TRAFFIC IMPACT ASSESSMENT (TIA)

Fox Hills Golf Club Seniors Living
55 Fox Hills Crescent, Toongabbie

Reference: 20.362r01v02
Date: March 2021

TRAFFIX
TRAFFIC & TRANSPORT PLANNERS

Suite 2.08, 50 Holt St
Surry Hills, NSW 2010

t: (02) 8324 8700
w: www.traffix.com.au

DOCUMENT VERIFICATION

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Project	Fox Hills Golf Club Seniors Living			
Client	Integrated Projects Pty Ltd			
Revision	Date	Prepared By	Checked By	Signed
v02	10/03/2021	Shenara Wanigasekera	Hayden Dimitrovski	

CONTENTS

1. INTRODUCTION

TRAFFIX has been commissioned by Integrated Project Pty Ltd to undertake a Planning Proposal relating to proposed seniors living development at 55 Fox Hills Crescent, Toongabbie.

For the purposes of the Planning proposal, an indicative development concept has been formulated, comprising of 403 residential apartments across 14 buildings. The development is located within the Blacktown City Council Local Government Area (LGA) and has been assessed under that Council's controls.

This report documents the findings of our investigations and should be read in the context of the Statement of Environmental Effects (SEE) prepared separately. The development is a major development and requires referral to Transport for NSW (TfNSW), formerly Roads and Maritime Services, under the provisions of SEPP (Infrastructure) 2007.

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing traffic conditions
- Section 4: Describes the proposed development
- Section 5: Assesses the parking requirements
- Section 6: Assesses traffic impacts
- Section 7: Discusses access and internal design aspects
- Section 8: Presents the overall study conclusions

2. LOCATION AND SITE

The subject site is known as 55 Fox Hills Crescent, Toongabbie and is legally identified as Lot 100 and DP834672. It is located at the north-western corner of the intersection of the Great Western Highway and Toongabbie Road. It is also located approximately 2.1 kilometres southwest of Pendle Hill Train Station and approximately 6.7 kilometres north-west of Parramatta Business District.

The site has a total site area of approximately 31.23 hectares and is currently a golf course used for recreational purposes. The site has a southern frontage of 395 metres to the Great Western Highway and Fox Hill Crescent and an eastern frontage of 841 metres to Toongabbie Road. It is bound to the north and west by residential developments for approximately 388 metres and 763 metres respectively.

Vehicular access to the site is currently provided via two (2) access driveways, one located along Fox Hills Crescent at the southern end of the site and the second providing access to the Golf Club carpark, located along Toongabbie Road.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2**. Reference should also be made to the Photographic Record presented in **Appendix A** which provides an appreciation of the general character of roads and other key attributes in proximity to the site.

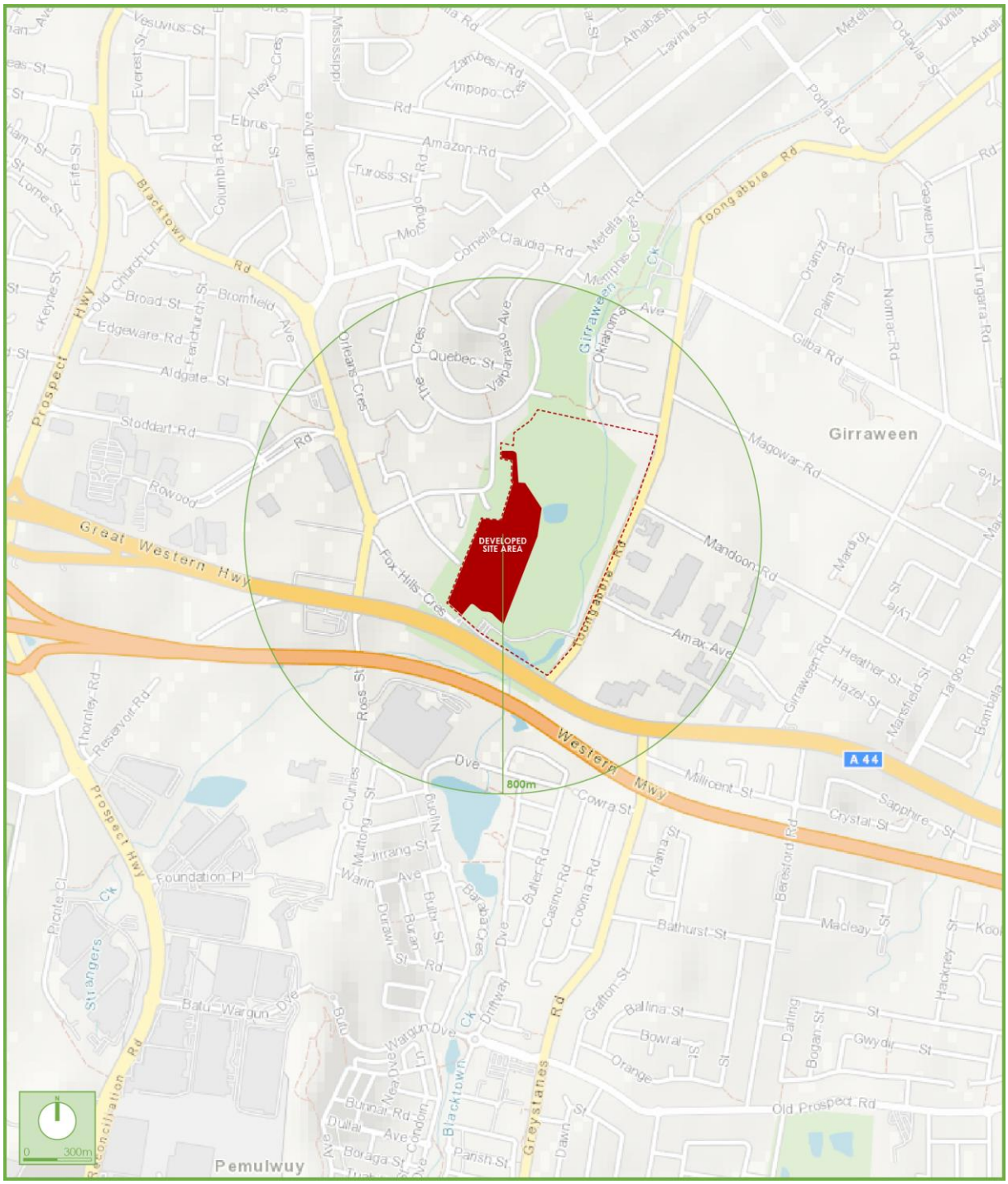


Figure 1: Location Plan

Figure 2: Site Plan

3. EXISTING TRAFFIC CONDITIONS

3.1 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- Great Western Highway: part of an RMS Highway (HW 5) that generally traverses east-west between Broadway in the east and the Western Motorway in the west. Great Western Highway accommodates four (4) lanes of traffic in the eastbound direction, with the second lane from the kerb is a T2 Transit Lane, operating from Monday to Friday between 6:00am-10:00am and 3:00pm-7:00pm and three (3) lanes of traffic in the westbound direction. The highway is separated by a median and is subject to an 80km/h speed zoning. No parking provided is provided along either kerbside.
- Blacktown Road: an Unclassified Regional Road (7150) that generally traverses north-south between Main Street in the north and the Great Western Highway in the south. In the vicinity of the site, Blacktown Road accommodates a single lane of traffic in either direction. It is subject to 60km/h speed zoning and generally does not permit kerbside parking near the site.
- Metella Road: a local road that generally traverses northeast to southwest between Cornelia Road in the northeast and Blacktown Road in the southwest. Metalla Road accommodates a single lane of traffic in each direction in the vicinity of the site. It is subject to 50km/h speed zoning and on-street parking is permitted along either kerbside.
- Fox Hills Crescent: a local road that traverses northwest to southwest between Blacktown Road in the northwest and ending in a cul-de-sac in the southeast at the site frontage. Fox Hill Crescent permits two way flow of traffic and is subject to a 50km/h speed zoning within the vicinity of the site. On-street parking is permitted along either side of the road.

- Oakwood Road: a local road that traverses southeast to northwest between Metella Road in the northwest and ending in a cul-de-sac in the southeast. Oakwood Road permits two way flow of traffic and is subject to a 50km/h speed zoning within the vicinity of the site. On-street parking is permitted along either side of the road.

It can be seen from **Figure 3** that the site is conveniently located with respect to the arterial and local road systems serving the region.

Figure 3: Road Hierarchy

3.2 Key Intersections

The key intersections in the vicinity of the site are shown below and provide an understanding of the existing road geometry and alignment in the locality.

3.2.1 Great Western Highway and Blacktown Road

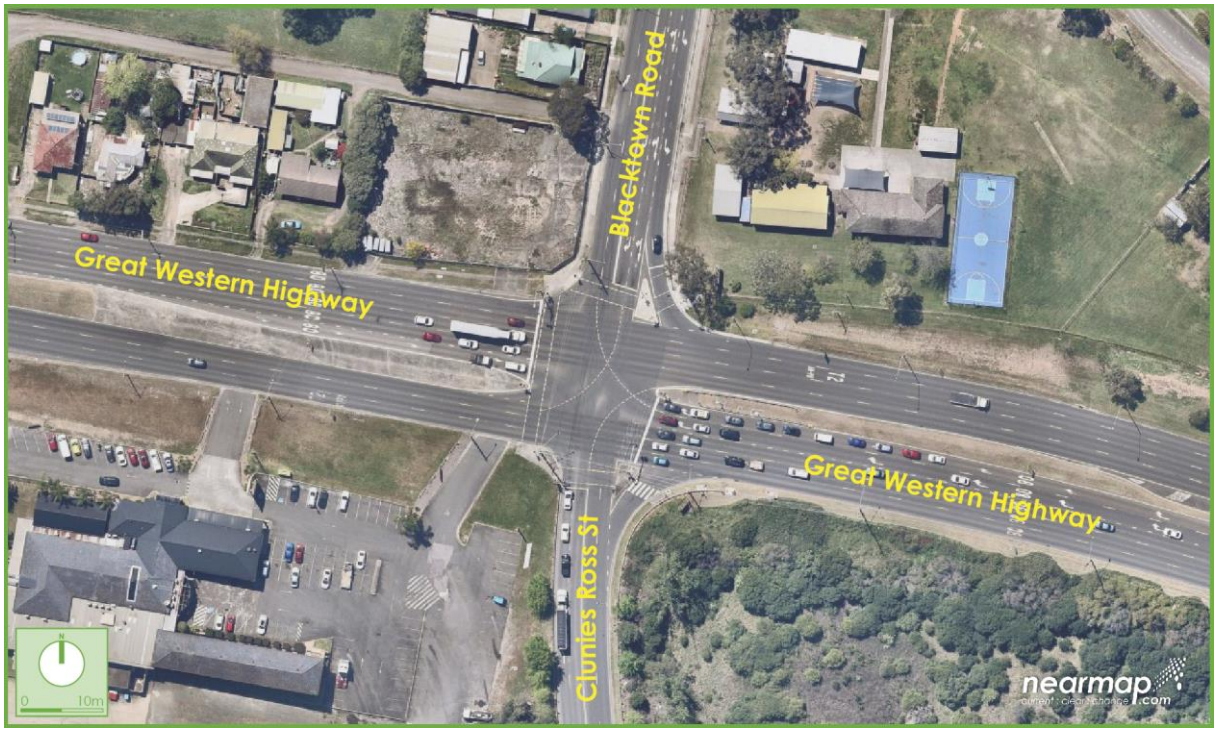


Figure 4: Intersection of Great Western Highway and Blacktown Road

It can be seen from **Figure 4** that the intersection of Great Western Highway and Blacktown Road is a four-legged signalised intersection. The northern, southern and western legs provide signalised pedestrian crossings. The main attributes of each approach are outlined below.

- Blacktown Road (north to south direction):
  - The south bound approach provides a single right turn only lane, one (1) lane for through and right turn movements and one (1) left turn slip lane.
- Clunies Ross Street (north to south direction):
  - The north bound approach provides one (1) left turn lane and one (1) through lane.
- Great Western Highway (east to west direction):
  - The east bound approach provides four (4) through lanes and a single right turn lane.

- The west bound approach provides three (3) through lanes and two (2) right-turn lanes.

3.2.2 Blacktown Road and Fox Hill Crescent

Figure 5: Blacktown Road and Fox Hill Crescent

It can be seen from **Figure 5** that the intersection of Blacktown Road and Fox Hill Crescent is a three-legged priority intersection. The main attributes of each approach are outlined below.

- Blacktown Road (north to south direction):
  - The north bound approach provides one (1) right turn short lane and one (1) through lane.
  - The south bound approach provides a single through lane.
- Fox Hill Crescent (south-east to west direction):
  - The west bound approach provides a single through lane.

3.2.3 Blacktown Road and Metella Road

Figure 6: Intersection of Blacktown Road and Metella Road

It can be seen from **Figure 6** that the intersection of Blacktown Road and Metella Road is a three-legged roundabout intersection. The main attributes of each approach are outlined below.

- Blacktown Road (north-west to south direction):
  - The north bound approach provides one (1) through lane.
  - The south bound approach provides one (1) through lane.
- Metella Raod (north-east to south-west direction):
  - The west bound approach provides a single through lane.

3.2.4 Metella Road and Oakwood Road

Figure 7: Intersection of Metella Road and Oakwood Road

It can be seen from **Figure 7** that the intersection of Metella Road and Oakwood Road is a four-legged priority intersection. The main attributes of each approach are outlined below.

- Metella Road (north-east to south-west direction):
  - The east bound approach provides one (1) through lane.
  - The west bound approach provides one (1) through lane.
- Nairobi Place (north to south direction):
  - The south bound approach provides a single through lane.
- Oakwood Road (north to south direction):
  - The north bound approach provides a single through lane.

3.3 Public Transport

The subject site is located within optimal walking distance (400 metres) of bus stops located along Blacktown Road. These services provide connections to the suburbs of Blacktown, Wetherill Park, Fairfield Heights, Fairfield, Seven Hills and Parramatta. These services are presented in **Figure 8** and summarised below:

- 700 – Blacktown to Parramatta
- 702 – Seven Hills to Blacktown via Toongabbie
- 800 – Blacktown to Fairfield via Wetherill Park

The bus service frequencies are summarised in **Table 1** below:

Table 1: Bus Frequencies

Bus No.	Monday to Friday	Saturday	Sunday and Public Holidays
700	Every 15-30 minutes	Every 30 minutes	Every 30 minutes
702	Every 30 minutes to 1 hour	Every 1 hour	Every 1 hour
800	Every 30 minutes	Every 30 minutes	Every 30 minutes

Furthermore, the bus services provide connections to Blacktown Train Station, which provides the following services to Parramatta, the City and other centres via the following lines:

- T1 – North Shore and Western Line;
- T5 – Cumberland Line; and,
- BMT – Blue Mountains Line.

The public transport services are regular although quite distant form the concept development and therefore may not be sufficient for all residents.

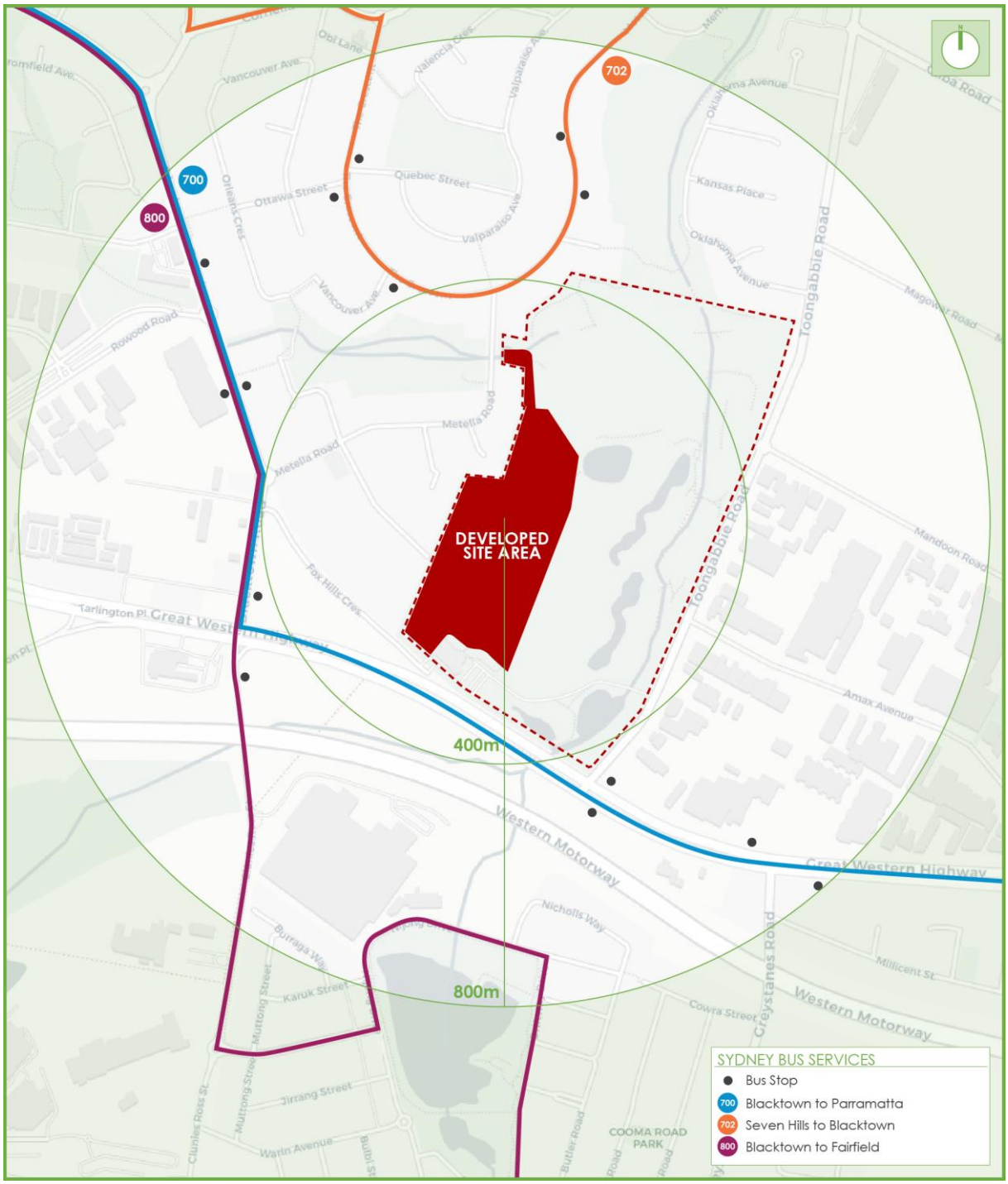


Figure 8: Public Transport

4. DESCRIPTION OF PROPOSED DEVELOPMENT

A detailed description of the concept development adopted for the purpose of assessing the planning Proposal impacts is provided in the Planning Report prepared separately. In summary, the concept development for which general planning approval is now sought is a seniors housing development, with six (6) different stages comprising the following components:

- 403 independent living units (ILUs) within 14 buildings consisting of:
  - 90 x one-bedroom apartments
  - 246 x two-bedroom apartments
  - 67 x three-bedroom apartments
- The provision of a total of 475 car parking spaces within basement car parks.
- The provision of a total of 74 on-street car parking spaces.
- No changes to the existing club house are proposed as part of the planning proposal.

The parking and traffic impacts arising from the development are discussed in **Section 5** and **Section 6**. Reference should be made to the plans submitted separately to Council which are presented at reduced scale in **Appendix B**.

It is emphasised that further analysis will be provided at development application stage, based on a confirmed development yield.

5. PARKING REQUIREMENTS

5.1 Car Parking

The *Blacktown Development Plan 2015 (DCP)* defers to the State *Environmental Planning Policy (Housing for Seniors or People with a Disability 2004)* in relation to relevant parking rates for self contained dwelling. The proposal has therefore been assessed in accordance with SEPP requirements.

The proposed development seeks approval for 403 Independent Living Units (ILU). *SEPP (Housing for Seniors or People with a Disability 2004)* states that a consent authority must not refuse consent to a development application proposing a self contained dwellings on parking related grounds should the development provide parking in accordance with the minimum rates as shown in **Table 2**:

Table 2: Parking Rates and Provision

Type	Number	SEPP Senior 2004 Rates	Minimum Spaces Required*	Spaces Provided
Independent Living Units (ILU)	783 bedrooms	0.5 spaces per bedroom	392	549
		Totals	**392**	**549**

It is evident from Table 2 that the proposed development requires a minimum of 392 spaces for the proposed development. In response, the development provides a total of 549 parking spaces. This provision includes a total of 475 car parking spaces within basement car parks which will cater for residents and staff parking. Additionally, a total of 74 on-street parking spaces are proposed which can be utilised by visitors. This provision would therefore ensure the development cannot be refused on the grounds of parking provision based on the *SEPP*.

The 'additional' parking spaces are considered supportable in the circumstances having regard to the following matters:

- The public transport services in the surrounding area while frequent may not be appropriate for all residents' trips. In addition, the distance to the bus stops may discourage residents with lower mobility from using public transport. Therefore, an increased car parking rate is considered appropriate for the concept development.

- Although Council's DCP refers to the SEPP for seniors living, for residential flat buildings the DCP requires one (1) space per one and two-bedroom apartments and two (2) spaces for 3-bedroom apartments. Therefore, the DCP encourages higher parking rates within the LGA than the SEPP.
- The SEPP does not allow for staff or visitor parking as part of the provision calculation. Therefore, to accommodate the parking demands from visitors and staff a higher parking provision is required. This is considered acceptable considering the limited public transport in the area is likely to result in higher parking demands for staff ad visitors than in other locations.

Therefore, the proposed concept development is considered to provide an acceptable and supportable parking arrangement.

5.2 Accessible Parking

The SEPP specifies that car parking spaces must comply with the requirements for parking for persons with a disability set out in AS 2890, and 5% of the total number of car parking spaces (or at least one space if there are fewer than 20 spaces) must be designed to enable the width of the spaces to be increased to 3.8 metres.

Discussion is required with council at DA Stage concerning their accessible parking requirements as this legislation refers to an outdated standard and the provision of all car parking as accessible parking is not considered necessary for independent seniors living.

5.3 Bicycle Parking

Council's DCP states that applicants are encouraged to incorporate, in the design of their buildings, safe storage/parking areas for bicycles for visitors and residents where appropriate.

5.4 Refuse Collection and Servicing

Servicing arrangements are to be confirmed at DA Stage, however with the provision of the new road through the development it is expected that refuse collection and general servicing can be conducted within the site.

6. TRAFFIC AND TRANSPORT IMPACTS

6.1 Development Trip Generation

The impacts of the proposed development on the external road network have been assessed having regard for the indicative yield scenarios as summarised in **Section 4** above. This assessment has been undertaken in accordance with the requirements of the *TfNSW Guideline to Traffic Generating Developments (2002)* and most recently the *TfNSW Technical Direction (TDT 2013/04a)*.

Based on *TfNSW Technical Direction (TDT 2013/04a)* the independent living units attracts a peak hour vehicle trip rate of 0.4 trips per dwelling during the PM peak period, noting that the AM peak does not coincide with the network peak hour.

Application of this rate to the proposed 403 Independent Living Units results in a trip generation of 161 vehicle trips per hour during the evening peak period as summarised below. The morning peak for the proposed development does not coincide with the network peak based on the rates specified in the Technical Direction and as such is not considered required for assessment. This reflects the fact that seniors residents enjoy a great deal of discretion as to when to make trips and typically avoid travel during peak periods. This is also reflected in the evening peak which has nevertheless been assessed.

- 161 vehicle trips per hour during the evening peak period; (129 in, 32 out)

6.2 Traffic Distribution

Journey to work data from the 2016 Census for the Seven Hills-Toongabbie SA2 area has been used to determine the future distribution of traffic to and from the proposed development. In this regard the localised distribution of residential traffic onto the surrounding road network is summarised in **Table 3** below.

Table 3: Traffic Distributions

Direction	Inbound Movements	Outbound Movements	Locations (To/From)
East via Great Western Highway	44%	44%	Sydney, Parramatta
West via Great Western Highway	1%	1%	Penrith
North Via Blacktown Road	27%	27%	Seven Hills, Toongabbie
North via Blacktown Road and Metella Road	0%	0%	N/A
East via Metella Road	8%	8%	Northmead, North Parramatta
North via Blacktown Road	19%	19%	Blacktown, Macquarie Park

Based on the above, **Figure 9** below shows the distributions of the traffic generated by the proposed development at the four key (4) intersections in the vicinity of the site in the evening peak hour.

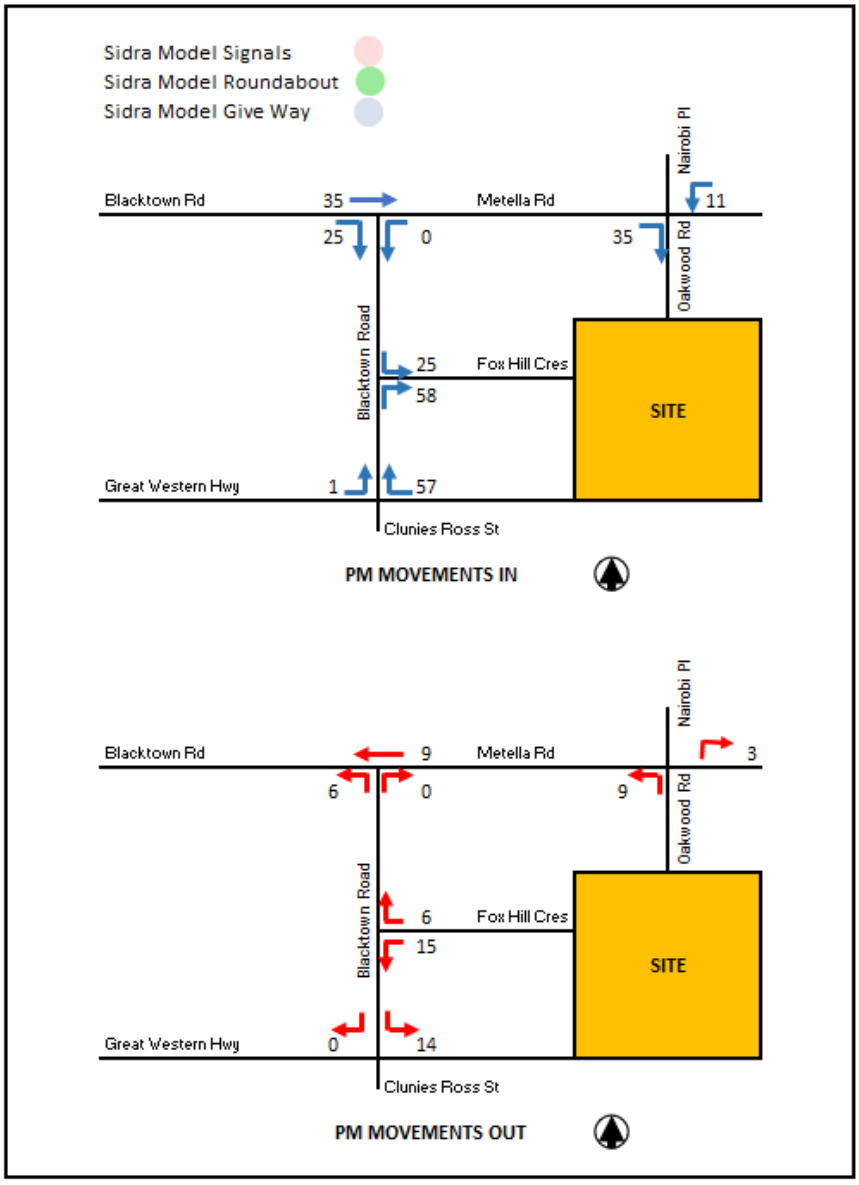


Figure 9: PM Peak Period Distribution

6.3 Peak Period Intersection Performance

Traffic surveys were undertaken of the key intersections described in Section 3.2, which are considered to be most critical in relation to the site. These counts were undertaken on 23 September 2020 during the network peak periods, being between 7:00am and 9:00am (morning peak period) and 4:00pm and 6:00pm (evening peak period).

In addition to these surveys, SCATS intersection volume data for the 25 September 2019 (Pre- Covid conditions) was obtained from TfNSW for the intersection of The Great Western Highway, Blacktown Road and Clunies Ross Street. The SCATS volume data was compared to surveys conducted on 23 September 2020. The comparison showed that there was a small decrease in 2020 traffic volumes due to Covid 19 conditions. As such, the SCATS data was used to model the intersection of the Great Western Highway and Blacktown Road, with turning volumes and heavy vehicle volumes based on the percentages determines by the surveys and the surveys conducted at the three local road intersections were factored in accordance with the change in volumes on the Blacktown Road leg to account for pre-Covid conditions.

This data forms the base case volumes for software modelling undertaken to assess intersection performance characteristics under existing traffic conditions. The SIDRA Intersection 9 model produces a range of outputs, the most useful of which are the Degree of Saturation (DoS) and Average Vehicle Delay per vehicle (AVD). The AVD is in turn related to a level of service (LoS) criteria. These performance measures can be interpreted using the following explanations:

DoS - the DoS is a measure of the operational performance of individual intersections. As both queue length and delay increase rapidly as DoS approaches 1, it is usual to attempt to keep DoS to less than 0.9. When DoS exceeds 0.9 residual queues can be anticipated, as occurs at many major intersections throughout the metropolitan area during peak periods. In this regard, a practical limit at 1.1 can be assumed. For intersections controlled by roundabout or give way/stop control, satisfactory intersection operation is generally indicated by a DoS of 0.8 or less.

AVD - the AVD for individual intersections provides a measure of the operational performance of an intersection. In general, levels of acceptability of AVD for individual intersections depend on the time of day (motorists generally accept higher delays during peak commuter periods) and the road system being modelled (motorists are more likely to accept longer delays on side streets than on the main road system).

LoS - this is a comparative measure which provides an indication of the operating performance of an intersection.

A summary of the modelled results is provided below in **Table 4**. Reference should also be made to the SIDRA outputs provided in **Appendix C** which provide detailed results for individual lanes and approaches.

Table 4: Existing and Proposed Intersection Performance

Intersection	Control	Period	Scenario	Degree of Saturation (DoS)	Average Delay	Level of Service
Great Western Highway, Blacktown Road and Clunies Ross Stret	Signal	PM	Existing	0.929	47.1	D
			Existing + Development	0.942	49.6	D
Blacktown Road and Fox Hill Crescent	Priority*	PM	Existing	0.538	31.8	C
			Existing + Development	0.551	34.6	C
Blacktown Road and Metella Road	Roundabout	PM	Existing	0.717	5.6	A
			Existing + Development	0.762	6.0	A
Intersection of Metella Road and Oakwood Road	Priority*	PM	Existing	0.108	6.7	A
			Existing + Development	0.130	7.0	A

* LoS for priority intersections based on the worst performing movement in accordance with TfNSW Guide to Traffic Generating Development.

It can be seen from Table 4 that the intersection of the Great Western Highway and Blacktown Road remains at a LoS D, with a minor increase in average delay of 2.5 seconds. The intersection of Blacktown Road and Fox Hill Crescent operates at a LoS of C in both the existing and development scenarios, undergoing a small increase in average delay of 2.8 seconds and operating with spare capacity under the development scenario. The intersection of Blacktown Road with Metella Road and the intersection of Metella Road and Oakwood Road both operate at a LoS of A under both the existing and development scenarios, experiencing minimal increases in average delay of 0.4 seconds and 0.3 seconds respectively and operating with spare capacity. Therefore, the additional traffic generation of the proposed development is expected to have only minor impacts on the surrounding road network.

7. ACCESS AND INTERNAL DESIGN ASPECTS

7.1 Site Vehicular Access

The proposed development will be accessed via a new road with two (2) intersections at Fox Hills Crescent and Oakwood Road. This will ensure efficient distribution of traffic via the local road network. The intersections and new road are to be provided in accordance with requirements of AS 2890.1 (2004) and Austroads, which will be assessed at DA stage.

The basement car parks will have separate vehicular accesses from the new road to be provided in accordance with AS 2890.1 (2004), which will be assessed at DA stage.

7.2 Internal Design

The basement car parks and servicing areas will be assessed in accordance with the requirements of AS 2890.1 (2004), AS 2890.2 (2018) and AS 2890.6 (2009) at DA Stage.

8. CONCLUSIONS

- The planning proposal seeks approval for a seniors living development at 55 Fox Hill Crescent, Toongabbie. For the purposes of this assessment a concept development has been adopted comprised of 403 residential apartments across 14 buildings.
- The subject site is well connected to the public transport network with reliable access to regular bus services. These ensure the site is ideally situated for a seniors living development as it provides a good opportunity to encourage future tenants / visitors to use sustainable transport modes.
- The proposed development requires a minimum of 392 parking spaces in accordance with the SEPP (Housing for Seniors or People with a Disability 2004). In response, the development proposes a total of 549 parking spaces, of which 475 spaces are provided within basements and 74 spaces are provided on-street. As such, all normal parking demands are expected to be readily accommodated on-site. The 'additional' parking spaces are justified for the reasons discussed, including the public transport not being appropriate in all circumstances and its distance may discourage some residents, and the DCP generally encouraging higher parking rates for residential development than the SEPP requirements. Furthermore, the SEPP rates does not include parking demands for staff or visitors and as such additional parking is considered necessary to accommodate these demands.
- The traffic generation arising from the development has been assessed as a net change over existing conditions. SIDRA modelling shows no change in LoS and only minor increases in average delay for all four (4) intersections during the critical evening peak. As such, the traffic impacts of the proposal are considered acceptable and supportable.
- Access for the development is proposed via anew road with intersections at Fox Hill Crescent and Oakwood Road. A detailed design of the internal road network, access arrangements and basement car parks will be conducted at DA stage.

This traffic impact assessment therefore demonstrates that the subject application is supportable on traffic planning grounds. TRAFFIX anticipates an ongoing involvement during the development approval process. It is further noted that a detailed assessment will occur at development application stage, based on final development yields and associated plans.

APPENDIX A

Photographic Record

View looking northeast at the subject site's entrance access driveway

View looking northeast at the subject site's exit access driveway

View looking southeast at the subject site's proposed access driveway

View looking northwest at the intersection of Metella Road and Oakwood Road

View looking northeast at the intersection of Metella Road and Oakwood Road

View looking south at the roundabout intersection of Blacktown Road and Metella Road

View looking south at the intersection of Blacktown Road and Fox Hills Crescent

View looking northeast at the intersection of Blacktown Road and Fox Hills Crescent

View looking south at the intersection of Blacktown Road and Great Western Highway

View looking west at the intersection of Great Western Highway and Blacktown Road

APPENDIX B

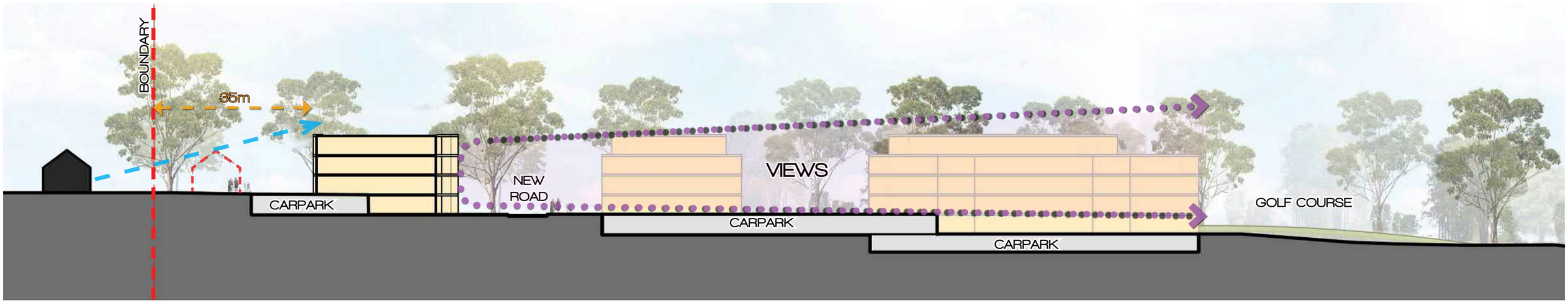
Reduced Plans

FOX HILLS GOLF CLUB
SENIORS LIVING MASTERPLAN

JUNE 2020




SECTION A-A



SECTION B-B

STAGE 1 - 81 APARTMENTS	106 CARS (incl Visitor)
BUILDING 3 - 22 APARTMENTS	26 CARS
BUILDING 4 - 25 APARTMENTS	23 CARS
BUILDING 5 - 34 APARTMENTS	37 CARS

STAGE 2 - 60 APARTMENTS	63 CARS (incl Visitor)
BUILDING 1 - 33 APARTMENTS	27 cars
BUILDING 2 - 27 APARTMENTS	21 cars

STAGE 3 - 64 APARTMENTS	89 CARS (incl Visitor)
BUILDING 8 - 30 APARTMENTS	36 cars
BUILDING 9 - 34 APARTMENTS	37 cars

STAGE 4 - 59 APARTMENTS	75 CARS (incl Visitor)
BUILDING 10 - 34 APARTMENTS	37 cars
BUILDING 11 - 25 APARTMENTS	23 cars

STAGE 5 - 85 APARTMENTS	114 CARS (incl Visitor)
BUILDING 12 - 25 APARTMENTS	23 cars
BUILDING 13 - 34 APARTMENTS	37 cars
BUILDING 14 - 26 APARTMENTS	32 cars

STAGE 6 - 54 APARTMENTS	68 CARS (incl Visitor)
BUILDING 6 - 27 APARTMENTS	27 cars
BUILDING 7 - 27 APARTMENTS	27 cars

403 APARTMENTS TOTAL	515 CARS

403 APARTMENTS TOTAL
88 x 1 bed (22%)
247 x 2 bed (61%)
68 x 3 bed (17%)

PARKING RATES
0.5 PER BEDROOM
VISITOR = 0.25 PER APT

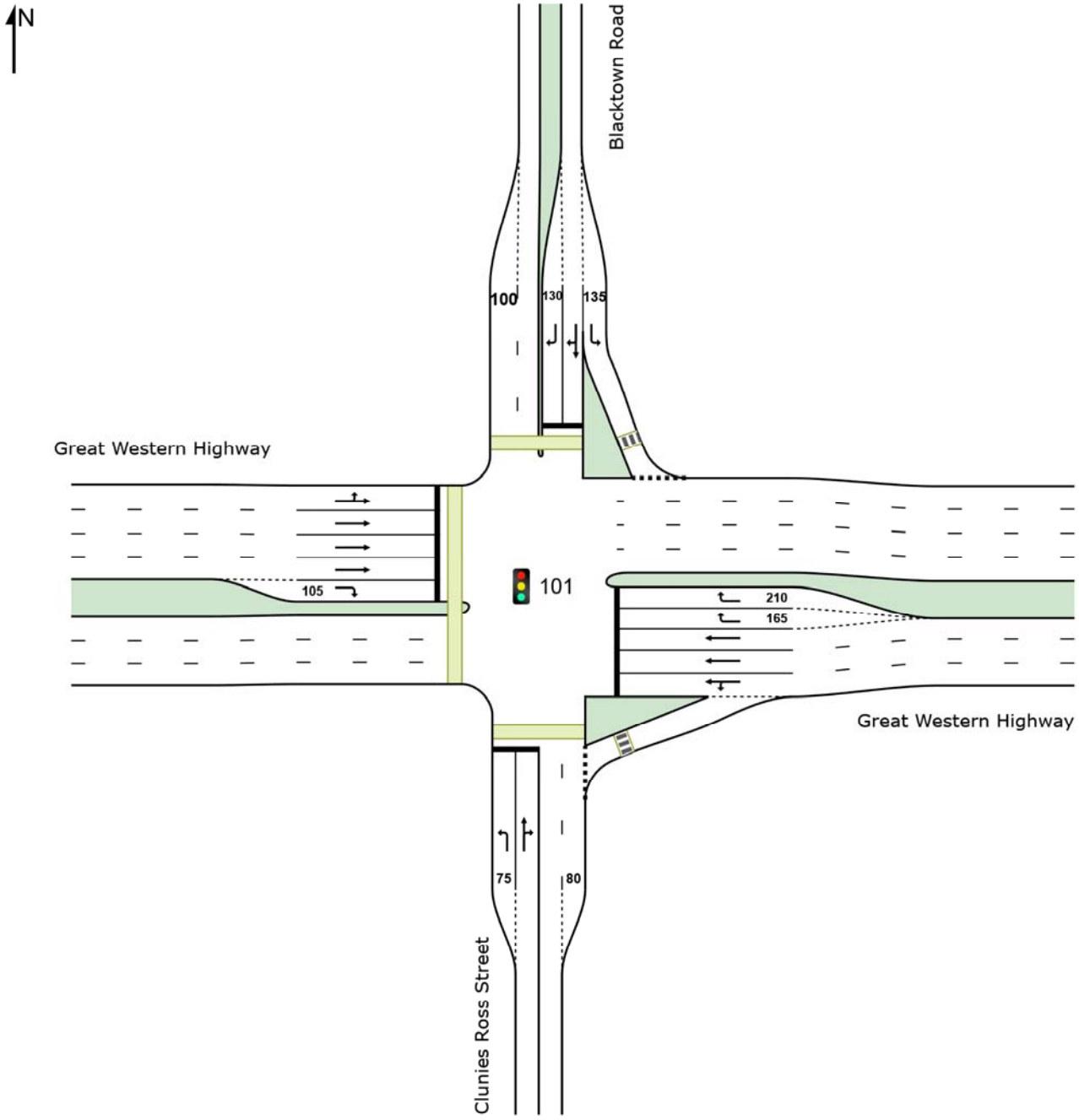
FOX HILLS GOLF CLUB
CONCEPT MASTERPLAN

MASTERPLAN - STAGING

Integrated Projects
ALTIS architecture

APPENDIX C

SIDRA Outputs


N
Blacktown Road
100
130
135
Great Western Highway
105
101
210
165
Great Western Highway
75
80
Clunies Ross Street

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 20.362m01v02 Fox Hill Golf Club — **Template: Movement Summaries**

Site: 101 [101_EXPM_Blacktown Rd x Great Western Hwy (Site Folder: Existing PM)] — Network: 2 [EXPM (Network Folder: PM)]

Blacktown Road and Great Western Highway
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: TCS
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D, E, F, F1*, F2*
Output Phase Sequence: A, B, C, D, E, F, F1*
(* Variable Phase)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Clunies Ross Street														
1	L2	115	2.9	115	2.9	0.150	34.0	LOS C	3.1	22.4	0.65	0.73	0.65	40.0
2	T1	108	7.0	108	7.0	0.628	70.3	LOS E	5.6	41.6	1.00	0.81	1.01	18.6
3	R2	19	5.6	19	5.6	* 0.628	76.0	LOS F	5.6	41.6	1.00	0.81	1.01	28.6
Approach		242	4.9	242	4.9	0.628	53.5	LOS D	5.6	41.6	0.84	0.77	0.84	28.9
East: Great Western Highway														
4	L2	35	0.0	35	0.0	0.929	73.4	LOS F	31.4	227.6	1.00	1.09	1.23	30.4
5	T1	2249	4.2	2249	4.2	* 0.929	56.4	LOS D	43.1	312.9	0.98	1.03	1.15	35.8
6	R2	619	2.8	619	2.8	0.651	31.8	LOS C	9.5	67.8	0.87	0.82	0.87	34.4
Approach		2903	3.9	2903	3.9	0.929	51.4	LOS D	43.1	312.9	0.96	0.99	1.09	35.6
North: Blacktown Road														
7	L2	699	2.7	699	2.7	0.516	10.1	LOS A	9.1	65.0	0.40	0.69	0.40	52.5
8	T1	99	4.8	99	4.8	* 0.921	86.5	LOS F	12.6	91.6	1.00	1.05	1.34	19.3
9	R2	393	4.0	393	4.0	0.921	91.7	LOS F	12.7	92.2	1.00	1.01	1.34	19.6
Approach		1191	3.3	1191	3.3	0.921	43.4	LOS D	12.7	92.2	0.65	0.83	0.79	30.9
West: Great Western Highway														
10	L2	122	2.8	122	2.8	0.698	44.3	LOS D	8.5	61.3	0.98	0.83	0.98	29.2
11	T1	979	3.1	979	3.1	* 0.698	37.3	LOS C	8.6	62.0	0.98	0.82	0.98	43.8
12	R2	103	1.3	103	1.3	* 0.712	50.8	LOS D	3.2	22.5	1.00	0.81	1.11	34.8
Approach		1204	2.9	1204	2.9	0.712	39.2	LOS C	8.6	62.0	0.98	0.82	0.99	41.7
All Vehicles		5540	3.6	5540	3.6	0.929	47.1	LOS D	43.1	312.9	0.89	0.91	0.99	35.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 20.362m01v02 Fox Hill Golf Club — **Template: Movement Summaries**

Site: 102 [102_EXPM_Blacktown Rd x Great Western Hwy (Site Folder: Development PM)] — **Network: 3 [PRPM (Network Folder: PM - Dev)]**

Blacktown Road and Great Western Highway
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Downstream lane blockage effects included in determining phase times
Phase Sequence: TCS
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D, E, F, F1*, F2*
Output Phase Sequence: A, B, C, D, E, F, F1*
(* Variable Phase)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Clunies Ross Street														
1	L2	115	2.9	115	2.9	0.150	34.0	LOS C	3.1	22.4	0.65	0.73	0.65	40.0
2	T1	108	7.0	108	7.0	0.628	70.3	LOS E	5.6	41.6	1.00	0.81	1.01	18.6
3	R2	19	5.6	19	5.6	* 0.628	76.0	LOS F	5.6	41.6	1.00	0.81	1.01	28.6
Approach		242	4.9	242	4.9	0.628	53.5	LOS D	5.6	41.6	0.84	0.77	0.84	28.9
East: Great Western Highway														
4	L2	35	0.0	35	0.0	0.942	78.7	LOS F	33.2	240.0	1.00	1.11	1.26	29.1
5	T1	2249	4.2	2249	4.2	* 0.942	61.4	LOS E	45.6	331.0	0.98	1.05	1.17	34.2
6	R2	679	2.6	679	2.6	0.686	31.7	LOS C	10.6	76.0	0.88	0.83	0.88	34.5
Approach		2963	3.8	2963	3.8	0.942	54.8	LOS D	45.6	331.0	0.96	1.00	1.11	34.1
North: Blacktown Road														
7	L2	714	2.6	714	2.6	0.521	10.2	LOS A	9.3	66.6	0.40	0.70	0.40	52.5
8	T1	99	4.8	99	4.8	* 0.921	86.5	LOS F	12.6	91.6	1.00	1.05	1.34	19.3
9	R2	393	4.0	393	4.0	0.921	91.7	LOS F	12.7	92.2	1.00	1.01	1.34	19.6
Approach		1205	3.3	1205	3.3	0.921	43.0	LOS D	12.7	92.2	0.65	0.83	0.78	31.1
West: Great Western Highway														
10	L2	123	2.8	123	2.8	0.747	47.8	LOS D	9.1	65.1	1.00	0.86	1.04	27.7
11	T1	979	3.1	979	3.1	0.747	40.8	LOS C	9.2	65.9	1.00	0.85	1.04	42.1
12	R2	103	1.3	103	1.3	* 0.712	50.8	LOS D	3.2	22.5	1.00	0.81	1.11	34.8
Approach		1205	2.9	1205	2.9	0.747	42.4	LOS C	9.2	65.9	1.00	0.85	1.04	40.2
All Vehicles		5616	3.5	5616	3.5	0.942	49.6	LOS D	45.6	331.0	0.89	0.92	1.01	34.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

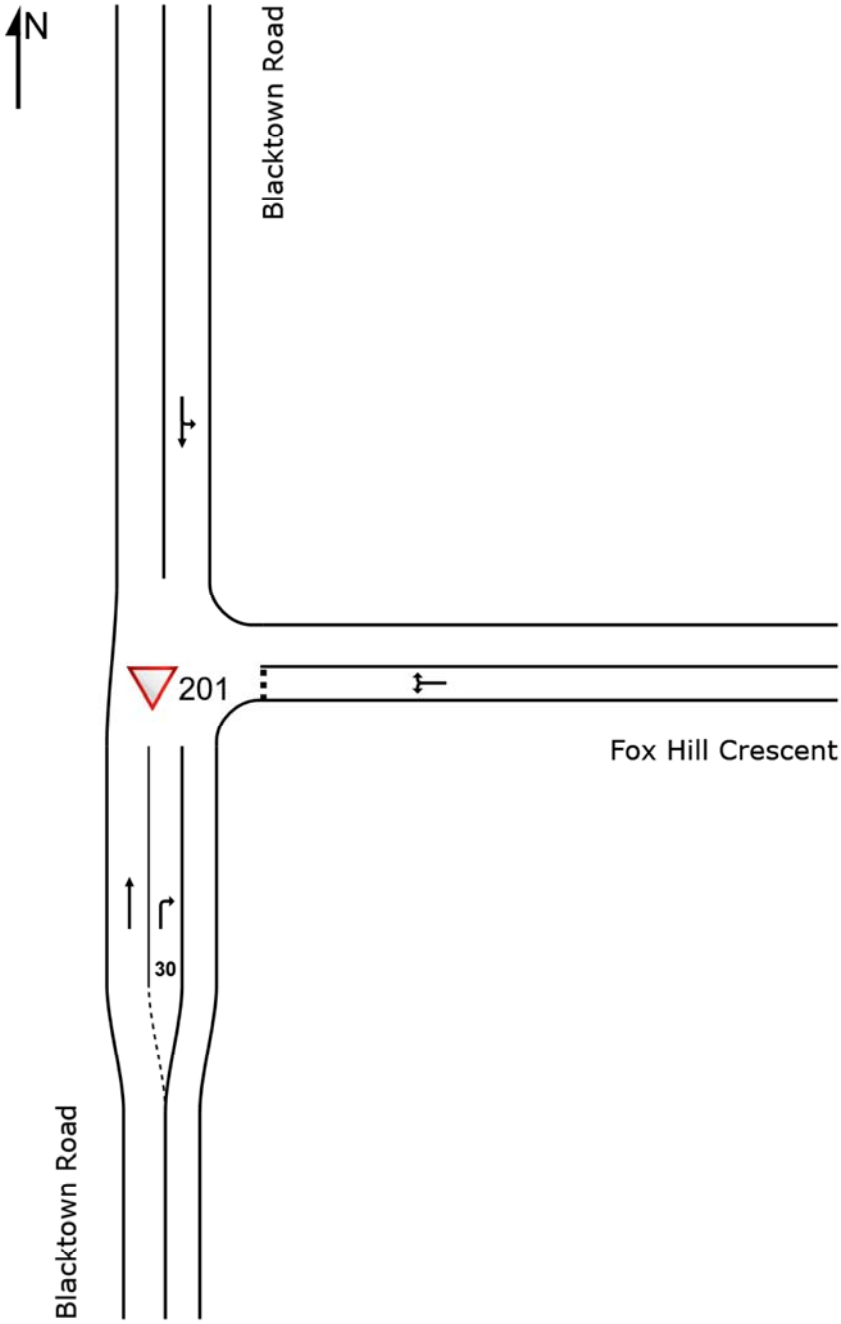
Site: 201 [201_EXPM_Blacktown Road x Fox Hill Cres (Site Folder: Existing PM)]

Network: 2 [EXPM (Network Folder: PM)]

Blacktown Road and Fox Hill Cres
Site Category: (None)
Give-Way (Two-Way)

Site Layout

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



Site: 201 [201_EXPM_Blacktown Road x Fox Hill Cres (Site Folder: Existing PM)]

Network: 2 [EXPM (Network Folder: PM)]

Blacktown Road and Fox Hill Cres
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Blacktown Road														
2	T1	820	3.1	820	3.1	0.458	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
3	R2	13	0.0	13	0.0	0.023	11.2	LOS A	0.0	0.2	0.74	0.86	0.74	43.0
Approach		833	3.0	833	3.0	0.458	0.2	NA	0.0	0.2	0.01	0.01	0.01	58.6
East: Fox Hill Crescent														
4	L2	20	10.5	20	10.5	0.217	13.5	LOS A	0.3	1.9	0.89	0.97	0.94	30.1
6	R2	24	0.0	24	0.0	0.217	31.8	LOS C	0.3	1.9	0.89	0.97	0.94	30.1
Approach		44	4.8	44	4.8	0.217	23.5	LOS B	0.3	1.9	0.89	0.97	0.94	30.1
North: Blacktown Road														
7	L2	21	0.0	21	0.0	0.538	3.1	LOS A	0.0	0.0	0.00	0.01	0.00	55.8
8	T1	1065	3.2	1065	3.2	0.538	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	58.1
Approach		1086	3.1	1086	3.1	0.538	0.1	NA	0.0	0.0	0.00	0.01	0.00	57.7
All Vehicles		1963	3.1	1963	3.1	0.538	0.7	NA	0.3	1.9	0.02	0.03	0.03	54.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 202 [202_EXPM_Blacktown Road x Fox Hill Cres (Site Folder: Development PM)]

Network: 3 [PRPM (Network Folder: PM - Dev)]

Blacktown Road and Fox Hill Cres
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Blacktown Road														
2	T1	820	3.1	820	3.1	0.472	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
3	R2	74	0.0	74	0.0	0.140	12.0	LOS A	0.2	1.2	0.78	0.91	0.78	42.3
Approach		894	2.8	894	2.8	0.472	1.1	NA	0.2	1.2	0.06	0.08	0.06	54.8
East: Fox Hill Crescent														
4	L2	36	5.9	36	5.9	0.303	14.4	LOS A	0.4	2.8	0.89	0.99	1.02	30.0
6	R2	31	0.0	31	0.0	0.303	34.6	LOS C	0.4	2.8	0.89	0.99	1.02	30.0
Approach		66	3.2	66	3.2	0.303	23.7	LOS B	0.4	2.8	0.89	0.99	1.02	30.0
North: Blacktown Road														
7	L2	47	0.0	47	0.0	0.551	3.1	LOS A	0.0	0.0	0.00	0.02	0.00	55.6
8	T1	1065	3.2	1065	3.2	0.551	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	56.4
Approach		1113	3.0	1113	3.0	0.551	0.2	NA	0.0	0.0	0.00	0.02	0.00	56.2
All Vehicles		2073	2.9	2073	2.9	0.551	1.3	NA	0.4	2.8	0.06	0.08	0.06	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

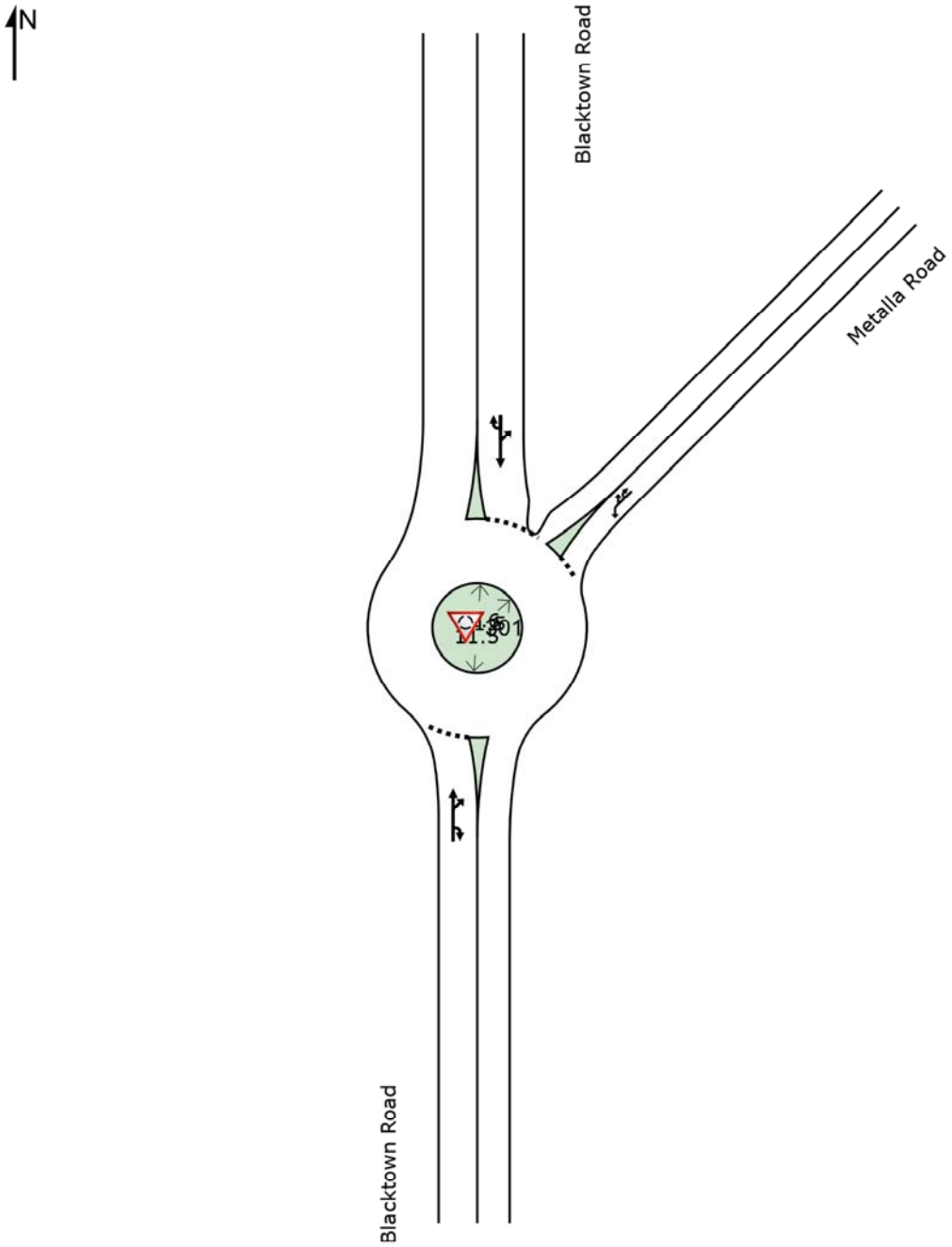
Site: 301 [301_EXPM_Blacktown Road x Metalla Rd (Site Folder: Existing PM)]

Network: 2 [EXPM (Network Folder: PM)]

Blacktown Road and Metalla Road
Site Category: (None)
Roundabout

Site Layout

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



Elliptical shape restrictions apply to this Roundabout.

Site: 301 [301_EXPM_Blacktown Road x Metalla Rd (Site Folder: Existing PM)]

Network: 2 [EXPM (Network Folder: PM)]

Blacktown Road and Metalla Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Blacktown Road														
2	T1	689	3.4	689	3.4	0.545	2.7	LOS A	1.9	13.7	0.20	0.44	0.20	48.6
3a	R1	142	1.5	142	1.5	0.545	4.9	LOS A	1.9	13.7	0.20	0.44	0.20	28.5
3u	U	4	25.0	4	25.0	0.545	7.5	LOS A	1.9	13.7	0.20	0.44	0.20	28.5
Approach		836	3.1	836	3.1	0.545	3.1	LOS A	1.9	13.7	0.20	0.44	0.20	47.4
NorthEast: Metalla Road														
24a	L1	187	2.2	187	2.2	0.434	15.3	LOS B	1.4	9.9	0.95	1.03	1.09	19.5
26b	R3	20	0.0	20	0.0	0.434	19.7	LOS B	1.4	9.9	0.95	1.03	1.09	34.4
26u	U	1	0.0	1	0.0	0.434	20.5	LOS B	1.4	9.9	0.95	1.03	1.09	19.5
Approach		208	2.0	208	2.0	0.434	15.8	LOS B	1.4	9.9	0.95	1.03	1.09	21.7
North: Blacktown Road														
7b	L3	57	1.9	57	1.9	0.717	5.8	LOS A	2.1	14.9	0.42	0.54	0.42	42.7
8	T1	897	3.2	897	3.2	0.717	5.5	LOS A	2.1	14.9	0.42	0.54	0.42	42.7
9u	U	7	0.0	7	0.0	0.717	10.7	LOS A	2.1	14.9	0.42	0.54	0.42	49.6
Approach		961	3.1	961	3.1	0.717	5.6	LOS A	2.1	14.9	0.42	0.54	0.42	42.8
All Vehicles		2005	3.0	2005	3.0	0.717	5.6	LOS A	2.1	14.9	0.38	0.55	0.40	41.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 302 [302_EXPM_Blacktown Road x Metalla Rd (Site Folder: Development PM)]

Network: 3 [PRPM (Network Folder: PM - Dev)]

Blacktown Road and Metalla Road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Blacktown Road														
2	T1	696	3.3	696	3.3	0.563	2.8	LOS A	2.1	14.8	0.24	0.45	0.24	48.3
3a	R1	142	1.5	142	1.5	0.563	5.0	LOS A	2.1	14.8	0.24	0.45	0.24	27.9
3u	U	4	25.0	4	25.0	0.563	7.6	LOS A	2.1	14.8	0.24	0.45	0.24	27.9
Approach		842	3.1	842	3.1	0.563	3.2	LOS A	2.1	14.8	0.24	0.45	0.24	47.1
NorthEast: Metalla Road														
24a	L1	187	2.2	187	2.2	0.478	17.4	LOS B	1.6	11.6	0.98	1.08	1.20	18.0
26b	R3	29	0.0	29	0.0	0.478	22.3	LOS B	1.6	11.6	0.98	1.08	1.20	32.7
26u	U	1	0.0	1	0.0	0.478	22.6	LOS B	1.6	11.6	0.98	1.08	1.20	18.0
Approach		218	1.9	218	1.9	0.478	18.1	LOS B	1.6	11.6	0.98	1.08	1.20	20.9
North: Blacktown Road														
7b	L3	94	1.1	94	1.1	0.762	5.9	LOS A	2.5	18.0	0.48	0.55	0.48	42.2
8	T1	923	3.1	923	3.1	0.762	5.6	LOS A	2.5	18.0	0.48	0.55	0.48	42.2
9u	U	7	0.0	7	0.0	0.762	10.8	LOS A	2.5	18.0	0.48	0.55	0.48	49.3
Approach		1024	2.9	1024	2.9	0.762	5.7	LOS A	2.5	18.0	0.48	0.55	0.48	42.3
All Vehicles		2084	2.9	2084	2.9	0.762	6.0	LOS A	2.5	18.0	0.44	0.57	0.46	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

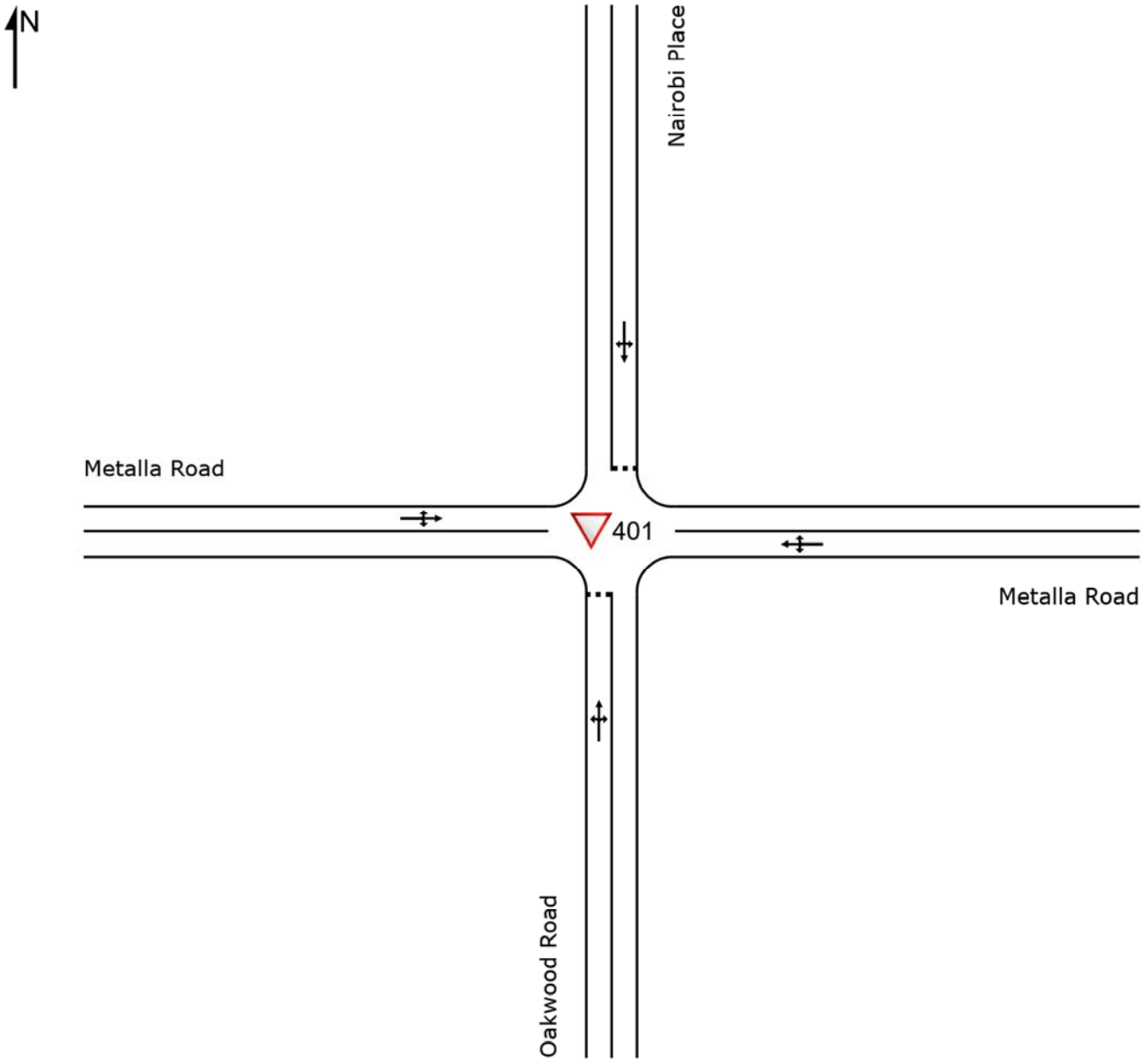
Site: 401 [401_EXPM_Metalla Rd x Oakwood Rd (Site Folder: Existing PM)]

Network: 2 [EXPM (Network Folder: PM)]

Metalla Road and Oakwood Road
Site Category: (None)
Give-Way (Two-Way)

Site Layout

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



Site: 401 [401_EXPM_Metalla Rd x Oakwood Rd (Site Folder: Existing PM)]

Network: 2 [EXPM (Network Folder: PM)]

Metalla Road and Oakwood Road
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Oakwood Road														
1	L2	4	0.0	4	0.0	0.009	5.1	LOS A	0.0	0.1	0.32	0.54	0.32	37.7
2	T1	1	0.0	1	0.0	0.009	4.8	LOS A	0.0	0.1	0.32	0.54	0.32	41.6
3	R2	3	0.0	3	0.0	0.009	6.7	LOS A	0.0	0.1	0.32	0.54	0.32	43.6
Approach		8	0.0	8	0.0	0.009	5.7	LOS A	0.0	0.1	0.32	0.54	0.32	41.6
East: Metalla Road														
4	L2	3	0.0	3	0.0	0.108	4.8	LOS A	0.0	0.1	0.01	0.01	0.01	49.1
5	T1	199	1.6	199	1.6	0.108	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	49.8
6	R2	2	0.0	2	0.0	0.108	5.3	LOS A	0.0	0.1	0.01	0.01	0.01	48.2
Approach		204	1.5	204	1.5	0.108	0.1	NA	0.0	0.1	0.01	0.01	0.01	49.7
North: Nairobi Place														
7	L2	1	0.0	1	0.0	0.006	5.1	LOS A	0.0	0.1	0.37	0.56	0.37	43.7
8	T1	1	0.0	1	0.0	0.006	4.8	LOS A	0.0	0.1	0.37	0.56	0.37	41.2
9	R2	3	0.0	3	0.0	0.006	6.7	LOS A	0.0	0.1	0.37	0.56	0.37	35.4
Approach		5	0.0	5	0.0	0.006	6.0	LOS A	0.0	0.1	0.37	0.56	0.37	39.8
West: Metalla Road														
10	L2	4	0.0	4	0.0	0.105	5.0	LOS A	0.0	0.1	0.02	0.03	0.02	47.8
11	T1	187	1.7	187	1.7	0.105	0.0	LOS A	0.0	0.1	0.02	0.03	0.02	49.6
12	R2	5	0.0	5	0.0	0.105	5.3	LOS A	0.0	0.1	0.02	0.03	0.02	46.6
Approach		197	1.6	197	1.6	0.105	0.3	NA	0.0	0.1	0.02	0.03	0.02	49.5
All Vehicles		415	1.5	415	1.5	0.108	0.4	NA	0.0	0.1	0.03	0.04	0.03	49.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 402 [402_EXPM_Metalla Rd x Oakwood Rd (Site Folder: Development PM)]

Network: 3 [PRPM (Network Folder: PM - Dev)]

Metalla Road and Oakwood Road
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Oakwood Road														
1	L2	14	0.0	14	0.0	0.020	5.1	LOS A	0.0	0.2	0.31	0.55	0.31	37.6
2	T1	1	0.0	1	0.0	0.020	5.1	LOS A	0.0	0.2	0.31	0.55	0.31	41.5
3	R2	6	0.0	6	0.0	0.020	7.0	LOS A	0.0	0.2	0.31	0.55	0.31	43.6
Approach		21	0.0	21	0.0	0.020	5.7	LOS A	0.0	0.2	0.31	0.55	0.31	40.8
East: Metalla Road														
4	L2	15	0.0	15	0.0	0.114	4.6	LOS A	0.0	0.1	0.01	0.04	0.01	48.9
5	T1	199	1.6	199	1.6	0.114	0.0	LOS A	0.0	0.1	0.01	0.04	0.01	49.4
6	R2	2	0.0	2	0.0	0.114	5.3	LOS A	0.0	0.1	0.01	0.04	0.01	48.0
Approach		216	1.5	216	1.5	0.114	0.4	NA	0.0	0.1	0.01	0.04	0.01	49.3
North: Nairobi Place														
7	L2	1	0.0	1	0.0	0.007	5.1	LOS A	0.0	0.1	0.38	0.57	0.38	43.5
8	T1	1	0.0	1	0.0	0.007	5.1	LOS A	0.0	0.1	0.38	0.57	0.38	41.0
9	R2	3	0.0	3	0.0	0.007	7.0	LOS A	0.0	0.1	0.38	0.57	0.38	35.0
Approach		5	0.0	5	0.0	0.007	6.2	LOS A	0.0	0.1	0.38	0.57	0.38	39.4
West: Metalla Road														
10	L2	4	0.0	4	0.0	0.130	5.3	LOS A	0.1	0.9	0.14	0.11	0.14	45.6
11	T1	187	1.7	187	1.7	0.130	0.2	LOS A	0.1	0.9	0.14	0.11	0.14	48.3
12	R2	42	0.0	42	0.0	0.130	5.4	LOS A	0.1	0.9	0.14	0.11	0.14	44.7
Approach		234	1.4	234	1.4	0.130	1.2	NA	0.1	0.9	0.14	0.11	0.14	47.8
All Vehicles		476	1.3	476	1.3	0.130	1.1	NA	0.1	0.9	0.09	0.11	0.09	48.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.