



**NATIONAL
INTERMODAL**

Moorebank Avenue Realignment Works

Construction Traffic and Transport Management Plan

SSI - 10053

19 June 2023

NATIONAL INTERMODAL CORPORATION

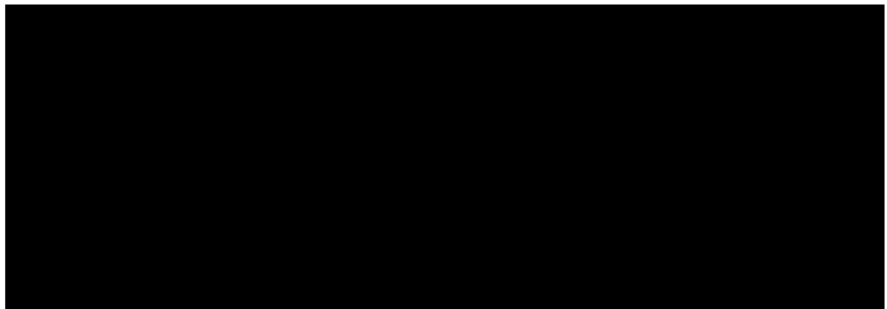
MOOREBANK AVENUE REALIGNMENT WORKS

CONSTRUCTION TRAFFIC AND TRANSPORT MANAGEMENT PLAN

Author

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Approver



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ACRONYMS AND DEFINITIONS

Acronym	Definition
CAQMP	Construction Air Quality Management Plan
CBMP	Construction Biodiversity Management Sub-plan
CCMP	Construction Contamination Management Sub-plan
CCC	Campbelltown City Council
CEMP	Construction Environmental Management Plan
CHMP	Construction Heritage Management Plan
CJM	Customer Journey Management
CLM Act	<i>Contaminated Land Management Act 1997 (NSW)</i>
CNVMP	Construction Noise and Vibration Management Sub-plan
CoA	Conditions of Approval
Construction	Includes all work required to construct the Project as described in the EIS and RTS (NSW CoA A1) including commissioning trials of equipment and temporary use of any part of the Project but excluding Low Impact Work which is carried out or completed before approval of the CEMP.
CSWMP	Construction Soil and Water Management Sub-plan (CSWMP),
CTTMP	Construction Traffic and Transport Management Sub-plan
CWRMP	Construction Waste and Resource Management Sub-plan
DAWE	Department of Agriculture, Water and Environment (now DCCEEW)
DCCEEW	Department of Climate Change, Energy, Environment and Water (formerly DAWE)
DECC	Department of Environment and Climate Change (now DPE)
DEC	Department of Environment and Conservation (now DPE)
DEL	Average Delay
DJLU	Defence Joint Logistics Unit
DOS	Degree of Saturation
DPE	Department of Planning and Environment (formerly DPIE)
DPIE	Department of Planning, Industry and Environment (now DPE)
EHC Act	<i>Environmentally Hazardous Chemicals Act 1985 (NSW)</i>
EES	NSW Environment, Energy and Science (part of DPE)
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental management system
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence

Acronym	Definition
ER	Environmental Representative
ERP	Emergency response plan
ESCP	Erosion and Sediment Control Plan
EWMS	Environmental Work Method Statement
HSE	Health Safety and Environment
Infrastructure Approval	SSI 10053 or NSW CoA
INP	Industry Noise Policy
LCC	Liverpool City Council
Local Road	Any road that is not defined as a classified road under the Roads Act 1993
LoS	Level of Service
Low Impact Work	As defined in the Infrastructure Approval, and which includes activities like survey work, investigative drilling, minor clearing, installation of mitigation measures etc. The low impact work described in this definition becomes construction when the Construction Environmental Management Plan is approved. This also applies to low impact work that has already commenced.
LV	Light vehicles
MARW	Moorebank Avenue Realignment Works
MIP	Moorebank Intermodal Precinct which includes Moorebank Precinct East (MPE) and Moorebank Precinct West (MPW)
MPE	Moorebank Precinct East
MPE Site	Comprises the MPE Stage 1 Project as approved by SSD 14-6766 for the development of the intermodal terminal facility (IMT) at Moorebank and MPE Stage 2 as approved under SSD 7628 (as modified) and MPE Concept Approval (MP 10_0193) for the construction and operation of warehousing and distribution facilities and upgrades to approximately 2.1 kilometres of Moorebank Avenue.
MPW	Moorebank Precinct West
MPW Site	Comprises the MPW Stage 2 Project which is the second stage of development under the MPW Concept Approval (SSD 5066) and SSD 7709. The Project involves the construction and operation of a multi-purpose intermodal terminal facility, Rail link connection, warehousing and upgraded intersection on Moorebank Avenue.
National Intermodal	National Intermodal Corporation
NGER Act	<i>National Greenhouse and Energy Reporting Act 2007 (Commonwealth)</i>
NML	Noise management level
OEH	NSW Office of Environment and Heritage (now NSW EES, a part DPE)
OSOM	Oversize or Over Mass
PIRMP	Pollution Incident Response Management Plan
Planning Secretary	Secretary to the DPE
PMP	Pedestrian Movement Plan

Acronym	Definition
Project Site	Refers to the construction footprint which is approximately 18.96 hectares and includes access for the construction of road embankments and cuttings, temporary and permanent fencing, temporary and permanent water quality control basins, ancillary facilities, access roads and construction side roads. It is generally bounded by the Defence Joint Logistics Unit (DJLU), MPE, Boot land and the Sydney Trains owned land adjacent to the East Hills Railway.
REMM	Revised Environmental Management Measures
RMS	Roads and Maritime Services (now TfNSW)
RtS	Response to Submissions
SEMP	Site Establishment Management Plan
SSI	State significant infrastructure
TfNSW	Transport for NSW
TGS	Traffic Guidance Scheme
TIA	Traffic Impact Assessment
TMP	Traffic Management Plan
TSP	Traffic Staging Plan
The Project	Moorebank Avenue Realignment Works
VMP	Vehicle Movement Plan
VPD	Vehicles per day
VPH	Vehicles per hour

1 INTRODUCTION

1.1 Context

This Construction Traffic and Transport Management Plan (CTTMP) forms part of the Construction Environmental Management Plan (CEMP) for the Moorebank Avenue Realignment Works (MARW) (the Project).

This CTTMP has been prepared to address the requirements of the NSW Minister's Conditions of Approval (CoA), Commonwealth CoA, the Revised Environmental Management Measures (REMMs) detailed in the Response to Submissions (RtS) and the applicable legislation.

1.2 Background and Project Description

National Intermodal Corporation (National Intermodal) plans to realign and upgrade a section of Moorebank Avenue. The Project involves the realignment of an existing two-kilometre section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Intermodal Precinct (MIP) into the Moorebank East Precinct (MPE site) and the Moorebank West Precinct (MPW site) (See Figure 1.1).

The Project is about three kilometres of additional road which ties in with the existing Moorebank Avenue at the northern and southern extremities. From its northernmost point, the realigned Moorebank Avenue follows the northern boundary of the MPE site, before continuing south along the MPE site eastern boundary. This section of the realignment comprises four lanes (i.e. two lanes in each direction). At the south-western corner of the MPE site, the additional road section merges to become a dual lane road (i.e. one lane in each direction) before continuing in a south-west direction, crossing Anzac Creek, and re-joining the existing Moorebank Avenue alignment near the East Hills Railway (refer to Figure 1.1). At completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the upgraded alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the MIP.

The Project Site (Project Site) is approximately 18.96 hectares and includes access for the construction of road embankments and cuttings, temporary and permanent fencing, temporary and permanent water quality control basins, ancillary facilities, access roads and construction side roads. It is generally bounded by the Defence Joint Logistics Unit (DJLU), MPE, Boot land and the Sydney Trains owned land adjacent to the East Hills Railway (refer to Figure 1.1).

A detailed description of the Project is provided in Section 2 of the CEMP and is also shown on Figure 1.2.

The Project will not be staged but is anticipated to be undertaken in phases. Construction is expected to take approximately 16 months to complete.

An Environmental Impact Statement (EIS) for the Project was prepared in March 2021 to describe and assess the Project and recommend management measures to address impacts. The EIS was exhibited by the then NSW Department of Planning, Industry and Environment (DPIE) from 17 March 2021 to 13 April 2021 to give the community and stakeholders the opportunity to provide comment. A RtS was submitted in May 2021 to address the identified issues.

The Project was approved by the NSW Minister for Planning on 14 October 2021 as State Significant Infrastructure (SSI-10053) (Infrastructure Approval) under Division 5.2 of the *Environmental Planning and*

Assessment Act 1979 (EP&A Act). The Project is also a controlled action under Section 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and was approved by the Minister for the Environment on 7 December 2021 (EPBC Approval 2020-8839).

The EIS assessed the impacts of construction of the Project on traffic and transport. As part of EIS development, a detailed Traffic Impact Assessment (TIA) was prepared in accordance with the legislation. The TIA was prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued by the DPIE and the Commonwealth EIS Guidelines issued by the Commonwealth the then Department of Agriculture, Water and Environment (DAWE)¹. The TIA was included as Appendix D in the EIS.

Further assessment of traffic and transport impacts was undertaken subsequent to exhibition of the EIS and incorporated into the RtS. The additional assessment considered a comparison of the travel time for through traffic on Moorebank Avenue Realignment under signalised versus priority-controlled intersections is provided in Appendix E of the RtS.

Revised Environmental Management Measures (REMMs) were provided within the RtS. Where applicable, the REMMs from the RtS have been included in this CTTMP (Section 6 and Appendix B).

1.3 Scope of the Plan

This CTTMP is applicable to the construction stage of the Project. The CTTMP describes how potential traffic and transport impacts will be managed during construction of the Project. Operational traffic and transport impacts and operation measures do not fall within the scope of this CTTMP and therefore are not included within the processes contained herein.

1.4 Environmental Management System Overview

The environmental management framework for the Project is described in Section 3 of the CEMP. This CTTMP forms part of the framework for the Project. The requirements of the NSW CoA and the REMMs identified in this CTTMP will be complied with during construction.

Management measures identified in this CTTMP may also be incorporated into site or activity specific Environmental Work Method Statements (EWMS). EWMS incorporate appropriate mitigation measures and controls and identify key procedures to be used during construction activities. A template EWMS for use is provided in Appendix E of the CEMP.

1.5 CTTMP Endorsement and Approval

This CTTMP has been prepared to satisfy the NSW and Commonwealth CoA's in relation to traffic and transport management during construction of the Project.

This CTTMP will be reviewed by the Project Manager / Delivery Team (or delegate) and will be endorsed by the Environmental Representative (ER). Construction of the Project will not commence prior to approval of the CEMP by the Secretary and endorsement of the CTTMP by the ER. The final approved Plan will be available on the MIP and/or National Intermodal website and be submitted to the Commonwealth for information.

¹ NSW Commonwealth Department of Climate Change, Energy, the Environment and Water

The ER can approve minor amendments to this CTTMP if they do not increase impacts to nearby receivers, are of an administrative nature and are consistent with the conditions of the Infrastructure Approval. This does not include any modifications to the conditions of the Infrastructure Approval.

1.5.1 Interactions with Other Management Plans

This CTTMP has the following interrelationships with other management plans and documents:

- Construction Noise and Vibration Management Plan due to the potential for construction traffic noise
- Construction Air Quality Management Plan due to the potential for construction traffic to generation dust and air quality impacts
- Construction Waste and Resources Management Plan (CWRMP) provides a framework for waste management including the transport of spoil.

1.6 Consultation

1.6.1 Consultation for Preparation of the CTTMP

The following government agencies and stakeholders have been consulted with during the development of this CTTMP:

- Liverpool City Council (LCC)
- Campbelltown City Council
- Fire and Rescue NSW (FRNSW)
- Rural Fire Service (RFS)
- NSW Police
- Ambulance NSW
- Department of Defence (Commonwealth)
- Transport for New South Wales (TfNSW).

A summary of the outcomes of the consultation with various agencies and stakeholders as provided in Table 1.1. Supplementary information demonstrating the consultation undertaken is included in Appendix A.

Table 1.1: Consultation Summary

Agency	Date	Person Contacted	Comment	Status
Liverpool City Council (LCC)	22/12/2022	LCC Representative	Emailed LCC introducing the project	Closed
	22/03/2023	LCC Representative	Acknowledgement was received via email for the CTTMP.	
	24/03/2023	DPE portal	CTTMP submitted through DPE portal. Consultation to close 20 April 2023.	
	06/04/2023	LCC Representative	Comments received on the CTTMP.	
	02/06/2023	DPE portal	CTTMP response submitted through DPE portal addressing LCC comments. These comments are tabulated in Appendix A.	

Agency	Date	Person Contacted	Comment	Status
	09/06/2023	LCC Representative	Confirmed that Council has reviewed the CTTMP response and had no further comments	
Campbelltown City Council	12/01/2023	Campbelltown City Council Representative	Emailed Campbelltown City Council introducing the project	Closed
	16/01/2023	Campbelltown City Council Representative	Email response received forwarding the correspondence onto LCC as Campbelltown City Council no longer falls in the jurisdiction of Moorebank Avenue Realignment Works.	
FRNSW	13/01/2023	FRNSW Representative	Emailed FRNSW introducing the project	Closed
	13/01/2023	FRNSW Representative	Email response received from FRNSW to confirm FRNSW Contact.	
	24/03/2023	DPE portal	CTTMP submitted through DPE portal. Consultation to close 20 April 2023.	
	27/03/2023	FRNSW Representative	Acknowledgement was received via email for the CTTMP. No comments were provided on the CTTMP.	
	10/04/2023	FRNSW Representative	Additional acknowledgement was received via email. No comments were provided on the CTTMP.	
RFS	22/12/2022	RFS Representative	Emailed RFS introducing the project	Closed
	10/01/2023	RFS Representative	Email response received from RFS advising to contact the Macarthur Fire Control Centre to review the CTTMP.	
	24/03/2023	DPE portal	CTTMP submitted through DPE portal. Consultation to close 20 April 2023.	
	20/04/2023	N/A	Consultation closed. No comments were received on the CTTMP.	
NSW Police	20/01/2023	NSW Police Representative	Phoned and emailed NSW Police introducing the Project.	Closed
	20/01/2023	NSW Police Representative	Email response acknowledging project and information was forwarded onto the representative NSW Police team.	
	24/03/2023	DPE Portal	CTTMP submitted through DPE portal. Consultation to close 20 April 2023.	
	20/04/2023	N/A	Consultation closed. No comments were received on the CTTMP.	
Ambulance NSW	18/01/2023	Ambulance NSW Representative	Emailed Ambulance NSW introducing the Project.	Closed
	24/03/2023	DPE Portal	CTTMP submitted through DPE portal. Consultation to close 20 April 2023.	
	20/04/2023	N/A	Consultation closed. No comments were received on the CTTMP.	
Department of Defence	22/12/2022	Department of Defence Representative	Phone and emailed Department of Defence introducing the Project.	Closed

Agency	Date	Person Contacted	Comment	Status
	03/02/2023	Department of Defence Representative	Email response acknowledging project and information and asked when the consultation period would begin.	
	24/03/2023	DPE Portal	CTTMP submitted through DPE portal. Consultation to close 20 April 2023.	
	30/03/2023	Department of Defence Representative	Comments received on the CTTMP. These have been responded in detail in Appendix A.	
TfNSW	18/01/2023	TfNSW Representative	Emailed TfNSW introducing the Project.	Closed
	24/03/2023	DPE Portal	CTTMP submitted through DPE portal. Consultation to close 20 April 2023.	
	20/04/2023	TfNSW Representative	Comments received on the CTTMP. These have been responded in detail in Appendix A.	

1.6.2 Ongoing Consultation during Construction

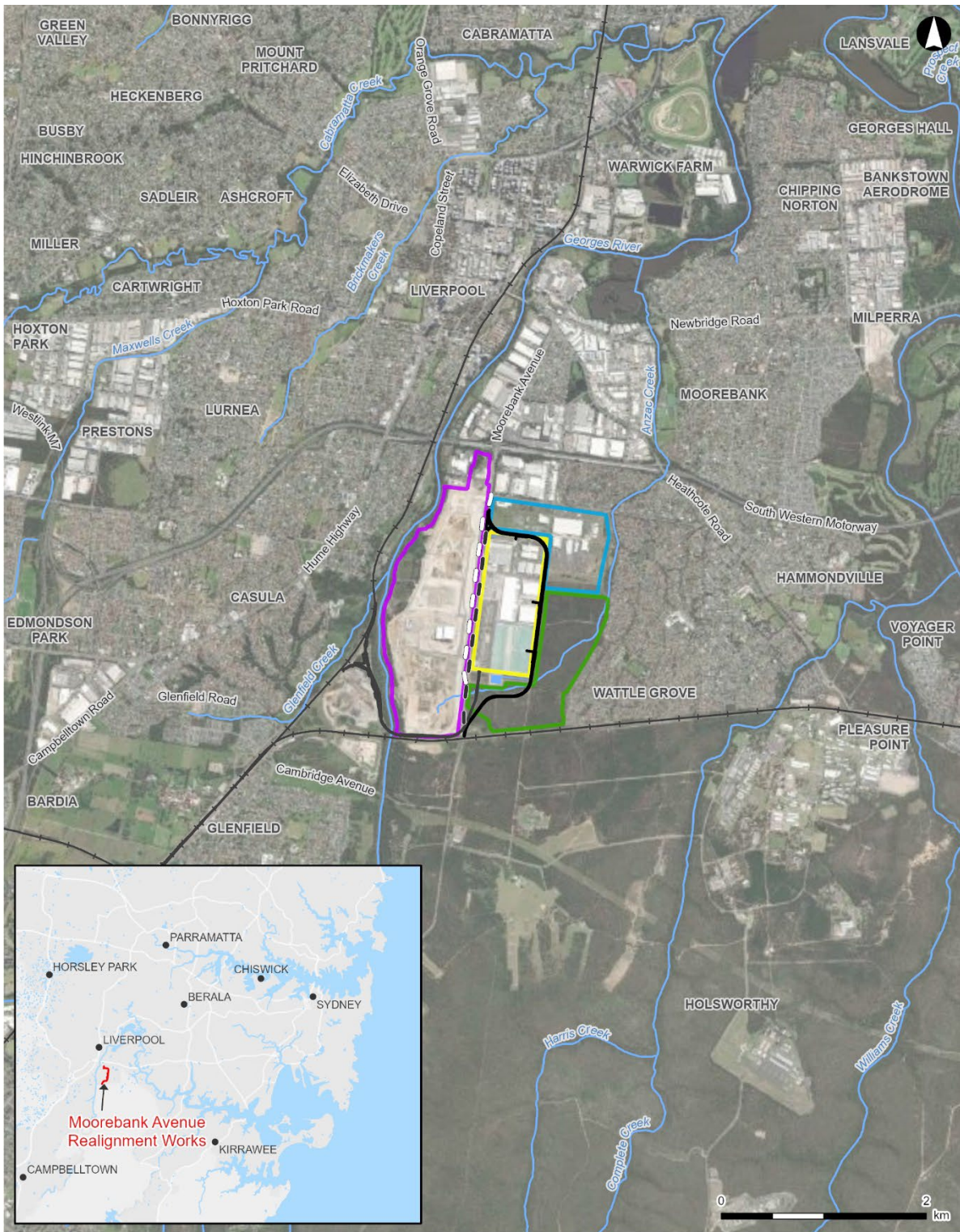
Consultation between the Principals Representative, Construction Contractor, stakeholders, the community and relevant agencies will be undertaken during the construction of the Project as required. The process for the consultation will be documented in the Community Communication Strategy (CCS).

Ongoing consultation related to traffic and transport will include consultation for, but not be limited to:

- Consultation with TfNSW, LCC, Campbelltown City Council, Department of Defence and other relevant stakeholders regarding the development of specific Traffic Management Plans (TMP) and associated elements such as Traffic Staging Plans (TSPs), Traffic Guidance Scheme (TGS), Vehicle Movement Plans (VMPs) and Pedestrian Movement Plans (PMPs) as required
- Notification of any changes in traffic conditions on roads or paths to road users, emergency services, public transport operators, and other relevant stakeholders
- Notification and consultation regarding property and utility access arrangements.

LCC can be contacted as follows:

- Charles Wiafe – Manager Transport Management, wiafec@liverpool.nsw.gov.au, 02 8711 7452
- Jeya Shanmuganathan – Maintenance Planning and Reporting Coordinator, shanmuganathanj@liverpool.nsw.gov.au, 02 8711 7016



Legend

- Moorebank Avenue Realignment Works
 - MIP Rail link
 - Previous Moorebank Avenue
 - Moorebank Avenue diversion road
 - Watercourse
 - Railway
 - Moorebank Precinct West
 - Moorebank Precinct East
 - Boot Land boundary*
 - Defence Joint Logistics Unit
 - On-site detention
- *relates to the parcel of land known as the Boot Land, does not indicate biobanking boundaries



1:55,000 at A4
 Coordinate System: GDA2020 MGA Zone 56
 Date issued: March 16, 2023
 Imagery: Esri, HERE, Garmin, USGS, Earthstar Geographics



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Figure 1.1: Project Location



Legend

- Moorebank Avenue Realignment Works
- Construction footprint
- Construction compound
- Watercourse
- Railway



1:16,000 at A4
 Coordinate System: GDA2020 MGA Zone 56
 Date issued: March 30, 2023
 Imagery: Nearmap



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Figure 1.2: Project layout

2 PURPOSE AND OBJECTIVES

2.1 Purpose

The purpose of this CTTMP is to describe how construction impacts on traffic and transport will be minimised and managed during the construction of the Project.

2.2 Objectives

The key objective of the CTTMP is to ensure that traffic and transport impacts are managed appropriately throughout the construction of the Project and consider the mitigation and management measures referred to in:

- NSW Minister's Infrastructure Approval dated 14 October 2021 (SSI-10053)
- Federal Minister for the Environment Approval dated 7 December 2021 (EPBC 2020-8839)
- Moorebank Avenue Realignment Environmental Impact Statement Volume 1 and *Volume 2* prepared by EMM for Sydney Intermodal Terminal Alliance dated March 2021 (EIS)
- *Moorebank Avenue Realignment Response to Submissions* prepared for Sydney Intermodal Terminal Alliance dated May 2021 (RtS).

2.3 Targets

Table 2.1 details the targets established for the management of traffic and transport impacts during construction of the Project.

Table 2.1: Project environmental targets for traffic and transport

Objective	Target	Timeframe	Responsibility
Ensure compliance with relevant NSW and Commonwealth CoA and applicable legislation	No written warnings or infringement notices Zero non-compliance	Throughout construction	Construction Contractor
Avoid unacceptable impacts on surrounding residents and commercial stakeholders	Existing property access or alternative property access will be provided at all times	Throughout construction	Construction Contractor
Minimise the potential for environmental incidents	No reportable incidents	Throughout construction	Construction Contractor
Minimise social impacts	100% of complaints to be responded to within agreed timeframes of the Community Communication Strategy	Throughout construction	Community Engagement Consultant

3 ENVIRONMENTAL REQUIREMENTS

3.1 Relevant Legislation and Guidelines

3.1.1 Legislation

All legislation relevant to the Project is included in Appendix B of the CEMP. Legislation considered during the development of this CTTMP includes:

- Environmental Planning and Assessment Act 1979
- Roads Act 1993.

3.1.2 Additional Approvals, Licences, Permits and Requirements

Additional approvals, licences, permits and requirements may include:

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

3.1.3 Guidelines and Standards

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

- Australian Standard 1428.1-2009 Design for access and mobility
- Australian Standard AS 1742 Parts 1 to 14, Manual of Uniform Traffic Devices (as required)
- Australian Standard AS 1743.3-2009 Traffic control devices for works on roads
- Australian Standard AS 3845:1999 Road Safety Barrier Systems
- Austroads Guide to Traffic Management – Parts 1-13 (2020)
- Austroads Guide to Road Design – Parts 1-8 (2020)
- Austroads Guide to Road Safety – Parts 1-9 (2019)
- NSW Bicycle Guidelines
- Roads and Maritime Traffic Control at Worksites Manual (2018)
- Transport for New South Wales, NSW Speed Zoning Guidelines (2011)
- Transport Management Centre – Road Occupancy Manual (2015).

3.2 Commonwealth Approval

The Project is considered a controlled action under the EPBC Act and is therefore subject to Commonwealth CoA's. There are no Commonwealth CoA related to traffic and transport management.

3.3 NSW Infrastructure Approval

The requirements of the Infrastructure Approval relevant to the development of this CTTMP are shown in Table 3.1. These are defined as 'primary NSW CoA' and specifically relate to the development of the

CTTMP. Secondary CoA relevant to, but not specific to the development of this CTTMP, have been listed in Appendix C. A cross reference is also included to indicate where the CoA is addressed in this CTTMP or other Project plans.

Table 3.1: Primary NSW CoA relevant to the CTTMP

No.	Requirements	Document reference
C6	CEMP Sub-plans as identified in documents listed in Condition A1 must be prepared in consultation with relevant government agencies and stakeholders. Relevant government agencies and stakeholders must be nominated in the risk assessment matrix submitted to the Planning Secretary require in accordance with Condition A14 or A19. 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.	Section 1.6
C7	The CEMP Sub-plans must state how:	
(a)	the environmental performance outcomes identified in the documents listed in Condition A1 will be achieved;	Table 6.1 Section 2.2 Section 2.3
(b)	the mitigation measures identified in the documents listed in Condition A1 will be implemented;	Table 6.1
(c)	the relevant terms of this approval will be complied with; and	Table 3.1 Table 3.2
(d)	issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART principles.	Section 8.1 Section 6.12

3.4 Revised Environmental Management Measures

The REMMs relevant to the development of this CTTMP, defined as 'primary REMMs' are detailed in Table 3.2. A cross reference is also included to indicate where the REMM is addressed in this CTTMP or other Project plans. Secondary REMMs relevant to, but not specific to the development of this CTTMP, have been listed in Appendix C.

Table 3.2: Primary REMMs relevant to the development of this CTTMP

No.	Requirements	Timing	Document reference
TRA01	A transport and traffic management plan (TTMP) will be developed for the Project post-approval and will be encompassed within the CEMP. The TTMP will provide details for the ongoing management and maintenance of traffic management and mitigation measures during the construction phase of the Project.	Pre-construction	This CTTMP

4 EXISTING ENVIRONMENT

4.1 Key References

The sources of data and information for the traffic and transport assessment carried out and used to develop this CTTMP are Section 7.4 and Appendix D of the Project EIS and Section 4.12 and Appendix E of the Project RfS.

Key components of the TIA methodology included:

- Traffic surveys including:
 - Intersection counts from 7am to 9am and from 4pm to 6pm on 4 March 2020 (prior to COVID 19 'lockdown' period) at the five intersections to be assessed in traffic modelling
 - Tube counts installed at Moorebank Avenue between the M5 and Bapaume Road on 28 February 2020 for a 7-day period
 - Travel time survey along Moorebank Avenue and Cambridge Avenue between Church Road (north) and Canterbury Road (south) on 26 February 2020 and 27 February 2020 to determine the existing travel times and average speeds along the full surveyed length of the roadway of Moorebank Avenue and Cambridge Avenue which can be used to validate the SIDRA intersection modelling
- Analysis of road crash history data for the five-year period from January 2016 to December 2020
- Modelling of key existing intersections which will be directly affected by the construction and operation of the Project.

The following sections summarise existing traffic and transport conditions within and adjacent to the Project Site.

4.2 Environmental Aspects

4.2.1 Road Network

Moorebank Avenue provides local and regional connections between Heathcote Road and Cambridge Avenue, Moorebank. Road traffic on the previous Moorebank Avenue alignment has been diverted onto the Moorebank Avenue diversion road. The Moorebank Avenue diversion road was constructed as part of MPE Stage 2 and runs parallel to the previous Moorebank Avenue within the MPW Site. The diversion road will stay in place until the completion of construction of the Project. It is noted that the Moorebank Avenue diversion road is subject to separate planning approvals (MPE Stage 2).

The realignment will result in a detour of approximately one additional kilometre for traffic along Moorebank Avenue. The surrounding road network is comprised of State, regional, local and privately owned publicly accessible roads, including:

- M5 Motorway
- Moorebank Avenue
- Anzac Road
- DJLU access
- Cambridge Avenue.

Figure 4.1 shows key intersections with the existing Moorebank Avenue.



Legend

- Moorebank Avenue Realignment Works
- MIP Rail link
- · - Previous Moorebank Avenue
- Moorebank Avenue diversion road
- - - Construction footprint
- Key Intersections
- Railway
- ~ Watercourse



1:17,500 at A4
 Coordinate System: GDA2020 MGA Zone 56
 Date issued: March 21, 2023
 Imagery: Nearmap



Path: C:\Users\cb98137\ARCADIS\30144760 - Env Panel Minor Projects - W1011 CEMP\01 Inputs\04 GIS\A_Current\B_Maps\CTTMP\CTMP.aprx

Figure 4.1: Key intersections

4.2.2 Traffic Volumes

The traffic data shows that Moorebank Avenue carried over 20,000 vehicles per day (vpd); the results are presented in Table 4.1.

In accordance with NSW CoA E45, operational access will be maintained between the internal Moorebank Precinct East road and MPE warehouses. Therefore, operational and construction traffic will operate concurrently during construction of the Project.

Table 4.1: Tube count results

Criteria	Southbound	Northbound	Combined
5-day average daily traffic	10,179 vpd	10,402 vpd	20,581 vpd
Weekly 85 th percentile speed	63 km/h	63 km/h	63 km/h
Heavy vehicle classification	20.4%	21.9%	21.1%

It is noted that the 85th percentile speed recorded by the tube counts was over the sign-posted speed limit of 60 km/h. Furthermore, over 20% of vehicles were classified as heavy vehicles, however only 4-5% of these were comprised of large trucks with three or more axles.

Based on an assessment of the peak hour volumes along Moorebank Avenue between the intersection with Anzac Road and the intersection with Cambridge Avenue, through volumes along the road are approximately 1,250-1,650 vehicles per hour (vph). Furthermore, in the morning peak, most traffic is directed north towards the M5, while during the afternoon peak, traffic is more evenly split between north and southbound. The surveyed peak hour volumes are attached for reference in Appendix D.

The typical existing northbound journey times for the section of Moorebank Avenue to be realigned varied between 2 minutes 07 seconds and 2 minutes 35 seconds, with the longest journey times again occurring during the AM peak period, which is a reflection of the generally higher northbound route traffic volumes and increased delays at the three traffic signal controlled intersections on this section during the busy periods of the day. The typical existing southbound journey times varied between 2 minutes 16 seconds and 2 minutes 30 seconds, with the longest journey times occurring during both the PM peak and off peak periods, which is again a reflection of the generally higher southbound route traffic volumes and increased traffic delays at the three traffic signal controlled intersections on this section during busy periods of the day.

4.2.3 Crash History

Within the five-year period from January 2016 to December 2020, there were a total of 40 recorded crashes in the vicinity of the Project Site. A summary of the extracted crash data is provided in Table 4.2.

Crashes are located in a combination of midblock and intersection locations. Of these, light trucks were involved in eight of these crashes while heavy trucks were not involved in any crashes. Only one crash involved speeding which resulted in a non-casualty. Five of these crashes involved fatigue, of which three resulted in serious injury.

Table 4.2: Summary of five year crash data

Location	Number of crashes				
	Serious	Moderate	Other	Non-casualty	Total
Moorebank Avenue between the M5 and Cambridge Avenue	6	6	7	14	33
Anzac Road between Moorebank Avenue and Wattle Grove Drive	1	2	-	4	7
Total	7	8	7	18	40

4.2.4 Parking

The eastern part of Anzac Road has unrestricted parking and the remaining sections of Anzac Road and Moorebank Avenue are no stopping restricted.

4.2.5 Public Transport Network

There are multiple bus stops along Moorebank Avenue and Anzac Road, with the 901-bus service stopping on Anzac Road. The 901 bus generally provides hourly services during the week, with half hourly services during peak hours. Furthermore, the 901 bus provides a connection to both Liverpool Station and Holsworthy Station.

There is also an early morning and an afternoon service along Anzac Road from Wattle Grove, turning left onto Moorebank Avenue and continuing south as far as the IMEX terminal entrance. The route then performs a U-turn and heads north on Moorebank Avenue before proceeding to Liverpool Station (or the reverse route). There are no published public bus routes that travel along the Moorebank Avenue to or from Cambridge Avenue.

4.2.6 Active Transport Network

Pedestrian access, cycle lanes or paths are not currently provided along Moorebank Avenue diversion road in the immediate vicinity of the Project Site except for a path on the eastern side providing access to Defence Joint Logistics Unit.

5 ENVIRONMENTAL ASPECTS AND IMPACTS

5.1 Construction Activities

Section 2.3 of the CEMP provides an overview of the construction activities that have the potential for environmental impact. The potential risks have been identified based on the outcomes of the risk assessment provided in Appendix C of the CEMP. The potential environmental aspects and impacts associated with construction are identified in Table 4-1 of the CEMP.

Key aspects of the Project that could result in impacts to traffic and transport include:

- Increased workforce and availability of carparking
- Generation of traffic during construction
- Use of heavy vehicles.

5.2 Traffic and Transport Impacts

Construction of the Project may result in direct and indirect impacts to traffic and transport, including:

- Reduction in available street parking
- Traffic generation
- Construction vehicles using the road network, especially heavy vehicles transporting spoil
- Surface roadworks requiring temporary traffic, cyclist and/or pedestrian diversions
- Surface roadworks requiring road occupation and temporary road closures
- Temporary changes to speed limit.

The aim of the environmental management measures provided in Section 6 is to minimise the potential impacts on traffic and transport of the Project.

5.2.1 Traffic Generating Activities

An increase in traffic volumes is expected during construction of the Project. Table 5.1: represents the anticipated light and heavy vehicle traffic generation for each stage of the Project. It is noted that this estimate excludes part-time workers, off-site worker vehicle movements, and minor delivery truck movements (i.e. assumed that all other heavy vehicle movements are included).

Table 5.1: Daily construction traffic movements

Stage	Average peak hour movement		Maximum peak hour movement	
	No. of light vehicles (vpd) ¹ .	No. of heavy vehicles (vpd) ² .	No. of light vehicles (vpd) ¹ .	No. of heavy vehicles (vpd) ² .
Phase 1: Enabling works	120	6	240	10
Phase 2: Construction of new carriageway	246	144	500	410
Phase 3: Finishing works	160	4	320	6

1. Light vehicle traffic includes employee generated traffic and utility trade uses, assuming each employee drives to and from the site individually.

2. The maximum heavy vehicle movement during the construction stage is based on a peak paving day – placing Selected Material Zone (SMZ) material, pouring 500m³ lean mix concrete subbase and placing 1500 tonnes of AC 2

The average daily construction movements are presented in Table 5.1. Peak construction activity is anticipated to occur during construction of carriageway (Phase 2) in late 2022/early 2023, thus, peak hour traffic is taken as 10% of the daily traffic values presented in Table 5.1. Peak hour movements are presented in Table 5.2.:

Table 5.2: Peak hour traffic generation

	Average traffic movement	Maximum traffic movement
Light vehicles (including employee traffic)	25 (24.6)	50 (50.0)
Heavy vehicles	15 (14.4)	41 (41.0)

Note: Rounding has been applied. Numbers in brackets represent the calculated value before rounding is applied.

5.2.2 Intersection Performance

Traffic intersection performance analysis was undertaken to determine the impacts of construction traffic at existing key intersections. A number of performance indicators which are outlined below:

- Degree of saturation (DOS) – the total usage of the intersection expressed as a factor of 1 with 1 representing 100% use/saturation (eg 0.8=80% saturation)
- Average delay (DEL) – the average delay encountered by all vehicles passing through the intersection. It is often important to review the average delay of each approach as a side road could have a long delay time, while the large free flowing major traffic will provide an overall low average delay
- Level of service (LoS) – this is a categorisation of average delay, intended for simple reference; and
- 95% queue lengths (Q95) – is defined to be the queue length in metres that has only a 5-percent probability of being exceeded during the analysed time period. It transforms the average delay into measurable distance units.

LoS is a good indicator of overall performance for individual intersections. The LoS ranges from LoS A to LoS F which is directly related to the average intersection delays experienced by traffic travelling through the intersection. The results of the intersection performance are presented in Table 5.4. An overall intersection LoS of D or better is considered acceptable.

The results of the intersection performance are presented in Table 5.4.

Table 5.3: LOS Criteria for Intersection Capacity Analysis

Level of Service	Average Delay per Vehicle (sec/veh)		Description of intersection operation
	Traffic Signals	Roundabouts	
A	$d \leq 10$	$d \leq 10$	Good operation
B	$10 < d \leq 20$	$10 < d \leq 20$	Good with acceptable delays & spare capacity
C	$20 < d \leq 35$	$20 < d \leq 35$	Satisfactory
D	$35 < d \leq 55$	$35 < d \leq 50$	Operating near capacity
E	$55 < d \leq 80$	$50 < d \leq 70$	At capacity; at signals, incidents will cause excessive delays Roundabouts require other control mode
F	$80 < d$	$70 < d$	Unsatisfactory and requires additional capacity.

Source: AustRoads Guide to Traffic Management Part 3

Table 5.4: Intersection performance with and without construction traffic

Stage	Peak hour	DOS		LoS		DEL		Q95		
		Existing	Construction	Existing	Construction	Existing	Construction	Existing	Construction	Approach
M5/ Moorebank Avenue	AM	0.745	0.745	B	B	25.0	25.1	86.7	86.7	RT from north
	PM	0.837	0.837	C	D	38.5	45.0	183.0	183.0	RT from north
Moorebank Avenue/ Anzac Road	AM	0.688	0.694	B	B	17.5	18.3	149.6	162.3	TH on south
	PM	0.804	0.804	B	B	18.5	18.5	107.9	117.2	TH on north
Moorebank Avenue/ DJLU Access	AM	0.681	0.731	A	A	5.2	6.2	80.2	82.8	TH on south
	PM	0.874	0.889	B	B	20.3	23.3	285.4	296.6	TH on north
Moorebank Avenue/ Cambridge Avenue	AM	0.690	0.692	A	A	8.4	8.4	51.0	51.4	LT on west
	PM	0.644	0.646	B	B	19.3	19.4	58.1	58.7	RT from north
Cambridge Avenue/ Glenfield Road/ Railway Parade/ Canterbury Road	AM	0.654	0.656	C	C	31.6	32.2	53.8	54.8	LT from north
	PM	0.319	0.320	A	A	11.8	11.8	14.5	14.5	TH & RT on east

Notes: For priority-controlled intersections and roundabouts, the LoS and DEL of the movement with highest delays are reported.

TH = Through

RT = Right Turn

LT = Left Turn

Table 5.5 indicates that there is no change to LoS at all intersections except for the right turn from north at M5/Moorebank Avenue in the PM. This is due to a 6.5 second delay between existing conditions and anticipated construction conditions. As this is the only deviation from the LoS across the intersections on the Project Site and the nature of the delay is relatively minor, overall impacts are anticipated to be minor in nature.

5.2.3 Staff Parking

To eliminate on-street parking demand, staff car parking will be provided within the Project Site, particularly at the site compound.

5.2.4 Public Transport

Due to the limited servicing area, the capacity of existing public transport services will not be impacted. The Project will not adversely impact on access to public transport.

Due to the extent and industrial nature of the surrounding area, it is not expected that many workers will rely on public transport. Regardless workers will be advised of public transport options.

5.2.5 Pedestrian and Cyclist Access

No pedestrian access will be provided along the realigned road section during construction as the existing Pedestrian access will remain as per existing access to the area until the newly realigned road is opened.

The existing Moorebank Avenue diversion road will remain publicly accessible for cyclists. At the Project Site access points, heavy vehicles will be managed by traffic controllers (personnel or automated) ensuring cyclist safety.

5.3 Cumulative Impacts

Cumulative traffic and transport impacts may arise from the interplay between construction activities associated with the Project, and other approved or proposed projects that are likely to occur within the area. When considered in isolation, specific impacts may be considered minor. These minor impacts may be more substantial however, when the impact of multiple projects on the same receivers is considered.

As outlined in the EIS, a number of other projects in the area that may coincide with construction works include:

- MPE Stage 2 (SSD 7628)
- MPW Stage 2 (SSD 7709) and Stage 3 (SSD 10431)
- M5 Motorway Westbound Traffic Upgrade
- Glenfield Waste Services Resource Recovery Facility (SSD 6249).

Cumulative traffic and transport impacts during construction would occur. Modelling indicates that the local traffic network will continue to operate at a satisfactory level, without any significant additional traffic impacts.

Communication between the Construction Contractor and developers for these projects will be undertaken with the aim of combining messages when possible, to coordinate disruptive activities and manage and minimise cumulative impacts to the local community as per the CCS.

6 ENVIRONMENTAL MITIGATION AND MANAGEMENT MEASURES

6.1 Traffic Management Documentation

The Construction Contractor will develop a specific Traffic Management Plan (TMP) conforming to AS 1742.3 and the TfNSW Traffic Control at Worksites Manual (TCWS) for their specific works. This TMP will contain additional written details describing the nature of the works.

The TMP will include as a minimum and where appropriate, the following elements:

- Details of any traffic staging arrangements associated, including TSP, and the time periods during which each stage will be in operation
- Traffic Guidance Scheme (TGS), including provision for cyclists and pedestrians, and any specific traffic control arrangements associated with the CoA or Road Occupancy Licence (ROL)
- Vehicle Management Plan (VMP) showing the mandated travel paths for vehicles to enter, leave or cross the through the traffic stream
- Pedestrian Movement Plan (PMP) showing the allocated travel paths for workers within the Project Site, and for pedestrians and cyclists around or through the Project Site, including safe and unhindered access to bus stops
- Plans showing access to local properties and side roads affected by the construction, relocated bus stops and any temporary car parking arrangements
- Plans showing temporary staff car parking at construction sites and ancillary facilities
- Design drawings for any temporary roadways and detours, including alignment and surface levels, pavement widths, pavement cross-sections, lane configurations, pavement markings, signage and drainage, and approved traffic signal plans if applicable
- Traffic incident management for dealing with unplanned traffic incidents.

6.1.1 Traffic Staging Plans

The Construction Contractor will prepare TSPs as part of their TMP. The purpose of the TSP is to show how traffic will be managed throughout the Project to:

- Ensure the safety of construction site personnel, road users and pedestrians
- Manage the works to minimise the need to occupy roads wherever possible
- Minimise idling and queueing on state and regional roads.

The TSPs will include, but not be limited to, road design drawings including details of road alignment and geometry, intersection layouts, work areas, drainage, signs and pavement markings. This CTTMP will be updated and the TSPs included as an appendix.

6.1.2 Traffic Guidance Scheme

Detailed TGS will be prepared by the Construction Contractor to identify measures that will be installed to warn traffic and guide it around or past the Project Site. TGS may be in the form of written documents and/or diagrams. TGS will incorporate VMPs and PMPs as relevant. TGS will also identify any property or business access issues related to construction. This CTTMP will be updated and the TGS included as an appendix.

6.1.3 Vehicle Movement Plans

The construction contractor will plan all construction vehicle movements by using VMPs to minimise the risk to other road users and keep the traffic generated by the Project to a minimum. VMPs will also outline arrangements to ensure marshalling of construction vehicles does not occur near sensitive land users. This CTTMP will be updated and the VMPs included as an appendix.

A copy of the relevant VMPs will be provided to all suppliers and construction staff to make sure they use the preferred travel paths when entering/leaving the Project Site.

6.2 Project Site Access

Final access arrangements for the Project Site have yet to be confirmed, and will be confirmed by the Construction Contractor. At this stage it is anticipated that the Project Site will initially be accessed via the existing signalised intersection of Moorebank Avenue and the DJLU access road. Once early stages of the road construction are complete, access will be from the new section of Moorebank Avenue at the north, and once the full length of the realigned road has been completed, additional access will be provided from the southern connection. This CTTMP will be updated once final access arrangements are confirmed and compliance against NSW CoA E54 re-confirmed. Traffic controllers (personnel or automated) will be present at the future access points, to ensure vehicles are able to enter and exit the site when it is safe to do so.

Sight distance assessments will be undertaken to ensure appropriate visibility is provided from the proposed access points.

Throughout construction, all vehicles accessing the Project Site will do so via the public road network; pedestrian paths, shared paths, and neighbouring accessways will not be blocked. Where obstruction of pedestrian paths, vehicular accesses and parking cannot be avoided, the obstruction must be minimised and alternative arrangements developed in consultation with stakeholders. In the event of a temporary detour or obstruction, directional signage to affected businesses must be installed.

Once site access arrangements are confirmed, the Construction Contractor must undertake a swept path assessment to check the movement of vehicles into and out of the Project Site access points.

6.2.1 Haulage Routes

All materials and plant required for the Project are to be delivered to and removed from the Project Site via the M5; all heavy vehicle trips will be generated to/from the north and in accordance with NSW CoA E49, spoil haulage will be monitored in real time (see Section 7.3.1). Heavy vehicle routes are detailed in Figure 6.1.

In accordance with NSW CoA E50, Moorebank Avenue south of Moorebank Avenue rail overbridge will only be permitted for heavy vehicles travelling to/from the Glenfield Waste facility and records of each trip will be kept for the duration of construction. Local roads must not be used by heavy vehicles to access the Project Site. Light vehicles may use Moorebank Avenue south of Moorebank Avenue rail overbridge to access the Project Site.

No oversize or over mass (OSOM) vehicle trips will be required to deliver the Project. As such, no OSOM routes have been considered.

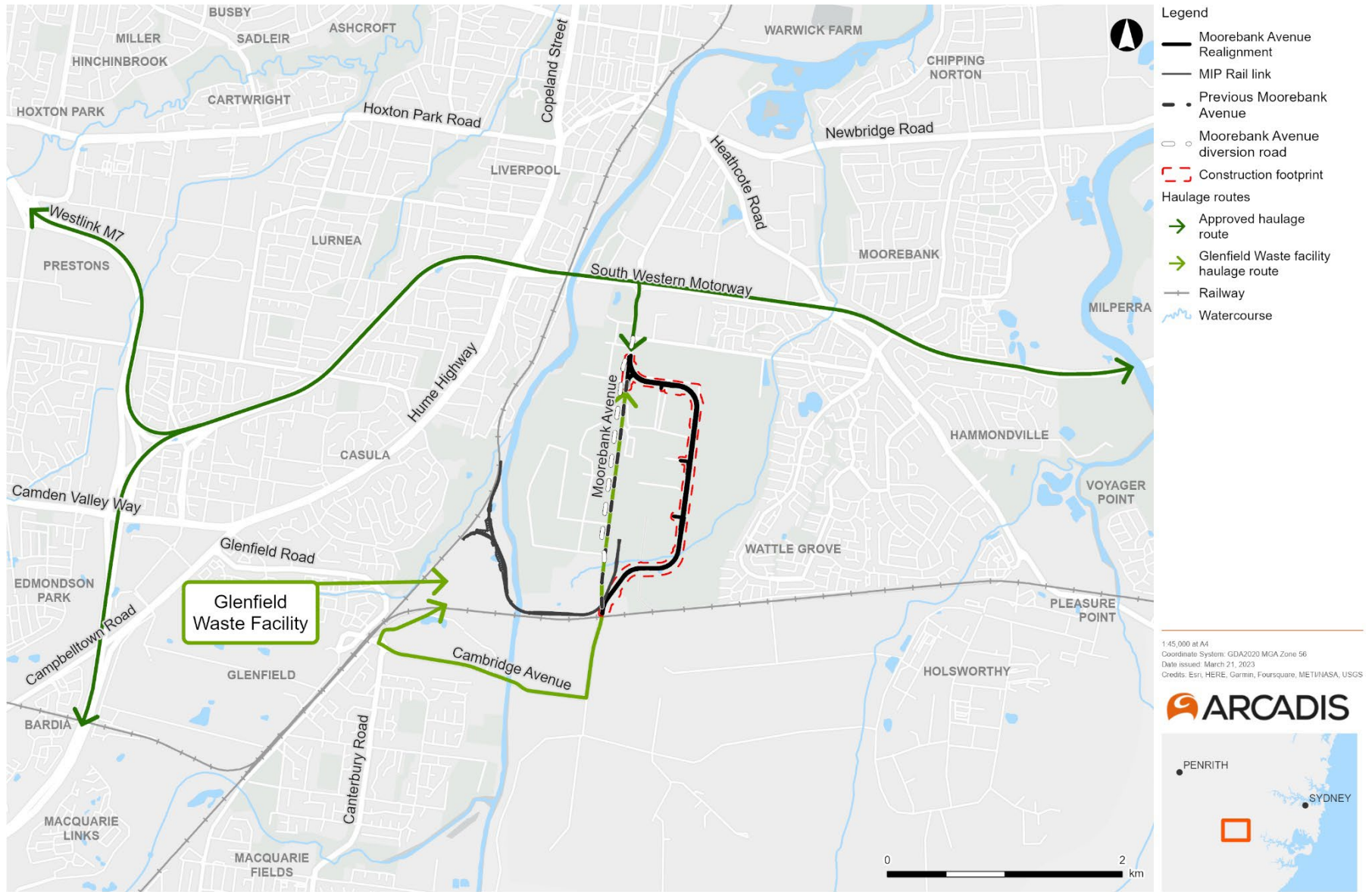


Figure 6.1: Haulage routes

6.3 Traffic Control Signs and Devices

Traffic control signs and devices required during construction will be identified in the TGS and implemented in accordance with the Traffic Control at Worksites manual (Roads and Maritime, 2018). The Construction Contractor will obtain all necessary approvals for traffic control devices used on the Project.

Signage associated with property access, local community access and businesses will be implemented to ensure the appropriate information for road users is always effectively communicated.

Construction staging and temporary works will efficiently manage conflicts with the existing road network and maximise spatial separation between work areas and travel lanes. Work areas are to be isolated from general traffic through the implementation of appropriate traffic and access controls.

Traffic control devices for the Project may include but are not limited to:

- Safety barriers
- Pavement markings and signs
- Portable Variable Message Sign (VMS)
- Temporary and permanent traffic signals
- Traffic counts
- Radar activated speed signs
- Temporary speed zones
- Lighting towers
- Traffic signal staging.

During construction, the Construction Contractors will maintain ongoing timely communication with affected businesses and properties on Project timing, changes to traffic conditions and access arrangements. This will include notice on timing and duration of activities and potential localised impacts. Information will be provided to, and sought from, affected business and property owners via various methods, including letterbox drops, face-to-face meetings, community information events and meetings, and the Project website. Further details are provided in the Community Consultation Strategy (CCS). Additionally, TfNSW TMC and Network Operation will be provided contact details for the contractor responsible for signal electrical and civil works, during construction.

6.4 Speed Management

Temporary speed zones may be implemented to assist in controlling the speed of traffic when tie in works are undertaken for the northern and southern intersections of the Project. A reduced roadwork speed zone will only be implemented where it is warranted. The Traffic Manager (refer to Section 7.1) will assess whether roadwork speed zones are necessary to assist in controlling vehicle speeds.

Roadwork speed limits and zoning in road occupancies must comply with Traffic Control at Work Sites manual (TfNSW, 2020) and the NSW Speed Zoning Guidelines (RTA, 2011).

- The key principles for the effective implementation of roadwork speed limits are:
- They are self-enforcing or will be enforced
- They are not used alone but with other traffic control signs and devices
- They are not used in place of more effective means of traffic controls

- They are only to be used while roadworks are in progress or there are temporary safe road conditions.

A Speed Zone Authorisation (if required) will be applied for by the Construction Contractor prior to implementation of temporary speed zones, as part of the ROL application process described in Section 6.5.

All drivers must observe posted speed limits on adjoining road networks and adjust speed to suit the road environment and weather conditions.

6.5 Road Occupancy

Construction of the Project may require closing of shoulders and lanes during the upgrades of the two existing intersections at either end of the Project as well as connection with Moorebank Avenue immediately north of the bridge over East Hills railway line, temporary road closures will be required during the construction period. If required, the Construction Contractor will (as required) obtain an ROL from the Traffic Management Centre (TMC), now Customer Journey Management (CJM), if an existing road is to be used in such a way that it affects traffic flow within the vicinity of the Project Site.

Road occupancies include:

- Shoulder occupancies and/or closures
- Date and time of proposed lane occupancies and/or closures
- Road closures and detours
- Any occupation of the Project Site by site personnel (including sub-contractors), equipment or plant that requires a TGS
- Any other event, including utility works, that causes delays to traffic flows.

Applications for a ROL will be prepared by the Construction Contractor in accordance with the Road Occupancy Manual (TMC, 2015) and will comply with the road safety and traffic management principles, objectives and targets outlined in this CTTMP. Applications will be submitted before the planned commencement of the work activity that requires road occupancy. The submission will include a description of the work to be conducted, design drawings if relevant, a program of the works, a TGS, VMP and contact details of the Construction Contractor.

6.6 Road Maintenance

Existing or temporary roads and on-street assets such as footpaths used by construction traffic will be monitored and maintained for the duration of construction of the Project. Maintenance activities will include repairing potholes, heavy patching, re-sealing/re-sheeting and removing debris and re-applying line-marking.

In accordance with NSW CoA E51, a Road Dilapidation Report must be prepared by the Construction Contractor prior to any activity requiring the use of a heavy vehicle. A copy of the Road Dilapidation Report will be provided to Liverpool City Council and/or Campbelltown City Council within three weeks of completion of the survey and at least one month before the road is used by heavy vehicles.

Public roads used by heavy vehicles to access the Project Site will be maintained in a safe condition for public use. Notwithstanding, if damage to roads does occur as a result of Project activities, corrective action will be undertaken to either:

- Compensate the relevant road authority
- Rectify the damage to at least the pre-works condition identified in the Road Dilapidation Report, or

- Make arrangements with the relevant road authorities to reinstate roads used by heavy vehicles where they are to be continuously used for construction purposes.

6.7 Parking

The VMPs will include provisions for appropriate off-road areas for construction traffic parking, including for workforce parking and site visitors. VMPs will describe access locations and safe entry and exit to and from all such parking areas. Parking will also be provided at Ancillary Facilities.

In addition to the workforce parking, all heavy vehicles used throughout the Project must be stored within the Project Site and off the public road network. Private parking lots will not be utilised by the Project unless otherwise agreed to by the stakeholder or landowner.

6.8 Property Access

In accordance with NSW CoA E46, access to the existing Moorebank Avenue on its current alignment between Anzac Road and the bridge over the East Hills rail line will be maintained until such time the Project is opened to traffic.

In accordance with NSW CoA E47, access to utility service or parcel of land will be maintained. If access is to be restricted due to Project activities, consultation with the appropriate owner will be undertaken to gain support for the provision of an alternative access for the duration of the works. Noting the use of the DJLU access road as the initial site access for the Project, all land uses, including the café on the corner of Moorebank Avenue and users of DJLU, will need to remain accessible throughout the duration of the Project.

Where property access is physically affected, it will be reinstated, or an alternative provided, to at least an equivalent standard, prior to opening the Project to traffic in accordance with NSW CoA E48. Any change to pre-existing property access will be agreed to by the landowner or occupier before the change is made and an equivalent level of access provided unless agreed to by the landowner. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption. Notification must be provided at least seven working days prior to works affecting residents and businesses.

6.9 Pedestrians

In accordance with NSW CoA E55 all reasonably practicable measures will be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses, and affected properties. Disruptions will be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected residents, businesses and affected property owners and implemented before the disruption.

6.10 Emergency Services

Consultation with emergency services providers will continue throughout construction of the Project to minimise impacts on emergency services operations. Emergency services will be kept fully informed of all changed traffic conditions throughout construction.

The Traffic Manager and/or delegate will notify the emergency services providers when access to properties or traffic routes is expected to be impeded for any period. Signage will be implemented to ensure that all construction and adjusted property accesses are clearly signposted.

6.11 Incident Management and Response

Transport for New South Wales is responsible for the management of unplanned traffic incidents on NSW roads in coordination with NSW Police. If requested, the Construction Contractors will provide support to TfNSW or Emergency Services agencies when emergencies or unplanned incidents occur within or adjacent to the Project Site.

A nominated contact person, such as the Traffic Manager, will be available if an emergency or disruptive unplanned incident occurs within the boundary of any construction area subject to a TGS. The nominated contact person will respond within one hour to after-hours callouts from the CJM or Police.

For non-emergency disruptive incidents, the Traffic Manager or delegate will attend the location of the traffic incident and assess if corrective actions are required to be undertaken or resources provided by the Construction Contractor. This assessment will occur in coordination with Emergency Services agencies, if in attendance. A record of communications with the CJM and Police and all traffic incidents attended will be kept by the Construction Contractor.

6.12 Management Measures

Management actions prescribed by this CTTMP aim to avoid and minimise impacts on traffic and transport and are summarised in Table 6.1.

The development of management measures has been based on SMART principles i.e. measures that are specific, measurable, achievable, relevant, and time-bound:

- **S**pecific –Mitigation and management measures identified in Table 6.1 specifically to manage traffic and transport impacts during construction
- **M**easurable – Inspection and monitoring requirements detailed in Section 7.3 include specific measures or indicators for which inspection and monitoring requirements will be triggered
- **A**chievable – Ongoing compliance with the Infrastructure Approval (Table 3.1), is achievable throughout the delivery of construction and represents the minimum requirements to be implemented by the Construction Contractor
- **R**elevant - The management measures outlined in Table 6.1 represent the approach to monitoring and tracking against the objectives, targets and environmental performance outcomes (identified in Section 2.3 of the CTTMP)
- **T**ime-bound – The management measures set out within Table 6.1 are required to be implemented for the duration of construction, setting a clear and defined time frame and includes reference to other timeframes, including during detailed design, pre-construction, post-construction and/or operation.

Table 6.1: Traffic and transport management and mitigation measures

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
Pre-construction management actions					
1	A traffic and transport management plan (TTMP) will be developed for the Project post-approval and will be encompassed within the CEMP. The TTMP plan will provide details for the ongoing management and maintenance of traffic management and mitigation measures during the construction phase of the Project.	Prior to commencement of construction	Principal Representative	NSW CoA C6 REMM TRA01	This CTTMP
2	Undertake a Road Dilapidation Audit prior to the commencement of construction. Conduct additional Road Dilapidation Audits as required. Conduct repairs identified in Road Dilapidation Reports as agreed with the authorities.	Pre-construction	Traffic Manager Road Quality Auditor	NSW CoA E51	Road Dilapidation Report/s Consultation with authorities
3	Prepare VMPs for all construction vehicle movements on site and throughout the road network. VMPs will also outlined arrangements to ensure marshalling of construction vehicles does not occur near sensitive land users. Provide copies of VMPs to all suppliers.	Pre-construction	Traffic Manager	NSW CoA E54 NSW CoAE55	Vehicle Movement Plans
4	Develop TGSs in accordance with the Australian Standards and the RMS Traffic Control at Work Sites Manual - Version 5 (RMS 2018) and include as an appendix to this CTTMP.	Pre-construction	Traffic Manager Traffic Control subcontractor	REMM TRA02	TGS
5	Install branded information signage on approaches to the site: <ul style="list-style-type: none"> Advising of the activity Any changes in access arrangements for pedestrians or cyclists 	Pre-construction	Project Manager Traffic Manager	NSW CoA E54	Compliance monitoring

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
	<ul style="list-style-type: none"> Identifying that there will be additional truck activity during construction Providing contact details for any enquiries or concerns prior to the commencement of works 				
6	Obtain approval for priority control traffic signals if required by construction compounds pursuant to the <i>NSW Roads Act 1993</i>	Pre-construction	Principal Representative Project Manager Traffic Manager	REMM TRA08	Consultation with authorities Traffic control plans Site layout plan
7	Establish a site car parking area within the Project Site for use by the construction workforce.	Pre-construction	Project Manager Traffic Manager	NSW CoA E54	Site layout plan
8	Obtain a Section 87 (NSW Roads Act 1993) approval for: <ul style="list-style-type: none"> Proposed traffic signal intersections on Moorebank Avenue Any proposed changes or removal of existing traffic signals along the existing Moorebank Avenue 	Pre-construction	Principal Representative	REMM TRA07	Consultation with authorities Section 87 approval
Traffic Control					
9	Engage TfNSW accredited traffic controllers. Manage traffic in accordance with TfNSW Standard Conditions, including: <ul style="list-style-type: none"> No stopping of traffic on public streets No stopping of pedestrians in anticipation of truck movements. Pedestrians may only be held for short periods, for their safety, whilst a truck is entering or leaving the site. Access to the site must be left in, left out in a forward direction, unless at a signalised intersection. 	Construction	Traffic Manager Traffic Control subcontractor	REMM TRA03	Proof of TfNSW accreditation Traffic Guidance Scheme

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
10	Implement truck scheduling, so that heavy vehicles do not marshall or queue on public roads.	Construction	Traffic Manager	REMM TRA04 NSW CoA E54	Site visits by authorities, photos
Heavy Vehicles					
11	Use nominated haulage routes for transport of spoil generated by the Project.	Construction	Traffic Manager	NSW CoA E54	Site layout plans
12	Access and egress for the site will be from the intersection of Moorebank Avenue and the DJLU access road, via the M5 at the north. Access from the south of Moorebank Avenue will only be permitted for heavy vehicles travelling to/from the Glenfield Waste facility. However, light vehicles may use Moorebank Avenue south of Moorebank Avenue rail overbridge to access the Project Site.	Pre-construction and construction	Traffic Manager All construction staff	NSW CoA E46 NSW CoA E50	Site layout plan
13	Establish a vehicle wash down area within the Project Site. Remove all mud, dust and debris from all construction vehicles prior to entering and leaving the Project Site.	Construction	Traffic Manager Site Supervisor	N/A	Site layout plan Compliance monitoring
14	Monitor heavy vehicle used for spoil haulage for the duration of the construction phase of the Project in real time. Maintain records of heavy vehicle movements which will 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.	Construction	Traffic Manager	NSW CoA E49	Heavy vehicle movement register Spoil Tracking Register Records to be maintained for no less than one year after project completion
Access					
15	Liaise with surrounding land and utility owners to inform them of any proposed occupation of their property or accessways.	Construction	Principal Representative	NSW CoA E47 NSW CoA E48	Landholder agreements

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
	Provide alternative access prior to the construction works, where required.				Consultation with landholders and utility owners
16	Consult with Liverpool City Council and affected businesses regarding any changes to access during construction. Erect and maintain signage to direct traffic where there are changes as a result of the construction. Maintain traffic control at accesses to worksites.	Construction	Traffic Manager	NSW CoA E54 NSW CoA E55	Traffic Guidance Scheme
17	Liaise with utility providers to raise or relocate any low-hanging wires.	Construction	Principal Representative Project Manager	NSW CoA E47	Consultation with utility providers
18	Public roads used by heavy vehicles to access the Project Site must be maintained in a safe condition for public use at all times. If damage to roads occurs as a result of Project activities the following course of action will be undertaken: (a) compensation to the relevant road authority for the damage so caused (b) rectification of the damage to restore the road to at least the condition it was in pre-works as identified in the Road Dilapidation Report or (c) satisfactory arrangements will be made with the relevant road authority(ies) regarding the reinstatement of roads used by heavy vehicles for construction where those roads continue to be used by heavy vehicles for construction of the Project.	Construction	Traffic Manager Road Quality Auditor	NSW CoA E52, NSW CoA E53	Road Condition Inspection Reports
19	If required, obtain a Road Occupancy Licence from the Transport Management Centre prior to any road closures.	Construction	Traffic Manager Traffic Control subcontractor	REMM TRA05	Road Occupancy Licence

ID	Measure / Requirement	Timing	Responsibility	Ref	Evidence
20	Install temporary safety barriers for the sections of the realigned road closest to the MIP Rail Link.	Construction	Site Supervisor	REMM TRA06	Compliance monitoring Road Safety Audit Report
21	Medians proposed to be demolished will be maintained using fixed separators during construction phase of the Project.	Construction	Site Supervisor	Best practise	TGS
Traffic incident response					
22	<p>In the event of a site safety incident relating to traffic, the following procedures will be implemented:</p> <ul style="list-style-type: none"> • Stop vehicle/personnel involved in the incident immediately (or as appropriate) • Operate warning lights and warn other drivers to slow down • Immediately begin warning other road users in the safest way possible • Use an appropriate TGS and use traffic controllers and signage where necessary • If a queue will be generated by the emergency incident, provide warning signs to inform road users and minimise the potential for end of queue collisions. 	Construction	Traffic Manager Traffic Control subcontractor Construction staff	Best practice	Daily diary TGS
23	In the event of inclement weather such as flooding or bushfire, traffic control personnel may be utilised to manage traffic flows and emergency road diversions will be out in place if necessary in consultation with Liverpool City Council and Transport for NSW.	Construction	Traffic Manager Traffic Control subcontractor	Best practice	Daily diary TGS

7 COMPLIANCE MANAGEMENT

7.1 Roles and Responsibilities

The Project organisational structure and overall roles and environmental responsibilities are outlined in Section 5.1 of the CEMP. Specific responsibilities for the implementation of traffic and transport management are detailed in Section 6 of this CTTMP.

Role	Responsibilities
Traffic Manager	<ul style="list-style-type: none"> • Ensuring that the approved traffic management measures are implemented and maintained in accordance with the approved plans • Carrying out regular inspections of the traffic control measures to ensure that they are effective • Identifying situations where traffic congestion, or unsafe conditions for vehicles, cyclists, pedestrians and workers, are occurring and providing recommendations for improvement • Maintaining current copies of the CTTMP and its various component plans, road occupancy licence (as relevant) and speed zone authorisations, and their controlled distribution • Keeping records of the Traffic Controllers' qualifications and ensuring that they are current • Liaising and facilitating regular meetings with TfNSW, other authorities and relevant parties on traffic management matters for the Project Site, maintaining records of these meetings and making them available to the relevant persons • Development and implementation of the Drivers Code of Conduct • Providing induction on traffic management measures to site personnel • Recording and reporting on all traffic incidents • Preparing monthly reports on traffic management matters • Stopping work on any activity where it is considered to be necessary to prevent traffic accidents or to comply with the directions of TfNSW and other authorities.
Road Quality Auditor	<ul style="list-style-type: none"> • Undertaking a survey of all the roads which will be used for haulage and access to the Project Site. • Preparing a Road Dilapidation Report, which provides details of the existing condition of all surveyed roads and roadside infrastructure to be used by heavy vehicles. • Provide the Road Dilapidation Report to Council within three weeks of survey completion and at least one month prior to the commencement of works. • Undertake routine inspections to ensure that the road pavement and street furniture is maintained to an acceptable standard.
Construction workers and drivers	<ul style="list-style-type: none"> • Understanding the CTTMP and reporting any incidents to the Site Supervisor.

7.2 Training

All site personnel (including sub-Construction Contractors) will undergo site induction training relating to traffic and transport management issues prior to construction commencing. The induction training will address elements related to traffic and transport management, including:

- Existence and requirements of this CTTMP
- Relevant legislation, regulations and Environment Protection Licence (EPL) conditions
- Incident response, management and reporting
- Environmentally sensitive locations and exclusion zones
- All heavy vehicle drivers are to be issued with relevant VMPs to ensure they are aware of approved transport routes and loading/unloading areas
- Requirement to follow the NSW road rules and are to be made aware of the site access and car parking areas
- The Drivers Code of Conduct to ensure that all the relevant procedures are met
- All requirements of Appendices contained within this CTTMP.

Targeted training in the form of toolbox talks or specific training will also be provided to personnel with a key role in traffic and transport management or those undertaking an activity with a high risk of environmental impact. Site personnel will undergo refresher training at not less than six monthly intervals.

Daily pre-start meetings conducted by the Construction Contractor Site Supervisor will inform the site workforce of any environmental issues relevant to traffic and transport that could potentially be impacted by, or impact on, the day's activities.

Further details regarding staff induction and training are provided in Section 5.2 of the CEMP.

7.3 Monitoring and Inspections

Inspections of sensitive areas and activities with the potential to impact traffic and transport will occur for the duration of the construction phase of the Project.

Requirements and responsibilities in relation to monitoring and inspections are documented in Section 7.1 of the CEMP.

7.3.1 Traffic monitoring

The Construction Contractor must use real time monitoring to record the location and movements of trucks hauling spoil. The records of these movements must be stored electronically and provided to the Planning Secretary and/or the EPA immediately upon request for a period of no less than one year following the construction completion. These records will be fed into the Spoil Tracking Register (refer to Section 5.2.4 of the CWRMP).

7.4 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this CTTMP, State and Commonwealth CoA and other relevant approvals, licenses and guidelines.

Audit requirements are detailed in Section 7.3 of the CEMP. The Road Safety Audit will be provided to LCC, upon their request.

7.5 Reporting and Identified Records

Reporting requirements and responsibilities are documented in Section 7.4 of the CEMP.

Specific reporting requirements associated with the CFFMP are outlined in Table 7.1.

Table 7.1: Reporting requirements relevant to traffic and transport management

Report	Frequency	Responsibility
Vehicle Movement Plan	<ul style="list-style-type: none"> Prior to construction and CTTMP implementation 	Traffic Manager
Traffic Guidance Schemes	<ul style="list-style-type: none"> Prior to construction and CTTMP implementation 	Traffic Manager
Road Dilapidation Audit Report	<ul style="list-style-type: none"> Within three weeks of completing the surveys and at least one month before the use of the roads by heavy vehicles. 	Traffic Manager

Accurate records will be maintained to substantiate all construction activities associated with the Project or relevant to the State and Commonwealth CoA, including measures taken to implement this CTTMP. Records will be made available to the DPE and DCCEEW upon request, within the timeframe nominated in the request.

7.6 Incidents

It is the responsibility of all personnel to report any incidents in accordance with the incident management procedures detailed to Section 6.1 of the CEMP.

7.7 Complaints

Complaints will be managed as soon as possible in accordance with the requirements of the CCS and Complaints Management System developed in accordance with NSW CoA B7 and B8 respectively.

Complaints will be managed in accordance with Section 5.4.3 of the CEMP and CCS.

7.8 Non-Compliance and Corrective Actions

Non-compliance may be identified via internal and external audits, site monitoring, inspections and observations, environmental incidents and emergencies, complaints and management reviews.

Non-compliance and resulting corrective actions will be managed in accordance with Section 7.2 of the CEMP.

8 REVIEW AND IMPROVEMENT

8.1 Continuous Improvement

Continuous improvement of this CTTMP will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement and through SMART principles. The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance
- Determine the cause or causes of non-compliances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-compliances 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.

Project environmental risks will be identified and included in the risk register and appropriate mitigation measures implemented throughout the construction of the Project as part of the continuous improvement process.

The process for ongoing risk identification and management during construction is outlined in Section 4.2 and Appendix C of the CEMP.

8.2 CTTMP Update and Amendment

The processes described in Section 7.5 of the CEMP may result in the need to update or revise this CTTMP. This will occur as needed.

Any revisions to the CTTMP will be endorsed and / or approved in accordance with the process outlined in Section 1.5 of the CEMP.

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

APPENDIX A Consultation

Response to Liverpool City Council's Letter of 20 April 2023.

Comment	Response and where the comment has been addressed
<p>1. The plans specified in Section 6.1 of the Construction Traffic and Transport Management Plan (CTTMP), including but not limited to the Traffic Management Plan (TMP), Traffic Staging Plans (TSPs), Traffic Control Plan (TCP) and Vehicle Movements Plans (VMPs), should be submitted to Council online via e-planning portal for review prior to the commencement of any construction works.</p>	<p>As detailed in Section 1.6, consultation with LCC will be undertaken regarding the development of specific Traffic Management Plans (TMP) and associated elements such as Traffic Staging Plans (TSPs), Traffic Guidance Schemes (TGS), Vehicle Movement Plans (VMPs) and Pedestrian Movement Plans (PMPs) as required.</p>
<p>2. Works within the road reserve should not commence until the relevant TMPs, and associated TCP and VMPs have been endorsed. The developer shall seek Road Occupancy, Road Opening Permits, and works zone approval from Council or Transport for New South Wales (TfNSW) if required, prior to any works within the public road reserve.</p>	<p>Section 1.6.2 details the TGS and CMP will be submitted to LCC for consultation.</p> <p>As detailed in Section 6.5, a Road Occupancy Licence will be obtained by the Construction Contractor at ties ins at the north and south connecting to Moorebank Avenue. Offline works do not require a ROL.</p>
<p>3. Council's on-street assets such as footpaths should be protected at all times. Any damages should be rectified to Council satisfaction</p>	<p>A road dilapidation survey will be undertaken. Any damages will be rectified to pre-existing conditions as detailed in Sections 6.6 and Table 6.1 of the CTTMP.</p>
<p>4. It is noted that final access arrangements for the project site have yet to be confirmed by the Construction Contractor. Hence, the CTTMP should be updated to include the following:</p> <ol style="list-style-type: none"> Access arrangements for the construction compound, construction site and zone; On-site construction car parking arrangement and traffic circulation; and Details regarding the need for a Road Occupancy Permit issued by Council or Road Occupancy License issued by the Transport Management Centre. 	<ul style="list-style-type: none"> Section 6.1 details construction access arrangement for the construction compound and site. Should these change the CTTMP would be updated and subject to endorsement by the ER. Section 5.2.3 states that parking will be within the Project Site (i.e. not on the surrounding road network). It is envisaged that car parking would be located within the construction compound and located strategically to facilitate works within the Project Site. Once the Construction Contractor has been awarded and confirm parking arrangements, the CTTMP will be updated and will be endorsed by the ER. As detailed in Section 6.5, a Road Occupancy Licence will be obtained by the Construction Contractor at ties ins at the north and south connecting to Moorebank Avenue.
<p>5. Traffic Guidance Scheme (former TCP)</p> <p>Prior to the commencement of any works, a Traffic Guidance Scheme (TGS) shall be prepared and include details regarding pedestrian and cyclist access management. The TGS should be in accordance with AS1742.3 'Traffic Control Devices for Works on Roads' and the Roads and Maritime Services publication 'Traffic Control at Worksites'.</p> <p>The TGS should be certified by an appropriately accredited Roads and Maritime Services Traffic Controller and submitted to Council (along with the Notice of Commencement) and the PCA for approval.</p> <p>Traffic control measures shall be implemented during the construction phase of the development in accordance with the certified plan. A copy of the endorsed plan shall always be available on site.</p>	<p>The CTTMP has been updated to reference the Traffic Guidance Scheme (TGS) replacing the Traffic Control Plan (TCP). As discussed in Section 1.6.2, the TGS will be submitted to Council for Council owned land. PCA approval is not required by the conditions of this Project. Electronic copies (rather than printed copies) will be stored on site.</p>

Comment	Response and where the comment has been addressed
<p>6. Community Consultation</p> <p>Although a Community Consultation Strategy (CCS) is to be prepared, the following points are also provided:</p> <ul style="list-style-type: none"> a. A project specific Communications Management Plan for construction activities should be submitted to Council for approval. The plan is to outline community consultation methodologies, approaches and timeline of consultation process and complaint handling process. b. Where not already identified, consultation measures like advertisements in the local newspapers, VMS sign notification, local community and interest group consultation meetings should be considered. c. Consultation processes should be established for key stakeholders such as Councils, TfNSW, Transport Management Centre, NSW Police and emergency services where not already established. d. It is recommended a project traffic control workshop be established to provide regular project upgrades, approval requirements and major construction traffic disruption events within the surrounding area. 	<ul style="list-style-type: none"> a. In accordance with the SSI Approval (SSI 10053), a CCS has been prepared and details consultation methodologies, approaches and timeline of consultation process and complaint handling process. The CCS has been approved by DPE and is provided herein for information. Consultation with the community (and other stakeholders) would be undertaken in accordance with the CCS, with clear notification provided for the commencement and completion of works, noisy works, audible (at receptor) out-of-hours works, and changes to traffic, parking or access (refer to Section 6.1.1 of the CCS). The CCS is therefore considered suitable to ensure appropriate engagement is undertaken with the community and key stakeholders and therefore further documentation (which would be repetitive), such as a Communications Management Plan, is not considered necessary. Consultation processes have been established as part of the CCS. Consultation on the CEMP and management plans has been undertaken with these stakeholders. See Table 1-1 and Appendix A. b. Noted and included within current CCS. The Community Consultative Committee currently established for the Moorebank Intermodal Precinct would be informed (outside of other mediums of communication) on the Project at quarterly meetings. c. Agreed. Consultation processes have been established as part of the CCS. Consultation on the CEMP and management plans has been undertaken with these stakeholders. See Table 1-1 and Appendix A. d. Mechanisms for providing project updates have already been established within the CCS. Note that Council consultation is discussed in Section 1.6 which states that ongoing consultation related to traffic and transport will include consultation for, but not be limited to: <ul style="list-style-type: none"> i. Notification of any changes in traffic conditions on roads or paths to road users, emergency services, public transport operators, and other relevant stakeholders ii. Specific Traffic Management Plans (TMP) and associated elements such as Traffic Staging Plans (TSPs), Traffic Control Plans (TCPs), Vehicle Movement Plans (VMPs) and Pedestrian Movement Plans (PMPs) as required iii. Notification and consultation regarding property and utility access arrangements. <p>Note that a Community Consultative Committee has been established and meets quarterly. Traffic control is discussed within this forum, further, community notifications will also be provided. These are</p>

Comment	Response and where the comment has been addressed
	considered sufficient methods with which to consult and inform the community regarding traffic management.
<p>7. Council Project Contacts</p> <p>The CTTMP, sub-CTMP or TMP and Communications Management Plan are also to include key contact details of principal, contractors, and public agencies. The following Council staff contact details are to be included in the Project Contacts:</p> <ul style="list-style-type: none"> • Charles Wiafe – Manager Transport Management, wiafec@liverpool.nsw.gov.au, 02 8711 7452 • Jeya Shanmuganathan – Maintenance Planning and Reporting Coordinator, shanmuganathanj@liverpool.nsw.gov.au, 02 8711 7016 	Section 1.6.2 has included the listed key contacts.
<p>8. Table 2.1 also specifies that all complaints received shall be responded to within the agreed timeframes of the CCS. Council's Transport Management Section request to be advised of any complaints received and the responses provided.</p>	All Project complaints would be made publicly available on the Project Complaints Register (which has been previously established for the Moorebank Intermodal Precinct). Complaints would also be discussed with the CCC, which includes Council. Council will not be individually notified for traffic or other complaints in that these would be provided via several other avenues. A complaints handling procedure is included in Appendix B of the CCS.
<p>9. Additional Documentation</p> <p>The following additional documentation is noted:</p> <ol style="list-style-type: none"> a. The pre-construction Dilapidation Report shall be prepared in consultation with Liverpool City Council, prior to the commencement of construction. b. A Road Safety Audit shall be prepared prior to the commencement of any works and provided to Council for review. c. A public lighting design brief in accordance with Council's and Endeavour Energy specifications along all public roads should be submitted to Council's Transport Management Section for review 	<ol style="list-style-type: none"> a. The dilapidation survey will be prepared in accordance with NSW CoA E51 (SSI 10053) with the report provided to Council within three weeks of completion of the survey and no later than one month before the road being used by heavy vehicles associated with the Project. b. A Road Safety Audit will be prepared in accordance with NSW CoA E58. Implementation of all actions emanating from the audits must be to the satisfaction of TfNSW. A copy of the audit can be provided to LCC, on request for information. c. Agreed. This is being undertaken as part of detailed design.

Response to Department of Defence Letter of 30 March 2023.

Comment	Response and where the comment has been addressed
<p>1. Section 1.6.2 Commonwealth to be added as a named ongoing consultee</p>	The Department of Defence is considered as a stakeholder of the Project and will continue to be consulted with during construction of the Project. This has been addressed in Section 1.6.2.
<p>2. Appendix D the traffic counts are low, assumption these are a single day and not a cumulative review? The JLU can have up to 20 or more large heavy vehicle movements per day.</p>	The existing turning movement counts were undertaken on 4 March 2020 and were presented in the Traffic Impact Assessment (Appendix D of the EIS). The existing turning movements consider the JLU access road and Moorebank Avenue intersection.

Comment	Response and where the comment has been addressed
3. The Traffic Managements plans will need to be reviewed and endorsed by the Commonwealth, particularly regarding access to the JLU and also any temporary access for construction	There is no requirement for Department of Defence or DCCEEW to endorse the CTTMP. However, as detailed in Section 1.6.2, the Department of Defence will continue to be consulted with during construction phase of the Project.

Response to TfNSW Letter of 20 April 2023.

Comment	Response and where the comment has been addressed
1. Update to advise who will be responsible for maintaining the Traffic Signal Staging works during the construction phase works 24/7, noting any issues with signals will need to be managed and TfNSW TMC and Network Operation will need to have contact details for the contractor responsible for signal electrical and civil works, during construction.	The Construction Contractor will be responsible for maintaining the Traffic Signal Staging works during construction. However, the Construction Contractor has not been awarded at the time of writing this CTTMP.
2. Please note TfNSW Traffic Signals Design Guide and Manual - section 1-16 and Appendix A to G via https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/document-types/guides-manuals/traffic-signal-design.html	This Guide will be considered during detailed design phase of the Project.
3. Replace Traffic Control Plan with Traffic Guidance Scheme as per the Traffic Control at Worksites Manual v6.1	The CTTMP has been updated to reference the Traffic Guidance Scheme replacing the Traffic Control Plan.
4. Existing lane configuration (number of lanes, width of lanes, length of lanes) on Moorebank Avenue must be maintained as existing, outside of approved ROL times for short term works	As detailed Section 6.5, the Construction Contractor will (as required) obtain an ROL from the Traffic Management Centre (TMC), now Customer Journey Management (CJM), if an existing road is to be used in such a way that it affects traffic flow within the vicinity of the Project Site.
5. Construction vehicles <ul style="list-style-type: none"> a. No traffic controllers should stop general traffic to allow construction vehicles to enter or exit, without an approved ROL. b. Site access must be left in left out, in a forward motion only. c. No Construction vehicles should obstruct any pedestrian crossings or footpaths. d. No Construction vehicles should queue/layover on Moorebank Avenue without an approved ROL. 	<p>As detailed in Section 6.5, the Construction Contractor will (as required) obtain an ROL if an existing road is to be used in such a way that it affects traffic flow within the vicinity of the Project Site. Additionally, signage will be implemented to direct traffic where there are changes as a result of construction.</p> <p>As detailed in Section 7.2, staff will undergo site induction training relating to traffic and transport management prior to construction commencing.</p> <p>As detailed in Section 6.9, all reasonably practicable measures will be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses, and affected properties.</p> <p>Table 6.1 has been updated to include 'access to the site must be in a left in, left out in forward direction, unless at a signalised intersection'.</p> <p>Table 6.1 outlines that truck scheduling will be implemented during construction to minimise queuing on public roads.</p>
6. Road Occupancy Licenses	Section 6.5 has been updated to include the listed information.

Comment	Response and where the comment has been addressed
<ul style="list-style-type: none"> a. Date and time of lane closures will be as per approved ROL. b. All ROLs to be submitted 10 business days in advance. c. All activation and deactivation of ROLs for work shifts must use the web application system and not call the CJM. 	
<p>7. Local Business & Resident access must be maintained at all times.</p>	<p>As detailed in Section 6.9, in accordance with NSW CoA E55, all reasonably practicable measures will be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses, and affected properties.</p>
<p>8. Access to bus stops for both buses and passengers must be maintained, including bus draw in and draw out distances.</p>	<p>As detailed in Section 4.2.5, there are no published public bus routes that travel along the Moorebank Avenue to or from Cambridge Avenue. Therefore, access to bus stops will not be affected by the construction of the Project.</p>
<p>9. If any medians are proposed to be demolished: Appropriate separators must be installed to delineate. These must be fixed to the pavement.</p>	<p>Medians proposed to be demolished will be maintained using fixed separators during construction phase of the Project. This has been included as an additional management measure in Table 6.1.</p>
<p>10. If any barriers are proposed, please note a cross section illustrating the existing lane widths versus lane widths proposed during construction, including barrier installation width, edge clearance and deflection zone to be provided to TfNSW via development.sydney@transport.nsw.gov.au</p>	<p>This requirement will be undertaken during detailed design phase of the Project.</p>

From: [Westley Owers](#)
To: [Cyston, Samantha](#)
Cc: [Gail Hall](#); [Eated, Ketan](#)
Subject: FW: MPE Stage 1 Mod 1 & SSI-10053 Update
Date: Friday, 9 June 2023 3:04:15 PM
Attachments: [image001.jpg](#)
[image002.jpg](#)
[image003.jpg](#)
[image004.jpg](#)
[image005.jpg](#)

Hi Sam,

See below, Council has considers the CTMP consultation closed

Regards

Wes

From: Lilyan Abosh [REDACTED]
Sent: Friday, June 9, 2023 10:42 AM
To: Westley Owers [REDACTED]
Cc: Nancy-Leigh Norris [REDACTED]
Subject: MPE Stage 1 Mod 1 & SSI-10053 Update

Hi Westley,

Thank you for your time on the phone this morning

[REDACTED]

Council's Traffic section have also reviewed the CTMP response back and raise no objections.

Kind regards,

Lilyan Abosh

Acting Senior Strategic Planner



[REDACTED]
Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia

www.liverpool.nsw.gov.au



We acknowledge the traditional custodians of the land that now resides within Liverpool City Council's boundaries, the Darug and Dharawal nations and pay our respects to their Elders past, present and emerging.

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From: Westley Owers
Sent: Monday, June 5, 2023 9:34 AM
To: 'Lilyan Abosh' [REDACTED]
Cc: Gail Hall [REDACTED]; Luke Oste [REDACTED]; Nancy-Leigh Norris [REDACTED]
Subject: RE: RE: Moorebank Avenue Realignment SSI-10053 Post Approval Documents

Hi Lilyan,

We did not assign a timeframe on this as we believed the comments have been closed. However, if there was anything LCC would like to discuss then it would be great to do so this week (before 9/06/23)

Do not hesitate to reach out to me

Regards,

Wes

From: Lilyan Abosh [REDACTED]
Sent: Friday, June 2, 2023 2:31 PM
To: Westley Ower [REDACTED]
Cc: Gail Hall [REDACTED]; Luke Oste [REDACTED]; Nancy-Leigh Norris [REDACTED]
Subject: RE: RE: Moorebank Avenue Realignment SSI-10053 Post Approval Documents

Hi Westley,

Thanks for sending through, I will forward this on to Council's Traffic team for review

Could you please advise however if there is a timeframe on this matter

Regards,
Lilyan Abosh
Acting Senior Strategic Planner

[REDACTED]
Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia
[REDACTED] [REDACTED] [REDACTED] www.liverpool.nsw.gov.au

[REDACTED]

We acknowledge the traditional custodians of the land that now resides within Liverpool City Council's boundaries, the Darug and Dharawal nations and pay our respects to their Elders past, present and emerging.

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From: Westley Owers [REDACTED]
Sent: Friday, June 2, 2023 10:16 AM
To: Lilyan Abosh [REDACTED]
Cc: Gail Hall [REDACTED]; Luke Oste [REDACTED]
Subject: RE: RE: Moorebank Avenue Realignment SSI-10053 Post Approval Documents

Hi Lilyan,

Find attached National Intermodal's response to LCC's comments in relation to the CTTMP. We have generally accepted LCC's comments and therefore consider this consultation closed, however please do not hesitate to contact me to discuss

Note that the document will be updated to the portal today

Regards,

Wes

[REDACTED]

nationalintermodal.com.au

National Intermodal acknowledges the Traditional Owners and Custodians of the land on which we operate. We pay our respects to their Elders past, present and emerging.

Department of Planning and Environment
Locked Bag 5022
Parramatta NSW 2124

Sent via Major Projects Portal

Re: State Significant Infrastructure – SSI-10053 Moorebank Avenue Realignment Post Approval Requirements (SSI-10053-PA-17 & SSI-10053-PA-21)

Dear Kylie Hargreaves,

I refer to the Construction Noise and Vibration Management Plan, and the Construction Traffic and Transport Management Plan, which are submitted as post approval documents for the Moorebank Avenue Realignment project (SSI-10053).

Council notes that the State Significant Infrastructure (SS1) application SSI-10053 was approved by the Minister of Planning and Public Spaces on 14 October 2021. The subject application granted consent for the construction of a multi lane road and ancillary road, stormwater, signage and infrastructure works along Moorebank Avenue.

Council staff have reviewed the submitted documentation, and comments are provided in **Attachment 1**. If you require any further information on this matter, please contact Lilyan Abosh, Strategic Planner, [REDACTED].

Yours sincerely,



Nancy-Leigh Norris
Executive Planner

Attachment 1 - Detailed Comments

1. Construction Noise and Vibration Management Plan

Council is not the consent authority and hence, no comments are made in relation to the submitted Construction Noise and Vibration Management Plan (CNVMP). It is recommended that the CNVMP be reviewed and determined satisfactory by the consent authority. This may include an independent review of the CNVMP by an external consultant.

Notwithstanding this, Council has previously endorsed a submission dated 30 April 2021 for the Moorebank Avenue Realignment Environmental Impact Statement (EIS). This submission advised that a CNVMP must be prepared by a suitably qualified acoustic consultant, and should incorporate actions that minimise noise arising from construction, including the following:

- Methods for promoting noise awareness by contractors and training procedures;
- A complaints lodgment procedure to ensure that the public and local residents are able to report any noise issues;
- An ongoing review process and a plan for responding to noise complaints; and
- Details of the site personnel who would manage noise and the steps that would be used to manage any potential noise impacts.

Furthermore, the Council submission raised concerns that the residents in the western portion of Wattle Grove would be exposed to increased traffic noise, where acoustic walls are not proposed. It was also outlined that the EIS did not identify whether the road traffic noise assessment considered the expected additional traffic volumes from the proposed Cambridge Avenue upgrade.

These comments and concerns are reiterated in this submission for consideration of the consent authority when reviewing the CNVMP.

2. Construction Traffic and Transport Management Plan

The following comments are to be incorporated into the Construction Traffic and Transport Management Plan (CTTMP).

- a) The plans specified in Section 6.1 of the Construction Traffic and Transport Management Plan (CTTMP), including but not limited to the Traffic Management Plan (TMP), Traffic Staging Plans (TSPs), Traffic Control Plan (TCP) and Vehicle Movements Plans (VMPs), should be submitted to Council online via e-planning portal for review prior to the commencement of any construction works.
- b) Works within the road reserve should not commence until the relevant TMPs, and associated TCP and VMPs have been endorsed. The developer shall seek Road Occupancy, Road Opening Permits, and works zone approval from Council or Transport for New South Wales (TfNSW) if required, prior to any works within the public road reserve.

- c) Council's on-street assets such as footpaths should be protected at all times. Any damages should be rectified to Council satisfaction.

Access Arrangements

It is noted that final access arrangements for the project site have yet to be confirmed by the Construction Contractor. Hence, the CTTMP should be updated to include the following:

- Access arrangements for the construction compound, construction site and zone;
- On-site construction car parking arrangement and traffic circulation; and
- Details regarding the need for a Road Occupancy Permit issued by Council or Road Occupancy Licence issued by the Transport Management Centre.

Traffic Guidance Scheme (former TCP)

Prior to the commencement of any works, a Traffic Guidance Scheme (TGS) shall be prepared and include details regarding pedestrian and cyclist access management. The TGS should be in accordance with AS1742.3 'Traffic Control Devices for Works on Roads' and the Roads and Maritime Services publication 'Traffic Control at Worksites'. The TGS should be certified by an appropriately accredited Roads and Maritime Services Traffic Controller and submitted to Council (along with the Notice of Commencement) and the PCA for approval.

Traffic control measures shall be implemented during the construction phase of the development in accordance with the certified plan. A copy of the endorsed plan shall always be available on site.

Community Consultation

Although a Community Consultation Strategy (CCS) is to be prepared, the following points are also provided:

- A project specific Communications Management Plan for construction activities should be submitted to Council for approval. The plan is to outline community consultation methodologies, approaches and timeline of consultation process and complaint handling process.
- Where not already identified, consultation measures like advertisements in the local newspapers, VMS sign notification, local community and interest group consultation meetings should be considered.
- Consultation processes should be established for key stakeholders such as Councils, TfNSW, Transport Management Centre, NSW Police and emergency services where not already established.
- It is recommended a project traffic control workshop be established to provide regular project upgrades, approval requirements and major construction traffic disruption events within the surrounding area.

Council Project Contacts

The CTTMP, sub-CTMP or TMP and Communications Management Plan are also to include key contact details of principal, contractors, and public agencies. The following Council staff contact details are to be included in the Project Contacts:

- Charles Wiafe – Manager Transport Management, [REDACTED]
- Jeya Shanmuganathan – Maintenance Planning and Reporting Coordinator, [REDACTED]

Table 2.1 also specifies that all complaints received shall be responded to within the agreed timeframes of the CCS. Council's Transport Management Section request to be advised of any complaints received and the responses provided.

Additional Documentation

The following additional documentation is noted:

- The pre-construction Dilapidation Report shall be prepared in consultation with Liverpool City Council, prior to the commencement of construction.
- A Road Safety Audit shall be prepared prior to the commencement of any works and provided to Council for review.
- A public lighting design brief in accordance with Council's and Endeavour Energy specifications along all public roads should be submitted to Council's Transport Management Section for review.

From: Oyston, Samantha
To: Stella Ou
Cc: Charles Wrafer; Neil Ramsay; Lihyan Aboch; Gail Hall; westley.owen; [redacted]; Patel, Ketan
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans
Date: Friday, 24 March 2023 5:09:00 PM
Attachments: [image001.jpg](#)
[image002.jpg](#)
[image003.jpg](#)
[image004.jpg](#)
[image005.jpg](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.jpg](#)

Hi Stella,

The Construction Traffic and Transport Management Plan has now also been uploaded to the DPE portal for Liverpool City Council review. Consultation closes Thursday, 20 April 2023

Warm Regards,

Samantha Oyston | Senior Environmental Consultant
Arcadis [redacted]
www.arcadis.com

From: Oyston, Samantha
Sent: Thursday, 22 December 2022 4:01 PM
To: [redacted]
Cc: Gail Hall [redacted]; Jamie Crawford [redacted]; Patel, Ketan [redacted]
Subject: Moorebank Avenue Realignment - Construction Management Plans

Hello Stella,

Following on from my voicemail today

Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

- Construction of approximately three kilometres of new road to bypass the MLP to the east, comprising:
 - A four-lane road (two lanes in each direction) near Moorebank Precinct East (MPE), commencing from a point approximately 130 metres south of the Anzac Road / Moorebank Avenue intersection to the south-eastern corner of the MPE site
 - A two-lane road (one lane in each direction) from the south-eastern corner of the MPE site to a point immediately north of the bridge over the East Hills railway
- Northern tie-in to the existing Moorebank Avenue, 130 meters south of the Anzac Road/Moorebank Avenue for a distance of 250 metres to the northwest corner of the MPE site
- Construction of four accesses with signalised intersections between the new road and the MLP
- Construction of a central median, typically six metres wide, tapering to zero width where the new road becomes two lanes
- Southern tie-in to the existing Moorebank Avenue, 17 metres before the East Hills railway over bridge. No work will be undertaken or impact the East Hills over bridge

At the completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the new alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the Moorebank Logistic Park

We are aiming to send the Construction Traffic and Transport Management Plan during the week commencing of 6 February 2023 and the Construction Noise and Vibration Management Plan during the week commencing of 23 January 2023 for Liverpool City Council review

Warm Regards,

Samantha Oyston (she/her) MRes, BEnv
Senior Environmental Consultant
Arcadis Australia Pacific
Level 16, 580 George Street, Sydney | NSW 2000 | Australia

www.arcadis.com



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From: [Charles Wiafe](#)
To: [Oyston, Samantha](#)
Cc: [Stella Qu](#)
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans
Date: Monday, 16 January 2023 1:39:42 PM
Attachments: [image007.jpg](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)
[image013.jpg](#)

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Hi Samantha,

I refer to your below to Campbelltown Council.

The section of Moorebank Avenue to be realigned is in the Liverpool Local Government Area.

Hence Campbelltown Council Customer Service has forwarded your email to Liverpool Council.

Please when the Construction Management Plan is ready, email a copy to Liverpool Council for our information and appropriate action.

Regards

Charles Wiafe
Manager Transport Management

From: Council <Council@campbelltown.nsw.gov.au>
Sent: Friday, 13 January 2023 10:16 AM
To: LCC <LCC@liverpool.nsw.gov.au>
Subject: FW: Moorebank Avenue Realignment - Construction Management Plans

Hi Team
This one falls under your LGA
Please action accordingly

Brand



Customer Service

P: 02 4645 4000

F: 02 4645 4111

www.campbelltown.nsw.gov.au

Council email signature



Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.

From: Oyston, Samantha [REDACTED]

Sent: Thursday, 12 January 2023 10:57 AM

To: Council <Council@campbelltown.nsw.gov.au>

Cc: Patel, Ketan [REDACTED] Gail Hall [REDACTED]

Jamie Crawford [REDACTED]

Subject: Moorebank Avenue Realignment - Construction Management Plans

Hello,

Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation.

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

- Construction of approximately three kilometres of new road to bypass the MLP to the east, comprising:
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- Southern tie-in to the existing Moorebank Avenue, 17 metres before the East Hills railway over bridge. No work will be undertaken or impact the East Hills over bridge

At the completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the new alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the Moorebank Logistic Park.

We are aiming to send the Construction Traffic and Transport Plan for Campbelltown Council review during the week commencing of 6 February 2023.

Warm Regards,

Samantha Oyston (she/her) MRes, BEnv

Senior Environmental Consultant

Arcadis Australia Pacific

Level 16, 580 George Street, Sydney | NSW 2000 | Australia

[REDACTED]
www.arcadis.com



I work flexibly. Unless it suits you, I don't expect you to read or respond to my emails outside of your normal work hours.

From: Muriel Maher [REDACTED]
Sent: Thursday, 20 April 2023 4:21 PM
To: Oyston, Samantha [REDACTED] Gail Hall
[REDACTED]
Cc: Rachel Cumming [REDACTED]; Development Sydney
[REDACTED]; Development CTMP CJP
[REDACTED] Westley Owers
[REDACTED]; Patel, Ketan [REDACTED] Dea
Khateeb [REDACTED]
Subject: TfNSW RE: MAR Construction T&T Mgmt Plan - SYD20/000740/21

Good afternoon Samantha/Gail,

Please refer following comments relevant to the CTTMP dated 24 March 2023 and traffic and transport during construction activities in general:

1. Update to advise who will be responsible for maintaining the Traffic Signal Staging works during the construction phase works 24/7, noting any issues with signals will need to be managed and TfNSW TMC and Network Operation will need to have contact details for the contractor responsible for signal electrical and civil works, during construction.
2. Please note TfNSW Traffic Signals Design Guide and Manual - section 1-16 and Appendix A to G via <https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/document-types/guides-manuals/traffic-signal-design.html>
3. Replace Traffic Control Plan with Traffic Guidance Scheme as per the Traffic Control at Worksites Manual v6.1.
4. Existing lane configuration (number of lanes, width of lanes, length of lanes) on Moorebank Avenue must be maintained as existing, outside of approved ROL times for short term works
5. Construction vehicles
 - a. No traffic controllers should stop general traffic to allow construction vehicles to enter or exit, without an approved ROL.
 - b. Site access must be left in left out, in a forward motion only.
 - c. No Construction vehicles should obstruct any pedestrian crossings or footpaths.
 - d. No Construction vehicles should queue/layover on Moorebank Avenue without an approved ROL.
6. Road Occupancy Licenses
 - a. Date and time of lane closures will be as per approved ROL.
 - b. All ROLs to be submitted 10 business days in advance.
 - c. All activation and deactivation of ROLs for work shifts must use the web application system and not call the CJM.
7. Local Business & Resident access must be maintained at all times.
8. Access to bus stops for both buses and passengers must be maintained, including bus draw in and draw out distances.
9. If any medians are proposed to be demolished: Appropriate separators must be installed to delineate. These must be fixed to the pavement.
10. If any barriers are proposed, please note a cross section illustrating the existing lane widths versus lane widths proposed during construction, including barrier installation width, edge clearance and deflection zone to be provided to TfNSW via development.sydney@transport.nsw.gov.au

Any queries, please do not hesitate to reach out.

Best regards,

Muriel Maher

Senior Coordinator Land Use | West & Central
Planning and Programs
Greater Sydney
Transport for NSW

[TfNSW Planning & Process Information](#)

[REDACTED]

From: Oyston, Samantha [REDACTED]
Sent: Friday, 24 March 2023 5:17 PM
To: Development CTMP CJP [REDACTED]; Development
Sydney [REDACTED]; Rachel Cumming
[REDACTED] Muriel Maher
[REDACTED] Development Applications
[REDACTED] Brandon Morson
[REDACTED] Samiah Assaad
[REDACTED]
Cc: Gail Hall [REDACTED]; Westley Owers
[REDACTED] Patel, Ketan [REDACTED]
Subject: RE: Construction Management Plan

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CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi All,

This is a courtesy email to let you know that the Construction Traffic and Transport Plan has been uploaded to the DPE portal for TfNSW review. Consultation closes Thursday, 20 April 2023.

Warm Regards,

Samantha O ston Senior Environmental Consultant
Arcadis | [REDACTED]
www.arcadis.com

From: [Oyston, Samantha](#)
To: muriel.maher@transport.nsw.gov.au; Rachel.cumming@transport.nsw.gov.au
Cc: [Patel, Ketan](#); [Gail Hall](#); [Jamie Crawford](#)
Subject: Moorebank Avenue Realignment - Construction Management Plans
Date: Thursday, 22 December 2022 4:03:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)

Hello,

Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation.

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

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At the completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the new alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the Moorebank Logistic Park.

We are aiming to send the Construction Traffic and Transport Plan for TfNSW review during the week commencing of 6 February 2023.

Warm Regards,

Samantha Oyston (she/her) MRes, BEnv
Senior Environmental Consultant
Arcadis Australia Pacific

From: [Pete Muir](#)
To: [Oyston, Samantha](#)
Cc: [Gail Hall](#); [Jamie Crawford](#); [Patel, Ketan](#); [Neely Majlessi](#); [Harman Lally](#)
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans
Date: Thursday, 30 March 2023 12:20:02 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)

Samantha

The report is quite high level and there are generally not too many comments at this stage:

- 1.6.2 Commonwealth to be added as a named on going consultee
- Appendix D the traffic counts are low, assumption these are a single day and not a cumulative review? The JLU can have up to 20 or more large heavy vehicle movements per day
- The Traffic Managements plans will need to be reviewed and endorsed by the Commonwealth, particularly regarding access to the JLU and also any temporary access for construction

We look forward to receiving those additional plans when prepared to allow a detailed assessment of the impact to the Commonwealth during construction to be assessed.

Pete Muir

Principal – Project Management
Defence and National Security
Beca



www.beca.com



Sensitivity: General

From: Oyston, Samantha [redacted]
Sent: Friday, 24 March 2023 3:43 PM
To: Pete Muir [redacted]
Cc: Gail Hall [redacted] Jamie Crawford
[redacted] Patel, Ketan [redacted] Neely
Majlessi [redacted] Harman Lally [redacted]
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans

Hi Pete,

Apologies for the delay on this. Please find attached the Construction Traffic and Transport Management Plan for Department of Defence review. Please note consultation closes on 20 April 2023.

Warm Regards,

Samantha Oyston | Senior Environmental Consultant
Arcadis [redacted]
www.arcadis.com

Sensitivity: General

From: Oyston, Samantha [REDACTED]
Sent: Thursday, 22 December 2022 3:05 PM
To: Pete Muir [REDACTED]
Cc: Gail Hall [REDACTED] Jamie Crawford
[REDACTED] Patel, Ketan [REDACTED]
Subject: Moorebank Avenue Realignment - Construction Management Plans

Hello Peter,

As discussed on the phone today.

Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation.

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

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At the completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the new alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the Moorebank Logistic Park.

We are aiming to send the Construction Traffic and Transport Plan for Department of Defence review during the week commencing of 6 February 2023.

Warm Regards,

Samantha Oyston (she/her) MRes, BEnv
Senior Environmental Consultant
Arcadis Australia Pacific
Level 16, 580 George Street, Sydney | NSW 2000 | Australia
[REDACTED]
www.arcadis.com



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From: [Oyston, Samantha](#)
To: AMBULANCE-SouthWestSydneySectorAdmin@health.nsw.gov.au
Cc: [Gail Hall](#); [Patel, Ketan](#); [Westley Owers](#)
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans
Date: Friday, 24 March 2023 5:14:00 PM
Attachments: [MARW_CTTMP_Rev E.pdf](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)

Hi,

Please find attached the Construction Traffic and Transport Management Plan for Ambulance NSW review. Please note consultation closes on 20 April 2023.

Warm Regards,

Samantha Oyston | Senior Environmental Consultant
Arcadis | [REDACTED]
www.arcadis.com

From: Oyston, Samantha
Sent: Wednesday, 18 January 2023 8:11 AM
To: AMBULANCE-SouthWestSydneySectorAdmin@health.nsw.gov.au
Cc: Gail Hall [REDACTED] Patel, Ketan [REDACTED]
Jamie Crawford [REDACTED]
Subject: Moorebank Avenue Realignment - Construction Management Plans

Hello,

Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation.

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

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We are aiming to send the Traffic and Transport Management Plan for NSW Ambulance review, to allow for consultation on any access constraints and proposed processes for future consultation, during the week commencing of 6 February 2023.

Warm Regards,

Samantha Oyston (she/her) MRes, BEnv
Senior Environmental Consultant
Arcadis Australia Pacific
Level 16, 580 George Street, Sydney | NSW 2000 | Australia
[REDACTED]
www.arcadis.com



I work flexibly. Unless it suits you, I don't expect you to read or respond to my emails outside of your normal work hours.



From: [Oyston, Samantha](#)
To: [REDACTED]
Cc: [Gail Hall](#); [Westley Owers](#); [Patel, Ketan](#)
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans
Date: Friday, 24 March 2023 5:07:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)

Hi,

This is a courtesy email to let you know that the Construction Traffic and Transport Plan has been uploaded to the DPE portal for NSW Police review. Consultation closes Thursday, 20 April 2023.

Warm Regards,

Samantha Oyston | Senior Environmental Consultant
Arcadis | [REDACTED]
www.arcadis.com

From: [REDACTED]
To: [REDACTED]
Cc: [Oyston, Samantha](#)
Subject: FW: Moorebank Avenue Realignment - Construction Management Plans [SEC=OFFICIAL]
Date: Friday, 20 January 2023 3:06:52 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)
[image007.jpg](#)

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Please see attached detail of proposed realignment of Moorebank Ave.

Traffic Office – [REDACTED] FYI and response.

Regards,



[REDACTED]
Inspector, Duty Officer
Liverpool City PAC
148 George Street, Liverpool NSW 2170
[REDACTED]

From: Oyston, Samantha [REDACTED]
Sent: Friday, 20 January 2023 2:01 PM
To: [REDACTED]
Cc: Jamie Crawford [REDACTED] Westley Owers
[REDACTED] Patel, Ketan [REDACTED]
Subject: Moorebank Avenue Realignment - Construction Management Plans

Hello,

Thank you for your time of on the phone just now, as I mentioned Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation and undertaking consultation with NSW Government Agencies, including Police NSW.

We are aiming to send the Traffic and Transport Management Plan for NSW Police review, to allow for consultation on any access constraints and proposed processes for future consultation, during the week commencing of 6 February 2023. For your reference I have included some detail about the project below.

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

- *Construction of approximately three kilometres of new road to bypass the MLP to the east, comprising:*
 - *A four-lane road (two lanes in each direction) near Moorebank Precinct East (MPE), commencing from a point approximately 130 metres south of the Anzac Road / Moorebank Avenue intersection to the south-eastern corner of the MPE site*
 - *A two-lane road (one lane in each direction) from the south-eastern corner of the MPE site to a point immediately north of the bridge over the East Hills railway*
- *Northern tie-in to the existing Moorebank Avenue, 130 meters south of the Anzac Road/Moorebank Avenue for a distance of 250 metres to the northwest corner of the MPE site.*
- *Construction of four accesses with signalised intersections between the new road and the MLP*
- *Construction of a central median, typically six metres wide, tapering to zero width where the new road becomes two*

lanes

- Southern tie-in to the existing Moorebank Avenue, 17 metres before the East Hills railway over bridge. No work will be undertaken or impact the East Hills over bridge

At the completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the new alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the Moorebank Logistic Park.

Warm Regards,

Samantha Oyston (she/her) MRes, BEnv
Senior Environmental Consultant
Arcadis Australia Pacific
Level 16, 580 George Street, Sydney | NSW 2000 | Australia


www.arcadis.com



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File Ref. No: FRN21/943 BFS23/1499 8000027172
TRIM Doc. No: D23/29661
Contact: Station Officer Luke Loseby

10 April 2023

HEATHER TILLEY
C/O NSW Department of Planning and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Dear Heather,

Re: Advice on Post Approval Matter - MOOREBANK AVENUE REALIGNMENT (SSI-10053-PA-21)

Fire and Rescue NSW (FRNSW) acknowledge correspondence received on 23 March 2023, requesting FRNSW provide consultation on the Construction Traffic Management Plan (CTMP) for MOOREBANK AVENUE REALIGNMENT (SSI-10053-PA-21).

It is deemed that the proposal has limited scope and application in regard to special hazards or special problems of firefighting. FRNSW submit no comments or recommendations for consideration, nor any requirements beyond that specified by applicable legislation.

Proponents of projects that require engagement with FRNSW on Post Approval Matters are required to engage directly with FRNSW. If a written response from FRNSW regarding this matter is required, this can be done by completing the [FRNSW written report application](#) form and sending to FireSafety@fire.nsw.gov.au. Further details can be found on our internet page at <https://www.fire.nsw.gov.au/page.php?id=9156>.

For further information please contact the Operational Liaison and Special Hazards Unit, referencing FRNSW file number BFS23/1499. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read "James O'Carroll".

Superintendent James O'Carroll
Manager
Operational Liaison and Special Hazards Unit

From: Kylie Hargreaves [REDACTED]
Sent: Wednesday, March 29, 2023 10:39 AM
To: Westley Owers [REDACTED]
Subject: FW: Acknowledgement of Application - Major Projects – Proponent Request for Advice - Moorebank Avenue Realignment - Construction Traffic Management Management Plan (SSI-10053-PA-21) (Liverpool City)

From: Fire Safety [REDACTED]
Sent: Monday, 27 March 2023 10:25 AM
To: Kylie Hargreaves [REDACTED]
Subject: Acknowledgement of Application - Major Projects – Proponent Request for Advice - Moorebank Avenue Realignment - Construction Traffic Management Management Plan (SSI-10053-PA-21) (Liverpool City)

Good Morning Kylie,

Fire & Rescue NSW acknowledge receipt of your application - Major Projects – Proponent Request for Advice - Moorebank Avenue Realignment - Construction Traffic Management Management Plan (SSI-10053-PA-21) (Liverpool City).

For any future correspondence regarding this matter, we request that you quote your job / reference number:

Project Reference:	FRN21/943
Job Number:	BFS23/1499
SRID:	8000027172

Should you have any question regarding this matter, please contact us here at Fire Safety.

Regards,

Samantha Cavanagh
Administrative Support Officer
CSD Admin & Project Services | Fire and Rescue NSW



T: [REDACTED] | E: firesafety@fire.nsw.gov.au
1 Amarina Ave, Greenacre, NSW 2190 | Locked Bag 12, Greenacre, NSW 2190



www.fire.nsw.gov.au



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From: no-reply@majorprojects.planning.nsw.gov.au <no-reply@majorprojects.planning.nsw.gov.au>

Sent: Friday, March 24, 2023 4:27 PM

To: Fire Safety <FireSafety@fire.nsw.gov.au>; Operational Liaison <OpsLiaison@fire.nsw.gov.au>

Subject: CM: Major Projects – Proponent Request for Advice - Moorebank Avenue Realignment - Construction Traffic Management Management Plan (SSI-10053-PA-21) (Liverpool City)

CAUTION: This email originated from outside of Fire and Rescue NSW. Do not click links or open attachments unless you recognise the sender and know the content is safe.

A proponent is requesting advice in relation to a post approval matter for the Moorebank Avenue Realignment.

Please sign in to your account to view the details of this request and to upload your advice.

If you have any enquiries about this request, you can contact Kylie Hargreaves at [REDACTED]

To sign in to your account click [here](#) or visit the [Major Projects Website](#).

Please do not reply to this email.

Kind regards

The Department of Planning and Environment



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Views expressed in the message are those of the individual sender, and are not necessarily the views of Fire and Rescue NSW (FRNSW). Use of electronic mail is subject to FRNSW policy and guidelines. FRNSW reserves the

From: [Oyston, Samantha](#)
To: [Fire Safety](#)
Cc: [Westley Owers](#); [Gail Hall](#); [Patel, Ketan](#)
Subject: RE: ATTN: John Hawes; Moorebank Avenue Realignment - Construction Management Plans
Date: Friday, 24 March 2023 5:05:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image012.jpg](#)

Apologies for my second email, in addition to the Construction Bushfire Management Plan, the Construction Traffic and Transport Plan has also been uploaded to the DPE portal for Fire and Rescue review. Consultation closes Thursday, 20 April 2023.

Samantha Oyston | Senior Environmental Consultant
Arcadis | [REDACTED]
www.arcadis.com

From: Oyston, Samantha
Sent: Friday, 24 March 2023 5:00 PM
To: Fire Safety <FireSafety@fire.nsw.gov.au>
Cc: Westley Owers [REDACTED] Gail Hall
[REDACTED] Patel, Ketan [REDACTED]
Subject: RE: ATTN: John Hawes; Moorebank Avenue Realignment - Construction Management Plans

Hi

This is a courtesy email to let you know that the Construction Bushfire Management Plan has been uploaded to the DPE portal for DPI Fisheries review. Consultation closes Thursday, 20 April 2023.

Could you also please confirm if Fire and Rescue would like to review the landscape design plan including design layout and vegetation once detailed design is complete? And how Fire and Rescue would like to be informed and updated about the Site (i.e. final design layout including water hydrants sources/water pumps/water sources), progressively or only in the case of the event of a fire?

Warm Regards,

Samantha Oyston | Senior Environmental Consultant
Arcadis | T. [REDACTED]
www.arcadis.com

From: Oyston, Samantha

From: Oyston, Samantha [REDACTED]
Sent: Friday, 13 January 2023 2:34 PM
To: Fire Safety <FireSafety@fire.nsw.gov.au>
Cc: Jamie Crawford [REDACTED]; Gail Hall
[REDACTED] Patel, Ketan [REDACTED]
Subject: ATTN: John Dawes; Moorebank Avenue Realignment - Construction Management Plans

CAUTION: This email originated from outside of Fire and Rescue NSW. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hello,

Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation.

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

- Construction of approximately three kilometres of new road to bypass the MLP to the east, comprising:
 - A four-lane road (two lanes in each direction) near Moorebank Precinct East (MPE), commencing from a point approximately 130 metres south of the Anzac Road / Moorebank Avenue intersection to the south-eastern corner of the MPE site
 - A two-lane road (one lane in each direction) from the south-eastern corner of the MPE site to a point immediately north of the bridge over the East Hills railway
- Northern tie-in to the existing Moorebank Avenue, 130 meters south of the Anzac Road/Moorebank Avenue for a distance of 250 metres to the northwest corner of the MPE site.
- Construction of four accesses with signalised intersections between the new road and the MLP
- Construction of a central median, typically six metres wide, tapering to zero width where the new road becomes two lanes
- Southern tie-in to the existing Moorebank Avenue, 17 metres before the East Hills railway over bridge. No work will be undertaken or impact the East Hills over bridge

At the completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the new alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the Moorebank Logistic Park.

From: no-reply@majorprojects.planning.nsw.gov.au <no-reply@majorprojects.planning.nsw.gov.au>

Sent: Thursday, May 4, 2023 10:36 AM

To: Kylie Hargreaves [REDACTED]

Subject: Moorebank Avenue Realignment Construction Traffic Management Management Plan - Response from NSW RURAL FIRE SERVICE

NSW RURAL FIRE SERVICE has responded to your request for advice in relation to the Moorebank Avenue Realignment Construction Traffic Management Management Plan . The response is below and/or attached. Record of this consultation has been automatically saved to the portal.

When you are ready, login to your profile to submit the final document to the Department.

To sign in to your account click [here](#) or visit the [Major Projects Website](#).

Please do not reply to this email.

Kind regards

The Department of Planning and Environment



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From: [Oyston, Samantha](#)
To: "macarthur@rfs.nsw.gov.au"
Cc: "[Gail Hall](#)"; [Patel, Ketan](#); "[Westley Owers](#)"
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans
Date: Friday, 24 March 2023 5:05:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)

Apologies for my second email, in addition to the Construction Bushfire Management Plan, the Construction Traffic and Transport Plan has also been uploaded to the DPE portal for RFS review. Consultation closes Thursday, 20 April 2023.

Samantha Oyston | Senior Environmental Consultant
Arcadis | [REDACTED]
www.arcadis.com

From: Oyston, Samantha
Sent: Friday, 24 March 2023 5:03 PM
To: macarthur@rfs.nsw.gov.au
Cc: [Gail Hall](#) [REDACTED]; [Patel, Ketan](#) [REDACTED];
[Westley Owers](#) [REDACTED]
Subject: FW: Moorebank Avenue Realignment - Construction Management Plans

Hi,

This is a courtesy email to let you know that the Construction Bushfire Management Plan has been uploaded to the DPE portal for RFS review. Consultation closes Thursday, 20 April 2023.

Could you also please confirm if RFS would like to review the landscape design plan including design layout and vegetation once detailed design is complete? And how RFS would like to be informed and updated about the Site (i.e. final design layout including water hydrants sources/water pumps/water sources), progressively or only in the case of the event of a fire?

Warm Regards,

Samantha Oyston | Senior Environmental Consultant
Arcadis | T. + 61 2 8907 8218
www.arcadis.com

From: [Oyston, Samantha](#)
To: [Kimberley Tadic](#)
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans
Date: Wednesday, 18 January 2023 8:06:00 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)

Hi Kimberley,

Following on from my last email along with the Bushfire Management Plan, Arcadis is also aiming to send the Traffic and Transport Management Plan for RFS review, to allow for consultation on any access constraints and proposed processes for future consultation, during the week commencing of 6 February 2023.

I will make sure to send both plans along to macarthur@rfs.nsw.gov.au as recommended by yourself below.

Many thanks,

Samantha Oyston | Senior Environmental Consultant
Arcadis | [REDACTED]
www.arcadis.com

From: Kimberley Tadic [REDACTED]
Sent: Tuesday, 10 January 2023 10:55 AM
To: Oyston, Samantha [REDACTED]
Subject: RE: Moorebank Avenue Realignment - Construction Management Plans

You don't often get email from [REDACTED] [Learn why this is important](#)

Good Morning Samantha,

Thank you for your email.

Please contact the local Fire Control Centre at Macarthur (macarthur@rfs.nsw.gov.au) who may be able to review the management plan.

Kind regards,

Kimberley Tadic | Administration Officer | Planning and Environment Services - East
NSW RURAL FIRE SERVICE

From: Oyston, Samantha [REDACTED]
Sent: Thursday, 22 December 2022 3:57 PM
To: Records <Records@rfs.nsw.gov.au>; Luke Robinson [REDACTED]
Cc: Jamie Crawford [REDACTED] Gail Hall
[REDACTED] Patel, Ketan [REDACTED]
Subject: Moorebank Avenue Realignment - Construction Management Plans

Hello,

Arcadis are currently developing the Construction Environmental Management Plan and Associated Sub-plans for the Moorebank Avenue Realignment Works (SSI-10053) on behalf of the National Intermodal Corporation.

The Project involves the realignment of an existing section of Moorebank Avenue, from a point approximately 130 meters south of the Anzac Road/Moorebank Avenue intersection to a point immediately north of the East Hills Railway. Moorebank Avenue currently divides the Moorebank Logistic Park. The key features of the Project include:

- Construction of approximately three kilometres of new road to bypass the MLP to the east, comprising:
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- Southern tie-in to the existing Moorebank Avenue, 17 metres before the East Hills railway over bridge. No work will be undertaken or impact the East Hills over bridge

At the completion and commissioning of the realigned road section, the public through traffic using Moorebank Avenue will be redirected onto the new alignment. The existing road alignment will be decommissioned and modified to function as a restricted access to the Moorebank Logistic Park.

We are aiming to send the Bushfire Management Plan for NSW Rural Fire Service review during the week commencing of 6 February 2023.

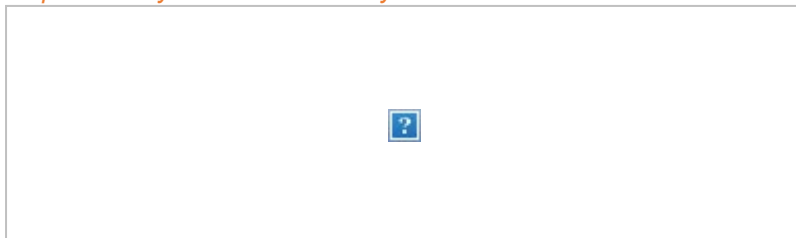
Warm Regards,

Samantha Oyston (she/her) MRes, BEnv
Senior Environmental Consultant
Arcadis Australia Pacific
Level 16, 580 George Street, Sydney | NSW 2000 | Australia

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APPENDIX B Environmental Representative Endorsement Letter



23 July 2023

Our Ref: 2205 L9

National Intermodal Corporation
Senior Manager – Planning and Environment
Attention: Westley Owers

Dear Westley

**SSI 10053 - Moorebank Avenue Realignment Works (MARW)
Environmental Representative (ER) - Endorsement of the Construction Traffic and
Transport Management Plan**

Pursuant to SSI10053 Conditions of Approval (CoA) A31(d) and C9, I confirm that I have reviewed and endorsed the following documentation as being consistent with the conditions of approval and relevant undertakings made in the documents listed in Condition A1:

- National Intermodal Corporation, Moorebank Avenue Realignment Works, Appendix M, Construction Traffic Access Management Plan, Version G, dated 19 June 2023 (CTTMP).

The CTTMP was prepared to expressly address REMM TRA01.

In accordance with CoA C8, the CTTMP was expressly nominated by a nominee of the Planning Secretary to be endorsed by the ER (Department of Planning and Environment letter dated 22 November 2022, Reference: SSI-10053-PA-4).

Yours sincerely,

Maurice Pignatelli
Environmental Representative – MARW Project
OptimE Pty Ltd



APPENDIX C Secondary CoA and REMMs

C1: Secondary NSW CoA relevant to the CTTMP

No.	Requirements	Document reference
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:	Section 1.6 Appendix A
(a)	documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval;	Section 1.6 Appendix A
(b)	a log of the dates of engagement or attempted engagement with the identified party;	Section 1.6 Appendix A
(c)	documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations;	Section 1.6 Appendix A
(d)	outline of the issues raised by the identified party and how they have been addressed; and	Section 1.6 Appendix
(e)	a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed.	Section 1.6 Appendix A
C8	With the exception of any CEMP Sub-plans expressly nominated by the Planning Secretary to be endorsed by the ER, all CEMP sub-plans must be submitted to the Planning Secretary for approval. <i>Note: The Planning Secretary will consider the assessment of the predicted level of environmental risk and potential level of community concern required under Condition A14(e) when deciding whether any CEMP Sub-plans may be endorsed by the ER.</i>	Section 1.5 Appendix B
C9	The CEMP Sub-plans not requiring the Planning Secretary's approval must obtain the endorsement of the ER as being in accordance with the conditions of approval and all relevant undertakings made in the documents listed in Condition A1. Any of these CEMP Sub-plans must be submitted to the ER with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before construction or where construction is staged no later than one (1) month before the commencement of that stage.	Section 1.5 Appendix B
C10	Any of the CEMP Sub-plans to be approved by the Planning Secretary must be submitted to the Planning Secretary with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before construction or where construction is staged no later than one (1) month before the commencement of that stage.	Section 1.5 Appendix B
C11	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary or endorsed by the ER (whichever is applicable), unless otherwise agreed by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary or endorsed by the ER (whichever is applicable), including any minor amendments approved by the ER, must be implemented for the duration of construction.	Section 1.5 Appendix B
E46	Public access to Moorebank Avenue on its current alignment between Anzac Road and the bridge over the East Hills railway must be maintained until the project is opened to traffic.	Section 6.8 Requirement 12 of Table 6.1

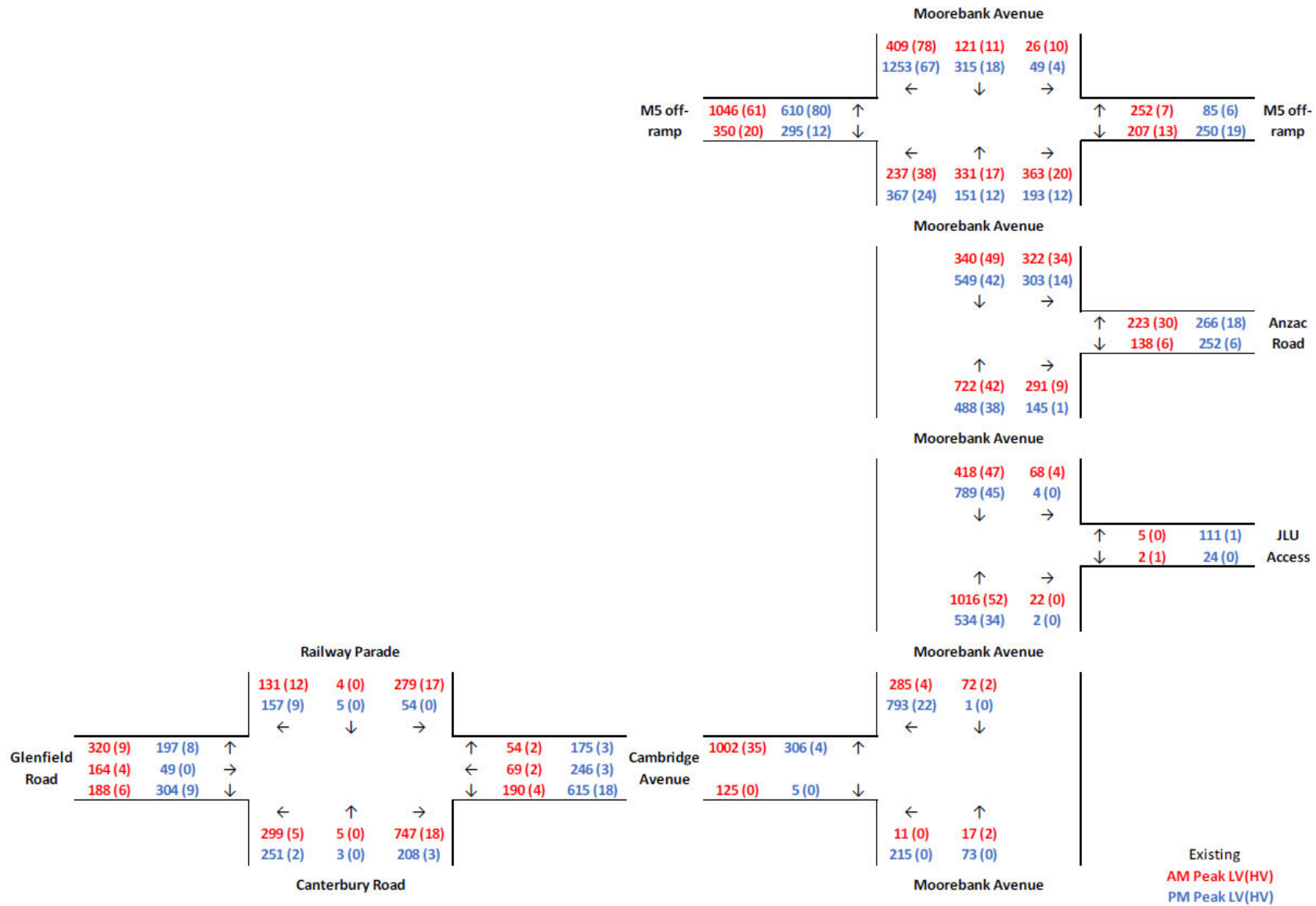
No.	Requirements	Document reference
E47	Access to utilities and properties must be maintained during work. If an access is affected by work, this must be agreed to by the relevant utility owner, landowner or occupier before the amended or a temporary alternative access is provided.	Section 6.8 Requirements 15 and 17 of Table 6.1
E48	Property access physically affected by the SSI must be reinstated or an alternative provided to at least an equivalent standard, before opening of the relevant part of the project to traffic. Any change to pre-existing property access must be agreed to by the landowner or occupier before the change is made. <i>Note: appropriate planning approval for permanent replacement of property access must be obtained before the replacement is provided.</i>	Section 6.8 Requirement 15 of Table 6.1
E49	Locations of all heavy vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one year following the completion of construction.	Section 6.2 Requirement 14 of Table 6.1
E50	Moorebank Avenue south of the Moorebank Avenue rail overbridge and local roads must not be used by heavy vehicles to access the site, with the exception of access to/from Glenfield Waste Services Facility. Records of those vehicles accessing Glenfield Waste Services Facility via this route must be maintained for the duration of work.	Section 6.2.1 Requirement 12 of Table 6.1
E51	Before activities requiring use of heavy vehicles for the purposes of the SSI commence, a Road Dilapidation Report must be prepared. 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 before the road being used by heavy vehicles associated with the SSI.	Section 6.6 Requirements 2 and 22 of Table 6.1
E52	If damage to roads occurs as a result of the SSI, the Proponent must either (at the relevant road authority's discretion):	
(a)	compensate the relevant road authority for the damage so caused; or	Section 6.6 Requirement 18 of Table 6.1
(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); or	Section 6.6 Requirement 18 of Table 6.1
(c)	make satisfactory arrangements with the relevant road authority(ies) regarding the reinstatement of roads used by heavy vehicles for construction where those roads continue to be used by heavy vehicles for construction of the MLP.	Section 6.6 Requirement 18 of Table 6.1
E53	Despite Condition E52, public roads used by heavy vehicles to access the construction site must be maintained in a safe condition for public use at all times.	Section 6.6 Requirement 18 of Table 6.1
E54	Vehicles (including light and heavy vehicles) associated with the SSI must be managed to:	
(a)	minimise parking on public roads;	Section 6.7 Requirements 3 and 7 of Table 6.1

No.	Requirements	Document reference
(b)	minimise idling and queueing on state and regional roads;	Section 6.1 Requirements 3 and 10 of Table 6.1
(c)	not carry out marshalling of construction vehicles near sensitive land user(s);	Section 6.1 Requirement 3 of Table 6.1
(d)	not block or disrupt access across pedestrian or shared user paths at any time; and	Section 6.9 Requirements 3, 5 and 16 of Table 6.1
(e)	ensure spoil haulage vehicles are made aware of the nominated haulage routes.	Section 6.1.3 Requirements 3 and 11 of Table 6.1
E55	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 must be avoided, and where avoidance is not possible, minimised. Where disruption cannot be avoided, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected businesses and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	Section 6.9 Requirements 3 and 16 of Table 6.1

C2: Secondary REMMs relevant to the CTTMP

No.	Requirements	Timing	Document reference
TRA02	Prior to the commencement of construction, traffic control plans (TCPs) will be developed and will be encompassed within the traffic management plan. TCPs shall be developed in accordance with the AS and the RMS Traffic Control at Work Sites Manual - Version 5 (RMS 2018).	Pre-construction	Requirement 4 of Table 6.1
TRA03	All traffic controllers engaged on-site will be accredited by TfNSW, and act in accordance with TfNSW Standard Conditions, including: <ul style="list-style-type: none"> no stopping of traffic on public streets; and no stopping of pedestrians in anticipation of truck movements. Pedestrians may only be held for short periods, for their safety, whilst a truck is entering or leaving the site. 	Construction	Requirement 9 of Table 6.1
TRA04	No marshalling or queuing of trucks will be permitted on the public road.	Construction	Requirement 10 of Table 6.1
TRA05	A Road Occupancy Licence application will be submitted to the Transport Management Centre for approval prior to any road closures.	Construction	Requirement 19 of Table 6.1
TRA06	Safety barriers will be installed for the sections of the new route which is closest to the new terminal rail line to prevent any chance of a vehicle on the new road losing control and crashing onto the rail track below.	Construction	Requirement 20 of Table 6.1
TRA07	A Section 87 (NSW Roads Act 1993) approval will be obtained for the proposed traffic signal intersections on MAR. Any proposed changes or removal of existing traffic signals along the existing Moorebank Avenue alignment will require TfNSW approval in accordance with Section 87 of the NSW Roads Act 1993.	Pre-construction	Requirement 8 of Table 6.1
TRA08	Where construction compounds require priority control traffic signals, an approval will be sought pursuant to the NSW Roads Act 1993	Pre-construction	Requirement 6 of Table 6.1

APPENDIX D Existing Turning Movement Counts



Source: Moorebank Avenue Realignment TIA (EMM, February 2021)