Construction Traffic Management Plan

SMWSTCTP-AFJ-OLP-TF PLN 000001 Revision 04

Sydney Metro West Central Tunnelling Package

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CONTENTS

INTRODUCTION 4
1.1 CTMP CHANGE SUMMARY 4
1.2 PROJECT BACKGROUND 4
PURPOSE AND SCOPE 5
1. 2.1 PURPOSE 5
2 2 OBJECTIVES 5
EXISTING TRAFFIC CONDITIONS 6
2. 3 1 EXISTING ROAD NETWORK 6
3 1 1 HOMEBUSH BAY DRIVE 6
3. 3.1.2 AUSTRALIA AVENUE 6
3.1.3 HERB ELLIOTT AVENUE 6
3.1.4 FIGTREE DRIVE 6
3.1.5 OLYMPIC BOULEVARD 6
3.1.6 SARAH DURACK AVENUE 6
3.2 EXISTING TRAFFIC VOLUMES 6
3.3 PUBLIC TRANSPORT NETWORK 7
3.4 PEDESTRIAN AND CYCLIST NETWORK 8
4. GENERAL CONSTRUCTION DETAILS 10
4.1 OVERVIEW OF CONSTRUCTION ACTIVITIES 10
4.2 CONSTRUCTION WORKING HOURS 10
4.3 HAULAGE ROUTES 11
4.4 SITE ACCESS 11
4.4.1 SITE SAFETY CONTROLS 12
5. 4.5 OSOM MOVEMENTS & TBM REMOVAL 12
4.6 INTERNAL SITE MANAGEMENT 13
CONSTRUCTION TRAFFIC AND TRANSPORT MANAGEMENT 14
5.1 LONG TERM TRAFFIC CHANGES 14
5.2 CONSTRUCTION TRAFFIC VOLUMES 14
5.3 WORKFORCE PARKING 14
5.4 ON STREET PARKING 15
5.5 PEDESTRIANS AND CYCLISTS 15
5.6 PUBLIC TRANSPORT 15
5.7 ACCESS TO LOCAL PROPERTIES, BUSINESSES AND UTILITIES 15
5.8 SPECIAL EVENTS 15
5.9 TRAFFIC STAGING PLAN 16
5.10 INSPECTIONS 16
5.11 ROAD SAFETY AUDIT 17

5 11 1 DRIVER TRAINING 17
COMPLIANCE MANAGEMENT 18
6 1 ROLES AND RESPONSIBILITIES 18
6.2 TRAFFIC AND TRANSPORT LIAISON GROUP 18
6.3 COORDINATION WITH ADJACENT PROJECTS 19
CONCLUSION..... 20
6. **APPENDIX A CONSTRUCTION SITE LAYOUT 21**
APPENDIX B - TRAFFIC GUIDANCE SCHEMES & PEDESTRIAN CONTROL PLAN..... 22
APPENDIX C VEHICLE MOVEMENT PLANS 23
7. **APPENDIX D - HEAVY VEHICLE TURN PATHS 24**
APPENDIX E ROAD SAFETY AUDIT 25
APPENDIX F - SIGHT DISTANCE CHECKS..... 26
APPENDIX G HEAVY VEHICLE LOCAL ROADS (HVLR) 27

INTRODUCTION

1.1 CTMP CHANGE SUMMARY

Throughout the duration of the project, updates to CTMPs may be required. These updates may result in changes to the CTMP to cater for changes in regulations, scope of work changes, or for other reasons to maintain the safe and efficient operation of the project. Changes associated with this revision are as detailed below, within Table 1.

1.

TABLE 1: CTMP CHANGE SUMMARY

CTMP Revision	Date of Revision	Summary of changes
03	22/07/2024	This CTMP was updated to Rev03 to include: • Removal of redundant haul routes associated with the bulk excavation phase of the site • Wording adjustments throughout to better reflect the current stage of works • Detail on the TBM removal.
04	26/08/2024	This CTMP has been revised to address comments raised on the Revision 03 submission

1.2 PROJECT BACKGROUND

The Sydney Metro West Central Tunnelling Package involves the construction of 11 5km of twin tunnel metro line from The Bays Precinct to Sydney Olympic Park, which will be connected with the Sydney Metro City & Southwest and double the rail capacity to/from Sydney CBD.

FIGURE 1: OVERVIEW OF SYDNEY METRO WEST

The Acciona Ferrovial Joint Venture (AFJV) will deliver the Project in partnership with NSW Government and Sydney Metro (SM)

2. PURPOSE AND SCOPE

2.1 PURPOSE

AFJV aims to maintain a safe environment for all road users by effectively maintaining traffic flows during the works and managing construction vehicles to/from the work sites

This site-specific Construction Traffic Management Plan (CTMP) has been prepared to meet the following requirements for Sydney Olympic Park metro station site as part of the Sydney Metro West Central Tunnelling Package (the Project):

- The Project's General Specifications Section 2.11, Section 5.1.11.1
- EIS Technical Paper 1 Stage 1 Traffic and Transport Mitigation Measures
- EIS Construction Traffic Management Plan Framework
- Minister for Planning and Public Spaces' Concept and Stage 1 Conditions of Approval (COA) for the State Significant Infrastructure (SSI 10038)

The scope of this CTMP is to detail the long and short-term traffic changes associated with the construction of Sydney Olympic Park metro station site. This CTMP and the documents referenced in the CTMP have been prepared in accordance with the relevant standards and guidelines.

AFJV will provide safety measures to a wide range of stakeholders potentially affected by the works including but not limited to motorists, pedestrians, cyclists, public transport users, local residents and property owners, business owners and workers/staff engaged on the Project.

2 2 OBJECTIVES

The primary objectives and principles of this CTMP are:

- Keeping traffic delays to a minimum
- Minimising disruption to businesses
- Minimising disturbance to the environment
- Ensuring traffic impacts are within the scope permitted by Transport for NSW (TfNSW), SM and Sydney Olympic Park Authority (SOPA)
- Ensure the safety of employees, contractors and road users
- Meet the requirements of the Project brief, project specifications, COA and TfNSW Traffic Control at Work Sites (TCaWS) Manual Issue 6 1 2022

EXISTING TRAFFIC CONDITIONS

3.1 EXISTING ROAD NETWORK

3.1.1 HOMEBUSH BAY DRIVE

Homebush Bay Drive is a classified state arterial road which forms part of the major north-south link
3. across Parramatta River. Homebush Bay Drive is generally configured with three traffic lanes in each direction separated by a 2.5m wide central median. Parking is not permitted along both sides of the road. The posted speed limit of Homebush Bay Drive is 80km/h.

3 1 2 AUSTRALIA AVENUE

Australia Avenue is a major road through the Sydney Olympic Park precinct. Australia Avenue is a two-way road with two traffic lanes in each direction Parking is prohibited along both sides of the road The posted speed restriction on Australia Avenue is 60km/h

3.1.3 HERB ELLIOTT AVENUE

Herb Elliott Avenue is a SOPA road primarily serving access to commercial office buildings. Herb Elliott Avenue is a two lane, two-way road with a road carriageway width of approximately 13m Ticketed kerbside parking is available along both sides of the road. The posted speed restriction on Herb Elliott Avenue is 40km/h.

3 1 4 FIGTREE DRIVE

Figtree Drive is a minor road within the Sydney Olympic Park precinct serving access to existing commercial buildings and recreational facilities. Figtree Drive has a road carriageway width of approximately 7m to accommodate the eastbound and westbound travel lanes There are some sections of indented parallel parking bays for restricted parking (2P) along both sides of the road. The posted speed restriction on Figtree Drive is 40km/h.

3 1 5 OLYMPIC BOULEVARD

Olympic Boulevard is a north south road between Kevin Coombs Avenue and Shirley Strickland Avenue. Olympic Boulevard is configured with two lanes in each direction separated by a 4m wide central median between Dawn Fraser Avenue and Shirley Strickland Avenue From north of Dawn Fraser Avenue, Olympic Avenue is an undivided two-way road with a road carriageway width of approximately 18m. Parking is available within the marked and indented bays along both sides of the road

3.1.6 SARAH DURACK AVENUE

Sarah Durack Avenue is one of the main roads that bound the Sydney Olympic Park precinct. Sarah Durack Avenue is configured with two traffic lanes in each direction separated by a 4 5m wide central median in the east-west alignment Parking is prohibited along both sides of the road In addition, there are on-road cycle lanes along the north and south sides of the road.

3.2 EXISTING TRAFFIC VOLUMES

The Environmental Impact Assessment of Sydney Metro West Stage 1 (Chapter 10 Transport and Traffic) documents the existing traffic volumes around the Sydney Olympic Park metro station construction site, as shown in Table 2.

TABLE 2: EXISTING TRAFFIC VOLUME (2019)

Road	Location	Direction	AM Peak Traffic Volume (vph)	PM Peak Traffic Volume (vph)
Homebush Bay Drive Ramps	West of Australia Avenue	Eastbound	850	670
		Westbound	360	480
Australia Avenue	North of Homebush Bay Drive	Northbound	1,810	1,750
		Southbound	1,300	1,800
	North of Figtree Drive	Northbound	760	400
		Southbound	420	630
Herb Elliott Avenue	West of Australia Avenue	Eastbound	160	330
		Westbound	370	90
Figtree Drive	West of Australia Avenue	Eastbound	40	150
		Westbound	230	20
Olympic Boulevard	North of Sarah Durack Avenue	Northbound	160	240
		Southbound	140	290
Sarah Durack Avenue	West of Olympic Boulevard	Eastbound	370	570
		Westbound	450	810

Reference: EIS

3 3 PUBLIC TRANSPORT NETWORK

The existing rail and bus service networks within the vicinity of the Sydney Olympic Park metro station construction site is shown in Figure 2. The nearby rail and bus route services are detailed in Table 3

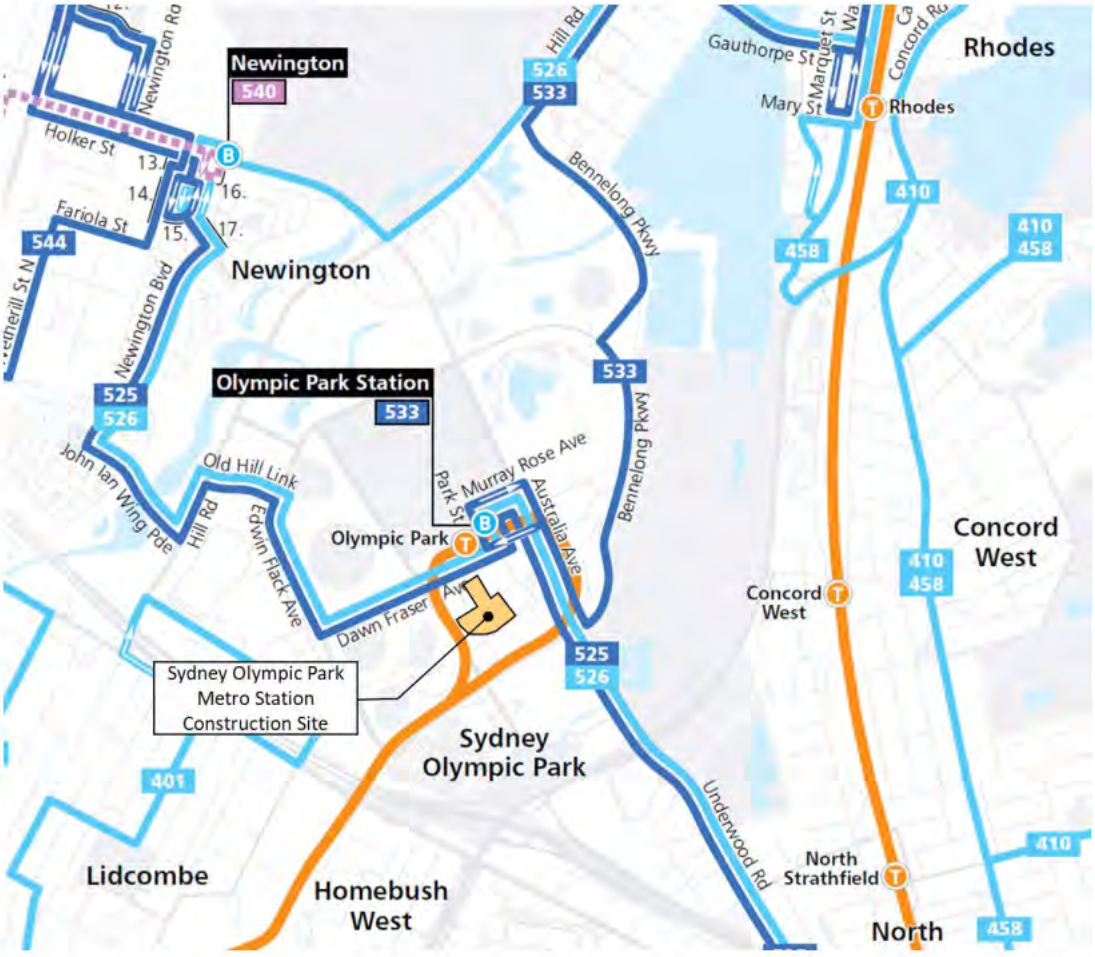
The service frequencies are based on available bus and train timetables (and not conducted as a site count) They were summarised from the TfNSW app 'Trip View'

TABLE 3: PUBLIC TRANSPORT SERVICES AND FREQUENCIES

			Typical Weekday Service Frequencies (No. of Services)		
Public Transport	Route No.	Route Description	AM Peak (7:00am – 9:00am)	Interpeak (11:00am – 1:00pm)	PM Peak (4:00pm 6:00pm)
Rail	T7	Olympic Park to Lidcombe	12	13	12
Bus	525	Parramatta to Strathfield via Sydney Olympic Park	5	8	6
	526	Burwood to Rhodes Shopping Centre	7	8	6
	533	Sydney Olympic Park to Chatswood	11	4	11

Public Transport	Route No.	Route Description	Typical Weekday Service Frequencies (No. of Services) AM Peak (7:00am 9:00am)	Interpeak (11:00am 1:00pm)	PM Peak (4:00pm 6:00pm)
		via Rhodes & North Ryde			

FIGURE 2: PUBLIC TRANSPORT NETWORK SURROUNDING SYDNEY OLYMPIC PARK METRO STATION CONSTRUCTION SITE

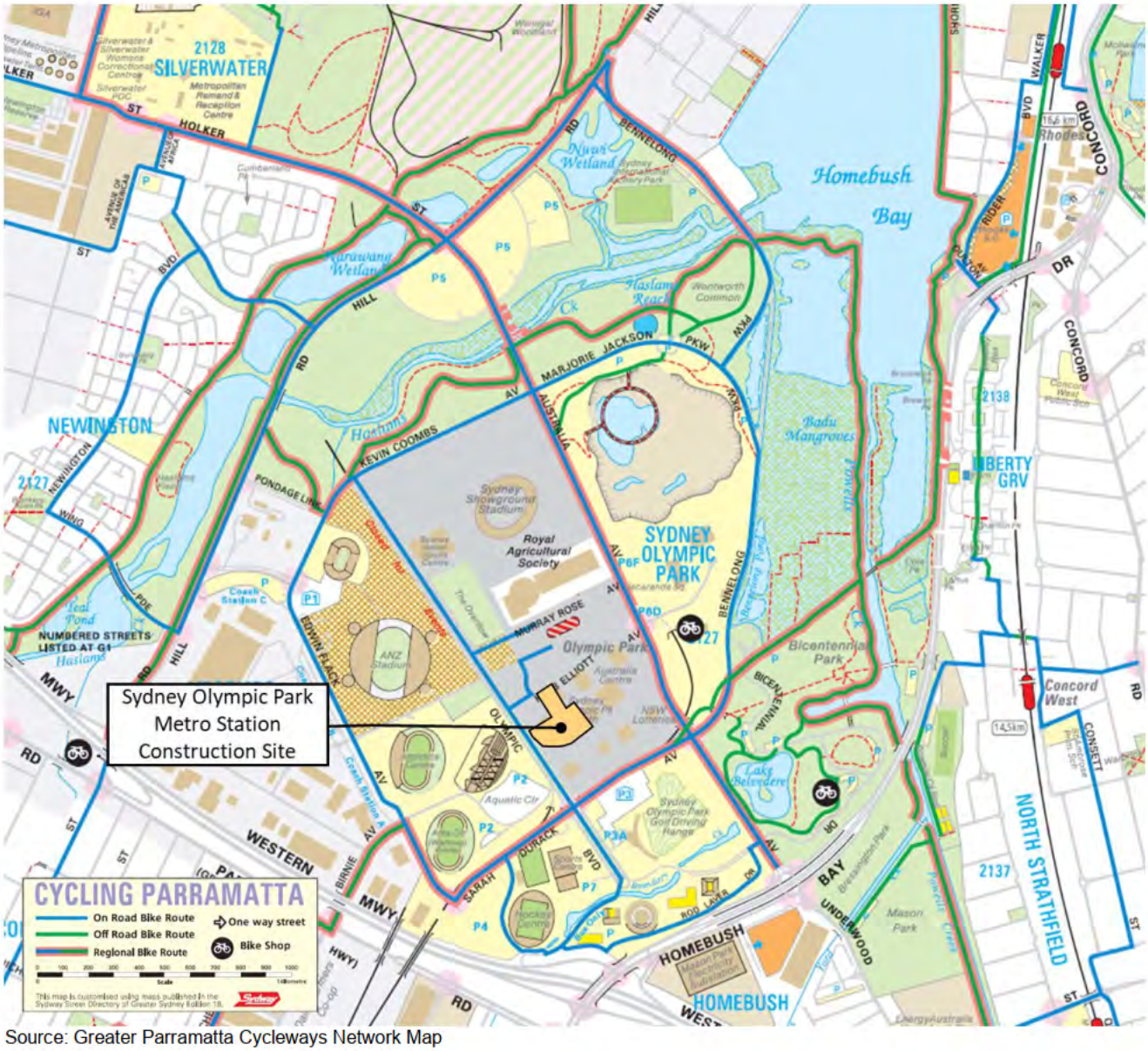


3.4 PEDESTRIAN AND CYCLIST NETWORK

Sydney Olympic Park is highly accessible and connected with footpaths and shared paths provided along both sides of all roads. In addition, there are on-road cycleways available on Australia Avenue, Kevin Coombs Avenue, Edwin Flack Avenue, Sarah Durack Avenue, Olympic Boulevard, Marjorie Jackson Parkway and Bennelong Parkway Further to this, there are shared paths available along the recreational and parkland areas within Sydney Olympic Park precinct.

The existing cycle network surrounding Sydney Olympic Park metro station construction site is shown in Figure 3

FIGURE 3: CYCLE NETWORK SURROUNDING SYDNEY OLYMPIC PARK METRO STATION CONSTRUCTION SITE



Source: Greater Parramatta Cycleways Network Map

4. GENERAL CONSTRUCTION DETAILS

4.1 OVERVIEW OF CONSTRUCTION ACTIVITIES

The following construction activities have been undertaken in order to establish Sydney Olympic Park metro station construction site:

- Demolition of existing buildings within the site
- Excavation and construction of station box
- Construction of three separate on-site car parks accommodating a total of 63 car spaces and 10 motorcycle spaces
- Establishment of project office in the existing Sanyo building
- Construction of internal road including installation of weighbridge and wheel wash
- Installation of crib and office facilities
- Installation of site utility services (i e water treatment plant, sewer discharge point, portable water supply and switch board)
- Establishment of spoil storage area
- Construction of site access gates on Herb Elliott Avenue and Figtree Drive
- Removal of weighbridge and wheel wash at completion of bulk excavation

Following site establishment, bulk excavation works and completion of tunnelling, the site demobilisation phase of the project will commence, this will include:

- Removal of redundant site facilities, plant and material
- Removal of the TBMs
- Demolition of the remaining building that is currently used as the Project Delivery Office (PDO)
- Various rectification and finishing work to enable handover of the site to Sydney Metro or Sydney Metro's nominated follow-on contractor.

The Sydney Olympic Park metro station construction site layout is provided in Appendix A

An indicative construction program is shown as follows for the construction site:

- Site handover from 21 October 2021
- Demolition from January 2022
- Excavation from mid 2022
- Finish excavation late 2023
- Concrete work until January 2024
- TBM retrieval (started at The Bays metro station site) expected in late 2024.
- Demolition of the PDO office mid 2025

4 2 CONSTRUCTION WORKING HOURS

The proposed construction activities at Sydney Olympic Park metro station construction site would be carried out during the following working days and hours:

- Monday to Friday: 7:00am 6:00pm
- Saturday 8:00am 2:00pm

No construction work will be undertaken on Sundays and public holidays.

Works outside of these standard construction hours will occur on occasion These works will only occur following notification to residents, businesses, and stakeholders. Where applicable; times will be restricted to approved ROL times only.

4 3 HAULAGE ROUTES

The designated haulage routes to be used by large heavy vehicles are detailed below and shown in Figure 4. In addition to the standard haul routes an 'alternative route' has also been nominated. This alternative route is intended for use during events when road closures, and higher than normal vehicular and pedestrian traffic volumes are expected, or as otherwise agreed with SOPA. The alternative routes will not be used unless SOPA agree and/or advise that AFJV are to use the route.

The proposed haul routes are as follows:

- Inbound Routes
  - **Primary Route:** Homebush Bay Drive, Australian Avenue, Sarah Durack Avenue, Olympic Boulevard and Herb Elliott Drive
  - **Alternative Route (EIS):** Homebush Bay Drive, Australia Avenue and Herb Elliott Avenue
- Outbound Routes
  - **Primary Route:** Figtree Drive, Olympic Boulevard, Sarah Durack Avenue and Australia Avenue
    Alternative Route (EIS): Herb Elliott Avenue, Australia Avenue and Homebush Bay Drive

Figure 4: Proposed haul routes

A full copy of the vehicle movement plan can be found within Appendix C of this CTMP.

4.4 SITE ACCESS

The proposed site access gates as shown in Appendix B are detailed in Table 4

TABLE 4: SITE ACCESS AND EGRESS ARRANGEMENTS

Gate Number	Site Access to	Access and Egress Movements	Vehicle Type
SOP01	Loading area and AFJV car parks of Sydney Olympic Park metro station construction site	Left and right turn in and right turn out only via Herb Elliott Avenue	Truck and dogs, semi trailers, rigid vehicles and AFJV light vehicles
SOP02	Loading area and AFJV car parks of Sydney Olympic Park metro station construction site	Right turn out via Figtree Drive	Truck and dogs, semi trailers and rigid vehicles
SOP03	AFJV car park for project office	All movements via Figtree Drive	AFJV light vehicles

Gates SOP01 and SOP02 will be accessed by heavy vehicles Gate SOP03 will be accessed by light vehicles for AFJV workers and staff travelling to/from the project office All construction vehicles will enter and exit the site in a forward direction, if at anytime movements differ from the above, additional 'sub plans' to this CTMP will be developed in consultation with CJP and SOPA.

Sight distance checks have been conducted for the new, heavy vehicle driveways to verify suitability The sight distance checks are provided in Appendix F.

Traffic Control/Gate Keepers will be in place at site access and egress gates where heavy vehicles need to cross an active footpath. For frequent truck movements this role is expected to be fulfilled by a traffic controller and will entail them actively managing pedestrian movements with barricades or pedestrian gates. The traffic controllers and site staff will manage the opening and closing of site gates. To ensure trucks don't stay idling on the road or obstruct footpaths, the gates will remain open when the site is in operation and a gate keeper is in place.

4 4 1 SITE SAFETY CONTROLS

As a critical project risk is the interface of pedestrians crossing truck paths, additional controls will be employed at some site access points and intersections. These additional controls will be installed where truck volumes are expected to be high and/or pedestrian volumes are expected to be significant. These additional controls are proposed to include pavement stickers to alert pedestrians of truck awareness and where necessary will include additional Line Marking or signage to alert pedestrians of the presence of trucks accessing the sites.

A plan showing these additional controls and their locations is provided within Appendix B

4.5 OSOM MOVEMENTS & TBM REMOVAL

The site will require several heavy vehicle movements in and out during the project delivery and demobilisation phases These will be to mobilise plant and equipment to site during the construction phase, and to demobilise plant, material and the tunnel boring machines (TBMs) after the tunnelling has been completed.

TBMs will be the most significant activity requiring OSOM loads. To limit the impact of this activity, AFJV are planning to scrap the TBMs inside the Sydney Olympic Park site. This will mean:

- TBMs will be dismantled into smaller pieces before being loaded onto trucks and removed from site.
- Oversize loads requiring special traffic management to facilitate the truck movements is not anticipated
- This method eliminates any need for the previously expected 6 7meter wide loads

- On occasion where oversize and/or over mass (OSOM) loads are required, these loads will be able to follow the haul routes identified within this CTMP and without the need for any additional traffic management.
- Heavy vehicle movements will remain consistent with volumes listed within Section 5 2 of this CTMP and will not exceed volumes listed within the EIS.

The movement of OSOM loads will be assessed, with applications submitted via the relevant transport company closer to the date for any required permits and approvals If during the assessment of these movements the need for additional traffic management is required, this will be raised with the Traffic Coordination Group (TCG) along with plans drafted and permits applied for/approved before any movement takes place

4.6 INTERNAL SITE MANAGEMENT

Internal site management will be planned and managed by site construction staff, and is subject to change to suit works The general principles that will govern the internal movements will be:

- Separate light and heavy vehicle movements
- Provide separated pedestrian accesses
- Where practical, provide physical barricades or segregated pedestrian walkways.

This is to ensure minimal interface with heavy plant and trucks and maximise safety for workers

CONSTRUCTION TRAFFIC AND TRANSPORT MANAGEMENT

5.1 LONG TERM TRAFFIC CHANGES

The following long term traffic changes have been installed at the Olympic Park metro station construction site:

5.

- Widening of the driveway on Figtree Drive
- Widening of the driveway on Herb Elliott Avenue
- Installation of truck symbolic signage

The widening of the driveways is to better accommodate the turning movements of the largest vehicle (19m truck and dog and semi-trailer) into and out of the construction site. The swept path assessment as shown in Appendix D indicate sufficient clearance could be provided at these heavy vehicle driveways.

Any changes in access and egress arrangements will be detailed within a Vehicle Movement Plan (VMP) and sent to SOPA for review

5.2 CONSTRUCTION TRAFFIC VOLUMES

The proposed construction activities will generate 306 heavy vehicle movements (arrival and departure) per day during the peak construction activities for spoil removal These heavy vehicle movements involve 19m long truck and dogs and semi trailers. Following completion of tunnelling and during the demobilisation phase of the site, heavy vehicle volumes are expected to be much lower

The total daily and peak hourly heavy vehicle volumes would be no more than the EIS. A breakdown is shown below within Table 4, with an hourly breakdown within Table 5.

A workforce of up to 70 construction contractors plus additional office staff will be required on site at any one time. It is anticipated light traffic generation would be no more than the EIS estimate of 252 movements (2-way) per day.

TABLE 5: DAILY CONSTRUCTION TRAFFIC GENERATION

	Peak Daily Traffic Volume		AM Peak Hour Traffic Volume		PM Peak Hour Traffic Volume	
Trip Type	**EIS**	**AFJV**	**EIS**	**AFJV**	**EIS**	**AFJV**
Light vehicle	252	252	40	40	46	46
Heavy vehicle	306	306	8	8	8	8
Total	**558**	**558**	**48**	**48**	**54**	**54**

TABLE 6: SUMMERY OF PEAK HOURLY HEAVY VEHICLE MOVEMENTS

Expected hourly heavy vehicle volumes						
0700-0800	**0800-0900**	**0900-1000**	**At all other times of site operation**	**1600-1700**	**1700-1800**	**total**
8	8	8	Site movements as required, not exceeding daily total.	8	8	**306**

5 3 WORKFORCE PARKING

The Sydney Olympic Park metro station construction site will provide a number of parking spaces for AFJV and Sydney Metro staff. During the peak construction period, it is anticipated that there will be up to approximately 70 construction contractors plus additional office staff on site at any one time, the total workforce would be no more than the EIS figure of 340.

Full details of workforce parking arrangements can be found within the Construction Parking and Access Strategy (CPAS).

5.4 ON-STREET PARKING

The existing driveways have been widened, with no impact on the existing on-street parking on Figtree Drive and Herb Elliott Avenue.

Furthermore, the existing parking demand in the vicinity of the construction site was mostly generated by the existing commercial premises that were demolished, and hence the on street parking demand will reduce accordingly

5.5 PEDESTRIANS AND CYCLISTS

Footpaths along the frontages of the construction site will be maintained at all times At any time a worksite is open and being used by heavy vehicles, Traffic controllers will be stationed at the site access gates to assist and manage heavy vehicle and pedestrian movements.

AFJV drivers are advised to be on alert for cyclists travelling along the haulage routes within Sydney Olympic Park. Additional Cyclist warning signage will be installed as detailed within AFJVCTP-TGS-0464, a copy of the TGS can be found within Appendix B.

During event days higher than normal pedestrian movements and various road closures are anticipated, The following controls will be implemented to mitigate the risks associated with the proposed haul routes.

- Truck drivers are to be toolboxed on the risks associated with pedestrians, cyclists and the need to report any concerns, near mises or incidents, to allow further investigation and continuous monitoring.
- When instructed by SOPA and when there are road closures anticipated, the alternative routes outlined within section 4.3 of this CTMP will be used.
- During major event days consideration will be given to the deployment of additional Traffic Controllers along haul routes and locations deemed necessary This will only occur following consultation with SOPA.

5.6 PUBLIC TRANSPORT

The proposed construction activities and operation of the construction site will not impact the surrounding public transport services.

5.7 ACCESS TO LOCAL PROPERTIES, BUSINESSES AND UTILITIES

Access to all neighbouring properties and businesses in the vicinity of Sydney Olympic Park metro station construction site will be maintained at all times

Access to all utilities will be maintained during construction unless agreed with the relevant utility owner, landowner or occupier

Local residents and businesses will be notified of any proposed traffic changes at least two weeks prior to the works.

5.8 SPECIAL EVENTS

Traffic management measures such as temporary road closures may be implemented for major events. AFJV will communicate with SOPA to ensure that the disturbance between the proposed construction activities and major events are minimal

Current major events which may affect works are listed below, noting that most events in the evening or which have a short duration have been omitted as they are not expected to have an impact on the operation of site

- Sydney Royal Easter Show
- State of Origin & Major Sporting Events
- Music Festivals

It is noted the proximity of the Figtree intersection to the bus zones on Olympic Boulevarde and additional controls may be warranted during key events with increased bus and pedestrian movements in the area (in addition to existing, proposed driveway controls).

Reference: https://www.sydneyolympicpark.com.au/Whats-On/Events (last viewed on 16/11/2021)

5.9 TRAFFIC STAGING PLAN

A Traffic Staging Plan has been prepared to detail the proposed traffic management measure for the construction site with appropriate signage on approach to the site including truck warning signs and distance plates as shown in **Error! Reference source not found.** and a full copy provided in Appendix B Where signs are positioned over a footpath or shared path, signs will be mounted at a height of 2.5m. All signs proposed in Sydney Olympic Park will be no smaller than A size, based on the guidance of Appendix B of AS1742.2. They will be installed to meet the criteria of Appendix D of AS 1742 2 for orientation and offset

FIGURE 6: TRAFFIC STAGING PLAN

5.10 INSPECTIONS

On site inspection and monitoring the impact of this CTMP and Traffic Staging Plan will be undertaken regularly

All long-term traffic management arrangements will be inspected at frequencies outlined within the Overarching Construction Traffic Management Plan and in accordance with the TCAWS Issue 6 1 any issues identified will be rectified. Where they pose a risk to public safety, they will be rectified as soon as possible. Minor issues will be recorded and may be rectified at a later date so the works are

more efficient As an example, a signpost which is protruding onto a footpath or onto the road will be rectified and made safe immediately and reinstated as soon as practically possible after. Sign discolouration or a reflector missing may be rectified at the next available traffic control works in the area

Any issues raised by stakeholders (including the public) will also be inspected and addressed as outlined above

Where traffic control deficiencies are identified through inspections, this CTMP and associated TGS will be amended, as required, by the Traffic Manager. All identified issues and status of rectification will be documented in the issues register The issues register will be issued to Sydney Metro on request

5.11 ROAD SAFETY AUDIT

A road safety audit has been conducted by a suitably qualified and independent auditor with Level 3 certification and another auditor with Level 2 or higher certification

A desktop road safety audit has been conducted on the proposed site arrangement plan (included in Appendix B The audit report is included in Appendix E

A post-opening audit will be conducted once signs are installed and driveways have been constructed. Where road safety deficiencies are identified through the audit, the relevant design/ implementation will be amended to address the deficiencies, where required.

5 11 1 DRIVER TRAINING

Heavy vehicle drivers shall be made fully aware of the traffic management arrangements within and surrounding the site. All drivers will be informed of all site access gates and the access requirements including specific heavy vehicle driver training to ensure the following:

- Appropriate procedures for accessing the site
- Drivers shall adhere to the nominated site access routes mentioned in Section 4.3
- Drivers are to be cautious to other road users (pedestrians and cyclists) travelling past the sites
- Drivers shall be aware of the speed restrictions along the site access routes, and
- Queuing and truck marshalling is to be wholly contained within the site (not in public spaces).

Trucking contractors will be provided training summaries to distribute among their drivers prior to attending site. Additional documentation will be provided to gatekeepers so they can be disseminated to trucks entering the site Repeat noncompliance with the requirements will be flagged and escalated with the company to re-educate the drivers or replace them.

6. COMPLIANCE MANAGEMENT

6.1 ROLES AND RESPONSIBILITIES

The AFJV project team's organisational structure and key roles and responsibilities for managing traffic and transport relating to the construction activities and construction personnel are summarised in Table 7.

TABLE 7: AFJV ROLES AND RESPONSIBILITIES

Roles	Responsibilities
Project Wide Construction Manager [redacted]	▪ Reports to the Project Director as part of the Project Management Team. ▪ Accountable for the overall construction delivery of the Surface Works. ▪ Directs the Traffic Manager and ensures work is prioritised to ensure safety of all road users, the community and construction personnel.
Project Manager [redacted]	▪ Reports to the Construction Director as part of the Project Management Team ▪ Accountable for the overall construction of the Surface Works ▪ Directs the Traffic Manager to prioritise work for the safety of road users, community and construction personnel
Traffic Manager [redacted]	▪ Reports to the Project Wide Construction Manager. ▪ Leads the traffic management team. ▪ Implements the CTMP and ensure it is followed. ▪ Ensures risk assessments are done. ▪ Reviews Construction Traffic Management Plans (CTMPs)/ Traffic Guidance Schemes (TGSs or formerly known as Traffic Control Plans)/ Road Occupancy Licence (ROLs) prior to submission to the stakeholders. ▪ Ensures that sub-contractors meet the requirements of the CTMP. ▪ Defines the requirements for traffic management and ensures that they are satisfied through spot checks and audits.
Traffic Advisor [redacted]	▪ Reports to the Traffic Manager. ▪ Develops CTMP/ TGS/ ROL submission. ▪ Ensures that long-term layouts are implemented in accordance with the CTMP/ TGS/ ROL, are safe and are maintained appropriately.

6.2 TRAFFIC AND TRANSPORT LIAISON GROUP

AFJV Traffic Manager will present at the monthly Traffic and Transport Liaison Group (TTLG) meetings for the Project. The TTLG will primarily include representatives from:

- Sydney Metro Delivery Office

- Transport for NSW (TfNSW)
- Customer Journey Management (formerly known as TMC)
- Customer Journey Planning (formerly known as SCO)
- NSW Police
- Sydney Olympic Park Authority (SOPA)
- Representative of any other authority or road user group affected by the Project.

The AFJV Traffic Manager is a member of the TTLG and will act as the authorised representative for the Project in matters related to traffic and transport. The AFJV Traffic Manager provides the following information and related updates to the TTLG:

- Construction site operations and activities
- Traffic operations, including changes in local road network
- Community concerns and comments or feedback
- Issues relating to pedestrians and cyclists or mobility impaired road users

6.3 COORDINATION WITH ADJACENT PROJECTS

The Parramatta Light Rail Stage 2 (PLRS2) is expected to commence during the construction of the CTP works at Olympic Park Once works commence on the PLRS2 regular coordination meetings will be held either as part of regular Traffic Coordination Group meetings, or separate interface meetings as necessary to ensure any works and vehicle movements are coordinated and wherever possible impacts minimised

CONCLUSION

This CTMP has been prepared to document the proposed construction activities and operations at Sydney Olympic Park metro station construction site for the construction period between January 2022 and mid 2025 The CTMP details the management measures to mitigate the identified traffic and transport impacts that would occur.

7. Based on the findings of the CTMP, it is concluded that:

- The construction activities and operations at Sydney Olympic Park metro station construction site will generate the 306 heavy vehicle movements per day during the peak construction period between September 2022 and late 2023, volumes will be much lower following completion of bulk excavation.
- It is anticipated that up to 252 light vehicle movements per day will be generated in line with the EIS estimate
- Pedestrian and cyclist access past the construction site will be maintained at all times. AFJV drivers will be advised to be aware of cyclists travelling along the haulage routes.
- AFJV will communicate with SOPA to assist minimising disruptions of any major events held at Sydney Olympic Park.
- AFJV will conduct regular inspections and monitor the traffic management measures detailed in this CTMP Any deficiencies identified will be recorded and rectified accordingly
- Removal of TBMs for the station site will be conducted in a way to reduce the impact of OSOM movements and are not anticipated to require any special traffic management.

APPENDIX A - CONSTRUCTION SITE LAYOUT

SITE LAYOUT LEGEND	
	Fencing location
	Hoarding locations
	Acoustic Shed
	Heavy vehicles gate
	Light vehicles gate
	Pedestrian gate
	Heavy vehicles route
	Light vehicles route
	Pedestrian route
	100mm Electrical Conduit
	100mm Water Main
	Loading areas
	Traffic lane changes
	Overhead services
	Height restrictions
	Hazardous zones
	Controlled areas
	Confined space areas
	Pedestrian delineated areas
	Car parks
	Laydown or storage areas
	Site facilities
	Sign-on locations
	Emergency evacuation points or routes
	Aboriginal archaeological potential
	Sewer Connection Point
	Storm Water Discharge
	Power Supply Point
	Water Supply Point

APPENDIX B - TRAFFIC GUIDANCE SCHEMES & PEDESTRIAN CONTROL PLAN

GATE ONLY TO BE CLOSED OUTSIDE OF SITE OPERATIONAL HOURS - DURING OPERATION GATE TO REMAIN OPEN

GATEHOUSE FOR GATEKEEPER TO BE POSITIONED 20m CLEAR OF PEDESTRIAN FOOTPATH

SHOWGROUND ROAD

HERB ELLIOTT AVE

OLYMPIC BLVD

FIGTREE DRIVE

GATE SOP1 UHF XX AV-JV VEHICLES ONLY

WATCH FOR HEAVY VEHICLES W5-234m

W5-22

100m ON RIGHT W8-207

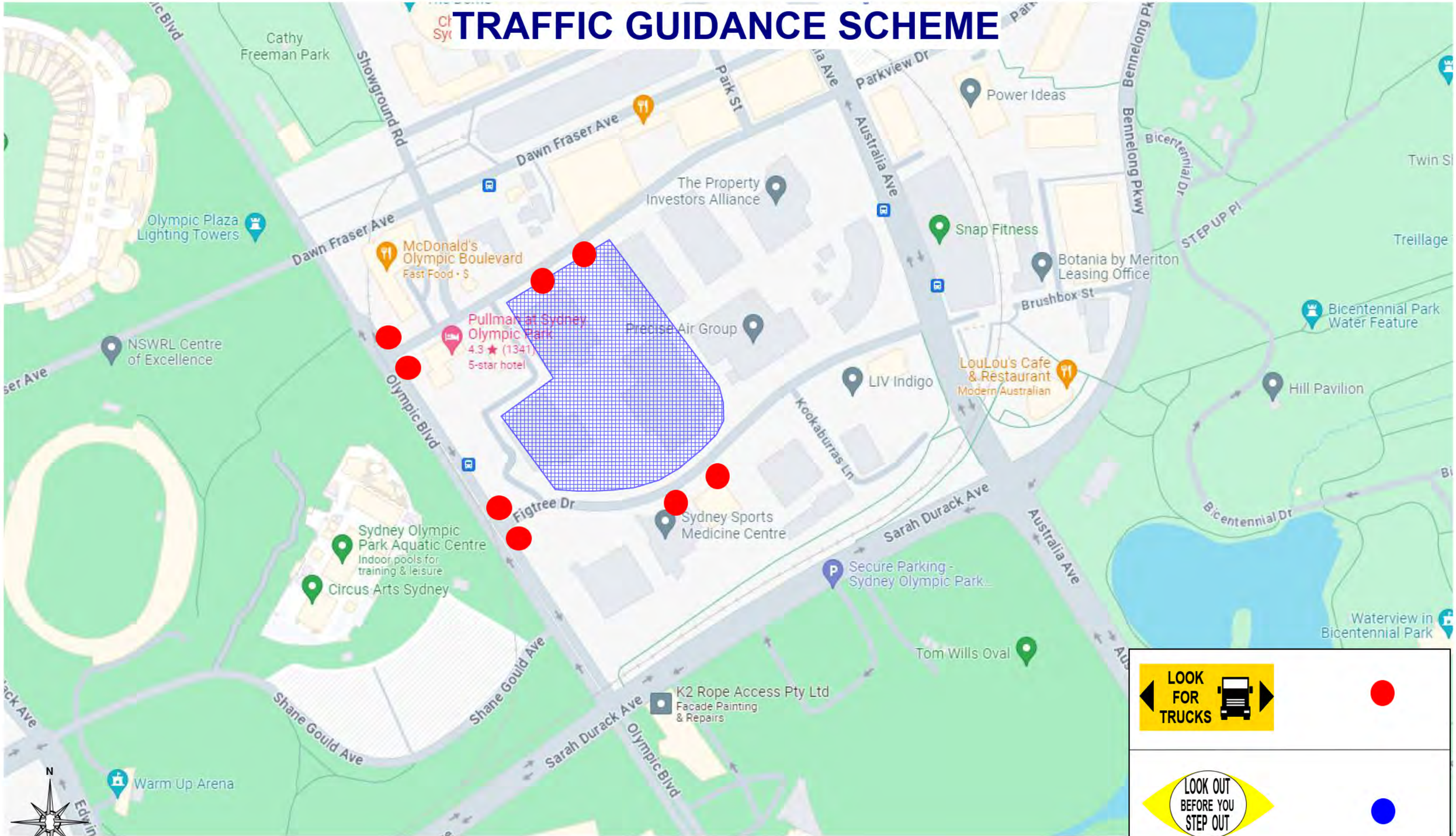
100m ON LEFT W8-207

51

53

53

TRAFFIC GUIDANCE SCHEME



PROJECT: SYDNEY METRO WEST - CENTRAL TUNNEL PACKAGE

LEGEND

Approximate site area

afJV

Date: 26/08/2024 **Location:** Sydney Olympic Park

Comments:

- THIS IS A SHORT TERM TGS, NOT TO SCALE
- THE CONTRACTOR SHALL ENSURE ALL ROL AND SZA REQUIRMENTS ARE SATISFIED DURING IMPLEMENTATION OF THIS TGS
- ANY EXISTING SIGNAGE THAT CONFLIICTS WITH THIS TGS MUST BE COVERED AT THE START OF SHIFT AND UNCOVERED AT THE END OF SHIFT
- ANY CHANGES REQUIRED, SPEAK TO THE SITE FOREMAN AND THEN MODIFY THIS PLAN IF NECESSARY. ANY CHANGES TO THIS PLAN SHALL BE MARKED ON THIS TGS & SIGNED OFF BY A PWZTMP HOLDER.
- A LANE WIDTH OF 3.5m (MINIMUM) IS TO BE MAINTAINED AT ALL TIMES UNLESS NOTED OTHERWISE
- SHOULDER WIDTH / EDGE CLEARANCE TO TRAFFIC CONES OF 0.5m IS TO BE PROVIDED AT ALL TIMES UNLESS NOTED OTHERWISE
- ALL SIGNAGE TO BE 'B' SIZE UNLESS NOTED OTHERWISE
- SIGNS TO BE POSITIONED IN ACCORDANCE WITH THE TCAWS MANUAL 2022 Issue 6.1
- DIMENSION 'D' IS DETERMINED IN ACCORDANCE WITH THE TCAWS MANUAL 2022 Issue 6.1
- BOLLARDS AND TRAFFIC CONES ARE TO BE INSTALLED IN ACCORDANCE WITH THE 2022 Issue 6.1
- TAPER LENGTHS ARE TO BE IN ACCORDANCE WITH THE TCAWS MANUAL 2022 Issue 6.1
- THE SITE MUST COMPLY WITH THE TCAWS MANUAL 2022 Issue 6.1 AND A.S. 1742.3
- REGULATORY SPEED / ROADWORK SIGNS TO BE REPEATED EVERY 400m UNLESS NOTED OTHERWISE

TGS Number:
AFJVCTP-TGS-0818

Traffic Guidance Scheme - Options & Risk Assessment

afJV

Location Details

Road **Various** Suburb **Sydney Olympic Park** Side Street **Various**

Direction (N) (E) (S) (W) Speed of road **40** km/h Speed of Side Streets **40** km/h

Options Assessment

Method selected Around Past Through

Reason for selection **NA**

Risk Assessment

Section 1 - Does the TGS Involve Detours of traffic? YES (NO) (If answered no proceed to section 2)

	YES	NO	Enter description of risks if answered no to any question	Enter Risk Rating
1.1 Are detour routes suitable for all vehicle classes being detoured?	☐	☐		
1.2 Is access to local residence and business maintained	☐	☐		
1.3 Are detour signs located at decision points, to clearly guide motorists through the detour?	☐	☐		
1.4 Can roads and intersections used as detour routes, accommodate the additional traffic volumes?	☐	☐		
1.5 Is the same level of safety maintained for turn movements? e.g. Traffic using signalized intersections being sent through a detour route that involves turn movements at non-signalized intersections.	☐	☐		

Section 2 - Does the TGS involve Stop/Slow arrangements? YES (NO) (If answered no proceed to section 3)

	YES	NO	Enter description of risks if answered no to any question	Enter Risk Rating
2.1 Are escape routes clearly defined on the TGS, clear and safe to use?	☐	☐		
2.2 Is a PTCD used in place of a manual Traffic Controller where existing speed is greater then 45km/h?	☐	☐	*	
2.3 Is the operating speed of the road 60km/h or less where Traffic Control or PTCD are in use?	☐	☐		
2.4 Are x4 traffic cones placed on the edge or center line, approaching the traffic controller or PTCD?	☐	☐		
2.5 Is prepare to stop and Traffic Control or PTCD symbolic signs installed?	☐	☐		
2.6 Do Traffic Control and PTCD positions have adequate lighting during low light conditions	☐	☐		
2.7 Does sight distance of at least 1.5D exist on approach to Traffic Control or PTCD	☐	☐		

Section 3 - General	YES	NO	Enter description of risks if answered no to any question	Enter Risk Rating
3.1 Does the TGS define minimum clearances required of workers to live traffic, are distances compliant?	☐	☐	NA	
3.2 Are worker symbolic signs to be placed in advance of areas where workers will be visible to traffic?	☐	☐	NA	
3.3 Are all signs placed at correct distances? i.e. D for multiple signs, 2D for single sign above 60km/h	☐	☐	NA	
3.4 Are taper lengths compliant and not placed in areas with poor sight distance?	☐	☐	NA	
3.5 Are lane status signs placed in advance of a lane merge?	☐	☐	NA	
3.6 Are the correct tapers being used? i.e. merge taper, traffic control taper, lateral shift taper.	☐	☐	NA	
3.7 Does the TGS clearly define transition zones between tapers on multilane roads, are they compliant?	☐	☐	NA	
3.8 Does the TGS clearly define Buffer areas, are they compliant and at least 30m in length?	☐	☐	NA	
3.9 Does the TGS clearly define site access and egress for work vehicles, is impact to traffic, managed?	☐	☐	NA	
3.10 Does the TGS clearly define pedestrian routes, are the routes suitable for all pedestrians?	☐	☐	NA	
3.11 Does the TGS consider Cyclists, can Cyclists transverse the site safely?	☐	☐	NA	

Section 4 - Do the works involve excavations YES (NO) (If answered no proceed to section 5)

	YES	NO	Enter description of risks if answered no to any question	Enter Risk Rating
4.1 Are excavations to be less then 200mm in depth?	☐	☐		
4.2 Are excavations to be less then 500mm in depth?	☐	☐	*	

Section 5 - Other Hazards & Risks			
	5.1		
	5.2		
	5.3		
	5.4		

Risk Management

Any Risks Identified identified during the above Risk Assessment must be assessed, with control measures listed below. Control measures must meet the WHS Risk Management Hierarchy of controls framework.

Item	Control Measures	Remaining Risk Rating

Risk evaluation Matrix

Risk ratings: Very high - VH; High - H; Medium - M; Low - L

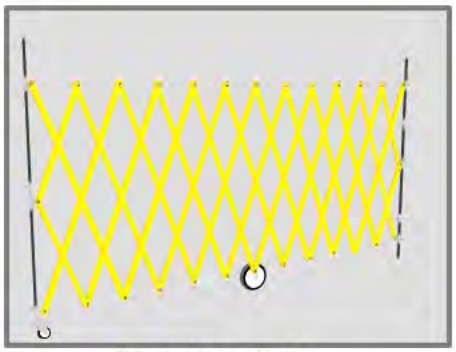
Likelihood		Consequence: Insignificant C6	Minor C5	Moderate C4	Major C3	Severe C2	Catastrophic C1
Almost certain	L1	M	H	H	VH	VH	VH
Very likely	L2	M	M	H	H	VH	VH
Likely	L3	L	M	M	H	H	VH
Unlikely	L4	L	L	M	M	H	H
Very unlikely	L5	L	L	L	M	M	H
Almost unprecedented	L6	L	L	L	L	M	M

Refer to TCAWS Table 3-4 for descriptions of Likelihood and Consequence measures

TGS Designer:

TGS Approved by:

One up Manager:



Example of Retractable Gate

20 m

When vehicles make contact on UHF in advance to their approach of the entrance/exit driveways, Gatekeepers must temporarily hold pedestrian movements by extending the retractable-gate at one side of the driveway and hold pedestrians on the other side of the driveway before approving the vehicles to approach. Once vehicle enters/exits the driveway, Gatekeepers are to pull back the gate to resume footpath movements.

AFJV
Construction Site

20 m

Legend

- Gatekeeper
- T8-1 PEDESTRIANS WATCH YOUR STEP
- T2-25 TRUCKS
- Truck Route - Inbound
- Truck Route - Outbound
- Pedestrian Route
- Retractable Gate
- Retractable Gate (Large Scaled)

Project:	SYDNEY METRO WEST, CENTRAL TUNNELLING PACKAGE
Metro Station Site:	[redacted]
Drawing Number:	
Issue	
Author:	
PWZTMP Licence:	

afJV

APPENDIX C - VEHICLE MOVEMENT PLANS

VEHICLE MOVEMENT PLAN - Option 1

UHF: 10

RESTRICTED MOVEMENT:
- This movement is only to be used when approved by AFJV
- This movement will only be approved on Event days, when road closures prevent the normal route from being used.

Traffic Control 'Gate Keeper' must be in place Any time these driveways are being used by heavy vehicles.
The Primary duty of the Traffic Controller is to maintain safe Pedestrian & vehicle interface.

Date: 14/10/2022 **Location:** Sydney Olympic Park site

Comments:
- Drivers must be briefed on this VMP
- Gatekeeper/s must be in position when gates are in use and the VMP requires it.
- Drivers must adhere to Gatekeepers directions
- Vehicles entering and exiting site must:
  1. Activate roof mounted beacons on approach
  2. radio intention via UHF
  3. Indicate intensions
  4. Turn into/out of site
  5. Exit with caution, ensuring the safety of pedestrian and other road users
  6. Disable roof mounted beacons after egress and speed has reached normal traffic flow.
  7. follow all road rules and speed limits.
- Use only approved haul routes

PROJECT: SYDNEY METRO WEST - CENTRAL TUNNEL PACKAGE

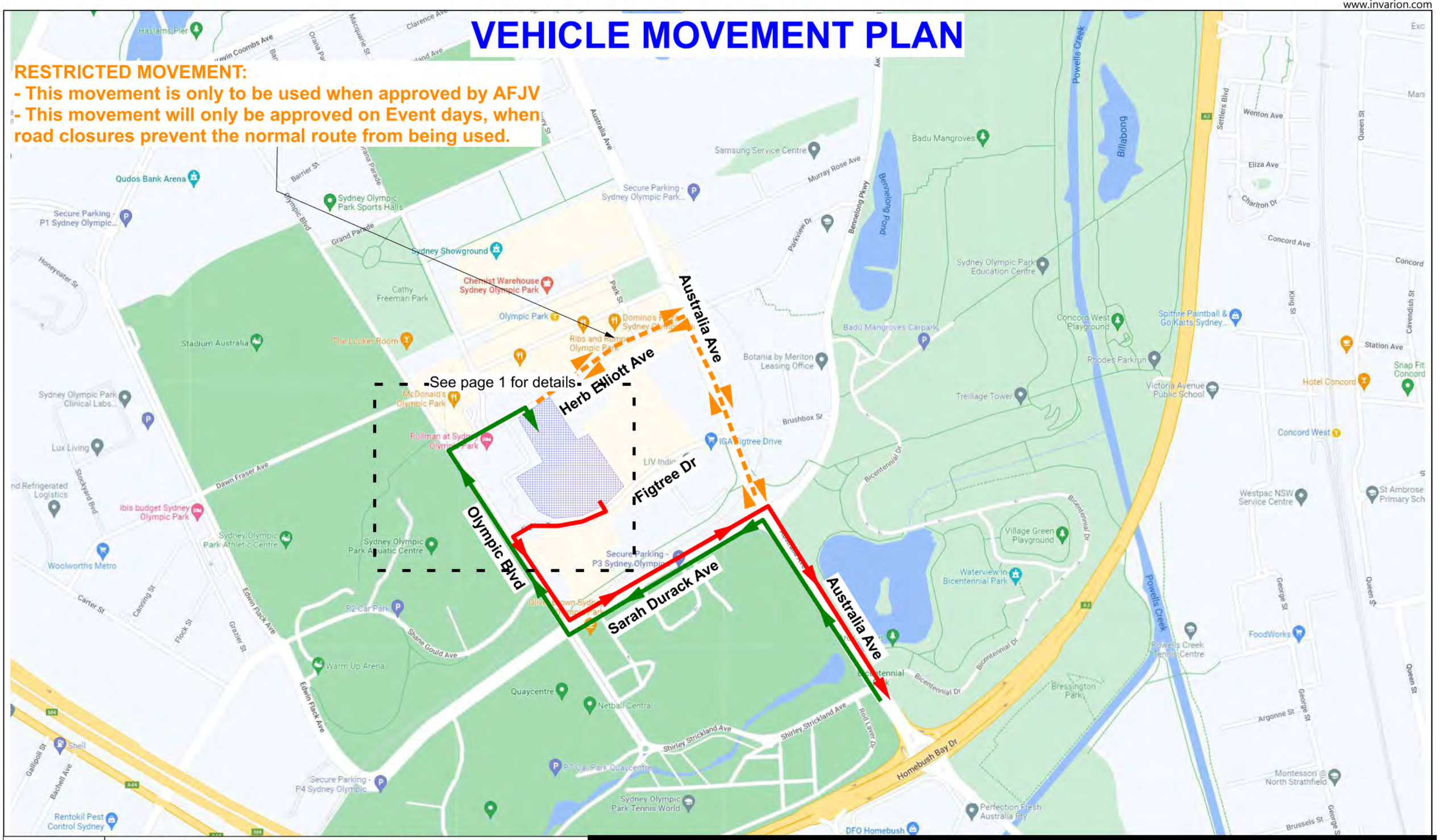
LEGEND

	Workzone		Signalised intersection
	Access		Restricted movement
	Egress		

N

VEHICLE MOVEMENT PLAN

RESTRICTED MOVEMENT:
- This movement is only to be used when approved by AFJV
- This movement will only be approved on Event days, when road closures prevent the normal route from being used.



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Comments:
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  3. Indicate intensions
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  7. follow all road rules and speed limits.
- Use only approved haul; routes

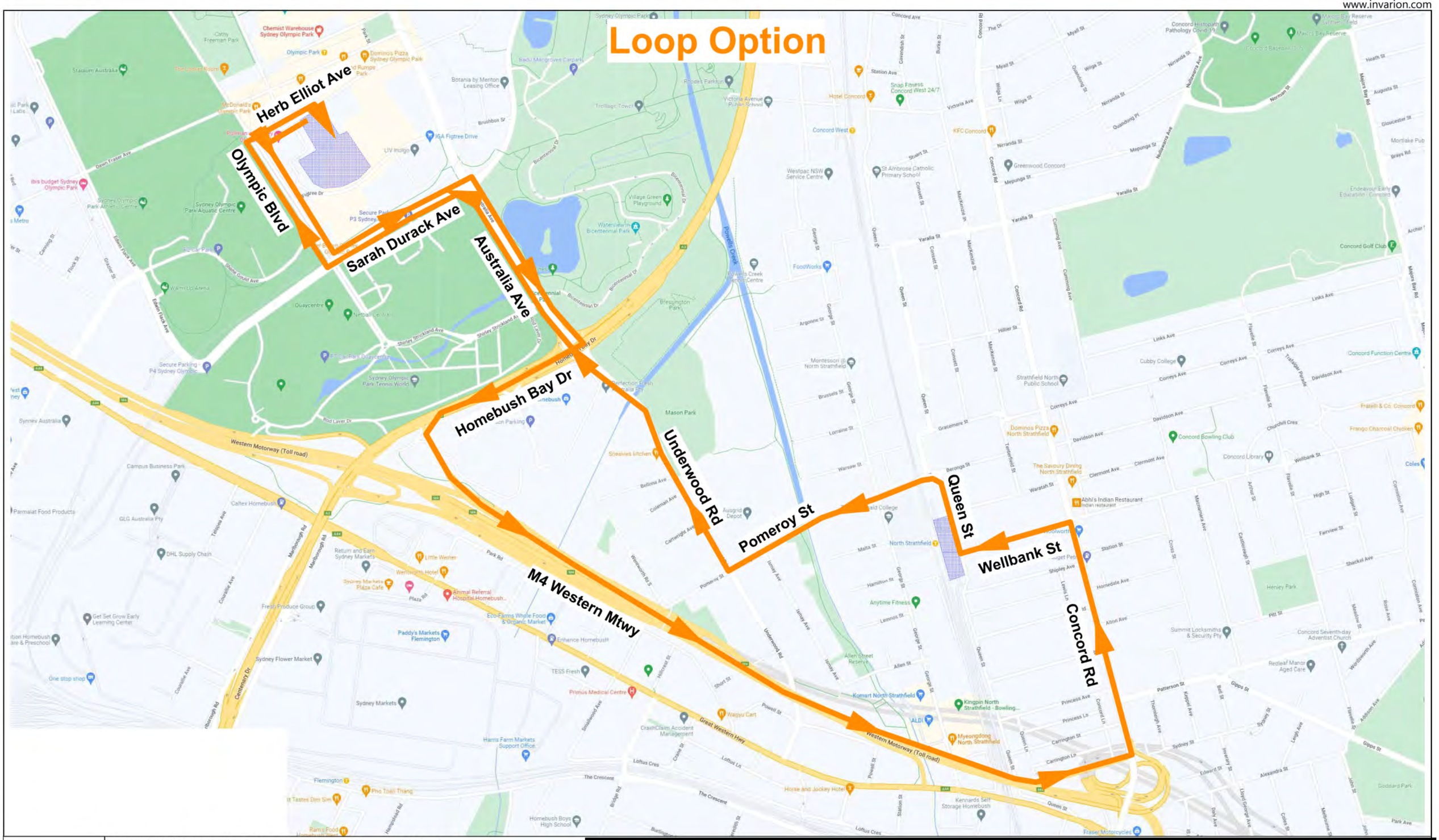
PROJECT: SYDNEY METRO WEST - CENTRAL TUNNEL PACKAGE

LEGEND

Workzone	Signalised intersection
Access	Restricted movement
Egress	

N

Loop Option



Date: 14/10/2022 **Location:** Sydney Olympic Park site

Comments:

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- Drivers must adhere to Gatekeepers directions
- Vehicles entering and exiting site must:
  1. Activate roof mounted beacons on approach
  2. radio intention via UHF
  3. Indicate intensions
  4. Turn into/out of site
  5. Exit with caution, ensuring the safety of pedestrian and other road users
  6. Disable roof mounted beacons after egress and speed has reached normal traffic flow.
  7. follow all road rules and speed limits.
- Use only approved haul; routes

afJV

PROJECT: SYDNEY METRO WEST - CENTRAL TUNNEL PACKAGE

LEGEND

Workzone	Signalised intersection
Access	Loop option
Egress	

N

APPENDIX D - HEAVY VEHICLE TURN PATHS

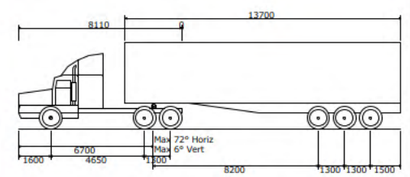
VEHICLE ENTERING

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

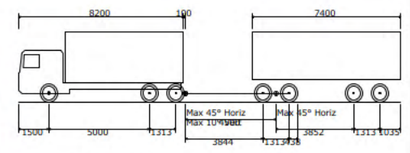
VEHICLE ENTERING

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

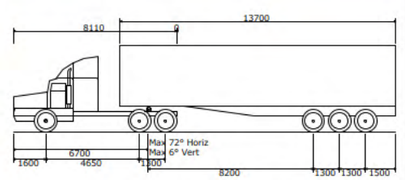
VEHICLE ENTERING

OLYMPIC BOULEVARD

SARAH DURACK AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

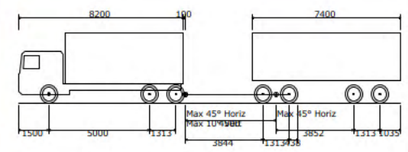
OLYMPIC BOULEVARD

SARAH DURACK AVENUE

Truck and Dog Trailer 19m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

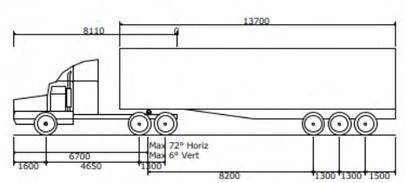
VEHICLE ENTERING

HERB ELLIOTT AVENUE

OLYMPIC BOULEVARD

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

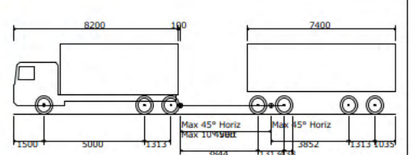
HERB ELLIOTT AVENUE

OLYMPIC BOULEVARD

Truck and Dog Trailer 19m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

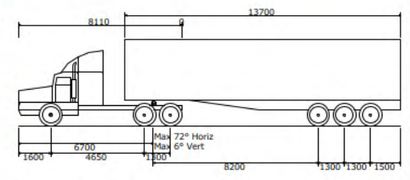
VEHICLE EXITING - OPTION 1 & 2

FIGTREE DRIVE

OLYMPIC BOULEVARD

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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VEHICLE EXITING - OPTION 1 & 2

FIGTREE DRIVE

OLYMPIC BOULEVARD

KEY:

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Wheel path		
Body envelope		
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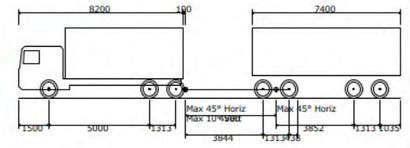

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Track Width	2500mm
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Curb to Curb Turning Radius	12500mm

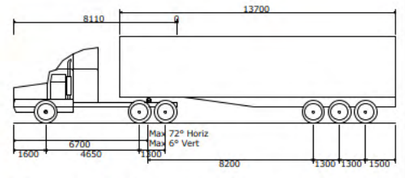
VEHICLE EXITING - OPTION 1

OLYMPIC BOULEVARD

SARAH DURACK AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
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Curb to Curb Turning Radius	12500mm

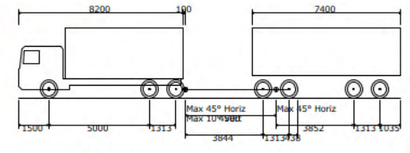
VEHICLE EXITING - OPTION 1

OLYMPIC BOULEVARD

SARAH DURACK AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

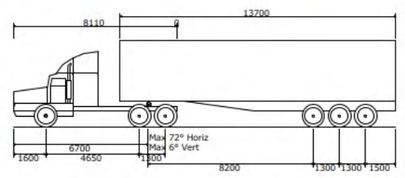
VEHICLE EXITING - OPTION 1

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
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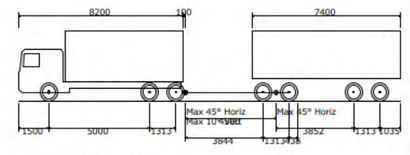
VEHICLE EXITING - OPTION 1

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Overall Body Height	3500mm
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Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

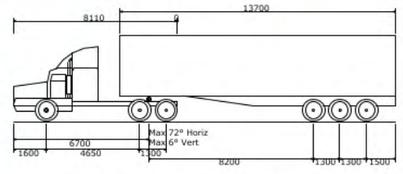
Parking
660m2

GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
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Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

Parking
660m²

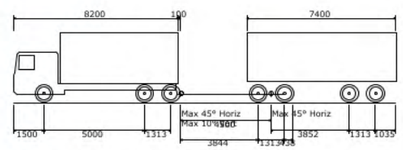
GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

Truck and Dog Trailer 19m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

Parking
660m²

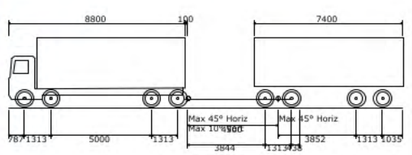
GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

Truck and Dog Trailer 19.6m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19.6m	
Overall Length	19600mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

HERB ELLIOTT AVENUE

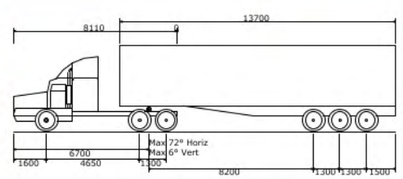
RL 20.56 GIS

Parking
660m2

GATE SOP01

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

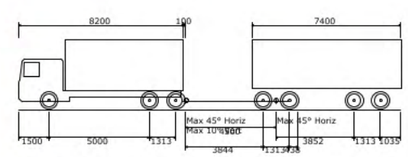
HERB ELLIOTT AVENUE

RL 20.56 GIS

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

GATE SOP01

VEHICLE ENTERING

HERB ELLIOTT AVENUE

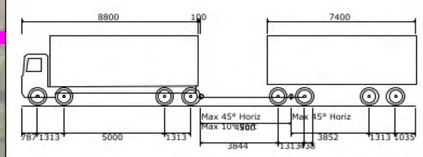
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

HERB ELLIOTT AVENUE

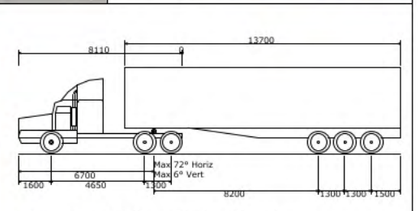
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

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Overall Body Height	4300mm
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Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

HERB ELLIOTT AVENUE

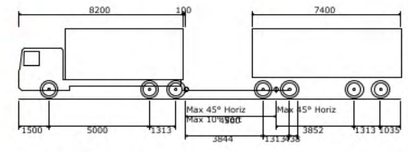
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

HERB ELLIOTT AVENUE

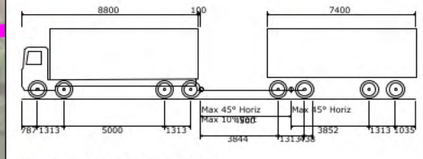
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19.6m	
Overall Length	19600mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

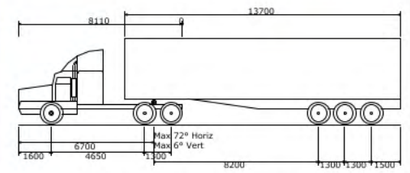
Parking
660m2

GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm


VEHICLE EXITING
Parking
660m
Truck and Dog Trailer 19m
GATE SOP01
AFJV Vehicles Only
HERB ELLIOTT AVENUE
KEY:
Forward
Reverse
Wheel path
Body envelope
500mm clearance
8200
100
7400
1500
5000
1313
3844
3852
1313
1035
Truck and Dog Trailer 19m
Overall Length 19000mm
Overall Width 2500mm
Overall Body Height 3500mm
Min Body Ground Clearance 427mm
Track Width 2500mm
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 12500mm

VEHICLE EXITING

Parking
660m2

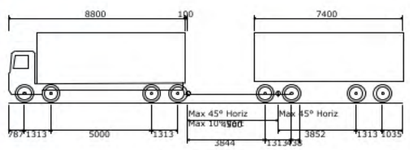
Truck and Dog Trailer 19.6m

GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19.6m

Overall Length	19600mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

GATE SOP02
AFJV Vehicles Only

Wheel wash

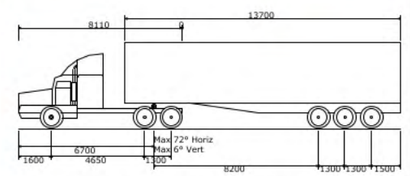
/eighbridge

Spoil storage 820m2

FIGTREE DRIVE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

GATE SOP02
AFJV Vehicles Only

Truck and Dog Trailer 19m

Wheel wash

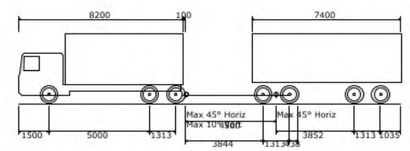
/eighbridge

Spoil storage 820m2

FIGTREE DRIVE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

GATE SOP02
AFJV Vehicles Only

Truck and Dog Trailer 19.6m

Wheel wash

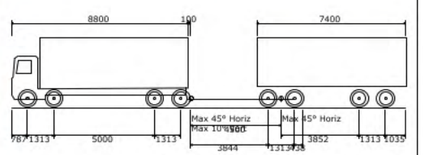
/eighbridge

Spoil storage 820m2

FIGTREE DRIVE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19.6m	
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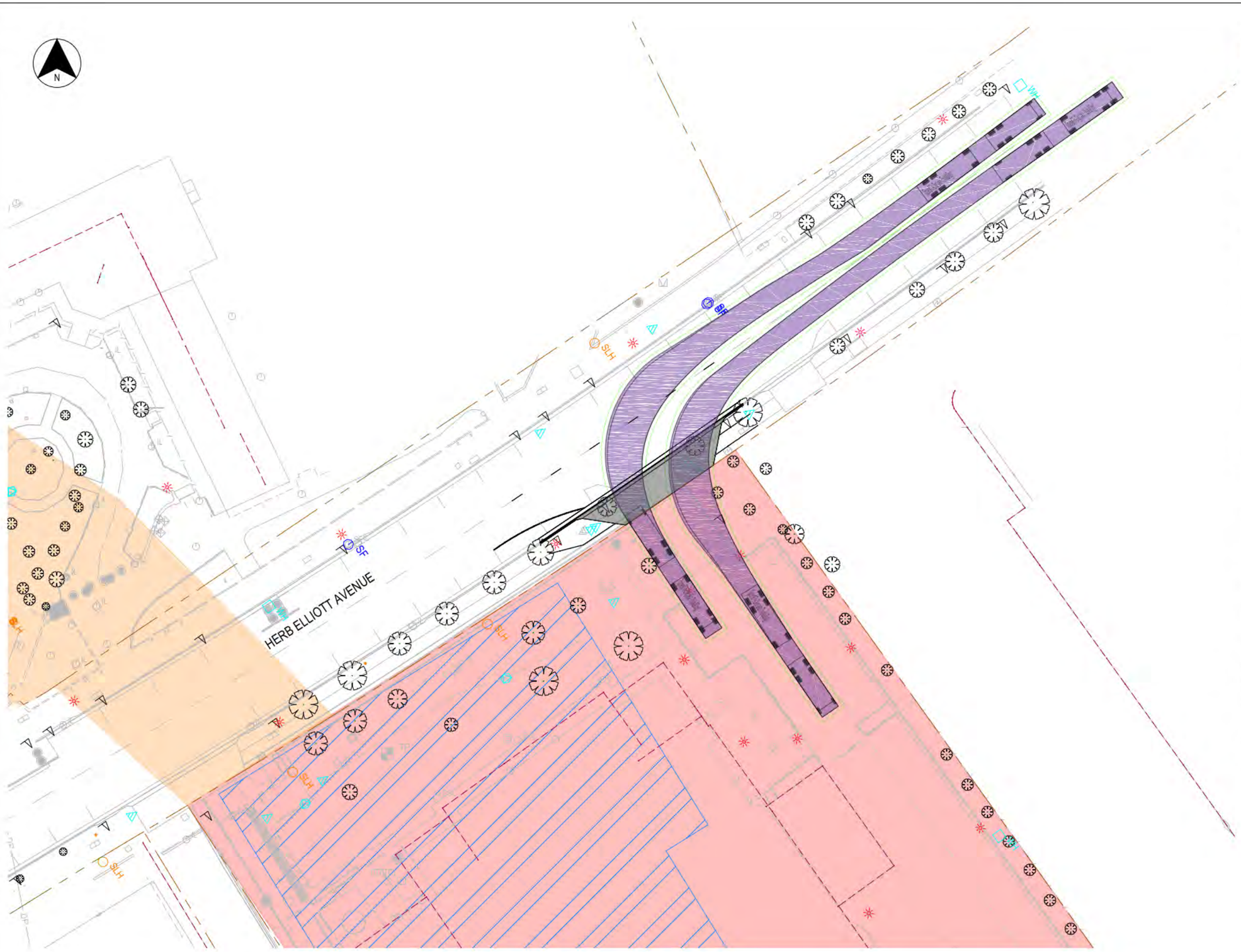
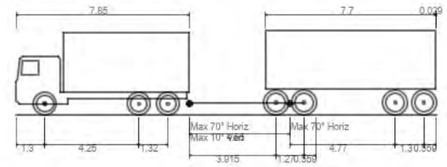
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm



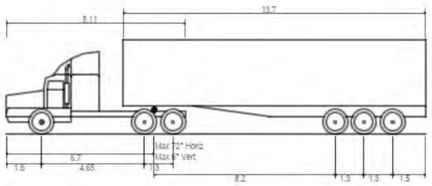
LEGEND

- VEHICLE SWEPT PATH ENVELOPE
- VEHICLE SWEPT PATH ENVELOPE
- 0.5m VEHICLE SWEPT PATH
- CLEARANCE ENVELOPE
- EXISTING PROPERTY BOUNDARY

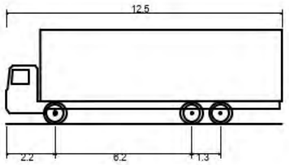
DESIGN VEHICLE PROFILE



Truck and Dog (50T)	
Overall Length	19.029m
Overall Width	2.500m
Overall Body Height	3.808m
Min Body Ground Clearance	0.498m
Track Width	2.500m
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	39.90°
Curb to Curb Turning Radius	15.000m
Speed	15km/h

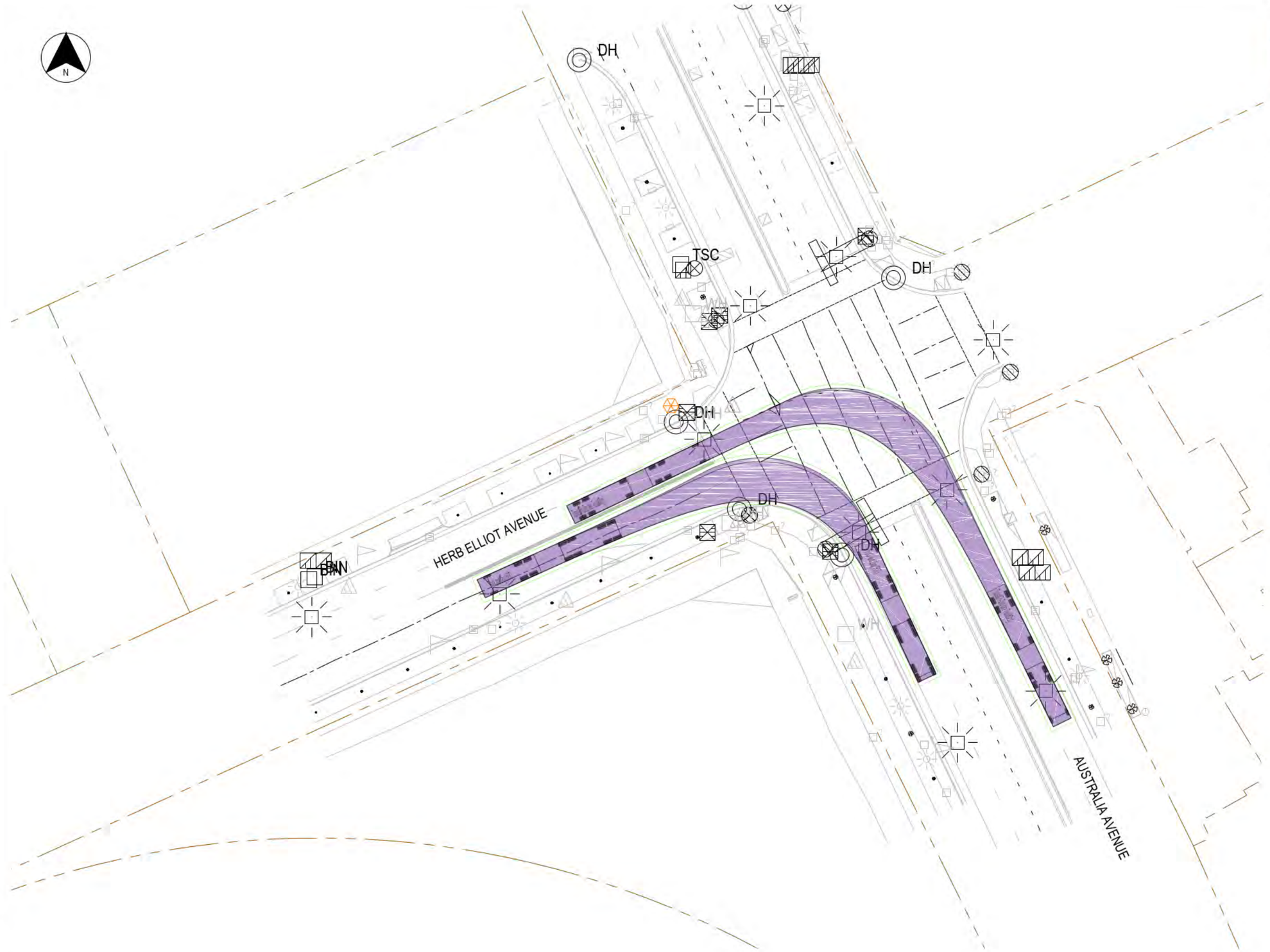


Prime mover and semi-trailer (19 m)	
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.540m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m
Speed	15km/h



Single Unit Truck/Bus (12.5 m)	
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.490m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m
Speed	15km/h

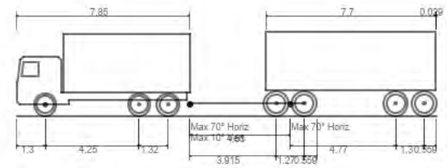
NOT FOR CONSTRUCTION



LEGEND

- VEHICLE SWEPT PATH ENVELOPE
- VEHICLE SWEPT PATH ENVELOPE
- 0.5m VEHICLE SWEPT PATH
- CLEARANCE ENVELOPE
- EXISTING PROPERTY BOUNDARY

DESIGN VEHICLE PROFILE



Truck and Dog (50T)

Overall Length	19.029m
Overall Width	2.500m
Overall Body Height	3.808m
Min Body Ground Clearance	0.498m
Track Width	2.500m
Lock-to-lock time	6.00s
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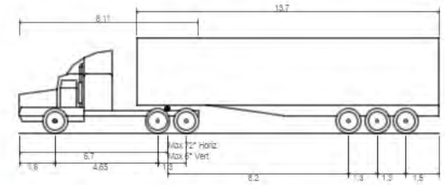


Prime mover and semi-trailer (19 m)

Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.540m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m
Speed	15km/h

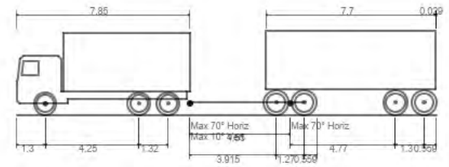
NOT FOR CONSTRUCTION

HERB ELLIOTT AVENUE

LEGEND

- VEHICLE SWEPT PATH ENVELOPE
- VEHICLE SWEPT PATH ENVELOPE
- 0.5m VEHICLE SWEPT PATH
- CLEARANCE ENVELOPE
- EXISTING PROPERTY BOUNDARY

DESIGN VEHICLE PROFILE



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Overall Width	2.500m
Overall Body Height	3.808m
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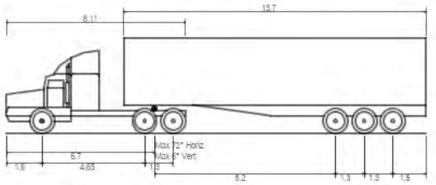

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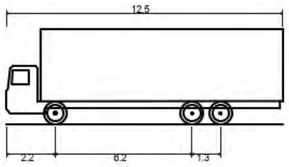
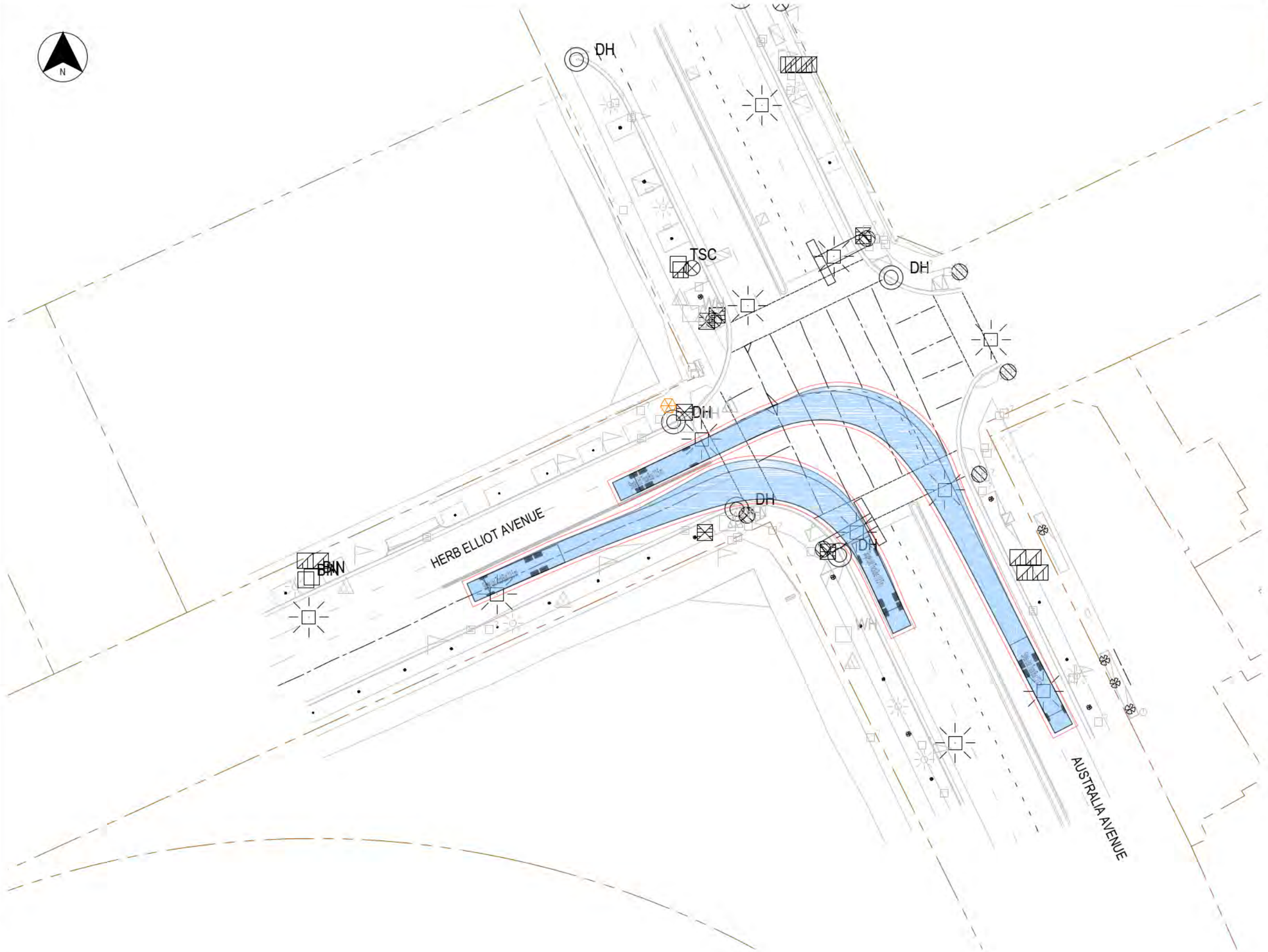


Single Unit Truck/Bus (12.5 m)	
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.490m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m
Speed	15km/h

NOT FOR CONSTRUCTION



LEGEND

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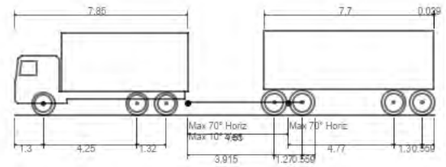

Truck and Dog (50T)	
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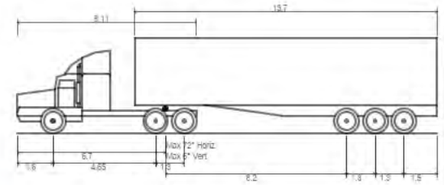

Prime mover and semi-trailer (19 m)	
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.540m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m
Speed	15km/h

Single Unit Truck/Bus (12.5 m)	
Overall Length	12.500m
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Overall Body Height	4.300m
Min Body Ground Clearance	0.490m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15.000m
Speed	15km/h

NOT FOR CONSTRUCTION

APPENDIX E - ROAD SAFETY AUDIT

Sydney Metro West SOPA Traffic Staging Concept Design Road Safety Audit

Prepared for:

Acciona Ferrovial Joint Venture

30 November 2021

The Transport Planning Partnership

Sydney Metro West SOPA Traffic Staging Concept Design Road Safety Audit

Client: Acciona Ferrovial Joint Venture

Version: V01

Date: 30 November 2021

TTPP Reference: 21319

Quality Record

Table of Contents

1 Road Safety Audit Summary 1
2 Introduction 2
2.1 Background 2
2.2 Audit Objective 3
2.3 Procedures and Reference Material 3
2.4 Audit Team 3
3 Road Safety Audit Program 4
3 1 Commencement Meeting 4
3.2 Site and Field Audit 4
3.3 Completion Meeting 4
4 Road Safety Audit Findings 5
4.1 Introduction 5
4.2 Responding to the Audit Report 6
4.3 Road Safety Audit Findings 6
5 Concluding Statement 11

Tables

Table 4.1: Risk Matrix 5
Table 4.2: Road Safety Audit Findings 7

Figures

Figure 2 1: Audit Scope 2

APPENDICES

A. DESIGN DRAWINGS

1 Road Safety Audit Summary

Audited project:	Sydney Metro West – Sydney Olympic Park
Client:	Acciona Ferrovial Joint Venture
Project manager:	[redacted]
Email address:	
Telephone:	
Audit Team:	
Audit type:	
Commencement meeting:	
Audit date:	
Completion meeting:	

2 Introduction

2.1 Background

This report has been prepared on behalf of Acciona Ferrovial Joint Venture to present road safety audit findings that have been identified for the construction vehicle access route and associated with the construction of the Sydney Olympic Park metro station as part of the Sydney Metro West project. The amended route differs to the construction vehicle haul route proposed by the Environmental Impact Statement (EIS) for the Sydney Metro West project.

Specifically, the audit scope covered the following routes:

- **Inbound route**: from Australia Avenue, turn left onto Sarah Durack Avenue, turn right onto Olympic Boulevard, and then turn right onto Herb Elliott Avenue.
- **Outbound route**: from Figtree Drive, turn left onto Olympic Boulevard, turn left onto Sarah Durack Avenue, and then turn right onto Australia Avenue.

The scope of the road safety audit is shown in Figure 2.1.

Figure 2 1: Audit Scope

2.2 Audit Objective

The objective of this road safety audit is to examine and identify road safety concerns regarding the amended construction vehicle haul route associated with the construction of the Sydney Olympic Park metro station as part of the Sydney Metro West project.

2.3 Procedures and Reference Material

The procedures used are described in the following guidelines:

- Roads and Maritime Services' 2011 Guidelines for Road Safety Audit Practices
- Austroads Guide to Road Safety 2019: Part 6 Managing Road Safety Audits
- Austroads Guide to Road Safety 2019: Part 6A Implementing Road Safety Audits.

Austroads checklist was used by the audit team as a reference in this road safety audit. Key elements examined included:

- general topics – drainage, type and degree of access to development
- design issues
- intersections
- lighting, signs and delineation
- physical objects
- environmental constraints
- other matters including over size vehicles.

2.4 Audit Team

The RSA was carried out by the following team:

[redacted]

[redacted]

[redacted]

3 Road Safety Audit Program

3.1 Commencement Meeting

A formal meeting was not held.

3.2 Site and Field Audit

No site inspection was undertaken for this audit However, a site inspection was carried out on Tuesday 28 September 2021 for the previous audit

3.3 Completion Meeting

Not required.

4 Road Safety Audit Findings

4.1 Introduction

Table 4.1 provides specific details of the audit findings and a risk rating as high, medium or low. The risk ratings have been based on the risk matrix presented in Table 4.1, which has been adopted from the standard Austroads Risk Matrix.

Table 4 1: Risk Matrix

Likelihood / Severity	Highly probable	Occasional	Improbable
Major	High	High	Medium
Moderate	High	Medium	Low
Minor	Medium	Low	Low

The terms in Table 4.1 are described below.

Likelihood:

- Highly probable: It is likely that more than one crash of this type could occur within a five-year period.
- Occasional: It is likely that less than one crash of this type could occur within a five-year period.
- Improbable: Less than one crash of this type could occur within a 10-year period.

Severity:

- Major: The crash is likely to result in a fatality or serious injuries

  For example, high/medium speed vehicle collision, high/medium speed collision with a fixed object, pedestrian struck at high speed, and cyclist hit by car.
- Moderate: The crash is likely to result in minor injuries or large scale of property damage

  For example, some slow speed vehicle collisions, cyclist falls, and rear end crashes.
- Minor: The crash is likely to result in minor property damage or many near miss crash events

  For example, some slow speed collisions, pedestrian walks into object (no head injury), and car reverses into post.

Priority:

- High: Very important, and needs to be addressed urgently.
- Medium: Important, and needs to be addressed as soon as possible.
- Low: Needs to be considered as part of regular maintenance/planning program.

4.2 Responding to the Audit Report

As set out in the road safety audit guidelines, the responsibility for the road rests with the project manager, not with the auditor. The project manager is under no obligation to accept the audit findings. Neither is it the role of the auditor to agree to, or approve the project manager's responses to the audit.

The audit provides the opportunity to highlight potential road safety problems and have them formally considered by the project manager in conjunction with all other project considerations.

4.3 Road Safety Audit Findings

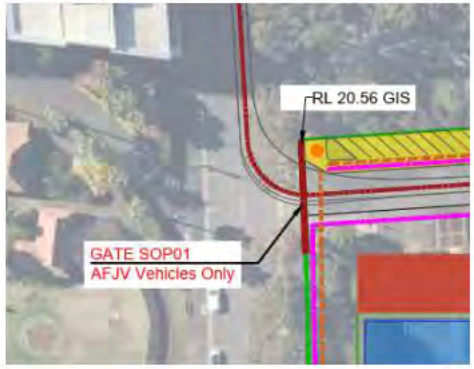
The audit findings are documented in Table 4.2 which provides:

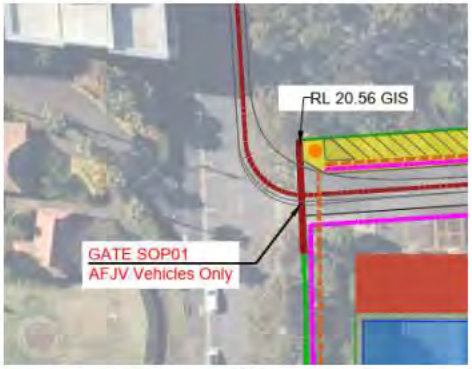
- specific details of the road safety issues identified during the audit
- a risk level rating for each of the road safety audit findings.

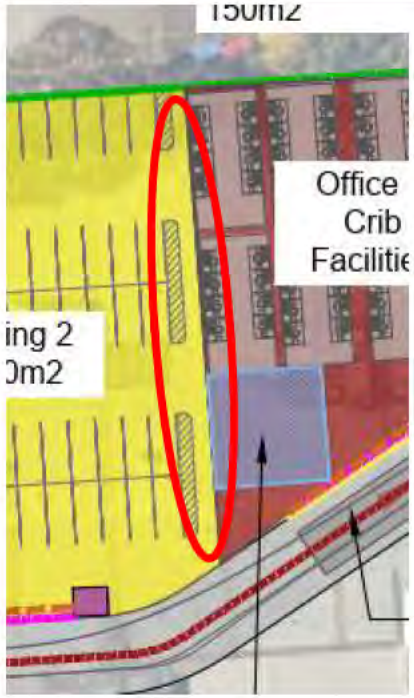
It should be acknowledged that positive attributes of the audited road section have not been discussed. Deficiencies that do not cause a safety problem are also not listed.

In-line with Roads and Maritime Services' best practice recommendations have not been included in the road safety audit findings.

Table 4.2: Road Safety Audit Findings

Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
1	Herb Elliott Avenue Driveway Access	The proposed driveway modification would create a much wider area for pedestrians to cross the driveway. Wide crossings can increase the risk of a pedestrian being struck. This should be considered given that SOPA events generate pedestrian activity in the area.		Improbable	Serious	Medium	Pedestrian gates added to increase awareness. Signs added (W5-234) Watch for Heavy Vehicles at the approach of the driveway
2	Herb Elliott Avenue Gate	The plans show a gate located some 9m from the frontage road. Heavy vehicles, including 20m semi-trailers and 19m truck and dogs would obstruct the carriageway if stopped at the gate. There would be as risk of minor crashes of vehicles manoeuvring around stopped trucks.		Improbable	Minor	Low	The gate will be open during operational hours. Therefore, no trucks will need to stop on Herb Elliott Ave to enter the site. Guard hut will be located 20m inside the site (from the footpath). This will allow trucks to clear the road and footpath prior to stopping.

Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
3	Herb Elliott Avenue Gate	The gate is located on a slope. Control points should be located on flat areas so that vehicles do not need to apply handbrakes while stopped. There is a risk that vehicles may roll back while stopped. This may result in the vehicle colliding with a parked vehicle or vehicle travelling past.	 	Improbable	Moderate	Low	Guard hut will be located 20m inside the site (from the footpath). This will allow trucks to clear the road and footpath prior to stopping. It is located on the flat area of the site.
4	Fig Tree Avenue	Truck Warning signs appear to be located only 50m from the driveway travelling westbound, yet the signage indicates 100m.				Note only	Signs adjusted.
5	Parking Area 1	Angled car parking is proposed in Parking Area 1. Vehicles could park front to kerb in these spaces in which case reversing vehicles would not have adequate sight		Improbable	Moderate	Low	The design is rear to kerb, as the entry is via Herb Elliott Ave. Risk identified incorrect.

Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
		distance (when exiting) and may collide with a truck or other vehicle.					
6	Parking Area 2	The circulation roadway at end of the parking aisles appears to be too narrow to allow vehicles to manoeuvre.				Note only	Parking design to be confirm. Parking layout removed.

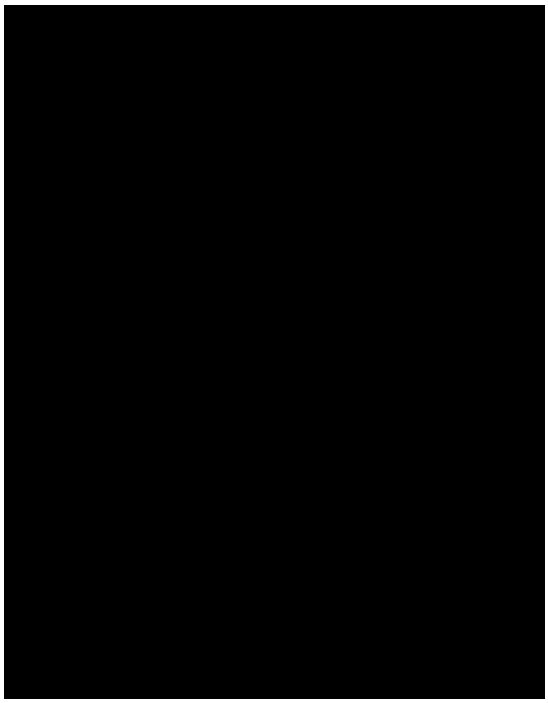
Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
7	Heavy vehicle route on-site	Presumably, heavy vehicles would enter the site then proceed to the brown or blue shaded area i.e. the works area. There is no swept path indicating such movement, and how trucks would then access the weighbridge/ wheel wash from the works area. Currently, the site layout plan and vehicle haul route only show heavy vehicles circulating along the outer roadway on-site.				Note only	Vehicle will move as per the swept path design. Assumption incorrect.
8	Parking Areas 1 and 2	Presumably, vehicles accessing Parking Areas 1 and 2 would enter the site via Herb Elliot Avenue. Access routes to/from these parking areas are not indicated on the site layout plan (while access to Parking Area 3 has been shown).				Note only	LV parking to follow the general traffic flow (entry Herb Elliott, exit via Figtree). Left in/Left out of parking area through the access corridor (in grey). This changes only during special events where entry/exit is via Herb Elliott Ave.

5 Concluding Statement

The findings and opinions in the report are based on the examination of the specific road and environs, and might not address all concerns existing at the time of the audit.

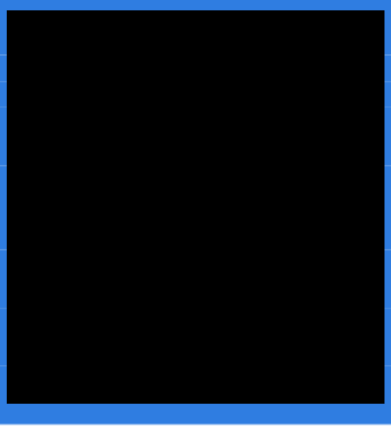
The auditors have endeavoured to identify features of the road that could be modified in order to improve safety, although it must be recognised that safety cannot be guaranteed since no road can be regarded as absolutely safe.

While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to the Auditors.



Appendix A

Design Drawings

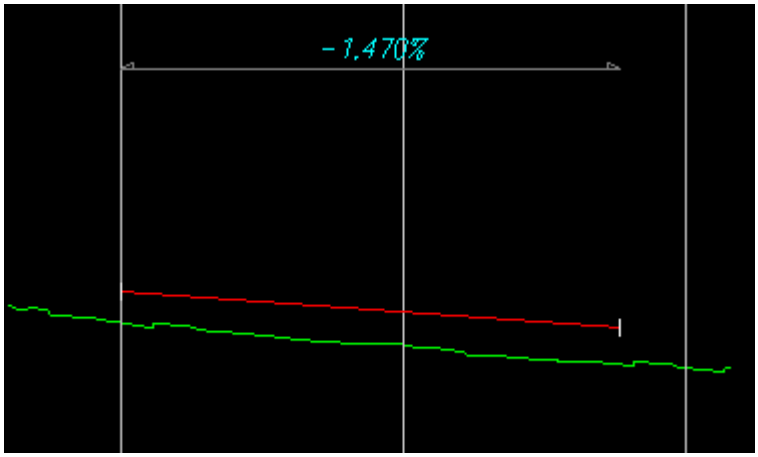


APPENDIX F - SIGHT DISTANCE CHECKS

Sight Distance Checks

SISD Gate SOP02 Eastbound

Eastbound Vertical

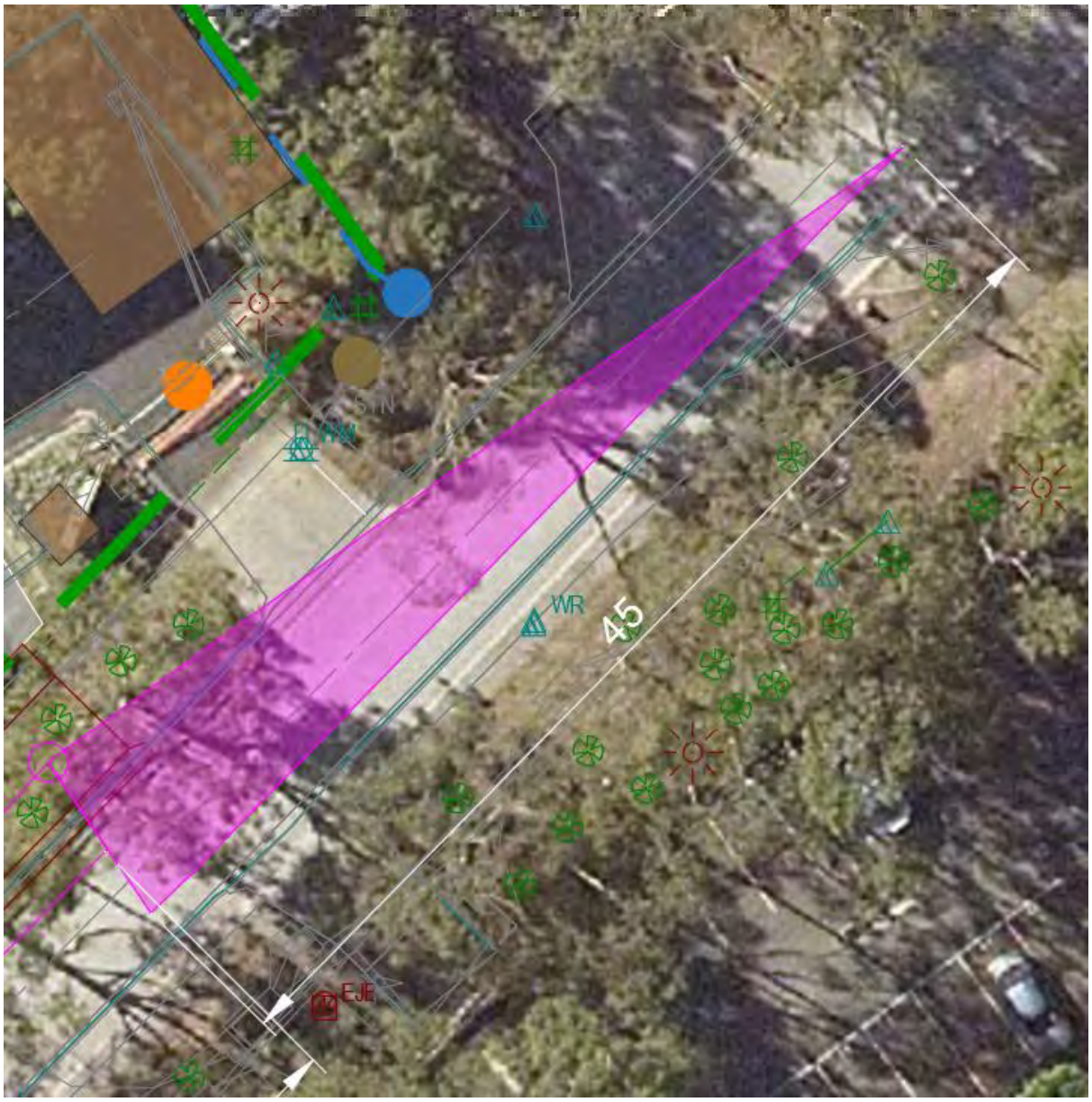


SISD Gate SOP02 Westbound

No vertical check was done for the W/B as the sight distance checks falls outside of the extents of available survey. Vertically the sight distances are assumed to work due to consistent longitudinal grade.

Minimum SSD Eastbound Approaching Traffic

Minimum SSD Westbound Approaching Traffic



APPENDIX G - HEAVY VEHICLE LOCAL ROADS (HVLR)

Sydney Olympic Park Heavy Vehicle Route

SMWSTCTP AFJ OLP TF RPT-000001 Revision 02

Sydney Metro West Central Tunnelling Package

DOCUMENT APPROVAL

	Prepared By	Reviewed By	Approved By
Name:	[redacted]		
Position:			
Date:			

REVISION HISTORY

Rev:	Date:	Pages:	By:	Description:
A	14/10.2021	All	[redacted]	For internal review
00	22/10/2021	All		Submission to Sydney Metro and SOPA
01	29/11/2021	All		For submission to DPIE
02	22/12/2021	All		For submission to DPIE

CONTENTS

1. INTRODUCTION 1
2. PURPOSE AND SCOPE 1
3. PROPOSED ROUTES 3
3.1 PROPOSE HEAVY VEHICLE ENTRY ROUTE 3
3.2 SWEPT PATH ANALYSIS FOR HEAVY VEHICLE ENTRY ROUTE 4
3.3 PROPOSE HEAVY VEHICLE EXIT ROUTE 4
3.4 SWEPT PATH ANALYSIS FOR HEAVY VEHICLE EXIT ROUTE 5
3.5 ROAD SAFETY AUDIT OF THE HEAVY VEHICLE ROUTE 5
3.6 ROAD DILAPIDATION SURVEY 5
3.7 IMPACT TO SCHOOL, AGED CARE, OR CHILDCARE 5
4. CONSULTATION WITH SOPA 6
5. PROFESSIONAL QUALIFICATION 7
6. APPROVAL 7
7. CONCLUSION 8
APPENDIX A SWEPT PATH ANALYSIS 9
APPENDIX B ROAD SAFETY AUDIT 10

1. INTRODUCTION

Sydney Metro is Australia's biggest public transport program. Services on the North West Metro Line between Rouse Hill and Chatswood started in May 2019. The Sydney Metro network also includes Sydney Metro City & Southwest, Sydney Metro West and Sydney Metro Western Sydney Airport
Sydney Metro West is a new 24 kilometre metro line between Westmead and the Sydney CBD (the Project) This infrastructure investment will double the rail capacity of the Greater Parramatta to Sydney CBD corridor with a travel time target between the two centres of about 20 minutes
The planning approvals and environmental impact assessment for Sydney Metro West has been split into a number of stages recognising the size of the project This includes:

- Stage 1 Concept and all major civil construction works including station excavation and tunnelling between Westmead and The Bays. Planning approval for this stage was granted in March 2021
- Stage 2 – All major civil construction works including station excavation and tunnelling from The Bays to Sydney CBD
- Stage 3 Tunnel fit-out, construction of stations, ancillary facilities and station precincts, and operation and maintenance of the Sydney Metro West line

Due to the Project's importance, the Project was declared to be Critical State Significant Infrastructure by the Minister for Planning and Public Spaces An Environmental Impact Statement (EIS) (Jacobs/Arcadis, 2020) for the Concept and Stage 1 (herein referred to as the Project) was placed on public exhibition from 30 April 2020 to 26 June 2020. Submissions were received from government, agencies, organisations and the public in repose to the project A Submissions Report was prepared by Sydney Metro in response to submissions received during the exhibition period and an Amendment Report was prepared by Sydney Metro in 2020 as a result of continued design development and refinement The Project was approved on 11 March 2021 (SSI 10038)

Stage 1 of the Project is being delivered under a number of packages in accordance with the Sydney Metro West Phasing Report The packages include:

- Phase A Power Enabling Works
- Phase B1 Central Tunnelling Package (Civils Works)
- Phase B2 Central Tunnelling Package (Tunnelling Works)
- Phase C Parramatta, Westmead and Clyde Demolition Works
- Phase D Greater Sydney Road Works
- Phase E Existing Rail Corridor Enabling Works
- Phase F – Western Tunnelling

The Central Tunnelling Package (CTP) involves the design and construction of 11km of twin tunnels and underground station excavations from The Bays to Sydney Olympic Park

This document has been prepared for the CTP for the proposal of heavy vehicles access on specific local roads within the Sydney Olympic Park not identified in Condition A1 of the Project Conditions of Approval (CoA) for Sydney Metro West, to access the CTP Sydney Olympic Park construction site

2. PURPOSE AND SCOPE

This document has been prepared to address the Sydney Metro West Central Tunnelling Package (CTP) project Condition of Approval as shown in Table 1, which includes a cross reference to where the information has been addressed within this document.

TABLE 1 RELEVANT CONDITIONS OF APPROVAL

	Project Planning Approval (dated 11 March (SSI 10038))	Where addressed
D84	The primary egress routes for spoil haulage trucks at Sydney Olympic Park metro station construction site must be determined in consultation with SOPA	Section 4 **Appendix C**
D86	Local roads proposed to be used by Heavy Vehicles to directly access construction sites that are not identified in the documents listed in Condition A1 of this schedule must be approved by the Planning Secretary and be included in the CTMPs	This document
D87	All requests to the Planning Secretary for approval to use local roads under Condition D86 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.	(a) Section 3 2 Section 3 4 **Appendix A** (b) **Appendix B** (c) Section 3.6 (d) Section 3.7 (e) Section 5
TT6	All trucks would enter and exit construction sites in a forward direction, where feasible and reasonable.	Section 3.1 Section 3.3
TT7	Construction site traffic would be managed to minimise movements during peak periods	Section 3.8
TT24	Coordination and consultation with the following stakeholders would occur, where required, to manage the interface of projects under construction at the same time: • Transport for NSW including Transport Coordination • Department of Planning, Industry and Environment • Sydney Trains • NSW Trains • Sydney Buses • Sydney Water • Port Authority of NSW • Sydney Motorways Corporation • Emergency service providers • Utility providers Construction contractors Coordination and consultation with these stakeholders would include: • Provision of regular updates to the detailed construction program, construction sites and haul routes	Section 4.1 Section 4 2 Section 4.3

Project Planning Approval (dated 11 March (SSI 10038))	Where addressed
• Identification of key potential conflict points with other construction projects • Developing mitigation strategies in order to manage conflicts. Depending on the nature of the conflict this could involve: ○ Adjustments to the Sydney Metro construction program work activities or haul routes or adjustments to the program activities or haul routes of other construction projects Coordination of traffic management arrangements between projects	

The scope will cover the heavy vehicle route to be taken within Sydney Olympic Park; swept path analysis; road safety analysis; dates of road dilapidation survey; any measures to avoid schools, aged care facilities, and child care facilities; and recommendation that the route is suitability of the proposed heavy vehicle route

3. PROPOSED ROUTES

3.1 PROPOSE HEAVY VEHICLE ENTRY ROUTE

In addition to the approved EIS heavy vehicle routes, Acciona Ferrovial Joint Venture (AFJV) propose to use the following heavy vehicle route into the Sydney Olympic Park site (also shown in Figure 1):

- Australia Avenue (northbound)
- Sarah Durack Avenue (westbound)
- Olympic Boulevard (northbound)
- Herb Elliott Avenue (eastbound)

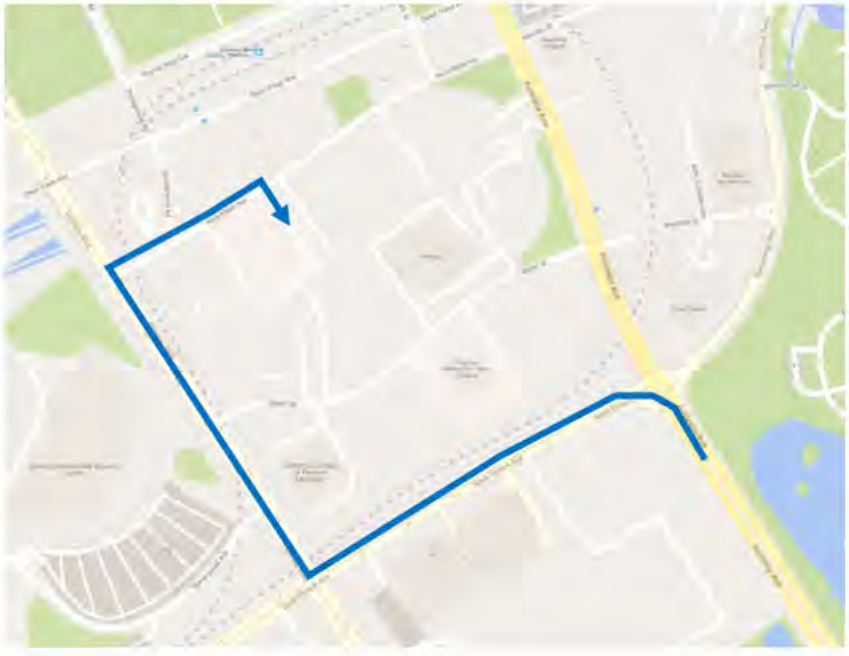


FIGURE 1 PROPOSE ADDITIONAL HEAVY VEHICLE ENTRY ROUTE TO SYDNEY OLYMPIC PARK SITE

Of those listed above, the following local roads were **not** identified in documents described in CoA A1 for access to the Sydney Olympic Park site:

- Sarah Durack Avenue (westbound)
- Olympic Boulevard (northbound)
- Herb Elliott Avenue (eastbound)

The use of these roads as construction site access has been identified in consultation with Sydney Olympic Park Authority (SOPA) as required under CoA D84. Evidence of this consultation will be included in the submission of this document to DPIE, as required in accordance with CoA A6

To provide safe access to the work sites, all trucks are to enter sites in a forward direction, where feasible and reasonable.

3.2 SWEPT PATH ANALYSIS FOR HEAVY VEHICLE ENTRY ROUTE

A swept path analysis for the above three site access roads has been undertaken to determine the suitability of these roads for heavy vehicle use This is included in **Appendix A**

Swept path analysis shows that the proposed heavy vehicle entry route is suitable for 19m prime mover and semi-trailer, and 19m truck and dog type vehicles.

One-off and special oversize deliveries will be managed under a separate process with National Heavy Vehicle Regulator. Oversize or overweight vehicles movements will comply with the National Heavy Vehicle Regulator (NHVR) where it has the authority to limit the time and route the oversize/overweight vehicle must use

3.3 PROPOSE HEAVY VEHICLE EXIT ROUTE

In addition to the approved EIS heavy vehicle route, AFJV proposed to use the following heavy vehicle route to exit the Sydney Olympic Park site (also shown in Figure 2):

- Figtree Drive (westbound)
- Olympic Boulevard (southbound)
- Sarah Durack Avenue (eastbound)
- Australia Avenue (southbound)

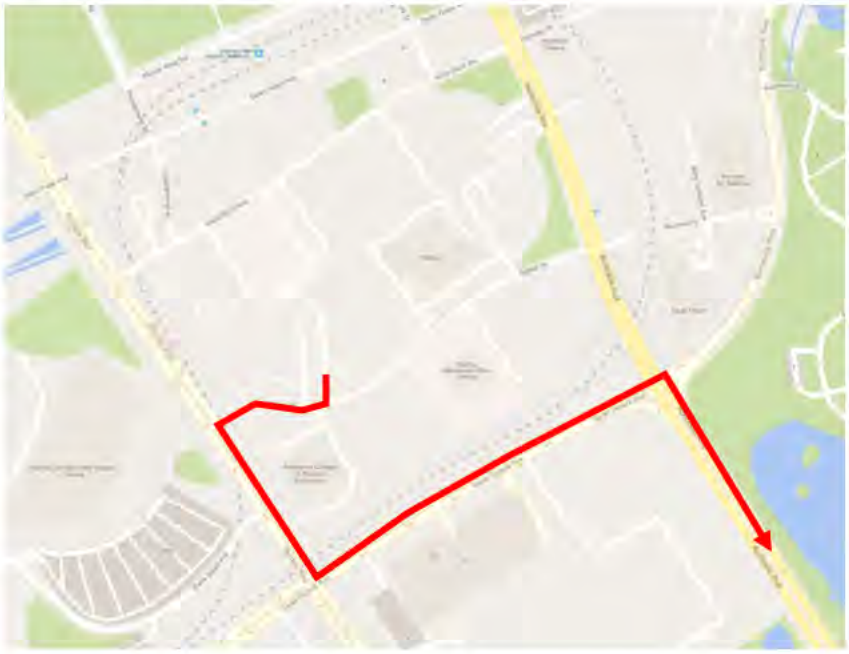


FIGURE 2 PROPOSE ADDITIONAL HEAVY VEHICLE EXIT ROUTE FROM SYDNEY OLYMPIC PARK SITE

Of those listed above, the following local roads were **not** identified in documents described in CoA A1 for access to the Sydney Olympic Park site:

- Figtree Drive (westbound)
- Sarah Durack Avenue (eastbound)

To provide a safe exit to the work sites, all trucks are to exit sites in a forward direction, where feasible and reasonable.

3.4 SWEPT PATH ANALYSIS FOR HEAVY VEHICLE EXIT ROUTE

A swept path analysis for the above two site exit roads has been undertaken to determine the suitability of these roads for heavy vehicle use This is included in **Appendix A**

Swept path analysis shows that the proposed heavy vehicle exit route is suitable for 19m prime mover and semi trailer, and 19m truck and dog type vehicles. This covers the general vehicle size that would be used by AFJV for spoil haulage and deliveries One-off and special oversize deliveries will be manage under a separate process with Sydney Olympic Park.

3 5 ROAD SAFETY AUDIT OF THE HEAVY VEHICLE ROUTE

A road safety audit was complete for the proposed heavy vehicle entry route and exit route Detail findings and response is included in **Appendix B**. In summary, there were no high risk items identified, and all medium risk items were considered 'improbable' in likelihood As such, the proposed entry and exit routes are acceptable routes for heavy vehicles.

3 6 ROAD DILAPIDATION SURVEY

Road dilapidation survey was completed in November 2021 (Sydney Metro, Transport for NSW, SOPA) as described in CoA D88. A copy of the dilapidation report with the photo/video records was distributed to Sydney Olympic Park Authority in accordance with CoA D87(c) on 3 December 2021

3.7 IMPACT TO SCHOOL, AGED CARE, OR CHILDCARE

Sarah Durack Avenue has footpath on both sides. The road is flanked by a train line on the northern side while the southern side is the P3 carpark The residential property on the corner of Sarah Durack Avenue and Olympic Boulevard does not have any shops fronting Sarah Durack Avenue.

Along Olympic Boulevard between Sarah Durack Avenue and Herb Elliott Avenue, the eastern side contains a wide footpath and indented bus bay with no property frontage Along the western side there is a wide footpath and indented bus bay and access to the Sydney Olympic Park Aquatic Centre.

Along Figtree Drive, there is a footpath on both sides of the street. NSW institute of Sport is located east of the Sydney Olympic Park Station site, while a private company is located immediate opposite of the construction site.

Herb Elliott Avenue is within the original EIS route with footpath on both sides and with Ibis Hotel and the Abattoir Heritage Precinct located on the north side of Herb Elliott Avenue

There are no schools, aged care, or childcare facilities along the proposed heavy vehicle entry and exit route The road safety audit have not identified any high risk items along the proposed route

3 8 CONSTRUCTION TRAFFIC MANAGEMENT

Construction traffic volumes would be minimised during peak periods, and special events, where possible.

Table 3 1 shows the proposed construction traffic volumes involving light vehicles and heavy vehicles accessing the construction sites on a typical day. The construction traffic generation is no more than what has been allowed for in the EIS construction traffic volumes for each site.

TABLE 3.1: DAILY CONSTRUCTION TRAFFIC VOLUMES (TWO-WAY MOVEMENT) DURING PEAK ACTIVITY

Site	AM Peak Hour			PM Peak Hour		
	Heavy Vehicle	Light Vehicle	Total	Heavy Vehicle	Light Vehicle	Total
Sydney Olympic Park Station	8	40	48	8	46	54

4. CONSULTATION

4 1 CONSULTATION WITH SOPA

This document will be provided for consultation with SOPA. Evidence of this consultation and confirmation of the proposed routes will be provided in **Appendix C**.

4.2 TRAFFIC AND TRANSPORT LIAISON GROUP (TTLG)

AFJV has been undertaking consultation and communication with stakeholders in regard to traffic management A communication strategy is being developed with stakeholders and the site-specific CTMPs outline consultation activities during the works. The community will be notified of any current and upcoming construction works and traffic arrangement that have the potential to impact on stakeholders, community and businesses, prior to them occurring

A community communications strategy is being developed (in consultation with Sydney Metro) to notify stakeholders that may be affected by changes to transport, access and local traffic arrangements. The community communications and strategy are being prepared in accordance with the General Specification requirements (Section 5.1.10). Once prepared, the community communications strategy will be forwarded to TfNSW for approval.

A Traffic and Transport Liaison Group (TTLG) will be established to discuss with stakeholders in relation to the proposed construction activities, upcoming works and related traffic and transport implications.

AFJV Traffic Manager is to participate in monthly TTLG meetings throughout the project, or at an agreed frequency. The Traffic Manager is a member of the TTLG and acts as the authorised representative for the Project in matters related to traffic and transport. The Traffic Manager provides the relevant information relating to the Project to the group

AFJV consult with all relevant stakeholders prior to the commencement of any works. Potential stakeholders for this Project include:

- Sydney Metro
- Transport for NSW including:

- Centre for Road and Maritime Safety
- Metro Bus and Ferry Planning and Development
- Greater Sydney Planning and Programs

- Freight Strategy and Planning
- Customer Journey Planning
- Sydney Trains
- Port Authority of NSW
- Infrastructure NSW
- Department of Planning, Industry and Environment
- NSW Police
- NSW Fire and Rescue
- NSW Ambulance Service
- Inner West Council
- City of Canada Bay Council
- Burwood Council
- Parramatta City Council
- Bus operators
- Sydney Olympic Park Authority
- Concord Oval Redevelopment

4.3 TRAFFIC CONTROL GROUP (TCG)

Sydney Metro to establish Metro West wide TCG and the Traffic Manager will attend on behalf of AFJV and meet weekly, fortnightly or as agreed. TCG members typically include the Project Traffic Manager and representatives from TfNSW, SM, and where required Councils and SOPA.

The TCG is to discuss and agree on any and traffic and transport related issues associated with the Project. It is the TCG where decisions and changes are made on CTMPs, traffic management issues as they relate to the project work.

5. PROFESSIONAL QUALIFICATION

The author of this document – [redacted], is a qualified traffic engineer with twenty years of experience and consider the proposed heavy vehicle route to be suitable for use under CoA D87.

6. APPROVAL

Following consultation with SOPA, this document will be finalised (where changes have been identified as being required) and provided to the Planning Secretary for approval in accordance with CoA D86

Approved local roads will be included in the Construction Traffic Management Plans (CTMPs) required under CoA D85, which will also be submitted to the Planning Secretary for information before the commencement of any construction in the area identified and managed under each CTMP.

7. CONCLUSION

Swept path analysis have shown that there are no swept path clashes with the proposed heavy vehicle route Road safety audits had identified no high risk items and medium risk items have improbable likelihood. Road dilapidation surveys (required under CoA D87(c)) will be completed in November 2021 prior to any heavy vehicle usage on the proposed local roads described in this document Finally, there are no schools, aged care facilities or childcare facilities along the proposed heavy vehicle route.

Therefore, the proposed heavy vehicle entry and exit route is considered suitable for use and is recommended for approval

APPENDIX A SWEPT PATH ANALYSIS

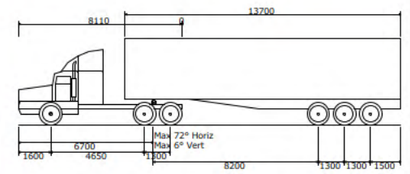
VEHICLE ENTERING

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

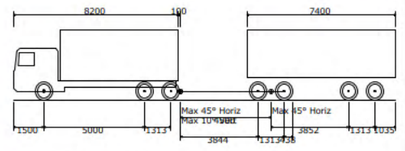
VEHICLE ENTERING

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

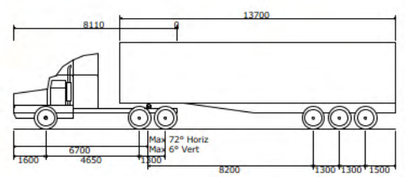
VEHICLE ENTERING

OLYMPIC BOULEVARD

SARAH DURACK AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

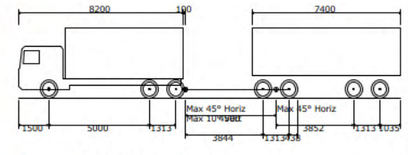
OLYMPIC BOULEVARD

SARAH DURACK AVENUE

Truck and Dog Trailer 19m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

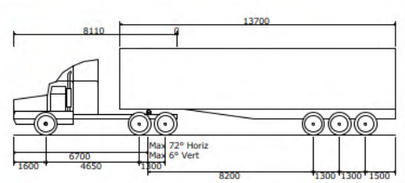
VEHICLE ENTERING

HERB ELLIOTT AVENUE

OLYMPIC BOULEVARD

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

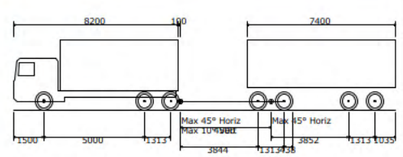
HERB ELLIOTT AVENUE

OLYMPIC BOULEVARD

Truck and Dog Trailer 19m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

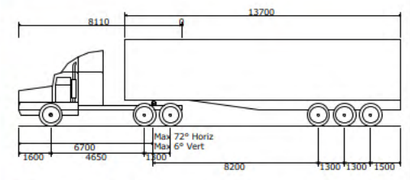
VEHICLE EXITING - OPTION 1 & 2

FIGTREE DRIVE

OLYMPIC BOULEVARD

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

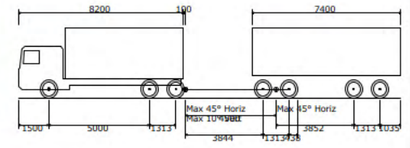
VEHICLE EXITING - OPTION 1 & 2

FIGTREE DRIVE

OLYMPIC BOULEVARD

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

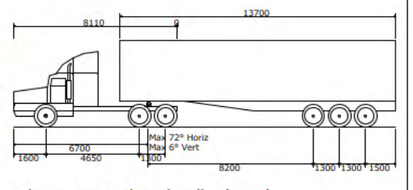
VEHICLE EXITING - OPTION 1

OLYMPIC BOULEVARD

SARAH DURACK AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

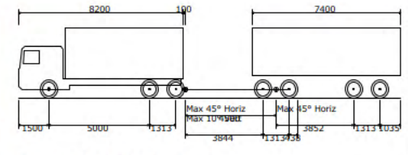
VEHICLE EXITING - OPTION 1

OLYMPIC BOULEVARD

SARAH DURACK AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

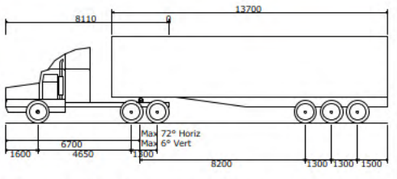
VEHICLE EXITING - OPTION 1

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

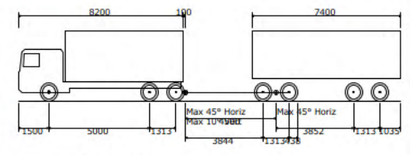
VEHICLE EXITING - OPTION 1

SARAH DURACK AVENUE

AUSTRALIA AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

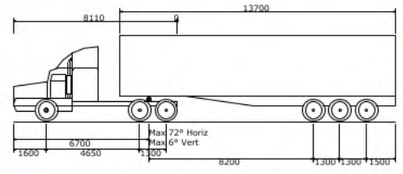
Parking
660m2

GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
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VEHICLE ENTERING

Parking
660m²

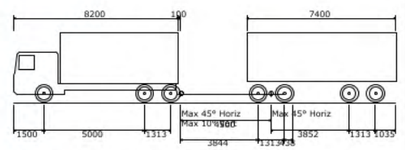
GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

Truck and Dog Trailer 19m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m

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Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

Parking
660m2

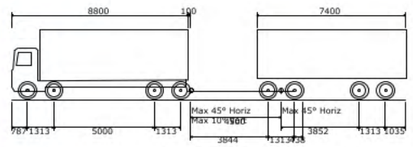
GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

Truck and Dog Trailer 19.6m

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19.6m	
Overall Length	19600mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

HERB ELLIOTT AVENUE

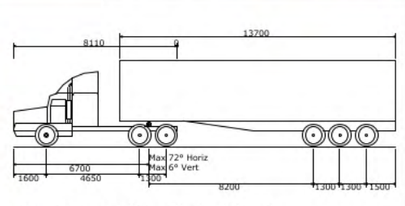
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Overall Length	19000mm
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Overall Body Height	4300mm
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Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

HERB ELLIOTT AVENUE

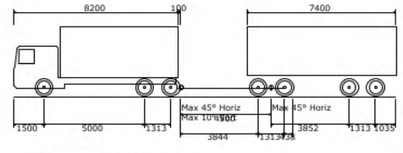
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Overall Body Height	3500mm
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Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE ENTERING

HERB ELLIOTT AVENUE

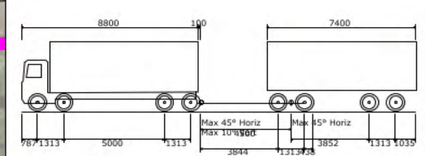
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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VEHICLE EXITING

HERB ELLIOTT AVENUE

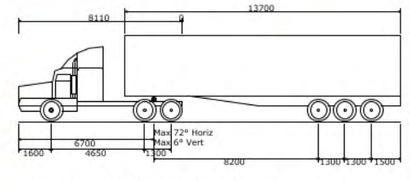
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Overall Body Height	4300mm
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Track Width	2500mm
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VEHICLE EXITING

HERB ELLIOTT AVENUE

RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

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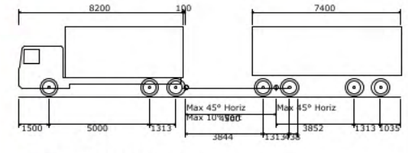
Wheel path		
Body envelope		
500mm clearance		



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VEHICLE EXITING

HERB ELLIOTT AVENUE

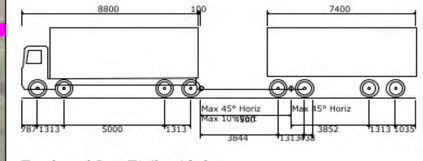
RL 20.56 GIS

GATE SOP01

Parking
660m2

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



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Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

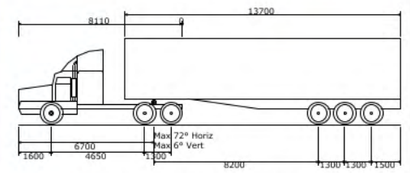
Parking
660m2

GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
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Track Width	2500mm
Lock-to-lock time	6.00s
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VEHICLE EXITING

Parking
660m2

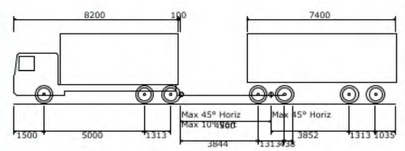
Truck and Dog Trailer 19m

GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
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Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

Parking
660m2

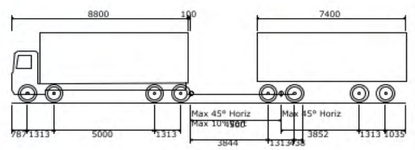
Truck and Dog Trailer 19.6m

GATE SOP01
AFJV Vehicles Only

HERB ELLIOTT AVENUE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19.6m	
Overall Length	19600mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

GATE SOP02
AFJV Vehicles Only

Wheel wash

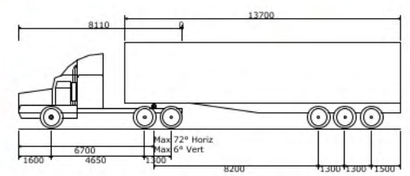
/eighbridge

Spoil storage 820m2

FIGTREE DRIVE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Prime mover and semi-trailer (19 m)

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

GATE SOP02
AFJV Vehicles Only

Truck and Dog Trailer 19m

Wheel wash

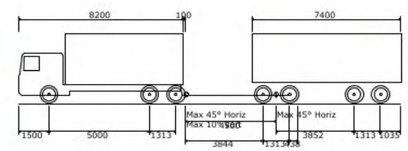
/eighbridge

Spoil storage 820m2

FIGTREE DRIVE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19m	
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Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	427mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

VEHICLE EXITING

GATE SOP02
AFJV Vehicles Only

Truck and Dog Trailer 19.6m

Wheel wash

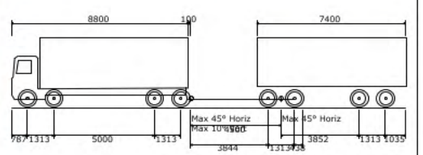
/eighbridge

Spoil storage 820m2

FIGTREE DRIVE

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



Truck and Dog Trailer 19.6m	
Overall Length	19600mm
Overall Width	2500mm
Overall Body Height	3500mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	12500mm

APPENDIX B ROAD SAFETY AUDIT

Sydney Metro West
Existing Conditions Road Safety Audit

Prepared for:

Acciona Ferrovial Joint Venture

5 October 2021

The Transport Planning Partnership

Sydney Metro West

Existing Conditions Road Safety Audit

Client: Acciona Ferrovial Joint Venture

Version: V01

Date: 5 October 2021

TTPP Reference: 21319

Quality Record

Table of Contents

1 Road Safety Audit Summary 1
2 Introduction 2
2.1 Background 2
2.2 Audit Objective 3
2.3 Procedures and Reference Material 3
2.4 Audit Team 3
3 Road Safety Audit Program 4
3 1 Commencement Meeting 4
3.2 Site and Field Audit 4
3.3 Completion Meeting 4
4 Road Safety Audit Findings 5
4.1 Introduction 5
4.2 Responding to the Audit Report 6
4.3 Road Safety Audit Findings 6
5 Concluding Statement 12

Tables

Table 4.1: Risk Matrix 5
Table 4.2: Road Safety Audit Findings 7

Figures

Figure 2 1: Audit Scope 2

APPENDICES

A. DESIGN DRAWINGS

1 Road Safety Audit Summary

Audited project:	Sydney Metro West – Sydney Olympic Park
Client:	[redacted]
Project manager:	
Email address:	
Telephone:	
Audit Team:	
Audit type:	
Commencement meeting:	
Audit date:	
Completion meeting:	

The objective of this road safety audit is to examine and identify road safety concerns regarding the amended construction vehicle haul route associated with the construction of the Sydney Olympic Park metro station as part of the Sydney Metro West project. The amended route differs to the construction vehicle haul route proposed by the Environmental Impact Statement (EIS) for the Sydney Metro West project.

The findings of the road safety audit have been detailed in Section 4.3 of this report.

2 Introduction

2.1 Background

This report has been prepared on behalf of Acciona Ferrovial Joint Venture to present road safety audit findings that have been identified for the amended construction vehicle haul route associated with the construction of the Sydney Olympic Park metro station as part of the Sydney Metro West project. The amended route differs to the construction vehicle haul route proposed by the Environmental Impact Statement (EIS) for the Sydney Metro West project.

Specifically, the audit scope covered the following routes:

- **Inbound route**: from Australia Avenue, turn left onto Sarah Durack Avenue, turn right onto Olympic Boulevard, and then turn right onto Herb Elliott Avenue.
- **Outbound route**: from Figtree Drive, turn left onto Olympic Boulevard, turn left onto Sarah Durack Avenue, and then turn right onto Australia Avenue.

The scope of the road safety audit is shown in Figure 2.1.

Figure 2 1: Audit Scope

2.2 Audit Objective

The objective of this road safety audit is to examine and identify road safety concerns regarding the amended construction vehicle haul route associated with the construction of the Sydney Olympic Park metro station as part of the Sydney Metro West project.

2.3 Procedures and Reference Material

The procedures used are described in the following guidelines:

- Roads and Maritime Services' 2011 Guidelines for Road Safety Audit Practices
- Austroads Guide to Road Safety 2019: Part 6 Managing Road Safety Audits
- Austroads Guide to Road Safety 2019: Part 6A Implementing Road Safety Audits.

Austroads checklist was used by the audit team as a reference in this road safety audit. Key elements examined included:

- general topics – drainage, type and degree of access to development
- design issues
- intersections
- lighting, signs and delineation
- physical objects
- environmental constraints
- other matters including over size vehicles.

2.4 Audit Team

The RSA was carried out by the following team:

[redacted]

3 Road Safety Audit Program

3.1 Commencement Meeting

A formal meeting was not held.

3.2 Site and Field Audit

A site inspection was carried out on Tuesday 28 September 2021 in fine weather conditions during the daytime This is in-line with the hours of construction which are proposed to be during the daytime period

The vehicle route was driven, and adjacent pedestrian pathways were walked over in each direction to identify possible road safety concerns Several photographs and video footage were taken

3.3 Completion Meeting

Not required.

4 Road Safety Audit Findings

4.1 Introduction

Table 4.1 provides specific details of the audit findings and a risk rating as high, medium or low. The risk ratings have been based on the risk matrix presented in Table 4.1, which has been adopted from the standard Austroads Risk Matrix.

Table 4 1: Risk Matrix

Likelihood / Severity	Highly probable	Occasional	Improbable
Major	High	High	Medium
Moderate	High	Medium	Low
Minor	Medium	Low	Low

The terms in Table 4.1 are described below.

Likelihood:

- Highly probable: It is likely that more than one crash of this type could occur within a five-year period.
- Occasional: It is likely that less than one crash of this type could occur within a five-year period.
- Improbable: Less than one crash of this type could occur within a 10-year period.

Severity:

- Major: The crash is likely to result in a fatality or serious injuries

  For example, high/medium speed vehicle collision, high/medium speed collision with a fixed object, pedestrian struck at high speed, and cyclist hit by car.
- Moderate: The crash is likely to result in minor injuries or large scale of property damage

  For example, some slow speed vehicle collisions, cyclist falls, and rear end crashes.
- Minor: The crash is likely to result in minor property damage or many near miss crash events

  For example, some slow speed collisions, pedestrian walks into object (no head injury), and car reverses into post.

Priority:

- High: Very important, and needs to be addressed urgently.
- Medium: Important, and needs to be addressed as soon as possible.
- Low: Needs to be considered as part of regular maintenance/planning program.

4.2 Responding to the Audit Report

As set out in the road safety audit guidelines, the responsibility for the road rests with the project manager, not with the auditor. The project manager is under no obligation to accept the audit findings. Neither is it the role of the auditor to agree to, or approve the project manager's responses to the audit.

The audit provides the opportunity to highlight potential road safety problems and have them formally considered by the project manager in conjunction with all other project considerations.

4.3 Road Safety Audit Findings

The audit findings are documented in Table 4.2 which provides:

- specific details of the road safety issues identified during the audit
- a risk level rating for each of the road safety audit findings.

It should be acknowledged that positive attributes of the audited road section have not been discussed. Deficiencies that do not cause a safety problem are also not listed.

In-line with Roads and Maritime Services' best practice recommendations have not been included in the road safety audit findings.

Table 4.2: Road Safety Audit Findings

Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
1.	Australia Avenue – Sarah Durack Avenue	There is a cycle lane marked within the road shoulder which significantly narrows at the left-turn slip lane from Australia Avenue to Sarah Durack Avenue. This results in cyclists having to share the travel lane with traffic, and namely, construction vehicles which have limited visibility towards cyclists. As observed on-site, this route is commonly utilised by cyclists. There is a risk of cyclists being struck by left turning trucks.		Improbable	Major	Medium	Entry route via Sarah Durack Ave will be used as an alternate route in addition to Australian Ave. Low heavy vehicle traffic volume will further reduce the likelihood of incidents. Briefing to driver to expect cyclists within the Sydney Olympic Park area. No road design changes proposed.
2.	Sarah Durack Avenue	As observed on-site, pedestrians cross the road along midblock to access the P3 car park. Evidently, this is an existing concern as seen by the signage on-site at the car park exit reminding pedestrians to cross at the signals. This could result in a person being struck by a vehicle, which would be more severe if it involved a heavy vehicle.		Improbable	Major	Medium	Pedestrian volume is due to COVID centre located in Sydney Olympic Park. SOPA has installed signage and place personnel to direct pedestrians to the signal crossing. During some special events (e.g. Easter Show) access to worksite will be via Australian Ave, thus avoiding this area. No road design changes proposed.

Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
							
3.	Figtree Drive	Sight lines between westbound vehicles on Figtree Drive and pedestrians at the southern kerb ramp are restricted by the curve in the roadway and overgrown roadside vegetation. This could lead to a vehicle-pedestrian collision, which could be exacerbated by the downward grade in travel lane on approach to the intersection and more heavy vehicles on this route.		Improbable	Major	Medium	Low risk as trucks needs to slow down prior to turning onto Olympic Boulevard. Briefing to driver to expect pedestrians along Olympic Boulevard. During some special events (e.g. Easter Show) exit from worksite will be via Herb Elliott Ave and Australian Ave, thus avoiding this area. No road design changes proposed.

Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
							
4.	Figtree Drive	Truck and dog vehicles are avoided in some high pedestrian areas as the gap for the draw bar between the truck and trailer can sometimes be mistaken to be two separate vehicles. A pedestrian could try to cross over the draw bar and get hit by the trailer as it accelerates.		Improbable	Major	Medium	Briefing to driver to expect pedestrians along Olympic Boulevard. During some special events (e.g. Easter Show) exit from worksite will be via Herb Elliott Ave and Australian Ave, thus avoiding this area. No road design changes proposed.

Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
5.	Olympic Boulevard	There are locations where there is a kerb ramp with pavement tactiles and varied pavement surface treatment (across the roadway) which could suggest to pedestrians that they have right-of way at this location. Any miscommunication/ misunderstanding between a motorist (including heavy vehicle driver) and pedestrian crossing the road could result in a collision. This severity of such incident occurring would be made worse if it involved a heavy vehicle.		Improbable	Major	Medium	Location north of Figtree Drive. This section of the road is not along the propose exit route. No road design changes proposed.
6.	Sarah Durack Avenue – Olympic Park Boulevard	The dedicated right-turn lane from Sarah Durack Avenue to Olympic Park Boulevard is approximately 30m in length. This would be able to accommodate a 19m heavy vehicle with one or two cars until the traffic would begin to protrude the adjacent through lane. This could impact road safety (as through traffic manoeuvres around the back of the queue) and intersection operation.	 	Occasional	Minor	Low	Entry route via Sarah Durack Ave will be used as an alternate route in addition to Australian Ave. Even if all heavy vehicles were to use Sarah Durack Ave, it will be approximately 1 heavy vehicle per 5min (approx.12 per hour) during peak period. The signal cycle time will be capable to allow vehicles to turn right without queuing. During some special events (e.g. Easter Show) exit from worksite will be via Herb Elliott Ave and Australian Ave, thus avoiding this area.

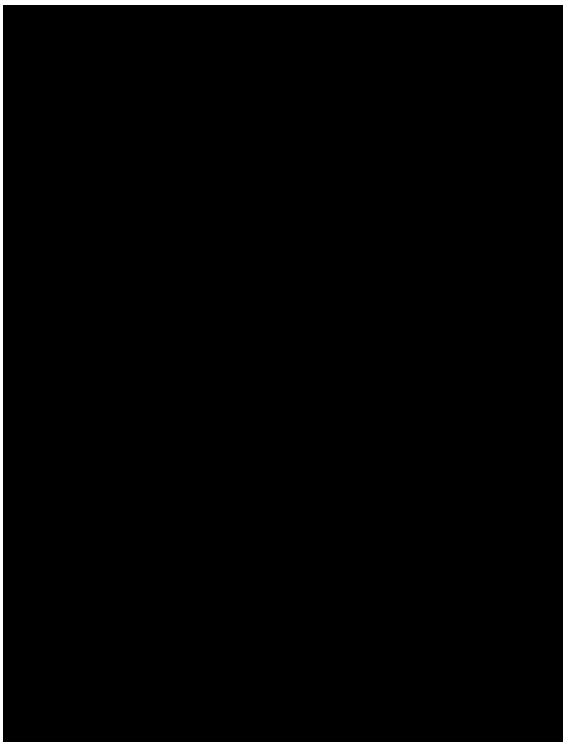
Item No.	Location	Descriptions of Findings	Design/ Photo	Likelihood	Severity	Risk Rating	Designer Response
							No changes proposed.
7.	Sarah Durack Avenue	The P3 car park shuttle bus stop is located on Sarah Durack Avenue, just before Olympic Boulevard. According to the Sydney Olympic Park website, the shuttle service travels between the P3 car park to Olympic Boulevard, presumably by turning right at the traffic signals (see figure). This could increase the probability of a side-swipe incident between an approaching heavy vehicle and a shuttle bus merging across to the far right lane.		Improbable	Minor	Low	Low risk due to low volume of heavy vehicles. During some special events (e.g. Easter Show) exit from worksite will be via Herb Elliott Ave and Australian Ave, thus avoiding this area. No changes proposed.
8.	Olympic Boulevard – Herb Elliot Avenue	Despite there being No U-Turn signage at the intersection, vehicles were observed undertaking u-turns on Olympic Boulevard.			Note only		

5 Concluding Statement

The findings and opinions in the report are based on the examination of the specific road and environs, and might not address all concerns existing at the time of the audit.

The auditors have endeavoured to identify features of the road that could be modified in order to improve safety, although it must be recognised that safety cannot be guaranteed since no road can be regarded as absolutely safe.

While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to the Auditors.



Appendix A

Design Drawings

APPENDIX C CONSULTATION EVIDENCE

RE: Heavy Vehicle Access Route

[redacted]

Thu 25/11/2021 8:59 AM

[redacted]

Thank you for sending through the second heavy vehicle access route for Aust Ave, Sarah Durack, Olympic Bld, Herb Elliott & Figtree Drive. SOPA has reviewed and approves this route conditional on the previous information SOPA sent through based on the swept vehicle analysis for the entry/exit at Figtree and Herb Elliott.

I will send through further information shortly on SOPA's requirements for the operation of the heavy vehicle access route throughout the construction period. This will include but not limited to the following:

1. Confirmation the Aust Ave, Sarah Durack, Olympic Bld, Herb Elliott & Figtree Drive route will be the primary route.
2. Confirmation the Herb Elliott, Figtree Drive to Australia Ave route will be the secondary route activated in times of major events at SOP where Olympic Boulevard will be closed.
3. Details on the extent of the pre-commencement photographic dilapidation report.
4. Procedures for heavy route road maintenance requirements throughout the works.
5. Completion reinstatement requirements post construction works.

[redacted]

[redacted]

[redacted],

Could you advise if there are any comments on the HV access route report?

Thanks,

[redacted]

[redacted]

Australia Ave access is covered as part of the approved EIS (page10-20, 21 of 39, Figure 10-25)

Thanks,

[redacted]

[redacted]

Working through the proposed Heavy Vehicle Access Route which is all looking good and I will provide a confirmation later this week. In looking forward you advised when we last spoke that the alternate route Australia Ave had already been submitted and that the Sarah Durack Olympic Bld was the outstanding issue. I can't locate a plan of the Australia Ave route and as such could you email across. The reason is I want to confirm within SOPA and advise afJV accordingly of the primary route and secondary route for major event mode so there is no confusion.

Please send across the Australia Ave route ASAP.

[redacted]

Sydney Olympic Park is a great place for leisure, sport, education and business.

To find out what's going on at the Park and be part of our great offers and competitions, register for What's On? updates.

Visit https://clicktime.symantec.com/36PQw4PdJiwZF2U7V3CDkWG7GS?u=http%3A%2F%2Fwww.sydneyolympicpark.com.au%2Fregister

This message and any attached files are intended solely for the use of the individual or entity to whom it is addressed and may

RE: Heavy Vehicle Access Route

[redacted]

SOPA has reviewed "Sydney Olympic Park Heavy Vehicle Route", Revision 00, dated 22/10/2021, and note that the submitted document includes:

1. swept path analyses,
2. consideration of the impact of the use of local roads on pedestrians and cyclists,
3. November as the nominated month for the road dilapidation survey
4. Consideration of safety and schools, aged care facilities and child care facilities
5. Comment from an experience traffic engineer

It would appear that the requirements of the consent, in particular Condition D87, in relation to the SOP Heavy Vehicle Route document have been met.

In addition, the document prepared addresses the requirements of Condition D87. Moreover, from the consent we can see that D86 requires that approval to be sought by the proponent from Planning Secretary.
SOPA requests that the CTMP be amended to include the route outlined in "Sydney Olympic Park Heavy Vehicle Route", Revision 00, dated 22/10/2021, as the PREFERRED route, with the route approved as part of the EIS being used only during event mode, as deemed by SOPA. Please confirm that this change can be actioned in the CTMP.

In addition to the above and in accordance with discussions to date, SOPA requires a detailed and comprehensive dilapidation report both photographic and video of existing roads and adjacent infrastructure as a base position for review and rectification requirements throughout and at the completion of the project.

[redacted]

[redacted]

Australia Ave access is covered as part of the approved EIS (page10-20, 21 of 39, Figure 10-25)

Thanks,

[redacted]

[redacted]

APPENDIX D DILAPIDATION REPORT TO SOPA

afJV

Document Transmittal

Transmittal No:	SMWSTCTP-AFJ-TX-000298
Contract No:	CTP - 00013/13033 - Central Tunnelling Works Design and Construction
Sub Contract:	
Date:	06 December 2021, 11:15 AM

Issued	Name
By	[redacted]

Issued	Name
To	[redacted]
Cc	

Reason for Issue	Issued for Information
Subject	**Sydney Metro West - CTP - Project Planning Approval Condition D88 - Road Dilapidation Report - Sydney Olympic Park Authority**

Dear [redacted],

SMW-CTP D&C Deed
Contract No 00013/13033
Project Planning Approval Condition D88 - Road Dilapidation Report

The Tunnelling Contractor refers to the requirements of Project Planning Approval Condition D88 which requires a Road Dilapidation Report to be provided to the relevant road authority prior to any local road being used by a Heavy Vehicle for the purposes of construction.

Pursuant to the above requirement, please find enclosed the Road Dilapidation Report for the relevant Local Roads within the Sydney Olympic Park area. The Tunnelling Contractor notes that the enclosed report covers areas which are in addition to those relevant to Sydney Olympic Park Authority (SOPA). This report is provided for information only.

Would Sydney Metro please issue this correspondence and enclosed report to SOPA.

Regards,

[redacted]
Document Controller
Acciona Ferrovial Joint Venture

Click here to download all Transmittal files.

Item	Document No	Title	Rev	Sts	Type	Design Lots	Alt Doc No
1	SMWSTCTP-AFJ-1NL-CX-RPT-000002	Sydney Metro West - CTP - Pre Construction Road Dilapidation Report - File 1 of 5	00.01	S3	RPT		
2	SMWSTCTP-AFJ-1NL-CX-RPT-000003	Sydney Metro West - CTP - Pre Construction Road Dilapidation Report - File 2 of 5	00.01	S3	RPT		
3	SMWSTCTP-AFJ-1NL-CX-RPT-000004	Sydney Metro West - CTP - Pre Construction Road Dilapidation Report - File 3 of 5	00.01	S3	RPT		
4	SMWSTCTP-AFJ-1NL-CX-RPT-000005	Sydney Metro West - CTP - Pre Construction Road Dilapidation Report - File 4 of 5	00.01	S3	RPT		
5	SMWSTCTP-AFJ-1NL-CX-RPT-000006	Sydney Metro West - CTP - Pre Construction Road Dilapidation Report - File 5 of 5	00.01	S3	RPT		