



Australian Government

**Department of Infrastructure, Transport,
Regional Development, Communications and the Arts**

Cath Snelgrove
Director Environment
Sydney Metro
PO Box K659
Haymarket NSW 1240

Dear Ms Snelgrove

I write to notify you that, in accordance with Condition 39 of the Airport Plan, I have today approved the Construction (Rail) Plan and nine CEMPs submitted by Sydney Metro on 13 July 2023, namely:

- Noise and Vibration CEMP
- Biodiversity CEMP
- Soil and Water CEMP
- Traffic and Access CEMP
- Air Quality CEMP
- Aboriginal Cultural Heritage CEMP
- European and Other Heritage CEMP
- Waste and Resources CEMP
- Visual and Landscape CEMP

The requirements set out with the original notice of approval of the nine CEMPs continue to apply to the revised approved CEMPs. Sydney Metro is required:

- a. To take reasonable steps to ensure that each person involved in carrying out a development that is part of the Rail Development is informed of, and complies with, the CEMP (Condition 45(3) of the Airport Plan).
- b. To maintain accurate records demonstrating implementation of, and compliance with, the approved CEMPs, and other applicable conditions contained in Section 3.11.6 of the Airport Plan. Records must be made available to the Infrastructure Department on request (Condition 46 of the Airport Plan).
- c. To publish information in a report about its compliance with the conditions set out in section 3.11.6 of the Airport Plan (Rail Conditions) and its implementation of the approved CEMPs (Condition 47 of the Airport Plan).



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- d. To ensure that an independent audit of its compliance with the conditions set out in section 3.11.6 (except Condition 44), and condition 46 of the Airport Plan (Rail Conditions) is conducted, by an approved independent auditor, in respect of the 12-month period commencing with commencement of Rail Construction Works. The independent audit report must be submitted to the Infrastructure Department, with a copy provided to the Environment Department, within six months of the end of the period in respect of which the audit was conducted (Condition 48 of the Airport Plan).
- e. To ensure that any Rail Development is not carried out inconsistently with any of the approved Rail CEMPs (Condition 39 of the Airport Plan).
- f. Unless otherwise agreed by an Approver, to publish the approved plans on its website (Condition 50 of the Airport Plan).

If you have any queries in relation to this letter, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, appearing to read 'David Jansen'.

David Jansen

Assistant Secretary

Western Sydney Airport Regulatory Policy Branch

14 August 2023



Sydney Metro Western Sydney Airport Traffic and Access Construction Environmental Management Plan

Sydney Metro Integrated Management System (IMS)

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Document Control

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Version Control

Revision	Date	Description
01	21 July 2021	Draft for Tender
02	17 August 2021	Draft for WSA review
03	11 October 2021	Issued for DITRDC
04	25 January 2022	Final for DITRDC
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06	11 July 2023	Draft for WSA Review
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Terms and Definitions

Terms	Definitions
The Act	Airports Act 1996 (Cth) (Airports Act)
AEPR	Airports (Environment Protection) Regulations 1997
AEW	Advanced and Enabling Works
Airport	Western Sydney International (Nancy-Bird Walton) Airport (WSI) located at the Airport Site. Note: The Airport is referred to in the Act as Sydney West Airport and is commonly known as Western Sydney International (Nancy-Bird Walton) Airport
Airport Lease	An airport lease for the Airport granted under section 13 of the Act
Airport Lessee Company	The company that is granted a lease over the Airport Site
Airport Plan	Means the September 2021 approved Airport Plan which includes the Variation for the SM - WSA Rail Development on the WSI airport and which otherwise means airport plan for the Airport Site as determined by the Infrastructure Minister under section 96B of the Act in December 2016 as varied from time to time in accordance with the Airports Act.
APV	Airport Variation Plan
AS	Australian Standard
CCS	Community Communication Strategy
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CIZ	Construction Impact Zone
CNVS	Construction Noise and Vibration Standard
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
CTMF	Construction Traffic Management Framework
Cwth	Commonwealth
DAWE	Department of Agriculture, Water and the Environment (Cwth)
DITRDC	Department of Infrastructure, Transport, Regional Development and Communications
DPIE	Department of Planning, Industry and Environment
ECM	Environmental Control Map
ECZ	Environmental Conservation Zone
EESG	NSW Environment, Energy and Science Group (formerly OEH)
EIS	Environmental Impact Statement
EP&A Act	Environment Planning and Assessment Act 1979 (NSW)
EPA	NSW Environment Protection Authority
EPBC Act	Environment Protection and Conservation Act 1999 (Cwth)
EPL	Environment Protection Licence under the POEO Act
ER	Environmental Representative
EWMS	Environmental Works Method Statement
E&SMS	Environment and Sustainability Management System

Terms	Definitions
IMS	Sydney Metro Integrated Management System
Infrastructure Department	The department responsible for administering the Act, currently the Australian Government Department of Infrastructure, Transport Regional Development and Communications (DITRDC)
ISO	International Standardization Organisation
KPI	Key Performance Indicator
NSW	New South Wales
OCCS	Overarching Community Communication Strategy
OOHW	Out-of-Hour Works
Planning Secretary	The Secretary of the Department of Planning, Industry and Environment
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
Preparatory Activities	<p>Preparatory Activities mean the following:</p> <ol style="list-style-type: none"> a. day to day site and property management activities; b. site investigations, surveys (including dilapidation surveys), monitoring, and related works (e.g. geotechnical or other investigative drilling, excavation, or salvage); c. establishing construction work sites, site offices, plant and equipment, and related site mobilisation activities (including access points, access tracks and other minor access works, and safety and security measures such as fencing but excluding bulk earthworks); d. enabling preparatory activities such as: <ol style="list-style-type: none"> i. demolition or relocation of existing structures (including buildings, services, utilities and roads); ii. the disinterment of human remains located in grave sites identified in the European and other heritage technical report in volume 4 of the EIS; and iii. application of environmental impact mitigation measures; and e. any other activities which an Approver determines are Preparatory Activities for this definition
Project	The Sydney Metro Western Sydney Airport Construction and operation as approved by the EPBC and Airport Plan as the Action or Rail Development within the Rail Construction Impact Zone on-airport, being the WSI airport, in agreeance with the Deed between SM - WSA and WSA Co.
Proponent	The person or organisation identified as the proponent in Schedule 1 of the planning approval. In this case Sydney Metro Authority
RCIZ	Rail Construction Impact Zone
REMM	Revised Environmental Mitigation Measure
RMS	NSW Roads and Maritime Services
ROL	Road Occupancy Licence
SBT	Station Box and Tunnelling Works
SCAW	Surface Civil & Alignment Works
SCO	Sydney Coordination Office
SEMF	Site Environmental Management Framework
SEMF	Site Environmental Management Framework
SM	Sydney Metro

Sydney Metro – Integrated Management System (IMS)

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Terms	Definitions
SM WSA	Sydney Metro Western Sydney Airport
SM WSA EIA	SM-WSA EIS Appendix J: EPBC Act Draft Environmental Impact Assessment of On-airport proposed action (EPBC 2019/8541)
SMP	Sustainability Management Plan
SSI	State Significant Infrastructure
SSTOM	Stations Systems, Trains, Operations & Maintenance
SWMS	Safe Works Method Statement
TACEMP	Traffic and Access Construction Environmental Management Plan
TfNSW	Transport for New South Wales
WSA	Western Sydney Airport Co (ACN 618 989 272), the entity responsible for constructing and operating the Airport in accordance with the Airport Plan. For the purposes of the Airports Act 1996 (Cth), WSA is the “airport-lessee company” for WSI
WSI airport	Western Sydney International (Nancy-Bird Walton) (WSI) Airport

1. Introduction

1.1. Sydney Metro

Sydney Metro is Australia's biggest public transport project. Services between Rouse Hill and Chatswood started in May 2019 on the new stand-alone metro railway system. The Sydney Metro network and program of work includes the Metro North West Line (which opened in May 2019), Sydney Metro City & Southwest (which is currently under construction and due to open in 2024), Sydney Metro West (with construction due to start in 2020) and Sydney Metro – Western Sydney Airport (SM-WSA) Project). Potential future extensions to Schofields/Tallawong in Rouse Hill in the north and to Macarthur in the south are under consideration and are being safeguarded but do not form part of the Project.

The project is shown in Figure 1-1 and would become the transport spine for Greater Western Sydney, connecting communities and travellers with the new Western Sydney International (Nancy-Bird Walton) Airport (referred to as Western Sydney International) (WSI airport) and the growing region.

The Project is being delivered under the Western Sydney City Deal, a partnership between the NSW Government, Australian Government and eight councils of the Western Parkland City. The NSW and Australian Governments have a shared objective of having the rail line operational when WSI airport is planned to open for passenger services.

The new railway line will service Greater Western Sydney and the new WSI airport. It will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service. The Project will link residential areas with job hubs from St Marys through to the new airport and the Western Sydney Aerotropolis.

It would provide a major economic stimulus for Western Sydney, supporting more than 14,000 jobs during construction for the NSW and national economies, including more than 250 new apprenticeships. The project comprises components that are located outside WSI airport (off-airport) and components that are located within WSI airport (on-airport).

The approval process for the off-airport and on-airport components of the project are different and are outlined below. One outcome of the on-airport approval is that a condition of working on the WSI airport site will require the Project to produce and have approved, a series of Construction Environmental Management Plans (CEMP) prior to the SM-WSA commencing construction on-airport. This Traffic and Access CEMP (TACEMP) is one of a series of nine CEMPs for the Project which will be consistent with the WSI airport CEMPs and address all on-airport environmental components of the Project.

Sydney Metro – Integrated Management System (IMS)

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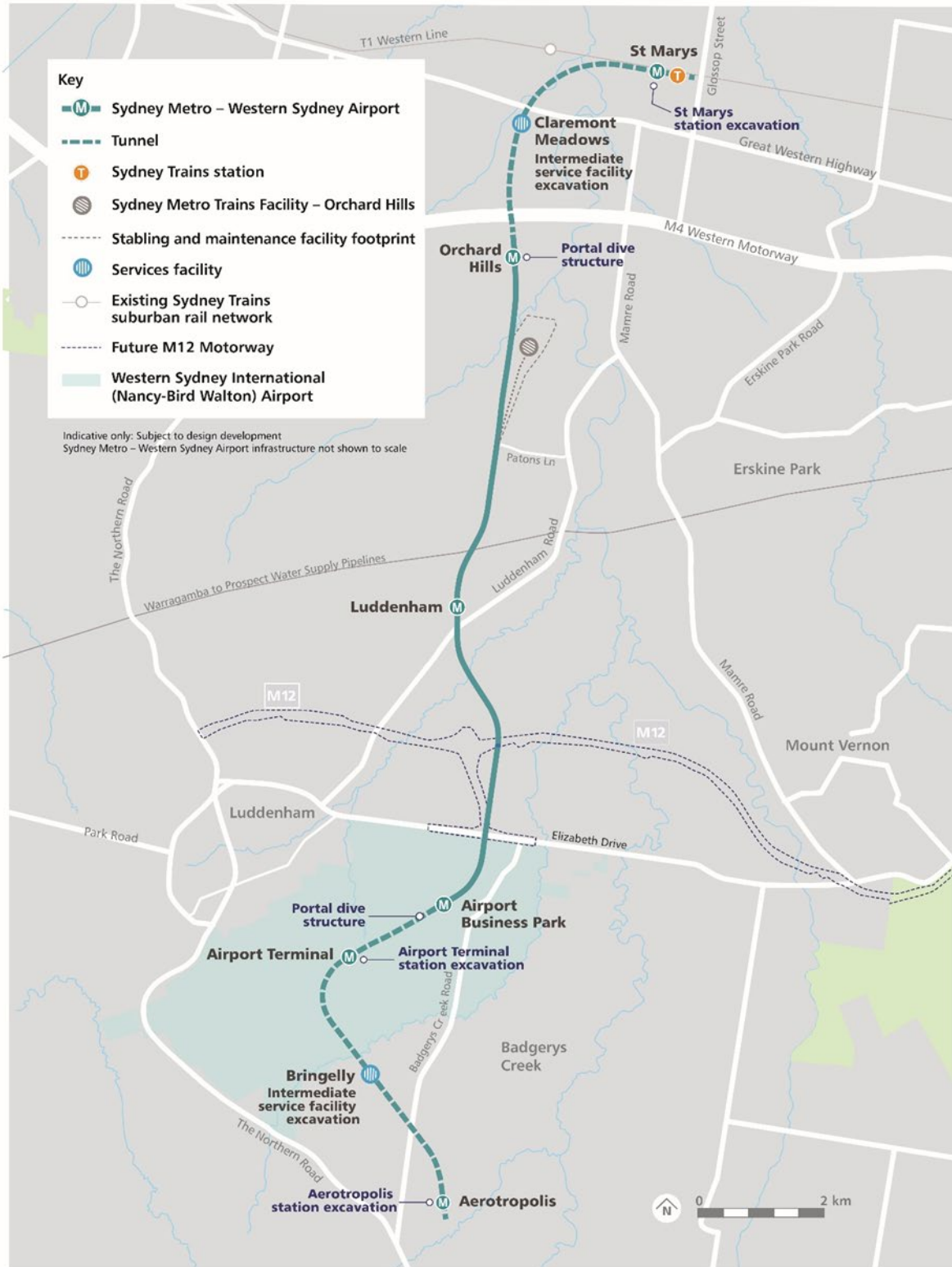


Figure 1-1 Sydney Metro Network (centre figure title)

1.2. Sydney Metro Western Sydney Airport

The Western Sydney Airport Plan sets out the vision for the development and operation of Western Sydney International and provides authorisation for Stage 1 of the airport. The construction of Stage 1 of the airport is expected to be completed to enable operations to commence in 2026 and will comprise a single runway, a terminal and other relevant facilities to accommodate around 10 million passengers annually as well as air freight traffic. Interface with Western Sydney International Rail access to Western Sydney International Airport would contribute to the success of the airport and the Western Parkland City, as it would facilitate passengers' and workers' journeys, reduce road congestion and support the economic viability of the airport.

The project is proposed to enter the WSI airport site from the north and would include the Airport Business Park Station and the Airport Terminal Station. The rail line would travel through the airport, before exiting the airport site beneath Badgerys Creek in the southeast. Sydney Metro has been, and will continue, working closely with Western Sydney Airport to ensure design development and Construction (Rail) Planning of the Project is coordinated with the construction and operation of WSI airport.

1.3. Background/Context

The Airport Plan for the WSI airport was determined in December 2016, following preparation and exhibition of an Environmental Impact Statement, and incorporates the conditions specified by the Commonwealth Environment Minister. The delivery of the Project on the WSI airport site will need to be authorised through a variation of the Airport Plan by the Commonwealth Infrastructure Minister, taking into account advice from the Commonwealth Environment Minister.

In September 2019, the Commonwealth Infrastructure Minister referred the On-airport components of the Project to the Commonwealth Environment Minister. In December 2019, the delegate of the Commonwealth Environment Minister decided that advice is required under section 160 of the Environment Protection and Biodiversity Conservation (EPBC) Act as the Project is likely to have a significant impact on the environment and will require further assessment (EPBC 2019/8541).

The following documents were prepared as part of the SM-WSA EIS, to respond to the Request for Further Information, and were published, in accordance with the Direction to Publish, from 21 October to 18 November 2020:

- SM-WSA EIS Technical Paper 3: Biodiversity Development Assessment Report
- SM-WSA EIS Appendix F: Construction Environmental Management Framework.
- An EPBC Act Final Environmental Impact Assessment of on-airport proposed action.

An EPBC Act Final Environmental Impact Assessment of on-airport proposed action

(EPBC 2019/8541) and an updated Biodiversity Development Assessment Report were approved by the Commonwealth Department of Agriculture, Water and the Environment (DAWE) and formed part of the conditions of the Airport Plan Variation which is still lodged with the Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) and awaiting approval by the Commonwealth Environment Minister.

The Commonwealth Infrastructure Minister decided to vary the Airport Plan on September 15 2021 taking into account advice received from the Commonwealth Environment Minister.

This SM-WSA TACEMP (this Plan) has been prepared to satisfy the requirements of the TA CEMP set out in the Conditions for the Project of the Western Sydney International (Nancy-Bird Walton) (WSI) Airport detailed in Section 3.11.6 of the Airport Plan. Condition 39 (2(d)) of the Airport Plan requires that a Sydney Metro Traffic and Access CEMP be approved under the Airport Plan prior to the commencement of Main Construction Works.

This TA CEMP provides the management approach and requirements for managing traffic and access related matters during construction of the Project. This Plan forms one of nine CEMPs which are collectively covered by the Sydney Metro Construction Environmental Management Framework (SM CEMF) as well as the Western Sydney Airport Site Environmental Management Framework (WSA SEMF). To ensure the environmental resources, responsibilities and management measures are implemented during the construction activities, both the SM CEMF and WSA SEMF will be included within the Sydney Metro Construction (Rail) Plan.

The implementation of the Sydney Metro Construction (Rail) Plan and the CEMF are aligned with Project level management plans including the Community Communications Strategy and the Sustainability Plan as illustrated in Figure 1-2.

The Sydney Metro Construction (Rail) Plan, including the SM CEMF, WSA SEMF and nine CEMPs provide the environmental management approach and requirements and therefore should be read in conjunction with each other due to interconnecting management outcomes and objectives. Specifically, for the TA CEMP, it is considered that the following management plan linkages can be made:

- Noise and Vibration CEMP – Management of noise and vibration associated with construction traffic to prevent impact on adjacent receptors.
- Air Quality CEMP – Construction traffic can be a source of dust and other emissions. Measures to mitigate these impacts are included in the Air Quality CEMP.
- Visual and Landscape CEMP – Construction traffic has the potential to affect the visual amenity and landscape of the receiving environment, particularly with regards to dust generation.
- Community communications strategy – It is anticipated that the surrounding community and stakeholders will be sensitive to traffic and access impacts, particularly dust generation and the accumulation of particulate matter.
- Sustainability Plan – Management and reduction of greenhouse gas emissions and management of impacts regarding general health, wellbeing, and quality of life for surrounding communities.

Where relevant, linkages to other CEMPs and management objectives have been included in the risk assessment and the environmental control measures (Section 7). Table 1-1 below highlights relationships and linkages of this TA CEMP with other CEMPs and management plans, including key cross-referencing to Airport Plan and SM-WSA EIS requirements.

The context of this Plan in relation to the Sydney Metro environmental management system is presented below in Figure 1-2.

Table 1-1 Traffic and Access CEMP relationship with other CEMP documentation (Centre Table)

CEMP	Airport Plan (3.11.6)	SM - WSA EIA Table 8-1: On-airport environmental management framework requirements	SM-WSA EIA Table 8-3: Mitigation measures
Aboriginal Cultural heritage	39 2(f)	CEMF5	AH8
Air quality	39 2(e)	CEMF10	AQ1-3
Biodiversity	39 2(b)	CEMF6	FF1, 3, 5, 6, 9-11 HR2
Community communications strategy	40	N/A	N/A
European and other heritage	39 2(g)	CEMF5	NAH9
Noise and vibration	39 2(a)	CEMF4	NV1
Soil and water	39 2(c)	CEMF3 CEMF8	HYD1 WQ1-2 GW4-6 SC1,5-9, 11 HR1,3
Sustainability plan	41	N/A	SUS1-3 GHG1
Traffic and access	39 2(d)	CTMF	T1,3 ,4,6
Visual landscape	39 2(i)	CEMF7	LV1-3
Waste and resources	39 2(h)	CEMF9 CEMF11	WR1-3

Key

Moderate to high relevance to this CEMP

Some relevance to this CEMP

1.4. Document purpose

The purpose of this Plan is to provide the foundation for the management of traffic and access impacts in accordance with best practice and legal requirements (including environmental mitigation measures, controls, monitoring and reporting) during the construction phase of the Railway Development based on the assessment undertaken as part of the SM-WSA EIA.

Specifically, this Plan details the traffic and access management requirements that must be satisfied in order to demonstrate compliance with Condition 39(2) of Section 3.11.6 of the Airport Plan for the construction of the Railway Development of the Western Sydney Airport.

Legal and other requirements are identified and maintained in a register within the SM CEMF (Refer to chapter 2). Mitigation measures (specific to traffic and access) required to satisfy these

requirements are derived from the SM-WSA EIS and through risk assessment processes (refer to chapter 26) and included within this CEMP in Sections 7 and 8.

Implementation of these measures is ensured through monitoring, training and competence, inspection, audit and reporting actions detailed in Sections 10 and 11, with the responsibilities for implementation identified in Section 9. Continual improvement processes in relation to compliance with regulatory requirements are detailed in the CEMF Section 3.18.

In summary, this Plan sets out to achieve the following:

- Provision of details for the management and mitigation measures to be implemented, including timing and responsibilities;
- Ensuring the commitments of the Conditions (as set out in the Airport Variation Plan) and regulatory requirements are met and satisfied by both Sydney Metro and contractors;
- Provision of process for monitoring implementation, reporting, and auditing of traffic and access related management and compliance related issues;
- Commitment to meeting the requirements of AS/NZS ISO 14001:2016 Environmental Management Systems, including the need for continual improvement;
- Provision of a process to be implemented for the management of complaints, for stakeholder engagement, and for the management of emerging environmental issues as they arise; and
- Provision of a system including procedures, plans and documentation for implementation by Sydney Metro personnel and contractors to enable Project completion in accordance with the environmental requirements.

Effective implementation of this Plan will assist Sydney Metro and relevant contractors to achieve compliance with necessary environmental regulatory and policy requirements in a systematic manner with an outcome of continual environmental management performance.

1.5. Consistency

A major requirement of these plans is for Sydney Metro to maintain consistency with the already approved WSA CEMPs. This consistency requirement results in SM not needing to undertake consultation as is the requirement of WSA for their plans.

SM approached the development of these plans to meet the requirements of the Airport Plan, ensure compliance with Tables 8-1, 8-2 and 8-3 of the EPBC 2019/8541 and remain consistent with the WSA CEMPs.

SM have achieved this consistency through the following:

- Consistent format
- Consistent language
- Consistent existing environment with the addition of the SM – WSA RCIZ existing environment
- Consistent aspects and impacts but removing those not applicable and adding specific SM – WSA aspects and impacts
- Consistent risk assessment but removing those not applicable and adding specific SM – WSA risks

- Consistent mitigation measures but removing those not applicable and adding SM – WSA specific mitigation measures
- Consistent monitoring with the addition of any SM – WSA specific monitoring requirements
- Consistent auditing and reporting
- References to SEMF replaced with consistent CEMF requirements.

1.6. Sydney Metro environmental management system overview

Sydney Metro operates in general accordance with AS/NZS ISO 14001 – Environmental management systems. A copy of the Sydney Metro environmental policy is provided in Appendix A of the CEMF.

The Project will be undertaken in accordance with the Sydney Metro Construction (Rail) Plan including the SM CEMF and the associated CEMPs (including this Plan).

The SM CEMF is the overarching management plans for a suite of environmental management documents. It provides a structured and systematic approach to environmental management and provides an expectation and guidance with regards to environmental management for the overall construction of the Airport Railway Development.

The structure of the environmental management system for the Project is shown in Figure 1-2.

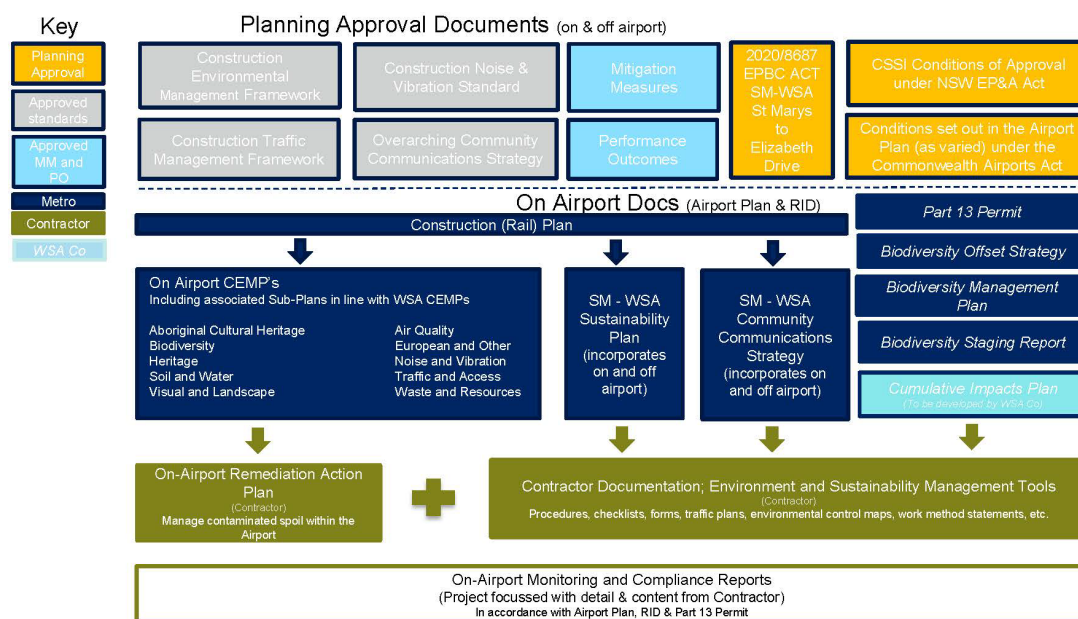


Figure 1-2 SM-WSA Environmental Management System and CEMP context

1.7. Consultation requirements of this document

There is no direct consultation condition requirement for the Project under the Airport Plan and as such, there has been no direct consultation completed during the development of this CEMP. However, WSA completed consultation for the development of their WSA TACEMP (Revision 0) and subsequently during the review and update of Revision 3 of their document. SM-WSA

will continue to consult with WSA in the development of these plans and as required with relevant stakeholders prior to seeking approval for these plans.

Consultation will continue with agencies, councils and other relevant stakeholders throughout the Project where there is a change to a WSA CEMP. Where the outcomes of this consultation impact on the scope of the Project, to maintain consistency, the change will be documented in subsequent revisions of the relevant SM – WSA CEMPs, with details of such consultation included in the applicable document.

1.8. Certification and approval

This Traffic and Access CEMP will be reviewed and approved for issue by the SM-WSA Environment Manager prior to submission to the Australian Government Department of Infrastructure, Transport, Regional Development and Communications.

1.9. Distribution

All Sydney Metro personnel and contractors will have access to this TA CEMP via the project document control management system. Unless otherwise agreed by the Approver, the Approved Plan must be published on Sydney Metro's website within one month of being approved and be available until the end of the Construction Period. An electronic copy can be found on the Project website.

This document is uncontrolled when printed. One controlled hard copy will be maintained by the quality manager at the project office.

2. Scope of works

2.1. Overall Project scope

The Sydney Metro Construction Plan details the construction staging of the Airport Railway Development.

The delivery of the Railway Development will be through a packaging strategy with a wide variety of package sizes, risk profiles and contracting entities. Each package will have different levels of environmental risk and environmental obligations, depending on the scope of works, location of works and sensitivity of the receiving environment and cultural heritage issues and relevant statutory requirements and obligations.

The packages have been divided into:

- AEW – Advanced and Enabling Works;
- SCAW – Surface and Civil Alignment Works;
- SBT – Station Boxes and Tunnelling Works;
- SSTOM – Stations, Systems, Trains, Operations and Maintenance.

The On-Airport Railway Development of the Project comprises the following key features as described in the Sydney Metro Construction (Rail) Plan (which is consistent with the Airport Plan and EIA Chapter 4):

- Around two kilometres of surface rail alignment within Western Sydney International (SCAW);
- Around 3.3 kilometres of twin rail tunnels (including tunnel portal) within Western Sydney International (SBT);
- Around three kilometres of twin rail tunnels between Western Sydney International and the Aerotropolis Station (SBT);
- Two new metro stations, Airport Business Park Station and Airport Terminal Station (STOM);
- All operational systems and infrastructure (SSTOM);
- A rail segment factory comprising a concrete batch plant and stockpile area (SBT, SCAW and SSTOM); and
- Spoil stockpile areas (SBT and SCAW).

Details of the Project construction activities, staging and programming including the phases of works is described in the Sydney Metro Construction (Rail) Plan (2021) as required by the Airport Plan Variation.

The proposed construction activities that would be undertaken for the Project include:

- preparatory activities (AEW);
- main construction works including;
 - tunnelling and associated works (SBT);
 - corridor and associated works (SCAW);

- stations and associated works (SSTOM);
- rail systems fitout (SSTOM);
- activities required for tunnel and viaduct segment manufacture and storage and temporary haulage roads (SBT and SCAW); and
- finishing works and testing and commissioning (FAW).

The Project would also include the potential permanent placement of spoil at two sites to support the development of future stages of the airport.

The Rail Construction Impact Zone (CIZ) including the construction footprint and key construction sites proposed for use during the construction of the Project are shown in Figure 2-1. This figure also indicates the Western Sydney International Stage 1 CIZ and the Environmental Conservation Zone within Western Sydney International.

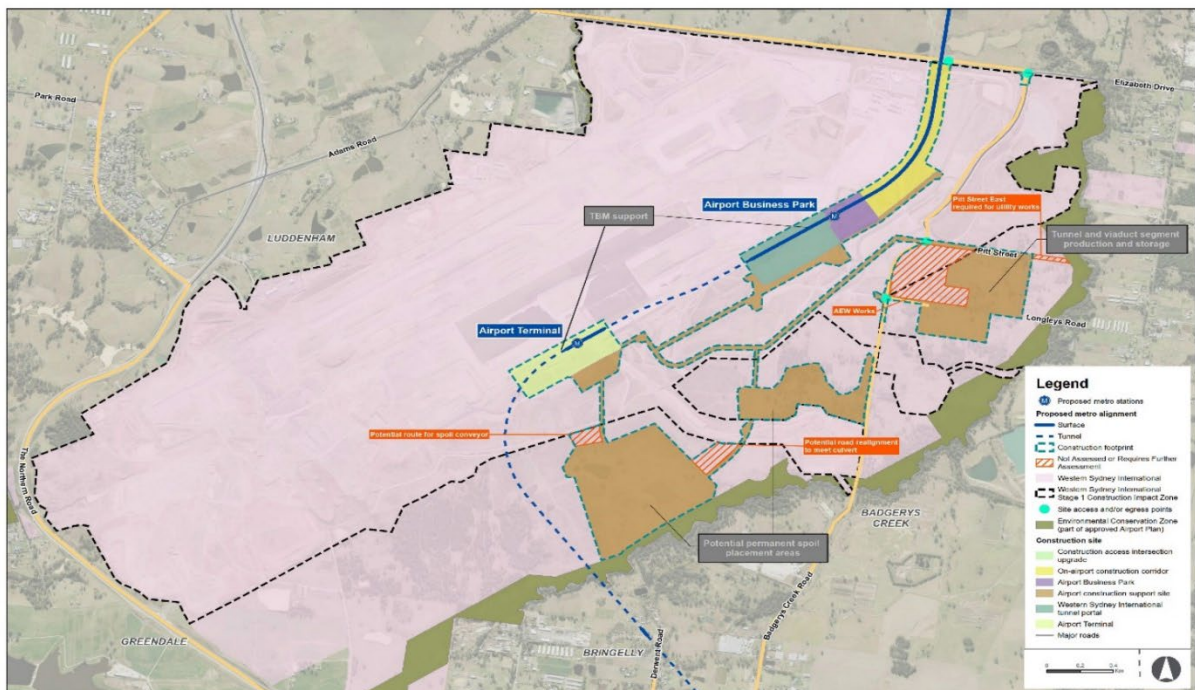


Figure 2-1 SM - WSA RCIZ and key construction sites

It is anticipated that the Project construction works would commence in 2021 and take about five years to complete, subject to planning approval. The Operational SM-WSA opening is anticipated to align with the opening of passenger services for Western Sydney International in 2026. An indicative main construction program for the project is shown in Figure 2-2.

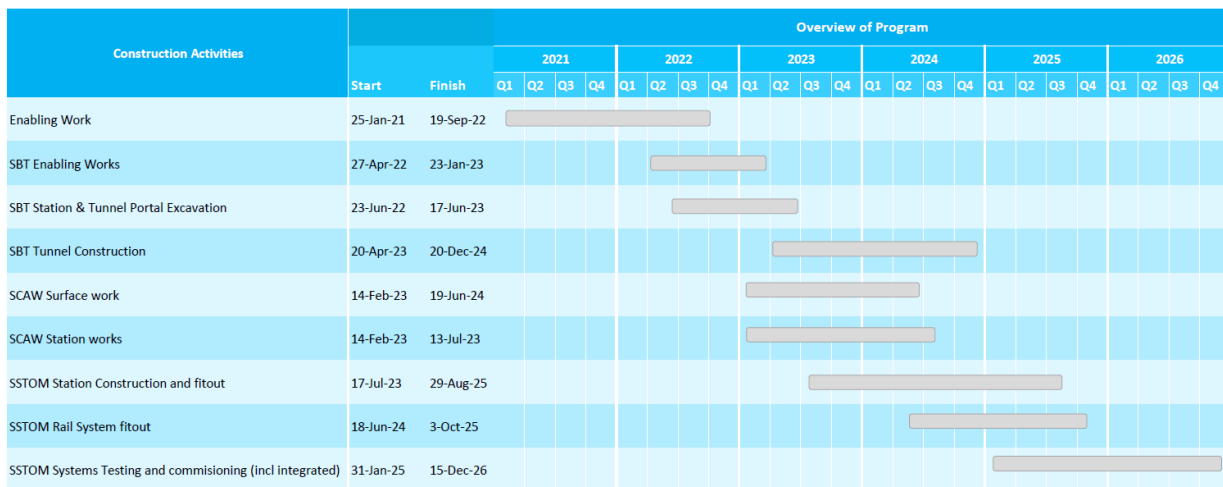


Figure 2-2 Indicative main construction program for the project

2.2. Preparatory activities

Preparatory activities for the proposed action are required to establish key construction sites and facilitate construction activities.

The majority of the preparatory activities are expected to commence in advance of main construction works, such as tunnelling and station excavation, while some preparatory activities would continue concurrently with the main construction works. Preparatory activities would include:

- detailed site investigations and subsequent clearance works;
- provision of construction haul roads;
- relocating, adjusting and protecting utilities and services affected by the proposed action;
- supplying power, water and other utilities to construction sites and other areas within the construction footprint;
- vegetation clearance (as required); and
- establishment of construction sites.

2.3. Construction sites

Construction activities would be carried out within and to the south of the WSI airport Stage 1 Construction Impact Zone. The indicative works at proposed construction sites required for the construction of the Project are shown in Figure 2-3. The construction sites would be confirmed by the construction contractor(s) when appointed in consultation with Western Sydney Airport.

Location	Preparatory activities	TBM launch	TBM support	TBM retrieval	Spoil handling and removal	Roadheader launch/support	Ancillary facility construction	Stabling and maintenance facility construction	Major earthworks	Bridge and viaduct construction	General civil works	Concrete batch plant	Equipment and material laydown	Rail system fitout	Site offices and worker amenities	Water treatment plant	Potential acoustic shed	Vehicle parking
On-airport																		
On-airport construction corridor	✓				✓		✓		✓	✓	✓		✓	✓	✓			✓
Airport Business Park	✓				✓		✓		✓		✓		✓	✓	✓			✓
Western Sydney International tunnel portal	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Airport Terminal	✓		✓		✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Airport construction support site	✓				✓				✓		✓	✓	✓	✓	✓			✓

Note: TBM retrieval would occur outside the Project at the Aerotropolis Station site

Figure 2-3 Indicative construction activities at the Project construction sites

3. Objectives and targets

3.1. Objectives

The key objective of this Plan is to ensure that movements of construction traffic (including any oversized vehicles) is appropriately managed and within the scope permitted by the planning approval.

To achieve this objective, the following will be undertaken:

- Minimise disturbance to the local and regional road network;
- Maintain communication with the potentially affected residents, visitors and businesses to minimise disruption;
- Ensure access to the Project Site does not compromise the safety of the local road network;
- Ensure appropriate measures are implemented to address the management measures detailed in the WSA TACEMP as well as the SM-WSA requirements including the approved SM-WSA EIS Construction Traffic Management Framework (CTMF);
- Ensure appropriate measures are implemented to comply with all relevant legislation and other requirements as described in Section 7 and 8 of this Plan
- Minimise disrupting to pedestrians, cyclists, and motorists
- Ensure SM-WSA construction traffic accesses the arterial network as soon as practicable on route to, and immediately after leaving, the construction site.
- Minimise construction traffic generation during network peak periods (maximum peak period construction vehicle volumes should not exceed those outlined in the EIS)
- Maintain access to properties and businesses where possible, or arrange alternative access
- Maintain a safe environment for pedestrians and cyclists
- No worker injury accidents during construction
- No injury accidents to members of the public because of construction
- Work collaboratively with other stakeholders and other major projects to mitigate traffic and transport impacts
- Minimise noise and other environmental impacts on the residents and businesses in the vicinity of the construction sites, in line with the Construction Noise and Vibration Strategy (CNVS)

3.2. Targets and Performance objectives

Traffic and Access specific targets and performance criteria have been established for the management of traffic and access impacts during the works which have been, in part, derived from the performance criteria identified in the WSA TA CEMP and are presented in Table 3-1.

Table 3-1 Traffic and performance objectives and targets

Objective	Target	Document Reference
Maintain communication with the potentially affected local residents, visitors and businesses to minimise disruption	Effective communication of traffic management measures to the local community within specified timeframes to minimise disruption to local residents and other road users.	Appendix B Communication timeframes in the Community communications strategy Complaints database
Minimise disturbance to the local and regional road network	Appropriate training on access and haulage routes provided to employees and contractors. Communication with the Traffic Management Centre, Emergency Services and public transport authorities prior to and during changes to the road network	CEMP Training records Complaints database
Ensure access to the Airport Site does not compromise the safety of the local road network	Safe access onto/from the local network implemented in full consultation with TfNSW.	Site Diary regular entries Ad hoc assessments
Comply with legislation and other requirements	No non-conformance with the requirements of the CEMP.	CEMP Audit report
Minimise disruption to pedestrians, cyclists and motorists	Measures to be put in place to ensure the minimisation of disruption to pedestrians, cyclists and motorists	SM-WSA EIS Appendix G Construction Traffic Management Framework
Ensure Sydney metro construction traffic accesses the arterial network as soon as practicable on route to, and immediately after leaving, the construction site	Enable and ensure Sydney Metro Construction traffic to access the arterial network as soon as practicable on route to and immediately after leaving, the construction site	SM-WSA EIS Appendix G Construction Traffic Management Framework
Minimise impacts on route bus operations, routes and stops where possible	Ensure that works cause minimal impact to	SM-WSA EIS Appendix G Construction Traffic Management Framework
Minimise changes to traffic operation during network peak periods (maximum peak period construction vehicle volumes should not exceed those outlined in the EIS)	Ensure that minimal changes to traffic operation during network peak periods occur (maximum peak period construction vehicle volumes should not exceed those outlined in the EIS)	SM-WSA EIS Appendix G Construction Traffic Management Framework
Maintain access to properties and businesses where possible, or arrange alternative	Where possible, access to properties and businesses must be maintained or an alternative must be arranged	SM-WSA EIS Appendix G Construction Traffic Management Framework
Maintain a safe environment for pedestrians and cyclists	Safe environments for pedestrians and cyclists are to be maintained	SM-WSA EIS Appendix G Construction Traffic Management Framework
No worker injury accidents during construction	Ensure that all workers are safe during construction and that no injury accidents occur	SM-WSA EIS Appendix G Construction Traffic Management Framework
No injury accidents to members of the public because of construction	Ensure that all members of the public are safe and that no injury accidents occur because of construction	SM-WSA EIS Appendix G Construction Traffic Management Framework
Work collaboratively with other stakeholders and other major projects to mitigate traffic and transport impacts	Adopt a collaborative approach when working with other stakeholders and other major projects to mitigate traffic and transport impacts	SM-WSA EIS Appendix G Construction Traffic Management Framework

Objective	Target	Document Reference
Minimise noise and other environmental impacts on the residents and businesses in the vicinity of the construction sites, in line with the Construction Noise and Vibration Strategy (CNVS)	In line with the Construction Noise and Vibration Strategy (CNVS) noise and other environmental impacts on the residents and businesses in the vicinity of the construction sites must be minimise	SM-WSA EIS Appendix G Construction Traffic Management Framework

The targets in Table 3-1 have been set to provide a benchmark performance objective to which Sydney Metro will endeavour to achieve. Failure to achieve the targets will not be considered a non-conformance, however, will prompt internal review of environmental management and assessment of potential improvement opportunities.

4. Legal and other requirements

Relevant environmental legislation and other requirements are identified below.

4.1. Relevant legislation and guidelines

As the Project is to be developed under the Airport Plan determined under the Airport Act, some state laws will not be applicable to the Project (s112 of this Act). Where state law is applicable, this Plan will set out the relevant applicable state legislation and requirements and to demonstrate how compliance with those laws including obtaining relevant permits will be achieved. Where state laws are not applicable, there may nonetheless be a requirement to have regard to those laws, for example, through mitigation measures to be incorporated in CEMPs to satisfy conditions under the Airport Plan.

4.1.1. Legislation

Relevant legislation and regulations to this plan are summarised in table 4-1:

Table 4-1 Principal legislation and relevance

Legislation or regulation	Relevance	CEMP compliance provisions
Airports Act 1996 (Cth) (Airports Act)	The Airports Act and AEPRs set out the framework for the regulation and management of activities at airports that could have potential to cause environmental harm. This includes offences related to environmental harm, environmental management standards, monitoring and incident response requirements. The Airport Plan prepared under the Airports Act covers several environmental matters and details specific measures to be carried out for the purposes of preventing, controlling or reducing the environmental impact associated with the airport. Criminal offences are applicable if these measures are not complied with	<p>This CEMP forms part of the overall SM environmental management system which has as a target, full compliance with the Airport Variation Plan. Relevant mechanisms within this CEMP that will contribute to this include but are not limited to:</p> <ul style="list-style-type: none"> • Section 3.1 – Objectives • Section 4.3 – Airport Plan Conditions • Section 4.4 – Environmental Impact Statement Requirements • Section 6.2 – Environmental Risk Register • Section 7 – Environmental Control Measures • Section 9 – Roles and Responsibilities • Section 10 – Environmental Inspection, Monitoring and Auditing • Section 10.4 – Environmental Reporting • Section 10.3 – Environmental Inspection, Monitoring and • Section 10.6 – Review of approved plans

Legislation or regulation	Relevance	CEMP compliance provisions
Airports (Environment Protection) Regulations 1997 (AEPR)	Imposes a general duty to prevent or minimise environmental pollution once an airport lease is granted. Promotes improved environmental management practices at airports.	Refer to commentary on Airport Plan above
Airports (Building Control) Regulations 1996	Any conditions imposed on the ABC and ALC consent are to inform the relevant CEMPs (where appropriate)	Section 7 – Environmental Control Measures Section 8 – Traffic and access management Section 9 – Roles and Responsibilities Section 10 – Environmental inspection, monitoring and reporting
NSW As the Airport is to be developed under the Airport Plan determined under the Airports Act, 1996 (Cth), some state laws will not be applicable to the project or to parts of the Project (see for example S 112 of that Act). Where state laws are not applicable, it is still intended to have regards to relevant laws for example through inclusion of mitigations measures incorporated into this CEMP. These laws are identified below.		
State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)	The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across NSW.	Section 7 – Environmental Control Measures
Environmental Planning and Assessment Act 1979 (EP&A Act)	Objects of the Act include the encouragement of proper management and conservation of natural and artificial resources and the promotion of the orderly and economic use and development of land in NSW. The EP&A Act also provides for the making of environmental planning instruments including State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs), which include land use controls, such as development standards applicable to the land within the area covered by each instrument.	This Project has been authorised under the Airports Act; however, a range of matters arising from the EP&A Act have been considered. Section 7 – Environmental Control Measures Section 8 – Traffic and access management Section 9 – Roles and Responsibilities
Work Health and Safety Act 2011 & Work Health and Safety Regulation 2017.	The Work Health and Safety Act 2011 (NSW) (the Act) provides a framework to protect the health, safety and welfare of all workers and others in relation to NSW workplaces and work activities. The Work Health and Safety Regulation 2017 set out specific requirements for particular hazards and risks, such as noise, machinery, and manual handling.	This document.
State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 (Aerotropolis SEPP)	The Aerotropolis SEPP was made in accordance with division 3.3 of the EP&A Act and provides planning controls for development within the Western Sydney Aerotropolis. The Aerotropolis SEPP overrides any LEP provisions that apply to that land.	Section 7 – Environmental Control Measures Section 8 – Traffic and access management Section 9 – Roles and Responsibilities

Legislation or regulation	Relevance	CEMP compliance provisions
Liverpool Local Environmental Plan 2008 (Liverpool LEP)	The Liverpool LEP provides local environmental planning controls and standards for land in the Liverpool LGA in accordance with the standard environmental planning instrument under section 3.20 of the EPA Act.	Section 7 – Environmental Control Measures Section 8 – Traffic and access management Section 9 – Roles and Responsibilities
Penrith Local Environmental Plan 2010 (Penrith LEP)	The Penrith LEP provides local environmental planning controls and standards for land in the Penrith LGA in accordance with the standard environmental planning instrument under section 3.20 of the EPA Act.	Section 7 – Environmental Control Measures Section 8 – Traffic and access management Section 9 – Roles and Responsibilities
Roads Act 1993	Governs the opening, operation and management, and closure, of public roads in NSW including obtaining Road Opening Permits.	Section 7 – Environmental Control Measures Section 9 – Roles and Responsibilities

4.1.2. Guidelines and standards

Guidelines and standards that are relevant to traffic and access management and this Plan are summarised in Table 4-2 below. For standards and guidelines relevant to traffic related noise, vibration and air impacts refer to the respective CEMPs (the Noise and Vibration CEMP and Air Quality CEMP).

Table 4-2 Relevant guidelines and standards

Guidelines and standards:
Austroads Guide to Road Safety – Part 6 (2009) Pre-opening scheme audit
Austroads Guide to Road Safety – Part 6 (2009) Roadwork traffic scheme audit
Austroads Guide to Road Safety – Part 6 (2009) Existing roads: road safety audit
TfNSW supplements to Austroads guidelines where relevant (http://www.rms.nsw.gov.au/businessindustry/partners-suppliers/documenttypes/supplements-Austroads-guides/index.html)
Austroads Road Safety Audit Second Edition 2002: Checklist 4. Pre-opening scheme audit
Austroads Road Safety Audit Second Edition 2002: Checklist 5: Roadwork traffic scheme audit
Austroads Road Safety Audit Second Edition 2002: Checklist 6: Existing roads: road safety audit
AS 1742.3 Manual of Uniform Traffic Control Devices – Traffic control for works on roads
TfNSW Road Design Guide
TfNSW QA Specification G10 – Traffic Management
TfNSW Traffic Control at Work Site manual
Austroads Guide to Traffic Management (RTA 2011)
Procedures for Use in the preparation of a Traffic Management Plan (RTA 2001)
Austroads Road Safety Audit Second Edition 2002: Checklist 4. Pre-opening scheme audit
TFNSW Supplements to Austroads and Australian standards
Sydney Metro Principal Contractor Health and Safety Standard

Guidelines and standards:**Traffic Control at Work Sites Technical Manual (TfNSW)****Western Sydney Aerotropolis Development Control Plan 2020 Phase 1**

4.2. Approvals and other specifications

- Functional Specifications;
- Sydney Metro Western Sydney Airport Variation Plan;
- Sydney Metro Western Sydney Airport Environmental Impact Statement;
- Sydney Metro Sustainability Plan;
- Sydney Metro Community communications strategy; and
- Sydney Metro Construction (Rail) Plan, including the Construction Environmental Management Framework.

4.3. Airport Plan Conditions

Conditions relevant to the management of Traffic and Access during construction are provided in Table 4-3. Compliance with the Airport Plan conditions is a statutory requirement and as such, failure to comply may constitute a criminal offence liable to criminal prosecution under the Airport Act.

Table 4-3 Airport Plan Conditions relevant to traffic and access management

Condition no.	Condition	Timing	Responsibility	Reference within this CEMP
39.1	The rail authority must not: (a) Commence Rail Construction Works until each and all of the CEMPs specified in paragraph (2) have been prepared and approved in accordance with this condition; or b) Carry out any Rail Development inconsistently with any of the approved Rail CEMPs.	Prior to Construction Works	Sydney Metro	CEMP Sections 6, 7, 9 and 10
39.2	The Rail Authority must prepare and submit to an Approver for approval; (d) a Traffic and Access CEMP; in relation to the carrying out of the Rail Development.	Prior to Construction Works	Sydney Metro All contractors	This document (Traffic and Access CEMP)
39.3	The criteria for approval of each of the Rail CEMPs are that an Approver is satisfied that (a) The CEMP complies with the mitigation measures and other requirements set out in Table 8-1 and Table 8-3 of the EIA which are relevant to that CEMP; and (b) The Rail Authority, in preparing the CEMP has taken into account any performance outcomes specified in Table 8-2 of the EIA relevant to the CEMP; and (c) the CEMP is otherwise appropriate	Prior to Construction Works	Sydney Metro	This document (Traffic and Access CEMP) Table 4.5
39.4	The Rail Authority must ensure that: (a) a Rail CEMP is to the extent possible, consistent with a CEMP of the Site Occupier; and (b) no Rail CEMP is inconsistent with the approved Construction (Rail) Plan; and (c) if a CEMP of the Site Occupier is varied or replaced and results in inconsistencies with a Rail CEMP, the relevant Rail CEMP is updated or replaced as soon as practicable to ensure compliance with subcondition (4)(a).	CEMP preparation	Sydney Metro	This document Section 1.3 Section 4.4 Section 7

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Condition no.	Condition	Timing	Responsibility	Reference within this CEMP
45.3	<p>The Rail Authority must take reasonable steps to ensure that:</p> <p>(a) each person involved in carrying out a development which is part of the Rail Development:</p> <p>(i) is informed of the conditions that are relevant to the carrying out of the Rail Development; and</p> <p>(ii) in carrying out the Rail Development, complies with those conditions as if they applied to the person in the same way as they apply to the Rail Authority; and</p> <p>(b) each person involved in operating a development described in section 3.10 of Part 3 of the Airport Plan:</p> <p>(i) is informed of the conditions that are relevant to the operation of the development; and</p> <p>(ii) in operating the development, complies with those conditions as if they applied to the person in the same way as they apply to the Rail Authority.</p>	Prior to construction	Sydney Metro	Section 11
46	<p>Site Occupier and Plan Owner to maintain records about compliance with conditions</p> <p>Each Site Occupier, the Rail Authority and each Plan Owner must maintain accurate records which demonstrate its compliance with the conditions, including measures taken to implement the Approved Plans, and must make the records available upon request to the Infrastructure Department.</p>	During construction	Sydney Metro	Section 10
47.4	<p>Unless otherwise agreed in writing by an Approver, the Rail Authority must prepare a report addressing its compliance with each condition set out in section 3.11.6, including implementation of any Approved Plan, in respect of:</p> <p>(a) the 12-month period commencing with the commencement of Rail Construction Works; and</p> <p>(b) each subsequent 12-month period until the end of the Rail Construction Period; and</p> <p>(c) any period between the commencement of Rail Construction Works and the end of the Rail Construction Period that is not covered by paragraph (a) or (b).</p>	During construction	Sydney Metro	Section 10.5

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Condition no.	Condition	Timing	Responsibility	Reference within this CEMP
47.5	Unless otherwise agreed in writing by an Approver, the Rail Authority must publish each report prepared under subcondition (4) on its website within three months of the end of the period in respect of which the report was prepared. Documentary evidence providing proof of the date of publication must be provided to the Infrastructure Department at the same time as each report is published (with a copy to be provided to the Environment Department). Each report must remain on the Rail Authority's website for a minimum of 12 months (beginning on the date of publication).	During construction	Sydney Metro	Section 10.5
48.4	The Rail Authority must ensure that an independent audit of its compliance with the conditions set out in section 3.11.6 (except condition 44) is conducted in respect of the 12-month period commencing with the commencement of Rail Construction Works.	During construction	Sydney Metro	Section 10.5
48.5	The Rail Authority must ensure that an independent audit of its compliance with condition 46 is conducted in respect of the 12-month period from commencement of Rail Operations.	During construction	Sydney Metro	Section 10.5
48.6	The Rail Authority must submit the report of each audit conducted under subcondition (4) or (5) to an Approver (with a copy to the Environment Department) within six months of the end of the period in respect of which the audit was conducted. For each audit, the independent auditor must be approved by an Approver prior to the commencement of the audit. Audit criteria must be agreed by an Approver and the report of the audit must address the criteria to the satisfaction of an Approver.	During construction	Sydney Metro	Section 10.5
49.1	The Plan Owner may seek approval for a variation of an Approved Plan by submitting to an Approver a version of the plan with the proposed variation clearly marked in it (varied plan).	During construction	Sydney Metro	Section 10.6
49.2	The criteria for approval of the varied plan are the same as those in the Approval Condition, but only to the extent that they are relevant to the proposed variation.	During construction	Sydney Metro	Section 10.6
49.3	If an Approver approves a varied plan prepared under subcondition (1) or paragraph (5)(b), or the Infrastructure Minister varies an Approved Plan under paragraph (5)(a), then, from the date when it is approved or varied (as the case may be), the plan as varied is taken to be the Approved Plan for the purposes of the conditions.	During construction	Sydney Metro	Section 10.6

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Condition no.	Condition	Timing	Responsibility	Reference within this CEMP
49.6	The Infrastructure Minister may: (a) vary an Approved Plan; or (b) request in writing that the Plan Owner prepare and seek approval for a specified variation of an Approved Plan in accordance with subcondition (1), if the Infrastructure Minister believes on reasonable grounds that: (c) a condition has been contravened and the nature of the contravention is relevant to the subject matter of the Approved Plan; and (d) the variation or the request for a specified variation (as the case may be) will address the contravention.	During construction	Sydney Metro	Section 10.6
49.7	The Plan Owner must comply with a request made by the Infrastructure Minister in accordance with subcondition (5) within three months of the date of the request.	During construction	Sydney Metro	Section 10.6
49.9	Within two months of the grant of an Airport Lease, the ALC must prepare and submit for approval, in accordance with subcondition (1), a variation of each plan that was approved under a condition before the lease was granted, and for which the ALC is the Plan Owner, to reflect the change in Site Occupier resulting from the grant of the Airport Lease.	During construction	Sydney Metro	Section 10.6
50.1	Unless otherwise agreed in writing by an Approver, the Plan Owner must publish all Approved Plans on its website.	During construction	Sydney Metro	Section 10.6
50.2	Each Approved Plan must be published on the Plan Owner's website within one month of being approved and remain so published: (a) for CEMPs – until the end of the Airport Construction Period or Rail Construction Period as relevant; (f) for all other plans – until there is a Master plan for the Airport.	During construction	Sydney Metro	Section 10.6

4.4. Environmental Impact Requirements

4.4.1. WSA EIS requirements

The requirements of traffic and access management to be taken into account and addressed during the construction phase of the Railway Development on the Stage 1 area are included in the WSA EIS, specifically Table 28-4. In line with the requirement of the SM-WSA CEMPs to be consistent with the WSA CEMPs, Sydney Metro have ensured that the implementation, risk assessment, management measures, monitoring, auditing, reporting and responsibility for traffic and access management by the SM Project is aligned with the requirements of the WSA.

4.4.2. SM-WSA EIA requirements

The requirements of traffic and access management to be taken into account and addressed during the construction phase of the Railway Development are included in the SM-WSA EIA Table 8-1 CEMF 2. A summary of these requirements and how they have been addressed in this Traffic and Access CEMP is presented in Table 4-5.

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Table 4-4 Summary of Traffic and Access Management Requirements for the SM-WSA EIS

EIS reference	Topic	Summary	Traffic and access CEMP reference
Table 8-1	CEMF 2	The on-airport Traffic and Access CEMP would detail the Sydney Metro – Western Sydney Airport management objectives and be consistent with the Western Sydney Airport Traffic and Access CEMP, including all appendices (and sub plans) to the CEMP.	Section 3 Objectives and targets: 3.1 Objectives 3.2 Performance objectives
Table 8-2	Performance outcomes	The local community and relevant authorities are informed of transport, access and parking changes/impacts to minimise inconvenience to the public	SM Community communications strategy Section 7 Environmental Control Measures
Table 8-3 Consolidated on-airport mitigation measures	T1	Construction Traffic Management Plans would be prepared in accordance with the Construction Traffic Management Framework	This Document
	T3	Coordination with Western Sydney Airport and Transport for NSW would be undertaken through the Traffic and Transport Liaison Group to manage potential cumulative construction traffic impacts with future M12 Motorway and Elizabeth Drive	TTLG has been set up and meets monthly
	T4	Road Safety Audits would be carried out to address vehicular access and egress, and pedestrian, cyclist and public transport safety. Road Safety Audits would be carried out as per the guidelines outlined in Section 10 of the Construction Traffic Management Framework (CTMF)	CTMF Road Safety audits Addressed by safety
	T5	Maintain access for pedestrians and cyclists around construction sites as per the guidelines outlined in the Construction Traffic Management Framework. Appropriate signage and line marking would be provided to guide pedestrians and cyclists past construction sites and on the surrounding network to allow access to be maintained	Section 7 – Environmental Controls
	T6	Access for construction vehicles to be planned as per the guidelines outlined in the Construction Traffic Management Framework. Construction site traffic would be managed to minimise movements during peak periods. Vehicle access to and from construction sites would be managed to maintain pedestrian, cyclist and motorist safety	Section 7 – Environmental Controls

5. Existing environment

The following information is summarised from both the WSA EIS and SM WSA EIS – specifically for the traffic and access assessment for the Western Sydney Airport stage 1 project, refer to Chapter 15 of WSA EIS Volume 2A and for the Sydney Metro Airport Project refer to Chapter 9 of the SM WSA EIS.

5.1. Existing road Network

TfNSW guidelines define four levels in a typical functional road hierarchy, ranging from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

- Arterial Roads – controlled by TfNSW they typically exhibit no limit in flow and are designed to carry vehicles long distances between regional centres;
- Sub-Arterial Roads – can be managed either by council or by TfNSW under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day. Their aim is to carry through-traffic between specific areas in a sub region, or provide connectivity from arterial road routes (regional links);
- Collector Roads – provide connectivity between local sites and the arterial road network, and typically carry between 2,000 and 10,000 vehicles per day; and
- Local Roads – provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

A description of the roads within and servicing the Railway site, including their functional category is provided below in Table 5-1.

Table 5-1 Existing roads servicing the Airport site

Road	Functional category	Description
Westlink M7 Motorway	Arterial	The M7 Motorway connects Western Sydney with the broader road network and Sydney CBD via the M2, M4 and M5 motorways.
The Northern Road	Arterial	The Northern Road connects Narellan in the southwest to the Great Western Highway in Penrith.
Elizabeth Drive	Arterial	Elizabeth Drive connects The Northern Road at its western end, and the M7 Motorway at its eastern end.
Bringelly Road	Arterial	Bringelly Road connects to The Northern Road at Bringelly and to Camden Valley Way at Horingsea Park.
Badgerys Creek Road	Collector	Badgerys Creek Road connects The Northern Road to the north of Bringelly to a roundabout on Elizabeth Drive, and is around seven kilometres in length, including a section of road within the airport site realigned north of Pitt Street.
Adams Road	Collector	Adams Road connects The Northern Road at Luddenham to Elizabeth Drive.
Anton Road	Local	Connects Adams Road to the western side of the site (future fuel farm and firefighting activities)
Mamre Road	Arterial	Mamre Road connects the Great Western Highway in St Marys to Elizabeth Drive. Luddenham Road connects Elizabeth Drive at Luddenham to Mamre Road.

Road	Functional category	Description
Luddenham Road	Collector	Luddenham Road connects Elizabeth Drive at Luddenham to Mamre Road.
Local roads within the Airport Site	Local	Eaton Road;; Fuller Street; Jackson Road; Jagelman Road; Leggo Street; Longleys Road; Pitt Street; Taylors Road and the Old Northern Road

There are currently four bus services operating in the vicinity of the Airport Site. These include the following:

- Route 789 Penrith Interchange to Luddenham via The Northern Road. Offering two services per day in both directions;
- Route 801 Liverpool Interchange to Badgerys Creek via Kemps Creek, Cecil Park and Bonnyrigg, offering three services per day in both directions;
- Route 855 Rutleigh Park to Liverpool via Prestons and Churchill Gardens, offering approximately ten services per day in both directions; and
- Route 856 Bringelly to Liverpool via Prestons and Churchill Garden, offering approximately seven services per day in both directions.

The following train interchanges are currently the closest to the Airport Site:

- T1 Western line – Penrith Interchange;
- T2 Inner West and South Line – Liverpool Interchange; and
- South West Rail Link – Leppington.

Pedestrian and cycling infrastructure is very limited within the vicinity of the Airport Site due to the rural nature of the existing environment but is being improved as part of TfNSW's Principal Bicycle network, including access as part of the upgrades of The northern Road and Elizabeth Drive and the construction of the M12 motorway.

5.2. Existing transport network

5.2.1. Road network performance

An assessment of existing weekday AM peak and PM peak hour traffic volumes was completed based on traffic survey data to determine the general performance of the current road network configuration of these key roads.

Most sections of road within the transport study area operate within their theoretical capacity, however:

- The current configuration of Elizabeth Drive (east of Badgerys Creek Road) operates close to its theoretical capacity
- The Northern Road (east of Badgerys Creek Road) operates above its theoretical capacity during both peak hours.

Assessment of the intersections within the transport study area indicated that all intersections analysed currently operate satisfactorily at Level of Service D or better (refer to Section 7.1.3 of Appendix J of the SM EIS) with spare capacity.

5.2.2. Parking

There is limited demand for on-street car parking along Luddenham Road, Elizabeth Drive and Badgerys Creek Road. This is due to the surrounding land uses predominantly consisting of undeveloped lands and rural and agricultural lands. Existing car parking in the study area south of the M4 Western Motorway primarily consists of informal parking, with no off-street parking facilities provided.

5.3. Proposed transport upgrades

As part of the broader development of the Western Parkland City including Western Sydney International, the Australian and NSW Governments are currently undertaking investigations for proposed public transport, road and active transport projects. Proposed transport upgrades of relevance to the Project include:

- Future M12 Motorway – a new motorway is being delivered between the M7 Motorway, Cecil Hills and The Northern Road in Luddenham over a distance of about 16 kilometres. Construction of the project is expected to start in 2022 and be open to traffic before the opening of the Western Sydney International Airport in 2026
- Mamre Road – Stage 1 of the upgrade includes the section of road between the M4 Motorway in St Clair and Erskine Park Road in Erskine Park, while Stage 2 includes the section of the road from Erskine Park Road to Kerrs Road in Kemps Creek. The NSW Government has committed \$220 million to Stage 1, Investigations to inform the concept design are currently underway
- The Northern Road – consisting of upgrade of a 35-kilometre section of The Northern Road between Mersey Road, Bringelly and Glenmore Parkway in Glenmore Park. The Northern Road upgrades are being delivered in stages with some stages completed and the final stages having started construction in 2019
- Badgerys Creek Road – Badgerys Creek Road has been realigned as part of the early earthworks for Western Sydney International. The realigned section of the road was completed in February 2020 and constitutes the first major piece of infrastructure for the Western Sydney International, which is now ready for traffic. Early earthworks for this project have now been completed with the northern section having been realigned providing a new connection point to Elizabeth Drive. By opening of the project in 2026. The intersection of Badgerys Creek Road and Elizabeth Drive will be signalised as part of the M12 Motorway/Elizabeth Drive works
- Elizabeth Drive – consisting of an upgrade of Elizabeth Drive directly in front of the Airport. Elizabeth Drive will be upgraded and grade separated over the Metro and M12 Motorway entry to Western Sydney International
- Potential public transport upgrades including the potential future extensions of the project to the north and south, and the potential future East West Rail Link and South West Rail Link Extensions
- Additional rapid and suburban bus routes within Western Sydney
- Pedestrian and cyclist upgrades including walking and cycling infrastructure as part of Western Sydney International, future M12 Motorway project, The Northern Road, Elizabeth Drive and Bringelly Road upgrades.

6. Traffic and Access aspects and impacts

6.1. Sydney Metro Western Sydney Airport Construction Sites

This section assesses the potential impact on transport during the construction of the Project. It identifies the potential nature and extent of impacts to transport services as a result of the Project. The full transport assessment is provided in Technical Paper 1 (Transport) of the Project Environmental Impact Statement.

6.1.1. Overview

Potential transport and traffic impacts of the project have been avoided and minimised, primarily by tunnelling underneath or bridging over key roads such as Luddenham Road, Elizabeth Drive and Badgerys Creek Road, identifying the most efficient haul route to the arterial road network and minimising movements during existing network peak periods. The management of construction traffic would be in accordance with the Sydney Metro Construction Traffic Management Framework and site specific mitigation measures. This includes measures to manage pedestrian, cyclist and motorist safety around construction sites.

There may be some potential temporary impacts to traffic performance on the road network due to the temporary addition of construction vehicles and temporary road closures as a result of the project. In general, most of the network near Western Sydney International would continue to perform at an acceptable level of service.

Cumulative temporary transport impacts may also be experienced where the same haul routes are concurrently used for the construction of the future M12 Motorway and Western Sydney International. Sydney Metro would consult with these projects to ensure these cumulative impacts are effectively managed.

6.1.2. Assessment methodology

Study area

A transport study area (see Figure 6-1) was determined based on the potential impacts of the Project on the existing and future road and public transport network in the areas within and surrounding the airport site during the construction and operational phases of the Project. These roads include Elizabeth Drive, Badgerys Creek Road, The Northern Road, Luddenham Road and Adams Road.

Figure 6-1 also indicates the locations of the intersections that were modelled as part of the transport environment.

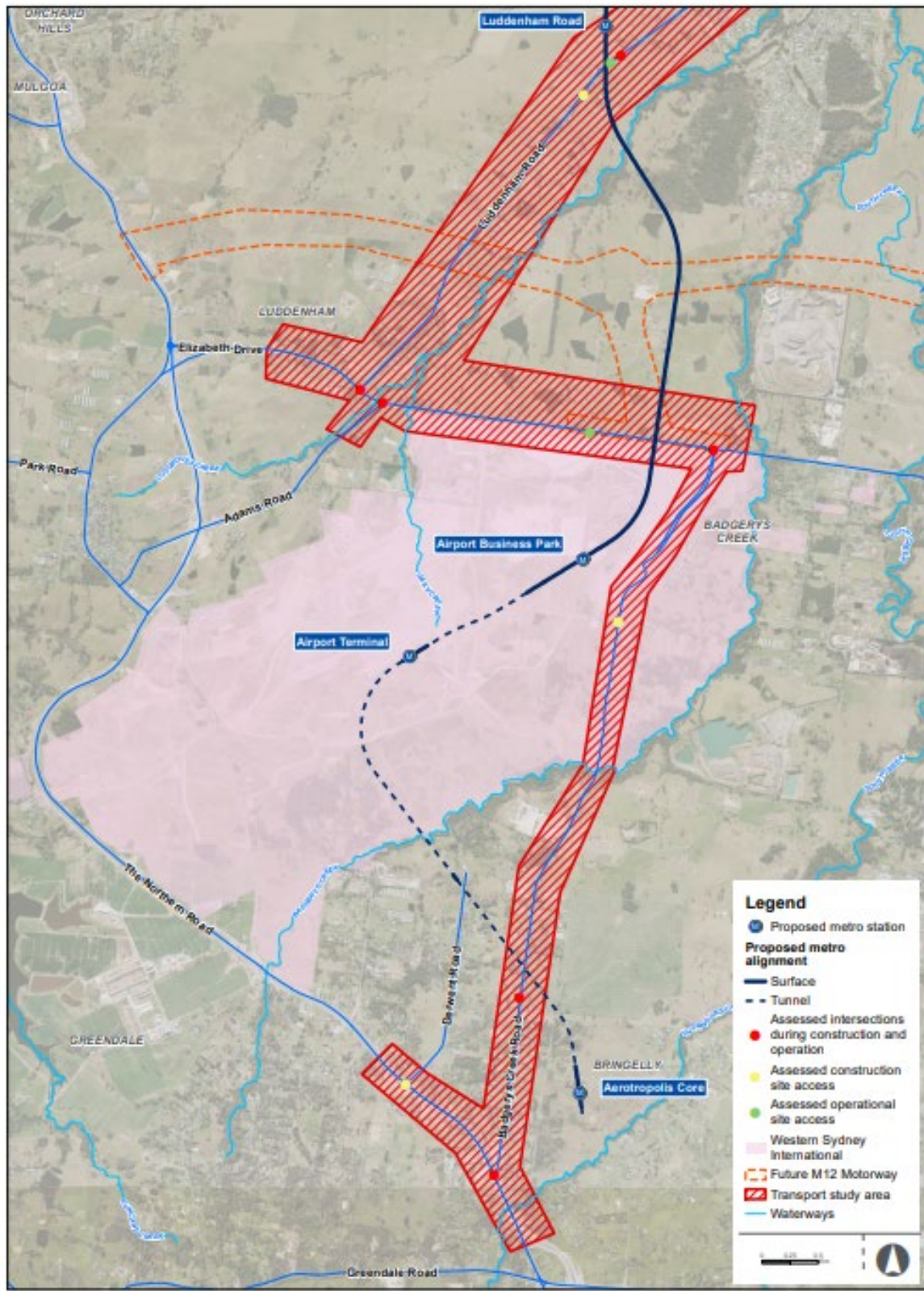


Figure 6-1 Traffic, transport access study area and local context

Assessment scenarios

Base year scenario

A 2019 network base year peak hour was adopted for the base year assessment scenario.

Construction scenarios

Assessment of the potential transport and traffic impacts during construction considered two scenarios:

- 2023/2024 without construction traffic
- 2023/2024 with construction traffic.

The assessment of the 2023/2024 without construction traffic scenario was informed by outputs from the WestConnex Road Toll Model (WRTM) prepared for the Environmental Impact Statement for the future M12 Motorway.

Construction traffic from the future M12 Motorway and Western Sydney International have also been considered as part of the cumulative impact assessment (refer to SM-WSA EPBC EIA Section 7.16).

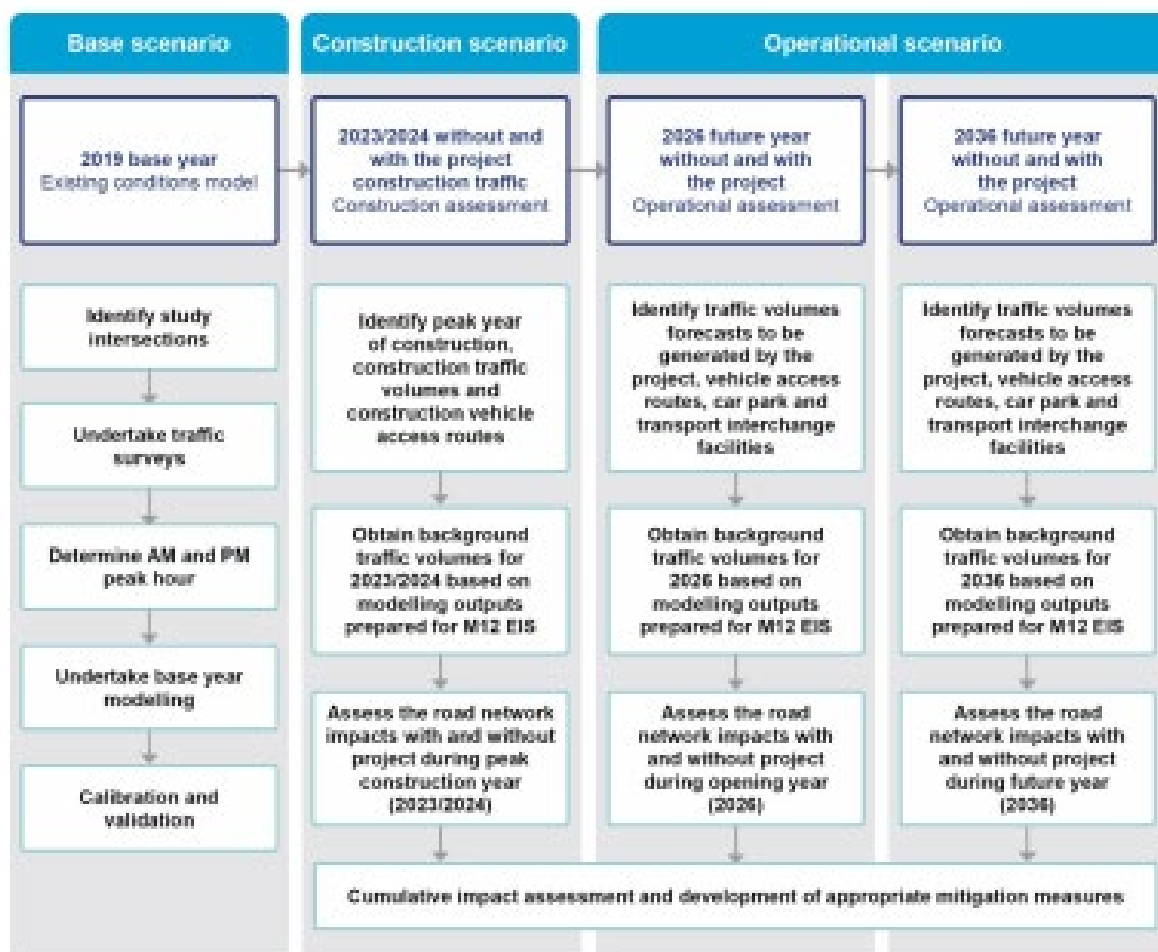


Figure 6-2 Summary of modelling methodology and assessment scenarios

Assessment criteria

Performance of the road network can be assessed in several ways, including at a mid-block level, showing the changes in traffic volumes or to travel routes, or at an intersection level, showing changes to the performance of an intersection.

Mid-block performance

Analysis of mid-block Level of Service (LoS) was conducted based on criteria set out for arterial and collector roads by the Austroads Guide to Traffic Management – Part 3.

LoS may range from LoS A to LoS F, where:

- LoS A refers to primarily free flow operations at average travel speeds. Vehicles are completely unimpeded in their ability to manoeuvre within the traffic stream.
- LoS C is generally considered satisfactory and
- LoS F is an interrupted flow with urban street flow at extremely low speeds, with high delays, high volumes and extensive queuing.

For the assessment of mid-block performance, LoS E is close to capacity and LoS F is considered at or above capacity.

Intersection performance

The operation of the key intersections within the study area was assessed using Signalised & unsignalised Intersection Design and Research Aid (SIDRA) INTERSECTION 8, a computer-based modelling package that calculates intersection performance. The commonly used measure of intersection performance, as defined by Transport for NSW, is vehicle delay. SIDRA INTERSECTION 8 determines the average delay that vehicles encounter and provides a measure of the LoS.

Similar to mid-block performance, intersection performance may range from LoS A indicating good operation to LoS F indicating an intersection that is over capacity involving extreme delays.

For the assessment of intersection performance, LoS E is generally considered close to or at capacity and LoS F as operating above capacity

6.1.3. Potential Impacts- construction

Potential temporary construction impacts of the Project on the road network, pedestrian and cycling networks and the public transport network are described in the following sections.

Road network performance

Internal construction vehicle movements to/from the construction sites within Western Sydney International would be managed in coordination with Western Sydney Airport, Transport for NSW and their respective contractors for the development of the Western Sydney International and the future M12 Motorway. Some construction trucks would require the use of internal construction routes also used for the construction of Western Sydney International. As such traffic management measures would need to be developed in consultation with Western Sydney Airport to manage access to construction sites as well as the cumulative construction impacts.

During the peak construction scenario in 2023/2024, construction works for the airport would still be progressing. As such, public access to the airport would be restricted, and potential transport related impacts would be limited.

It is expected that construction vehicle movements would be planned in conjunction with the airport construction works and the M12 Motorway as per the guidelines included in the Construction Traffic Management Framework (CTMF) (Appendix G of the Project Environmental Impact Statement). Cumulative impacts associated with the project, Western Sydney International and the M12 project are likely to be partially unpredictable due to the complexity and uncertainty of the exact timing associated with these developments. As such the Traffic and Transport Liaison Group (TTLG) would be established to coordinate, manage and minimise transport impacts during construction and would include Western Sydney Airport, Transport for NSW, M12 Motorway Contractors, local councils, emergency services and other stakeholders. Development of the traffic management measures will be carried out in consultation with the TTLG.

Construction traffic movements within Western Sydney International and M12 Motorway would also affect the performance of the surrounding road network and intersections located off-airport. This includes roads such as Elizabeth Drive, Badgerys Creek Road, The Northern Road, Luddenham Road and Adams Road. The impacts due to construction activities proposed were assessed by looking at both mid-block and intersection performance.

Mid-block performance

An assessment of the weekday AM peak and PM peak hour traffic volumes was completed to determine the general performance of the road network during the peak construction year without and with project construction.

In summary, the assessment indicates that the sections of Luddenham Road and Elizabeth Drive are forecast to operate at or above theoretical capacity during the peak construction year without the addition of construction traffic generated by the project.

The following sections of the road network are forecast to operate at or above theoretical capacity due to the temporary addition of construction traffic to be generated by the project:

- Luddenham Road north of Elizabeth Drive (southbound) would change from LoS E to LoS F during the PM peak
- Elizabeth Drive west of Badgerys Creek Road (westbound) would change from LoS D to LoS E during the PM peak
- Elizabeth Drive east of Badgerys Creek Road (eastbound) would change from LoS D during the AM peak and LoS C during the PM peak to LoS E during the AM and PM peaks
- Badgerys Creek Road north of The Northern Road would change from LoS C (northbound) during AM peak and LoS C (southbound) during the PM peak to LoS F (northbound) during the AM peak and (southbound) during the PM peak
- The Northern Road east of Badgerys Creek Road would change from LoS D (northbound) during the AM peak and LoS C (southbound) during the PM peak to LoS F during those times.

The potential impacts forecast along these roads are temporary and due to construction vehicle movements accessing both the on-airport and off-airport construction sites. A conservative assessment has been undertaken whereby all tunnel and other spoil generated by the Project is

expected to be transported by road to disposal sites located outside the airport site. However, it is anticipated that the use of the permanent spoil placement area within Western Sydney International to reuse up to 1.9 million cubic metres of tunnel spoil is likely to reduce impacts on the road network.

Intersection performance

Construction traffic movements within Western Sydney International would temporarily affect the intersection performance of surrounding intersections located off-airport.

The assessment identified that all intersections expected to be impacted by the on-airport construction activities are forecast to perform satisfactorily with acceptable delays and spare capacity during future year conditions in 2024 without construction. During the peak year with construction scenario, intersections likely to be temporarily impacted by the construction activities planned in the on-airport environment are forecast to operate at a LoS D or better.

Pedestrian and active transport impacts

During the peak year of construction of the project, the airport is forecast to be under construction and as such active transport links are not anticipated to exist within Western Sydney International. No impacts to pedestrian and active transport networks are therefore expected within and adjacent to the on-airport environment during construction.

Public transport impacts

During the peak year of construction of the project, the airport is forecast to be under construction and as such public transport services are not forecast to be operational within the on-airport environment. No impacts to public transport networks are therefore expected within the airport site during construction. Outside of the airport site the road-based public transport modes are likely to be impacted in the same way as general traffic.

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Table 6-1 2023/2024 peak construction year mid-block performance

Location	Direction	Theoretical capacity (pcu/h)	AM Peak				PM Peak			
			Future year without construction scenario		Future year with construction scenario		Future year without construction scenario		Future year with construction scenario	
			Volumes (pcu/h)	LoS	Volumes (pcu/h)	LoS	Volumes (pcu/h)	LoS	Volumes (pcu/h)	LoS
Luddenham Road (north of Elizabeth Drive)	NB	900	1080	F	1280	F	590	C	660	C
	SB	900	300	A	370	B	860	E	1070	F
Elizabeth Drive (west of Badgerys Creek Road)	EB	900	560	C	720	D	580	C	680	D
	WB	900	690	D	790	D	730	D	880	E
Elizabeth Drive (east of Badgerys Creek Road)	EB	900	770	D	840	E	620	C	850	E
	WB	900	930	F	1160	F	1000	F	1070	F
Badgerys Creek Road (south of Elizabeth Drive)	NB	900	420	B	510	C	380	B	690	D
	SB	900	440	B	750	D	610	C	710	D
Badgerys Creek Road (north of The Northern Road)	NB	900	500	C	1320	F	340	B	440	B
	SB	900	280	A	400	B	550	C	1370	F
The Northern Road (west of Badgerys Creek Road)	NB	1900	880	B	960	C	770	B	840	B
	SB	1900	1100	C	1170	C	1100	C	1180	C
The Northern Road (east of Badgerys Creek Road)	NB	1900	1550	D	2330	F	1380	C	1440	D
	SB	1900	1110	C	1180	C	1260	C	2040	F

Notes:

1. Assessments have been undertaken using SIDRA INTERSECTION 8.
2. Traffic volumes have been rounded to the nearest 10.
3. Peak hour construction traffic forecast to be generated by the project from each construction site have been distributed as per assumptions stated above and added to the forecast future year network traffic without the project

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Table 6-2 2023/2024 peak construction

Intersection	AM Peak				PM Peak			
	Future year without construction scenario		Future year with construction scenario		Future year without construction scenario		Future year with construction scenario	
	Average Delay(sec)	Level of Service (LoS)	Average Delay(sec)	Level of Service (LoS)	Average Delay(sec)	Level of Service (LoS)	Average Delay(sec)	Level of Service (LoS)
Luddenham Road/Station Site Access West (P)	-	-	42	C	-	-	34	C
Luddenham Road/Station Site Access East (P)	-	-	50	D	-	-	47	D
Luddenham Road/Elizabeth Drive (P)	10	A	15	B	12	A	16	B
Elizabeth Drive/Adams Road (P)	9	A	13	A	16	B	32	C
Elizabeth Drive/Badgerys Creek Road (R)	13	A	17	B	14	A	28	B
Badgerys Creek Road/Badgerys Creek Site Access (R)	-	-	33	C	-	-	36	C
Badgerys Creek Road/Aerotropolis Site Access (P)	-	-	43	D	-	-	42	C
Badgerys Creek Road/The Northern Road (S)	34	C	53	D	28	B	32	C
The Northern Road/Derwent Road (S)	6	A	7	A	6	A	6	A

Notes:

- Assessments have been undertaken using SIDRA INTERSECTION 8.
- Peak construction traffic likely to be generated in 2023 by the construction sites north of Elizabeth Drive have been used for the assessments. For all other construction sites, peak construction traffic forecast in 2024 have been used for the assessments.
- For traffic signals, the average movement delay and level of service over all movements is used. For roundabouts and priority control intersections (with stop and give way signs), the critical movement for level of service assessment with the worst movement delay is used.
- The intersection of Kent Road/Lansdowne Road experiences the worst movement delay for through traffic approaching from the west on Lansdowne Road during the 2023 base scenario due to low traffic volumes (less than 5 veh/hr). However, the delay is not representative of the overall intersection performance. Therefore, the movement that corresponds to the next highest delay is reported here to provide an indication of the intersection performance.
- Dashes indicate new construction site accesses that would only be constructed and used by construction vehicles and hence would not exist during the future year scenario without construction.
- Intersection control type as indicated against each (P: Priority-controlled, R: Roundabout, S: Signalised)

6.2. Cumulative impacts

Construction of the Project would overlap with the construction activities associated primarily with Western Sydney International and the future M12 Motorway which are due to be completed in 2025 and 2026 respectively.

For the purposes of this cumulative impact assessment, peak construction activities for all projects are conservatively assumed to occur concurrently in 2023/2024. Cumulative impacts could occur as a result of a temporary increase in construction vehicles on the road network resulting in potential impacts to both mid-block and intersection performance, as well as potential safety impacts arising from increased numbers of heavy vehicles using the road network during construction.

Aside from the cumulative impacts associated with the projects identified in this assessment, the road network impacted by construction of the Project is likely to experience growth in background traffic and this is anticipated to result in reduced performance of the road network. The transport assessment indicates that some of the intersections and mid-block sections impacted by the project are forecast to operate at or above capacity due to this forecast growth in background traffic within the study area. This is likely to result in significant delays and queuing at these intersections that would be expected to increase with the addition of traffic forecast to be generated by the Project.

6.3. Environmental Risk Register

A risk assessment has been undertaken as part of the review and development of this CEMP and in accordance with the Environmental risk analysis process of the WSA TA CEMP. The parts of the overall risk assessment relevant to Traffic and Access have been extracted and summarised in Table 6-3 applies to all phases of works that the Construction (Rail) Plan authorises.

The identification of construction activities and associated impacts that could eventuate during construction of the Project is central to the selection of appropriate environmental safeguards. The risk management process involved an assessment of all specific Project activities/aspects in or near environmentally sensitive areas and resulted in the development of a list of environmental risks (effects and impacts) and a corresponding risk mitigation strategy and risk ranking.

The identification of risks included a review of the works, and review of the environmental risks identified by the EIS. The mitigations in the risk assessment are in line with the WSA EIS mitigation measures in chapter 7, Table 7-1.

6.3.1. Risk Assessment process

The following tables outline the risk assessment process using 3 steps to identify the appropriate management measures required.

Table 6-3 is used to determine the likelihood that the aspect will have an impact on the environment. Table 6-4 is used to determine the potential consequence rating of the risk identified.

From these two tables, a risk rating can then be assigned using Figure 6-3 to determine the potential severity of the risk and the appropriate management response as per Table 6-6.

Table 6-3 Likelihood descriptor

Rating	Likelihood	Description
A	Rare / improbable	<ul style="list-style-type: none"> The event may only occur in exceptional circumstances.
B	Unlikely / remote	<ul style="list-style-type: none"> The event may occur at some time (about once every five years).
C	Possible	<ul style="list-style-type: none"> The event is likely to occur at some time (about once every year).
D	Likely	<ul style="list-style-type: none"> The event will probably occur in most circumstances (at least once every six months).
E	Almost certain	<ul style="list-style-type: none"> The event is expected to occur in most circumstances (at least once every month).

Table 6-4 Consequence descriptor

Rating	Consequence (impact)	Description
1	Insignificant/ Negligible (1-3)	<ul style="list-style-type: none"> Short-term disturbance with minor environmental release or damage that is non-reportable. No impact outside site boundary. No community complaints or media reports.
2	Minor/low (4-10)	<ul style="list-style-type: none"> Minor violation of regulation or guideline with minimal damage to the environment and small clean-up. Immediately contained on site. Local government action, minor community complaints. Potential or actual breach of legislation.
3	Moderate (11-15)	<ul style="list-style-type: none"> Violation of regulation or guideline with moderate temporary damage to the environment and significant clean-up costs. Release of pollution off site. Detrimental media reports, community concerns and complaints.
4	Major / High (16-22)	<ul style="list-style-type: none"> Major environmental damage with potentially permanent consequences. Release of pollution off site. Significant loss of environmental resources. Detrimental media reports in the national or state media, organised community concern. High likelihood of fine or court action.
5	Catastrophic / Priority (23-25)	<ul style="list-style-type: none"> Long-term environmental harm. Permanent irreparable damage to the environment. Sustained detrimental state and national media reports. Sustained community outrage. Penalty Infringement Notice/court action.

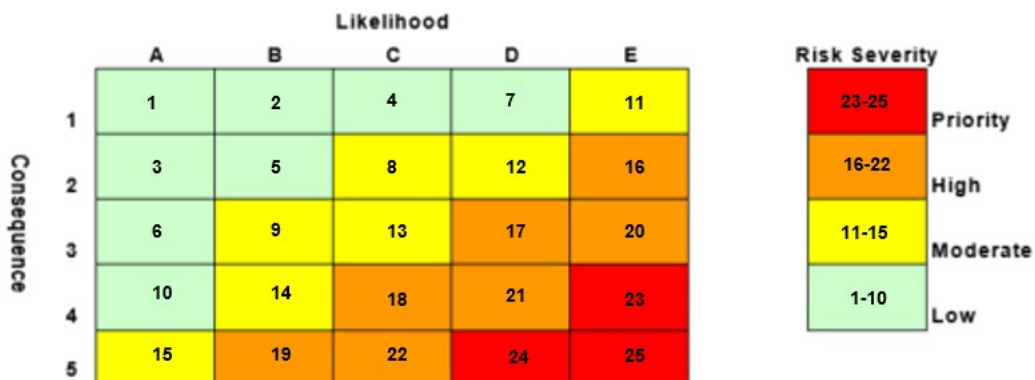


Figure 6-3 Risk severity ranking

Table 6-5 Risk severity and management response

Risk severity	Management response
Priority	<ul style="list-style-type: none"> Immediate and detailed management action required. (e.g. stop or change activity)
High	<ul style="list-style-type: none"> Priority management action warranted
Moderate	<ul style="list-style-type: none"> Management action warranted
Low	<ul style="list-style-type: none"> Management action should be considered, particularly for low-level impacts that nevertheless occur on a continual basis



Table 6-6 Traffic and Access risk assessment

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level ² pre-mitigation	Mitigation measure ¹	Risk level ² post-mitigation	Management tools
01	Site establishment	Importing construction materials	Additional traffic	Delays to local traffic, potential for accidents	Med (17)	TA_01 TA_03 TA_04 TA_07 TA_08 TA_09 TA_10 TA_12	Low (9)	<ul style="list-style-type: none"> Community and Stakeholder Engagement Plan Traffic and Access CEMP Air Quality CEMP Soil and Water CEMP Traffic Control Plans Complaints Procedure Induction Environmental Control Map (ECM)
02		Transportation of site buildings	Additional traffic	Delays to local traffic, potential for accidents	Med (13)	TA_01 TA_03 TA_04 TA_08 TA_09 TA_10	Low (9)	<ul style="list-style-type: none"> Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction ECM
03		Site personnel travel to/from site	Additional traffic during peak hour	Additional traffic congestion	Low (8)	TA_01 TA_12 TA_13	Low (5)	<ul style="list-style-type: none"> Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction ECM

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Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level ² pre-mitigation	Mitigation measure ₁	Risk level ² post-mitigation	Management tools
04	Construction works	Works adjacent to existing roads	Temporary reduction in speed limit	Delays to local traffic, caused by traffic control, temporary slow zone	Med (13)	TA_01 TA_03 TA_04	Low (5)	<ul style="list-style-type: none"> Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction ECM
05	Construction works (continued)	Construction vehicles and plant crossing Badgerys Creek Road	Temporary road closures	Delays to local traffic, caused by traffic control, temporary slow zone	High (20)	TA_01 TA_03 TA_04 TA_09 TA_10 TA_12	Low (9)	<ul style="list-style-type: none"> Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction ECM
06		Out of Hours Works	Temporary road closures	Delays to local traffic, caused by traffic control, temporary slow zone	Med (13)	TA_14	Low (9)	<ul style="list-style-type: none"> Community and Stakeholder Engagement Plan Traffic and Access CEMP Traffic Control Plans Complaints Procedure Induction ECM

7. Environmental Control Measures

A range of environmental requirements and control measures are identified in the various environmental documents, including the WSA EIS, the subsequent Submission Report, SM WSA EIS and the Airport Plan Conditions. The specific measures and requirements to address impacts on Traffic and Access during construction are outlined in Table 7-1.

Table 7-1 Environmental control measures

Ref	Measure/ Requirement	When to Implement	How to Implement	Responsibility for Implementation	Reference
TA_01	As part of the Community communications strategy a community awareness programme will be implemented prior to Construction Works commencing and would continue throughout the entire construction period. The programme will aim to make road users (including local residents) aware of construction traffic and safety issues, such as diversions, temporary road closures, traffic signalling and speed limits	Pre-construction	Implement as per overarching Community communications strategy	All Contractors	EIS Table 28-9 SM-WSA EIA Appendix G- section 5
TA_02	Management for the temporary and permanent closures of roads within the Airport Site.	Construction	Traffic Control Plans to be developed for individual closures, requiring approval before road closures can occur. See section 8.9	All Contractors	EIS Table 28-9 SM-WSA EIA Table 8-3 T1
TA_03	Ongoing consultation with TfNSW and local councils as appropriate and emergency services.	Construction	In addition to the existing engagement forums with TfNSW, LCC, PCC and other key NSW Government transport authorities, including the Stakeholder Planning Forum, a Traffic and Transport Liaison Group (TTLG) has been established for the project. Western Sydney Transport and Roads Hub is the forum that will manage the TTLG with WSA participating, refer Section 8.9.4 Consultation will be undertaken as per the community awareness programme and overarching Community communications strategy. This includes regular meetings with council by way of Environmental Review Groups, and other meetings as necessary before TCP's are approved. See section 8.9.1	Sydney metro All Contractors	EIS Table 28-9 SM-WSA EIA Table 8-3 T3 SM WSA EIA Appendix G- section 4
TA_04	Induction for drivers working on the project to cover safety measures particularly for night works.	Construction	All drivers are to be inducted onto site before commencing their works. Induction to include	All Contractors	EIS Table 28-9

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Ref	Measure/ Requirement	When to Implement	How to Implement	Responsibility for Implementation	Reference
			specific night-works requirements such as lighting and communication measures. Temporary delivery drivers to undertake temporary driver inductions when onsite.		SM-WSA EIA Table 8-3 T4 SM WSA EIA Appendix G- section 7
TA_05	Review of speed environments along transport corridors.	Construction	To be assessed during regular inspections by the relevant contractor. Corrective actions such as driver education, signage to be implemented as necessary. No modification to signage will be made without consultation and approval from TfNSW.	All Contractors	EIS Table 28-9 SM-WSA EIA Table 8-3 T4
TA_06	Restriction of construction related traffic within the AM and PM peak periods where required.	Construction	To be mitigated when preparing the TCPs. See section 8.11.1.	All Contractors	EIS Table 28-9 SM WSA EIA Appendix G- section 7
TA_07	Management of the transportation of construction materials to optimise vehicle loads in order to minimise vehicle movements.	Construction	Deliveries and load outs, and load ins are scheduled for efficiency to minimise vehicle movements and to limit changes to traffic control setups.	All Contractors	EIS Table 28-9 SM WSA EIA Appendix G- section 3, 6 and 7
TA_08	Traffic control measures to manage and regulate traffic movements during construction.	Construction	Keeping traffic flowing safely is a primary focus of contractor TCPs. See section 8.9.1.	All Contractors	EIS Table 28-9

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Ref	Measure/ Requirement	When to Implement	How to Implement	Responsibility for Implementation	Reference
			Any changes or control measures will be done with the approval of TfNSW as required.		SM WSA EIA Appendix G- section 3
TA_09	Identification of potential disruption to road users.	Construction	This is undertaken in the planning phase of TCP development. See section 8.9.1. Vehicle access to and from construction sites would be managed to maintain pedestrian, cyclist and motorist safety.	Sydney Metro All Contractors	EIS Table 28-9
TA_10	Identification of any road closures and/or road upgrades that may be required.	Construction	Road closures and upgrades requiring work are identified in the project design and TCPs used for project works. See section 8.9.1. Community and stakeholder consultation to be undertaken in accordance with the Community communications strategy. No state roads will be closed without consultation and approval from TfNSW, refer section 8.9.4.	All Contractors	EIS Table 28-9 SM WSA EIA Appendix G- section 6
TA_11	Construction vehicle routes, including the use of arterial roads, haulage routes, access to the Airport Site and procedures for oversize and heavy vehicles	Construction	Construction vehicle routes/haulage roads have been identified and can be seen in section 8.7 of this Plan	All Contractors	EIS Table 28-9 SM-WSA EIA Table 8-3 T6 SM WSA EIA Appendix G- section 7
TA_12	Parking facilities for construction workers.	Construction	Parking facilities are available in the main compound area shown in section 8.8	All Contractors	EIS Table 28-9

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Ref	Measure/ Requirement	When to Implement	How to Implement	Responsibility for Implementation	Reference
					SM WSA EIA Appendix G- section 7
TA_13	Measures to support and encourage sustainable travel for construction workers to and from the Airport Site, including public transport, shuttle buses, cycling, walking, and car-sharing (as also outlined in the Air Quality CEMP).	Construction	Site vehicle pooling will be undertaken for workers from the main compound to individual site locations to limit individual vehicle movements. Section 8.4 discusses bus routes which can be used by site workers, where possible.	All Contractors	EIS Table 28-9 SM WSA EIA Appendix G- section 2

8. Traffic and Access Management

8.1. Road closures

Movements of oversized vehicles or plant and equipment may at times require temporary road closures or escorts to the site, but these would generally be conducted outside of peak hours and notifications prepared and distributed in accordance with the Community communications strategy. Dependent on the routes and/or roads involved, closures may require approval from TfNSW, this will be identified as part of the planning process and approval would be gained prior to the notifications being distributed.

8.2. Construction site access

Access to the site will be controlled to protect the general public from exposure to the inherent hazards of a construction site. Security guards stationed at the main entry point to the site will provide access control and ensure that all those entering the site are wearing the appropriate personal protective equipment (PPE) for work on a construction site. Figure 8-1 shows the planned WSA site entry points, entry point restrictions and locations of major site features in relation to access points.

Most deliveries are expected to come from north of the site via Elizabeth Drive. SM-WSA will establish their own site access points from the eastern section of the airport site which will include Pitt Street from the east of Badgerys Creek as well as a new access from Badgerys Creek Road via a new roundabout at the corner of Badgerys Creek Road and Longleys Road.

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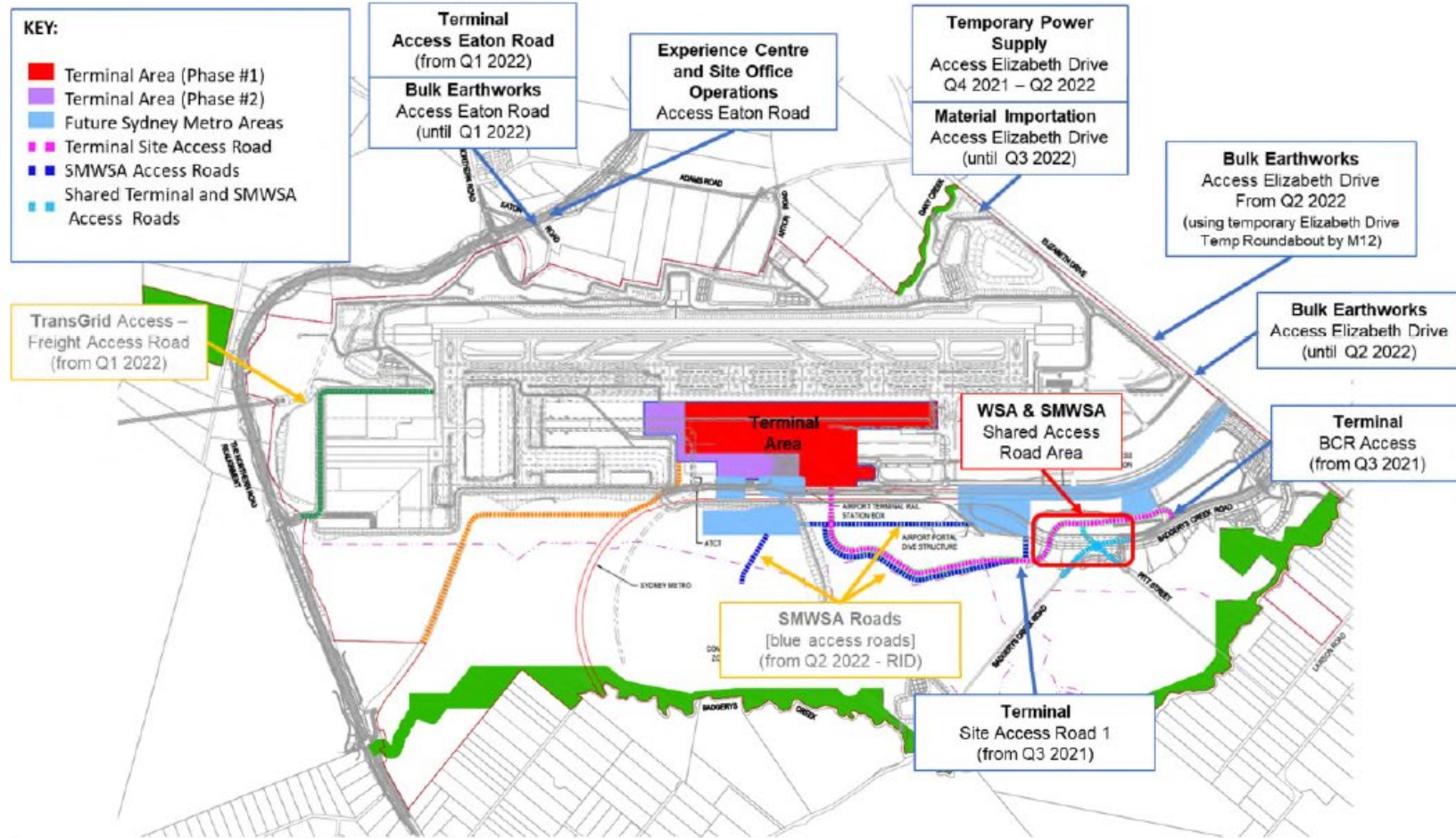




Figure 8-1 Main Site Access for WSA

8.3. Material Importation

Construction traffic for SM - WSA Material Importation would use the nearby road network, all traffic will access Elizabeth Drive as the main arterial road followed by use of the purpose built, sealed haul road running from the entrance to the former EPIC Mine site. This entry and exit point is left in – left out only.

8.4. Parking facilities

For all scopes of work, construction plant, machinery and vehicle parking areas will be located as far as practicable from sensitive receivers. Parking locations will be identified on ECMs and shown on Vehicle Movement Plans as applicable.

8.5. Public transport

Public transport options include four bus routes within the immediate surrounds of the Airport Site and the closest train station is situated 15 kilometres away (eg. Penrith and Leppington). Refer to Section 5.1 for further details.

Public transport options would be maintained in consultation with Transport for NSW during construction.

8.6. Property access

Property access affected by the construction works will be maintained or alternative arrangements made in consultation with the affected landowners.

8.7. General road user delay prevention strategies

Maintaining the capacity of the road network, including local roads, and minimising the delays experienced by road users during the construction of the Project is a key Project objective. Delay minimisation strategies can generally be divided into four categories:

- Isolation of work areas;
- Maximising through traffic speeds and the number of available lanes;
- Work methods; and
- Road occupancy planning.

The measures to be implemented to minimise Road User delays include, but are not limited to:

- Creating specific Vehicle Movement Plans to minimise construction traffic;
- Creating clear gate signage to minimise driver confusion;
- Creating a main site access which can accept most of the construction traffic;
- Manage Over Dimension deliveries to occur outside of peak travel periods where possible;
- Plan the routes of Over Dimension deliveries to ensuring that the roads through which these deliveries pass are designated for that purpose;
- Manage truck deliveries so that they can access the site safely through designated gates;

- Provide for enough parking within the site to remove the risk of roadside parking of construction vehicles;
- Develop construction staging and temporary works that avoid conflicts with the existing road network, maximizes separation between work areas and travel lanes, isolates work areas and maintains existing road network capacity;
- Isolate work areas from traffic flows (e.g. using alternative routes, temporary side-tracks, lane deviations/widening and temporary safety barriers);
- Develop alternative work methods to minimize impacts (e.g. utilize more efficient plant/equipment, apply different solution, enclosed work platforms);
- Plan all road occupancies with the aim to; minimize the actual work area; limit obstructions and restrictions; maximize road capacity; and avoid peak traffic flow periods;
- Analyse traffic volume data to:
 - identify the capacity requirements of the road;
 - assess the potential impact on traffic flows; and
 - identify the time to minimise the inconvenience to road users;
- Provide road users with changed traffic condition information to enable them to plan their journey and avoid roadwork;
- Perform Road Safety Audits as required;
- Perform Traffic Control inspections at least once a week during the duration of the works; and
- Additional inspections to be undertaken when new traffic arrangements are set up to monitor effectiveness.

8.7.1. Closure of shoulders or auxiliary lanes

Road occupancies involving closure of any shoulder or auxiliary lane, where auxiliary lane(s) exist, must always provide a minimum of one travel lane in each direction through the road occupancy.

A minimum of 1 metre shoulder width will be provided on all roads except as approved by relevant authorities (e.g. TfNSW, Local Council, or the Airport Building Controller).

8.7.2. Partial Closures of Auxiliary Lanes

Partial closures of any length of an auxiliary lane may only be implemented if the remaining open length of the auxiliary lane is equal to or greater than 600 metres where the posted speed is 70km/hr and 600 metres where the posted speed is 60km/hr.

If this open length cannot be achieved, the entire length of the auxiliary lane must be closed.

8.7.3. Temporary Lane Closures

Lane closures on arterial roads will not be implemented during the following periods:

- From 6.00am to 9.30am Monday to Friday;
- From 3.00pm to 7.00pm Monday to Friday;
- 1 day prior and 1 day after commencement of school holidays; and
- During the Christmas period.

The temporary lane closures for all roads will be managed to minimise stoppages and to minimise impacts on motorists by implementing the following:

- No stoppages will occur which are longer than five (5) minutes, including the time taken to clear all stopped, slowed and queued traffic;
- Cumulatively delay to all road occupancies, including temporary speed zoning complying with not cause a delay longer than eight (8) minutes including the time taken to clear all stopped, slowed and queued traffic; and
- Traffic queues caused lane closures, measured along a single lane in any direction, must not exceed 250 metres in length for any period of traffic delay. If traffic queues reach 250 metres in length, the traffic control measures will be reviewed and adjusted to remove the cause of the traffic delay until the flow of traffic returns to free flow conditions.

8.8. Construction Access and Egress Mitigations

Construction access and egress will be closely managed in order to ensure the safety of the community and construction workers. This will be managed from both a high level with regards to the nomination of construction haulage routes, utilising key arterial roads / routes in addition to site level management with regards to construction site access and egress. Further details are provided in the following sections.

8.8.1. Construction haulage routes

The construction haulage routes for access and egress from the site are presented below in Figure 8-2. These haulage routes will be included in site induction material (as detailed further in Section 11) and will be distributed to all key suppliers and providers of goods and services.

Period inspections and audits of the use of the appropriate use of the construction haulage routes will be undertaken in accordance with Section 10.

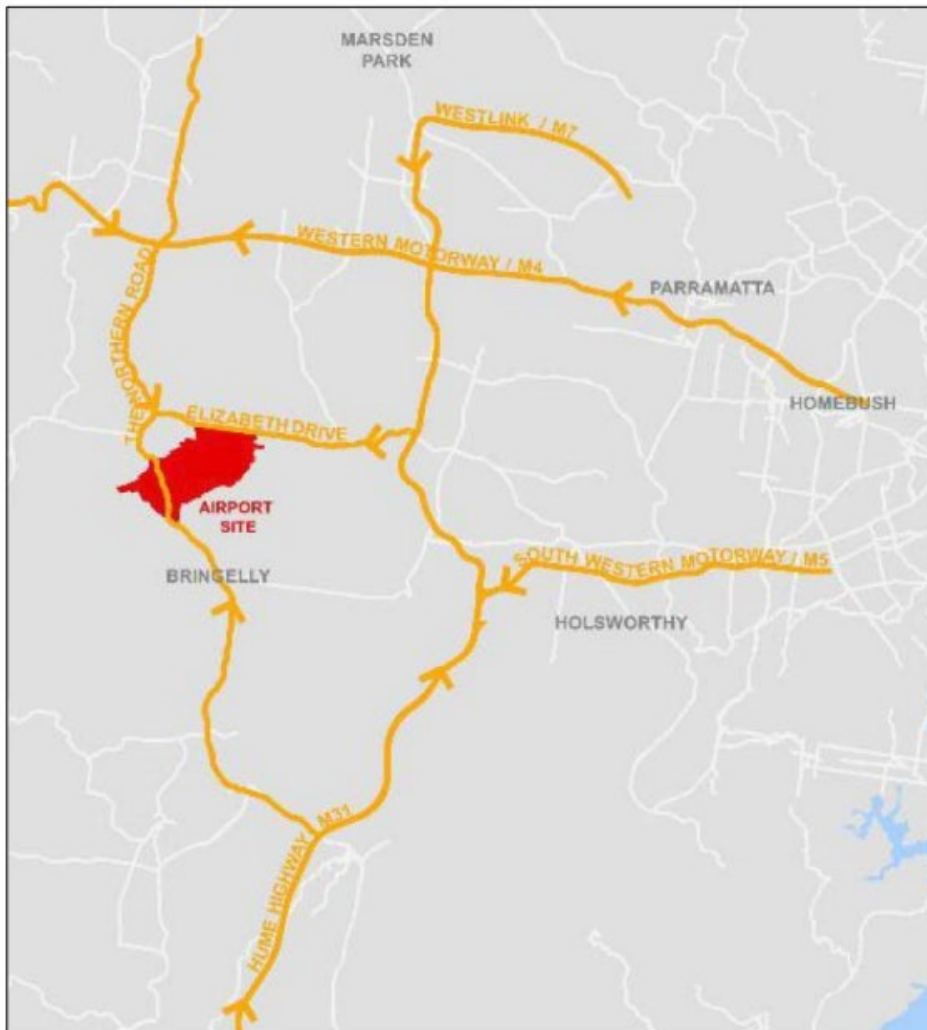


Figure 8-2 Construction haulage routes

8.9. Site Entry and Access Arrangements

Access to the project will be via the existing local road network. The local roads used for access to the project site are Badgerys Creek Road, Elizabeth Drive, The Northern Road and Anton Road. These access arrangements are subject to change in response to the works, to reduce any potential impacts to the road network and maintain safety.

8.10. Material Importation

The access arrangement for the SM - WSA Material Importation phase will utilise Elizabeth Drive as the main arterial road followed by the Badgerys Creek – Longleys Road roundabout and new internal roads linking the Pre-fabrication yards, Spoil placement area and the station sites. This entry and exit point is left in – left out only. The Material Importation access arrangement is shown in figure 8.2 SM-WSA will develop alternate routes as outlined above and where else applicable.



Figure 8-3 Material Importation Access arrangements

8.11. Documentation

8.11.1. Traffic Control Plans

All Traffic Control Plans must be designed in alignment with the CTMF (Appendix G of the SM EIS) and prepared in accordance with the Procedures for Use in the preparation of a Traffic Management Plan (RTA 2001). Traffic Control Plans are diagrams that illustrate the signs and devices that will be installed to warn traffic, pedestrians and cyclist around or past, or if necessary, through the work site. These plans will address the specific control measures required to safely work on the road during a single shift period.

Contractors will submit site specific TCP's (not Traffic Control at Work Sites generic plans) for all road occupancies which form part of the project Works. These will be prepared by a person qualified in the "Prepare a Work Zone Traffic Management Plan and Design and Inspect Traffic Control Plans" course or equivalent and who has at least 5 years relevant experience. The TCPs will include:

- Types and locations of permanent regulatory (R series) and warning (W series) signs;
- Types and locations of temporary signs (T series) including advance warning signs and variable message signs (VMS);
- Locations of permanent and temporary traffic signals;
- Locations of any required Traffic Controllers;
- Locations and lengths of taper and safety buffer areas;
- Locations of safety barrier systems including end terminals;
- Pedestrians and cyclist paths;
- Locations of entry and exit gates to work areas, individually numbered and signposted;
- Details of access to adjoining properties, car parking areas, and side roads;
- Pavement marking details, including types of delineation required, turning arrows, stop/holding lines and other road markings, types and positions of raised pavement markers and other delineation devices; and
- Location of temporary lighting, if required.

A TCP can only be prepared by a person who has undertaken and passed the TfNSW training course and holds a current accreditation. All traffic control plans will be implemented by suitably qualified personnel as per the authorised TCP for the stage of the works.

In accordance with the Appendix G of the SM-WSA EIS, Documents to be referenced in the preparation of TCPs include:

- Australian Standard AS1742.3 – Manual of uniform traffic control devices, Part 3, traffic control devices for works on roads.
- Roads and Maritime Services NSW – Traffic Control at Worksites Technical Manual
- Principal’s General Specifications – Traffic and Transport Management.
- Relevant Austroads Guides.
- TfNSW Supplements to Austroads and Australian Standards.
- Sydney Metro Principal Contractor Health and Safety Standard.

8.11.2. Vehicle Movement Plans

All Vehicle Movement Plans must be designed in alignment with the CTMF (Appendix G of the SM EIS). Site specific VMPs will be developed prior to implementation for every active site compound and site gate. Wherever practicable, ‘left in, left out’ (LILO) movements only will be permitted to and from work sites. Where LILO is not practicable, additional controls will be implemented to manage the safe access and egress from the site gate. These controls may include, but are not limited to:

- Roundabouts;
- Traffic Signals;
- Traffic Controller (Gatekeeper);
- Controlled crossing points;
- Advice and directional signage;
- Each individual VMP will nominate the following information;
- Site gate / Compound I.D. (alpha-numeric);
- UHF Channel;
- Preferred approach and departure routes;
- Any additional ‘Road Rules’ instruction relevant for the particular road; and
- The necessity for additional Traffic Control for specific vehicle or plant deliveries.

The VMPs will:

- Comply with the TfNSW G10 and G22;
- Show on the VMP; the vehicle entry and exit points into the work areas, and indicate clearly that these are the only points where interface with the through traffic is permitted;
- Consider the entire length of the route travelled by the construction or delivery vehicle, in line with chain-of-responsibility requirements; and

- For major haulage operations, the plan must show the entire travel route, and include detail of all key points that are remote from the work site, such as intersections, U-Turn facilities, holding areas, accesses, ramps and side roads. A VMP may be combined with or superimposed on a TCP.

Traffic management controls and measures will be applied to mitigate the risk of hazardous movements including restricting the practice of specific movements (e.g. turning bans); providing permanent major traffic controls and devices; installing TCPs; providing deceleration, acceleration and turning lanes outside of the through lanes; educating drivers; installing warning devices on vehicles; and implementing contingency plans for adverse weather / unplanned incidents / unforeseen circumstances.

8.11.3. Traffic Staging Plans

The Traffic Staging Plans must be designed in alignment with the CTMF (Appendix G of the SM EIS). The TMP will include a set of long-term Traffic Staging Drawings. These drawings will conform to the procedures outlined in TfNSW G10.

These drawings will comply with the requirements detailed in Section 2.4 of TfNSW G10 will be to scale and provide exact geographical references for:

- Lane configurations on existing and new (temporary and permanent) pavements, indicating any departures from existing traffic lanes;
- Intersection layouts and temporary traffic signals arrangements;
- Pedestrian and cyclist facilities;
- Bus stopping requirements where applicable;
- Work areas and exclusion zones, buffer zones etc.
- Access to adjoining properties, the site and side roads;
- Pavement markings and signage including advance warning and electronic signs;
- Drainage system, both temporary and permanent, including any pollution control measures;
- Utilities and their impact on the traffic staging;
- Locations of any required temporary structures such as retaining walls or the like;
- Street lighting, including temporary arrangements where required (refer to TfNSW G7 Clause 4.5);
- Impacts on existing traffic signals and staging of new traffic signal installation;
- New signage;
- Safety Barrier placement; and
- Portable VMS, VSLS and RASS positions.

If removal of pavement markings is required, the Traffic Staging Plans will provide details of the proposed methods for removal, the estimated durations to carry out the removal, and if necessary, any proposed measures to restore the road surface.

8.11.4. Governance and approvals

All aspects of traffic management will be coordinated by the "Western Sydney Transport and Roads Hub" which is a unit that has been created by Transport for New South Wales (TfNSW) to address coordination of transport and road issues in the Western Sydney area with particular regard to the immediate vicinity of the Airport Site.

The hub has executive sponsorship from TfNSW, Sydney Metro, Western Sydney Airport (WSA) and Liverpool City Council to provide leadership and "best for all" decision making.

Within the hub the Roads Approvals Working Group ensures that all road works approvals for temporary and permanent roads are in line with the program level coordination and decision making provided by the hubs Transport Steering Committee.

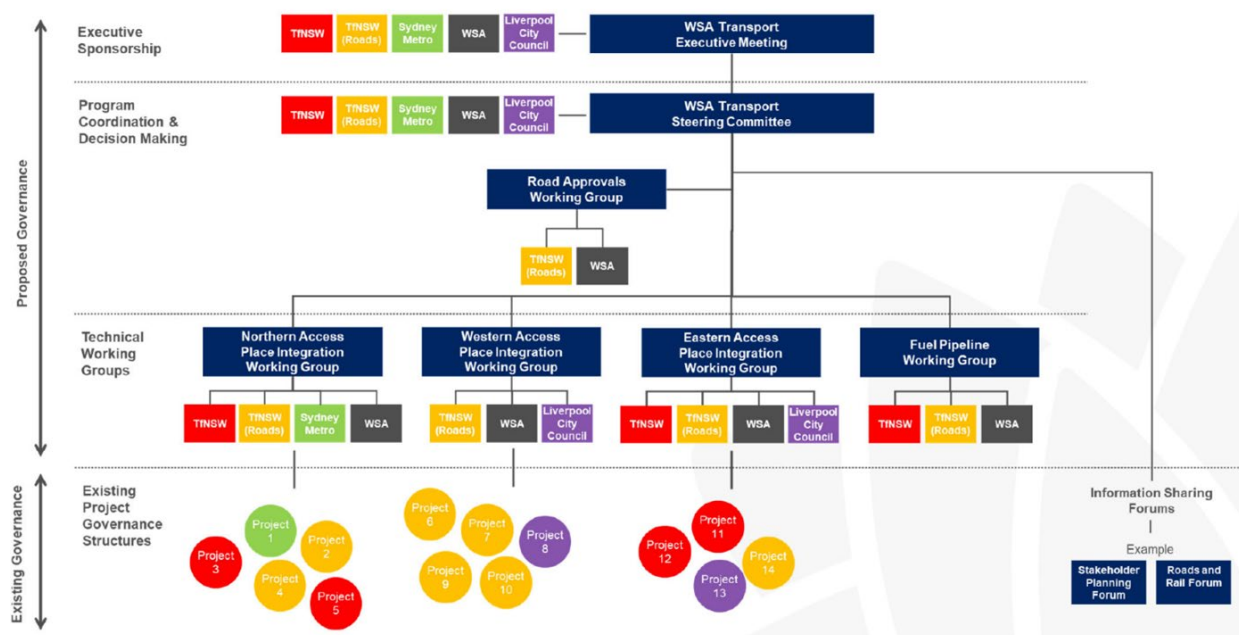


Figure 8-4 Structure of the Western Sydney Transport and Roads hub Technical working groups have been formed to address project interfaces associated with particular locations ensuring that overall objectives are met by integrating permanent and temporary transport solutions.

While individual projects hold Traffic and Transportation Liaison Groups (TTLG's) where stakeholders such as, emergency services, bus operators, schools, local councils, community members etc are consulted prior to the approval or implementation of traffic control measures, TTLG meetings are coordinated by the hub to minimise stakeholder "fatigue" due to the number of projects in the vicinity of the airport development all requiring input from the same stakeholders.

Through the coordination provided by the Western Sydney Transport and Roads Hub the cumulative impact of the numerous transport and roads infrastructure projects in the vicinity of the airport development can be minimised, ensuring that the road networks integrity and capacity is maintained and suitable levels throughout the initial construction phase of the Western Sydney Airport and its supporting infrastructure.

8.12. Road Safety Audit

An independent Road Safety Audit must be undertaken to assess the safety performance of new or modified local road, parking, pedestrian and cycle infrastructure to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management.

The audit must be undertaken by an appropriately qualified (currently registered on the NSW Register of Road Safety Auditors) and experienced person during detailed design development and traffic management plans (audit of plans), and prior to opening (pre-opening audit).

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

9. Environmental roles and responsibilities

The key environmental management roles and responsibilities for the construction phase of the work are detailed in the SM CEMF (Section 3.15).

Responsibilities specifically relating to Traffic and Access are outlined in Appendix G (CTMF) of the SM-WSA EIS.

Sydney Metro will ensure enough resources are allocated on an ongoing basis to ensure effective implementation by both Sydney Metro and the responsible contractors.

10. Environmental inspection, monitoring and auditing

Monitoring, inspection and auditing will be undertaken to measure effectiveness and facilitate continuous improvement of traffic and access management.

General environmental monitoring, inspection and auditing requirements are summarised in Section 3.16 of the CEMF.

A summary of the environmental inspection, monitoring and auditing requirements is provided below, with details of how they apply to traffic and access management where applicable.

10.1. Environmental inspections

10.1.1. Sydney Metro environmental inspections

Environmental site inspections at active, exposed work sites will be undertaken by the Sydney Metro Environment Manager (or delegate) on a weekly basis to evaluate the effectiveness of environmental controls implemented by the contractor. The Site Environmental Inspection Checklist included as Appendix K of the SEMF in with an accompanying photographic style inspection report.

For the purpose of this CEMP, a monthly site inspection is undertaken by the Contractor Safety team and includes a visual inspection of all traffic and access management control measures including but not limited to the following:

- Adherence to the designated traffic access and transport routes (this may include observation from strategic locations); and
- Ensuring that all vehicle movements (including contractors and sub-contractors) are compliant with the approved routes.

The findings of the inspections will be recorded in a Sydney Metro Site Environmental Inspection report.

10.1.2. Contractor environmental inspections

Regular site inspections will be undertaken to monitor compliance with this Plan at active, exposed work sites. Inspection results will be recorded, and the inspection log made available to the Infrastructure Department upon request. Any improvement opportunities or non-conformances will be reported in the monthly report and discussed at the Environmental Coordination meeting. More frequent site inspections by the person accountable for traffic and access issues will be conducted onsite when activities with many vehicle movements are underway.

The Contractor's Environmental Manager and/or Environmental Coordinators will undertake inspections in accordance with the Contractor Environmental Management Framework. The Contractor's Environmental Coordinators will record inspection findings on an inspection checklist form. If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.

10.1.3. Pre-start inspection

Prior to the commencement of works on each shift, an inspection will be carried out by the relevant contractor and will include a check of relevant environmental controls and resources required to ensure effective operation and maintenance. This is to include an inspection of relevant traffic and access management mitigation measures and controls where applicable. Works are not to commence unless inspections are found to be satisfactory.

10.2. Construction site traffic Inspections

General construction site traffic management requirements are set out in Appendix G (CTMF) of the SM EIS.

10.2.1. Frequency of inspections

For long-term works, that is, longer than one shift, traffic management road inspections will be carried out regularly by the contractor's works supervisor to ensure the safe movement of traffic and the protection of persons and property through and/or around the construction site.

Inspections will ensure that all signs and devices are properly located, oriented and maintained in an effective condition, and that the layout is satisfactory and not confusing to motorists or pedestrians. Records will be maintained by the contractor of all traffic guidance facilities and any adjustments or changes made to such facilities, together with dates and times the facilities were installed, varied and removed.

Inspection reports recording dates and times of inspections of the traffic management facilities are to be recorded on a suitable pro-forma and made available for inspection. Incidents are to be reported, investigated and actioned in accordance with the Sydney Metro Principal Contractor Health and Safety Standard.

10.2.1.1. Inspections of roadwork traffic management schemes

The requirement to undertake inspections of traffic control measures is outlined in Section 6.1 of the Traffic Control at Worksites Technical Manual (TfNSW) and Appendix A of Australian Standard AS 1742.3 – Manual of uniform traffic control devices – Traffic control for works on roads. There are three main types of inspections to be carried out:

- Pre-start and pre-close-down inspections of short-term traffic control.
- Weekly inspections of long-term traffic control.
- Night inspections of long-term traffic control.

Appendix E of the Traffic Control at Worksites Technical Manual provides inspection checklists and forms that can be used for all inspections, whether short term, long term or night. The responsibility and frequency of the inspections required is provided in Section 6.1 of the Traffic Control at Worksites Technical Manual.

10.3. Traffic and access monitoring

General environmental monitoring requirements are set out in the AEPR which include the following:

- Monitoring must take place under the direction of an appropriately qualified person; and

- The results of the monitoring must be kept in a written record.

Specific traffic and access monitoring requirements, including timing and responsibilities, are included in Table 10-1 below.

Table 10-1 Traffic and access monitoring requirements

Reference	Requirement	Timing	Responsibility
TA_M_01	Monitoring the effectiveness of traffic control measures on site by way of observation of site traffic speed and adherence to designated site traffic routes (the latter may require off-site surveillance). If vehicles to and from site are not adhering to traffic and access requirements, consideration should be given to improvement of mitigation measures and controls, including upgrade of signage, clearer signage, training etc.	Pre-construction and during construction	All Contractors and Metro.

Where a non-conformance is detected, the non-conformance process described in Section 3.17 of the SM CEMF will be implemented.

Monitoring data and inspections will be used as a basis to assess the implementation of the objectives and determine if the targets have been achieved. Where an issue is identified additional measures considered. This may require:

- Review and modification of work practices as appropriate; and/or
- Provide training to relevant workforce or contractors.

10.4. Environmental auditing

Refer to Section 3.16 of the SM CEMF for environmental auditing requirements, including internal audits, independent audits and audits to be undertaken by contractors.

10.5. Environmental reporting

General environmental reporting requirements are detailed in Section 3.18 of the SM CEMF. In addition, a summary of reporting requirements required under this Traffic and Access CEMP (including environmental reporting requirements required under the Airport Plan specific to the Traffic and Access CEMP) is provided in Table 10-2.

Table 10-2 Traffic and access management reporting

Action	Scope	Timing / Frequency	Responsibility
Annual reporting	Unless otherwise agreed in writing by an Approver, an annual report will be prepared in relation to compliance with this Traffic and Access CEMP (Condition 39). In accordance with Condition 39 (2) WSA will publish each of the annual reports on its website within three months of the end of the period in respect of which the report was prepared, with evidence providing proof of the date of publication to the Infrastructure Department with a copy to the Environment Department.	As required	Sydney Metro Environment Manager

Action	Scope	Timing / Frequency	Responsibility
	The report must remain on the website for a period of at least 12 months.		
Recording of exceptional incidents	Recording in a log book any exceptional incidents that cause excessive traffic delays on local road network and the action taken to resolve the situation.	As required	All Contractors Sydney Metro
Reporting pollution incidents (required under the Airport Act)	Report pollution incidents resulting in offsite impacts to the NSW Environment Protection Authority – refer to WSA Environmental Non-conformance Classification and Reporting Procedure	As required	All Contractors WSA
General environmental inspection	Inspection of environmental management controls on site and sighting of site documentation as required by the contractor's CEMP	Weekly	Sydney Metro
General environmental inspection	Inspection of environmental management controls and site documentation for contractor works (as required by the contractor's CEMP).	As per Contractor environmental management system (at least weekly)	All Contractors
Complaints reporting	Recording of complaints and stakeholder interactions	As required	Sydney Metro Environment Manager Sydney Metro Community and Stakeholder Manager All Contractors
Reporting of nonconformances and improvement opportunities	The management and reporting requirements of environmental nonconformances and improvement opportunities will be in accordance with Section 8 of the SEMF.	As required	Sydney Metro All Contractors

10.6. Review of approved plans

Sydney Metro will review each approved plan at least every five years (from the date of approval) as required by the Airport Variation Plan. A review will also be completed annually to ensure that it continues to meet the approval criteria. Details of the review will be included in the annual report. If the review identifies areas where the plan does not continue to meet the approval criteria for that plan, a variation to the approved plan will be prepared and submitted for approval. Once the reviewed plan is approved by the Approver, this reviewed plan will be the Approved Plan.

Sydney Metro may initiate reviews of Approved Plans at other times in response to improvement opportunities, non-conformances, and changes to scope of work or construction methodology or alterations to legal or contractual requirements.

Any changes identified and implemented through the variation and review process identified above will be communicated to relevant contractors through re-issue of the revised Sydney Metro Approved Plan and subsequent training and awareness.

10.7. Environmental incidents and complaints management

The management and reporting of environmental incidents shall be undertaken by the appropriate person as detailed in Section 3.12 of the CEMF. All communications and complaints management will be implemented and managed in accordance with Section 4.2 and 4.3 of the SM CEMF, section 8 of the SEMF and the Community communications strategy.

11. Competence, training and awareness

To ensure this Traffic and Access CEMP is effectively implemented, each level of management is responsible for ensuring that all personnel reporting to them are aware of the requirements within.

The Sydney Metro Environment Manager will coordinate the necessary and relevant environmental training in conjunction with other training and development activities. All competence, training and awareness requirements will be implemented as detailed in Section 3.11 of the SM CEMF.

12. References

Commonwealth Department of Infrastructure and Regional Development, 2016. Airport Plan (December 2016)

Commonwealth Department of Infrastructure and Regional Development, 2016. Western Sydney Airport Environmental Impact Statement, 2016

Construction Traffic Management Framework, 2021 SM - WSA