

Agright 775 Warrah Ridge Broiler Farm



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LIST OF ACRONYMS

ASD	Approach Sight Distance
AUL	Auxiliary Left
BAL	Basic Left
BAR	Basic Right
CHML	Combined Higher Mass Limits
CHR	Channelised Right
CML	Concessional Mass Limit
DA	Development Application
EDS	Engineering Development Standards
GARID	Guidelines for Assessment of Road Impacts of Development
GML	General Mass Limit
GTIA	Guide to Traffic Impact Assessment
HML	Higher Mass Limit
IDM	Infrastructure Design Manual
LEP	Local Environmental Plan
LGA	Local Government Area
LOS	Level of Service
NSW	New South Wales
PSA	PSA Consulting
RAV	Restricted Access Vehicles
RTA	Roads and Traffic Authority
SSD	State Significant Development
SSID	Safe Intersection Sight Distance
TfNSW	Transport for NSW
TIA	Traffic Impact Assessment
TMR	Transport and Main Road



1. INTRODUCTION

PSA Consulting (PSA) has been engaged by AgRight Griffith Pty LTD to provide a Traffic Impact Assessment (TIA) to accompany a Development Application (DA) for a new proposed free-range poultry (broiler) farm at 775 Warrah Ridge Road, Warrah Ridge 2343, NSW, approximately 90.1km southwest from Tamworth. Figure 1 illustrates the site locality plan.



Figure 1: Proposed Development Location (Source: Google Earth, PSA)

The proposed development is located within the Liverpool Plains Shire Council Local Government Area (LGA). This TIA is undertaken in accordance with the requirements of the Liverpool Plains Shire *Development Control Plan 2012* and aligns with the requirements of *Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development*.

This report will address the following components:

- Existing Conditions
- Development Profile
- Impact Assessment
- Parking and Access Assessment
- Swept Path Analysis



2. EXISTING CONDITIONS

2.1 SITE BACKGROUND

The proposed Warrah Ridge poultry broiler farm is located at 755 Warrah Ridge Road, Warrah Ridge, NSW, 2343 formally described as Lot 42 on DP3762

. The proposed site is currently used for rural production purposes (cropping). Access to the site is achieved via an internal vehicular access road from Warrah Ridge Road.

The total site area is approximately 444 hectares and is zoned RU1- Primary Production (as per *Liverpool Plains Shire Local Environmental Plan (LEP) 2011*). Both the total site area and the proposed farm boundaries are graphically highlighted below in Figure 2.

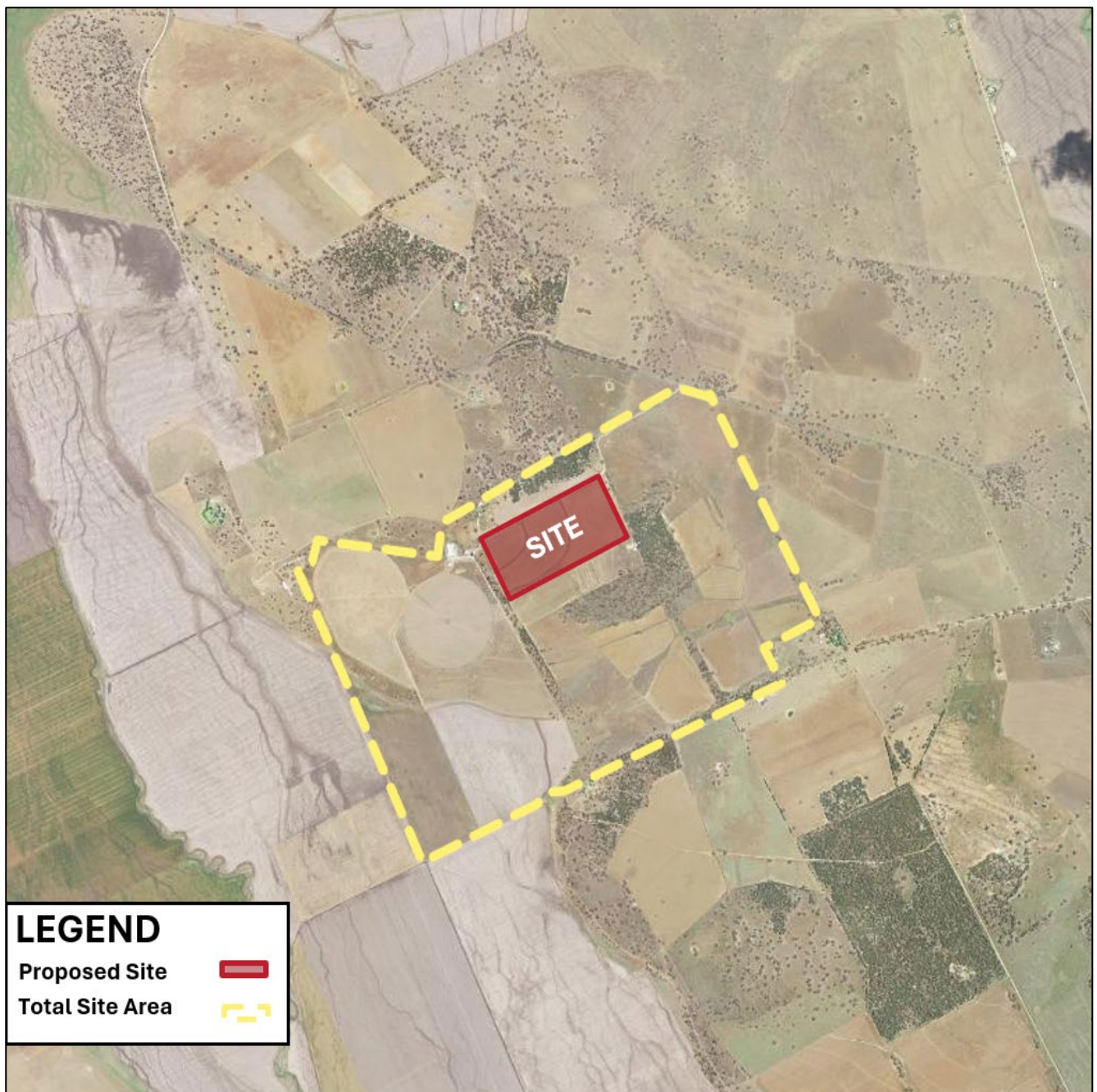


Figure 2: Proposed Farm and Site Locality Map (Source: Agright, PSA)



2.2 ROAD NETWORK

Figure 3 illustrates the road network and hierarchy in the vicinity of the site. The proposed development access is located along Warrah Ridge Road, approximately 16.8km west of Willow Tree.

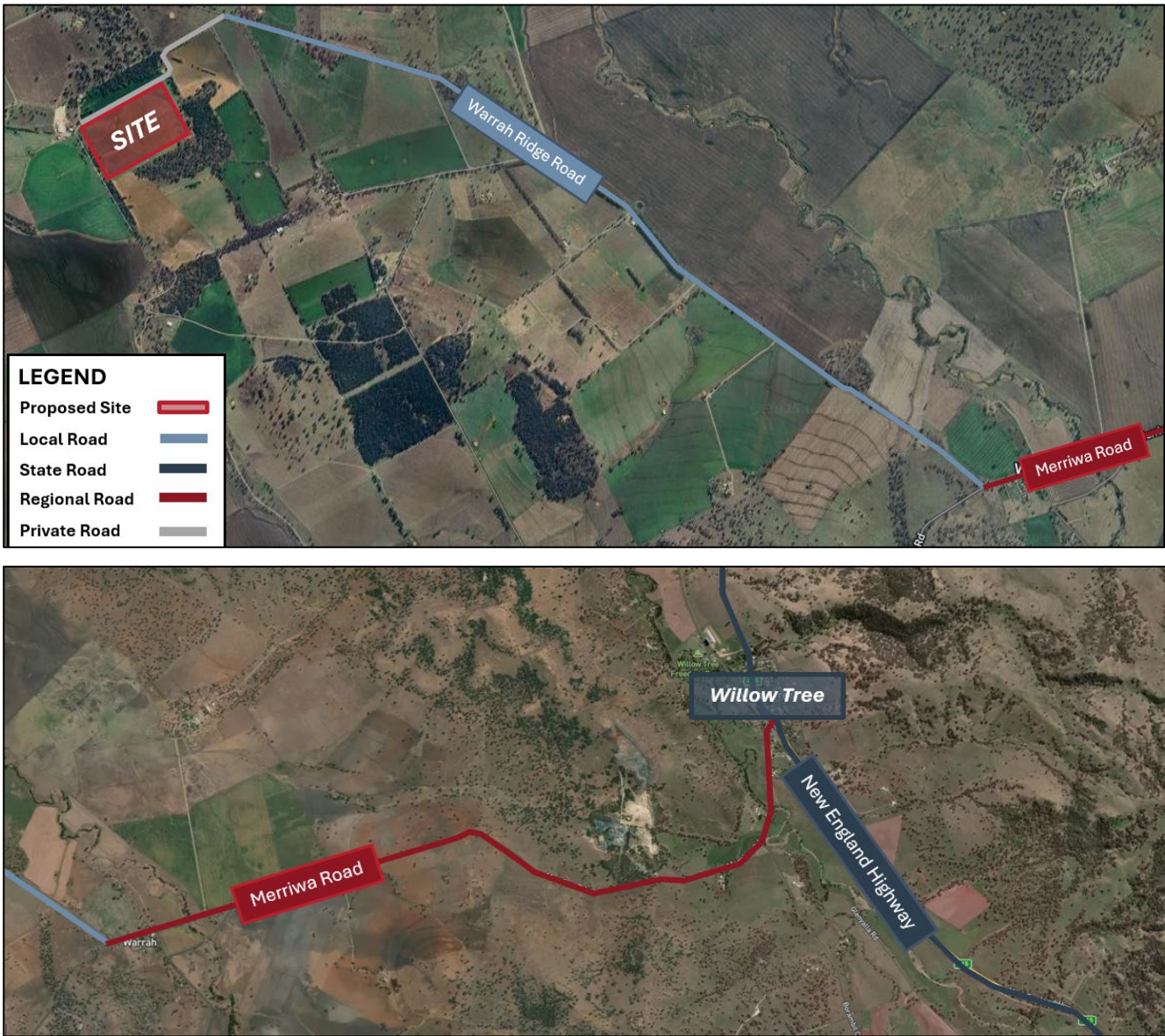


Figure 3: Road Classification (Source: TfNSW, PSA)

The road hierarchy, speed limit and cross section of the proposed access roads have been summarised below in Table 1.

Table 1: Road Hierarchy (Source: TfNSW)

ROAD NAME	JURISDICTION	CLASSIFICATION / HIERARCHY	CROSS SECTION/ GEOMETRY	SPEED LIMIT
Warrah Ridge Road	Council-Controlled	Local Road	Sealed, Two-way / Two-Lane undivided Carriageway	100 km/h
Merriwa Road	Council-Controlled	Regional Road	Sealed, Two-way / Two-Lane divided Carriageway	100 km/h
New England Highway	State-Controlled	State Road	Sealed, Two-way / Two-Lane divided Carriageway	50 km/h



2.2.1 Freight Network

The site and surrounding road network are located in the Liverpool Plains Approved Area and all roads are accessible to B-heavy vehicles up to and including 25/26m B-Doubles subject to the following conditions.

1. *It is the responsibility of the driver of the B-Double transport to satisfy themselves that the proposed route is suitable for use under the conditions existing at the time and undertake a risk assessment of the route prior to travelling the route to assess the suitability of travel along the route.*
2. *Temporary route restrictions may be imposed when routes become impassable for heavy vehicles.*
3. *Following rainfall, the driver of a B-Double transport must check with the Liverpool Plains Shire Council, or the RTA Area Office, regarding possible road closures.*
4. *Extreme care must be taken on the route especially during wet weather or during school bus hours.*

Merriwa Road and the New England Highway are fully approved under the Restricted Access Vehicle (RAV) Maps for GML, CML, and Higher Mass Limit (HML) B-Doubles up to 26 metres. Figure 4 and Figure 5 below highlight the approved access roads, along with the roads which are approved with conditions.

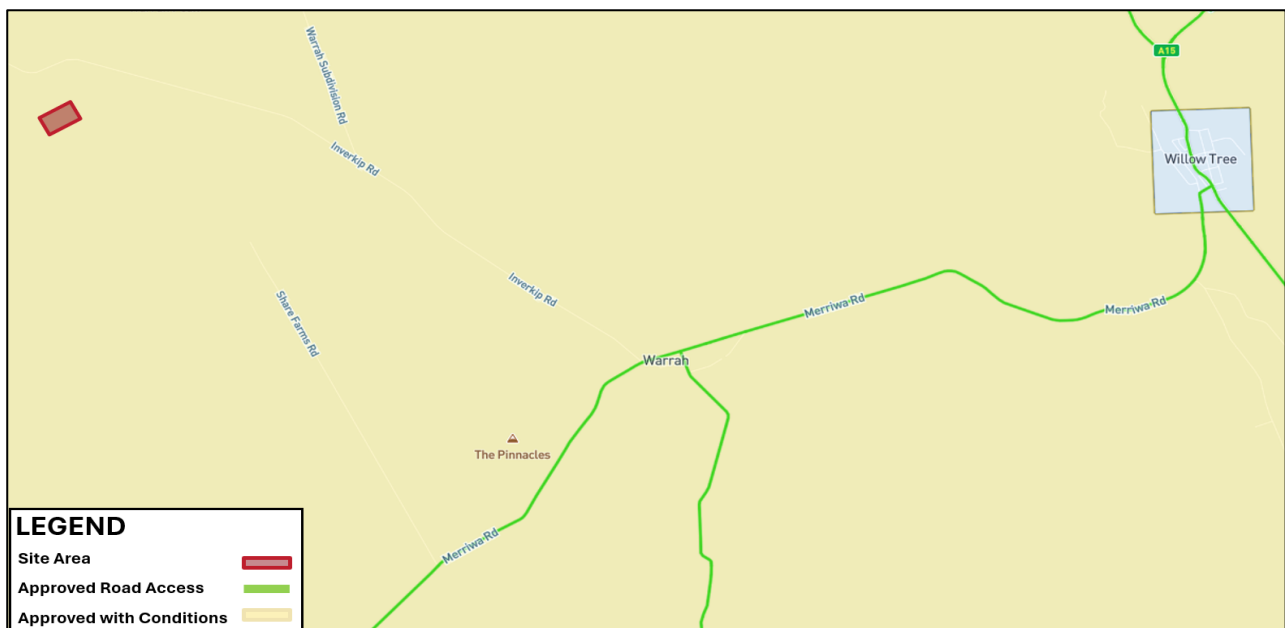


Figure 4: NSW RAV GML & CML Network Map (Source: TfNSW)

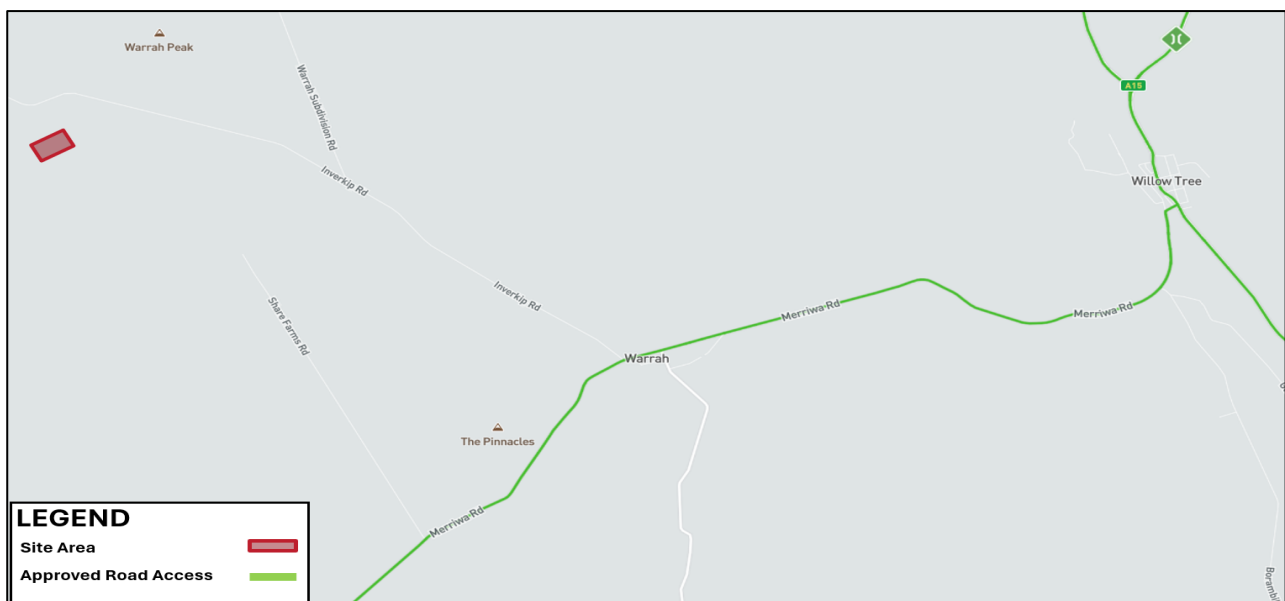


Figure 5: NSW RAV HML Network Map (Source: TfNSW)



3. DEVELOPMENT PROFILE

3.1 DEVELOPMENT DETAILS

The proposed development, as shown below in Figure 6, involves the construction of 14 poultry sheds dedicated for free range chicken production. Each shed will accommodate up to 57,900 chickens, resulting in a maximum total capacity of approximately 810,600 birds. The sheds will be constructed in two rows, running north-south across the site. Additional ancillary buildings and supporting infrastructure will also be constructed, including a solar farm.

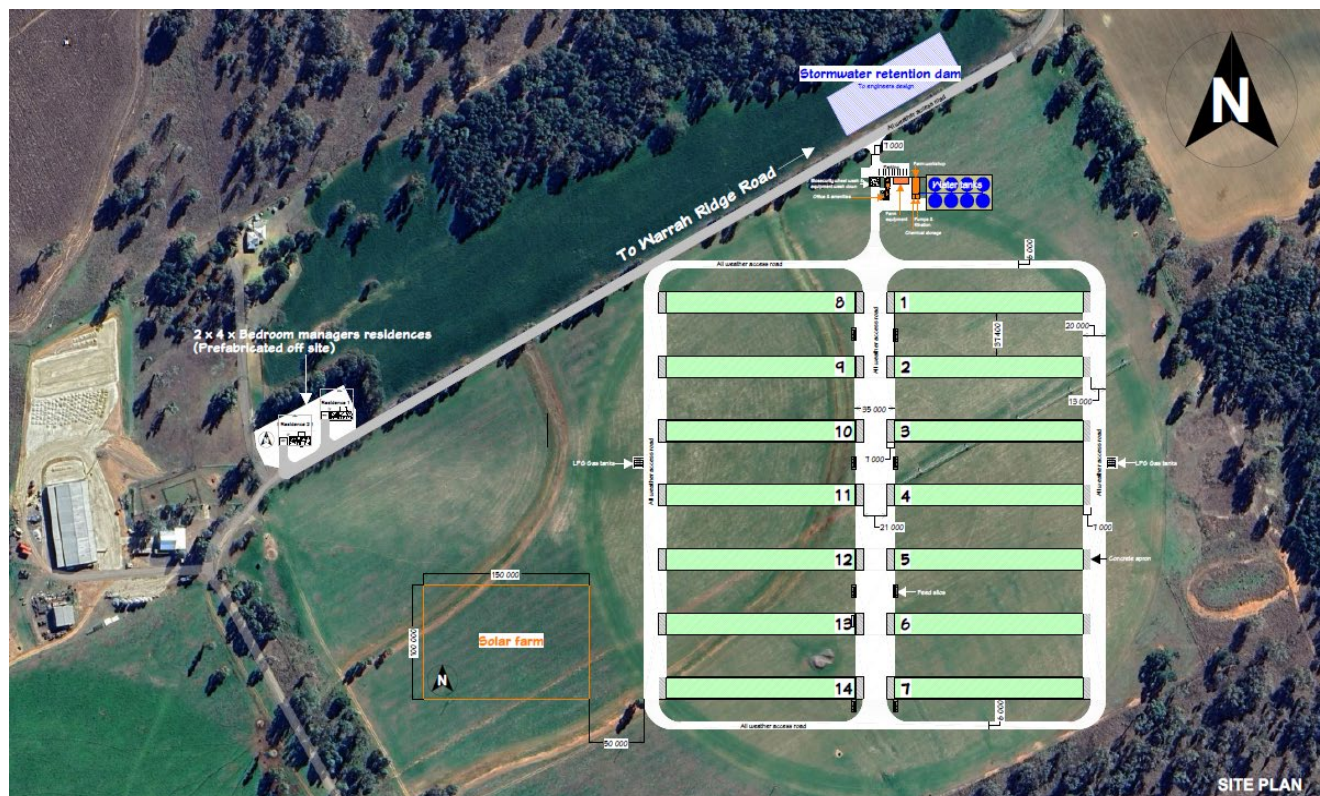


Figure 6: Proposed Development Plan (Source: Agright)

3.2 DEVELOPMENT TRAFFIC GENERATION AND DISTRIBUTION

Expected traffic volumes for the proposed development were determined in consultation with Agright. Two stages of traffic generation have been identified:

1. **Construction Phase** – associated with the build-out of the development.
2. **Operational Phase** – ongoing traffic volumes once the development is complete.

3.2.1 Construction Phase

The construction phase is expected to run for approximately six months; working a total of 26 weeks, 6 days per week. A breakdown of the required vehicle types and movements is provided in Table 2 below.

Table 2: Construction Traffic – Vehicle Movement (Source: Agright)

Construction Development Traffic			
Activity	Vehicle Type	Total Movements	Avg. Daily Movements
Builders	Cars/Utes/vans	15	1
Trades	Cars/Utes/vans	1,092	7
Concreters	Cars/Utes/vans	100	1
Total Light Vehicle Movements		1,207	9



Concrete supply	Concrete trucks	504	4
Rubbish collection	Rubbish truck	26	1
Fuel delivery	Semi-truck	26	1
Earthworks mobilisation/demobilisation	Semi-trucks	24	1
Roading gravel	Semi-trucks	60	1
Construction materials	Semi-trucks	55	1
Houses (transportable)	Semi-trucks	2	1
Total Heavy Vehicle Movements		697	10

3.2.2 Operational Phase

Operational traffic volumes for the proposed development have been confirmed in consultation with Agright. A breakdown of the light and heavy vehicle movements is provided in Table 3. With the operational phase is based on 5.7 Batches per year (approximately 64 days per batch).

Table 3: Operational Traffic – Vehicle Movement (Source: Agright)

Operational Traffic – Vehicle Movements			
Activity	Vehicle Type	Movements per Batch	Movements per Day
Feed delivery	Truck and trailer	59	1
Chick delivery	Twin-axle rigid truck	4	1
Rubbish collection	Rubbish truck	2	1
Fuel delivery	Semi-truck	2	1
Live bird transport	Semi-truck	95	2
Catching equipment transport	Semi-truck	45	1
Manure removal	Semi-truck	55	1
Fresh litter delivery	Semi-truck	15	1
Dead bird collection	Twin-axle rigid truck	7	1
Heavy Vehicle Average Daily Movements (64 days per batch)			10
Off-site staff	Cars/Utes/vans	60	1
On-site staff	Cars/Utes/vans	80	2
Light Vehicle Average Daily Movements (64 days per batch)			3

In determining the expected daily operational traffic, it is noted that most activities generate fewer than one vehicle trip per day. For the purposes of assessment, these values have been conservatively rounded up to the nearest whole number. While this approach ensures a conservative estimate, it likely overstates actual traffic volumes. In practice, total operational traffic is expected to be closer to 8 vehicle movements per day (comprising around 5 heavy vehicle movements and 3 light vehicle movements), rather than the 13 movements per day (10 heavy and 3 light) adopted in this assessment.

3.3 TRIP DISTRIBUTION

The following assumptions were applied in assigning development-generated traffic to the external road network:

- Given the site's location, and the fact that primary deliveries and arrivals will be serviced from Tamworth, further to the north, it is assumed that all trips (construction and operational phases) will travel to and from the east towards Willow Tree along Merriwa Road and then head north on the New England Highway.
- All movements will generate two (2) trips, comprising one inbound and one outbound trip.
- Heavy vehicle trips generally relate to the delivery or collection of materials and are expected to be completed within an hour during farm operations.
- Heavy vehicle trips are likely to occur both outside typical operating hours and during peak hours when the site is in operations. Therefore, heavy vehicle trips have been equally distributed throughout the day.
- All staff and tradie/construction staff (light vehicle) trips will arrive during the AM peak and depart during the PM peak hours.



The total peak hour traffic volumes and movements are summarised in Table 4. The directional distribution of movements across the surrounding road network is shown in Figure 7 and Figure 8 for the construction phase, and in Figure 9 and Figure 10 for the operational phase.

Table 4: Development Traffic Distribution (Source: Agright, PSA)

Trip Distribution Volumes					
Phase	Direction	AM Peak (In)	AM Peak (Out)	PM Peak (In)	PM Peak (Out)
Construction	Light Vehicles	9	0	0	9
	Heavy Vehicles	10	0	0	10
Operational	Light Vehicles	3	0	0	3
	Heavy Vehicles	1	1	1	1

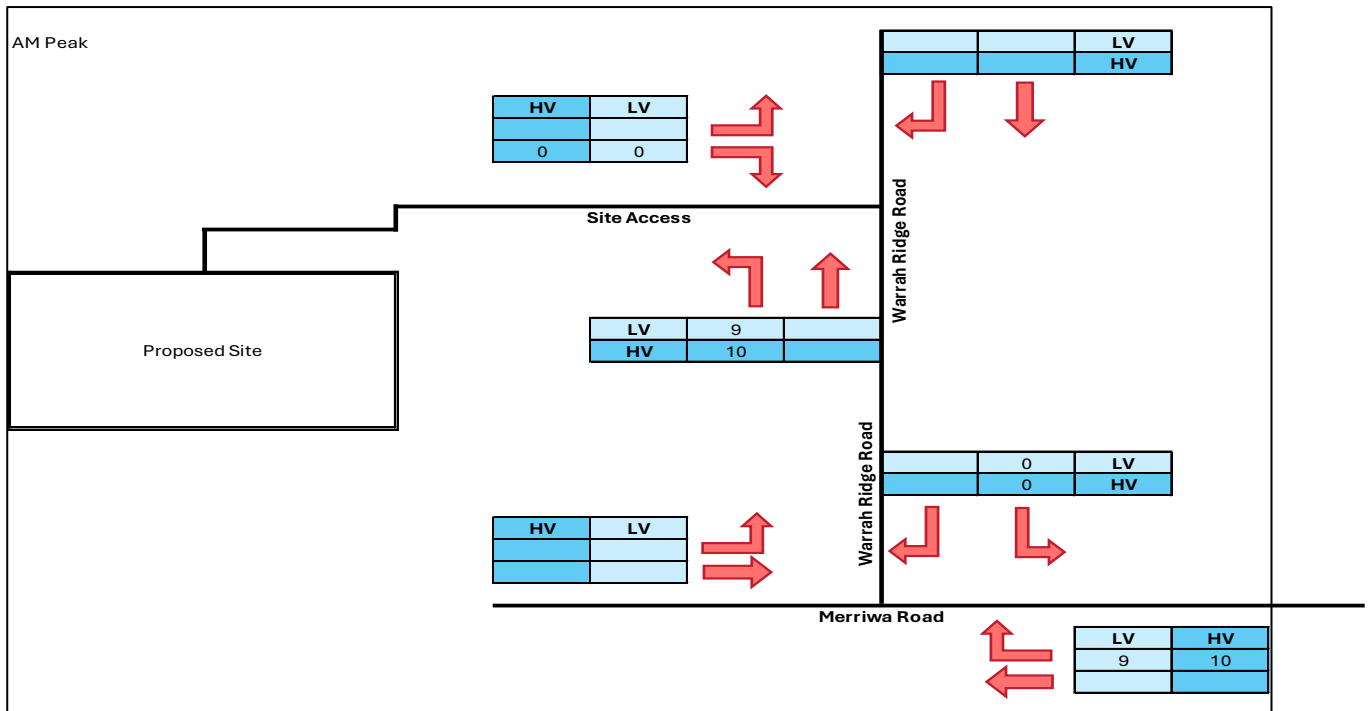


Figure 7: AM Peak Hour - Construction Traffic (Source: Agright, PSA)

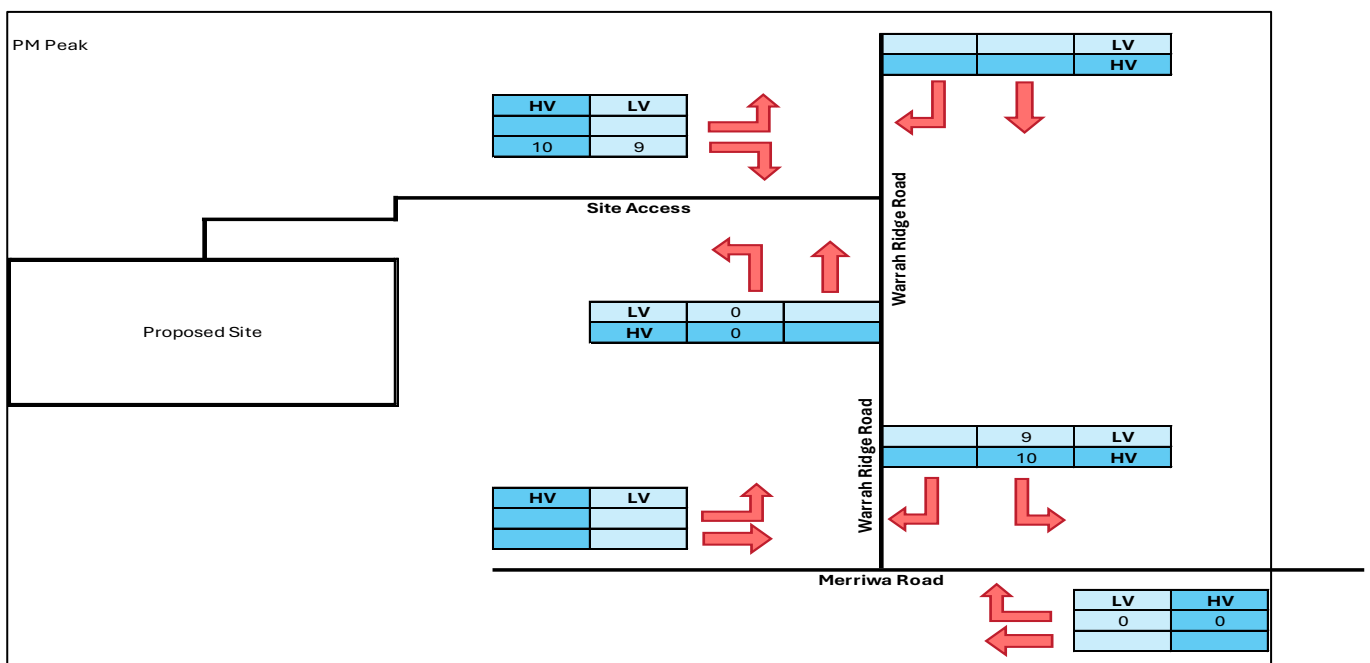


Figure 8: PM Peak Hour - Construction Traffic (Source: Agright, PSA)

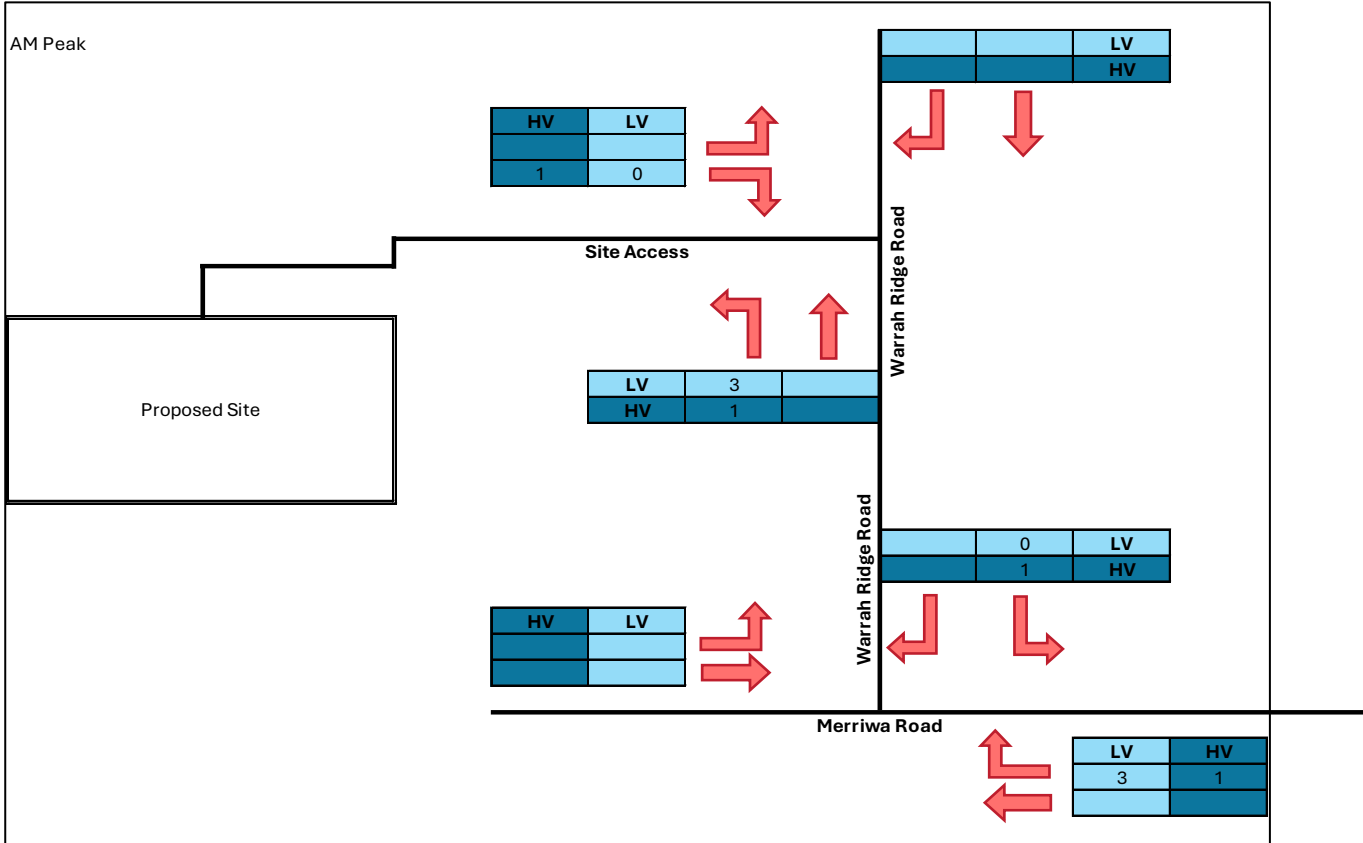


Figure 9: AM Peak Hour - Operational Traffic (Source: Agright, PSA)

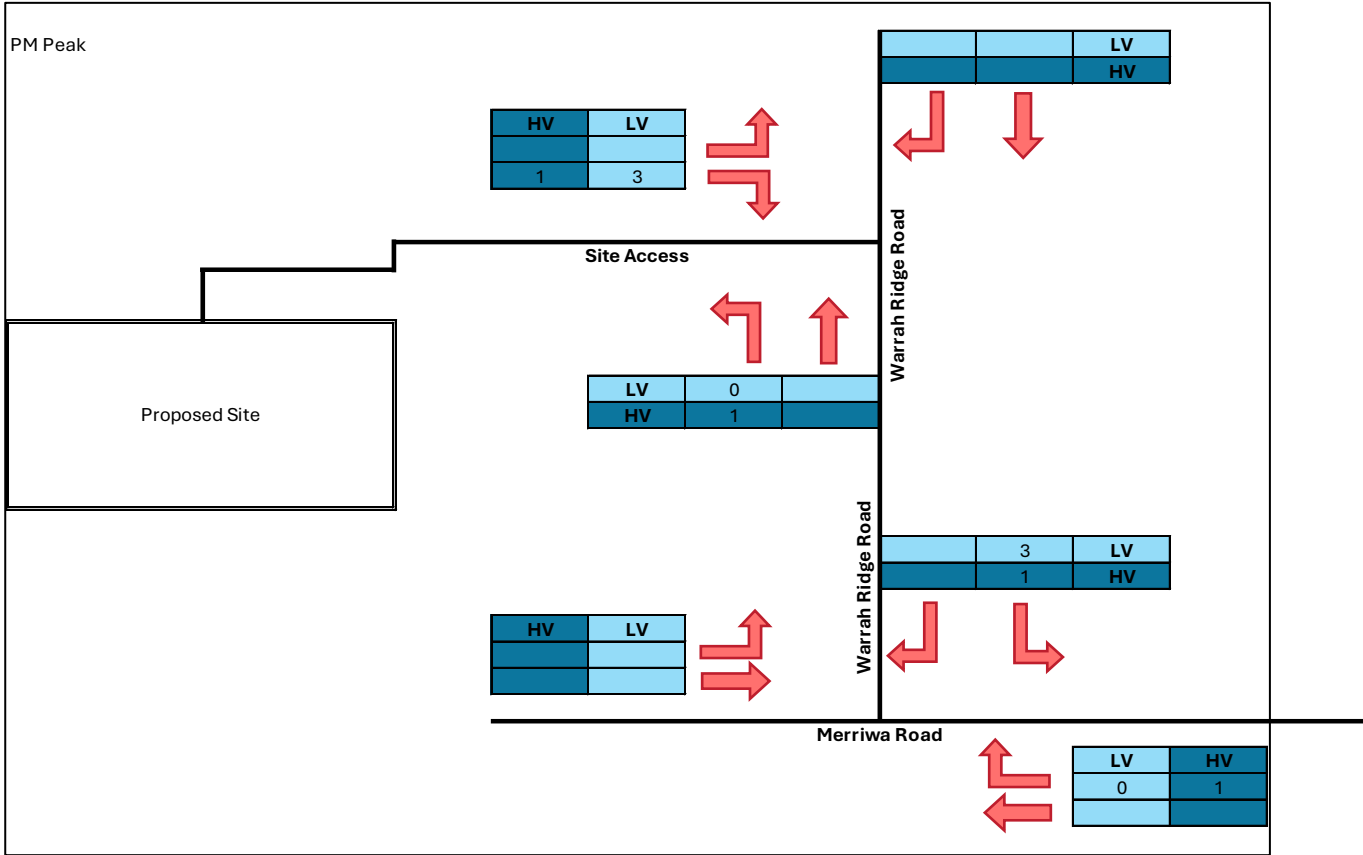


Figure 10: PM Peak Hour - Operational Traffic (Source: Agright, PSA)



4. IMPACT ASSESSMENT

The peak hour traffic generation of the development as discussed above is 4 trips in an hour which averages to one vehicle every 15 minutes. The development is expected to generate a total of 13 vehicle movements per day. The low vehicle turning movements are therefore not likely to result in any impacts on the intersections and road network and hence, further traffic intersection assessment of the development is not warranted.

4.1 CRASH HISTORY

The vehicle crash history within the vicinity of the development was sourced from the TfNSW's LGA View Crashes Map for a 5-year period from 2020 to 2024. The data indicates 1 serious crash along Warrah Ridge Road and several non-casualty, moderate and serious crashes along the New England Highway.

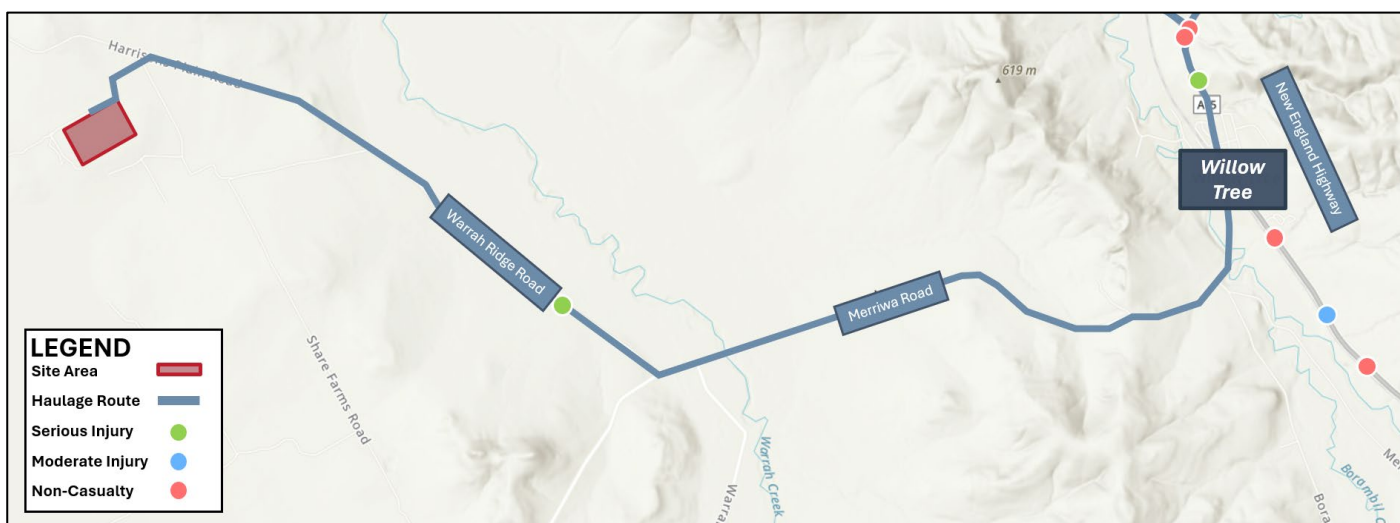


Figure 11: Crash History (Source: TfNSW)

Table 5: Crash History (Source: TfNSW)

YEAR	CRASH ID	DEGREE OF CRASH	RUM - CODE
2021	1258609	Non-Casualty	39
2021	1258967	Non-Casualty	13
2021	1276013	Serious Injury	71
2021	1277286	Non-Casualty	71
2021	1269631	Moderate Injury	72
2021	1279777	Non-Casualty	82
2023	1315835	Non-Casualty	81
2024	1355526	Serious Injury	73

4.2 ROAD SAFETY ASSESSMENT

A desktop road safety assessment has been undertaken for both the Merriwa Road / Warrah Ridge Road intersection and Merriwa Road / New England Highway intersection. Identified risks have been scored against a risk matrix to determine whether the proposed development would result in any significant change to existing road safety condition. The risk matrix, reproduced from Figure 9.2.2 (a) – Safety risk score matrix of the TMR's GTIA has been adopted as a recognised and suitable tool to provide a consistent and clear framework for assessing road safety risk. The risk assessment indicates that the proposed development will result in no to minimal increase in the likelihood of a collision occurring. All risk items are deemed to score "Medium" for both without and with development.



		Potential consequence				
		Property only (1)	Minor injury (2)	Medical treatment (3)	Hospitalisation (4)	Fatality (5)
Potential likelihood	Almost certain (5)	M	M	H	H	H
	Likely (4)	M	M	M	H	H
	Moderate (3)	L	M	M	M	H
	Unlikely (2)	L	L	M	M	M
	Rare (1)	L	L	L	M	M

L: Low risk
M: Medium risk
H: High risk

Figure 12: Safety Risk Score Matrix (Source: TMR)

Table 6 shows the risk assessment for the 'without development' and 'with development' scenarios to determine whether the proposed development worsens existing safety risk.

Table 6: Risk Assessment (Source: PSA)

RISK ITEM	WITHOUT DEVELOPMENT			WITH DEVELOPMENT		
	Likelihood	Consequence	Risk Score	Likelihood	Consequence	Risk Score
MERRIWA ROAD / WARRAH RIDGE ROAD INTERSECTION						
Increased risk of rear-end collision between vehicles travelling north eastbound on Merriwa Road and those entering via Warrah Ridge Road.	1	5	M	1	5	M
Increased risk of rear-end collision between vehicles travelling south westbound on Merriwa Road and those entering via Warrah Ridge Road.	1	5	M	1	5	M
Increased risk of vehicles from adjacent approach through-left collision between vehicles travelling on Merriwa Road and vehicles turning left out of Warrah Ridge Road.	1	5	M	1	5	M
Increased risk of vehicles from adjacent approach through-right collision between vehicles travelling on Merriwa Road and vehicles turning left out of Warrah Ridge Road.	1	5	M	1	5	M
MERRIWA ROAD / NEW ENGLAND HIGHWAY INTERSECTION						
Increased risk of rear-end collision between vehicles travelling northbound on New England Highway and those entering via Merriwa Road.	2	5	M	2	5	M
Increased risk of rear-end collision between vehicles travelling southbound on New England Highway and those entering via Merriwa Road.	2	5	M	2	5	M
Increased risk of vehicles from adjacent approach through-left collision between vehicles travelling on New England Highway and vehicles turning left out of Merriwa Road.	2	5	M	2	5	M
Increased risk of vehicles from adjacent approach through-right collision between vehicles travelling on New England Highway and vehicles turning right out of Merriwa Road.	1	5	M	1	5	M



5. SITE ACCESS

5.1 DEVELOPMENT SITE ACCESS

All access to the proposed farm will be facilitated via Warrah Ridge Road, with connection to the wider road network provided through its intersection with the Merriwa Road.

Development access driveway design will need to comply with Liverpool Plains Shire Council's planning scheme requirements, specifically the *Liverpool Plains Development Control Plan 2012*. For the proposed Poultry Farm, the expected vehicle activity aligns with the Industrial land-use category. As such, the following design considerations apply:

- The site access must be designed to accommodate the largest vehicle expected to use the facility. Where larger vehicles are anticipated, the development application must include access and manoeuvring designs demonstrating compliance.

The access will be required to accommodate a B-Double vehicle, which is considered the largest anticipated design vehicle. Accordingly, the driveway layout should be developed in accordance with:

- *Liverpool Plains Shire Council's Engineering Guidelines for Development and Subdivision Works*
- *AS2890.2 – Parking Facilities: Off-street commercial vehicle facilities*
- *Infrastructure Design Manual (IDM) Standard Drawing SD265 – Typical Semi or B-Double Vehicle Crossing (Rural Entrance)*

In addition to the site access requirements, consideration will also need to be given to the capability of the Merriwa Road / Warrah Ridge Road intersection to safely accommodate B-Double turning movements. Preliminary review indicates that upgrades will be required to ensure compliant turning paths and intersection geometry for higher-order vehicles. Furthermore, the section of Warrah Ridge Road between the Merriwa Road and the proposed site access may require localised widening, pavement strengthening or general upgrade works to provide a suitable access route for heavy vehicles associated with the development.

5.2 SITE DISTANCE ASSESSMENT

A desktop safe sight distance assessment has been conducted for the following intersections:

- Site Access / Warrah Ridge Road
- Warrah Ridge Road / Merriwa Road
- Merriwa Road / New England Highway

Warrah Ridge Road all and Merriwa Road have speed limit of 100km/h and thus the sight distance requirements were assessed against a 110km/h design speed in accordance with Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections. New England Highway at the intersection of Merriwa Road has a speed limit of 50km/h and thus assessed against a design speed of 60km/h.

Table 7: Sight Distance Assessment (Source: Austroads, PSA)

SCENARIO	ASD ^a	SISD ^b
Site Access / Warrah Ridge Road Posted Speed: 100km/h Design Speed: 110km/h	193m	285m
Warrah Ridge Road / Merriwa Road Posted Speed: 100km/h Design Speed: 110km/h	193m	285m
Merriwa Road / New England Highway Posted Speed: 50km/h Design Speed: 60km/h	73m	123m

^a Approach Sight Distance – Minimum sight distance required from Site access to the road intersection.

^b Safe Intersection Sight Distance – Minimum sight distance required from road intersection.



Figure 13: Approach Sight Distance Triangle - Site Access (Source: Google Earth, PSA)



Figure 14: Safe Sight Distance Triangle - Warrah Ridge Road (Source: Google Earth, PSA)



Figure 15: Approach Sight Distance Triangle - Merriwa Road (Source: Google Earth, PSA)



Figure 16: Safe Sight Distance Triangle - Merriwa Road (Source: Google Earth, PSA)

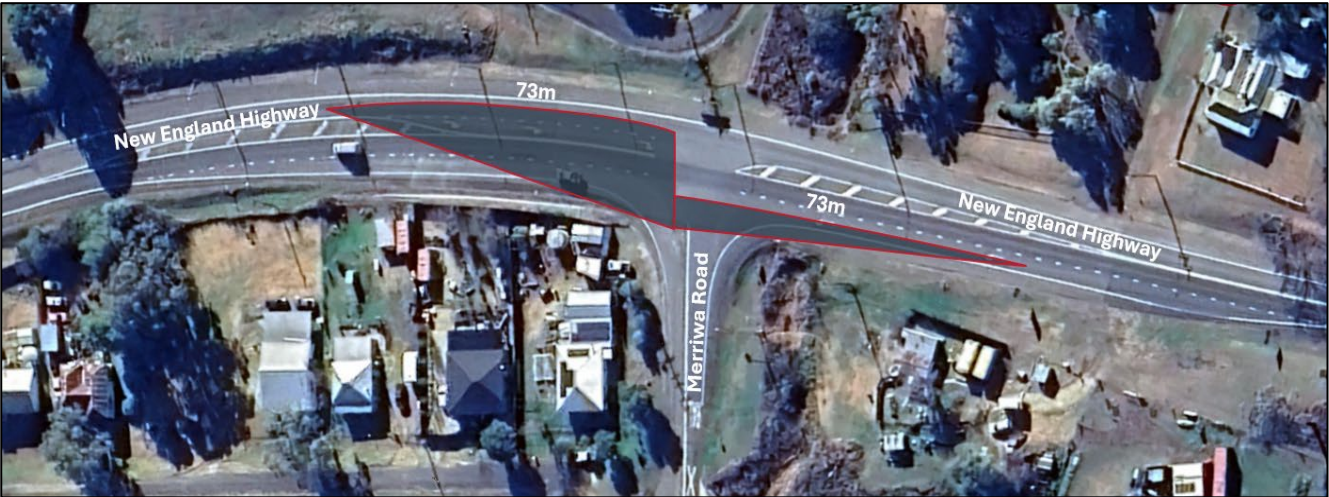


Figure 17: Approach Sight Distance Triangle - New England Highway (Source: Google Earth, PSA)



Figure 18: Safe Sight Distance Triangle - New England Highway (Source: Google Earth, PSA)



Figure 19: Site Distance Looking Northwest & Southeast from Site Access towards Warrah Ridge Road
(Source: Google Maps)



Figure 20: Site Distance Looking Northwest & Southeast towards Site Access from Warrah Ridge Road
(Source: Google Maps)



Figure 21: Site Distance Looking Northeast & Southwest from Warrah Ridge Road towards Merriwa Road
(Source: Google Maps)



Figure 22: Site Distance Looking Northeast & Southwest towards Warrah Ridge Road from Merriwa Road
(Source: Google Maps)



Figure 23: Site Distance Looking Northwest & Southeast from Merriwa Road towards New England Highway
(Source: Google Maps)



Figure 24: Site Distance Looking Northwest & Southeast towards Merriwa Road from New England Highway
(Source: Google Maps)

As demonstrated from Warrah Ridge Road, Merriwa Road and New England Highway, all sight lines for traffic remain clear with no major obstructions noted within the site access point and all 3 intersections.



5.3 SITE ACCESS TURN WARRANT ASSESSMENT

The turn treatments of the prior 3 intersections were assessed according to *Austroads Guide to Road Design Part 4: Intersections and Crossings*.

5.3.1 New England Highway

Currently, New England highway has a channelised right turn (CHR) treatment and an auxiliary left-turn (AUL) lane treatment into Merriwa Road. It is deemed that the turn treatments are adequate and therefore, no other treatments are required.

5.3.2 Merriwa & Warrah Ridge Road

There are no turn treatments on Merriwa Road leading into Warrah Ridge Road and the internal road access / Warrah Ridge intersection. Due to the low volumes generated by the development, it is recommended that a Basic Right Turn (BAR) be required at the intersections.

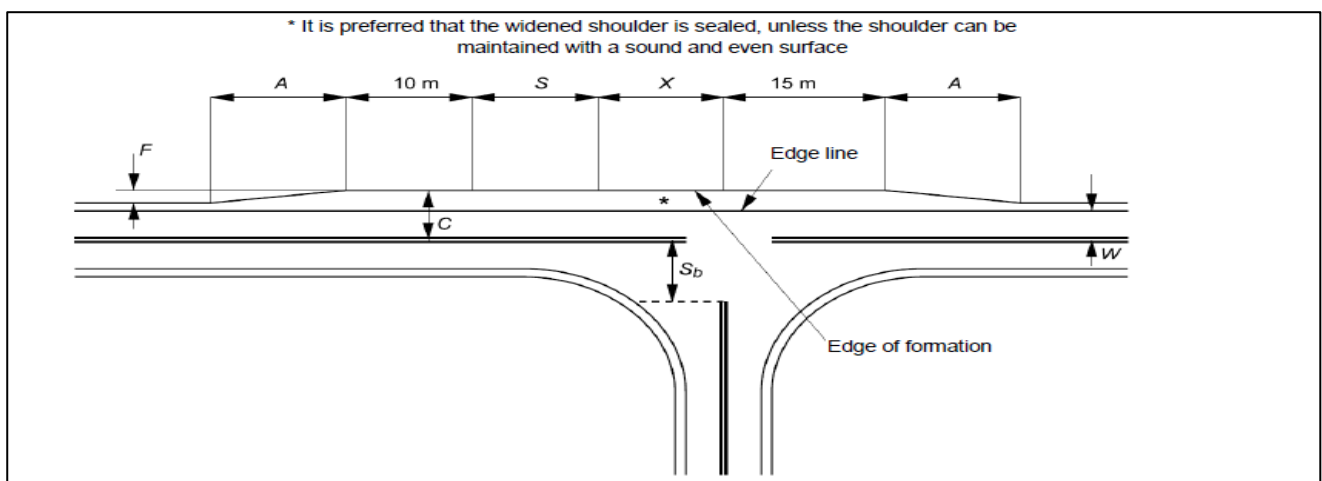


Figure 25: Rural Basic Right Turn Treatment - BAR (Source: Austroads)

5.4 ROAD UPGRADE



Figure 26: Proposed Road Wide Upgrade - Private Road Access (Source: Google Maps)

An upgrade of the internal road is proposed to meet the standard from the engineering guidelines. The proposal will be an increase to the road width from 4.3m to around 7-8m and will include sealed shoulders to accommodate the development traffic and 2 passing vehicles.

6. PARKING

6.1 PARKING PROVISION

The on-site parking arrangements have been assessed in accordance with Liverpool Plains Shire Council's *Development Control Plan, 3.4 Parking & access*. Council's DCP does not state a minimum parking requirement for intensive livestock agricultural uses, thus, the minimum parking rate is subject to council's discretion.

In this instance, the development will have 6 full time equivalent (FTE) positions which include 2 on-site staff and 4 off-site staff. There are currently 9 parking spaces is proposed, which is consider sufficient to meet the requirements.

Design of the proposed staff car parking area has been reviewed against the requirements of AS2890.1 (2004), based on a User Class 1 profile which reflects the typical use and operational characteristics of the site. A summary of the design review is presented in Table 8.

Table 8: Car Parking Review (Source: AS2890)

Design Requirement	AS2890.1 Minimum Requirement	Proposed Design Dimensions	Compliant (Y/N)
Width	2.4m	17.2 m (approx. 6 bays at 2.4m)	Y
Length	5.4m	5.8m minimum	Y
Parking Aisle	6.2m	8.7m minimum	Y

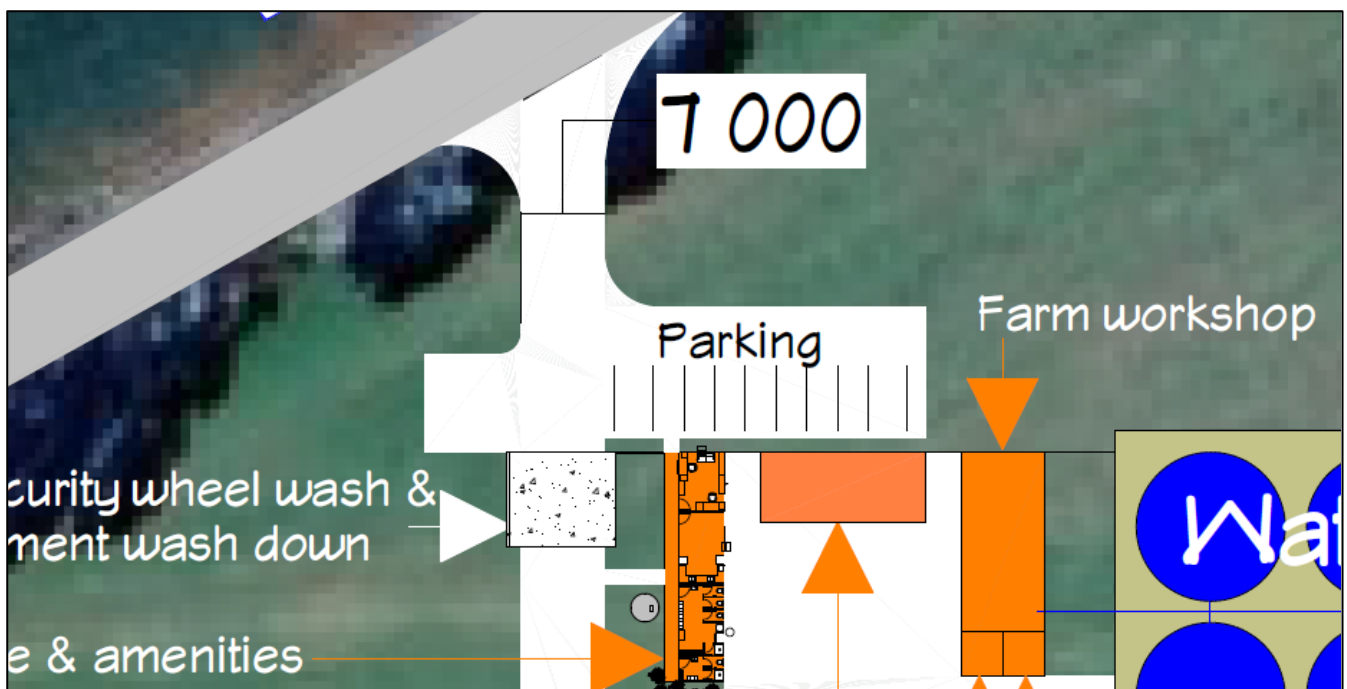


Figure 27: Proposed Car Park Design (Source: Agright)

The proposed car park design will be constructed on a compacted gravel surface. As the site is a restricted bio secured facility, access would be limited to only staff and expected visitors. The proposed car park is therefore deemed to comply with requirements.



6.2 SWEPT PATH ASSESSMENT

A comprehensive swept path assessment has been undertaken to assess the developments design for access to the largest anticipated design vehicle accessing the development site. The breakdown of the specific vehicle paths and profiles assessed have been identified for consideration:

- B-Double (26m)
 - SK01 - Clockwise Internal Movement and Site Entry and Exit
 - SK02 - Anti-Clockwise Internal Movement
 - SK03 - Site Access / Warrah Ridge Road Intersection and Warrah Ridge Road / Merriwa Road Intersection Entry and Exit

The vehicle profile utilised for the assessment is highlighted below in Figure 28:

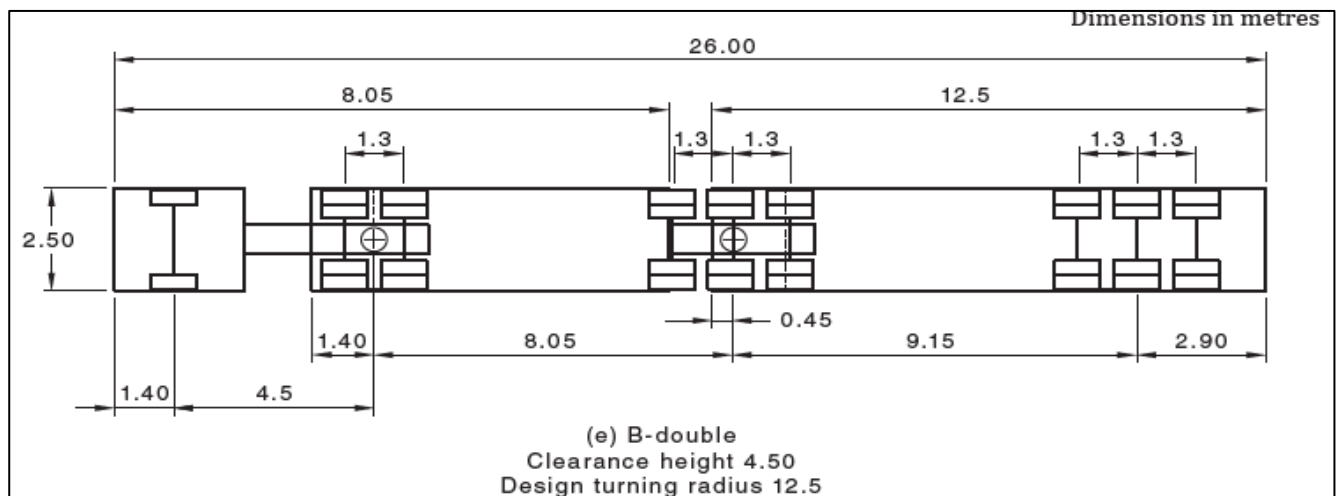


Figure 28: B-Double 26m - Profile (Source: AS2890.2)

Swept path modelling was undertaken using AutoCAD and AutoTURN modelling software, where it was determined that a B-Double 26m (largest design vehicle) could effectively manoeuvre within the site travelling clockwise and anti-clockwise. Swept path modelling was also undertaken and confirmed the suitability of the access arrangements for the B-Double to safely enter and exit without conflict. It should be noted that the modelling was undertaken against aerial imagery and consideration into any surface or road treatments at the access driveway location will need to factor in adequate turning arrangements.

In addition, design of the newly upgraded internal road has not been finalised yet. Initial swept path modelling, however, does indicate that a two-way movement on the internal road by B-Doubles (26m) is feasible. Through consultation with Agright, it is not expected for 2 B-doubles to be on-site at one time as heavy vehicle movements are distributed evenly throughout the day. Furthermore, majority of heavy vehicles are expected to be semi-trailers (19m) which will minimise conflict and maintain safe access.

It is deemed that straight line tracking of B-Doubles for swept paths is not necessary as vehicles remain within the carriageway when travelling in a forward direction. Sheets SK01 and SK02 therefore have been cropped to only highlight the critical turning movements within the site where vehicle overhang and off-tracking are high-risk.



7. SUMMARY

PSA Consulting has undertaken a Traffic Impact Assessment (TIA) for AgRight Griffith Pty LTD for the proposed free-range poultry (broiler) farm at 775 Warrah Ridge Road, Warrah Ridge 2343, NSW. The assessment focused on analysing the traffic implications associated with the development of the breeder farm and their operational periods of the farm. Key findings from the assessment include:

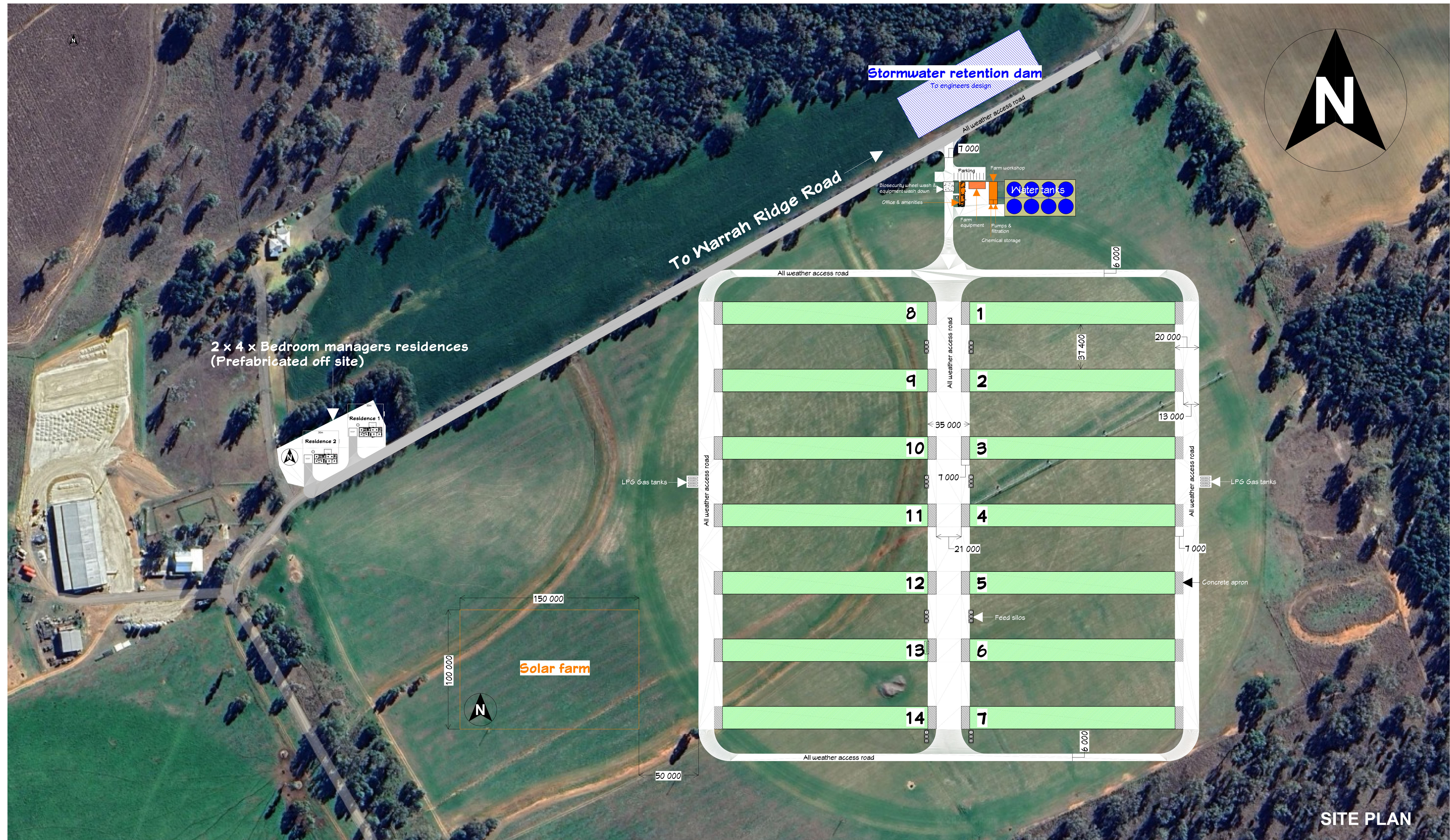
- The proposed development is situated at Warrah Ridge Road, intersecting Merriwa Road and is approximately 7.5km South-east of Merriwa Road. The development site falls within the approved with condition B-double (25/26m) General Mass Limit (GML) & Concessional Mass Limit (CML) network freight network, facilitating the movement of heavy vehicles essential for the transportation of feed and livestock with prior approval with Council.
- The proposed development is expected to generate a maximum of 9 light and 10 heavy vehicles during the construction phase.
- The proposed development is expected to generate a maximum of 3 light and 1 heavy vehicle during a peak hour period when it is in operation (inbound and outbound total).
- The farm will have a total of 2 on-site staff and 4 off-site staff.
- Light vehicle movements have been determined through consultation with AgRight. Staff trips are assumed to be 100% inbound during the AM peak and 100% outbound during the PM peak, while operational HV movements are split evenly across both peak periods.
- Heavy vehicle movements are assumed to be evenly distributed throughout the day. For a conservative assessment, all daily HV trips were assigned to each peak hour, representing a worst-case scenario.
- A road safety assessment found no to minimal change in risk between the existing and with-development scenarios, with all assessed items rating “Medium” under Transport and Main Roads’ GTIA safety matrix.
- A desktop sight distance assessment confirmed that Safe Intersection Sight Distance (SISD) requirements for a 110 km/h design speed are met for both the Site Access/Warrah Ridge Road and Warrah Ridge Road/Merriwa Road intersections, with no significant obstructions identified.
- A desktop sight distance assessment confirmed that Safe Intersection Sight Distance (SISD) requirements for a 60 km/h design speed are met for the Merriwa Road / New England Highway intersections, with no significant obstructions identified.
- There is currently no existing turn treatment present at the Merriwa Road / Warrah Ridge Road intersection. It is recommended a Basic Right Turn (BAR) be required.
- Parking requirements were reviewed against Liverpool Plains Shire Council’s DCP. With 6 full-time equivalent staff and 9 on-site parking spaces, parking provision is considered sufficient.
- Swept path analysis using AutoCAD and Auto TURN confirmed that B-Double vehicles can manoeuvre throughout the site and out and into from Merriwa Road and Warrah Ridge Road.

Overall, the combined assessment demonstrates that the proposed Warrah Ridge Farm will not result in any unacceptable traffic impacts, with the surrounding road network operating efficiently under both current and future conditions. Appropriate upgrade and design measures have been identified to ensure safe access, compliant manoeuvrability and adequate site functionality.



APPENDIX 1 DEVELOPMENT SITE PLANS

AP01

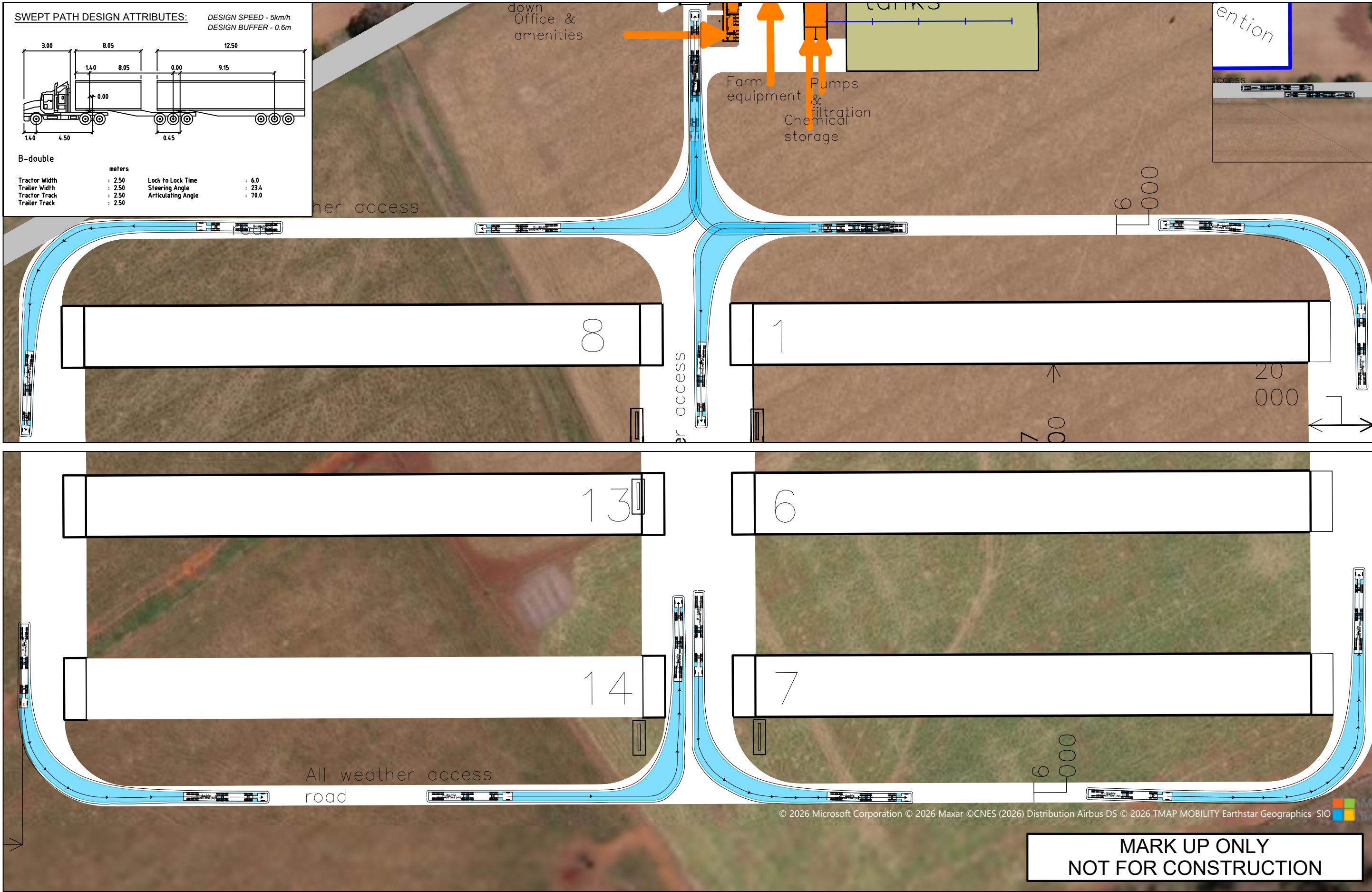


SITE PLAN



APPENDIX 2 SWEPT PATH ANALYSIS

AP02



REVISION	DESCRIPTION	BY	DATE
1	ORIGINAL ISSUE	B.G	09.02.2026
2	UPDATED LAYOUT	H.F	31.03.2026



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DRAWING TITLE
SWEPT PATH ANALYSIS - B-DOUBLE ANTI-CLOCKWISE

CLIENT
AGRITHT

PROJECT
WARRAH RIDGE BROILER POULTRY FARM

LOCATION
775 WARRAH RIDGE ROAD, NEW SOUTH WALES, 2343

DRAWING DATE
MARCH 2026

ORIGINAL SIZE: A1 SCALE A3: 1:1100

SCALE

SCALE 1:550 (A1)

DRAWN BY
B.G

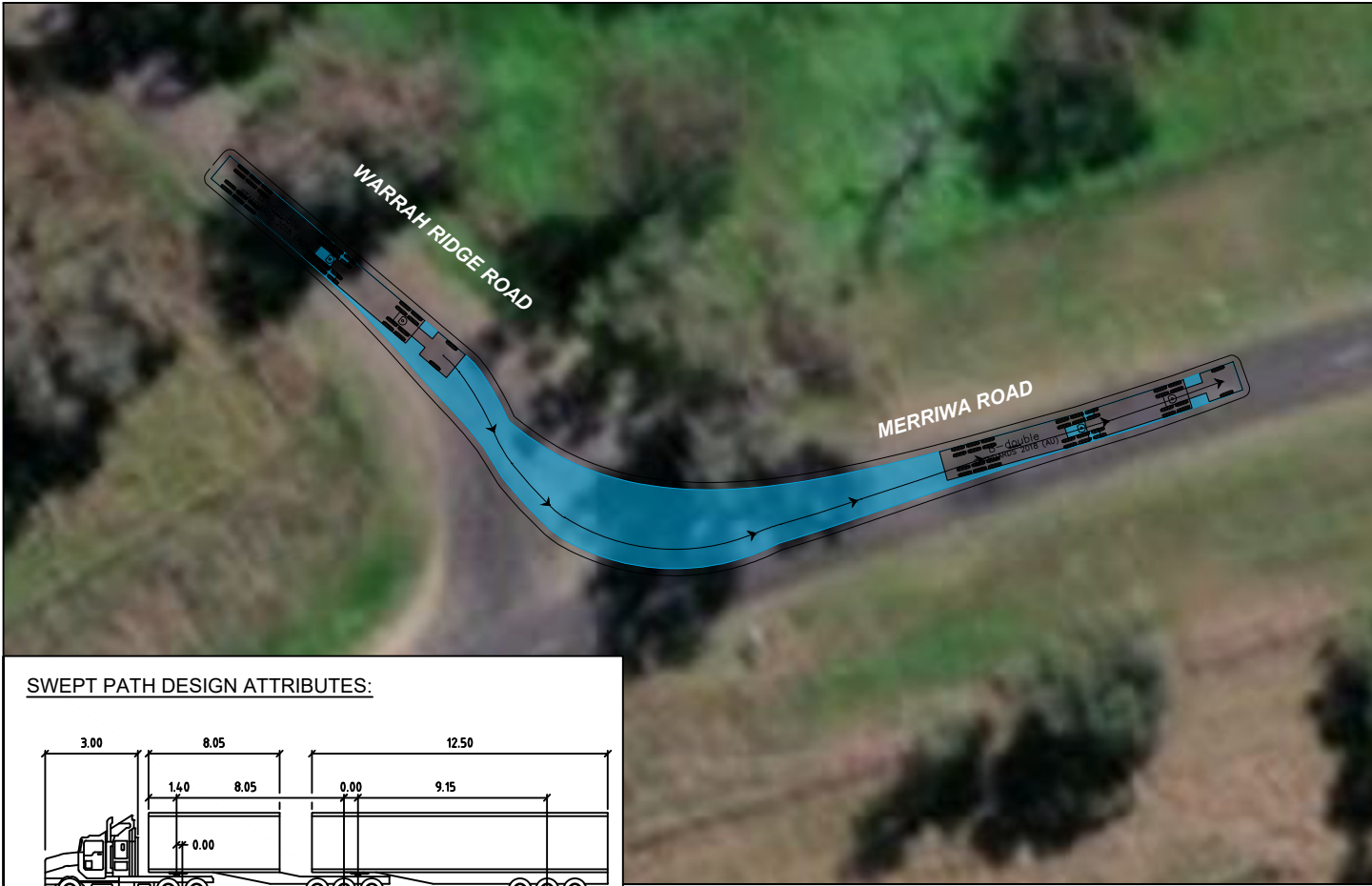
CHECKED BY
H.R

APPROVED BY
H.R

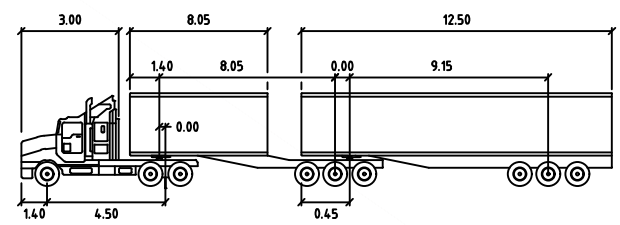
PROJECT NO.
2451

DRAWING NO.
SK02

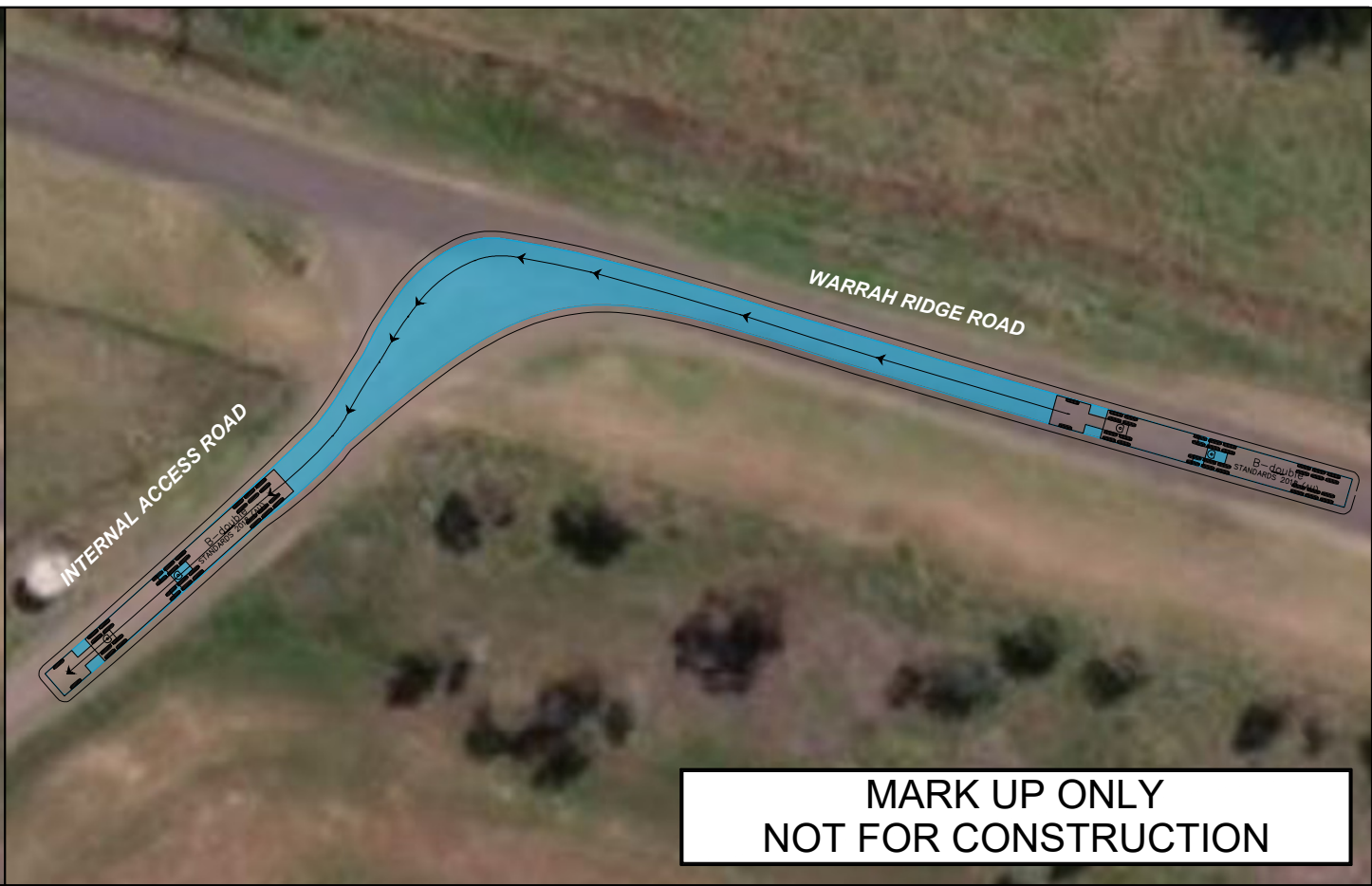
REVISION
2



SWEPT PATH DESIGN ATTRIBUTES:



B-double			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 23.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		



MARK UP ONLY
NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	BY	DATE
1	ORIGINAL ISSUE	B.G	09.02.2026
2	UPDATED LAYOUT	H.F	31.03.2026



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DRAWING TITLE
SWEPT PATH ANALYSIS - B-DOUBLE EXIT AND ENTRY

CLIENT
AGRITHT

PROJECT
WARRAH RIDGE BROILER POULTRY FARM

LOCATION
775 WARRAH RIDGE ROAD, NEW SOUTH WALES, 2343

DRAWING DATE
MARCH 2026

ORIGINAL SIZE: A1 SCALE A3: 1:600

SCALE
0 6 12 18m

SCALE 1:300 (A1)

DRAWN BY
B.G

CHECKED BY
H.R

APPROVED BY
PROJECT NO.
2451

DRAWING NO.
SK03

REVISION
2



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