Appendix B

Traffic, Transport and Access Management Sub-Plan

STW-JHC-PLN-00-EN-002-000002

Western Harbour Tunnel Stage 3A

31 October 2022

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Document control

Revision	Date	Prepared by	Reviewed by	Remarks
A1	10/05/2022	Isabel Wong	Kathy Lloyd Charles Scarf	Internal review
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B	10/06/2022	Adrian Broger	Kathy Lloyd	External review by TfNSW/ER
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This TTAMP as part of the CEMP is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the Project website.

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Glossary / Abbreviations

Table 1-1: Table of common abbreviations used within this document

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*
CCS	Community Communication Strategy
CEMP	Construction Environmental Management Plan
CJP	Customer Journey Planning
CPAS	Construction Parking and Access Strategy
CSSI	Critical State Significant Infrastructure
DPE	Department of Planning and Environment (formerly the Department of Planning, Industry and Environment)
DPIE	NSW Department of Planning, Industry and Environment (now known as Department of Planning and Environment)
EIS	Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement (January 2020)
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	NSW Environment Protection Authority
ER	Environmental Representative
JHCPB	John Holland CPB Contractors
LoS	Level of Service
MCoA	Minister's Condition of Approval
Minister, the	Minister for Planning and Homes
The Principal	Transport for NSW
the Project	Western Harbour Tunnel project Stage 3A, a component of the Western Harbour Tunnel and Warringah Freeway Upgrade project

Abbreviation	Expanded text
REMM	Revised Environmental Management Measure
Roads and Maritime	Former Roads and Maritime Services (now TfNSW)
ROL	Road Occupancy Licence
RtS	Response to Submissions Report
SMART	Specific, Measurable, Achievable, Realistic and Time-based
SZA	Speed Zone Authorisation
TCG	Traffic Control Group
TCP	Traffic Control Plan
TGS	Traffic Guidance Scheme
TMC	Traffic Management Centre
TMP	Traffic Management Plan
TSD	Traffic Staging Drawing
TfNSW	Transport for New South Wales
TMC	Transport Management Centre
TTAMP	Traffic, Transport and Access Management Plan (this document)
TTCR	Temporary Traffic Control Room
VMP	Vehicle Movement Plan
VMS	Variable message sign
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 Stage 3A of the Western Harbour Tunnel project (the Project), a component of the Western Harbour Tunnel and Warringah Freeway Upgrade project.

This TTAMP has been prepared for the Project to address the relevant 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) and applicable guidelines and legislation.

This Plan describes how the Project propose to manage potential traffic impacts during the construction of Stage 3A (for further details on staging refer to the Staging Report). Other construction stages, and operational traffic and transport impacts and management measures are not included within this TTAMP.

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 future connection to the proposed Beaches Link and Gore Hill Freeway Connection project.

The Western Harbour Tunnel (WHT) will connect the approved M4-M5 Link in Rozelle to the Warringah Freeway at North Sydney/Cammeray.

The Western Harbour Tunnel and Warringah Freeway Upgrade project is being constructed in three stages. The Project (Stage 3A) includes the following key features:

- A portion of the twin mainline tunnels connecting the M4-M5 at Rozelle to the Warringah Freeway, near Cammeray, of about 2 kilometres long and commencing from the stub tunnels at the M4-M5 Link in Rozelle and terminating underground at Birchgrove
- Ventilation cavern and tunnel excavation in Rozelle
- Limited in tunnel operational infrastructure including road pavement and drainage to enable Stage 3B works.

The construction of the Project will be supported by two surface based ancillary facilities, located at the Western Harbour Tunnel cut and cover structure in Rozelle (WHT12) and at White Bay in Rozelle (WHT3). Figure 1–1 below shows the extent of tunnelling works and any ancillary sites required for Stage 3A construction activities.

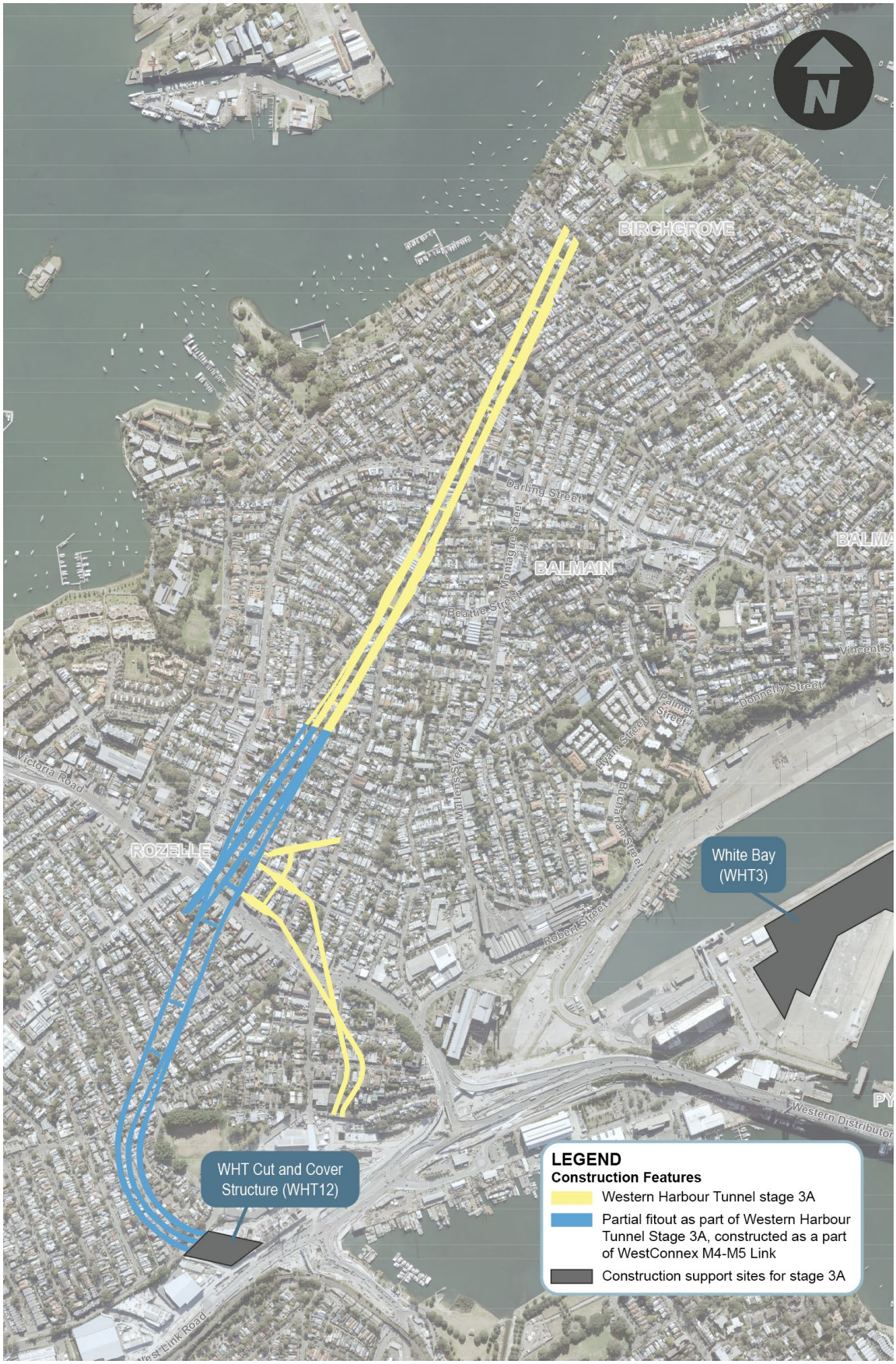

Figure 1–1 WHT Stage 3A project

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1.3 Scope of the Sub-Plan

The scope of this TTAMP is to describe how the Project will manage potential traffic, worker parking, transport and access impacts during construction of the Project. Operational impacts and measures do not fall within the scope of this Plan.

1.4 Environmental management system overview

The environmental management system overview is described in Section 1.5 of the Project CEMP.

1.5 Interface with other planning documents

This TTAMP is one of several plans and documents established to manage construction of the Project. 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 for the Project	▪ 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 Communication Strategy and Complaints Management System (CCS)	▪ 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 (CPAS or Strategy)	▪ Identifies and describes how the Project will mitigate impacts resulting from on- and off-street parking changes during construction ▪ Ensures appropriate controls and procedures are implemented during construction activities to address potential parking impacts around the Project footprint

2 Purpose and objectives

2.1 Purpose

The purpose of this TTAMP is to describe how the Project 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 safeguards detailed in the Response to Submissions Report (RtS), 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, the Project will meet the performance outcomes from the EIS 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	Source
• 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	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 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	Heavy vehicle routes Complaints register Weekly inspection record	EIS – Chapter 28

Performance outcome	How performance outcome will be addressed	Records	Source
and the level of service are effectively managed • Works are compatible with existing infrastructure and future transport corridors.	Section 7.4 and 7.5 and Section 3.5 of the CEMP.		
	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	EIS – Chapter 28
	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 6.9 • Undertake training, inspections, auditing and recording in accordance with Section 7.4 and 7.5 and Section 3.5 of the CEMP.	Site Specific Traffic Management Plans Complaints register	EIS – Chapter 28
	Maintain pedestrian and cyclist safety along surface roads near the project • Section 6.7 outlines processes and mitigation measures which will be implemented • Undertake training, inspections, auditing and recording in accordance with Section 7.4 and 7.5 and Section 3.5 of the CEMP.	Site Specific Traffic Management Plans Complaints register	EIS – Chapter 28

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

Legislation relevant to traffic management also includes the *Environmental Planning and Assessment Act 1979* (EP&A Act), under which the project approval was granted. Relevant provisions of the EP&A Act are explained in the register of legal and other requirements included in Appendix A1 of the Project CEMP.

3.1.2 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, 2009-2020 – Parts 1-8
- AUSTROADS Guide to Road Safety, 2006-2019 – Parts 1-9
- AUSTROADS Road Safety Audit Second Edition, 2019: Checklist 4. Pre-opening scheme audit
- AUSTROADS Road Safety Audit Second Edition, 2019: Checklist 5: Roadwork traffic scheme audit
- AUSTROADS Road Safety Audit Second Edition, 2019: Checklist 6: Existing roads: road safety audit
- TfNSW Traffic Control at Worksites Manual (Version 5, 2018)
- Roads and Maritime Services Truck and Plant Requirements: Specification (2019)
- Roads & Traffic Authority NSW Bicycle Guidelines Version 1.2, 2005
- Austroads Cycling Aspects of Austroads (2017)
- TfNSW Cycleway Design Toolbox (2020)
- 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 – 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 Roads & Traffic Authority NSW Guide to Traffic Generating Developments, 2002 TfNSW Technical Direction TDT 2013/04a Guide to Traffic Generating Developments

3.2 Ministers Conditions of Approval

The MCoA relevant to this plan are listed in Table 3-1 below. A cross reference is also included to indicate where the condition is 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	Section 4 Table 4-1,	This TTAMP has been prepared in consultation with the relevant agencies identified in MCoA C4(a). A summary of consultation is included in Table 4-1.

MCoA No.	Condition Requirements	Document reference	How addressed
	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.		
Identification of workforce and compounds			
A47	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.	Section 6.2.3 Table 6-4-TTAMP18	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 6.2.3.

<table>
<tr><th>MCoA No.</th><th>Condition Requirements</th><th>Document reference</th><th>How addressed</th></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
Table 4-1</td><td>This TTAMP has been prepared in consultation with the relevant agencies identified in this condition.
A summary of consultation is included in Table 4-1.</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 2.2	This TTAMP has been prepared in accordance with the environmental performance outcomes identified in the EIS and RtS as outlined in Section 2.2.
	(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 RtS relating to traffic, transport and access are detailed in Table 3-2 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.

MCoA No.	Condition Requirements	Document reference	How addressed
	(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 3.2.1 of the CEMP)	Traffic, transport and access issues requiring management during the Project have been identified through the EIS and RtS an Environmental Risk Assessment Workshop. These issues, including cumulative impacts, have been outlined in Appendix A2 of the CEMP. Environmental risk analysis will be ongoing, with regular review in accordance with Section 3.2.1 of the CEMP to ensure effective management of traffic impacts. Traffic, transport and access issues, including marine traffic, are detailed in Section 5 of this Plan, with cumulative impacts outlined in Section 5.4. Management of cumulative impacts is discussed in Section 6.12. Management measures identified in Table 6-4 of this TTAMP have been developed with consideration of SMART principles.

MCoA No.	Condition Requirements	Document reference	How addressed
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 6.9 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 6.9. Where impacts to private property access is unavoidable during construction, property owners will be consulted in advance to develop appropriate alternative access arrangements.

MCoA No.	Condition Requirements	Document reference	How addressed
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 6.9 Table 6-4 - TTAMP03	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 6.9.
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 6.2.5 Table 6-4 -TTAMP04	Section 6.2.5 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.

MCoA No.	Condition Requirements	Document reference	How addressed
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, 5-9, 5-11 inclusive of Appendix F of the EIS must be approved by the Planning Secretary and included in the Traffic, Transport and Access Management CEMP Sub-plan.	Section 5.1.1 Section 6.2.6 Appendix B2	The roads to be used by Project heavy vehicles are outlined in Section 6.2.5 and Section 6.2.6. Local roads beyond those already shown in EIS are not currently proposed for this stage (Stage 3A) of the WHT. Local roads used by heavy vehicles to directly access the construction boundary and ancillary facilities that are not shown in Figure 5-7, 5-9, 5-11 inclusive of Appendix F of the EIS will be approved by the Planning Secretary and included in the Traffic, Transport and Access Management CEMP Sub-plan prior to 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	Section 6.2.6	Local roads beyond those already shown in EIS are not currently proposed for this stage (Stage 3A) of the WHT.

MCoA No.	Condition Requirements	Document reference	How addressed
	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; 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.		
E134	Opportunities to maximise spoil / dredging material removal by non road methods must be investigated and implemented where reasonably practicable to minimise movements by road.	Section 6.2.7	The Project does not include any dredging materials. Tunnel spoil will be removed using major arterial roads or motorways.

MCoA No.	Condition Requirements	Document reference	How addressed
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 6.2.3 Table 6-4 -TTAMP09	Spoil heavy vehicles used by the project will be monitored in real time as outlined in Section 6.2.3. 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.
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 6.13 Table 6-4 - TTAMP10	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. Details regarding the road dilapidation surveys are outlined in Section

MCoA No.	Condition Requirements	Document reference	How addressed
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 6.13 Table 6-4	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 6.13.
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 6.7 Table 6-4 -TTAMP12	Safe pedestrian and cyclist access will be maintained around work sites during the works, as detailed in Section 6.7.

MCoA No.	Condition Requirements	Document reference	How addressed
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 6.2.2, 6.2.3 and 6.2.5 Table 6-4 -TTAMP13, TTAMP14, TTAMP15	Construction vehicles will be managed in accordance with the measures in Section 6.2.2 and 6.2.3, to minimise impacts on parking, roads in the vicinity of the construction support sites, pedestrians and cyclists. Spoil haulage routes are included in Section 5.1.1 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:	Section 6.10 Appendix B1 Table 6-4 -TTAMP16	A Construction Parking and Access Strategy has been prepared for the Project and has been included in Appendix B1 of this Plan. The approved Strategy will be implemented before impacting on on-street parking.

MCoA No.	Condition Requirements	Document reference	How addressed
	a) achieving the requirements of Condition E139; 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		

MCoA No.	Condition Requirements	Document reference	How addressed
	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 and off-site car parking facilities (where these are provided) and between construction sites;		

MCoA No.	Condition Requirements	Document reference	How addressed
	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.		

MCoA No.	Condition Requirements	Document reference	How addressed
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 6.9 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 is provided in Section 6.9.
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 3.1.2 Table 6-4	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
E145	An independent Road Safety Audit must be undertaken to assess the safety performance of new or modified local road, parking, pedestrian and cycle	Section 7.5 Table 6-4 -TTAMP17	Independent Road Safety Audits will be undertaken to assess the safety performance of new and modified local roads, parking and pedestrian

MCoA No.	Condition Requirements	Document reference	How addressed
	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.		and cyclist infrastructure provided as part of the Project as outlined in section 7.5.
Public Transport			
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	Section 6.8	There are no impacts to public transport anticipated for the Project. In the event that any bus stops required to be closed or relocated that the Project will ensure to comply with the requirement of MCoA.

MCoA No.	Condition Requirements	Document reference	How addressed
	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.		
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 6.8	There are no impacts to public transport anticipated for the Project. In the event that any bus stops required to be closed or relocated that the Project will ensure to comply with the requirement of MCoA.

3.3 Environmental Management Measures

Relevant Revised Environmental Management Measures (REMMs), as identified in Part D of the RtS, are listed in Table 3-2 below. This includes reference to required outcomes, the timing of when the commitment applies, and where it has been addressed in the TTAMP.

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

Ref #	Commitment	Timing	Document reference	How Addressed
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.	Pre-construction	Section 6.13 Table 6-4 - TTAMP10	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.
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.	Construction	Section 4 Community Consultation Strategy	A Traffic and Transport Liaison Group (TTLG) 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.	Construction	Sections 4, 6.2.2, 6.8 and 7.3 Community Consultation Strategy	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, as detailed in the Project Community Communication Strategy.

Ref #	Commitment	Timing	Document reference	How Addressed
CTT6	Construction road traffic will be managed to minimise movements during peak periods.	Construction	Section 6.2 Table 6-4 - TTAMP05	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 6.2.3, 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	Construction	Sections 6.2.2 and 6.2.3 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.	Construction	Section 6.2.2, 6.6 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

Ref #	Commitment	Timing	Document reference	How Addressed
				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.
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.	Construction	Section 6.10 Appendix B1 Table 6-4 - TTAMP16	A Construction Parking and Access Strategy has been prepared for the Project and has been included in Appendix B1 of this plan. Construction vehicles (including light and heavy vehicles) associated with the Project will be managed to minimise parking on public roads. Alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected property owners and/or businesses and implemented prior to the disruption.

Ref #	Commitment	Timing	Document reference	How Addressed
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.	Construction	Section 6.2.3 Table 6-4-TTAMP14	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.	Construction	Section 6.2.2 Section 6.2.7 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. All closures will be approved by TfNSW, Traffic Management Centre (TMC) & Customer Journey Planning (CJP) through the Traffic Management Plan (TMP) & Road Occupancy Licence (ROL) process.
LP3	Where impacts to private property access is unavoidable during construction, property owners will be consulted in advance to develop appropriate alternative access arrangements.	Construction	Section 6.9 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 6.9.

4 Consultation

4.1 Consultation for TTAMP Preparation

This TTAMP has been developed and finalised in consultation with the agencies 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 are summarised in Table 4-1.

4.2 Ongoing consultation

Any ongoing consultation with agencies, where required, will be undertaken in accordance with Section 6 of this Plan. A Traffic and Transport Liaison Group (TTLG) will be formed to consult on traffic and transport impacts and will include senior representatives from the following stakeholders:

- DPE
- TfNSW
- CJP
- NSW Police Service
- Fire and Rescue NSW
- Sydney Buses
- NSW Bus and Coach Association
- NSW Taxi Council
- Inner West Council
- Representatives of any other Authority or road user group affected by the Project

The TTLG would meet at least once every month, or at another frequency that is acceptable to all members of the group. A report would be distributed to relevant stakeholders as described in Section 7.7.2.

Regular updates will be provided through a range of tools outlined within the Community Communication Strategy, including notification of proposed transport network changes and maritime restrictions, monthly meetings (or at a frequency agreed with key stakeholders), community updates and notifications and emails, to ensure all upcoming changes and impacts are communicated in a timely fashion.

Additional consultation with the above stakeholders will be triggered as a result of incident emergency response or special event planning.

Community feedback and complaints relating to traffic, transport and access will be managed in accordance with the Community Communication Strategy and Complaints Management System.

Table 4-1: Summary of consultation undertaken for the development of this Plan

Agency	Date of engagement	Date correspondence received	Key issues	Where addressed / how addressed	Outstanding issues / why not addressed
Inner West Council (IWC)	6/7/2022 - Initial contact with IWC to overview the management plans and organise a briefing to be run by the Project. 15/7/2022 - Submission of TTAMP to IWC formally via email 15/7/2022 – submission of TTAMP formally via Planning Portal 18/7/22 - Project briefing held with key members from IWC to overview Stage 3A. 16/8/2022 – follow up email to IWC to check whether any comments on the plan would be provided	16/8/2022 – Email from IWC received regarding the TTAMP and CPAS	• Impacts on pedestrians and cyclists • Heavy Vehicle Routes	• Section 6.7 • Appendix B2 updated to show vehicle direction where possible	• N/A

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, 5-9, 5-11 inclusive of Appendix F of the EIS are approved for use by heavy vehicles on the Project. However, Victoria Road (WHT2) and the northern section of White Bay (WHT3) will not be used on the Project as construction support sites. The Western Harbour Tunnel cut and cover structure (WHT12) and the southern section of White Bay (WHT3) will be construction support sites for the Project. Vehicles will be considered using the routes to access Rozelle Yards and the southern section of White Bay. The amendments of the road usage and site supports are shown in Appendix B2. There are no 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, 5-9, 5-11 of Appendix F of the EIS. Additional details are provided in Section 6.2.6 of this Plan.

5.2 Parking management

A Construction Parking and Access Strategy (CPAS) has been prepared to identify and mitigate impacts resulting from on and off-street parking changes during construction of the CSSI and is included in Appendix B1.

5.3 Property Access Impacts

There are no property access impacts have been identified on the Project.

5.4 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:

- Sydney Metro West
- M4-M5 Link
- NSW Port Authority's operations from White Bay (eg 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. 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).

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 RtS, 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 Construction stage traffic management

6.2.1 Construction staging

There will be a single construction traffic stage for the Project. Configuration of the temporary access to WHT12 will be undertaken by the Rozelle Interchange Project prior to the commencement of the Project and will remain in place for the duration of the works.

No road changes are proposed for the use of WHT3.

6.2.2 Construction site traffic management

To safely manage interactions between construction vehicles and workers, and public vehicles, pedestrians and cyclists at access and egress points and construction works, 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 specify the road safety and traffic management measures to be applied while undertaking construction works to ensure pedestrian, cyclist and motorist safety.

The Project 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. The Project will manage local road closures and maintain adequate property access. This will be undertaken in consultation with Roads and Maritime, local councils and property owners likely to be impacted.

- Temporary signalised site access points at construction support sites will be designed and constructed where required, in accordance with TfNSW Signal Design (and relevant Traffic Signal Drawings), Austroads Guide to Traffic Management and Austroads Guide to Road Design. They will be developed in consideration of construction vehicle movements with the provision of a deceleration lane on approach where there is capacity
- Signage will be installed to warn motorists, pedestrians and cyclists of trucks turning into and out of site accesses
- 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. Specific management measures (TTAMP05, TTAMP06, TTAMP07 and TTAMP08) are included in Table 6-4.

6.2.3 Construction support site traffic management

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

- Western Harbour Tunnel cut and cover structure (WHT12)
- White Bay construction support site (WHT3) (Southern section of White Bay)

There are a range of hazards to vehicles operating onsite, including rough surfaces, other larger plant and existing infrastructure. The safety of construction personnel and the community is paramount importance. 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 ancillary facilities including the expected peak (or maximum) heavy and light vehicle movements, which are based on those presented in the EIS. It is noted that the values provided will fluctuate downwards depending on the works being undertaken and will not be consistent throughout the Project.

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. Details of the project identification markings have been included in this plan for approval by the Planning Secretary prior to the heavy vehicles used for spoil haulage being utilised for the CSSI. A specific management measure (TTAMP18) is provided in Table 6-4.

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. A specific management measure (TTAMP09) is provided in Table 6-4.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. A specific management measure (TTAMP15) is provided in Table 6-4. To avoid idling and queuing of project heavy vehicles on state and regional roads the following truck marshalling areas have been identified:

- The truck marshalling area will be located predominantly underground and within the approach to the spoil loading area. The spoil loading area is approximately 500m into the tunnel. This has been designed to allow trucks to arrive at a safe and secure area to park up before reaching the spoil storage area for loading. This provides sufficient space within the site for vehicles, limiting queuing and parking of heavy vehicles on public roads in the vicinity of the Project site.
- Site supervisors will be tasked with coordinating vehicles, utilising radios and GPS tracking to maximise just in time arrival and adjust truck flows with changes in local traffic conditions.

6.2.4 Temporary Traffic Control Room

The Project will establish and operate a Temporary Traffic Control Room (TTCR) for this stage (Stage 3A). The TTCR will operate 24 hours a day, seven days a week for the duration of construction phase. The TTCR will undertake:

- Queuing management at the site access/egress locations to ensure the accesses are free of obstructions to prevent any queues spilling back onto the external road network,
- Site traffic management for construction traffic queueing, marshalling inside tunnel site (using CCTV feeds),
- Monitoring general traffic conditions in relation to construction (using CCTV feeds),
- Incident detection (using CCTV feeds, construction personnel reports and/or the TMC),
- Incident logging and management as required,
- ROL supervision and management (includes reporting active ROLs to TMC), and
- Incident Response Team supervision and direction

The TTCR will be staffed by at least one experienced control room operator at all times. This operator will have radio, telephone and CCTV monitors connected to TMC CCTVs capable of monitoring the core road network.

The CCTV system will provide visual coverage of the views at the following site access and egress locations with a distance at least 200m in the field of view. The Project will discuss with TMC the feasibility of a direct feed to their control room.

Table 6-1: Peak traffic generation for Stage 3A Ancillary Facilities

Construction Site	Traffic control (Y/N)	Access/Egress	Parking on site (Y/N)	Peak daily movements		Morning peak vehicle movements (6am to 10am)		Evening peak vehicle movements (3pm to 7pm)	
				Light	Heavy	Light	Heavy	Light	Heavy
WHT cut and cover structure in Rozelle (WHT12)	Traffic lights	Y	Limited	306	586	134	149	137	153
White Bay ancillary site (WHT3)	N	Y	Y	530	700	205	189	255	189

6.2.5 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. 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. Where a local road has been identified which was not nominated in Figures 5-7, 5-9, 5-11 of Appendix F (Technical working paper: Traffic and transport) of the EIS, further justification for the route is outlined in Section 6.2.6. However, Victoria Road (WHT2) and the northern section of White Bay (WHT3) will not be used on the Project as construction support sites. The WHT cut and cover structure (WHT12) and the southern section of White Bay (WHT3) will be ancillary support (parking, laydown, office and amenities blocks) sites for the Project. Vehicles will be considered using the routes to access WHT12 and the southern section of WHT3. The amendments of the road usage and site supports are shown in Appendix B2.

Site access and egress routes will utilise roads which avoid sensitive areas including schools, aged care facilities and childcare facilities wherever possible. These routes were selected to minimise impacts on residents and return construction vehicles to major arterial roads as quickly as possible.

The construction vehicle routes will be provided to sub-contractors for dissemination 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 6.7.

Table 6-2: Access routes for construction support sites

Construction Site	Vehicle Type	Access Route	Road Classification	Justification for route
Western Harbour Tunnel cut and cover structure (WHT12)	Light vehicles	Balmain Road, Lilyfield Road, Catherine Street Loop	Balmain Road: Regional Road Lilyfield Road: Regional Road Catherine Street: Regional Road	Access into site is left in, egress would be right out only. If vehicles are approaching the site from the eastern side (via Victoria Road or the Western Distributor) or from WHT3, this route provides turn around for vehicles to access the site.
		City West Link	State Road	Access and egress from the site
	Heavy vehicles	City West Link	State Road	Access and egress from the site
		Balmain Road, Lilyfield Road, Catherine Street Loop	Balmain Road: Regional Road Lilyfield Road: Regional Road Catherine Street: Regional Road	Access to and from the WHT12 site is left in, right out only. This route has been identified as the most efficient route available for heavy and spoil vehicles travelling from the eastern side of the site (via Victoria Road or the Western Distributor) or from WHT3, this route provides turn around for vehicles to access the site. This route would also be utilised to prevent queuing be experienced on City West Link, in accordance with E139, as a turnaround for vehicles that have been required to used the City West Link/The Crescent/Victoria Road James Craig

Construction Site	Vehicle Type	Access Route	Road Classification	Justification for route
				Road, Sommerville Road and Solomons Way turn around.
		City West Link/The Crescent/Victoria Road James Craig Road, Sommerville Road and Solomons Way	James Craig Road: Local Road Sommerville Road and Solomons Way: Private Road	This route would be used to prevent queuing on City West Link at the site entrance in accordance with E139. Heavy and spoil vehicles would proceed down City West Link towards WHT3 to turn around. This route would be used in conjunction with the Balmain Road, Lilyfield Road, Catherine Street Loop.
		The Crescent / Minogue Crescent / Ross Street	The Crescent / Minogue Crescent / Ross Street: State Road	This route has been identified as the most effect route available to facilitate concrete deliveries from the St Peters' area. This route includes the use of State Roads. No local roads will be used on this route. Vehicles accessing the site from this direction require the use of the Catherine Street loop. Although this route passes Forest Lodge Public School, it will not be a primary route as the primary concrete batch plants are located in Enfield and St Leonards.
	Light vehicles	City West Link/The Crescent	City West Link/The Crescent: State Road	Use required to access to the WHT3 site for parking and laydown area.

Construction Site	Vehicle Type	Access Route	Road Classification	Justification for route
White Bay construction support site (WHT3)		James Craig Road, Solomons Way and Sommerville Road	James Craig Road: Local Road Sommerville Road and Solomons Way: Private Road	
	Heavy vehicles	City West Link/The Crescent/Victoria Road James Craig Road, Sommerville Road and Solomons Way	City West Link/The Crescent/Victoria Road: State road James Craig Road: Local Road Sommerville Road and Solomons Way: Private Road	Direct access to the WHT3 parking and laydown area. Heavy vehicle use is required for the delivery and load out of office and amenity blocks and for laydown purposes located in the WHT3 site.

6.2.6 Construction traffic routes (local roads)

The construction vehicle routes outlined in Section 6.2.5 have been developed, where possible, to avoid local roads outside the construction footprint and maximise the use of state and regional roads. James Craig Road is required to access WHT3 (southern section of White Bay) which is a local road and is outlined in Table 6-3. The use of this local road was identified in the EIS (Figure 5-11 of Appendix F).

Where 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.

Table 6-3: Impacts on local roads

Local road	Description of use during construction	Description of potential impacts
James Craig Road	Access for heavy and light vehicles moving to/from the WHT3 parking and laydown area. Vehicle use is required for the delivery and load out of plant, equipment and tunnel components located in the WHT3 site.	Construction vehicle movements are anticipated to increase vehicle volumes on James Craig Road. These volumes and anticipated impacts are lessened compared to those described in the EIS.

6.2.7 Material removal by non-road methods

The Project does not include removal of any dredged materials. Spoil will be removed using major arterial roads or motorways as this is the most practicable way available to Stage 3A. Removal via non-road means is not suitable due to the location of the WHT12 tunnel support site providing direct access from the site to a major arterial road.

6.3 Road Safety Audit

An appropriately qualified and experienced person will undertake the independent Road Safety Audits during detailed design development (audit of plans). 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. A specific management measure (TTAMP17) is provided in Table 6-4.

6.4 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.

Road Occupancy Licences (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 other 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 except in the case of an emergency, or when directed by Police or Emergency services. 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. The Project will manage local road closures and maintain adequate property access. This will be undertaken in consultation with TfNSW, local councils and property owners likely to be impacted. A specific management measure (TTAMP08) isincluded in Table 6-4.

6.5 Speed 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. JHCPB 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), 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
- Position speed signs away from other traffic control signs and devices
- 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), 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.

6.6 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. Specific management measures (TTAMP06 and TTAMP07) are included in Table 6-4.

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 (AS1743).

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

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 TCP.

6.7 Pedestrians and cyclists

The Project does not anticipate any impacts to pedestrian or cyclist activity due to the nature of the works being undertaken.

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 6.6).

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. A specific management measure (TTAMP12) is included in Table 6-4.

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 (TTAMP13) is included in Table 6-4.

6.7.1 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, 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.

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

6.7.2 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, TfNSW and community stakeholder prior to implementation.

Cyclists on local/urban roads will typically utilise shoulders or dedicated paths where they exist. The cycle network in the Stage 3A surrounds identified in the EIS is shown in Figure 6-1. This consists of a mixture of off-road shared user paths and on-road cycle routes on local and collector roads, none of which directly interact with the tunnel support site access and egress point (WHT12).

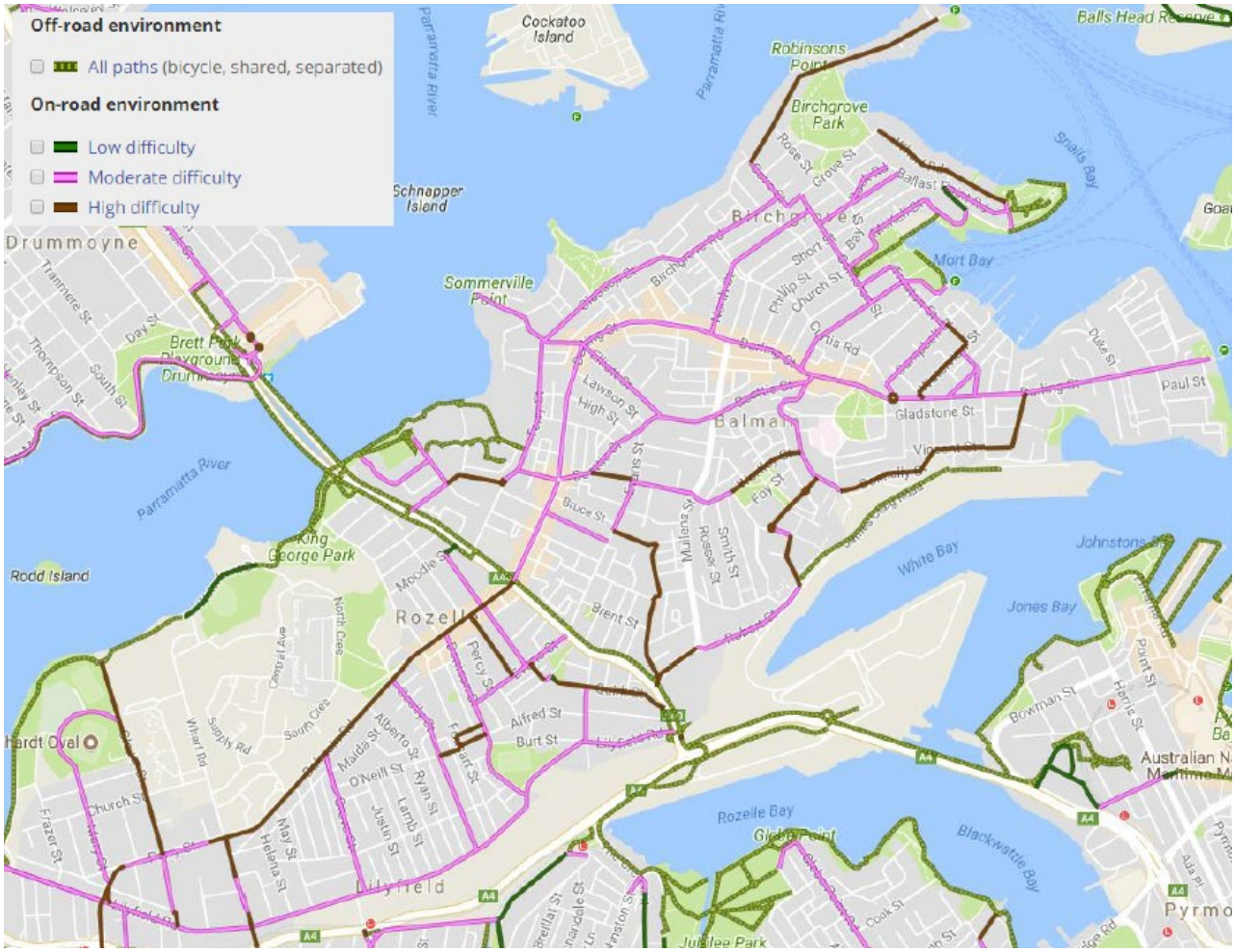

Figure 6–1 Cycle network identified in the EIS

6.8 Public transport

There are no impacts to public transport anticipated for the Project. In the event that any public transport services have to be adjusted, disruptions to the current level of public transport services will be minimised. 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 Communication Strategy developed in line with MCoA B1 to B5. A review of this plan would be undertaken in such circumstances with updates made where required, as outlined in Section 8.

6.9 Property 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 must be developed in consultation with affected businesses, land owners and / or

occupiers and implemented prior to the disruption. Adequate signage and directions to businesses must be provided prior to, and for the duration of, any disruption. A specific management measure (TTAMP02) is provided in Table 6-4.

Any property access physically affected by the Project will be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. A specific management measure (TTAMP03) is provided in Table 6-4.

6.10 Parking management

Construction worker parking will be managed in accordance with the Construction Parking and Access Strategy, which has been prepared, and will be implemented, in accordance with MCoA E140 (refer to Appendix B1). Under this strategy the Project will provide car parking facilities to support its construction support sites to minimise worker parking on local roads and streets. A specific management measure (TTAMP16) is included in Table 6-4.

6.11 Incident management and response

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.

Incident response reporting will be carried out in accordance with Section 3.8 of the CEMP. The Project team will immediately notify the TfNSW Representative of the occurrence of the incident and record the knowledge of the facts. The Traffic Manager, or delegate, is then required to forward a report with the information to TfNSW Representative within two days of the occurrence of the incident.

Furthermore, in case of unplanned incidents such as power failure and public road traffic incidents that occur within the work site, internal construction trucks would be re-routed over a short period of time. The cause of disruption can then be resolved, and the intersection can be returned to normal operation conditions. The Project will communicate the instructions to truck drivers through traffic marshals.

6.12 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 cumulative traffic working group, established in July 2018 to investigate the potential cumulative traffic impacts associated with the concurrent traffic generating activities in the Glebe Island and White Bay area due to construction of the of Rozelle Interchange, Western Harbour Tunnel and Sydney Metro West, along with an expansion of existing operations at Glebe Island by the Port Authority of NSW, developed a range of mitigation measures to be implemented in the area. The Project will implement the following mitigation measures to manage cumulative traffic impacts:

- Implementation and incentivising bus services to transport suitable project personnel to and from site (refer to mitigation measure TTAMP16 in Table 6-4.)
- Avoiding tunnelling shift changeovers occurring between 7am and 9am and 4pm and 6pm Monday to Friday, to reduce peak period traffic impacts (refer to mitigation measure TTAMP05 in Table 6-4)

Considered and tailored multi-party engagement and cooperation will be established prior to construction to ensure all contributors to impacts are working together to minimise adverse impacts

or enhance benefits of multiple projects occurring concurrently or consecutively. Haulage routes and road occupancy will be coordinated with other major transport projects via Transport Coordination within Transport for NSW.

Multi-party engagement and cooperation will be established prior to construction to coordinate with the following projects to manage fatigue impacts where possible:

a) M4-M5 Link

b) Sydney Metro West.

The Community Communication Strategy will include consideration of complaint fatigue and includes procedures to proactively manage this type of issue where possible.

6.13 Road Maintenance

6.13.1 Dilapidation Reports

The Project will undertake road dilapidation surveys on public local roads before they are used by heavy vehicles for works associated with the Project and following completion of the works. The pre-condition reports would include a written survey, photos and/or video of each road. A copy of the report will be provided to the relevant roads' authority (local 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.

6.13.2 Repair and Restore

In accordance with CoA E137, if damage to roads occurs as a result of the construction of CSSI, the Project will either:

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 preworks as identified in the Road Dilapidation Reports(s).

Temporary alignments installed by the Project through the Traffic and Management Plan (TMP) process will be monitored and maintained, as well as existing infrastructure inspected.

6.14 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	Reference	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	JHCPB Traffic Manager JHCPB Project Manager	Best practice	Commencement meeting
TTAMP02	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 will be avoided, and where avoidance is not possible, minimised. Access to all utilities and properties will be maintained during construction, where practicable, unless otherwise agreed with the relevant utility owner, landowner or occupier. Alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected property owners and/or businesses and implemented prior to the disruption. Adequate signage and directions to businesses will be provided prior to, and for the duration of, any disruption.	TMP TGS	Construction	JHCPB Traffic Manager JHCPB Project Manager	MCoA E128 REMM LP3 MCoA E141	Consultation records Inspections

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
TTAMP03	Any property access physically affected by the Project must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier.	This Plan	After construction works impacting access has been completed	JHCPB Project Manager	MCoA E129	Inspections Agreement with owner
TTAMP04	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	JHCPB Traffic Manager JHCPB Project Manager JHCPB Site supervisor	MCoA E130	Inspections
TTAMP05	Construction road traffic will be managed to minimise movements during peak periods.	TMPs	Construction	JHCPB Traffic Manager JHCPB Site supervisor	REMM CTT6	TMP
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 TGS	Construction	JHCPB Traffic Manager JHCPB Site supervisor	REMM CTT7 TfNSW Supplement Manual of Uniform Control Devices (AS 742.3) and Road Sign	Traffic signal at site entrance TMP

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
					Specifications (AS1743).	
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 TGS	Construction	JHCPB Site supervisor	REMM CTT8 TfNSW Traffic Control at Worksites Manual (Version 5, 2018)	Task specific traffic management plans
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	JHCPB Site supervisor	REMM CTT12	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	JHCPB Project Manager JHCPB Project Engineer JHCPB Environmental manager	MCoA E135	Real time monitoring electronic records
Road Dilapidation						
TTAMP10	Before any local road is used by a heavy vehicle for the purposes of the Project, a Road Dilapidation Report will be prepared for	Suitably qualified person	Before local road is used by Project	JHCPB Traffic Manager	MCoA E136 REMM CTT1	Road Dilapidation Report

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
	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. 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.		heavy vehicles	JHCPB Project Manager		
TTAMP11	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	Where damage to a road occurs	JHCPB Traffic Manager JHCPB Project Manager	MCoA E137 REMM CTT1	Road Dilapidation Report
Pedestrian and Cyclist Access						
TTAMP12	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	TMPs VMPs TGS	Construction	JHCPB Site manager	MCoA E138 REMM CTT19 Austroads Guide to Road Design Part 6A: Pedestrians	Task specific traffic management plans

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
	endorsed by an independent, 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.				and Cycle Paths AustRoads Guide to Road Design Part 10 AS1742.3: Manual of Uniform Traffic Control Devices – Part 3: Traffic Control for Works on Roads AS1742 Part 9: Bicycle Facilities, AS1743: Road Signs Specification	
TTAMP13	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 CPAS	Construction	JHCPB Traffic Manager JHCPB Site supervisor	MCoA E139	Inspection records

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
Construction Parking Management						
TTAMP14	Vehicles (including light and heavy vehicles) associated with the Project will be managed to ensure spoil haulage vehicles adhere to the nominated haulage routes identified in this Plan.	Real time monitoring VMPs	Construction	JHCPB Project Manager JHCPB Project Engineer JHCPB Site Supervisor	MCoA E139	Real time monitoring electronic records
TTAMP15	Vehicles (including light and heavy vehicles) associated with the Project 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	JHCPB Traffic Manager JHCPB Site Supervisor	MCoA E139 REMM CTT11	Real time monitoring electronic records
TTAMP16	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.	CPAS TMPs	Construction	JHCPB Project Manager JHCPB Site Supervisor	MCoA E139 MCoA E140 REMM CTT9	Implementation of CPAS
Road safety						

ID	Measure/Requirement	Resources needed	When to implement	Responsibility	Reference	Evidence
TTAMP17	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	JHCPB Traffic Manager	MCoA E145 Austroads Guide to Traffic Management	Proof of engagement Auditor qualifications Audit report
Public transport						
Identification of workforce and compounds						
TTAMP18	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.	Approved sticker	Construction	JHCPB Project Manager JHCPB Plant Manager	MCoA A47	Vehicle induction/ inspection records

7 Compliance management

7.1 Roles and responsibilities

The Project's organisational structure and overall roles and responsibilities as well as the Environmental Representative and required specialists are outlined in Section 3.3 of the CEMP. Specific roles and their responsibilities for the implementation of construction traffic management are summarised in Table 7.1.

Table 7-1 Traffic management during construction

Role	Traffic management responsibilities
Project Director	▪ Supports the delivery of the traffic management objectives ▪ Supports the principles and requirements of this TTAMP ▪ Provide direction and support to the Project Manager to enable effective planning of temporary traffic management arrangements ▪ Review and authorise relevant plans and processes ▪ Ensure construction team members receive the appropriate training.
Site Supervisor	▪ Allocate field resources as required ▪ Support the delivery of the traffic management objectives ▪ Assist with the implementation of this TTAMP ▪ Ensure relevant field team members receive the appropriate training.
Project Managers	▪ Deliver traffic management objectives outlined in this TTAMP and TMPs ▪ Assist with planning work activities to identify the required traffic management arrangements to facilitate the works ▪ Prepare VMPs for construction deliveries, haul movements, site ingress/egress points and crane work ▪ Assist in the response to unplanned incidents/ hazards, and task incident management teams accordingly, to make the site safe ▪ Actively participates in the implementation of actions to mitigate, future occurrences of unplanned incidents ▪ Organise and directs engineers to undertake fortnightly long- and short-term traffic management inspections.
Traffic Manager	▪ Responsible for the traffic, pedestrian and parking management of the project ▪ Prepare, implement, monitor and review all staging TMPs. ▪ Present TMP drafts to the Public Liaison (Community) Manager for their approval before submitting to RMS. ▪ Review TMP/TCP following incidents ▪ Obtain all necessary approvals and ROLs for the TCPs as necessary ▪ Regular monitoring and audits of the implemented TMP's/TCP's

Role	Traffic management responsibilities
	▪ Be responsible for the implementation of ROLs and must continuously monitor the implementation and operation of all road occupancies to ensure that they are compliant with the ROLs ▪ Maintain close liaison with construction teams regarding the programming of work activities which impact traffic.
Senior traffic engineer	▪ Manage required traffic control measures and resources during every shift ▪ Undertake daily inspections of short-term traffic control ▪ Install and maintains long term traffic control plan layouts, e.g. signs and barriers ▪ Manage VMPs for construction deliveries, haul movements, site ingress/egress points and crane work on-site.
Stakeholder and Community Relations Director	▪ Represent the Project for community and stakeholder issues ▪ Consult stakeholders for traffic, pedestrian and bike planning issues ▪ With the Community Relations Manager, prepare and distribute changed traffic condition information to road users, transport operators, active transport groups and local communities ▪ Work with the Project Manager on the resolution of traffic complaints and stakeholder enquiries.

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 Section 3.5 of the CEMP.

7.3 Communication

Project communication protocols are detailed in the project CCS. The Project's Traffic Manager, the Project 's Community Relations Manager, TMC and TfNSW will jointly distribute information pertaining to changes in traffic conditions in accordance with the CCS.

7.4 Inspections

Requirements and responsibilities in relation to inspections are documented in Section 3.9 of the CEMP.

The Project 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 6.1 of the TfNSW Traffic Control at Worksites Manual.

These regular inspections will also verify the on-street parking commitments established by the 'Driver Code of Conduct'.

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 will 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.

7.5 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 Section 3.9.3 of 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.

7.6 Incidents and Non-compliances

All incidents will be managed in accordance with Section 3.8 of the CEMP.

All non-compliances will be managed in accordance with Section 3.10 of the CEMP.

7.7 Reporting

Reporting requirements are detailed in Section 3.9.4 of the CEMP.

7.7.1 Monthly reporting

A monthly report would be submitted to TfNSW and TMC during construction until the completion of construction that summarises:

- Current and upcoming critical issues, including those identified by RMS, traffic and transport liaison group and other relevant stakeholders, and the proposed measures to address these issue,
- Recent and proposed changes to traffic and parking management and their impacts on the operation of the road network and traffic systems,
- Media or community information released and proposed to be released,

- Recent traffic and pedestrian accidents on and in the vicinity of the Construction Site and traffic management works, including cumulative totals,
- Construction scheduling for the Project Company's work, including the current status of all construction stages and impacts on traffic management and approved ROLs,
- Approved and anticipated ROL applications, together with any associated issues of concern to the Project Company, RMS, the traffic and transport liaison group and other relevant stakeholders, including comparisons of base-case performance indicators with those for the current and proposed traffic conditions and achieving the specified targets,
- Comparisons of current and modelled traffic volumes at intersections with the base-case volumes,
- Comparisons of current and modelled traffic travel times on routes with the base-case times, and
- Community and media comments and complaints and the Project Company's response to these comments and complaints.

7.7.2 TTLG meeting reports

A report would be submitted to each meeting of the TTLG or relevant stakeholder group that would include:

- Minutes from the previous traffic and transport liaison or stakeholder group meeting,
- A summary of existing and proposed ROLs, together with details on the status and critical impacts of the ROLs,
- Community and media comments and complaints and the Project Company's response to these comments and complaints, and
- Issues of concern or identified by the traffic and transport liaison group or relevant stakeholder groups.

8 Review and improvement

8.1 Continuous improvement

As outlined in Section 3.12 of 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 2 of this Plan.

8.2 TTAMP update and amendment

The processes described in section 3.9 and section 3.11-3.12 of 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).

Any update of this Plan will require endorsement of the TfNSW Representative, the Environmental Representative and depending on the change, the process outlined in Section 3.13 of the CEMP must be followed where approval from the Planning Secretary prior to implementation of the update is required.

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

Appendix B1 Construction Parking and Access Strategy

Appendix B2 Heavy Vehicle Routes from Appendix F of the EIS and routes not identified in the EIS


HVs use this route for access to WHT3 and as contingency to prevent queuing on CWL
WHT3
Balmain Rd, Lilyfield Rd, Catherine St loop provides turn around for HVs accessing WHT12 from east of the site
WHT12
Routes identified in the EIS
Routes not identified in the EIS
HV (non-spoil) and LV routes
HV (all types) and LV routes