and convenience.	Section 6.11 Table **6-4** - TTAMP13	Safe pedestrian and cyclist access will be maintained around work sites during the works, as detailed in Section 6.11. Impacts to shared user paths will be minimised.
LP3	Where impacts to private property access is unavoidable during construction, property owners will be consulted in advance to develop appropriate alternative access arrangements.	Section 6.13 Table **6-4** - TTAMP02	Access will be maintained to private properties during construction unless otherwise agreed with the relevant landowner or occupier, as detailed in Section 6.13.
HR2	Dangerous goods and hazardous substances will be transported in accordance with relevant legislation and codes, including the Dangerous Goods (Road and Rail Transport) Act 2008, Road and Rail Transport (Dangerous Goods) (Road) Regulation 1998 and the Australian Code for the Transport of Dangerous Goods by Road and Rail (National Transport Commission, 2007).	Section 6.9	These codes and legislation are minimum requirements for transporters of dangerous goods, and apply regardless of the location/project.
HR3	Adequate access and egress for fire fighting vehicles and staff will be provided at the Wicks Road construction support site (WFU10). Access roads should have a minimum width of four metres to allow passage of fire fighting vehicles	Not applicable	Not applicable to Stage 3B or 3C of the Project.

4 Consultation

4.1 Consultation for Plan Preparation

This Plan has been developed and finalised in consultation with relevant councils outlined in MCoA C4(a), and in accordance with MCoA A5. Consultation with each agency, including responses received and how any issues raised were addressed in the development of this Plan will be provided to the Planning Secretary along with this Plan.

4.2 Ongoing consultation

Community feedback and complaints will be managed in accordance with the Community Consultation Strategy and Complaints Management System.

Ongoing consultation with Transport Coordination (a division within TfNSW), the Port Authority of NSW, relevant Councils, emergency services, bus operators and other stakeholders will be undertaken regarding impacts associated with construction traffic and parking management.

Information will be disseminated to the community through the following channels for project impacts or changes:

- Project website updates
- Temporary advisory signage
- Notices at bus stops or pedestrian and cyclist facilities affected by the works
- Variable message signs prior to traffic changes
- Radio advertising for traffic changes
- Newsletters
- Leaflets and flyers to local properties affected by the works
- Project display centres and social media

4.2.1 Traffic Control Group (TCG)

A Traffic Control Group (TCG) will be established as a technical forum to discuss road safety and traffic management measures, potential impacts on the road, pedestrian and cycle network, TMPs and program. The Traffic Control Group will include representatives from Customer Journey Planning (CJP), TfNSW and relevant Councils. On occasion the TCG may include adjacent construction project representatives.

4.2.2 Traffic and Transport Liaison Group (TTLG)

A Traffic and Transport Liaison Group will be formed including senior representatives from relevant stakeholders. Ongoing consultation will be carried out through this forum to minimise construction traffic and transport impacts. The TTLG would typically include a wider audience and be more of an informative session for key stakeholders (in lieu of project problem solving, and discussions as would be part of the TCG with a smaller more targeted audience). The TTLG may include stakeholders from bus operators, other adjacent projects and the usual invite list from the Traffic Coordination Group.

The TTLG will be convened at the start of the project (prior to construction) and are proposed to be held monthly initially (unless otherwise requested by stakeholders). The frequency and benefit of the meeting is expected to reduce once sites are established and tunnelling works are continuous, therefore meeting frequency will be agreed with stakeholders and TfNSW representatives and will vary throughout the project.

5 Construction traffic, transport and access impacts

Potential traffic, transport and access impacts resulting from the construction of the Project were assessed in the EIS. The EIS identified that the construction of the Project is anticipated to have impacts on the surrounding road network, public transport and active transport routes surrounding the construction sites. Although with the introduction of construction traffic, performance of the road network is expected to worsen in some areas, it is expected to not materially change compared to existing conditions. Impacts to performance in the vicinity of construction support sites will be managed in accordance with the measures outlined in Section 6 of this plan.

5.1 Construction Traffic

5.1.1 Haulage Routes

Appendix F (Technical working paper: Traffic and Transport) of the EIS identified site access points and vehicle routes which would be utilised during the construction of the Project. The roads (including local roads) identified in Figure 5-7 to 5-22 of Appendix F of the EIS are approved for use by heavy vehicles on the Project. Impacts associated with the use of these roads was assessed in the EIS.

Section 9.1 of the MOD2 report identified site access points and primary and secondary vehicles routes which would be utilised during the operation of the Emu Plains construction ancillary site (WHT13). Figure 9-1 of the MOD2 report shows the approved roads (including local roads) for use by heavy vehicles on the Project. This figure has been replicated and provided in Appendix B2. Impacts associated with the use of these roads are assessed in the MOD2 report.

Local roads proposed to be used by heavy vehicles to directly access the construction boundary and ancillary facilities that are not shown in Figure 5-7 to 5-22 of Appendix F of the EIS or in Section 9.1 of the MOD2 report must be approved by the Planning Secretary. Additional details are provided in Section 6.5.1 of this Plan.

5.1.2 Temporary Road Closures

The following temporary road closures are required during construction of the Project:

- Berry Street northbound entry ramp to Warringah Freeway
- Falcon Street northbound Bus Exit ramp from Warringah Freeway
- Warringah Freeway central (reversible) carriageway
- Brook Street northbound exit ramp from Warringah Freeway

These temporary road closures would be managed in accordance with the measures outlined in Section 6 of this plan. Additional closures may be required during delivery for scope not yet identified, these closures will be planned and communicated in consultation with TfNSW, Customer Journey Planning (CJP) and relevant stakeholders.

5.2 Public Transport

Construction of Stage 3B and 3C of the Project is not expected to result in any additional impacts on public transport.

5.3 Active Transport

As a result of construction staging across the entirety of the WHT and WFU Projects, construction of the Project is not anticipated to result in any further impacts beyond those currently occurring for the Warringah Freeway Upgrade under Stage 2 which includes:

- The shared user path of the northern side of Ernest Street would be maintained by the WFU contractor, however a signalised crossing would be installed across the Cammeray Golf Course construction support site (WHT10) secondary site entry / exit on Ernest Street to facilitate safe access by pedestrians and cyclists during the operation of the site
- The shared user path along Warringah Freeway near Cammeray Golf Course would be temporarily realigned by the WFU contractor to travel along the rear of the support site to the Ernest Street/Merlin Street intersection.

There are no anticipated changes or modifications to the existing active transport route in the neighbouring area of the Emu Plains construction ancillary site (WHT13).

Should development of the detailed design and further construction planning identify that construction will result in long-term disruptions to pedestrian footpaths and cycleways during construction of the Project, this impact along with the required management and mitigation will be discussed with CJP, TfNSW and local council representatives, and reasonable alternatives will be investigated and provided where feasible to mitigate any impacts to local communities.

These impacts would be managed in accordance with the measures outlined in Section 6 of this plan.

5.4 Parking Removal

The Project will require the temporary long term removal of parking at the following locations, as identified in the EIS and the MOD2 report:

- Twelve parking spaces on Ridge Street (North Sydney) at the eastern end have been removed to provide suitable access to the Ridge Street north construction support site (WHT9) (these parking spaces have already been removed by the WFU contractor)
- Ten parking spaces on Ernest Street (Cammeray) have been removed to provide suitable access to the Cammeray Golf Course construction support site (WHT10) (these parking spaces have already been removed by the WFU Contractor)
- Up to six parking spaces on Lee Street (Emu Plains) would need to be removed to provide suitable access to the Emu Plains construction ancillary site (WHT13)

Development of the detailed design and further construction planning may identify additional long-term removal of parking is required during construction of the project. Should this be identified, it will be detailed in the Construction Parking and Access Strategy (CPAS). The CPAS is to be submitted one month prior to any parking being affected as a result of the project works, in accordance with MCoA E140.

5.5 Property Access Impacts

The Project has not yet identified the need for impacts to property accesses. Where impacts are identified during delivery, these impacts would be managed in accordance with the measures outlined in Section 6 of this plan.

5.6 Cumulative impacts with other major projects

The following projects have been identified as having potential to create cumulative construction impacts should they proceed concurrent with the Project:

- Warringah Freeway Upgrade
- Sydney Metro West
- Sydney Metro City and Southwest
- NSW Port Authority's operations from White Bay (e.g. Glebe Island concrete batching plant and Glebe Island Multi-User Facility)

- The new Sydney Fish Market.

Cumulative traffic impacts include the additional and prolonged reduction in level of service on local streets due to construction traffic volumes. Areas considered most likely to experience sustained impacts to receivers that may result in construction fatigue include residential receivers in the vicinity of the Rozelle Rail Yards, White Bay and Glebe Island, commercial receivers in the North Sydney CBD, residential receivers in Cammeray, and regular users of the Warringah Freeway. Potential impacts include construction traffic and parking. A detailed assessment of cumulative impacts will be undertaken as part of site-specific Traffic Management Plans (TMPs).

The anticipated cumulative impacts for Rozelle and North Sydney are described below, in Section 5.6.1 and 5.6.2 respectively.

5.6.1 Rozelle Cumulative Impacts

At the commencement of works Rozelle the WestConnex M4-M5 Link works as well as the WHT Stage 3A works will be completed. This will ensure there are no cumulative impacts in the Rozelle area due to either of these projects operating concurrently to the WHT Stage 3B and 3C works.

Sydney Metro West projects (including Central Tunnelling Project and Eastern Tunnelling Project) will have completed their major spoil operations by the time the WHT Stage 3B and 3C works get underway. This will see a significant reduction in truck movements in the area compared to their peak tunnelling operation.

Other subsequent projects listed in the Rozelle area are not anticipated to generate significant heavy vehicle movements and are therefore not anticipated to create a significant cumulative impact issue on the roads around Rozelle and White Bay.

5.6.2 North Sydney Cumulative Impacts

Warringah Freeway Upgrade (WFU) works will continue after the commencement of the WHT Stage 3B and 3C works have commenced. There will be some cumulative impacts from truck movements on roads around the North Sydney area and on the Warringah Freeway. Peak daily heavy vehicle movements outlined in the WFU TTAMP suggest that the peak movements for Cammeray sit at 280 and the main corridor of the Warringah Freeway as 200 movements.

The movements associated with the Cammeray Golf Course are anticipated to relate primarily to the excavation and construction of the WHT site and should see a reduction to coincide with the commencement of the WHT Package 2 tunnelling operation at Cammeray. The 200 movements on the mainline of the Warringah Freeway are expected to continue concurrently to the tunnelling operation for the WHT Stage 3B and 3C works.

6 Traffic, Transport and Access Management

6.1 Traffic, Transport and Access Management Strategies

Construction associated with the Project has the potential to impact traffic, transport and access in the vicinity of the construction footprint. In order to avoid, mitigate and/or minimise these potential impacts, a range of environmental requirements and control measures are identified in the various environmental documents, including the EIS and other Transport for NSW guidance documents. Specific measures and requirements to address impacts on traffic, transport and access are outlined in Table **6**-**4**.

This section has been developed in consideration of the SMART Principles – Specific, Measurable, Achievable, Relevant and Time-based. Risk assessments for the Project, including the development of the REMMs as part of the detailed environmental risk analysis undertaken throughout the development of the EIS and MOD2 report, as well as lessons learnt from previous major projects delivered by Transport for NSW in highly urbanised environments, have contributed to the development of this Plan. On this basis the measures developed for the Project are considered to be relevant and achievable for the project and would be monitored against specific, measurable and time-based targets.

6.2 Staged traffic management

6.2.1 General staging

Road safety and traffic management measures will be staged as construction progresses. Traffic staging has been categorised and described in this section according to the general construction area wherein road safety and traffic management measures will be implemented.

Traffic Staging Drawings (TSD) will be prepared in advance of the works and will be included with a Traffic Management Plan (TMP) in support of a ROL application (refer to Section 6.7). The purpose of a TSD is to illustrate the proposed traffic staging to be implemented during construction. TSDs will outline the basic construction methodology, identify the need for temporary works, specify any traffic management measures / controls, define work areas and illustrate the available travel lanes.

Temporary traffic works including temporary bridges / crossings and access roads will be removed / rehabilitated as soon as practicable once their use is no longer required.

6.2.2 Rozelle Area Staging

Rozelle Area staging is limited to the provision of access and egress arrangements to and from the worksite from City West Link Road. This signalised modification will already be established by the WHT Package 1 Contractor and access for the WHT Project will not commence until works by other contractors have been completed in this area.

The WHT Project will maintain this access arrangement for the duration of tunnelling operations. The permanent signalised intersection will be constructed under localised traffic control arrangements prior to final opening and integration of the new tunnel.

6.2.3 Cammeray Area Staging

The Cammeray site will have access provided by the WFU contractor when each of the handover areas are transferred to the WHT Package 2 contractor. The Cammeray site will have pre-constructed shared access road connecting the site to Ernest Street via a signalised intersection. There will also be new accesses also constructed by the WFU contractor which connects the site to the southbound carriageway of the Warringah Freeway / Miller Street onramp which will include acceleration and deacceleration lanes.

6.2.4 Berry Street Area Staging

The Berry Street sites will have some minor traffic staging arrangements to facilitate construction of permanent works. Berry Street entry ramp will require some localised barriers to protect the construction of permanent barrier. The barrier separates the new decline ramp and the northbound Berry Street entry ramp to the Warringah Freeway.

Some localised traffic control is required on Berry Street and at the intersection of Berry Street and The Pacific Highway as part of the WHT Package 2 works. Due to the proximity of traffic lanes and the extent of the work scope; the work is expected to be completed within localised traffic arrangements and short-term traffic control.

6.2.5 Ridge Street North Area Staging

Ridge Street north access is to be constructed by the WFU contractor to coincide with the relevant portion handover. The access will consist of an acceleration and deacceleration lane to access the site.

The exit lanes which connect the Warringah Freeway northbound to Falcon Street westbound will be closed by the WFU contractor. This closure is expected to be implemented prior to any portion handover at the Ridge Street site. The closure of the exit lanes is expected to create space for the necessary access and egress arrangements. The egress route from the Ridge Street North site will be via the Falcon Street off-ramp (which was closed by the WFU Contractor), left onto Falcon Street to Pacific Highway, where vehicles will either turn left or right onto the Pacific Highway to travel in a northerly or southerly direction depending on the destination.

Internally the Ridge Street site will require some additional internal haul roads and ramps to be constructed to best cater for vehicles navigating the site after entering via the Warringah Freeway.

6.2.6 Emu Plains Area Staging

The Emu Plains site has an existing access and egress point which is currently being maintained by Boral (operator of the wider site area). No modification or additional traffic controls at the existing access and egress point is expected to be required for the Project to utilise the site. Minor adjustments is required along Railway Street, Lee Street and Smith Street to ensure safe vehicle movement. The minor adjustment would include the removal of on street parking, existing road furniture and linemarking to allow for safe swept path for heavy vehicles. The removal of on street parking is addressed in the Construction Parking and Access Strategy. Minor adjustments as described above will be required to be approved by the Penrith City Council Traffic Committee prior to implementation. These adjustments will also be identified in the TMP that will require approval by CJP.

Guidance will be obtained from the Traffic Manager to assess the requirements for adjustment at the intersection of Railway Street and Lee Street for the safe movement of construction vehicles to and from the Emu Plains site.

6.2.7 Finishing and opening

Finishing works will incorporate a series of night shift works to permit pavement, drainage, kerb, and signage installation in preparation for tunnel opening. The works will be within the existing Westconnex tunnel network within tunnel closures. Kerb, pavement and linemarking works will be required to reconfigure the signalised intersection at Rozelle. Pavement, kerb, drainage, linemarking and signage works will be required at the Warringah Freeway interface with the new tunnel portals. New pavement and linemarking works will also be required on the northbound carriageway of the Warringah Freeway to the north of Berry Street.

Some tidal flow equipment throughout the Warringah Freeway alignment, and other existing features will need to be removed or modified to facilitate the opening of the western harbour tunnel. These modifications will typically be facilitated through localised traffic control arrangements.

6.3 Construction vehicle management

The Project will develop site specific TMPs for work sites, ancillary facilities, intersection works and/or where long-term changes occur to the road network. The TMPs will outline how the Project will safely manage interactions between construction vehicles, workers, public vehicles, pedestrians and cyclists. The TMPs will specify the road safety and traffic management measures to be applied while undertaking construction works to ensure pedestrian, cyclist and motorist safety.

ACCIONA will implement management measures including:

- Traffic Guidance Schemes (TGS) (previously known as Traffic Control Plans or TCPs) will be prepared where required for any temporary changes to the traffic environment associated with the establishment and use of construction support sites and construction works
- Vehicle Movement Plans (VMPs) will be prepared where required for any access associated with establishment and use of construction support sites and construction access routes
- Construction road traffic will be managed to minimise movements during peak periods
- Where a partial and / or full road closure is required, this will be scheduled to occur outside of peak periods and / or during night time to minimise the impact of these activities on the road network where feasible and reasonable
- Temporary signalised site access points at construction support sites will be designed and constructed where required, in accordance with Austroads Guide to Traffic Engineering and the TfNSW Road Design Guide. They will be developed in consideration of construction vehicle movements
- Signage will be installed to warn motorists, pedestrians and cyclists of trucks turning into and out of site accesses with frequent truck movements
- Ensure access and egress driveways are visible to approaching traffic and signposted accordingly
- Where practicable, manage pedestrians at site access and egress driveways with suitable measures such as designated crossings and traffic controller supervision
- Install security fences and gates at locations which maintain clear sight lines and enable vehicles to park clear of adjacent travel lanes
- Community notification in advance of proposed traffic changes through appropriate media and other appropriate forms of community liaison.

The above management measures will be incorporated in site specific TMPs.

In addition to the above, all heavy vehicles used for spoil haulage will be clearly marked on the sides and rear with the project name and CSSI application number to enable immediate identification by a person viewing the heavy vehicle. The markings will be in accordance with CoA A47. Details of the project identification markings will be submitted for approval by the Planning Secretary prior to the heavy vehicles used for spoil haulage being utilised for the CSSI.

The locations of all heavy vehicles used for spoil haulage will be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the Environment Protection Authority (EPA) upon request for a period of no less than one year following the completion of construction. Daily heavy vehicle numbers will be recorded during the hours of 10pm and 7am either by a gate warden or a electronic system to ensure the 100 vehicle limit is not exceeded.

Truck marshalling areas will be used to minimise queuing and traffic disruptions in the vicinity of construction support sites. Marshalling of construction vehicles will not be carried out near sensitive land users. To avoid idling and queuing of project heavy vehicles on state and regional roads the following truck marshalling areas have been identified:

- Glebe Island area (for Rozelle sites)
- Within the WHT portals at Rozelle (for Rozelle sites)
- Falcon Street (closed) ramp from Warringah Freeway (for Falcon Street and Berry Street sites)
- Cammeray Golf Course access (for Cammeray site).

Non-road transport options were investigated for the project, however the location which would need to be used for loading barges at Glebe Island has a significant structural issue with the existing seawall and has load limitations for a distance from the water. This has excluded this location as a point to load barges with spoil. The other areas within Glebe Island have existing commitments or lease arrangements with other stakeholders or infrastructure projects which has limited options for loading barges with spoil generated by the tunnel construction.

6.4 Surface site access and vehicle management

The Project will involve works at the following construction support sites:

- Rozelle Rail Yards construction support site (WHT1) – including WHT cut and cover structure
- White Bay (Glebe Island) construction support site (WHT3)
- Berry Street north construction support site (WHT8)
- Ridge Street north construction support site (WHT9)
- Cammeray Golf Course construction support site (WHT10)
- Emu Plains construction ancillary site (WHT13)

In addition, the Project will be utilising other minor ancillary facilities as approved by the ER in accordance with CoA A19.

There are a range of hazards to vehicles operating onsite, including rough surfaces, other larger plant and existing infrastructure. Of equal importance is the safety of construction personnel working within the work sites. For each stage of work, the Project will ensure that:

- Regular toolbox meetings discuss onsite vehicle movements and changes to work areas
- Risks relating to traffic, transport and access provisions are identified, assessed and managed
- Site plant is fitted with flashing yellow lights, non-tonal reversing alarms ('quackers'), horns and two-way radios
- Access tracks are clearly defined and sign posted
- Pedestrian tracks and crossing points are defined and sign posted
- Warning signs or traffic controls are installed on the approach to hazards or conflict points
- Consideration would be given to reducing on-site speed limits.

Table **6-1** provides details for each of the sites including the expected heavy and light vehicle movements, which are based on those presented in the EIS. It is noted that the values provided will fluctuate depending on the works being undertaken and will not be consistent throughout the Project. The numbers provided in Table 6-1 are total anticipated peak movements (where a truck entering and then a truck exiting would equate to two movements).

6.4.1 Ridge Street local road use

Ridge Street is required as the primary access for early works and site establishment of the Ridge Street north construction support site (WHT9). Once the site is established access using Ridge Street would be limited however access via Ridge Street would still be required.

Vehicle movements during site establishment and early works is not expected to exceed 70 light vehicle and 20 heavy vehicle movements per day.

Ridge Street will be the primary access and egress route for site demobilisation once construction works at Ridge Street north construction support site is complete, and facilities are to be removed. During this period vehicle movements are not expected to exceed 70 light vehicle and 20 heavy vehicle movements per day.

Table 6-1: Surface sites traffic management

Construction Site	Traffic control (Y/N)	Parking on site (Y/N)	Peak daily movements		AM Peak vehicle movements (8 – 9am)[1]		PM Peak vehicle movements (5 – 6pm)[1]	
			Light	Heavy	Light	Heavy	Light	Heavy
Rozelle (MCAF1)	No	Yes	305	165	134	42	137	43
White Bay construction support site (WHT3)	No	Yes	530	700	205	61	255	61
Ridge Street north construction support site (WHT9) during site establishment – accessed via Ridge Street	No	Yes	70	20	10	2	20	2
Ridge Street north construction support site (WHT9)	No	Yes	165	200 [3]	10	8	20	8
Cammeray Golf Course construction support site (WHT10)	No	Yes	480	485	20	12	40	12
Berry Street construction support site (WHT8)	No	Yes	130	30	8	2	16	2
City West Link Portal (WHT12)[2]	No	No	200	1527	44	305	44	305
Emu Plains construction ancillary site (WHT13)[2]	No	Yes	100	180	50	30	10	30
Ernest Street Bridge (MCAF4)	No	No	60	30	10	5	10	5

Notes: [1] Figures are estimates. Typical shift structure will see workers arriving at sites prior to the AM peak period and some leaving after the PM peak period
[2] Based on MOD2 report, not the EIS.

Construction Site	Traffic control (Y/N)	Parking on site (Y/N)	Peak daily movements		AM Peak vehicle movements (8 – 9am)[1]		PM Peak vehicle movements (5 – 6pm)[1]	
			Light	Heavy	Light	Heavy	Light	Heavy
[3] Number of spoil haulage trucks and concrete trucks exiting Ridge Street (WHT9) construction support site between 10:00pm and 7:00am (Monday to Sunday) and are travelling westbound along Falcon Street is limited to 100 vehicles, unless otherwise permitted through an Environment Protection Licence.								

6.5 Construction traffic routes

The Project will access and depart from each construction site using the routes and roads outlined in Table 6-2, and the access and egress points shown in Appendix B2.

Where alternative temporary access and egress points to the construction site is required, the proposed temporary access points will not cause further impacts than described in this TTAMP. The routes were chosen to minimise potential impacts on traffic and sensitive receivers along the route and generally use major arterial roads or motorways as the routes. Construction related road traffic noise impacts is addressed in Section 8.5 and 9.6 of the Noise and Vibration Management Plan.

No local roads required to service the construction support sites have been identified for use which were not nominated in Figures 5-7 to 5-22 in Appendix F (Technical working paper: Traffic and transport) of the EIS and Section 9.1 of the MOD2 report.

Where additional access routes are required, these will aim to:

- Avoid sensitive areas including schools, aged care facilities and child care facilities
- Minimise impacts on residents
- Return construction vehicles to major arterial roads as quickly as possible.

The construction vehicle routes will be provided to sub-contractors for distribution to their workers and drivers and will be readily available at each ancillary facility for review by drivers.

Mitigation measures which will be implemented at construction site access and egress points to manage interactions between construction vehicles and public vehicles, pedestrians and cyclists are outlined in Section 6.11.

Table 6-2: Access & egress routes for construction support sites

Construction Site	Vehicle Type	Access Route	Road Classification	Identified in Figure 5-7 to 5-22 of Appendix F of the EIS?	Justification for route
Rozelle construction support site (MCAF1)	Light vehicles	The Crescent and City West Link Road	State	Yes	Direct access & egress requirement
		Balmain Road, Lilyfield Road and Catherine Street	Regional	No	Direct access & egress requirement
	Heavy vehicles	The Crescent and City West Link Road	State	Yes	Direct access & egress requirement
		Balmain Road, Lilyfield Road and Catherine Street	Regional	No	Direct access & egress requirement – infrequent use by heavy vehicles
White Bay construction support site (WHT3)	Light vehicles	The Crescent, City West Link Road & Victoria Road	Sate	Yes	Direct access & egress requirement
		James Craig Road & Sommerville Road	Local	Yes	Direct access & egress requirement
	Heavy vehicles	The Crescent, City West Link Road & Victoria Road	Sate	Yes	Direct access & egress requirement
		James Craig Road & Sommerville Road	Local	Yes	Direct access & egress requirement

Construction Site	Vehicle Type	Access Route	Road Classification	Identified in Figure 5-7 to 5-22 of Appendix F of the EIS?	Justification for route
Ridge Street north construction support site (WHT9)	Light vehicles	Falcon Street, Miller Street & Warringah Freeway	State & Regional	Yes	Direct access & egress requirement
		Ridge Street	Local	Yes	Direct access & egress requirement – refer Section 6.4.1 for use
	Heavy vehicles	Warringah Freeway	State	Yes	Direct access & egress requirement
		Falcon Street, Miller Street, Pacific Highway	State & Regional	Yes	Direct access & egress requirement
		Ridge Street	Local	Yes	Direct access & egress requirement – refer Section 6.4.1 for use
Cammeray Golf Course construction support site (WHT10)	Light vehicles	Warringah Freeway	State	Yes	Direct access & egress requirement
		Ernest Street	Regional	Yes	Direct access & egress requirement
	Heavy vehicles	Warringah Freeway	State	Yes	Direct access & egress requirement
		Ernest Street	Regional	Yes	Direct access & egress requirement
Berry Street construction support site (WHT8)	Light vehicles	Berry Street and Warringah Freeway	State	Yes	Direct access & egress requirement
	Heavy vehicles	Berry Street and Warringah Freeway	State	Yes	Direct access & egress requirement

Construction Site	Vehicle Type	Access Route	Road Classification	Identified in Figure 5-7 to 5-22 of Appendix F of the EIS?	Justification for route
Emu Plains construction ancillary site (WHT13)	Light vehicles	Railway Street, Lee Street and Smith Street	Local	Yes[1]	Direct access & egress requirement
		Russell Street (north) and Old Bathurst Road	Regional	Yes[1]	Direct access & egress requirement
		Russell Street (south), Great Western Highway and M4 Motorway	State	Yes[1]	Direct access & egress requirement
	Heavy vehicles	Railway Street, Lee Street and Smith Street	Local	Yes[1]	Direct access & egress requirement
		Russell Street (north) and Old Bathurst Road	Regional	Yes[1]	Direct access & egress requirement
		Russell Street (south), Great Western Highway and M4 Motorway	State	Yes[1]	Direct access & egress requirement
Ernest Street Bridge (MCAF4)	Light vehicle	Ernest Street	State	Yes	Direct access and egress requirements
	Heavy vehicles	Ernest Street	State	Yes	Direct access and egress requirements
Note: [1] Identified in Figure 9-1 of the MOD2 report, and not the EIS.					

6.5.1 Construction traffic routes (local roads)

The construction vehicle routes outlined in Section 6.5 have been developed to avoid local roads outside the construction footprint, where possible, maximising the use of state and regional roads. However, some construction site and work areas can only be accessed from local roads. Current local roads proposed to be used include those listed in Table **6**-**3** and shown in the relevant Heavy Vehicle Route diagrams located in Appendix B2. These align with those local roads identified in Figure 5-7 to 5-22 of Appendix F of the EIS and Section 9.1 of the MOD2 report.

If during construction additional local roads are identified as necessary for the Project, a request will be made to the Secretary under MCoA E132 and E133, and once approved will be appended to this Plan (Refer to Appendix B3).

Where the Project works require access to a local road for regular heavy vehicle movements, the Project will undertake early and ongoing consultation and communication with the local council and affected property occupiers to identify the potential impacts of the proposed route. Standard mitigation strategies and approaches have been identified that will be implemented with respect to the use of local roads to address the requirements of MCoA E133 (refer to Table **3**-**1**).

Table 6-3: Impacts on local roads

Local road	Description of use during construction	Description of potential impacts
Ridge Street, North Sydney	Heavy and light vehicle access to Ridge Street construction site	Impacts would include an increase in movements on Ridge Street and connecting regional and state roads during construction of the Falcon Street and Berry Street tunnel connections. Heavy vehicles use to be limited to site establishment, demobilisation, or local area & utility works.
James Craig Road, Rozelle	Heavy and light vehicle access to White Bay construction support site	Increased heavy and light vehicle movements on James Craig Road, Rozelle to service the construction support site.
Sommerville Road, Rozelle	Heavy and light vehicle access to White Bay construction support site	Increased heavy and light vehicle movements on Sommerville Road, Rozelle to service the construction support site.
Railway Street, Emu Plains	Heavy and light vehicle access to Emu plains construction ancillary site	Increased heavy and light vehicle movements on Railway Street, Emu Plains to service the construction ancillary site.
Lee Street, Emu Plains	Heavy and light vehicle access to Emu plains construction ancillary site	Increased heavy and light vehicle movements on Lee Street, Emu Plains to service the construction ancillary site.
Smith Street, Emu Plains	Heavy and light vehicle access to Emu plains construction ancillary site	Increased heavy and light vehicle movements on Smith Street, Emu Plains to service the construction ancillary site.

6.6 Road restoration

Road dilapidation surveys will be undertaken on the local roads identified in Section 6.5 and 6.5.1, before they are used by heavy vehicles for works associated with the Project to identify existing conditions, and following completion of the works.

A road dilapidation report will be provided to relevant agencies in accordance with E136. The condition reports will include a written survey, photos and/or video of each road. A copy of the report, including such mechanisms to be considered for the repair of damage to the local road(s) caused by heavy vehicle movements associated with the Project, shall be provided to the relevant roads' authority (Inner West Council, North Sydney Council or TfNSW) within three weeks of completing the surveys and no later than one month prior to the commencement of roads being used by construction vehicles.

If damage to roads occurs as a result of the construction of the Project, the following will be offered (at the relevant road authority's discretion):

- Compensate the landowner for the damage so caused
- Rectify the damage to restore the road to at least the condition it was in pre-works as identified in the Road Dilapidation Report (refer to Section 6.6).

The Project will monitor and maintain temporary alignments installed to facilitate the delivery of WHT project works as part of a TMP. A specific management measure (TTAMP12) is provided in Table **6-4**.

6.7 Road safety audit

An appropriately qualified and experienced person will undertake independent Road Safety Audits:

- During detailed design development (audit of plans)
- Prior to opening (pre-opening audit)

The audits will be undertaken to assess the safety performance of new or modified local road, parking, pedestrian and cycle infrastructure provided as part of the Project (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management.

The audit findings and recommendations of the detailed design plans (audit of the plans) will be actioned prior to construction of the relevant infrastructure. The pre-opening audit findings and recommendations will be actioned prior to the relevant infrastructure being made available for use.

6.8 Road occupancy

A road occupancy consists of any activity likely to impact on the operational efficiency of the road network. Where feasible, construction works will be staged to limit road occupancy and minimise potential impacts on the existing road network. However, where road occupancy cannot be avoided the necessary approvals will be obtained with concurrence of the relevant road authority, prior to conducting any works on the road or the road reserve.

A ROL authorises the occupation of a portion of the road that would normally be available for public traffic or pedestrian thoroughfare. ROLs will be required for the following scenarios:

- Development works within the road reserve and/or any changes to existing infrastructure
- Temporary or permanent installation and/or change of any regulatory traffic control device on a road
- Road closures, occupation of the road network to conduct works, and the associated installation of temporary traffic control devices.

Except in the case of an unplanned incident, or when directed by the Police or the emergency services, they will be obtained for work which:

- Slows, stops or otherwise delays or affects the normal flow of traffic
- Diverts traffic from its normal course along the road, including lane closures and detours
- Occupies any portion of the road related area, including the footpath that is normally available for vehicular, pedestrian or bicycle movement.

The ROL will be obtained prior to the commencement of any works on or near a State road. ROL applications will be submitted in accordance with Road Occupancy Licensing Guidelines to the TMC.

Activities requiring partial and full road closures will occur outside of peak periods and/or during night-time to minimise the impact of these activities on the road network wherever possible.

6.9 Safety management

Temporary roadwork speed limits are one of many traffic controls that will be implemented to manage the speed of traffic approaching and passing through the work site. The Project will be conscious of the potential for speed reductions over long distances, to have negative impacts on road user travel times. The Speed zones will comply with Section 8.2 of the TfNSW Traffic Control at Work Sites Manual (version 6.1), the TfNSW NSW Speed Zoning Guidelines, Australian Standard 1742.3 and Austroads Guide to Temporary Traffic Management.

The Project will implement Roadwork Speed Zones logically, credibly and capable of being enforced by the NSW Police Force, in accordance with approved Speed Zone Authorisations and as detailed in the ROL.

When considering the use of a roadwork speed zones, the Project will:

- Ensure they are clearly delineated and capable of being enforced
- Ensure they are used only while road works are in progress or the lower speed road conditions exist.

As per the TfNSW Traffic Control at Worksites Manual (Version 6.1), in order to maintain the current speed limits through some of the work zones, the use of safety barriers will be required to protect work and workers.

When night works are required, special consideration will be taken to determine changes in the speed limit depending on the location and type of works.

Dangerous goods and hazardous substances will be transported in accordance with relevant legislation and codes, including the Dangerous Goods (Road and Rail Transport) Act 2008, Road and Rail Transport (Dangerous Goods) (Road) Regulation 1998 and the Australian Code for the Transport of Dangerous Goods by Road and Rail (National Transport Commission, 2007). These codes and legislation are minimum requirements for transporters of dangerous goods, and apply regardless of the location/project.

6.10 Signposting and delineation

Traffic Control Devices (TCD) are all signs, traffic signals (permanent and temporary), road markings, pavement markers, traffic islands, and/or other devices placed or erected to regulate, inform, warn and/or guide road users. These TCDs are used to promote orderly traffic flow, regulate traffic (assign right of way, and indicate regulations in force), warn road users of hazards or regulatory controls ahead, (in particular they also warn of temporary hazards that could endanger road users or workers at roadwork sites), and guide traffic (e.g. guide signs to inform road users of directions to destinations, identify routes, and pavement markings to guide the travel path of vehicles).

TCDs including directional signage, barriers and/or line marking will be used as required to direct and guide drivers, cyclists and pedestrians past construction sites and on the surrounding network. This will be supplemented by Variable Message Signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternative routes.

Signage associated with property access, local community access and businesses will be considered during the detailed design and implementation of temporary traffic management schemes and impacts will be addressed to ensure appropriate information for road users is effectively communicated at all times.

Information signage and advance warning signage will be designed for changes to the road network and traffic conditions in accordance with relevant TfNSW Supplement Manual of Uniform Control Devices (AS 742.3) and Road Sign Specifications (AS 1743).

All signposting changes will be detailed in the TMP and TGS.

Delineation of any intersection layout changes will comply with the requirements of TfNSW Traffic Control at Worksites and other standards and will be detailed in the individual TMP and TGS.

6.11 Pedestrians and cyclists

Safe pedestrian and cyclist access will be maintained around construction support sites and work area. This will be done through strategic planning and implementing construction techniques that consider the impact on and safety of road users and the general public. Appropriate signage will be installed around worksites to alert pedestrians and cyclists of vehicle movements. Where documented in the site specific TMP. This signage will be supplemented with Variable Message Signs where necessary (as outlined in Section 6.10).

Where pedestrian and cyclist access is restricted or removed a proximate alternative route which complies with relevant standards will be provided in accordance with MCoA E138 unless otherwise endorsed by an independent, appropriately qualified and experienced person, prior to the restriction or removal of the impacted access. Any detours and adjustments will be designed with consideration of user safety and convenience.

Vehicles (including light and heavy vehicles) associated with the Project will be managed to not block or disrupt access across pedestrian or shared user paths at any time. A specific management measure (TTAMP14) is included in Table **6-4**.

Diversions to pedestrian and cyclist access have been identified as required for the Western Harbour Tunnel construction works in Section 5.3. Note that no additional diversions have been identified as part of the WHT Package 2 works at this stage.

6.11.1 Pedestrians

The Project will endeavour to maintain pedestrian connectivity around construction support sites and work areas, however some detours may be required to improve the safety or amenity of pedestrians including where heavy vehicles are entering and exiting construction support sites. Any changes to pedestrian connectivity will be communicated to Inner West Council, North Sydney Council, TfNSW and community stakeholders prior to implementation.

The Project will manage pedestrian desire lines with temporary footpaths that comply with the requirements of Austroads Guide to Road Design Part 6A: Pedestrians and Cycle Paths and AS1742.3: Manual of Uniform Traffic Control Devices – Part 3: Traffic Control for Works on Roads. Prior to work commencing on State and local roads, where the pedestrian access may be affected, the Contractor will provide alternate pedestrian access routes that are clearly signed and delineated in accordance with all safety requirements.

Alternate routes will aim to minimise inconvenience to pedestrians with the primary goal of maintaining clear space between pedestrians, active work areas and live traffic. This will be addressed in site specific TMPs prior to the commencement of the works.

As part of the TMPs, the following measures will be implemented when providing alternate pedestrian routes to minimise impacts on mobility impaired pedestrians:

- Clearly define temporary footpath arrangements by using appropriate signage
- Maintain sufficient space for wheelchair access
- Maintain a smooth, even surface on all temporary footpaths and crossings

- Conduct regular inspections to maintain footpaths free of trip hazards
- When changing footpath access, minimise grades for wheelchair use.

Disability Discrimination Act 1992 requirements will be adopted for kerb ramps and bus stop locations.

Pedestrian safety will be a critical consideration wherever construction (and especially heavy vehicle) traffic interacts with pedestrian movements. Each site will have their pedestrian and vehicle risk assessed as part of each Traffic Management Plan, and will deploy appropriate controls such as:

- Audible warnings for approaching and/or departing heavy vehicles
- Visual warnings at entry/exit points (including flashing lights and/or signage)
- Traffic controllers or gatekeepers to assist in managing the interface between pedestrians and vehicles

The type and extent of control will be outlined in site specific Traffic Management Plans submitted to TfNSW and CJP for review and approval.

The Project has been designed with limited locations of interface with pedestrians, and most access and egress points avoid crossing pedestrian paths.

6.11.2 Cyclists

The Project will endeavour to maintain cyclist connectivity and functionality provided within and directly adjacent to the construction support sites and work areas, by preserving existing facilities or providing alternative facilities as part of a detour. The Contractor will manage the cyclist desire lines with temporary routes that comply with the requirements of AS1742 Part 9: Bicycle Facilities, AustRoads Guide to Road Design Part 10 and AS1743: Road Signs Specification.

Where alternate routes are implemented, they will be appropriately signed and marked. Where alternate routes are impractical, directional signage will be erected to advise cyclists that the cycle access is temporarily unavailable. Any changes will be communicated to Inner West Council, North Sydney Council, TfNSW and community stakeholder prior to implementation.

Cyclists on local/urban roads will typically utilise shoulders or dedicated paths where they exist. Cyclist movements at site access points will be managed to maximise cyclist safety. The existing cycle routes as shown in the TfNSW Cycleway Finder are outlined below in Figure **6**-**1** to Figure **6**-**3**.

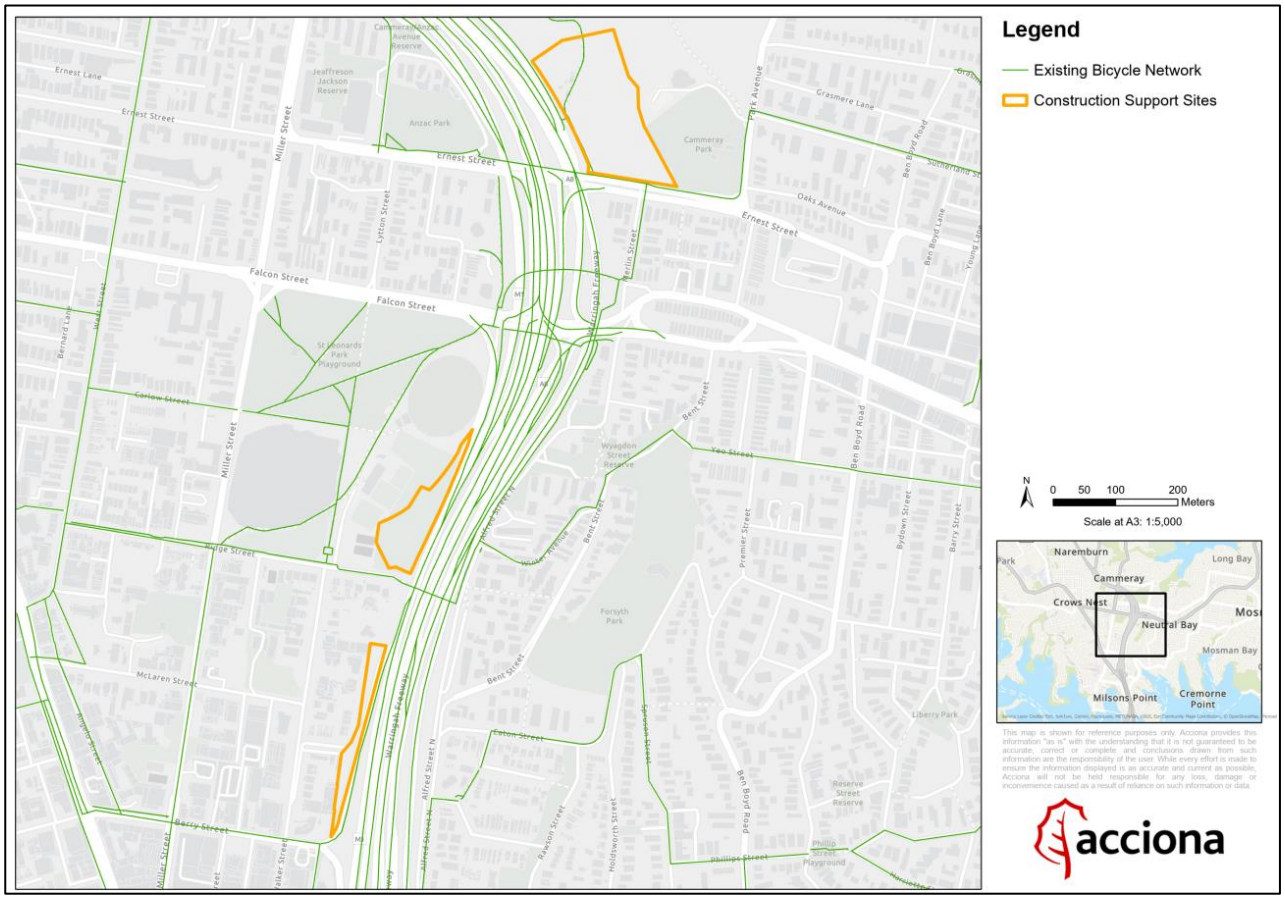

Figure 6-1: Cycleway finder map (North Sydney area)

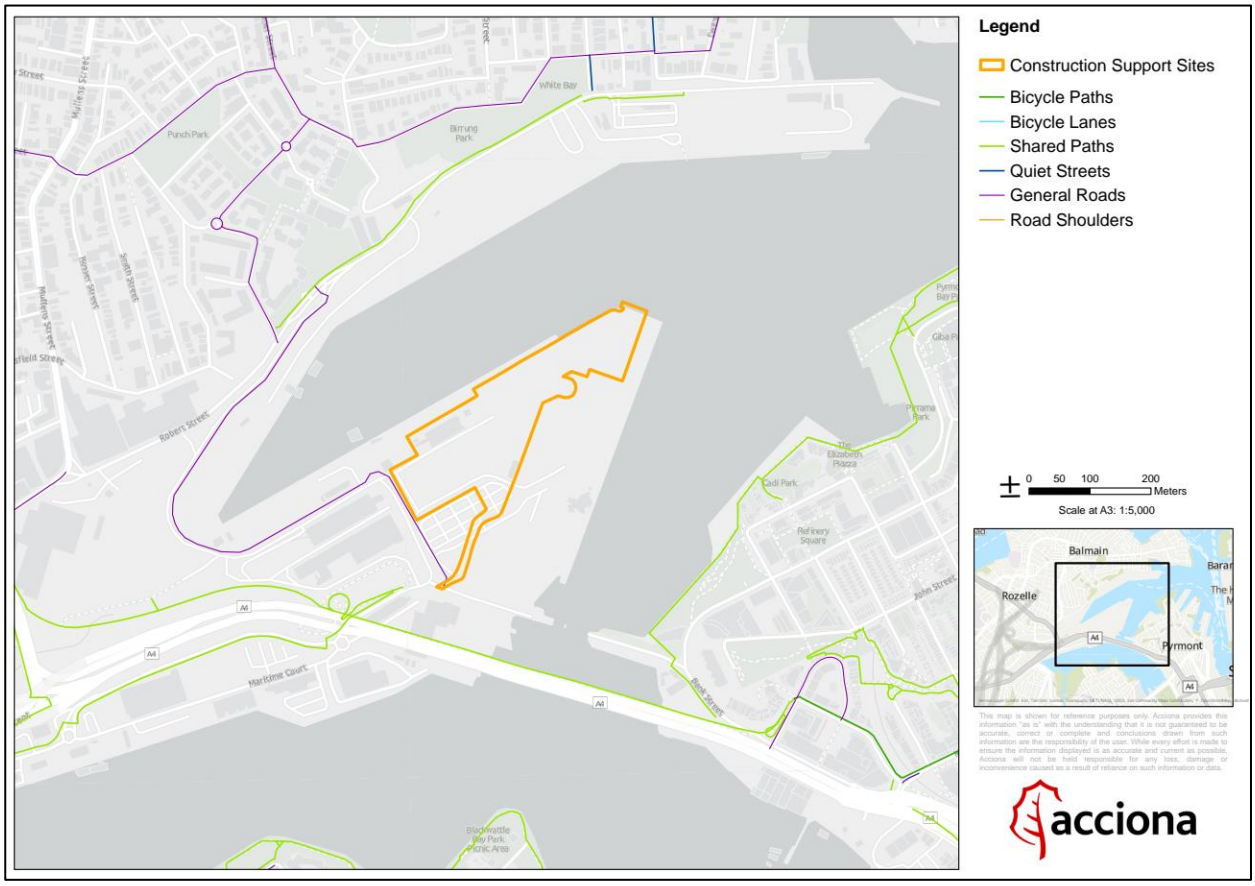

Figure 6-2: Cycleway finder map (Rozelle area)

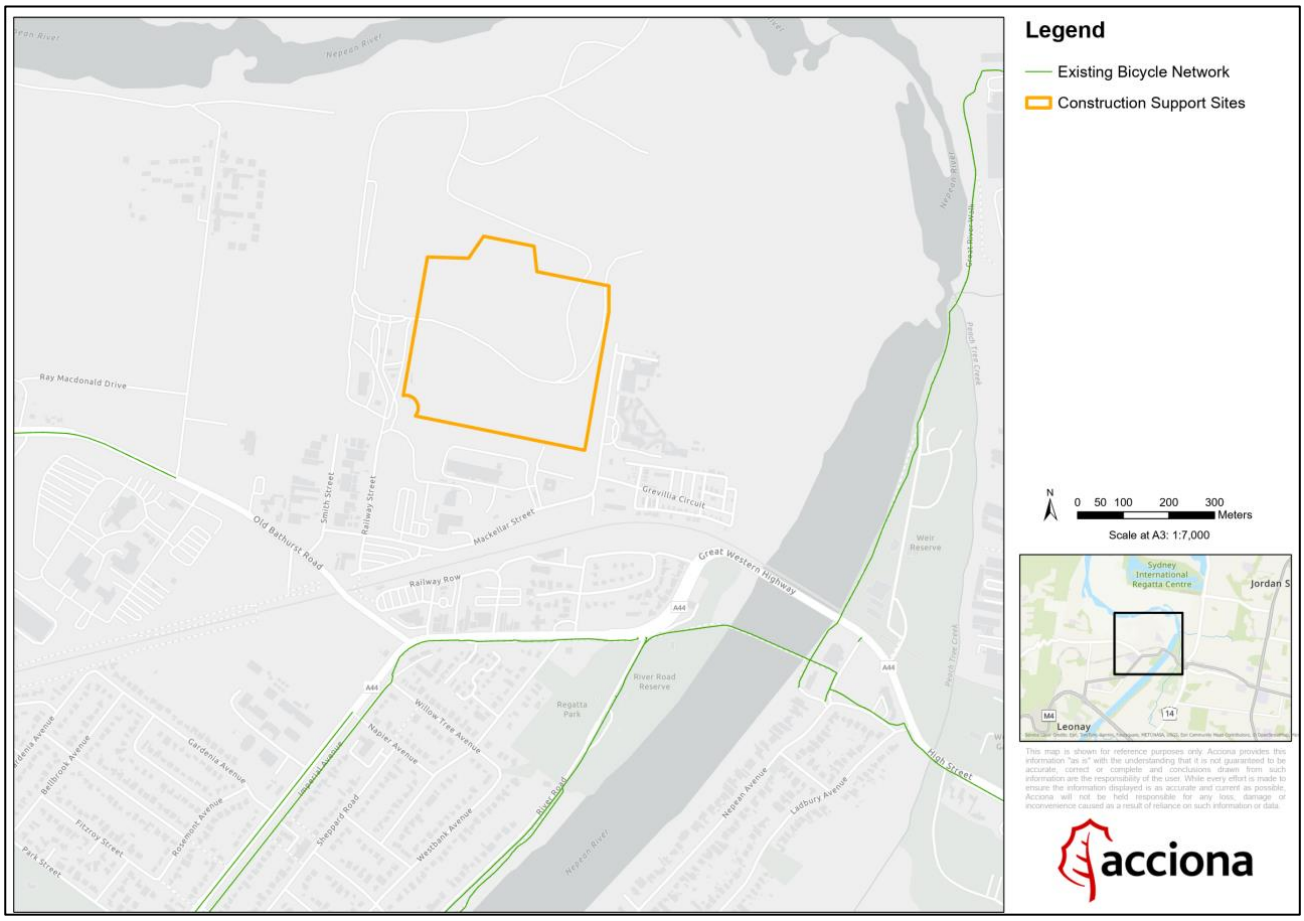

Figure 6-3: Cycleway finder map (Emu plains construction ancillary site area)

6.12 Public transport

The Project will seek to minimise disruption to the current level of service of public transport services, however some impacts are required for the construction of the Project as outlined in Section 5.2. No impacts have been identified at this stage to accommodate WHT Stage 3B and 3C works.

The community will be notified in advance of proposed transport network changes, through appropriate media and other appropriate forms of community liaison as detailed in the Project Community Consultation Strategy developed in line with MCoA B1 to B5.

6.12.1 Bus services

Where impacts to bus lanes or bus stops are identified, the Project will consult with the bus operators and other divisions of Transport for NSW to identify appropriate mitigation. During the short-term closures of bus lanes, buses will be required to use the adjacent general traffic lanes available. Impacts due to the temporary closure of the bus lanes will be minor and managed during the short periods that these bus lanes would not be in operation.

Where adjustments to bus stops within the construction works area are required, disruption to bus customers will be minimised by relocating the bus stops to a location within 400 metres walking distance of the existing stop in accordance with MCoA E149 and E150. Bus stop closure will not occur until relocated bus stops that comply with relevant standards are functioning and have similar capacity and amenity. Closures and relocations of bus stops will be undertaken in consultation with North Sydney Council. Bus stop relocation may require some existing parking spaces to be removed.

Advance notification will be provided to affected bus customers of the changes to stopping sequences and location of bus stops in accordance with TfNSW and CJP requirements.

Wayfinding signage will be provided directing commuters to adjacent or relocated bus stops. Footpaths and (where required) road crossing facilities will be provided to any relocated bus stops such that accessibility and safety standards are met.

Prior to the commencement of operation, all bus stops temporarily closed will 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 North Sydney Council.

Bus service operator maps in the areas affected by The Project are provided below, in Figure 6-4 and Figure **6**-**5**.

There are no bus stops or public bus routes located along Old Bathurst Road, Emu Plains between the roundabout with Russell Street and the intersection with Great Western Highway. No impacts to public bus stops are expected from the operation of Emu Plains construction ancillary site (WHT13).

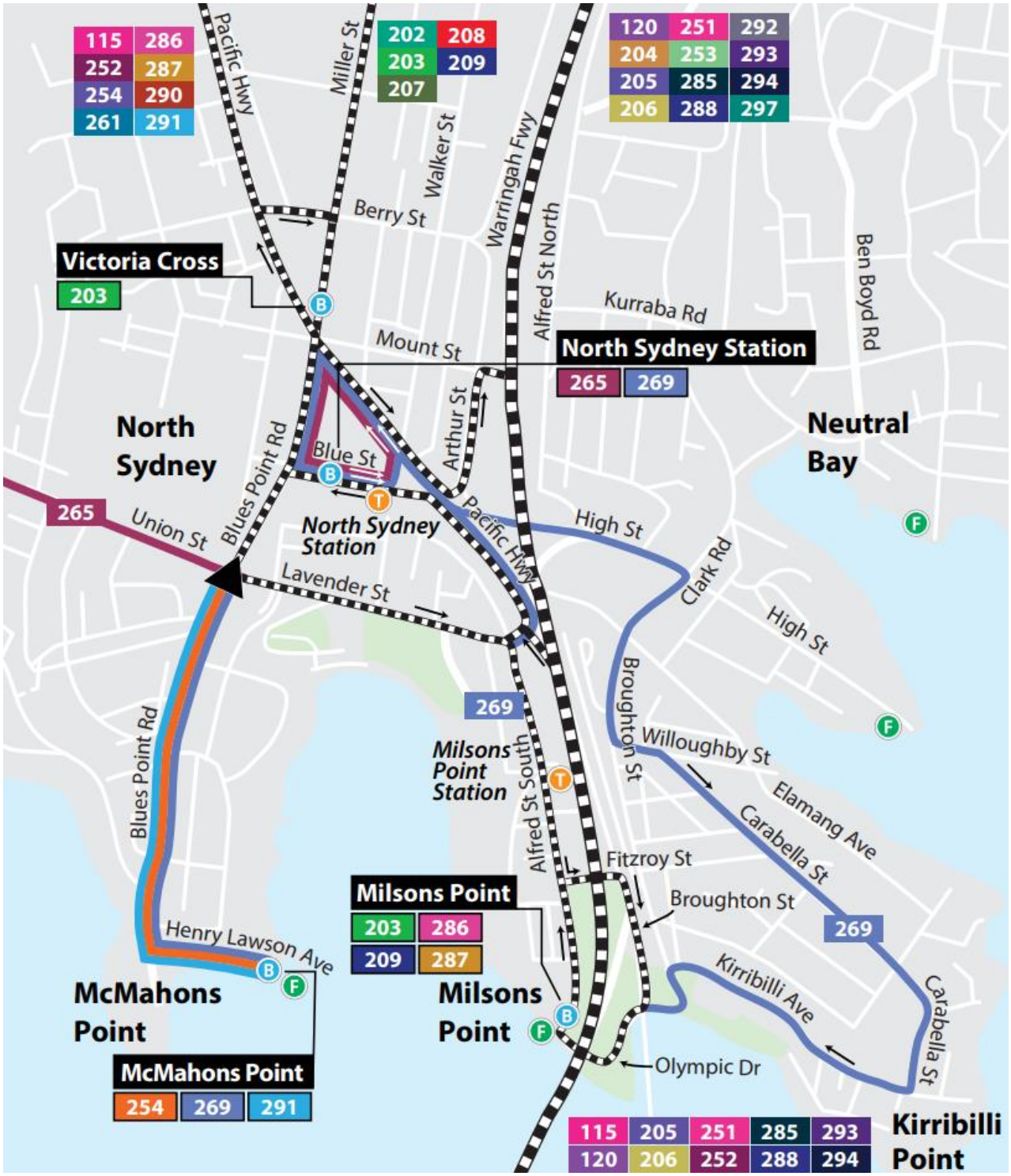

Figure 6-4: North short and west bus operator map - Busways

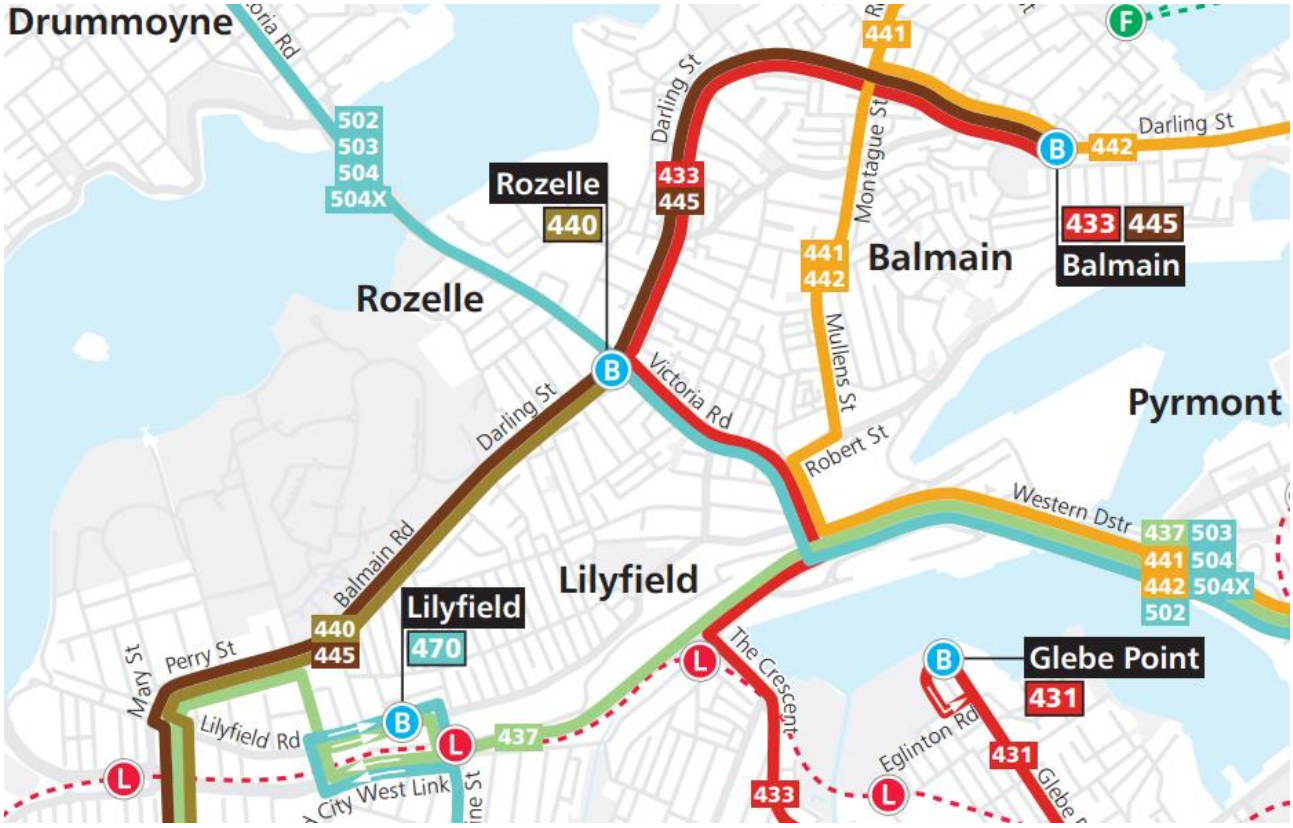

Figure 6-5: Inner west bus operator map – Transit Systems

6.13 Property and utility access

Access to all utilities and properties will be maintained during construction, where practicable, unless otherwise agreed with the relevant utility owner, landowner or occupier. There are no known access impacts on existing commercial or residential properties as access will be retained throughout the works.

During construction, all reasonably practicable measures will 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 will be developed in consultation with affected businesses, landowners and / or occupiers and implemented prior to the disruption. Adequate signage and directions to businesses will be provided prior to, and for the duration of, any disruption.

Any property or utility access physically affected by the Project will be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier.

6.14 Parking management

Construction worker parking will be managed in accordance with the Construction Parking and Access Strategy (CPAS), which will be implemented, in accordance with MCoA E140. The Construction Parking and Access Strategy will be developed and submitted to the Planning Secretary for approval at least one month prior to commencement of construction that reduces availability of existing parking. When approved the CPAS will be appended to this plan in Appendix B1.

The Project may require multiple CPAS to be developed. Currently the Project proposes three CPAS, covering work areas north of the Sydney Harbour, work areas south of Sydney Harbour, and for Emu Plains (WHT13) construction ancillary facility.

6.14.1 Worker parking

The project sites will include some on-site parking across the tunnelling and civil sites in the North Sydney area. These include a number of parking spaces at the Cammeray construction support site and the Ridge Street north construction support site. Berry street construction support site will have limited room for on-site parking. Any surplus parking demand for the north is expected to be accommodated through public transport noting the proximity of the North Sydney train station to the sites.

Worker parking will be provided at Glebe Island. The parking is anticipated to be sufficient to support the tunnelling and construction activities at both Glebe Island and the Rozelle worksites. Some on-site parking will be available within the tunnel portals at Rozelle however will only be limited.

Onsite workers parking will be provided at the Emu Plains construction ancillary site. The parking is anticipated to be sufficient to support the workforce required for fabricating tunnel lining segments, culverts and other concrete elements and along with other activities occurring at the site.

Emergencies or unplanned incidents may occur during the works which impact upon traffic including motor vehicle crashes, environmental spills, terrorist attacks, bomb threats, construction type incidents, structural catastrophic failures, inclement weather conditions, flooding and anti-social behaviour. Road incidents will be managed under the direction of emergency services and communicated to TMC.

Any incidents responded to as part of incident management for the project will be recorded in an incident management database. The incident database will be transmitted to TfNSW on a daily basis, or as otherwise agreed with TfNSW representatives.

Environmental relevant incidents reporting will be carried out in accordance with Section 5.11 of the CEMP.

6.15 Cumulative impacts

Cumulative construction impacts may result if other major projects proceed concurrently with the Project. A detailed assessment of cumulative impacts will be undertaken as part of site-specific Traffic Management Plans (TMPs).

The Community Consultation Strategy includes consideration of construction fatigue and includes procedures to proactively manage this type of issue where possible.

6.16 Management and mitigation measures

Management and mitigation measures relevant to the Project are outlined in Table **6-4**. These will be implemented to minimise traffic, transport and access impacts, and ensure all commitments and requirements of the project approval are met. These specific management and mitigation measures have been developed to address the requirements of applicable legislation, the MCoA and commitments of the REMMs.

Table 6-4: Traffic, transport and access management and mitigation measures

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
Construction traffic management						
TTAMP01	Road safety and traffic management measures will be staged as outlined in this Plan to minimise delays for private road users and public transport.	This Plan TMP Traffic staging drawings	Construction	Site supervisor	Multiple Best practice	TMPs Inspection Records Road Safety Audit Reports
TTAMP02	During construction, all reasonably practicable measures will be implemented to maintain pedestrian and vehicular access to, utilities and properties unless otherwise agreed with the relevant owner/occupier, by implementing the actions as described in Section 6.13	Pre-construction dilapidation reports. TMP TGS	Construction	Site supervisor	MCoA E128 MCoA E129 MCoA E141 REMM LP3	Consultation records Inspections Agreement with owner
TTAMP03	Access to the White Bay construction support site (WHT3) by construction vehicles (including light vehicles) will only be via The Crescent/City West Link and James Craig Road, with no access to the site via Robert Street, Rozelle, unless required in the event of an emergency.	TMPs VMPs	Construction	Site supervisor	MCoA E130	Inspections
TTAMP04	Construction road traffic will be managed to minimise movements during peak periods.	TMPs	Construction	Contractor's Traffic Manager Site supervisor	REMM CTT6	Traffic Management Plans

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
TTAMP05	Number of spoil haulage trucks and concrete trucks exiting Ridge Street (WHT9) construction support site between 10:00pm and 7:00am (Monday to Sunday) and are travelling westbound along Falcon Street is limited to 100 vehicles, unless otherwise permitted through an Environment Protection Licence.	TMPs VMPs	Construction	Traffic Manager Site supervisor	MCoA E135A	Traffic Management Plans
TTAMP06	Vehicle movements to and from construction sites will be managed to ensure pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic signals and modifications to existing signals or, on occasion, police presence	TMPs VMPs TGSs	Construction	Contractor's Traffic Manager Site supervisor	REMM CTT7	Road safety audits Traffic Management Plans
TTAMP07	Directional signage, barriers and/or line marking will be used as required to direct and guide drivers, cyclists and pedestrians past construction sites and on the surrounding network. This will be supplemented by Variable Message Signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternative routes.	TMPs VMPs TGSs	Construction	Site supervisor	REMM CTT8	Traffic Management Plans, approvals and Road Safety Audits

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
TTAMP08	Activities requiring partial and full road closures will occur outside of peak periods and/or during night-time to minimise the impact of these activities on the road network.	RoLs	Road closure activities	Site supervisor	REMM CTT12	Traffic Management Plans and Road Occupancy Licences
TTAMP09	The locations of all heavy vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one year following the completion of construction.	Real time monitoring	Construction	Site supervisor Environmental manager	MCoA E135	Real time monitoring electronic records
TTAMP10	Additional approvals for local roads will be undertaken as described in Section 6.5.1	Local road approval application	Construction	Traffic Manager	MCoA E132 MCoA E133	DPHI approval letters
Road Dilapidation						
TTAMP11	Before any local road is used by a heavy vehicle for the purposes of the Project, a Road Dilapidation Report will be prepared for the road in consultation with relevant councils and road owners, including such mechanisms to be considered for the repair of damage to the local road(s) caused by heavy vehicle movements associated with the Project.	Suitably qualified person	Before local road is used by Project heavy vehicles	Traffic Manager	MCoA E136 REMM CTT1	Road Dilapidation Report Evidence of submission in accordance with this requirement.

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
	A copy of the Road Dilapidation Report will be provided to the relevant council within three weeks of completion of the survey and no later than one month prior to the road being used by heavy vehicles associated with the Project.					
TTAMP12	A Road Dilapidation Report will be prepared following completion of works using a road. If damage to roads occurs as a result of the Project, either the relevant road authority will be compensated for the damage so caused, or the damage will be rectified to restore the road to at least the condition it was pre-works as identified in the Road Dilapidation report (at the relevant road authority's discretion).	Suitably Qualified Person	Following completion of works using local roads	Traffic Manager Project Manager	MCoA E137	Road Dilapidation Report
Pedestrian and Cyclist Access						
TTAMP13	Direct impacts to existing shared user paths will be minimised. Safe pedestrian and cyclist access will be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternative route which complies with relevant standards, unless otherwise endorsed by an independent,	TMPs VMPs TGSs	Construction	Traffic Manager	MCoA E138 REMM CTT19	Traffic Management Plans and Road Safety Audit reports for long-term closures or impacts.

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
	appropriately qualified and experienced person, will be provided (including signposting) prior to the restriction or removal of the impacted access. Any detours and adjustments will be designed with consideration of user safety and convenience.					
TTAMP14	Vehicles (including light and heavy vehicles) associated with the Project will be managed to not block or disrupt access across pedestrian or shared user paths at any time.	TMPs VMPs TGS	Construction	Traffic Manager Site supervisor	MCoA E139	Traffic Management Plans, Gatekeepers where necessary and CCTV monitoring where necessary
Construction Parking Management						
TTAMP15	Spoil haulage vehicles must adhere to the nominated haulage routes identified in this Plan.	Real time monitoring VMPs	Construction	Traffic Manager Project Manager Spoil Manager	MCoA E139	Real time monitoring electronic records
TTAMP16	Vehicles will be managed to minimise idling and queueing on state and regional roads. Truck marshalling areas will be used to minimise potential queueing and traffic and access disruptions in the vicinity of construction support sites. Marshalling of construction vehicles will not be carried out near sensitive land user(s).	TMPs VMPs TGS Real time monitoring	Construction	Traffic Manager Site Supervisor	MCoA E139 REMM CTT11	Real time monitoring records, CCTV cameras and Vehicle Movement Plans

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
TTAMP17	The Construction Parking and Access Strategy will be implemented to mitigate impacts resulting from on- and off-street parking changes during construction. Vehicles (including light and heavy vehicles) associated with the Project will be managed to minimise parking on public road.	Construction Parking and Access Strategy TMPs	Construction	Traffic Manager Site Supervisor Project Manager	MCoA E139 MCoA E140 REMM CTT9	Implementation of Construction Parking and Access Strategy
Road safety						
TTAMP18	For new and modified local roads, parking, pedestrian and cycle infrastructure, the design will meet relevant design, engineering and safety guidelines, including the Austroads Guide to Traffic Management	Detailed design to comply with MCoA E144	Detailed design and construction	Traffic Manager Project Manager	MCoA E144	Design reports
TTAMP19	An independent Road Safety Audit will be undertaken by an appropriately qualified and experienced person to assess the safety performance of new or modified local road, parking, pedestrian and cycle infrastructure provided as part of the Project (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management.	Suitably qualified person	Prior to construction of relevant infrastructure Pre-opening	Traffic Manager	MCoA E145	Proof of engagement Auditor qualifications Audit report

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
Public transport						
TTAMP20	Where bus stops are required to be temporarily closed, such closure will not occur until relocated bus stops are provided 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 will be undertaken in consultation with relevant council(s) and relevant divisions of Transport for NSW. Wayfinding signage will be provided directing commuters to adjacent or relocated bus stops. Footpaths and (where required) road crossing facilities will be provided to any relocated bus stops such that accessibility and safety standards are met. Advanced notification will be provided to affected bus customers regarding any adjustments.	TMP, signage and community consultation	Construction	Traffic Manager	MCoA E149 REMM CTT10	Consultation records

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Source	Evidence
TTAMP21	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).	TMP and Signage	Prior to commencement of operation	Traffic Manager	MCoA E150	Consultation records
TTAMP22	The community will be notified in advance of proposed transport network changes, through appropriate media and other appropriate forms of community liaison as detailed in the Project Community Consultation Strategy developed in line with MCoA B1 to B5.	Community Consultation Strategy	Construction	Traffic Manager Community Manager	CCTT5	Consultation records
Identification of workforce and compounds						
TTAMP23	All heavy vehicles used for spoil haulage will be clearly marked on the sides and rear with the project name and CSSI application number to enable immediate identification by a person viewing the heavy vehicle.	Graphic for stickers Traffic Management Strategy and Spoil Management Plan	Construction	Project Manager Spoil Manager	MCoA A47	Inspection records

7 Compliance management

Compliance with this Plan will be measured against the targets outlined in Section 2.3 of this plan through ongoing monitoring throughout the construction of the Project.

7.1 Roles and responsibilities

The Project Team's organisational structure and overall roles and responsibilities as well as the Environmental Representative and required specialists are outlined in the CEMP.

Specific roles and their responsibilities for the implementation of construction traffic management are detailed below.

Table 7-1: Traffic management roles and responsibilities

Position	Skill Levels Required / Authority
Traffic Manager	• Develop TMPs and TGS and obtaining required approvals from the relevant authorities. • Ensure approved traffic management measures are implemented and maintained in accordance with approved plans. • Carry out regular inspections of the traffic control measures to ensure they are effective. • Amend and update the plans as required to ensure that they remain current as work progresses. • Record and report on all identified traffic incidents. • Arrange traffic control audits and implementing audit close out actions. • Undertake traffic-based risk assessments of the works.
Traffic Engineer(s)	• Assist in the development of Traffic Management Plans • Conduct inspection to verify the operation of Traffic Management Plans meets intent and safety goals • Assist in scheduling traffic control resourcing, development of Traffic Guidance Schemes and seeking approvals • Assist in scheduling Road Safety Audits and closing out findings • Assist in implementations, inspections, procurement and installation of signs, linemarking, barriers and other traffic related equipment
Site supervisor	• Allocate field resources as required • Support delivery of the traffic management objectives • Assist with the implementation of the TTAMP • Ensure relevant field team members receive the appropriate training.

7.2 Training

All employees, contractors and utility staff will undergo site induction training relating to traffic, transport and access management issues. The induction training will address site and/or construction activity specific impacts, including:

- Existence and requirements of this Plan
- Relevant legislation and guidelines

- Construction traffic routes
- Construction parking and access requirements.

Further details regarding staff induction and training are outlined in the CEMP.

7.3 Inspections

Requirements and responsibilities in relation to inspections are documented in the CEMP.

ACCIONA will undertake regular inspections to ensure the safety of all traffic movements, as well as the wellbeing of pedestrians, cyclists, drivers and property through and surrounding all worksites. The responsibility and frequency of inspections is stipulated in section 8.1 of the TfNSW Traffic Control at Worksites Manual Version 6.1.

Three main types of inspections and records will occur:

- Inspections of short-term (single shift) traffic controls during the shift
- Regular daytime inspections of long-term traffic controls after implementation
- Regular night time inspections of long-term traffic controls after implementation.

Pre-opening inspections may be carried out by the Traffic Manager before the start of each new temporary roadwork site or major modification.

Any signage or devices identified during the checks or audits requiring attention will either be rectified at the time or advised to the Project's Traffic Manager during that shift for follow-up action.

7.4 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of traffic management measures, compliance with this Sub-plan, MCoA and other relevant approvals, licenses and guidelines.

Audit requirements are detailed in the CEMP.

An independent Road Safety Audit will be undertaken in accordance with MCoA E145 to assess the safety performance of new or modified local road, parking, pedestrian and cycle infrastructure (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management.

The audit must be undertaken by an appropriately qualified and experienced person during detailed design development (audit of plans) and audit findings and recommendations must be actioned prior to construction of the relevant infrastructure.

7.5 Incidents and Non-compliances

All incidents will be managed in accordance with the CEMP.

All non-compliances will be managed in accordance with the CEMP.

7.6 Reporting

Reporting requirements are detailed in the CEMP. Any additional reporting requirements described in this document will be undertaken in addition to those described in the CEMP.

8 Review and improvement

8.1 Continuous improvement

As outlined in the CEMP, management reviews will be undertaken as part of the continual improvement process. The reviews will be initiated by the Environmental Manager and include relevant project team members and stakeholders. Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against planning approval requirements, environmental policies, objectives, and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of traffic management
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets outlined in Section 0 of this Plan.

8.2 Plan update and amendment

The continuous improvement processes described in the CEMP may result in the need to update or revise this Plan. This will occur whenever there is a change to the construction scope or methodology that may increase the potential impacts upon traffic, transport or access or to address relevant updates to a related Sub-plan (as identified in Table 1-1).

Only the Environment Manager can amend this Plan. Any update of this Plan will require endorsement by the Environmental Representative and depending on the change, the process outlined in Section 2 of the CEMP must be followed where approval from the Planning Secretary prior to implementation of the update is required.

Appendix B1 Construction Parking and Access Strategy

WESTERN HARBOUR TUNNEL
Package 2: WHT Driven Tunnels,
Mechanical and Electrical Fitout

Construction Parking and Access Strategy (North)

WHTP2-ACOC-WHT-EV-PLN-000018

Client: Transport for NSW | Project No: WHTP2

Revision 10

Date: 28 June 2024

Contents

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Figures

Document control

This plan is a controlled document, approved by the Acciona Project Director. The Traffic Manager is responsible for ensuring this plan is kept up to date for the Project, according to Transport for NSW (TfNSW) requirements, Project risks, activities and legislative requirements.

Project revision history

Rev	Date	Description of changes
A	13.03.2023	Original issue
00	27.03.2023	Updated following TfNSW review; for DPE Submission
01	03.04.2023	Updated following TfNSW review; for DPE Submission
02	08.05.2023	Updated following DPE Comments
03	15.06.2023	Updated following DPE Comments
04	19.06.2023	Updated following DPE Comments
05	23.06.2023	Updated following DPE Comments
06	24/10/2023	Updated to include Berry Street north (WHT8), Adjusted parking at Cammeray construction support site Adjusted parking numbers for Ridge Street Retitled to Construction Parking and Access Strategy (North)
07	20/12/2023	Updated following DPE Comments
08	19/01/2024	Updated following DPE Comments
09	13/06/2024	Update to Section 6.1
10	28/06/2024	Updated following DPHI comments and recommendations from DPHI Independent Audit

Control and records

This plan will be signed and made available for all Project Personnel on the appropriate Electronic Document management System.

Uncontrolled Copies

Any uncontrolled hard copy documents are up to date at issue and are only issued to outside organisations, customers, etc., upon request and approval by a Workplace Manager. Such uncontrolled documents will be clearly marked ‘Uncontrolled Copy When Printed’ and will not be subject to an update.

Abbreviations and definitions

Term	Meaning
ACCIONA	ACCIONA Infrastructures
CPAS	Construction Parking and Access Strategy
CEMP	Construction Environmental Management Plan
CCS	Community Consultation Strategy
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
DPHI	Department of Planning, Housing and Infrastructure (formerly Department of Planning and Environment (DPE))
Project, the	Western Harbour Tunnel (Package 2)
EIS	Environmental Impact Statement
ROL	Road Occupancy Licence
TfNSW	Transport for NSW
TTAMP	Traffic Transport and Access Management sub-plan
WFU	Warringah Freeway Upgrade
WHT	Western Harbour Tunnel

1. Introduction

This Construction Parking and Access Strategy (CPAS) has been developed to provide an outline of the construction parking arrangements for workers on the Western Harbour Tunnel project (the Project). The CPAS also outlines the anticipated impacts for any on-street parking removal as a result of the construction activities.

Specifically, it has been developed to be consistent with the Project Environmental Impact Statement (EIS) and provide the information necessary to address Project Condition of Approval (CoA) E139 and E140 relating to parking and access.

1.1. Background

The Project is a major transport infrastructure project that will make it easier, faster and safer to travel around Sydney. By creating a western bypass of the Sydney CBD, the WHT will take pressure off the Sydney Harbour Bridge, Sydney Harbour Tunnel, Anzac Bridge and Western Distributor corridors to improve transport capacity in and around Sydney Harbour.

The tunnel project will be constructed using two Tunnel Boring Machines (TBMs) to tunnel through sandstone under Sydney Harbour, while roadheaders will excavate the northern approach to the harbour crossing. The project methodology has adopted TBMs to eliminate any dredging activities through the Sydney Harbour seabed, removing risks to the marine environment and biodiversity and the need for construction sites at Yurulbin Point and Berrys Bay, significantly reducing construction impacts for residents in Birchgrove and Waverton.

Once all excavation activities are finished, the roadheaders will be removed from the two northern tunnelling construction sites and the TBMs will be disassembled and removed in pieces from the City West Link portal. The larger parts of the TBMs that cannot be removed will be buried underground allowing for the mechanical and electrical (M&E) work to fit out the tunnels with lighting, safety features, and jet fans to proceed.

1.2. Purpose and scope of this CPAS

This CPAS will outline how the Project will satisfy the requirements of the CoA and Revised Environmental Management Measures (REMM). The CPAS will describe how construction worker parking will be facilitated and monitored on the project, and the implementation of mitigation measures described in Section 4, 5 and 6.

This CPAS (CPAS North) have been prepared and includes the following sites:

- Ridge Street north (WHT9) construction support site;
- Berry Street north (WHT8) construction support site; and
- Cammeray (WHT10) construction support site.

This document will also be updated as required to address any additional works which are not associated with a construction support site, but may impact on- and off-street parking, such as:

- Utilities installations; and
- Local area works and road upgrades.

A separate CPAS (CPAS South) will be prepared for the Rozelle Precinct comprising of Glebe Island (WHT3) construction support site (formerly White Bay (WHT3)) and City-West Link (WHT12) construction support site (formerly Rozelle rail yard (WHT1)) and any other relevant construction activities which occur south of the Harbour Crossing works.

1.3. Compliance Matrix

The Compliance Matrices below outline specific requirements detailed in the CoA as well as the REMM and where they have been addressed in this plan.

Table 1-1 CoA Compliance Matrix

Reference	Requirement	Section
E135	The locations of all heavy vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one year following the completion of construction.	Section 5.7
E136	Before any local road is used by a heavy vehicle for the purposes of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the relevant council within three weeks of completion of the survey and no later than one month prior to the road being used by heavy vehicles associated with the CSSI.	Section 5.6
E139	Vehicles (including light and heavy vehicles) associated with the CSSI must be managed to:	-
	(a) Minimise parking on public roads;	Section 4
	(b) Minimise idling and queuing on state and regional roads;	Section 5.8
	(c) Not carry out marshalling of construction vehicles near sensitive land user(s);	Section 5.8
	(d) Not block or disrupt access across pedestrian or shared user paths at any time; and	Section 5.4
	(e) Ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the Traffic, Transport and Access Management CEMP Sub-plan.	Section 5.5 & Section 5.7
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:	-
	(a) achieving the requirements of Condition E139;	See above
	(b) confirmation and timing of the removal of on- and off-street parking associated with construction of the CSSI;	Section 4
	(c) 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 pickup, weekend periods and during special events;	Section 3
	(d) consultation with affected stakeholders utilising existing on- and off-street parking stock which will be impacted as a result of construction;	Section 2 Note, no additional long-term parking removal
	(e) assessment of the impacts 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 3
	(f) 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, 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;	Section 5.10

Reference	Requirement	Section
	(g) where residential parking schemes already exist, off-road parking facilities must be provided for the CSSI workforce;	Section 5.1
	(h) mechanisms for monitoring, over appropriate intervals, to determine the effectiveness of implemented mitigation measures;	Section 5
	(i) 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 5.3
	(j) provision of contingency measures should the results of mitigation or monitoring indicate implemented measures are ineffective; and	Section 5.10
	(k) provision of reporting of monitoring results to the Planning Secretary and relevant council(s) at three monthly intervals.	Section 6.2
	The Construction Parking and Access Strategy must be submitted to the Planning Secretary for approval at least one month before the commencement of any construction that reduces the availability of existing parking. The approved Strategy must be implemented before impacting on on-street parking and incorporated into the Traffic, Transport and Access Management CEMP Sub-plan.	Section 1.2

Table 1-2 REMM compliance matrix

REMM Reference	Requirement	Section
CTT7	Vehicle movements to and from construction sites will be managed to ensure pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic signals and modifications to existing signals or, on occasion, police presence.	Section 5.4
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 location, management measures may include workforce shuttle buses and the use of public transport.	Section 5.10
CTT11	Truck marshalling areas will be identified and used where feasible and reasonable, to minimise potential queueing and traffic and access disruptions in the vicinity of construction support sites	Section 5.8

2. Consultation & Approval

2.1. Community consultation

Consultation on parking impacts for the Ridge Street location has been undertaken with the affected stakeholders and residents in accordance with the project Community Consultation Strategy (CCS). The intent of consultation is to inform affected stakeholders, to assess impacts to affected stakeholders and to identify any addition specific mitigation measures to manage the impacts to affected stakeholders.

The initial notifications distributed by WFU project for the Ridge Street parking removal included a completion date of June 2023. As such, the WHT Stage 3B Project has undertaken additional notifications to affected stakeholders for the extension of the parking removal required at this site. The notifications for the extension include:

- Start of work notification to local community of the extension of the removal of the 9 parking spaces until June 2028. Distribution completed 13-14 May 2023.
- Information included in Ridge Street fact sheet that was provided as part of door knocking of homes and businesses within 250 metres of the site during the week of 8 April 2023.
- Additional door-knocking and notification drop to residents on 15 June 2023.

No major issues were raised at that time.

Notification and consultation of any additional parking removal would be undertaken in accordance with the Project CCS, and as part of updates to this document.

2.2. Council consultation

Consultation has been undertaken on revisions of this document as follows:

Table 3 Council consultation register

Rev	Date	Change to impacts as described in document.	Council consultation summary
A	13.03.2023	Original issued	In accordance with the WFU Construction Parking and Access Strategy (Rev M; 15 February 2023) parking impacts for the impact of nine spaces were approved at Ridge Street.
00	27.03.2023	No worsening of proposed impacts; no additional consultation required.	
01	03.04.2023	No worsening of proposed impacts; no additional consultation required.	
02	08.05.2023	Updated following DPE Comments	Consultation with North Sydney Council for the extension of the existing nine spaces was undertaken within the Western Harbour Tunnel Stage 2 and North Sydney Council Interface meeting, held on 3 May 2023. No issues were raised.
03	15.06.2023	Update to include removal of additional three spaces at ridge Street, consistent with EIS.	Notification of the change and opportunity for ongoing discussion was made to Council 15 June 2023. No response was received.
04	19.06.2023	No worsening of proposed impacts; no additional consultation required.	
05	23.06.2023	Updated following DPE Comments	Document approved.

Rev	Date	Change to impacts as described in document.	Council consultation summary
06	19.10.2023	Updated to include Berry Street north (WHT8), Adjusted parking at Cammeray construction support site	The proposed construction support site at Berry Street north will not impact existing on- and off-street parking for local stakeholders and residents. Adjustment to Cammeray construction support site does not result in change to impact. Document provided to North Sydney Council, who provided comment. Response to comments was provided back to Council – no changes to document required. One update made to reflect increase in parking impact at Ridge Street from 3 to 7 spaces, as a result of a corresponding decrease in numbers described in the latest approved WFU CPAS (i.e. total number of impacted spaces doesn't change). This update was communicated to North Sydney Council via routine coordination meeting.
07	20.12.2023	Adjustment to Section 4.1.1 to clarify parking removal at Ridge Street to align with Table 4-1.	Nil – no net change to removal only fixing wording.

In addition to the above, ongoing opportunity for consultation with Council and other stakeholders will be available through the Traffic and Transport Liaison Group (TTLG), established as a technical forum to discuss road safety and traffic management measures, potential impacts on the road, pedestrian and cycle network and program. The TTLG will include representatives from TfNSW and relevant Councils and on occasion representatives from other construction projects.

Additional consultation will be undertaken where there is a worsening of parking impacts than previously considered under the approved CPAS.

2.3. Document approval

In accordance with CoA E140 this CPAS will be submitted to the Planning Secretary for approval at least one month before the commencement of any construction that reduces the availability of existing parking and, following approval, will be incorporated into the Projects Traffic, Transport and Access Management Sub-plan (TTAMP).

Note, additional on-street parking removal required by the Project, excluding mandatory changes Road Occupancy Licenses (ROL) or Council Permit as described in Section 4.1, will be addressed in an updated CPAS and provided to the Planning Secretary for review and approval.

3. Existing Conditions

In accordance with CoA E140(c), initial parking surveys have been undertaken by the WFU project at all locations where on-street parking spaces have been removed to determine existing parking demand during peak, off-peak, school drop-off and pick up, weekend periods and during special events. The parking survey results are included below for the relevant Project locations; further details can be found in the WFU Construction Parking and Access Strategy.

Table 3-1 Parking survey precinct areas

Precinct reference	Survey area February and May/June 2022
Ridge Street Precinct	Ridge St
	Walker St

Table 3-2 Parking survey results per Precinct

Day	Time period	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
Ridge Street Precinct					
Average weekday	8:30am (weekday morning peak / school drop-off)	77	42	119	65%
	3pm (school pick up)	105	14	119	88%
	5pm (weekday evening peak)	82	47	129	64%
	10pm (weekday evening off-peak)	41	98	139	29%
Average weekend	12pm (weekend day)	104	35	139	75%
	11pm (weekend evening)	36	103	139	26%

Further parking surveys have been conducted at Ridge Street Precinct prior to WHT extending the existing parking removal at this site.

Table 3-3, below outlines the updated parking survey results recorded during May 2023.

Table 3-3 Updated parking survey results per Precinct

Day	Time period	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
Ridge Street Precinct					
Average weekday	8:30am (weekday morning peak / school drop-off)	74	36	110	67%
	3pm (school pick up)	108	2	110	98%
	5pm (weekday evening peak)	62	58	120	52%
	10pm (weekday evening off-peak)	47	83	130	36%
Average weekend	12pm (weekend day)	124	6	130	95%
	11pm (weekend evening)	43	87	130	33%

The updated survey results suggest an increased demand on weekends, however the counts conducted often had local events which saw an increased utilisation of parking (including a local market as well as a football game at North Sydney stadium).

In consideration of the above results, the proposed additional removal of three spaces and ongoing removal of the original nine spaces (as also described in the WFU CPAS), to result in a total

removal of twelve spaces consistent with the EIS, will only result in very minor changes to overall parking availability and indicates remaining parking opportunities in the area for residents and visitors.

4. Parking and access impacts

4.1. General impacts

As part of the delivery of the Project, there will be times where localised, short-term removal of parking will be required under a Road Occupancy License (ROL) or council permit. Short-term removal of parking would include works which are for a single, or a series of shifts but would be reinstated at the completion of the activity. This short-term removal of parking may be necessary where utilities or footpath works are required. Where this occurs, any short term on-street parking that has been removed will be reinstated following the expiration of the ROL.

Any such short-term car parking removal will be managed in accordance with the TTAMP, site specific Traffic Management Plans, and Traffic Guidance Schemes and will not result in an update of this document.

The project will provide off-road parking facilities at all sites where there are existing residential parking schemes. This is to ensure minimal parking by the workforce is on public roads. Subject to the approval of this CPAS, the impacts outlined in this document will be undertaken in accordance with the TTAMP and the associated project notification requirements.

4.1.1. Ridge Street

Long-term parking removal of seven spaces at the Ridge Street site is proposed as part of the WHT project (CPAS North Rev 05 and Rev 06), and existing approved parking removal of five spaces as implemented by the Warringah Freeway Upgrade (WFU) contractor will be retained (note, the removal of these spaces is also described in the WFU CPAS). This results in a total of 12 removed spaces which is consistent with the Project EIS[1].

Table 4-1 outlines the approved parking removal for the WHT Stage 3B project. WHT Stage 3B and 3C proposes to retain the existing parking removal implemented by the WFU contractor. The locations the parking is proposed to be retained is listed in Table 4-1, below.

Table 4-1 Summary of approved parking impacts at Ridge Street north site

Location	Street	No. spaces removed	Approved (A) or Proposed (P)	Current approved timeframe until	Figure reference
Ridge Street north construction support site	Ridge Street	5	A[1]	1 December 2024	Figure 4-1
		3	A[2]	30 June 2028	Figure 4-1
		4	A[3]	30 June 2028	Figure 1

Notes:
1. 5 spaces currently approved in Rev P of the WFU CPAS
2. 3 spaces approved as part of WHT CPAS North (Rev 05)
3. 4 spaces approved as part of WHT CPAS North (Rev08), note these spaces were previously approved and removed as part of WFU CPAS Rev J

These spaces are expected to be required for the entire project delivery (expected completion in 2028) and time to facilitate demobilisation of the site facilities. A tentative date of 30th June 2028 has been noted as the anticipated period for returning the spaces however this may be adjusted as the project program develops. Should there be a requirement for further parking removal extension beyond 30th of June 2028, the Project will resubmit the CPAS including the new revised date to DPE for approval.

[1] Chapter 8, Table 8-17.

Figure 4-1 Total of twelve spaces impacted at Ridge Street north construction support site (WHT9)

Access to the Ridge Street north site will be facilitated initially via Ridge Street (accessed from Miller Street, in accordance with Figure 4-2, below). Depending on origin and destination of construction vehicles, some movements may be to and from Falcon Street to the north-west.

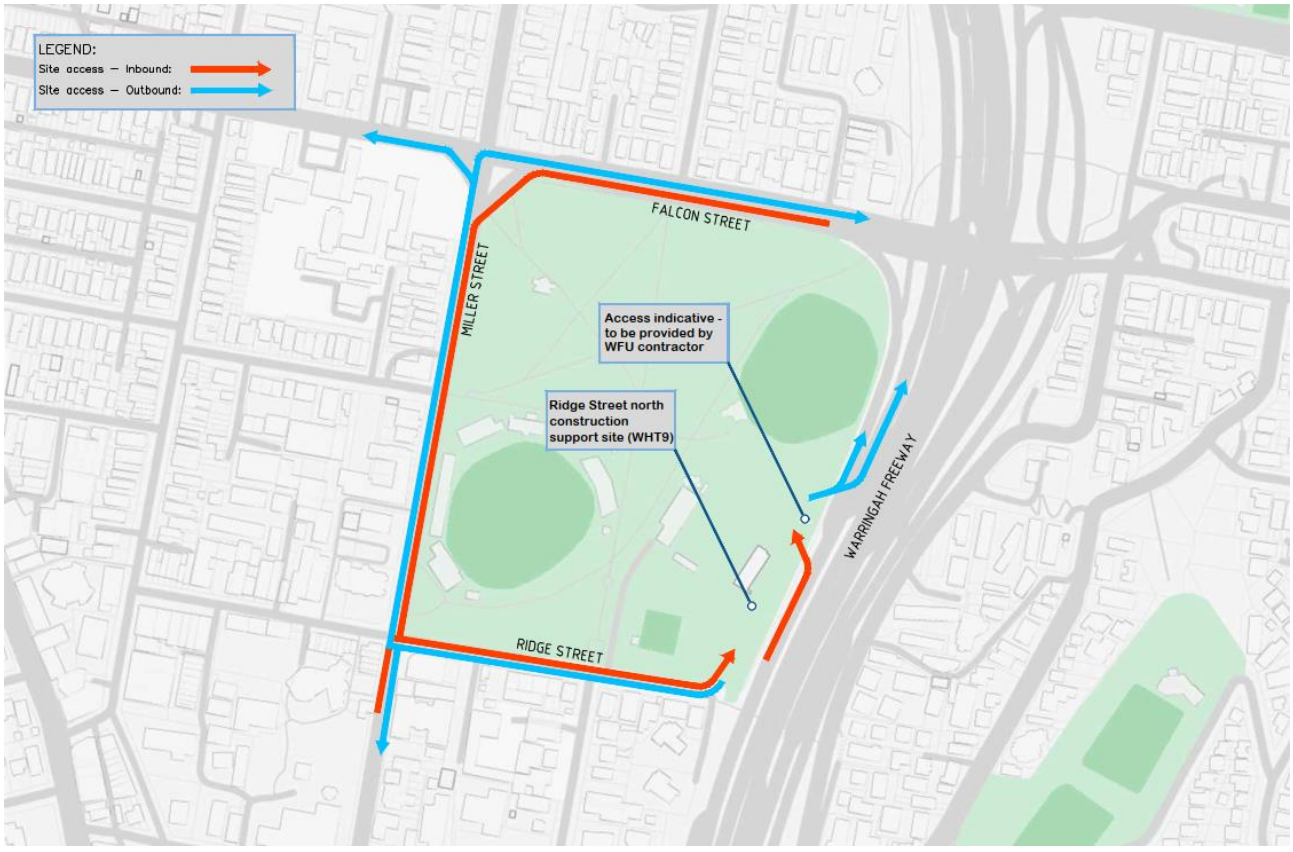

Figure 4-2 Access arrangements for Ridge Street north construction support site

The WFU contractor identified a potential impact to long-term resident and visitor parking servicing the adjoining unit blocks, townhouse and the short-term parking associated with the North Sydney Bowling Club. It was noted however that when parking surveys were conducted at the site by the WFU contractor that there was spare capacity to accommodate the displaced parking demand.

Limited impact is expected as a result of the extension of the parking space removal at this site and the additional three spaces to be removed.

4.1.2. Berry Street north

No long-term removal of on-street parking to accommodate the workforce associated with the Berry Street north (WHT8) is proposed by the Project.

Berry Street north site is not a tunnelling site and will typically only have civil construction workers accessing the site. Worker demand at this site will be low during construction. Some light vehicles will access the site to service the works and provide the access for workers, any other ad-hoc access may be provided by approaching the site on foot from Ridge Street if necessary.

Access to the Berry Street north site will be facilitated via the Berry Street onramp (via Berry Street). Constructions vehicles will leave the site via the Berry Street onramp and join the Warringah Freeway. Refer to Figure 4-3 below.

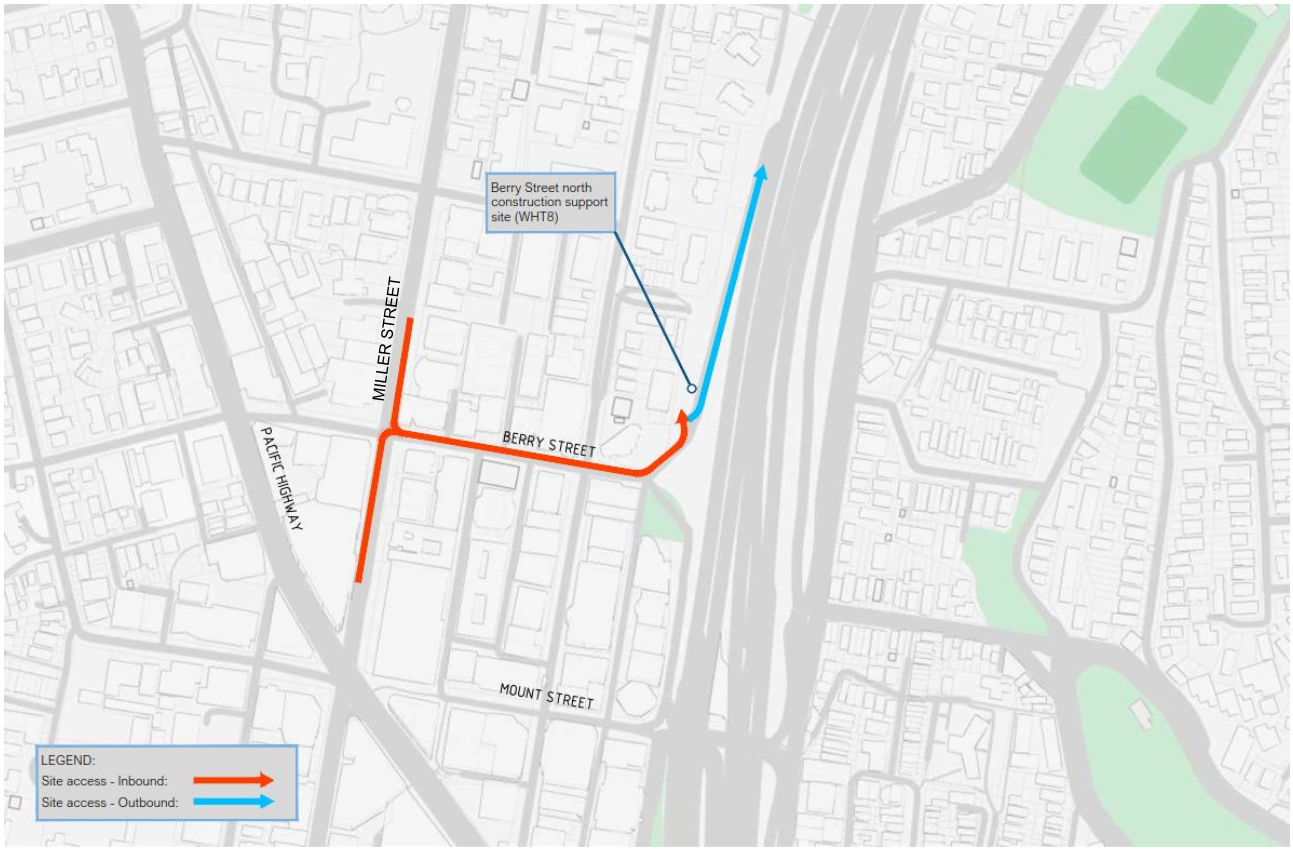

Figure 4-3 Access arrangements for Berry Bay north construction support site

4.1.3. Cammeray

Long-term parking removal of 10 spaces on Ernest Street have been implemented and approved as part of the WFU CPAS. No further parking removal is proposed as part of this CPAS at this site. As described in the WFU CPAS, the existing approval extends to 30 June 2025. Should no further extension be applied for as part of the WFU works, a subsequent assessment will be conducted by WHT on any ongoing requirements for parking removal in the area.

5. Mitigation Measures

5.1. Construction workforce parking

This section will discuss the on-site available parking for the construction workforce. This will be a measure of the forecast worker demand compared to available on-site parking. The project program for each of the sites will dictate the demand for parking.

The workforce size will vary between different activities, with peak worker and parking demand typically during fit out of the tunnels. Early site establishment activities will typically have a smaller workforce, until the tunnelling operation commences, and onsite parking availability may fluctuate until the site establishment period concludes.

Construction workforce parking will be managed between day and night shift turnover where required. Management measures to address parking turnover may include options (where reasonably practicable) such as: scheduling a buffer between shifts; organising workers' shift to encourage carpooling activities for workers who reside close to one another into similar shift patterns to minimise number of vehicles; or other alternative measures. Impact of parking turnover is not expected to occur until the commencement of 24-hour tunnelling operation.

Overall parking demand has been developed to reflect the current delivery program and workforce histogram. These numbers are outlined in Table 5-1 and Table 5-2. A 20% reduction in parking demand based on worker numbers has been assumed for this plan to allow for workers utilising public transport and carpooling options.

5.1.1. Berry Street north (WHT8)

No on-site carpark will be provided at the Berry Street north (WHT8) construction support site.

The workforce will be encouraged to utilise the public transport system given the proximity to major local transport hubs from the site. Where workforce require the use of vehicles, they will be directed to park their vehicles at Ridge Street north (WHT9) construction support site and walk approximately 500m to the Berry Street north (WHT8) site. Workforce will also be encouraged to use carpooling options.

Table 5-1, below outlines some expected workforce demand, and the associated impact on the Ridge Street carpark.

Table 5-1 Berry Street workforce parking demand comparison

Period	Indicative daily on-site total workforce	Indicative day shift On-Site Parking Demand	Indicative night shift On-Site Parking Demand	On-site Carparks
2024	12	8	0	0
2025	4	3	0	0
2026	4	3	0	0
2027[1]	12	8	0	0

Notes:

1. Increase in worker demand later in the project may be serviced from Cammeray, Ridge or Rozelle subject to tunnel progress

5.1.2. Ridge Street north (WHT9)

Anticipated on-site workforce and on-site parking availability at the completion of site establishment is outlined in Table 5-2, below.

Table 5-2 Ridge Street workforce parking demand comparison

Period	Indicative daily on-site total workforce	Indicative day shift On-Site Parking Demand (With Berry)	Indicative night shift On-Site Parking Demand	On-site Carparks
2023	20	16 (16)	0	56
2024	70	35 (43)	21	56
2025	70	35 (38)	21	56
2026	50	25 (28)	15	56
2027	30	15 (23)	9	56

There will be no deficit in parking availability for the anticipated workforce during peak construction at this site. The workforce listed above will be split over a night and day shift as shown. Peak day shift workforce on site is not anticipated to exceed 35 (or 43 when including the demand created by the Berry Street site). This will see sufficient parking on site to accommodate visitors to the site in addition to daily workforce parking demand.

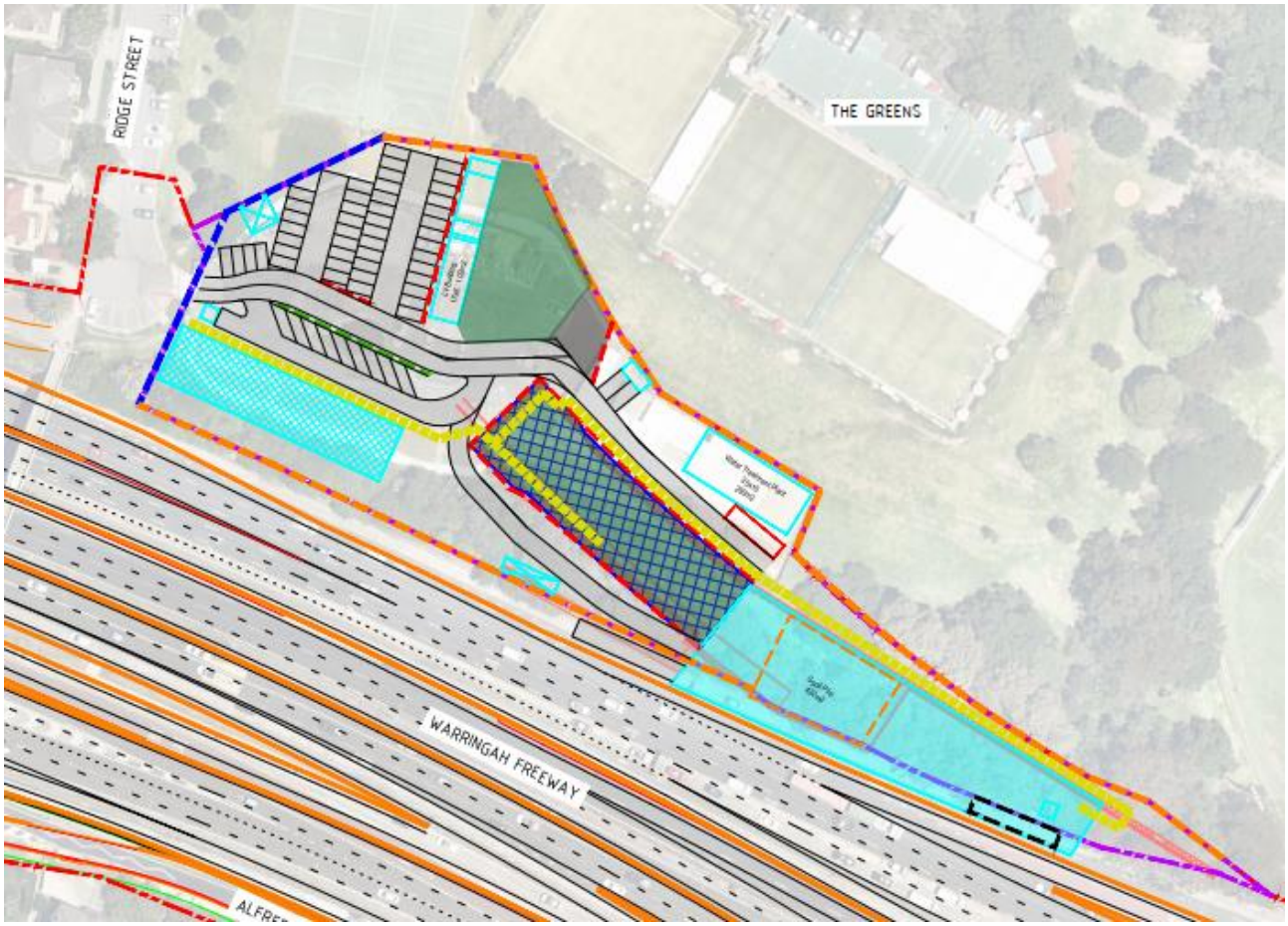

Figure 5-1 Ridge street north construction support site indicative layout and parking

5.1.3. Cammeray construction support site (WHT10)

The anticipated on-site workforce compared to anticipated on-site parking demand as well as on-site parking availability is outlined in Table 5-3, below.

Table 5-3 Typical Cammeray workforce parking demand comparison

Period	Indicative daily on-site total workforce	Indicative day shift On-Site Parking Demand	Indicative night shift On-Site Parking Demand	On-site Carparks – main carpark (secondary site)
2023	40	32	0	68 (37[1])
2024	150	75	44	68 (37[1])
2025	170	86	50	68 (37[1])
2026	120	60	36	68 (37[1])
2027	40	20	12	68 (37[1])

Notes:
1. Spaces provided by secondary carpark still subject to design development.

Although the total daily peak worker demand for on-site parking will exceed the available spaces, the workforce needing parking will be split across day and night shift and is not expected to exceed 105 spaces required during the day, and approximately 50 during the night (during peak construction).

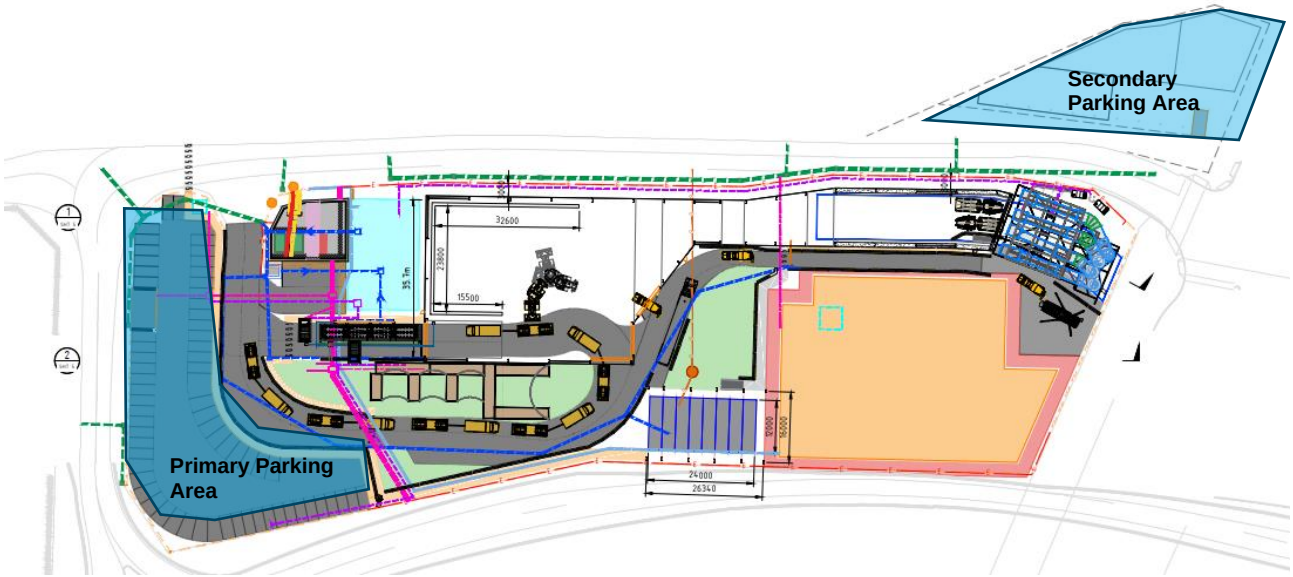

Figure 5-2 Cammeray construction support site indicative layout and parking

5.2. Visitors

Limited (approximately two) visitor parking is available at most sites, and, unless otherwise organised, all visitors will initially report to the main Project office to attend the mandatory visitor's induction, which will provide detail on the Project parking strategy (i.e. locations of available visitors parking and shuttle bus options).

Where a visitor has been instructed by their Project contact to go directly to site, this contact will be required to inform them of the Project parking strategy and locations of available visitor parking, prior to conducting the visitor's induction on-site.

Repeat visitors will know of the satellite parking facilities and will utilise these as needed during site visits.

5.3. Shuttle services and worker transport

Where project demand necessitates, a shuttle service for workers will be implemented for the north construction areas. The shuttle service, where needed, will provide worker connectivity between each of the construction sites and the major local transport hubs. There will be one shuttle for the northern portion of the works.

The shuttle service is likely to be commissioned to support the worker demand at the Cammeray site, with less demand expected for a shuttle service at the Ridge Street and Berry Street sites. Ridge Street and Berry Street sites are only 15 and 10-minute walk from the train station respectively. A shuttle service is likely to take longer to get to site than using existing pedestrian accesses.

Worker consultation will assist in determining the shuttle service route and need. Shuttle bus services are more likely to be utilised during peak tunnelling and during mechanical and electrical fit-out works, proposed to being undertaken later in the project program, and after site establishment works have completed.

ACCIONA will modify the routes and timing of the shuttle bus services during delivery to match worker demand, feedback and overall usage.

5.4. Pedestrian interface at site accesses

Each site will be assessed as to the demand for pedestrian movements past the access and egress points, especially those which carry heavy vehicles, spoil movements and delivery trucks. Potential mitigation measures include a vehicle actuated warning which would be implemented to alert pedestrians to the potential for heavy (and some light) vehicles crossing their paths ahead.

More robust controls may be employed where there is a high pedestrian interface and regular heavy vehicle movements, which would include full-time traffic controllers assisting in truck movements. The interface with pedestrians at interface points will be managed with barricades to allow stopping pedestrians temporarily while heavy vehicles cross the paths unless other controls are already in place (such as signalised pedestrian crossing points).

It is acknowledged that the frequency and duration of truck movements for the life of the Project may increase the relative risk in those locations. For sites where greater volumes of pedestrians and increased risk profiles are apparent, additional engineered controls based on risk assessments will be implemented. These will better manage interactions between vehicle and pedestrian movements around and past the access and egress points. These controls will ensure safety is maintained for the duration of the Project.

Vehicles will not be permitted to block or disrupt access for pedestrian or shared user paths.

5.5. Haulage routes

In accordance with CoA E132, DPE approval is required for any local roads that have not been identified and assessed in the EIS. The proposed haulage routes for each construction support site are included in Appendix A however will depend on the origin and destination of each of the movements. Where additional local roads are required to access and service the construction support site, additional approval is required from the Planning Secretary. Refer to Section 5.1 of the TTAMP.

5.6. Road dilapidation

In accordance with CoA E136, A Road Dilapidation Report for heavy vehicle travel on local roads will be prepared and provided to relevant councils prior to the affected roads being used by heavy vehicles.

5.7. Vehicle tracking

Linkedsite will be used by the Project to provide live monitoring of heavy vehicles used for spoil in accordance with condition CoA E135. The records of monitoring will be made available to the Planning Secretary and the EPA for a period of no less than one year following the completion of construction.

5.8. Marshalling

Marshalling of vehicles (including both heavy and light vehicles) will not be conducted near sensitive land users. Sites will provide as much off-street marshalling space for spoil trucks as can be achieved within the sites, while balancing parking availability for light vehicles.

Marshalling of vehicles associated with the project will be monitored as part of regular site inspections and where any issues with marshalling space is identified additional areas will be located and incorporated into the CPAS and site specific TMPs.

Where drivers are identified idling or queueing on state and regional roads and relate to the project, they will be instructed to move on to one of the designated waiting or marshalling areas.

5.9. Training

Training for elements of the project delivery affecting haulage, parking and pedestrian interface controls will be provided to workers. The ways in which information will be disseminated to the workforce is outlined below based on the element being communicated:

- Approved haul routes will be communicated to spoil contractors and contract managers for communication to drivers.
- Pedestrian management techniques and strategies will be toolboxed to traffic controllers and site staff managing the heavy vehicle and pedestrian interface.
- Worker parking provision on site will be communicated as part of site inductions and updated as part of project pre-start discussions.

Additional training may be conducted to a targeted audience where any monitoring or issues are identified.

5.10. Contingency

If monitoring, surveys, consultation or complaints prompt intervention by the Project to improve or otherwise modify parking services, one or more of the options discussed in the sections below may be enacted to ensure impacts to the public are reduced and public relationships and reputation is protected.

5.10.1. Modification to shuttle service

If the services are inadequate, additional services will be added to try to improve travel times between parking and construction sites.

Where travel between sites and any satellite parking facilities is causing significant delay to workers alternate routes will be investigated, with the potential for operating a number of different scenarios or routes in lieu of those currently proposed, to try to better cater for workers from each site. This may include adding popular pick-up points, such as public transport hubs, to the shuttle bus routes.

5.10.2. Additional overflow parking

Parking utilisation will be monitored at each of the primary parking areas. Where supply is dwindling additional parking will be investigated and provided where practical solutions can be identified. This may include leased parking spaces from within a commercial parking structure.

Investigations will potentially include lease options with adjacent businesses to sites or parking stations, investigating layout improvements within sites where opportunities arise, or expanding existing parking facilities at other sites and modifying shuttle bus movements to provide suitable and efficient transport solutions from the additional parking.

5.10.3. Public transport encouragement

Where existing strategies are nearing capacity as determined through the inspections or the informal feedback channels, alternate options to promote public transport use will be investigated. This will include investigating opportunities to encourage public transport use by providing additional shuttle bus pick up points at popular public transport hubs.

5.10.4. Active transport encouragement

Active transport options will also be encouraged through the provision of changing and end-of-trip facilities and bike storage areas for cyclists.

5.10.5. Additional consultation

Where issues with parking management is identified, additional consultation with affected stakeholders may be conducted to best identify the issues with the parking measures adopted. Consultation will aim to incorporate feedback from stakeholders in revised planning to ensure mitigation measures are acknowledged and achieve the planned result.

6. Monitoring and reporting

6.1 Monitoring

As part of the ongoing monitoring processes on the Project, parking assessment and monitoring will play a vital role of the surveillance team's responsibility. Monitoring will include surveillance of site parking availability at approximately fortnightly intervals to ensure parking on site doesn't have a deficit issue. This will provide indication of the effectiveness of alternative arrangements, and mechanisms of encouraging workers to park in the dedicated parking facilities and catch public transport or the Project shuttle service.

Informal feedback will be sought from the workforce if it is identified that the proposed measures are not working satisfactory.

Parking surveys will be conducted approximately fortnightly for the areas immediately adjacent the sites are inspected, with utilisation included in the quarterly reports outlined in MCoA E140. Refer to Figure 6-1 to 6-3 below for the indicative monitoring locations. As part of the surveys an occupancy rate and project related vehicles utilising on-street parking will be included (for what can be identified by branding).

Should the parking surveys identify any issues with overflow or excessive worker parking in public spaces an appropriate mitigation measure will be implemented to minimise parking on local roads.

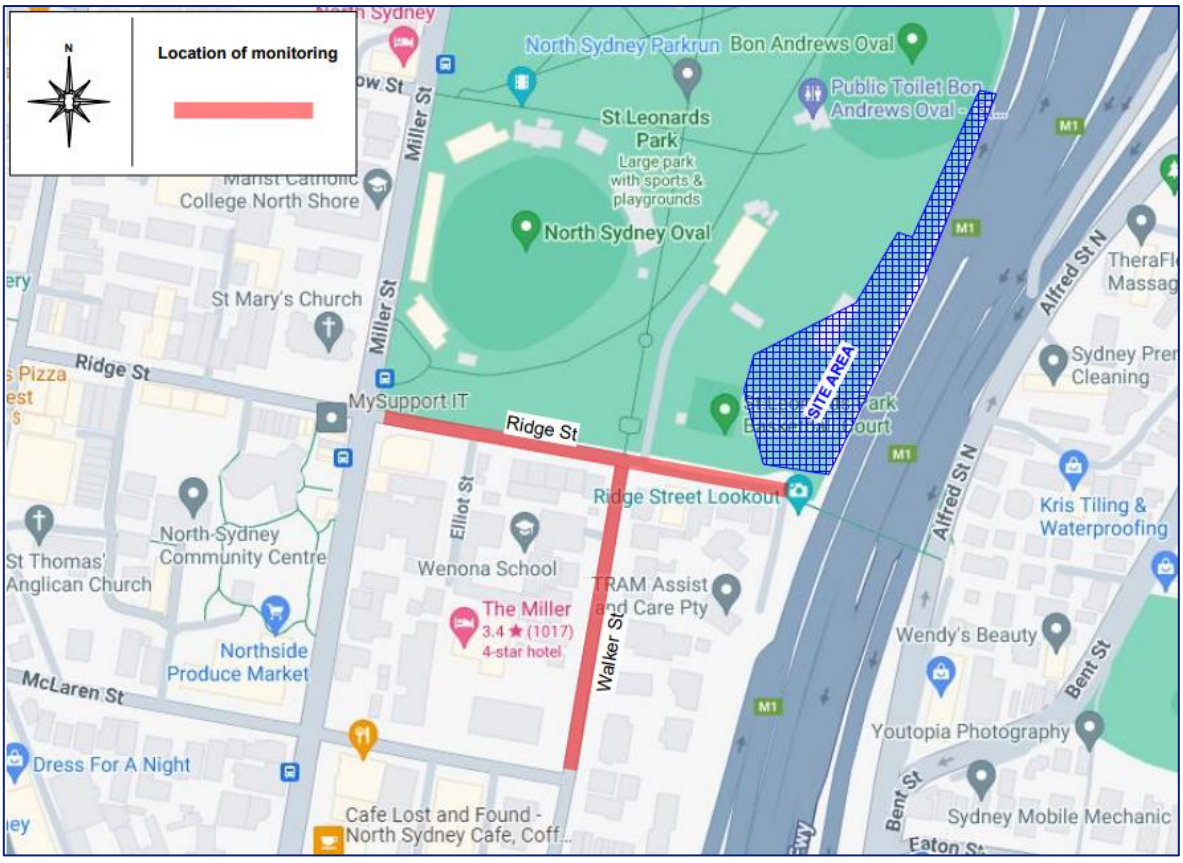

Figure 6-1: Ridge Street indicative monitoring location

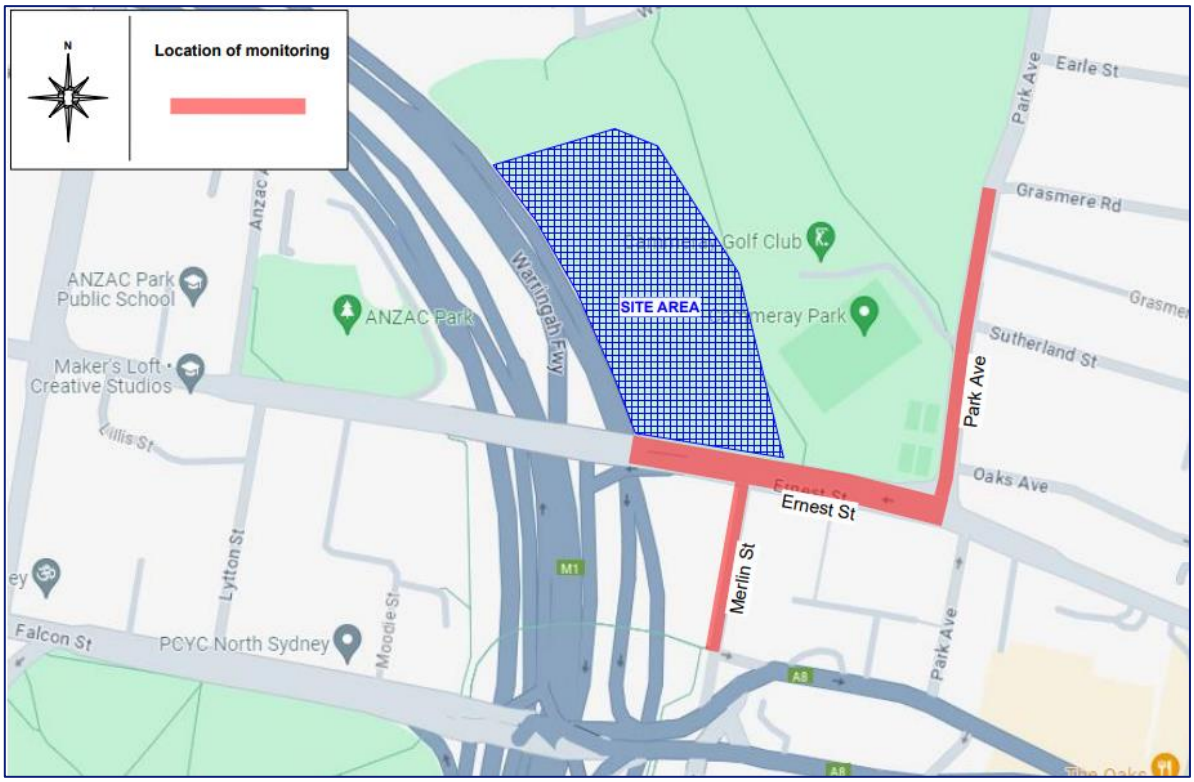

Figure 6-2: Cammeray indicative monitoring location

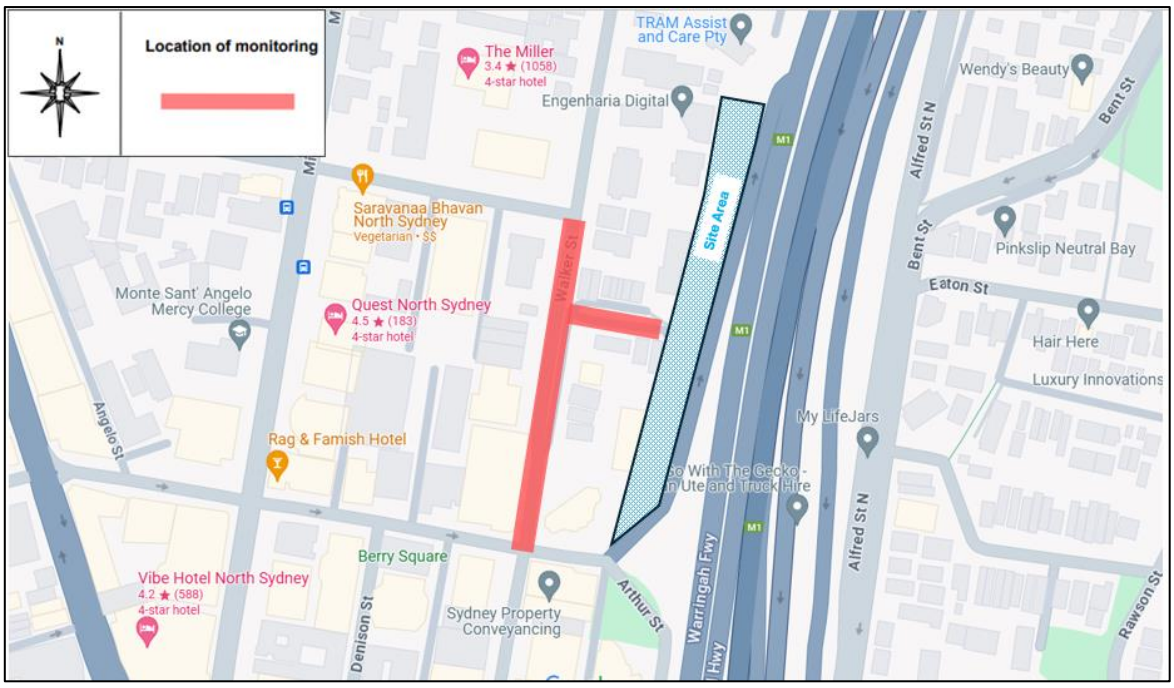

Figure 6-3: Berry Street indicative monitoring location

6.2 Reporting

Quarterly reports of compliance, monitoring results, and effectiveness of the controls and parking strategies will be provided in accordance with MCoA E140(k). The report will be provided as a standalone report.

Ongoing regular consultation with stakeholders, businesses and residents will occur, to ensure early identification of issues will be maintained for the duration of works.

6.3 Complaints and Non-compliances

All community complaints will be managed in accordance with the CEMP and the CCS.

All non-compliances will be managed in accordance with the CEMP.

6.4 Document updates and amendments

This CPAS will be updated when any of the following items triggers the need for an update:

- A reduction to parking available at any of the construction sites (including commencement of works at a new site) as described herein.
- Identified need for additional long-term parking removal based on impacts to community.
- Modification of the dates or durations of parking impacts
- Modification to controls due to worker demand or identification of issues.

Any updates will be submitted to the Planning Secretary for approval prior to implementation.

Appendix A: Haulage Routes

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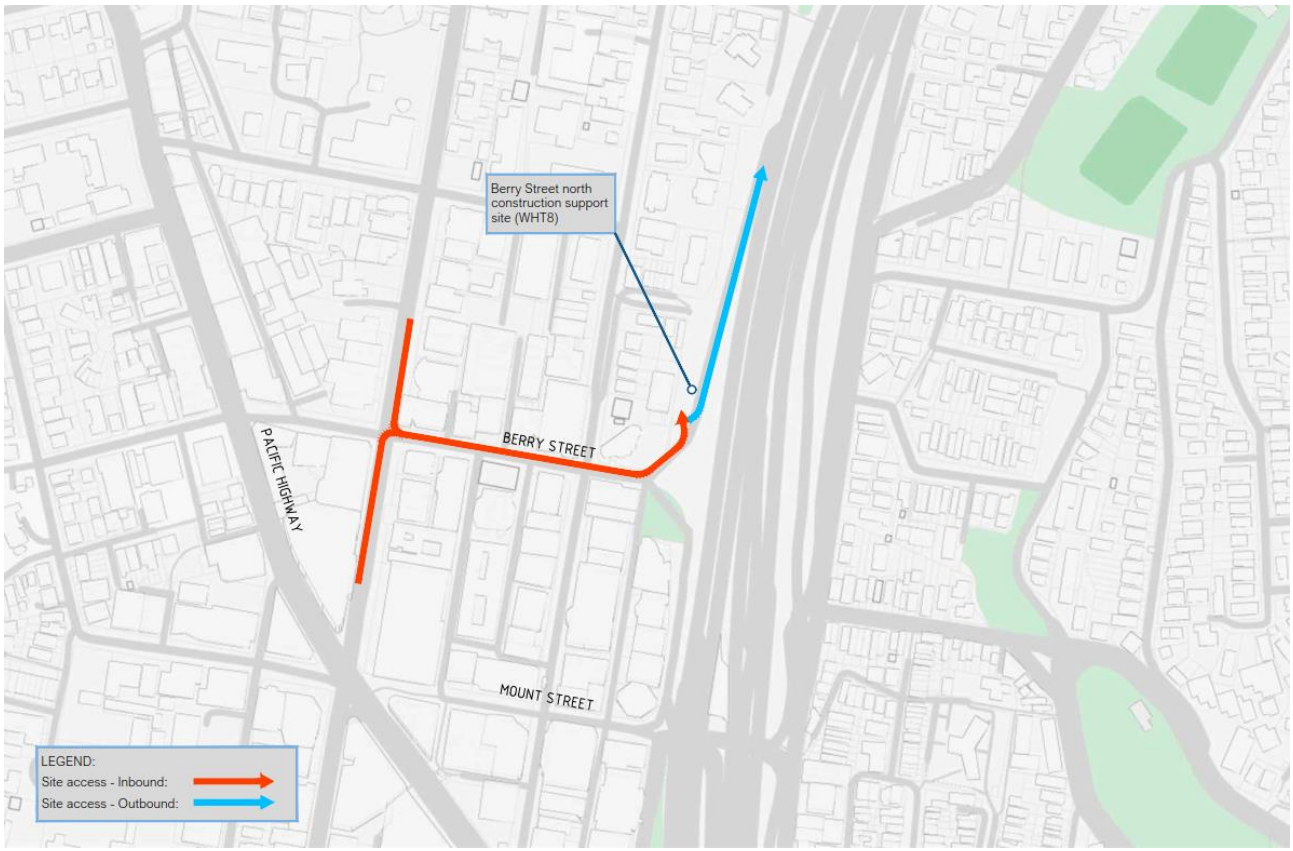
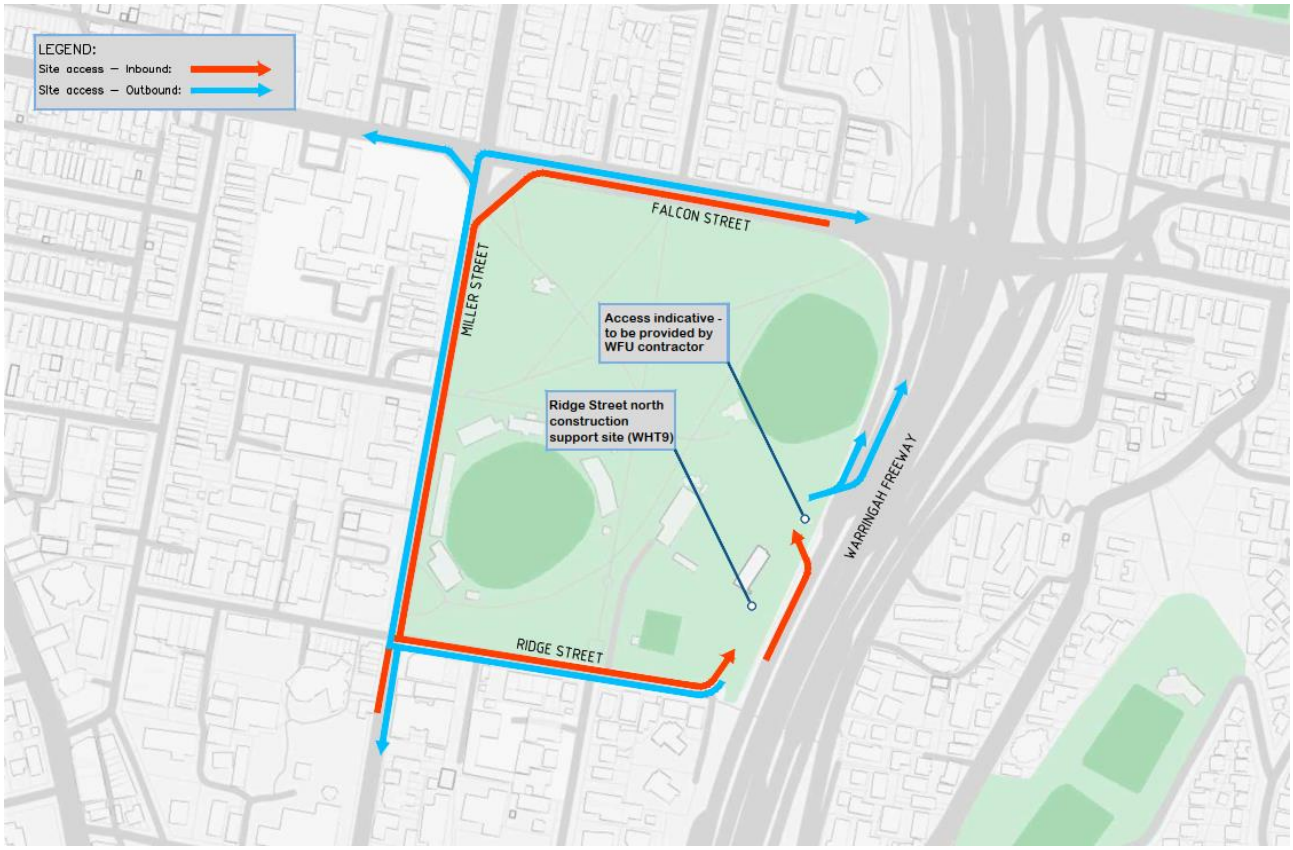
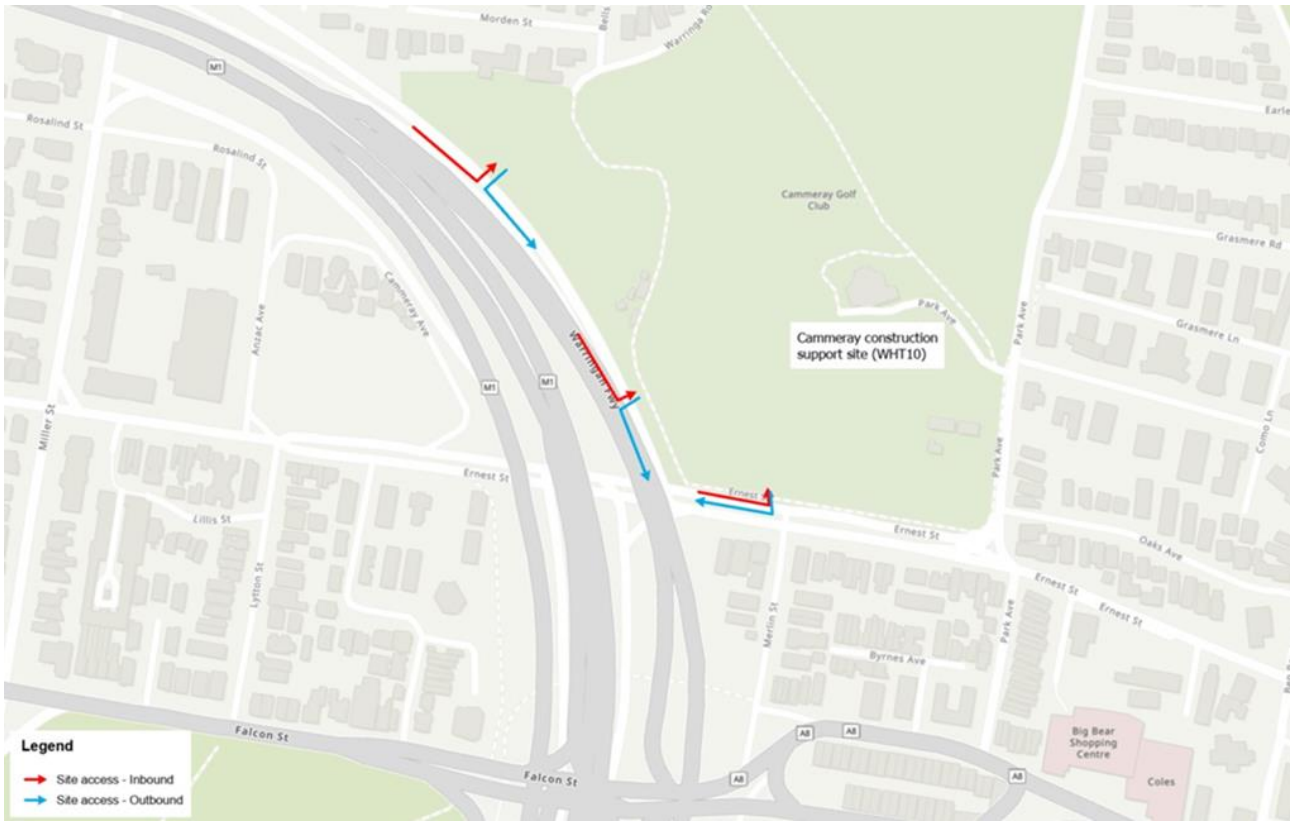

Berry Street north construction support site (WHT8)
BERRY STREET
PACIFIC HIGHWAY
MOUNT STREET
LEGEND:
Site access - Inbound:
Site access - Outbound:


LEGEND:
Site access – Inbound:
Site access – Outbound:
FALCON STREET
MILLER STREET
Access indicative - to be provided by WFU contractor
Ridge Street north construction support site (WHT9)
WARRINGAH FREEWAY
RIDGE STREET


Cammeray construction support site (WHT10)
Cammeray Golf Club
Morden St
Rosalind St
Ernest St
Falcon St
Byrnes Ave
Park Ave
Grasmere Rd
Grasmere Ln
Oaks Ave
Merlin St
Lytton St
Miller St
Lillis St
Big Bear Shopping Centre
Coles
M1
A8
Legend
Site access - Inbound
Site access - Outbound

WESTERN HARBOUR TUNNEL
Package 2: WHT Driven Tunnels,
Mechanical and Electrical Fitout

Construction Parking and Access Strategy (South)

WHTP2-ACOC-WHT-EV-PLN-000026

Client: Transport for NSW | Project No: WHTP2

Revision 03

Date: 14 June 2024

Contents

Tables

Figures

Document control

This plan is a controlled document, approved by the Acciona Project Director. The Traffic Manager is responsible for ensuring this plan is kept up to date for the Project, according to Transport for NSW (TfNSW) requirements, Project risks, activities and legislative requirements.

Project revision history

Rev	Date	Description of changes
A	20/12/2023	Draft for TfNSW
B	19/01/2024	Updated following TfNSW comments
C	16/02/2024	To include additional detail on MOC2 & Inner West utility works
D	13/03/2024	To address TfNSW comments
00	14/03/2024	Issue to DPHI
01	09/04/2024	To address DPHI comments
02	22/05/2024	Updated following DPHI comments
03	14/06/2024	Updated following DPHI comments

Control and records

This plan will be signed and made available for all Project Personnel on the appropriate Electronic Document management System.

Uncontrolled Copies

Any uncontrolled hard copy documents are up to date at issue and are only issued to outside organisations, customers, etc., upon request and approval by a Workplace Manager. Such uncontrolled documents will be clearly marked ‘Uncontrolled Copy When Printed’ and will not be subject to an update.

Abbreviations and definitions

Term	Meaning
ACCIONA	ACCIONA Infrastructures
CPAS	Construction Parking and Access Strategy
CEMP	Construction Environmental Management Plan
CCS	Community Consultation Strategy
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
DPHI	Department of Planning Housing and Infrastructure (formerly the Department of Planning and Environment)
Project, the	Western Harbour Tunnel (Package 2)
EIS	Environmental Impact Statement
ROL	Road Occupancy Licence
TfNSW	Transport for NSW
TTAMP	Traffic Transport and Access Management sub-plan
WFU	Warringah Freeway Upgrade
WHT	Western Harbour Tunnel

1. Introduction

This Construction Parking and Access Strategy (CPAS) has been developed to provide an outline of the construction parking arrangements for workers on the Western Harbour Tunnel project (the Project). The CPAS also outlines the anticipated impacts for any on-street or off-street parking removal as a result of the construction activities.

Specifically, it has been developed to be consistent with the Project Environmental Impact Statement (EIS) and provide the information necessary to address Project Condition of Approval (CoA) E139 and E140 relating to parking and access.

Given the nature and scope of the project, the CPAS has been prepared as three distinct documents, namely CPAS North, CPAS West, and CPAS South (this document).

1.1. Background

The Project is a major transport infrastructure project that will make it easier, faster and safer to travel around Sydney. By creating a western bypass of the Sydney CBD, the WHT will take pressure off the Sydney Harbour Bridge, Sydney Harbour Tunnel, Anzac Bridge and Western Distributor corridors to improve transport capacity in and around Sydney Harbour.

The tunnel project will be constructed using two Tunnel Boring Machines (TBMs) to tunnel through sandstone under Sydney Harbour, while roadheaders will excavate the northern approach to the harbour crossing. The project methodology has adopted TBMs to eliminate any dredging activities through the Sydney Harbour seabed, removing risks to the marine environment and biodiversity and the need for construction sites at Yurulbin Point and Berrys Bay, significantly reducing construction impacts for residents in Birchgrove and Waverton.

Once all excavation activities are finished, the roadheaders will be removed from the two northern tunnelling construction sites and the TBMs will be disassembled and removed in pieces from the City West Link portal. The larger parts of the TBMs that cannot be removed will be buried underground allowing for the mechanical and electrical (M&E) work to fit out the tunnels with lighting, safety features, and jet fans to proceed.

1.2. Purpose and scope of this CPAS

This CPAS will outline how the Project will satisfy the requirements of the CoA and Revised Environmental Management Measures (REMM). The CPAS will describe how construction worker parking will be facilitated and monitored on the project, and the implementation of mitigation measures described in Section 5.

This CPAS (CPAS South) have been prepared for the following sites:

- Motorway Operations complex (MOC) part of Rozelle Rail Yards (WHT1) construction support site,
- Glebe Island (WHT3) construction support site (formerly White Bay (WHT3)),
- City-West Link (WHT12) construction support site; and
- Utility works in the Inner West area, including Rozelle and Lilyfield (Inner West utility works).

This CPAS will be updated prior to access being provided to the City-West Link (WHT12) construction support site at Rozelle Interchange toward the end of 2024.

Separate CPAS documents (CPAS North) and (CPAS West) have been prepared for construction support sites located north of the Sydney Harbour and at Emu Plains. This includes the Berry Street north (WHT8), Ridge Street (WHT9), Cammeray (WHT10) and Emu Plains (WHT13) construction support sites.

1.3. Summary of parking impacts

Parking removal detailed within this CPAS is limited to utility works in the Inner West area (Inner West utility works), there is no proposed parking removal associated with the three construction supports sites detailed in this CPAS. An overview of the proposed parking removal for the Inner West utility works is provided below within Table 1 with further detail also provided within Section 4.2.

Table 1 Overview of parking removal detailed within this CPAS

Overview of parking removal					
Location	Number of spaces currently approved for removal	Additional spaces to be removed under this CPAS (worst case)*	Timeframe for impact**		Where addressed within CPAS
			Indicative duration	Indicative work period ***	
Belmore Street	0	33*	18 Days	June 2024 & June 2025	Removal detailed in Section 4.2.4.1, Table 6 Mitigations detailed in 5.1.4.1
Evans Street	0	40*	40 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 7 Mitigations detailed in 5.1.4.1
Denison Street	0	27	10 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 8 Mitigations detailed in 5.1.4.1
Cheltenham Street	0	10	10 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 9 Mitigations detailed in 5.1.4.1
Foucart Street	0	11	38 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 10 & Table 15 Mitigations detailed in 5.1.4.1
O'Neil Street	0	36*	20 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 11 Mitigations detailed in 5.1.4.1
Lamb Street	0	65*	89 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 12 Mitigations detailed in 5.1.4.1
Kenniff Street	0	2	53 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 13 Mitigations detailed in 5.1.4.1
Catherine Street	0	2	53 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 13 Mitigations detailed in 5.1.4.1
Charlotte Street	0	4	53 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 13 Mitigations detailed in 5.1.4.1
Albion Street	0	2	6 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1, Table 14 Mitigations detailed in 5.1.4.1

Overview of parking removal					
Location	Number of spaces currently approved for removal	Additional spaces to be removed under this CPAS (worst case)*	Timeframe for impact**		Where addressed within CPAS
			Indicative duration	Indicative work period ***	
Brockley Street	0	4	10 Days	June 2024 & June 2025	Removal detailed in 4.2.4.1,Table 15 Mitigations detailed in 5.1.4.1

Note

* Parking removal listed above is indicative of a worst-case scenario only, this 'worst-case scenario' would generally occur for a one-day period, when moving the works area from one section to the next section. When works are occurring in any one section, parking loss would more typically be approximately half of the numbers listed. This is further detailed within 4.2.4.1.

** Due to the nature of works, there may at times be small variances to the listed durations. This may occur as a result of; weather, ground conditions or other unforeseen circumstances. These variances may mean a small increase of duration, it may also mean a decrease of duration if works are completed ahead of program.

*** The program of works is expected to take a total of 9 months, 12 months has been listed above to account for any potential delays that may result from; obtaining approvals, weather, ground conditions or other unforeseen circumstances.

It is noted that the parking surveys completed as detailed within Section 3, indicate that sufficient available parking exists to absorb any parking loss during the 'worst-case scenario'.

1.4. Compliance Matrix

The Compliance Matrices below outline specific requirements detailed in the CoA as well as the REMM and where they have been addressed in this plan.

Table 2 CoA compliance matrix

Reference	Requirement	Section
E135	The locations of all heavy vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one year following the completion of construction.	Section 5.7
E136	Before any local road is used by a heavy vehicle for the purposes of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the relevant council within three weeks of completion of the survey and no later than one month prior to the road being used by heavy vehicles associated with the CSSI.	Section 5.6
E139	Vehicles (including light and heavy vehicles) associated with the CSSI must be managed to:	-
	(a) Minimise parking on public roads;	Section 5.1
	(b) Minimise idling and queuing on state and regional roads;	Section 5.8
	(c) Not carry out marshalling of construction vehicles near sensitive land user(s);	Section 5.8
	(d) Not block or disrupt access across pedestrian or shared user paths at any time; and	Section 5.4
	(e) Ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the Traffic, Transport and Access Management CEMP Sub-plan.	Section 5.5 & Section 5.7
E140	A Construction Parking and Access Strategy must be prepared to identify and mitigate impacts resulting from on- and off-street parking changes during	-

Reference	Requirement	Section
	construction of the CSSI. The Strategy must include, but not necessarily be limited to:	
	(a) achieving the requirements of Condition E139;	See above
	(b) confirmation and timing of the removal of on- and off-street parking associated with construction of the CSSI;	Section 4.2
	(c) 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 pickup, weekend periods and during special events;	Section 3
	(d) consultation with affected stakeholders utilising existing on- and off-street parking stock which will be impacted as a result of construction;	Section 2
	(e) assessment of the impacts 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 3
	(f) 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, 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;	Section 5
	(g) where residential parking schemes already exist, off-road parking facilities must be provided for the CSSI workforce;	Section 5.1
	(h) mechanisms for monitoring, over appropriate intervals, to determine the effectiveness of implemented mitigation measures;	Section 6
	(i) 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 5.3
	(j) provision of contingency measures should the results of mitigation or monitoring indicate implemented measures are ineffective; and	Section 5.10
	(k) provision of reporting of monitoring results to the Planning Secretary and relevant council(s) at three monthly intervals.	Section 6.2
	The Construction Parking and Access Strategy must be submitted to the Planning Secretary for approval at least one month before the commencement of any construction that reduces the availability of existing parking. The approved Strategy must be implemented before impacting on on-street parking and incorporated into the Traffic, Transport and Access Management CEMP Sub-plan.	Section 2.3

Table 3 REMM compliance matrix

REMM Reference	Requirement	Section
CTT7	Vehicle movements to and from construction sites will be managed to ensure pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic signals and modifications to existing signals or, on occasion, police presence.	Section 5.4
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 location, management measures may include workforce shuttle buses and the use of public transport.	Section 5.10

REMM Reference	Requirement	Section
CTT11	Truck marshalling areas will be identified and used where feasible and reasonable, to minimise potential queueing and traffic and access disruptions in the vicinity of construction support sites	Section 5.8

2. Consultation & Approval

2.1 Council consultation

Consultation with Inner West Council has been undertaken as part of the preparation of this document, and prior to parking impacts in the Rozelle Precinct (including MOC (WHT1), Glebe Island (WHT3), City-West Link (WHT12), and the Inner West utility works. In addition to processes described in the Community Consultation Strategy (CCS), opportunity for this, and ongoing consultation with Council will be available through the Traffic Control Group (TCG), established as a technical forum to discuss road safety and traffic management measures, potential impacts on the road, pedestrian and cycle network and program. The TCG will include representatives from TfNSW and relevant Councils and on occasion representatives from other construction projects.

Evidence of consultation with Inner West Council is documented in a consultation report which is prepared separately to this CPAS. The consultation report will be prepared in accordance with MCoA A5 and submitted to the Department along with this CPAS.

2.2 Community consultation

A Community Action Plan have been developed to provide a strategy on local community engagement and consultation techniques for the Inner West utility works. Due to the nature of this work, the Project have been conscious about the frequency and timeframe of undertaking community engagement. The Project proposes to engage with the local community in a phase approach and consultation with the residents and local community in the affected areas will occur as the proposed works approaches. Refer to Table 4 below.

Table 4: Proposed local engagement strategy

Phases	Purpose	Timing	Tools
Pre-work commencement	• Provide general update on work commencing • Answer Frequently Asked Questions • Identify any issues or concerns that the stakeholder may have • Offer an opportunity to set a meeting to talk through construction staging • Encourage residents to sign up to mailing list	A minimum of six weeks before work commences	• Community Update / Fact Sheet • Email • Doorknock
Two weeks prior to work starting	• Provide maximum amount of notice allowable under the EPL • Email to residents to provide update of work starting in two week • Provide an overview of the different locations of static work areas • Provide an overview of the detours and any road closures for that week	10 business days (two weeks) before work starts	• Notification • Email • Website Update
One week prior to work starting	• To notify specific residents and businesses that are directly impacted by the work areas • Traffic alerts will be issued by the Transport for NSW Media Unit to key media outlets within the project area • To supplement the work slip distribution• Allow opportunity to discuss any remaining concerns with residents and stakeholders	5 business days before work	• Work Slip • Traffic Alert • Doorknock • Social Media

Phases	Purpose	Timing	Tools
Conclusion of first week (and ongoing until work completion)	• Provide an email update on status of work to residents • Provide update on status of road closures and detours that will be in place the following week	At the end of each week	• Email

2.3 Document approval

In accordance with CoA E140 this CPAS will be submitted to the Planning Secretary for approval at least one month before the commencement of any construction that reduces the availability of existing parking and, following approval, will be incorporated into the Projects Traffic, Transport and Access Management Sub-plan (TTAMP).

Additional parking removal required by the Project, excluding changes due to Road Occupancy Licenses (ROL) or Council Permits as described in Section 4.2, will be addressed in an updated CPAS and provided to the Planning Secretary for review and approval. Notification and consultation of the additional parking removal would be undertaken in accordance with the Project CCS.

3. Existing Conditions

With exception to utility works, The Project does not propose to implement any extended removal of on-street parking spaces associated with the Rozelle Precinct sites outside of temporary localised occupancy in accordance with ROLs or council permits. Should this change, this plan will be updated and resubmitted to the relevant stakeholders and the Planning Secretary for re-approval.

In accordance with CoA E140(c), parking surveys were completed the 7th and 17th of February 2024, as outlined in Figure 1, and detailed within Table 5 below. Parking surveys were undertaken to determine existing parking demand during peak, off-peak, school drop-off and pick up, weekend periods and during special events.

While it's noted that the area subject to this parking survey is mostly residential and would not directly be host to many special events, the survey was completed on a day where various special events were taking place within the surrounding Inner West Council area. These events include:

- Newtown ArtSeat
- Callan Park Bushcare
- Zumba Gold – Ashfield
- Zentangle - creative program for older adults
- Eastern Mah-jong
- The Footpath Library FREE Service Hub Hannaford Community Centre
- Mums Get Active Postnatal Pilates – Lilyfield
- Play Canasta Stanmore Library
- After School: Gamify with Coding: Snakes and Ladders
- Parenting Talk: Help your child navigate 'Back to School' anxiety
- Inspiring A Revolution in Your Heart and Mind Rigpa
- MSK&BC: Alister Spence trio

Further detail on these events can be found at the Inner West Council events calendar: https://www.innerwest.nsw.gov.au/calendar.aspx?view=general

Figure 1 Parking survey areas - Inner West utility works

Table 5 Parking survey results

Total combined parking survey results				
Time of survey	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
AM PEAK	650	349	999	65%
SCHOOL PICK-UP	618	381	999	62%
PM PEAK	687	312	999	69%
SATURDAY	617	382	999	62%

Parking survey results detailed above within Table 5 are the combined survey results. Refer to Appendix B for further detail on the parking surveys for each individual street.

4. Parking and access impacts

4.1 Access impacts

Impacts associated with the access of construction sites detailed within this CPAS will be minimised so far as reasonably practical.

Construction heavy vehicles will be restricted to approved haul routes only.

Access to and from all residential and commercial properties will be maintained at all times unless agreed otherwise with the relevant property landowner/occupier.

Site specific information is further detail below within Sections 4.1.1 to Section 4.1.4

4.1.1 MOC2

Access to and from the Rozelle MOC2 site will be facilitated by Lilyfield Road, Balmain Road and Catherine Street to allow access to and from City West Link. Refer to Figure 2 below.

Typically, the largest vehicles that will access the MOC2 site will a 10m rigid vehicle. It is however noted that at times larger vehicles may be required for deliveries or to facilitate other construction activities. These larger vehicles would be assessed on a case by case and would only occur in accordance with the relevant approvals and traffic control in place where required.

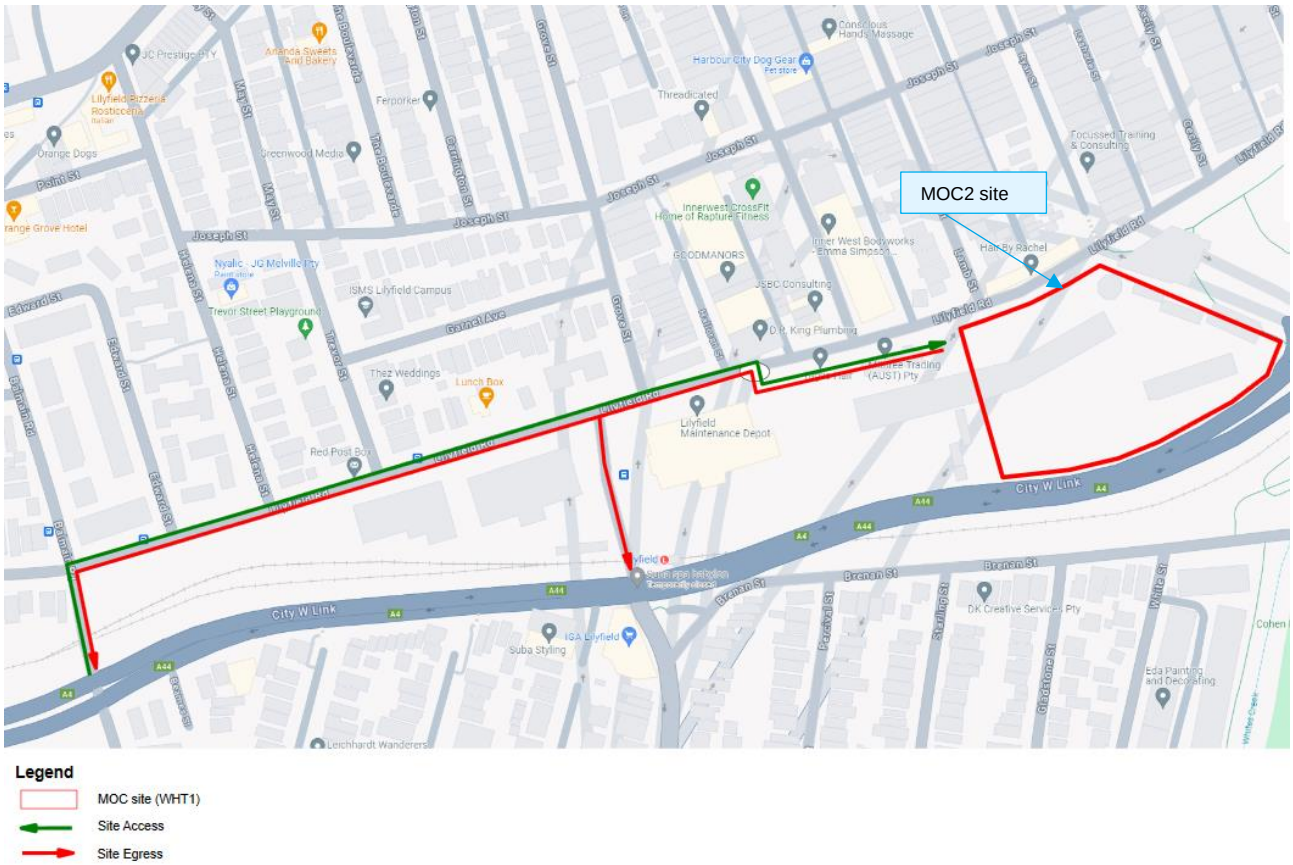


Figure 2 Access arrangements for MOC2

4.1.2 Glebe Island (WHT3)

Access to and from the WHT3 construction support site will be facilitated by two routes:

1. City West Link Road and James Craig Road.

2. City West Link Road James Craig Road, Solomons Way, Port Access Road and Sommerville Road.

Route 1 would be primarily used for heavy vehicles while Route 2 would primarily be used for light vehicles. Refer to Figure 3 below.

The largest vehicle expected to attend site on a regular occurrence would be a 26m B-double. At times other floats and Over Size Over Mass (OSOM) vehicles may need to attend site for deliveries or to facilitate other construction activities. These OSOM vehicles would be assessed on a case by case and would only occur in accordance with the relevant approvals and traffic control in place where required.

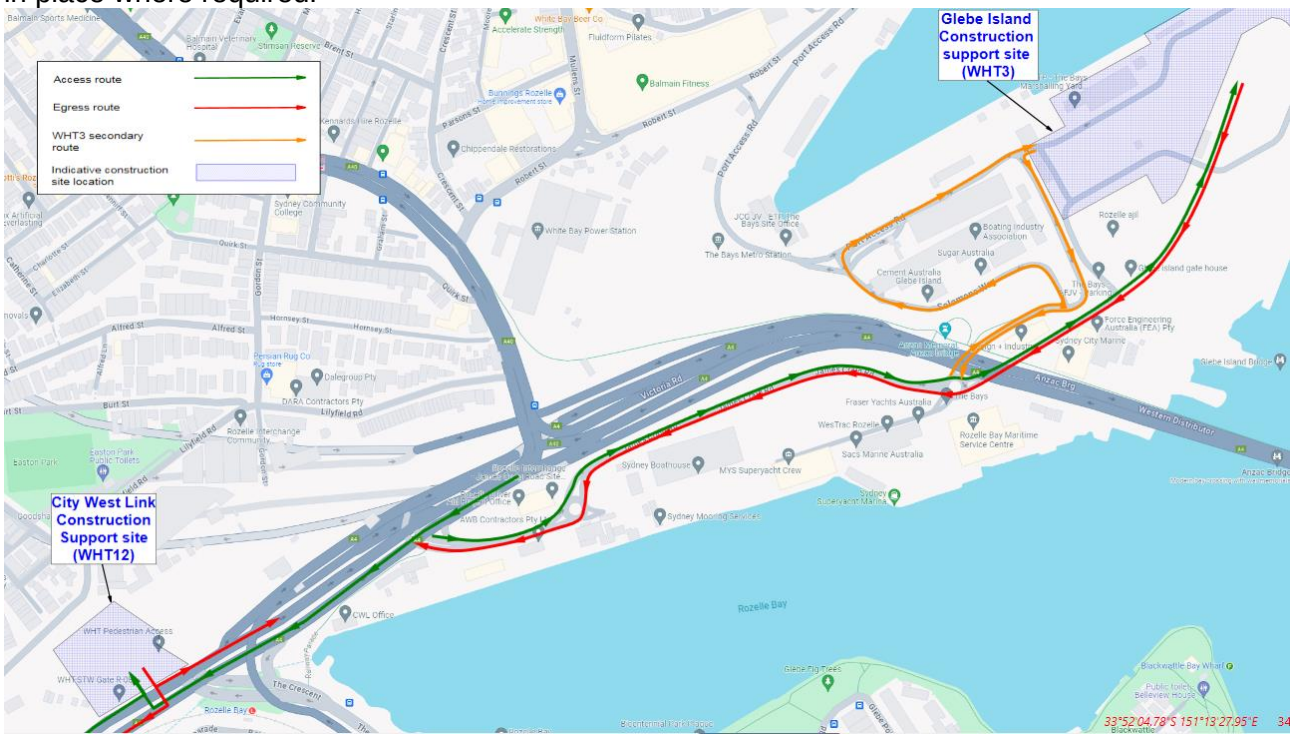


Figure 3 Access arrangements for WHT3 and WHT12 construction support sites

Construction pedestrian access will be available between WHT3 and public transport options in the area (including Light Rail and bus stops on Victoria Road).

4.1.3 City West Link (WHT12)

The City West Link (WHT12) construction support site (shown in Figure 3) is still under planning phase. This document will be updated and resubmitted for approval prior to any works being undertaken on this site (expected approximately late 2024).

4.1.4 Inner West utility works

Access arrangements for the Inner West utility works will vary as works progress, an overview of the routes is shown below within Figure 4.

Typically, the largest vehicles that will access the MOC2 site will a 10m rigid vehicle. It is however noted that at times larger vehicles will be required for deliveries or to facilitate other construction activities. These larger vehicles would be assessed on a case by case and would only occur in accordance with the relevant approvals and traffic control in place where required.

Some vehicular access to commercial and residential properties will be restricted during works, Pedestrian access will be maintained at all times. Any restriction to these properties will only occur within consultation with the relevant property owner or occupier.

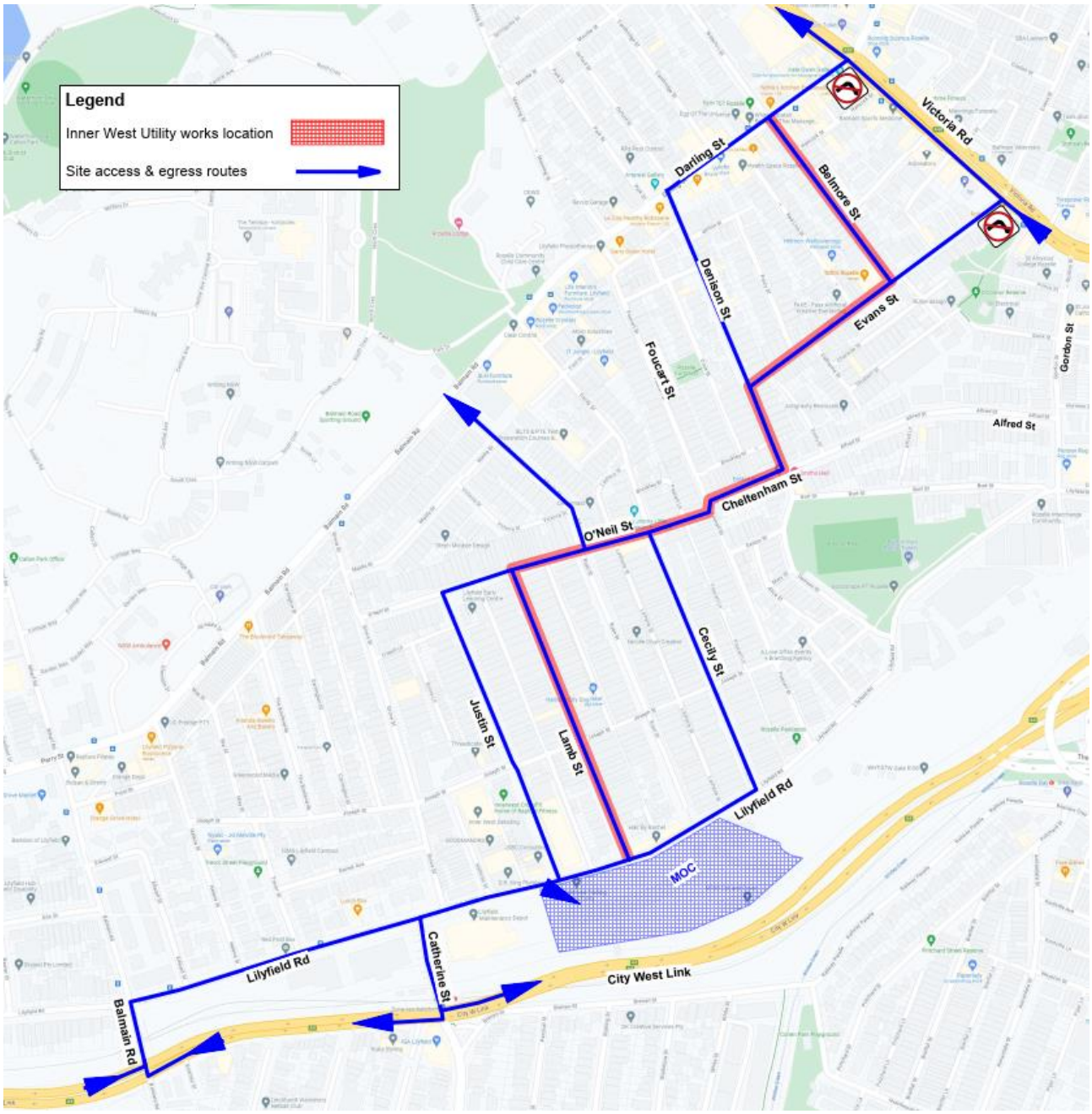


Figure 4 Access arrangements for Inner West utility works

4.2 Parking impacts

Throughout the project works some parking impacts will be unavoidable, despite this Acciona will implement a variety of mitigation measures to minimise and where practical eliminate such impacts from occurring.

The project will provide off-road parking facilities at all sites where there are existing residential parking schemes.

4.2.1 MOC2

4.2.1.1 Impacts to exiting public parking

There is no intention for the long-term removal of any on street public parking spaces to facilitate operations at MOC2.

4.2.1.2 Impacts of worker parking

Up to 30 workers are expected to attend the MOC2 site at any one time, however, the workforce numbers are expected to vary at any one time depending on the activities being undertaken in the MOC2 area. To accommodate the workforce, up to 28 off-street parking spaces will be made available for worker parking within the site area.

It's noted that a minor deficit in off-street worker parking may at times exist. See section 5 for further detail on mitigation measures for minimising impacts and worker parking on public roads.

4.2.2 Glebe Island (WHT3)

4.2.2.1 Impacts to exiting public parking

There is no intention for the long-term removal of any on street public parking spaces to facilitate operations at WHT3.

4.2.2.2 Impacts of worker parking

Up to 265 workers are expected to attend the WHT3 site at any one time. To accommodate this workforce up to 350 off-street parking spaces will be made available for worker parking within the site area.

It's noted that there will be an abundance of spare off-street worker parking spaces available. It is intended that these spare worker parking spaces will be utilised to facilitate worker parking for the WHT12 site, where workers would be transported to site via shuttle bus.

As WHT12 is still in planning phase, this document will be updated and resubmitted for approval prior to any works or introduction of shuttle buses at WHT12 (expected approximately late 2024).

See section 5 for further detail on mitigation measures for minimising impacts and worker parking on public roads.

4.2.3 City West Link (WHT12)

The City West Link (WHT12) construction support site (shown in Figure 2) is still under planning phase. This document will be updated and resubmitted for approval prior to any works being undertaken on this site (expected approximately late 2024), however, there is no intention for the long-term removal of any on street public parking spaces to facilitate operations at WHT12.

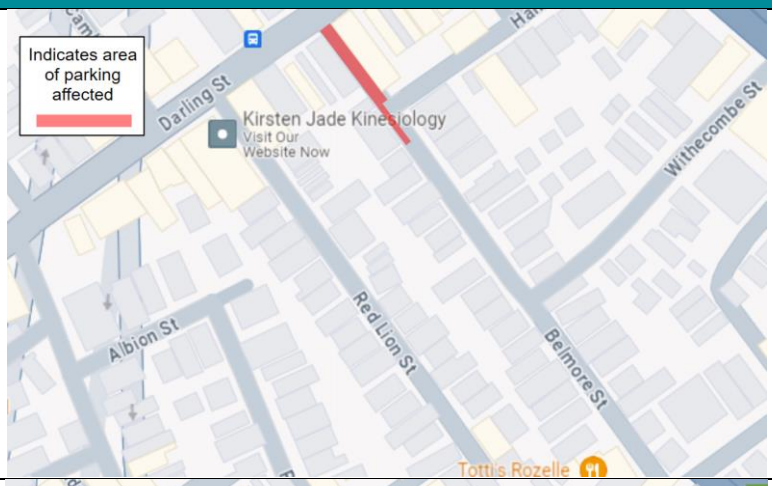
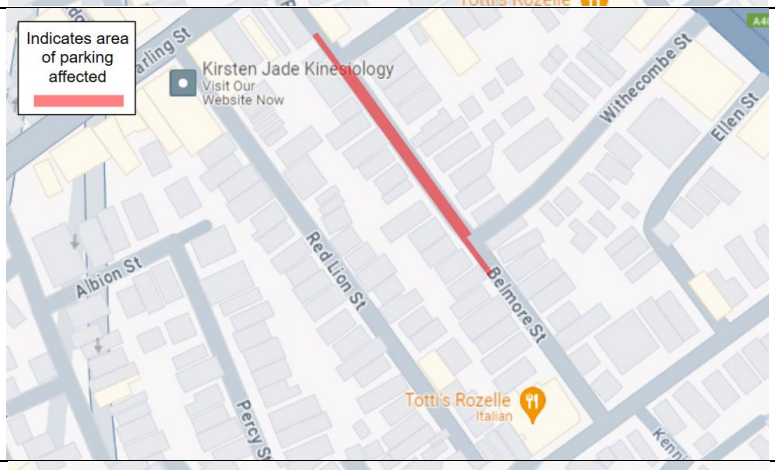
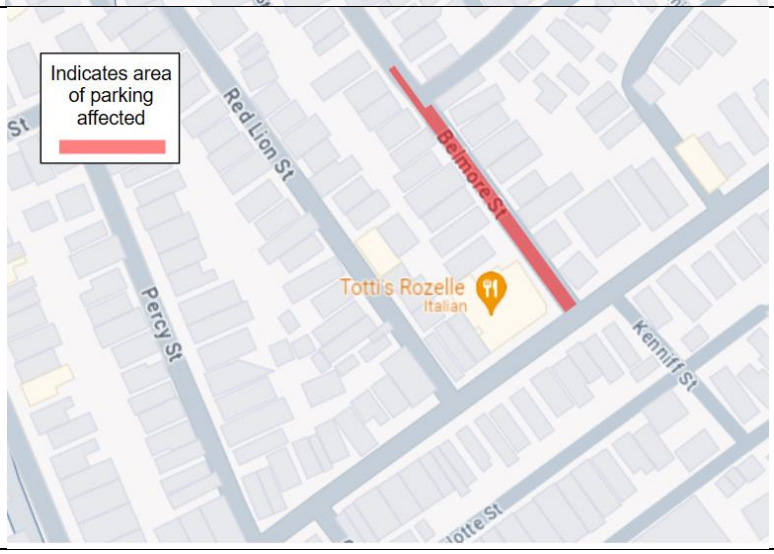
4.2.4 Inner West utility works

4.2.4.1 Impacts to exiting public parking

To facilitate the Inner West utility works it is anticipated there will be up to three work crews working within three separate sites at any one time, to complete the trenching, under bore and joint bay construction works. Each of these sites require various impacts to the existing on-street public parking.

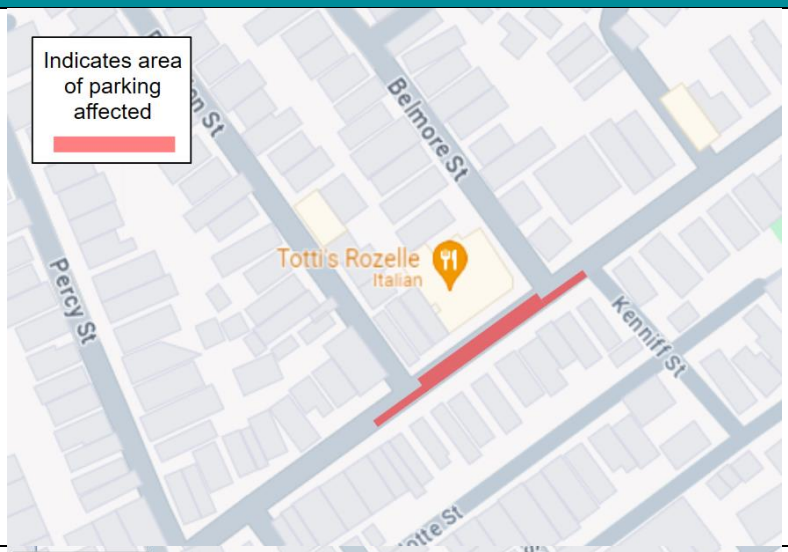
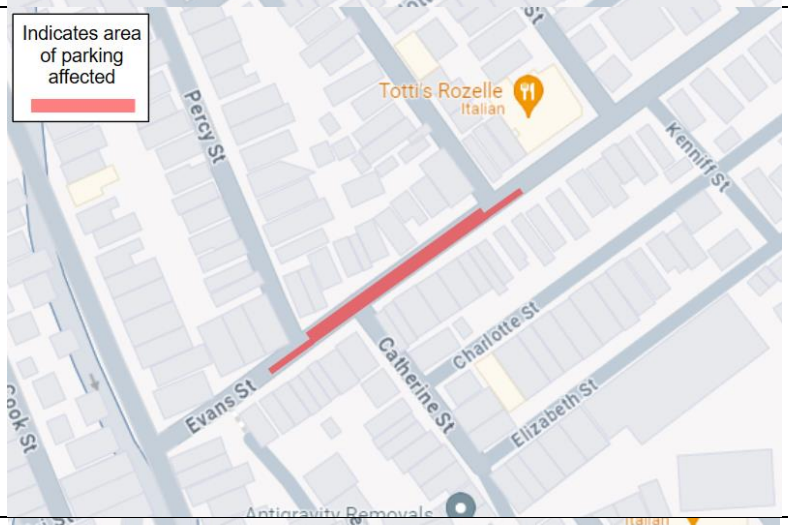
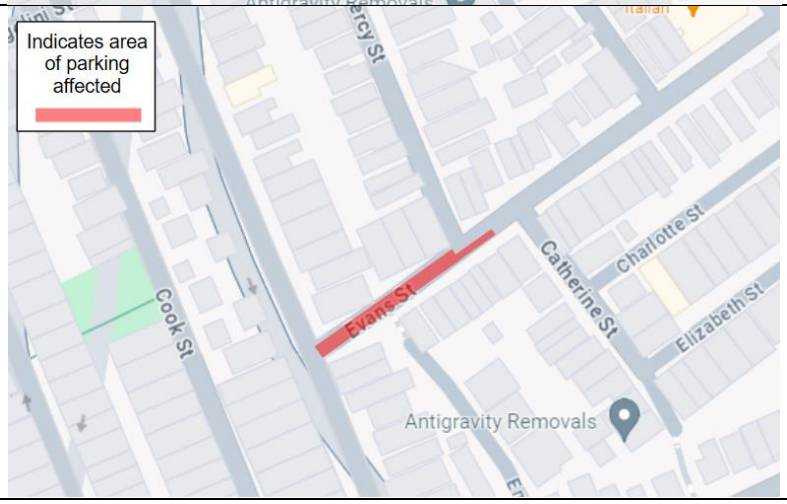
The expected parking impacts associated with works on each street is further detailed below within Table 6 to Table 12.

Table 6 Parking impacts - Belmore Street

Parking impacts - Belmore Street			
Location	Indicative Duration	Estimated total parking loss	Map
Belmore Street – section 1	6 Days Between June 2024 and June 2025	6 Spaces*	
Belmore Street – section 2	6 Days Between June 2024 and June 2025	20 Spaces*	
Belmore Street – section 3	6 Days Between June 2024 and June 2025	13 Spaces*	

*Only one parking section will be impacted at a time, to minimise the impact of parking loss that would otherwise occur. With the exception to a short-term duration (circa one-day) when moving the work area from one section to the next, in this instance a maximum impact of two sections will exist for the duration of the movement.

Table 7 Parking impacts – Evans Street

Parking impacts - Evans Street			
Location	Indicative Duration	Estimated total parking loss	Map
Evans Street – Section 1	28 Days Between June 2024 and June 2025	15 Spaces*	
Evans Street – Section 2	7 Days Between June 2024 and June 2025	22 Spaces*	
Evans Street – Section 3	6 Days Between June 2024 and June 2025	18 Spaces*	

*Only one parking section will be impacted at a time, to minimise the impact of parking loss that would otherwise occur. With the exception to a short- term duration (circa one-day) when moving the work area from one section to the next, in this instance a maximum impact of two sections will exist for the duration of the movement.

Table 8 Parking impacts – Denison Street

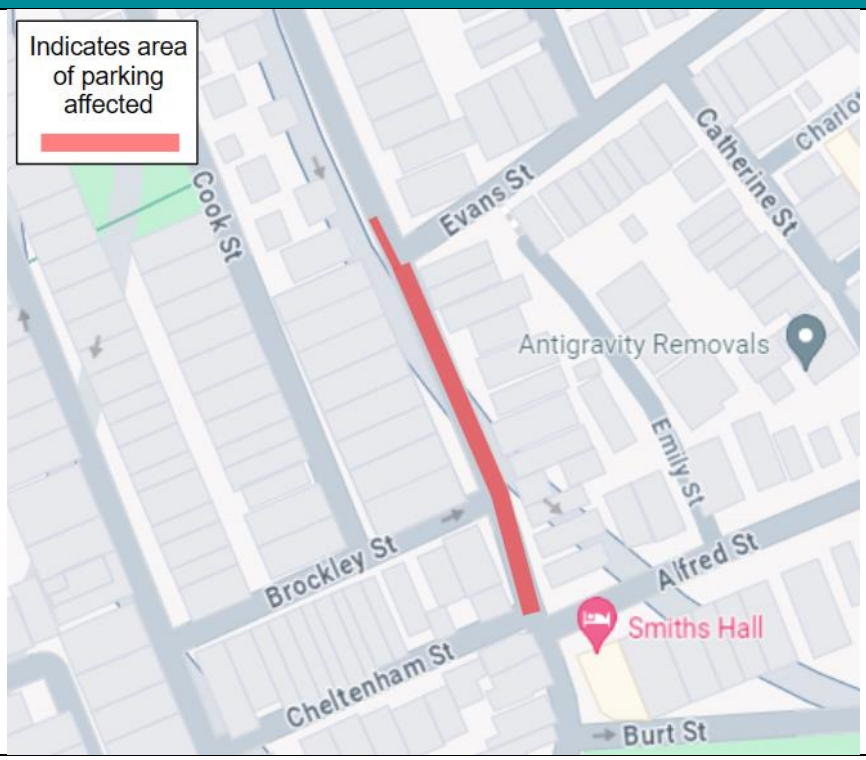
Parking impacts – Denison Street			
Location	Indicative Duration	Estimated total parking loss	Map
Denison Street	10 Days Between June 2024 and June 2025	27 Spaces	

Table 9 Parking impacts – Cheltenham Street

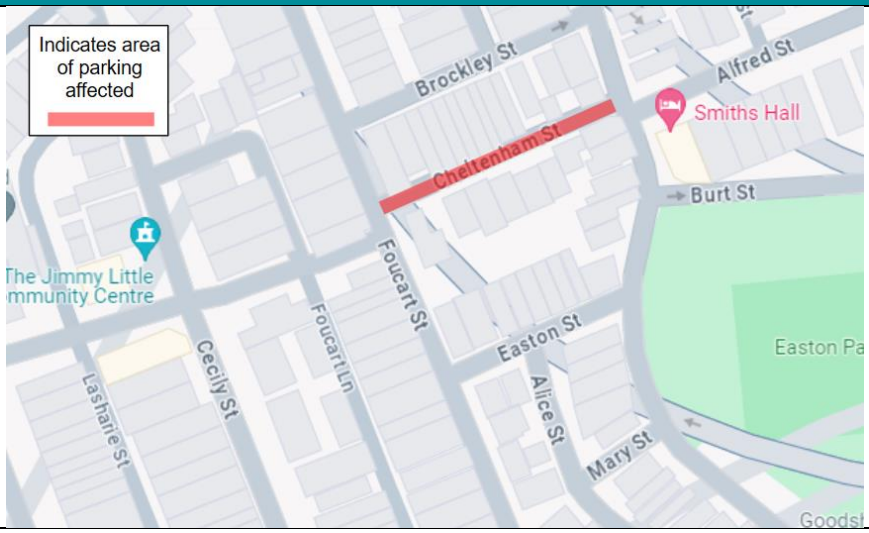
Parking impacts – Cheltenham Street			
Location	Indicative Duration	Estimated total parking loss	Map
Cheltenham Street	10 Days Between June 2024 and June 2025	10 Spaces	

Table 10 Parking impacts – Foucart Street intersection

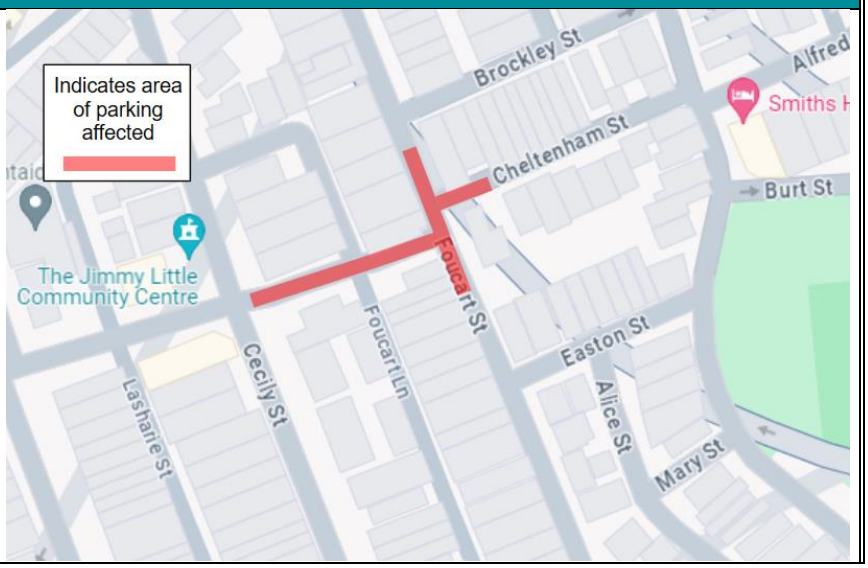
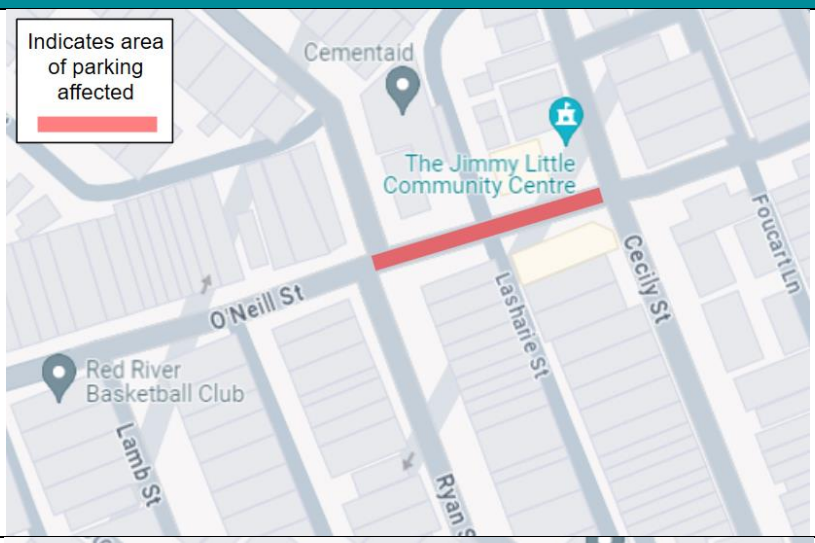
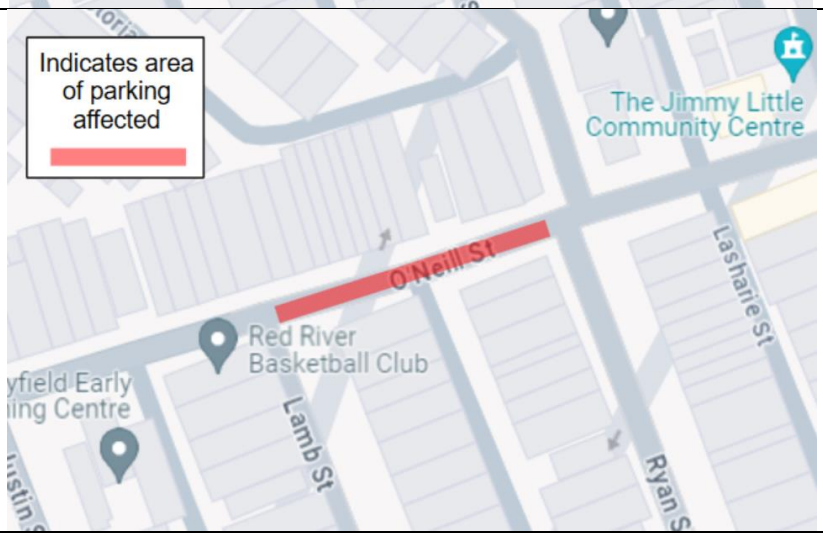
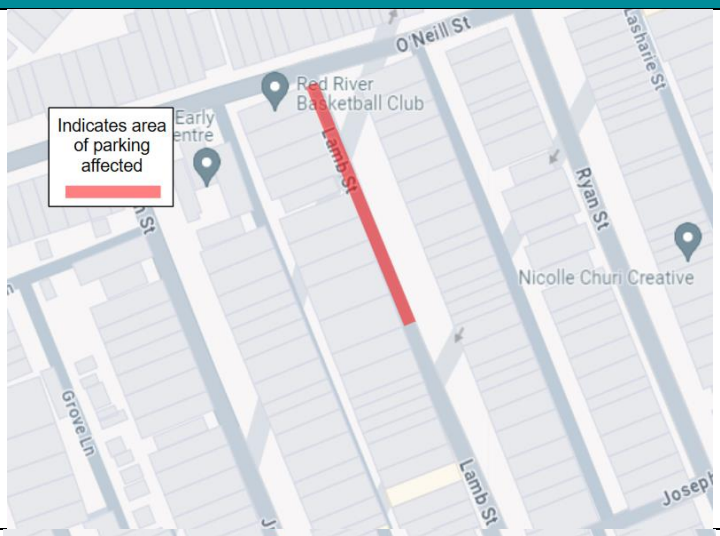
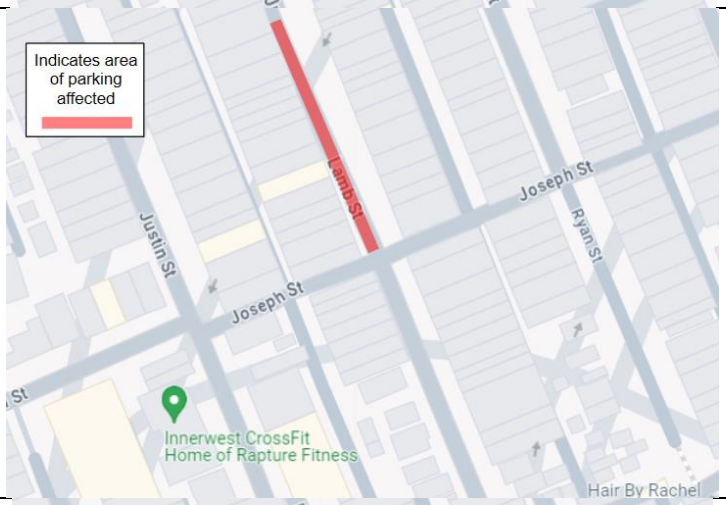
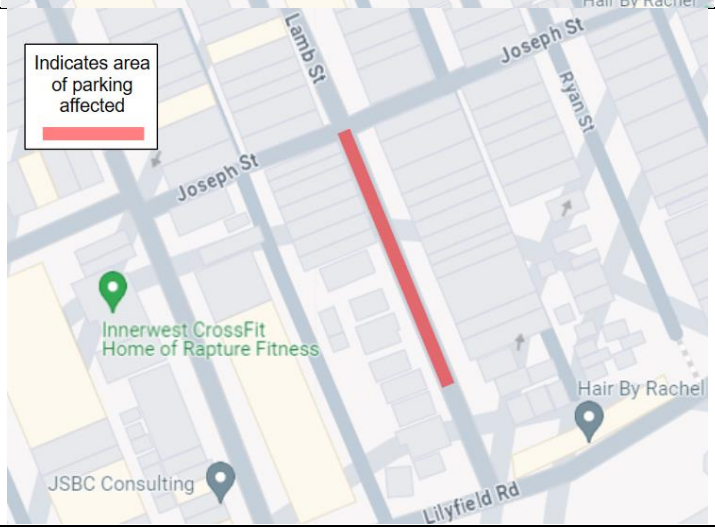
Parking impacts – Foucart Street INTERSECTION			
Location	Indicative Duration	Estimated total parking loss	Map
Foucart Street intersection	28 Days Between June 2024 and June 2025	9 Spaces	

Table 11 Parking impacts – O'Neil Street

Parking impacts – O'Neil Street			
Location	Indicative Duration	Estimated total parking loss	Map
O'Neil Street – Section 1	10 Days Between June 2024 and June 2025	14 Spaces*	
O'Neil Street – Section 2	10 Days Between June 2024 and June 2025	22 Spaces*	

*Only one parking section will be impacted at a time, to minimise the impact of parking loss that would otherwise occur. With the exception to a short-term duration (circa one-day) when moving the work area from one section to the next, in this instance a maximum impact of two sections will exist for the duration of the movement.

Table 12 Parking impacts – Lamb Street

Parking impacts – Lamb Street			
Location	Indicative Duration	Estimated total parking loss	Map
Lamb Street – Section 1	7 Days Between June 2024 and June 2025	31 Spaces*	
	28 Days Between June 2024 and June 2025	10 Spaces	
Lamb Street – Section 2	7 Days Between June 2024 and June 2025	31 Spaces*	
Lamb Street – Section 3	7 Days Between June 2024 and June 2025	34 Spaces*	
	40 Days Between June 2024 and June 2025	12 Spaces	

*Only one parking section will be impacted at a time, to minimise the impact of parking loss that would otherwise occur. With the exception to a short-term duration (circa one-day) when moving the work area from one section to the next, in this instance a maximum impact of two sections will exist for the duration of the movement.

Further to the parking impacts detailed above, within Table 6 to Table 12, some additional parking loss will be required to facilitate sufficient turn paths on detour routes. These attached parking impacts are as detailed below within Table 13 to Table 15.

It's noted that parking impacts as a result of the nominated detour routes have been reduced where practical. Despite this, some detour routes could not be changed to eliminate the associated parking loss, due to a variety of reasons such as:

- Detour lengths
- Equivalent level of safety along detour routes
- Target destinations of detoured traffic

Detour routes are approved as part of the Traffic Management Plan (TMP), outside of this CPAS.

Table 13 Parking impacts – Charlotte Street & Kenniff Street detour route

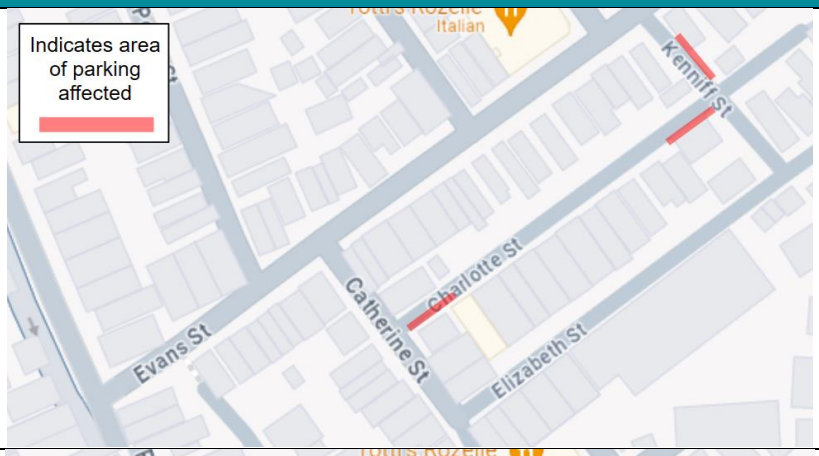
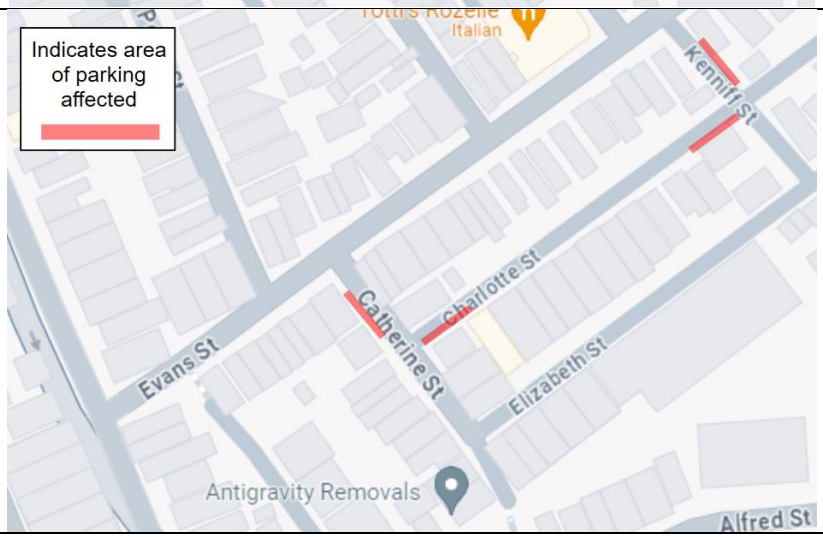
Parking impacts – Charlotte Street & Kenniff Street detour route			
Location	Indicative Duration	Estimated total parking loss	Map
Charlotte Street and Kenniff Street	18 Days Between June 2024 and June 2025	6 Spaces	
Charlotte Street, Catherine Street and Kenniff Street	35 Days Between June 2024 and June 2025	8 Spaces	

Table 14 Parking impacts – Albion Street and Percy Street detour

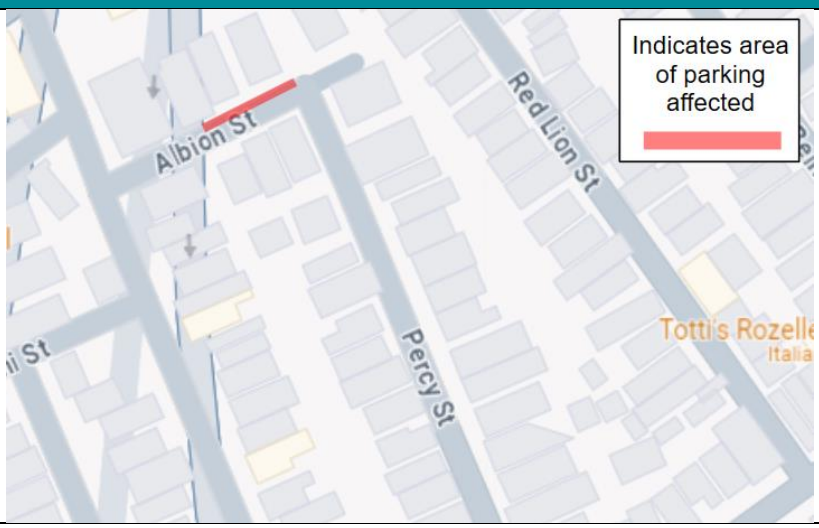
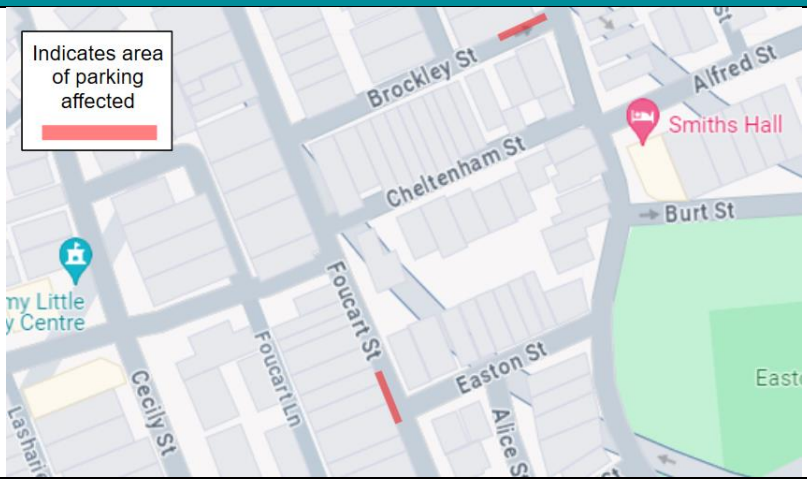
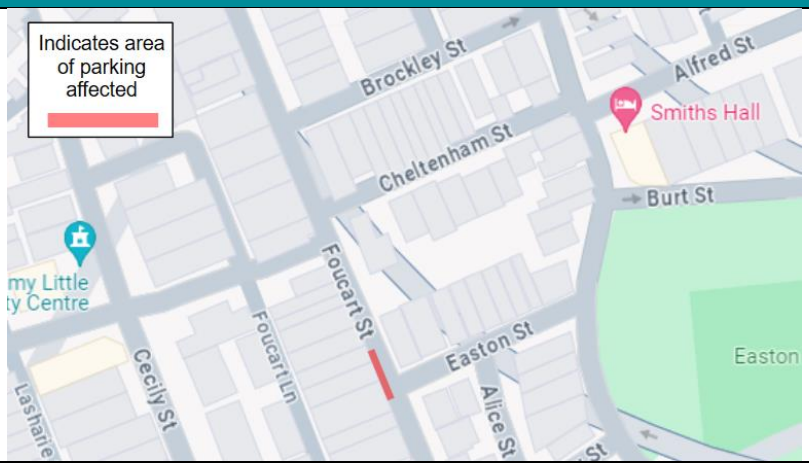
Parking impacts – Albion Street and Percy Street detour route			
Location	Indicative Duration	Estimated total parking loss	Map
Albion Street	6 Days Between June 2024 and June 2025	2 Spaces	

Table 15 Parking impacts – Albion Street and Percy Street detour

Parking impacts – Brockley Street and Foucart Street detour route			
Location	Indicative Duration	Estimated total parking loss	Map
Brockley Street and Foucart Street	10 Days Between June 2024 and June 2025	4 Spaces	

Parking impacts – Brockley Street and Foucart Street detour route			
Location	Indicative Duration	Estimated total parking loss	Map
Foucart Street	10 Days Between June 2024 and June 2025	2 Spaces	

Parking loss detailed in the tables above shows a worst-case scenario only. A variety of measures will be employed to minimise parking loss wherever practical. This may include exploring options to limit the length of work areas and the possibility of installing alternative parking arrangements to maximise existing space. Further detail on these mitigation measures can be found within section 5.

The Inner West utilities program is anticipated to start in July 2024, and take approximately 9 months to complete. It is however noted that dates and durations of work may change to accommodate unforeseen circumstances such as weather or construction program changes. Due to the variable nature of these works, regular updates will be provided to the community, along with updates presented at TTLG meetings.

4.2.4.2 Impacts of worker parking

The expected workforce onsite at any one time would be 35 across the three work fronts. It is however noted that workforce numbers do fluctuate and will often be much lower. To accommodate the workforce:

- Up to 15 off-street parking spaces will be made available within the MOC2 site for workers,
- Up to 6 onsite (off-street) parking will be available within the worksites for workers specifically required to have their vehicles on site and for pool cars or similar.

Workers near Belmore Street and Evans Street will prioritise use of the 15 off-street worker parking spaces at the MOC2 site, due to the existing residential parking schemes on:

- Belmore Street between Darling Street and Evans Street
- Evans Street between Victoria Road and Denison Street

See section 5 for further detail on mitigation measures for minimising impacts and workers parking on public roads.

4.2.5 Short-term works

As part of the delivery of the Project, there will be times where localised, short-term occupation of parking that will be required under a ROL or council permit. Occupation of parking would include works which are for a single, or a series of shifts but would be reinstated at the completion of the activity. This short-term occupation of parking may be necessary where utilities or footpath works are required. Where this occurs, any short term on-street parking that has been occupied will be reinstated at the end of each shift or following the expiration of the ROL.

Any short-term occupation of car-parking will be managed in accordance with the TTAMP, site specific Traffic Management Plans, and Traffic Guidance Schemes and will not result in an update of this document.

4.2.6 Cumulative impacts

4.2.6.1 Cumulative impacts with adjacent projects

The M4-M5 Link Project – Rozelle Parklands project have been identified as having potential to create cumulative construction impacts. Potential cumulative traffic impacts include the removal of on-street parking. The Construction Parking and Access Strategy (Rev 01 Dated March 2024) developed for M4-M5 Link Project – Rozelle Parklands indicated temporary construction impacts for two work sections along Lilyfield Road.

- Temporary removal of 4 parking spots opposite the Gordon Street, Burt Street, Lilyfield Road junction from early April 2024 to 30 October 2024.
- Temporary removal of 4 parking spots opposite Hutcheson Street from early April 2024 to 30 July 2024.

Parking survey results from the M4-M5 Link Project – Rozelle Parklands CPAS demonstrate that the removal of eight parking spaces for a short period of time will not impact the availability of on street parking in the area, nor will it directly impact the same local roads. Given the temporary removal of eight parking spots, and a small workforce, the impacts to on street parking associated with the M4-M5 Link – Rozelle Parklands project – Stage 4 will be minimal and manageable for the short duration of the works.

This CPAS does not propose removal of on-street parking along these streets. As depicted in Figure 5, the Western Harbour Tunnel and Rozelle Parklands proposed works areas are separated from one another. In addition, the parking survey undertaken for each CPAS does not overlap. The parking survey results detailed within each respective CPAS indicated there are sufficient parking in nearby streets to accommodate the temporary parking removal for the respective projects.

Therefore, due to the relatively small-scale impacts from the M4-M5 Link – Rozelle Parklands project, cumulative impacts have been assessed as minimal and manageable for the duration of the works.

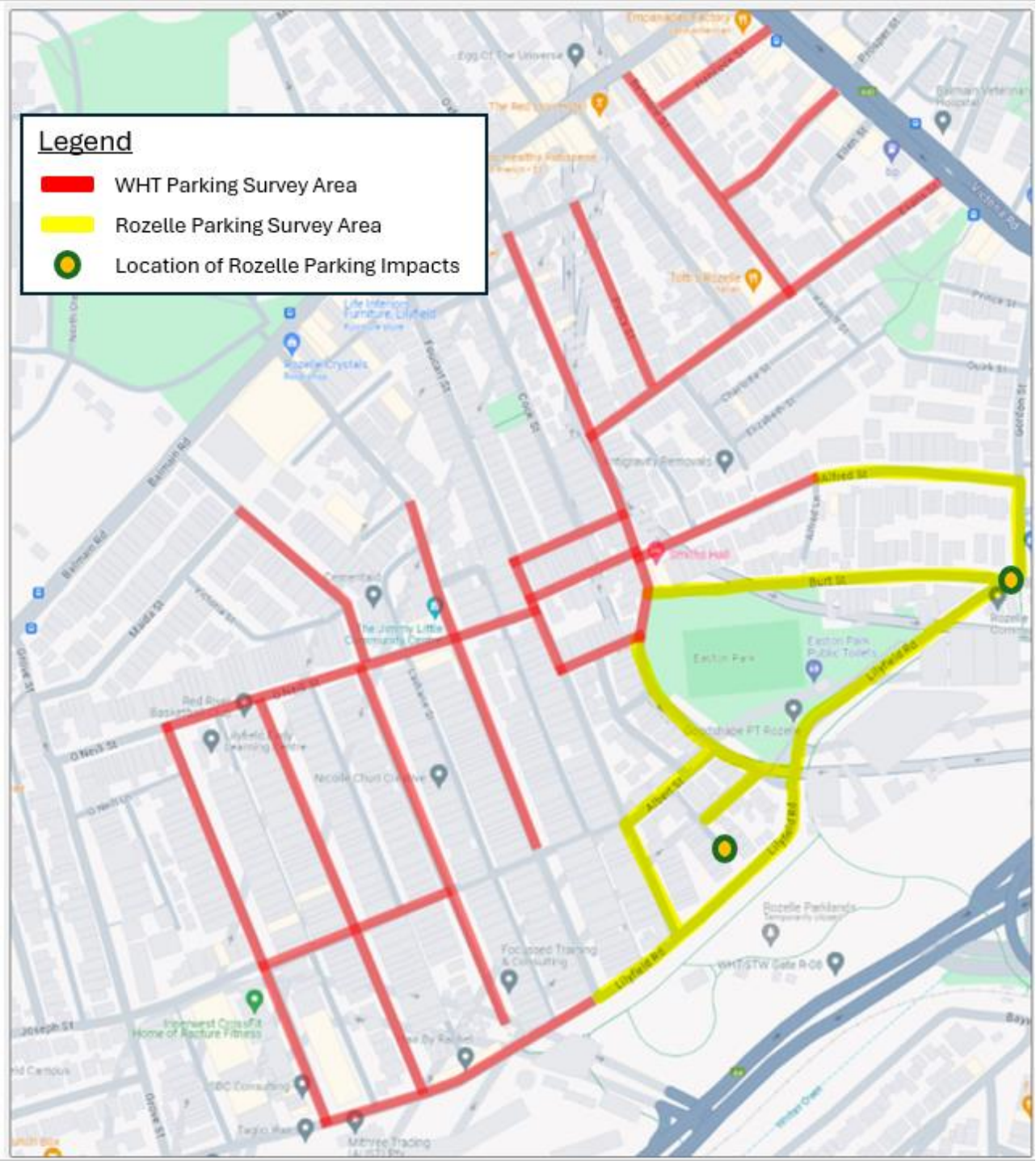


Figure 5 Comparison of WHT and Rozelle Impacts

4.2.6.2 Cumulative impacts of Inner West utility works

As described within this CPAS, the inner west utility works requires temporary removal of parking spaces across various streets within the Lilyfield and Rozelle areas. The cumulative effect of simultaneously removing all parking spaces to facilitate these works, would result in significant parking loss where the surrounding network would have difficulties absorbing. This would also result in increased difficulties for residents attempting to find a parking spaces and potentially longer walking distances.

The mitigation measures described within 5.1.5 aim to reduce overlapping works to ensure this does not result in an unacceptable cumulative impact.

5. Mitigation Measures

5.1 Parking impacts

5.1.1 MOC2

No existing public parking spaces will be removed as part of the site works to be carried out at MOC2.

Off-street parking for the majority of the workforce exists with only minor risk of a defect in available parking occurring. Despite this, the following additional controls will be implemented:

- Workers will be encouraged to use public transport
- Regular monitoring of parking availability will be carried out
- Workers will be briefed on the parking requirements using a combination of; inductions, prestart meetings and toolbox talks.
- Workers will be directed to not park on local roads at anytime.
- Managing the change over between dayshift and nightshift, by implementing a buffer between shifts, if required

5.1.2 Glebe Island (WHT3)

No existing public parking spaces will be removed as part of the site works to be carried out at WHT3.

Off-street parking for the entire workforce exists with no risk of exceedance. Despite this, the following additional controls will be implemented:

- Workers will be encouraged to use public transport
- Regular monitoring of parking availability will be carried out
- Workers will be briefed on the parking requirements using a combination of; inductions, prestart meetings and toolbox talks.
- Managing the change over between dayshift and nightshift, by implementing a buffer between shifts, if required

5.1.3 City West Link (WHT12)

The City West Link (WHT12) construction support site (shown in Figure 2) is still under planning phase. This document will be updated and resubmitted for approval prior to any works being undertaken on this site (expected approximately late 2024).

5.1.4 Inner West utility works

5.1.4.1 Impacts to exiting public parking

As detailed within Section 4.2.4.1 some unavoidable parking loss is required so that the Inner West utility works can be completed.

To understand impacts of this parking removal, parking surveys have been completed as detailed within Section 3. Parking surveys have identified more available parking typically exists then what is proposed to be removed. For this reason, parking displacement could be absorbed within the surrounding streets. Despite this and to further mitigate the impact of parking loss, the following additional mitigation measures will be implemented:

- Restricting the length of worksites to 100 meters for Lamb Street and O'Neil Street (generally consisting of 50 meters of active worksite and 50 meters for preparation to move the active site to the next section),
- Reducing the length of sites where possible and as works progress.

- Ongoing community consultation including regular community updates.
- Where parking impacts on residents who are disabled, this will be identified through community consultation. Through this consultation appropriate arrangements will be made to accommodate these residents.
- Ongoing consultation with Council to consider issuing temporary parking permits to residents or to temporary removal several timed parking in the adjacent streets throughout construction periods
- Where a disabled parking space needs to be removed, where possible an alternative parking space as close to the original space as practical, will be converted into a disabled parking space.
- Parking impacts on residents who are disabled, have upcoming construction work schedule or requires community services has been identified. Consultation on a case-by-case basis will be undertaken to understand the appropriate arrangements that need to be made to accommodate these residents.
- For residents who have reported they would like their bins taken out, workers will take bins to an appropriate nominated location and back for residents when proposed work affect their property. This will be consulted with Council as program of works are confirmed. (Noting that majority of residents pointed out their bins are collected in the laneways at the back of the property and therefore assistance is not required).
- For residents who have expressed interest in the offer of assistance to carry heavy items to their property, further consultation will be undertaken on a case-by-case basis to understand the appropriate arrangements that need to be made to accommodate these residents.
- Where possible (primarily Lamb Street) and as detailed within Figure 6 below, implement options to increase capacity of exiting parking areas adjacent to the active work areas. This would consist of converting exiting kerb-side parking; into, rear to kerb angle parking in order to achieve as close to net zero parking loss as practical.

Figure 6 Generic example - Increase public parking availability with rear to kerb parking.

5.1.4.2 Impacts of worker parking

To mitigate the impact by minimising workers parking on surrounding local roads, a variety of measures will be put in place, including:

- Providing up to 15 off street worker parking spaces at MOC2, as detailed within 4.2.4.2
- Provide up to an additional 6 off street worker parking spaces on sites, as detailed within 4.2.4.2
- Construction personnel will be directed to not park on the surrounding local roads
- Construction personnel will be strongly encouraged to use public transport
- Where possible construction personnel who live close together, will be rostered together to strongly encourage car-pooling
- Daily pre-start meeting will occur at the Rozelle MOC2 compound to strongly encourage workers to utilise the off-street parking spaces at MOC2. This will require workers who drive to work to start their day at the MOC2 to enable car pooling to the individual work areas.
- Regular monitoring of parking availability will be carried out and where issues are identified, contingency measures installed as detailed within 5.10.
- Construction personnel will be briefed on the parking requirements using a combination of, inductions, prestart meetings and toolbox talks.
- A standing item on the daily prestart will include words to the effect “No one is to park on local roads with the exception of pool vehicles transferring the team to and from site”.
- Relevant sub-contracts for 33kV power supply works will include a requirement making clear that worker parking on local roads is not permitted.
- Identified parking breaches of sub-contracts will be delt with formally with the Subcontractors Representative by the Contract Administrator or Commercial Manager in accordance with the Western Harbour Tunnel Fair and Just Culture HSEQ Model to determine the appropriate action.

The listed mitigation measures are intended to reduce the quantity of workers driving their vehicles to work, by instead using public transport and car-pooling. Understanding that some workers will still drive their private or work vehicles to site, up to 21 off street worker parking spaces will be provided. With consideration to this, workers parking on public roads is not expected to become an issue. Regular monitoring will be conducted, if this monitoring identifies issues with workers parking on public roads contingency measures as listed within Section 5.10 will be reviewed and where relevant will be installed.

5.1.5 Cumulative affect

5.1.5.1 Cumulative affect of worker parking at MOC2 and Inner West utility works

It is noted that some cumulative worker parking impacts exist with the use of the off-street worker parking area at MOC2. This off-street worker parking area is expected to support both the workforce of MOC2 and the Inner West utility works.

To mitigate the risk of this cumulative effect:

- The peak use of the MOC2 area by the MOC2 workforce is anticipated to not occur any earlier than September 2024.
- At the commencement of MOC2 works, worker numbers will be minimal.
- While there is a slight overlap between the MOC2 and Inner West utility works, the Project will look at opportunities to improve efficiency and productivity of the Inner West utility works during the peak use of the MOC2 area by the MOC2 workforce.

5.1.5.2 Cumulative impacts of Inner West utility works

As described within 4.2.6.2 if all parking was simultaneously removed to facilitate the Inner West utility works, this would have an unacceptable impact to the community. Therefore, the following measures to reduce impact will be implemented:

- A maximum of only three locations will be installed at any one time
- Where possible the three sites will be separated to spread out the impacts over a wider area. While this will not always be possible, particularly near Lamb Street and O'Neill Street, available parking in this area is generally much higher.
- When moving a worksite from one location to the next, the required parking removal is much higher (approximately double). While this only occurs for a short time (about a day), the intent will be to only move one site at any one time. If issues with weather or other unforeseen circumstances arise and more than one worksite needs to be moved at the same time, this will only occur strategically and under the following conditions;
    - Delaying the relocation would cause significant delays and cost impacts
    - The sites are separated as to spread out the impacts
- Implementing the other contingency measures as detailed within 5.1.4

5.2 Visitors

Limited (approximately two) visitor parking spaces is available at most sites, and, unless otherwise organised, all visitors will initially report to the main Project office to attend the mandatory visitor's induction, which will provide detail on the Project parking strategy (i.e. locations of available visitors parking and shuttle bus options).

Where a visitor has been instructed by their Project contact to go directly to site, this contact will be required to inform them of the Project parking strategy and locations of available visitor parking, prior to conducting the visitor's induction on-site.

Repeat visitors will know of the satellite parking facilities and will utilise these as needed during site visits.

5.3 Shuttle services and worker transport

5.3.1 MOC2

A shuttle service is not anticipated to be installed to shuttle workers to and from this site for the following primary reasons:

- The quantity of workers on site during these works will generally by low
- Sufficient off-street worker parking exists for almost all workers that will attend this site

It's noted that if issues are identified and the mitigation measures detailed within Section 5 are proving insufficient, A shuttle service maybe implemented. In this instance further consultation will take place with stakeholders and this CPAS will be updated accordingly, however this is not expected to be required.

5.3.2 Glebe Island (WHT3)

A shuttle service is not anticipated to be installed to shuttle workers to and from this site for the following primary reasons:

- Sufficient off-street worker parking exists to cater for all workers at WHT3.

It's noted that in future shuttle services will run from this site, where workers would park at WHT3 and be shuttled to their respective site. Further consultation will take place with stakeholders and this CPAS will be updated accordingly before this occurs.

5.3.3 City West Link (WHT12)

A shuttle service will be established for the City West Link (WHT12) construction support site (shown in Figure 2). This site is still under planning phase, and for this reason the document will be

updated and resubmitted for approval prior to a shuttle service being implemented (expected approximately late 2024).

5.3.4 Inner West utility works

A shuttle service is not anticipated to be installed to shuttle workers to and from site for the following primary reasons:

- The quantity of workers on site during these works will generally by low and spread across up to three sperate sites at any one time.
- Some off-street parking will be provided at the MOC2 site.
- Some off-street parking will be provided on each site.
- Acciona will aim to reduce the quantity of workers driving to work and instead use public transport or car-pool.

Workers who park at the MOC2 will attend prestart before walking from the MOC2 to their respective sites along the 33kv alignment. The walk is only short (approximately 14min) as further demonstrated within Figure 7 showing the worst-case scenario. Work vehicles will also be able to transfer workers from the MOC2 to their respective work sites.

It's noted that if issues are identified and the mitigation measures detailed within Section 5 are proving insufficient, a shuttle service maybe implemented. In this instance further consultation will take place with stakeholders and this CPAS will be updated accordingly, however this is not expected to be required.

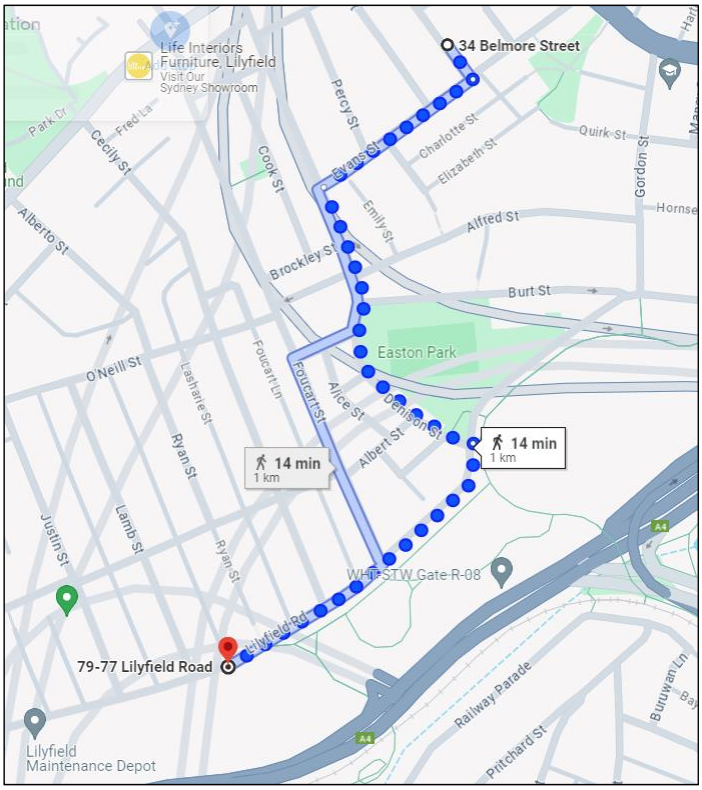


Figure 7 Worker pedestrian route – MOC2 to 33kv alignment

5.4 Pedestrian interface at site accesses

Vehicle access and egress at each site will be managed to minimise disruption and maintain safety of the public at all times. At no time is any work vehicle permitted to queue across, park on or block pedestrian facilities, including shared paths or pedestrian footpaths.

5.4.1 MOC2

Entry into MOC2 is via the exiting driveway established as part of earlier project's (not Western Harbor Tunnel Stage 2) works.

Vehicle movements into and out of this driveway will be limited, consideration will be given for additional controls if the driveway needs to be accessed by larger than normal vehicles where sightlines maybe further restricted.

Well established footpaths on both sides of the roadway generally exist along the remainder of the heavy vehicle route for this site. with various signalised pedestrian crossing points and a raised pedestrian crossing on Lilyfield Road.

For this reason, pedestrian interface at this site is expected to be minimal.

Despite this, toolbox-talks and various prestart meetings will highlight any areas of concern to make drivers aware of conditions. Site conditions will be monitored regularly, and additional controls introduced if deemed necessary.

5.4.2 Glebe Island (WHT3)

Access to WHT3 will be via James Craig road. Newly constructed shared paths exist for pedestrians and cyclists along James Craig Road, for this reason pedestrian activity on the roadway is expected to be limited. To further increase safety, toolbox-talks and prestart meetings will be held to highlight any areas of concern to make drivers aware of conditions.

Site conditions will be monitored regularly, and additional controls introduced if deemed necessary.

5.4.3 City West Link (WHT12)

The City West Link (WHT12) construction support site (shown in Figure 2) is still under planning phase. This document will be updated and resubmitted for approval prior to any works being undertaken on this site (expected approximately late 2024).

5.4.4 Inner West utility works

The works are not anticipated to have any long-term impact on existing pedestrian facilities. Pedestrian access will be maintained on footpaths adjacent to the work areas. At times works need to take place on a footpath this would only occur with sufficient traffic control in place and with alternative pedestrian access routes made available.

It is noted that due to work locations being on local roads and near residential and commercial areas, it is highly likely that pedestrians would cross the road in locations where pedestrian crossing facilities do not exist. To mitigate any risk of pedestrians entering the work area by attempting to cross the road, appropriate fencing will be installed adjacent to the footpaths. This fencing will span the entire length of the work area and prevent unauthorised access.

Traffic control/gate keepers will be employed at all site entry and exit locations when works are occurring.

To further increase safety, toolbox-talks and prestart meetings will be held to highlight any areas of concern to make drivers aware of conditions.

Site conditions will be monitored regularly, and additional controls introduced if deemed necessary.

5.5 Haulage routes

In accordance with CoA E132, DPHI approval is required for any local roads that have not been identified and assessed in the EIS or Modification. The proposed haulage routes for each construction support site are included in Appendix A however will depend on the origin and destination of each of the movements. Where additional local roads are required to access and service the construction support site, additional approval is required from the Planning Secretary. Refer to Section 5.1 of the TTAMP.

5.6 Road dilapidation

In accordance with CoA E136, A Road Dilapidation Report for heavy vehicle travel on local roads will be prepared and provided to relevant councils prior to the affected roads being used by heavy vehicles.

5.7 Vehicle tracking

LinkedSite will be used by the Project to provide live monitoring of heavy vehicles used for spoil in accordance with condition CoA E135. The records of monitoring will be made available to the Planning Secretary and the EPA for a period of no less than one year following the completion of construction.

5.8 Marshalling idling and queueing

Marshalling of vehicles (including both heavy and light vehicles) will not be conducted near sensitive land users. Sites will provide as much off-street marshalling space for spoil trucks as can be achieved within the sites, while balancing parking availability for light vehicles.

Areas designated for marshalling idling and queueing will be identified in site-specific TMPs. Marshalling of vehicles associated with the project will be monitored as part of regular site inspections and where any issues with marshalling space is identified additional areas will be located and incorporated into the CPAS and site specific TMPs.

Where drivers are identified idling or queueing on state and regional roads and relate to the project, they will be instructed to move on to one of the designated waiting or marshalling areas.

During the development of site specific TMPs, the risks of queuing and idling are further considered and minimised so far as reasonably practical.

5.9 Training

Training for elements of the project delivery affecting haulage, parking and pedestrian interface controls will be provided to workers. The ways in which information will be disseminated to the workforce is outlined below based on the element being communicated:

- Approved haul routes will be communicated to spoil contractors and contract managers for communication to drivers.
- Pedestrian management techniques and strategies will be toolboxed to traffic controllers and site staff managing the heavy vehicle and pedestrian interface.
- Worker parking provision on site will be communicated as part of site inductions and updated as part of project pre-start discussions.

Additional training may be conducted to a targeted audience where any monitoring or issues are identified.

5.10 Contingency

If monitoring, surveys, consultation or complaints prompt intervention by the Project to improve or otherwise modify parking services, one or more of the options discussed in the sections below may be enacted to ensure impacts to the public are reduced and public relationships and reputation is protected.

5.10.1 Modification to shuttle service

Wherever future services are installed and identified to be inadequate:

- Additional services will be added to try to improve travel times between parking and construction sites.
- Where travel between sites and any satellite parking facilities is causing significant delay to workers, alternate routes will be investigated.
- Additional stops may be pursued along routes to maximise availability of public transport options.

5.10.2 Additional overflow parking

Parking utilisation will be monitored at each of the primary parking areas. Where supply is dwindling, additional parking will be investigated and provided where practical solutions can be identified. This may include leased parking spaces from within a commercial parking structure.

Investigations will potentially include lease options with adjacent businesses to sites or parking stations, investigating layout improvements within sites where opportunities arise, or expanding existing parking facilities at other sites and modifying shuttle bus movements to provide suitable and efficient transport solutions from the additional parking.

5.10.3 Public transport encouragement

Where existing strategies are nearing capacity as determined through the inspections or the informal feedback channels, alternate options to promote public transport use will be investigated. This will include investigating opportunities to encourage public transport use by providing additional shuttle bus pick up points at popular public transport hubs.

5.10.4 Active transport encouragement

Active transport options will also be encouraged through the provision of changing and end-of-trip facilities and bike storage areas for cyclists.

5.10.5 Additional consultation

Where issues with parking management is identified, additional consultation with affected stakeholders may be conducted to best identify the issues with the parking measures adopted. Consultation will aim to incorporate feedback from stakeholders in revised planning to ensure mitigation measures are acknowledged and achieve the planned result.

6. Monitoring and reporting

6.1 Monitoring

As part of the ongoing monitoring processes on the Project, parking assessment and monitoring will play a vital role of the surveillance team's responsibility. Monitoring will include surveillance of site parking availability at regular intervals to ensure parking on site doesn't have a deficit issue. This will provide indication of the effectiveness of alternative arrangements, and mechanisms of encouraging workers to park in the dedicated parking facilities and catch public transport or the Project shuttle service.

Informal feedback will be sought from the workforce if it is identified that the proposed measures are not working satisfactory.

Parking surveys will be conducted approximately fortnightly on the parking utilisation within the site. Should the parking utilisation regularly be at or near capacity, parking surveys will be undertaken for the areas immediately adjacent to the sites. On site parking utilisation will be included in the quarterly reports outlined in MCoA E140.

6.1.1 MOC2

Where surveys are undertaken near the MOC2 area, these occupancy rates will also be included in the quarterly reports. The survey area proposed for MOC2 is shown below, in Figure 8. It should be noted that there are a number of major projects already operating within the area, and the ability to identify specific vehicles related to the WHT Package 2 contractor works may be difficult.

As part of the surveys an occupancy rate and project related vehicles utilising on-street parking will be included (for what can be identified by branding).

Figure 8 MOC2 Parking survey area

6.1.2 Glebe Island (WHT3)

Where surveys are undertaken on Robert Street, these occupancy rates will also be included in the quarterly reports. The survey area proposed for Robert Street is shown below, in Figure 9. It should be noted that there are a number of major projects already operating within the area, and the ability to identify specific vehicles related to the WHT Package 2 contractor works may be difficult.

As part of the surveys an occupancy rate and project related vehicles utilising on-street parking will be included (for what can be identified by branding).

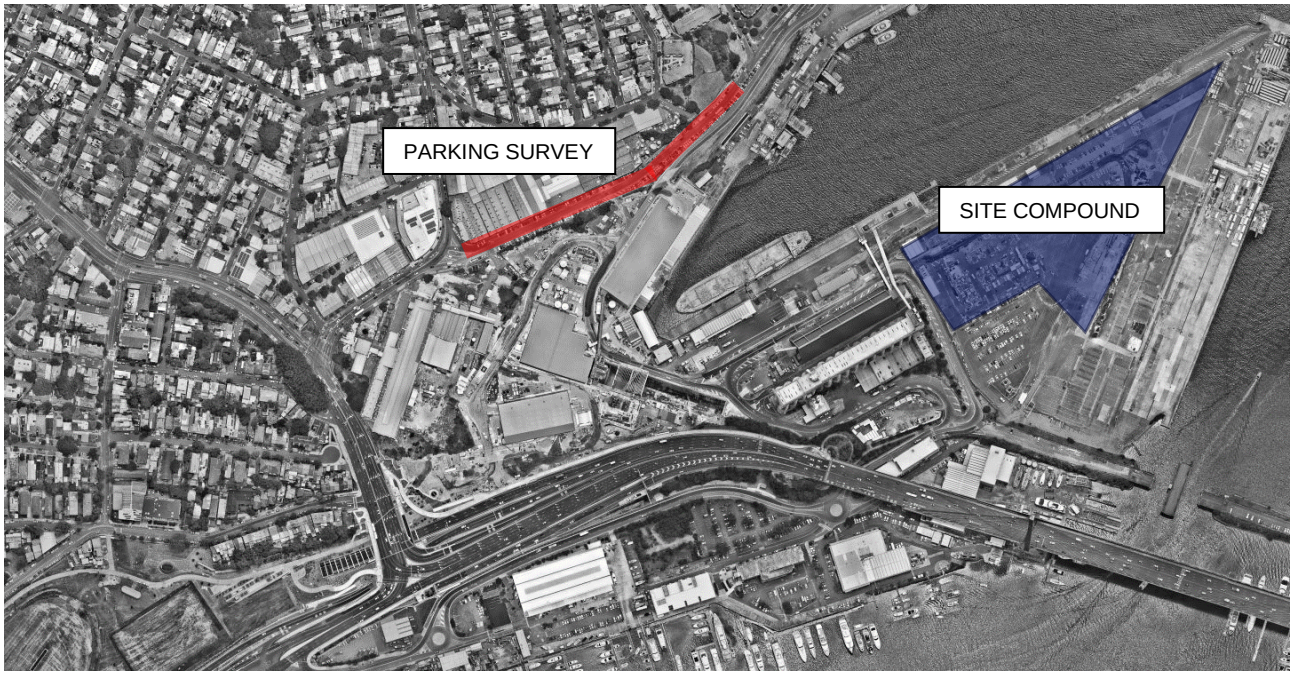


Figure 9 WHT3 parking survey area

6.1.3 City West Link (WHT12)

The City West Link (WHT12) construction support site (shown in Figure 2) is still under planning phase. This document will be updated and resubmitted for approval prior to any works being undertaken on this site (expected approximately late 2024

6.1.4 Inner West utility works

Where surveys are undertaken in the area of the Inner West utility works, these occupancy rates will also be included in the quarterly reports. The survey area proposed for Robert Street is shown below, in Figure 10. It should be noted that there are a number of major projects already operating within the area, and the ability to identify specific vehicles related to the WHT Package 2 contractor works may be difficult.

As part of the surveys an occupancy rate and project related vehicles utilising on-street parking will be included (for what can be identified by branding).

Figure 10 Inner West utility works parking survey area

Should parking surveys identify any issues with overflow or excessive worker parking in public spaces an appropriate mitigation measure will be implemented to minimise parking on local roads.

6.2 Reporting

Quarterly reports of compliance, monitoring results, and effectiveness of the controls and parking strategies will be provided in accordance with MCoA E140(k). The report will be provided as a standalone report.

Ongoing regular consultation with stakeholders, businesses and residents will occur, to ensure early identification of issues will be maintained for the duration of works.

6.3 Document updates and amendments

The CPAS will be updated when any of the following items triggers the need for an update:

- A change to long term availability of parking at any of the construction sites (including commencement of works at a new site)
- Identified need for additional long-term parking removal
- Modification to shuttle services due to worker demand or identification of issues
- Adjustments to site access (including the addition of the WHT Portals site in late 2024)
- In response to a complaint or non-conformances raised from inspections and audits.

Any updates will be submitted to the Planning Secretary for approval prior to implementation.

On approval this document will be appended to the project TTAMP, however the TTAMP document itself is not expected to be resubmitted for re-approval as it is already approved.

Appendix A: Haulage Routes

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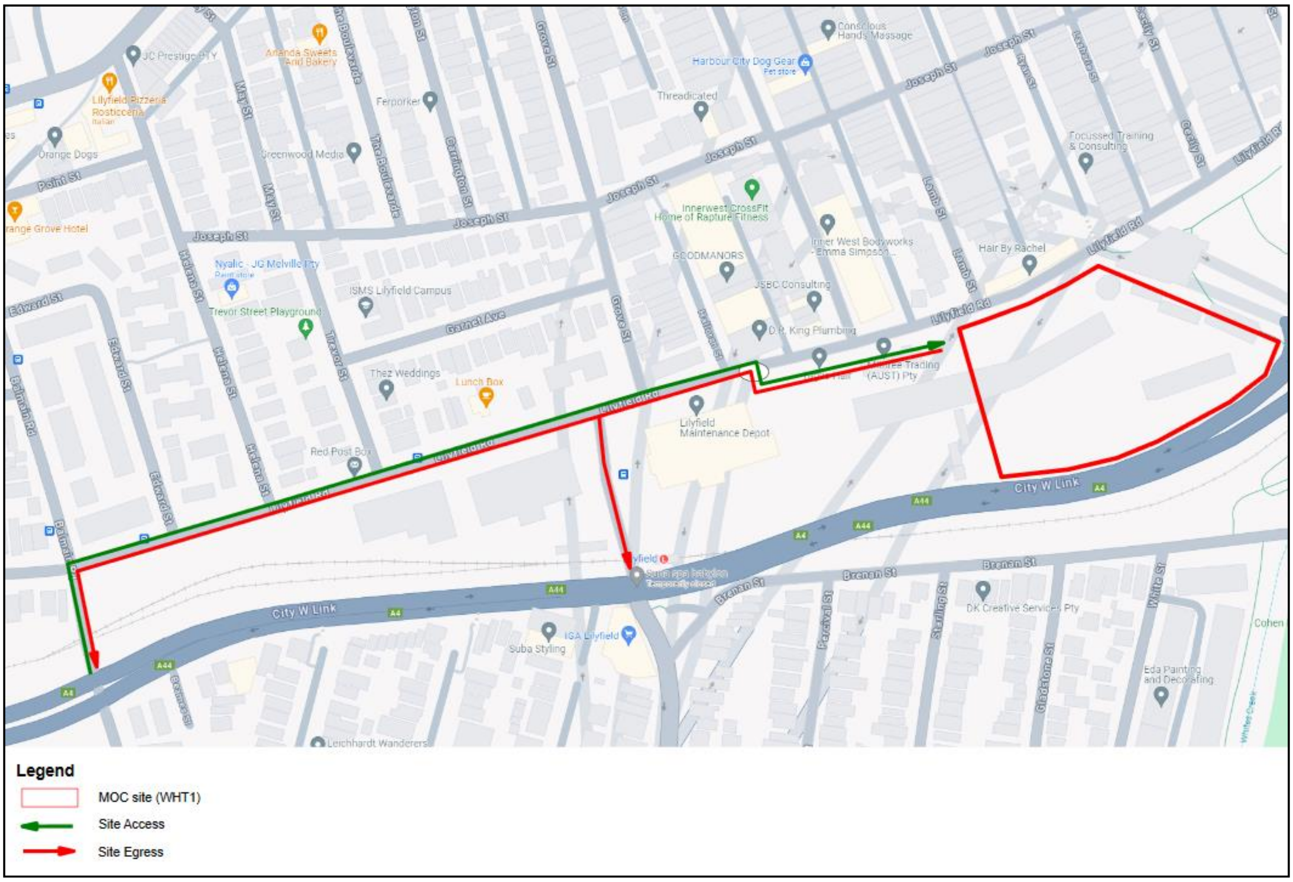
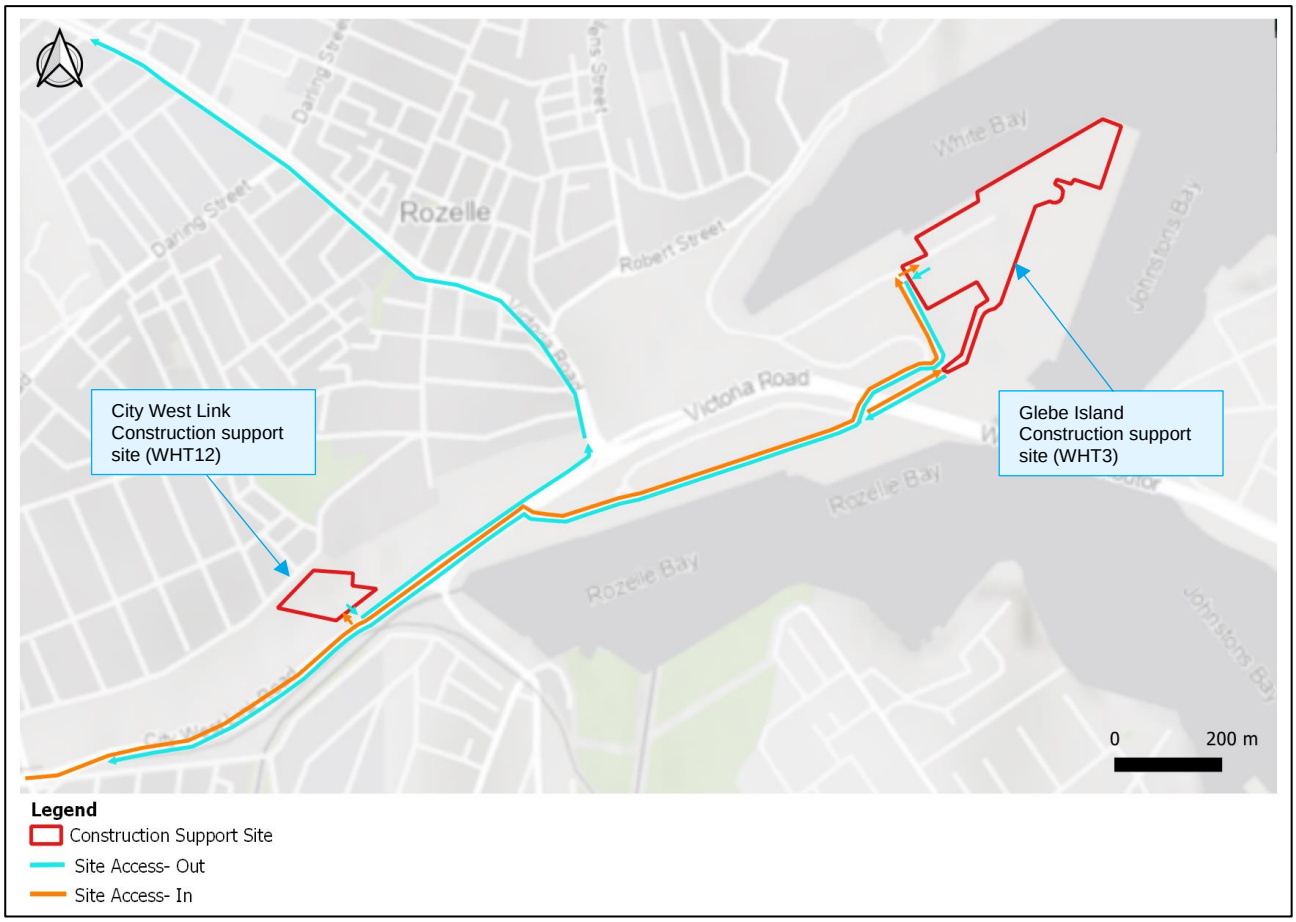
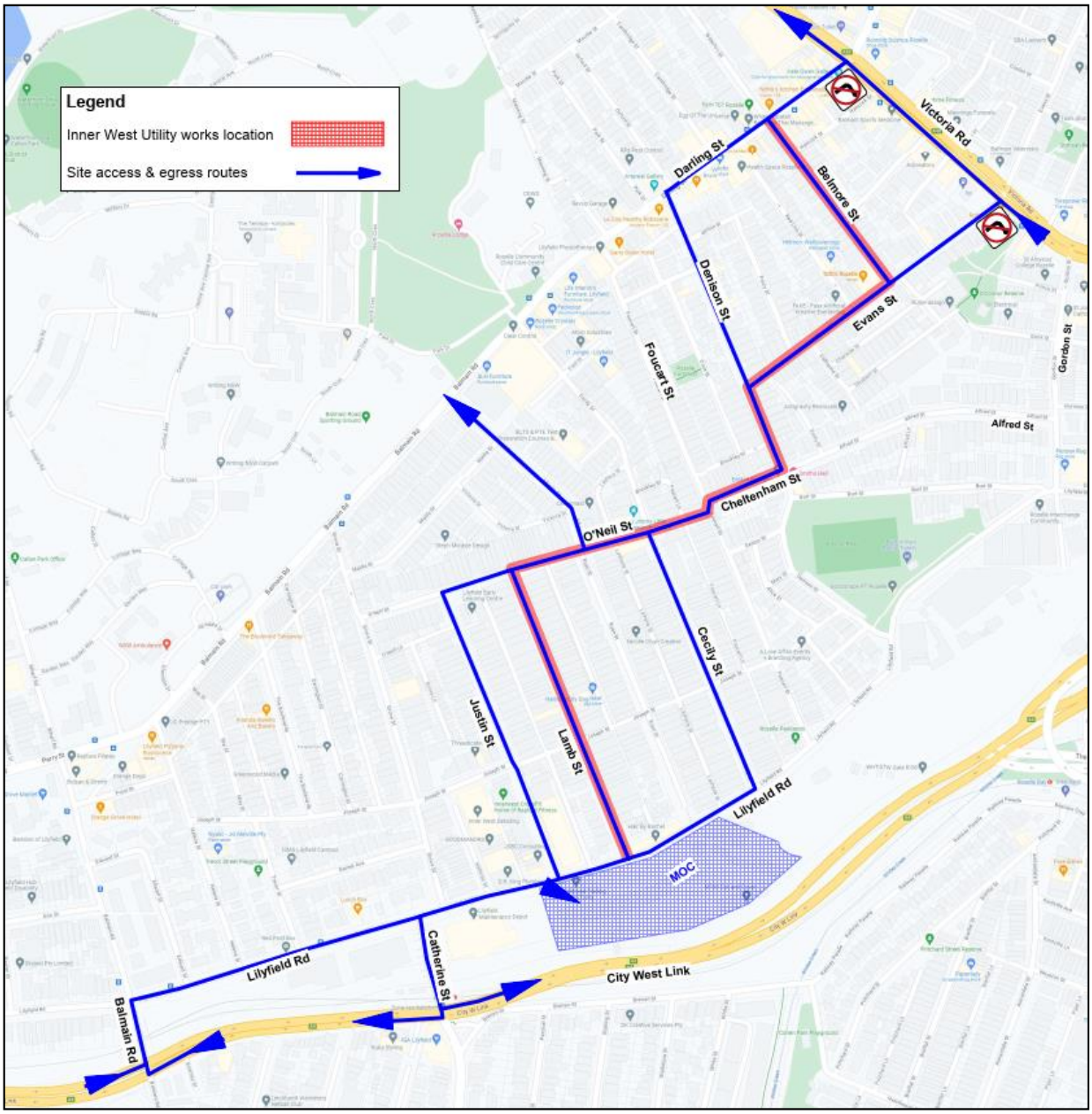

Lilyfield Rd
Joseph St
City W Link
Brenan St
Lilyfield Maintenance Depot
Legend
MOC site (WHT1)
Site Access
Site Egress


Rozelle
Daring Street
Robert Street
Victoria Road
White Bay
Johnstons Bay
Rozelle Bay
City West Link Construction support site (WHT12)
Glebe Island Construction support site (WHT3)
0
200 m
Legend
Construction Support Site
Site Access- Out
Site Access- In


Legend
Inner West Utility works location
Site access & egress routes
Victoria Rd
Darling St
Belmore St
Denison St
Evans St
Foucart St
Gordon St
Alfred St
Cheltenham St
O'Neill St
Cecily St
Justin St
Lamb St
Lilyfield Rd
MOC
Catherine St
City West Link
Balmain Rd

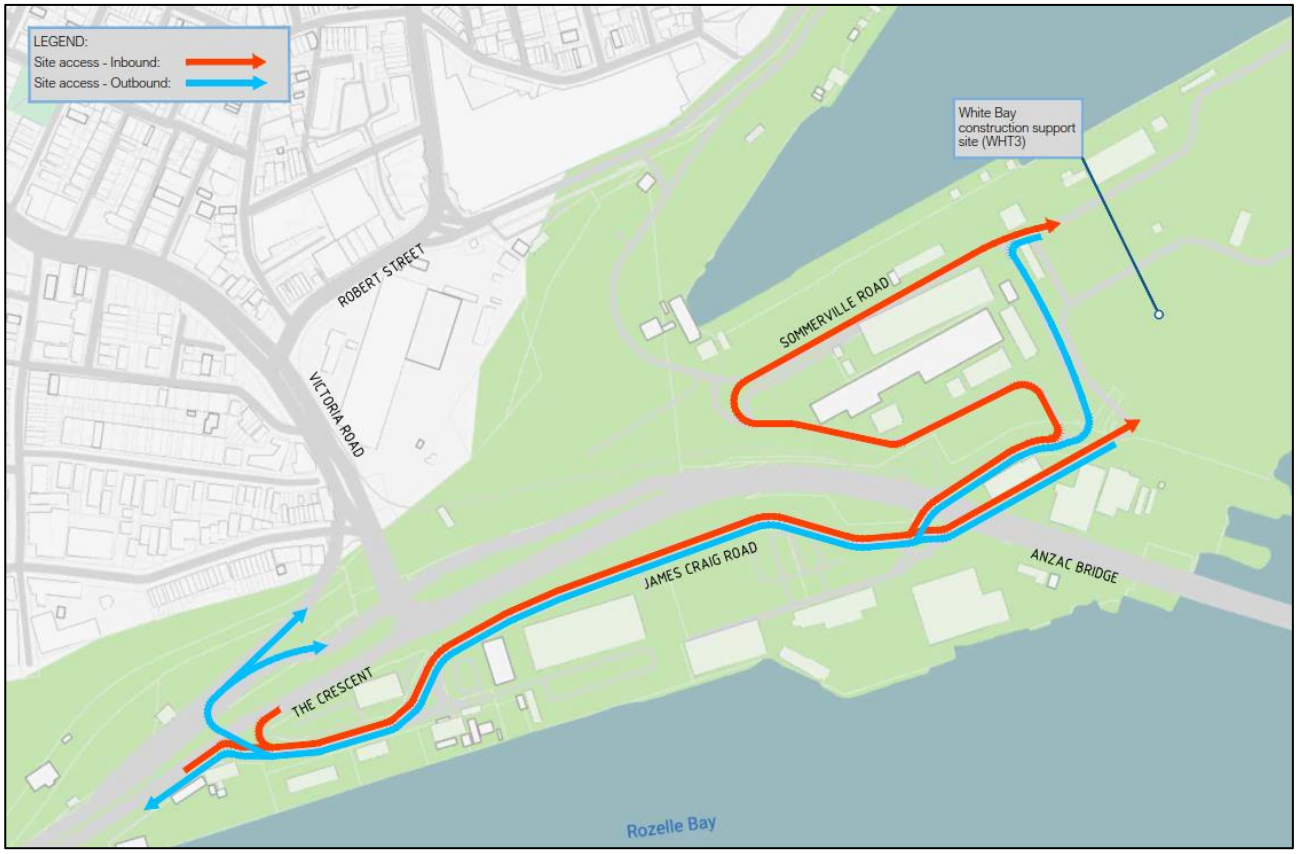
Appendix B: Parking survey results

Time of survey	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
1. Justin Street				
AM PEAK	78	29	107	73%
SCHOOL PICK-UP	68	39	107	64%
PM PEAK	61	46	107	57%
SATURDAY	60	47	107	56%
2. Lamb Lamb Street				
AM PEAK	72	44	116	62%
SCHOOL PICK-UP	60	56	116	52%
PM PEAK	82	34	116	71%
SATURDAY	33	83	116	28%
3. Ryan Street				
AM PEAK	85	73	158	54%
SCHOOL PICK-UP	74	84	158	47%
PM PEAK	88	70	158	56%
SATURDAY	87	71	158	55%
4. Alberto Street				
AM PEAK	30	12	42	71%
SCHOOL PICK-UP	30	12	42	71%
PM PEAK	30	12	42	71%
SATURDAY	30	12	42	71%
5. Joseph Street				
AM PEAK	7	9	16	44%
SCHOOL PICK-UP	8	8	16	50%
PM PEAK	8	8	16	50%
SATURDAY	8	8	16	50%
6. Cecily St (south of O'Neil)				
AM PEAK	38	25	63	60%
SCHOOL PICK-UP	36	27	63	57%
PM PEAK	45	18	63	71%
SATURDAY	53	10	63	84%
7. Cecily St (Sunnyside to O'neill)				
AM PEAK	13	9	22	58%
SCHOOL PICK-UP	11	11	22	50%
PM PEAK	15	7	22	68%
SATURDAY	12	10	22	55%
8. Faucart				
AM PEAK	9	3	12	75%
SCHOOL PICK-UP	11	1	12	92%
PM PEAK	12	0	12	100%
SATURDAY	10	2	12	83%
9. Alfred				
AM PEAK	28	7	35	80%
SCHOOL PICK-UP	24	11	35	69%
PM PEAK	23	12	35	66%
SATURDAY	30	5	35	86%
10. Evans				
AM PEAK	56	26	82	68%
SCHOOL PICK-UP	61	21	82	74%
PM PEAK	71	11	82	87%
SATURDAY	63	19	82	77%
11. Belmore				
AM PEAK	25	8	33	76%
SCHOOL PICK-UP	30	3	33	91%
PM PEAK	31	2	33	94%
SATURDAY	30	3	33	91%

Time of survey	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
12. Red Lion				
AM PEAK	30	3	33	91%
SCHOOL PICK-UP	29	4	33	88%
PM PEAK	32	1	33	97%
SATURDAY	24	9	33	73%
13. Percy St				
AM PEAK	20	1	21	95%
SCHOOL PICK-UP	16	5	21	76%
PM PEAK	21	0	21	100%
SATURDAY	19	2	21	90%
14. Denison				
AM PEAK	46	37	83	55%
SCHOOL PICK-UP	53	30	83	64%
PM PEAK	47	36	83	57%
SATURDAY	53	30	83	64%
15. Easton				
AM PEAK	11	2	13	85%
SCHOOL PICK-UP	8	5	13	62%
PM PEAK	10	3	13	77%
SATURDAY	9	4	13	69%
16. Withecombe St				
AM PEAK	22	2	24	93%
SCHOOL PICK-UP	20	4	24	83%
PM PEAK	24	0	24	100%
SATURDAY	23	1	24	96%
17. Hancock St				
AM PEAK	13	1	14	90%
SCHOOL PICK-UP	14	0	14	100%
PM PEAK	13	1	14	93%
SATURDAY	11	3	14	79%
18. Brockley				
AM PEAK	10	1	11	91%
SCHOOL PICK-UP	10	1	11	91%
PM PEAK	11	0	11	100%
SATURDAY	9	2	11	82%
19. Cheltenham				
AM PEAK	9	1	10	93%
SCHOOL PICK-UP	8	2	10	80%
PM PEAK	10	0	10	100%
SATURDAY	10	0	10	100%
20. O'Neill St				
AM PEAK	35	32	67	53%
SCHOOL PICK-UP	35	32	67	52%
PM PEAK	40	27	67	60%
SATURDAY	31	36	67	46%
21. Lilyfield Rd Ryan to Justin				
AM PEAK	12	25	37	33%
SCHOOL PICK-UP	12	25	37	32%
PM PEAK	13	24	37	35%
SATURDAY	12	25	37	32%

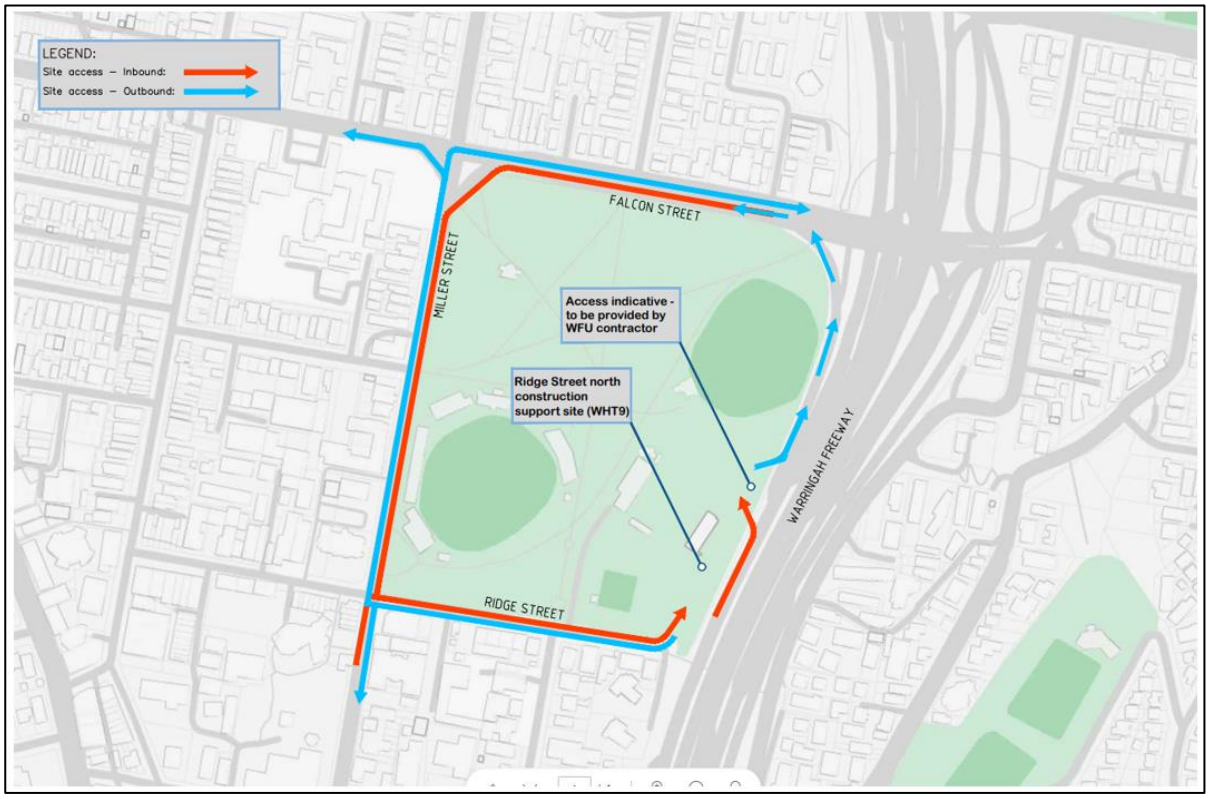
Total average				
Time of survey	Occupied spaces	Unoccupied spaces	Total available spaces	Parking occupancy
AM PEAK	650	349	999	65%
SCHOOL PICK-UP	618	381	999	62%
PM PEAK	687	312	999	69%
SATURDAY	617	382	999	62%

Appendix B2 Heavy vehicle routes to construction support sites



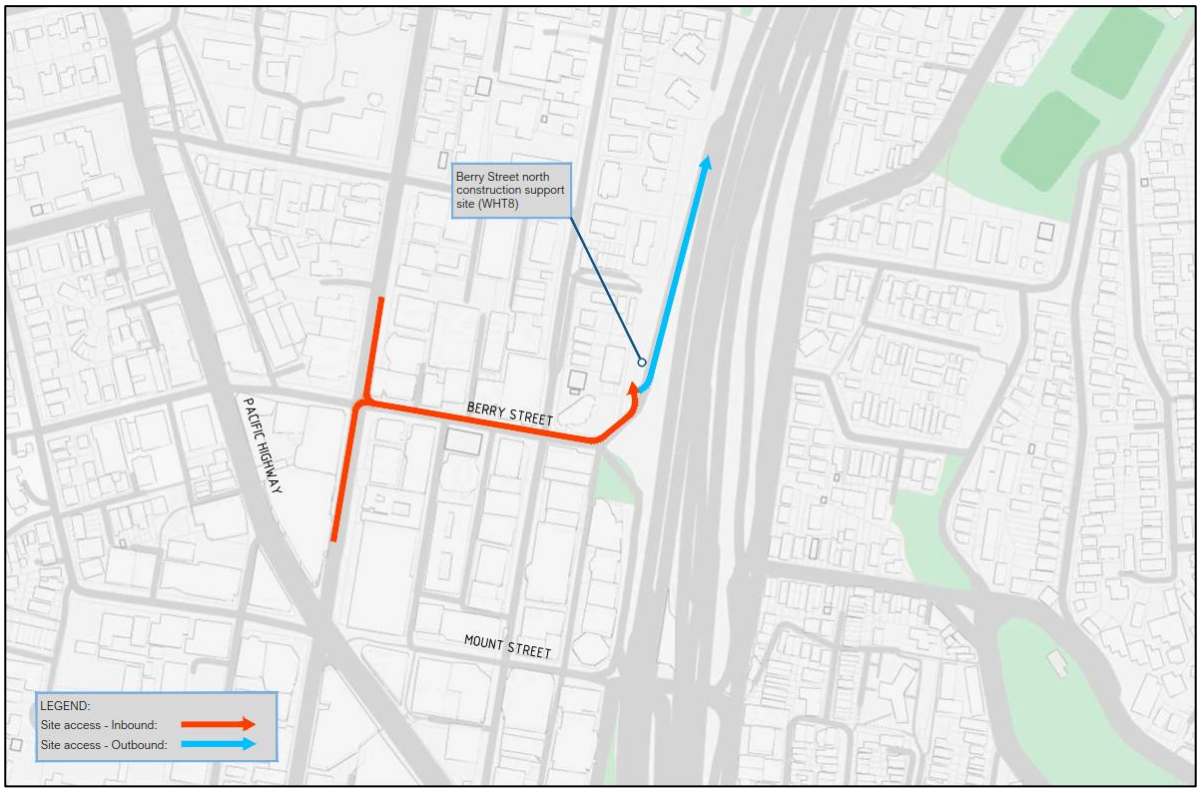
(Reference: Acciona original)

Figure 8-1: Indicative construction vehicle routes – White Bay WHT3 (MCAF3)



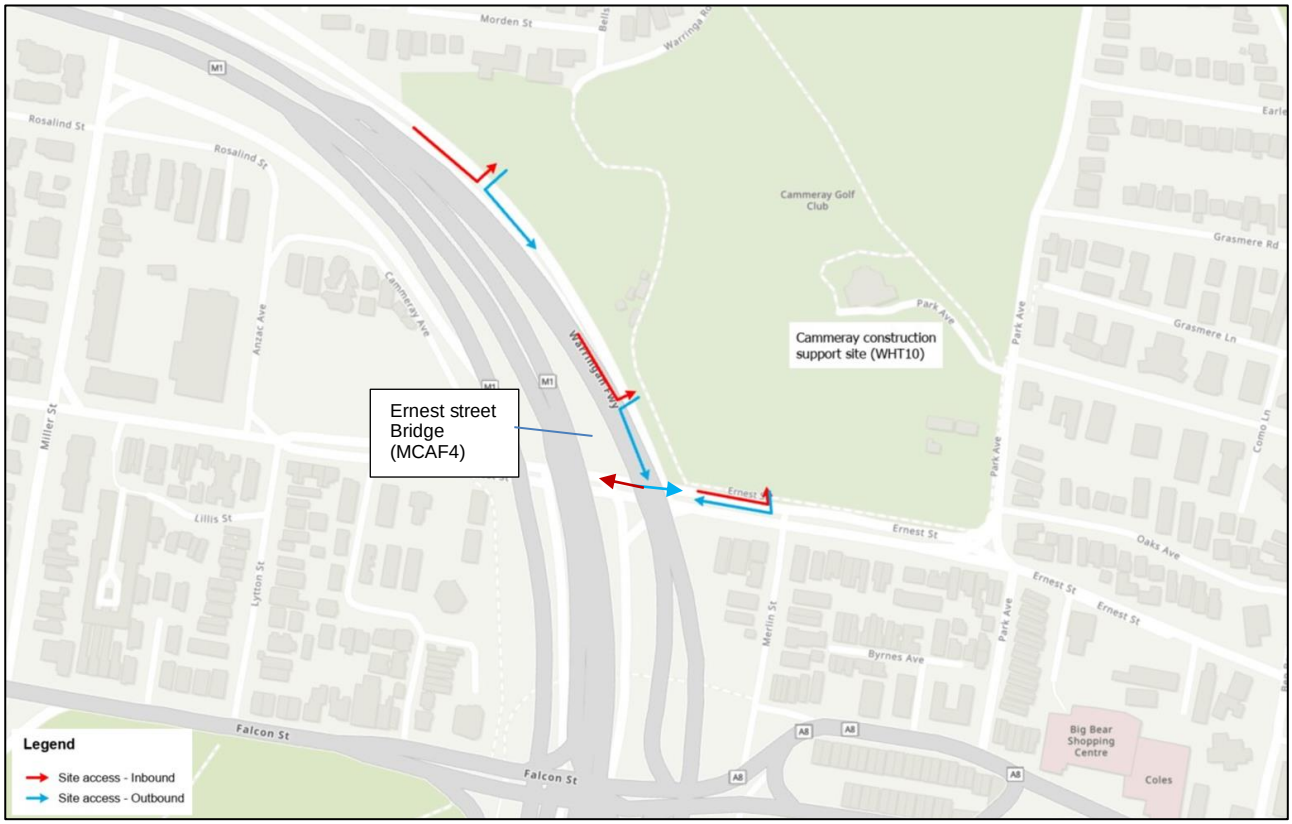
(Reference: Acciona original)

Figure 8-2: Indicative construction vehicle routes – Ridge Street North WHT9



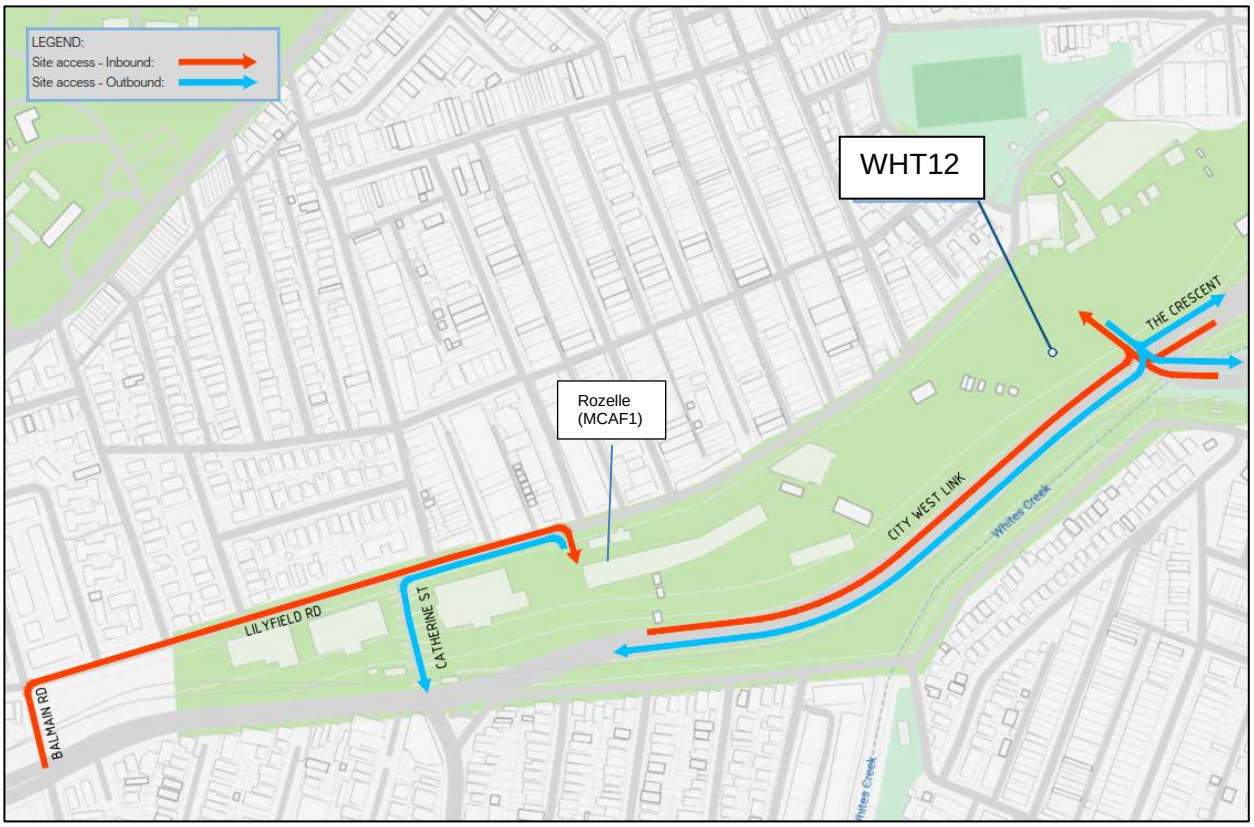
(Reference: Acciona original)

Figure 8-3: Indicative construction vehicle routes – Berry Street North WHT8



(Reference: Acciona original)

Figure 8-4: Indicative construction vehicle routes – Cammeray Golf Course WHT10



(Reference: Acciona original)

Figure 8-5: Indicative construction vehicle routes – Rozelle Rail Yards WHT12 (MCAF1)

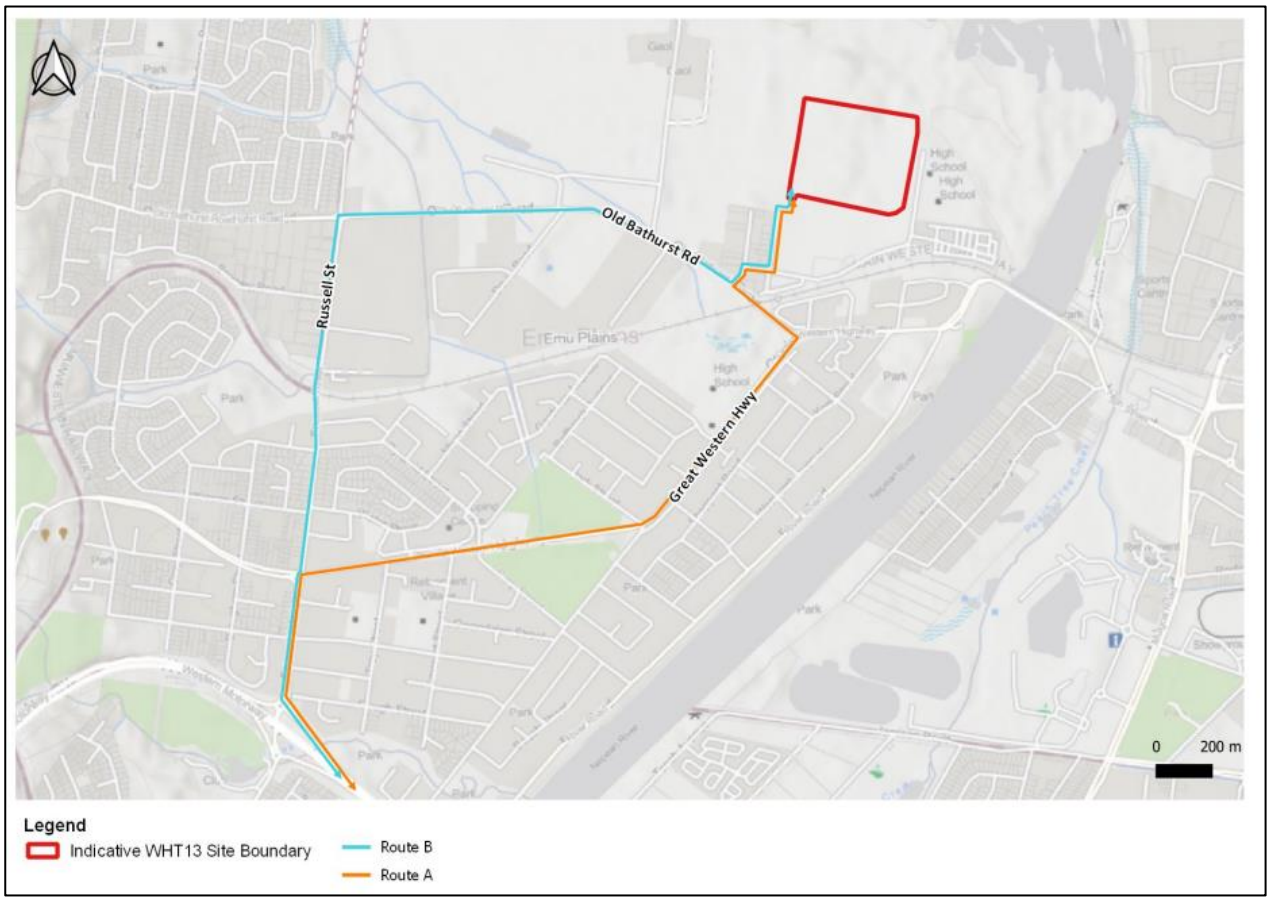


Figure 8-6: Indicative construction vehicle route – Emu Plains WHT13 (MCAF2)

Appendix B3 Heavy Vehicle Routes not identified in Appendix F of the EIS

[Information to be progressively updated if additional local roads are identified during construction]

Local road	Duration	Description of use during construction	Description of potential impacts
Belmore Street, Lilyfield	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Evans Street, Lilyfield	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Denison Street, Lilyfield	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Cheltenham Street, Lilyfield	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
O'Neill Street, Lilyfield[1]	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Cecily Street, Lilyfield	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Alberto Street, Lilyfield	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Lamb Street, Lilyfield	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Justin Street, Lilyfield[1]	27 June 2024 till 30 June 2025	Heavy and light vehicle access to the 33kV utility installation work sites.	Increased heavy and light vehicle movements on local road network.
Note [1] subject to the conditional approval that no heavy vehicle movements occur along Justin Street and O'Neill Street adjacent to the Lilyfield Early Learning Centre (LELC) during peak drop-off and pick-up times (7:30am to 9:30am and 4:00pm to 6:00pm) on weekdays.			

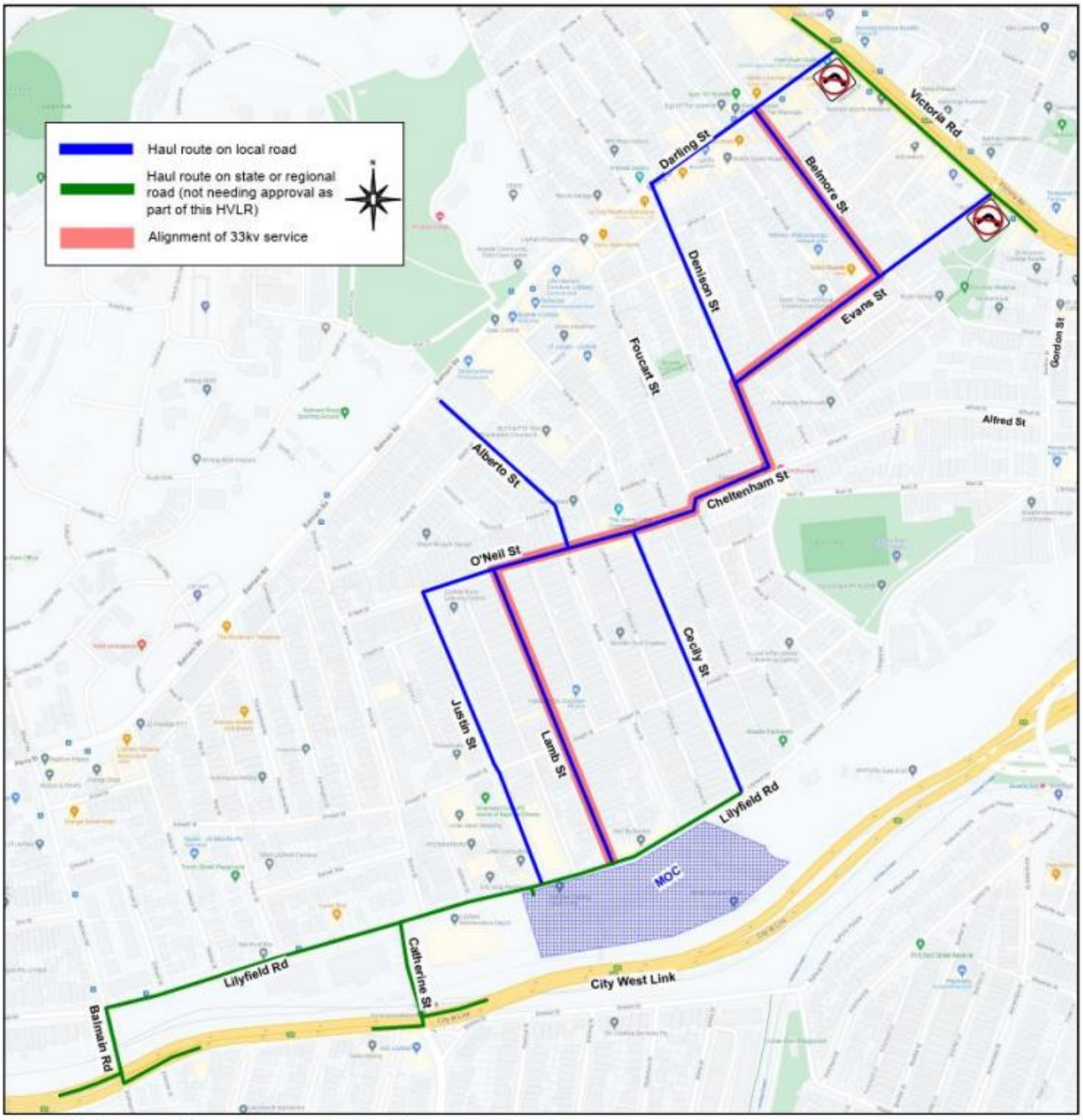


Figure 2 - Heavy vehicle routes required for the proposed works