



Baldivis Local Tavern

Corner of Sierra Parade & McDonald Road, Baldivis

Transport Impact Assessment

PREPARED FOR:
Spera Property Group

April 2026

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Author: Mohammad Rasouli

Project manager: Behnam Bordbar

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1 Introduction

This Transport Impact Assessment (TIA) has been prepared by Transcore on behalf of Spera Property Group with respect to a proposed local tavern located at the corner of Sierra Parade & McDonald Road, Baldivis, in the City of Rockingham.

Transcore prepared a TIA in November 2015 on behalf of Galati Group with regard to the Development Application of Lots 14 & 299 Kerosene Lane, Paradiso Estate. The proposed tavern is part of the commercial component of the Paradiso Estate, which is bordered by Kerosene Lane to the north, Annabelle Way to the west, Sierra Parade to the south, and McDonald Road to the east (referred to as super lot in this TIA).

Transcore was the traffic engineer for the approved and constructed Service Station and Fast-Food outlet located at 120 & 124 Kerosene Lane, Baldivis.

Currently, a Spudshed is also located within this proposed commercial area of the Paradiso Estate. The new development will be situated over a vacant land at the corner of Sierra Parade & McDonald Road as illustrated in **Figure 1**.

Transcore undertook a parking utilisation survey on Friday, February 6, 2026, to assess parking utilisation during the peak demand period for the proposed tavern.

In order to assess the traffic operation of the proposed development on Sierra Parade eastern crossover and the intersections of McDonald Road with Sierra Parade and Kerosene Lane, Transcore organised traffic counts for the intersections and the crossover during a typical weekday PM peak hour and Saturday mid-day peak hour.

This TIA will evaluate the trip generation and distribution associated with the proposed development. It will also assess the traffic operations at the existing intersection of McDonald Road with Sierra Parade and Kerosene Lane, along with the existing eastern crossover on Sierra Parade, as a network. Additionally, the traffic movements of service vehicles will be reviewed and assessed in this TIA.



Figure 1: Location of the subject site

2 Development Proposal

The proposed development is a local tavern with total GFA of about 1,093.6m² at the corner of Sierra Parade and McDonald Road within a super lot with an existing Spudshed, as shown in the site plan at [Appendix A](#).

The access/ egress for the proposed tavern will be from the existing access/egress system for the super lot Including the existing crossovers on Sierra Parade. The main crossover of the super Lot that would be utilised more than the other existing crossovers on surrounding roads is the eastern crossover on Sierra Parade as illustrated in [Figure 2](#) below.



Figure 2: Proposed access arrangements

Delivery and rubbish collection will be provided within the site. Turn path plans have been prepared for entry and exit movements by a 12.5m heavy rigid vehicle to demonstrate that service vehicles up to this size can be accommodated by the proposed tavern. The turn paths are presented in [Appendix B](#).

3 Existing Situation

3.1 Existing Land Use

The subject site is currently vacant land as shown in **Figure 1**.

3.2 Existing Road Network

Kerosene Lane, north of the subject site, is constructed as two 3.5m, single-lane carriageways separated by a 4.5m central median and 2.5m shared path fronting the subject site as shown in **Figure 3**. Right turn lanes are provided at the existing intersections and crossovers along this section of Kerosene Lane.

Based on the Metropolitan Functional Road Hierarchy document (Main Roads WA), Kerosene Lane is classified as a District Distributor (B) road and is under care and control of the City of Rockingham. It operates with a sign-posted speed limit of 60km/hr in the vicinity of the subject site.



Figure 3: Kerosene Lane

Annabelle Way, to the west of the subject site, is constructed as 7m carriageway with 2m to 2.5m shared path fronting the subject site and on-street bays on the western side of the road. The intersection of Annabelle Way/ Kerosene Lane is constructed in the form of a priority-controlled T-intersection with right turn lane on Kerosene Lane.

McDonald Road, located to the east of the subject site, features a 10m carriageway, divided by a 2m solid median and 2.5m shared paths on both sides. On-street parking bays are available on either side of the road. The intersection of McDonald Road and Kerosene Lane is designed as a priority-controlled T-intersection, including a right turn lane on Kerosene Lane (refer **Figure 4**).

Sierra Parade forms the southern side of the site and is constructed as 7.2m carriageway with on-street bays on the north side of the road. Sierra Parade connects to McDonald Road and Annabelle Way as priority-controlled T-intersections.



Figure 4: McDonald Road looking north near the subject site

3.3 Existing Traffic Volumes

Transcore organised manual traffic counts at the intersection of Kerosene Lane/ McDonald Road, McDonald Road/ Sierra Pde and the eastern crossover on Sierra Pde during a Thursday 5th of February 2026 (15:15-16:15) and Saturday 07th of February 2026 (12:00-13:00). The peak hour traffic counts are illustrated in **Figure 5**.

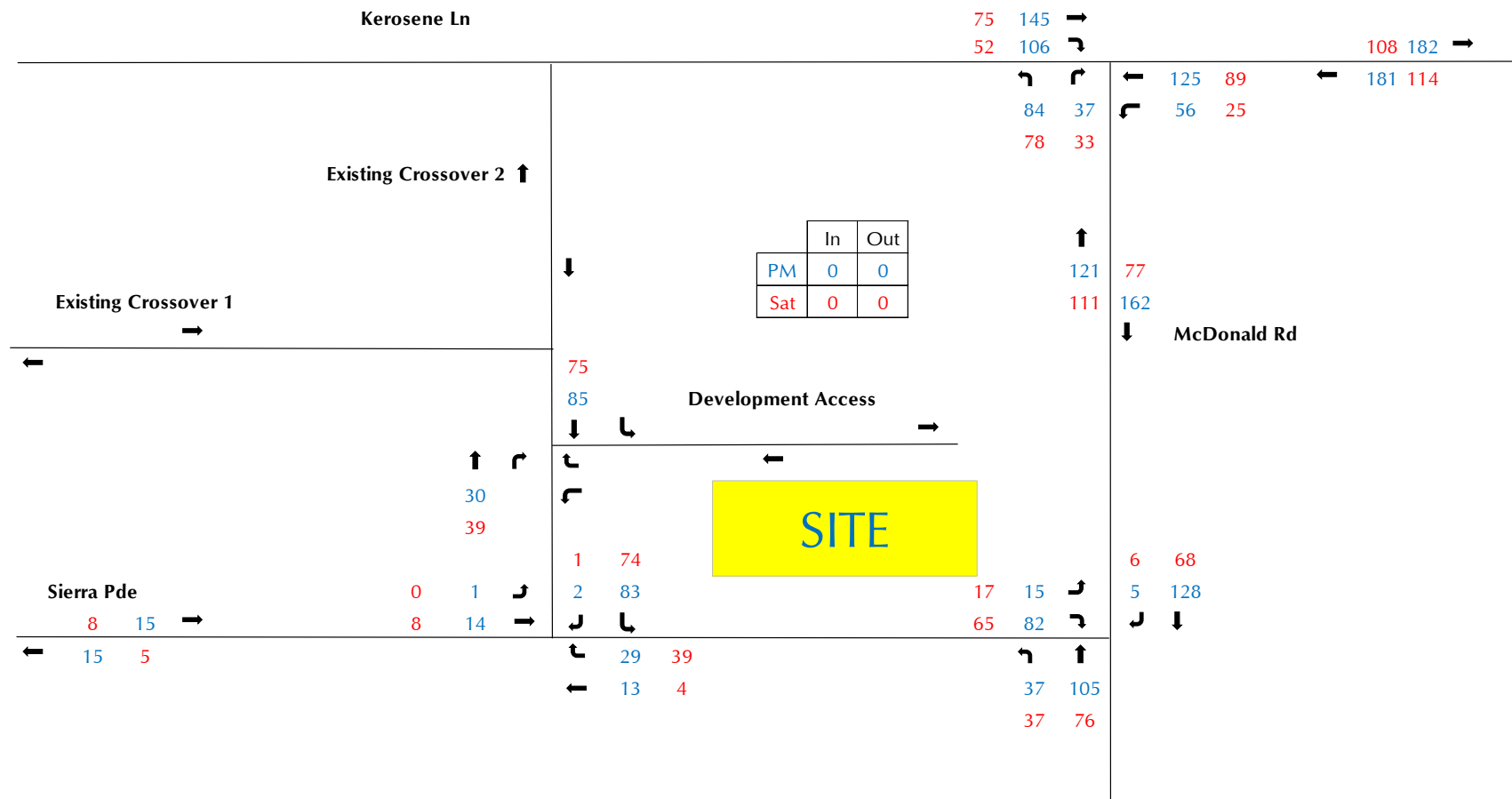


Figure 5: Existing traffic – PM Weekday and Saturday mid-day

3.4 Public Transport Access

The closest existing bus route to the subject site is Transperth Route 568, as shown in **Figure 5**. The Transperth 568 - Warnbro - Baldvis North bus serves 20 bus stops in the Perth area departing from Warnbro Station and ending at Sierra Pde / McDonald Rd.

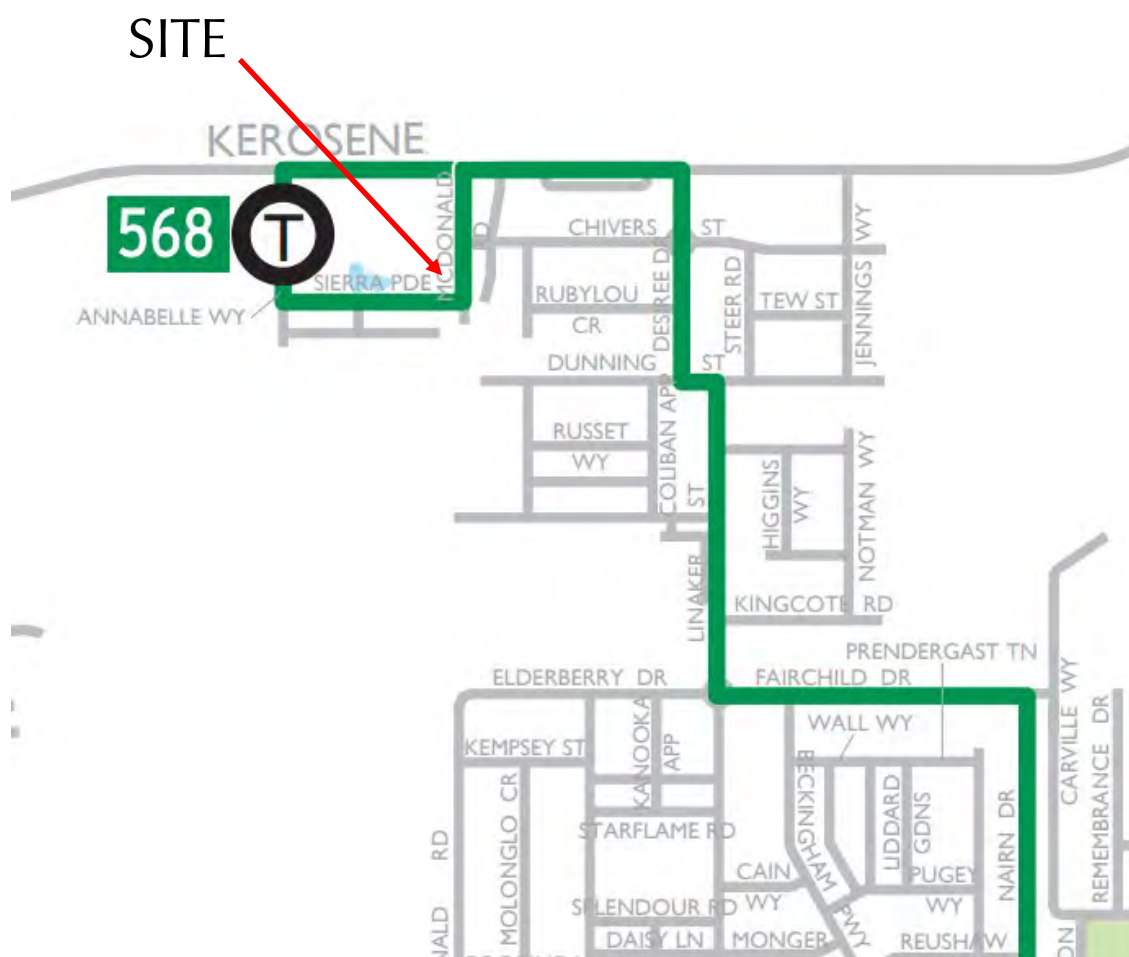


Figure 6: Existing Bus Routes

3.5 Pedestrian and Cyclist Facilities

A 2.5m shared path has already been constructed along all frontages of the existing super lot including McDonald Road and Sierra Pde. The existing shared paths near the subject site is connected seamlessly to the surrounding shared path network in the area.

3.6 Crash Data

No existing crash data is available on the existing intersections and nearby crossovers.

4 Changes to Surrounding Transport Networks

The proposed development would not change the layout and control of the existing Spudshed crossovers on the surrounding road network. The eastern crossover on Sierra Pde would be modified slightly to accommodate the exit of the tavern service vehicles.

5 Integration with Surrounding Area

The proposed development is consistent with the type of land uses appropriate within the Paradiso Estate in Baldivis.

6 Traffic Assessment

6.1 Assessment Period

The peak period for the proposed tavern is anticipated to be the Friday evening or Saturday afternoon or lunchtime peak periods. The tavern is not open in the morning. The combination of the tavern traffic and road network traffic would be higher during the Friday afternoon (3:15-4:15) and Saturday lunch time (12:00-1:00). Therefore, assessments are undertaken for these two peak hours.

6.2 Trip Generation and Distribution

The traffic volumes anticipated to be generated by the proposed tavern has been estimated using trip generation rates derived from the ITE *Trip Generation Manual* (11th Edition). The applicable trip rates which were used to estimate the proposed land uses are:

Drinking Place (#975)

- Weekday road network AM peak hour: 0 vph per 100m² GFA;
- Weekday road network PM peak hour: 12.2 vph per 100m² GFA;
- Saturday peak hour of development: 8.6 vph per 100m² GFA.

Accordingly, it is estimated that the proposed tavern would generate the following total traffic flows:

- Weekday road network AM peak hour: 0 vph;
- Weekday road network PM peak hour: 134 vph;
- Saturday peak hour of development: 94 vph.

Trips associated with the proposed tavern may be internal trips within the super lot. The ITE *Trip Generation Handbook* (3rd Edition) provides additional information on internal trips within a mixed-use development and on pass-by and primary trips for various types of land use. Based on the information provided it is estimated that approximately 20% of the trips visiting the proposed tavern would be internal trips within the super lot (i.e. to/from the Spudshed, fast food and service station).

As evident, the trip generation for the tavern during the Saturday midday peak hours is less than 100 vph. According to the WAPC Guidelines, the traffic impact of the tavern during this time period is deemed moderate.

Table 1 summarises the trips associated with the proposed development.

Table 1: Traffic generation

	Saturday peak hour		PM peak hour	
	IN	OUT	IN	OUT
Total trips	56	38	88	46
Internal Trips	11	8	18	10
External trips	45	30	71	36

Trip distribution of the proposed tavern has been evaluated by considering the distribution of the existing and future residential dwellings in the locality and the existing traffic pattern at the surveyed intersections. Accordingly, the following trip distribution was assumed for the tavern trips:

- 50% towards south on McDonald Road (residential catchment to the south);
- 35% towards north on McDonald Road (residential catchment to the west and east)
- 10% via existing Kerosene Lane crossovers.
- 5% towards Sierra Pde west towards Annabelle Way.

The peak period traffic flows expected to be generated by the proposed tavern have been manually assigned on the adjacent road network in line with the directional distribution assumptions outlined in the previous section. Traffic flows to and from this proposed development for weekday PM and Saturday peak hours are shown in **Figure 7**.

6.3 Future Traffic Flows

Total future traffic flows have been established by adding the existing traffic counts to the development traffic. In order to establish the projected traffic volumes on Kerosene Lane for post development (2027) and 10-year post development (2037) scenarios, a 2% traffic growth was applied to the through traffic on Kerosene Lane.

Figure 7 and **Figure 8** illustrate the 2027 and 2037 peak hours traffic projections.

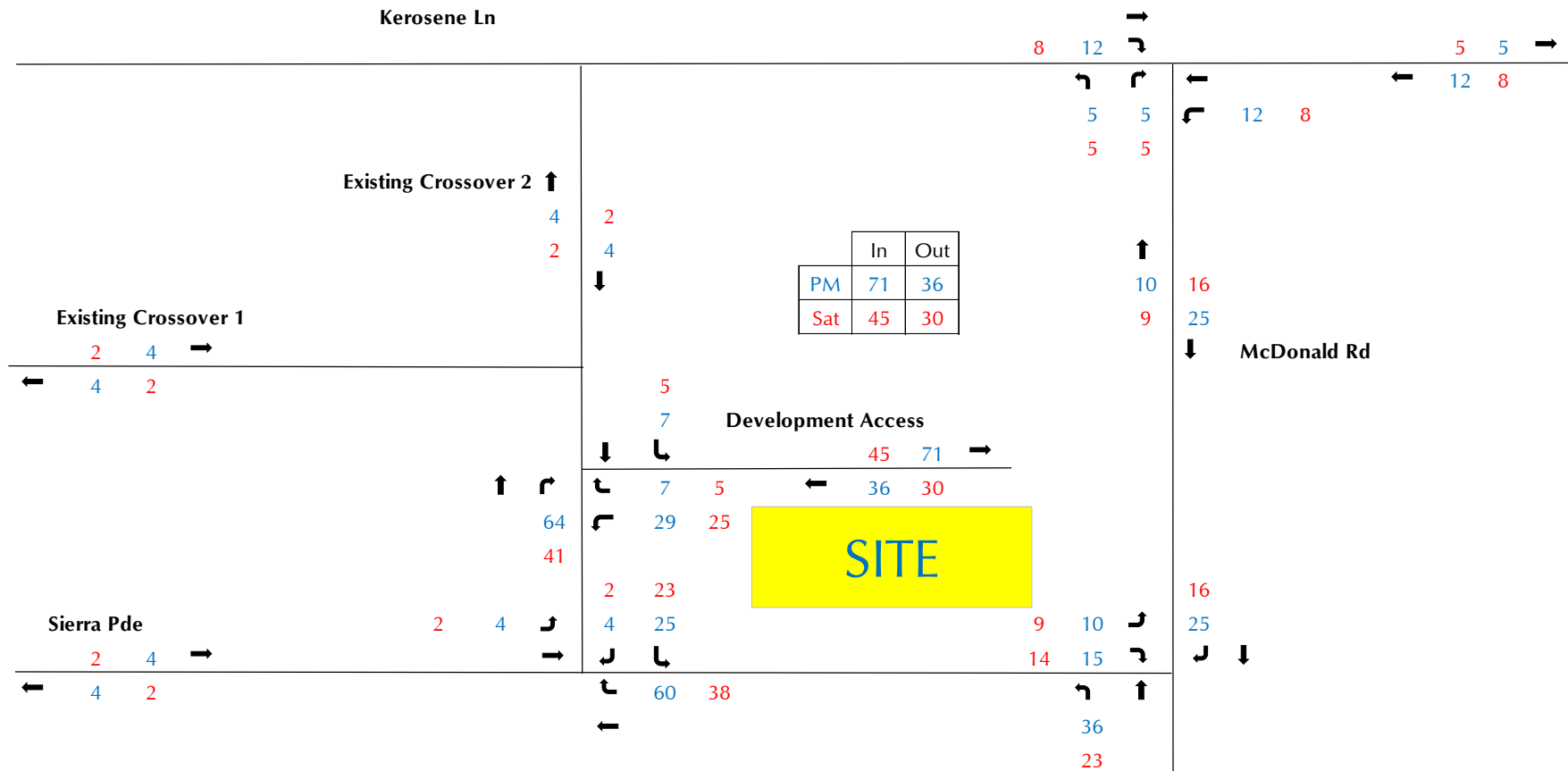


Figure 7: Development trip distribution – PM Weekday and Saturday mid-day

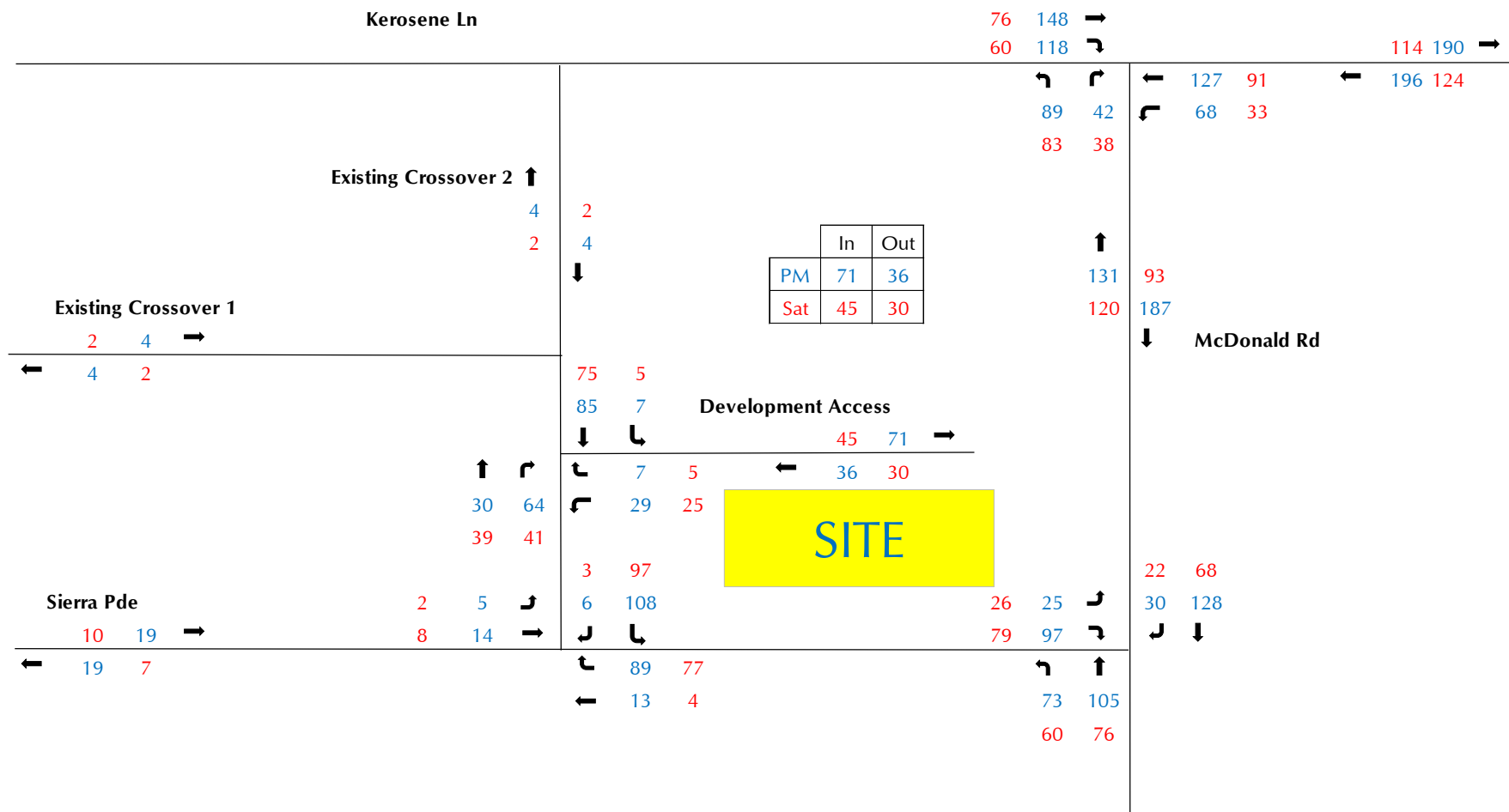


Figure 8: Total (2027) traffic –PM Weekday and Saturday mid-day

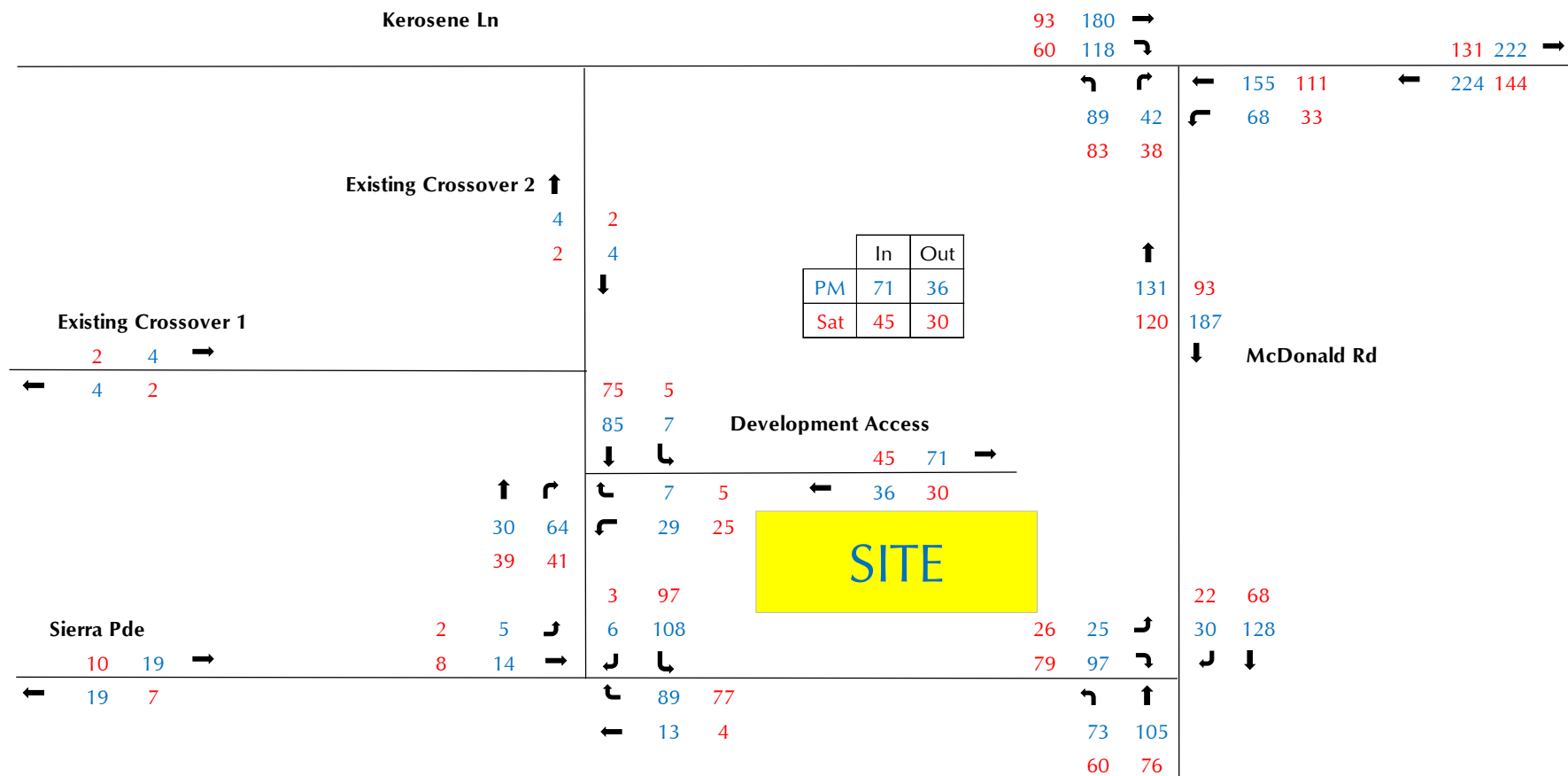


Figure 9: Total (2037) traffic – PM Weekday and Saturday mid-day

6.4 Intersection Analysis

Intersection capacity analysis has been undertaken for existing intersections and the eastern crossover on Sierra Pde, as a network for PM and Saturday peak hour traffic flows shown in **Figure 10**. The assessments are undertaken for existing, post development and 10 years post development scenarios.

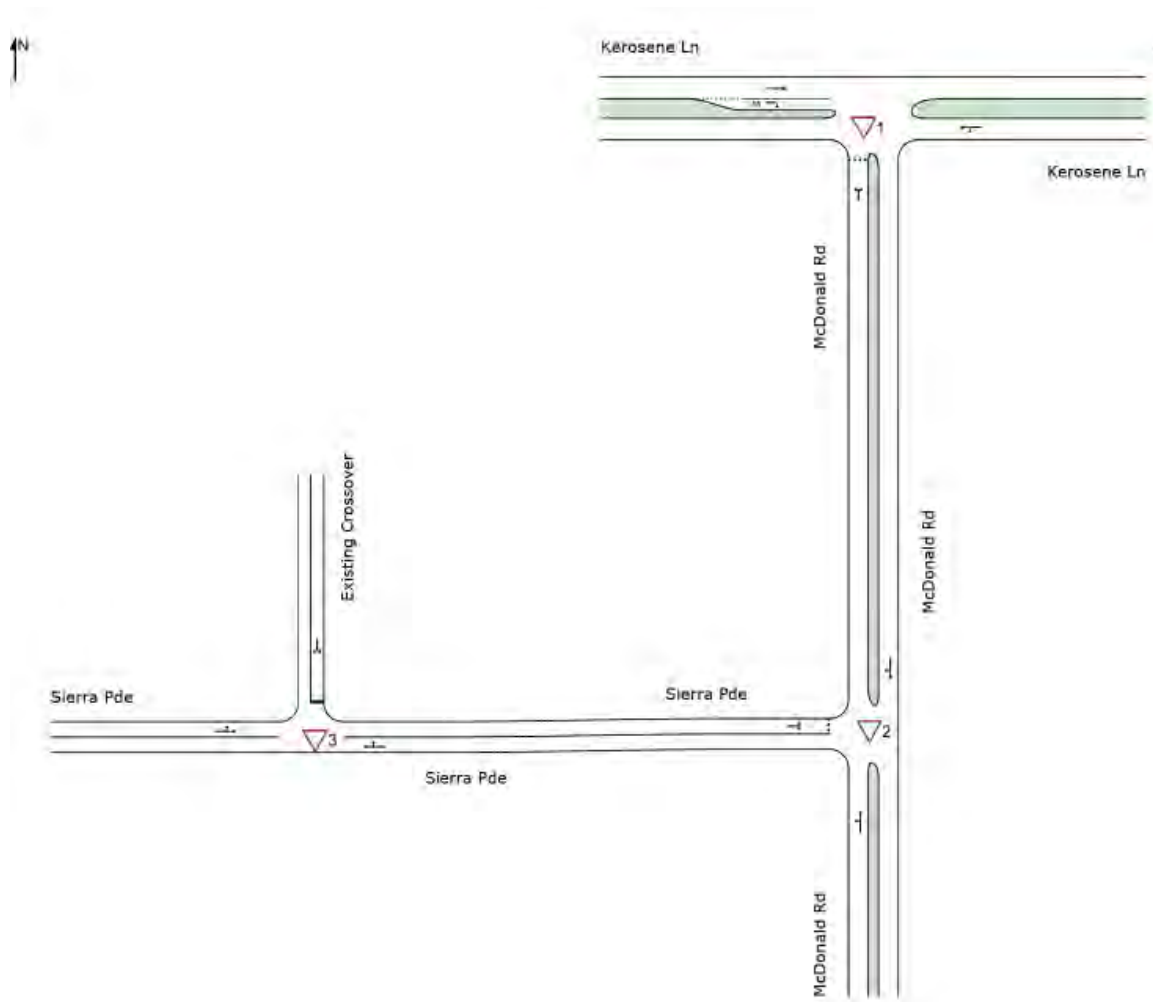


Figure 10: SIDRA network layout

Capacity analysis of those four intersections was undertaken using the SIDRA computer software package. SIDRA is an intersection modelling tool commonly used by traffic engineers for all types of intersections. SIDRA outputs are presented in the form of Degree of Saturation, Level of Service, Average Delay and 95% Queue. These characteristics are defined as follows:

- **Degree of Saturation** is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The Degree of Saturation ranges from close to zero for infrequent traffic flow up to one for saturated flow or capacity.
- **Level of Service** is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. In

general, there are 6 levels of service, designated from A to F, with Level of Service A representing the best operating condition (i.e. free flow) and Level of Service F the worst (i.e. forced or breakdown flow).

- **Average Delay** is the average of all travel time delays for vehicles through the intersection.
- **95% Queue** is the queue length below which 95% of all observed queue lengths fall.

The results of the SIDRA analysis are summarised in **Appendix C**.

Intersection of McDonald Road and Kerosene Lane

The SIDRA intersection analysis and site observations show that the intersection of McDonald Road and Kerosene Lane is currently operating satisfactorily, achieving a Level of Service (LoS) A with minimal delays and queues during peak hours. The projected increase in traffic from the development in 2027 and 2037 is not expected to adversely affect the operation of the intersection. It will continue to function satisfactorily, with no significant changes in the LoS for all approaches to the intersection.

Intersection of McDonald Road and Seirra Pde

The SIDRA intersection analysis and site observations show that the intersection of McDonald Road and Seirra Pde is currently operating satisfactorily, achieving a Level of Service (LoS) A with minimal delays and queues during peak hours. The projected increase in traffic from the development in 2027 and 2037 is not expected to adversely affect the operation of the intersection. It will continue to function satisfactorily, with no significant changes in the LoS for all approaches to the intersection.

Eastern crossover on Seirra Pde

SIDRA intersection analysis undertaken indicates that all movements of the eastern crossover on Seirra Pde will operate at Level of Service A (the best possible rating) with minimal queues and delays during the 2027 and 2037 scenarios.

6.5 Impact on Surrounding Roads and Neighbouring Areas

The WAPC *Transport Impact Assessment Guidelines* (2016) provides the following guidance on the assessment of traffic impacts:

“As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road, but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

As can be seen in **Figure 6**, the proposed development will not increase traffic on any lanes on the surrounding road network by more than 100vph (increases will actually be significantly less than this threshold). Therefore, the proposed development will not increase traffic flows at or above the quoted WAPC threshold on the surrounding roads to warrant further detailed analysis.

6.6 Traffic Noise and Vibration

It generally requires a doubling of traffic volumes on a road to produce a perceptible 3dB(A) increase in road noise. The proposed development traffic will be very much less than half of the future total traffic on adjacent roads so it will not represent a sufficient proportion of total traffic volumes to account for a perceptible increase in noise on the surrounding roads.

6.7 Road Safety

No particular road safety issues have been identified in relation to the proposed development.

7 Parking Assessment

The parking requirement for the proposed development is established in line with City of Rockingham Local Planning Scheme No. 2 (LPS2) and is summarised in **Table 2**. This table also presents the average number of available parking bays (parking supply) within the super lot during the critical Friday afternoon period, as well as the theoretical parking shortfall in accordance with LPS2. The parking supply figures have been established through a parking utilisation survey conducted by Transcore, which is discussed in detail in the following section.

As evident based on LPS2, there would be parking shortfall of about 28 bays in average for the proposed tavern as the proposed tavern will use the existing parking bays within the super lot and in particular the existing parking bays to the east and south of the existing Spudshed.

It should be noted that the parking rates in LPS2 are reasonably old and arguably due for review. Therefore, for comparison purposes the Department of Planning, Lands and Heritage (DPLH) Draft Interim Guidance for Non-Residential Car Parking within Activity Centres was also sourced and parking demand calculations were undertaken based on parking requirements from this document. The outcome of this calculation is also included in the parking assessment. The DPLH Guideline provides the minimum and maximum rates for establishing the parking requirements of the development. **Table 2** provides the comparison between the parking requirements under LPS2 and DPLH Guidelines (minimum and maximum).

As evident, the parking requirement for the tavern according to the DPLH Guideline is considerably lower than that specified by LPS 2. The DPLH parking requirement can be satisfactorily met with the available vacant bays during the critical peak operating hours on Friday.

Table 2: Car parking requirements based on LPS2 and DPLH

Planning Instrument	Car Parking Rate	Floor area	Required	Supply (average vacant bays)	Shortfall/ Surplus
LPS2	1 bay per 5m ² of bar and public areas	1,093.6m ²	219	191	-28
DPLH (Min)	1 bay per 100m ²	1,093.6m ²	10	191	+172
DPLH (Max)	1 bay per 10m ²	1,093.6m ²	109	191	+82

7.1 Parking Utilisation survey

To assess the current parking utilisation of the existing land uses within the super lot Transcore undertook a parking utilisation survey during the Friday evening on 6th February 2026 between 6PM to 9PM.

The existing Spudshed parking area was divided to three different areas (A, B and C) as shown in **Figure 11**. In addition, on-street parking bays along McDonald Road (18 bays) and Sierra Parade (12 bays) have been surveyed.

The parking inventory and utilisation survey indicated that currently:

- There are 242 off street bays within the super lot plus 30 on street bays along McDonald Road and Sierra Pde fronting the super lot.
- Parking area A, B and C in average are utilised 38%, 21% and 19% during the weekday peak operating times respectively.
- In average there are minimum 192 vacant parking bays (including on-street bays) available during the Friday peak operating times.

The parking vacancy during the peak operating times of the proposed tavern on Friday is shown in **Figure 12**. As evident, the available vacant bays exceed the parking requirement based on DPLH but slightly short based on LPS2.

It should be noted that the available parking bays within the super lot are expected to adequately meet the parking requirements of the proposed tavern for several compelling reasons.

First and foremost, the tavern is primarily frequented by local residents, who are more likely to walk or use public transport to access the site. This local patronage significantly reduces the overall demand for parking spaces, as many individuals can conveniently reach the tavern without the need for a vehicle.

In addition to local accessibility, the tavern's location is well served by public transport options, making it easier for patrons to choose these alternatives instead of driving. Moreover, many patrons prefer not to drink and drive, opting instead to use taxis or ride-sharing services like Uber for both their arrival and departure. This choice not only promotes safety but also substantially decreases the demand for on-site parking, as these transportation services transport individuals directly to and from the tavern without requiring additional parking spaces.

The existing available parking bays are particularly sufficient during peak operating hours on Friday when the tavern experiences its highest patronage. The parking utilisation survey conducted by Transcore indicates that there will be enough vacant bays to accommodate the tavern's parking needs.

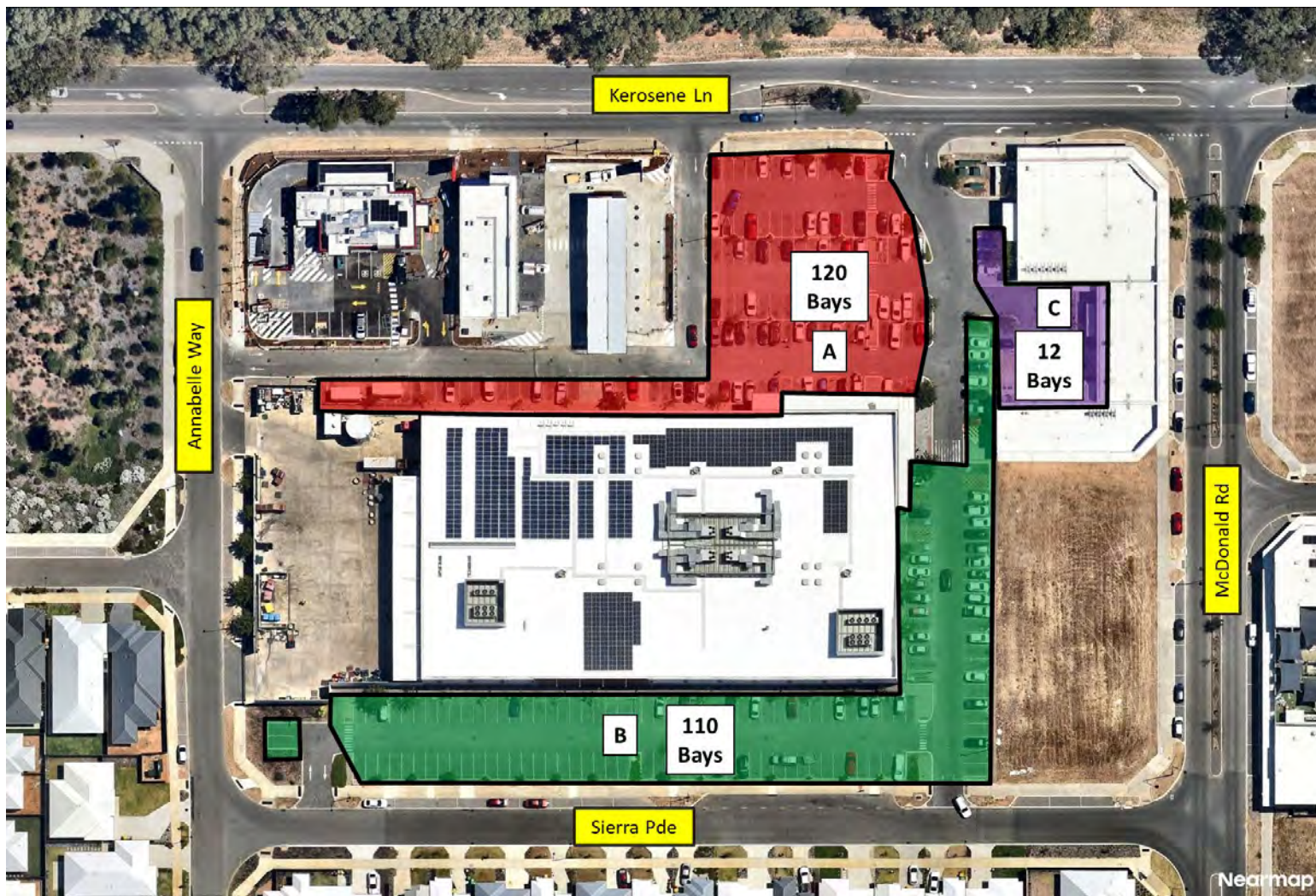


Figure 11: Parking areas surveyed

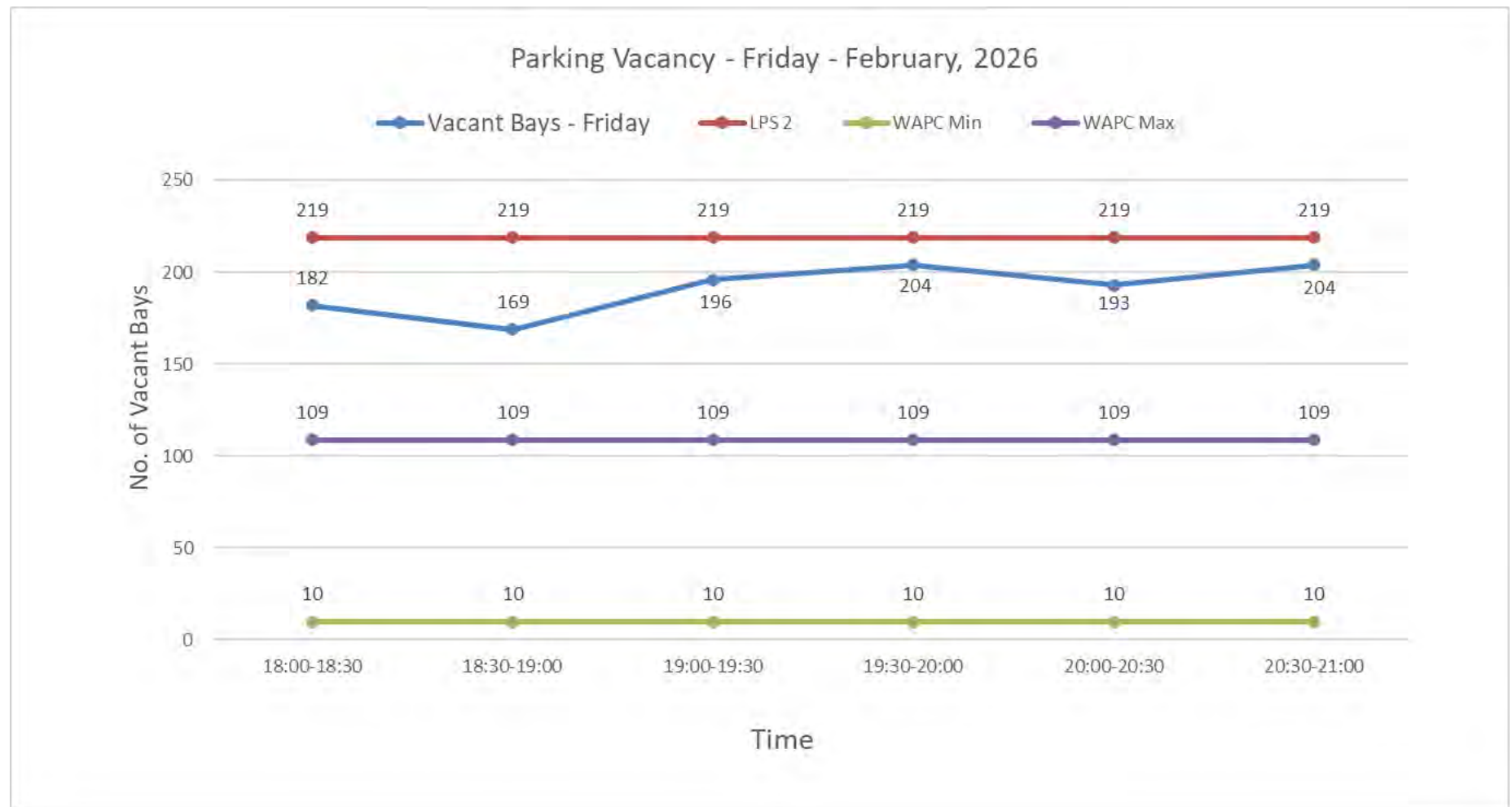


Figure 12: Parking vacancy for peak hours during the Friday

8 Conclusions

This Transport Impact Assessment (TIA) has been prepared by Transcore on behalf of Spera Property Group with respect to a proposed local tavern located at the corner of Sierra Parade & McDonald Road, Baldivis, in the City of Rockingham.

This proposed development is part of the commercial component of the Paradiso Estate, which is bordered by Kerosene Lane to the north, Annabelle Way to the west, Sierra Parade to the south, and McDonald Road to the east.

The parking utilisation survey undertaken by Transcore during the critical peak operating hours of tavern on Friday indicated that there are enough vacant bays within the existing super lot to accommodate the anticipated parking demand of the proposed tavern.

The proposed development is designed to accommodate the traffic movements of delivery vehicles and rubbish collection. Delivery and rubbish collection will take place within the site, ensuring efficient operations. Turn path analysis undertaken confirms satisfactory movement of the design vehicles.

The proposed development would not significantly change the layout and control of the existing Spudshed crossovers on the surrounding road network.

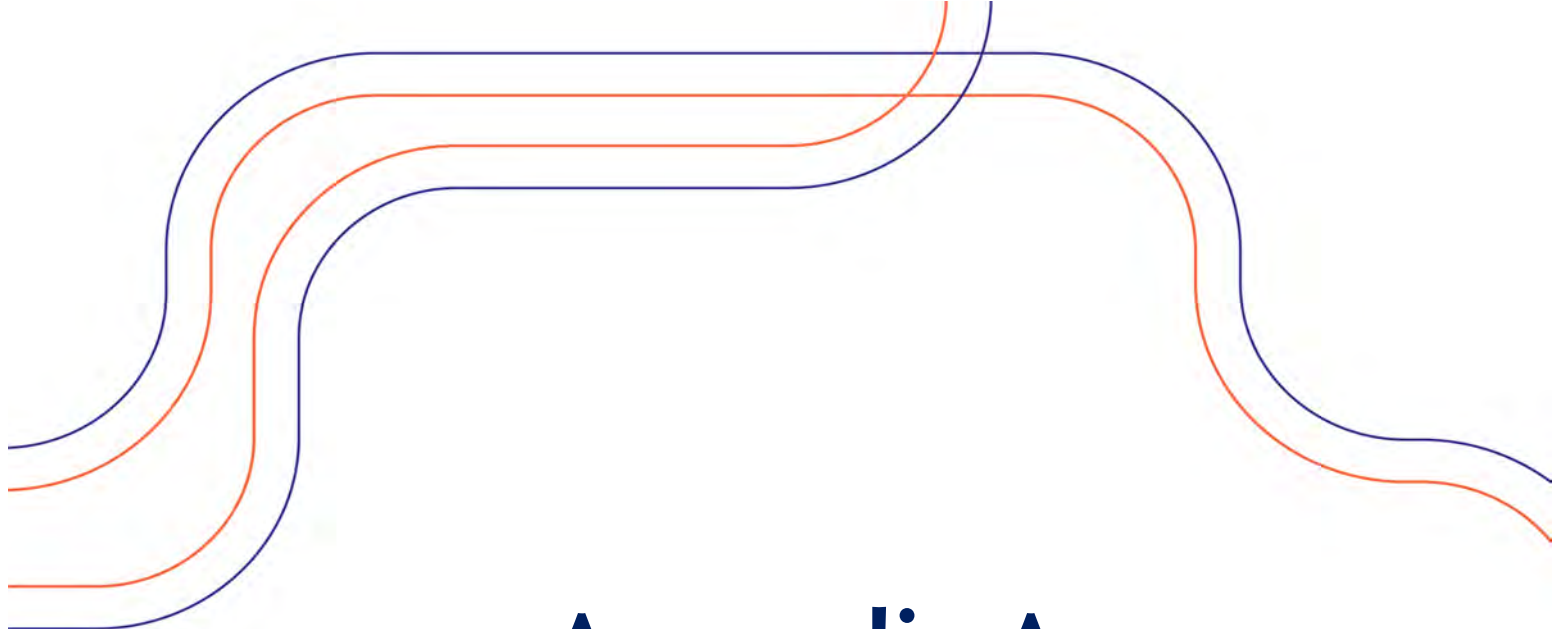
Traffic generation of the proposed tavern has been allowed for the assessment of the proposed Paradiso Estate.

SIDRA intersection analysis confirms satisfactory traffic operation for the existing intersection of McDonald Road/ Kerosene Lane, McDonald Road/ Sierra Pde along with the eastern crossover on Sierra Pde, as a network for PM and Saturday peak hour for post development and 10-year post development scenarios.

Pedestrian and cyclist access to the proposed development will be accommodated by the existing shared paths on the adjacent road network.

No particular transport or safety issues have been identified for the proposed development within the scope of this assessment.

Accordingly, it is concluded that traffic-related issues should not form any impediment to the approval of the proposed development.



Appendix A

PROPOSED DEVELOPMENT PLANS





SITE PLAN
1:400

GENERAL NOTES

[illegible]

SITE / BUILDING AREAS

PUBLIC AREAS	= 818.33 m2
BEER GARDEN	= 175.00 m2
OUTDOOR TERRACES	= 51.40 m2
TOTAL TAVERN CALC	= 1044.83 m2
BACK OF HOUSE	= 312.93 m2
AMENITIES	= 62.22 m2
PLAYGROUND	= 31.2 m2
TOTAL (GFA) =	1461.88 m2

TOTAL NO. OF CAR BAYS

JAYVEN
1 BAY PER 5m² (LA);
1 x (1045.33m²/5m²) = **209 BAYS**

TOTAL BAYS REQUIRED = 206 BAYS
TOTAL BAYS PROVIDED = 0 BAYS

D	20.01.26	PRELIMINARY	KW
E	16.01.26	PRELIMINARY	KW
S	12.01.26	PRELIMINARY	KW
A	17.12.25	PRELIMINARY	KW
REV	DATE	DESCRIPTION	BY
REVISIONS			

DEVELOPMENT APPROVAL



4/44 Deepen Street (Arrows) nr 6103
 po box 1427 lakemba nr 6026
 (09 9293 0290)
 (09 9293 0543)
olk.com.au

CLIENT:
THE LAST LOCAL

PROJECT:
THE LAST LOCAL

CORNER OF SIERRA PARADE & McDONALD ROAD, BALDIVISIO

(DRAWING TITLE):
SITE PLAN

SITE PLAN

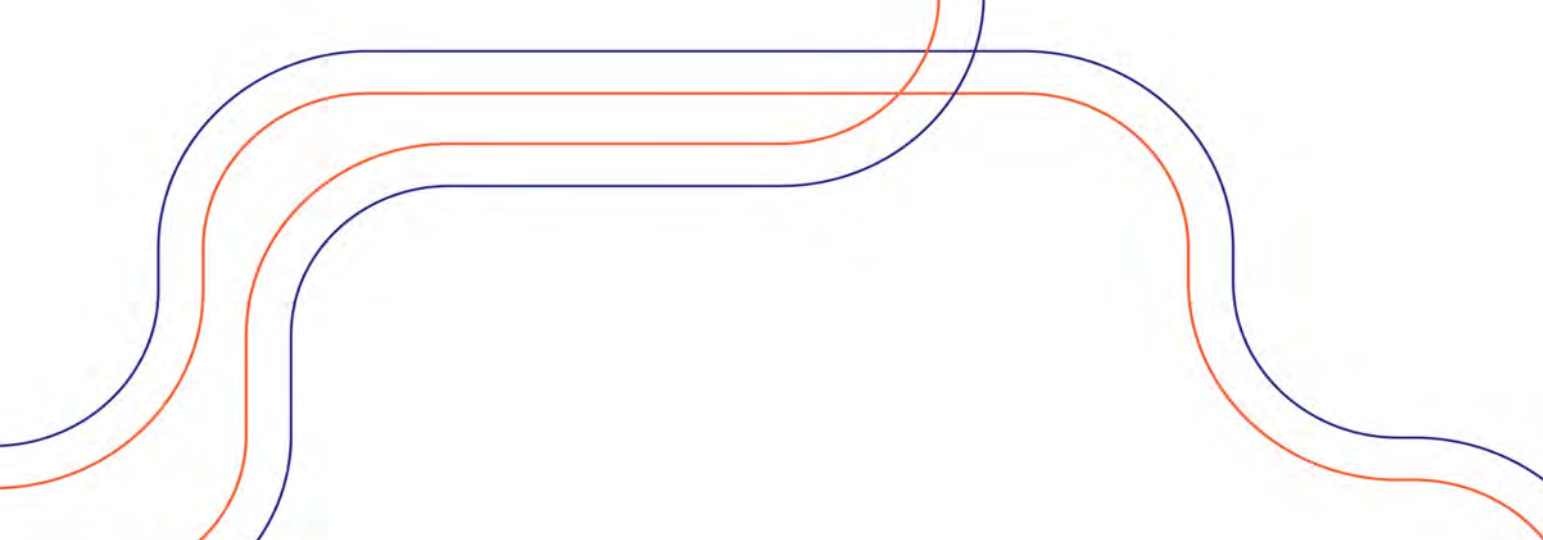
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1000	1000	1000	1000
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PROJECT NO. C-400-BAL-01
SCALE: 1" = 10' @ A1

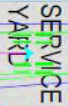
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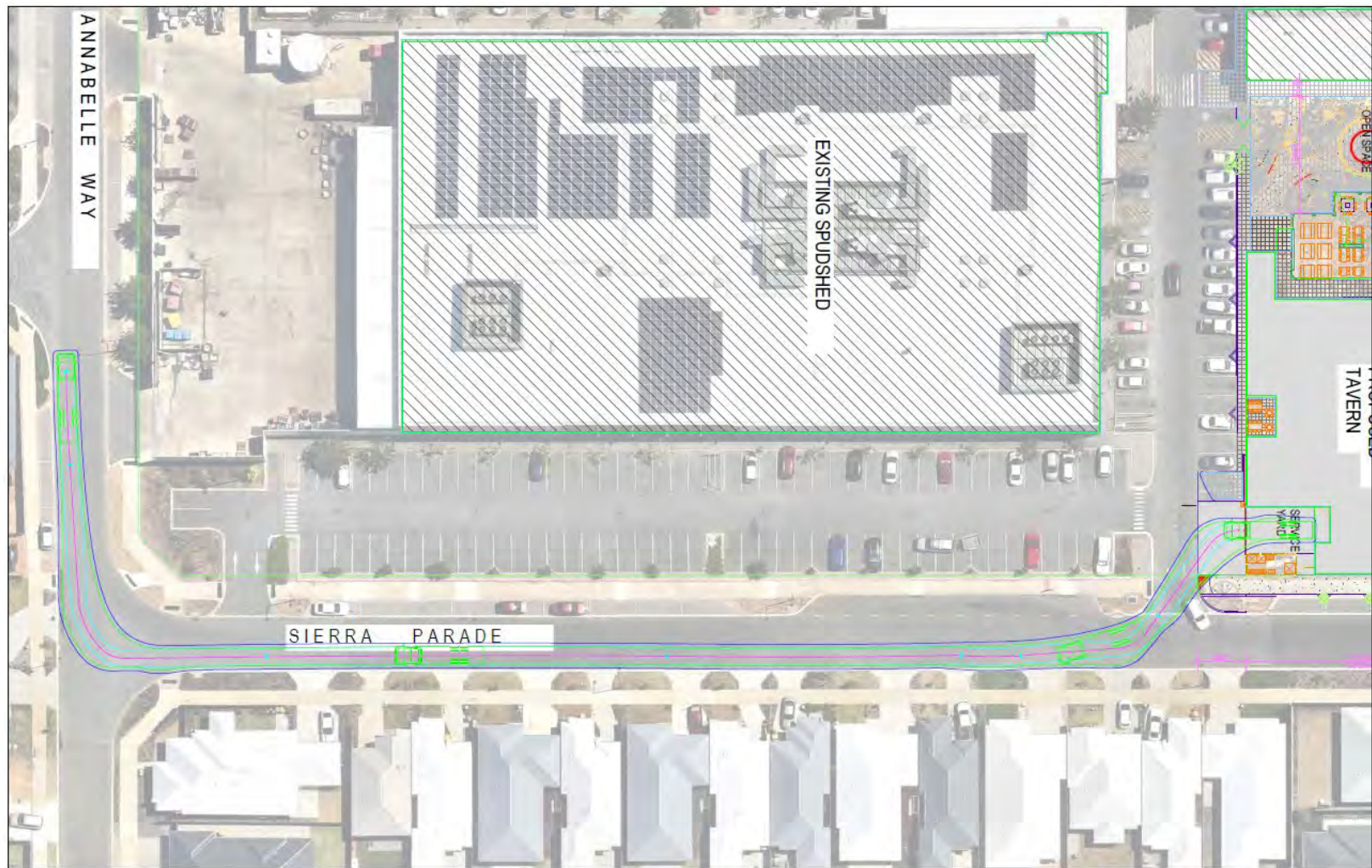
Year	1990	1995	2000	2005
1990	1990	1995	2000	2005



Appendix B

TURN PATH ANALYSIS





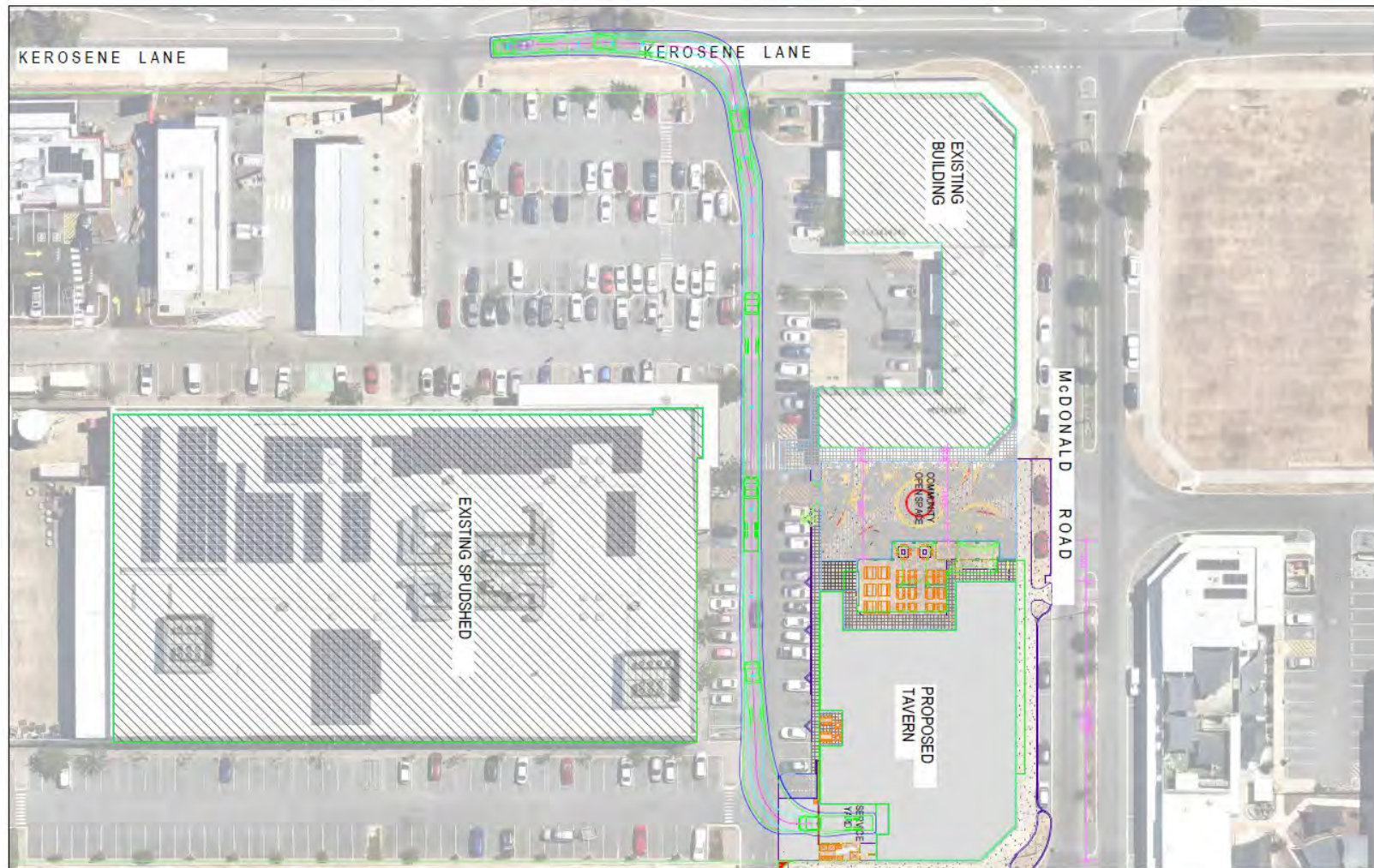
Baldvis Local Tavern - 124 Kerosene Lane, Baldvis
 12.5m Service Vehicle
 Loading Bay Exit : Sierra Parade - Annabelle Way

LEGEND
 Vehicle Body
 Wheel Path
 500mm Clearance



t25.342.sk12
 22/04/2026
 Scale: 1:500 @ A3





Baldvis Local Tavern - 124 Kerosene Lane, Baldvis
 12.5m Service Vehicle
 Loading Bay Exit : Kerosene Lane

LEGEND
 Vehicle Body
 Wheel Path
 500mm Clearance



t25.342.sk13
 22/04/2026
 Scale: 1:600 @ A3





Appendix C

SIDAR ANALYSIS



EXISTING

MOVEMENT SUMMARY

 **Site: [1] Kerosene Ln & McDonald Rd - Existing - PM**
(Existing)

Network: [1] PM (Existing)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Cycles	Number Rate to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: McDonald Rd															
1	L2	All MCs	88	3.6	88	3.6	0.126	5.1	LOS A	0.5	4.1	0.33	0.54	0.33	46.0
3	R2	All MCs	39	20.0	39	20.0	0.126	8.7	LOS A	0.5	4.1	0.33	0.54	0.33	41.2
Approach			127	8.6	127	8.6	0.126	6.2	LOS A	0.5	4.1	0.33	0.54	0.33	44.4
East: Kerosene Ln															
4	L2	All MCs	59	20.0	59	20.0	0.100	5.9	LOS A	0.0	0.0	0.00	0.18	0.00	57.2
5	T1	All MCs	132	3.1	132	3.1	0.100	0.0	LOS A	0.0	0.0	0.00	0.18	0.00	58.5
Approach			191	8.3	191	8.3	0.100	1.8	NA	0.0	0.0	0.00	0.18	0.00	58.3
West: Kerosene Ln															
11	T1	All MCs	153	2.8	153	2.8	0.074	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	112	6.7	112	6.7	0.077	6.4	LOS A	0.4	2.8	0.31	0.56	0.31	49.1
Approach			264	4.4	264	4.4	0.077	2.7	NA	0.4	2.8	0.13	0.24	0.13	56.6
All Vehicles			582	6.6	582	6.6	0.126	3.2	NA	0.5	4.1	0.13	0.28	0.13	54.4

MOVEMENT SUMMARY

Site: [2] McDonald Rd & Sierra Pde - Existing - PM (Existing)

Network: [1] PM (Existing)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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.		Eff. Stop of Cycles	Number of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist m]	Rate to Depart		km/h
South: McDonald Rd														
4	L2	All MCs	39	2.0	39	2.0	0.075	4.6	LOS A	0.0	0.0	0.00	0.14	0.00
5	T1	All MCs	111	2.0	111	2.0	0.075	0.0	LOS A	0.0	0.0	0.00	0.14	0.00
Approach			149	2.0	149	2.0	0.075	1.2	NA	0.0	0.0	0.00	0.14	0.00
North: McDonald Rd														
11	T1	All MCs	135	2.0	135	2.0	0.071	0.0	LOS A	0.0	0.3	0.03	0.03	0.03
12	R2	All MCs	5	2.0	5	2.0	0.071	4.9	LOS A	0.0	0.3	0.03	0.03	0.03
Approach			140	2.0	140	2.0	0.071	0.2	NA	0.0	0.3	0.03	0.03	0.03
West: Sierra Pde														
1	L2	All MCs	16	2.0	16	2.0	0.098	4.4	LOS A	0.3	2.5	0.30	0.56	0.30
3	R2	All MCs	86	2.0	86	2.0	0.098	5.2	LOS A	0.3	2.5	0.30	0.56	0.30
Approach			102	2.0	102	2.0	0.098	5.1	LOS A	0.3	2.5	0.30	0.56	0.30
All Vehicles			392	2.0	392	2.0	0.098	1.9	NA	0.3	2.5	0.09	0.21	0.09

MOVEMENT SUMMARY

 **Site: [3] Sierra Pde & Existing Crossover - Existing - PM**
(Existing)

Network: [1] PM (Existing)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist] m				km/h
East: Sierra Pde															
11	T1	All MCs	14	2.0	14	2.0	0.025	0.0	LOS A	0.1	0.8	0.07	0.37	0.07	41.9
12	R2	All MCs	31	2.0	31	2.0	0.025	4.1	LOS A	0.1	0.8	0.07	0.37	0.07	24.7
Approach			44	2.0	44	2.0	0.025	2.8	NA	0.1	0.8	0.07	0.37	0.07	30.5
North: Existing Crossover															
1	L2	All MCs	87	2.0	87	2.0	0.064	4.2	LOS A	0.3	2.0	0.07	0.97	0.07	14.9
3	R2	All MCs	2	2.0	2	2.0	0.064	4.4	LOS A	0.3	2.0	0.07	0.97	0.07	18.1
Approach			89	2.0	89	2.0	0.064	4.2	LOS A	0.3	2.0	0.07	0.97	0.07	15.1
West: Sierra Pde															
4	L2	All MCs	1	2.0	1	2.0	0.008	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	35.8
5	T1	All MCs	15	2.0	15	2.0	0.008	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	48.7
Approach			16	2.0	16	2.0	0.008	0.3	NA	0.0	0.0	0.00	0.04	0.00	47.3
All Vehicles			149	2.0	149	2.0	0.064	3.4	NA	0.3	2.0	0.06	0.69	0.06	22.6

MOVEMENT SUMMARY

 **Site: [1 (2)] Kerosene Ln & McDonald Rd - Existing - SAT**
(Existing)

Network: [2] SAT (Existing)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: McDonald Rd															
1	L2	All MCs	82	3.6	82	3.6	0.099	4.9	LOS A	0.4	3.3	0.24	0.51	0.24	46.5
3	R2	All MCs	35	20.0	35	20.0	0.099	6.6	LOS A	0.4	3.3	0.24	0.51	0.24	41.5
Approach			117	8.5	117	8.5	0.099	5.4	LOS A	0.4	3.3	0.24	0.51	0.24	44.9
East: Kerosene Ln															
4	L2	All MCs	26	20.0	26	20.0	0.062	5.9	LOS A	0.0	0.0	0.00	0.13	0.00	58.0
5	T1	All MCs	94	3.1	94	3.1	0.062	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	59.0
Approach			120	6.8	120	6.8	0.062	1.3	NA	0.0	0.0	0.00	0.13	0.00	58.8
West: Kerosene Ln															
11	T1	All MCs	79	2.8	79	2.8	0.038	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	55	6.7	55	6.7	0.035	6.1	LOS A	0.2	1.2	0.23	0.53	0.23	49.5
Approach			134	4.4	134	4.4	0.038	2.5	NA	0.2	1.2	0.10	0.22	0.10	56.9
All Vehicles			371	6.5	371	6.5	0.099	3.0	NA	0.4	3.3	0.11	0.28	0.11	53.7

MOVEMENT SUMMARY

 **Site: [2 (2)] McDonald Rd & Sierra Pde - Existing - SAT**
(Existing)

Network: [2] SAT (Existing)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Cycles	Number Rate to Depart
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist] m			
South: McDonald Rd														
4	L2	All MCs	39	2.0	39	2.0	0.060	4.6	LOS A	0.0	0.0	0.00	0.18	0.00
5	T1	All MCs	80	2.0	80	2.0	0.060	0.0	LOS A	0.0	0.0	0.00	0.18	0.00
Approach			119	2.0	119	2.0	0.060	1.5	NA	0.0	0.0	0.00	0.18	0.00
North: McDonald Rd														
11	T1	All MCs	72	2.0	72	2.0	0.040	0.0	LOS A	0.0	0.3	0.05	0.06	0.05
12	R2	All MCs	6	2.0	6	2.0	0.040	4.9	LOS A	0.0	0.3	0.05	0.06	0.05
Approach			78	2.0	78	2.0	0.040	0.4	NA	0.0	0.3	0.05	0.06	0.05
West: Sierra Pde														
1	L2	All MCs	18	2.0	18	2.0	0.075	4.3	LOS A	0.3	2.0	0.23	0.52	0.23
3	R2	All MCs	68	2.0	68	2.0	0.075	4.8	LOS A	0.3	2.0	0.23	0.52	0.23
Approach			86	2.0	86	2.0	0.075	4.7	LOS A	0.3	2.0	0.23	0.52	0.23
All Vehicles			283	2.0	283	2.0	0.075	2.2	NA	0.3	2.0	0.08	0.25	0.08

MOVEMENT SUMMARY

▽ Site: [3 (2)] Sierra Pde & Existing Crossover - Existing - SAT
(Existing)

Network: [2] SAT (Existing)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]	[Total HV]	[Total HV]				[Veh. veh	Dist]				km/h
			veh/h	%	veh/h	%	v/c	sec			m				
East: Sierra Pde															
11	T1	All MCs	4	2.0	4	2.0	0.026	0.0	LOS A	0.1	0.9	0.05	0.48	0.05	40.2
12	R2	All MCs	41	2.0	41	2.0	0.026	4.1	LOS A	0.1	0.9	0.05	0.48	0.05	23.5
Approach			45	2.0	45	2.0	0.026	3.7	NA	0.1	0.9	0.05	0.48	0.05	25.3
North: Existing Crossover															
1	L2	All MCs	78	2.0	78	2.0	0.056	4.2	LOS A	0.2	1.7	0.05	0.98	0.05	14.9
3	R2	All MCs	1	2.0	1	2.0	0.056	4.3	LOS A	0.2	1.7	0.05	0.98	0.05	18.1
Approach			79	2.0	79	2.0	0.056	4.2	LOS A	0.2	1.7	0.05	0.98	0.05	15.0
West: Sierra Pde															
4	L2	All MCs	1	2.0	1	2.0	0.005	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	35.5
5	T1	All MCs	8	2.0	8	2.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	47.9
Approach			9	2.0	9	2.0	0.005	0.5	NA	0.0	0.0	0.00	0.06	0.00	45.7
All Vehicles			134	2.0	134	2.0	0.056	3.8	NA	0.2	1.7	0.05	0.75	0.05	20.5

2027

MOVEMENT SUMMARY

Site: [1 (5)] Kerosene Ln & McDonald Rd - 2027- PM (2027)

Network: [5] PM (2027)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Cycles	Number of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Total HV]	[Total HV]				[Veh.]	[Dist]	Rate to Depart		km/h
			veh/h	%	veh/h	%	v/c	sec		veh	m			
South: McDonald Rd														
1	L2	All MCs	94	3.6	94	3.6	0.141	5.1	LOS A	0.6	4.6	0.35	0.54	45.8
3	R2	All MCs	44	20.0	44	20.0	0.141	9.1	LOS A	0.6	4.6	0.35	0.54	41.0
Approach			138	8.8	138	8.8	0.141	6.4	LOS A	0.6	4.6	0.35	0.54	44.2
East: Kerosene Ln														
4	L2	All MCs	72	20.0	72	20.0	0.108	5.9	LOS A	0.0	0.0	0.00	0.20	56.8
5	T1	All MCs	134	3.1	134	3.1	0.108	0.0	LOS A	0.0	0.0	0.00	0.20	58.3
Approach			205	9.0	205	9.0	0.108	2.1	NA	0.0	0.0	0.00	0.20	58.0
West: Kerosene Ln														
11	T1	All MCs	156	2.8	156	2.8	0.076	0.0	LOS A	0.0	0.0	0.00	0.00	60.0
12	R2	All MCs	124	6.7	124	6.7	0.087	6.4	LOS A	0.4	3.1	0.33	0.56	49.0
Approach			280	4.5	280	4.5	0.087	2.9	NA	0.4	3.1	0.15	0.25	56.3
All Vehicles			623	6.9	623	6.9	0.141	3.4	NA	0.6	4.6	0.14	0.30	54.1

MOVEMENT SUMMARY

Site: [2 (5)] McDonald Rd & Sierra Pde - 2027- PM (2027)
Network: [5] PM (2027)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes 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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	[Dist] m				
South: McDonald Rd															
4	L2	All MCs	77	2.0	77	2.0	0.095	4.6	LOS A	0.0	0.0	0.00	0.22	0.00	39.0
5	T1	All MCs	111	2.0	111	2.0	0.095	0.0	LOS A	0.0	0.0	0.00	0.22	0.00	39.0
Approach			187	2.0	187	2.0	0.095	1.9	NA	0.0	0.0	0.00	0.22	0.00	39.0
North: McDonald Rd															
11	T1	All MCs	135	2.0	135	2.0	0.089	0.2	LOS A	0.2	1.7	0.14	0.16	0.14	46.2
12	R2	All MCs	32	2.0	32	2.0	0.089	5.2	LOS A	0.2	1.7	0.14	0.16	0.14	44.5
Approach			166	2.0	166	2.0	0.089	1.1	NA	0.2	1.7	0.14	0.16	0.14	46.0
West: Sierra Pde															
1	L2	All MCs	26	2.0	26	2.0	0.126	4.4	LOS A	0.4	3.4	0.32	0.57	0.32	24.5
3	R2	All MCs	102	2.0	102	2.0	0.126	5.5	LOS A	0.4	3.4	0.32	0.57	0.32	29.9
Approach			128	2.0	128	2.0	0.126	5.3	LOS A	0.4	3.4	0.32	0.57	0.32	29.2
All Vehicles			482	2.0	482	2.0	0.126	2.5	NA	0.4	3.4	0.13	0.29	0.13	39.0

MOVEMENT SUMMARY

 Site: [3 (5)] Sierra Pde & Existing Crossover - 2027 - PM
(2027)

Network: [5] PM (2027)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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.		Eff. Stop of Cycles	Number of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist] m	Rate to Depart		km/h
East: Sierra Pde														
11	T1	All MCs	14	2.0	14	2.0	0.061	0.1	LOS A	0.3	2.2	0.08	0.46	40.3
12	R2	All MCs	94	2.0	94	2.0	0.061	4.1	LOS A	0.3	2.2	0.08	0.46	23.6
Approach			107	2.0	107	2.0	0.061	3.6	NA	0.3	2.2	0.08	0.46	25.9
North: Existing Crossover														
1	L2	All MCs	114	2.0	114	2.0	0.088	4.2	LOS A	0.4	2.7	0.07	0.96	14.9
3	R2	All MCs	6	2.0	6	2.0	0.088	4.7	LOS A	0.4	2.7	0.07	0.96	18.1
Approach			120	2.0	120	2.0	0.088	4.2	LOS A	0.4	2.7	0.07	0.96	15.3
West: Sierra Pde														
4	L2	All MCs	5	2.0	5	2.0	0.011	4.6	LOS A	0.0	0.0	0.00	0.14	34.4
5	T1	All MCs	15	2.0	15	2.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.14	45.4
Approach			20	2.0	20	2.0	0.011	1.2	NA	0.0	0.0	0.00	0.14	41.2
All Vehicles			247	2.0	247	2.0	0.088	3.7	NA	0.4	2.7	0.07	0.68	21.9

MOVEMENT SUMMARY

Site: [1 (6)] Kerosene Ln & McDonald Rd - 2027 - SAT (2027)

Network: [6] SAT (2027)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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. Queued	Eff. Stop Rate	Number of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Total HV]	[Total HV]	v/c	sec		[Veh. veh]	[Dist]			km/h
South: McDonald Rd														
1	L2	All MCs	87	3.6	87	3.6	0.110	4.9	LOSA	0.5	3.7	0.26	0.51	46.4
3	R2	All MCs	40	20.0	40	20.0	0.110	6.8	LOSA	0.5	3.7	0.26	0.51	41.5
Approach			127	8.7	127	8.7	0.110	5.5	LOSA	0.5	3.7	0.26	0.51	44.8
East: Kerosene Ln														
4	L2	All MCs	35	20.0	35	20.0	0.068	5.9	LOSA	0.0	0.0	0.00	0.16	57.6
5	T1	All MCs	96	3.1	96	3.1	0.068	0.0	LOSA	0.0	0.0	0.00	0.16	58.7
Approach			131	7.6	131	7.6	0.068	1.6	NA	0.0	0.0	0.00	0.16	58.6
West: Kerosene Ln														
11	T1	All MCs	80	2.8	80	2.8	0.039	0.0	LOSA	0.0	0.0	0.00	0.00	60.0
12	R2	All MCs	63	6.7	63	6.7	0.041	6.1	LOSA	0.2	1.5	0.25	0.53	49.5
Approach			143	4.5	143	4.5	0.041	2.7	NA	0.2	1.5	0.11	0.24	56.5
All Vehicles			401	6.9	401	6.9	0.110	3.2	NA	0.5	3.7	0.12	0.30	53.4

MOVEMENT SUMMARY

Site: [2 (6)] McDonald Rd & Sierra Pde - 2027 - SAT (2027)
Network: [6] SAT (2027)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes 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] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: McDonald Rd															
4	L2	All MCs	63	2.0	63	2.0	0.073	4.6	LOS A	0.0	0.0	0.00	0.24	0.00	38.4
5	T1	All MCs	80	2.0	80	2.0	0.073	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	38.4
Approach			143	2.0	143	2.0	0.073	2.0	NA	0.0	0.0	0.00	0.24	0.00	38.4
North: McDonald Rd															
11	T1	All MCs	72	2.0	72	2.0	0.051	0.2	LOS A	0.1	1.1	0.14	0.17	0.14	45.6
12	R2	All MCs	23	2.0	23	2.0	0.051	5.0	LOS A	0.1	1.1	0.14	0.17	0.14	43.6
Approach			95	2.0	95	2.0	0.051	1.4	NA	0.1	1.1	0.14	0.17	0.14	45.2
West: Sierra Pde															
1	L2	All MCs	27	2.0	27	2.0	0.097	4.3	LOS A	0.3	2.6	0.24	0.53	0.24	25.2
3	R2	All MCs	83	2.0	83	2.0	0.097	4.9	LOS A	0.3	2.6	0.24	0.53	0.24	30.4
Approach			111	2.0	111	2.0	0.097	4.8	LOS A	0.3	2.6	0.24	0.53	0.24	29.6
All Vehicles			348	2.0	348	2.0	0.097	2.7	NA	0.3	2.6	0.11	0.31	0.11	37.5

MOVEMENT SUMMARY

Site: [3 (6)] Sierra Pde & Existing Crossover - 2027 - SAT
(2027)

Network: [6] SAT (2027)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Sierra Pde															
11	T1	All MCs	4	2.0	4	2.0	0.048	0.0	LOS A	0.2	1.7	0.05	0.51	0.05	39.8
12	R2	All MCs	81	2.0	81	2.0	0.048	4.1	LOS A	0.2	1.7	0.05	0.51	0.05	23.3
Approach			85	2.0	85	2.0	0.048	3.9	NA	0.2	1.7	0.05	0.51	0.05	24.2
North: Existing Crossover															
1	L2	All MCs	102	2.0	102	2.0	0.076	4.2	LOS A	0.3	2.4	0.05	0.98	0.05	14.9
3	R2	All MCs	3	2.0	3	2.0	0.076	4.4	LOS A	0.3	2.4	0.05	0.98	0.05	18.1
Approach			105	2.0	105	2.0	0.076	4.2	LOS A	0.3	2.4	0.05	0.98	0.05	15.1
West: Sierra Pde															
4	L2	All MCs	2	2.0	2	2.0	0.006	4.6	LOS A	0.0	0.0	0.00	0.11	0.00	34.9
5	T1	All MCs	8	2.0	8	2.0	0.006	0.0	LOS A	0.0	0.0	0.00	0.11	0.00	46.4
Approach			11	2.0	11	2.0	0.006	0.9	NA	0.0	0.0	0.00	0.11	0.00	42.9
All Vehicles			201	2.0	201	2.0	0.076	3.9	NA	0.3	2.4	0.05	0.73	0.05	20.4

MOVEMENT SUMMARY

Site: [1 (3)] Kerosene Ln & McDonald Rd - 2037- PM (2037)
Network: [3] PM (2037)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes 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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: McDonald Rd															
1	L2	All MCs	94	3.6	94	3.6	0.151	5.2	LOS A	0.6	4.9	0.39	0.56	0.39	45.5
3	R2	All MCs	44	20.0	44	20.0	0.151	10.1	LOS B	0.6	4.9	0.39	0.56	0.39	40.8
Approach			138	8.8	138	8.8	0.151	6.7	LOS A	0.6	4.9	0.39	0.56	0.39	43.9
East: Kerosene Ln															
4	L2	All MCs	72	20.0	72	20.0	0.123	5.9	LOS A	0.0	0.0	0.00	0.18	0.00	57.2
5	T1	All MCs	163	3.1	163	3.1	0.123	0.0	LOS A	0.0	0.0	0.00	0.18	0.00	58.5
Approach			235	8.2	235	8.2	0.123	1.8	NA	0.0	0.0	0.00	0.18	0.00	58.3
West: Kerosene Ln															
11	T1	All MCs	189	2.8	189	2.8	0.092	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	124	6.7	124	6.7	0.090	6.6	LOS A	0.4	3.2	0.36	0.58	0.36	48.9
Approach			314	4.3	314	4.3	0.092	2.6	NA	0.4	3.2	0.14	0.23	0.14	56.7
All Vehicles			686	6.6	686	6.6	0.151	3.2	NA	0.6	4.9	0.14	0.28	0.14	54.6

MOVEMENT SUMMARY

Site: [2 (3)] McDonald Rd & Sierra Pde - 2037- PM (2037)

Network: [3] PM (2037)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Cycles	Number Rate to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: McDonald Rd															
4	L2	All MCs	77	2.0	77	2.0	0.095	4.6	LOS A	0.0	0.0	0.00	0.22	0.00	39.0
5	T1	All MCs	111	2.0	111	2.0	0.095	0.0	LOS A	0.0	0.0	0.00	0.22	0.00	39.0
Approach			187	2.0	187	2.0	0.095	1.9	NA	0.0	0.0	0.00	0.22	0.00	39.0
North: McDonald Rd															
11	T1	All MCs	135	2.0	135	2.0	0.089	0.2	LOS A	0.2	1.7	0.14	0.16	0.14	46.2
12	R2	All MCs	32	2.0	32	2.0	0.089	5.2	LOS A	0.2	1.7	0.14	0.16	0.14	44.5
Approach			166	2.0	166	2.0	0.089	1.1	NA	0.2	1.7	0.14	0.16	0.14	46.0
West: Sierra Pde															
1	L2	All MCs	26	2.0	26	2.0	0.126	4.4	LOS A	0.4	3.4	0.32	0.57	0.32	24.5
3	R2	All MCs	102	2.0	102	2.0	0.126	5.5	LOS A	0.4	3.4	0.32	0.57	0.32	29.9
Approach			128	2.0	128	2.0	0.126	5.3	LOS A	0.4	3.4	0.32	0.57	0.32	29.2
All Vehicles			482	2.0	482	2.0	0.126	2.5	NA	0.4	3.4	0.13	0.29	0.13	39.0

MOVEMENT SUMMARY

Site: [3 (3)] Sierra Pde & Existing Crossover - 2037 - PM
(2037)

Network: [3] PM (2037)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand		Arrival		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			Flows		Flows					[Veh. veh	Dist] m				
			[Total HV] veh/h	%	[Total HV] veh/h	%									v/c
East: Sierra Pde															
11	T1	All MCs	14	2.0	14	2.0	0.061	0.1	LOS A	0.3	2.2	0.08	0.46	0.08	40.3
12	R2	All MCs	94	2.0	94	2.0	0.061	4.1	LOS A	0.3	2.2	0.08	0.46	0.08	23.6
Approach			107	2.0	107	2.0	0.061	3.6	NA	0.3	2.2	0.08	0.46	0.08	25.9
North: Existing Crossover															
1	L2	All MCs	114	2.0	114	2.0	0.088	4.2	LOS A	0.4	2.7	0.07	0.96	0.07	14.9
3	R2	All MCs	6	2.0	6	2.0	0.088	4.7	LOS A	0.4	2.7	0.07	0.96	0.07	18.1
Approach			120	2.0	120	2.0	0.088	4.2	LOS A	0.4	2.7	0.07	0.96	0.07	15.3
West: Sierra Pde															
4	L2	All MCs	5	2.0	5	2.0	0.011	4.6	LOS A	0.0	0.0	0.00	0.14	0.00	34.4
5	T1	All MCs	15	2.0	15	2.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.14	0.00	45.4
Approach			20	2.0	20	2.0	0.011	1.2	NA	0.0	0.0	0.00	0.14	0.00	41.2
All Vehicles			247	2.0	247	2.0	0.088	3.7	NA	0.4	2.7	0.07	0.68	0.07	21.9

MOVEMENT SUMMARY

Site: [1 (4)] Kerosene Ln & McDonald Rd - 2037 - SAT (2037)

Network: [4] SAT (2037)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	Dist]				km/h
South: McDonald Rd															
1	L2	All MCs	87	3.6	87	3.6	0.115	5.0	LOS A	0.5	3.8	0.29	0.52	0.29	46.3
3	R2	All MCs	40	20.0	40	20.0	0.115	7.2	LOS A	0.5	3.8	0.29	0.52	0.29	41.4
Approach			127	8.7	127	8.7	0.115	5.7	LOS A	0.5	3.8	0.29	0.52	0.29	44.6
East: Kerosene Ln															
4	L2	All MCs	35	20.0	35	20.0	0.078	5.9	LOS A	0.0	0.0	0.00	0.13	0.00	57.9
5	T1	All MCs	117	3.1	117	3.1	0.078	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	58.9
Approach			152	7.0	152	7.0	0.078	1.4	NA	0.0	0.0	0.00	0.13	0.00	58.8
West: Kerosene Ln															
11	T1	All MCs	98	2.8	98	2.8	0.048	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	63	6.7	63	6.7	0.042	6.2	LOS A	0.2	1.5	0.27	0.54	0.27	49.3
Approach			161	4.3	161	4.3	0.048	2.4	NA	0.2	1.5	0.11	0.21	0.11	56.9
All Vehicles			440	6.5	440	6.5	0.115	3.0	NA	0.5	3.8	0.12	0.28	0.12	54.0

MOVEMENT SUMMARY

Site: [2 (4)] McDonald Rd & Sierra Pde - 2037 - SAT (2037)

Network: [4] SAT (2037)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%	v/c	sec		[Veh.] veh	[Dist] m			km/h
South: McDonald Rd														
4	L2	All MCs	63	2.0	63	2.0	0.073	4.6	LOS A	0.0	0.0	0.00	0.24	38.4
5	T1	All MCs	80	2.0	80	2.0	0.073	0.0	LOS A	0.0	0.0	0.00	0.24	38.4
Approach			143	2.0	143	2.0	0.073	2.0	NA	0.0	0.0	0.00	0.24	38.4
North: McDonald Rd														
11	T1	All MCs	72	2.0	72	2.0	0.051	0.2	LOS A	0.1	1.1	0.14	0.17	45.6
12	R2	All MCs	23	2.0	23	2.0	0.051	5.0	LOS A	0.1	1.1	0.14	0.17	43.6
Approach			95	2.0	95	2.0	0.051	1.4	NA	0.1	1.1	0.14	0.17	45.2
West: Sierra Pde														
1	L2	All MCs	27	2.0	27	2.0	0.097	4.3	LOS A	0.3	2.6	0.24	0.53	25.2
3	R2	All MCs	83	2.0	83	2.0	0.097	4.9	LOS A	0.3	2.6	0.24	0.53	30.4
Approach			111	2.0	111	2.0	0.097	4.8	LOS A	0.3	2.6	0.24	0.53	29.6
All Vehicles			348	2.0	348	2.0	0.097	2.7	NA	0.3	2.6	0.11	0.31	37.5

MOVEMENT SUMMARY

 Site: [3 (4)] Sierra Pde & Existing Crossover - 2037 - SAT
(2037)

Network: [4] SAT (2037)

Output produced by SIDRA INTERSECTION Version: 10.0.8.241

NA

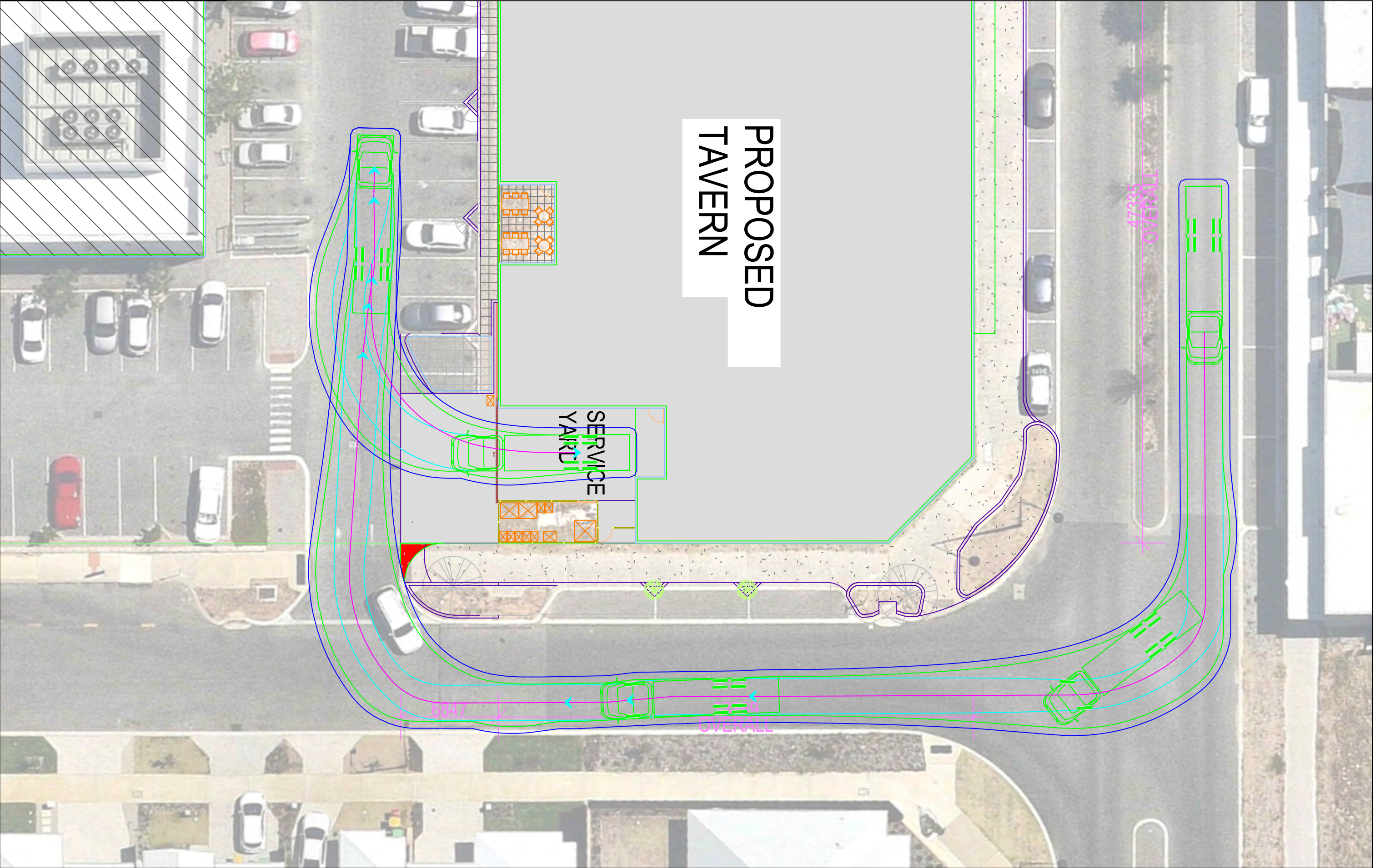
Site Category: (None)

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

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 [Veh. veh]	Of Queue Dist]	Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart
			veh/h	%	veh/h	%	v/c	sec			m			km/h
East: Sierra Pde														
11	T1	All MCs	4	2.0	4	2.0	0.048	0.0	LOS A	0.2	1.7	0.05	0.51	0.05
12	R2	All MCs	81	2.0	81	2.0	0.048	4.1	LOS A	0.2	1.7	0.05	0.51	0.05
Approach			85	2.0	85	2.0	0.048	3.9	NA	0.2	1.7	0.05	0.51	0.05
North: Existing Crossover														
1	L2	All MCs	102	2.0	102	2.0	0.076	4.2	LOS A	0.3	2.4	0.05	0.98	0.05
3	R2	All MCs	3	2.0	3	2.0	0.076	4.4	LOS A	0.3	2.4	0.05	0.98	0.05
Approach			105	2.0	105	2.0	0.076	4.2	LOS A	0.3	2.4	0.05	0.98	0.05
West: Sierra Pde														
4	L2	All MCs	2	2.0	2	2.0	0.006	4.6	LOS A	0.0	0.0	0.00	0.11	0.00
5	T1	All MCs	8	2.0	8	2.0	0.006	0.0	LOS A	0.0	0.0	0.00	0.11	0.00
Approach			11	2.0	11	2.0	0.006	0.9	NA	0.0	0.0	0.00	0.11	0.00
All Vehicles			201	2.0	201	2.0	0.076	3.9	NA	0.3	2.4	0.05	0.73	0.05



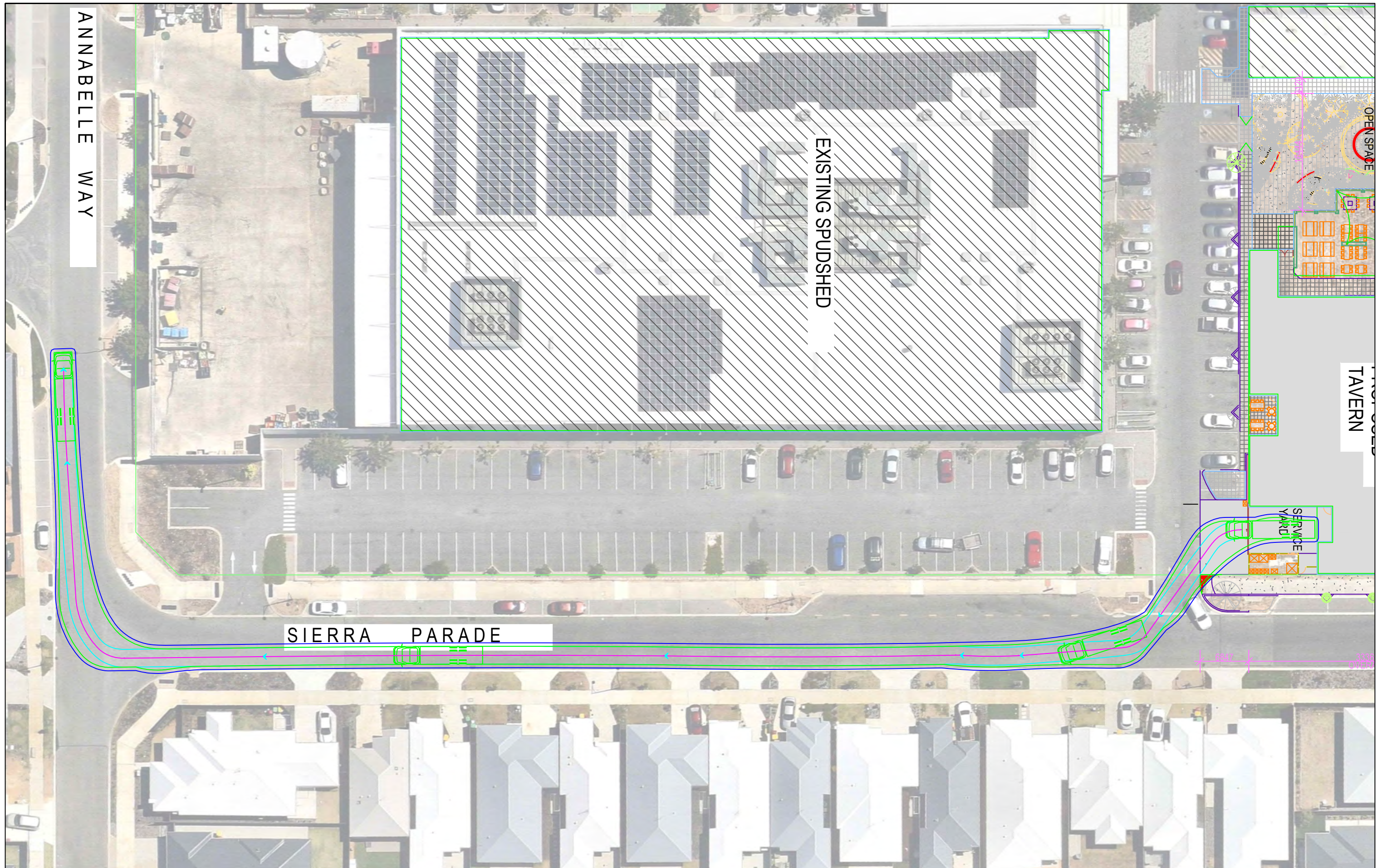
Baldvis Local Tavern - 124 Kerosene Lane, Baldvis
12.5m Service Vehicle
Loading Bay Entry

LEGEND
Vehicle Body
Wheel Path
500mm Clearance



t25.342.sk11
22/04/2026
Scale: 1:250 @ A3





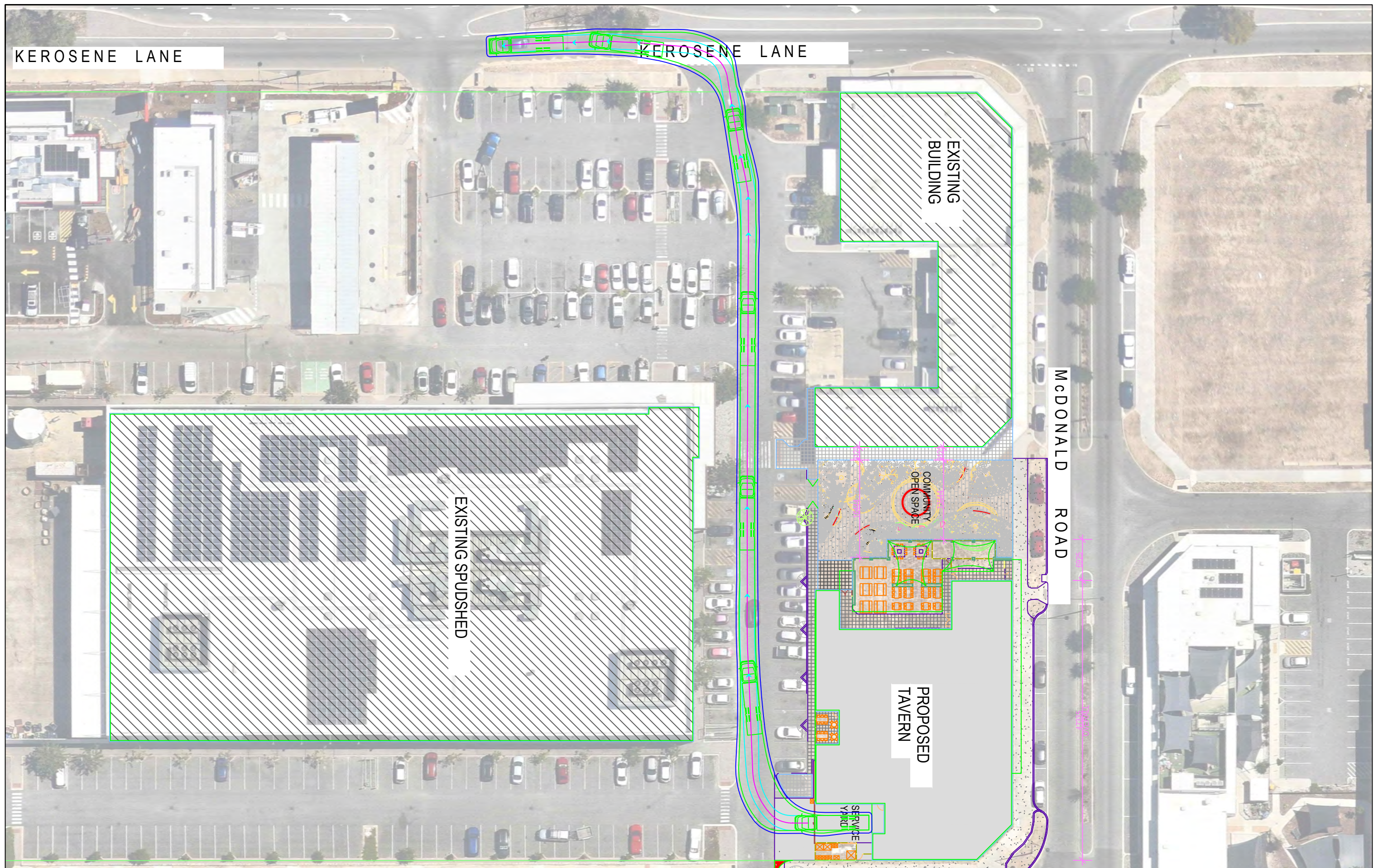
Baldivis Local Tavern - 124 Kerosene Lane, Baldivis
 12.5m Service Vehicle
 Loading Bay Exit : Sierra Parade - Annabelle Way

LEGEND
 Vehicle Body
 Wheel Path
 500mm Clearance



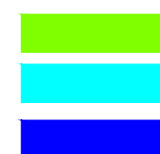
t25.342.sk12
 22/04/2026
 Scale: 1:500 @ A3





Baldvis Local Tavern - 124 Kerosene Lane, Baldvis
 12.5m Service Vehicle
 Loading Bay Exit : Kerosene Lane

LEGEND
 Vehicle Body
 Wheel Path
 500mm Clearance



t25.342.sk13

22/04/2026

Scale: 1:600 @ A3

