

## Construction Traffic Management Plan Patons Lane – nightly closures

# 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	13 May 2024	
Revision	В	
Document Number	SMWSASCA-CPU-1NL-NL000-TF-PLN-000012	

#### **Document Approval**

Rev.	Date	Prepared by	Reviewed by	Approved by	Remarks
А	9 Feb 24				For review
В	13 May 2024				For approval
Signa	ture				



#### **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
А	Initial draft
В	Revised based on comments received



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## Abbreviations and definitions

Abbreviation	Description		
CJP	Customer Journey Planning (formerly SCO)		
СРВ	CPB Contractors Pty Ltd		
CPBUI JV	CPB Contractors Pty Limited and United Infrastructure Pty Limited Joint Venture		
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.



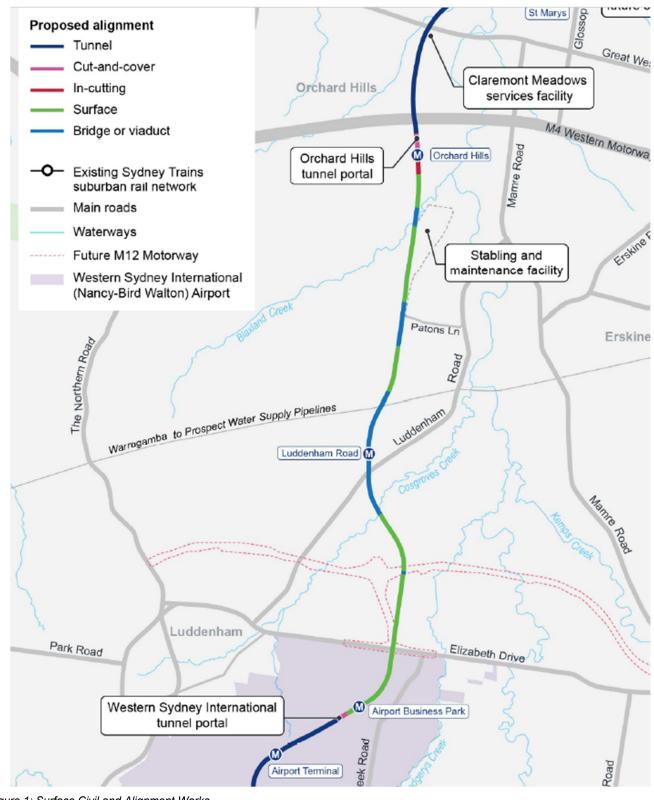


Figure 1: Surface Civil and Alignment Works

<sup>•</sup> 



#### **1.2. Plan Purpose and Objectives**

The Patons Lane Construction Traffic Management Plan (CTMP or this plan) has been developed by CPB Contractors, United Infrastructure Joint Venture (CPBUI) to identify the traffic management measures for the closure of Patons Lane at night for works associated with the Sydney Metro Western Sydney Airport Surface Civils and Alignment Works (SCAW works).

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 western side of Luddenham Road on Patons Lane and is adjacent to the BINGO waste centre. To the north of Patons Lane the stabling and maintenance facility is being developed for the Western Sydney Airport Metro, refer to Figure 2.

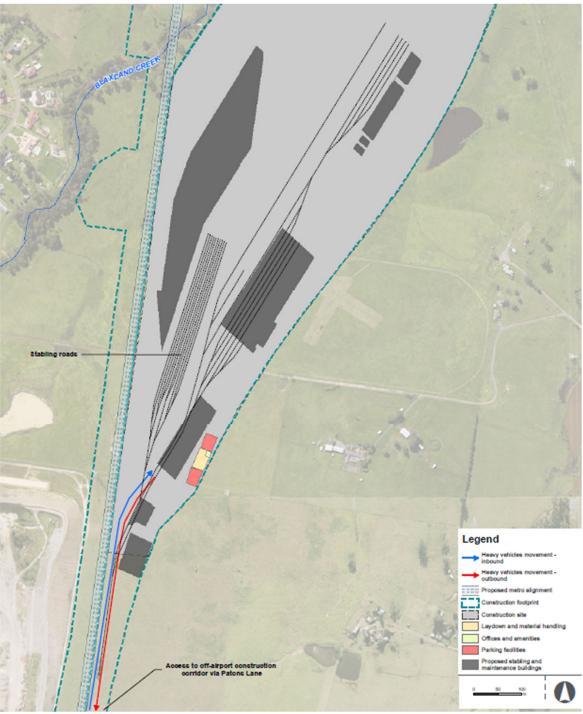


Figure 2 Stabling and Maintenance facility with access off Patons Lane



#### 2.1. Patons Lane, Orchard Hills

Patons Lane is a local road under the care and control of Penrith City Council. Patons Lane runs in an east -west direction with a speed limit of 50km/hr. The road is gated at Luddenham Road, refer to Figure 3. There are no sealed footpaths, cycle routes or on street parking along Patons Lane. No public transport operates along Patons Lane.



Figure 3: Patons Lane to the west of Luddenham Road

Patons Lane terminates to the west of BINGO waste centre, refer to Figure 4. Patons Lane is not a public thoroughfare with the only volumes being associated with the operation of the waste centre and works for Sydney Metro Western Sydney Airport.

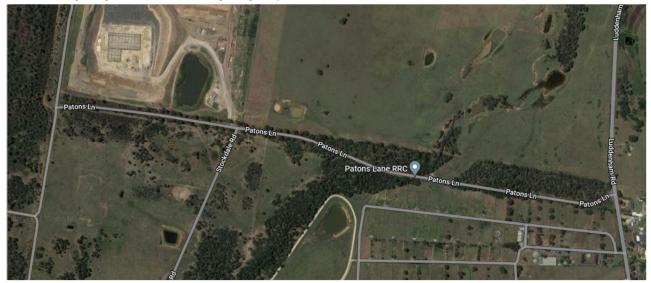


Figure 4: Patons Lane





There is a right turn bay for southbound traffic along Luddenham Road, refer to Figure 5

Figure 5: Right turn bay into Patons Lane

There is a right turn ban for vehicles over 5t from Patons Lane onto Luddenham Road southbound. This turn restriction was imposed on the recycling centre by the Land and Environment Court, refer to section 3.2.1 and Figure 6



Figure 6: Right turn restriction from Patons Lane onto Luddenham Road



## 3. Viaduct erection works

*Duration*: approximately 2 weeks *Timing*: 27-May to 9-June 2024

#### 3.1. Works required

Works to be undertaken during the closure relate to the viaduct erection works over Patons Lane.

Works will generally be undertaken between the hours of 5PM-7AM. There is a requirement for approximately 2 weeks of nighttime closures to complete the works.

#### 3.2. Operating conditions

BINGO's Patons Lane Resource Recovery Centre and Landfill is open between 7AM and 5PM Monday to Friday. The location of the centre is to the west of the SCAW/ SSTOM gate on Patons Lane.



Figure 7: Location of BINGO and SCAW/ SSTOM



#### **3.2.1.** Impact on traffic flow

As it is proposed to close Patons Lane once the BINGO site is closed and the fact that Patons Lane is not open to the public, there is no impact on public traffic flow. Stop slow will be in place to manage internal traffic flows.

#### 3.2.2. Impact on public transport

Two school buses use Luddenham Road one runs in the morning and the other in the afternoon. There is no impact on public transport.

#### 3.2.3. Impact on active transport users

There are no existing footpaths or cycles routes provided along Luddenham Road or Patons Lane. All staff and subcontractors will be inducted and will receive the training as noted in section 5.5 of this CTMP.

#### 3.2.4. Impact on property and utilities access

There is no impact utility access. The BINGO property access will be impacted but the works are planned outside of the Centre's operating hours.

#### 3.2.5. Cumulative impacts

There are no cumulative impacts associated with this CTMP.

#### 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:

• Road closure to the west of the SCAW/ SSTOM gates.

#### 3.5. Required Council approvals

The CTMP will require Penrith City Council's approval

• A ROL will be required from Penrith City Council

#### **3.6. Traffic Guidance Schemes**

Two traffic guidance schemes are required for the work site:

- Stop slow on Patons Lane for gravel installation at initial access/ egress points x 2
- Stop slow on Patons Lane for driveway works at access/ egress points x 2

#### 3.7. Required Council approvals

The CTMP will require Penrith City Council's approval ROL from Penrith City Council will be required



## 4. 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, semitrailers, truck and dog combinations and low loaders, for example.

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.



#### 4.1. 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 8. The routes include Luddenham Road from the M4 Motorway/ Mamre Road intersection and Luddenham Road from Elizabeth Drive. CPBUI JV will predominately use the M4/ Mamre interchange for material delivery, however, access is available from the south via Luddenham Road.

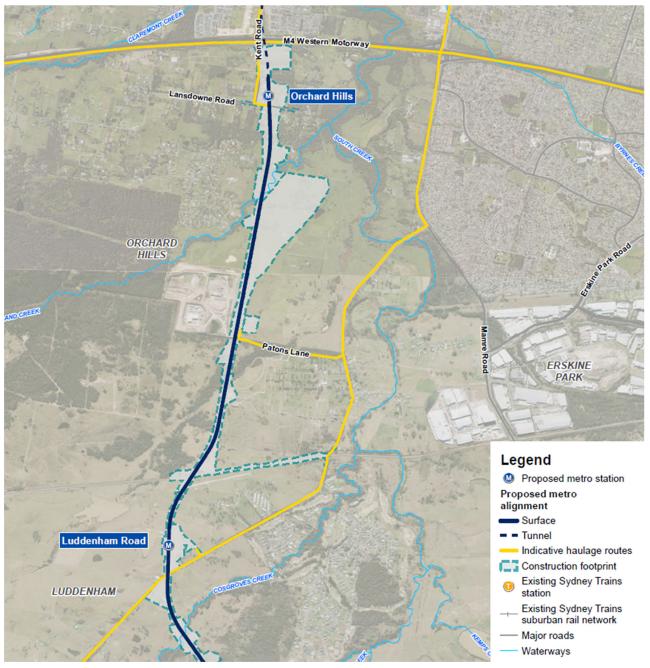


Figure 8: EIS haulage routes

#### 4.2. Road dilapidation report

As noted in the Ministerial Conditions of Approval, a road dilapidation report will be prepared. A copy of that report will be provided to Council within three (3) weeks of completion of the survey and no later than one (1) month before the road is used by Heavy Vehicles associated with the project. Note that it is



not anticipated that any local road, open to the public will be used by heavy vehicles at this construction site.

#### 4.3. 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.

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.



## 5. Other matters

#### 5.1. 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.

#### 5.2. 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.

#### 5.2.1. 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
  - o 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 2: Proposed communications

Notification	Viaduct installation
Community notice	Yes
Precinct update/ e-update	Yes
Email and internet	Yes
Print advertising	No
Advance warning sign(s)	Yes
Gate signs	No

#### 5.2.2. 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

#### 5.3. Stakeholders

There are a number of stakeholders consulted during the development of this CTMP. A copy of their review comments are provided in Appendix D. Table 3 provides an overview of the consultation undertaken for this CTMP.



#### Table 3: Consultation undertaken

Stakeholder	Consultation Type	Date
Traffic and Transport Liaison Group	Presentation	11 <sup>th</sup> January 2024 and 9 February 2024
CJP	Submission of CTMP	9 Feb 2024
Sydney Metro Western Sydney Airport project team	Submission of CTMP	9 Feb 2024
Penrith City Council	Submission of CTMP	9 Feb 2024
TfNSW	Submission of CTMP	9 Feb 2024
DEOH	Meeting and emails	10 May 2024
Endeavour Energy (substation)	Meeting and emails	29 <sup>th</sup> April 2024
Private developer with site access to south of Patons Lane	Meeting and emails	6 <sup>th</sup> May 2024
BINGO	Meeting and emails	24 <sup>th</sup> April 2024
STOM Contractor	Presentation at TTLG	11 <sup>th</sup> January 2024
CJP	Resubmission of CTMP	13 <sup>th</sup> May 2024
Sydney Metro Western Sydney Airport project team	Resubmission of CTMP	13 <sup>th</sup> May 2024
Penrith City Council	Resubmission of CTMP	13 <sup>th</sup> May 2024
TfNSW	Resubmission of CTMP	13 <sup>th</sup> May 2024

#### 5.3.1. 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.

#### 5.3.2. 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



#### 5.4. 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 <u>Destination NSW</u>
- NSW events and festivals Visit NSW
- Upcoming events <u>Penrith City Council</u>

#### 5.5. 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.

#### 5.6. 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.

#### 5.7. Site contacts

Table 4 provides the contact details for the works identified in this CTMP.

Table 4: Site contacts

Name	Position	Mobile#

#### 5.8. 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 I	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.	Section 4
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 4.2
E108	<ul> <li>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):</li> <li>(a) compensate the Relevant Road Authority for the damage so caused; or</li> <li>(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.</li> </ul>	Section 4.2
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;	Sections Error! Reference source not



Project	Planning Approval (SSI 10051)	
	<ul> <li>(c) not carry out marshalling of construction vehicles near sensitive use</li> <li>(d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and</li> <li>(e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMP.</li> </ul>	found. 3.3, 4, 3.2.3 and 4.1
E110	Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.	Section 3.2.4
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.	Section 3.2.4
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.	Section 3.2.4
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.	Section 3.2.4
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.	Section 3.2.3
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 5.3.1
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 5.3.1



## Project Planning Approval (SSI 10051)

-		
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
	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	Section 5.8
Τ2	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
Т3	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 5.3.1
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 5.1
Τ5	Maintain access for pedestrians and cyclists around construction sites as per the guidelines outlined in the Construction Traffic Management Framework. Appropriate signage and line marking would be provided to guide pedestrians and cyclists past construction sites and on the surrounding network to allow access to be maintained	Section 3.2.3
Τ6	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 5.8

#### Sydney Metro Western Sydney Airport Revised performance outcomes

Revised Performance outcomes - Transport								
Network connectivity, safety and efficiency of	Safe and efficient routes are provided for pedestrians, cyclists, and road users at/ near construction sites	Section 3.2.3						
the transport system in the vicinity of the project are managed to minimise	Access to the existing St Marys Station is maintained while train services are operating	Not applicable to the SCAW scope of works						
impacts. The safety of transport system customers is maintained . impacts on network	Safe access to properties and businesses is maintained during construction, unless alternatives are agreed with property owners and businesses	Section 3.2.4						
capacity and the level of	Heavy vehicles access the arterial network as soon as practicable on route to, and immediately after leaving a construction site	Section 4.1						

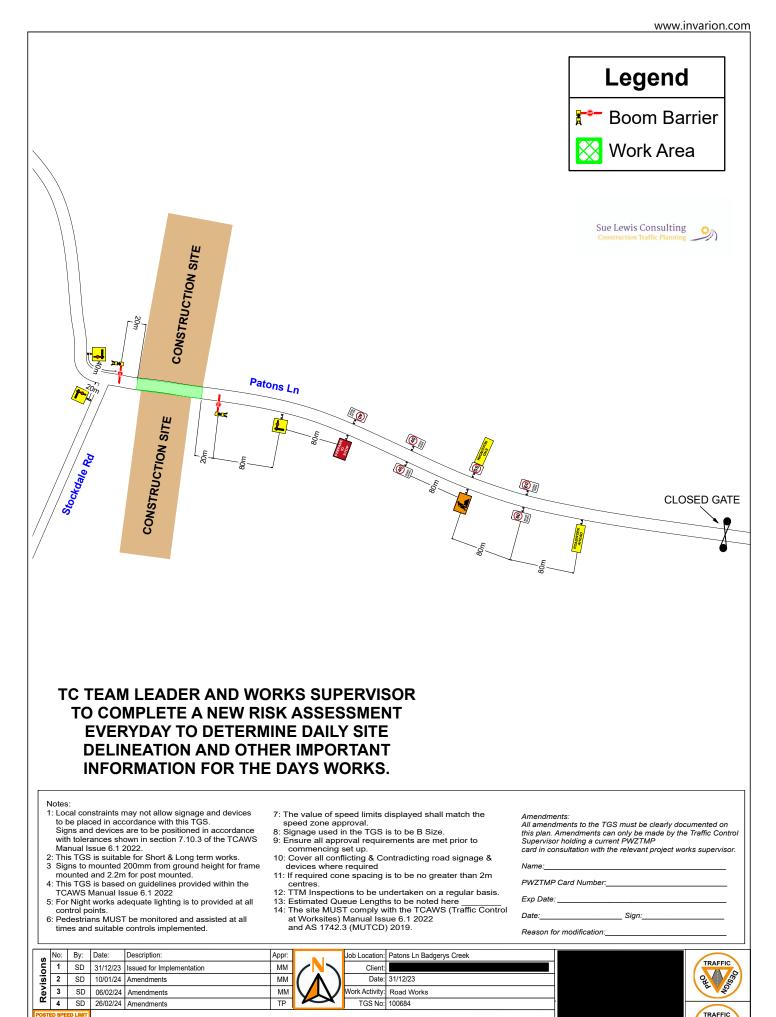


Revised Performance outcomes - Transport						
service are effectively managed	The local community and relevant authorities are informed of transport, access and parking changes/ impacts to minimise inconvenience to the public	Section 5.2				



## Appendix B – Traffic Guidance Schemes/ Drawings

TGS#	Location	Between		Time of day	Works	Expected duration	Traffic control	Impacts
100684	Patons Lane	SCAW/ SSTOM gate	BINGO entrance	Night	Viaduct installation	2 -4 weeks	Full road closure	Minimal as works are undertaken at night outside of BINGO's operating hours SSTOM access provided



Disclaimer: This guidance scheme is for Traffic Management purposes only. Workforce Road Services disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses. Ioses, damages & costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason. The plan is drawn in accordance with the TCAWS manual

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## Appendix C – Road Safety Audit



## Road Safety Audit Report



## Western Sydney Airport SCAW- CTMP

Practical Independent Specialised

Road/Area	Patons Lane		Road Safety Audits Reference	RSA-15334			
Traffic Stage/Phase	Nightly Lane Closures		Report Date	10 January 2024			
Audit Stage	Desktop Traffic Guidance Scheme		Lead Auditor Second Auditor				
Client			TMP / Drawings	Patons Lane Construction Traffic Management Plan – Nightly Lane Closures (Document No: SMWSASCA-CPU-1NL000-TF-PLN-0000XX Rev A)			
Client Contact			Report Provider	Road Safety Audits			
Desisten ICS Convert Scone: The scone of the guidit is to great the plans on their marits and in the context of the read environment, with standards and							

**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.





	Western Sydney Airport SCAW- CTMP Nightly Lane Closures									
	Audit Point	Treatment Option								
			Response	Status						
1.	No road safety issues are identified in relation to the CTMP and the layout as proposed in TGS 100684.	Nil. Note only.	Noted	Closed						
2.	There is a minor compliance issue with the arrangement shown in TGS 100684. There are no 40km/h speed limit repeater signs shown facing traffic on the departure side of the work area ((refer to mark up in the drawing below).	Include 40km/h speed repeater signs.	TGS amended	Closed						
	model and the second se	Contraction of the second seco								



#### **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.

\*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.

YStatus: 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.
- o '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 D – Stakeholder comments

TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY REV	VIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
Construction Traffic Management Plan Patons Lane - nightly closures	A.01	S3	01	12/02/2024	SMD	1NL-NI 000012	2	Section 3.6 and 3.7	N/A	Sections 3.6 and 3.7 appear to be incorrectly duplicated. Please remove.	Observation		Ν
								Section 3.6 and 3.7	N/A	I was not able to find this duplication - therefore no change has been done	Observation		Ν
			02	12/02/2024	SMD		SASCA-CPU- IL000-TF-PLN- I2	5.3	N/A	There are other stakeholders on Patons Lane in addition to those listed in table 3. Other stakeholders include DEOH, Endeavour Energy substation (and associated contractors), and private developer with site access to south of Patons Lane. Please provide evidence that all stakeholders with property access points on Patons Lane have been consulted regarding proposed closure.	Observation		Ν
							SASCA-CPU- NL000-TF-PLN- 12	5.3	N/A	Document amended	Observation		N
			03	12/02/2024	SMD			Section 5.3 and Appendix D	N/A	Section 5.3 refers to Appendix C - reference should be to Appendix D. It is noted that Appendix D is blank or not included. Please provide evidence of consultation with all stakeholders and property owners in Appendix D.	Observation		Ν
							SASCA-CPU- NL000-TF-PLN- 12	Section 5.3 and Appendix D	N/A	Reference amended and consultation included in relevant appendix	Observation		Ν
			04	13/02/2024	TFN			Appendix B	NA	The TGS in Appendix B appears to be missing signage to the West of the construction site on approach to the portable boom (shown in the RSA attachment). Please update to full TGS.	Observation		Ν
						1NL-N 000012	2	Appendix B	NA	TGS amended	Observation		Ν
			05	19/02/2024	SMD	1NL-N 000012	2	Section 3.2.1	CTMF	Section 3.2.1 - Please include evidence that the SCAW contractor has consulted with Bingo and that the proposed works do not impact their operations.	Observation		Ν
							SASCA-CPU- NL000-TF-PLN- 2	Section 3.2.1	CTMF	Consultation included in Appendix D	Observation		Ν
			06	23/02/2024	PCC	1NL-N 000012	2	General	NA	Please ensure nearby residents and businesses, emergency services and bus operators are notified at least seven days prior to the planned closure.	Observation		N
								General	NA	Noted and to be undertaken 7 days prior to closure	Observation		Ν
			07	23/02/2024	TFN		SASCA-CPU- NL000-TF-PLN- 12	Section 3.2.1	N/A	1. Would the viaduct erection works introduce additional traffic? If yes, please include the construction volumes for information. 2. Would there be OSOM transport required for the viaduct works? If yes, please include relevant information.	Observation		N
							SASCA-CPU- NL000-TF-PLN- 12	Section 3.2.1	N/A	No additional traffic will be required above the numbers previously included in the Patons Lane . Refer to Luddenham Road closure for UTB transport for OSOM details	Observation		N



## Appendix E – 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:			
			Inspection 1	Inspection 2	Inspection 3
Date:		Time/s	00-00	00-00	00-00
				1	
Drive through TGS inspec	tion		Inspection 1	Inspection 2	Inspection 3
Have any adjustments been	made to the appro	ved TGS?	□ Yes	□ Yes	□ Yes
	🗆 No	□ No	🗆 No		
If yes, provide details:	Are changes within	n tolerances?	□ Yes	□ Yes	□ Yes
	lf no, TGS mu	st be reviewed by a PWZTMP	□ No	🗆 No	🗆 No
	Have changes bee	en approved?	□ Yes	□ Yes	□ Yes
		If no, TGS must be approved	□ No	🗆 No	🗆 No
Comments or details of action taken:					
Have all signs and devices b	een installed in ac	cordance with			
approved TGS?			□ Yes	□ Yes	□ Yes
	lf no,	provide detail of action taken	□ No	□ No	□ No
Comments or details of action taken:					

Drive through TGS inspec	tion	Inspection 1	Inspection 2	Inspection 3
Are PTCD positioned as pres	cribed in TGS?	□ Yes	□ Yes	□ Yes
	If no, provide detail of action taken	🗆 No	□ No	🗆 No
		□ N/A	□ N/A	□ N/A
Comments or details of action taken:				
Are manual traffic controllers escape route?	s clear of travel lane, have suitable	□ Yes	□ Yes	□ Yes
-	vide detail and reposition manual traffic controllers	□ No	🗆 No	🗆 No
		□ N/A	□ N/A	□ N/A
Comments or details of action taken:			1	I
Are sign and devices in good	I condition, clearly visible to road users?	□ Yes	□ Yes	□ Yes
	If no, provide detail of action taken	🗆 No	□ No	🗆 No
Comments or details of action taken:			1	1
Are all signs mounted level a	nd suitably clear of travel lanes?	□ Yes	□ Yes	□ Yes
	If no, provide detail of action taken	🗆 No	□ No	🗆 No
Comments or details of action taken:				
Are conflicting or non-applic	able signs covered or removed?	□ Yes	□ Yes	□ Yes
	If no, provide detail and remove or cover signs	🗆 No	🗆 No	🗆 No
		□ N/A	□ N/A	□ N/A
Comments or details of action taken:			·	·

Drive through TGS inspec	tion	Inspection 1	Inspection 2	Inspection 3
Is temporary delineation inst forming taper?	alled as prescribed i.e. straight line	□ Yes	□ Yes	□ Yes
If no provide details and rectify delineation		🗆 No	🗆 No	□ No
Comments or details of action taken:				
Have site conditions change	d due to shade, park vehicles, glare etc.	□ Yes	□ Yes	□ Yes
	If yes provide details and note if action is required	🗆 No	🗆 No	🗆 No
Comments or details of action taken:				
Are registered trailers i.e. VN lanes and delineated?	IS / light towers; suitably clear of travel	□ Yes	□ Yes	□ Yes
	If no provide details and rectify location	□ No	🗆 No	🗆 No
		□ N/A	□ N/A	□ N/A
Comments or details of action taken:				
Are temporary speed zones of	operating as prescribed?	□ Yes	□ Yes	□ Yes
lf n	o provide details and discuss with work supervisor	□ No	🗆 No	🗆 No
		□ N/A	□ N/A	□ N/A
Comments or details of action taken:				
Are workers on foot / plant c	learances been applied / observed?	□ Yes	□ Yes	□ Yes
lf i	no provide details and implement controls to rectify	□ No	🗆 No	🗆 No
		□ N/A	□ N/A	□ N/A
Comments or details of action taken:			·	·

Post drive through confirm	Inspection 1	Inspection 2	Inspection 3	
		□ Yes □ No	□ Yes □ No	□ Yes □ No
Comments or details of action taken:				
Is TGS is appropriate for the	current traffic conditions?	□ Yes	□ Yes	□ Yes
lf ne	o provide details and implement controls to rectify	🗆 No	🗆 No	🗆 No
Comments or details of action taken:				
-	ified in TGS been addressed? i.e. end-	□ Yes	□ Yes	□ Yes
of-queue management	details of additional hazards and controls required			
Comments or details of action taken:		·		

#### Additional comments:

<u></u>		

## 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 in	spection		
Item		Comments / Action	
Have all work activities been	□ Yes		
completed?	□ No		
Has all plant and equipment been	□ Yes		
removed?	□ No		
Have all TTM signs and devices been	□ Yes		
removed?	□ No		
Has all TTM linemarking been	□ Yes		
obliterated?	□ No		
Have existing permanent speed limits	□ Yes		
been reinstated?	🗆 No		
Have all TTM site hazards been	□ Yes		
removed?	□ 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:

#### 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 b	y:					
Name:			Signature:			
TMP Reference:			TGS Reference:			
Date:			Inspection type	Pre-opening     Weekly		Veekly
Desktop revi	ew					
Is a copy of the	e location TMP	and relevant TGS ava	ilable?			□ Yes
		lf no inspe	ection must not be undertal	ken until documents are	obtained	
Details of TMP	and TGS:					
Are the location	on TMP and rele	evant TGS approved?				
				□ Yes □ No		
	nents or details of action taken:					
Site Inspection	on	·				
Inspection cor	npleted:	□During the day	$\Box$ During the night			
Signs and dev	ices positioned	d as prescribed and co	ommanding attention?	)		□ Yes
			lf no	provide details and rec	tify signs	□ No
	nents or details of action taken:					

Site Inspection				
Sign sizes as prescribed?		□ Yes		
	If no provide details and rectify signs			
Comments or details of action taken:				
Signs are mounted level and suitably clear of travel lanes?				
	If no provide details and rectify signs			
Comments or details of action taken:				
Has temporary delineation be	een applied as prescribed, with permanent markings obliterated?	□ Yes		
	If no provide details of action required to rectify delineation			
Comments or details of action taken:				
Are registered trailers i.e. VM	S / light towers; suitably clear of travel lanes and delineated?	□ Yes		
	If no provide details and rectify location			
Comments or details of action taken:				
Are temporary speed zones of	operating as prescribed?	□ Yes		
	If no provide details and discuss with work supervisor			
Comments or details of action taken:				
Are PTCD positioned as pres	cribed in TGS?	□ Yes		
	If no provide details of action required to rectify			
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					
Comments or details of action taken:					
Are site accesses and egress	ses well defined and safe for work vehicles?	□ Yes			
	If no provide details of action required to rectify	🗆 No			
Comments or details of action taken:					
Termination signs are suitab	y located? i.e. D downstream of last activity.	□ Yes			
	If no provide details of action required to rectify	🗆 No			
Comments or details of action taken:					

Post site inspection confirmation					
Is worksite layout operating safely	v as intended?				
is workshe layout operating saler	y do interfaced.	□ Yes			
	If no provide details and implement controls to rectify	🗆 No			
Comments or details of action taken:					
Has TMP identified and addressed	d key TTM risks?	□ Yes			
	If no provide details and implement controls to rectify				
Comments or details of action taken:					
Have key TTM risks been address	Have key TTM risks been addressed on site?				
	If no provide details of additional hazards and controls required	🗆 No			
Comments or details of action taken:		1			
Have copies of Shift Inspections I	been sighted as completed as required?				
		□ Yes			
	If no provide details and discuss with nominated rep completing Shift Inspections	□ No			
		□ N/A			
Comments or details of action taken:					

#### Additional comments: