Construction Traffic Management Plan – Luddenham Road Gates 4&5

Western Sydney Airport – Surface and Civil Alignment Works

Project Name	Sydney Metro – Western Sydney Airport, Surface and Civil Alignment Works
Project Number	N81150
Revision Date	4 May 2023
Revision	05
Document Number	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005

Document Approval

Rev.	Date	Prepared by	Reviewed by	Approved by	Remarks
A	27/10/2022	[redacted]	[redacted]	[redacted]	External review
B	2/12/2022	[redacted]	[redacted]	[redacted]	For approval
C	14/12/2022	[redacted]	[redacted]	[redacted]	For approval
D	14/02/2023	[redacted]	[redacted]	[redacted]	For approval
01	22/02/2023	[redacted]	[redacted]	[redacted]	Issued for Construction
02	20/03/2023	[redacted]	[redacted]	[redacted]	External review
03	14/04/2023	[redacted]	[redacted]	[redacted]	For approval
04	17/04/2023	[redacted]	[redacted]	[redacted]	For approval
05	4/5/2023	[redacted]	[redacted]	[redacted]	For approval
Signatures	[redacted]				

Distribution and Authorisation

Document Control

The CPBUI JV Project Director is responsible for ensuring this plan is reviewed and approved. The Construction Manager is responsible for updating this plan to reflect changes to the project, legal and other requirements, as required.

The controlled master version will be maintained on Teambinder. All circulated hard copies are deemed to be uncontrolled.

Amendments

The implementation of this Plan is under the authority of the CPBUI Delegated Authority Matrix. All Contract personnel will perform their duties in accordance with this Plan, supporting plans, and related procedures.

Revision Details

Rev.	Details
A	For external review
B	For approval
C	For approval
D	For approval
01	Issued for Construction. All review comments closed by Sydney Metro
02	Reissued due to access gate and temporary protection for formwork for pier 43 changes
03	For approval
04	For approval – changes to the last revision based on comments received
,05	For approval – changes to the last revision based on comments received

Table of contents

List of figures

List of tables

Abbreviations and definitions

Table 1 Abbreviations and definitions

Abbreviation	Description
CJP	Customer Journey Planning (formerly SCO)
CPB	CPB Contractors Pty Ltd
CPBUI JV	CPB Contractors Pty Limited and United Infrastructure Pty Limited Joint Venture
CTMF	Construction Traffic Management Framework (an appendix of the EIS)
CTMP	Construction Traffic Management Plan
HML	Higher Mass Limit
HVNL	Heavy Vehicle National Law
IAP	Intelligent Access Program
LTC	Local Traffic Committees
OSOM	Oversize and/or over mass
PedMP	Pedestrian Management Plan
PMP	Project Management Plan
PMS	Project Management System
PkMP	Parking Management Plan
QR	Quick Response
RAV	Restricted Access Vehicle
ROL	Road Occupancy Licence
RSA	Road Safety Audit
SBT	Sydney Metro – Western Sydney Airport, Station Boxes and Tunnelling package
SCAW	Western Sydney Airport Surface and Civil Alignment Works package
SCO	Sydney Coordination Office (now CJP)
SSTOM	Sydney Metro – Western Sydney Airport, Stations, Systems, Trains, Operations and Maintenance package
SWTC	Scope of Work and Technical Criteria
TCG	Transport Coordination Group
TCP	Traffic Control Plan now known as Traffic Guidance Scheme
TfNSW	Transport for New South Wales
TGS	Traffic Guidance Scheme (formerly TCP)
TTLG	Traffic and Transport Liaison Group
UI	United Infrastructure Pty Limited
VMP	Vehicle Movement Plan
VMS	Variable message signs
WSA	Western Sydney Airport
WSI	Western Sydney International

Part A Overview

1. Introduction

1.1. Project Scope

The SMWSA Project involves the construction and operation of a new 23km metro rail line that extends from the existing Sydney Trains suburban T1 western line (at St Marys) in the north to the Aerotropolis (at Bringelly) in the south. The alignment includes a combination of tunnels and civil structures, including viaducts, bridges, and surface and open-cut troughs between the two tunnel sections. The Project also includes six new metro stations, and a stabling and maintenance facility and operational control centre at Orchard Hills. The SCAW package is the second major contract package to be procured for the Project. The successful and timely completion of the SCAW package is critical to the subsequent construction activities and ultimate completion of the entire Project.

1.1.1. Surface, Civil and Alignment Works (SCAW) scope

The scope for the SCAW package includes approximately 10.6km of alignment up to the underside of track formation from Orchard Hills to the WSI airport. This includes approximately:

- 3.6km of viaduct
  - 400m of viaduct over Blaxland Creek
  - 660m of viaduct over the Patons Lane area and un-named creek
  - 2.5km of viaduct in the Luddenham Road area including across the Warragamba pipeline, at Luddenham Station, across Luddenham Road and across Cosgrove Creek
- 205m of bridges
  - An over rail bridge, approximately 180m long, over the proposed M12 Motorway
  - An over rail bridge, approximately 25m long, over the drainage swale on the WSI airport site
- 6.9km of at-grade alignment
  - 600m at Orchard Hills, south of Lansdowne Road
  - 1.6km alongside the stabling maintenance facility in Orchard Hills
  - 900m to the north of the Warragamba pipelines
  - 1.1km north of the proposed M12 motorway
  - 1.4km south of the proposed M12 Motorway on Elizabeth Derive
  - 1.3km within the Airport site from the northern boundary to the Airport Business Park Station
- Temporary and permanent access roads.

The scope of works can be seen on Figure 1, noting that the tunnel and station works are by others.

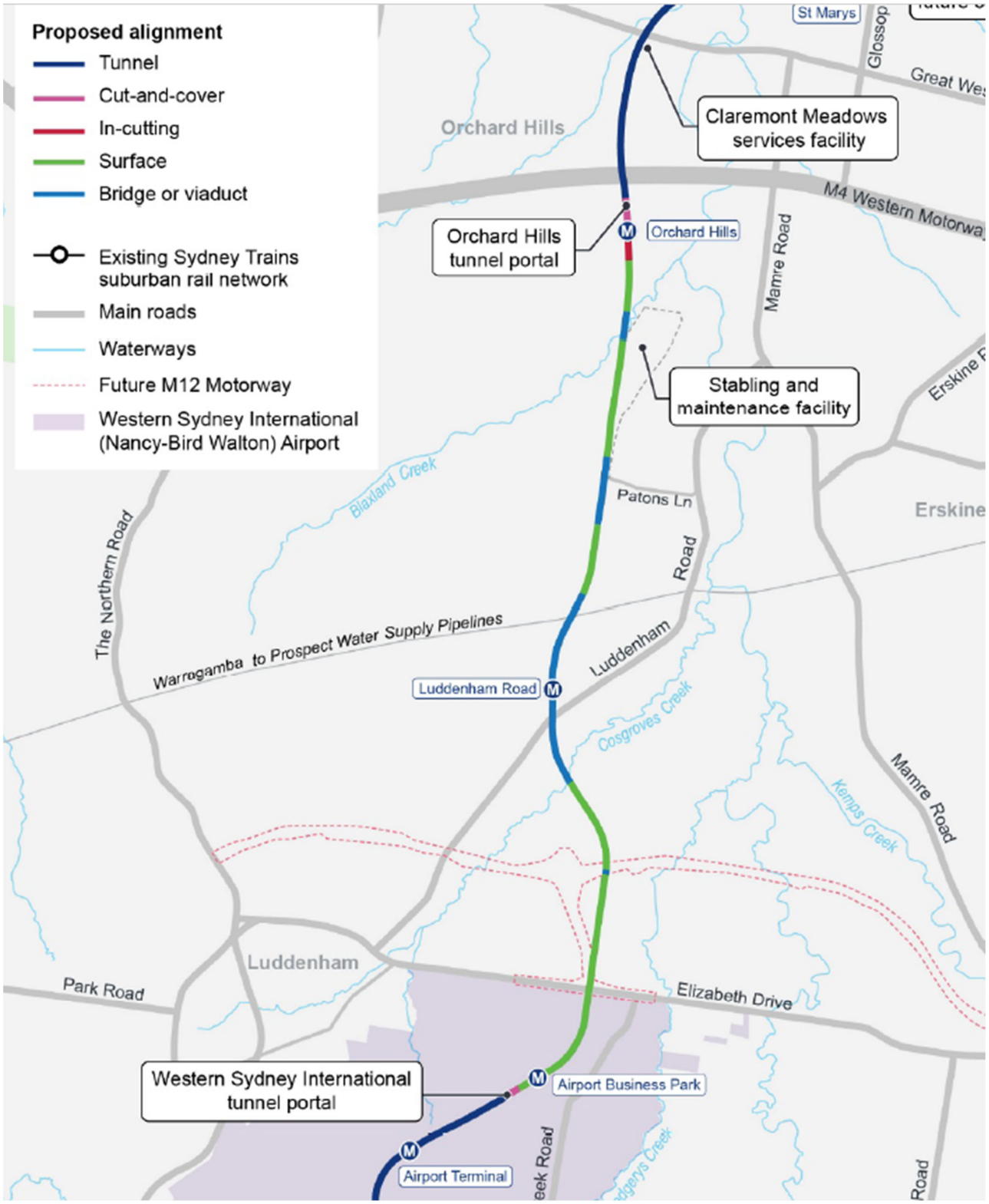


Figure 1: Surface Civil and Alignment Works

1.2. Plan Purpose and Objectives

The Luddenham Road Construction Traffic Management Plan Gates 4&5 (CTMP or this plan) has been developed by CPB Contractors, United Infrastructure Joint Venture (CPBUIJV) to identify the traffic management measures at the Luddenham Road worksite for the construction of the acceleration and deceleration lanes for Gate 5 and the subsequent operation of the gates off Luddenham Road associated with the Sydney Metro Western Sydney Airport Surface Civils and Alignment Works (SCAW works).

Changes to the previously approved CTMP for these gates are:

- Gate provided to access the work site behind the barriers
- Installation of further barriers north of the Gate 5 deceleration lane for temporary pier formwork protection
- Maintenance of barriers for temporary pier formwork protection until the formwork is removed

The plan sets out the traffic management initiatives that will be deployed to minimise disruption and ensure the safety of the wide range of stakeholders potentially affected by the SCAW works including but not limited to motorists, pedestrians, cyclists, public transport users, local residents, property owners, business owners and workers/ staff.

This plan has been prepared in accordance with the Construction Traffic Management Framework, SSI 10051 Planning Approval Condition E103 and will be submitted to the Planning Secretary of the NSW Department of Planning and Environment for information prior to the commencement of activities noted in the CTMP.

The key objectives of this plan are to ensure:

- The provision of a safe environment for road users, pedestrians, cyclists and workers
- Any impact on road users is kept to a minimum
- Access is maintained for the local community, transport operators and commercial developments
- Works are staged on key parts of the network to maintain levels of service
- The SCAW package is represented as a proactive member of relevant local traffic coordination groups
- Road users, local businesses, local Councils, Emergency Services, stakeholders and local communities are informed to changed traffic conditions, and

There is sufficient advance warning of changes to normal traffic conditions.

2. Locality and existing conditions

The site is located on the eastern and western sides of Luddenham Road, refer to Figure 2.

Figure 2: Luddenham Road access points

The road network surrounding the access points are as noted on Figure 3.

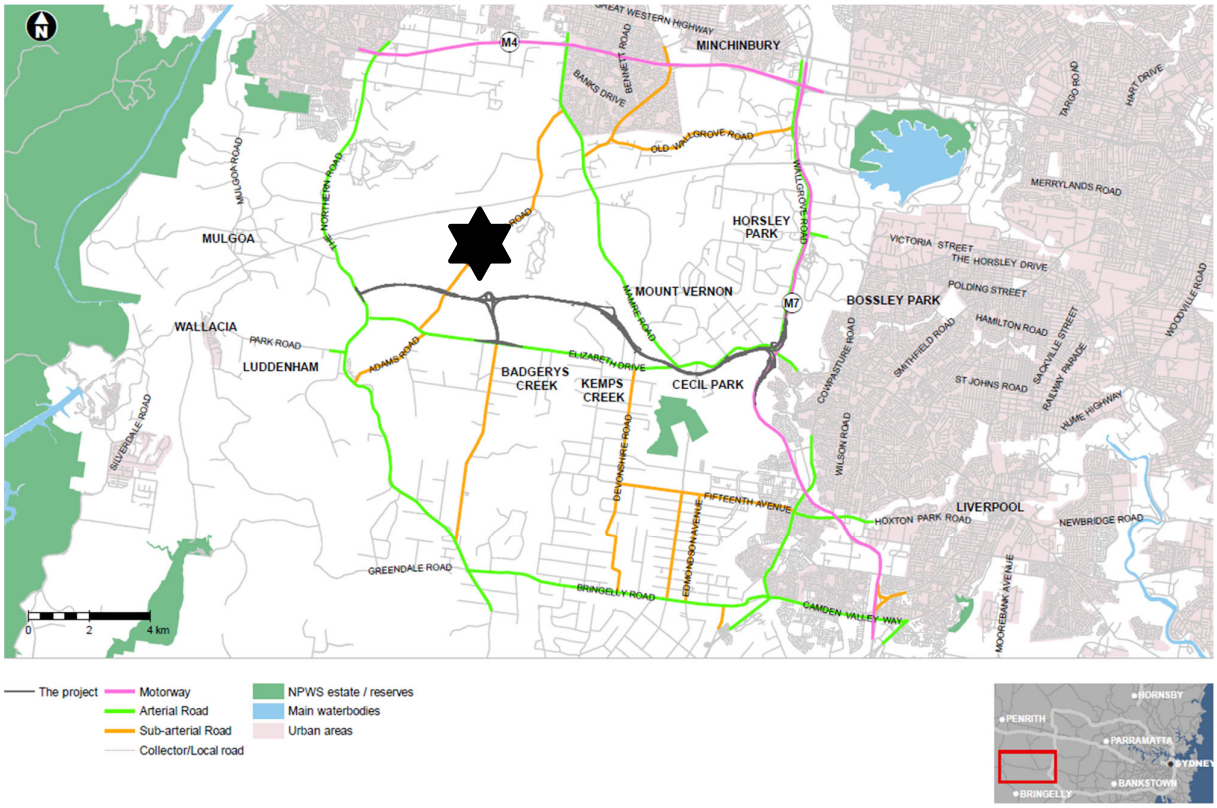


Figure 3 Road network surrounding the project

2.1. Luddenham Road, Luddenham

Luddenham Road is a regional road. Regional roads typically fall under council care with control of the road exercised between Council and TfNSW with TfNSW agreement required for any regulatory changes. Luddenham Road runs in a north-south direction. Luddenham Road terminates to the north at Mamre Road and to the south at Elizabeth Drive. It has a speed limit of 80km/hr near the work area. There is no on street parking along Luddenham Road. There are no existing footpaths or off road cycle facilities along Luddenham Road, refer to Figure 4.

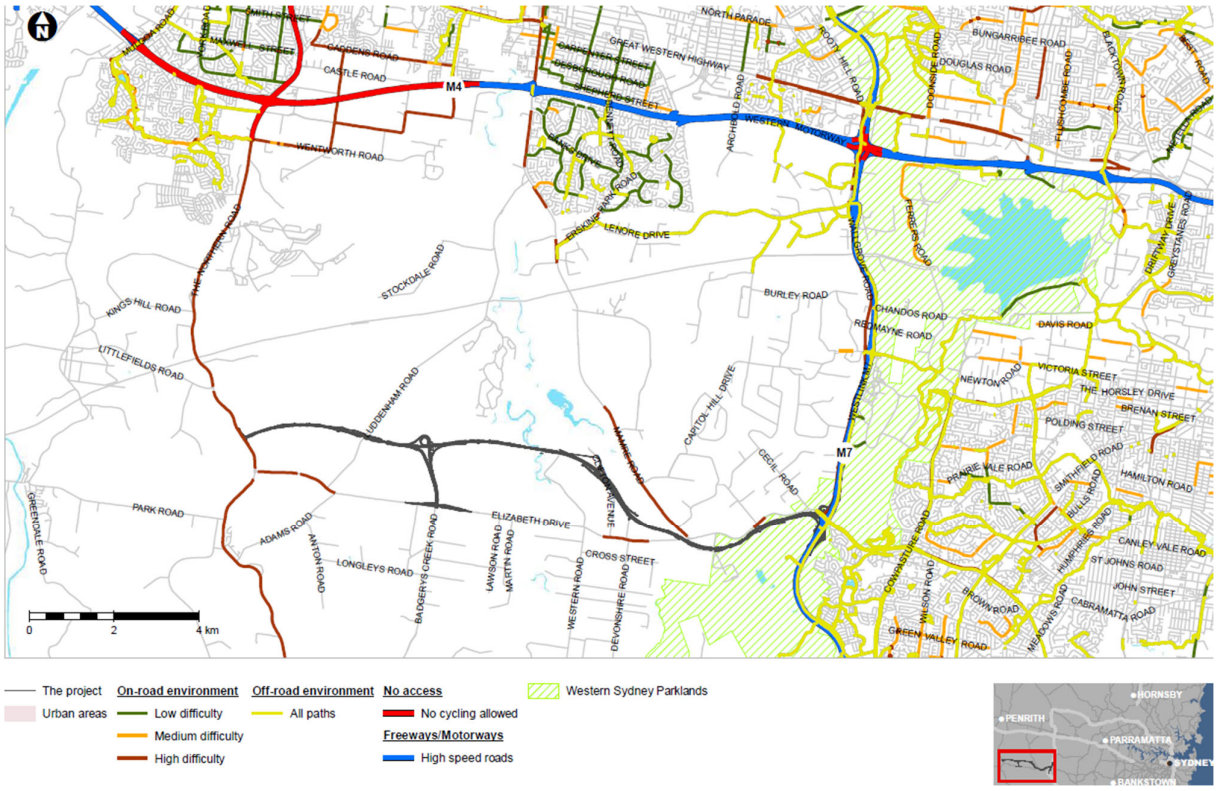


Figure 4: Existing cycle network

However, a small section of on road cycling facilities are provided adjacent to Gate 4 (northbound only), refer to Figure 5.

Figure 5: Gate 4 entry with on-road cycle route

Two school buses use Luddenham Road one runs in the morning and the other in the afternoon.

3. Site early works

Duration: approximately 2 months

Timing: April 2023 to May 2023 (8 weeks)

3.1. Works required

Works to be undertaken during the site early works predominantly relate to the importation of materials to allow the commencement on the internal haul roads. Other works to be undertaken include:

- Installation of fencing around the site – Gate 5
- Clearing and grubbing including site levelling – Gate 5
- Installation of environmental controls within the site including run off protection – Gates 4&5
- Installation of site services – Gate 5
- Site investigation works.
- Construction of internal access roads – Gates 4&5
- Installation of site sheds and amenities – Gate 5
- Earthworks including stockpiling – Gates 4&5
- Acceleration and deceleration lane on Luddenham Road for Gate 5
- Commencement of pier works.

Works will generally be undertaken between the hours of 7AM-6PM Monday to Friday and 8AM-1PM Saturday,

3.2. Operating conditions

Vehicles will enter and exit Gate 4 on the western side of Luddenham Road Drive via the existing seagull treatment, refer to Figure 6, which allows for all movements into and out of the site. This seagull treatment was installed by others.

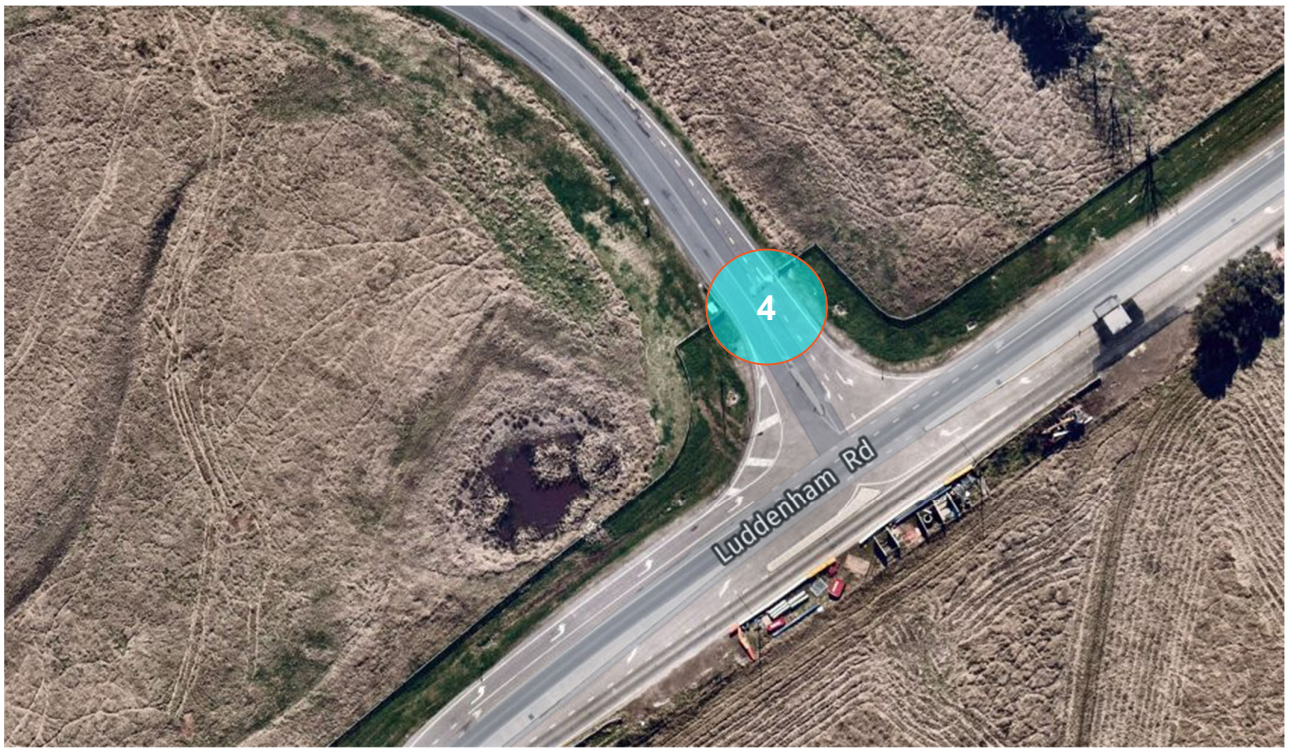


Figure 6: Luddenham Road access

Access into the site during the works is proposed via a new access point on Luddenham Road. This gate will operate for the duration of the construction of the acceleration and deceleration lanes – once these works are completed, the driveway for Gate 5 will be used. In the initial stages of the construction, access and egress will operate with all movements allowed. Once the driveway access is completed the access will cater for left in/ left out only with acceleration/ deceleration lanes to be provided, refer to Figure 7. A signalised intersection will be constructed by others and is shown for information only.

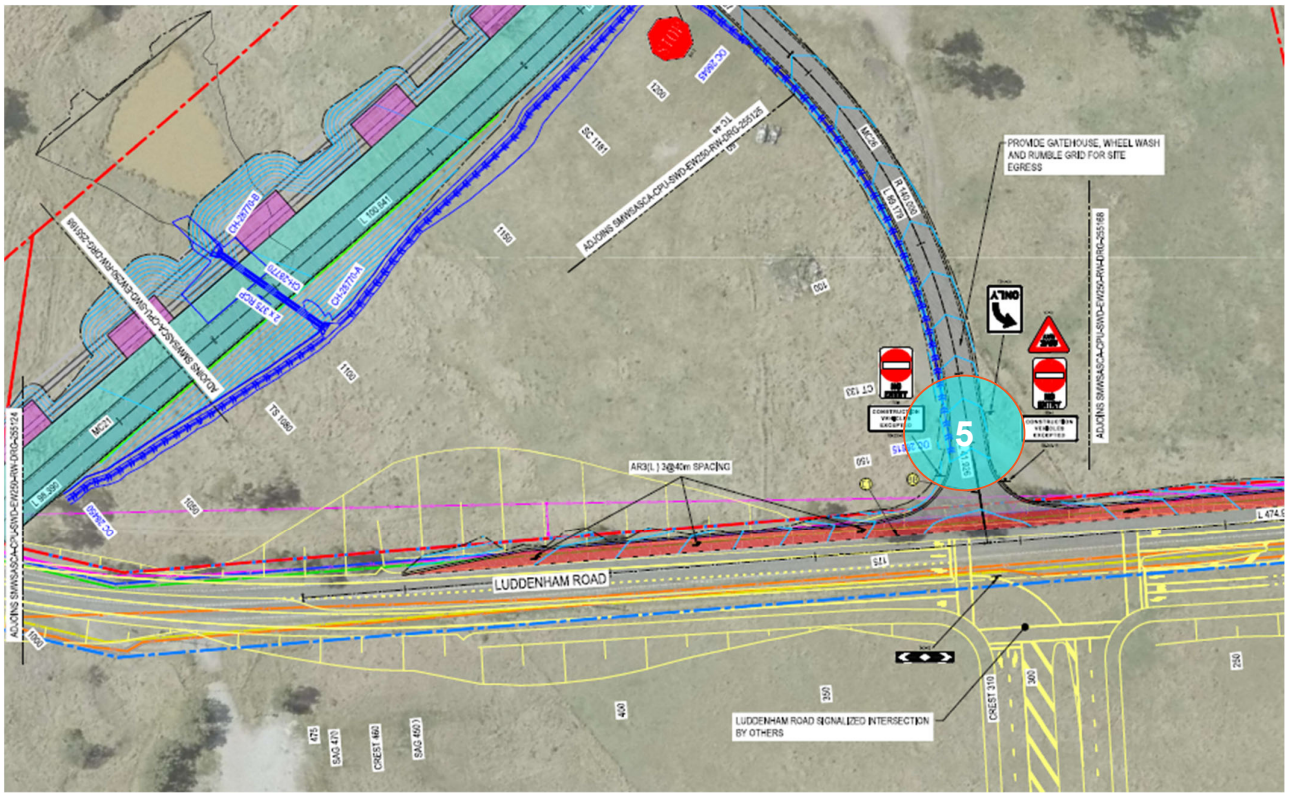


Figure 7: Proposed acceleration and deceleration lanes at Gate 5

3.2.1. Impact on traffic flow

3.2.1.1. Gate 4

There will be 10 truck and dog vehicles per day for the transportation of materials with a further 5 light vehicle per day. Based on a standard 11 hour day, this would mean 1 heavy vehicles per hour with light vehicle movements generally taking place prior to the commencement of the work day, lunch time and at the end of the work day. All movements will be allowed at Gate 4. Drivers will be instructed to only turn right out of site when no heavy vehicles are using the deceleration lane into Gate 4 to ensure that appropriate sight distance is maintained.

3.2.1.2. Gate 5

There will be 10 truck and dog vehicles per day for the transportation of materials with a further 5 light vehicles per day. Based on a standard 11 hour day this would mean 1 heavy vehicles per hour with light vehicle movements generally taking place prior to the commencement of the work day, lunch time and at the end of the work day. All movements into and out of the site will be allowed. . During the works on Luddenham Road, a stop slow will be in place to facilitate vehicle access and egress.

To undertake the works associated with the acceleration and deceleration lane construction it is proposed to install barriers and adjust the line marking locally. During non-work hours it is proposed to reduce the speed on Luddenham Road to 60km/hr, refer to Figure 8 When workers are on site, typically between 0700 and 1800 Monday to Friday and 0700-1300 Saturdays, it is proposed to reduce the speed limit to 40km/hr. The proposed barrier layout drawings are provided in Appendix D.

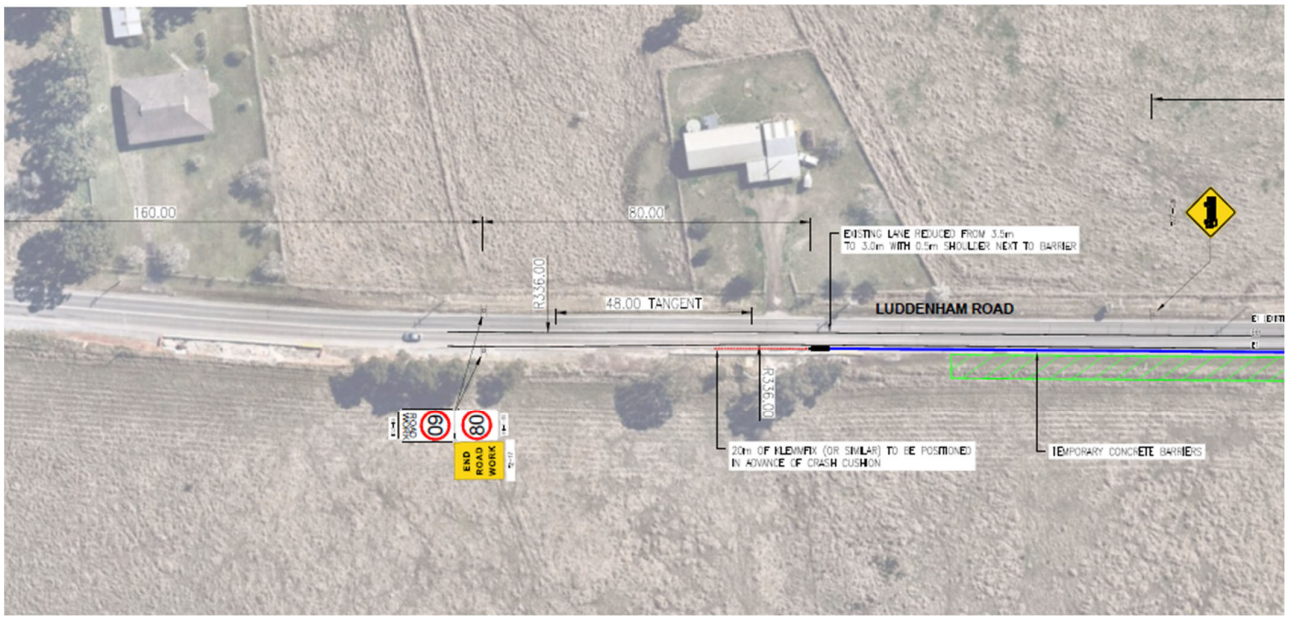


Figure 8: Proposed layout with reduced speed limit

A new gate is also proposed on Luddenham Road at an existing access point on Luddenham Road, as shown on Figure 9 and

Figure 9: Luddenham Road existing access

To provide protection of the viaduct pier formwork located to the north of the site (highlighted below), it is proposed to install barriers to the north of the previously approved barrier arrangement.

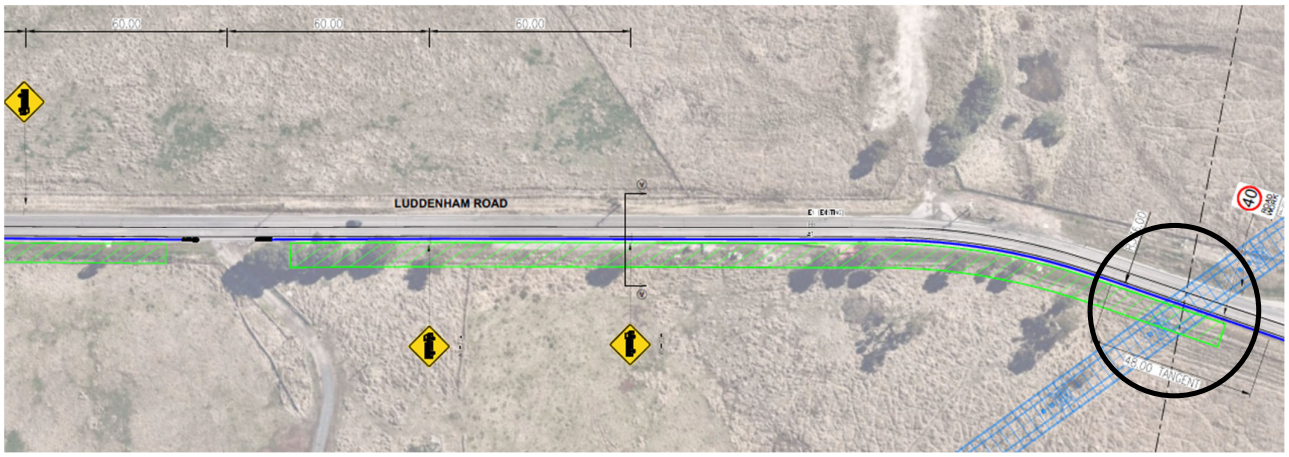


Figure 10: Barrier arrangement

Once the works on the acceleration and deceleration lanes are completed, the barriers at this work site will be removed other than the section of barrier provided for the pier formwork protection, refer to Figure 11

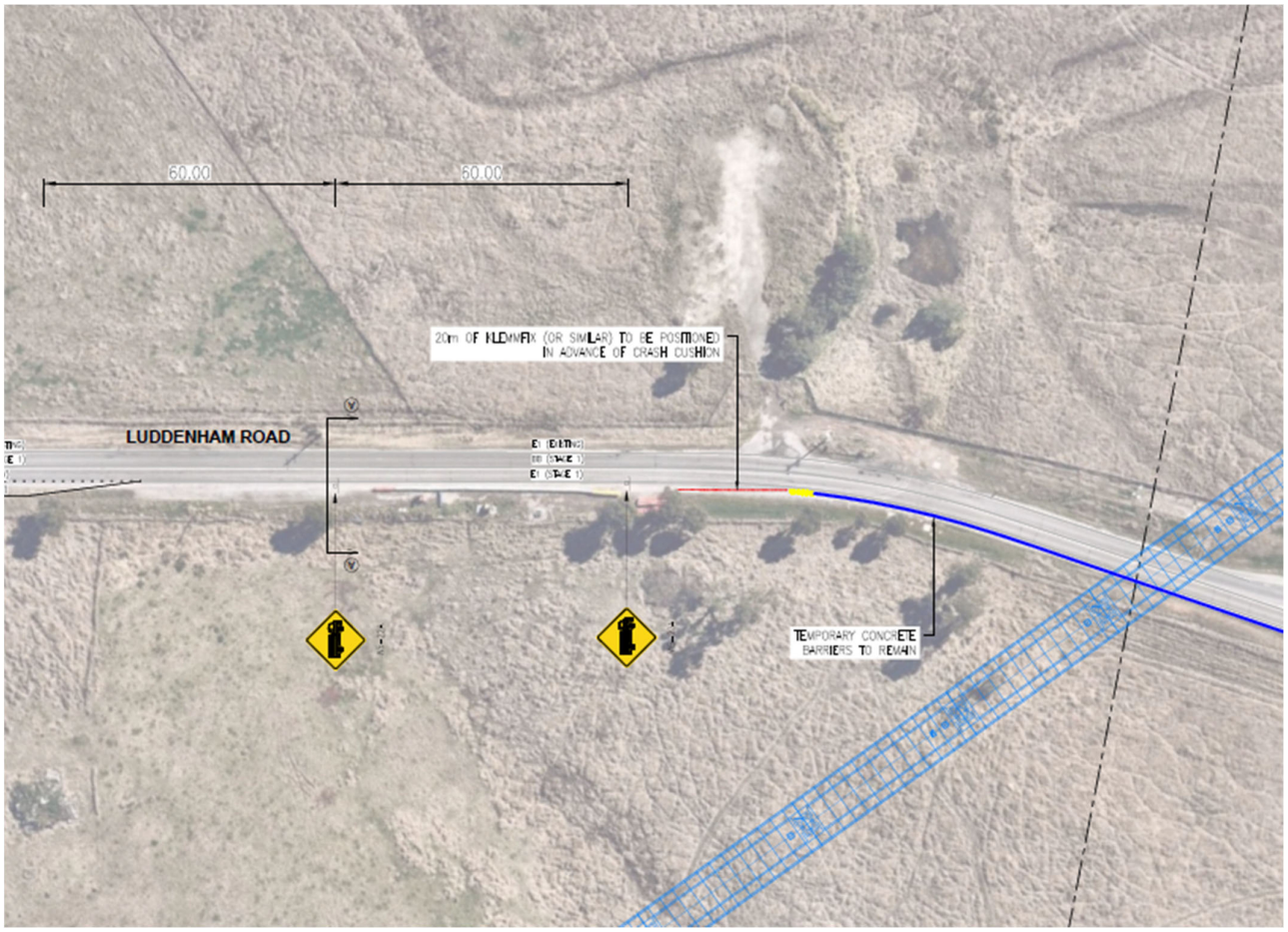


Figure 11: Pier temporary formwork protection barrier

3.2.2. Impact on public transport

There is no impact on public transport during these works as there are limited services that operate in the area, as noted in section 2.1. No bus stops or services will be affected by the works.

3.2.3. Impact on active transport users

There are no existing footpaths or cycles routes provided along Luddenham Road. There is a small section of on road cycling facility on the northbound carriageway, however this is only available for approximately 600m (300m either side of the entry point), refer to Figure 12. Heavy vehicle drivers will be instructed to provide priority to cyclists using this cycle lane.

Figure 12: On road cycle facility at Gate 4

3.2.4. Impact on property and utilities access

Access to residential-and commercial properties will be retained during the site establishment works and ancillary facilities (compounds) operations. Access for utility providers/ maintainers will not be impacted.

Any property access that is physically affected by the Project Works will be reinstated to at least an equivalent standard, in consultation with the landowner or alternative access provided in consultation with the landowner.

During construction, all reasonably practicable measures will be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses and affected properties. Disruptions will be avoided, where possible and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected residents, businesses and affected property owners and implemented before the disruption. Adequate signage and directions to businesses will be provided before, and for the duration of, any disruption.

Existing property access would be maintained at all times.

Any changes to access arrangements or alternative access that are necessary during construction will be done in with consultation with the landowner. Any changes to access will provide the same equivalent pre-existing level of access unless agreed to by the land owner. Property access that is physically affected by the project will be reinstated to at least an equivalent standard, in consultation with the landowner.

3.2.5. Cumulative impacts

There are a number of construction activities within the immediate area associated with services installation on Luddenham Road and M12 West haulage crossing and compound access. The EIS for the Sydney Metro Western Sydney Airport, Chapters 6 and 24 discuss the cumulative impacts of the various projects occurring within the vicinity of the Western Sydney Airport including:

- Western Sydney International Airport works and
- M12 Motorway works

The outcomes of that modelling and analysis notes:

> Aside for the cumulative impacts associated with the project, the road network impacted by the construction of the project is likely to experience growth in background traffic as a result of broader development of the Western Parkland City. This growth is anticipated to result in reduced performance at certain locations within the road network (even without the project and assuming there are no further upgrades to the network over this period, other than the approved projects).

SCAW will be undertaking works on Luddenham Road including roundabout construction and viaduct installation – both of which will be the subject of separate CTMPs.

Regular meetings are also being conducted with Endeavour Energy and the Luddenham Road Construction Group which includes all parties with works along Luddenham Road. Phone calls will be made to Endeavour Energy and the M12 a couple of days in advance so that we understand their program and they understand ours - Once that initial contact has been made there would be ongoing liaison within the construction and traffic control teams for the duration of the acceleration and deceleration lane construction.

3.3. Staff and labour parking

All vehicles associated with the works will park within the site.

3.4. Traffic Guidance Schemes

One traffic guidance scheme is required for the work site:

- Stop slow on Luddenham Road for barrier installation and removal
- Dynamic Work for line marking changes
- Stop slow on Luddenham Road for pavement tie in works and driveway works and delivery of materials to site

3.5. Required Council approvals

Penrith City Council and TfNSW are the approval authorities for works on Luddenham Road. CJP are the approvers of this CTMP.

4. Site main works

Duration: approximately 23 months

Timing: May 2023 -December 2024

4.1. Works required

Works to be undertaken during the site main works include:

- Viaduct construction including substructure and superstructure – a separate CTMP will be provided for the closure of Luddenham Road during superstructure works.
- Surface and viaduct substructure and superstructure works between Warragamba pipeline and Elizabeth Drive
- Roundabout construction - a separate CTMP will be provided for the staging of construction.

Works will generally be undertaken between the hours of 7AM-6PM Monday to Friday and 8AM-1PM Saturday.

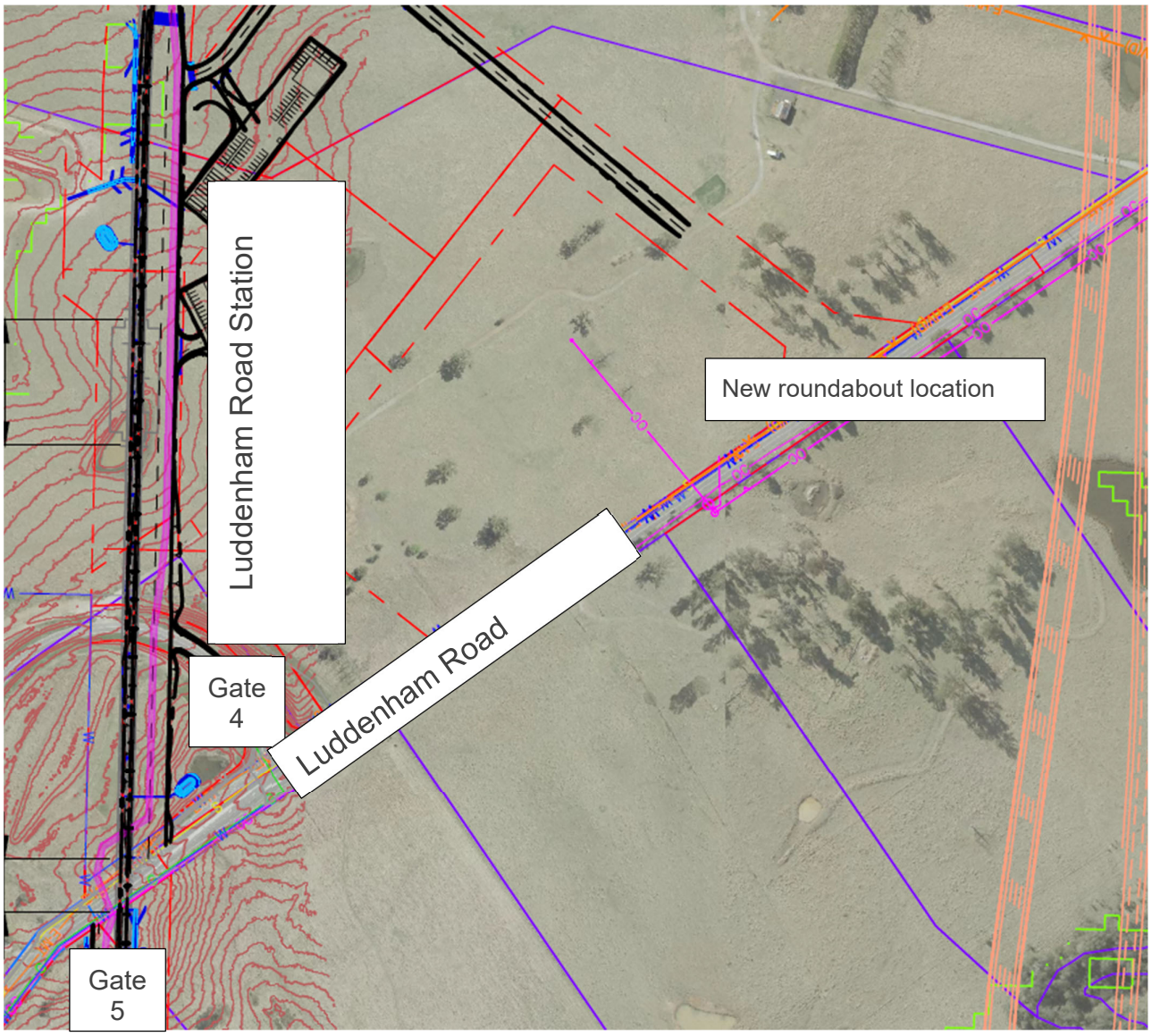


Figure 13: New roundabout location

4.2. Operating conditions

Vehicles will enter and exit the site via Luddenham Road as per the site early works phase.

4.2.1. Impact on traffic flow

The barriers installed for the temporary works associated with the pier formwork protection will remain in place and will be and removed, currently programmed, for January 2024.

The EIS indicative peak hour vehicle numbers associated with the site operations phase of works are provided in Table 2.

Table 2: EIS predicted vehicle numbers

	Vehicle Type	Peak construction movements[1]					
		AM PEAK[2]			PM PEAK[3]		
		IN	OUT	Total	IN	OUT	Total
Off airport construction corridor[4]	LV Staff	281	0	281	0	281	281
	LV Deliveries	4	4	8	4	4	8
	HV	29	29	58	29	29	58

CPBUI JV vehicle numbers are provided in Table 3 which provides the numbers for both gates (Gates 4&5 as combined totals). It should be noted that the bulk of the workforce will arrive to the site prior to 7AM and leave the site after 6PM.

Table 3: CPBUI JV vehicle numbers

	Vehicle Type	Peak construction movements[1]					
		AM PEAK			PM PEAK		
		IN	OUT	Total	IN	OUT	Total
Gates 4&5 Luddenham Road	LV Staff	10	0	10	0	10	10
	LV Deliveries	2	2	4	2	2	4
	HV	10	10	20	10	10	20

There will be heavy vehicle movements associated with the segment deliveries, material import and export of unsuitable material. Based on a standard 10 hour day there will be 10 heavy vehicles per hour outside of the AM and PM peaks with light vehicle movements generally taking place prior to the commencement of the work day and at the end of the work day. As noted the CPBUI JV vehicle numbers are below those predicted in the EIS. It should be further noted that the use of Performance Based Standard vehicles is being actively pursued by CPGUI JV – this would also reduce the number of heavy vehicles required for the transport task.

[1] Per hour
[2] AM peak as noted in the EIS 730-830AM
[3] PM peak as noted in the EIS 430-530PM
[4] Off airport includes Luddenham Road, Elizabeth Drive and Badgerys Creek Road sites

4.2.2. Impact on public transport

There is no impact on public transport during these works as there are limited services that operate in the area, as noted in section 2.1. No bus stops or services will be affected by the works

4.2.3. Impact on active transport users

There are no existing footpaths or cycles routes provided along Luddenham Road. There is a small section of on road cycling facilities provided for approximately 600m at Gate 4, refer to Figure 12. Heavy vehicle drivers will be instructed to provide priority to cyclists using this cycle lane.

4.2.4. Impact on property and utilities access

Access to residential-and commercial properties will be retained during the site establishment works and ancillary facilities (compounds) operations. Access for utility providers/ maintainers will not be impacted.

Any property access that is physically affected by the Project Works will be reinstated to at least an equivalent standard, in consultation with the landowner or alternative access provided in consultation with the landowner.

During construction, all reasonably practicable measures will be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses and affected properties. Disruptions will be avoided, where possible and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected residents, businesses and affected property owners and implemented before the disruption. Adequate signage and directions to businesses will be provided before, and for the duration of, any disruption.

Existing property access would be maintained at all times.

Any changes to access arrangements or alternative access that are necessary during construction will be done in with consultation with the landowner. Any changes to access will provide the same equivalent pre-existing level of access unless agreed to by the land owner. Property access that is physically affected by the project will be reinstated to at least an equivalent standard, in consultation with the landowner.

4.2.5. Cumulative impacts

There are a number of construction activities within the immediate area associated with services installation on Luddenham Road, M12 West minor interface works are located, refer to section 3.2.5 for the discussion from the EIS and the scope of works associated with the SCAW contract.

4.3. Staff and labour parking

All vehicles associated with the works will park within the site.

4.4. Traffic Guidance Schemes

No traffic guidance schemes are required for the work sites

4.5. Required Council approvals

Penrith City Council and TfNSW are the approval authorities for works on Luddenham Road. CJP are the approvers of this CTMP.

5. Fleet management

Trucks to be used for the delivery of the SCAW works will be compliant with NSW legislation and standards including Heavy Vehicle National Legislation (HVNL). All heavy vehicle operations will be conducted in accordance with CPBUI JV Chain of Responsibility (CoR) Management Plan and the Principal's Contractors Safety Standard as noted in the Overarching TMP.

A combination of truck types will be used during the SCAW works including single unit trucks, semi-trailers, truck and dog combinations and low loaders, for example. No b-doubles will be used as Luddenham Road is not a recognised b-double route. The largest vehicle to access this site, outside of oversize vehicle movements will be semi-trailers. When segment deliveries are taking place with low loaders, stop slow will be in place on Luddenham Road outside of peak hours.

The location of all heavy vehicles used for spoil haulage will be monitored in real time and these records can be made available electronically to the Planning Secretary and the Environmental Protection Authority (EPA) upon request for a period of no less than one (1) year following the completion of construction.

The is sufficient room on site for all heavy vehicles required for the works. Therefore. marshalling facilities are not proposed for this site. Heavy vehicle will not idle or queue on roads surrounding the site.

5.1. Haulage routes

Generally, the haulage routes will be via arterial roads, freeways or tollways. The routes included in the EIS have been adopted for this site, refer to Figure 14 and Figure 15 The routes include Elizabeth Drive and Luddenham Road from The Northern Road, from the east from the M7 Motorway, Elizabeth Drive and Luddenham Road and Luddenham Road from the north, . CPBUI JV will predominately use The Northern Road for material delivery and disposal for gate 4. Gate 5 will be restricted to the use of Luddenham Road from the north but will exit via Luddenham Road southbound. Heavy vehicles will be accessing the arterial network as soon as possible after leaving the construction sites.

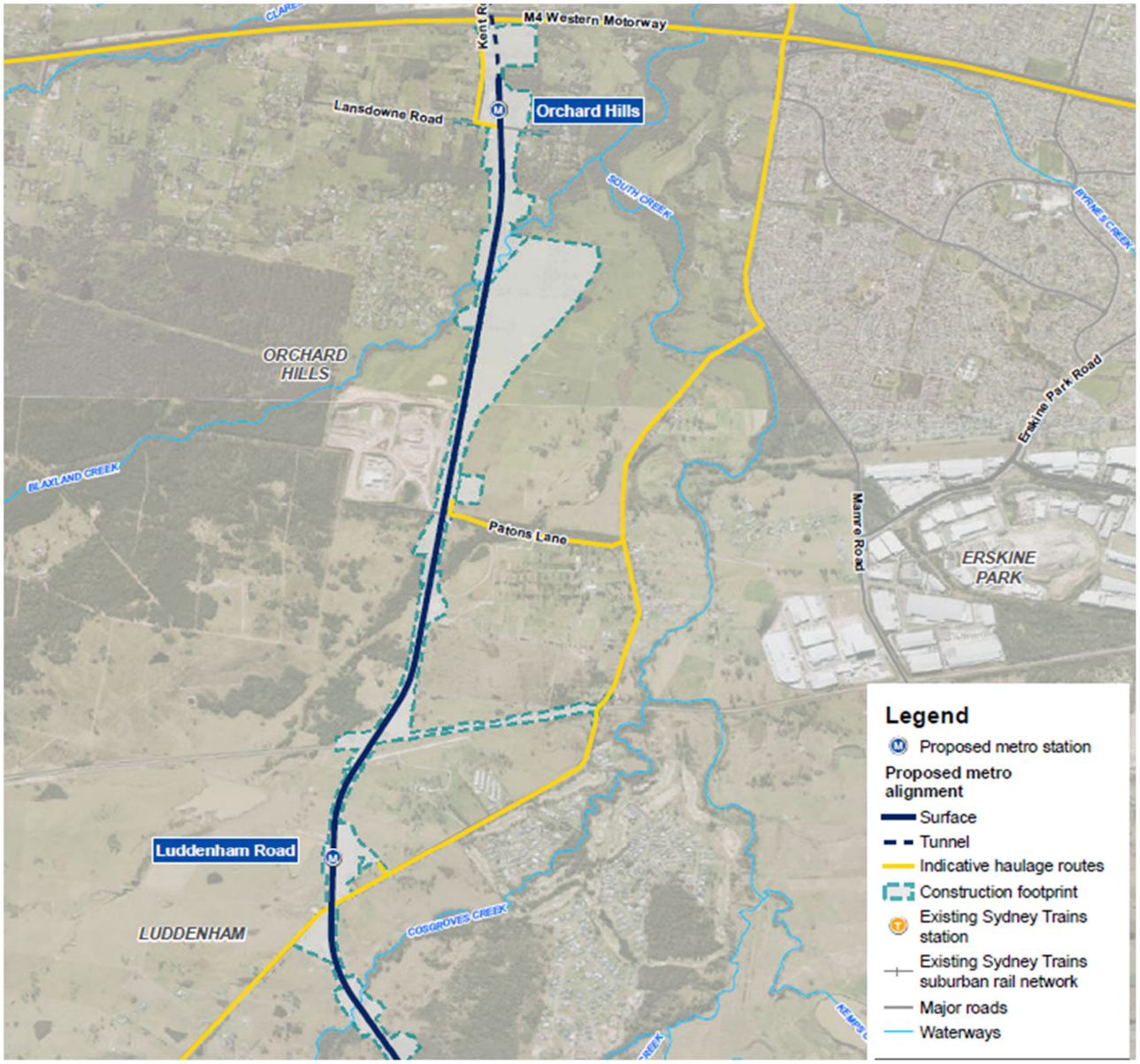


Figure 14: EIS haulage routes from the north

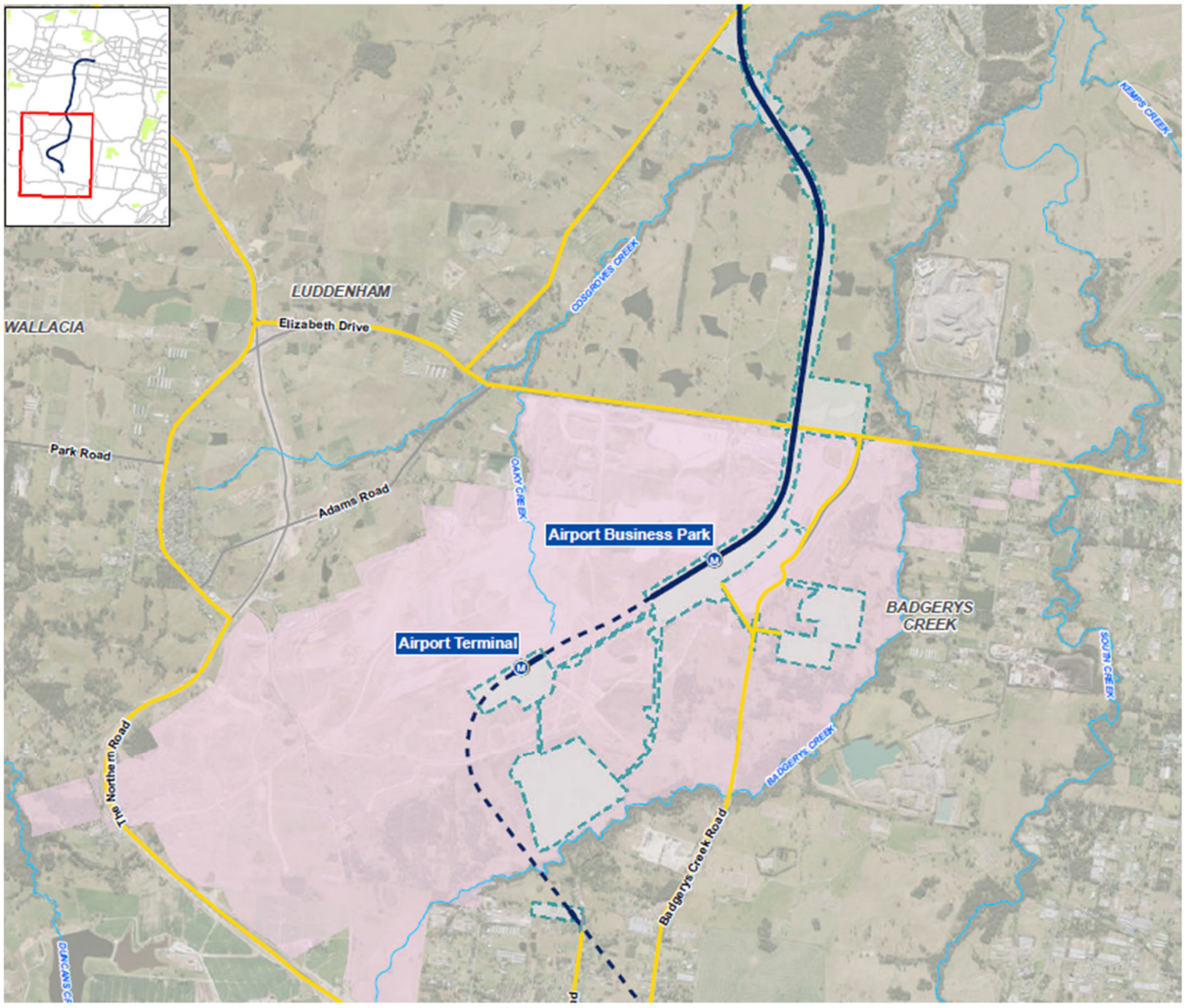


Figure 15: EIS haulage routes from the north

5.2. Road dilapidation report

As noted in the Ministerial Conditions of Approval, road dilapidation report has been prepared for local roads and provided to Penrith City Council.

5.3. Permits for over-dimensional vehicles

Permit for vehicles greater than 4.5t through the National Heavy Vehicle Regulator (NVHR). This applies to particular special purpose vehicles (SPV) such as mobile cranes and other oversize/ over mass (OSOM) vehicles. TfNSW is currently undertaking this permit issue.

For over dimensional vehicles generally vehicles that are greater than 25m in length of 3.5m wide require a pilot(s). Extremely long or wide vehicles will require an escort, fee payable. Permits are generally applied for by the transport operator.

There is a requirement for over mass/ oversize vehicles during the works identified in this CTMP. The OSOM deliveries of precast segments and super tees will be the subject of a separate CTMP.

6. Other matters

6.1. Road Safety Audits

Road safety audits will be undertaken during the development and implementation of the CTMP. The audit will be undertaken as noted in section 10 of the Construction Traffic Management Framework. A copy of the road safety audit is provided in Appendix B.

6.2. Communications and the community

CPBUI JV will be responsible for the dissemination of information to the community including affected residents, relevant councils, businesses and the public.

6.2.1. Proposed communications

Typical timelines for the various notifications are:

- Community notices (notifications) issued at least seven (7) days prior to:
  - Start of work
  - New work with a new activity that has the potential to impact on stakeholders and the community
  - Handover of a construction site to a new contractor
  - Activities requiring notification to comply with relevant Environmental Protection License (EPL) usually out of hours works
- Precinct updates/ e-update (newsletters) – published 2 per year and for changes to planning approvals
- email and internet updates - done with publication and deliver to letterboxes of notifications and newsletters
- advertisement – published in advance of significant traffic management changes, detours, traffic disruptions
- advance warning signs – as noted in the CTMP where required.

Table 4: Proposed communications

Notification	Site early works	Site operations
Community notice	Yes	Yes
Precinct update/ e-update	Yes	Yes
Email and internet	Yes	Yes
Print advertising	No	No
Advance warning sign(s)	No	No
Gate signs	Yes	Yes

6.2.2. Travelling public

Where the SCAW works will impact on the travelling public, CPGUI JV will undertake the following communications:

- Public transport interruptions will be communicated via on site signage
- Motoring public will be forewarned of any changes including road closures, road changes and lane changes well in advance using appropriate signs including Variable Message Signs (VMS)
- Active transport users will be provided with advance warning signs

6.3. Stakeholders

There are a number of stakeholders consulted during the development of this CTMP. A copy of their review comments are provided in Appendix C. Table 5 provides an overview of the consultation undertaken for this CTMP.

Table 5: Consultation undertaken

Stakeholder	Consultation Type	Date
Traffic Control Group	Presentation	27th October 2022
CJP	Submission of CTMP	27th October 2022
Sydney Metro Western Sydney Airport project team	Submission of CTMP	27th October 2022
Penrith City Council	Submission of CTMP	27th October 2022
TfNSW	Submission of CTMP	27th October 2022
CJP	Resubmission of CTMP	2nd December 2022
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	2nd December 2022
Penrith City Council	Resubmission of CTMP	2nd December 2022
TfNSW	Resubmission of CTMP	2nd December 2022
CJP	Resubmission of CTMP	14th December 2022
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	14th December 2022
Penrith City Council	Resubmission of CTMP	14th December 2022
TfNSW	Resubmission of CTMP	14th December 2022
CJP	Resubmission of CTMP	13th February 2023
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	13th February 2023
Penrith City Council	Resubmission of CTMP	13th February 2023
TfNSW	Resubmission of CTMP	13th February 2023
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	22 March 2023
CJP	Resubmission of CTMP	23 March 2023
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	23 March 2023
Penrith City Council	Resubmission of CTMP	23 March 2023
TfNSW	Resubmission of CTMP	23 March 2023
CJP	Resubmission of CTMP	17 April 2023
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	17 April 2023
Penrith City Council	Resubmission of CTMP	17 April 2023
TfNSW	Resubmission of CTMP	17 April 2023
CJP	Resubmission of CTMP	4th May 2023
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	4th May 2023
Penrith City Council	Resubmission of CTMP	4th May 2023
TfNSW	Resubmission of CTMP	4th May 2023

6.3.1. Traffic and Transport Liaison Group

The Traffic and Transport Liaison Group (TTLG) has been established by Sydney Metro Western Sydney Airport for the project, as required under MCoA E116. The TTLG consists of members from Sydney Metro Western Sydney Airport project team, Liverpool City Council, Penrith City Council, Customer Journey Planning, Western Sydney Airport Corporation (WSA Co), Western Parkland City

Authority (WPCA), TfNSW's Planning and Programs, other contractors associated with the project and Emergency Services.

Further development of this CTMP will occur in consultation with this group. It is noted that this group meets monthly.

Supplementary analysis and modelling as required by Sydney Metro Western Sydney Airport and/ or the TTLG will be undertaken to demonstrate that construction traffic can be managed to minimise disruption to traffic networks operations including changes to the management of pedestrians, cyclists and public transport networks and services. Any revised traffic management measure will be incorporated into the CTMP.

6.3.2. Traffic Control Group

The Traffic Control Group (TCG) has been established by Sydney Metro Western Sydney Airport for the project. The TCG consists of members from Sydney Metro Western Sydney Airport project team, Liverpool City Council, Penrith City Council, Customer Journey Planning, Western Sydney Airport Corporation (WSA Co), Western Parkland City Authority (WPCA), TfNSW's Planning and Programs and other contractors associated with the project. The TCG meets fortnightly.

The purpose of the TCG is for open and honest technical discussion on the contractors proposed works, methodologies and traffic management plans. The TCG will:

- Provide feedback on proposals
- Guide CTMP and other document finalization prior to submission for review/ approval
- Guide coordination of works and traffic management activities on and off airport (local, regional and state roads)
- Assist in transport mitigation

6.4. Special events

When planning the works, CPGUI JV will identify special events which directly impact the works or haulage activities and will continue to interrogate event websites that provide details on forthcoming events such as:

- NSW and Sydney events - Destination NSW
- NSW events and festivals - Visit NSW
- Major events - Penrith City Council Upcoming events

6.5. Training

CPBUI JV will ensure that all personnel, including subcontractors are aware of the specific requirements of TfNSW's customers, general public, residents and businesses, prior to attending site through the induction process and regular updates through tool box talks. Specific training will be provided to heavy vehicle drivers regarding the possible presence of pedestrians and cyclists and the increased risk of high speed run off the road and head on collision types due to the narrow road widths, high speeds and little to no shoulder availability.

Further training will be provided on the use of the seagull treatment installed at Gate 4 including restricting right turn movements out of the site onto Luddenham Road whilst a heavy vehicle is within the deceleration lane and turning into site. Further the existence of the on-road cycling facility will also be highlighted with instructions provided to ensure that cyclists have the highest priority at this location.

6.6. Inspections and monitoring

The site will be monitored by the site supervisor. Any changes to signs and lines that impact on the public will be recorded. Daily monitoring will be undertaken during the site operating hours.

Traffic control used for pedestrian management, lane closures etc will need to provide records of the traffic control implemented. Any changes required to a traffic control set up will be authorised by a holder of a SafeWork NSW "Prepare a Work Zone Traffic Management Plan" or equivalent. Checklist for monitoring of the implemented CTMP are provided in Appendix D.

6.7. Site contacts

Table 6 provides the contact details for the works identified in this CTMP.

Table 6: Site contacts

Name	Position	Mobile#
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

6.8. References

The following documents were used in the development of this CTMP:

- Construction Traffic Management Framework, Sydney Metro West and Sydney Metro Western Sydney Airport
- TfNSW's Traffic Control at Worksites Manual v6.1
- Relevant AustRoads Guides and TfNSW Supplements
- Sydney Metro Principal Contractor Health and Safety Standard

Part C Appendices

Appendix A – Compliance Matrix

Sydney Metro Western Sydney Airport CSSI Infrastructure Approval (SSI 10051)

Project Planning Approval (SSI 10051)		
E103	Construction Traffic Management Plans (CTMPs) must be prepared in accordance with the Construction Traffic Management Framework. A copy of the CTMPs must be submitted to the Planning Secretary for information before the commencement of any construction in the area identified and managed within the relevant CTMP.	This plan
E104	The locations of all Heavy Vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one (1) year following the completion of construction.	Refer to Overarching CTMP
E105	Local roads proposed to be used by Heavy Vehicles to directly access ancillary facilities / construction sites that are not identified in the documents listed in Condition A1 must be approved by the Planning Secretary and be included in the CTMP.	Not applicable to this CTMP as all roads to be used are included in the EIS
E106	All requests to the Planning Secretary for approval to use local roads under Condition E105 above must include the following: (a) a swept path analysis; (b) demonstration that the use of local roads by Heavy Vehicles for the CSSI will not compromise the safety of pedestrians and cyclists of the safety of two-way traffic flow on two-way roadways; (c) details as to the date of completion of the road dilapidation surveys for the subject local roads; and (d) measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and child care facilities during their peak operation times; and (e) written advice from an appropriately qualified professional on the suitability of the proposed Heavy Vehicle route which takes into consideration items (a) to (d) of this condition.	Not applicable to this CTMP as all roads to be used are included in the EIS
E107	Before any local road is used by a Heavy Vehicle for the purposes of construction of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the Relevant Road Authority(s) within three (3) weeks of completion of the survey and at no later than one (1) month before the road being used by Heavy Vehicles associated with the construction of the CSSI.	Section 5.2
E108	If damage to roads occurs as a result of the construction of the CSSI, the Proponent must either (at the Relevant Road Authority's discretion): (a) compensate the Relevant Road Authority for the damage so caused; or (b) rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report.	Section 5.2
E109	Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive use	Section 5

Project Planning Approval (SSI 10051)		
	(d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and (e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMP.	
E110	Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.	Sections 3.2.4 and 4.2.4
E111	The Proponent must maintain access to properties during the entirety of works unless an alternative access is agreed in writing with the landowner(s) whose access is impacted by the CSSI works.	Sections 3.2.4 and 4.2.4
E112	Where construction of the CSSI restricts a property's access to a public road, the Proponent must, until their primary access is reinstated, provide the property with temporary alternate access to an agreed road decided through consultation with the landowner, at no cost to the property landowner, unless otherwise agreed with the landowner.	Sections 3.2.4 and 4.2.4
E113	Any property access physically affected by the CSSI must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. Property access must be reinstated within one (1) month of the work that physically affected the access is completed or in any other timeframe agreed with the landowner or occupier.	Sections 3.2.4 and 4.2.4
E114	During construction, all reasonably practicable measures must be implemented to maintain pedestrian, cyclist and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian, cyclist and vehicular access, and parking arrangements must be developed in consultation with affected businesses and landowners and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	Sections 3.2.3, 3.2.4, 4.2.3 and 4.2.4
E115	Safe pedestrian and cyclist access must be maintained around the St Marys construction site during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternate route which complies with the relevant standards, must be provided and signposted before the restriction or removal of the impacted access.	Not applicable to the SCAW scope of works
E116	A Traffic and Transport Liaison Group(s) must be established in accordance with the Construction Traffic Management Framework to inform the development of CTMP.	Sydney Metro will establish the TTLG Section 0
E117	Supplementary analysis and modelling as required by TfNSW and / or the Traffic and Transport Liaison Group(s) must be undertaken to demonstrate that construction and operational traffic can be managed to minimise disruption to traffic network operations including changes to and the management of pedestrian, bicycle and public transport networks, public transport services, and pedestrian and cyclist movements. Revised traffic management measures must be incorporated into the CTMP.	Section 0
E118	As part of Condition E117 the Traffic and Transport Liaison Group(s) is to identify opportunities to improve the intersection performance during operation at:	Not applicable to the SCAW scope of works

Project Planning Approval (SSI 10051)		
	a) Queen Street/Great Western Highway/Mamre Road in St Marys; b) Glossop Street/ Forrester Road in St Marys; and c) Glossop Street / Great Western highway in St Marys. Identified improvements must be implemented prior to the commencement of operation.	

Sydney Metro Western Sydney Airport Environmental Impact Statement

Revised Environmental Management Measures (REMMs)		
T1	Construction Traffic Management Plans would be prepared in accordance with the Construction Traffic Management Framework	This plan
T2	The Construction Traffic Management Plan for St Marys would be developed in consultation with the Traffic and Transport Liaison Group to ensure existing transport interchange infrastructure continues to operate effectively within the St Marys station precinct.	Not applicable to the SCAW scope of works
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 M12 Motorway and Elizabeth Drive	Section 0
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	Section 6.1
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	Sections 3.2.3 and 4.2.3
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 5

Sydney Metro Western Sydney Airport Revised performance outcomes

Revised Performance outcomes - Transport		
Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained . impacts on network capacity and the level of service are effectively managed	Safe and efficient routes are provided for pedestrians, cyclists, and road users at/ near construction sites	Not applicable to the SCAW scope of works
	Access to the existing St Marys Station is maintained while train services are operating	Not applicable to the SCAW scope of works
	Safe access to properties and businesses is maintained during construction, unless alternatives are agreed with property owners and businesses	Sections 3.2.4 and 4.2.4
	Heavy vehicles access the arterial network as soon as practicable on route to, and immediately after leaving a construction site	Section 5.1
	The local community and relevant authorities are informed of transport, access and parking changes/ impacts to minimise inconvenience to the public	Section 6.2.1

Appendix B – Haulage routes

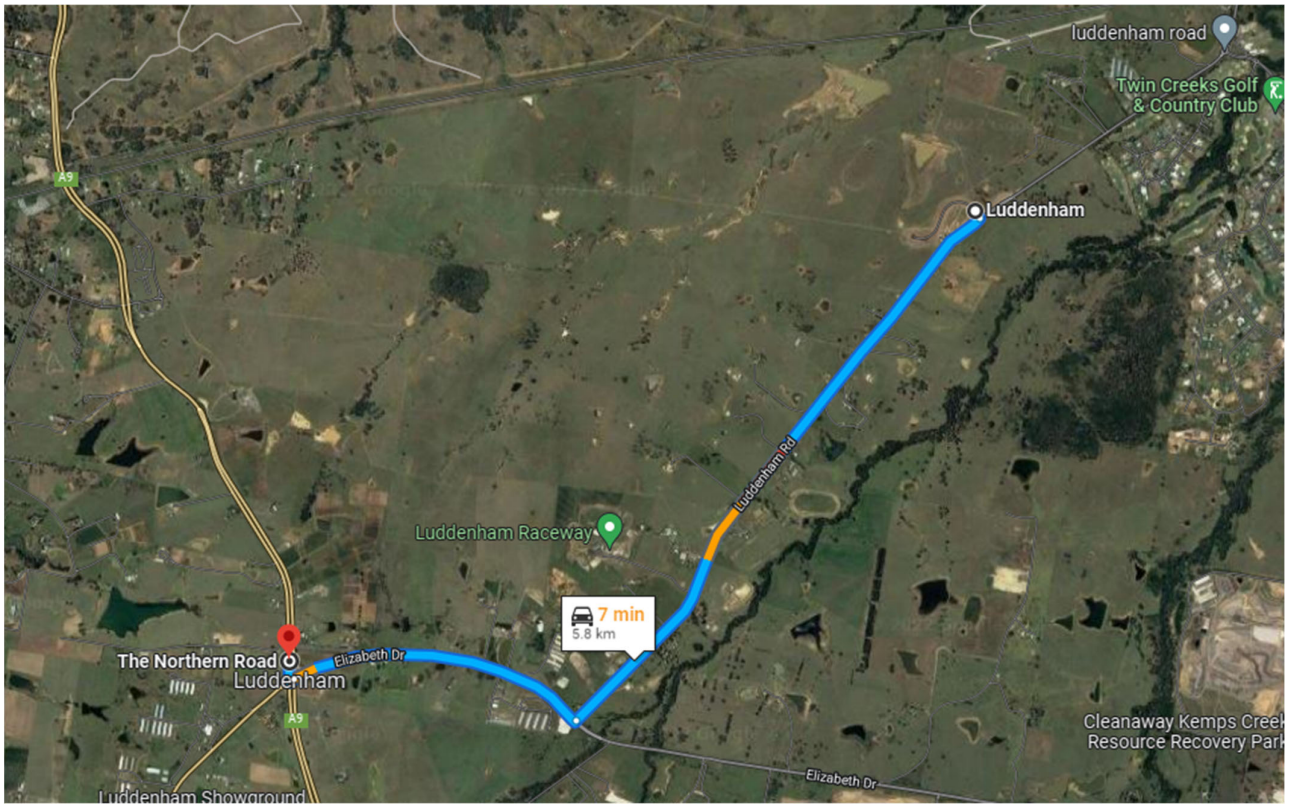


Figure 16: To and from the Northern Road for Gate 4 and egress from Gate 5

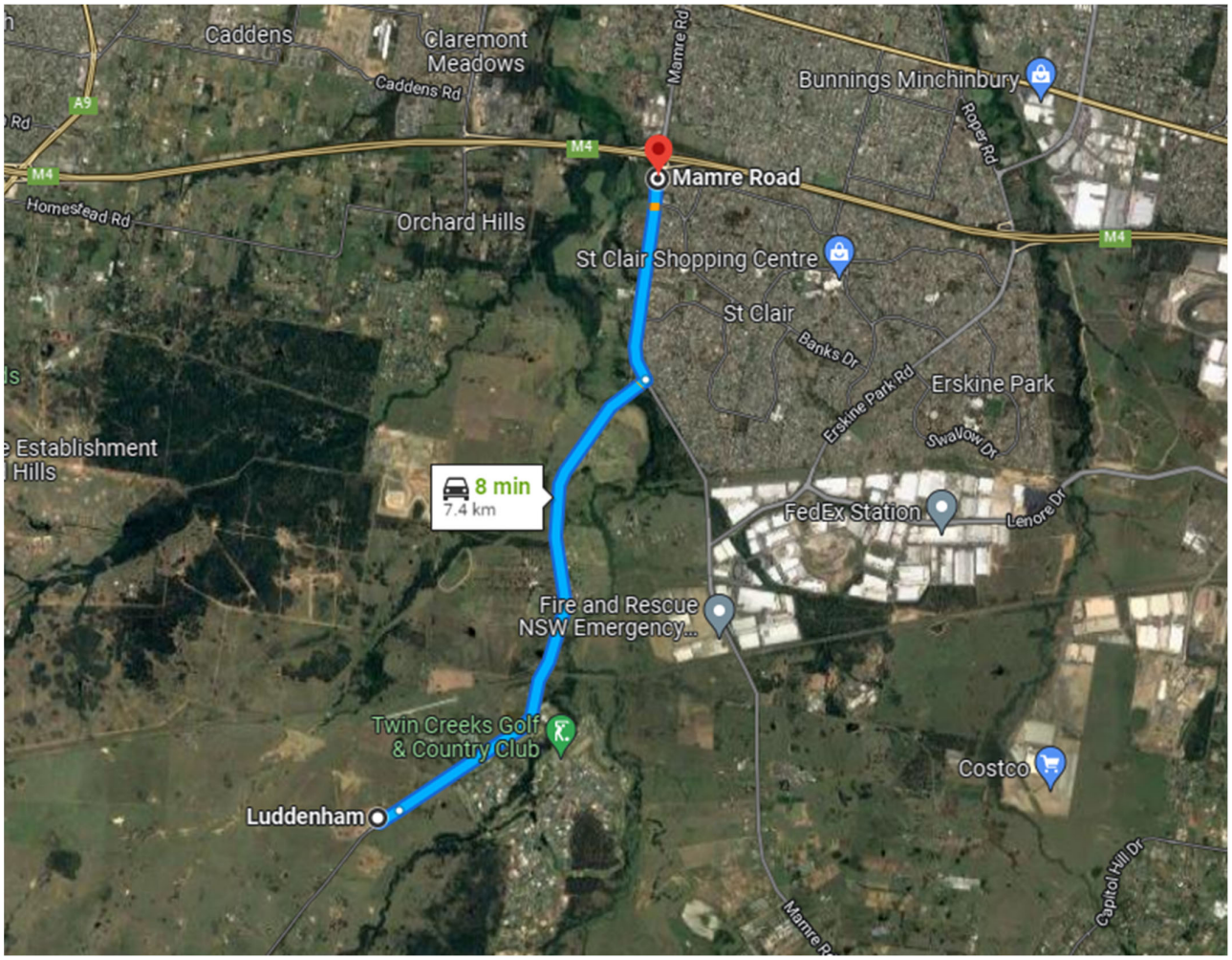
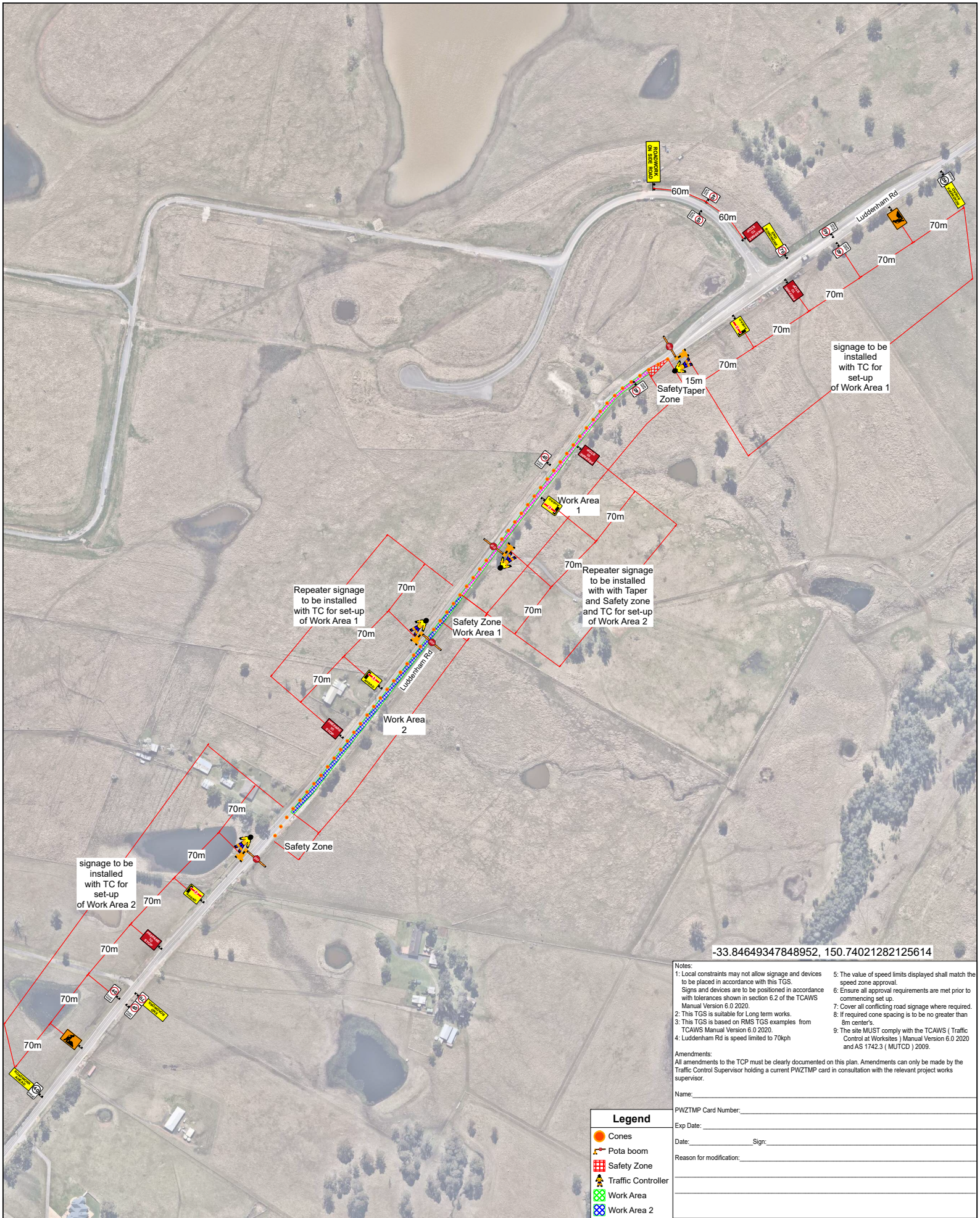


Figure 17: From the M4 Motorway for access

Appendix C – Traffic Guidance Schemes

TGS#	Location	From	To	Time and duration	Traffic control	Works	Impacts
SCAW-TGS-LUD-0001	Luddenham Road	Gate 5		Day – 1 week for barrier placement and removal Day – daily during the life of the construction works of the acceleration and deceleration lanes	Stop slow	Barrier installation and removal and pavement tie in works including deliveries and removal of materials	Minimal impacts as traffic flow is maintained under stop slow
SCAW-TGS-LUD-0002	Luddenham Road	Various locations		Day – 1 week in total	Stop slow	Signage installation	Minimal impacts as traffic flow is maintained under stop slow
GEN-LM	Luddenham Road			Day	Dynamic work area	Line marking install and removal	Minimal impacts as traffic flow is maintained
SCAW-TGS-LUD-0003	Luddenham Road	Pier location on eastern side of Luddenham Road		Day – 1 week in total	Stop slow	Barrier installation and removal around pier	Minimal impacts as traffic flow is maintained under stop slow

The sign installation will occur first and once this completed the line marking changes will be implemented. Then the barriers will be installed. The removal will be in the reverse sequence



Notes:
1: Local constraints may not allow signage and devices to be placed in accordance with this TGS. Signs and devices are to be positioned in accordance with tolerances shown in section 6.2 of the TCAWS Manual Version 6.0 2020.
2: This TGS is suitable for Long term works.
3: This TGS is based on RMS TGS examples from TCAWS Manual Version 6.0 2020.
4: Luddenham Rd is speed limited to 70kph
5: The value of speed limits displayed shall match the speed zone approval.
6: Ensure all approval requirements are met prior to commencing set up.
7: Cover all conflicting road signage where required.
8: If required cone spacing is to be no greater than 8m center's.
9: The site MUST comply with the TCAWS (Traffic Control at Worksites) Manual Version 6.0 2020 and AS 1742.3 (MUTCD) 2009.

Amendments:
All amendments to the TCP must be clearly documented on this plan. Amendments can only be made by the Traffic Control Supervisor holding a current PWZTMP card in consultation with the relevant project works supervisor.

Name:

PWZTMP Card Number:

Exp Date:

Date: Sign:

Reason for modification:

Legend

- Cones
- Pota boom
- Safety Zone
- Traffic Controller
- Work Area
- Work Area 2

TGS DRAWN BY : [redacted]
PWZTMP :
SIGNATURE :

TGS APPROVED BY : [redacted]
PWZTMP :
SIGNATURE :

SCALE : NOT TO SCALE

Date : 24/10/2022

SHEET NUMBER 1

Issue : 3

PROJECT : Ludenham Rd Ludenham Barrier Installation

TITLE : SCAW-TGS-LUD-0001

N

TGS DRAWN BY : [redacted]
PWZTMP :
SIGNATURE :

TGS APPROVED BY : [redacted]
PWZTMP :
SIGNATURE :

SCALE : NOT TO SCALE

Date : 21/11/2022

SHEET NUMBER 1

Issue : 1

PROJECT : Ludenham Rd Ludenham Signage Installation

TITLE : SCAW-TGS-LUD-0002

North

Marker

Legend

- Cones
- Porta Boom
- Pota boom
- Safety Zone
- Traffic Controller
- Traffic Controller
- Work Area

Notes:
1: Local constraints may not allow signage and devices to be placed in accordance with this TGS. Signs and devices are to be positioned in accordance with tolerances shown in section 6.2 of the TCAWS Manual Version 6.0 2020.
2: This TGS is suitable for Long term works.
3: This TGS is based on RMS TGS examples from TCAWS Manual Version 6.0 2020.
4: Ludenham Rd is speed limited to 70kph
5: The value of speed limits displayed shall match the speed zone approval.
6: Ensure all approval requirements are met prior to commencing set up.
7: Cover all conflicting road signage where required.
8: If required cone spacing is to be no greater than 8m center's.
9: The site MUST comply with the TCAWS (Traffic Control at Worksites) Manual Version 6.0 2020 and AS 1742.3 (MUTCD) 2009.

Amendments:
All amendments to the TCP must be clearly documented on this plan. Amendments can only be made by the Traffic Control Supervisor holding a current PWZTMP card in consultation with the relevant project works supervisor.

Name:

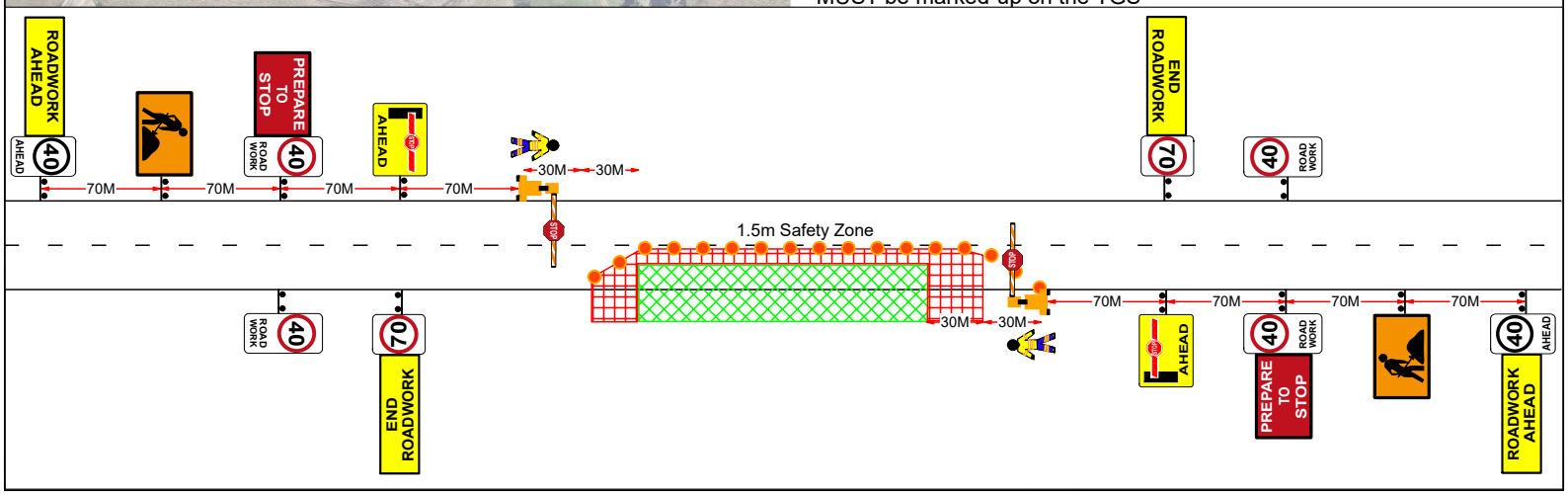
PWZTMP Card Number:

Exp Date:

Date: Sign:

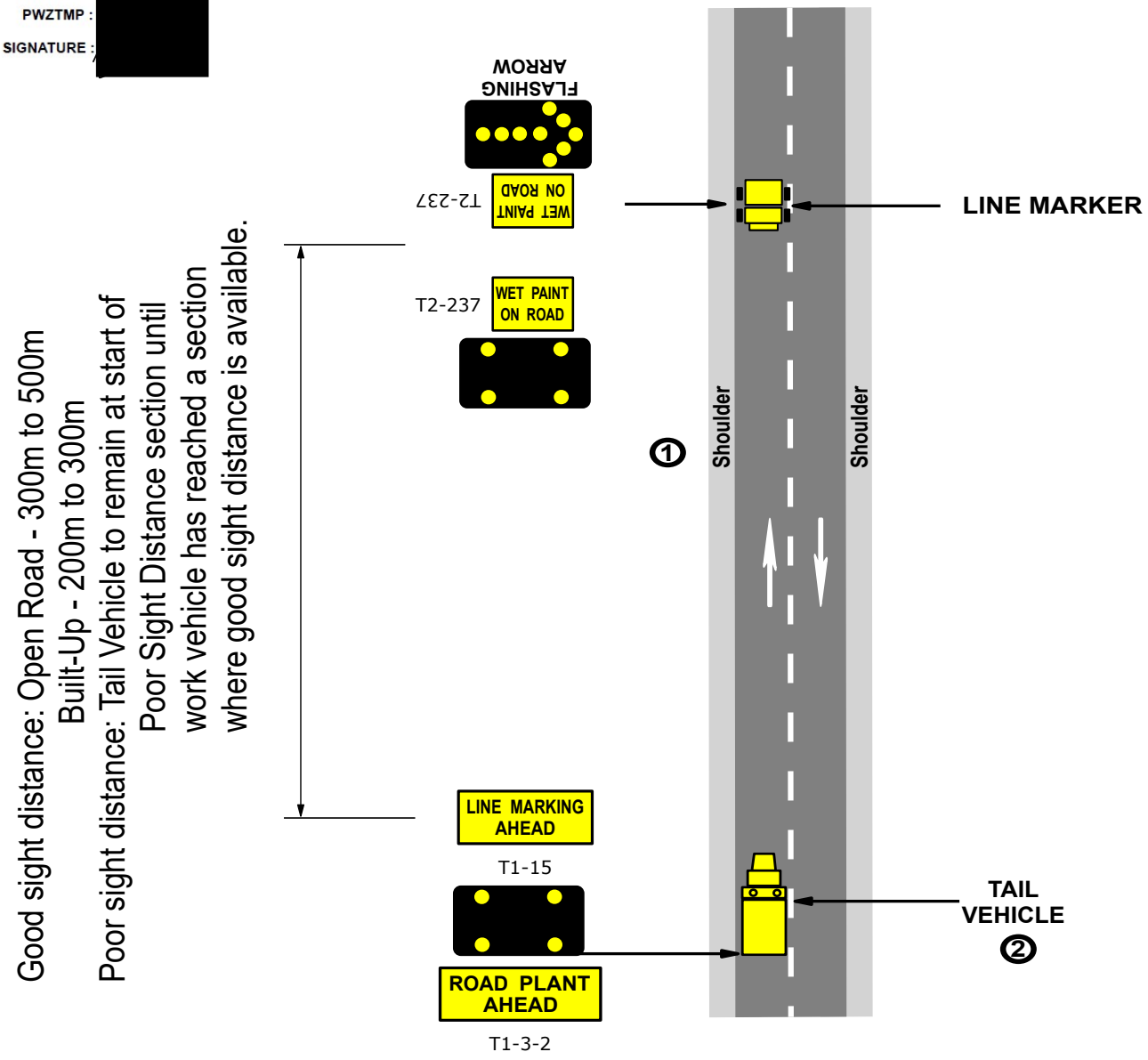
Reason for modification:

NOTE:
This is a generic style TGS designed to be used at multiple locations on this project with the following conditions to be met.
1: TC must release traffic once one of the conditions below is met;
- Traffic stopped reaches a Max of 3min.
2: TC Team Leader to determine North Marker and markup on the TGS
3: TC to radio and retreat all workers to a safe location prior to releasing traffic.
4: All Side Roads are to be signed up in accordance with the TCAWS 6.0 and MUST be marked-up on the TGS



TGS DRAWN BY : [redacted]
PWZTMP :
SIGNATURE :

TGS APPROVED BY : [redacted]
PWZTMP :
SIGNATURE :

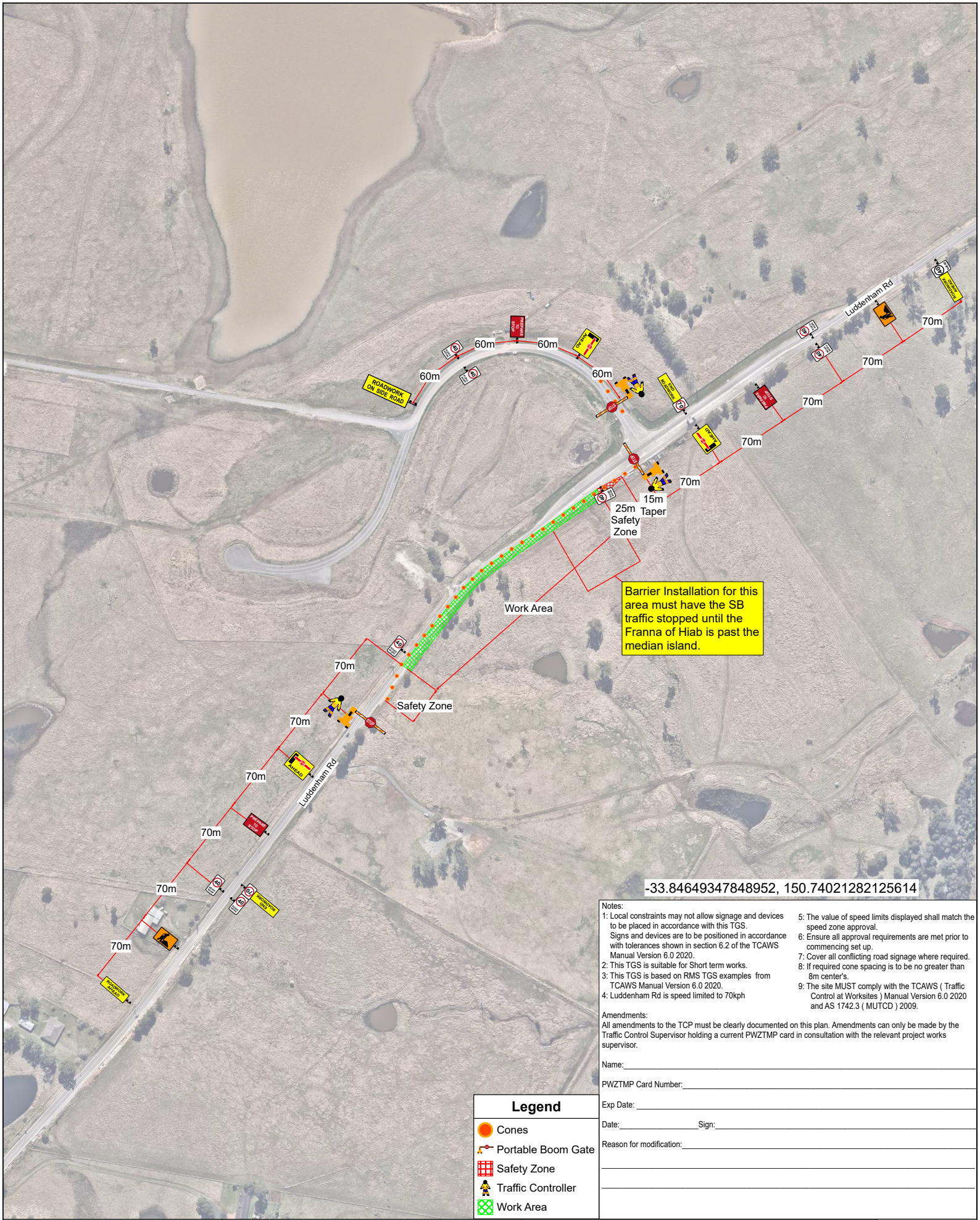


NOTES:

① A mirror image of this arrangement to apply for right-hand edge line on divided carriageways.
② On crests and curves, ensure that sight distance to Tail Vehicle is not less than D.

DYNAMIC WORK
2 LANE / 2 WAY
LINE MARKING - LEFT EDGE LINE

GEN-LM



Notes:
1: Local constraints may not allow signage and devices to be placed in accordance with this TGS. Signs and devices are to be positioned in accordance with tolerances shown in section 6.2 of the TCAWS Manual Version 6.0 2020.
2: This TGS is suitable for Short term works.
3: This TGS is based on RMS TGS examples from TCAWS Manual Version 6.0 2020.
4: Luddenham Rd is speed limited to 70kph
5: The value of speed limits displayed shall match the speed zone approval.
6: Ensure all approval requirements are met prior to commencing set up.
7: Cover all conflicting road signage where required.
8: If required cone spacing is to be no greater than 8m center's.
9: The site MUST comply with the TCAWS (Traffic Control at Worksites) Manual Version 6.0 2020 and AS 1742.3 (MUTCD) 2009.

Amendments:
All amendments to the TCP must be clearly documented on this plan. Amendments can only be made by the Traffic Control Supervisor holding a current PWZTMP card in consultation with the relevant project works supervisor.

Name:

PWZTMP Card Number:

Exp Date:

Date: Sign:

Reason for modification:

Legend

- Cones
- Portable Boom Gate
- Safety Zone
- Traffic Controller
- Work Area

TGS DRAWN BY :
PWZTMP :
SIGNATURE : [redacted]

TGS APPROVED BY :
PWZTMP :
SIGNATURE : [redacted]

SCALE : NOT TO SCALE

Date : 02/05/2023

SHEET NUMBER 1

Issue : 2

PROJECT : Ludenham Rd Ludenham Barrier Installation

TITLE : SCAW-TGS-LUD-0003

N

Appendix D - Site layout drawings and swept paths

Drawing #	Description
SMWSASCA-CPU-SWD-EW250-RW-DRG-255124	Pier location on Luddenham Road
SMWSASCA-CPU-SWD-EW250-RW-DRG-255167	Acceleration and deceleration lanes at Gate 5 with internal signs
SMWSASCA-CPU-SWD-EW250-RW-SKE-255107	Swept paths for truck and dog Gate 5
SMWSASCA-CPU-SWD-EW250-RW-SKE-255110	Swept paths for low loader Gate 5
SMWSASCA-CPU-SWD-EW250-RW-SKE-255111	Swept paths for low loader Gate 5
SMWSASCA-TMP-0001	Barrier installation speed limit of 40km/hr
SMWSASCA-TMP-0002	Barrier installation speed limit of 60km/hr
SMWSASCA-TMP-0003	Barriers for pier protection temporary works

Swept paths for the access/ egress point is provided below:

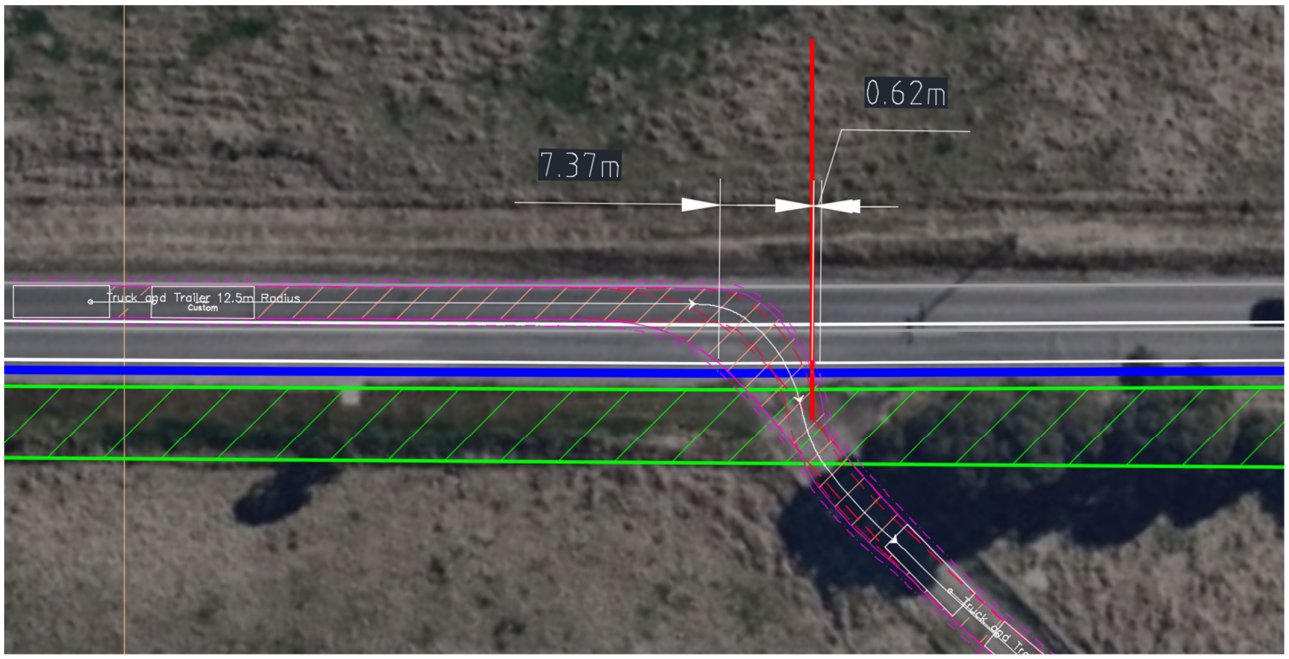


Figure 18: Truck and trailer right turn into site

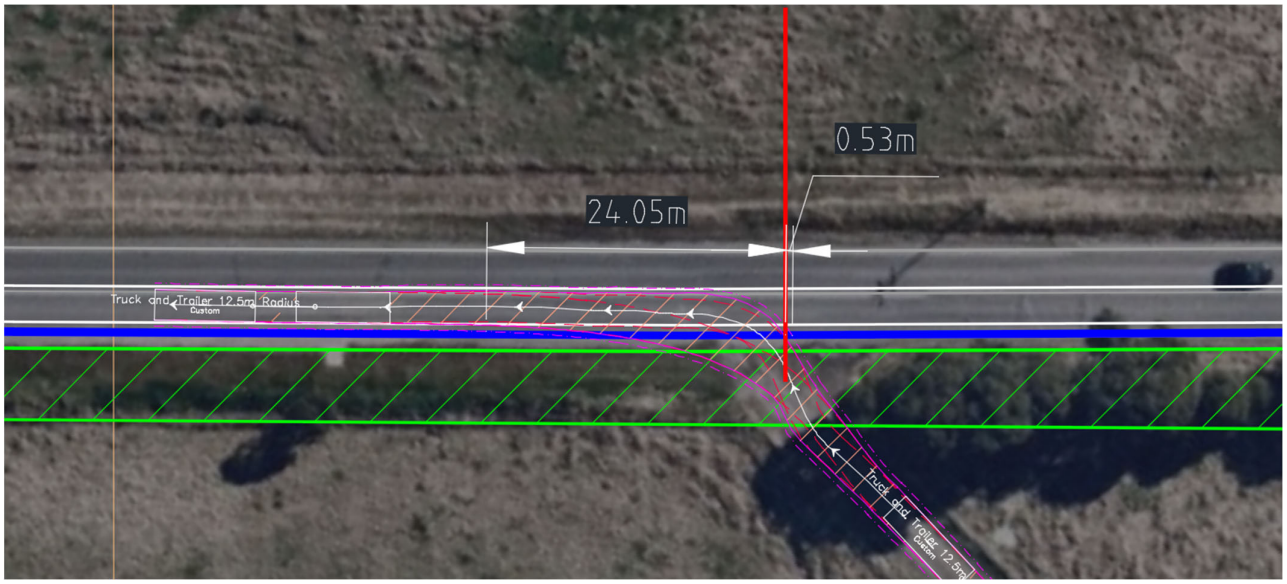


Figure 19: Left turn out of site egress

Figure 20: Right turn out of site

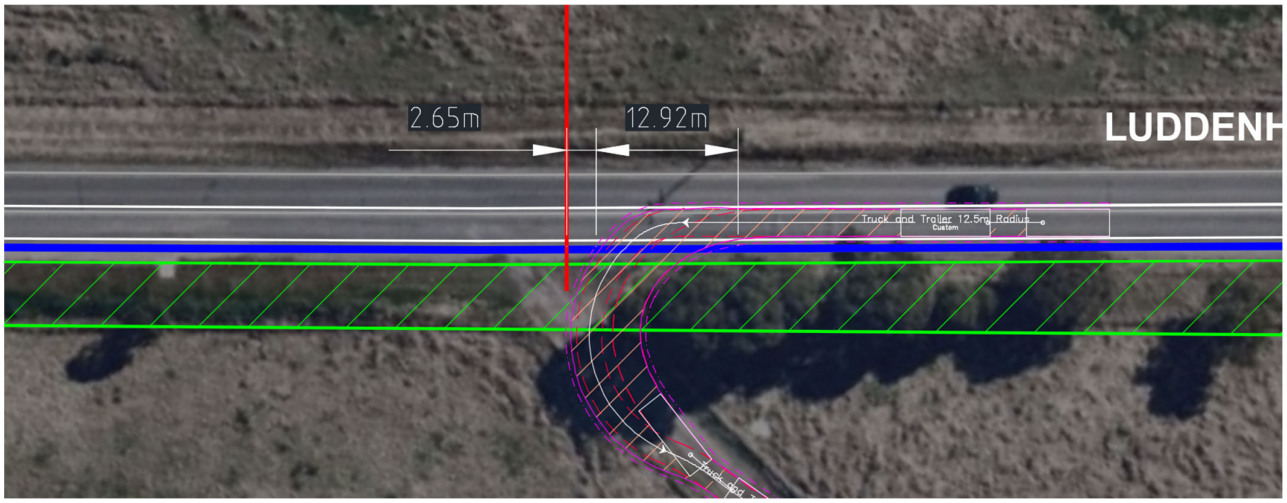


Figure 21: Left turn into site

Appendix E - Road Safety Audit

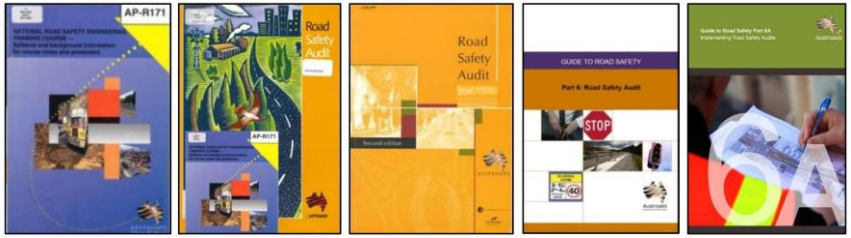
Road Safety Audit Report

Luddenham Road

Practical
Independent
Specialised

Road/Area	Luddenham Road		**Road Safety Audits Reference**	RSA-13539
Traffic Stage/Phase	Western Sydney Airport – Surface and Civil Alignment Works: Barrier Installation		**Report Date**	28 December 2022
Audit Stage	*Desktop* Traffic Guidance Scheme		**Lead Auditor** **Second Auditor**	[redacted]
Client	**Sue Lewis Consulting**		**TMP / Drawings**	Luddenham Road Barrier Installation TGS – Drawing Number SCAW-TGS-LUD-0001, Issue 3
Client Contact	[redacted]		**Report Provider**	Road Safety Audits

Desktop TGS General Scope: The scope of the audit is to assess the plans on their merits and in the context of the road environment, with standards and guidelines as a reference.



[redacted]

Luddenham Road Western Sydney Airport – Surface and Civil Alignment Works: Barrier Installation				
	Audit Point	**Treatment Option**	**Sue Lewis Consulting** Responder:	
			Response[x]	**Status**[y]
Barrier Installation				
1.	No road safety issues are identified in relation to the proposed TGS for the barrier installation. It is noted that there is a crest along Luddenham Road, east of the intersection (Gate 4). However, the advance signage as shown in the TGS are located on approach to the crest and as such would be visible to westbound motorists approaching the Work Area 1. Similarly, advance signage for eastbound drivers approaching Work Area 2 is expected to be visible based on the prevailing road geometry (Google Streetview).	Nil. Note only.	Noted	Closed
2.	No road safety issues are identified in relation to the proposed signage for the two work areas, which are expected to operate as intended based on on-site communications between the traffic controllers.	Nil. Note only.	Noted	Closed

Explanatory Notes

Short Format: This 'short format' report has been pioneered by RSA (Road Safety Audits) since 2008, initiated through requests by clients to assist their processes, for ease with stakeholders, and for timeliness. It is typically confined in use to construction traffic management and typically for discrete packages of plans / areas and often for large projects with repetitious small audit sections. The use of this format assumes that the reader/s know what a road safety audit is and how to respond to it.

Projects: Audit points are often raised in projects in relation to: 1. specific themes (e.g. the use of a safety barrier type), or 2. the treatment of particular locations. Once key issues have been initially raised, they will not necessarily be re-raised in future audits. This will depend on the issue, the RSA's perception of the client's assessment and understanding of the issue, and other factors. Therefore, discrete audits as part of a project should be read and actioned by a **project representative who is familiar with the audit history**.

Responding: Although the client receiving the report does not have to agree to the audit findings/suggestions, the issues and associated risks should be carefully considered. A written response should be made to all of the audit findings raised, then signed off by the responsible person from the project team.

[X]**Response**: The responder should focus on and consider the **audit point**, regardless of whether the audit team's suggested treatment option is feasible / appropriate / agreed to.

[Y]**Status**: The status of the issue as it sits with the Project. i.e. 'actioned', 'closed', 'pending information / further guidance'.

Language:
Austroads Road Safety Audit Part 6 suggests that the organisation responding to the audit provides a risk assessment. However, RSA will at times offer a guide of 'high' 'medium' and 'low' risk, which is based on a professional appraisal of the risk ('severity' and 'frequency') for the responder to use as a guide. Other language commonly used and its intent is as follows:

- 'Urgent': Needs immediate attention / changes as per RSA suggestion or similar.
- 'Recommend' / 'Serious' / 'Important': Must be robustly reviewed. Most likely requires a change to avoid a high-risk road environment for one or more user groups.
- 'Should' / 'Suggest' / 'Significant': Based on the view of the RSA team the suggestion should be done, but it concedes that there could be reasons why inaction or alternative action may be preferred. Must be robustly reviewed by contractor and where relevant with key traffic engineering project stakeholders.
- 'Review' / 'Consider': RSA is raising an observation but has no *strong* opinion on the outcome and need for changes. Project should review because it's not an immediate and high risk and may not be immediately obvious to RSA the reasons for the practice / setup / behaviour. May need monitoring.
- 'Minor': Typically, a low road-safety consequence / compliance issues (to guidelines or plans) / administrative controls. Unlikely to increase risk of crash.
- 'Note': Little or no road safety significance. Typically added to give a complete picture of the design, site, context, analysis, auditors understanding.

Intent of Issues Listing Order: Audit points might be clustered according to location, theme, or time. When this is not done and the audit comprises an uncategorised list of points, the key issues are often discussed first. However, there is no official ordering of points, and they should all be read on their merits and on the basis of the language guide above.
References: 1. Austroads Guide to Road Safety – Road Safety Audit – (2019) 6 and 6A; 2. AS 1742.3 – 2019; 2. State specific codes and guidelines re: Traffic Control at Work Sites; and 3. Design: 1. Austroads guidelines and 2. state-specific supplements and technical publications as relevant.

Safe System: Austroads GRS-RSA6A encourages practitioners to adopt safe system principles within the road safety audit. Safe system (roads) calls for a design to not allow serious injury and fatalities to occur for the expected road users and the typical crash types expected for that design type. This design-objective is considered within this road safety audit as a good practice objective. However, in practice, safe system-based analysis of risks and treatment options is typically not adopted for traffic management stage audits in the same way as it is in design stage audits.

Process and Quality: RSA's quality assurance process is based on its senior auditors having a rich experience base, but also utilises customised checklists designed for niche areas in traffic engineering/road design (e.g. safety barriers, pavement shaping, CBD traffic management), in conjunction with a four-layer audit process: 1. on-site inspection; 2. media and data capture and review; 3. specialist / second auditor input; and (where warranted) 4. secondary blinded reviews.

Audit Coverage: The audit has attempted to balance the safety needs of all road users. As per Austroads guidelines, the suggestions provided have attempted to be realistic/feasible and commensurate with the actual risk posed. Suggestions are made from a safety perspective only, and are made in the absence of full project knowledge and design constraints. RSA can provide a detailed risk assessment / issue evaluation report upon request. The audit raises potential safety risks noted / observed / anticipated by the audit team, and in

particular the higher-risk issues. However, a road safety audit is undertaken by people, highly influenced by the experience, views and limitations of the individual team members. It is expected that the project team has competence to identify safety issues itself as the project progresses, and to ask the audit team further questions where necessary.

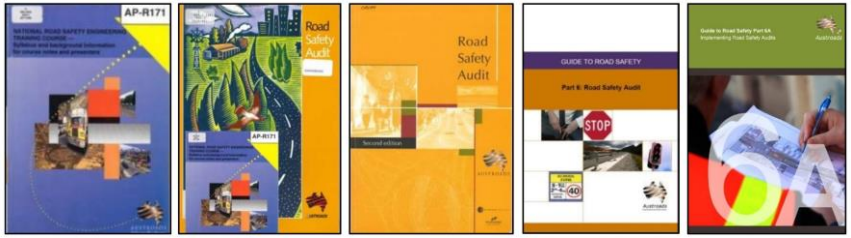
Road Safety Audit Report

Luddenham Road Gates 4 & 5 CTMP

Practical
Independent
Specialised

Road/Area	Luddenham Road	**Road Safety Audits Reference**	RSA-13834
Traffic Stage/Phase	Western Sydney Airport – Surface and Civil Alignment Works	**Report Date**	20 March 2023
Audit Stage	*Desktop* Traffic Guidance Scheme	**Lead Auditor** **Second Auditor**	[redacted]
Client	**Sue Lewis Consulting**	**TMP / Drawings**	Luddenham Road Gates 4 & 5 - Construction Traffic Management Plan (Document No: SMWSASCA-CPU-1NL000-TF-PLN-000005 Rev 02) which included the following TGS: • SCAW-TGS-LUD-0001 Issue 3 – Barrier Installation, SCAW-TGS-LUD-0002 Issue 1 – Signage Installation, SCAW-TGS-LUD-0003 Issue 1 – Barrier Installation • SMWSASCA-TMP-0001 (3 sheets) • SMWSASCA-TMP-0002 (3 sheets) • SMWSASCA-TMP-0003 (3 sheets)
Client Contact	[redacted]	**Report Provider**	Road Safety Audits

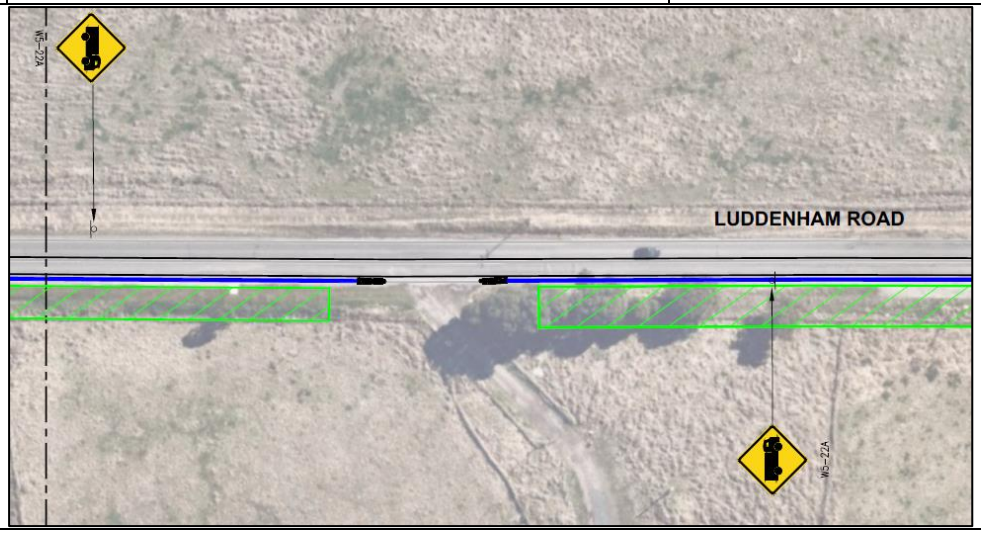
Desktop TGS General Scope: The scope of the audit is to assess the plans on their merits and in the context of the road environment, with standards and guidelines as a reference.



[redacted]

Luddenham Road Gates 4 & 5 CTMP Western Sydney Airport – Surface and Civil Alignment Works				
	Audit Point	**Treatment Option**	**Sue Lewis Consulting** Responder: [redacted] **Response**	**Status**
SCAW-TGS-LUD-0001 – Barrier Installation				
1.	No road safety issues are identified in relation to the proposed TGS for the barrier installation. It is noted that there is a crest along Luddenham Road, east of the intersection (Gate 4). However, the advance signage as shown in the TGS are located on approach to the crest and as such would be visible to westbound motorists approach the work area.	Nil. Note only.	Noted	Closed
SCAW-TGS-LUD-0002 – Signage Installation				
2.	No road safety issues are identified in relation to the proposed TGS for the signage installation.	Nil. Note only.	Noted	Closed
SCAW-TGS-LUD-0003 – Barrier Installation				
3.	No road safety issues are identified in relation to the proposed TGS for the signage installation.	Nil. Note only.	Noted	Closed

Luddenham Road Gates 4 & 5 CTMP Western Sydney Airport – Surface and Civil Alignment Works				
	Audit Point	**Treatment Option**	**Sue Lewis Consulting** Responder: [redacted] **Response**	**Status**
Site Layout Drawings				
	It is understood that the posted speed limit will be 40km/h when workers are present and a reduced speed limit of 60km/h is proposed along Luddenham Road after constructions hours.			
4.	**SMWSASCA-TMP-0001 & 0002** No road safety issues are identified in relation to the proposed signage and temporary barrier layout. However, it is not obvious as to what type of concrete barrier or terminal treatment is proposed.	Ensure that there is adequate separation, to allow for barrier deflection width, between the temporary barrier and work area for the type of temporary barrier selected. In addition, ensure that the terminal treatment selected is appropriate for the conditions and applicable speed limit after construction hours. Risk: N/A	Noted - Safety Manager to ensure that No Go area delineated in accordance with TfNSW approved safety barriers requirements	Ongoing

Luddenham Road Gates 4 & 5 CTMP Western Sydney Airport – Surface and Civil Alignment Works				
	Audit Point	**Treatment Option**	**Sue Lewis Consulting** Responder: [redacted] **Response**	**Status**
5.	**SMWSASCA-TMP-0001 & 0002** Noted that truck warning signs are proposed at the break along the barrier. Hence, it is expected that trucks will use this opening. There is no indication in the drawing that anti gawk-screens will be omitted to ensure adequate SISD will be available at the access/egress.	Ensure that anti-gawk screens are omitted along the top of barrier at the access/egress so that adequate SISD is available. Risk: Low to Medium	Note added to drawings	Closed
				

Luddenham Road Gates 4 & 5 CTMP Western Sydney Airport – Surface and Civil Alignment Works				
	Audit Point	**Treatment Option**	**Sue Lewis Consulting** Responder: [redacted]	
			Response	**Status**
6.	**SMWSASCA-TMP-0003** No road safety issues are identified in relation to the proposed signage and the deceleration/acceleration lane layout. It is noted that the drawing indicates that the deceleration and acceleration lanes are for 70km/h and refers to the AGRD Part 4A tables that relate to cars but not trucks. However, trucks are not expected to operate as such speeds during construction hours.	Nil. Note only.	Noted	Closed

Explanatory Notes

Short Format: This 'short format' report has been pioneered by RSA (Road Safety Audits) since 2008, initiated through requests by clients to assist their processes, for ease with stakeholders, and for timeliness. It is typically confined in use to construction traffic management and typically for discrete packages of plans / areas and often for large projects with repetitious small audit sections. The use of this format assumes that the reader/s know what a road safety audit is and how to respond to it.

Projects: Audit points are often raised in projects in relation to: 1. specific themes (e.g. the use of a safety barrier type), or 2. the treatment of particular locations. Once key issues have been initially raised, they will not necessarily be re-raised in future audits. This will depend on the issue, the RSA's perception of the client's assessment and understanding of the issue, and other factors. Therefore, discrete audits as part of a project should be read and actioned by a **project representative who is familiar with the audit history**.

Responding: Although the client receiving the report does not have to agree to the audit findings/suggestions, the issues and associated risks should be carefully considered. A written response should be made to all of the audit findings raised, then signed off by the responsible person from the project team.

[X]**Response**: The responder should focus on and consider the **audit point**, regardless of whether the audit team's suggested treatment option is feasible / appropriate / agreed to.

[Y]**Status**: The status of the issue as it sits with the Project. i.e. 'actioned', 'closed', 'pending information / further guidance'.

Language:
Austroads Road Safety Audit Part 6 suggests that the organisation responding to the audit provides a risk assessment. However, RSA will at times offer a guide of 'high' 'medium' and 'low' risk, which is based on a professional appraisal of the risk ('severity' and 'frequency') for the responder to use as a guide. Other language commonly used and its intent is as follows:

- 'Urgent': Needs immediate attention / changes as per RSA suggestion or similar.
- 'Recommend' / 'Serious' / 'Important': Must be robustly reviewed. Most likely requires a change to avoid a high-risk road environment for one or more user groups.
- 'Should' / 'Suggest' / 'Significant': Based on the view of the RSA team the suggestion should be done, but it concedes that there could be reasons why inaction or alternative action may be preferred. Must be robustly reviewed by contractor and where relevant with key traffic engineering project stakeholders.
- 'Review' / 'Consider': RSA is raising an observation but has no *strong* opinion on the outcome and need for changes. Project should review because it's not an immediate and high risk and may not be immediately obvious to RSA the reasons for the practice / setup / behaviour. May need monitoring.
- 'Minor': Typically, a low road-safety consequence / compliance issues (to guidelines or plans) / administrative controls. Unlikely to increase risk of crash.
- 'Note': Little or no road safety significance. Typically added to give a complete picture of the design, site, context, analysis, auditors understanding.

Intent of Issues Listing Order: Audit points might be clustered according to location, theme, or time. When this is not done and the audit comprises an uncategorised list of points, the key issues are often discussed first. However, there is no official ordering of points, and they should all be read on their merits and on the basis of the language guide above.
References: 1. Austroads Guide to Road Safety – Road Safety Audit – (2019) 6 and 6A; 2. AS 1742.3 – 2019; 2. State specific codes and guidelines re: Traffic Control at Work Sites; and 3. Design: 1. Austroads guidelines and 2. state-specific supplements and technical publications as relevant.

Safe System: Austroads GRS-RSA6A encourages practitioners to adopt safe system principles within the road safety audit. Safe system (roads) calls for a design to not allow serious injury and fatalities to occur for the expected road users and the typical crash types expected for that design type. This design-objective is considered within this road safety audit as a good practice objective. However, in practice, safe system-based analysis of risks and treatment options is typically not adopted for traffic management stage audits in the same way as it is in design stage audits.

Process and Quality: RSA's quality assurance process is based on its senior auditors having a rich experience base, but also utilises customised checklists designed for niche areas in traffic engineering/road design (e.g. safety barriers, pavement shaping, CBD traffic management), in conjunction with a four-layer audit process: 1. on-site inspection; 2. media and data capture and review; 3. specialist / second auditor input; and (where warranted) 4. secondary blinded reviews.

Audit Coverage: The audit has attempted to balance the safety needs of all road users. As per Austroads guidelines, the suggestions provided have attempted to be realistic/feasible and commensurate with the actual risk posed. Suggestions are made from a safety perspective only, and are made in the absence of full project knowledge and design constraints. RSA can provide a detailed risk assessment / issue evaluation report upon request. The audit raises potential safety risks noted / observed / anticipated by the audit team, and in particular the higher-risk issues. However, a road safety audit is undertaken by people, highly influenced by the experience, views and limitations of the individual team members. It is expected that the project team has competence to identify safety issues itself as the project progresses, and to ask the audit team further questions where necessary.

Appendix F – Stakeholder comments

REVIEW COMMENTS SHEET

DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	**Traffic Management Plan, Luddenham Rd - Gate 4 & 5**	04.01	S3	36	24/03/2023	SMD	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 1.2	CTMF	Section 1.2 further to the lack of clarity and stakeholder confusion at the TCG on 23 March the CTMP does not make clear why this Rev 02 document has been submitted and what the relationship is with the Gate 5 access. This section refers to Gate 5 in the first paragraph and yet a photo of Gate 4 is provided further on.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 1.2	CTMF		Observation	Y
				36.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 1.2	CTMF	Document amended	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 1.2	CTMF		Observation	Y
				37	24/03/2023	SMD	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3.2.1.2	CTMF	Section 3.2.1.2 - further to the lack of clarity and stakeholder confusion at the TCG on 23 March the CTMP refers to pier protection in the end state situation which will not be the case.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3.2.1.2	CTMF		Observation	Y
				37.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3.2.1.2	CTMF	Document amended	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3.2.1.2	CTMF		Observation	Y
				39	27/03/2023	SMD	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3	N/A	Is the timing shown under the section 3 heading still valid? Please review and adjust. Section 3.2.1.2 states that barriers will remain in place around the pier worksite until January 2024 - this is substantially longer than the finish date for the Site Early Works. The barriers required to protect the pier construction site appear to fall under section 4 - Site Main Works. Section 4.1 refers specifically to viaduct construction including substructure. Please clarify.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3	N/A		Observation	Y
				39.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3	N/A	The viaduct construction will continue in the site main works. However, it is proposed to install the barriers in the site early works with the possible commencement of the pier works behind the barriers	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Section 3	N/A		Observation	Y
				40	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA	Where is the new access point located on Luddenham Rd? Does the access point use an existing driveway? Images would be beneficial.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA		Observation	Y
				40.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA	Document amended	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA		Observation	Y
				41	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA	Please confirm that the new access point would only be used for an 8 week period. How will it look / be closed off once no longer in use?	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA		Observation	Y
				41.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA	The access is an existing access point. Once the barriers are removed, this access point will become the access point into the SCAW site	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2	NA		Observation	Y

DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
				42	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2	NA	What is the reasoning for the stop/slow arrangement for vehicle access/egress during works? All driveways and gates should accommodate these movements without need for traffic control. There are already a number of other worksites on Luddenham Rd requiring a similar arrangement, so it is important for community impacts to be minimised as much a possible.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2	NA		Observation	Y
				42.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2	NA	Noted. It is proposed to operate stop slow as requested by Council, refer to comment 48	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2	NA		Observation	Y
				43	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2 and Appendix D	NA	Barriers systems must comply with all relevant standards (incl. TCAWS and TfNSW barrier systems) and adhere to any further agreements made between Sydney Metro and Council.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2 and Appendix D	NA		Observation	Y
				43.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2 and Appendix D	NA	Noted	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.1.2 and Appendix D	NA		Observation	Y
				44	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.5	NA	In addition to Endeavour Energy / Garde, SCAW should have regular contact with M12 to coordinate works and ensure no conflicts	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.5	NA		Observation	Y
				44.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.5	NA	Document amended	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	3.2.5	NA		Observation	Y
				45	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	TGS ending -0001	NA	Is the intent to only have one work area active at a time?	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	TGS ending -0001	NA		Observation	Y
				45.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	TGS ending -0001	NA	Yes	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	TGS ending -0001	NA		Observation	Y
				46	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D - General	NA	Explain the reason for lane width being reduced from 3.5m to 3m. It is always perferred that existing be maintained and/or a min. of 3.2m lane widths to be provided - particularly on roads serviced by buses and heavy vehicles.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D - General	NA		Observation	Y
				46.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D - General	NA	The lane width of 3m was previously approved for Gates 4 and 5 CTMP so this has been maintained	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D - General	NA		Observation	Y
				47	3/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D, DWG: SMWSASCA-TMP-0001	NA	There are both 60km/h and 40km/h road work speed signs in close proximity to each other shown on the drawing. In section 3.2.1.2, it suggests the 40km/h would only be required when workers are on site, and not a permanent fixture. Suggest the 40km/h be managed under an ROL / SZA arrangement and implemented only when workers are within close proximity to live traffic.	Observation	Y

DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D, DWG: SMWSASCA-TMP-0001	NA		Observation	Y
				47.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D, DWG: SMWSASCA-TMP-0001	NA	These drawings have not substantially changed since the previously approved CTMP. The only change is the installation of a new gate and the extension of the barriers to the north to provide the temporary formworks for the pier	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D, DWG: SMWSASCA-TMP-0001	NA		Observation	Y
				47.01.01	20/04/2023	TFN	[redacted]				Conditionally closed - Noted. However, SCAW will need to coordinate work zones to ensure no conflicting setups and that consistent speed limits are applied.	Observation	Y
												Observation	Y
				48	4/04/2023	PCC	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	NA	NA	Council advises that all heavy vehicle movement in and out of Gate 5 and temporary site access point off Luddenham Road are to be performed under traffic control for safety.	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	NA	NA		Observation	Y
				48.01	17/04/2023	CPU	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	NA	NA	Noted	Observation	Y
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	NA	NA		Observation	Y
				50	12/04/2023	TFN	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	SCAW-TGSLUD- 0003 (pg.38)	-	The work zone indicated here is beyond the pier protection area as shown in Appendix D Part 2. Can the barrier setup for 'gate-5 deceleration lane' and 'pier protection' be a concurrent task? If not the plan, the work zone should be limited to the protection area.	Potential Non-Compliance	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	SCAW-TGSLUD- 0003 (pg.38)	-		Potential Non-Compliance	N
				50.01	17/04/2023	CPU	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	SCAW-TGSLUD- 0003 (pg.38)	-	In the previous approved version of this CTMP you requested that the work zones be reduced - hence why this has resulted in a number of TGS for the barrier placement. If we did implement the TGS concurrently this would result in a longer stop slow operation	Potential Non-Compliance	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	SCAW-TGSLUD- 0003 (pg.38)	-		Potential Non-Compliance	N
				50.01.01	24/04/2023	TFN	[redacted]	SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	SCAW-TGSLUD- 0003 (pg.38)	-	The comment here is consistent with my previous - to reduce length of work zone as much as practical. If the TGS- SCAWTGSLUD0003 is for pier protection setup only then the work zone indicated seem too long. If the TCS is for both pier protection and Gate 5 access setup, please explain how this plan correlates with TGS-SCAWTGSLUD0001 (ie work zone overlapped).	Potential Non-Compliance	N
								SMWSASCA-CPU-1NL-NL000-TF-PLN-000005	SCAW-TGSLUD- 0003 (pg.38)	-	TGS amended	Potential Non-Compliance	N
				51	12/04/2023	TFN	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-	Based on the swept path, B-double access to and from gate-5 require traffic control. The CTMP should justify the purpose and frequency of use and how the impact will be managed.	Potential Non-Compliance	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-	B-Double access is not required as Luddenham Road is not a B-double route. Low loader access will be required for segment deliveries which are delivered at night. CTMP amended to note this in Section 5	Potential Non-Compliance	N
				51.01	17/04/2023	CPU	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-	Refer to comment 48 from Council	Potential Non-Compliance	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-		Potential Non-Compliance	N
				51.01.01	24/04/2023	TFN	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-	Please clarify which section of the CTMP addressed the Counci/TfNSW comment regarding the use and controls of B-double. B-double is not even mentioned in Section 3.2.1 impacts on traffic flow. Need clarification.	Potential Non-Compliance	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-	Refer to section 3.2 and 5 which clarifies vehicle size and access/ egress arrangements	Potential Non-Compliance	N

DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
				52	12/04/2023	TFN	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 2 (pg.2)	-	Please advise the largest vehicle and if any turn restrictions apply on the driveway access between barriers/work zones.	Observation	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 2 (pg.2)	-	Refer to section 3.2 and 5 which clarifies vehicle size and access/ egress arrangements	Observation	N
				52.01	17/04/2023	CPU	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 2 (pg.2)	-	The access is an existing access point. Swept paths have been undertaken to show the vehicles that can access this location	Observation	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 2 (pg.2)	-		Observation	N
				52.01.01	24/04/2023	TFN	[redacted]	MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-	The swept paths for left in from Luddenham and right out to Luddenham seem to impact the existing tree and fencing on the side road? It's hard to judge due to the vague image.	Observation	N
								MWSASCA-CPU-1NL-NL000-TF-PLN-000005	Appendix D Part 1 (pg.5 & 6)	-	The B-double swept path has been removed as Luddenham Road is not a nominated B-Double route. Low loader swept paths have been included. The trees have been removed and the power pole will be removed early next week from within the site. It should be noted that the only change to the previously approved CTMP for Gates 4 and 5 is the installation of barriers for pier formwork protection.	Observation	N
				53	18/04/2023	SMD	[redacted]				No Comments		Y
													Y

Gmail [redacted]

Open comments on Gates 4&5 CTMP

1 message

[redacted]
Thu, Dec 22, 2022 at 12:31 PM
To: [redacted]
Cc: [redacted]

Afternoon [redacted]

Left a voicemail regarding the above

Comment 15.01.01 - regarding the barriers and end treatments to be used and the requirement for Road Work ahead and End Road work signs is still open. I have not provided details on the type of barriers and crash cushions to be used as CPBUI will be sourcing these barriers and end treatments from other CPB projects - the project team and safety manager have been provided with the TfNSW's barrier document (attached for your information) so that they are aware of the requirements for deflection zones.

As you would be aware the type of RRPM's to be used - these are readily available on the market and as long as they comply with the RMS Delineation Guideline CPB are able to source these from a number of suppliers including from the line marking company that will be engaged to undertake the line marking changes on Luddenham Road

As far as the road work signs - I have added a note to the drawings to liaise with Endeavour Energy as their work areas are constantly changing.

Comment 16 - reconsider the median island location of the 60 Ahead sign - likely to be hit in this location. the 60 Ahead sign should be duplicated - this comment was actioned previously - refer below excerpt- so it is unclear as to why this comment is still open?

Regards

[redacted]

Sue Lewis Consulting
Construction Traffic Planning

Gmail [redacted]

RE: Open comment on Luddenham Road Gates 4&5 CTMP

1 message

[redacted] Fri, Dec 23, 2022 at 1:16 PM
To: [redacted]
Cc: [redacted]

Hi [redacted]

Just to confirm I spoke to [redacted] yesterday and we can now close out our comments regarding the cycle lane.

The issue raised was around the plan presented and the future intersection overlay, this implies that this TCS design will be operational at some point. Our concern was that if the construction access was still in use with the TCS operational it would have serious safety implications for cyclists due to the lane encroachment for the HV turning path.

This is now resolved but if the situation does change in the future than we will need to revisit the access arrangements.

Hope this helps to clarify our position.

Merry Christmas and a Happy New Year.

Regards

[redacted]
Operations Manager

Greater Sydney

Transport for NSW

M [redacted]

NSW GOVERNMENT | Transport for NSW

From: [redacted]
Sent: Thursday, 22 December 2022 3:50 PM
To: [redacted]
Cc: [redacted]

Subject: RE: Open comment on Luddenham Road Gates 4&5 CTMP

[redacted]

I've looked into the issues raised in your email and it looks like there is no cycle lane in this particular plan, but I would like to chat with [redacted] further clarify the situation before I agree to close it out.

Regards

[redacted]
Operations Manager

Greater Sydney

Transport for NSW

M [redacted]

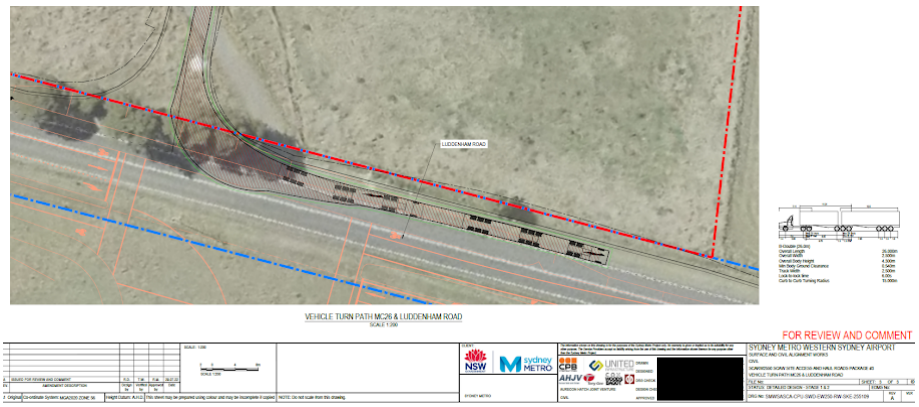
From: [redacted]
Sent: Thursday, 22 December 2022 12:43 PM
To: [redacted]
Cc: [redacted]
Subject: Open comment on Luddenham Road Gates 4&5 CTMP

[redacted]

Comment 21.01.01

Egress movement for B-Doubles appears to extend into the marked bicycle path.

However, this path is not there at present and will be built by the developer at a later stage (> 2 years) and therefore would appreciate if the comment could be closed out



Regards

[redacted]

Gmail [redacted]

Re: Comments on Luddenham Road Gates 4&5

1 message

[redacted]
Mon, Jan 9, 2023 at 4:19 PM
To: [redacted]
Cc: [redacted]

[redacted]

Just so that you are aware my first name is [redacted] - so please address the emails to [redacted] unless you want to put a Ms in front of it 😀

The design went through the Sydney Metro design review process of which I am not a part of - maybe [redacted] or [redacted] can answer that

Numbers to be updated on next review of the CTMP

The contra flow (stop slow) will be implemented during the day with the hours being those provided by CJP through the ROL process. The duration of the implementation is dependent on the ROL hours received. The works should take approximately 1 week to implement the long term arrangements - again this is also weather dependent and also dependent on other contractor's in the area. Once the long term arrangement is in place the TGS will be implemented intermittently over the duration of the construction task - approximately 1 month

[redacted]

Mon, Jan 9, 2023 at 4:11 PM [redacted]
[redacted]

Happy New Year.

Thanks for the update and explanation:

- Item 23: the item has been closed. Please can you advise which TfNSW team/department was consulted for our records?
- Item 24: Table 3 of the CTMP attached indicates all (50) LV staff movements will occur during peaks which against your advice. Please update the table numbers accordingly.
- Items 26 & 32: the staged TGS attached should be a better way to manage the length and traffic impacts of the work areas on Luddenham Road. How long will the contraflow be implemented within areas 1 & 2 (ie TGS duration & operational hours), and am I correct there will be no concurrent operation between areas 1 & 2 (ie staged contraflow)?

Please reach out if you need clarification.

Regards,

[redacted]

[redacted]

Subject: Comments on Luddenham Road Gates 4&5

[redacted]

I note that there are still a number of comments that are still open on the above CTMP.

I note that you expressed some concern with the length of the stop slow operation on Luddenham Road to implement the barrier and line marking changes as well as to facilitate truck movements during the works. Based on our discussion last week I have amended the TGS to reduce the length of the stop slow to the original length.

I note that there are other comments that were not closed on the last comment sheet that I received specifically:

Item 23 regarding the design of the acceleration and deceleration lanes - which was reviewed through the Sydney Metro design process which includes Council and TfNSW. I also noted that the lanes will only be in place for the duration of the CTMP as can be seen by the designers overlay of a signalised intersection which is to be installed by others post the completion of our works.

Item 24 regarding staff vehicle movements driving in and out of the site daily - as noted in my response 50 staff will be accommodated on site and are expected to drive in prior to the main AM peak hour and leave between 6 and 630pm. There may be some small movements outside of these peak periods but these will be limited.

Item 32 regarding the sequencing and duration of the TGS at the various locations - this was included in the previous revision of the CTMP (C.01 version). Is there any other information that is required to close out this comment?

[redacted]

If you wouldn't mind uploading this email vai Teambinder as well that would be appreciated

Regards

[redacted]
Director

[redacted]

Sue Lewis Consulting
Construction Traffic Planning

OFFICIAL

--
Regards

[redacted]

Sue Lewis Consulting
Construction Traffic Planning

Appendix G – Inspection checklists

E.4 Shift / Daily TTM inspection checklist

Shift Inspections must be undertaken by a person holding the PWZTMP or ITCP qualification when a TGS is installed, changed or updated, to ensure the TGS is implemented as designed. This includes at a minimum, twice per shift (recommended every 2 hours). This form can also be used for inspecting 'Aftercare' arrangements.

Completed by:					
Name:		Signature:			
TMP Reference:		TGS Reference:			
Date:		Time/s	*Inspection 1*	*Inspection 2*	*Inspection 3*
			00-00	00-00	00-00

Drive through TGS inspection		*Inspection 1*	*Inspection 2*	*Inspection 3*
Have any adjustments been made to the approved TGS?		☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If yes, provide details:	Are changes within tolerances? ***If no, TGS must be reviewed by a PWZTMP***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
	Have changes been approved? ***If no, TGS must be approved***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:				
Have all signs and devices been installed in accordance with approved TGS? ***If no, provide detail of action taken***		☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:				

Drive through TGS inspection	*Inspection 1*	*Inspection 2*	*Inspection 3*
Are PTCD positioned as prescribed in TGS? ***If no, provide detail of action taken***	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A
Comments or details of action taken:			
Are manual traffic controllers clear of travel lane, have suitable escape route? ***If no, provide detail and reposition manual traffic controllers***	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A
Comments or details of action taken:			
Are sign and devices in good condition, clearly visible to road users? ***If no, provide detail of action taken***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:			
Are all signs mounted level and suitably clear of travel lanes? ***If no, provide detail of action taken***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:			
Are conflicting or non-applicable signs covered or removed? ***If no, provide detail and remove or cover signs***	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A
Comments or details of action taken:			

Drive through TGS inspection	*Inspection 1*	*Inspection 2*	*Inspection 3*
Is temporary delineation installed as prescribed i.e. straight line forming taper? ***If no provide details and rectify delineation***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:			
Have site conditions changed due to shade, park vehicles, glare etc. ***If yes provide details and note if action is required***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:			
Are registered trailers i.e. VMS / light towers; suitably clear of travel lanes and delineated? ***If no provide details and rectify location***	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A
Comments or details of action taken:			
Are temporary speed zones operating as prescribed? ***If no provide details and discuss with work supervisor***	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A
Comments or details of action taken:			
Are workers on foot / plant clearances been applied / observed? ***If no provide details and implement controls to rectify***	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No ☐ N/A
Comments or details of action taken:			

Post drive through confirmation	*Inspection 1*	*Inspection 2*	*Inspection 3*
Is TGS valid for the site activity and operating safely as intended? ***If no provide details and implement controls to rectify***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:			
Is TGS is appropriate for the current traffic conditions? ***If no provide details and implement controls to rectify***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:			
Have potential hazards identified in TGS been addressed? i.e. end-of-queue management ***If no provide details of additional hazards and controls required***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Comments or details of action taken:			

Additional comments:

Reset forms - pages 278 to 281

E.5 Post completion inspection checklist

Completed by:			
Name:		Road name/Staging Plan number:	
Signature:		Date / time:	
ITCP or PWZTMP card number			

Drive through post completed inspection		
Item		**Comments / Action**
Have all work activities been completed?	☐ Yes ☐ No	
Has all plant and equipment been removed?	☐ Yes ☐ No	
Have all TTM signs and devices been removed?	☐ Yes ☐ No	
Has all TTM linemarking been obliterated?	☐ Yes ☐ No	
Have existing permanent speed limits been reinstated?	☐ Yes ☐ No	
Have all TTM site hazards been removed?	☐ Yes ☐ No	
Other	☐ Yes ☐ No	

Desktop post completion inspection		
Have all TGSs for completed tasks been retained?	☐ Yes ☐ No	
Have all TMP required documents been placed in relevant folders?	☐ Yes ☐ No	
Has TMP/TGS designer requested addition information post TTM removal?	☐ Yes ☐ No	
Is the road safe for opening to road users?	☐ Yes ☐ No	

Additional comments:

Reset forms - pages 282 to 283

E.3 Weekly TTM inspection checklist

Weekly inspections must only be carried out by a PWZTMP qualified person. Weekly inspections must be carried out when a site is first open and at least once every week thereafter.

Completed by:				
Name:		Signature:		
TMP Reference:		TGS Reference:		
Date:		Inspection type	☐ Pre-opening	☐ Weekly
Desktop review				
Is a copy of the location TMP and relevant TGS available? ***If no inspection must not be undertaken until documents are obtained***			☐ Yes ☐ No	
Details of TMP and TGS:				
Are the location TMP and relevant TGS approved? ***If no, work must be stopped until documents are approved***			☐ Yes ☐ No	
Comments or details of action taken:				
Site Inspection				
Inspection completed:	☐During the day ☐During the night			
Signs and devices positioned as prescribed and commanding attention? ***If no provide details and rectify signs***			☐ Yes ☐ No	
Comments or details of action taken:				

Site Inspection	
Sign sizes as prescribed? *If no provide details and rectify signs*	☐ Yes ☐ No
Comments or details of action taken:	
Signs are mounted level and suitably clear of travel lanes? *If no provide details and rectify signs*	☐ Yes ☐ No
Comments or details of action taken:	
Has temporary delineation been applied as prescribed, with permanent markings obliterated? *If no provide details of action required to rectify delineation*	☐ Yes ☐ No
Comments or details of action taken:	
Are registered trailers i.e. VMS / light towers; suitably clear of travel lanes and delineated? *If no provide details and rectify location*	☐ Yes ☐ No
Comments or details of action taken:	
Are temporary speed zones operating as prescribed? *If no provide details and discuss with work supervisor*	☐ Yes ☐ No
Comments or details of action taken:	
Are PTCD positioned as prescribed in TGS? *If no provide details of action required to rectify*	☐ Yes ☐ No
Comments or details of action taken:	

Site Inspection	
Are manual traffic controllers clear of travel lane, have suitable escape route? ***If no provide details of action required to rectify***	☐ Yes ☐ No
Comments or details of action taken:	
Are site accesses and egresses well defined and safe for work vehicles? ***If no provide details of action required to rectify***	☐ Yes ☐ No
Comments or details of action taken:	
Termination signs are suitably located? i.e. D downstream of last activity. ***If no provide details of action required to rectify***	☐ Yes ☐ No
Comments or details of action taken:	

Post site inspection confirmation	
Is worksite layout operating safely as intended? ***If no provide details and implement controls to rectify***	☐ Yes ☐ No
Comments or details of action taken:	
Has TMP identified and addressed key TTM risks? ***If no provide details and implement controls to rectify***	☐ Yes ☐ No
Comments or details of action taken:	
Have key TTM risks been addressed on site? ***If no provide details of additional hazards and controls required***	☐ Yes ☐ No
Comments or details of action taken:	
Have copies of Shift Inspections been sighted as completed as required? ***If no provide details and discuss with nominated rep completing Shift Inspections***	☐ Yes ☐ No ☐ N/A
Comments or details of action taken:	

Additional comments:

Reset forms - pages 273 to 277