

9 January 2026

asongroup.com.au



**788 – 882 Mamre Road, Kemps
Creek**
**Warehouse 4 – Aspect Industrial
Estate**

Transport Assessment

—
1029B



Document control

Project number	1029B
Issue number	v02
Project title	Warehouse 4 – Aspect Industrial Estate
Client	Mirvac
File reference	P1029Br01v01 TA_WH4, Aspect Industrial Estate, Kemps Creek

Revision history

Issue no	Date	Details	Author	Reviewer	Approver
v01	11 December 2025	Final	Angela Ji	Rhys Hazell	Rhys Hazell
v02	9 January 2026	Final – Updated to include minor amendments	Angela Ji	Rhys Hazell	Rhys Hazell

info@asongroup.com.au

+61 2 9083 6601

Suite 17.02, Level 17,
1 Castlereagh Street,
Sydney NSW 2000

ABN: 81 168 423 872

This document has been prepared for the sole use of the Client and for a specific purpose, as expressly stated in the document. Ason Group does not accept any responsibility for any use of or reliance on the contents on this report by any third party. This document has been prepared based on the Client's description of its requirements, information provided by the Client and other third parties.

Contents

1	Introduction	1
1.1	Overview	1
1.2	Site Context	1
1.3	Reference Documents	2
1.4	Secretary's Environmental Assessment Requirements	2
1.5	Government Agency Submissions	4
2	Planning History	8
2.1	Summary of Original Development (SSD-10448)	8
2.2	AIE SSD-10448 Modifications	9
2.3	SSD-10448-Mod-10 (MOD 10)	10
3	Infrastructure Review	11
3.1	SSD-10448 Condition A14	11
4	Proposal Summary	14
4.1	Overview	14
5	Parking Requirements	16
5.1	Car Parking	16
5.2	Accessible Parking	16
5.3	Electric Vehicle Parking	17
5.4	Bicycle Parking and End of Trip Facilities	17
6	Traffic Impact Assessment	18
6.1	Trip Rates and Generation	18
6.2	Comparative Assessment	18
6.3	Cumulative Traffic Impact Assessment	19
6.4	Traffic Impact Summary	24
6.5	Construction Traffic Generation	25
7	Design Review	26
7.1	Relevant Design Standards	26
7.2	Site Access, Circulation and Parking	26
8	Summary	27

Appendix A	Ason RFI Modelling Assessment	28
Appendix B	Cumulative Traffic Modelling Assessment	29
Appendix C	Operational Traffic Flows	30
Appendix D	Swept Path Assessment	31
Appendix E	Approved Preliminary Construction Traffic Management Plan	32
Appendix F	Site-Specific Green Travel Plan	33
Appendix G	TfNSW Consultation Record	34

1 Introduction

1.1 Overview

Mirvac engaged Ason Group to prepare a transport assessment as part of the proposed Concept Approval Modification to SSD-10448 (MOD 12) and separate subsequent State Significant Development Application (SSDA) SSD-98407710 for warehouse and distribution premises within Aspect Industrial Estate (AIE). The site is located at 788-882 Mamre Road, Kemps Creek.

The proposed modification to the development consent associated with the Concept Plan Approval and Stage 1 development under SSD-10448 for AIE (MOD 12). It should be considered in light of other amendments and subsequent stage SSDA consents associated with Warehouse 9 (SSD 46516461) (MOD 5), Warehouse 2 (SSD 58257960) (MOD 4), and Warehouse 8 (SSD 60513208) (MOD 10) also within the AIE.

Concept consent was granted by the Department of Planning, Housing and Infrastructure (DPHI) for the development of AIE by way of SSD-10448¹ on 24 May 2022. The AIE is currently subject to the most recent Concept Masterplan approval granted in September 2025 (reference: SSD-10448-Mod-10²). This application refers to the detailed design for Warehouse 4 of the approved Concept Masterplan.

In this regard, Ason Group has reviewed all relevant documentation and undertaken an assessment of the proposal, focusing on:

- Parking compliance in accordance with Mamre Road Precinct Development Control Plan 2021 (MRP DCP).
- Traffic assessment to determine the proposal's consistency with that estimated for the warehouse under the current Concept Masterplan.
- Design compliance in accordance with relevant Australian Standards.

1.2 Site Context

The proposed development is located within AIE and legally described as Lot 104, DP1305965, Mamre Road, Kemps Creek. AIE covers an area of approximately 56.3 hectares and with an approximate 950m direct frontage to Mamre Road to the west. Site access is provided via a signalised intersection at Mamre Road/ Darrabarra Avenue, providing vehicle access via Mamre Road with convenient connections with the M4 Motorway and Great Western Highway to the north and the Elizabeth Drive and M7 Motorway (and future M12) to the south and east.

The site is approximately 4km north-west of the future Western Sydney International (Nancy-Bird Walton) Airport, 13km south-east of Penrith CBD and 40km west of Sydney CBD. The site location in the context of the Mamre Road Precinct (MRP) is shown in Figure 1.

¹ <https://www.planningportal.nsw.gov.au/major-projects/projects/aspect-industrial-estate>

² <https://www.planningportal.nsw.gov.au/major-projects/projects/modification-10-aspect-industrial-estate-modification-10-wh8>



Figure 1: Site Location within Mamre Road Precinct

Base image source: MRP DCP

1.3 Reference Documents

Having regard to the above, the following key documents have been referenced in preparing this transport assessment:

- Ason Group, *Transport and Accessibility Management Plan, Aspect Industrial Estate State Significant Development Application, Lots 54 – 58 Mamre Road, Kemps Creek*, revision 3, dated 13/08/2021 (Ason TMAP)
- Ason Group, *Aspect Industrial Estate, Mamre Road – Request for Further Information*, P1029l03 (Ason RFI)
- Ason Group, *Aspect Industrial Estate, Mamre Road Precinct – Modification 3 to State Significant Development Application (SSD 10448)*, P1901l01v5 (Ason MOD-3 transport statement)
- SBA Architects, *ASPECT INDUSTRIAL ESTATE – Lot 4 SITE AND WAREHOUSE PLAN – 25229_DA-02_J*, dated 31/10/2025 (Warehouse 4 plan).

1.4 Secretary’s Environmental Assessment Requirements

Secretary’s Environmental Assessment Requirements (SEARs) were provided by DPHI in relation to the SSD on 1 December 2025.

The SEARs relating to transport issues are outlined in Table 1 below. Ason Group has provided a summary response to each SEAR requirement, as well as reference to the section of this TA providing a more detailed analysis of each requirement.

Table 1: DPHI Traffic and Transport SEARs – SSD-98407710

SERAs Item	Ason Group Response
details of the likely construction trip generation, construction vehicle routes, access and parking arrangements during construction works and measures to mitigate any construction traffic and parking impacts, detailed in a draft Construction Traffic Management Plan	The Preliminary CTMP prepare for the approved SSD-10448 is reproduced as Appendix E. This CTMP forms the basis on which to develop all future detailed CTMPs on. It is anticipated that confirmation of construction traffic generation will be detailed at such a time when the specific CTMP for Warehouse 4 is developed. It is noted that construction has started on the wider estate. On the basis of these current works, some preliminary staging and traffic generation forecasts are provided in Section 6.5. The implementation of the CTMP during construction would ensure no queuing on to the external road network.
a quantitative transport impact assessment prepared in accordance with TfNSW's Guide to Transport Impact Assessment (GTIA)	The Ason TMAP and Ason RFI provided the modelling assessment of the whole Masterplan, with the methodology agreed with Transport for New South Wales (TfNSW). The following traffic generation rates are adopted within the Ason TMAP: • AM peak: 0.23 vph per 100m² GFA • PM peak: 0.24 vph per 100m² GFA • Daily: 2.91 daily vehicle trips per 100m² GFA Notably, these agreed trip rates are higher than GTIA's large format warehousing development (0.14 vph per 100m² GFA) during both AM and PM network peaks. Accordingly, the traffic impact assessments undertaken in this TA adopt these agreed trip generation rates, providing a conservative assessment.
an estimate of trip generation (daily and peak hour movements), mode split, arrival/departure profiles and trip distribution using the benchmarking method (where tenants are unknown) or first principles method (where tenants are known)	An estimate of trip generation of the proposed Warehouse 4 development, applying the trip generation rates agreed with TfNSW, is summarised in Section 6.1. As the proposed development is located within the Aspect Industrial Estate, where the broader traffic impacts have been assessed and approved under the Concept Masterplan SSD-10448, the mode split, arrival/departure profiles and trip distribution assumptions adopted for this proposal are consistent with those within the approved Ason TMAP. Furthermore, the trip generation associated with the proposed Warehouse 4 development is marginally less than that envisaged under the approved MOD-10 Concept Masterplan. Therefore, traffic generation of this proposal remains consistent with the traffic impact assessment undertaken within the Ason TMAP and Ason RFI.
an assessment of cumulative traffic impact on road performance and safety, using appropriate modelling and considering: • the Mamre Road / Darrabarra Avenue intersection	Traffic impact assessment considering the cumulative development impact of all developments within the AIE as well as all currently approved developments within the MRP was conducted and detailed in Section 6. The findings of this assessment concludes that Mamre Road /

SERAs Item	Ason Group Response
- Mamre Road Stage 2 Upgrade - Abbotts Road Upgrade - Aldington Road Upgrade - other approved developments in the Aspect Industrial Estate and MRP.	Darrabarra Avenue intersection would operate at a satisfactory level of performance in 2026. Notwithstanding, the Mamre Road Stage 2 upgrade, which will provide a six-lane dual carriageway along Mamre Road between Erskine Park Road and Kerrs Road, is expected to commence in late 2026. The delivery of this geometry is consistent with the Ultimate Mamre Road network identified within the MRP DCP, which will adequately provide for the full development of the MRP. Therefore, it is concluded that the proposed development is supported on traffic planning grounds.
if upgrade to the Mamre Road / Darrabarra Avenue intersection is required, provide details of the timing, funding and delivery of the upgrades and evidence of consultation with TfNSW and Penrith City Council	As detailed above, the cumulative traffic impact assessment concludes that the Mamre Road / Darrabarra Avenue intersection can adequately accommodate development traffic associated with the full operation of the AIE development as well as all currently approved developments within the MRP in 2026, no upgrade to the intersection is required.
plans demonstrating how all vehicles generated during construction and operation can be accommodated on the site to avoid queuing on the road network	A reduced scale copy of the site plan is included in Figure 5. In terms of queuing potential, access into the site would be unfettered during operational hours so vehicles can move freely into and out of the Site with no chance for queuing to occur. During construction, it is anticipated that an authorised traffic controller will be present on-site throughout the duration of construction works, all construction vehicles accessing the site will be supervised by the authorised traffic controller(s) to ensure no queuing on public road.
swept path diagrams for the largest vehicles manoeuvring through access points, internal roads, hardstand areas and nearby intersections (where necessary)	Swept path assessments for the largest design vehicles manoeuvring through all site access driveways, internal roads and hardstand have been conducted and provided in Appendix D.
details of integration with and provision of access to the dedicated freight corridor and evidence of consultation with TfNSW's Corridor and Network Protection team.	Consultation with TfNSW was sought to ensure the sufficient offset distance and alignment of the Automated Guided Vehicle (AGV) network have been provided adequately. A record of consultation detailing communication with TfNSW is provided in Appendix G

1.5 Government Agency Submissions

Penrith City Council's advice in relation to the Request for SEARs were issued on 18 November 2025. The comments relating to traffic engineering and transport planning matters are summarised in table below, with corresponding responses provided.

Table 2: Penrith City Council Advice

Council Comments	Report Section / Response
2. Development Engineering Considerations	
i. A traffic and parking impact assessment report shall be submitted in accordance with Section 3.4 of MRP DCP and shall include a brief description on construction and operation traffic.	This transport assessment has been prepared with reference to Section 3.4 Transport Network of MRP DCP, a Site-Specific Green Travel Plan including a Traffic Access Guide (TAG) has been provided as required and annexed as Appendix F .
ii. The EIS must demonstrate that access, car parking, and manoeuvring details comply with AS2890 Parts 1, 2 and 6.	Design review of the proposed site plan, including light and heavy vehicle access, car parking and hardstand area has been conducted with reference to AS2890 Parts 1, 2 and 6. Swept path assessment of design vehicles manoeuvring at critical locations have also been conducted.
iii. The EIS shall be supported by vehicle turning paths in accordance with AS2890 clearly demonstrating satisfactory manoeuvring on-site and forward entry and exit to and from the public road for the largest vehicle servicing the development.	Swept path assessments of the largest vehicle and design vehicles have been conducted to demonstrate that all vehicles can manoeuvre to and from the site in a forward direction.
iv. Any works on Council Road reserve shall be clearly shown on the plans as these works will be subject to a separate s.138 approval from Council.	Noted.

Further, TfNSW provided advice for consideration to the draft SEARs on 17 November 2025 in response to DPHI request, the advice and corresponding response are provided in

Table 3: TfNSW Advice

TfNSW Advice	Report Section / Response
Suggested inclusion in the transport and accessibility requirements	
<u>Traffic Generation and Movement</u> - Provide detailed projections of all traffic types and volumes expected to be generated by the proposed development, including daily and peak hour movements - Detail the types of service vehicles expected to access the site, including anticipated arrival and departure times.	- The anticipated traffic generation of the proposed development, including daily and peak hour movements, are detailed in Section 6.1. - As the project is in the early development stage, site-specific operational information is unavailable. Nevertheless, a daily operational traffic movement profile applying the generic profile for industrial developments have been provided and annexed in Appendix C.
<u>Access and Parking Provisions</u> - Outline the proposed access arrangements and parking provisions, ensuring compliance with relevant Australian Standards (e.g. sight distance, aisle widths). - Include swept path analysis using Austroads turning templates and Development Control Plan (DCP) design vehicle requirements to demonstrate that the	- The proposed access arrangements and parking provisions have been reviewed in accordance with AS2890 requirements, key findings are detailed in Section 7. - Swept path assessments using vehicle profile established in accordance with Austroads turning templates and design vehicle as required by MRP DCP are conducted and provided in Appendix D. All

TfNSW Advice	Report Section / Response
largest vehicle anticipated to use the site can enter and exit in a forward direction and manoeuvre safely throughout the site. Specify the proposed number of car parking spaces and demonstrate compliance with applicable parking codes and planning controls.	vehicles can enter and exit the site in a forward direction and manoeuvre safely throughout the site. Parking provisions, including car parking spaces, has been assessed against MRP and AIE DCP requirements, and detailed in Section 5.
<u>Road Infrastructure and Upgrades</u> - Identify any required road upgrades, interim works, new roads, or access points necessary for the development or proposed by adjacent developments within the precinct. - Describe and assess the road network expected to be operational at the time of the development's completion and occupation, including but not limited to: - Mamre Road Stage 2 Upgrade (MRUS2) - Abbotts Road Upgrade - Aldington Road Upgrade	- No road upgrades, interim works or new roads is required to support the proposed development. - All road networks within the AIE have been delivered at the time of preparation of this report, prior to the delivery of Warehouse 4. As such, it is anticipated that all construction and operational traffic accessing Warehouse 4 will be entering and exiting the AIE via the existing signalised Mamre Road / Darrabarra Road intersection. Nevertheless, the following timing for external road network delivery is anticipated based on latest information available: - MRUS2: work to commence in July 2026, expected to complete in December 2029 - Abbotts Road Upgrade: works commenced in 2025, with Mamre Road/ Abbotts Road intersection upgrade (MAIU) anticipated to be completed by June 2027 - Aldington Road Upgrade: works commenced in 2025, with upgrade of the Abbotts Road/ Aldington Road intersection anticipated to be completed in February 2026
<u>Intersection Impact Assessment</u> - Assess the impact of the development on the intersection of Mamre Road and Darrabarra Avenue, referencing intersection layouts developed for MRUS2. - Identify any required upgrades or improvement works and outline associated funding responsibilities for both the ultimate development and the road network at the time of occupation.	A traffic modelling assessment of the signalised Mamre Road/ Darrabarra Avenue intersection under its current geometry has been assessed to ascertain the impact of the proposed development traffic. The SIDRA assessment results indicate that the existing intersection can adequately accommodate traffic associated with the full AIE development as well as all currently approved developments in the broader MRP. Noting the Mamre Road/ Darrabarra Avenue intersection layout developed for MRUS2 will allow for additional 2 full through lanes, the ultimate intersection will provide more capacity.
<u>Public Transport, Pedestrian and Cycling Infrastructure</u> - Evaluate the adequacy of existing and planned public transport services, pedestrian pathways, and bicycle networks in the vicinity of the site. - Propose measures to integrate the development with current and future public transport infrastructure.	A Site-Specific Green Travel Plan has been prepared to evaluate the adequacy of the existing and planned public transport services and active transport infrastructure network in the vicinity of the site. This Green Travel Plan will be implemented to encourage the use of the available public transport options and active transport infrastructure for access to and from the site. The Site-Specific Green Travel Plan is provided in Appendix F.

TfNSW Advice	Report Section / Response
<u>Traffic Impact Mitigation</u> Identify measures to mitigate adverse traffic and transport impacts, including the implementation of a Travel Demand Management Program to promote sustainable transport options (e.g. a Green Travel Plan).	The cumulative traffic impact assessment demonstrates that the existing signalised Mamre Road/ Darrabarra Avenue intersection will be able to adequately accommodate all developments within the AIE as well as all currently approved developments within the MRP, as such, no further mitigation is required to manage the traffic demand generated by the proposed development from a traffic impact perspective. Notwithstanding, the strategies to encourage travel to and from the site utilising public transport services and active transport infrastructure have been outlined in the Site-Specific Green to reduce the reliance on journey-to-work travel by private vehicles.
<u>Construction Pedestrian and Traffic Management Plan (CPTMP)</u> - Prepare a preliminary CPTMP addressing the following: - Assessment of cumulative impacts from concurrent construction activities in the area. - Road safety analysis at key intersections and locations with high pedestrian activity and heavy vehicle movements. - Construction program outlining duration, key milestones, and significant events. - Anticipated peak hour and daily construction vehicle movements. - On-site parking and access arrangements for construction vehicles, workers, emergency services, and service vehicles. - Temporary pedestrian and cycling access provisions during construction.	The Preliminary CTMP prepared for the approved SSD-10448 is reproduced as Appendix E. Further, it is noted that since construction works have commenced on within the AIE, a number of CTMPs have already been implemented. All future CTMPs would be consistent with those already implemented. Noting that there are currently no pedestrian and cyclist facilities along Mamre Road, there are no pedestrian or cyclist currently utilising the route. Therefore, while the CTMPs implemented do provide consideration to pedestrian and cyclist management, should these movements occur, it is not expected that it is actually required. The focus of the CPTMPs is therefore on construction traffic management. In lieu of a Contractor being engaged, it is difficult at this time to ascertain the required staging and traffic generation for construction of Warehouse 4. However, a forecast is provided based on the works that have been carried out for the completed Warehouses 1, 2, 3 and 9 construction work.
<u>Dedicated Freight Corridor</u> Demonstrate compliance with the Western Sydney Employment Area Stage Environmental Planning Policy, Part 6; clause 33C; Development within the Mamre Road Precinct; specifically, integration with the Mamre Road Precinct dedicated freight corridor (DFC), including provision for access from the DFC to the entire estate. The applicant may be required to engage with TfNSW Corridor and Network Protection team with respect to the design considerations for the DFC if relevant.	Noted. As detailed above, Mirvac has sought consultation with TfNSW to ensure the Automated Guided Vehicle (AGV) network have been provided in accordance with relevant design requirements. A record of consultation detailing communication with TfNSW is provided in Appendix G

2 Planning History

2.1 Summary of Original Development (SSD-10448)

AIE was originally granted development consent under SSD-10448 in May 2022 and included the following:

- A Concept Masterplan for the site comprising 11 industrial buildings for warehousing, distribution centre and general industrial uses, internal road network layout, building locations, gross floor area (GFA), car parking, concept landscaping, building heights, setbacks and built form parameters with the following GFAs:
 - A total GFA of up to 247,990m² for industrial, warehousing and distribution centres, including:
 - 236,510m² warehousing
 - 10,080m² office space
 - 1,400m² dock office space.
 - 122m² Café.
- A Stage 1 development including:
 - Warehouse 1: A total of 36,722m² GFA, including 34,970m² of warehouse GFA, 1,430m² of ancillary office GFA, 200m² of dock office and a 122m² café.
 - Warehouse 3: A total of 21,535m² GFA, including 20,735m² of warehouse GFA, 800m² of ancillary office GFA and 100m² of dock office GFA.
- A new signalised intersection on Mamre Road to accommodate all Stage 1 traffic.

The Stage 1 and Concept Masterplan approved under SSD-10448 is reproduced as Figure 2 and Figure 3.



Figure 2: SSD-10448 Approved Architectural Stage 1 Plan



Figure 3: SSD-10448 Approved Architectural Masterplan

With reference to the original approval under SSD-10448, the Ason TMAP forecast that AIE site would, once fully operational would generate 570 vehicle trips per hour in the AM peak hour and 595 vehicle trips in the PM peak hour. This would equate to 7,217 vehicle trips per day.

2.2 AIE SSD-10448 Modifications

Subsequent to the approval of the Concept Masterplan, SSD-10448 has been subject to several modifications. DPHI requested an administrative change to the Conditions of Consent, which formed MOD-1. The subsequent modifications which have been approved include:

- MOD-2, to the Concept Plan and the Stage 1 Development, related to the relocation of Access Road 2, revised parking provision across Lots 1, 2, and 3, and revised GFA across Warehouse 1 and 3.
- MOD-3, to the Concept Plan related to the reconfiguration of the estate to reduce the overall number of lots from 11 to 9, relocation of Access Road 4 and revised warehouse footprints.
- MOD-4, to incorporate the Elizabeth Enterprise Precinct (EEP) site into the AIE concept proposal for stormwater management purposes only.
- MOD-5, modification to SSD-10448 Condition D6 for using construction access roads for operational vehicles associated with Stage 1 development of the AIE.
- MOD-6, modification to the Concept Plan to Warehouse 8 building footprint to comprise two separate warehouse tenancies and modifications to the on-site car parking, access driveways and hardstand layout.
- MOD-7, modification to SSD-10448 for using the construction access road for operational vehicles associated with Warehouse 1 and 9 developments until the operation of the signalised AIE site access.

- MOD-8, modification to Concept and Stage 1 stormwater management strategy.
- MOD-9, modification to Concept Plan to include a revised Warehouse 8 building layout.
- MOD-10, modification to the Concept Plan to amend carparking, noise limits and tree canopy for Warehouse 8.

2.3 SSD-10448-Mod-10 (MOD 10)

MOD-10 presents the latest approved modification to the Concept Masterplan, which provides for the redesign to the Concept Masterplan to accompany the tenant-specific requirements of Warehouse 8. It includes the amendments to the intended development configuration on Lot 8 of AIE.

Consolidated consent was approved on 25 September 2025. Concurrent to the approval of MOD-10, the Stage 4 development (SSD-60513208-MOD-2³) which relates to Warehouse 8 was also approved. The approved MOD-10 masterplan is shown in Figure 4.



Figure 4: Approved SSD-10448 MOD-10 Masterplan

³ <https://www.planningportal.nsw.gov.au/major-projects/projects/aspect-industrial-estate-stage-4-wh8-mod-2>

3 Infrastructure Review

3.1 SSD-10448 Condition A14

Conditions A14 of the Conditions of Consent associated with the approved SSD requires the following:

A14. The Applicant must prepare an Infrastructure Review to support each future stage of the Concept Proposal. The Infrastructure Review must demonstrate the surrounding road infrastructure can accommodate the relevant stage and other approved developments in the MRP. The Infrastructure Review must:

- (a) detail traffic volumes from all operating stages of the Concept Proposal*
- (b) include background traffic volumes from key roads within the MRP, including Mamre Road*
- (c) assess the operating performance of key intersections in the MRP, including Mamre Road and Access Road 1*
- (d) detail the current level of approved development within the MRP, including total approved GFA*
- (e) consider consistency with the latest approved Concept Proposal traffic volumes*
- (f) demonstrate the road network has sufficient capacity to accommodate the proposed stage of the Concept Proposal, and if the proposed stage would trigger the need for any road upgrades, including those identified in the traffic modelling for the MRP*
- (g) if road upgrades are required to support the proposed stage, identify the timing and mechanisms to contribute to the delivery of the required road upgrades.*

Table 4 details the response to each of the requirements.

Table 4: Infrastructure Review

Item	Condition	Response																								
(a)	detail traffic volumes from all operating stages of the Concept Proposal	Warehouses 1,2, 3 and 9 are operational at the time of preparation of this report. Operational traffic monitoring (in accordance with Condition D3) indicates that current traffic volumes represent only a fraction of the forecast generation anticipated at full development occupation. Nevertheless, the forecast traffic generation for each operational warehouse during network peak periods and daily movements is summarised below: <table><tr><th colspan="4">Operating Development Traffic Volumes</th></tr><tr><th>Development</th><th>AM</th><th>PM</th><th>Daily</th></tr><tr><td>Warehouse 1</td><td>78</td><td>82</td><td>987</td></tr><tr><td>Warehouse 2</td><td>56</td><td>58</td><td>707</td></tr><tr><td>Warehouse 3</td><td>50</td><td>52</td><td>627</td></tr><tr><td>Warehouse 9</td><td>153</td><td>159</td><td>1,931</td></tr></table>	Operating Development Traffic Volumes				Development	AM	PM	Daily	Warehouse 1	78	82	987	Warehouse 2	56	58	707	Warehouse 3	50	52	627	Warehouse 9	153	159	1,931
Operating Development Traffic Volumes																										
Development	AM	PM	Daily																							
Warehouse 1	78	82	987																							
Warehouse 2	56	58	707																							
Warehouse 3	50	52	627																							
Warehouse 9	153	159	1,931																							
(b)	include background traffic volumes from key roads within the MRP, including Mamre Road;	A recent traffic survey of the Mamre Road / Bakers Lane intersection (undertaken in August 2022) found the following traffic flows: <table><tr><th colspan="3">August 2022 Traffic Volumes</th></tr><tr><th>Direction</th><th>AM</th><th>PM</th></tr><tr><td>Mamre Road Northbound</td><td>643</td><td>867</td></tr><tr><td>Mamre Road Southbound</td><td>791</td><td>710</td></tr></table>	August 2022 Traffic Volumes			Direction	AM	PM	Mamre Road Northbound	643	867	Mamre Road Southbound	791	710												
August 2022 Traffic Volumes																										
Direction	AM	PM																								
Mamre Road Northbound	643	867																								
Mamre Road Southbound	791	710																								

Item	Condition	Response																								
		Note that the above includes construction traffic generated by SSD-9522. The modelling assessment detailed in the Ason RFI adopted May 2018 traffic flows and applied a 3% growth rate per year to establish baseline flows (noting the COVID-19 pandemic restrictions to movement of people), as requested by TfNSW. The flows recorded in 2018 were as follows: <table border="1"> <thead> <tr> <th colspan="3">May 2018 Traffic Volumes</th></tr> <tr> <th>Direction</th><th>AM</th><th>PM</th></tr> </thead> <tbody> <tr> <td>Mamre Road Northbound</td><td>609</td><td>865</td></tr> <tr> <td>Mamre Road Southbound</td><td>782</td><td>678</td></tr> </tbody> </table> Therefore, on the basis of actual survey data, the resulting growth rates are as follows: <table border="1"> <thead> <tr> <th colspan="3">% Change per Year</th></tr> <tr> <th>Direction</th><th>AM</th><th>PM</th></tr> </thead> <tbody> <tr> <td>Mamre Road Northbound</td><td>+1.4%</td><td>+0.1%</td></tr> <tr> <td>Mamre Road Southbound</td><td>+0.3%</td><td>+1.2%</td></tr> </tbody> </table> As shown by the current survey data, despite construction commencing on other development projects, the increase in traffic flows over the past 4 years is actually less than the growth rate requested for use by TfNSW in the Ason RFI modelling assessment. Therefore, the modelling assessment already undertaken is expected to be conservative.	May 2018 Traffic Volumes			Direction	AM	PM	Mamre Road Northbound	609	865	Mamre Road Southbound	782	678	% Change per Year			Direction	AM	PM	Mamre Road Northbound	+1.4%	+0.1%	Mamre Road Southbound	+0.3%	+1.2%
May 2018 Traffic Volumes																										
Direction	AM	PM																								
Mamre Road Northbound	609	865																								
Mamre Road Southbound	782	678																								
% Change per Year																										
Direction	AM	PM																								
Mamre Road Northbound	+1.4%	+0.1%																								
Mamre Road Southbound	+0.3%	+1.2%																								
(c)	assess the operating performance of key intersections in the MRP, including Mamre Road and Access Road 1	There have been no changes in the MRP that would change the modelling assessment already undertaken (i.e. such as additional approved developments) and documented in the Ason TMAP and Ason RFI. Note that the relevant sections of the Ason RFI have been provided as Appendix A. All conditions within the MRP remain the same as when this assessment was undertaken. Therefore, the expected intersection performance will remain consistent with the level already considered acceptable.																								
(d)	detail the current level of approved development within the MRP, including total approved GFA	Since consent was provided for SSD-10448, the following developments have recently been approved: - SSD-10479, located at 200 Aldington Road, which provides for 340,540m² of GFA⁴; - SSD-9138102, being Stage 1 of the Westlink Estate, at 290-308 Aldington Road, 59-62 Abbots Road and 63 Abbots Road, which provides for 81,317m² of GFA⁵;																								

⁴ <https://www.planningportal.nsw.gov.au/major-projects/projects/200-aldington-road-industrial-estate>

⁵ <https://www.planningportal.nsw.gov.au/major-projects/projects/westlink-industrial-estate-stage-1>

Item	Condition	Response
		- SSD-9522-Mod-2, located at 657-703 Mamre Road (north west of the AIE) which provides for 187,378m² of industrial warehouse GFA⁶; - SSD-10272349, located at 754-786 Mamre Road, Kemps Creek which provides for 54,982 m² of GFA⁷; and - A place of worship at 230-242 Aldington Road (DA17/1247) which provides for a GFA of 3,821m². Note that no traffic from this development is expected to actually travel past the site. In this regard, a revised SIDRA analysis of the endorsed LOG-E scenario 2 model is conducted with consideration cumulative traffic impact of the proposed AIE Warehouse 4 development trip generation. The modelling assumptions and results are detailed in Section 6.3.
(e)	consider consistency with the latest approved Concept Proposal traffic volumes	As detailed in Section 6.2, the proposal presents a minor reduction in GFA than that envisaged under the latest approved Masterplan. Therefore, on adoption of the approved vehicle trip rates, the traffic volumes associated with the proposal would be consistent with that envisaged under the Concept Masterplan.
(f)	demonstrate the road network has sufficient capacity to accommodate the proposed stage of the Concept Proposal, and if the proposed stage would trigger the need for any road upgrades, including those identified in the traffic modelling for the MRP	As detailed above, the conditions have not changed in the MRP that would require revision of the modelling assessment already undertaken for the approved Concept Masterplan (detailed in the Ason TMAP and the Ason RFI). Therefore, there would be no change in the expected operation of the road network.
(g)	if road upgrades are required to support the proposed stage, identify the timing and mechanisms to contribute to the delivery of the required road upgrades	As detailed in Section 6, no further upgrades are required to support the proposal. It is critical to recognise that the proponent is offsetting the impacts of the whole Concept Masterplan approved by delivery of the signalised access intersection; rather payment of contributions that would otherwise contribute to upgrades of the wider road network required to support the whole MRP.

⁶ <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9522-MOD-2%2120220412T002309.267%20GMT>

⁷ <https://www.planningportal.nsw.gov.au/major-projects/projects/yiribana-logistics-estate>

4 Proposal Summary

4.1 Overview

As part of the staged development of AIE, Mirvac is seeking approval for a proposed Concept Approval Modification to SSD-10448 (MOD 12) and a separate subsequent SSDA for Warehouse 4.

This proposal involves preparation of a subsequent stage SSDA for development of a warehouse building on Lot 4 of AIE for the purposes of 'warehouse and distribution centre'. Generally, the proposed development on Lot 4 within AIE includes minor earthworks internal to the lot, installation of on-lot infrastructure and construction of a warehouse, ancillary offices, landscaping, hardstand areas and at-grade car parking. The lot location and configuration will align with a Modification Application (MOD 12) being undertaken concurrently with this proposal.

4.1.1 SSD-10448 MOD 12 & Staged SSDA Modifications

In order to respond to market demand, a change to the warehouse footprint and on-lot configuration of Lot 4 and Lot 5 will be sought under SSD-10448 MOD 12 which is intended to be lodged concurrently with the Warehouse 4 SSDA. The modification will seek to consolidate the warehouse built form from two buildings, as currently approved, into a single building identified as Warehouse 4.

This modification will also seek to amend the alignment of the Automated Guided Vehicle network at the eastern boundary of Lots 4 & 5 to be consistent with the approved AGV alignment within the GPT approvals to the north and Barings approvals to the south.

4.1.2 Warehouse 4

Warehouse 4 on AIE Lot 4 will comprise a single warehouse building. It is proposed to be used for warehouse and distribution premises 24 hours a day, 7 days a week and will comprise the following:

- Construction and fit-out of a warehouse building covering 30,095m² GFA
- Ancillary two level 700m² GFA office
- Ancillary 200m² GFA dock office
- Construction of hardstand area to the north and south of the warehouse for truck manoeuvring, comprising 21,950m²
- Construction of three separate heavy vehicle crossovers (one entry only driveway and two exit driveways) plus one light vehicle crossover along Berriwerri Drive
- On-site car park south of the warehouse with a total supply of 128 spaces
- On-site services and infrastructure
- Grading and civil works, including retaining walls
- Landscaping of 16,890m², comprising 24 per cent of the site area, along the site frontages and within the car park.

The SBA Architects site plan is shown in Figure 5.

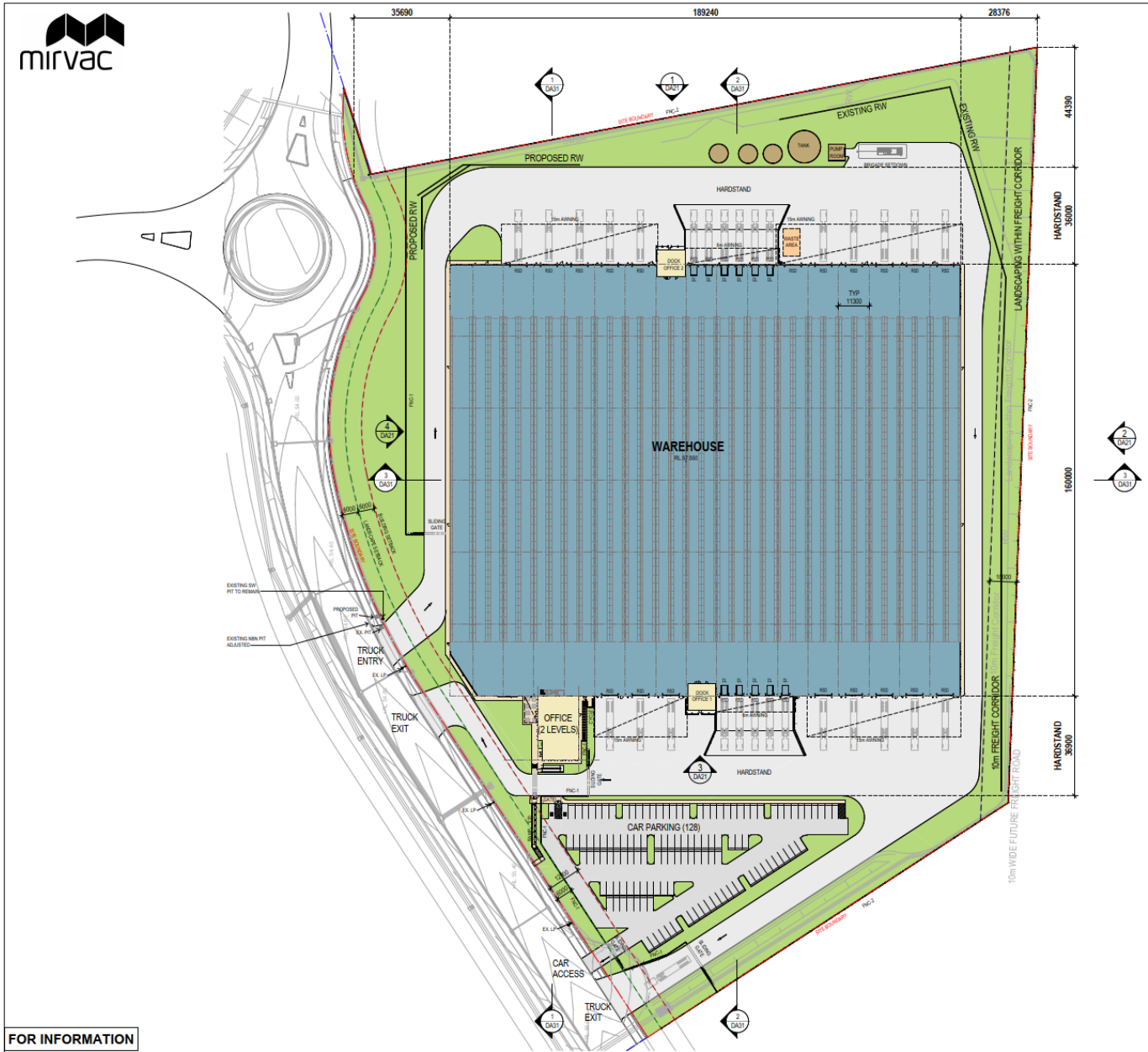


Figure 5: Proposed Warehouse 4 Site Plan

Source: SBA, 25229 DA02 Rev J, dated 31 October 2025

5 Parking Requirements

5.1 Car Parking

The Ason TMAP adopted rates which were consistent with the MRP DCP and AIE DCP. In this regard, the rates applicable to the proposed development are as follows, with Table 5 summarising the necessary minimum parking requirement and proposed provision:

- Warehouse: 1 space per 300m²
- Office: 1 space per 40m²
- Café: 1 space per 10m².

Table 5: Lot 4 Minimum MRP DCP Parking Requirement

Lot	Use	Gross Floor Area	Parking Requirement	Provision
4	Warehouse	30,095	101	128 spaces
	Office and Dock Office	900	23	
	Total	30,995	124	

As shown in Table 5, AIE DCP requires the provision of 124 spaces for Warehouse 4. The proposed parking provision includes 128 spaces and is therefore compliant with the minimum DCP requirement.

Furthermore, carparking provision associated with Lots 4 and 5 under the approved SSD-10448-MOD-10 is provided in Table 6.

Table 6: Approved Lots 4 & 5 Car Parking Provision

SSD	Lot	Use	Gross Floor Area	Requirement	Provision
SSD-10448-MOD-10	4	Warehouse	18,055	61	93
		Office and Dock Office	850	22	
	5	Warehouse	11,872	40	60
		Office and Dock Office	750	19	
Total			31,527	142	153

As shown, a total of 128 car parking spaces are proposed under the MOD 12, representing a reduction in total parking provision compared to the MOD-10 approval.

5.2 Accessible Parking

AIE DCP details the need for accessible parking to be provided in accordance with the Building Code of Australia, Disability (Access to Premises – Buildings) Standards 2010. In this regard, accessible parking for industrial developments is to be provided at a rate of one space for every 100 car parking spaces or part thereof.

In this regard, two accessible spaces are required and with these provided in the north-west corner of the at-grade car park, close to the main building office access, this is compliant with the DCP requirement.

5.3 Electric Vehicle Parking

Section 4.6.1(8) of the MRP DCP notes that while *parking areas should incorporate dedicated parking bays for electric vehicle charging*, it does not provide for guidance on the specific number of bays.

Mirvac has proposed to provide seven EV spaces and equates to five per cent of the total car parking provision. The proposed EV charging spaces are near the office. Practical and accessible charging facilities will be provided to align with similar infrastructure already delivered and planned throughout AIE.

5.4 Bicycle Parking and End of Trip Facilities

The MRP DCP bicycle parking rates have been adopted to assess the requirements of the proposal. In this regard, AIE DCP specifically notes the following regarding bicycle parking, as also summarised in Table 7:

- *Consideration is to be given to the delivery of infrastructure and/or the implementation of management measures that encourage the use of alternative forms of transport, which could include:*
 - *Safe storage/parking areas for bicycle facilities.*
 - *Shower and change room facilities for staff.*

Table 7: Bicycle Parking & EOTF Requirements

Type	Land Use	Requirements
Bicycle Parking	Warehouse	1 space per 1,000m ² of gross floor area of industrial activities (over 2,000m ² gross floor area)
	Office	1 space per 600m ² of gross floor area of office and retail space (over 1,200m ² gross floor area)
End of Trip Facilities	Warehouse	For industrial activities with a gross floor area over 4,000m ² , at least 1 shower cubicle with ancillary change rooms
	Office	For ancillary office and retail space with a gross floor area over 2,500m ² , at least 1 shower cubicle with ancillary change rooms

Based on the above, the proposed development is required to provide a minimum 30 bicycle parking spaces and one shower room with change facilities.

6 Traffic Impact Assessment

6.1 Trip Rates and Generation

To determine the traffic generation potential of the proposal, reference is made to the traffic generation rates adopted in the Ason TMAP under the approved development (SSD-10448). In this regard, the relevant rates, are as follows:

- AM Road Network Peak: 0.23 vph per 100m² GFA
- PM Road Network Peak: 0.24 vph per 100m² GFA
- Daily: 2.91 daily vehicle trips per 100m² GFA.

On this basis and with Warehouse 4 covering 30,995m² GFA, the forecast trip generation associated with the proposed development during the network peak hours and across the day are summarised in Table 8.

Table 8: Forecast Warehouse 4 Trip Generation

Warehouse	GFA (m ²)	AM Peak	PM Peak	Daily Trips
Warehouse 4	30,995	71 trips	74 trips	902 trips

6.2 Comparative Assessment

6.2.1 Approved SSD-10448-MOD-10 Traffic Generation

The site GFA under approved SSD-10448-MOD-10 and the corresponding vehicle trips through application of the approved traffic generation rates is summarised in Table 9.

Table 9: SSD-10448-MOD-10 Warehouse 4 & 5 Trip Generation

Warehouse	GFA (m ²)	AM Peak	PM Peak	Daily Trips
Warehouse 4	18,905	44	46	550
Warehouse 5	12,622	29	30	367
Total	31,527	73 trips	76 trips	917 trips

As shown, Warehouse 4 GFA proposed under the current SSD is 30,995m², which presents a reduction in trip generation potential than that approved under SSD-10448-MOD-10.

6.2.2 Approved Concept Masterplan Trip Generation

The proposed development includes marginally less GFA than that approved as part of the MOD-10 Masterplan and as such, traffic generation associated with the site will remain generally consistent with that previously approved. The daily breakdown of this operational traffic generation is included in Appendix C.

The Ason TMAP provided a detailed assessment of the anticipated traffic impacts associated with the whole Masterplan and were mitigated accordingly through the provision of a signalised intersection at Mamre Road and Darrabarra Avenue. This key intersection was confirmed to operate at satisfactory levels of service under the approved development. The relevant SIDRA analysis detailed in the Ason RFI is included in Appendix A.

Noting that the proposal is generally consistent with the approved MOD-10 Masterplan, no further assessment or mitigation is necessary. On this basis, the proposed development is acceptable from a traffic perspective.

Finally, and as already noted, the traffic generation assessed for the originally approved Concept Masterplan forms the acceptable traffic generation threshold for the whole of AIE. The Warehouse 4 proposal presents the last stage of development of AIE, with Table 10 detailing the traffic generation of all approved and warehouse 4 proposal, together with the net positive balance.

Table 10: Comparative Vehicle Trip Assessment

Status	Development	GFA (m ²)	AM Peak	PM Peak	Daily
Approved	Original Masterplan (SSD-10448) ^{Note 1}	247,990m ²	570 trips	595 trips	7,217 trips
	Stage 1 (Warehouse 1 & 3)	(-) 55,421	(-) 67	(-) 69	(-) 1,007
	Warehouse 9 (SSD-46516461)	(-) 66,516	(-) 153	(-) 160	(-) 1,936
	Warehouse 2 (SSD-58257960)	(-) 24,295	(-) 56	(-) 58	(-) 707
	Warehouse 8 (SSD-60513208)	(-) 42,630	(-) 98	(-) 102	(-) 1,241
	Warehouse 6	(-) 9,574	(-) 22	(-) 23	(-) 279
	Warehouse 7 ^{Note 1}	(-) 15,208	(-) 35	(-) 36	(-) 443
Proposed	Warehouse 4	(-) 30,995	(-) 71	(-) 74	(-) 902
-	Remaining balance	3,351m ²	68 trips	72 trips	704 trips

Note 1: Excludes GFA associated with café as it is anticipated trips would be linked to warehouse uses.

As the proposal entails the last stage of the overall AIE masterplan development, the remaining balance demonstrates that the total GFA proposed under the detailed developments remains less than that envisaged by the original Concept Masterplan. The remaining GFA equates to 1.4 per cent of the overall GFA approved under SSD-10448 and 12.4 per cent of the overall traffic generation.

Therefore, the operational and previously approved developments within AIE and proposed Warehouse 4 are expected to generate less vehicle trips than that approved under the original Concept Masterplan. The operation of the signalised intersection on Mamre Road would similarly remain consistent with the traffic impact assessment already considered as part of the Ason TMAP and Ason RFI, which supports the approved SSD-10448.

6.3 Cumulative Traffic Impact Assessment

Further to the above, it is noted that Condition A14 of the Conditions of Consent associated with the AIE Masterplan approval (SSD-10448) requires the following:

- *A14. The Applicant must prepare an Infrastructure Review to support each future stage of the Concept Proposal. The Infrastructure Review must demonstrate the surrounding road infrastructure can accommodate the relevant stage and other approved developments in the MRP.*

In this regard, reference is made to the traffic modelling completed which informed the Ultimate and Interim MRP road network layout. It is noted that the total GFA of all currently approved developments within the MRP is less than those adopted for assessment within the endorsed Interim MRP road network model.

Nevertheless, a cumulative traffic impact assessment of the traffic generation associated with the proposed AIE Warehouse 4 development as well as the endorsed Interim MRP model has been undertaken and herein referred to as the “cumulative traffic impact assessment”. The modelling assumptions and results are detailed below.

6.3.1 Interim MRP – LOG-E Assessment

The MRP DCP identifies the ultimate road network (by 2036), however no staging strategy was identified to allow for the initial stages of development in the interim period prior to delivery of the ultimate road network. Therefore, Land Owners Group East (LOG-E) worked together to identify the relevant upgrades required by the corridors to facilitate development of their sites by 2026. Ason Group worked on behalf of the LOG-E to deliver the modelling assessment of the interim road network, which was agreed with TfNSW.

The sites covered by the LOG-E assessment are summarised in Figure 6.



Figure 6: Developments considered within LOG-E Assessment

As shown above, development of the AIE was considered within the MRP Modelling Assessment with respect to the ultimate road layout and intersection configuration. The assumptions that underpinned this modelling assessment included the following:

- Most of the land use will take the form of a larger format industrial warehousing
- The land was separated into smaller land parcels for the purposes of identifying any constraints which will impact the developable GFA
- The sub-precinct in which the site lies was assumed to be able to accommodate a GFA which represented 55 per cent of the total site area
- Trip rates adopted (as detailed in Section 6.1) included a level of conservatism to allow for more intensive land uses that are permissible within the MRP under the current land use zoning.

In this regard, an interim modelling scenario assuming 75 per cent of the total GFA was modelled to identify the road network upgrades required in 2026. The key inputs into the 2026 assessment included the following:

- 1,291,584m² of total GFA within the precinct
- Widening of Mamre Road to four lanes (two northbound and two southbound) between Bakers Lane and the signalised intersection at Darrabarra Avenue
- Internal road network (to connect Darrabarra Avenue with Aldington Road) assumed to be delivered by 2026.

The endorsed AIE site access layout identified by the LOG-E model for 2026 is shown in Figure 7.

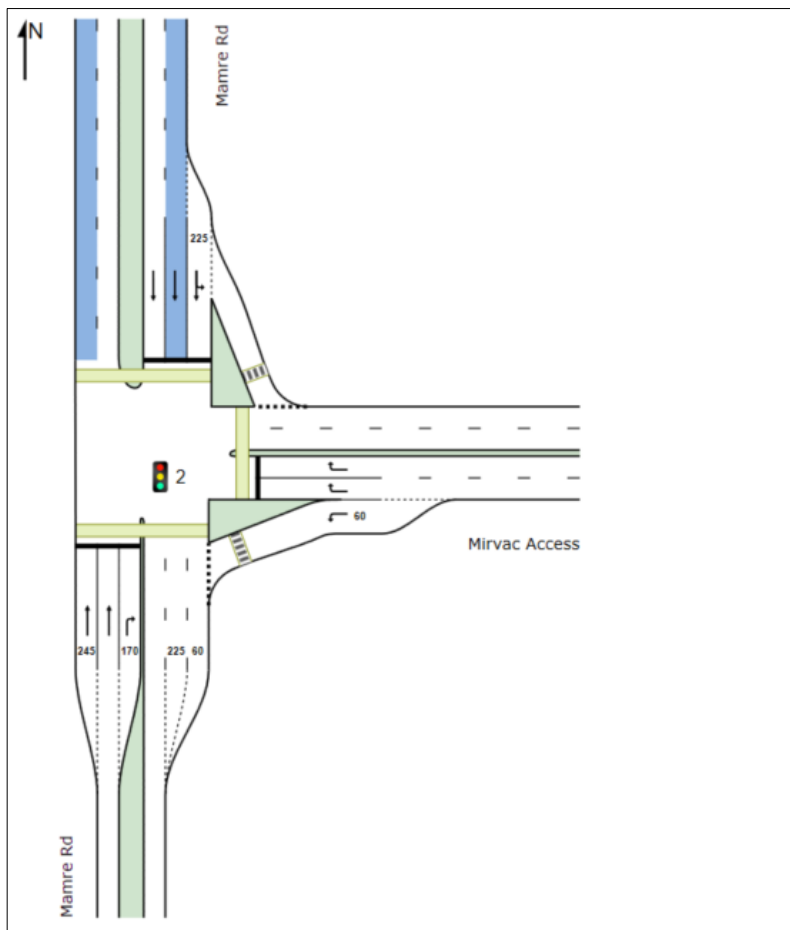


Figure 7: Endorsed LOG-E Model – Mamre Road/Darrabarra Avenue Layout

It should be noted that the Mamre Road Stage 2 Upgrade⁸ will deliver a six-lane dual carriageway along Mamre Road between Erskine Park Road and Kerrs Road, including the section along the site frontage. This geometry is consistent with the Ultimate Mamre Road network identified within the MRP DCP. Funding for Mamre Road Stage 2 Upgrade has been committed by the Australian Government⁹, with construction expected to commence in late 2026 with project completion expected in late 2029.

6.3.2 Approved Developments within the MRP

All developments located within the MRP which have received development consent at the time of preparation of this report are summarised in Figure 8 and Table 11.



Figure 8: Approved Developments within the MRP

⁸ transport.nsw.gov.au/projects/current-projects/mamre-road-upgrade-%E2%80%93-between-erskine-park-road-erskine-park-and-kerrs

⁹ investment.infrastructure.gov.au/projects/126960-23nsw-np

Table 11: Approved Developments within the MRP

Number	Site Name	Location	Approval Status	Max allowable GFA per CoC (m ²)
1	FPI/ Altis Estate	657-769 Mamre Road	Approved (SSD-9522)	188,153
2	Kemps Creek Data Centre	706-769 Mamre Road	Approved (SSD-10101987)	60,943
3	Fife Stockland Estate (Stage 1 & 2)	200 Aldington Road	Approved (SSD-10479)	65,816
4	ESR Estate (Westlink Estate, Stage 1)	59-63 Abbots Road and 290-308 Aldington Road	Approved (SSD-9138102)	81,317
5	ESR Estate (Westlink Estate, Stage 2)	1030 Mamre Rd	Approved (SSD-46983729)	37,490
6	Barings Mamre South Estate (Access Logistics Park)	884-928 Mamre Road	Approved (SSD-17647189)	39,161
7	Icon Oceania (Westgate)	253-267 Aldington Rd	Approved (SSD-23480429)	34,245
8	Aldington Road Industrial Estate	113-153 Aldington Road	Approved (SSD-32722834)	68,914
9	GPT Estate	754-770 and 784-786 Mamre Road	Approved (SSD-10272349)	54,982
10	ARDEX Warehouse and Manufacturing Facility	Lot 10 - 657-769 Mamre Road	Approved (SSD-25725029)	27,470
11	Edge South	155-217 Aldington Road	Approved (SSD-17552047)	153,343
12	Mirvac Estate (Aspect Logistic Estate)	788-882 Mamre Road	Approved (SSD-10448)	247,990
13	Yiribana West Logistics Estate	771-781 Mamre Road	Approved (DA23/0067)	24,953
Total				1,084,777m²

As shown, the total GFA of all currently approved developments within the MRP (1,084,777m²) remains less than the GFA adopted for the LOG-E model (1,291,584m²). As such, the endorsed LOG-E model included the traffic generation potential of all approved developments within the MRP and is appropriate to be maintained as the overarching traffic model.

6.3.3 Cumulative Traffic Impact – Proposed AIE WH4 & Endorsed LOG-E Assessment

Nevertheless, a cumulative traffic impact assessment considering the proposed AIE Warehouse 4 development as well as all currently approved developments within MRP (as outlined in Section 6.2.2) has been undertaken in accordance with the requirements of Condition A14.

The corresponding background and development traffic at the Mamre Road / Darrabarra intersection in assessment year 2026 is shown in Figure 9.

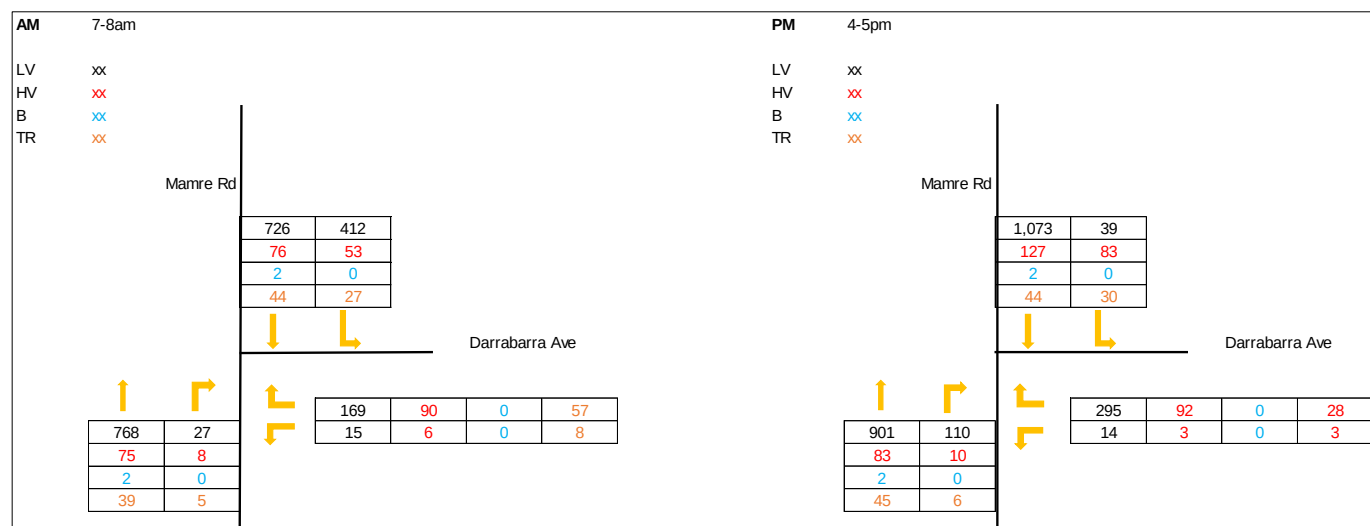


Figure 9: 2026 Background and Approved Development Traffic Flows

The SIDRA modelling results of the cumulative traffic impact assessment are summarised in Table 12, with detailed SIDRA outputs included in Appendix B.

Table 12: Cumulative Traffic Impact Assessment Modelling Summary

Intersection	Configuration	Year	Peak Period	DoS	LoS	Delay
Mamre Road / Darrabarra Avenue	Signals	2026	AM	0.608	B	24.2
			PM	0.833	C	37.5

As shown, the Mamre Road / Darrabarra Avenue intersection is anticipated to operate at an overall LoS B and LoS C in assessment year 2026 during the weekday AM and PM road network peak hours, respectively. As such, the intersection is anticipated to operate satisfactorily in 2026 under the existing layout, whilst accommodating the necessary background traffic growth together with AIE development traffic and all other approved developments within the MRP. Overall, the warehouse 4 proposal is acceptable from a traffic impact perspective.

Notwithstanding, the Mamre Road Stage 2 upgrade has been committed, which will deliver the Ultimate Mamre Road network identified within the MRP DCP, providing a six-lane dual carriageway along Mamre Road between Erskine Park Road and Kerrs Road. Construction of this upgrade is expected to commence in late 2026 and will accommodate the full development yield of the MRP on completion. It is noted that the proposed development does not require or rely on delivery of the Mamre Road Stage 2 upgrade.

6.4 Traffic Impact Summary

As shown above, the GFA for the proposed Warehouse 4 development is marginally less than that envisaged under the approved MOD-10 Concept Masterplan and as such, the traffic generation assessed remains consistent with the traffic impact assessment undertaken within the Ason TMAP and Ason RFI. The Ason TMAP and Ason RFI found that the key intersection of Mamre Road / Darrabarra Avenue would operate at satisfactory levels of service under the approved development.

Furthermore, the revised LOG-E traffic modelling that considers the cumulative traffic impact of the proposed Warehouse 4 development as well as all currently approved developments within the MRP found that the Mamre Road / Darrabarra Avenue intersection would operate at a satisfactory level of performance in 2026. Notwithstanding, the Mamre Road Stage 2 upgrade, which will provide a six-lane dual carriageway along Mamre Road between Erskine Park Road and Kerrs Road, is expected to commence in late 2026. The delivery of this geometry is consistent with the

Ultimate Mamre Road network identified within the MRP DCP, which will adequately provide for the full development of the MRP.

Therefore, it is concluded that the proposed development is supported on traffic planning grounds.

6.5 Construction Traffic Generation

Construction traffic will be subject to a future site-specific CTMP however to inform this assessment; the following staging can be expected:

- Site Establishment works to occur over 4-8 weeks
- Main construction to occur over 6-8 months
- Fit out and commissioning to occur over 4 weeks.

The main construction works stage will generate peak construction traffic, estimated as follows:

- 200 vehicles per day (140 light vehicles and 60 heavy vehicles)
- 45 vehicle movements in the AM peak hour (35 light vehicles and 10 heavy vehicles)
- 35 vehicle movements in the PM peak hour (30 light vehicles and 5 heavy vehicles).

Given that the anticipated peak period construction vehicle trips are less than the anticipated Warehouse 4 operational trips, no further analysis is necessary.

7 Design Review

7.1 Relevant Design Standards

The proposed development considers a range of key design requirements noting that the proposed site access arrangements, internal circulation, separation of light and heavy vehicles, car park layout and all hardstand areas have been designed in accordance with relevant Australian Standards. This includes AS2890.1:2004, AS2890.2:2018 and AS2890.6:2022.

The architectural plans detail all relevant requirements, with reference to these standards typically expected to be used to inform any such standard Conditions of Consent, subject to approval.

A 30m PBS Level 2 Type B (A-Double) vehicle has been adopted as the largest design vehicle, with vehicle swept paths of all heavy vehicle access driveways and internal circulation tested in accordance with the minimum design vehicle requirements for industrial developments stipulated by Table 13 of the MRP DCP.

20m articulated vehicles are generally adopted for manoeuvring in and out of loading bays, with smaller vehicles identified as required.

7.2 Site Access, Circulation and Parking

The proposed site layout has considered all pedestrian, cyclist and vehicle requirements, with the following key items noted:

- All access driveways have been designed with reference to AS2890.1:2004, AS2890.2:2018 and the MRP DCP. Heavy vehicle access driveways have been designed to provide for vehicles up to and including a 30m PBS Level 2 Type B vehicle, with all swept paths run to reflect the necessary approach and departure routes.
- Vehicle swept paths demonstrate that the necessary manoeuvres can be accommodated by the design, with all heavy vehicles entering via the northern crossover and exiting via the two southern crossovers. The central exit only driveway will be limited to right turns on exit on account of the driveway alignment. In the unlikely event that heavy vehicles need to exit the precinct to the south, they would use the roundabout to the north to turnaround. All heavy vehicle circulation areas and loading bay accesses etc. have been designed in accordance with the requirements of AS2890.2:2018. Vehicle swept paths are included in Appendix D.
- Access to and from the at-grade car park is via a dedicated light vehicle crossover, with all car space dimensions, aisle widths and circulation designed as a User Class 1/1A car park. This includes 2.4m wide and 5.4m long spaces with adjacent 6.2m wide aisles, meeting or exceeding the requirements of AS2890.1:2004. The accessible parking spaces have been designed to be minimum 2.4m wide with an adjacent shared area of the same width (and central bollard), per the requirements of AS2890.6:2022. A turnaround bay has been provided at the end of the short blind aisle to allow cars to turn around, as required.
- Security sliding gates will be located on each crossover and within the site boundaries. They will remain open during operational hours with security access arrangements in place for after-hours access.

Vehicle swept paths have been completed for a range of design vehicles to ensure appropriate site access arrangements, internal circulation and manoeuvring throughout. The key vehicle swept paths are included Appendix D.

8 Summary

- The proposed development seeks approval for a Concept Approval Modification to the Aspect Industrial Estate Concept Masterplan SSD-10448 (MOD 12) and a separate subsequent SSDA for Warehouse 4.
- The site is currently subject to an approved Concept Masterplan and Modification (MOD-10) by way of State Significant Development 10448, with the proposed GFA presenting a marginal reduction than that approved as part of the MOD-10 Masterplan.
- The proposed development generates a car parking provision that complies with the methodology detailed in the Ason TMAP, which requires 124 spaces to service Warehouse 4. The proposal includes 128 parking spaces and is meets the minimum requirements of the MRP DCP. As such, the proposal remains supportable on parking grounds and would satisfy the parking demands of the site.
- Application of the traffic generation rates detailed in the Ason TMAP to the proposed development results in a traffic generation of up to 71 and 74 vehicle trips in the AM and PM peak hours respectively. This reflects marginally less traffic generation than the permissible threshold set by the approved MOD-10 Masterplan under SSD-10448.
- Further, the revised traffic modelling analysis indicates that the Mamre Road / Darrabarra Avenue intersection would operate with satisfactory level of performance in 2026 whilst accommodating the background traffic growth, as well as development traffic of the AIE and other approved developments in the MRP.
- The site includes separated light and heavy vehicle crossovers with appropriate internal circulation and separation of users throughout. Fire appliance vehicles can circulation around the perimeter, as required. All on-site car parks and hardstand loading areas have been designed in accordance with relevant Australian Standards.
- Full compliance with Australian Standards is expected to form a standard condition of consent to any development approval.

With regard for the above key findings, the proposed development is supported on traffic and transport planning grounds, with no material impacts to the external road network expected over and above that previously approved. Accordingly, it is concluded that the design is supported, and the proposal remains consistent with all parking, traffic, and design conclusions of the Concept Masterplan.

Appendix A Ason RFI Modelling Assessment

Mirvac
Level 28, 200 George Street
Sydney NSW 2000

Attn: Russel Hogan

info@asongroup.com.au
+61 2 9083 6601

Suite 17.02, Level 17,
1 Castlereagh Street,
Sydney, NSW 2000

ABN: 81 168 423 872

RE: Aspect Industrial Estate, Mamre Road – Request for Further Information

Dear Russell,

The modelling assessment as requested by Transport for New South Wales (TfNSW) in relation to SSD-10448 has been undertaken, with the results summarised below. Further, the Transport & Accessibility Plan has also been updated and is attached to this letter.

The modelling assessment to be undertaken, as requested by TfNSW is as follows:

1. *Revised SIDRA intersection modelling for the Mamre Road / Aspect Access Road intersection for the 2026, 2031 and 2036 horizon year assuming:*
 - a. *Stage 1 DA (Lots 1 & 3)*
 - b. *Full masterplan for Aspect Industrial Estate*
2. *Only approved developments are to be included in the model.*

Modelling Assessment

The following baseline information has been included in the assessment:

- Noting the current restrictions placed on movement of people as a result of the COVID-19 pandemic, 2018 survey data has been referred to.
- A growth rate of 3% has been applied to the baseline traffic flows to establish the future years.
- The only approved development which would impact flows through the intersection relate to the Kemps Creek Warehouse, Logistics and Industrial Facilities Hub (SSD-9522), which has detailed approval for 166,225m² GFA, and a traffic generation of 411 veh/hr in the AM peak and 303 veh/hr in the PM peak.
- Noting that the intersection will ultimately be subject to future capacity to accommodate the traffic associated with growth and the wider MRP itself, the interim intersection to be delivered by Mirvac has been adopted for all assessment years.
- The current Concept Plan has a GFA of 246,625m². This GFA, has been adopted for assessment of all years, noting the Stage 1 has a GFA of 59,640m².
- All other assumptions remain as previously documented (trips rates, distribution, etc.).

The results are summarised in Table 1, with the SIDRA outputs provided as **Attachment 1**.

TABLE 1: MAMRE ROAD & AIE ACCESS INTERSECTION OPERATIONS

Heading	Peak Period	Delay (s)	Level of Service	Degree of Saturation
2026	AM	17.8	B	0.57
	PM	17.2	B	0.63
2031	AM	18.5	B	0.62
	PM	18.3	B	0.68
2036	AM	18.6	B	0.65
	PM	23.8	B	0.75

With reference to the above, the SIDRA analysis indicates that the proposed intersection can accommodate the traffic generation associated with 100% of the traffic associated with Masterplan

Other Comments

Further to the above, TfNSW also provided the following in regard to the TMAP:

It is noted that in the Interim drawing Turning path plans for the test vehicle of 36.5m PBS Level 3 type A vehicles are provided but TMAP report doesn't have any turning path for the test vehicle accessing the warehouse to and from the access road 1.

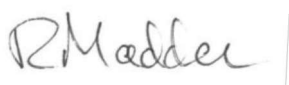
The warehouse developments have been designed to accommodate 26m b-double vehicles. The roads have been tested with a 36.5m PBS Level 3 type as this is the requirement provided within Section 3.4 of the Draft Mamre Road Precinct Development Control Plan (DCP). Driveways are only to be designed for sites that specifically need to accommodate a 36.5m PBS Level 3 type vehicle (as per 4.7.3 of the Draft DCP).

Further, Table 13 of the Draft DCP requires a design vehicle of up to a 26m b-double vehicle for industrial developments. The assessment of the 30m A-double has been undertaken in response to comments received.

As there is no current requirement operationally to accommodate a PBS Level 3 type vehicle within the Site, it has not been designed as such. Nevertheless, swept paths for Stage 1 (**Attachment 2**) have been undertaken to demonstrate that, should a future tenant require larger vehicles, they could be accommodated by the driveways, subject to some minor modifications. Any detailed requirements such as this would be subject to a different assessment process.

I trust this satisfies your requirements at this stage. Should you have any queries, please contact the undersigned.

Yours sincerely,



Rebecca Butler-Madden

Senior Transport Planner

E: rebecca.bmadden@asongroup.com.au

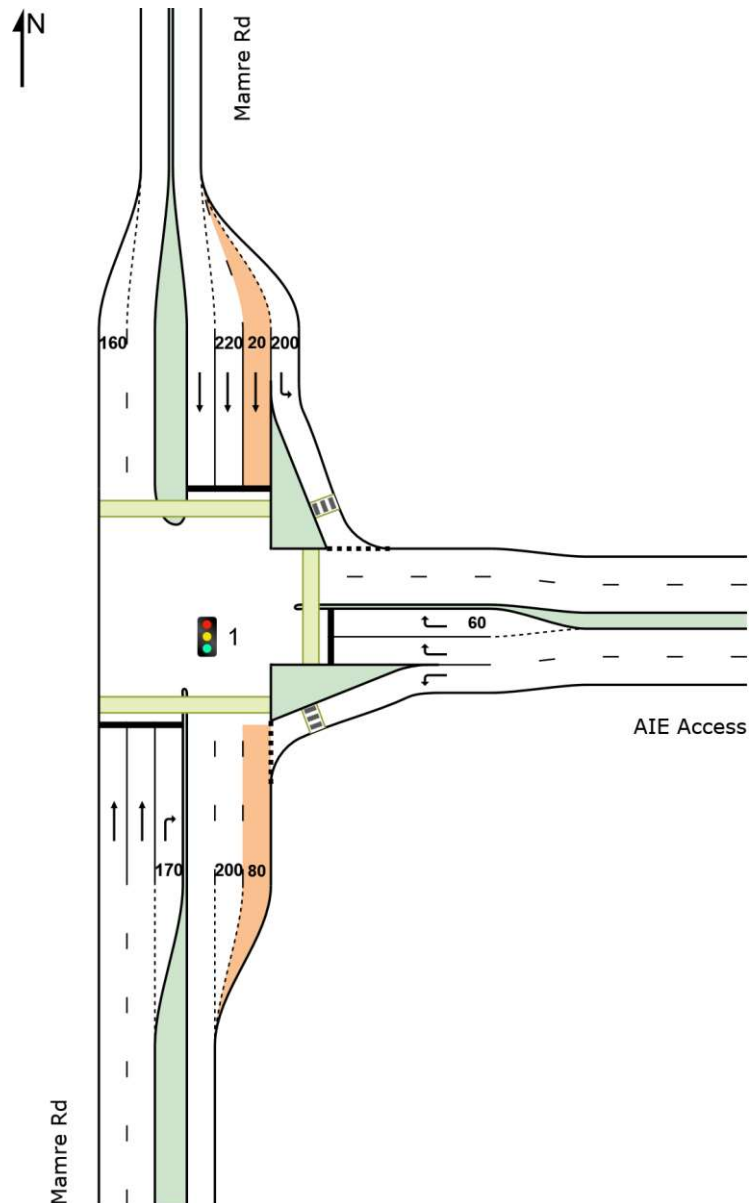
Attachment 1

SITE LAYOUT

Site: 1 Mamre x AIE

Mamre Road x Aspect Industrial Estate Access
Site Category: Proposed Interim
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

 **Site: 1 [Mamre x AIE - 2026 AM (Site Folder: 2026 Base + Dev)]**

Mamre Road x Aspect Industrial Estate Access

Site Category: Proposed Interim

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV veh/h]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Mamre Rd														
2	T1	1078	143	1135	13.3	0.459	7.6	LOS A	12.0	93.9	0.44	0.40	0.44	62.8
3	R2	199	60	209	30.2	* 0.565	43.8	LOS D	9.2	81.1	0.93	0.82	0.93	34.4
Approach		1277	203	1344	15.9	0.565	13.2	LOS A	12.0	93.9	0.52	0.46	0.52	55.6
East: AIE Access														
4	L2	86	26	91	30.2	0.113	10.9	LOS A	1.2	10.3	0.34	0.60	0.34	44.7
6	R2	86	26	91	30.2	* 0.237	49.9	LOS D	2.2	19.1	0.93	0.74	0.93	30.1
Approach		172	52	181	30.2	0.237	30.4	LOS C	2.2	19.1	0.64	0.67	0.64	36.0
North: Mamre Rd														
7	L2	199	60	209	30.2	0.183	9.2	LOS A	2.1	18.5	0.29	0.65	0.29	51.1
8	T1	803	148	845	18.4	* 0.570	24.5	LOS B	15.7	127.0	0.82	0.72	0.82	48.2
Approach		1002	208	1055	20.8	0.570	21.5	LOS B	15.7	127.0	0.71	0.70	0.71	48.7
All Vehicles		2451	463	2580	18.9	0.570	17.8	LOS B	15.7	127.0	0.61	0.58	0.61	50.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^{*} Critical Movement (Signal Timing)

Pedestrian Movement Performance

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped	Dist]			sec	m	m/sec
South: Mamre Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	216.2	223.5	1.03
East: AIE Access												
P2	Full	50	53	23.9	LOS C	0.1	0.1	0.69	0.69	190.4	216.5	1.14
North: Mamre Rd												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	216.2	223.5	1.03
All Pedestrians		150	158	37.5	LOS D	0.1	0.1	0.86	0.86	207.6	221.2	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 1 [Mamre x AIE - 2026 PM (Site Folder: 2026 Base + Dev)]

Mamre Road x Aspect Industrial Estate Access

Site Category: Proposed Interim

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Mamre Rd														
2	T1	877	114	923	13.0	0.383	7.0	LOS A	8.7	67.4	0.43	0.38	0.43	63.1
3	R2	89	27	94	30.3	* 0.607	52.2	LOS D	4.3	37.6	1.00	0.81	1.07	31.9
Approach		966	141	1017	14.6	0.607	11.2	LOS A	8.7	67.4	0.49	0.42	0.49	57.9
East: AIE Access														
4	L2	207	62	218	30.0	0.347	17.6	LOS B	4.1	36.4	0.53	0.68	0.53	43.2
6	R2	207	62	218	30.0	* 0.513	46.1	LOS D	4.9	42.9	0.97	0.78	0.97	31.0
Approach		414	124	436	30.0	0.513	31.8	LOS C	4.9	42.9	0.75	0.73	0.75	36.1
North: Mamre Rd														
7	L2	89	27	94	30.3	0.074	8.1	LOS A	0.5	4.8	0.21	0.62	0.21	51.9
8	T1	1154	160	1215	13.9	* 0.628	18.1	LOS B	18.6	145.8	0.76	0.68	0.76	53.8
Approach		1243	187	1308	15.0	0.628	17.3	LOS B	18.6	145.8	0.72	0.67	0.72	53.7
All Vehicles		2623	452	2761	17.2	0.628	17.4	LOS B	18.6	145.8	0.64	0.59	0.64	51.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^{*} Critical Movement (Signal Timing)

Pedestrian Movement Performance

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	
South: Mamre Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	211.2	223.5	1.06
East: AIE Access												
P2	Full	50	53	15.6	LOS B	0.1	0.1	0.59	0.59	182.2	216.5	1.19
North: Mamre Rd												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	211.2	223.5	1.06
All Pedestrians		150	158	31.4	LOS D	0.1	0.1	0.82	0.82	201.5	221.2	1.10

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 Site: 1 [Mamre x AIE - 2031 AM (Site Folder: 2031 Base + Dev)]

Mamre Road x Aspect Industrial Estate Access

Site Category: Proposed Interim

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	[HV veh/h	[Total veh/h	[HV %				[Veh. veh	[Dist m				
South: Mamre Rd														
2	T1	1248	208	1314	16.7	0.542	9.0	LOS A	15.3	122.7	0.48	0.44	0.48	62.2
3	R2	214	60	225	28.0	0.626*	45.2	LOS D	10.1	88.1	0.95	0.83	0.95	34.0
Approach		1462	268	1539	18.3	0.626	14.3	LOS A	15.3	122.7	0.55	0.50	0.55	55.4
East: AIE Access														
4	L2	86	26	91	30.2	0.118	12.1	LOS A	1.3	11.2	0.37	0.60	0.37	44.4
6	R2	86	26	91	30.2	0.237*	50.8	LOS D	2.2	19.1	0.93	0.74	0.93	30.1
Approach		172	52	181	30.2	0.237	31.4	LOS C	2.2	19.1	0.65	0.67	0.65	35.8
North: Mamre Rd														
7	L2	199	60	209	30.2	0.184	9.5	LOS A	2.2	19.6	0.30	0.66	0.30	50.9
8	T1	895	165	942	18.4	0.621*	24.8	LOS B	17.8	144.3	0.83	0.74	0.83	48.1
Approach		1094	225	1152	20.6	0.621	22.0	LOS B	17.8	144.3	0.74	0.72	0.74	48.6
All Vehicles		2728	545	2872	20.0	0.626	18.5	LOS B	17.8	144.3	0.63	0.60	0.63	50.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Suburban Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped	Dist]			sec	m	m/sec
South: Mamre Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	216.2	223.5	1.03
East: AIE Access												
P2	Full	50	53	23.2	LOS C	0.1	0.1	0.68	0.68	189.7	216.5	1.14
North: Mamre Rd												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	216.2	223.5	1.03
All Pedestrians		150	158	37.2	LOS D	0.1	0.1	0.86	0.86	207.4	221.2	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 Site: 1 [Mamre x AIE - 2031 PM (Site Folder: 2031 Base + Dev)]

Mamre Road x Aspect Industrial Estate Access

Site Category: Proposed Interim

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	[HV] veh/h	[Total veh/h	[HV] %				[Veh. veh	[Dist] m				
South: Mamre Rd														
2	T1	978	126	1029	12.9	0.427	7.6	LOS A	10.1	78.5	0.45	0.40	0.45	62.8
3	R2	89	27	94	30.3	* 0.683	54.4	LOS D	4.4	38.8	1.00	0.84	1.16	31.3
Approach		1067	153	1123	14.3	0.683	11.5	LOS A	10.1	78.5	0.50	0.44	0.51	57.9
East: AIE Access														
4	L2	207	62	218	30.0	0.368	22.2	LOS B	4.7	41.1	0.58	0.70	0.58	42.4
6	R2	207	62	218	30.0	* 0.513	46.4	LOS D	4.9	42.9	0.97	0.78	0.97	31.0
Approach		414	124	436	30.0	0.513	34.3	LOS C	4.9	42.9	0.77	0.74	0.77	35.8
North: Mamre Rd														
7	L2	89	27	94	30.3	0.074	8.1	LOS A	0.5	4.8	0.21	0.62	0.21	51.9
8	T1	1284	176	1352	13.7	* 0.684	19.6	LOS B	21.5	167.6	0.78	0.71	0.78	53.7
Approach		1373	203	1445	14.8	0.684	18.8	LOS B	21.5	167.6	0.75	0.70	0.75	53.6
All Vehicles		2854	480	3004	16.8	0.684	18.3	LOS B	21.5	167.6	0.66	0.61	0.66	51.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped	Dist]					
						ped/h	ped					
South: Mamre Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	211.2	223.5	1.06
East: AIE Access												
P2	Full	50	53	15.1	LOS B	0.1	0.1	0.58	0.58	181.6	216.5	1.19
North: Mamre Rd												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	211.2	223.5	1.06
All Pedestrians		150	158	31.2	LOS D	0.1	0.1	0.82	0.82	201.3	221.2	1.10

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 **Site: 1 [Mamre x AIE - 2036 AM (Site Folder: 2036 Base + Dev)]**

Mamre Road x Aspect Industrial Estate Access

Site Category: Proposed Interim

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Mamre Rd														
2	T1	1314	170	1383	12.9	0.558	9.5	LOS A	16.5	127.9	0.49	0.45	0.49	62.0
3	R2	199	60	209	30.2	0.646*	47.3	LOS D	9.7	85.3	0.97	0.83	0.99	33.3
Approach		1513	230	1593	15.2	0.646	14.5	LOS A	16.5	127.9	0.55	0.50	0.56	55.7
East: AIE Access														
4	L2	86	26	91	30.2	0.124	13.4	LOS A	1.4	12.1	0.39	0.61	0.39	44.0
6	R2	86	26	91	30.2	0.237*	51.2	LOS D	2.2	19.1	0.93	0.74	0.93	30.1
Approach		172	52	181	30.2	0.237	32.3	LOS C	2.2	19.1	0.66	0.67	0.66	35.7
North: Mamre Rd														
7	L2	199	60	209	30.2	0.181	9.5	LOS A	2.2	19.5	0.30	0.66	0.30	50.9
8	T1	986	181	1038	18.4	0.653*	24.2	LOS B	19.7	159.1	0.84	0.74	0.84	48.7
Approach		1185	241	1247	20.3	0.653	21.7	LOS B	19.7	159.1	0.75	0.73	0.75	49.0
All Vehicles		2870	523	3021	18.2	0.653	18.6	LOS B	19.7	159.1	0.64	0.60	0.64	51.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Mamre Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	216.2	223.5	1.03
East: AIE Access												
P2	Full	50	53	21.8	LOS C	0.1	0.1	0.66	0.66	188.4	216.5	1.15
North: Mamre Rd												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	216.2	223.5	1.03
All Pedestrians		150	158	36.8	LOS D	0.1	0.1	0.85	0.85	206.9	221.2	1.07

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 Site: 1 [Mamre x AIE - 2036 PM (Site Folder: 2036 Base + Dev)]

Mamre Road x Aspect Industrial Estate Access

Site Category: Proposed Interim

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV veh/h]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Mamre Rd														
2	T1	1080	138	1137	12.8	0.472	8.3	LOS A	11.7	90.6	0.47	0.42	0.47	62.5
3	R2	89	27	94	30.3	* 0.683	54.4	LOS D	4.4	38.8	1.00	0.84	1.16	31.3
Approach		1169	165	1231	14.1	0.683	11.8	LOS A	11.7	90.6	0.51	0.46	0.52	58.1
East: AIE Access														
4	L2	207	62	218	30.0	0.381	41.0	LOS C	5.2	46.0	0.64	0.72	0.64	41.4
6	R2	207	62	218	30.0	* 0.513	46.9	LOS D	4.9	42.9	0.97	0.78	0.97	31.0
Approach		414	124	436	30.0	0.513	43.9	LOS D	5.2	46.0	0.80	0.75	0.80	35.5
North: Mamre Rd														
7	L2	89	27	94	30.3	0.074	8.1	LOS A	0.5	4.8	0.21	0.62	0.21	51.9
8	T1	1413	192	1487	13.6	* 0.753	28.8	LOS C	25.1	196.1	0.83	0.76	0.83	52.9
Approach		1502	219	1581	14.6	0.753	27.5	LOS B	25.1	196.1	0.80	0.75	0.80	52.8
All Vehicles		3085	508	3247	16.5	0.753	23.8	LOS B	25.1	196.1	0.69	0.64	0.69	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^{*} Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped	Dist]					
		ped/h	ped/h	sec		ped	m					
South: Mamre Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	211.2	223.5	1.06
East: AIE Access												
P2	Full	50	53	15.1	LOS B	0.1	0.1	0.58	0.58	181.6	216.5	1.19
North: Mamre Rd												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	211.2	223.5	1.06
All Pedestrians		150	158	31.2	LOS D	0.1	0.1	0.82	0.82	201.3	221.2	1.10

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Appendix B Cumulative Traffic Modelling Assessment

SITE LAYOUT

 **Site: [1] AM: Mamre Rd/Darrabarra Ave** (Current Mamre Rd/
Darrabarra Ave Layout)

Site: Mamre Road / Site Access

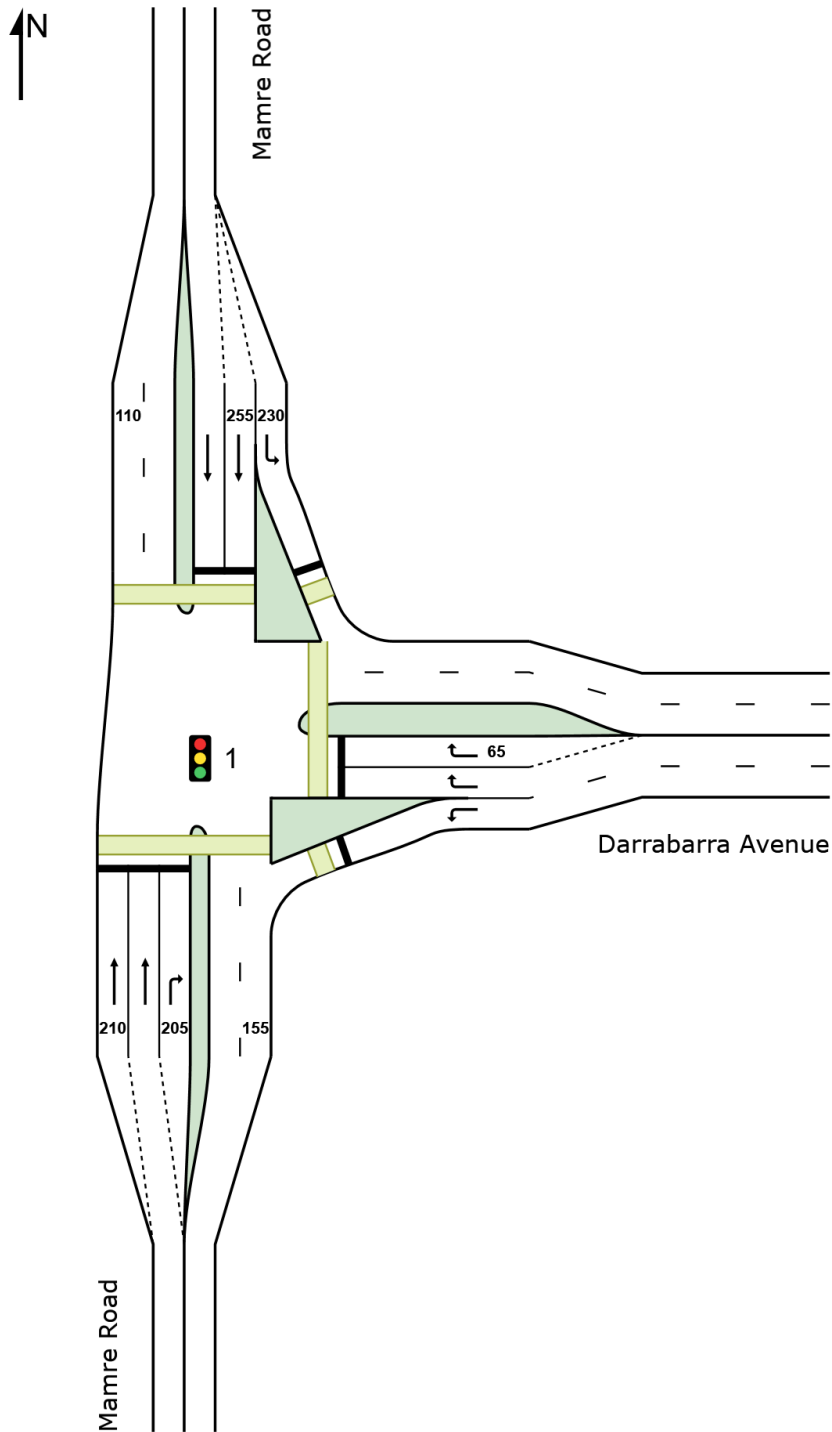
Scenario: AM Peak Existing

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SIDRA INTERSECTION 10.0 | Copyright © 2000-2025 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: ASON GROUP PTY LTD | Licence: NETWORK / FLOATING | Created: Friday, 9 January 2026 12:43:56 PM

Project: C:\Users\Angela Ji\OneDrive - Ason Group\Ason Group Team Site - 1029B\Projects\Modelling\P1029Bm01v1_WH4 SSD Model.sipx

MOVEMENT SUMMARY

 **Site: [1] AM: Mamre Rd/Darrabarra Ave** (Current Mamre Rd/
Darrabarra Ave Layout)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

Site: Mamre Road / Site Access
Scenario: AM Peak Existing
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance												
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %	Arrival Flows [Total HV] veh/h %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Mamre Road												
2	T1	All MCs	931 13.1	931 13.1	0.577	19.9	LOS B	20.6 171.7	0.64	0.57	0.64	47.7
3	R2	All MCs	42 32.5	42 32.5	* 0.505	69.7	LOS E	2.6 27.1	1.00	0.76	1.01	27.3
Approach			973 14.0	973 14.0	0.577	22.0	LOS B	20.6 171.7	0.65	0.58	0.65	46.2
East: Darrabarra Avenue												
4	L2	All MCs	31 48.3	31 48.3	0.063	28.4	LOS B	1.0 13.7	0.61	0.68	0.61	39.3
6	R2	All MCs	333 46.5	333 46.5	* 0.608	51.0	LOS D	10.3 123.6	0.89	0.81	0.89	33.1
Approach			363 46.7	363 46.7	0.608	49.1	LOS D	10.3 123.6	0.86	0.80	0.86	33.1
North: Mamre Road												
7	L2	All MCs	518 16.3	518 16.3	0.401	8.4	LOS A	7.3 63.2	0.27	0.64	0.27	50.6
8	T1	All MCs	893 14.4	893 14.4	* 0.608	25.6	LOS B	20.5 174.4	0.78	0.69	0.78	42.7
Approach			1411 15.1	1411 15.1	0.608	19.3	LOS B	20.5 174.4	0.59	0.67	0.59	45.3
All Vehicles			2746 18.9	2746 18.9	0.608	24.2	LOS B	20.6 174.4	0.65	0.66	0.65	43.5

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Mamre Road												
P1	Full	1	1	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
East: Darrabarra Avenue												
P2	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
P2B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: Mamre Road												
P3	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

P3B Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians	201	212	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 10.0 | Copyright © 2000-2025 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: ASON GROUP PTY LTD | Licence: NETWORK / FLOATING | Processed: Friday, 9 January 2026 12:44:14 PM

Project: C:\Users\Angela Ji\OneDrive - Ason Group\Ason Group Team Site - 1029B\Projects\Modelling\P1029Bm01v1_WH4 SSD Model.sipx

MOVEMENT SUMMARY

 **Site: [2] PM: Mamre Rd/Darrabarra Ave** (Current Mamre Rd/
Darrabarra Ave Layout)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

Site: Mamre Road / Site Access
Scenario: AM Peak Existing
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120.0 seconds (Site User-Given Cycle Time)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]	[Total HV]	[Total HV]									
			veh/h	%	veh/h	%	v/c	sec		[Veh.]	Dist]				km/h
South: Mamre Road															
2	T1	All MCs	1085	12.6	1085	12.6	0.601	29.0	LOS C	22.0	182.5	0.58	0.52	0.58	50.2
3	R2	All MCs	133	12.7	133	12.7	* 0.832	71.5	LOS F	8.5	71.2	1.00	0.95	1.27	27.1
Approach			1218	12.6	1218	12.6	0.832	33.6	LOS C	22.0	182.5	0.62	0.57	0.65	45.9
East: Darrabarra Avenue															
4	L2	All MCs	21	30.0	21	30.0	0.039	31.5	LOS C	0.7	7.8	0.63	0.67	0.63	39.1
6	R2	All MCs	437	28.9	437	28.9	* 0.833	79.8	LOS F	16.1	154.1	0.97	0.89	1.08	30.4
Approach			458	29.0	458	29.0	0.833	77.5	LOS F	16.1	154.1	0.95	0.88	1.06	29.3
North: Mamre Road															
7	L2	All MCs	160	74.3	160	74.3	0.205	9.5	LOS A	2.2	30.6	0.26	0.61	0.26	48.1
8	T1	All MCs	1312	13.9	1312	13.9	* 0.832	30.5	LOS C	36.8	303.9	0.89	0.83	0.92	41.0
Approach			1472	20.5	1472	20.5	0.832	28.3	LOS B	36.8	303.9	0.82	0.81	0.84	41.7
All Vehicles			3147	18.7	3147	18.7	0.833	37.5	LOS C	36.8	303.9	0.76	0.73	0.80	40.7

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped]	Dist]			sec	m	m/sec
South: Mamre Road												
P1	Full	10	11	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
East: Darrabarra Avenue												
P2	Full	10	11	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
P2B	Slip/Bypass	10	11	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
North: Mamre Road												
P3	Full	10	11	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96

P3B Slip/ Bypass	10	11	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96
All Pedestrians	50	53	54.2	LOS E	0.0	0.0	0.95	0.95	208.0	200.0	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 10.0 | Copyright © 2000-2025 Akcelik and Associates Pty Ltd | sidrasolutions.com

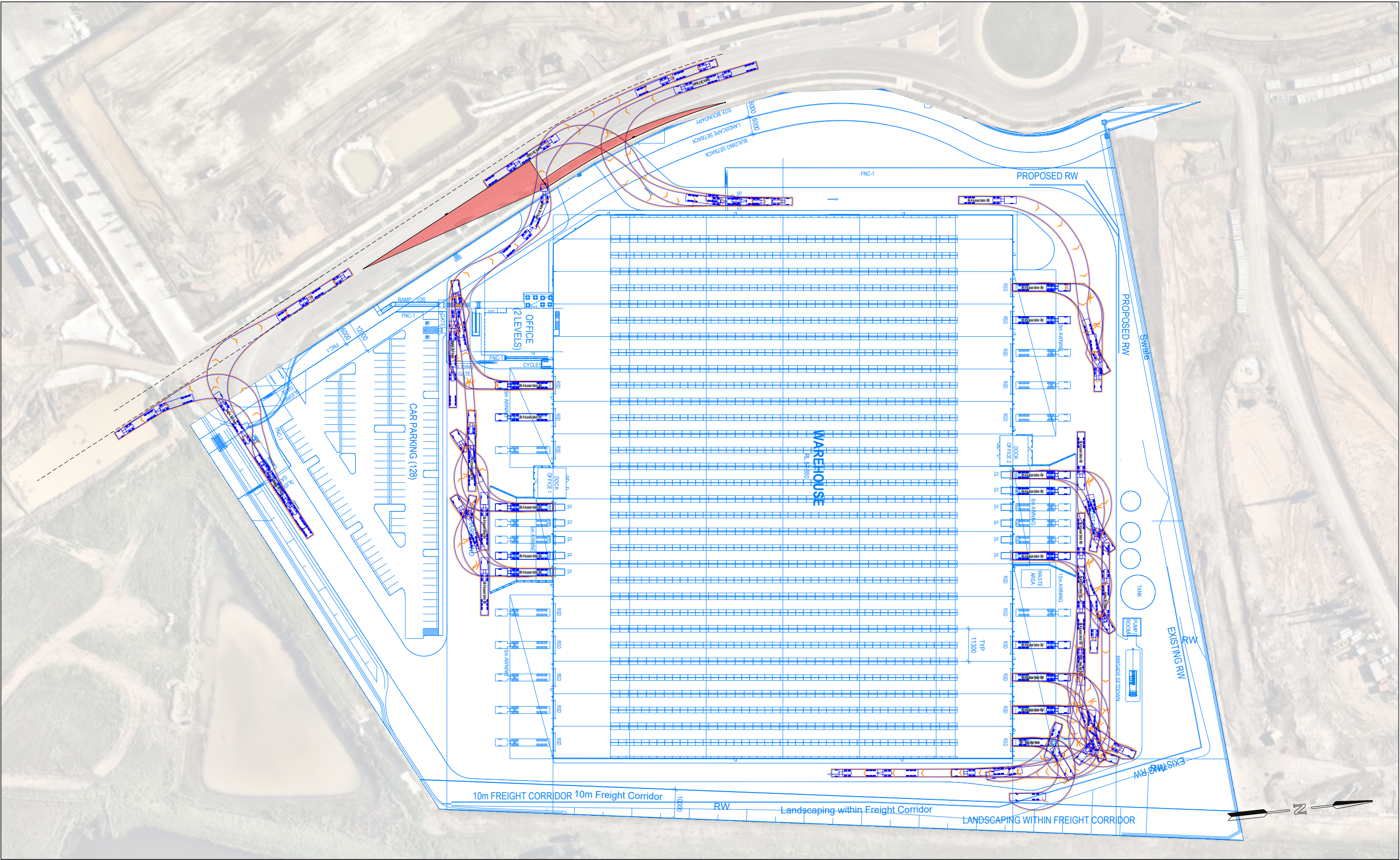
Organisation: ASON GROUP PTY LTD | Licence: NETWORK / FLOATING | Processed: Friday, 9 January 2026 12:44:05 PM

Project: C:\Users\Angela Jil\OneDrive - Ason Group\Ason Group Team Site - 1029B\Projects\Modelling\P1029Bm01v1_WH4 SSD Model.sipx

Appendix C Operational Traffic Flows

Warehouse 4 Traffic Generation Traffic Profile (Generic Assessment)							
Start Time	All Vehicle ¹	Light Vehicle	Heavy Vehicle	Rigid	Semi-trailer	B-double	A-double
0:00	7	5	2	1	0	0	1
1:00	7	4	2	1	0	0	1
2:00	7	5	2	2	0	0	1
3:00	8	6	2	1	0	0	0
4:00	25	21	4	3	0	0	1
5:00	49	39	10	6	1	0	2
6:00	66	52	14	9	1	0	3
7:00²	65	49	16	11	1	0	4
8:00	60	42	19	12	1	0	5
9:00	52	32	20	14	1	0	5
10:00	49	29	20	13	1	0	5
11:00	51	31	20	13	1	0	5
12:00	56	38	18	12	1	0	5
13:00	67	49	18	12	1	0	5
14:00	74	57	16	11	1	0	4
15:00	63	48	14	10	1	0	4
16:00³	52	41	12	8	1	0	3
17:00	43	33	10	6	1	0	2
18:00	26	19	7	4	0	0	2
19:00	15	11	4	3	0	0	1
20:00	11	8	3	2	0	0	1
21:00	15	12	3	2	0	0	1
22:00	19	16	3	2	0	0	1
23:00	13	11	3	2	0	0	1
Total	902	659	243	161	16	4	62
Note	1) Minor discrepancies between sum numbers due to 'rounding'. 2) AM Peak: 7am – 8am 3) PM Peak: 4pm – 5pm						

Appendix D Swept Path Assessment



GENERAL NOTES

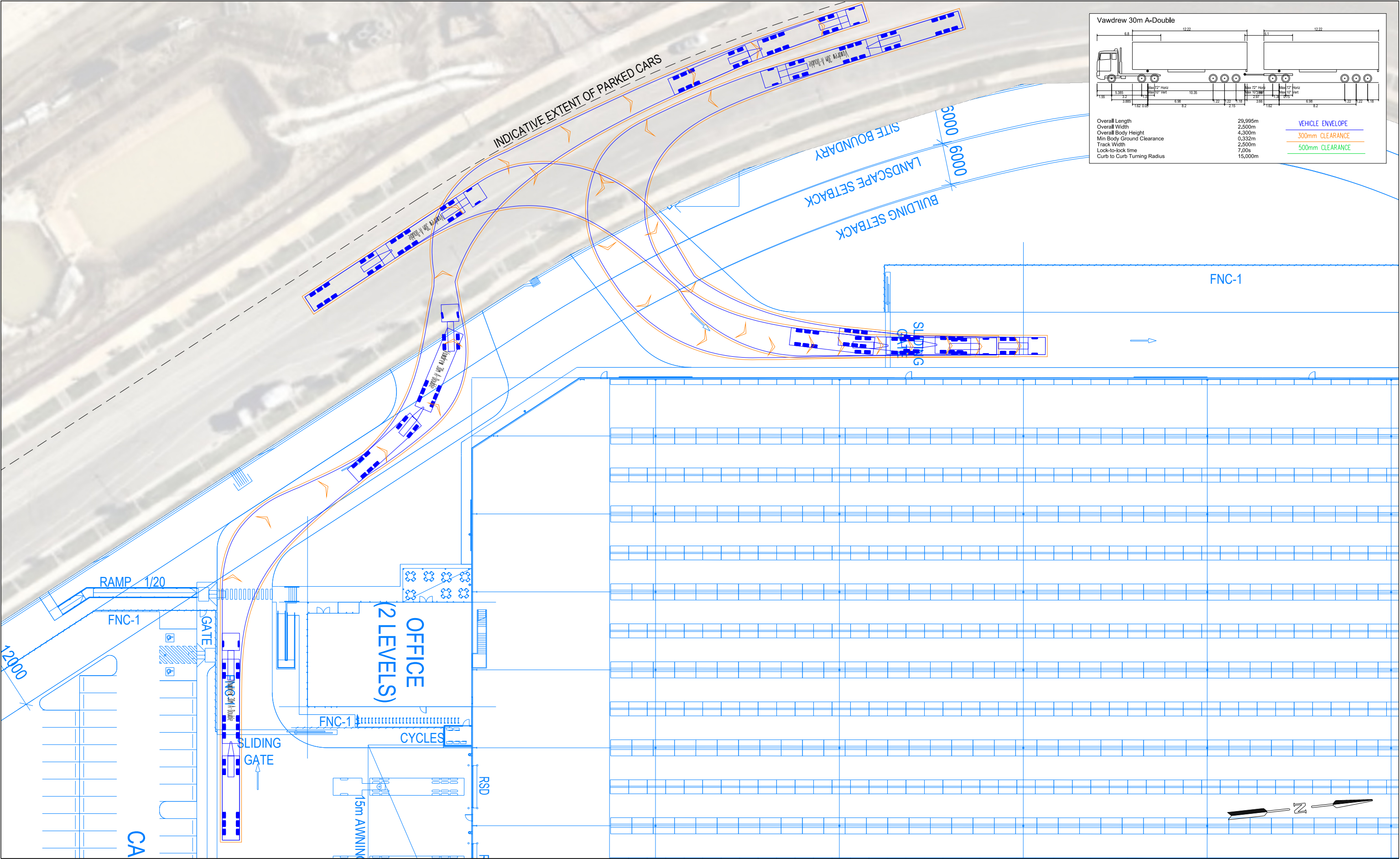
This drawing is provided for information purposes only and should not be used for construction.
Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025.
Swept path assessments completed at 10 km/h and 300mm clearance.

DESIGNED	Angela Ji
APPROVED BY	R. Hazell
SCALE	1:1200
PAPER SIZE	A3
DATE	07.11.2025
	NTS

CLIENT	MIRVAC
PROJECT	P1029B
	ASPECT INDUSTRIAL ESTATE LOT 4

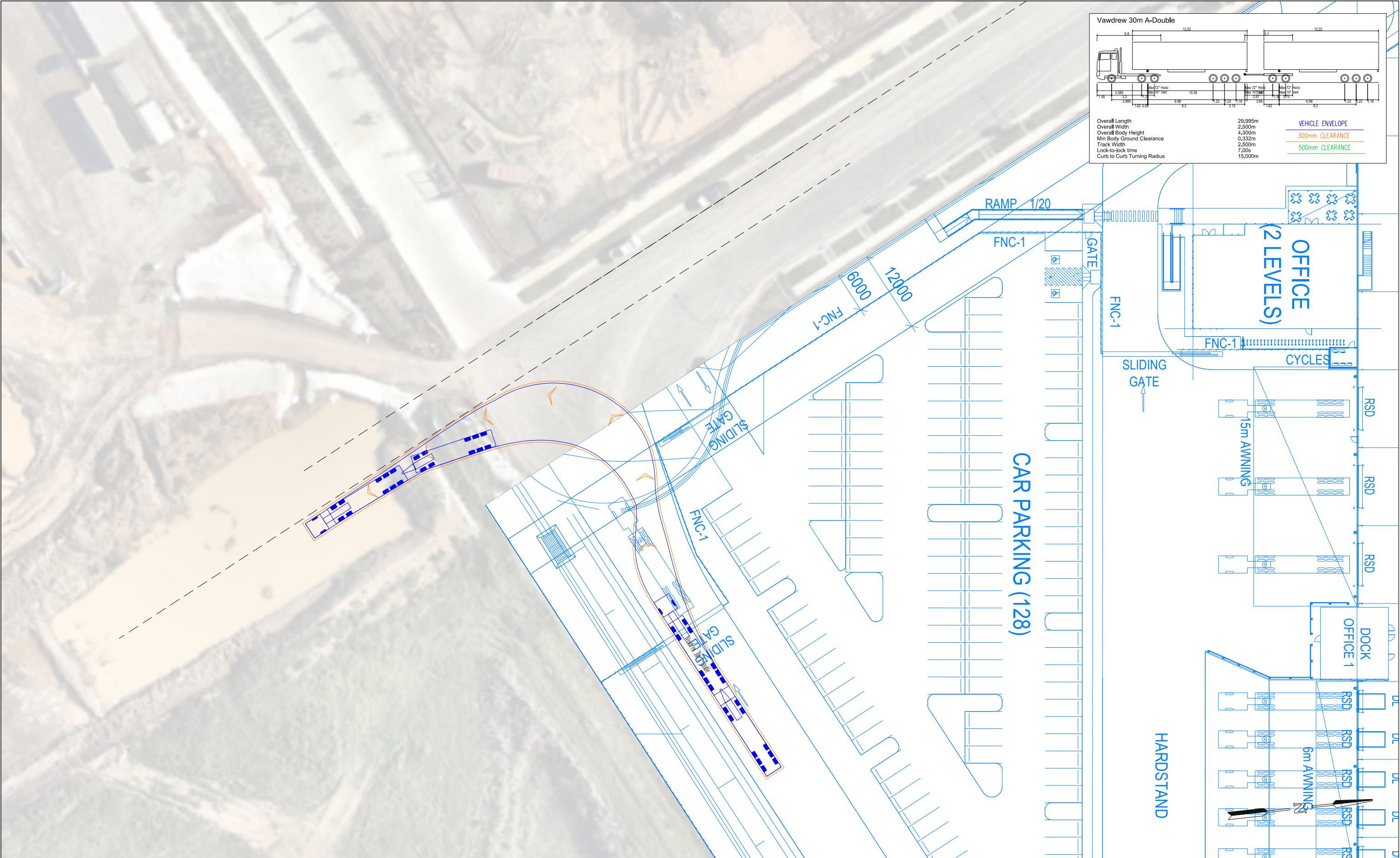
DOCUMENT INFORMATION	
ASPECT INDUSTRIAL ESTATE LOT 4	
SWEPT PATH ASSESSMENT	
FILE NAME	AG1029B-02-v03.dwg
SHEET	AG01

Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

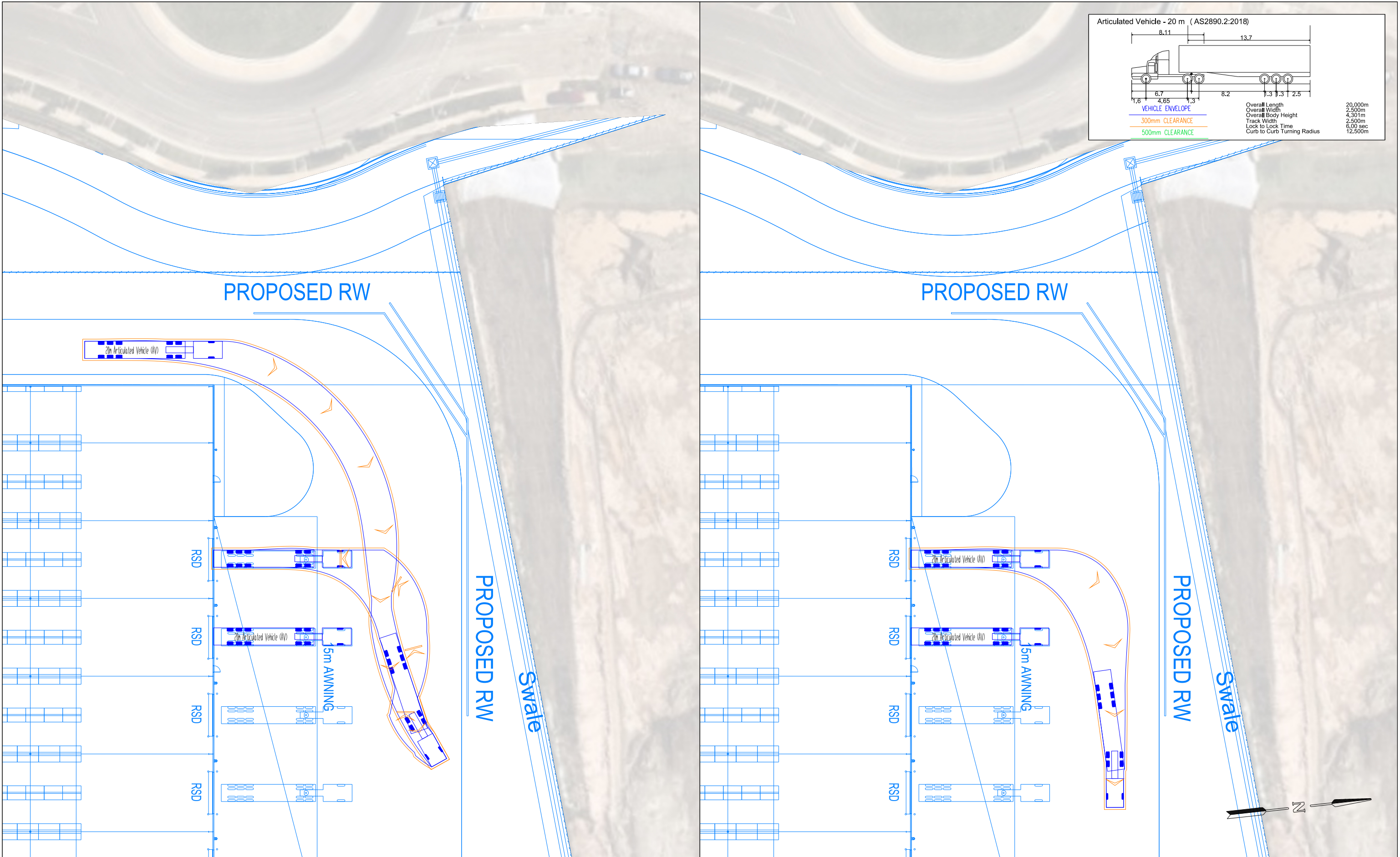


GENERAL NOTES This drawing is provided for information purposes only and should not be used for construction. Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025. Swept path assessments completed at 10 km/h and 300mm clearance.	DESIGNED Angela Ji	PAPER SIZE A3	CLIENT MIRVAC	DOCUMENT INFORMATION ASPECT INDUSTRIAL ESTATE LOT 4	
	APPROVED BY R. Hazell	DATE 07.11.2025	PROJECT P1029B	SWEPT PATH ASSESSMENT	
	SCALE 1:500	0510	ASPECT INDUSTRIAL ESTATE LOT 4	FILE NAME AG1029B-02-v03.dwg	SHEET AG02

Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au



GENERAL NOTES This drawing is provided for information purposes only and should not be used for construction. Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025. Swept path assessments completed at 10 km/h and 300mm clearance.	DESIGNED	PAPER SIZE	CLIENT	DOCUMENT INFORMATION		asongroup Suite 17.02, Level 17, 1 Castlereagh St Sydney NSW 2000 info@asongroup.com.au
	Angela Ji	A3	MIRVAC	ASPECT INDUSTRIAL ESTATE LOT 4		
	APPROVED BY	DATE	PROJECT	SWEPT PATH ASSESSMENT		
	R. Hazell	07.11.2025	P1029B			
	SCALE			FILE NAME	SHEET	
	1:500	0510		AG1029B-02-v03.dwg	AG04	



This drawing is provided for information purposes only and should not be used for construction.
Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025.
Swept path assessments completed at 10 km/h and 300mm clearance.

DESIGNED Angela Ji	PAPER SIZE A3	CLIENT MIRVAC PROJECT P1029B ASPECT INDUSTRIAL ESTATE LOT 4
APPROVED BY R. Hazell	DATE 07.11.2025	
SCALE 1:500		

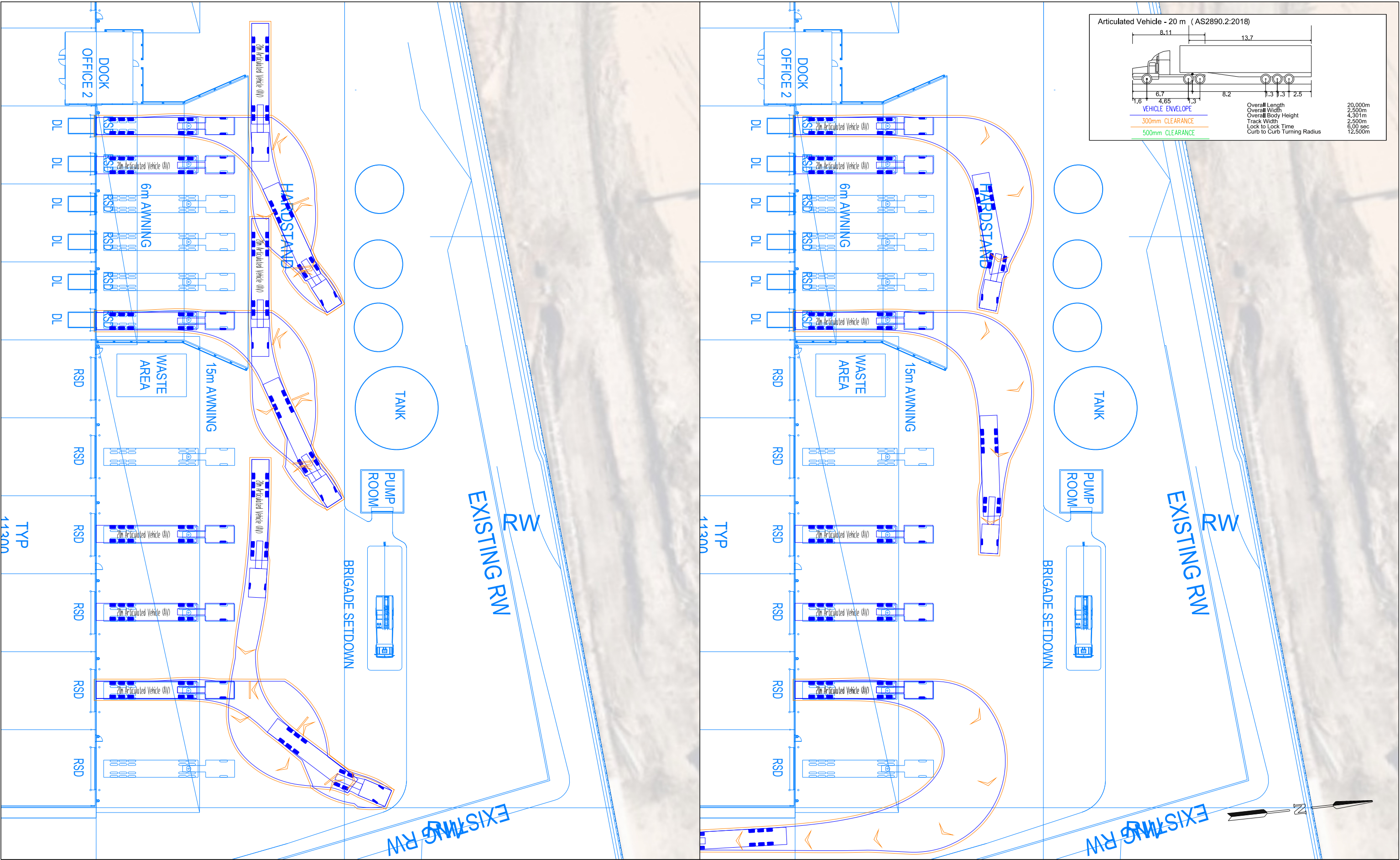
DOCUMENT INFORMATION

ASPECT INDUSTRIAL ESTATE LOT 4	
SWEPT PATH ASSESSMENT	
FILE NAME AG1029B-02-v03.dwg	SHEET AG05

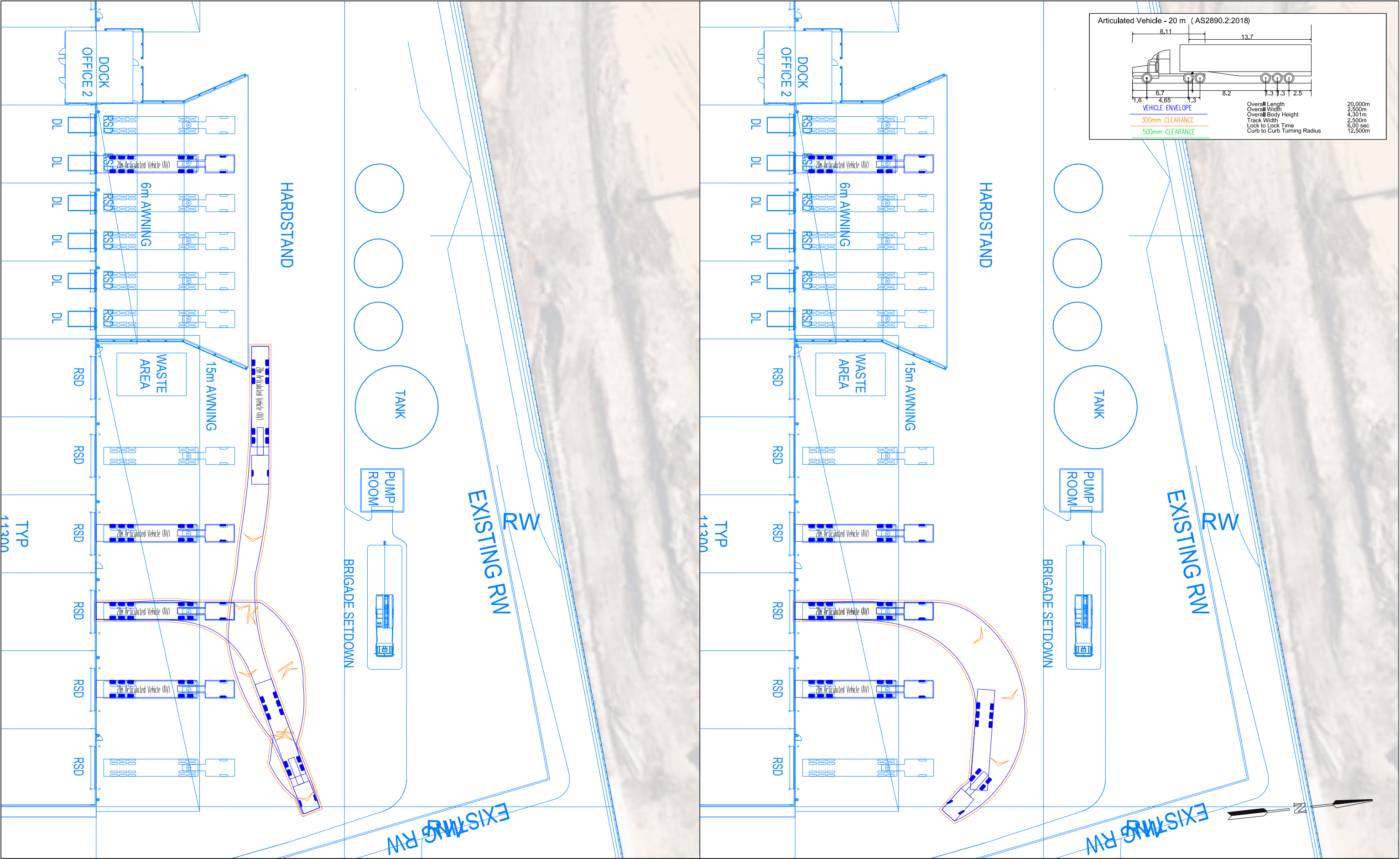
asongroup

Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000

info@asongroup.com.au



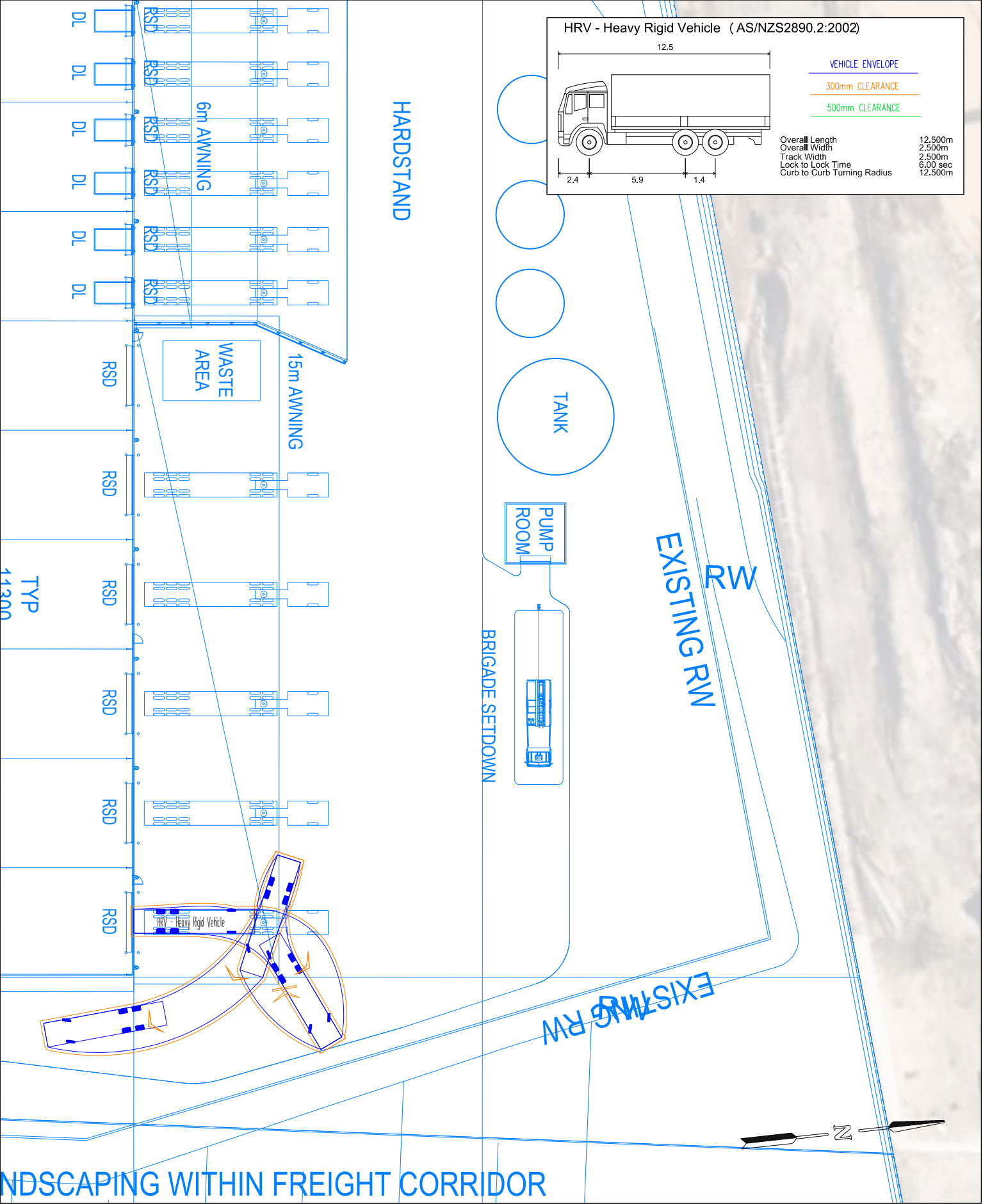
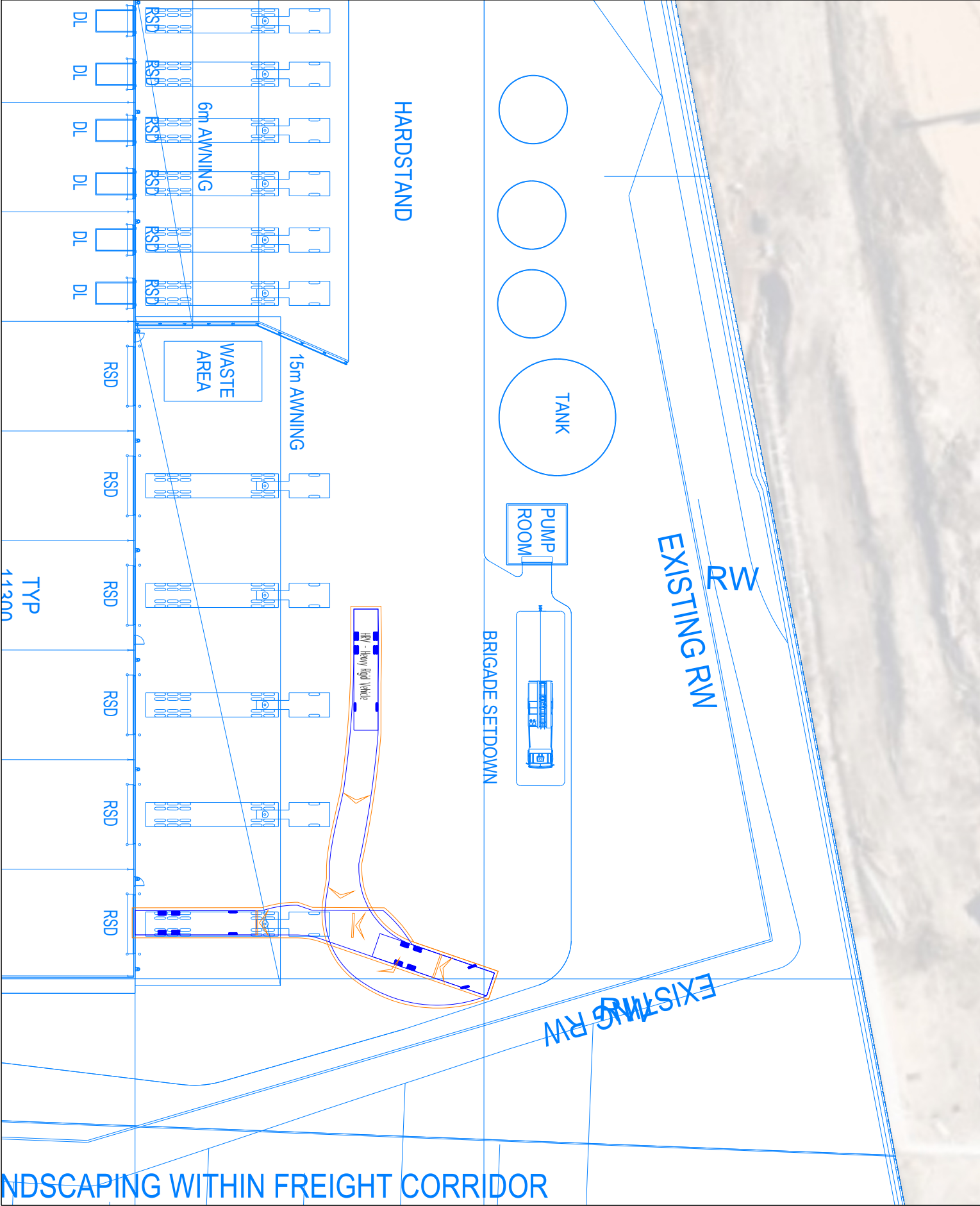
GENERAL NOTES This drawing is provided for information purposes only and should not be used for construction. Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025. Swept path assessments completed at 10 km/h and 300mm clearance.	DESIGNED Angela Ji	PAPER SIZE A3	CLIENT MIRVAC	DOCUMENT INFORMATION ASPECT INDUSTRIAL ESTATE LOT 4	
	APPROVED BY R. Hazell	DATE 07.11.2025	PROJECT P1029B	SWEPT PATH ASSESSMENT	
	SCALE 1:500	0 5 10	ASPECT INDUSTRIAL ESTATE LOT 4	FILE NAME AG1029B-02-v03.dwg	SHEET AG06



GENERAL NOTES This drawing is provided for information purposes only and should not be used for construction. Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025. Swept path assessments completed at 10 km/h and 300mm clearance.	DESIGNED Angela Ji	PAPER SIZE A3	CLIENT MIRVAC	DOCUMENT INFORMATION ASPECT INDUSTRIAL ESTATE LOT 4	
	APPROVED BY R. Hazell	DATE 07.11.2025	PROJECT P1029B	SWEPT PATH ASSESSMENT	
	SCALE 1:500	0510	ASPECT INDUSTRIAL ESTATE LOT 4	FILE NAME AG1029B-02-v03.dwg	SHEET AG07

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

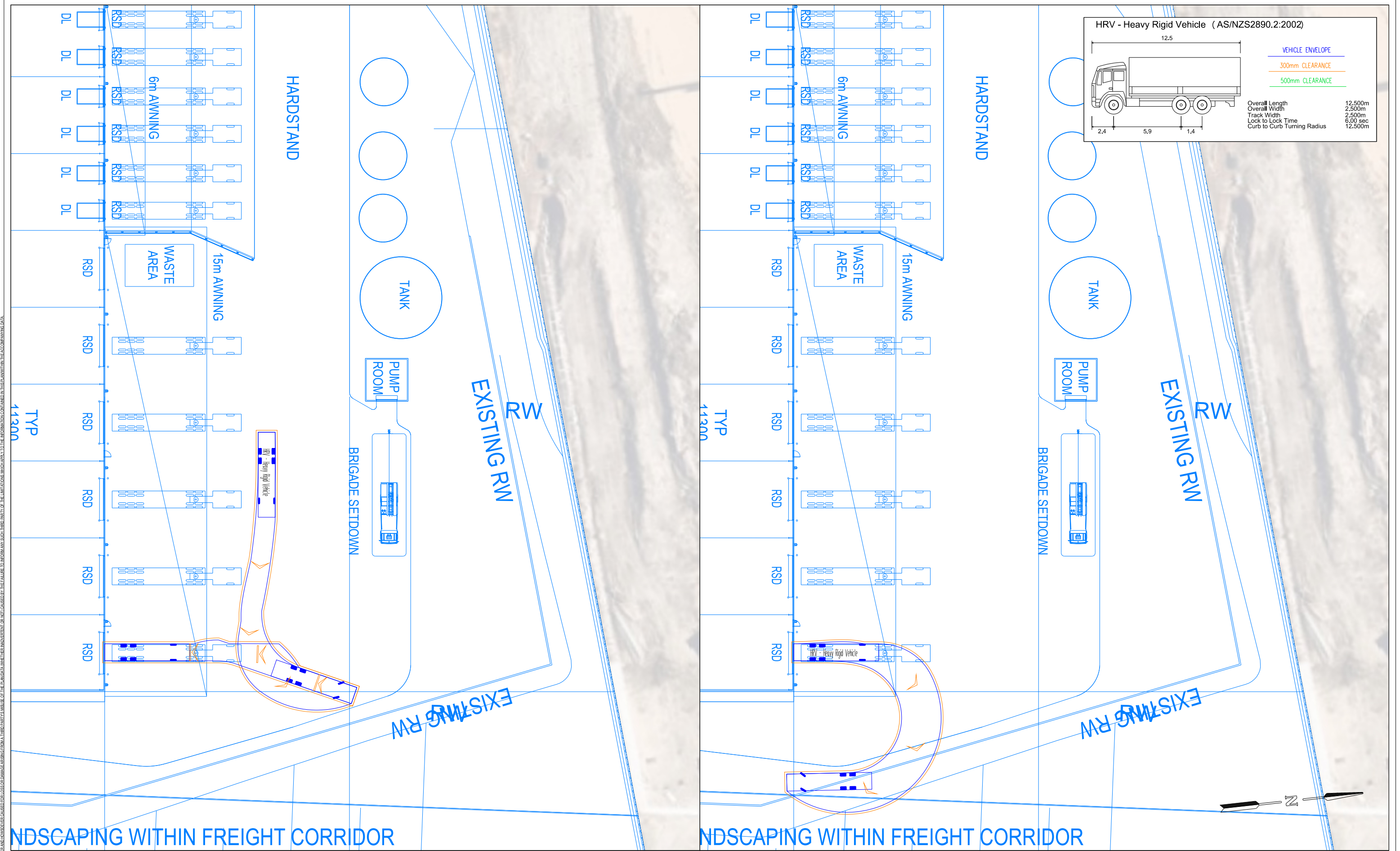
ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCHMARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTERNAL PART OF THIS PLAN DATA. REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE. ASON GROUP, ASON THEREFORE DISCLAIMS ALL LIABILITY FOR ANY LOSS OR DAMAGE CAUSED BY OR ARISING FROM ANY THIRD PARTY'S USE OF THE PLAN DATA. THE INFORMATION CONTAINED IN THIS PLAN DATA IS THE PROPERTY OF THE EMPLOYER AND IS NOT TO BE REPRODUCED OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF ASON GROUP.



GENERAL NOTES This drawing is provided for information purposes only and should not be used for construction. Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025. Swept path assessments completed at 10 km/h and 300mm clearance.	DESIGNED Angela Ji	PAPER SIZE A3	CLIENT MIRVAC	DOCUMENT INFORMATION	
	APPROVED BY R. Hazell	DATE 07.11.2025	PROJECT P1029B	ASPECT INDUSTRIAL ESTATE LOT 4	
	SCALE 1:500	0 5 10	ASPECT INDUSTRIAL ESTATE LOT 4	SWEPT PATH ASSESSMENT	SHEET AG08
				FILE NAME AG1029B-02-v03.dwg	



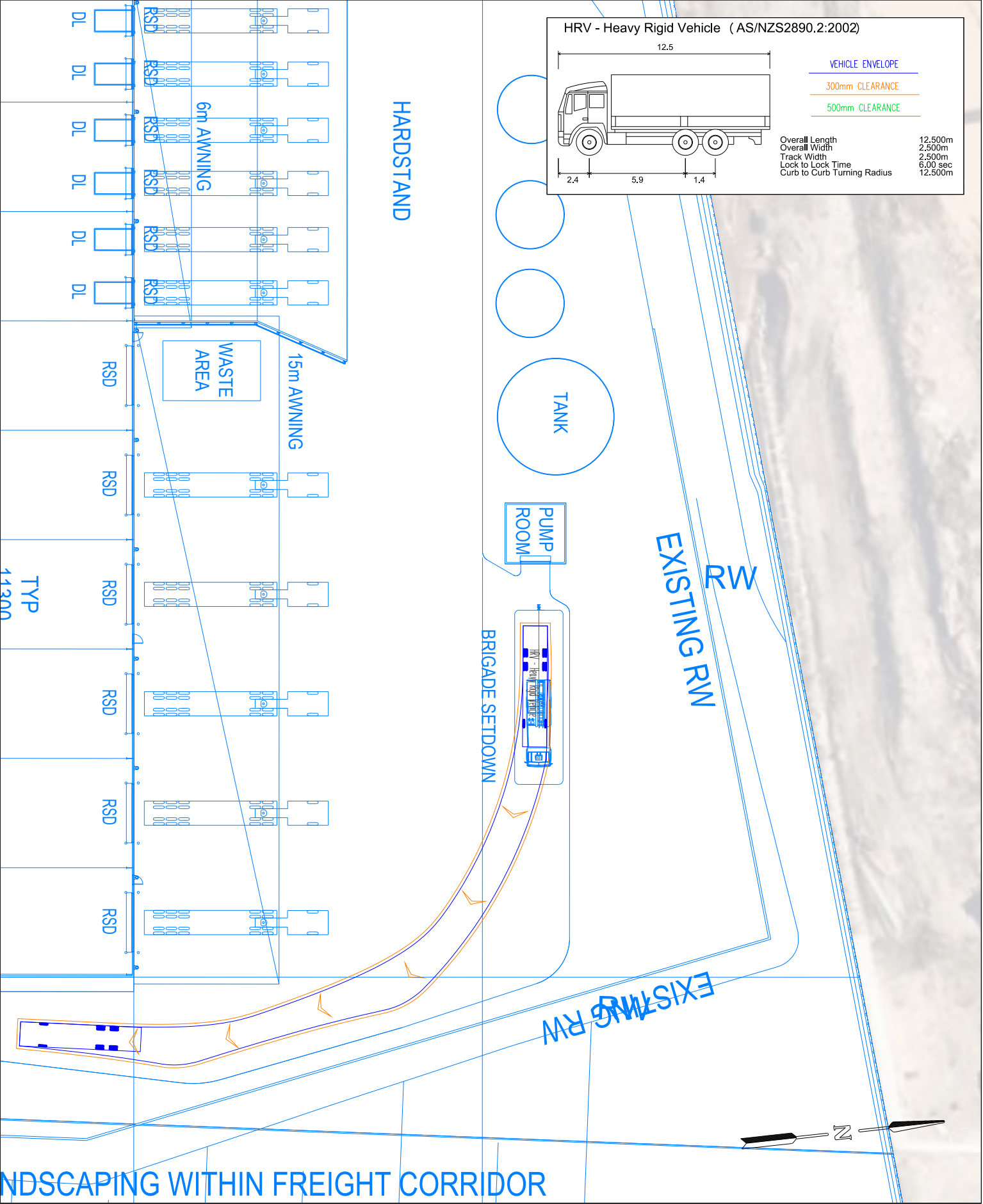
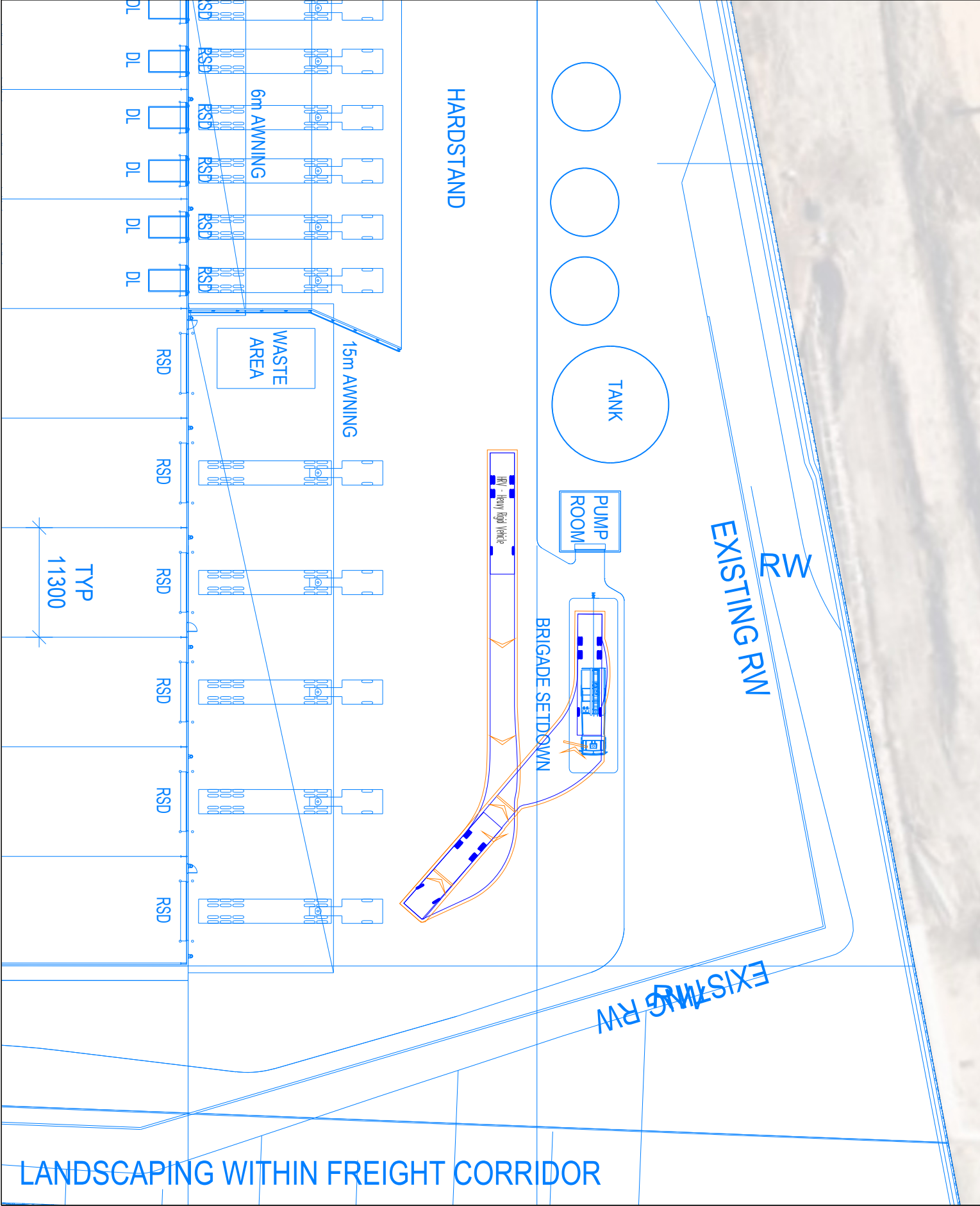
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au



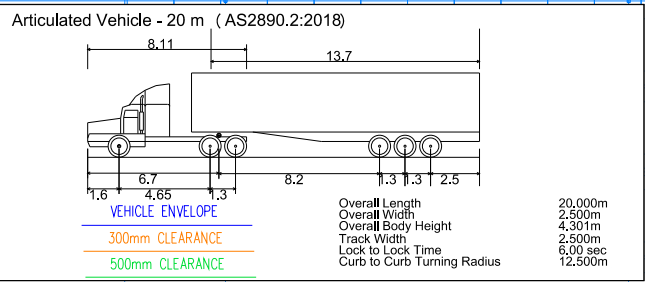
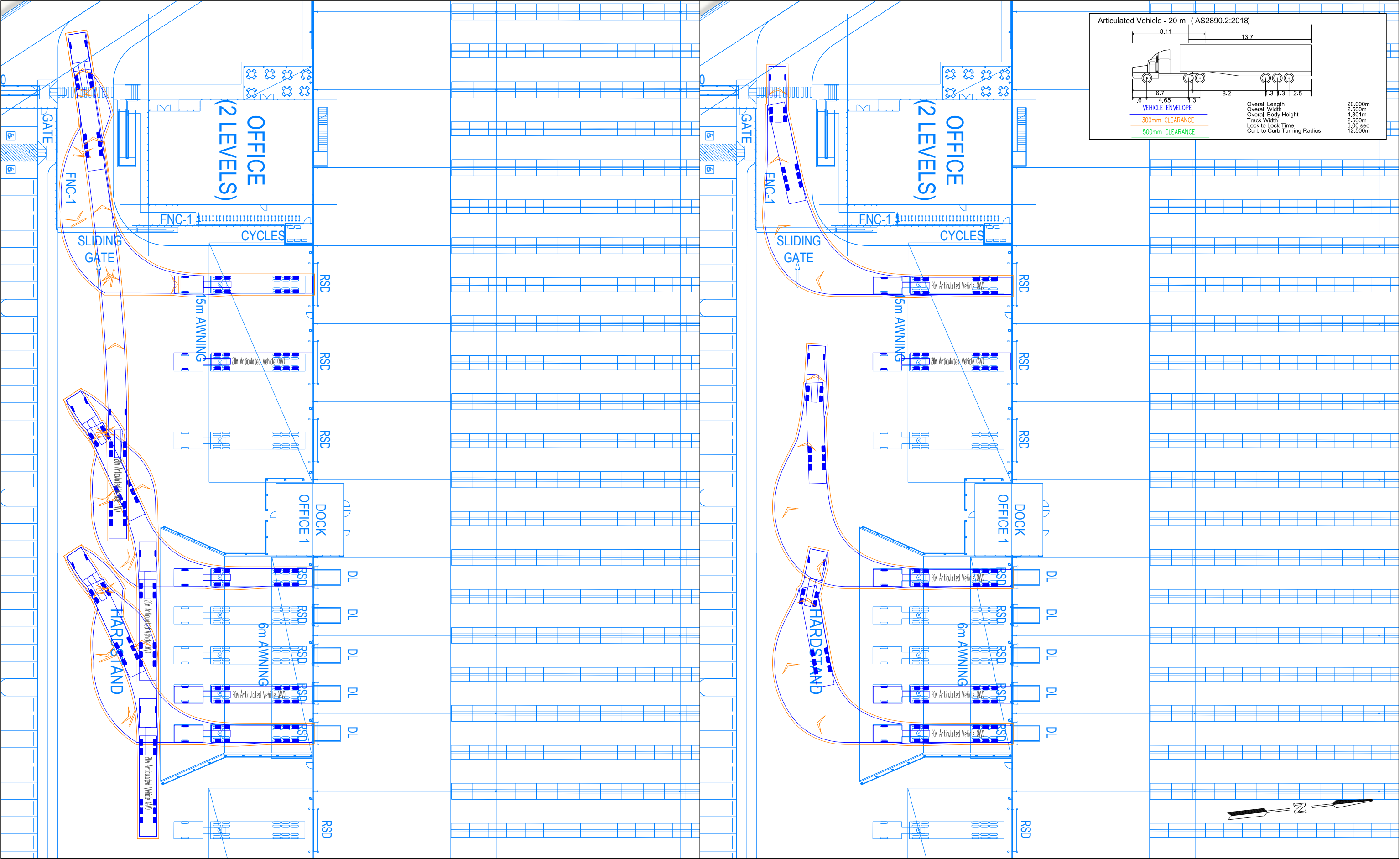
GENERAL NOTES This drawing is provided for information purposes only and should not be used for construction. Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025. Swept path assessments completed at 10 km/h and 300mm clearance.	DESIGNED Angela Ji	PAPER SIZE A3	CLIENT MIRVAC	DOCUMENT INFORMATION ASPECT INDUSTRIAL ESTATE LOT 4	
	APPROVED BY R. Hazell	DATE 07.11.2025	PROJECT P1029B	SWEPT PATH ASSESSMENT	
	SCALE 1:500	0 5 10	ASPECT INDUSTRIAL ESTATE LOT 4	FILE NAME AG1029B-02-v03.dwg	SHEET AG09

asongroup
Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000
info@asongroup.com.au

ASON ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE USE OF UNAPPROVED PLANS IN ANY CONSTRUCTION OR FOR ANY COMMERCIAL PURPOSES. SET OUT DIMENSIONS OF ALL DESIGN LINES, GRID LINES, CONTROL LINES, RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED AGAINST THE LATEST INFORMATION AT CONSTRUCTION. ASON IS TO BE NOTIFIED IMMEDIATELY OF ANY ERROR OR DISCREPANCY AND THE MATTER RESOLVED PRIOR TO THE COMMENCEMENT OR CONTINUATION OF ANY WORK. THIS NOTE IS AN INTRINSIC PART OF THIS PLAN DATA. REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH REPRODUCTION INVALID AND NOT SUITABLE FOR USE. ASON GROUP, ASON GROUP'S DESIGN AND LIABILITY FOR THE INFORMATION CONTAINED IN THIS DOCUMENT OR NOT CAUSED BY THE FAILURE TO INFORM ANY SUCH THIRD PARTY OF THE LIMITATIONS WHICH APPLY TO THE INFORMATION CONTAINED IN THIS DOCUMENT. THE ACCOMPANYING DATA.



GENERAL NOTES This drawing is provided for information purposes only and should not be used for construction. Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025. Swept path assessments completed at 10 km/h and 300mm clearance.	DESIGNED Angela Ji	PAPER SIZE A3	CLIENT MIRVAC	DOCUMENT INFORMATION ASPECT INDUSTRIAL ESTATE LOT 4	
	APPROVED BY R. Hazell	DATE 07.11.2025	PROJECT P1029B	SWEPT PATH ASSESSMENT	
	SCALE 1:500	0 5 10	ASPECT INDUSTRIAL ESTATE LOT 4	FILE NAME AG1029B-02-v03.dwg	SHEET AG10
	asongroup Suite 17.02, Level 17, 1 Castlereagh St Sydney NSW 2000 info@asongroup.com.au				



GENERAL NOTES

This drawing is provided for information purposes only and should not be used for construction.
Base Plan (Project 25229, Drawing DA02, Rev J) prepared by SBA Architects, received 30.10.2025.
Swept path assessments completed at 10 km/h and 300mm clearance.

DESIGNED

Angela Ji

APPROVED BY

R. Hazell

SCALE

1:500

PAPER SIZE

A3

DATE

07.11.2025

0 5 10

CLIENT

MIRVAC

PROJECT

P1029B

ASPECT INDUSTRIAL ESTATE LOT 4

DOCUMENT INFORMATION

ASPECT INDUSTRIAL ESTATE LOT 4

SWEPT PATH ASSESSMENT

FILE NAME

AG1029B-02-v03.dwg

SHEET

AG11

asongroup

Suite 17.02, Level 17, 1 Castlereagh St
Sydney NSW 2000

info@asongroup.com.au



Appendix E Approved Preliminary Construction Traffic Management Plan

Preliminary Construction Traffic Management Plan

Lot 54 – 58 Mamre Road, Kemps Creek

Ref: 1029r03v1
30/07/2020

Document Control

Project No: 1029

Project: Lot 54 – 58 Mamre Road, Kemps Creek

Client: Mirvac Projects Pty Ltd

File Reference: 1029r03v1 Draft CTMP_Mamre Road

Revision History

Revision	Date	Details	Author	Approved by
-	15/05/2020	Draft	V. Cheng	A. Reisch
I	29/05/2020	Final	V. Cheng A. Reisch	A. Reisch

This document has been prepared for the sole use of the Client and for a specific purpose, as expressly stated in the document. Ason Group does not accept any responsibility for any use of or reliance on the contents on this report by any third party. This document has been prepared based on the Client's description of its requirements, information provided by the Client and other third parties.

Table of Contents

1	INTRODUCTION	1
1.1	OVERVIEW	1
1.2	SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS	1
2	THE SITE	3
2.1	SITE LOCATION.....	3
2.2	ROAD NETWORK.....	4
2.3	CRASH DATA AT KEY INTERSECTIONS.....	5
3	OVERVIEW OF CONSTRUCTION WORKS	8
3.1	STAGING AND DURATION OF WORKS.....	8
3.2	CONSTRUCTION HOURS	8
3.3	SITE ACCESS	9
3.4	CONSTRUCTION VEHICLE ACCESS ROUTES.....	11
3.5	FENCING REQUIREMENTS.....	12
3.6	MATERIALS HANDLING	13
3.7	ADDITIONAL SITE MANAGEMENT	13
3.8	ROAD OCCUPANCY	13
3.9	CTMP – MONITORING & REVIEW PROCESS	13
4	ASSESSMENT OF TRAFFIC & TRANSPORT IMPACTS.....	14
4.1	CONSTRUCTION VEHICLE TRAFFIC GENERATION	14
4.2	MAMRE ROAD & SITE ACCESS ROAD GEOMETRY	15
4.3	MAMRE ROAD & SITE ACCESS ROAD OPERATIONS.....	15
4.4	FUTURE ROAD SAFETY	17
4.5	VEHICLE MANAGEMENT – PRINCIPLES	17
4.6	CONSTRUCTION STAFF PARKING	17
5	TRAFFIC CONTROL.....	18
5.1	TRAFFIC CONTROL	18
5.2	AUTHORISED TRAFFIC CONTROLLER.....	18
6	MONITORING AND COMMUNICATION STRATEGIES	19
6.1	DEVELOPMENT OF MONITORING PROGRAM	19
6.2	COMMUNICATIONS STRATEGY	19
7	SUMMARY.....	20

Appendices

Appendix A: Driver Code of Conduct

Appendix B: Traffic Control Plan

1 Introduction

1.1 Overview

Ason Group has been engaged by Mirvac Projects (Mircvac) to prepare a Draft Construction Traffic Management Plan (CTMP) in regard to the future construction of the Aspect Industrial Estate (AIE) at Lots 54 – 58 Mamre Road, Kemps Creek (the Site).

This CTMP details the proposed construction management strategies which would provide for the safe and efficient completion of the proposed works while minimising construction traffic impacts on the surrounding road network and public road network users.

From the outset, it is noted that the this CTMP is designed to be updated over time as additional details in regard to the construction proposal are revised / finalised as is standard in any major construction project, noting that all such updates would be completed in consultation with Penrith City Council (Council) in whose Local Government Area (LGA) the Site lies; and / or with the relevant authorities such as Transport for NSW (TfNSW) where special road occupancy or the like are required.

Importantly, Ason Group has been responsible for the preparation of this CTMP, which has been prepared with reference to all available information in regard to the construction program, and all relevant CTMP preparation guidelines. The implementation of the recommendations and strategies detailed in this CTMP are the strict responsibility of Mirvac and / or Mirvac's designated construction Project Manager.

1.2 Secretary's Environmental Assessment Requirements

Secretary's Environmental Assessment Requirements (SEARs, dated 30 April 2020) have been received from the Department of Planning, Industry & Environment (DPIE); these include general SEARs provided by DPIE, as well as more detailed SEARs provided by TfNSW, a number of which speak directly to the scope of work required in this CTMP.

A summary of the TfNSW SEARs is provided in Table 1 below; where relevant, Ason Group has provided a summary response to each SEAR, and reference to the section of this CTMP providing a more detailed assessment of each SEAR.

Table 1: TfNSW Requirements Compliance Table

Reference	Requirement	Response
1.11	The preparation of a preliminary Construction Pedestrian and Traffic Management Plan (CPTMP) to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:	
1.11.1	assessment of cumulative impacts associated with other construction activities (if any);	This preliminary CTMP has considered the cumulative construction impacts of future development across the Mamre Road Precinct, including the Mamre Road Upgrade and key connections to the existing and future regional road network. This is discussed further in Section 4.3. Due to uncertainties in regard to the timing of development across the Mamre Road Precinct, the modelling of the Site access intersection includes background traffic growth to 2022, by which time it is expected that the construction task will be completed. It is noted that TfNSW has recently commenced a detailed traffic modelling assessment of the broader Mamre Road Precinct; the outcomes of this assessment will be instrumental to future revisions to this CTMP as required.
1.11.2	an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;	An assessment of the existing crash data is provided in Section 2.3. An assessment of potential heavy vehicle impacts is provided in Section 4.4. As heavy vehicles will only utilise TfNSW Restricted Access Vehicle routes - routes which have little pedestrian activity - there is no expectation of any impacts on pedestrian safety.
1.11.3	details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;	See Section 3.1 and 3.2 .
1.11.4	details of anticipated peak hour and daily construction vehicle movements to and from the site;	See Section 4.1
1.11.5	details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle;	See Section 3.3 and 4.6 .
1.11.6	details of temporary cycling and pedestrian access during construction	See Section 3.3.3 .

2 The Site

2.1 Site Location

The Site is legally described as Lots 54 – 58 in DP 259135, Mamre Road Kemps Creek, and has an area of approximately 56.3 hectares (ha). The Site is located approximately 6.5km north-east of the future Western Sydney International (Nancy-Bird Walton) Airport (WSA), 13.5km south-east of the Penrith CBD and 40km west of the Sydney CBD.

The Site in its sub-regional context is shown in **Figure 1**, as well as the broader Mamre Road Precinct as designated by DPIE.

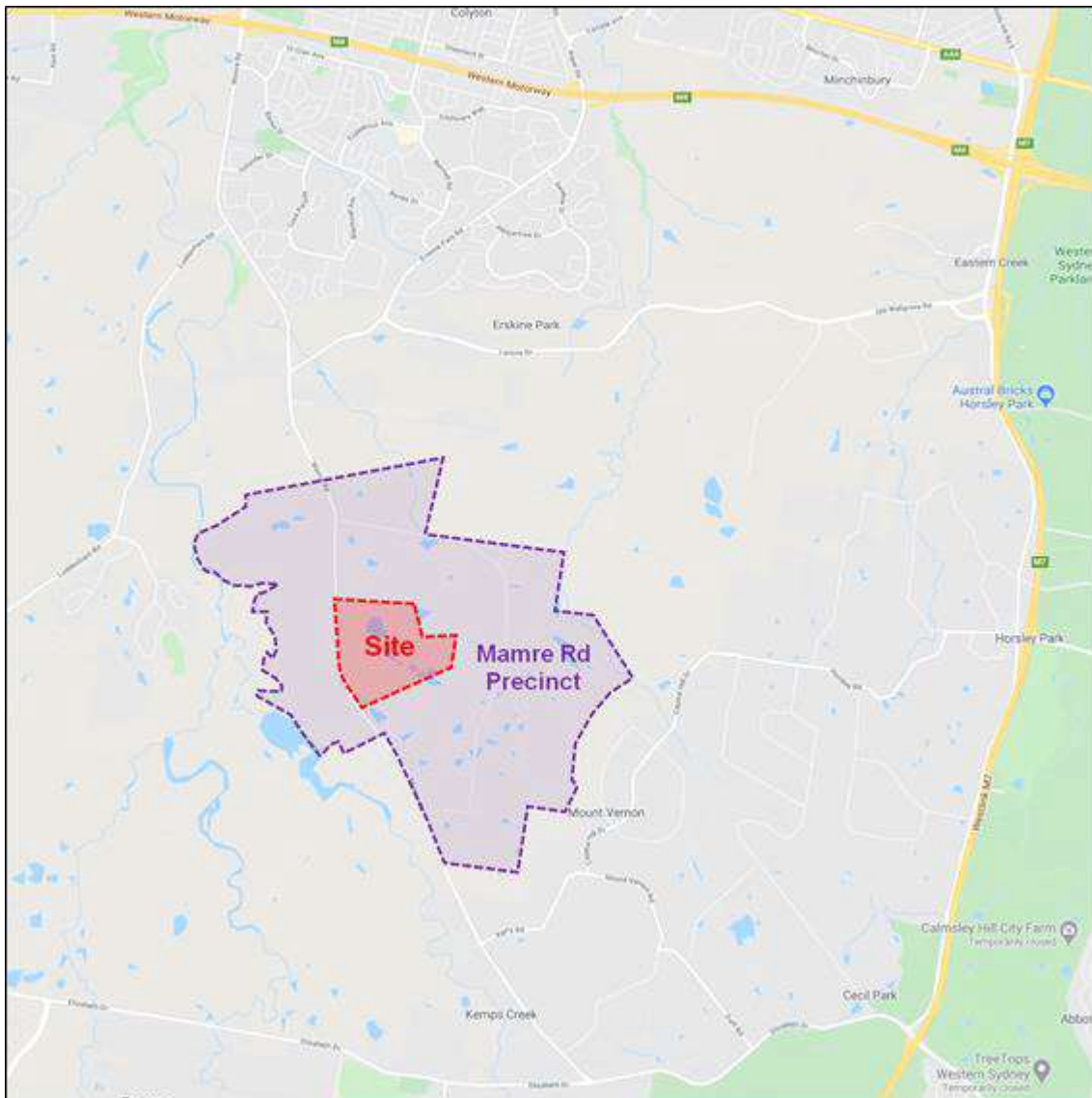


Figure 1: Site Location

2.2 Road Network

Key roads in the vicinity of the Site are shown in **Figure 1**, and include:

- **Westlink M7 Motorway:** M7 Motorway is a high capacity road link of state significance and was built to accommodate future traffic growth in the Western Sydney region. It provides a key north-south link between the M2 Motorway to the north and the M5 Motorway to the south as part of the Sydney orbital road network. A major interchange between the M7 Motorway and M4 Western Motorway is located approximately 3.5 km north of the Site, which connects the Sydney CBD and western Sydney suburbs. The M7 Motorway provides 4 lanes (2 lanes per direction, divided carriageway) and has a posted speed limit of 100 km/h
- **(Future) M12 Motorway:** A proposed 16km motorway generally running in an east-west between the existing M7 motorway and the Northern Road. It is expected to run in parallel with Elizabeth Drive and is to have 2 lanes in each direction separated by a central median. Construction is expected to commence in 2020.
- **Wallgrove Road:** Wallgrove Road is an arterial road that runs in a north-south direction to the east of the Site and parallel (to the west of) the M7, functioning as a service road. The 2-lane, two-way road provides a link between the Great Western Highway to the north and Elizabeth Drive to the south. As with the M7, Wallgrove Road connects to the M4 motorway approximately 2.5 kilometres to the north of the Site.
- **Elizabeth Drive:** An TfNSW classified main road (MR 535) that runs in an east-west direction to the south of the site. Elizabeth Drive in the vicinity of the site generally provides 2 lanes (1 lane per direction) and has a posted speed limit of 80km/h. This road forms the Site's southern frontage and provides a vital link between Westlink M7 Motorway and The Northern Road.
- **The Northern Road:** The Northern Road is TfNSW classified main road (MR 154) that runs in a north-south direction to the west of the site. The Northern Road section near the vicinity of the site generally provides 3 lanes (1 to 2 lanes per direction) and has a posted speed limit of 80km/h. Currently, The Northern Road is undergoing multiple stages of road upgrades by RMS, including a realignment of the road in the south. The road upgrades between The Old Northern Road, Narellan and Peter Brock Drive, Oran Park, has been completed.
- **Mamre Road:** Mamre Road is an arterial road servicing traffic between the Great Western Highway and M4 to the north and Elizabeth Drive to the south. In the vicinity of the Site, Mamre Road generally provides 2 lanes for two-way traffic, with additional through movement and turning infrastructure at key intersections to the north through the Erskine Park and Mamre West industrial precincts, and at Elizabeth Drive to the south. Mamre Road has a posted speed limit of 80km/h in the vicinity of the Site. TfNSW has confirmed road upgrades will be undertaken for Mamre Road between Elizabeth Drive and Luddenham Road.

Further to the above, it is clear that the Site is well located in regard to immediate access to the local and sub-regional road network, as shown in **Figure 2** with specific reference to TfNSW Restricted Access Vehicle (RAV) routes, which allow for up to 25m/26m B-Double combinations.

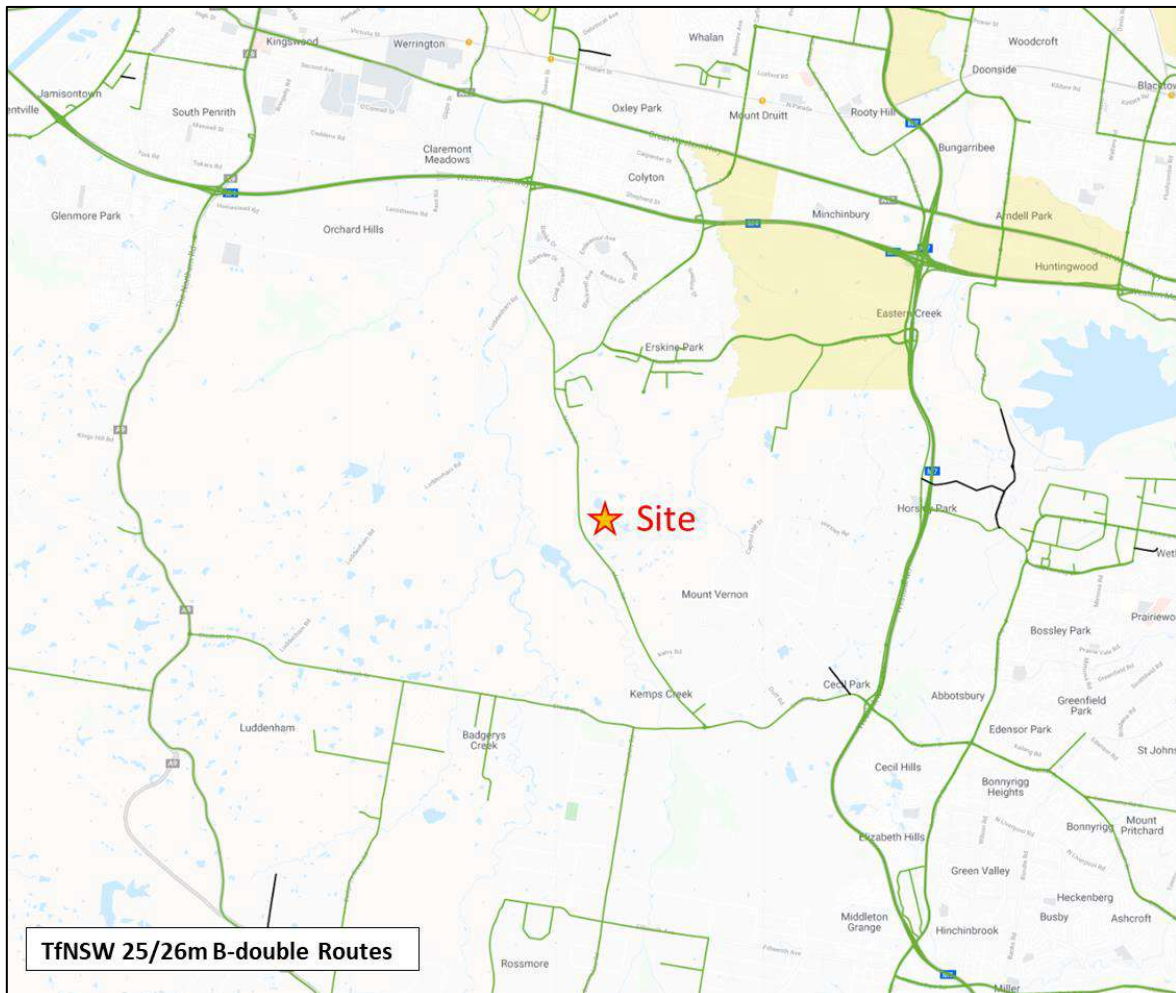


Figure 2: TfNSW Approved 25/26m B-Double Routes

2.3 Crash Data at Key Intersections

Mamre Road will be the key road to access the Site for heavy vehicles. As such, a crash history of the road and nearby key intersections of Mamre Road / Bakers Lane and Mamre Road / Abbots Road have been reviewed using TfNSW Centre for Road Safety's crash statistics between 2014 – 2018. **Figure 3** below details all crashes identified by TfNSW, while

Table 2 details the severity of each of these crashes.

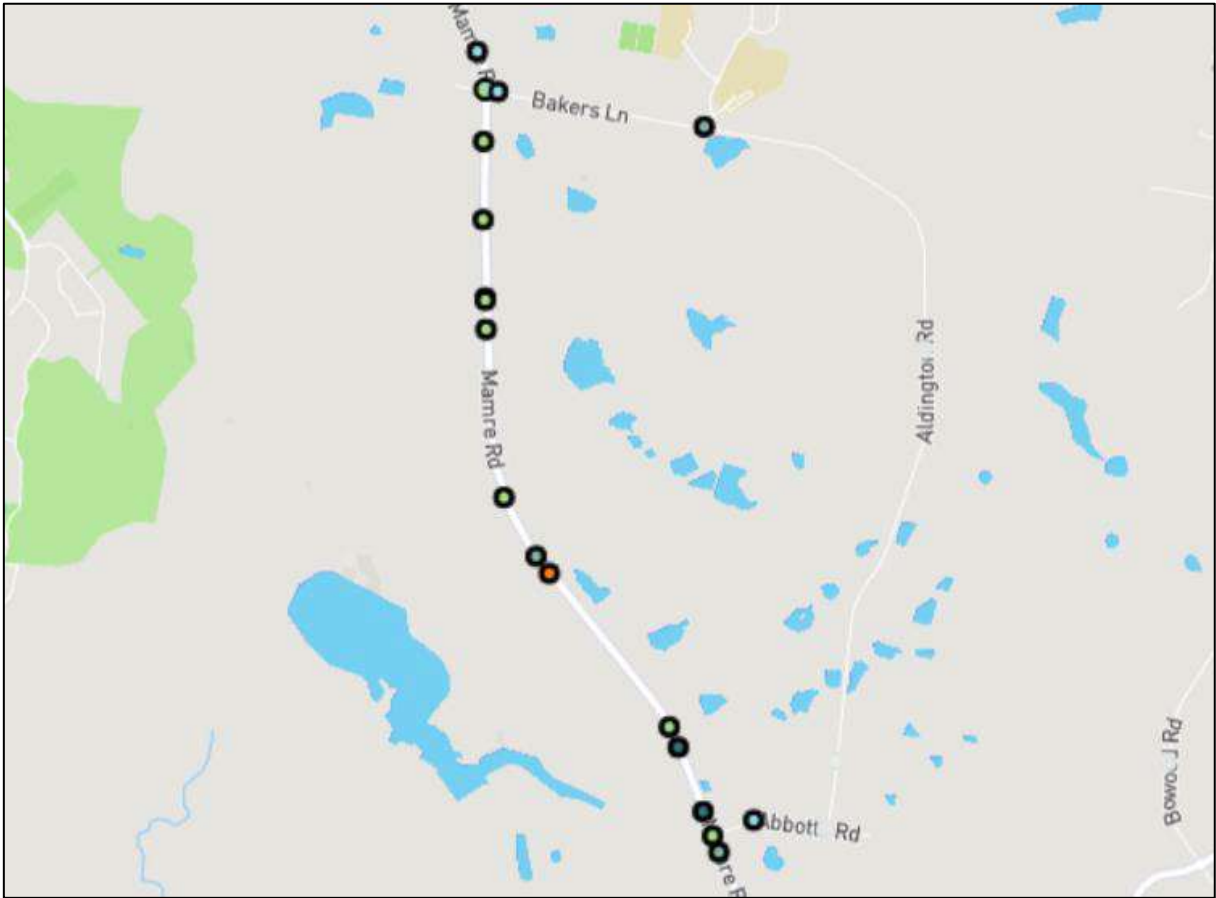


Figure 3: Crash History along Mamre Road

Table 2: Historical Crash Data

Year	Degree of Crash	RUM Code	RUM Description
<i>Mamre Road / Bakers Lane</i>			
2014	Minor/Other Injury	30	Rear end
2017	Non-casualty	19	Other adjacent
2017	Minor/Other Injury	39	Other same direction
<i>Mamre Road</i>			
2014	Minor/Other Injury	30	Rear end
2014	Non-casualty	71	Left off carriageway into object / parked vehicle
2014	Serious Injury	71	Left off carriageway into object / parked vehicle
2015	Moderate Injury	71	Left off carriageway into object / parked vehicle
2015	Non-casualty	83	Off carriageway right on right bend into object / parked vehicle
2016	Non-casualty	30	Rear end
2017	Non-casualty	39	Other same direction
2017	Non-casualty	32	Right rear
2017	Serious Injury	49	Other maneuvering
2017	Non-casualty	30	Rear end
2017	Fatal	20	Head on
<i>Mamre Road / Abbotts Road</i>			
2015	Moderate Injury	59	Other overtaking
2016	Non-Casualty	19	Other adjacent

As shown in **Table 2**, there has only been one fatality in the vicinity of the Site (2017) and no crashes are reported in the vicinity of the Site during 2018.

3 Overview of Construction Works

3.1 Staging and Duration of Works

Based on information provided to Ason Group by Mirvac, it is anticipated that construction works would commence in Start 2021 and be completed over a duration between 2-3 years, subject to authority approvals and inclement weather delays.

The following summarises key aspects of the construction stages:

- Demolition works are set to have a duration for 8-12 weeks commencing Start 2021.
- Excavation activities would continue for 12-18 months commencing Start 2021 finishing Mid-Late 2022.
- General Construction works are estimated to continue concurrently to excavation activities for 12-24 months commencing Mid-End 2021.

3.2 Construction Hours

The type of work being undertaken will remain consistent throughout the duration of construction and associated activities. All works will be undertaken within the following hours:

- Monday to Friday (other than Public Holidays): 7:00am – 6:00pm.
- Saturday: 8:00am – 1:00pm
- Sunday & Public Holidays: No works to be undertaken.

Any work to be undertaken outside of the standard construction hours will be required to obtain an Out of Hours (OOH) approval; any such works would necessarily be undertaken in accordance with the appropriate OOH protocols and approval processes.

3.3 Site Access

3.3.1 Construction Vehicle Access

All construction vehicles will enter and depart the Site from / to Mamre Road via a temporary access driveway, which be constructed on the alignment of the future Access Road 1.

It is anticipated that the largest vehicle accessing the Site would be a 19.6m Truck & Dog combination, which the temporary access driveway will be designed for. It is expected that two-way heavy vehicle flow would be enabled along Mamre Road. Regardless, construction management protocols will require that the vehicle entering site access road will have right of way in order to ensure that there is no queueing on Mamre Road.

It is anticipated that for the first stages of construction (at least), access to and from the Site onto Mamre Road will be restricted to left-in and left-out movements; this is discussed further in **Section 4**. The following **Figure 4** shows the indicative Site access location.

Further to this restriction, **Figure 5** details the likely key access strategy into the routes between the Site and the regional road network.



Figure 4: Indicative Vehicle Access Plan

3.3.2 Emergency Vehicle Access

Emergency vehicle access to and from the Site will be available at all times while the Site is occupied by construction workers; emergency protocols during the works will be developed by the Project Manager for inclusion within the final CTMP.

3.3.3 Pedestrian Access

There are currently no pedestrian amenities or footpaths along Mamre Road adjacent to the Site. However, the grassed verge on both sides of the road remains usable for any pedestrian that may wish to walk along Mamre Road.

Further to the above, while there is no expectation of pedestrians crossing the future construction access road (at Mamre Road), pedestrian safety will be managed through the provision of appropriate signage and pedestrian barriers. Construction personnel will also be able to access the Site by foot via a secure access gate along the temporary access road, though with all construction staff (and vehicle) parking to be provided within the Site there is again little potential for such pedestrian demand.

3.4 Construction Vehicle Access Routes

As discussed, all construction vehicles will enter and exit the Site via Mamre Road.

It is anticipated that all heavy vehicles will access Site via the approved RAV routes shown in **Figure 2**, though the following routes are expected to provide for the majority of construction vehicle trips:

➤ Arrival Trips:

- Route 1: From M4 Western Motorway, southbound along Mamre Road and left into the Site.
- Route 2: From Westlink M7, westbound on Old Wallgrove Road, Lenore Drive and Erskine Park Road, then south along Mamre Road and left into the Site.

➤ Departure Trips:

- Route 1: From the Site, left onto Mamre Road then south to Elizabeth Drive and left to the M7 Motorway and sub-regional routes to the east.
- Route 2: From the Site, left onto Mamre Road then south to Elizabeth Drive and right to Badgerys Creek and The Northern Road to the west.

These routes are shown in **Figure 5**.

A copy of the approved routes will be distributed by the Project Manager to all drivers as part of their induction process.

In the event that an oversized or over-mass vehicles is required to travel to and / or from the Site, a permit from Roads and Maritime Services and / or the National Heavy Vehicle Register (NHVR) will be required prior to arrival to the site. Notwithstanding, this CTMP relates to general construction which does not seek the use of oversize vehicles; a separate application would be submitted if such access is required.

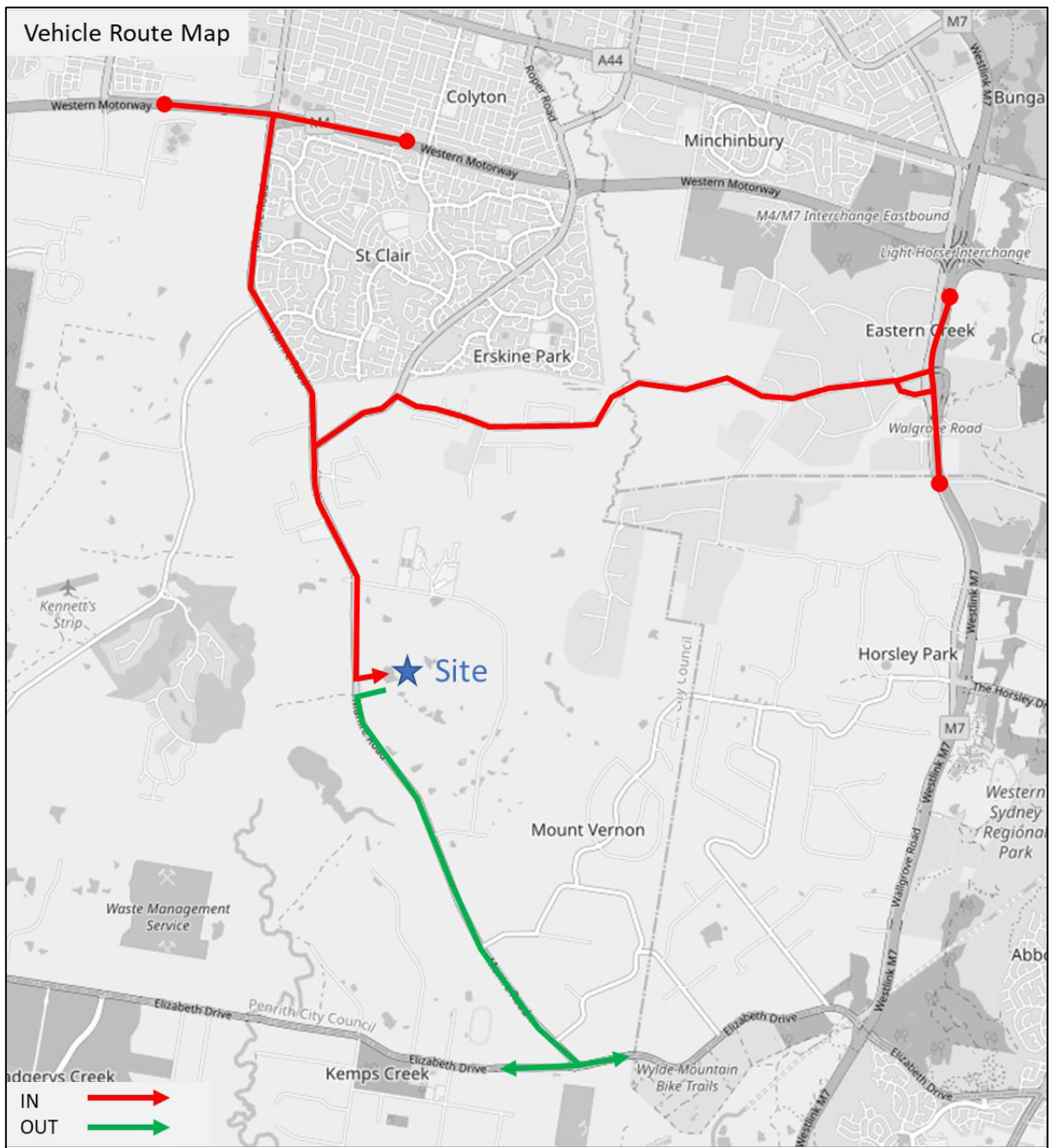


Figure 5: Construction Vehicle Routes

3.5 Fencing Requirements

Security fencing will be erected along the entire boundary of the Site and will be maintained for the duration of the construction works to ensure that unauthorised persons are kept out of the Site. The fencing will either be ATF or 2.4m chain wires.

Site access gates would be provided at the temporary driveway which would remain closed at all times outside of the permitted construction hours.

3.6 Materials Handling

All material loading will be undertaken wholly within the Site, and all construction equipment, materials and waste will similarly be strictly kept within the Site.

While not anticipated, should any materials handling (or other constructed related activity) be required from the public roadway (i.e. Mamre Road) then prior approval shall be sought and obtained from the appropriate authorities.

3.7 Additional Site Management

Although it is not expected, in the event that any Site construction traffic management outside of that described in this CTMP is required, the Project Manager will be required to notify adjacent properties of any temporary traffic restrictions (or the like) at least fourteen (14) days in advance.

3.8 Road Occupancy

The potential exists for future road occupancy requirements to facilitate the construction of the temporary driveway, and then any further upgrades to the intersection of Mamre Road. Road occupancy permits will necessarily be procured prior to starting intersection construction works, while a detailed intersection-specific CTMP would be prepared in consultation with Council and Roads & Maritime to ensure traffic along Mamre Road would continue to operate adequately during any such occupancy period.

3.9 CTMP – Monitoring & Review Process

This CTMP has been prepared referencing the existing Site conditions and information provided by Mirvac. Consultation with Council, Roads and Maritime and neighbouring developments will continue to be undertaken to ensure that the cumulative traffic impacts of construction within the area do not adversely impact the operations of the neighbouring developments or the local road network.

4 Assessment of Traffic & Transport Impacts

4.1 Construction Vehicle Traffic Generation

Table 3 provides a breakdown of potential vehicle movements throughout the proposed works (as provided by Mirvac):

Table 3: Movement Overview

Stage	Demolition	Excavation	General Construction
Worker Numbers (Maximum on-site at any one time)	50 - 100	50 – 200	50 – 400
Truck Frequency (Maximum movements per day)	100 (50 in / 50 out)	600 (300 in / 300 out)	600 (300 in / 300 out)
Peak Hour Heavy Vehicle Movements	50 (25 in / 25 out)	120 (60 in / 60 out)	120 (60 in / 60 out)
Largest Vehicle Size	Truck & Dog	Truck & Dog	Truck & Dog

4.1.1 Light Vehicle Movements

It is anticipated that a peak construction workforce of up to 400 workers on-site at any one time (based on the specific constructions tasks being undertaken). Light vehicle traffic generation would generally be associated with construction staff movements to and from the Site, including Project Managers, trade and general employees.

With respect to the potential impacts of light vehicle traffic, the overwhelming majority of trips would occur in the short workforce arrival and departure periods, being (based on the proposed construction hours) 6:30am – 7:00am and 6:00pm – 6:30pm respectively; as such, these movements would occur outside of the existing (commuter) peak periods in the local network.

4.1.2 Heavy Vehicle Movements

As indicated in **Table 3**, the construction works are estimated to generate a peak demand for up to 600 truck movements per day (300 vehicles arriving / 300 vehicles departing). To provide a conservative assessment of intersection operations, a peak hour truck generation of up to 120 movements (60 vehicles arriving / 60 vehicles departing) has been assigned; on average, it is expected there would be approximately 60 truck movements per hour (30 vehicles arriving / 30 vehicles departing).

For modelling purposes, it is expected that there will be a 50% / 50% arrival and departure profile in the AM peak, and 50% / 50% arrival and departure profile in the PM peak.

4.2 Mamre Road & Site Access Road Geometry

As discussed, all construction vehicles will use the temporary access road to Mamre Road for access to / from the Site, with movements restricted to left in / left out only. This access intersection will design such that arriving vehicles are able to immediately enter the Site so as to remove the potential for queuing back to Mamre Road.

4.3 Mamre Road & Site Access Road Operations

4.3.1 Future Intersection Volumes

For the assessment of the Mamre Road & Site Access Road operations, Mamre Road traffic volumes for a forecast year 2023 have been developed with reference to the Mamre Road Upgrade traffic assessments; these flows represent average annual growth of between 4% and 8% during the peak periods for northbound and southbound through movements.

As discussed previously, a peak of 120 truck trips per hour (60 arrivals and 60 departures) has then been assigned to provide a worst-case assessment. The resulting intersection volumes during the AM and PM peak hours are shown in **Figure 6**.

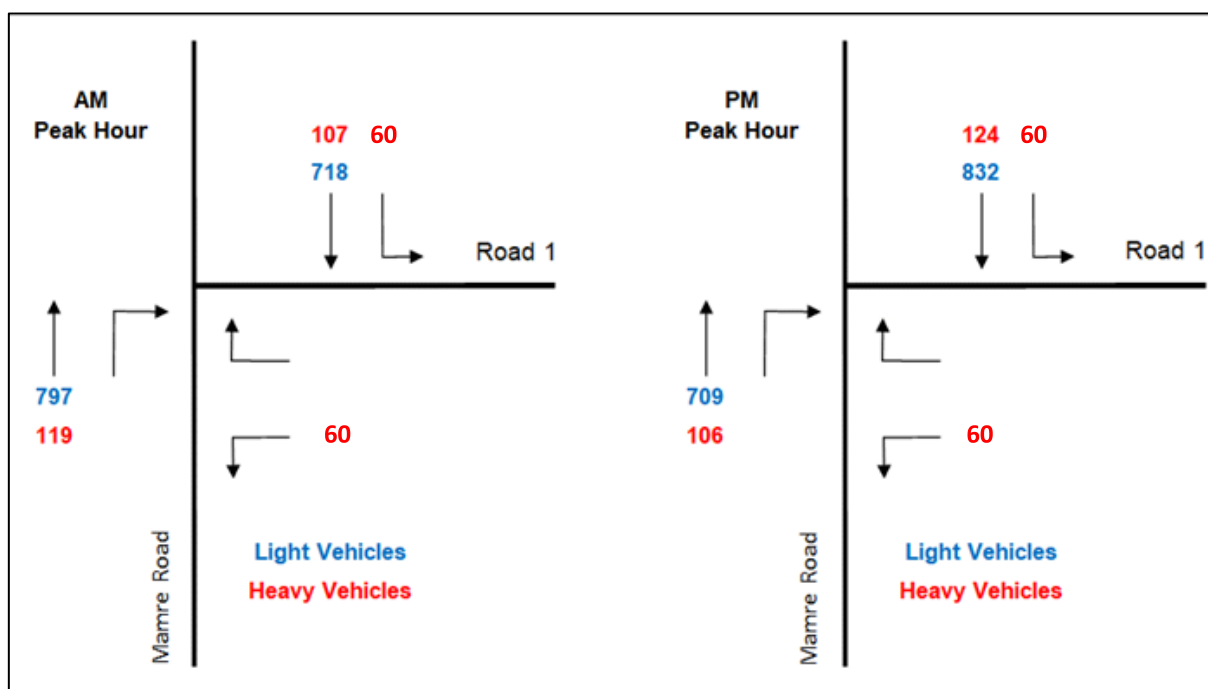


Figure 6: Future Site Intersection Flows

4.3.2 SIDRA Modelling

SIDRA intersection modelling has been undertaken to establish the existing performance of key intersections in the vicinity of the Site so as to provide an appropriate baseline against which the relative impacts of the works can be measured.

In this regard, SIDRA modelling outputs a range of performance measures relevant to this assessment, including:

- *Degree of Saturation (DOS)* – The DOS is used to measure the performance of intersections where a value of 1.0 represents an intersection at theoretical capacity. As the performance of an intersection approaches DOS of 1.0, queue lengths and delays increase rapidly. It is recommended that DOS to be less than 0.9, with satisfactory intersection operation generally achieved with a DOS below 0.8.
- *Average Vehicle Delay (AVD)* – The AVD (or average delay per vehicle in seconds) for intersections also provides a measure of the operational performance and is used to determine an intersection's Level of Service (see below). For signalised intersections, the AVD reported relates to the average of all vehicle movements through the intersection. For priority (Give Way, Stop & Roundabout controlled) intersections, the AVD reported is that for the movement with the highest AVD.
- *Level of Service (LOS)* – This is a comparative measure that provides an indication of the operating performance, based on AVD.

Table 4 below provides a summary of the RMS LOS criteria.

Table 4: Level of Service Criteria for Intersections

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way and Stop Signs
A	less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity; at signals, incidents will cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	More than 70	Unsatisfactory and requires additional capacity.	Unsatisfactory and requires other control mode or major treatment.

4.3.3 Future Intersection Operation

Further to the above, the results of the SIDRA analysis of future operations are summarised in **Table 5** below.

Table 5: Future Intersection Performance

Intersection	Control Type	Period	Intersection Delay	Level of Service
Mamre Road & Site Access Road	Priority (Left-in & Left-out)	AM	25.0	B
		PM	54.7	D

With reference to **Table 5**, the SIDRA analysis indicates that the peak construction trip generation of the Site can be accommodated at the Mamre Road access intersection. Important, the reported delays primarily relate to vehicles departing the Site, not to Mamre Road [southbound] through movements.

4.4 Future Road Safety

It is noted that there will be an increased number of heavy vehicles along Mamre Road during the construction period. However, the heavy vehicles will be travelling along approved RAV routes which would mitigate road safety impacts along local roads and heavily pedestrianised areas. Traffic control plans at the Site's access will be designed to minimise pedestrian and cyclists impacts along Mamre Road.

4.5 Vehicle Management – Principles

In accordance with TfNSW requirements, all vehicles transporting loose materials would have the entire load covered and/or secured to prevent any large items, excess dust or dirt particles depositing onto the roadway during travel to and from the Site.

Further to covering/securing the load to prevent deposits onto the roadway, a Shaker Grid is proposed and installed at the point of vehicle egress to minimise the risk of dirt tracking out onto Mamre Road. The responsibility of the driver to ensure that the Shaker Grid is driven over would be included as part of the Driver Code of conduct; this requirement, and indeed all driver requirements, will be detailed during an induction process for all drivers prior to commencing work at the Site, and will be further detailed in the Driver Code of Conduct, a copy of which included in **Appendix A**.

4.6 Construction Staff Parking

All construction staff and contractors will be required to park wholly within the Site, noting that there will be significant area available (at all times) to meet the peak parking demand.

5 Traffic Control

5.1 Traffic Control

The RMS guide “Traffic Control at Worksites” (TCAW) manual contains standard traffic control plans (TCPs) for a range of work activities. The manual’s objective is to maximise safety by ensuring traffic control at worksites complies with best practice.

The RMS TCAW outlines the requirements for a Vehicle Movement Plan (VMP) for construction works such as proposed; a VMP is a diagram showing the preferred travel paths for vehicles associated with a work site entering, leaving or crossing the through traffic stream. A VMP should also show travel paths for trucks at key points on routes remote from the work site such as places to turn around, accesses, ramps and side roads.

Regarding construction work on roads with an average daily total (ADT) in excess of 1,500 vehicles, approach speeds of between 60 km/hr and 80 km/hr, with truck movements > 20 veh/shift, and sight distance is less than 2d, (where d equals the posted speed limit and in this instance the sight distance is required to be up to 120 metres), it would be expected for the following to be required by the RMS TCAW:

- A detailed Traffic Control Plan (TCP) with Traffic controllers
- A VMP.
- Warning Signs required during shifts.

With regard to the proposed temporary access road, a site-specific version of TCP 195 (as shown in **Appendix B**) would be implemented for the duration of the works.

5.2 Authorised Traffic Controller

An authorised Traffic Controller(s) is to be present on-site throughout the proposed works. Responsibilities of the Traffic Controller will include:

- The supervision of all construction vehicle movements into and out of site at all times,
- The supervision of all loading and unloading of construction materials during the deliveries in the construction phase of the project, and
- Pedestrian management, to ensure that adverse conflicts between vehicle movements and pedestrians do not occur, while maintaining radio communication with construction vehicles at all times.

6 Monitoring and Communication Strategies

6.1 Development of Monitoring Program

The development of a program to monitor the effectiveness of this CTMP shall be established by the Project Manager and should consider scheduled reviews as well as additional reviews should construction characteristics be substantially changed (from those outlined in the Final CTMP). All and any reviews of the CTMP should be documented, with key considerations expected to include:

- Tracking heavy vehicle movements against the estimated heavy vehicle flows during the Stage 1 works.
- The identification of any shortfalls in the CTMP, and the development of revised strategies / action plans to address such issues.
- Ensuring that all TCPs are updated (if necessary) by “Prepare a Work Zone Traffic Management Plan” card holders to ensure they remain consistent with the set-up on-site.
- Regular checks to ensure all loads are departing the Site covered as outlined within this CTMP.

6.2 Communications Strategy

A Communications Strategy shall be established by the Project Manager for implementation throughout the construction works; this strategy will outline the most effective communication methods to ensure adequate information within the community and assist the Project Team to ensure the construction works have minimal disruption on the road network. The Communications Strategy will include:

- The erection of appropriate signage providing advanced notice of works and any traffic control measures to be implemented.
- Written notices to surrounding landowners (and tenants) likely to be directly affected by the works, prior to commencement.

Ongoing communication is also required so that all stakeholders are kept up to date of works and potential impacts.

7 Summary

This CTMP has been prepared to ensure appropriate traffic management is undertaken during the proposed industrial development.

Ultimately, this CTMP report has been prepared with regard to the management principles outlined in the RMS Traffic Control at Worksites Manual (2018) and AS1742.3, and per the detailed strategies outlined in the CTMP is recommended for adoption at the Site.

In summary though – and further to a determination that the proposal's construction traffic will not impact the local road network - the following measures are recommended to minimise the potential traffic impacts associated with the proposal:

- Traffic control would be required to manage and regulate construction vehicle traffic movements to and from the Site during construction.
- All vehicles transporting loose materials will have the load covered and/or secured to prevent any items depositing onto the roadway during travel to and from the Site.
- All vehicles are to enter and depart the Site in a forward direction, with reverse movements to occur only within the Site boundary.
- All contractor parking is to be contained wholly within the Site, and.
- Pedestrian and cyclist traffic along the Site frontage will be managed appropriately at all times.

In summary, the CTMP report is proposed in accordance with the RMS TCAW.

Appendix A

Driver Code of Conduct

- Driver Code of Conduct -

Drivers Code of Conduct

Safe Driving Policy for the Lots 54 – 58 Mamre Road, Kemps Creek

Objectives of the Drivers Code of conduct

- To minimise the impact of earthworks and construction on the local and regional road network;
- Minimise conflict with other road users;
- Minimise road traffic noise; and
- Ensure truck drivers use specified routes

Code of Conduct

All vehicle operators accessing the site must:

- Take reasonable care for his or her own personal health and safety.
 - Not adversely, by way of actions or otherwise, impact on the health and safety of other persons.
 - Notify their employer if they are not fit for duty prior to commencing their shift.
 - Obey all applicable road rules and laws at all times.
 - In the event an emergency vehicle behind your vehicle, pull over and allow the emergency vehicle to pass immediately.
 - Obey the applicable driving hours in accordance with legislation and take all reasonable steps to manage their fatigue and not drive with high levels of drowsiness.
 - Obey all on-site signposted speed limits and comply with directions of traffic control supervisors in relation to movements in and around temporary or fixed work areas.
 - Ensure all loads are safely restrained, as necessary.
 - Drive over cattle grids – located at the Site's access – to vibrate off any loose material attached to construction vehicles.
 - Operate their vehicles in a safe and professional manner, with consideration for all other road users.
 - Hold a current Australian State or Territory issued driver's licence.
 - Notify their employer or operator immediately should the status or conditions of their driver's license change in any way.
-

- Comply with other applicable workplace policies, including a zero tolerance of driving while under the influence of alcohol and/or illicit drugs.
- Not use mobile phones when driving a vehicle or operating equipment. If the use of a mobile device is required, the driver shall pull over in a safe and legal location prior to the use of any mobile device.
- Advise management of any situations in which you know, or think may, present a threat to workplace health and safety.
- Drive according to prevailing conditions (such as during inclement weather) and reduce speed, if necessary.
- Have necessary identification documentation at hand and ready to present to security staff on entry and departure from the site, as necessary, to avoid unnecessary delays to other vehicles.

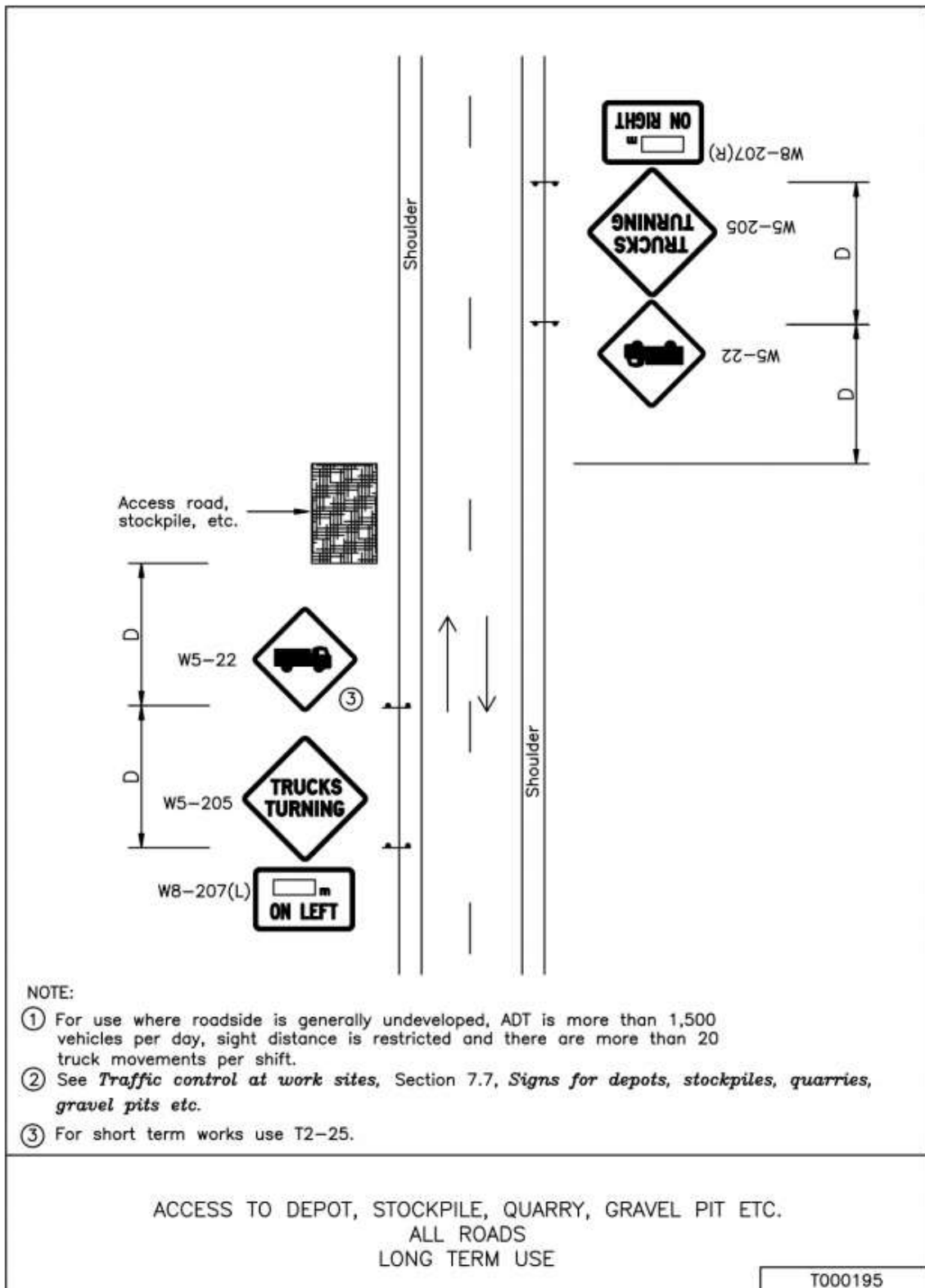
Crash or incident Procedure

- Stop your vehicle as close to it as possible to the scene, making sure you are not hindering traffic. Ensure your own safety first, then help any injured people and seek assistance immediately if required.
 - Ensure the following information is noted:
 - Details of the other vehicles and registration numbers
 - Names and addresses of the other vehicle drivers
 - Names and addresses of witnesses
 - Insurers details
 - Give the following information to the involved parties:
 - Name, address and company details
 - If the damaged vehicle is not occupied, provide a note with your contact details for the owner to contact the company.
 - Ensure that the police are contacted should the following circumstances occur:
 - If there is a disagreement over the cause of the crash.
 - If there are injuries.
 - If you damage property other than your own.
 - As soon as reasonably practical, report all details gathered to your manager.
-

Appendix B

Traffic Control Plan(s)

TCP 195



Appendix F Site-Specific Green Travel Plan

11 December 2025

asongroup.com.au



**Aspect Industrial Estate –
Warehouse 4 Mamre Road
Precinct
Sustainable Travel Plan**

—
P1029B





Document control

Project number	P1029B
Issue number	V01
Project title	Sustainable Travel Plan
Client	Mirvac
File reference	P1029Br02v01 STP_WH4, Aspect Industrial Estate, Kemps Creek

Revision history

Issue no	Date	Details	Author	Reviewer	Approver
V01	11 December 2025	Final	Angela Ji	Rhys Hazell	Rhys Hazell

info@asongroup.com.au
+61 2 9083 6601

Suite 17.02, Level 17,
1 Castlereagh Street,
Sydney NSW 2000

ABN: 81 168 423 872

This document has been prepared for the sole use of the Client and for a specific purpose, as expressly stated in the document. Ason Group does not accept any responsibility for any use of or reliance on the contents on this report by any third party. This document has been prepared based on the Client’s description of its requirements, information provided by the Client and other third parties.

Contents

1	Introduction	1
1.1	Context	1
1.2	Background	1
1.3	Goals	4
1.4	Objectives	4
2	Site Context	5
2.1	Development Site	5
2.2	Public and Active Transport Opportunities	8
2.3	On Demand Services	13
2.4	Existing Travel Patterns	13
3	Sustainable Travel Plan Framework	15
3.1	Travel Plan Scope	15
3.2	Implementation	15
3.3	Consultation	15
3.4	Travel mode targets	16
4	Measures and Action Strategies	18
4.1	Measures	18
4.2	Strategies	18
4.3	Communications Strategy	25
5	Monitoring Strategy	26
5.1	Plan Maintenance	26
5.2	Monitoring	26
Appendix A	Travel Access Guide	27
Appendix B	Sample Questionnaire	28
	Instructions for Surveyor(s)	29
	Travel Mode Questionnaire Survey Form	30

1 Introduction

1.1 Context

Mirvac engaged Ason Group to prepare a Sustainable Travel Plan (STP) in support of the proposed Concept Approval Modification to SSD-10448 (MOD 12) and separate subsequent State Significant Development Application (SSDA) for warehouse and distribution premises of Warehouse 4 development at Aspect Industrial Estate (AIE), located at 788-882 Mamre Road, Kemps Creek (the site). The site is within the Penrith City Council Local Government Area (LGA).

This STP has been prepared to address the following requirement within the Mamre Road Precinct Development Control Plan 2021 (MRP DCP), Section 3.4.1, Control 1:

Development applications shall be accompanied by a Traffic and Transport Report. The Traffic and Transport Report shall include a Green Travel Plan and Travel Access Guide.

The purpose of this document is to complement the intent of the MRP DCP by outlining the overarching requirements for a future Green Travel Plan package for the site. This GTP will inform the future plan, expected to be implemented as part of conditions of consent relating to any detailed development approval.

1.2 Background

1.2.1 Mamre Road Precinct

The AIE is located east of Mamre Road and lies within the Mamre Road Precinct (MRP). DPHI rezoned the MRP in June 2020 for primarily IN1 General Industrial uses. While sustainable transport planning seeks to promote alternative modes of travel, the nature of industrial land uses typically generates higher levels of car and truck-based travel compared to other development types.

The MRP has also historically comprised mostly rural residential properties and small-scale agricultural industry businesses, resulting in limited public transport options throughout the regional area. The MRP DCP does however set objectives to establish an integrated public and active transport network as the MRP develops, better serving all future developments, including the subject site.

This STP has been prepared with reference to the above, with the targets outlined in Section 3.2 being reflective of the anticipated public and active transport connections.

1.2.2 Western Sydney Aerotropolis

The delivery of MRP will assist in supporting the broader Western Sydney Aerotropolis (Aerotropolis) following the opening of Western Sydney International (Nancy-Bird Walton) Airport in 2026. Given that the MRP is undergoing an accelerated rezoning process, it is subject to separate planning controls. The relevant studies that have been prepared for the Aerotropolis do however provide relevant context to actively inform this STP and ensure consistency.

Specifically, the AECOM Western Sydney Aerotropolis transport planning and modelling Stage 2 report dated October 2020 (herein referred to as the AECOM Report) highlights the importance of implementing transport policies and strategies that promote a shift to sustainable travel modes.

As detailed in the AECOM report, travel plans should include the following:

- Baseline travel data on the existing modal share
- Targets
- Action plan to achieve targets

- Commitment to on-going review of the travel plan
- A monitoring and review strategy.

Of particular relevance to this STP are the mode share targets set by the AECOM Report for each of the Aerotropolis precincts. The precinct(s) with the most comparable characteristics to the MRP are the Badgerys Creek and Agribusiness Precincts, which includes a high proportion of land zoned for industrial and warehouse activities.

Among the five Aerotropolis Precincts covered, Badgerys Creek and Agribusiness have the lowest sustainable mode share targets (by 2056) of 20% for Active and Public Transport, including 18% for Public Transport. Figure 1 below reproduces the mode share detailed by the AECOM Report for the Agribusiness Precinct for 2056.

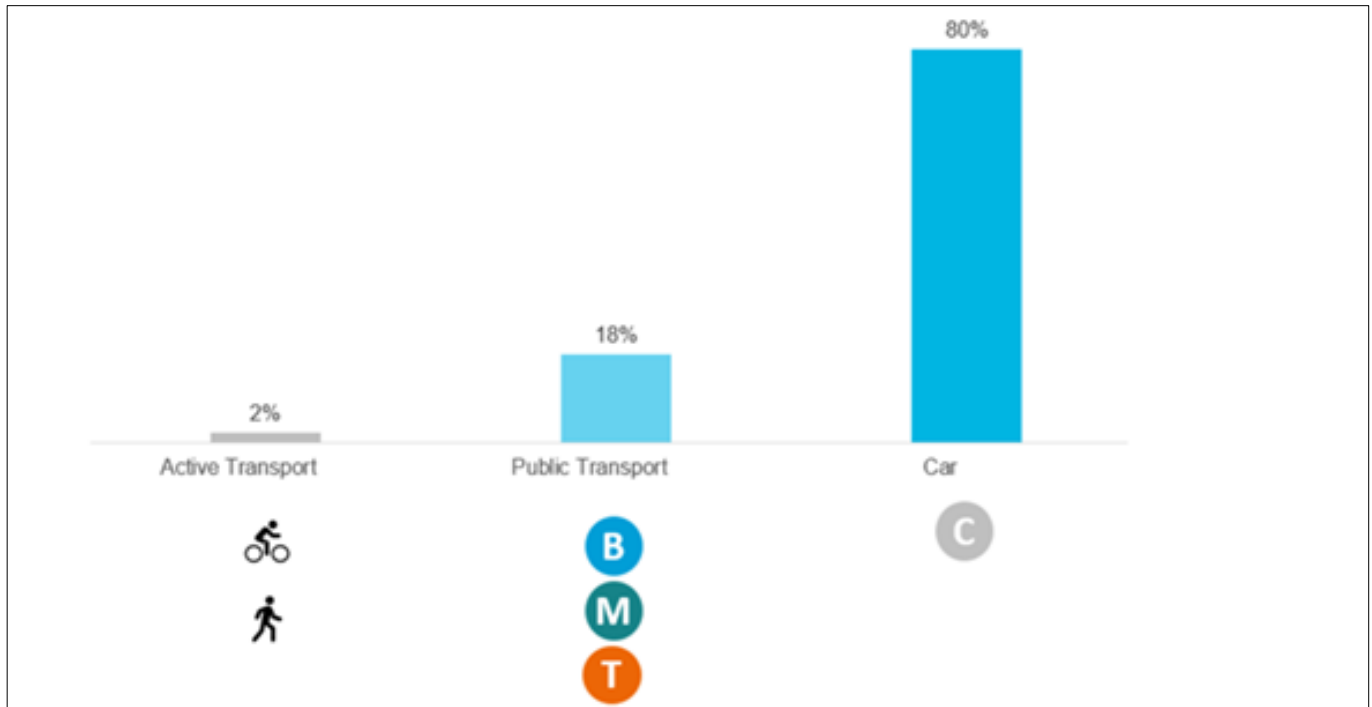


Figure 1: 2056 Badgerys Creek Mode Share Targets

Source: AECOM Report

Further to the above, the finalised Western Sydney Aerotropolis Precinct Plan 2022 (Precinct Plan) includes details on mode share targets, as shown in Figure 2. It is expected that these mode shares are reflective of the anticipated public and active transport links planned. Given the similarities between the MRP and the land uses of these Aerotropolis Precincts, the mode share targets included in the Precinct Plan have been used to inform the targets of this STP.

Precinct	Target mode share		
	Active transport	Public transport	Private Vehicle
2026			
Aerotropolis Core	4%	20%	76%
Northern Gateway	3%	16%	81%
Agribusiness	2%	16%	82%
Badgerys Creek	2%	18%	80%
Aerotropolis wide (average)	3%	18%	79%
2036			
Aerotropolis Core	6%	34%	60%
Northern Gateway	5%	31%	64%
Agribusiness	2%	16%	82%
Badgerys Creek	2%	18%	80%
Aerotropolis wide (average)	5%	30%	65%
2056			
Aerotropolis Core	9%	52%	39%
Northern Gateway	7%	43%	50%
Agribusiness	2%	16%	82%
Badgerys Creek	2%	18%	80%
Aerotropolis wide (average)	7%	43%	50%

Figure 2: Precinct Plan Objective MFO5 Travel Mode Share Targets

1.3 Goals

This STP has been prepared to achieve the following key goals:

1. Identify objectives and modes share targets (i.e., site and land use specific, measurable and achievable timeframes for implementation) to define the direction and purpose of the future Plan
2. Suggest specific tools and actions to help achieve the objectives and mode share targets
3. Suggest measures to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibilities for relevant employees involved in the implementation of the future Plan
4. Suggest a methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets of the future STP, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours at appropriate times.

1.4 Objectives

Underpinning this STP comprises a package of measures to be adopted and designed to address the specific travel needs of the Site. In this regard, the overall intention is to encourage and facilitate the use of alternative and sustainable modes of transport and to reduce single-occupancy car travel for journeys to and from the Site.

The primary objectives of the STP will be to:

- Reduce the environmental footprint of the site
- Set realistic future staff travel mode share targets
- Improve access, amenity, convenience, and safety of sustainable transport modes to/from the site
- Promote and encourage the uptake of 'active transport' modes such as walking and cycling, particularly for short-medium distance journeys, including to and from public transport stops
- Reduce reliance on the use of private vehicles for all journeys
- Encourage participation from stakeholders in the ongoing development of this STP to better understand barriers
- Monitor and evaluate progress.

2 Site Context

2.1 Development Site

2.1.1 Location

The site is located within AIE which is positioned about 4km northwest of the future Western Sydney International Airport, 13km southeast of Penrith CBD, and 40km west of Sydney CBD. The sub-regional context is depicted in Figure 3, along with the broader MR Precinct Structure Plan area in which the site is located.



Figure 3: Site Location

2.1.2 Approved Development

The AIE Concept Masterplan comprises nine industrial buildings, internal road network, building locations, car parking, concept landscaping, building heights, setbacks and built form parameters.

The approved Concept Masterplan is included in Figure 4, with the road connections providing access to the site shown.



Figure 4: Approved SSD-10448-MOD-10 Masterplan

Source: SBA (25107_MP01_Rev B, dated 03 April 2025)

Stage 1 provides a total Gross Floor Area (GFA) of 55,421m², including 33,886m² in warehouse 1 and 21,535m² in warehouse 3. 230 at-grade parking spaces, together with delivery of the key internal roads and the signalised intersection at Mamre Road are also key to Stage 1 delivery.

Stage 2 includes construction of a single level warehouse (warehouse 9) covering 64,742m² of warehouse GFA, 1,365m² of office space and 243m² dock office. Light vehicle access and heavy vehicle exit driveway is via Pemul Place, with heavy vehicle entry via Berriwerri Drive. Car parking for 257 vehicles, including 196 linemarked car parking spaces and 61 provisional parking spaces is also included.

The approved Stage 1 and Stage 2 staging plan is shown in Figure 5.



Figure 5: Approved Staging Plan

Source: SBA (21250_MP3-03_Rev E, dated 23 February 2023)

Stage 3 includes construction of a single level warehouse (warehouse 2), comprising 22,595m² of warehouse GFA, 1,500m² office space and a 200m² dock office. At-grade car parking for 150 vehicles at the northern and southern ends are accessed via separate light vehicle accesses on Birragu Close and Darrabarra Avenue. All heavy vehicles access the site via Birragu Close.

Stage 4 includes construction of a single level warehouse (warehouse 8) covering 39,800m² of warehouse GFA, 2,000m² office, 370m² dock office and 460m² storeroom. Light and heavy vehicle access is via Pemul Place. Car parking for 360 vehicles.

2.1.3 Proposed Development

As detailed above, the proposal relates to a Concept Approval Modification to SSD-10448 (MOD 12) and separate subsequent SSDA for Warehouse 4 within the AIE. Warehouse 4 presents the final stage of the AIE development and includes the construction of a single level warehouse building for warehouse and distribution operations 24 hours a day, 7 days a week. The proposed development will comprise 30,095m² of warehouse GFA, 700m² of ancillary office space GFA, 200m² of dock office GFA. Light and heavy vehicle access will be provided via Berriwerri Drive. Car parking for 128 spaces on the southern side of the proposed warehouse and bicycle parking for 30 spaces east of the office.

The proposed Warehouse 4 site plan is shown in Figure 6.

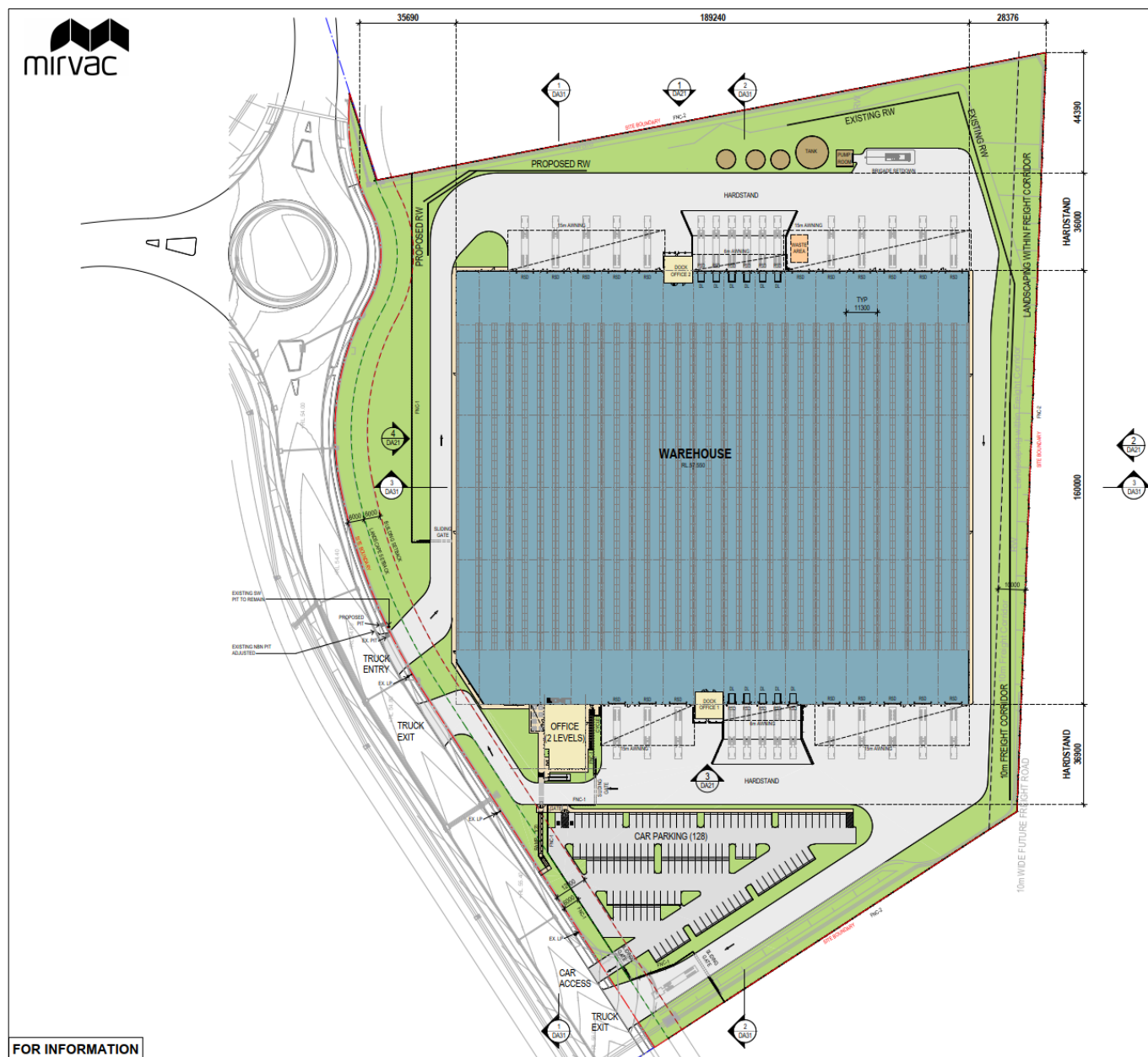


Figure 6: Warehouse 4 Site Plan

Source: SBA (25229_DA02_Rev J, dated 31 October 2025)

2.2 Public and Active Transport Opportunities

2.2.1 Existing Bus Services

The site is afforded limited access to existing public transport services, as shown in Figure 7. While it is noted that the MRP is ultimately planned to accommodate meaningful bus services, it is understood that no immediate investment in additional services is planned by Transport for New South Wales (TfNSW). A more immediate opportunity relates to the potential extension of bus route 779 which currently services areas north of the MRP.

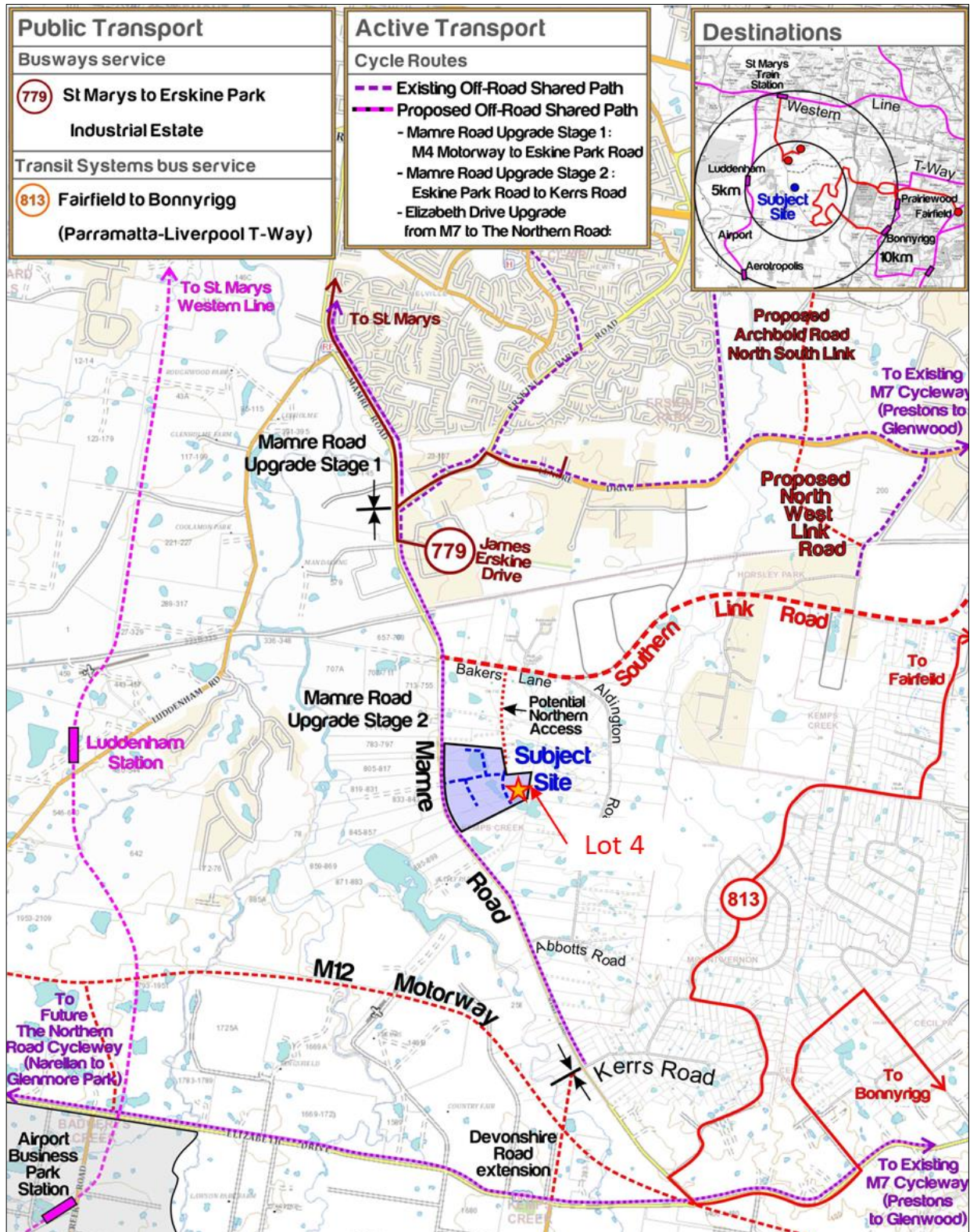


Figure 7: Public and Active Transport Network

2.2.2 Train Services – Metro Western Sydney Airport

The site is located around 10 kilometres from the nearest train station however, with the introduction of Sydney Metro Western Sydney Airport, a new railway system spanning 23 kilometres will be established. This metro will connect

residential areas with major employment centres and the broader public transport network across Sydney. The alignment of the metro is shown in Figure 8.

Luddenham Station is expected to be the closest station and while it will be located approximately 4 kilometres to the west, it will significantly enhance access to high frequency public transport for the region. Future bus services are also anticipated to be integrated with the Metro, presenting an opportunity to improve connectivity between residential areas, complementary businesses and the MRP. Such measures are expected to be medium to long-term aspirations and would unlikely be realised in the short term.

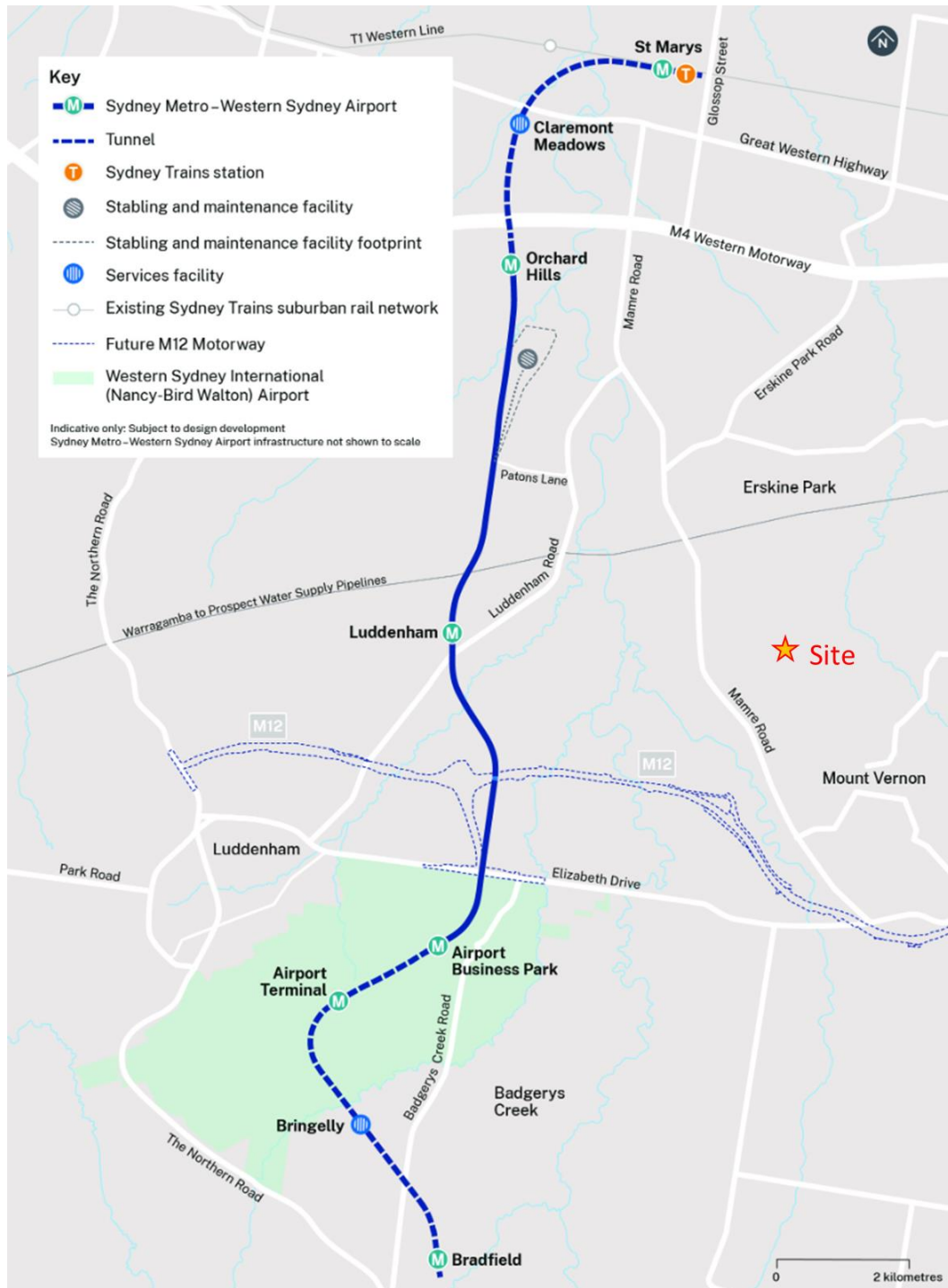


Figure 8: Metro Western Sydney Airport Alignment

Source: [Sydney Metro](#)

2.2.3 Bicycle Network

At present, a 2.1 metre shared cycle and pedestrian footpath has been provided on one side of all internal roads within the AIE, in accordance with the MRP DCP requirements.

External to the AIE, shared pedestrian and bicycle paths are generally provided along Erskine Park Road and sections of Mamre Road to the north of the site, but there is little cycling (or pedestrian) infrastructure currently available along Mamre Road in the immediate vicinity.

The Mamre Road upgrade project currently being planned by TfNSW aims to deliver shared paths along at least one side of the road for the entire length once complete.

The specifications for Industrial Local Roads as outlined in the MRP DCP are reproduced in Figure 9. All roads within AIE have been designed to these requirements.

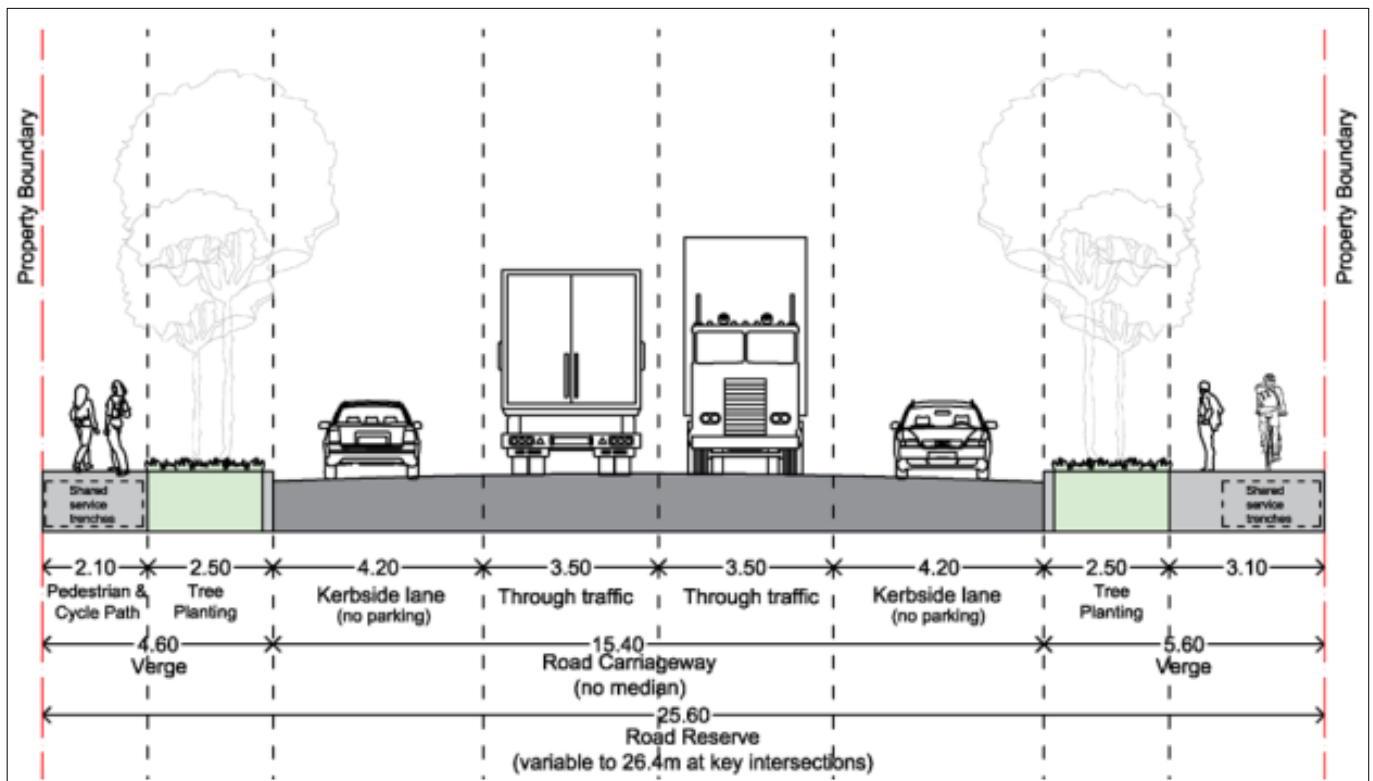


Figure 9: Mamre Road DCP Typical Industrial Local Road

Source: Mamre Road DCP 2021

2.2.4 Pedestrian Connectivity

Currently, a 1.5 metre pedestrian footpath is provided on one side of all internal roads within the AIE, in accordance with the MRP DCP requirements. Due to the current largely undeveloped nature of land surrounding AIE, there is a general absence of pedestrian infrastructure along Mamre Road and within the MRP generally. Key pedestrian desire lines in the vicinity of the site would be triggered by connections to future public transport infrastructure as delivery of the MRP occurs over the next few years.

The road network outlined within the MRP DCP is shown in Figure 10 and provides context on the configuration of the MRP roads and demonstrates the connectivity benefits associated with the connection through AIE.

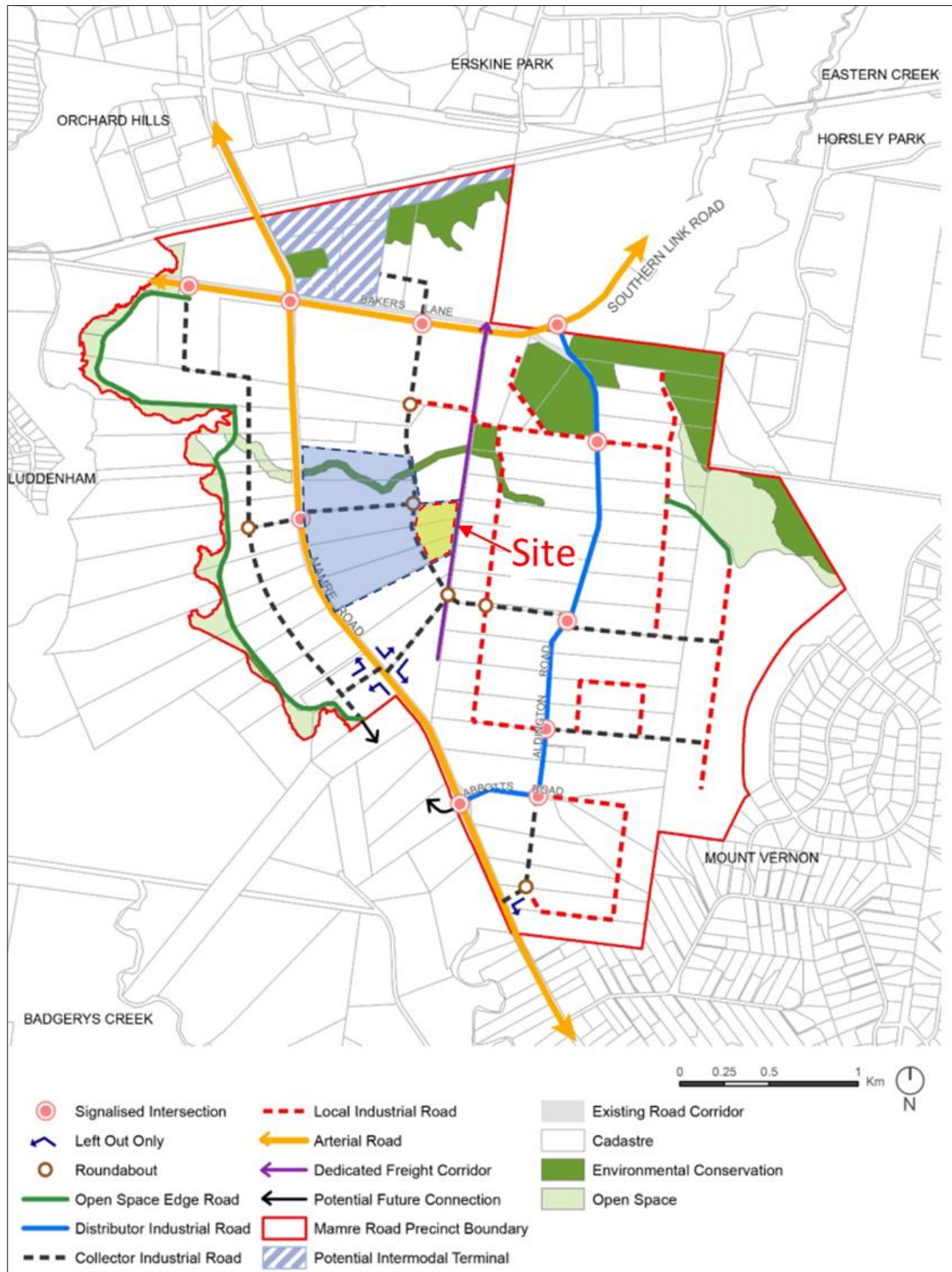


Figure 10: Indicative Road Network and Access Plan

Source: Mamre Road DCP 2021

2.3 On Demand Services

2.3.1 Car Share

Car share services have become a cost-effective and versatile option to traditional private vehicle ownership. By introducing car share services in the area, it would be possible to facilitate intermittent work-related trips, enabling both staff and visitors to share their journeys and reduce the number of single-use trips. This would contribute to a more sustainable transport approach and promote efficient resource utilisation.

Considering that the MRP comprises large lot industrial development, it is not expected that car sharing services would initially gain significant traction. However, given the benefits of reducing reliance on private vehicles, it is worth evaluating the suitability of car share services as the area evolves.

To understand whether car sharing among staff is worth exploring, the travel surveys which form part of the STP will gauge whether car sharing initiatives would be beneficial. Initiatives such as providing designated car share priority parking spaces rather than the establishment of car share providers is expected to be more beneficial. This proactive approach aims to encourage and facilitate car sharing practices.

2.4 Existing Travel Patterns

2.4.1 Journey to Work Data Analysis

Journey-to-Work (JTW) data from the Australian Bureau of Statistics (ABS) 2021 Census and specifically aggregated Destination Zones (DZ) have been referenced to understand the baseline travel characteristics of the Site. This data informs the initial targets and should be refined and updated as part of the monitoring process.

A summary of key travel modes for those travelling to the locality for work have been reviewed with regard for the surrounding Destination Zone 115184210, within the Horsley Park – Kemps Creek statistical area. The travel modes are presented in Figure 11.

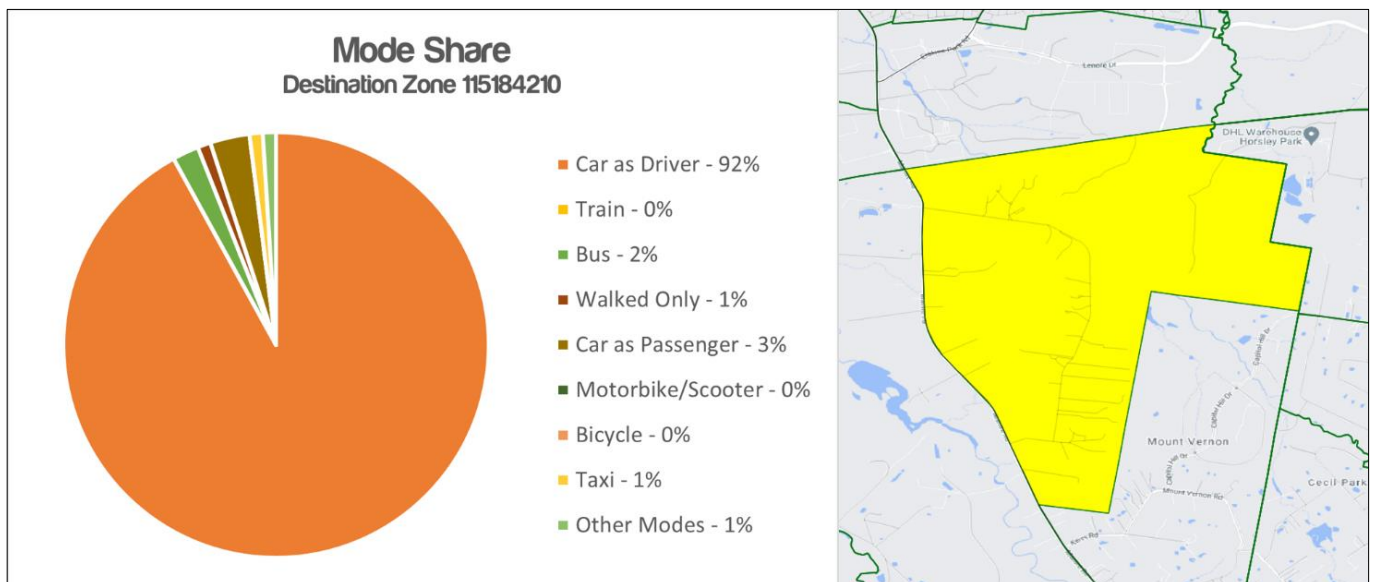


Figure 11: Travel Mode Share

Travel by private vehicle (car) is the overwhelmingly preferred mode of transportation for commuters in the area when traveling to work. The data reveals that 95% of commuters choose to travel by car, with 92% as drivers and 3% as passengers (carpooling).



This trend is reflective of the current characteristics of the area, which primarily consists of rural residential properties and agricultural businesses. However, considering the future industrial nature of the Site, it is expected that the above-mentioned data accurately represents the prevailing patterns of commuting to industrial work sites where there is limited direct and high frequency public transport available.

The Guide to Traffic Generating Developments Updated Traffic Surveys, August 2013, published by TfNSW (TfNSW Guide Update), offers insights into the primary mode of travel employed by staff warehouses surveyed in Western Sydney by TfNSW. According to these surveys, 90% of the workforce would commute via private vehicles, while 8% would travel as passengers. Therefore, the existing census data aligns with the travel patterns observed in existing industrial developments.

3 Sustainable Travel Plan Framework

3.1 Travel Plan Scope

The STP will address the following types of travel generated by the development:

- Commuter journeys by staff
- Visitor journeys
- Business travel

The STP is expected to have the most effect on commuter journeys by staff. While the operator will aim to encourage sustainable travel by visitors, ultimately staff travel is easier to influence.

The aim is to develop practical measures that are effective in reducing car use for all journeys to the Site.

3.2 Implementation

A Travel Plan Coordinator (TPC) will be appointed to act as the primary point of contact for enquiries relating to the progress of the future Plans. Accordingly, the TPC will be a personnel nominated by the warehouse tenant and assume responsibilities to implement initiatives under this STP. The TPC will manage all aspects of the STP, including the co-ordination and joint working practices with the estate owner, Mirvac, across all tenants within the AIE.

The TPC will promote participation in and commitment to the STP from future tenant and will work in partnership with all stakeholders to deliver the strategies and actions.

The TPC should be appointed within 6 months of the Site becomes occupied. Contact details for the TPC will be provided in the implemented Plan.

The main duties of the TPC are envisaged to be:

- Overseeing final development and implementation of the STP
- Internal liaison to promote awareness of the STP amongst businesses and staff
- Coordination with the estate owner, Mirvac (as representative for all tenants), to assist liaison with outside bodies, such as Penrith City Council (Council) and local bus operators, as required regarding the operation of the STP
- Providing updated travel information to staff and visitors, as necessary
- Monitoring, reviewing and (if necessary) updating the STP

The contact details of the appointed TPC will be provided in table below within 6 months post-opening. This table shall also be updated should there be a change in the appointed TPC or their contact details.

Table 1: TPC contact list

Role	Name	Company	Contact
Travel Plan Coordinator			

3.3 Consultation

It is essential that any parties that may play a part in the future of STPs have the opportunity to discuss further actions and solutions with one another. This would enable equitable input and feedback as well maximising their overall

efficacy. For this reason, a coordinated approach to STPs should be implemented (subject to individual tenant participation) to assist in the consultation with the relevant parties, which could include the following:

- Staff
- Council Traffic & Transport Department and Traffic Committee
- Local Bus Operators
- TfNSW

Other organisations may be added to this list as the STP evolve.

3.4 Travel mode targets

3.4.1 Introduction

Based on the existing travel mode splits identified in **Section 2.4**, the Site and the surrounding areas are considered to have a low dependency on public and active transport. This is reflective of the current nature of the area.

However, noting the future land use of the Site as industrial in nature, it is expected that the JTW data accurately reflects the current trends for travel to places of work at industrial sites. The TfNSW Guide to Traffic Generating Developments – Updated Traffic Surveys itself provides details in relation to the principal mode of travel used by staff at the Erskine Park and Eastern Creek warehouses surveyed by TfNSW. These surveys indicate that 90% of all workers would travel via private vehicles with 8% travelling as passengers.

This section therefore sets out the targets for the reduction in car journeys associated with the Site, with consideration to the future land use in the area. Targets are the means of measuring the achievement of the objectives. They need to be clear, directly linked to the objectives, monitored and reviewed.

Questionnaire surveys will be conducted in the future that will form the updated travel mode baseline to further develop site-specific targets. The first surveys will be undertaken 3 months after occupation to allow for full occupancy of the development to occur. These surveys will be repeated at a suitable time to assess the effectiveness of the implemented STP; the targets are to be reviewed to align with the most up-to-date information.

The implemented STP to be in place for the lifetime of the development. The initial timeframe in which targets need to be monitored and reviewed will be reviewed annually, for a minimum of 5 years.

3.4.2 Mode Share Targets

It is essential that mode share targets be achievable with consideration for the public transport, walking and cycling opportunities available within proximity to the Site. Targets should also be factoring in what future transport options could reasonably be used to access the Site, and also the nature of the development itself.

As per **Section 1.2**, the Precinct Plan provides a mode share target for public & active transport of 18% and by car of 82% by 2056 for the Agribusiness Precinct. Sites within the MRP should ideally reflect a similar target.

Further, it should be recognised that during the earlier stages in development of the MRP, it would be anticipated that change in travel behaviour will be slower than in other areas, while the public and active transport networks are still being integrated.

The targets should therefore be revisited and updated after the opening of the relevant development as part of the monitoring process. The initial targets are nominated in Table 2, which represents a 5-year target to coincide with the minimum 5 years of monitoring and review. Upon receipt of the data from the first site surveys to better understand the site-specific travel behaviours, these targets will need to be reviewed.

In the event that mode share targets are not being met, it is crucial to understand the barriers that prevent staff from achieving them.

Table 2: Preliminary 2026 mode share targets

Travel Mode	Existing Mode Share of Employees	Proposed Targets	Relative Change
Car as driver	92%	88%	-4%
Car as passenger	3%	3%	-
Truck	0%	0%	-
Train	2%	4%	+2%
Bus	1%	1%	-
Walked only	0%	1%	+1%
Motorbike/Scooter	0%	1%	+1%
Bicycle	1%	1%	-
Other Modes	1%	1%	-

Table 3 presents the ultimate targets which are consistent with those detailed in the Precinct Plan. However, investment by TfNSW in additional bus services would be critical in achieving the public transport target. It is understood that there is no immediate investment planned for the MRP at this stage.

Table 3: Indicative 2056 mode share targets

Travel Mode	2026 Mode Share of Employees	Proposed Targets	Relative Change
Car as driver	88%	82%	-6%
Car as passenger	3%	3%	-
Train	0%	0%	-
Bus	4%	4%	+6%
Walked only	1%	1%	-
Motorbike/Scooter	1%	1%	-
Bicycle	1%	1%	-
Taxi	1%	1%	-
Other Modes	1%	1%	-

4 Measures and Action Strategies

4.1 Measures

Below is a range of measures that need to be implemented if the objectives of this STP are not met. It is critical to note that these are suggested measures and are not necessarily likely to be applicable in the early stages of development in the MRP.

This section needs to be reviewed and confirmed prior to implementation of any future STP.

- An introduction to the STP for all staff, setting out its purpose and objectives.
- Provision of public transport travel information for staff, customers and visitors.
- Encouragement of car sharing, both amongst staff on site and in the wider context.
- Provision of car share spaces (future potential measure) and / or provision of a business “pool car” while public car share operators are limited in the area.
- A transport section on the company website with links to local bus operator sites, to ensure that travel information is always up to date.
- The provision of transport information for visitors to the Site.

4.2 Strategies

Seven (7) main strategies are identified, and the associated actions for each strategy are detailed in Table 4. The table details specific actions that could be implemented as part of a future site-specific STP and the party responsible for implementing each action. It is emphasised that these strategies are provided as recommendations for the consideration of the appointed TPC and in the context of achieving overall improvement in mode share outcomes.

These actions must be reviewed at regular intervals to ensure that the mode split targets are being met. By that principle, this document is classed as a live document and subject to regular review. It is important to note, that the actions should not be taken as mandatory but rather potential options that should be investigated and implemented by all future inhabitants of the development.

Table 4: Proposed FSTP action strategies

STRATEGY		HOW IT WORKS	implementation	RESOURCES / RESPONSIBILITY	TIMELINE	FUNDING
1 Travel Planning and Demand Management						
1.1	Green Travel Plans	- Develop a STP to provide information for Travel Access Guide (TAG). Refer to Appendix A. - Management of STPs. - Promotion of STPs.	Provide information resources and implement a range of additional initiatives to reward and encourage those who travel actively to help develop a healthy, active culture and meet travel targets. Continued support of the person/organisation in charge of managing the STP. This would happen with the appointment of a TPC: - Undertake a STP event annually. - Promote the following initiatives via bulletins, web pages, social media: - Travel Survey Results; and - Progress and update of STP. Retain a current copy of the TAG to be relevant, useable, and accessible. TAG should be displayed in communal areas.	TPC to be responsible for overall implementation of final STP and providing annual reporting on STP outcomes.	Upon completion of the development and ongoing annual STP events	Tenant
1.2	Travel Information Points	- Establish locations such as travel information points where staff and visitors and others can access travel information via interactive platforms. - Promotion of STPs	Establish locations such as travel information points where staff, visitors and others can access travel information via interactive platforms. These can be similar to wayfinding kiosks provided at public transport stations, shopping centres etc. Information could include walking and cycling routes, bicycle parking, public transport availability, routes, real-time timetables and shared vehicles.	TPC	Subject to employer preference.	Tenant

STRATEGY		HOW IT WORKS	implementation	RESOURCES / RESPONSIBILITY	TIMELINE	FUNDING
		Provision of travel and transport information options				
1.3	Flexible Working Hours	Allow employees the flexibility to commute outside peak periods to reduce overall congestion and travel time.	Manage staff rosters where possible.	Tenant	Subject to tenant operations. Action to be considered by tenant over lifespan of development.	Tenant
2 Promoting Public Transport						
2.1	Maximise Bus Travel	Display route maps and timetables (for services within 10 minutes walking distance) in high trafficable areas within the Site.	Provide information sources.	TPC	Upon occupation of development	Tenant
2.2	Maximise Bus Service Frequency	Advocate for TfNSW to improve public transport services in response to increased development within the surrounding area.	Report to TfNSW on perception of bus service adequacy.	Developer (Mirvac) is responsible for liaison with outside bodies, such as TfNSW, Council and local bus operators.	Developer to hold on-going discussions with TfNSW after each annual review of STP and report on relevant findings	Developer (Mirvac) / Tenant
2.3	Provide Bus Stops with Shelter Facilities	Ensuring provision of bus stops suitable for waiting areas for commuters, the majority of which would likely be workers associated with the development.	Propose or recommend improvements to the proposed / implemented bus stops along Mamre Road to TfNSW.	TPC is to collect feedback, promote shuttle service (once in place) and assist Mirvac as part of the coordinated effort for the Estate.	Subject to discretion of TfNSW.	TfNSW

STRATEGY		HOW IT WORKS	implementation	RESOURCES / RESPONSIBILITY	TIMELINE	FUNDING
2.4	Lobby for Precinct Wide Shuttle Service	Lobby for shuttle service initiative that would transport staff to / from the MRP to the Railway Station. This would need to be a precinct wide service, rather than just specific to the Site.	Provision of bus shuttle service running between the development and either nearby homes or proposed Luddenham Station. Tenant / Business Owner on the Site would arrange for a bus shuttle service that would travel between the development / Site and the homes / Station at a dedicated time / interval. Persons signing onto the program or service would be accountable for turning up at the appropriate times so as to not delay the service. This should be promoted as part of the STP and on communal locations such as main website or notice boards.		Ongoing as MRP develops	Developer (Mirvac)
3 Promoting Carpooling						
3.1	Open Car Sharing	Where anyone in a defined geographical area can join a ride sharing scheme. This involves no input from the employer and should be on the onus of staff to schedule.	This can usually be accomplished by having notice boards in business premises which are a good place for employees to find colleagues looking to share journeys. Utilise car share spaces provided and actively promote on site to staff and visitors.	TPC	Ongoing in the workplace	Fuel costs can be arranged and split equitably by the participating members of the Open

STRATEGY		HOW IT WORKS	implementation	RESOURCES / RESPONSIBILITY	TIMELINE	FUNDING
						Car Sharing scheme
3.2	Closed Car Sharing	The company / department sets up an in-house car-matching scheme	The company / department sets up an in-house car-matching scheme and gets staff to participate. A points system can be setup to encourage friendly competition between staff and overall reduce carbon footprint from single car usage. Utilise car share spaces and actively promote on Site to staff and visitors. Reward regular car sharers by providing preferential parking spaces. An example would be for an initial 2 carpool parking spaces to be dedicated to encourage uptake, which could thereafter increase up to 10 carpool parking spaces in response to demand identified from the travel survey results.	TPC	Ongoing in the workplace.	Tenant
4 Promoting Cycling						
4.1	Providing & Maintaining End of Trip Facilities	Providing facilities such as showers, change rooms, lockers. For the initial stages of development, it is recommended to provide facilities compliant with the relevant controls, and as the Site develops further, they should be reviewed as part of the STP monitoring process to meet any increase in demand.	Bicycle parking spaces will be provided for staff and visitors. Access to other facilities such as showers will also be made. Developer to provide bicycle parking spaces in the parking area together with male and female lockers, male and female showers and an accessible shower as per Building Plans.	Developer	To be provided at completion	Developer

STRATEGY		HOW IT WORKS	implementation	RESOURCES / RESPONSIBILITY	TIMELINE	FUNDING
4.2	Promote Bicycle Initiatives	Promotion of bicycle initiatives – NSW bicycle week, Ride to Work etc.	Promote and encourage cycling in the precinct and should actively participate in recognised NSW government bicycle initiatives such as bicycle week and cycle to workday. <i>It is noted that limited active transport infrastructure is currently available as the broader MRP is under its early development stage. This strategy is to be implemented subject to development of the broader bicycle network (not funded by the developer).</i>	TPC	To be promoted annually	Tenant
4.3	Advertise Bicycle Routes	Promotion of bike lanes through the TAG.	Prepare Site specific maps with guidance on the most optimal way of travelling to/from the Site by bicycle.	TPC	To be promoted and provided at communal areas within facility.	Tenant
5 Promoting Walking						
5.1	Providing End of Journey Facilities	Provision of sufficient end of trip facilities such as showers, change rooms, lockers etc to maximise pedestrian activity throughout the Site and the wider precinct.	Provide pedestrian facilities and amenities in close proximity in the Site and at the bus stops. Developers to provide male and female lockers, male and female showers and an accessible shower as per Building Plans.	Developer	To be provided at completion of development	Developer
5.2	Walking Routes	Incentivise travelling by foot by highlighting possible routes particularly those to nearest bus stops	Prepare Site specific maps highlighting pedestrian desire lines and optimal routes to provide guidance to pedestrians to key public transport and car sharing locations.	TPC	To be promoted and provided at communal areas within facility	Tenant
6 Restraining Parking						

STRATEGY		HOW IT WORKS	implementation	RESOURCES / RESPONSIBILITY	TIMELINE	FUNDING
6.1	Limited Parking Allocation On Site	Over-provision of parking spaces will inherently encourage travel by car. By restricting parking supply, you can discourage non-essential car use.	Consideration to reducing the number of car parking spaces by managing access via permit parking or needs based parking policies. This can be considered as travel behaviour changes.	TPC	To be consider during the operation of the development; as public and active transport connections improve, Site management can consider restricting parking availability.	Tenant
7 Influencing Travel Behaviour						
7.1	Provision of Sustainable Travel Packs to Employees and Visitors	Introduces employees and visitors alike to the STP and provides information on walking and cycling routes, and travel by bus & train, timetables, and access routes. This would include a TAG.	To be distributed to staff, visitors, and neighbouring properties. Contact details as to who is responsible for the STP will also be provided. This would include a TAG.	TPC	Travel Packs to be provided upon occupancy of building to employees.	Tenant

4.3 Communications Strategy

4.3.1 Welcome Packs

New staff shall be provided with a ‘welcome pack’ as part of the on-site induction process which includes a STP Pamphlet and other information in relation to sustainable transport choices. This pack shall include a copy of the STP and a Travel Access guide (TAG) as provided in Appendix A. Furthermore, general information regarding the health and social benefits of active transport and advice on where to seek further information shall also be provided. It is recommended that an electric copy of the welcome pack be created and made available to staff.

4.3.2 Accurate Transport Information

In addition to these ‘welcome packs’, a copy of the TAG (as shown in Appendix A) shall be clearly displayed in communal areas of the Site including (but not limited to):

- The staff lunch room;
- Lift lobby area and entrances to buildings; and
- Any marketing material associated with the Site, such as websites and newsletters.

5 Monitoring Strategy

5.1 Plan Maintenance

This Plan shall be subject to ongoing reviews and will be updated accordingly. Annual reviews will be undertaken by the TPC, as required.

The key considerations when reviewing or monitoring the STP are as follows:

- Update baseline conditions to reflect any changes to the transport environment in the vicinity of the Site such as changes to bus services, new cycle routes, etc. In this regard, a review of the Plan – and associated TAG in particular – may be undertaken on a more frequent basis;
- Track progress against target travel mode targets;
- Identify any shortfalls and develop an updated action plan to address issues; and
- Ensure travel modes targets are updated (if necessary) to ensure they are realistic and remain ambitious.

5.2 Monitoring

To record the overall success, as well as the effectiveness of the individual measures, monitoring and reviewing the STP is to be conducted at regular intervals. The TPC will act as the primary point of contact for all enquiries relating to the STP's progress.

The STP will be monitored annually, with the first survey being carried out 3 months after the first occupation of the Site. Travel mode surveys would determine the proportion of persons travelling to/from the Site by each transport mode. This will be in the form of annual travel mode questionnaire surveys to be completed by all persons attending the Site, as far as practicable. A sample of a typical travel mode questionnaire form is included in Appendix B.

If targets are not met at the end of the initial period of monitoring, the STP will be reviewed, new measures introduced and would be reassessed at the next monitoring stage.



Appendix A Travel Access Guide



Appendix B Sample Questionnaire



Instructions for Surveyor(s)

1. The Survey Form (over page) should be completed by EVERY PERSON attending the site on a particular day.
2. This survey should be completed SEPARATELY for EACH TRIP undertaken



Travel Mode Questionnaire Survey Form

Date:

Approximate Time:

Q1. Are you one of the following?

- | | |
|---|---|
| ☐ Warehouse staff | ☐ Casual contractor |
| ☐ Office staff | ☐ Company driver / sub-contractor |
| ☐ Courier / office delivery | ☐ Other (Please specify)..... |

Q2. How did you travel to / from the site today?

- | | |
|------------------------------------|---|
| ☐ Walked only. | ☐ Car share vehicle |
| ☐ Bicycle only | ☐ Motorcycle / scooter |
| ☐ Train | ☐ Car (as passenger) |
| ☐ Bus | ☐ Car (as driver) |
| ☐ Taxi | ☐ Other (Please specify)..... |

Q3. If you drove to the site, where did you park?

- ☐ Not applicable – did not drive.
- ☐ On-site car park
- ☐ On-site within truck hardstand
- ☐ Other (Please specify).....



[Blank Page]

Appendix G TfNSW Consultation Record

Angela Ji

From: Chee Hui Chan <cheehui.chan@mirvac.com>
Sent: Wednesday, 6 August 2025 11:34 AM
To: Sam Li
Cc: Lee Farrell; Richard Mawer; Alexandra Chung
Subject: RE: Request for TfNSW Consultation – Aspect Industrial Estate (AIE) - Mamre Road Precinct – Automated Guided Vehicle (AGV) Network

Hi Sam

Thank you for your response.

We appreciate TfNSW's review to the draft architectural plans and acknowledgement to the pre-lodgement consultation made by Mirvac with respect to the AGV corridor.

Regards

Chee Hui Chan
Development Manager
Commercial & Mixed Use Development

M: +61 450 130 715

Level 28, 200 George Street Sydney NSW 2000 Australia

[Electronic data transmission disclaimer](#)



*Issued by ratings agency Equifax in relation to Mirvac Constructions Pty Ltd licenced builder in NSW.

Acknowledgement of Country | Mirvac acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Owners and Custodians of the lands and waters of Australia. We recognise that we all live, work and play on Traditional lands of the oldest continuing culture and pay our respect to Elders past and present.



'Collaborating on Country'
created by Riki Salam (Mualgal, Kaurareg, Kuku Yalanji), We Are 27 Creative.

From: Sam Li <Sam.Li@transport.nsw.gov.au>
Sent: Tuesday, 5 August 2025 1:54 PM
To: Chee Hui Chan <cheehui.chan@mirvac.com>
Cc: Lee Farrell <Lee.Farrell@transport.nsw.gov.au>; Richard Mawer <richard.mawer@mirvac.com>; Alexandra Chung <alexandra.chung@mirvac.com>
Subject: RE: Request for TfNSW Consultation – Aspect Industrial Estate (AIE) - Mamre Road Precinct – Automated Guided Vehicle (AGV) Network

Hi Chee Hui,

Thanks for sending through the draft architectural plans. Based on these, it appears the design accurately reflects the AGV requirements, namely:

- The accurate location of the AGV corridor and alignment with neighbouring properties;
- Provision of access from the AGV to the site along the southern boundary; and,
- Sufficient spacing to enable the future construction of retaining infrastructure along the AGV corridor edge.

Transport will review the engineering and civil detailed design documents at exhibition to determine our position regarding concurrence. This email acknowledges the pre-lodgement consultation made by Mirvac with respect to the AGV corridor.

If you have any questions, please feel free to reach out.

Regards,

Sam Li

Transport Planning Officer
Transport Planning
Planning, Integration and Passenger
Transport for NSW

E sam.li@transport.nsw.gov.au

22-44 Ennis Rd
Milsons Point NSW 2061



**Transport
for NSW**



Please consider the environment before printing this email.

OFFICIAL

From: Chee Hui Chan <cheehui.chan@mirvac.com>

Sent: Tuesday, 5 August 2025 10:53 AM

To: Lee Farrell <Lee.Farrell@transport.nsw.gov.au>; Sam Li <Sam.Li@transport.nsw.gov.au>

Cc: Richard Mawer <richard.mawer@mirvac.com>; Alexandra Chung <alexandra.chung@mirvac.com>

Subject: RE: Request for TFNSW Consultation – Aspect Industrial Estate (AIE) - Mamre Road Precinct – Automated Guided Vehicle (AGV) Network

Some people who received this message don't often get email from cheehui.chan@mirvac.com. [Learn why this is important](#)

Hi Lee and Sam

Thank you for attending our meeting this morning. It was great to meet you both to go through the AGV freight layout plan.

We have attached the sketches which we presented in the meeting for your reference. We have also prepared the attached **draft** Warehouse 4&5 architectural plan with the revised AGV freight network located closer to the estate boundary. This indicates sufficient clearance between the AGV network and the Warehouse 4&5 hardstand. We trust that this would satisfy TfNSW comments with relation to constructing the retaining wall adjacent to building operations.

As discussed in the meeting, we are targeting to lodge our request for SEARs to modify the Concept Masterplan by 15-August. We are hoping to obtain TfNSW initial consultation comments this week to allow us to proceed with this lodgement. We understand that once the SSD application is formally lodged and in exhibition, the Department of Planning, Housing and Infrastructure (DPHI) will request TfNSW formal review and comments.

Please let us know if you require any additional information.

Regards

Chee Hui Chan
Development Manager
Commercial & Mixed Use Development

M: +61 450 130 715

Level 28, 200 George Street Sydney NSW 2000 Australia

Electronic data transmission disclaimer



*Issued by ratings agency Equifax in relation to Mirvac Constructions Pty Ltd licenced builder in NSW.

Acknowledgement of Country | Mirvac acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Owners and Custodians of the lands and waters of Australia. We recognise that we all live, work and play on Traditional lands of the oldest continuing culture and pay our respect to Elders past and present.



'Collaborating on Country'
created by Riki Salam (Mualgal, Kaurareg, Kuku Yalanji), We Are 27 Creative.

From: Alexandra Chung <alexandra.chung@mirvac.com>

Sent: Thursday, 31 July 2025 10:54 AM

To: Lee.Farrell@transport.nsw.gov.au

Cc: Chee Hui Chan <cheehui.chan@mirvac.com>; Richard Mawer <richard.mawer@mirvac.com>

Subject: Request for TfNSW Consultation – Aspect Industrial Estate (AIE) - Mamre Road Precinct – Automated Guided Vehicle (AGV) Network

Hi Lee,

RE: Request for TfNSW Consultation – Aspect Industrial Estate (AIE) - Mamre Road Precinct – Automated Guided Vehicle (AGV) Network

Thanks for your time on the phone earlier this week. As discussed, Mirvac would like to commence consultation with TfNSW for the development of Warehouse 4&5 (WH4&5) at the Aspect Industrial Estate, specifically seeking concurrence for the AGV network design.

As shown in *Figure 17 - Integrated Freight Network* of the [Mamre Road DCP](#), an AGV network is contemplated within the site of WH4&5. To ensure that Mirvac are not precluding the transition to an Automated Guided Vehicle (AGV) network, we have prepared the attached drawings for your review and consideration. These drawings have been prepared to accommodate the AGV network and align with the approved connection points for neighbouring developers, GPT to the North and Barings to the South.

Noting the AGV network will require consultation for our planning approvals which is targeting lodgement in September this year, we would like to organise a meeting with TfNSW to go through the layout plan and provide the opportunity for TfNSW to ask any questions and provide feedback.

As agreed, we will set up a meeting to run through with yourself and your team on 5-August 2025 (Tuesday) from 10:00am to 10:45am. We will send through an invite shortly, can we please seek your assistance with forwarding the invite on to the appropriate TfNSW representatives to attend?

Alexandra Chung

Development Manager

Commercial & Mixed Use Development

M: +61 402 019 313

Level 28, 200 George Street Sydney NSW 2000 Australia

Electronic data transmission disclaimer

RANKED #5 IN AUSTRALIA AND #15 GLOBALLY

For Gender Equality in Equileap's 2025 Global Report

Acknowledgement of Country | Mirvac acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Owners and Custodians of the lands and waters of Australia. We recognise that we all live, work and play on Traditional lands of the oldest continuing culture and pay our respect to Elders past and present.



'Collaborating on Country'

created by Riki Salam (Mualgal, Kaurareg, Kuku Yalanji), We Are 27 Creative.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.