

PTG/02794

Transport Impact Statement Mallokup Road, Stirling Estate - Proposed Extractive Industry

27th February 2026

Prepared for: Dunkley Holdings Pty Ltd

CONTENTS

REPORT DETAILS	3
1 Introduction.....	4
1.1 Background.....	4
2 Existing Site Context.....	5
2.1 Existing Site.....	5
2.2 Surrounding Land Uses.....	7
3 Road Network	8
3.1 Road Hierarchy	8
3.2 Traffic Flows on Surrounding Roads.....	10
3.3 Existing Restricted Access Vehicle (RAV) Network	10
3.4 Changes to Surrounding Road Network	10
4 Public Transport Facilities	11
4.1 Existing Public Transport Services.....	11
4.2 Future Public Transport Facilities.....	11
5 Pedestrian and Cycling Facilities	11
5.1 Existing Pedestrian and Cycling Network.....	11
5.2 Future Pedestrian and Cycling Facilities.....	11
6 Proposed Development.....	12
6.1 Proposed Land Use	12
6.2 Access Arrangements.....	13
6.3 Vehicle Types	13
6.4 Haulage Route.....	14
6.5 Hours of Operation.....	14
6.6 Traffic Volumes.....	15
6.7 Haulage Route Review	16
6.7.1 Safe Intersection Sight Distance.....	16
6.7.2 Swept Path Analysis	17
6.8 Crash Assessment	19
7 Conclusions.....	20
Appendix A – WAPC Checklist	
Appendix B – Site Plans	
Appendix C – SISD Assessment	
Appendix D – Swept Paths	

REPORT DETAILS

Document Title	Transport Impact Statement – Mallokup Road, Stirling Estate – Proposed Extractive Industry
Project Number	PTG/02794
Document ID	TR-R002-A
Client	Dunkley Holdings Pty Ltd

PTG Consulting Office Details

Location	
Address	Level 4, 167 St Georges Terrace, Perth WA 6000
Telephone	+61 8 6188 4500
Email	ray.cook@ptgconsulting.com.au
Web	www.ptgconsulting.com.au

Revision Details

Revision No.	Date	Comments	Prepared By	Approved By
A	27/02/2026	For Issue	LH	AW/SGL

1 INTRODUCTION

1.1 Background

PTG Consulting Pty Ltd (PTG) has been commissioned by **Dunkley Holdings Pty Ltd** ('the Client') to prepare a Transport Impact Statement (TIS) for a proposed extractive industry development located on Lots 159, 167, 168, 203, 204, 205, 206 and 207 Mallokup Road, Stirling Estate within the Shire of Capel (the 'Site').

This report has been prepared in accordance with the Western Australian Planning Commission (WAPC) Transport Assessment Guidelines for Developments: Volume 4 - Individual Developments (2016) and the TIS Checklist is included at Appendix A.

Specifically, this report aims to assess the operations of the proposed development and its connections to the adjacent road network, with a focus on traffic volumes and site access.

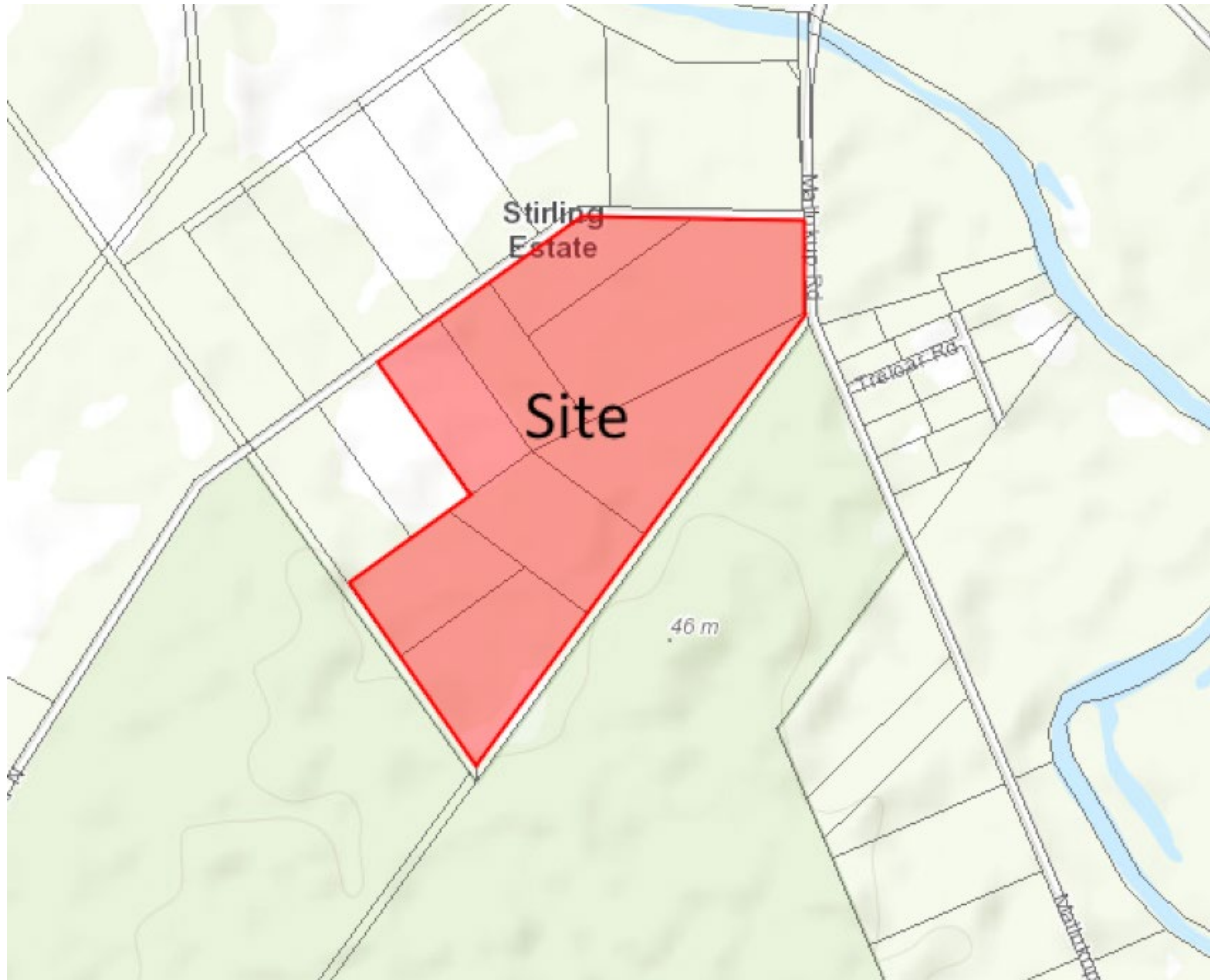
This report also outlines the requirements and opportunities associated with traffic and transport within the development, referencing relevant Council and WAPC policies and guidelines as well as best-practice planning within Western Australia.

2 EXISTING SITE CONTEXT

2.1 Existing Site

As shown in **Figure 1**, the Site comprises of various Lots within Stirling Estate

Figure 1 - Site Location



Source: PlanWA

The Site is currently occupied by a single rural residential dwelling located towards the north-eastern side of the Site as illustrated in **Figure 2**.

Figure 2 - Site Location

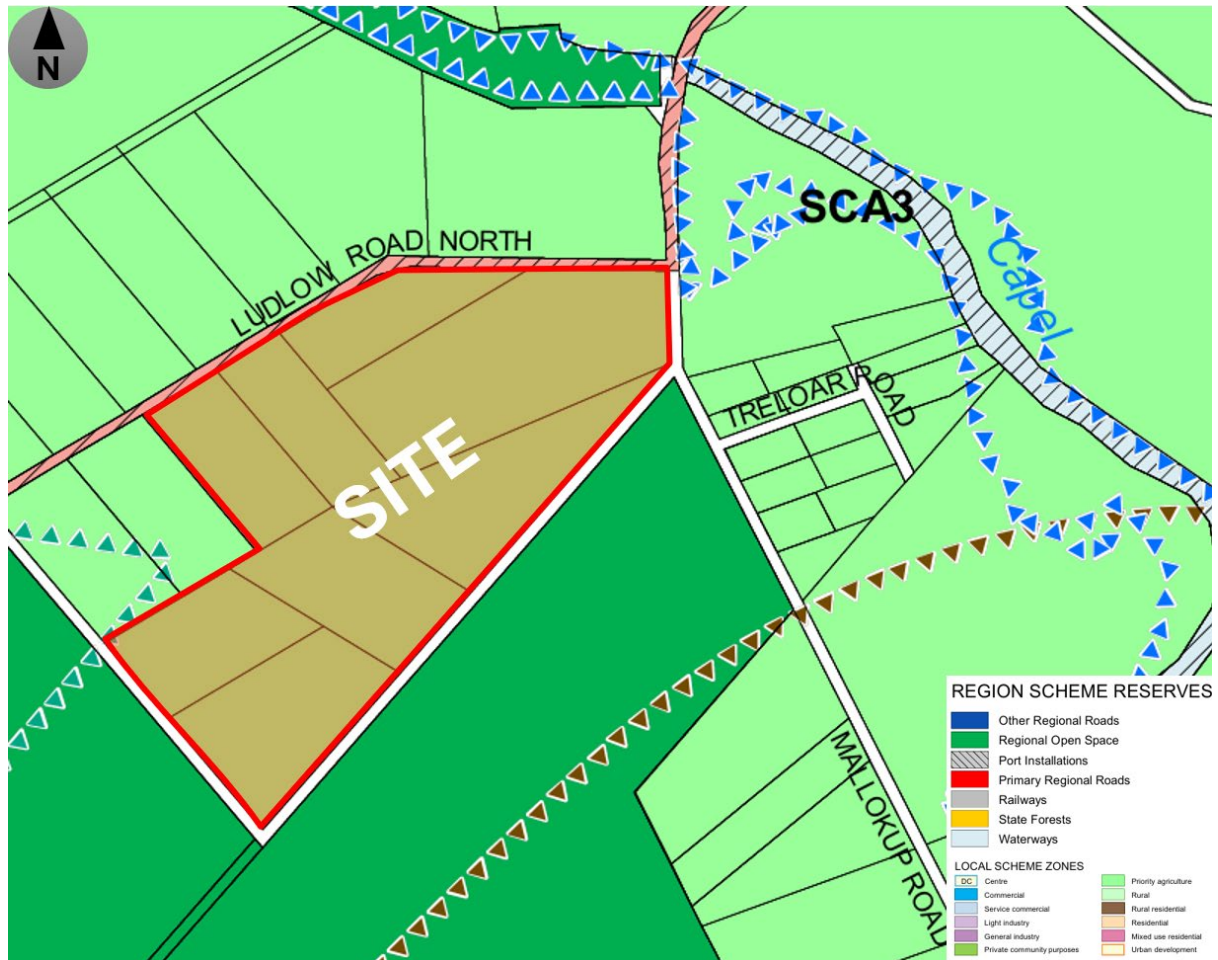


Source: Metromap

2.2 Surrounding Land Uses

As shown in **Figure 3**, the Site is zoned as "Rural" in accordance with the Shire of Capel Local Planning Scheme No. 8 (LPS8). The Site adjoins predominantly "Regional Open Space" land to the south and west. The majority of properties surrounding the Site are zoned as "Rural".

Figure 3 - Zoning Map



Source: Shire of Capel Local Planning Scheme No.8 (Map No. 2)

3 ROAD NETWORK

3.1 Road Hierarchy

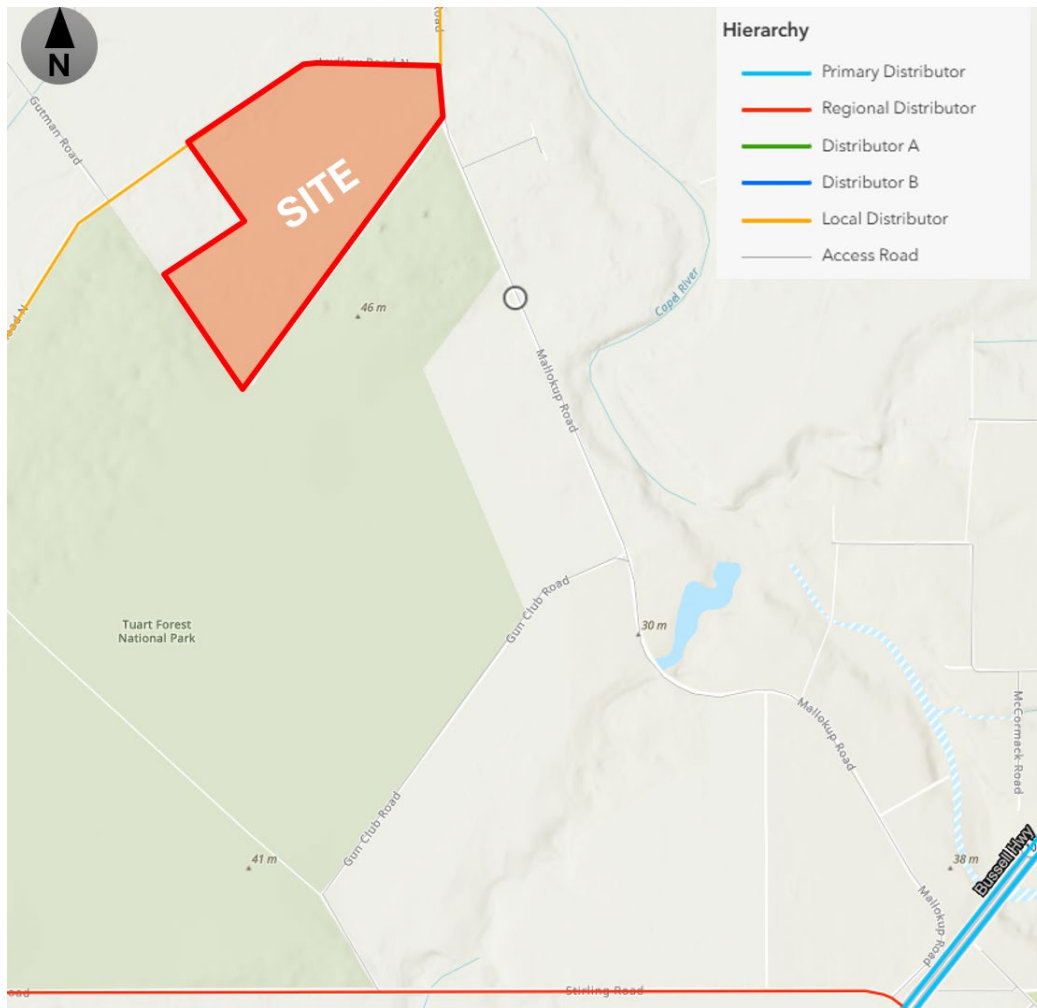
The road network within Western Australia is defined by Main Roads WA Road Hierarchy which describes the function, characteristic and management of each type of road. A description of each road type as per Main Roads WA Road Hierarchy criteria is summarised in **Table 1** below.

Table 1 – Road Hierarchy Description

Road Type	Description
Primary Distributors	Provide for major regional and inter-regional traffic movement and carry large volumes of generally fast-moving traffic. Some are strategic freight routes and all are State Roads. They are managed by Main Roads Western Australia.
District Distributor A	Carry traffic between industrial, commercial and residential areas and generally connect to Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining property. They are managed by local government.
District Distributor B	Perform a similar function to type A District Distributors but with reduced capacity due to flow restrictions from access to and roadside parking alongside adjoining property. These are often older roads with a traffic demand in excess of that originally intended. District Distributor A and B roads run between land-use cells and generally not through them, forming a grid which would ideally space them around 1.5 kilometres apart. They are managed by local government.
Regional Distributor	Roads that are not Primary Distributors but which link significant destinations and are designed for efficient movement of people and goods within and beyond regional areas. They are managed by local government.
Local Distributor (Urban)	Roads that carry traffic within a cell and link District Distributors or Regional Distributors at the boundary, to access roads. The route of Local Distributors should discourage through traffic so that the cell formed by the grid of District Distributors only carries traffic belonging to or serving the area. These roads should accommodate buses but discourage trucks. Urban Local Distributor roads are managed by local government.
Local Distributor (Rural)	Connect to other Rural Distributors and to Rural Access Roads. Not Regional Distributors, but which are designed for efficient movement of people and goods within regional areas. Rural Local Distributor roads are managed by local government.
Access Roads	Provide access to abutting properties with amenity, safety and aesthetic aspects having priority over the vehicle movement function. These roads are bicycle and pedestrian friendly. They are managed by local government.

Figure 4 shows the road hierarchy network and Table 2 provides a summary of the road characteristics of the surrounding road network.

Figure 4 - Road Hierarchy



Source: Main Roads Road Information Mapping

Table 2 - Surrounding Network Road Hierarchy

Road Name	Road Hierarchy	Jurisdiction	No. of Lanes	Road Pavement Width (m)	No. of Footpaths	Speed Limit (km/h)
Mallokup Road	Access Road	Shire of Capel	2	6.0	0	110 ¹
Stirling Road	Regional Distributor	Shire of Capel	2	7.8	0	110 ¹
Bussell Highway	Primary Distributor	MRWA	4	38 (23m median)	0	80
Ludlow Road North	Local Distributor	Shire of Capel	2	6	0	110 ¹

¹ Default speed limit outside built-up areas

Source: Main Roads Road Information Mapping

3.2 Traffic Flows on Surrounding Roads

The existing traffic volumes surrounding the Site were sourced from the traffic counts arranged by PTG and are summarised in **Table 3**. (assume development operates on weekday).

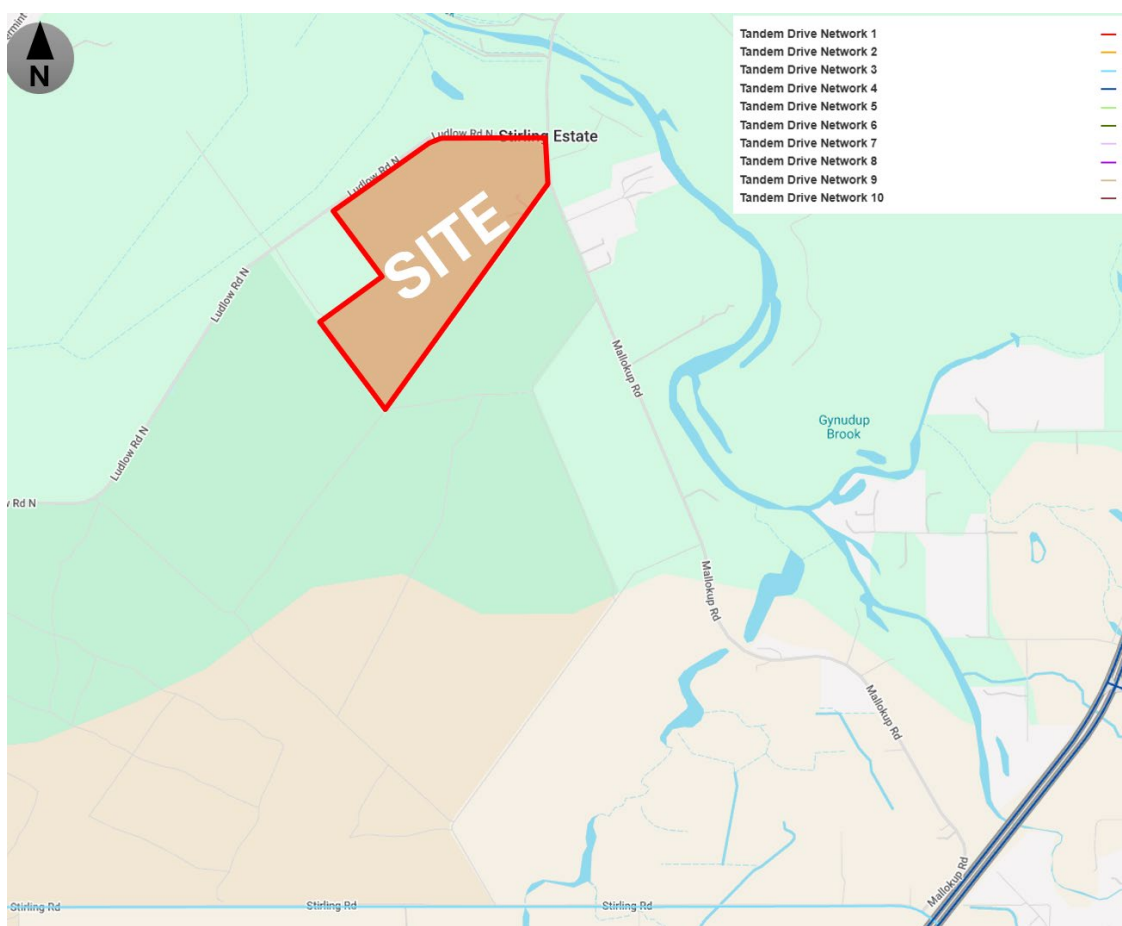
Table 3 - Existing Traffic Volumes

Road Name	Date	Source	AM Peak (vph)	PM Peak (vph)	Daily (vpd)	HV (%)
Mallokup Road	September 2025	PTG Consulting	18	21	216	19.5%
Bussell Highway	December 2024	MRWA	1,297	1,406	17,461	7.0%

3.3 Existing Restricted Access Vehicle (RAV) Network

Figure 5 shows the existing RAV network in the vicinity of the Site. As shown, Mallokup Road does not form part of the existing RAV network.

Figure 5 - Existing RAV Network



Source: MRWA HVS Network Map

3.4 Changes to Surrounding Road Network

PTG is not aware of any planned changes to the surrounding road network.

4 PUBLIC TRANSPORT FACILITIES

4.1 Existing Public Transport Services

There is no existing public transport network in the vicinity of the Site.

4.2 Future Public Transport Facilities

There is currently no future public transport facilities proposed near the vicinity of the Site.

5 PEDESTRIAN AND CYCLING FACILITIES

5.1 Existing Pedestrian and Cycling Network

There is no existing pedestrian and cycling network in close proximity of the Site.

5.2 Future Pedestrian and Cycling Facilities

There is currently no proposal for pedestrian and cycling facilities near the vicinity of the Site.

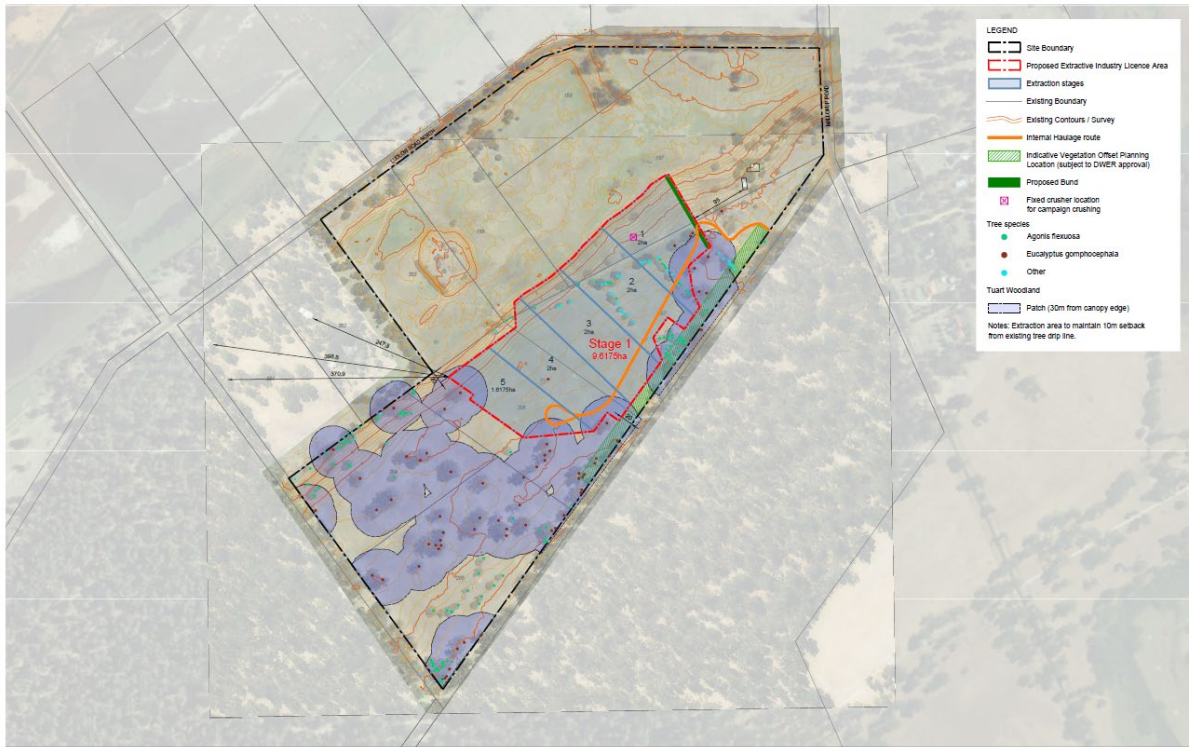
6 PROPOSED DEVELOPMENT

6.1 Proposed Land Use

The proposed development is for an extractive industry. The extraction operations are planned to occur over a total area of 9.6 ha, divided into 5 extraction stages. Each stage will involve an area of no more than 2ha at any given time.

Figure 6 illustrates the proposed extraction area within the subject Site, including the proposed staging plan for the extraction. A larger version of this figure is available in **Appendix B**.

Figure 6 - Excavation Plan



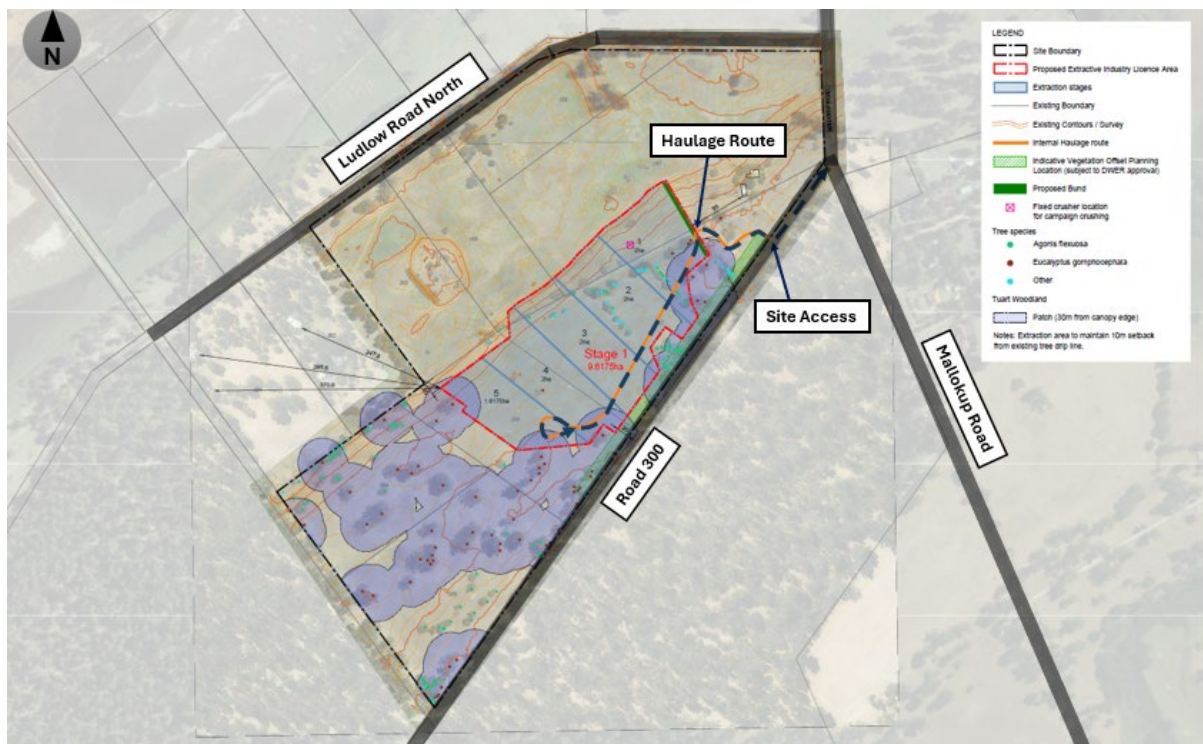
Source: SLR Consulting

6.2 Access Arrangements

As shown in **Figure 7**, access to the Site from Mallokup Road is via 'Road 300' (an unsealed, unconstructed public road reserve) and an existing unsealed crossover from 'Road 300' to the Site, approximately 150m south west of Mallokup Road. This existing crossover will be upgraded to accommodate the design vehicle movements.

While the swept paths (refer to **Section 6.7.2**) show that the 19m trucks can undertake the left-in and right-out turns at the intersection within the unsealed section of Road 300, it is recommended that Road 300 be sealed at the throat of the intersection to accommodate the volume of haulage trucks as part of the proposed extractive industry development. The extents of the sealing of Road 300 should be undertaken to the Shire of Capel specification and be able to accommodate the swept paths.

Figure 7 - Access Arrangements



Source: SLR Consulting

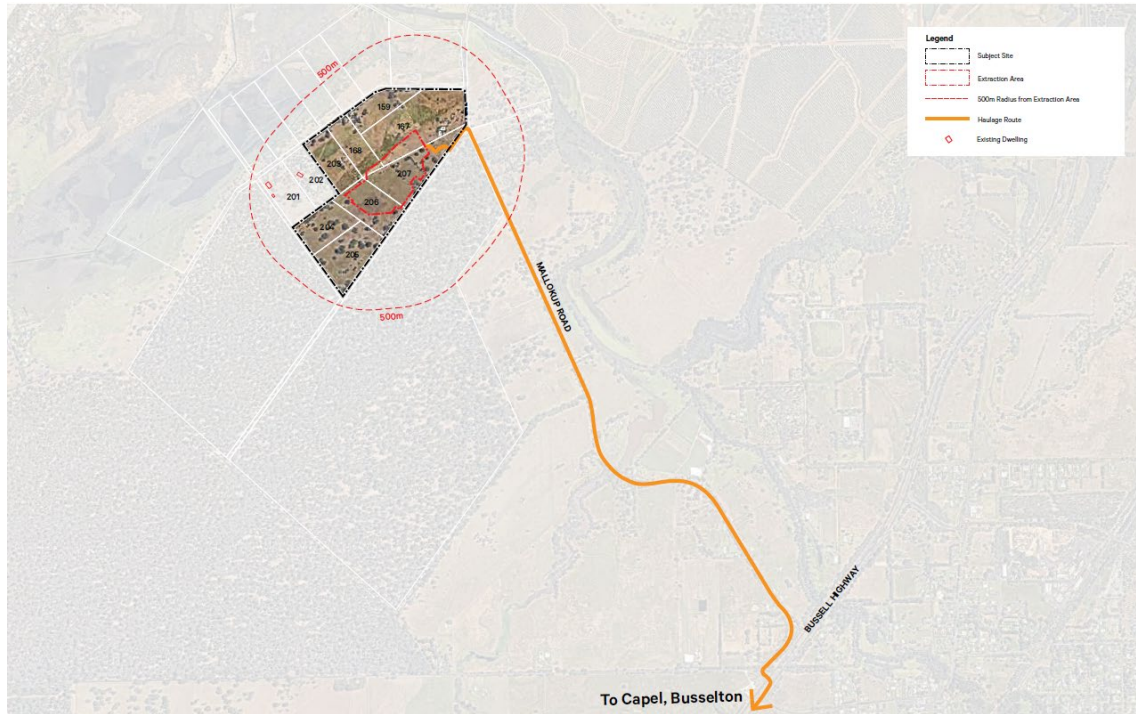
6.3 Vehicle Types

Haulage operations between the Site and Bussell Highway are proposed to utilise 19m articulated trucks

6.4 Haulage Route

As described in Section 6.3, haulage operations between the Site and Bussell Highway are proposed to utilise 19m articulated trucks. The designated haulage route, as illustrated in **Figure 8**.

Figure 8 - Proposed Haulage Route



Source: SLR Consulting

6.5 Hours of Operation

The proposed hours of operation are 7:00am to 6:00pm, Monday to Friday inclusive, and 7:00am to 12:00pm on Saturdays. No works are to occur on Sundays or Public Holidays.

6.6 Traffic Volumes

For the purposes of this assessment, a trip is defined as the ingress and egress of a vehicle to and from the Site. Accordingly, a vehicle that enters and subsequently exits the Site within the same day is considered to generate two trips.

» Staff trips

For the purpose of estimating trip generation, it is estimated that the Site will have a maximum of 4 employees on-site.

» Peak Hour Haulage

The maximum haulage intensity is anticipated to be 10 loaded trucks per peak hour, which equates to 20 trips per hour (10 inbound unloaded and 10 outbound loaded movements).

» Daily Trips

During normal operating periods, the Site is expected to generate up to 50 loaded trucks per day which is equivalent to 100 daily trips.

» Short Term Peak Demand

On occasion during periods of increased demand for materials, peak haulage operations may extend over longer working hours within the same day resulting in a higher number of daily truck movements with no change to the maximum number of truck movements per hour. These short-term peaks are expected to occur only for limited durations (e.g. a few days).

» Annual Tonnage

The total yearly tonnage material is expected to be 120,000 tonnes per annum.

Table 4 shows the estimated traffic generation.

Table 4 - Estimated Traffic Generation

	AM Peak (vph)		PM Peak (vph)		Daily (vpd)
	IN	OUT	IN	OUT	
Truck Trips	10	10	10	10	100
Staff Trips (Light Vehicles)	4	-	-	4	8
Total	24		24		108

It should be noted that the above values are based on estimates provided by the Client. The actual number of trips generated by the development may fluctuate depending on the time of day and extraction requirements, however, such variations are expected to remain consistent with the estimated trip generation.

6.7 Haulage Route Review

6.7.1 Safe Intersection Sight Distance

A Safe Intersection Sight Distance (SISD) assessment was undertaken for the Mallokup Road / Road 300 intersection. The assessment was based on a minimum reaction time of 2 seconds and a design speed of 110km/h, matching the default speed limit applicable to Mallokup Road. The resulting minimum required SISD is 285m as shown in **Figure 9**. The assessment confirms that the required SISD can be achieved at the intersection. A larger version of the figure is attached in **Appendix C**.

Figure 9 - Sight Distance Assessment



Source: MetroMap

6.7.2 Swept Path Analysis

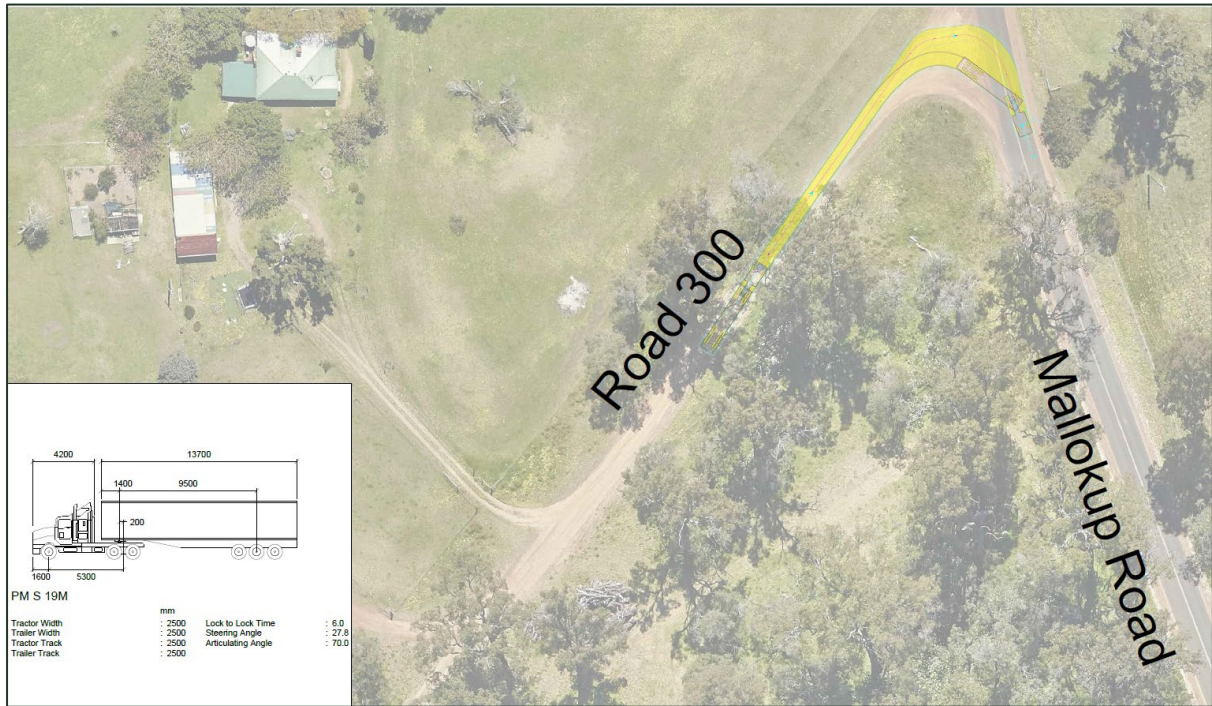
A Swept Path analysis was conducted at the intersection of Road 300 and Mallokup Road, using a 19.0m semi-trailer truck, as shown in **Figure 10** and **Figure 11**. A larger version of the figure is attached in **Appendix D**.

While the swept paths show that the 19m trucks can undertake the left-in and right-out turns at the intersection within the unsealed section of Road 300, it is recommended that Road 300 be sealed at the throat of the intersection to accommodate the volume of haulage trucks as part of the proposed extractive industry development. The extents of the sealing of Road 300 should be undertaken to the Shire of Capel specification and be able to accommodate the swept paths.

Figure 10- Swept Path inbound direction for 19.0m truck



Figure 11 - Swept path outbound direction for 19.0m truck



6.8 Crash Assessment

A crash assessment for the proposed haulage route has been completed using Main Roads WA Reporting Centre. The assessment covers all the recorded crashes for the 5-year period between 1 January 2020 to 31 December 2024 for the following road sections:

- » Mallokup Road (south of Ludlow Road N)
- » Stirling Road/Bussell Highway Intersection

Crash data is summarised as follows:

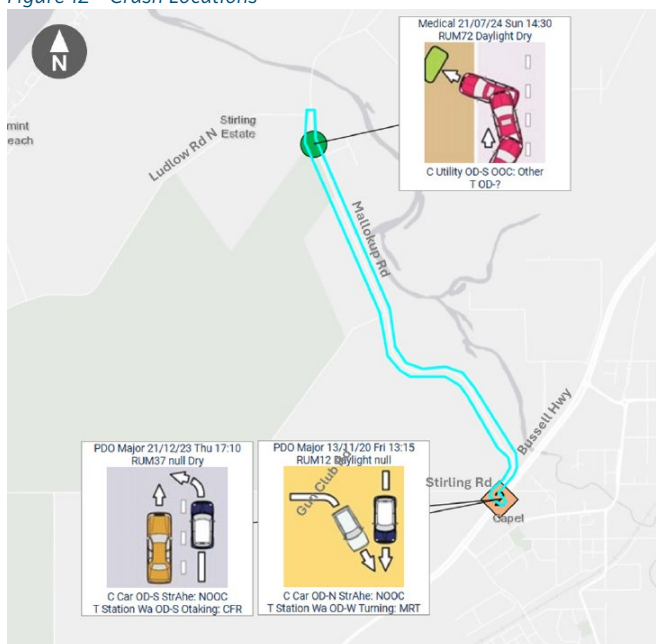
- » A total of three (3) crashes were recorded along the route, with no fatal crashes reported. One (1) crash needed medical attention, while the other two (2) crashes resulted in major property damage.
- » One crash was recorded on Mallokup Road (SLK 3.58) that resulted in medical attention was recorded as a “hit object” crash and involved a driver that experienced a sudden loss of control of the vehicle for unknown reasons and drove in to a ditch.

The location and severity of these crashes is illustrated in **Figure 12** while **Table 5** provides the summary of all crashes that occurred along the proposed haulage route.

Table 5 - Total Crashes

Crash Nature	Fatal	Hospital	Medical	PDO Major	PDO Minor	Total Crashes
Mallokup Road, south of Ludlow Road N						
Hit Object	-	-	1	-	-	1
Stirling Road/Bussell Highway Intersection						
Right Angle	-	-	-	1	-	1
Side Swipe Same Dirn	-	-	-	1	-	1
Total	0	0	1	2	0	3

Figure 12 - Crash Locations



Source: Main Roads WA Reporting Centre

Overall, it is not expected that the proposed extractive industry and haulage road will have any significant impacts on road safety in the area.

7 CONCLUSIONS

This Transport Impact Statement outlines the transport aspects of the proposed development focusing on traffic operations and access. Included are discussions regarding traffic generation and potential issues.

This statement has been prepared following the WAPC Transport Assessment Guidelines for Developments: Volume 4 - Individual Developments (2016).

The following conclusions are made for the proposed development:

- » The proposed development is for an extractive industry across various lots adjacent to Mallokup Road within the Stirling Estate.
- » The proposed development is estimated to generate the following truck movements:
 - Maximum of 10 loaded trucks per hour (20 combined in-and-out trips)
 - Up to 50 loaded trucks per day (100 combined in-and-out trips) during typical busy periods
 - Occasional periods of peak demand where additional daily trips will occur
- » The extracted material will be transported between the Site and Bussell Highway via Mallokup Road by 19m semi-trailer trucks.
- » Access to the Site from Mallokup Road is via 'Road 300' (an unsealed, unconstructed public road reserve) and an existing unsealed crossover from 'Road 300' to the Site, approximately 150m south west of Mallokup Road. This existing crossover will be upgraded to accommodate the design vehicle movements.
- » While the swept paths show that the 19m trucks can undertake the left-in and right-out turns at the intersection within the unsealed section of Road 300, it is recommended that Road 300 be sealed at the throat of the intersection to accommodate the volume of haulage trucks as part of the proposed extractive industry development. The extents of the sealing of Road 300 should be undertaken to the Shire of Capel specification and be able to accommodate the swept paths.

Overall, the proposed development is expected to have minimal impact on the traffic operations and safety on the surrounding network.



Appendix A

WAPC CHECKLIST FOR INDIVIDUAL
DEVELOPMENT - TRANSPORT
IMPACT STATEMENT



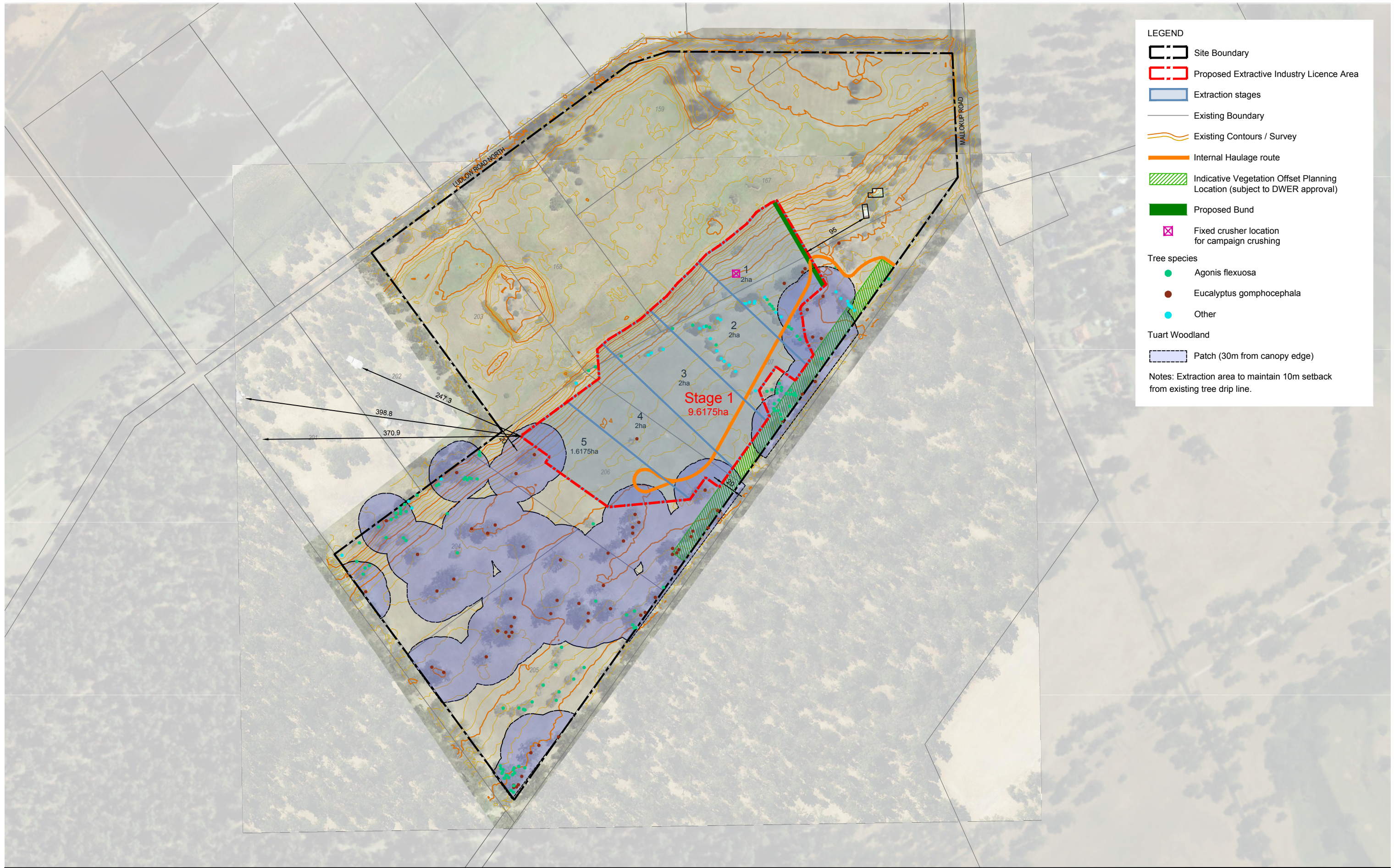
APPENDIX A - WAPC CHECKLIST

Item	Provided	Comments/Proposals
Proposed development		
existing land uses	Section 2.1	
proposed land use	Sections 1 and 6	
context with surrounds	Section 2.2	
Vehicular access and parking		
access arrangements	Section 6.2	
public, private, disabled parking set down/pick up	NA	
Service vehicles (non-residential)		
access arrangements	Section 6.2	
on/off-site loading facilities	NA	
Service vehicles (residential)		
Rubbish collection and emergency vehicle access	NA	
Hours of Operation	Section 6.5	
Traffic Volumes		
daily or peak traffic volumes	Section 6.6	
type of vehicles (e.g. cars, trucks)	Section 6.3	
Traffic management on frontage streets	NA	
Public transport access		
nearest bus/train routes	Section 4	
nearest bus stops/train stations	Section 4	
pedestrian/cycle links to bus stops/ train station	NA	
Pedestrian transport access		
existing pedestrian facilities within the development (if any)	NA	
proposed pedestrian facilities within development	NA	
existing pedestrian facilities on surrounding roads	Section 5.1	
proposals to improve pedestrian access	NA	
Cycle access/facilities		
existing cycle facilities within the development (if any)	NA	
proposed cycle facilities within development	NA	
existing cycle facilities on surrounding roads	Section 5.1	
proposals to improve cycle access	NA	
Site specific issues	Section 6.7	
Safety issues		
identify issues	Section 6.8	
remedial measures	NA	

Appendix B

SITE PLANS





Excavation Works Plan

Mallokup Road, Stirling Estate

Date: 4 Feb 2026 Scale: 1:5000 @ A3 1:10,000 @ A1 File: 23-434 EX01A Staff: HK JJ Checked: DL



element. PART OF **SLR**



Level 1, 500 Hay Street, Subiaco, Western Australia 6008.
 T. +61 8 9289 8300 | E. hello@elementadvisory.com.au
 elementadvisory.com.au

Appendix C

SISD Assessment



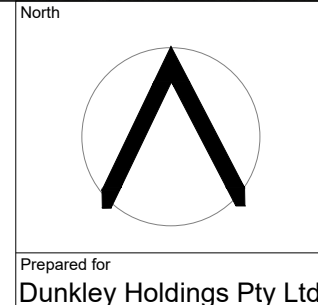
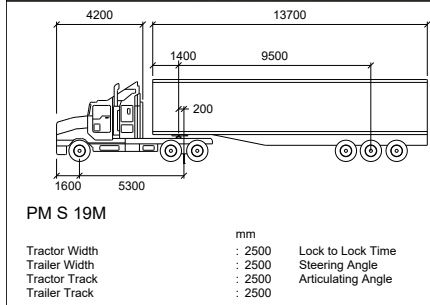


<p>North</p> 				<p>Drawing Title: SWEPT PATH DRAWING Safe Intersection Sight Distance (SISD) Mallokup Road, Stirling Estate</p>																			
<p>Prepared for Dunkley Holdings Pty Ltd</p>		<p>PTG Consulting ABN 89 668 880 448 Level 4, 167 St George Terrace, Perth, WA, 6000 Tel: (08) 6188 4500 Web: www.ptgconsulting.com.au</p>		<table border="1"> <tr> <th>Drawn</th> <th>Designed</th> <th>Approved</th> <th>Scale @ A3</th> <th>Drawing Status</th> </tr> <tr> <td>LH</td> <td>AW</td> <td>AW</td> <td></td> <td>FINAL</td> </tr> </table>	Drawn	Designed	Approved	Scale @ A3	Drawing Status	LH	AW	AW		FINAL	<table border="1"> <tr> <th>Date</th> <th>Project No.</th> <th>DWG No.</th> <th>Revision</th> </tr> <tr> <td>27/02/26</td> <td>PTGT.02794</td> <td>D01</td> <td>A</td> </tr> </table>	Date	Project No.	DWG No.	Revision	27/02/26	PTGT.02794	D01	A
Drawn	Designed	Approved	Scale @ A3	Drawing Status																			
LH	AW	AW		FINAL																			
Date	Project No.	DWG No.	Revision																				
27/02/26	PTGT.02794	D01	A																				

Appendix D

Swept Path



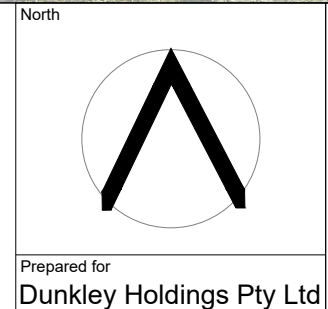
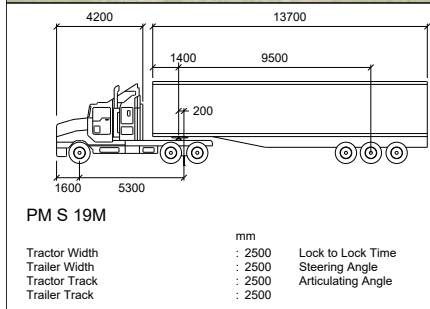


ptg
consulting

PTG Consulting | ABN 89 668 880 448
Level 4, 167 St George Terrace, Perth, WA, 6000
Tel: (08) 6188 4500
Web: www.ptgconsulting.com.au

Drawing Title:
SWEPT PATH DRAWING
Mallokup Road/Road 300 Intersection Left-In
Mallokup Road, Stirling Estate

Drawn LH	Designed AW	Approved AW	Scale @ A3	Drawing Status FINAL
Date 27/02/26	Project No. PTGT.02794	DWG No. D02	Revision A	



PTG Consulting | ABN 89 668 880 448
Level 4, 167 St George Terrace, Perth, WA, 6000
Tel: (08) 6188 4500
Web: www.ptgconsulting.com.au

Drawing Title:
SWEPT PATH DRAWING
Mallokup Road/Road 300 Intersection Right-Out
Mallokup Road, Stirling Estate

Drawn LH	Designed AW	Approved AW	Scale @ A3	Drawing Status FINAL
Date 27/02/26	Project No. PTGT.02794	DWG No. D03	Revision A	



ptg
consulting

www.ptgconsulting.com.au

