Australian Government

BUILDING OUR FUTURE

NSW GOVERNMENT

Appendix B1

Construction Transport and Traffic Management Sub-plan

M12 Motorway

May 2024

THIS PAGE LEFT INTENTIONALLY BLANK

Document control

File Name	M12PPW-ADAP-ALL-EN-PLN-000007_L_S3_CTTMP
Title	M12 Motorway OCEMP Appendix B1: Construction Traffic and Transport Management Sub-plan
Document Number (Teambinder)	M12PPW-ADAP-ALL-EN-PLN-000007

Approval and authorisation

Plan reviewed by:	Plan reviewed by:
Tracey Austin	Deanne Forrest
TfNSW Environment and Sustainability Manager	TfNSW Project Director, M12
Date 28.06.2024	Date 28/6/2024
Signed [redacted]	Signed [redacted]

Revision history

Revision	Date	Description
A	09/09/2020	First draft for TfNSW review
B	30/09/2020	Response to TfNSW comments
C	21/10/2020	Response to TfNSW comments
D	23/07/2021	Update based on NSW and Commonwealth CoA
E	24/08/2021	Response to TfNSW and ER comments
F	18/11/2021	Response to comments received during consultation
G	16/12/2021	Update to reflect DPIE comments
H	02/12/2022	Additional design change updates
I	13/02/2023	Response to TfNSW comments
J	19/03/2023	Response to ER comments

Revision	Date	Description
K	12/01/2024	Updated to reflect additional CAs
L	09/04/2024	Updated to reflect comments from TfNSW, ER and the Construction Contractors
L.1	07/05/2024	Updated figures

Contents

Glossary / Abbreviations ..... **v**

1 Introduction **1**

1.1 Context 1

1.2 Background 1

1.3 Scope of the Plan 4

1.4 Environmental Management Systems overview 4

1.5 Consultation 5

2 Purpose and objectives **8**

2.1 Purpose 8

2.2 Objectives 8

2.3 Target 8

3 Environmental requirements **9**

3.1 Relevant legislation and guidelines 9

3.2 Ministers Conditions of Approval 11

3.3 Revised Environmental Management Measures 13

4 Construction traffic impacts **15**

4.1 Traffic generating activities 15

4.2 Intersection performance 19

4.3 Parking 20

4.4 Public transport 20

4.5 Pedestrian and cyclist access 21

5 Traffic Management **22**

5.1 Construction traffic management 22

5.2 Haulage Routes 24

5.3 Traffic control signs and devices 31

5.4 Road occupancy 31

5.5 Speed management 32

5.6 Signposting and delineation 32

5.7 Pedestrians and cyclists 34

5.8 Public transport 34

5.9 Property access 34

5.10 Parking 35

5.11 Road maintenance 35

5.12 Special events 36

5.13 Emergency services 36
5.14 Incident management and response 36
5.15 Construction traffic management at Devonshire Road/ Elizabeth Drive intersection 37
5.16 Management of cumulative traffic impacts 37
5.17 Management measures 38
6 Compliance management 48
6.1 Roles and responsibilities 48
6.2 Community notification 49
6.3 Training 49
6.4 Traffic management risk assessment workshop 50
6.5 Inspections and monitoring 50
6.6 Auditing 51
6.7 Reporting and identified records 52
7 Review and improvement 53
7.1 Continuous improvement 53
7.2 CTTMP update and amendment 53
Appendix A – Consultation correspondence 54
Appendix B – Secondary CoA and REMMs 55

Tables

Table 1-1: Log of engagement with government agencies and stakeholders 6
Table 3-1**:** Primary NSW CoA 11
Table 3-2: Primary REMMs 13
Table 4-1: Construction traffic generation (inbound and outbound) 16
Table 4-2: Intersection performance: 2024 Project with 'construction' scenario 19
Table 5-1: Indicative construction access to ancillary facilities 23
Table 5-2: Transport and Traffic management and mitigation measures 39
Table 6-1: Inspections and monitoring relevant to traffic and transport 50
Table 6-2: Reporting requirements relevant to traffic management 52

Figures

Figure 5-1 Haulage routes and ancillary facility access 27
Figure 5-2: Local Road 1 km boundary 30

Glossary / Abbreviations

Abbreviation	Expanded text
AR	Amendment Report
AS	Australian Standard
CAQMP	Construction Air Quality Management Sub-plan
CA	Consistency Assessment
CoA	Condition of Approval
Commonwealth CoA	Federal Conditions of Approval under the EPBC Act
Construction	Includes all activities required to construct the CSSI as described in the documents listed in Condition A1, including commissioning trials of equipment and temporary use of any part of the CSSI, but excluding Low Impact Work which is carried out to complete prior to the approval of the CEMP, works approved under a Site Establishment Management Plan, approved under a Consistency Assessment, demolition of acquired residential houses, structures and sheds, and works specified in Appendix B and approved under an environmental management plan(s) in accordance with Condition A24.
CSSI	Critical State Significant Infrastructure
CFFMP	Construction Flora and Fauna Management Sub-plan
CNVMP	Construction Noise and Vibration Management Sub-plan
CPTED	Crime Prevention Through Environmental Design
CSWMP	Construction Soil and Water Management Sub-plan
CTTMP	Construction Transport and Traffic Management Sub-plan
DAWE	Former Commonwealth Department of Agriculture, Water and the Environment
DCCEEW	Commonwealth Department of Climate Change, Energy, Environment and Water
Division 5.2 Approval	Approval issued by the NSW Minister for Planning and Public Spaces for the M12 Motorway
DPE	Former NSW Department of Planning and Environment
DPHI	NSW Department of Planning, Housing and Infrastructure (formerly NSW DPE which has now been split into NSW DCCEEW and NSW DPHI, with all planning functions falling to DPHI).
DPIE	Former NSW Department of Planning, Industry and Environment
EAD	Environmental Assessment Documentation
EDC	Elizabeth Drive Connections

Abbreviation	Expanded text
EIS	Environmental Impact Statement
EMS	Environmental Management System

Environmental Assessment Documentation	The set of documents that comprise the Division 5.2 Approval: • Roads and Maritime Services (October, 2019) M12 Motorway, Environmental Impact Statement (EIS) • Transport for NSW (October, 2020) M12 Motorway, Submissions Report (the Submissions Report) • Transport for NSW (October, 2020) M12 Motorway, Amendment Report (AR) • Transport for NSW (December, 2020) M12 Motorway, Amendment Report submissions report (ARSR) • Transport for NSW (March, 2021) The M12 Motorway Amendment Report Submissions Report – Amendment (ARSR amendment) • WSP (October, 2021) M12 Motorway – West Package Detailed Design Consistency Assessment • GHD (October, 2021) M12 Motorway – Central Package Detailed Design Consistency Assessment • Arcadis (June, 2022) M12 Motorway – Sydney Water Crossings Consistency Assessment • Arcadis (July, 2022) M12 Motorway – Design Boundary Changes Consistency Assessment • Arcadis (August, 2022) M12 Motorway Minor Consistency Assessment for Proposed Change to the M12 Motorway Project (M12 Central) • Arcadis (September, 2023) M12 Motorway – Devonshire Road Temporary Roundabout Consistency Assessment • WSP (September, 2023) M12 Motorway – Elizabeth Drive Connections Consistency Assessment • TfNSW (September, 2023) M12 Motorway – Minor Consistency Assessment M12 West demolition of structures as 752 Luddenham Road • TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East AF9 Power Supply • TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East Cecil Road Laydown Area • TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East Temporary Construction Signage • Arcadis (December, 2023) M12 Motorway Project (M12 East) Sites 48, 50 and 51 • Arcadis (January, 2024) M12 Motorway – Minor Consistency Assessment M12 Central Water Tower Access Road

Abbreviation	Expanded text
	The documents that comprise the EPBC referral: • Submission #3486 – The M12 Motorway Project between the M7 Motorway, Cecil Hills and The Northern Road, Luddenham, NSW • Notification of referral decision and designated proponent - controlled action; date of decision 19 October 2018; ID: 2018-8286.
EPA	NSW Environmental Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
EPL	Environmental Protection Licence
ER	Environmental Representative
ESM	Transport for New South Wales Environment and Sustainability Manager
ESR	Construction Contractor Environmental Site Representative
FCC	Fairfield City Council
Federal Approval	Approval (EPBC 2018/8286) for carrying out the M12 Project under Part 8 of the *Environmental Protection and Biodiversity Conservation Act 1999* subject to specific CoA as detailed in Annexure A of the approval.
Final construction footprint	The area shown in the map(s) submitted under Commonwealth CoA 2, determined by TfNSW in accordance with a consistency assessment(s) or a modification assessment under the NSW Environmental Planning and Assessment Act 1979 where no new significant impacts to protected matters are identified.
Hold Point	A point beyond which a work process must not proceed without express written authorisation from Transport for New South Wales
Infrastructure Approval	Approval (SSI 9364) for carrying out of the M12 Project under Section 5.19 of the Environmental Planning and Assessment Act 1979 subject to specific CoA as detailed in Schedule 2 of the approval.
LCC	Liverpool City Council
Local Road	Any road that is not defined as a classified road under the *Roads Act 1993 (NSW).*
LoS	Level of Service
LUIIP	Western Sydney Land Use and Infrastructure Implementation Plan by DPIE 2018

Abbreviation	Expanded text
M7 Motorway (MOD 6 Widening)	Refers to the State Significant Infrastructure project (SSI-663-MOD 6) to construct and operate an additional lane in both directions within the existing median of the M7 Motorway, south of the Kurrajong Road overhead bridge at Prestons to the M7 Motorway bridge at Richmond. This project interacts with the M12 East stage at the M7 interchange.
M7 Widening	Shorthand term for M7 Motorway (MOD 6 Widening)
M7-M12 Integration Project	The M7-M12 Integration project incorporates the following: • M7 Motorway (Mod 6 Widening) (SSI 663 Mod 6) – modification (mod) to the M7 Motorway approved on 17 February 2023 under Division 5.2 of the Environmental Planning and Assessment Act 1979 (EP&A Act) • M12 Motorway (CSSI 9364) – approved on 23 April 2021 under Division 5.2 of the EP&A Act and split into separate stages or packages of work (West, Central (main construction), Central (temporary roundabout) and East). The M12 Motorway is also subject to a federal approval under the Environment Protection and Biodiversity Conversation Act 1999. The M7-M12 Integration project incorporates the M12 East package only.
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water (formerly NSW DPE which has now been split into NSW DCCEEW and NSW DPHI)
OCEMP	Overarching Construction Environmental Management Plan
OCS	Overarching Communication Strategy
PCC	Penrith City Council
PMP	Pedestrian Movement Plans
Primary CoA	CoA that are specific to the development of this Plan
Project, the	M12 Motorway
REMM	Revised Environmental Management Measure as provided in the Amendment Report
Roads and Maritime (RMS)	Former Roads and Maritime Services, now Transport for New South Wales
ROL	Road Occupancy Licence
RTA	Former Roads & Traffic Authority
SEARs	Secretary's Environmental Assessment Requirements
Secondary CoA	CoA that are related to, but not specific to, the development of this Plan
SZA	Speed Zone Authorisations
TCP	Traffic Control Plan
TCWS	Traffic Control at Work Sites Manual by Roads and Maritime Services

Abbreviation	Expanded text
TfNSW	Transport for New South Wales
TMC	Transport Management Centre
TMP	Traffic Management Plan
TSP	Traffic Staging Plan
VMP	Vehicle Movement Plan
VMS	Variable message sign
WSIA	Western Sydney International Airport

1 Introduction

1.1 Context

This Construction Transport and Traffic Management Sub-plan (CTTMP or Plan) forms part of the Overarching Construction Environmental Management Plan (OCEMP) for the M12 Motorway (the Project).

This CTTMP has been prepared to address the requirements of the NSW Minister's Conditions of Approval (CoA), the Revised Environmental Management Measures (REMMs) listed in the M12 Motorway Environmental Impact Statement (EIS), Amendment Report, all subsequent Consistency Assessments (CA), all applicable legislation and Transport for New South Wales (TfNSW) specifications.

1.2 Background

TfNSW is planning to construct and operate the M12 Motorway to provide direct access between the Western Sydney International Airport (WSIA) at Badgerys Creek and Sydney's motorway network. The M12 Motorway would run between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham for about 16 kilometres and is expected to be opened to traffic prior to opening of WSIA.

The Project will be constructed in separate stages under separate construction contracts:

- M12 West – between The Northern Road, Luddenham and about 250 metres east of Badgerys Creek
- M12 Central (main construction) – between about 250 metres east of Badgerys Creek and the Western Sydney Parklands at Duff Road, Cecil Park
- M12 Central (Temporary Roundabout) – temporary roundabout installation at Elizabeth Drive and Devonshire Road, Kemps Creek
- M12 East – (as part of the M7/M12 Integration Project)
    - Elizabeth Drive Connections (EDC) – a two-kilometre section from Duff Road to about 300 metres east of the M7 Motorway
    - M7/M12 Interchange – An interchange between the M12 Motorway and M7 Motorway and tie-in works for approximately four kilometres on the M7 Motorway M12 West – between The Northern Road, Luddenham and about 250 metres east of Badgerys Creek

The Project is subject to an approval under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as Critical State Significant Infrastructure (CSSI). The Project is also a controlled action under Section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), requiring a separate approval from the Australian Minister for the Environment.

An Environmental Impact Statement (EIS) was prepared to describe and assess the Project and recommend management measures to address impacts. The EIS was exhibited by the NSW

Department of Planning, Industry and Environment (DPIE[1]) for 34 days from 16 October 2019 to 18 November 2019 to give the community and stakeholders the opportunity to provide comment.

In accordance with Section 5.17 of the EP&A Act, the Planning Secretary requested TfNSW to provide a Response to Submissions report. These were addressed within the Submission Report. Due to design developments since the exhibition of the EIS, an Amendment Report (AR) was developed to assess the impacts of these amendments. The AR was exhibited by DPIE for 14 days from 21 October 2020 to 4 November 2020. Following exhibition of the AR, an Amendment Report Submissions Report (ARSR) was developed in December 2020 to address the identified issues followed by the ARSR amendment in March 2021.
The following additional assessments have since been undertaken:

- Two Consistency Assessments (CA) for M12 West and Central addressing detailed design changes for the Project construction boundary approved in October 2021
- Sydney Water Consistency Assessment related to construction boundary extensions associated with Sydney Water utility crossings; approved in June 2022
- Design Boundary Change Consistency Assessment related to design boundary changes within the M12 alignment. This required an extension of the construction footprint and operational footprint, property adjustments and the demolition of Building No.1 at McMasters Field Station; approved in July 2022. Threatened Species Surveys were also undertaken along the M12 alignment between September and December 2021 to satisfy the NSW Conditions of Approval (CoA) E4, E5 and E6; the outcomes of which captured within the Design CA.
- Minor Consistency Assessment (M12 Central) required amendments to the construction footprint as a result of utility adjustments and tie in works, property adjustments for flood alleviation and improvements to ancillary facility access due to safety concerns, temporary widening of Elizabeth Drive and signage installation; approved in August 2022.
- Devonshire Road Temporary Roundabout Consistency Assessment required to address the requirements of REMM TT10. This has resulted in an increase to the construction footprint at the Elizabeth Drive and Devonshire Road intersection to allow for the construction of a temporary roundabout; approved in September 2023.
- Elizabeth Drive Connections Consistency Assessment addressed detailed design changes for the Elizabeth Drive Connections. This involved minor construction and operation boundary adjustments, design changes, new sediment basin locations, utility works, property access changes and property adjustments; approved in September 2023.
- M12 West Minor Consistency Assessment for the demolition of structures as 752 Luddenham Road required to address the need for the demolition of structures within Ancillary Facility 11. Whilst this ancillary facility is already located within the construction footprint and was previously assessed in the M12 Motorway Amendment Report, the demolition and disposal of structures in this location required assessment; approved in September 2023.
- M12 East AF9 Power Supply Minor Consistency Assessment required to address a minor temporary amendment to the construction footprint in order to provide permanent site power to the construction ancillary facility 9 (AF9); approved in October 2023.

[1] Former NSW Department of Planning, Industry and Environment; now split into two departments NSW Department of Planning, Housing and Infrastructure (DPHI) and NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW)

- M12 East Cecil Road Laydown Area Minor Consistency Assessment required to address temporary amendment to the construction boundary to facilitate the installation of a DN150 Steel Secondary Gas main within Cecil Road; approved in October 2023.
- M12 East Temporary Construction Signage Minor Consistency Assessment required to address temporary traffic signage installed prior to the start of temporary barriers on the M7 Motorway; approved in October 2023.
- M12 East Sites 48, 50 and 51 Boundary Changes Minor Consistency Assessment addressed the required amendments to the construction footprint in three locations as a result of temporary traffic control measures, pavement build up and resurfacing; approved in December 2023.
- M12 Central Water Tower Access Road Minor Consistency Assessment addressed changes to the construction boundary to facilitate the construction of concrete slabs over the Sydney Water main, the construction of a temporary access road to the existing water town and radar tower, and the subsequent reinstatement of this temporary access road to pre-construction conditions; approved in January 2024.

The Project must be carried out generally in accordance with the EIS, Submissions Report, AR, ARSR and the ARSR - Amendment, M12 West and Central CA, Sydney Water CA, Design Boundary Change CA, Minor CA, Devonshire Road Temporary Roundabout CA, Elizabeth Drive Connections CA, M12 West Demolition of Structures as 752 Luddenham Road CA, M12 East AF9 Power Supply CA, M12 East Cecil Road Laydown Area CA, M12 East Temporary Construction Signage CA, M12 East Sites 48, 50 and 51 CA and M12 Central Water Tower Access Road CA in accordance with NSW CoA A1. These documents are collectively referred to as the Environmental Assessment Documentation (EAD). The CSSI must also be carried out in accordance with all procedures, commitments, preventative actions, performance outcomes and mitigation measures set out in the EAD as required by NSW CoA A2.

Approval for the Project under the EP&A Act was granted by the Minister for Planning on 23 April 2021 (SSI 9364). Approval for the Project under the EPBC Act was granted by the Federal Minister for the Environment on 3 June 2021 (EPBC 2018/8286). The Project must be carried out in accordance with the terms of the NSW and Federal Approvals.

The Project EIS assessed the traffic and transport impacts during the construction of the Project. As part of EIS development, a Transport and Traffic Assessment Report was prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued by the NSW DPIE and the Commonwealth EIS Guidelines issued by the Commonwealth Department of the Water, Agriculture and Environment (DAWE[2]). The Transport and Traffic Assessment Report was included in the EIS as Appendix F.

Further assessment of transport and traffic impacts was undertaken subsequent to exhibition of the EIS and incorporated into the Amendment Report. The additional assessment considered the impacts on traffic and transport due to refinements in the Project design, including changes in the Project footprint and ancillary facilities. A Transport and Traffic updated technical report was included in the Amendment Report as Appendix B and Section 6 of the ARSR. Revised Environmental Management Measures (REMMs) were provided within the Amendment Report and further updated in the ARSR. Where applicable, the REMMs from the ARSR have been included

[2] Former Commonwealth Department of Agriculture, Water and Environment; now Commonwealth Department of Climate Change, Energy, Environment and Water (DCCEEW)

in this Plan. Further, design development has progressed, providing additional environmental assessment, and where relevant, this detail has been included within this CTTMP.

Additionally, the M12 East Stage is being delivered as part of the M7-M12 Integration Project which includes the M7 Motorway Widening Project (MOD 6 Widening (SSI-663-MOD 6)) (referred to herein as M7 Widening) delivered by Western Sydney Orbital Company (WSO Co). Additional assessments were undertaken as a part of the EAD for this project.

The detailed project description is outlined in Section 2 of the OCEMP.

1.3 Scope of the Plan

The OCEMP and Sub-plans are related to the construction phase only. Early Works, as defined in the EIS Section 5.24.4 and OCEMP Section 2.4 are not within the scope of the OCEMP and Sub-plans. Notwithstanding, where Early Works activities are undertaken during the construction phase, they will be governed by the approved OCEMP and Sub-plans.

The scope of this CTTMP is to describe how the Construction Contractors propose to manage potential transport and traffic impacts during construction of the Project. The Construction Contractor responsible for each stage of the Project; M12 West, M12 Central (main construction), M12 Central (temporary roundabout), M12 East (Elizabeth Drive connections) and M12 East (M7/M12 interchange) must use this CTTMP as the basis for their stage-specific CTTMP.

Operational traffic impacts and operation measures do not fall within the scope of this CTTMP and are therefore not included within the processes contained within the CTTMP.

1.4 Environmental Management Systems overview

The overarching Environmental Management System (EMS) for the Project is described in Section 3 of the OCEMP. The Construction Contractor delivering the Project will have an EMS, consistent with the overarching EMS described in the OCEMP and will develop stage-specific CTTMPs in accordance with the OCEMP, the Environmental Protection Licence (EPL) and their EMS. This overarching CTTMP forms part of the environmental management framework for the Project, as described in Section 3 of the OCEMP.

The Construction Contractor will be required to develop, as part of their stage-specific CTTMPs, detailed procedures and plans to address specific requirements of the CoA and REMMs identified in this overarching CTTMP.

The review and document control processes for this CTTMP are described in Section 6.4.2 and Section 6.6 of the OCEMP.

Management measures identified in this CTTMP may also be incorporated into site or activity specific Environmental Work Method Statements (EWMS). EWMS will be prepared to manage and control high risk activities that have the potential to negatively impact on the environment. EWMS incorporate appropriate mitigation measures and controls and identify key procedures to be used concurrently with the EWMS. A EWMS template for use by the Construction Contractors is provided in Appendix A8 of the OCEMP. Appendix A8 also contains a template EWMS register and template EWMS training register.

EWMS for high-risk activities will be prepared by the Construction Contractor's Environmental Site Representatives (ESR) and reviewed by the TfNSW Environment and Sustainability Manager (ESM) (or delegate) and independent Environmental Representative (ER) prior to the commencement of the construction activities to which they apply. Construction personnel

undertaking a task governed by a EWMS will undertake the activity in accordance with the mitigation and management measures identified in the EWMS.

Used together, the OCEMP, strategies, procedures and EWMS form management guides that clearly identify required environmental management actions for reference by TfNSW and its Construction Contractors.

The review and document control processes for this CTTMP are described in Section 7 of the OCEMP. TfNSW will review the Construction Contractors documentation to confirm consistency with the requirements of this CTTMP and specifications.

1.4.1 CTTMP preparation, endorsement and approval

This overarching CTTMP has been prepared to satisfy the NSW CoA in relation to traffic management during construction of the Project.

This CTTMP was reviewed by the TfNSW Senior Project Manager and the TfNSW Environment and Sustainability Manager (ESM) and endorsed by the ER prior to submission to the Secretary of the former Department of Planning and Environment (DPE; now DPHI) for approval, which was received on 21st December 2021. In accordance with NSW CoA C10, construction of the Project did not commence before approval of the OCEMP, including this CTTMP, by the Planning Secretary.

1.4.2 Interactions with other management plans

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

- The Construction Noise and Vibration Management Sub-plan (CNVMP) addresses noise impacts associated with construction traffic on surrounding areas
- The Construction Air Quality Management Sub-plan (CAQMP) addresses emission impacts associated with increased vehicles within the road network and dust impacts from construction roads
- The Construction Soil and Water Management Sub-plan (CSWMP) addresses soil, erosion and water quality impacts associated with site access points and construction roads
- The Sustainability Strategy considers traffic and transport emissions from vehicles.

1.5 Consultation

1.5.1 Consultation for preparation of the CTTMP

The following government agencies and stakeholders will be consulted with during the development of this CTTMP, in accordance with NSW CoA C4(a):

- Penrith City Council (PCC)
- Liverpool City Council (LCC)
- Fairfield City Council (FCC).

In accordance with NSW CoA A5 (b), Table 1-1 provides a log of engagement or attempted engagement with the identified government agencies and stakeholders.

Table 1-1: Log of engagement with government agencies and stakeholders

Agency	Date	Person Contacted	Comment	Consultation Status
Penrith City Council	21 October 2021	PCC Representative	TfNSW emailed CTTMP to PCC requesting comment.	Open
	2 November 2021	PCC Representative	TfNSW followed up the PCC Representative via phone and received no response.	Open
	17 November 2021	PCC Representative	PCC Representative notified that consultation has been closed.	Closed
Liverpool City Council	21 October 2021	LCC Representative	TfNSW emailed CTTMP to LCC requesting comment.	Open
	2 November 2021	LCC Representative	TfNSW followed up the LCC Representative via email and received no response.	Open
	17 November 2021	LCC Representative	LCC Representative notified that consultation has been closed.	Closed
Fairfield City Council	21 October 2021	FCC Representative	TfNSW emailed CTTMP to FCC requesting comment.	Open
	4 November 2021	TfNSW Representative	Response received from FCC via email (See Appendix A) accepting the CSWMP. Consultation closed	Closed

In accordance with NSW CoA C4 and A5, the consolidated evidence of consultation undertaken for the preparation of this CTTMP will be submitted to the Planning Secretary as part the CTTMP submission. The consolidated evidence of consultation is provided in Appendix A and includes:

- Documentation of the engagement with the parties identified above that occurred before submitting the document to the Secretary for approval
- A log of the dates of engagement or attempted engagement with the identified parties and a summary of the issues raised by them
- Documentation of the follow-up with the identified parties where feedback has not been provided to confirm that they have no feedback or have failed to provide feedback after repeated requests
- An outline of the issues raised by the identified parties, a summary of how they have been addressed and a cross reference to the section or Sub-plan of the OCEMP where the issue has been addressed
- A description of the outstanding issues raised by the identified parties and the reasons why they have not been addressed.

Refer to Appendix A for evidence of community consultation undertaken for the preparation of this Plan.

1.5.2 Ongoing consultation during construction

Consultation between TfNSW, Construction Contractors, 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 Overarching Communication Strategy (OCS).

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

- Consultation with affected businesses and properties where pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties cannot be maintained. In accordance with NSW CoA E96 and REMM TT07 and TT08, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected businesses and implemented before the disruption
- Consultation with TfNSW, relevant councils and bus operators regarding bus stop closures and / or relocations in accordance with REMM TT02
- Consultation with the operators of the M7 Motorway to develop measures to manage the potential impacts of construction within the operating M7 Motorway corridor in accordance with REMM TT04
- Consultation with affected businesses and properties where property adjustments, including replacement of farm infrastructure (such as fencing) and relocation of property access is required in accordance with NSW CoA E83 and REMM SLP04
- Consultation with TfNSW, councils and other relevant stakeholders regarding the development of 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) in accordance with NSW CoA E99 and TfNSW Specification G10 – Traffic Management
- Notification of any changes in traffic conditions on roads or paths to road users, emergency services, public transport operators, and other relevant stakeholders in in accordance with REMM TT01
- Consultation with WSIA and Sydney Metro – Western Sydney Airport for traffic and access interfaces in accordance with REMM TT01.

2 Purpose and objectives

2.1 Purpose

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

2.2 Objectives

The key objective of the CTTMP is to ensure all CoA, REMMs and licence/permit requirements relevant to transport and traffic are described, scheduled and assigned responsibility as outlined in:

- NSW CoA granted to the Project on 23 April 2021
- Environmental Assessment Documentation
- TfNSW Specifications G1, G10 and G36
- All relevant legislation and other requirements described in Section 3.1 of this Plan.

2.3 Target

Targets for the management of traffic and transport impacts during the Project are to:

- Achieve full compliance with relevant legislative requirements and the NSW CoA and environmental management measures
- Ensure safe and continuous traffic movement for construction workers and the general public
- Maintain the capacity of existing roads where possible during construction to minimise road user delays
- Maintain continuity of access to local roads and properties
- Maintain or provide alternative safe pedestrian and cyclist access around work sites
- Undertake appropriate consultation with impacted residents and businesses and stakeholders
- Implement traffic control operations to minimise delays to road users taking into consideration traffic volumes including peak times of the day and seasonal traffic
- Avoid road occupancy where possible
- Plan all construction vehicle movements to minimise disruption to traffic flow on roads within the Project area and surrounds
- Minimise impacts on, and complaints from, the community and stakeholders through the implementation of management measures as described in Section 5.17.

3 Environmental requirements

3.1 Relevant legislation and guidelines

3.1.1 Legislation and regulatory requirements

Legislation relevant to traffic and transport include:

- *Roads Act 1993*
- *Road Transport Act 2013*
- *Transport Administration Act 1988*
- *Local Government Act 2013.*

Identified regulatory requirements are:

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

Legislation relevant to traffic management also includes the *Environmental Planning and Assessment Act 1979* (EP&A Act), under which the project approval was granted. Relevant provisions of the EP&A Act are explained in the register of legal and other requirements included in Appendix A2 of the OCEMP.

Relevant provisions of the above legislation are identified in the register of legal requirements included Appendix A1 of the OCEMP.

3.1.2 Guidelines and standards

The main guidelines, specifications and policy documents relevant to this Plan 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)
- Roads and Maritime Delineation Manual (2008)
- Transport for New South Wales, NSW Speed Zoning Guidelines (2011)
- Transport Management Centre – Road Occupancy Manual (2015)
- Transport for New South Wales Specification G1 – Job Specific Requirements for The M12 Motorway

- Transport for New South Wales Specification G10 – Traffic Management
- Transport for New South Wales Specification G36 – Environmental Protection (Management System)
- PS311 – Environmental Design and Compliance
- Subsequent Consistency Assessments:
  - M12 Motorway – Sydney Water crossings Consistency Assessment (Arcadis, 2020a)
  - M12 Motorway – Design boundary changes Consistency Assessment (Arcadis, 2022b)
  - M12 Motorway – Minor design boundary changes and temporary signage areas Consistency Assessment (Arcadis, 2022c).
  - M12 Motorway – Minor Consistency Assessment for Proposed Change to the M12 Motorway Project (M12 Central) (Arcadis, 2022d)
  - M12 Motorway – Devonshire Road Temporary Roundabout Consistency Assessment (Arcadis, 2023a)
  - M12 Motorway – Minor Consistency Assessment M12 West demolition of structures as 752 Luddenham Road (TfNSW, 2023a)
  - M12 Motorway – Minor Consistency Assessment M12 East AF9 Power Supply (TfNSW, 2023b)
  - M12 Motorway – Minor Consistency Assessment M12 East Cecil Road Laydown Area (TfNSW, 2023c)
  - M12 Motorway – Minor Consistency Assessment M12 East Temporary Construction Signage (TfNSW, 2023d)
  - M12 Motorway Project (M12 East) Sites 48, 50 and 51 (Arcadis, 2023b)
  - M12 Motorway – Minor Consistency Assessment M12 Central Water Tower Access Road (Arcadis, 2024)
  -

TfNSW specifications are a key source of environmental protection management processes relevant to this CTTMP. The specifications set out environmental protection requirements, including Hold Points that must be complied with by the Construction Contractors during construction of the Project. A Hold Point is a point beyond which a work process must not proceed without express written authorisation from TfNSW. The Construction Contractor is to review the TfNSW specifications to inform the preparation of the stage-specific management plan.

3.2 Ministers Conditions of Approval

The primary NSW CoA relevant to the development of this CTTMP are listed in Table 3-1. Secondary CoA relevant to this Plan have been listed in Appendix B. A cross reference is also included to indicate where the CoA is addressed in this CTTMP or other project management documents.

Table 3-1: Primary NSW CoA

CoA No.	Condition Requirement	Applicability			Document reference
		M12 West	M12 Central	M12 East	
C2	The CEMP must provide: (h) a list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C4. Where staged construction of the Critical State Significant Infrastructure (CSSI) is proposed, the CEMP must also identify which CEMP Sub-plan applies to each of the proposed stages of construction;	✓	✓	✓	OCEMP This CTTMP
	(k) for periodic review and update of the CEMP and all associated plans and programs.	✓	✓	✓	OCEMP Section 7
C4	The following CEMP Sub-plans must be prepared in consultation with the relevant government and other agencies identified for each CEMP Sub-plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP Sub-plan, including copies of all correspondence from those agencies as required by Condition A5. (a) Traffic and Transport - Relevant Council(s)	✓	✓	✓	Section 1.5.1 Appendix A
C5	The CEMP Sub-plans must state how: (a) the environmental performance outcomes identified in the documents listed in Condition A1 will be achieved;	✓	✓	✓	Section 2.2 Section 2.3

CoA No.	Condition Requirement	Applicability			Document reference
		M12 West	M12 Central	M12 East	
	(b) the mitigation measures identified in the documents listed in Condition A1 will be implemented;	✓	✓	✓	Section 5
	(c) the relevant terms of this approval will be complied with; and	✓	✓	✓	Section 3.2
	(d) issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART (Specific, Measurable, Achievable, Realistic and Timely) principles.	✓	✓	✓	Section 5.16 Section 7
C9	Any of the CEMP Sub-plans may be submitted to the Planning Secretary for approval along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before the commencement of construction.	✓	✓	✓	Section 1.4.1
C10	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary, unless otherwise agreed by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction. Where construction of the CSSI is staged, construction of a stage must not commence until the CEMP and sub-plans for that stage have been endorsed by the ER and approved by the Planning Secretary.	✓	✓	✓	Section 1.4.1

3.3 Revised Environmental Management Measures

The primary REMMs relevant to the development of this CTTMP are listed in Table 3-2 below. Secondary REMMs relevant to this CTTMP are listed in Appendix B. A cross reference is also included to indicate where the REMM is addressed in this CTTMP or other project management documents.

Table 3-2: Primary REMMs

ID	Measure/requirement	Timing	Applicability			Document Reference
			M12 West	M12 Central	M12 East	
TT01	A Construction Transport and Traffic Management Plan (CTTMP) will be prepared as part of the CEMP in consultation with relevant local Councils, and in accordance with relevant guidelines. The CTTMP will outline:	Prior to construction	✓	✓	✓	This CTTMP Section 1.5.1
	• Staging and planning of works to minimise the need to occupy roads where practicable, including identification of haulage routes		✓	✓	✓	Section 5.1.3 Section 5.2
	• Safe alternative routes for pedestrians and cyclists in accordance with relevant safety and accessibility standards		✓	✓	✓	Section 5.7
	• The requirements for traffic control plans to be prepared for each work area which will include details of site access and specific traffic control measures (including signage) to manage traffic movements		✓	✓	✓	Section 5.1.2 Section 5.1.3
	• Road safety audit requirements		✓	✓	✓	Section 6.6
	• Parking arrangements for construction staff		✓	✓	✓	Section 5.10

ID	Measure/requirement	Timing	Applicability			Document Reference
			M12 West	M12 Central	M12 East	
	• Identification of access arrangements at construction sites detailing vehicle access movements	Prior to construction	✓	✓	✓	Section 5.1.2 Section 5.1.3 Section 5.2
	• Measures to minimise changes to the existing road network, property access, bus stops and pedestrian/cyclist facilities where feasible		✓	✓	✓	Section 5
	• Measures to communicate and notify of any changes in traffic conditions on roads or paths to road users, emergency services, public transport operators, and other relevant stakeholders		✓	✓	✓	Section 1.5.2 Section 5.16 Section 6.2
	• Measures to manage construction traffic interfaces and access arrangements with Western Sydney International Airport and Sydney Metro – Western Sydney Airport		✓	✓	✓	Section 1.5.2 Section 5.16
	• Requirements for appropriate warning and signage for traffic and other road users such as cyclists and pedestrians in the vicinity of work areas and work site access, and road diversions.		✓	✓	✓	Section 5.6

4 Construction traffic impacts

Potential traffic impacts from the construction of the Project were assessed in the Environmental Assessment Documentation Transport and Traffic Assessment Reports, notably EIS Appendix F and Amendment Report Appendix B respectively. The assessment identified that during construction, the Project may affect the surrounding road network due to:

- Construction vehicles using the surface road network, especially heavy vehicles transporting spoil
- Surface roadworks requiring temporary traffic, cyclist and/or pedestrian diversions, road occupation and temporary road closures
- Temporary changes to speed limits.

4.1 Traffic generating activities

Construction is proposed to occur between 2022 and 2026. An increase in traffic volumes is expected during construction of the Project with peak construction activity anticipated to occur in 2024 during the bulk earthworks and pavement activities. These activities will generate the most construction traffic for deliveries of spoil to build reinforced earth structures and pavement materials.

Table 4-1 represents the anticipated light and heavy vehicle traffic generation from each of the work sites and construction ancillary facilities for the Project, based on those presented in the Amendment Report and the Consistency Assessment – Traffic and Transport Memo for M12 West Package Detailed Design (WSP, 2021). It is noted that the values presented in Table 4-1 may fluctuate depending on the works being undertaken and will not be consistent throughout the entire construction period.

The main traffic generating construction activities comprise of:

- Construction haulage by heavy vehicles
- Light vehicle movements (vans, utility pick-ups) associated with construction staff and contractors
- Delivery of materials such as civil, concrete and paving materials
- Movements of construction equipment.

Table 4-1: Construction traffic generation (inbound and outbound)

Ancillary Facility	Work Sites[3]	Daily heavy vehicle generation	Morning peak light vehicle generation	Morning peak[4] heavy vehicle generation	Evening peak[5] light vehicle generation	Evening peak heavy vehicle generation
AF1/10	ML-01 The Northern Road to Luddenham Road	80*	100*	20*	100*	20*
AF2/3	ML-03, ML-05, ML-06, ML-08 Cosgroves Creek bridge to Badgerys Creek ML-04 Airport interchange north of the M12 Motorway main line ML-07 Western Sydney International Airport access road LR-02 Elizabeth Drive, west of the Western Sydney International Airport access road LR-03 Elizabeth Drive, east of the Western Sydney International Airport ML-09 Badgerys Creek to South Creek bridge	220*	100*	16*	100*	16*
AF4/12	ML-10 South Creek bridge to Clifton Avenue LR-04 Clifton Avenue north of the M12 Motorway main line LR-05 Clifton Avenue south of the M12 Motorway main line	80	93	8	93	8
AF5	ML-12 Kemps Creek to Elizabeth Drive	160	93	16	93	16

[3] As detailed in the AR and depicted in AR Figure 6-4 Amended Haulage Arrangements
[4] Morning peak is 0730 to 0830 hours
[5] Evening peak is 1730 to 1830 hours

Ancillary Facility	Work Sites[3]	Daily heavy vehicle generation	Morning peak light vehicle generation	Morning peak[4] heavy vehicle generation	Evening peak[5] light vehicle generation	Evening peak heavy vehicle generation
AF6	ML-15 Existing utility access road to M7 interchange ramp bridges LR-06 Western Sydney Parklands Utility access road to the north LR-07 Western Sydney Parklands Utility access road to the south	160	93	16	93	16
AF7/8	ML-16 M12 Motorway Westbound Entry Ramp from Elizabeth Drive bridge to the M7 Motorway Northbound Exit Ramp to Elizabeth Drive ML-17 M7 Motorway Northbound Exit Ramp to Elizabeth Drive M7 Motorway Southbound Entry Ramp from the M12 Motorway and Elizabeth Drive M7 Motorway Southbound Entry Ramp from the M12 Motorway and Elizabeth Drive ML-19 M7 Motorway Northbound Exit Ramp to the M12 Motorway Westbound ML-21 M7 Motorway Northbound Exit Ramp to Elizabeth Drive	100	-	10	-	10
AF9	ML-23 M7 Motorway Southbound Exit Ramp to the M12 Motorway Westbound ML-24 M7 Motorway Interchange - M7 Motorway Southbound Exit Ramp to Elizabeth Drive	120	-	12	-	12
AF11	ML-02 Luddenham Road to Cosgroves Creek bridge LR-01 Luddenham Road's private access driveway	220*	100*	16*	100*	16*
AF13	ML-11 Clifton Avenue to Kemps Creek	160	93	16	93	16

Ancillary Facility	Work Sites[3]	Daily heavy vehicle generation	Morning peak light vehicle generation	Morning peak[4] heavy vehicle generation	Evening peak[5] light vehicle generation	Evening peak heavy vehicle generation
AF15	ML-13 Elizabeth Drive to Range Road	160	93	16	93	16
AF16	ML-14 Range Road to existing utility access road	200	93	20	93	20
AF17	ML-22 M7 Motorway Northbound Entry Ramp from the M12 Motorway and Elizabeth Drive LR-09 Elizabeth Drive East to Bridge over M12 Motorway Eastbound Exit Ramp to Elizabeth Drive LR-10 Cecil Road and roundabout at Wallgrove Road Intersection LR-11 Wallgrove Road Realignment	160	-	16	-	16
AF18	ML-22 M7 Motorway Northbound Entry Ramp from the M12 Motorway and Elizabeth Drive LR-09 Elizabeth Drive East to Bridge over M12 Motorway Eastbound Exit Ramp to Elizabeth Drive LR-10 Cecil Road and roundabout at Wallgrove Road Intersection LR-11 Wallgrove Road Realignment	120	-	12	-	12
Tank Road	ML-14 Range Road to existing utility access road ML-15 Existing utility access road to M7 interchange ramp bridges	-	90	-	90	-
Total:		**1960**	**927**	**194**	**927**	**194**

*As identified within Consistency Assessment – Traffic and Transport Memo for M12 West Package Detailed Design (WSP, 2021)

4.2 Intersection performance

Traffic intersection performance analysis was undertaken to determine the impacts of construction traffic at key intersections. TfNSW uses Level of Service (LoS) as a measure of performance for all intersection types operating under prevailing traffic conditions. 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.

In the 2024 'with construction' scenario, the following intersections have been modelled to perform poorly at Level of Service F:

- Elizabeth Drive / Devonshire Road – will remain at Level of Service F during the morning (368 seconds) and evening (771 seconds) peaks. See also Section 5.15.
- Elizabeth Drive / Badgerys Creek Road – will change from Level of Service D (55 seconds) to Level of Service F (124 seconds) during the morning peak.

It noted that the modelling results do not reflect the recent roundabout upgrade that has been installed by WSA Co at this intersection as part of WSIA construction. The implementation of the roundabout would result in an improved performance for this intersection and it is expected it would perform at a LoS higher than F.

Increases in delay at these intersections are a result of the addition of construction-related heavy vehicle traffic. Additional delays would be experienced for vehicles waiting for a gap in traffic when turning right or left onto Elizabeth Drive. Due to their length, construction-related heavy vehicles require longer gaps in traffic to safely turn from minor roads at priority-controlled intersections.

The results of the intersection performance as identified in the Amendment Report are presented in Table 4-2.

Table 4-2: Intersection performance: 2024 Project with 'construction' scenario

Intersection	Morning peak		Evening peak	
	Average delay (secs)	Level of Service	Average delay (secs)	Level of Service
Elizabeth Drive / M7 Motorway southbound ramps	34	C	42	C
Elizabeth Drive / M7 Motorway northbound ramps / Wallgrove Road	41	C	51	D
Elizabeth Drive / Cecil Road	23	B	14	A
Elizabeth Drive / Duff Road	24	B	20	B
Elizabeth Drive / Mamre Road	23	B	18	B
Elizabeth Drive / Range Road	35	C	45	D

Intersection	Morning peak		Evening peak	
	Average delay (secs)	Level of Service	Average delay (secs)	Level of Service
Elizabeth Drive / Devonshire Road	368	F	771	F
Elizabeth Drive / Clifton Avenue	20	B	21	B
Elizabeth Drive / Western Road	24	B	36	C
Elizabeth Drive / Martin Road	10	A	13	A
Elizabeth Drive / Lawson Road	11	A	10	A
Elizabeth Drive / Badgerys Creek Road	124	F	19	B
Elizabeth Drive / Adams Road	13	A	24	B
Elizabeth Drive / Luddenham Road	17	B	17	B
Elizabeth Drive / The Northern Road	41	C	41	C

4.3 Parking

Parking for construction personnel will be provided at ancillary facilities. It is not expected that surplus parking demand from construction activities would reduce the availability of surrounding public parking as there is currently limited or no on-street parking in the vicinity of the Project.

4.4 Public transport

Bus routes 801 and 813 operate along Elizabeth Drive between the M7 Motorway and Badgerys Creek Road and Route 789 operates on The Northern Road. During construction of the project, the following impacts on buses and bus customers are likely:

- Reductions in speed when travelling through construction activity areas, resulting in longer travel times
- Temporary relocation of bus stops away from construction zones and alternative access requiring some passengers to walk further, while other passengers may have a shorter distance to walk to their desired bus stop.

4.5 Pedestrian and cyclist access

The increase in construction vehicles will have a negligible impact on sensitive road users given the existing low volumes of pedestrians and cyclists using the proposed construction access routes. Notwithstanding, construction of the Project will affect pedestrian and cyclists, who will be required to use temporary alternative paths.

In particular, the existing off-road shared user path along the M7 Motorway will be relocated to the east for about two kilometres between Villiers Road and south of Elizabeth Drive to accommodate the new off-ramps and on-ramps between the M7 Motorway and the M12 Motorway. The realignment would tie-in to the existing shared user path to the north and south of Elizabeth Drive.

The realigned path will be constructed and opened to sensitive road users before the existing path is decommissioned to maintain access. Safety barriers would separate users from the construction zone during construction of the new path and the decommissioning of the old path to provide safe passage during the realignment works.

5 Traffic Management

5.1 Construction traffic management

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

The TMP will be prepared by a person(s) suitably experienced in the design and implementation of TMPs of equivalent complexity and holding qualifications acceptable to TfNSW, including as a minimum, a “Prepare a Work Zone Traffic Management Plan” qualification.

The TMP must be signed off by the Construction Traffic Manager before forwarding to TfNSW for consideration and approval. Key stakeholders including councils, WSIA, Sydney Metro – Western Sydney Airport and bus operators will also be provided a copy of the approved TMP for their information and overview.

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

- Details of any traffic staging arrangements associated with each proposed construction stage, including TSP, and the time periods during which each stage will be in operation
- TCP, including provision for cyclists and pedestrians, and any specific traffic control arrangements associated with the conditions of approval of the ROL
- VMP showing the mandated travel paths for vehicles to enter, leave or cross the through traffic stream
- PMP showing the allocated travel paths for workers within the Site, and for pedestrians and cyclists around or through the 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 carparking 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 Plan, for dealing with unplanned traffic incidents.

5.1.1 Traffic staging plans

The Construction Contractors will prepare TSPs as part of their stage-specific TMP. The purpose of the TSP is to show how traffic will be managed through 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.

The TSPs will include, but not be limited to, road design drawings showing traffic lane configurations to be provided for traffic passing through the construction sites, including details of road alignment and geometry, intersection layouts, provision for buses and cyclists, work areas and pedestrian areas, drainage, signs and pavement markings.

5.1.2 Vehicle movements

Detailed TCPs will be prepared by the Construction Contractor to identify measures that will be installed to warn traffic and guide it around or past the construction sites. TCPs may be in the form of written documents and/or diagrams. TCPs will incorporate VMPs and PMPs as relevant. TCPs will also identify any property or business access issues related to construction.

5.1.3 Ancillary facility traffic management

Ancillary facilities are required to support the construction of the Project. The locations and access to these ancillary facilities will be confirmed by the Construction Contractors and are indicatively identified in Table 5-1 and shown in Figure 5-1.

Traffic management for ancillary facilities will be planned to minimise effects on existing traffic flows. Dedicated light and heavy vehicle turning areas and temporary traffic management measures, if required, will be developed and detailed in the Construction Contractors' TMP.

Table 5-1: Indicative construction access to ancillary facilities

Ancillary facility	Access
AF1	Access from The Northern Road via an existing property access
AF2	Access from Elizabeth Drive opposite the existing Elizabeth Drive/Taylors Road intersection, opposite the northern boundary of the Western Sydney Airport.
AF3	Access via AF2 and then through the construction footprint (i.e. from Elizabeth Drive opposite the existing Elizabeth Drive/Taylors Road)
AF4	Access from Clifton Avenue via an existing property access
AF5	Access from Elizabeth Drive to an existing driveway access in Mamre Road
AF6	Access from an existing utilities access road that connects to Elizabeth Drive near Duff Road.
AF7	Access through the construction footprint along the proposed project alignment from AF6
AF8	Access via an internal haul route from AF7, then via an existing underpass beneath the M7 Motorway
AF9	From Wallgrove Road and via the existing M7 Motorway underpass opposite Kosovich Place, Cecil Park
AF10	Access from The Northern Road, via the existing ancillary facility access point
AF11	Access from Luddenham Road via an existing property access
AF12	Access via Clifton Avenue via an existing property access
AF13	Access via Salisbury Avenue via an existing property access
AF14	Will not be used
AF15	Access via Range Road via an access road to be constructed
AF16	Access via Range Road via an existing access to the carpark of the Wylde Mountain Bike Trail

Ancillary facility	Access
AF16a	Access via Range Road via an existing access to the carpark of the Wylde Mountain Bike Trail
AF17	Access via Wallgrove Road via an access point to be constructed
AF18	Access along the proposed Project alignment and existing Wallgrove Road
Tank Road AF	Access via Water Tower Road (private road)

5.2 Haulage Routes

Heavy vehicle routes and ancillary facility access points to be used for construction of the Project as identified in the EAD, are shown on Figure 5-1. Should the Construction Contractor propose alternative haulage routes not identified in the EAD, the Construction Contractor will require approval from TfNSW and in accordance with NSW CoA E93, as per Section 5.2.1.

The Construction Contractors will undertake detailed planning of haulage routes and vehicle turning movements during preparation of the Construction Contractors' TMP. The Construction Contractors' TMP will include an indicative assessment and impact of the number and timing of additional construction vehicle traffic movements on the haulage routes identified in Figure 5-1 that will be generated by the construction of each stage of the Project. The Construction Contractors' TMP will include detailed maps illustrating haulage routes between material source sites and ancillary sites, details of the haulage route roads, direction of travel, access points to ancillary facilities and construction sites, locations of any sensitive receivers and any limitations of the haulage route.

In accordance with NSW CoA A94, all heavy vehicles used for construction haulage will be clearly marked on the sides and rear with the CSSI name, and the name of the stage, to enable immediate identification by a person viewing the heavy vehicle. Details of the CSSI identification markings was submitted to the Planning Secretary for approval on 8 June 2021 and approved on 23 June 2021 i.e. prior to the heavy vehicles being used for construction spoil haulage. Only one Project form of signage will be placed on a heavy vehicle at any one time; this will be checked by the Construction Contractor as trucks enter and leave site. The identification markings will be as follows:

- Orange for M12 West, green for M12 Central, blue for M12 East
- Produced with retroreflective background to ensure visibility in low light conditions and at night
- Sized:
    - Small: 296.93mm x 81.28mm
    - Large: 594.11mm x 156.46mm

Signage is publicly available on the DPHI website: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-9364%2120220810T022412.822%20GMTHaulage routes will be planned to minimise movements on the road network during the AM and PM peak periods where practicable. Where haulage routes pass schools, childcare facilities and/or aged care facilities, heavy vehicle movements during operational peak hours of these facilities would also be minimised where practicable.

5.2.1 Local Roads

In accordance with NSW CoA E93, heavy vehicles used for spoil haulage and concrete deliveries associated with the Project are not permitted to use local roads within 1km of work areas or construction ancillary facilities, unless approved by the Planning Secretary in accordance with CoA E94 or are identified in the Environmental Assessment Documentation. Figure 5-1 and Figure 5-2 depicts the identified haulage routes in the Environmental Assessment Documentation and the 1km boundary around the Project. The Construction Contractor will identify whether the use of any additional local roads within the 1km boundary is required. If so, the Construction Contractor, in conjunction with TfNSW, must seek approval from the Planning Secretary before the use of the additional local roads.

In accordance with NSW CoA E94, requests to the Planning Secretary for the approval of spoil haulage and concrete delivery vehicles to use these additional local roads will include a Traffic and Pedestrian Impact Assessment and be prepared in consultation with the relevant local council(s). The assessment will be undertaken by an appropriately qualified and experienced person and:

a) Include a swept path analysis if required by the Department

b) Demonstrate that the use of local roads will not compromise the safety of the public and have no more than minimal amenity impacts

c) Provide details as to the date of completion of the road dilapidation surveys for the subject local roads

d) Describe the measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and childcare facilities during peak times for operation.

The outcomes and recommendations of the Traffic and Pedestrian Impact Assessment (particularly E94(c)) will be incorporated into the Site Establishment Management Plan or CTTMP as relevant.

All local roads approved for use by the Planning Secretary must be identified in this CTTMP and the Construction Contractors' TMP.

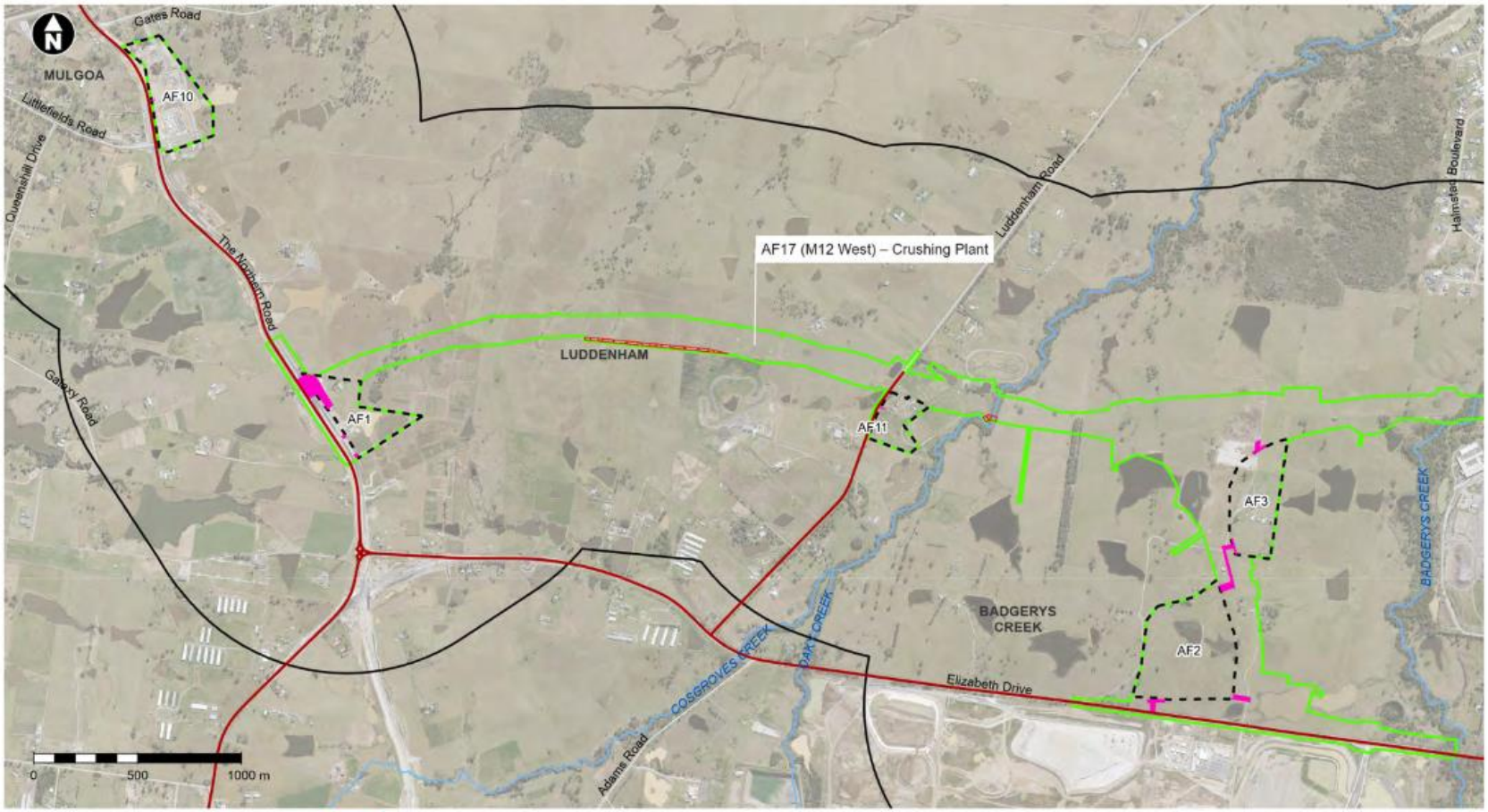

Figure 5-1 Haulage routes and ancillary facility access points

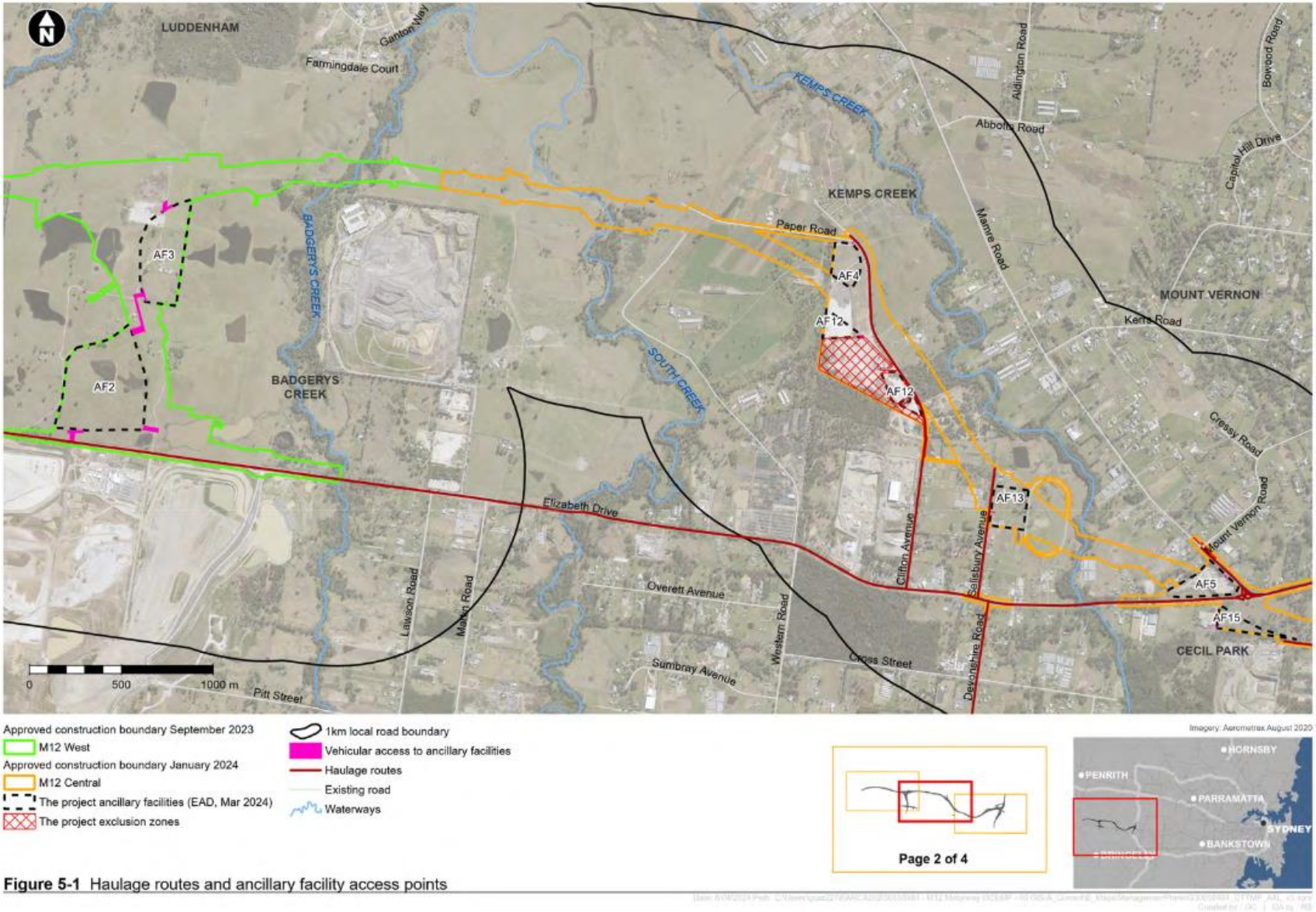

Figure 5-1 Haulage routes and ancillary facility access points

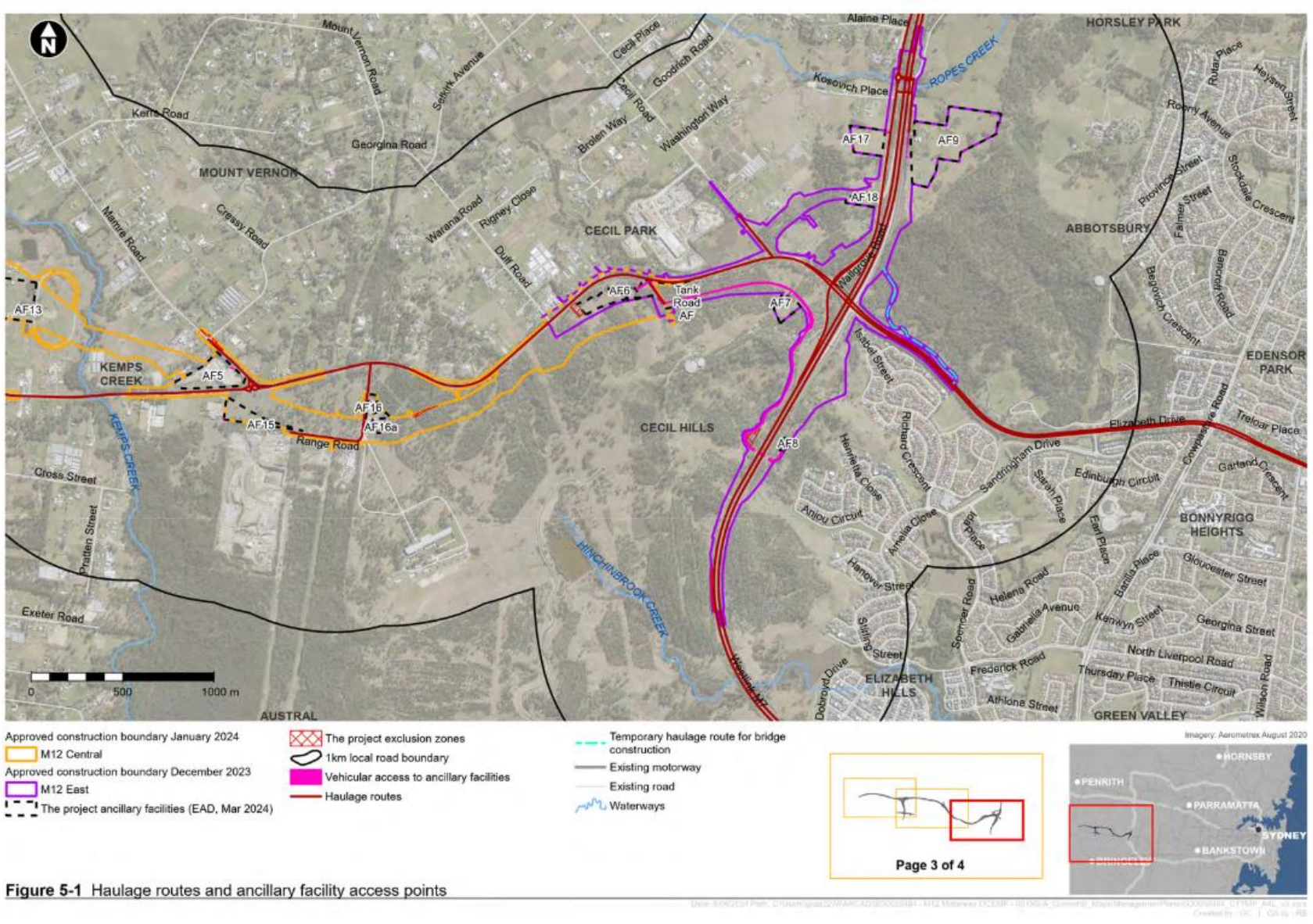

Figure 5-1 Haulage routes and ancillary facility access points

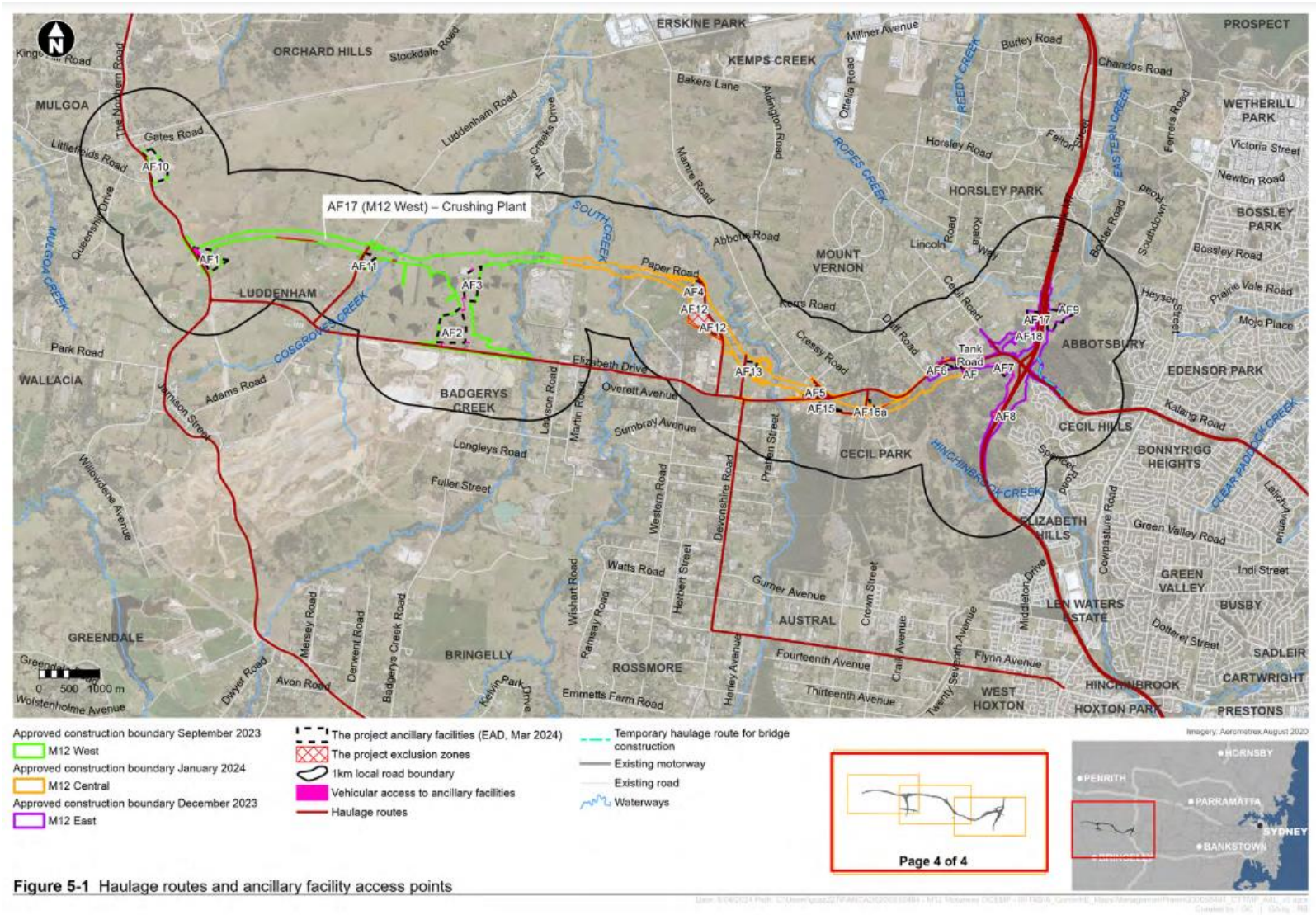

Figure 5-1 Haulage routes and ancillary facility access points

Figure 5-1 Haulage routes and ancillary facility access

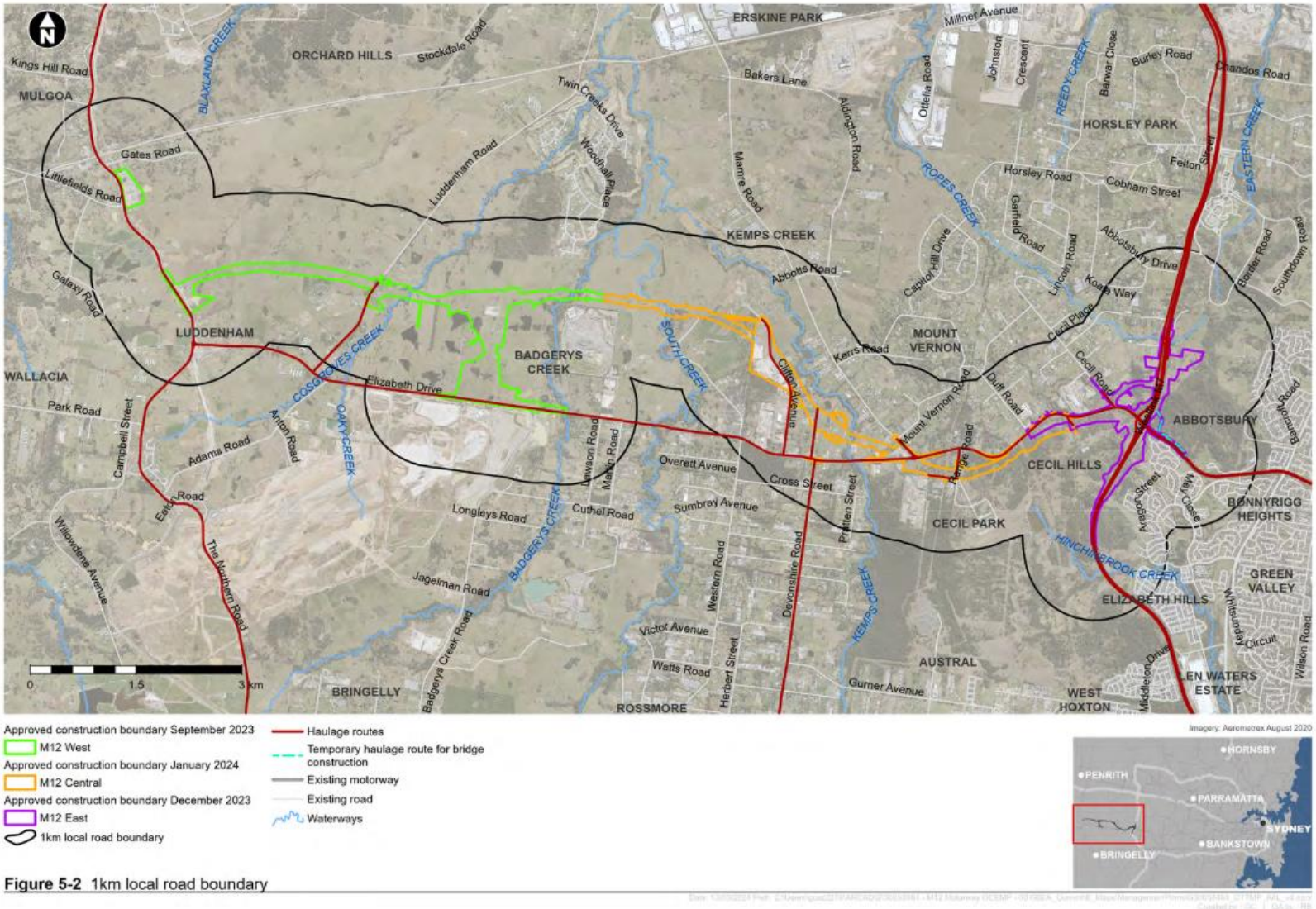

Figure 5-2 1km local road boundary

Figure 5-2: Local Road 1 km boundary

5.3 Traffic control signs and devices

Traffic control devices include signs, traffic signals, pavement markings, traffic islands, and other devices used to regulate, warn and/or guide road users. Traffic control devices for the Project include:

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

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

5.4 Road occupancy

Construction of the Project may require closing of shoulders and lanes on either the existing, temporary, or new roads. An ROL will be obtained by the Construction Contractors if an existing road is to be used in such a way that it affects traffic flow within the vicinity of the Project works.

Road occupancies include:

- Shoulder occupancies and/or closures
- Lane occupancies and/or closures
- Road closures and detours
- Any occupation of the construction site by site personnel (including sub-contractors), equipment or plant that requires a traffic control plan
- Any other event, including utility works, that causes delays to traffic flows.

Applications for an 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 in accordance with TfNSW G10 Traffic Management 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 TCP, VMP, details of SZA submission (if applicable), and contact details of the Construction Contractor Traffic Manager or delegate.

5.5 Speed management

Temporary speed zones may be implemented to assist in controlling the speed of traffic through roadwork sites. A reduced roadwork speed zone will only be implemented where it is warranted. The Construction Contractor Traffic Managers 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.

The Construction Contractors will apply for an SZA prior to implementation of temporary speed zones, as part of the ROL application process described in Section 5.4.

The Construction Contractor Traffic Managers will retain copies of all approved SZAs on site and provide a copy to NSW Police and Liverpool City Council, Penrith City Council or Fairfield City Council, as relevant. The Construction Contractors will maintain a record of times when temporary speed zoning signs are in place. The community will be informed of any SZA to be implemented via advertising and signage.

5.6 Signposting and delineation

Signposting and delineation are important aspects of road safety and traffic management. Regulatory signs control specific traffic movements, warning signs give advance notice of traffic hazards, road markings (and pavement markers) provide delineation and reinforce signage, guide signs give advance guidance and advice of routes and destinations which assist all drivers to make clear, early decisions.

Signage associated with property access, local community access and businesses will be considered during the detailed design and implementation of temporary traffic management schemes and any impacts addressed 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.

The details of controls for maintaining access will be provided as part of the Construction Contractors' TCPs, which will include a Signage Strategy that identifies the types and locations for signage that will be implemented. The Signage Strategy will be developed in consultation with affected local businesses and properties, Penrith City Council, Liverpool City Council and Fairfield City Council, and other relevant authorities.

The Construction Contractor will develop a Signage Strategy in accordance with Guide: Signposting (RTA, 2007) to outline the measures to be implemented to minimise disruption and access to businesses and properties in the Project area. In accordance with REMM TT10, this Signage Strategy will provide for appropriate signage for businesses where existing signage is

obscured/no longer visible or where customers are required to use alternative access to reach the businesses during construction.

The Signage Strategy will include:

- A review of existing signage along the Project corridor, which may include:
    - Private and commercial signage
    - Street signage
    - Visitor information signage
    - Parking, pedestrian and public transport facilities signage
- The principles to be adopted for the Signage Strategy, such as:
    - Signage design – ensuring signs are highly visible, clear and easy to understand, of appropriate size and style
    - Signage placement – positioned in accordance with relevant Australian Standards, clearly legible to motorists, pedestrians and cyclists and without causing an obstruction, positioned at eye level for motorists, minimising clutter in the roadway
- The implementation program for the strategy, which will detail the methods and timing for following steps:
    - Audit of existing signage
    - Consultation with stakeholders including the coordination of temporary or permanent signage with other developments
    - Identification of existing signage that will be obscured/no longer visible or where customers are required to use alternative access to reach the businesses
    - Identification of locations where signage will be required
    - Inclusion of signage in TSP/TCPs as required for submission to TfNSW as part of the ROL approval process
    - Liaise with local businesses, properties, the relevant local Council and TfNSW to design and arrange signage
    - Removal of existing signage, if required
    - Installation of signage, which will occur progressively in consultation with affected stakeholders and prior to any disruption from construction
- A monitoring and maintenance program for signage to ensure signs are effective and remain fit for purpose, including:
    - Development and maintenance of a database of installed signage, including sign location, type and installation date
    - Audit program of signage installed to assess its effectiveness, including consultation with affected business and property owners
    - Inspections as part of the weekly environmental inspections to check for damage or removal of signage installed
    - A process for cleaning or replacement of signage as soon as feasibly practicable where vandalism, damage or removal occurs.

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 OCS.

5.7 Pedestrians and cyclists

In accordance with NSW CoA E99 safe pedestrian and cyclist access must be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction, an alternate route which complies with the relevant standards must be provided and signposted.

In accordance with NSW CoA E63, active transport facilities must be designed, constructed and / or rectified in accordance with the *Guide to Road Design Part 6A: Paths for Walking and Cycling* and relevant *AS 1428.1-2009 Design for access and mobility*. Active transport links must also incorporate relevant Crime Prevention Through Environmental Design principles.

The Construction Contractors will prepare PMPs as part of the Construction Contractors' TMPs. The PMPs will consist of diagrams showing the allocated travel paths for construction site personnel and pedestrians around or through construction sites. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, an alternate route which complies with the relevant standards will be provided and signposted.

When preparing PMPs, the Construction Contractor must consider Crime Prevention Through Environmental Design (CPTED) principles of relevant guidelines. These principles include natural surveillance, natural access control and good definition of space and ownership.

5.8 Public transport

Public transport in the core study area is currently served by bus services only with very limited coverage and frequency. Transit Systems operates the following routes via Elizabeth Drive:

- Route 813 (Liverpool town centre to Badgerys Creek Road) runs to the east of Mamre Road on Elizabeth Drive. This is a local bus service that operates on weekdays only with 4 services a day in each direction between 9.30 am and 6.20 pm
- Route 801 (Bonnyrigg to Fairfield) travels up to Badgerys Creek Road. There are no bus services or bus facilities west of Badgerys's Creek Road on Elizabeth Drive. This is local bus route that operates on weekdays only with two services in the peak direction in the morning and evening peak.

Busways operates the following routes via The Northern Road:

- Route 789 operates along The Northern Road between Penrith and Luddenham. This is a peak hour only service and operates twice a day on weekdays with no services provided on weekends.

Changes to bus stops will be implemented in consultation with TfNSW, relevant councils, and relevant bus operators. Alternate temporary bus stops will be provided with appropriate signage to direct commuters. Safe access will be provided in accordance with relevant safety and accessibility standards.

5.9 Property access

In accordance with CoA E96 and REMM TT07 all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of,

residences, businesses, and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised.

Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected residents, businesses and affected property owners and implemented before the disruption. Any changes to access will provide the same equivalent pre-existing level of access unless agreed to by the landowner. Property access that is physically affected by the project must be reinstated to at least an equivalent standard, in consultation with 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 5 working days prior to works affecting residents and businesses.

In accordance with NSW CoA E79 and REMM SLP07, construction activities will be planned to minimise intrusion and disruption to existing agricultural operations/activities in surrounding properties where feasible and reasonable (e.g. stock access, access to farm dams, etc) unless otherwise agreed by the landowner.

Any property adjustments, including replacement of agricultural infrastructure (such as fencing) and relocation of property access that impact the property will be carried out in consultation with property owners/ business managers.

5.10 Parking

The Construction Contractors 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 arrangements for businesses and properties are not anticipated to be impacted by the Project, including at Luddenham Town Centre. However, where any specific requirements are identified during consultation with affected businesses and properties, the Construction Contractors will implement appropriate arrangements, including providing temporary signage, for parking.

Private parking lots will not be utilised by the Project unless otherwise agreed to by the stakeholder or landowner. Parking will also be provided at Ancillary Facilities.

5.11 Road maintenance

The Construction Contractors will monitor and maintain existing or temporary roads used by construction traffic during the Project in the Project area. Maintenance activities will include repairing potholes, heavy patching, re-sealing/re-sheeting and removing debris and re-applying line-marking.

The Construction Contractors will co-operate with TfNSW, relevant councils and its personnel or contractors in carrying out maintenance of existing roads outside the Project area.

In accordance with CoA E95, the Construction Contractors will prepare a Road Dilapidation Report for any local road that is used by a heavy vehicle. A copy of the Road Dilapidation Report will be provided to the relevant road authority within three (3) weeks of completion of the survey and at least two (2) weeks before the local road is used by heavy vehicles. In accordance with REMM TT06, the report will document the existing conditions of local roads and outline measures to repair damage to roads from heavy vehicle movements associated with the Project.

If damage to roads occurs as a result of construction, the Construction Contractor will rectify the damage to restore the road to at least the condition it was in pre-construction in consultation with the relevant road authority. Rectification works must be undertaken within three (3) months of the subject road no longer being used for the construction of the CSSI unless an alternative timeframe is agreed to by the relevant road authority.

5.12 Special events

A special event in traffic management terms is defined as any planned activity that is wholly or partially conducted on a road, requires multiple agency involvement, requires special traffic management arrangements and may involve large numbers of participants and/or spectators. Special events may include:

- Local festivals and celebrations
- Annual local events
- Sporting events
- Parades and marches
- Daylight savings changes
- Seasonal variations in traffic volumes
- NSW holiday periods.

Where special events are expected to generate additional vehicle or pedestrian traffic in the area affected by construction of the Project, the Construction Contractors will co-operate with the event organiser, TMC, TfNSW, local Councils and other authorities to facilitate traffic and pedestrian flows on the existing road network or adjacent to the construction sites. The Construction Contractors will also liaise with Liverpool City Council, Penrith City Council and Fairfield City Council and Western Sydney Parklands Trust in relation to upcoming traffic generating special events when planning any traffic arrangements to avoid any conflict with construction activities.

5.13 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 Construction Contractors Traffic Managers will arrange for representatives of the Emergency Services to attend traffic control and stakeholder meetings to ensure they remain informed of current or upcoming changes to traffic conditions.

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

5.14 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 a construction site.

The Construction Contractors will nominate a contact person, such as the Construction Contractor Traffic Manager, to be available at all times if an emergency or disruptive unplanned incident occurs within the boundary of any construction area subject to a TCP. The nominated contact person will respond within one hour to after-hours callouts from the Transport Management Centre (TMC) or Police.

For non-emergency disruptive incidents, the Construction Contractor 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 TMC and Police and all traffic incidents attended will be kept by the Construction Contractor.

5.14.1 Traffic incident management plan

The Construction Contractors will prepare a Traffic Incident Management Plan as part of the Construction Contractors TMP. The Traffic Incident Management Plan will be developed in consultation with the TMC, Sydney Metro, WSIA, Liverpool City Council, Penrith City Council and Fairfield City Council, as relevant.

5.15 Construction traffic management at Devonshire Road/ Elizabeth Drive intersection

As outlined in the Environmental Assessment Documentation and Section 4.2, traffic delays during construction are expected in the vicinity of Devonshire Road and Elizabeth Drive intersection. As a result, the revised environmental management measure, REMM TT10, was developed requiring appropriate traffic solutions to be investigated at this location. TfNSW and its contractors subsequently identified that installing a temporary roundabout at the Devonshire Road - Elizabeth Drive intersection was the preferred traffic solution to mitigate these traffic delay concerns. A consistency assessment, in accordance with TfNSW Environmental Assessment Procedure EIA-PO3 was then prepared to ensure that the work is consistent with the approved project. This has resulted in the additional stage of works during M12 Central construction called the M12 Central Temporary Roundabout.

The M12 Central Temporary Roundabout Construction Contractor will implement traffic management controls during its construction. These controls have been detailed in the M12 Central Temporary Roundabout Construction Contractor's stage specific CEMP and have taken into consideration the Contractor's traffic staging plans, vehicle movement plans and overall traffic management for M12 Central. Upon its completion the Temporary Roundabout is expected to mitigate the decline in intersection performance at this location that is anticipated due to construction of the M12 central and M12 East stages of the Project.

5.16 Management of cumulative traffic impacts

Potential cumulative construction impacts may occur from the aggregated effect of other developments preparing for or starting Construction. Projects that may contribute to cumulative traffic impacts due to location, timeframe and project size include:

- M7 Widening
- WSIA
- Sydney Metro – Western Sydney Airport
- Operational M7 Motorway
- Other works being undertaken as part of the M12 Motorway project including:
  - M12 Central
  - M12 East
  - M12 West
  - M12 Early Works
- Sydney Water DN900 works along Elizabeth Drive.

The Construction Contractor will:

- Liaise and coordinate with other contractors undertaking these adjacent concurrent works which may involve road occupancies
- Liaise and facilitate regular meetings with TfNSW, other authorities and relevant parties including meeting at least monthly with TfNSW and Transport Management Centre (TMC)
- Liaise with TfNSW and other regulatory authorities (such as TMC), emergency services, Council(s) when planning and implementing your traffic management proposals
- Develop measures to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic caused by other developments
- Keep records of these meetings make them available to relevant personnel. Meetings may include but are not limited to Traffic Coordination Groups and Traffic and Transport Liaison Groups.

5.17 Management measures

Management actions prescribed by this CTTMP aim to minimise construction traffic impacts and are summarised in Table 5-2.

Table 5-2: Transport and Traffic management and mitigation measures

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
Notification and Consultation								
TT01	Notify any changes in traffic conditions on roads or paths to road users, emergency services, public transport operators, and other relevant stakeholders	Consultation Records OCS	Prior to construction, and during construction	Construction Traffic Manager / Community Stakeholder Manager	✓	✓	✓	REMM TT01
TT02	Consultation will be carried out with WSIA and Sydney Metro – Western Sydney Airport for traffic and access interfaces.	Consultation Records OCS	Prior to construction, and during construction	Construction Traffic Manager / Community Stakeholder Manager	✓	✓	✓	REMM TT01
TT03	Consultation will be carried out with TfNSW, councils and other relevant stakeholders regarding the development of specific TMP and associated elements such TSPs, Traffic TCPs, VMPs and PMPs.	Consultation Records OCS	Prior to construction, and during construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10
TT04	Consultation will be carried out with the operators of the M7 Motorway to develop measures to manage the potential impacts of construction within the operating M7 Motorway corridor.	Consultation Records OCS	Detailed design prior to construction, and during construction	Construction Traffic Manager / Community Stakeholder Manager			✓	REMM TT04
TT05	Notify local residents and local businesses about any new or changed construction activities which will affect access to their properties or otherwise disrupt the residents'	Consultation Records OCS	Prior to construction, and	Construction Traffic Manager / Community	✓	✓	✓	TfNSW G36

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
	use of their premises, at least 5 working days before commencing work affecting residents.		during construction	Stakeholder Manager				
TT05A	Coordination and liaison will be undertaken with contractors undertaking adjacent concurrent works which may involve road occupancies	Consultation Records OCS	Prior to construction, and during construction	Construction Traffic Manager / Community Stakeholder Manager	✓	✓	✓	TfNSW G10
TT05B	Consultation with affected businesses and properties where pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties cannot be maintained. In accordance with NSW CoA E96 and REMM TT07, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected businesses and implemented before the disruption	Consultation Records OCS	Prior to construction, and during construction	Construction Traffic Manager / Community Stakeholder Manager	✓	✓	✓	NSW CoA E96 REMM TT07
Dilapidation report and repairs								
TT06	A Road Dilapidation Report must be prepared for local roads proposed to be used by heavy vehicles for works associated with the Project before the commencement of use by such vehicles.	Road Dilapidation Report	Prior to construction	Construction Traffic Manager	✓	✓	✓	NSW CoA E95 REMM TT06
TT07	If damage to roads occurs as a result of the construction, the Construction Contractor will rectify the damage to restore the road to at	Consultation Records	On identification of damage	Construction Traffic Manager	✓	✓	✓	NSW CoA E95

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
	least the condition it was in pre-construction in consultation with the relevant road authority.							
TT08	Independent Safety Audit(s) are to be undertaken by an appropriately qualified and experienced person during detailed design (audit of the plans) and prior to opening (pre-opening audit).	Independent Safety Audit Report	Prior to the commencement of construction Prior to operations	Construction Traffic Manager	✓	✓	✓	NSW CoA E98
Access and Property								
TT09	Consultation will be undertaken with affected businesses and properties where pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties cannot be maintained. All reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised.	Site specific Traffic Management Plans	During construction	Construction Traffic Manager	✓	✓	✓	NSW CoA E96 REMM TT07
TT10	Where disruption cannot be minimised, 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	Consultation Records	During construction	Construction Traffic Manager	✓	✓	✓	NSW CoA E96 REMM TT07

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
	to businesses must be provided before, and for the duration of, any disruption							
TT11	Safe pedestrian and cyclist access must be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, an alternate route which complies with the relevant standards must be provided and signposted. Consideration must also be given to CPTED principles when designing and implementing alternative routes.	Vehicle Movement Plans / Pedestrian Movement Plans	During construction	Construction Traffic Manager	✓	✓	✓	NSW CoA E99 NSW CoA E63 ISCA
TT12	Active transport facilities must be designed, constructed and / or rectified in accordance with the Guide to Road Design Part 6A: Paths for Walking and Cycling and relevant AS 1428.1-2009 Design for access and mobility.	Design Report	Detailed design Construction	Construction Traffic Manager	✓	✓	✓	NSW CoA E63
TT13	A Signage Strategy will be prepared to provide for appropriate signage for businesses where existing signage is obscured/no longer visible or where customers are required to use alternative access to reach the businesses during construction.	Signage Strategy	Prior to construction impacting properties	Construction Traffic Manager	✓	✓	✓	REMM TT08

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
TT14	Property adjustments, including replacement of farm infrastructure (such as fencing) and relocation of property access, prior to work that impact the property will be carried out in consultation with property owners/ business managers.	Consultation Records	Prior to construction impacting properties	Construction Traffic Manager	✓	✓	✓	REMM SLP04
TT15	Construction activities will be planned to minimise disruption to existing agricultural operations/activities in surrounding properties where feasible and reasonable (e.g. stock access, access to farm dams, etc) unless otherwise agreed by the landowner.	Consultation Records	During construction	Construction Traffic Manager	✓	✓	✓	NSW CoA E79 REMM SLP07
Traffic Management								
TT16	The M12 Central Construction Contractor in consultation with TfNSW, will implement appropriate traffic management controls to mitigate the expected delays and intersection performance decline in the vicinity of Devonshire Road and Elizabeth Drive due to the Project. The traffic management controls will be detailed within the stage-specific CTTMP.	Site specific Traffic Management Plans	During construction	Construction Traffic Manager		✓		REMM TT10
TT17	When planning and carrying out traffic management, comply with the TfNSW Traffic Control at Work Sites Manual (TCWS)	Site specific Traffic Management Plans	Prior to construction, and during construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
TT18	Site specific TMP conforming to the RMS Traffic Control at Worksites manual will be developed for the works. These plans will contain additional written details describing the nature of the works.	Site specific Traffic Management Plans	Prior to construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10
TT19	Traffic Staging Plans conforming to the TfNSW Traffic Control at Worksites manual will be developed showing how traffic will pass safely through the Site during the various construction stages.	Traffic Staging Plans	Prior to construction, and during construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10
TT20	Traffic Control Plans conforming to the TfNSW Traffic Control at Worksites manual will be developed showing signs and devices arranged to warn traffic and to guide it around, past or if necessary, through a work site or temporary hazard	Traffic Control Plans	Prior to construction, and during construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10
TT21	Where applicable, Vehicle Movement Plans and Pedestrian Movement Plans will be developed and prepared with Traffic Control Plans.	Vehicle Movement Plans / Pedestrian Movement Plan	Prior to construction, and during construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10
TT22	A Traffic Incident Management Plan will be developed and implemented. The Traffic Incident Management Plan will be developed in consultation with the Traffic Management Centre, Sydney Metro, WSIA, Liverpool City Council, Penrith City Council and Fairfield City Council, as relevant.	Traffic Incident Management Plan	Prior to construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
TT23	Undertake traffic audits and monitoring inspections in accordance with Section 6.5 and Section 6.6 of this CTTMP.	Monitoring and Audit Records	Prior to construction	Construction Traffic Manager	✓	✓	✓	TfNSW G10
TT24	Construction vehicle movements (both on and offsite) will be managed to minimise noise impacts. Where feasible, this will include (but not be limited to): • Establishment and use of internal haul routes, or existing major roads where this is not feasible • Restriction of heavy vehicle movements to standard construction hours • Locating traffic marshalling areas away from residences to minimise noise impacts from idling vehicles • Instructing workers on the operation of heavy vehicles entering and exiting the site to minimise noise.	Construction Noise and Vibration Management Plan	During Construction	Construction Traffic Manager	✓	✓	✓	REMM NV12
Public Transport								
TT25	Changes to bus stops will be implemented in consultation with TfNSW, relevant councils, and relevant bus operators. Alternate temporary bus stops will be provided with appropriate signage to direct commuters. Safe access will be provided in accordance	Consultation Records	During construction	Construction Traffic Manager	✓	✓	✓	REMM TT02

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
	with relevant safety and accessibility standards.							
Spoil Haulage								
TT26	The Construction Contractor must ensure that all heavy vehicles used for spoil haulage are clearly marked on the sides and rear with the project name and CSSI name (or where the CSSI is staged, the name of that stage) with signage approved by DPE to enable immediate identification by a person viewing the heavy vehicle.	DPE Approval	Prior to construction	Construction Traffic Manager	✓	✓	✓	NSW CoA A49
TT26A	Only one CSSI form of signage must be placed on a heavy vehicle at any one time. This will be checked by the Construction Contractor upon heavy vehicle entry and exit from site	DPE Approval	Prior to construction	Construction Traffic Manager	✓	✓	✓	NSW CoA A49
TT27	Heavy vehicles used for spoil haulage and concrete deliveries associated with the Project are not permitted to use local roads within one (1) kilometre of the Project, unless approved by the Planning Secretary. This includes movements associated with waiting to access construction ancillary facilities and work areas. All local roads approved for use by the Planning Secretary must be identified in the Traffic and Transport CEMP Sub-plan.	Haulage Routes	During construction	Construction Traffic Manager	✓	✓	✓	NSW CoA E93 NSW CoA E94

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Applicability			Reference or source
					M12 West	M12 Central	M12 East	
TT28	Movements of haulage vehicles will be planned to minimise movements on the road network during the AM and PM peak periods where practicable. Where haulage routes pass schools, childcare facilities and/or aged care facilities, heavy vehicle movements during operational peak hours of these facilities will also be minimised where practicable.	Stage specific CTTMP	Prior to construction and during construction	Construction Traffic Manager	✓	✓	✓	REMM TT03
Design								
TT29	If temporary new roadways and detours, or adjustments to existing lane configurations and road geometry, are required as part of traffic staging, they must be designed in accordance with the relevant design standards.	Design Report	Detailed design	Road designer	✓	✓	✓	TfNSW G10
TT30	Traffic signals must be coordinated to minimise congestion and manage traffic flows.	Design Report	Detailed design	Road designer	✓	✓	✓	REMM TT09

6 Compliance management

6.1 Roles and responsibilities

The Project organisational structure and overall roles and environmental responsibilities are outlined in Section 5.1 of the OCEMP. Specific responsibilities for the implementation of traffic management are detailed in Table 5-2 of this CTTMP.

6.1.1 Traffic Manager

The Construction Contractors will provide a Traffic Manager (dedicated resource) for each stage of the Project. The Construction Contractors Traffic Managers will hold a current "Prepare Work Zone Traffic Management Plan" qualification and will be responsible for the overall management of traffic and road safety for the applicable stage of the Project. The Traffic Managers responsibilities include:

- 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
- Amending and updating the plans, as required, to ensure that they remain current as the work progresses
- 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 Traffic and Transport Management Plan and its various component plans, lane occupancy licences 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 site, maintaining records of these meetings and making them available to the relevant persons
- Liaising with WSIA and Sydney Metro – Western Sydney Airport on traffic and access interfaces with the aim of minimising cumulative impacts where possible
- In conjunction with your Community Relations Manager, undertaking consultations with local businesses and residents
- 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 the TfNSW and other authorities

6.1.2 Traffic Controllers

Traffic controllers will be appointed by the Construction Contractors solely for the purposes of the Contract to provide for the safe movement of traffic around, past or through the work site. Traffic Controllers controlling and directing traffic will hold a current "Traffic Controller" qualification.

6.1.3 Road Designer

If temporary new roadways and detours, or adjustments to existing lane configurations and road geometry, are required as part of traffic staging, they will be designed in accordance with the relevant design standards, engineering and safety guidelines by a suitably qualified and experienced road designer.

6.2 Community notification

An OCS has been prepared in accordance with the requirements of NSW CoA B1 and B2 to document the approach to stakeholder and community communications for the Project. The OCS identifies opportunities and tools for providing information and consulting with the community and stakeholders during the construction of the Project. The Construction Contractors will support the delivery of the OCS through its implementation prior to traffic management.

Traffic and transport management information will be communicated to the community and stakeholders in accordance with the principles and procedures outlined in the OCS. Construction Contractors will provide timely, accurate, relevant and accessible information about changed traffic and access arrangements, potential delays to road users and local communities, and out of hours works, with provision for feedback through a complaints line during construction.

Various communication methods relating to traffic management will be enacted as appropriate and may include, but are not limited to:

- TfNSW Website
- Social media posts
- Community updates (newsletters)
- Local newspaper advertisements
- Notification letters
- Live Traffic NSW
- Traffic alerts and media releases
- Variable message signs
- Community forums / information events.

For further detail on the measures implemented for advising the community in advance of upcoming work, including upcoming out-of-hours work, refer to the OCS Section 8.

6.3 Training

To ensure that this Plan is effectively implemented, all site personnel (including sub-contractors) will undergo site induction training that includes 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 overarching CTTMP, the Construction Contractor's TMP and all plans and procedures
- Relevant legislation, regulations, licences, EPL conditions and permit requirements
- Incident response, management and reporting
- Road safety

- Road occupancy
- Construction hours
- Complaints response and reporting
- Roles and responsibilities for traffic management
- Temporary and interim traffic arrangements
- Response procedure for dealing with traffic incidents.

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

Further details regarding staff induction and training are provided in Section 5.3 of the OCEMP.

6.4 Traffic management risk assessment workshop

The Construction Contractors will undertake a Traffic Management Risk Assessment Workshop to identify and address the risks associated with traffic management, road safety and other road network issues specific to each stage of the Project.

The workshop will be attended by Construction Contractor Traffic Managers, road designers, TfNSW personnel involved in reviewing the Construction Contractor TMP, the TfNSW Senior Environment Officer (or delegate) and representatives from Penrith City Council, Liverpool City Council and Fairfield City Council. Where appropriate, representatives of nearby schools, emergency services, affected bus companies, local businesses, and utility owners will be invited.

The outcomes of the workshop will be documented in the Project Risk Registers prepared as part of the Construction Contractors' CEMPs. The identified risks will be managed through the implementation of Traffic Control Plans and other measures outlined in the Construction Contractors TMPs.

6.5 Inspections and monitoring

Inspection and monitoring requirements relevant to traffic and transport are summarised in Table 6-1. Specific requirements for inspection of traffic management will be carried out in accordance with the TCWS Manual (TfNSW, 2018). Inspections of temporary traffic controls during construction will focus on monitoring compliance against TCP/VMP and identifying safety hazards to enable implementation of corrective solutions.

Table 6-1: Inspections and monitoring relevant to traffic and transport

Inspection / monitoring	Frequency	Responsibility	Reference
Traffic control plan inspection Ensure all traffic control signs and devices are functioning and implemented in the correct location	Daily	Construction Contractor Traffic Manager	TfNSW Specification G10 Traffic Control at Work Sites Manual Appendix E
Traffic management risk assessment checklist	Daily	Construction Contractor Traffic Manager	TfNSW Specification G10 Traffic Control at Work Sites Manual Appendix E

Inspection / monitoring	Frequency	Responsibility	Reference
Traffic control safety inspection Ensure traffic control plans implemented are approved and Construction sites are operating safely	Monthly	Construction Contractor Traffic Manager	TfNSW Specification G10 Traffic Control at Work Sites Manual Appendix E
Traffic control plan inspection Ensure that the pavement markings, road signs and other traffic control devices have been installed in accordance with the TCP.	Prior to opening the temporary roadways to traffic	Construction Contractor Traffic Manager	TfNSW Specification G10
ROL compliance monitoring	Weekly or as required for traffic switches	Construction Contractor Traffic Manager	TfNSW Specification G10
Road dilapidation inspection	Pre-Construction and prior to Completion	Construction Contractor Traffic Manager	NSW CoA E95 REMM TT06

Requirements and responsibilities in relation to monitoring and inspections are documented in Section 6.1 and Section 6.2 of the OCEMP.

6.6 Auditing

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

Audit requirements are detailed in Section 7.4 of the OCEMP.

6.6.1 Construction road safety audits

Prior to its initial implementation and whenever significant changes are made to the TMP, a road safety audit will be carried out in accordance with the requirements in the NSW Centre for Road Safety publication Guidelines for Road Safety Audit Practices and AGRS06 Austroads Guide to Road Safety Part 6: Implementing Road Safety Audits and Specification G10.

If a road safety audit of the TMP has been undertaken, then within 24 hours of a traffic switch on to temporary roadways or detours, a road safety audit of the implemented traffic control measures at both daytime and night-time must be conducted.

6.6.2 Independent road safety audit prior to opening

In accordance with NSW CoA E98, independent road safety audit(s) will be undertaken by an appropriately qualified and experienced person during detailed design (audit of the plans) and prior to opening (pre-opening audit) to assess the safety performance of new or modified roads (road safety audit), parking, pedestrian and cycle infrastructure provided as part of the Project (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management.

The audit findings and recommendations of the detailed design plans (audit of the plans) will be actioned prior to construction of the relevant infrastructure. The pre-opening audit findings and recommendations will be actioned prior to the relevant infrastructure being made available for use. All audit findings must be made available to the Planning Secretary on request, within the timeframe stated in the request. The Independent Auditor will be appointed by TfNSW.

6.7 Reporting and identified records

Reporting requirements and responsibilities are documented in the OCEMP.

Reporting requirements relevant to traffic and transport are summarised in Table 6-2.

The Construction Contractors will be required to maintain accurate records substantiating all construction activities associated with the Project or relevant to the CoA, including measures taken to implement this CTTMP. Records will be made available to the DPHI, NSW DCCEEW and Commonwealth DCCEEW upon request, within the timeframe nominated in the request.

Table 6-2: Reporting requirements relevant to traffic management

Report	Frequency	Recipient	Responsibility	Timing	Reference
Road Dilapidation Report (local roads)	Within three weeks of completing the surveys and at least two weeks before the use of the local roads by heavy vehicles.	Penrith, Liverpool, Fairfield City Council(s)	Construction Contractor Traffic Manager	Prior to construction	NSW CoA E95 REMM TT06
Traffic Management Report	Monthly	TfNSW	Construction Contractor Traffic Manager	Prior to construction	TfNSW Specification G10
Traffic Incident Reporting	Following a traffic incident	TfNSW	Construction Contractor Traffic Manager	Where required	TfNSW Specification G10
Construction Road Safety Audit	Prior to TMP implementation, when there are significant changes to TMP, within 24 hours of a traffic switch	TfNSW	Construction Contractor Traffic Manager	Where required	TfNSW Specification G10
Independent Road Safety Audit	During design development (audit of the plans) and prior to opening (pre-opening audit)	Audit findings must be made available to Planning Secretary on request, within the timeframe stated in the request	Construction Contractor Traffic Manager	Prior to operation	NSW CoA E98

7 Review and improvement

7.1 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.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of traffic management
- Identify environmental risks not already included in the risk register
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets.

The Construction Contractor will be responsible for ensuring project environmental risks are 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 4.1 of the OCEMP.

7.2 CTTMP update and amendment

The processes described in Section 7.7 of the OCEMP may result in the need to update or revise this CTTMP. This will occur as needed.

Any revisions to the CTTMP will be in accordance with the process outlined in Section 7.7 of the OCEMP.

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

The review and document control processes for this CNVMP is described in Section 1.12 and 7.6 of the OCEMP.

Appendix A – Consultation correspondence

Appendix A

Consultation Correspondance

M12 Motorway

May 2024

THIS PAGE LEFT INTENTIONALLY BLANK

1 Introduction

As detailed in Section 1.5 of the CTTMP, in accordance with NSW CoA C4(a), consultation has been undertaken with the following government agencies and stakeholders during the preparation of the CTTMP:

- Penrith City Council (PCC)
- Liverpool City Council (LCC)
- Fairfield City Council (FCC).

A log of the dates of engagement or attempted engagement with the parties identified above has been included in Section 1.5.1 of the CTTMP in accordance with NSW CoA A5(b). Section 2 details the evidence of engagement with each party and responses.

2 Government Agency and Stakeholder Responses

This section provides consultation documentation undertaken during the consultation period with parties including:

- Engagement with parties identified in that NSW CoA C4(a) occurred prior to the submission of the CTTMP for approval by the Planning Secretary as required by NSW CoA A5(a)
- A copy of the responses provided during consultation with the required parties
- A summary of the issues raised during consultation and how they have been addressed as required by NSW CoA A5(d). A description of the outstanding issues raised during consultation and why they have not been addressed has also been included where required as per NSW CoA A5(e).

2.1 Penrith City Council

Section 2.1 details the engagement and response from PCC regarding the CTTMP prior to submission for approval and a summary of how the issues have been addressed. Table 1 provides a summary of the issues raised during consultation and how they have been addressed as required by NSW CoA A5(d).

Table 1: PCC comments and TfNSW response

Section of comment	Comments	TfNSW Response	Section Amended
N/A	No comments were provided.	No further comment required.	N/A

2.2 Liverpool City Council

Section 2.2 details the engagement and response from LCC regarding the CTTMP prior to submission for approval and a summary of how the issues have been addressed.

Table 2: LCC comments and TfNSW response

Section of comment	Comments	TfNSW Response	Section Amended
N/A	No comments were provided.	No further comment required.	N/A

2.3 Fairfield City Council

Section 2.3 details the engagement and response from FCC regarding the CTTMP prior to submission for approval and a summary of how the issues have been addressed.

Table 3 provides a summary of the issues raised during consultation and how they have been addressed as required by NSW CoA A5(d).

Table 3: FCC comments and TfNSW response

Section of comment	Comments	TfNSW Response	Section Amended
N/A	1. Consultation shall be undertaken with the bus companies in regard to temporary relocation of bus stops and any issues raised by them should be satisfactorily addressed. 2. Consultation shall be undertaken with the affected residents and business operators in regard to the proposed road closures and detours and any concerns raised by them should be satisfactorily addressed.	Agreed. Text is already included in Section 1.5.2, 5.8, 5.9, management measure TT25. New management measure TT05B added to address item 2 stating: "Consultation with affected businesses and properties where pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties cannot be maintained. In accordance with NSW CoA E96 and REMM TT07, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected businesses and implemented before the disruption"	N/A

Appendix B – Secondary CoA and REMMs

CoA

CoA No.	Condition Requirements	Applicability			Document Reference
		M12 West	M12 Central	M12 East	
A5	Where the terms of this approval require a document or monitoring program to be prepared or a review to be undertaken and submitted to the Planning Secretary, and the terms of this approval require the document, monitoring program or review to be prepared/undertaken in consultation with identified parties, evidence of the consultation must be submitted to the Planning Secretary with the relevant document, monitoring program or review. The evidence must include:	✓	✓	✓	Section 1.5.1 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;	✓	✓	✓	
	(b) a log of the dates of engagement or attempted engagement with the identified party;	✓	✓	✓	
	(c) documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations;	✓	✓	✓	
	(d) outline of the issues raised by the identified party and how they have been addressed; and	✓	✓	✓	
A7	References in the terms of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval.	✓	✓	✓	Section 3.1
A49	All heavy vehicles used for construction spoil haulage must be clearly marked on the sides and rear with the CSSI name (or where the CSSI is staged, the name of that stage) to enable immediate identification by a person viewing the heavy vehicle. Details of the CSSI identification markings must be submitted to the Planning Secretary for approval and approved prior to the heavy vehicles being used for construction spoil haulage. There must only be one CSSI form of signage on a heavy vehicle at any one time.	✓	✓	✓	Section 5.2

CoA No.	Condition Requirements	Applicability			Document Reference
		M12 West	M12 Central	M12 East	
E63	Active transport facilities must be designed, constructed and/or rectified in accordance with the *Guide to Road Design Part 6A: Paths for Walking and Cycling* (Austroads, 2017) and relevant Australian Standards (AS) such as *AS 1428.1-2009 Design for access and mobility*. The active transport links must also incorporate relevant Crime Prevention Through Environmental Design principles.	✓	✓	✓	Section 5.7
E79	The CSSI must be delivered in a manner that minimises intrusion, as far as reasonably practicable, and disruption to agricultural operations/activities in surrounding properties (e.g. stock access, access to farm dams, etc.), unless otherwise agreed by the landowner	✓	✓	✓	Section 5.9
E93	The Planning Secretary's approval is required before any heavy vehicles used for spoil and fill haulage or concrete deliveries (for the purpose of the CSSI) are driven on local roads within one (1) kilometre of early works, construction and construction ancillary facilities and that are not identified for use by heavy vehicles in the documents listed in Condition A1. The local roads must be identified in the Early Works Environment Management Plan and Traffic Management CEMP Sub-plan.	✓	✓	✓	Section 5.2
E94	All requests to the Planning Secretary for approval to use local roads in accordance with Condition E93, must include a traffic and pedestrian impact assessment and be prepared in consultation with the relevant local council(s). The assessment must be undertaken by an appropriately qualified and experienced person and must include a swept path analysis if required by the Department. The traffic and pedestrian impact assessment must: (a) demonstrate that the use of local roads will not compromise the safety of the public and have no more than minimal amenity impacts; (b) provide details as to the date of completion of the road dilapidation surveys for the subject local roads; and (c) describe the measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and childcare facilities during peak times for operation.	✓	✓	✓	Section 5.2.1

CoA No.	Condition Requirements	Applicability			Document Reference
		M12 West	M12 Central	M12 East	
	The outcomes and recommendations of the traffic and pedestrian impact assessment must be incorporated into the Site Establishment Management Plan or Traffic Management CEMP Sub-plan as relevant.				
E95	Before any local road is used by a heavy vehicle for the purposes of the CSSI, a Road Dilapidation Report must be prepared for the road unless otherwise agreed by the relevant road authority. A copy of the Road Dilapidation Report must be provided to the relevant road authority within three (3) weeks of completion of the survey and at least two (2) weeks before the road is used by heavy vehicles associated with the construction of the CSSI. If damage to roads occurs as a result of the construction of the CSSI, the Proponent must rectify the damage to restore the road to at least the condition it was in pre-construction in consultation with the relevant road authority. Rectification works must be undertaken within three (3) months of the subject road no longer being used for the construction of the CSSI unless an alternative timeframe is agreed to by the relevant road authority.	✓	✓	✓	Section 5.9 Section 5.11
E96	During construction, all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected residents, businesses and affected property owners and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	✓	✓	✓	Section 5.9
E97	The CSSI (including new or modified local roads, parking, pedestrian and cycle infrastructure) must be designed to meet relevant design, engineering and safety guidelines, including the Austroads Guide to Traffic Management.	✓	✓	✓	Section 6.1.3
E98	An independent Road Safety Audit is to be undertaken by an appropriately qualified and experienced person during design development (audit of the plans) and prior to opening	✓	✓	✓	Section 6.6

CoA No.	Condition Requirements	Applicability			Document Reference
		M12 West	M12 Central	M12 East	
	(pre- opening audit) to assess the safety performance of new or modified roads (road safety audit), parking, pedestrian and cycle infrastructure provided as part of the CSSI (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including *Austroads Guide to Traffic Management*. Audit findings and recommendations of the detailed design plans (audit of the plans) must be actioned before construction of the relevant infrastructure. The pre-opening audit findings and recommendations must be actioned prior to the relevant infrastructure being made available for use. All audit findings must be made available to the Planning Secretary on request, within the timeframe stated in the request.				
E99	Safe pedestrian and cyclist access must be maintained around work sites during Work. In circumstances where pedestrian and cyclist access is restricted or removed due to Work, an alternate route which complies with the relevant standards must be provided and signposted	✓	✓	✓	Section 5.7

REMMs

ID	Revised environmental management measure	Timing	Applicability			Document Reference
			M12 West	M12 Central	M12 East	
TT02	Changes to bus stops will be implemented in consultation with TfNSW, relevant councils, and relevant bus operators. Alternate temporary bus stops will be provided with appropriate signage to direct commuters. Safe access will be provided in accordance with relevant safety and accessibility standards.	Prior to construction, during construction and after construction	✓	✓	✓	Section 5.8
TT03	Movements of haulage vehicles will be planned to minimise movements on the road network during the AM and PM peak periods where practicable.	Prior to construction and during construction	✓	✓	✓	Section 5.2
TT04	Consultation will be carried out with the operators of the M7 Motorway to develop measures to manage the potential impacts of construction within the operating M7 Motorway corridor.	Detailed design prior to construction, and during construction			✓	Section 1.5.2
TT06	A road dilapidation report will be prepared before impacts on local roads in consultation with relevant councils and other relevant stakeholders. The report will document the existing conditions of local roads and outline measures to repair damage to roads from heavy vehicle movements associated with the project.	Prior to construction	✓	✓	✓	Section 5.11
TT07	Existing property access would be maintained at all times. Any changes to access arrangements or alternative access that are necessary during construction will be done with consultation with the landowner. Any changes to access will provide the same equivalent pre-existing level of access unless agreed to by the land owner. Property access that is physically affected by the project will be reinstated to at least an equivalent standard, in consultation with the landowner.	Detailed design prior to construction, and during construction	✓	✓	✓	Section 1.5.2 Section 5.9

ID	Revised environmental management measure	Timing	Applicability			Document Reference
			M12 West	M12 Central	M12 East	
TT08	A signage strategy will be prepared as part of the CTTMP to provide for appropriate signage for businesses where existing signage is obscured/no longer visible or where customers are required to use alternative access to reach the businesses during construction.	Prior to construction	✓	✓	✓	Section 5.6
TT09	Traffic signals will be coordinated to minimise congestion and manage traffic flows.	Detailed design	✓	✓	✓	Section 6.1.3
TT10	Investigate and develop an appropriate traffic solution to manage the expected traffic delays during construction in the vicinity of Devonshire Road. The options considered and the preferred solution will be documented in a memo and then implemented through the CTTMP for the project.	Prior to construction		✓		Section 5.15
SLP04	Property adjustments, including replacement of farm infrastructure (such as fencing) and relocation of property access, prior to work that impact the property will be carried out in consultation with property owners/ business managers.	Prior to implementing property adjustments	✓	✓	✓	Section 5.9
SLP07	Construction activities will be planned to minimise disruption to existing agricultural operations/activities in surrounding properties where feasible and reasonable (e.g. stock access, access to farm dams, etc) unless otherwise agreed by the landowner.	Prior to construction	✓	✓	✓	Section 5.9
NV12	Construction vehicle movements (both on and offsite) will be managed to minimise noise impacts. Where feasible, this will include (but not be limited to): • Establishment and use of internal haul routes, or existing major roads where this is not feasible • Restriction of heavy vehicle movements to standard construction hours	During construction	✓	✓	✓	Section 5.17 Construction Noise and Vibration Management Plan

ID	Revised environmental management measure	Timing	Applicability			Document Reference
			M12 West	M12 Central	M12 East	
	• Locating traffic marshalling areas away from residences to minimise noise impacts from idling vehicles • Instructing workers on the operation of heavy vehicles entering and exiting the site to minimise noise.					