Doran Drive Precinct – Proposed Mixed Use Development

Lot 55, DP 1253217
2 Mandala Parade, Castle Hill

TRAFFIC AND PARKING ASSESSMENT REPORT

19 July 2021

Ref 20417

VARGA TRAFFIC PLANNING Pty Ltd
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Executive Summary

This report has been prepared to accompany an Environmental Impact Statement (EIS) to *NSW Department of Planning* for a mixed-use development to be located at Lot 55, DP 1253217, 2 Mandala Parade, Castle Hill.

The Hills Showground Station Precinct is bounded by De Clambe Drive to the north and west, Carrington Road to the south and Showground Road to the east.

Landcom on behalf of *Sydney Metro* lodged a Concept State Significant Development Application (SSDA) as part of a State Significant Development Application (SSDA) application – SSD9653, which was approved by the Executive Director, Industry and Key Sites, as delegate to the Minister for Planning and Public Spaces in January 2021.

The approved concept of the Hills Showground Precinct includes:

- three development precincts (Precinct West, Doran Drive Precinct and Precinct East)
- building envelopes of varying heights between three to 20 storeys (12m to 68m)
- a maximum total gross floor area (GFA) of 166,486m², consisting:
    - a maximum residential GFA of 152,546m²
    - a maximum non-residential GFA of 13,940m², of which 10,935m^2 GFA is proposed within the Doran Drive Precinct – i.e. the subject site
- a maximum of 1,620 dwellings (including a minimum 5% affordable housing)
- a maximum of 1,957 cars and 705 bicycle spaces
- public domain improvements, public open space and a new road
- concept subdivision of Lot 56 DP 1253217 (Precinct East).

The SSDA would facilitate development by providing increased residential and employment density in proximity to existing and planned transport infrastructure upgrades, that provides employees with greater access to public transport and employment options while promoting the use of sustainable travel options.

The Hills Showground Station offers high-frequency metro services, typically with 4-minute interval services during the peak periods. Additionally, there are currently seven bus routes traversing along Doran Drive, with bi-directional bus services offering up to 35 bus services per hour during the weekday commuter peak periods.

The Traffic and Transport Assessment Report which accompanied the Concept Masterplan of the Hills Showground Precinct, prepared by *SCT Consulting*, recommended parking rates as follows.

Table 7: Doran Drive Precinct Residential Car Parking Spaces

	Minimum (per unit)	Maximum (per unit)
1 bedroom units	0.4	Average of 1 across all bedroom apartment mix
2 bedroom units	0.7	
3 bedroom units	1.0	
	Minimum (per area)	Maximum (per area GFA)
Retail	1 space per 130m² GFA	1 space per 60m² GFA
Commercial	1 space per 145m² GFA	1 space per 100m² GFA

Table 8: Doran Drive Precinct Bicycle Parking Facility Rates

	Rate (minimum)
Residential flat buildings	1 resident space per 3 apartments 1 visitor space per 12 apartments
Commercial use	1 space per 600m² GFA for staff
Retail use	1 space per 450m² GFA for staff

Source: ***Hills Showground Station Precinct: Site Urban Design Guidelines (June 2020)***

The Traffic and Transport Assessment Report which accompanied the Concept Masterplan, also estimated the precinct would generate in the order of 702 and 964 peak hour trips during the *morning* and *afternoon* peak periods respectively, as set out below.

Table 4-13 Peak hour vehicle trip generation of Hills Showground Station Precinct site

Land Use	Indicative Yield	Proposed AM Peak trip rates	AM Peak trips	Proposed PM Peak trip rates	PM Peak trips
Apartment	1,604 units	0.19 per unit	305 veh/h	0.15 per unit	241 veh/h
Townhouse	16 dwellings	0.57 per dwelling	9 veh/h	0.57 per dwelling	9 veh/h
Commercial	4,367m²	1.6 / 100m² GFA	70 veh/h	1.2 / 100m² GFA	52 veh/h
Retail	7,180m² ^	5.9 / 100m² GLFA *	318 veh/h	12.3 / 100m² GLFA *	662 veh/h
Total	**-**	**-**	**702 veh/h**	**-**	**964 veh/h**

Source: SCT Consulting, 2018

^Assuming GLFA: GFA=0.75:1 (refer to Section 5.7 Guide to Generating Traffic Development).

*A 25% reduction factor has also been applied to retail vehicular trip rates to account for high passing trade expected given the location of these retail next to metro station.

By way of comparison, the proposed development is expected to generate in the order of 444 and 821 peak hour trips during the *morning* and *afternoon* peak periods respectively.

An analysis of the operating performance of the nearby surrounding intersections using the SIDRA NETWORK capacity analysis program has found that the majority of the immediately surrounding intersections will continue to operate at acceptable *Levels of Service*, even in 2026 and 2031. The capacity analysis confirms that the development proposal will not result in any unacceptable traffic implications in terms of road network capacity, and that no additional road improvements or intersection upgrades would be required, other than the upgrade of the Showground Road and Carrington Road signalised intersection, consistent with the findings in the *SCT Consulting* report.

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1.0 INTRODUCTION

1.1 Project Summary

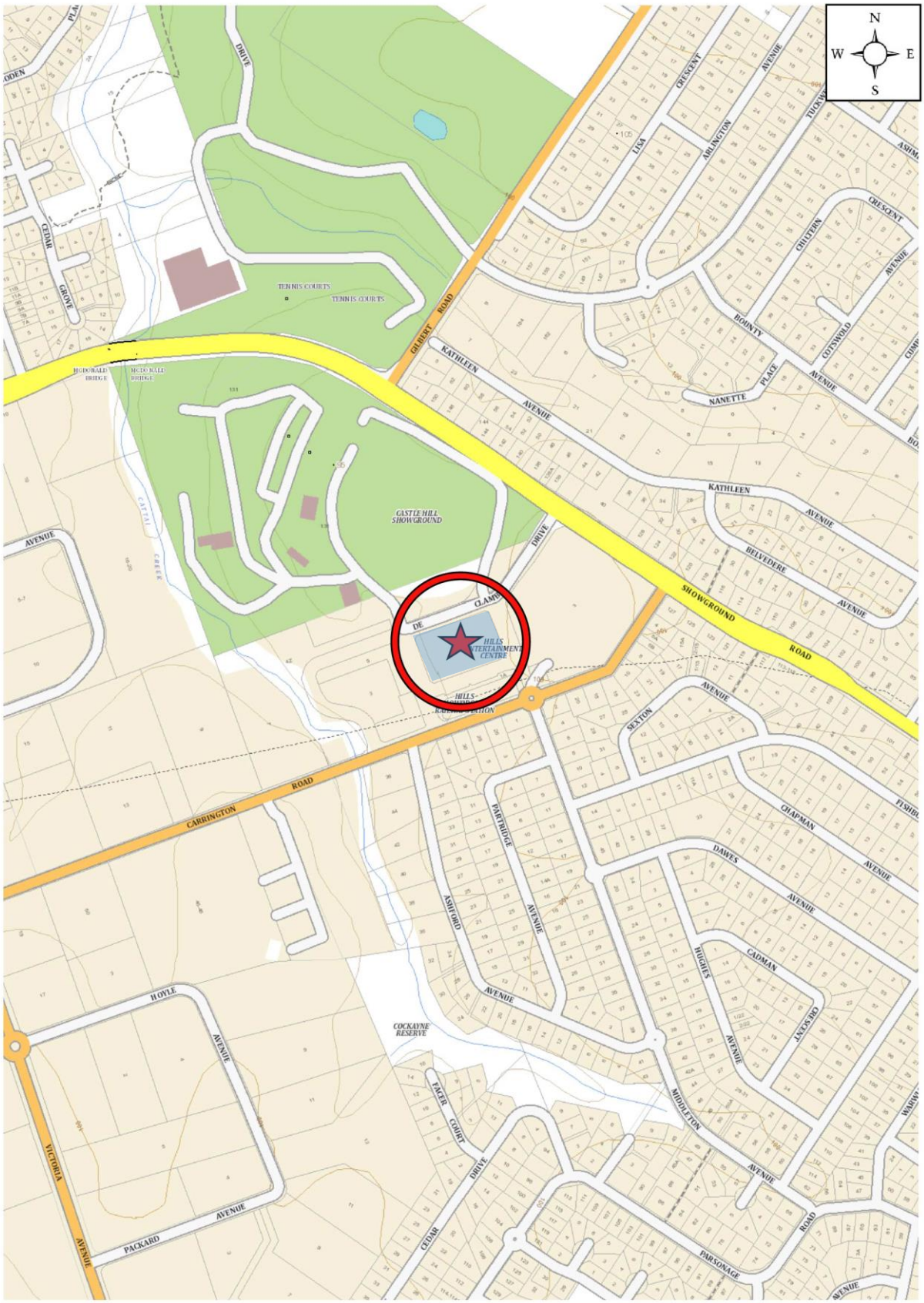
This report has been prepared on behalf of *Deicorp Projects Showground Pty Ltd* to accompany an Environmental Impact Statement to the *NSW Department of Planning* for a mixed use development to be located at Lot 55, DP 1253217, 2 Mandala Parade, Castle Hill (Figures 1 and 2).

In January-2021, a Concept State Significant Development Application (SSDA) was approved for the Hills Showground Station Precinct (SSD-9653), involving the concept subdivision, road hierarchy and precinct layout of a mixed-use precinct on Lots 53, 55 and 56, DP 1253217 and Part Lot 50 DP 1253217.

This development proposal therefore seeks approval for the construction of a new mixed-use development located within the Doran Drive Precinct of the approved Concept SSDA.

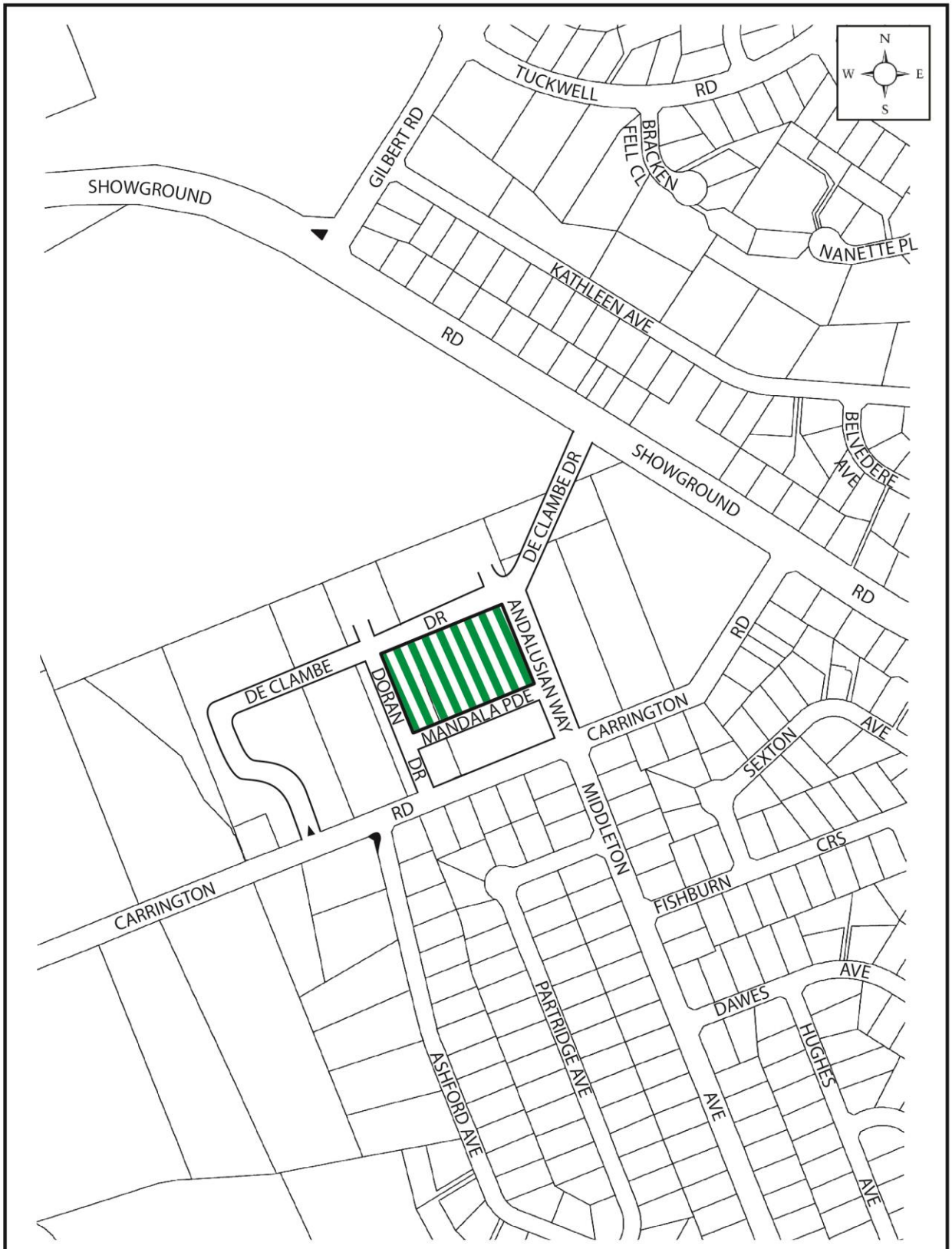
Off-street parking for the proposed Doran Drive development is to be provided in a new six-level basement car parking area in accordance with Council and *State Environmental Planning Policy No.65- Design Quality of Residential Apartment Development (SEPP 65)* requirements. Vehicular access to the parking facilities is to be provided via a new entry/exit driveway located towards the eastern end of the De Clambe Drive site frontage, in accordance with the Hills Showground Station Precinct Urban Design Guideline requirements.

Loading/servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles and rigid trucks up to and including 12.5m HRV trucks. A dedicated service area is to be located on the ground floor level (Level 01) at the rear of the retail shop. Three dedicated loading docks are provided capable of accommodating 3 x 12.5m long HRV trucks. Vehicular access to the loading facilities is to be provided via a new service driveway located at the southern end of the Andalusian Way site frontage, also in accordance with the Hills Showground Station Precinct Urban Design Guideline requirements.



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LOCATION
FIGURE 1



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SITE
FIGURE 2

1.2 Purpose of this Report

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site and the traffic conditions on that road network
- reviews the sustainable forms of transport available in the vicinity of the site
- estimates the traffic generation potential of the development proposal and assigns that traffic generation to the road network serving the site
- assesses the traffic implications of the development proposal on the surrounding local and arterial road network in terms of road network capacity
- describes high-level construction traffic management methodology
- reviews the geometric design features of the proposed car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street parking and loading provided on the site.

2.0 SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

2.1 SEARS

This report addresses the Secretary's Environmental Assessment Requirements (SEARs) for the State Significant Development (SSD), SSD-15882721. Table 1 below details where the responses to each of the items raised under *Item 10* of the SEARs have been addressed in this report.

Table 1: Secretary's Environmental Assessment Requirements	
Item 10 – Transport, traffic, parking and access (operation and construction)	**Report Section**
The predicted transport mode share split for the development	Refer to Green Travel Plan
An analysis of the existing traffic network, including the road hierarchy, current daily and peak hour vehicles, public transport, pedestrian and bicycle movements and existing performance levels of nearby intersections	Chapter 3.6
A forecast of additional daily and peak hour vehicle movements as a result of the development (using SIDRA modelling or similar at 5-year intervals) and identification of potential traffic impacts on road capacity, intersection performance and road safety (including pedestrian and cycle conflict). Including, but not limited to the following intersections: • Showground Rd at Carrington Rd • Showground Rd at De Clambe Dr	Chapter 4.3
Mitigation measures for any traffic impacts, including intersection upgrades to achieve acceptable performance.	Chapter 4.3
Details of car parking provision, having regard to relevant parking rates, specifications and standards	Chapter 4.5
A vehicular servicing and management plan providing details of proposed vehicular access for off-street loading, deliveries and servicing arrangements, and any proposed infrastructure improvements or measures to reduce potential conflicts with pedestrians and cyclists.	Refer to Vehicular Servicing & Management Plan (VSMP)
Proposals to improve walking and cycling, such as connections into existing walking and cycling networks, high quality end-of-trip facilities and adequate bicycle parking for visitors, employees and residents (provided in accordance with the relevant rates, specifications and standards)	Chapter 3.4
Measures to promote sustainable travel choices for employees, residents or visitors, such as minimising car parking provision, encouraging car share and public transport, cycling and walking, implementing a green travel plan and providing end of trip facilities	Chapter 3.4 & Refer to GTP

2.2 Transport for NSW Requirements

Comments were also sought from Transport for NSW (TfNSW) for the SEARs development proposal, with comments issued to DPIE on 25 March 2021 which included a number of matters to be addressed in the DA submission. Table 2 below details where responses to each of the matters raised by TfNSW have been addressed in this report.

Table 2: Transport for NSW Requirements

TfNSW Matters	Report Section
Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need/associated funding for upgrading or road improvement works (if required)	Chapter 4.3 & 4.4 (Daily Traffic Assessment not required, as 'Peak Traffic Assessment' represents *worst-case* scenario)
Details of the proposed accesses and the parking provisions associated with the proposed development including compliances with the requirements of the relevant Australian Standards (i.e. Turn paths, sight distance requirements, aisle width, etc.)	Chapter 4.5 & 4.9
Proposed number of car parking spaces and compliance with the appropriate parking codes including compliance with the Hills Showground Station Precinct Concept SSDA	Chapter 4.5
Details of light and heavy vehicle movements (including vehicle type and likely arrival and departure times)	Chapter 4.1 & 4.2
Details of service vehicle movements (including vehicle type and likely arrival and departure times)	Chapter 4.1 & Refer to VSMP

2.3 Relevant Policies and Guidelines:

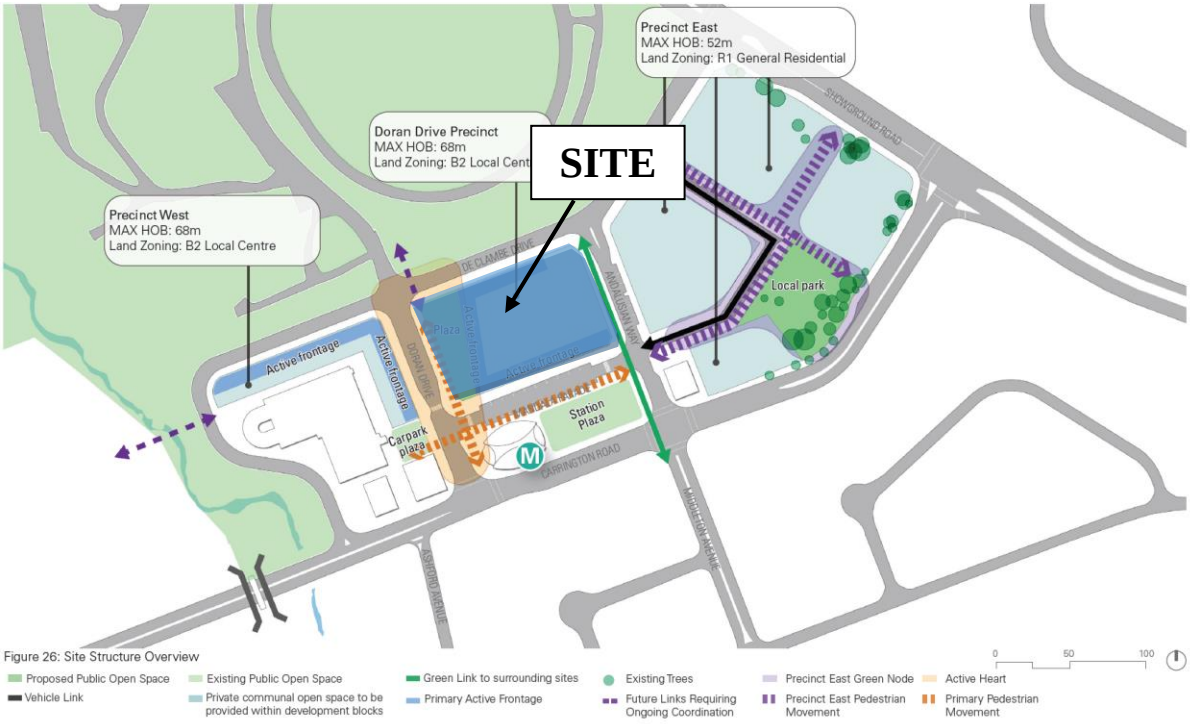
- Hills Showground Station Precinct Urban Design Guidelines
- The Hills Shire Council DCP 2012, Part C, Section 1 - Parking
- The Hills Shire Council DCP 2012, Part D, Section 19 - Showground Station Precinct
- Guide to Traffic Generating Developments (Roads and Maritime Services, 2002)
- EIS Guidelines – Road and Related Facilities (DUAP, 1996)
- Cycling Aspects of Austroads Guides
- NSW Planning Guidelines for Walking and Cycling (DIPNR, 2004)

- Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments (Austroads, 2020)
- Standards Australia AS2890.1 – 2004 (Part 1: Off-street Car Parking)
- Standards Australia AS2890.2 – 2018 (Part 2: Off-street commercial vehicle facilities)
- Standards Australia AS2890.3 – 2015 (Part 3: Bicycle Parking)
- Standards Australia AS2890.6 – 2009 (Part 6: Off-street parking for people with disabilities)
- Traffic Control at Work Sites 2020 (Transport for NSW)

3.0 EXISTING CONDITIONS

3.1 Site Location

The subject site is bounded by Doran Drive, Mandala Parade, Andalusian Way and De Clambe Drive and forms part of the *Hills Showground Station Precinct* located within The Hills Local Government Area (LGA). The site is known as the 'Doran Drive Precinct' and forms part of the three development precincts located at the new Hills Showground Station which is adjacent to the south of the site.



Source: Hills Showground Station Precinct: Site Urban Design Guidelines (June 2020)

The site has street frontages of approximately 63m in length to both Doran Drive and Andalusian Way and approximately 104m in length to both Mandala Parade and De Clambe Drive. The site occupies an area of approximately 7,969m^2.

Approved Concept SSDA – The Hills Showground Station Precinct (SSD-9653)

In January 2021, *SCT Consulting* undertook a Traffic and Transport Assessment to support the concept SSDA for the Hills Showground Station Precinct site located in The Hills Local Government Area (LGA).

The SSDA was approved, subject to conditions, for building envelopes and Gross Floor Area (GFA) for residential and non-residential development on the three development precincts located directly adjacent to the Hills Showground Station which opened in 2019. The approved concept of the Hills Showground Precinct includes:

- three development blocks (Hills Showground Precinct West, Doran Drive Precinct and Hills Showground Precinct East)
- building envelopes of varying heights between three to 21 storeys (12m to 68m)
- a maximum total gross floor area (GFA) of 166,486m², consisting:
    - a maximum residential GFA of 152,546m²
    - a maximum non-residential GFA of 13,940m², of which a total of 10,935m^2 are proposed within the Doran Drive Precinct – i.e. the subject site
- a maximum of 1,620 dwellings (including a minimum 5% affordable housing), of which a total of 440 dwellings are proposed within the subject site
- a maximum of 1,957 cars and 705 bicycle spaces
- public domain improvements, public open space and a new road
- concept subdivision of Lot 56 DP 1253217 (Precinct East).

3.2 Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Transport for NSW is illustrated on Figure 3.

Showground Road is classified by the TfNSW as an *Arterial Road* and provides the key north-south road link in the area, linking Windsor Road and Old Northern Road. It typically carries two traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a wide landscaped island. Additional lanes are provided at key locations including along the De Clambe Drive as well as the Carrington Road intersections.

Carrington Road is classified by the TfNSW as a *Sub-Arterial Road* which provides a key east-west road link in the area, linking Showground Road and Victoria Avenue. It typically carries one traffic lane in each direction in the vicinity of the site, with additional lanes provided at key locations. Notwithstanding, as noted in the foregoing, the TfNSW is proposing to upgrade Carrington Road, with the upgrade works to provide a left-turn slip lane

turning onto Showground Road, additional turning lanes from Showground Road onto Carrington Road and two continuous in both directions, between Showground Road and Andalusian Way. Clearway restrictions will ultimately apply during peak periods, with kerbside parking generally prohibited outside of peak periods.

De Clambe Drive, Doran Drive, Andalusian Way and Mandala Parade are local, unclassified roads which are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted along both sides of all these roads, subject to signposted restrictions.

3.3 Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 50 km/h SPEED LIMIT which applies to Carrington Road, De Clambe Drive and Andalusian Way
- a 40 km/h SPEED LIMIT which applies to Doran Drive and Mandala Parade in the vicinity of the Showground Metro Station, due to high pedestrian activity
- TRAFFIC SIGNALS in Showground Road where it intersects with De Clambe Drive and Carrington Road
- TRAFFIC SIGNALS in Carrington Road where it intersects with Andalusian Way / Middleton Avenue and also Doran Drive
- a CENTRAL MEDIAN ISLAND in Showground Road, with DEDICATED RIGHT TURN HOLDING LANES turning onto De Clambe Drive and also Carrington Road
- a LEFT TURN ONLY eastbound restriction in De Clambe Drive turning onto Showground Road
- DEDICATED RIGHT TURN BUS LANE in De Clambe Drive turning onto Showground Road

- a ROUNDABOUT in Middleton Avenue where it intersects with Davies Avenue

- PEDESTRIAN REFUGE ISLAND in Andalusian Way where it intersects De Clambe Drive

- RAISED/PEDESTRIAN CROSSING in the vicinity of the Hills Showground Station and Bus interchange along Doran Drive and Mandala Parade

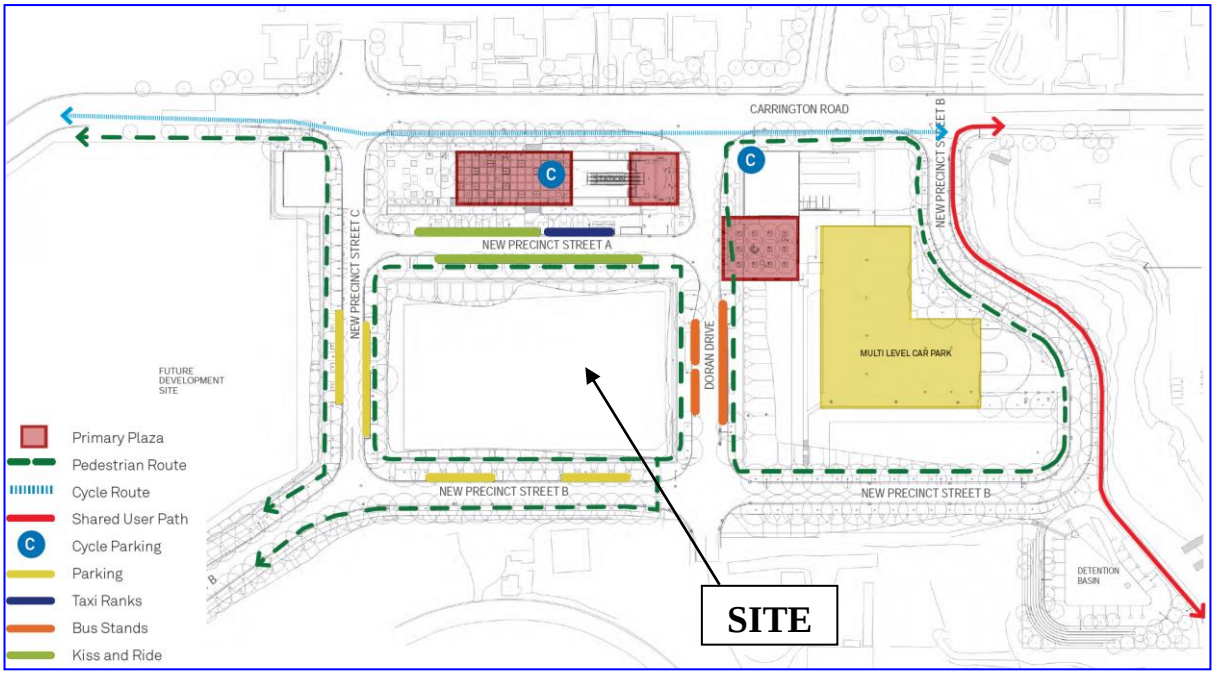
- GIVE WAY SIGN restrictions in Doran Drive where it intersects with De Clambe Drive

- GIVE WAY SIGN restrictions in Mandala Parade where it intersects with Doran Drive and also Andalusian Way

- NO RIGHT TURN restrictions in Carrington Road turning onto Ashford Avenue and also De Clambe Drive.

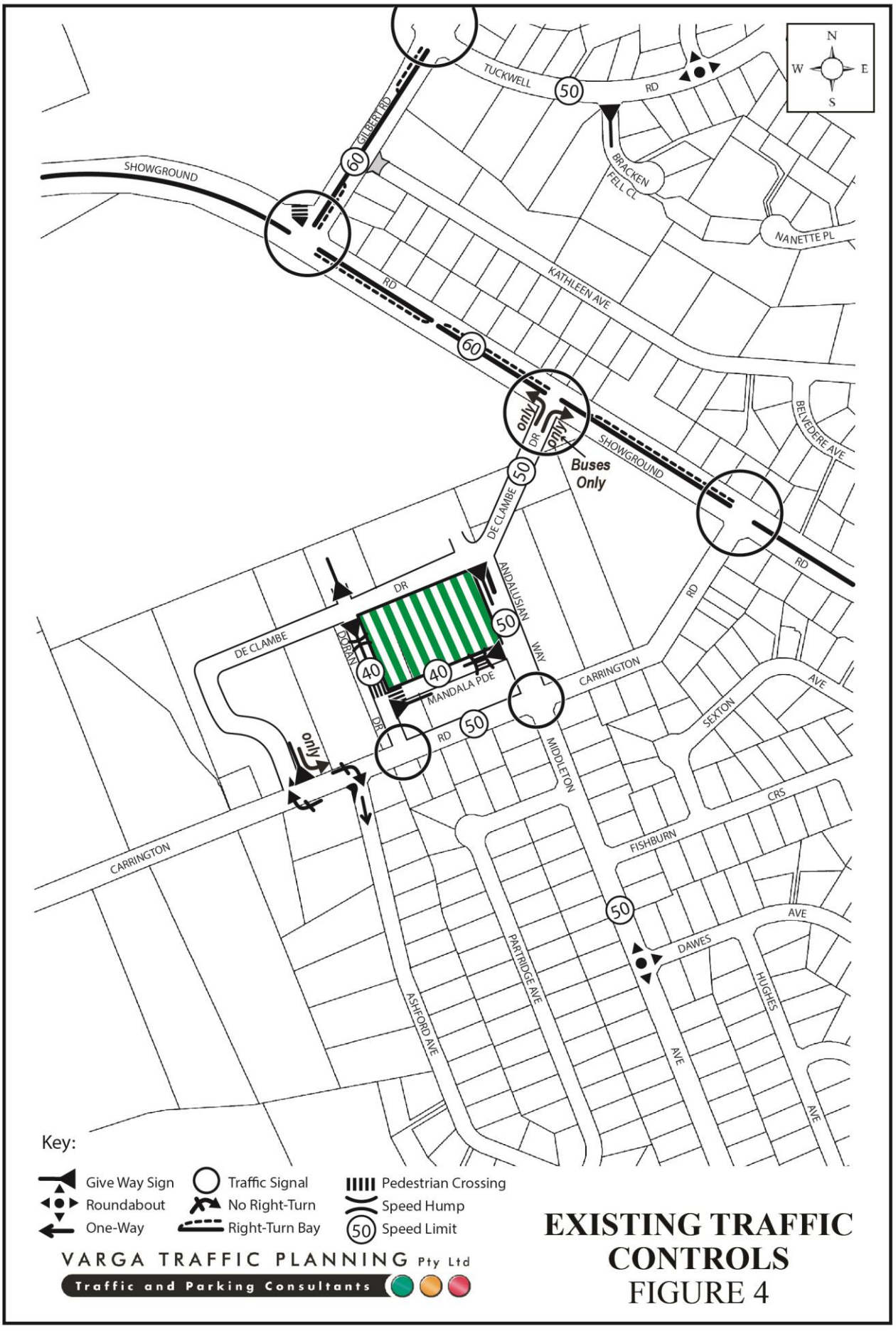
3.4 Existing Sustainable and Public Transport Options

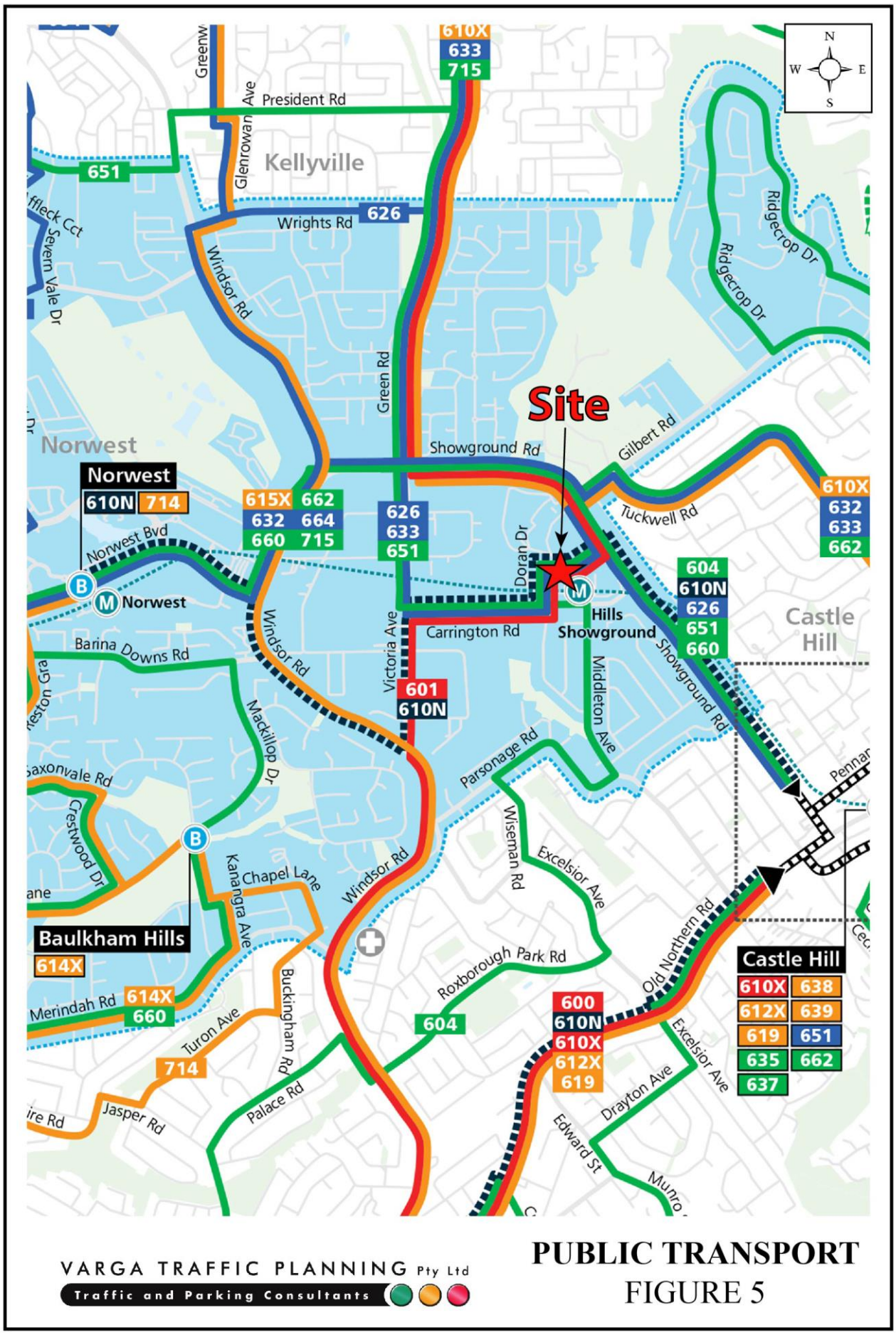
The subject site is located within the centre of the Hills Showground Station Precinct where there is a variety of sustainable transport options in close proximity to the site, as illustrated in the access arrangement plan below and on Figure 5.





ROAD HIERARCHY
FIGURE 3


N
W
E
S
TUCKWELL RD
50
GILBERT RD
60
SHOWGROUND
BRACKEN FELL CL
NANETTE PL
KATHLEEN AVE
RD
60
only
DR
only
SHOWGROUND
BELVEDERE AVE
Buses Only
50
DE CLAMBE
RD
DR
DE CLAMBE
ANDALUSIAN WAY
50
DORAN DR
40
40
MANDALA PDE
CARRINGTON
RD
SEXTON
AVE
only
DR
RD
50
MIDDLETON
CRS
CARRINGTON
FISHBURN
50
AVE
DAWES
PARTRIDGE AVE
HUGHES
ASHFORD AVE
AVE
AVE
Key:
Give Way Sign
Roundabout
One-Way
Traffic Signal
No Right-Turn
Right-Turn Bay
Pedestrian Crossing
Speed Hump
50 Speed Limit
VARGA TRAFFIC PLANNING Pty Ltd
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EXISTING TRAFFIC CONTROLS
FIGURE 4

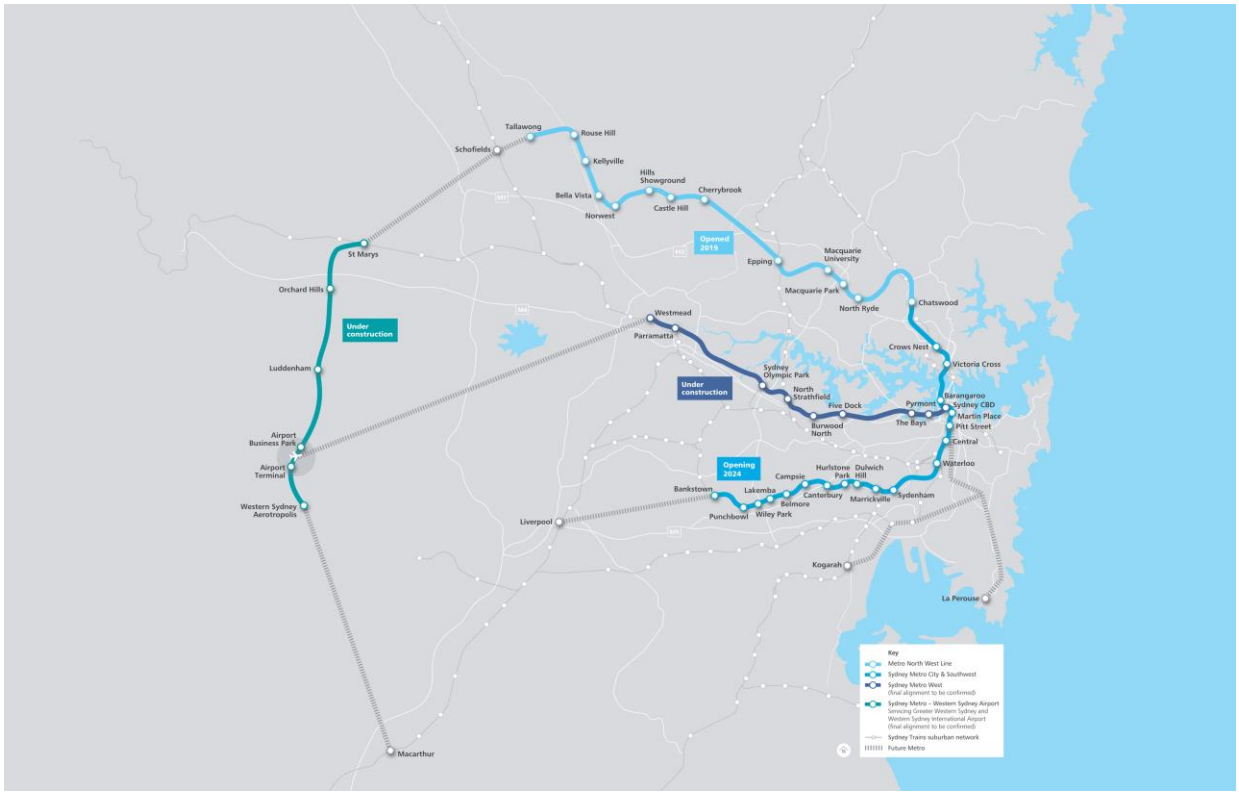


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PUBLIC TRANSPORT
FIGURE 5

Metro North West Line

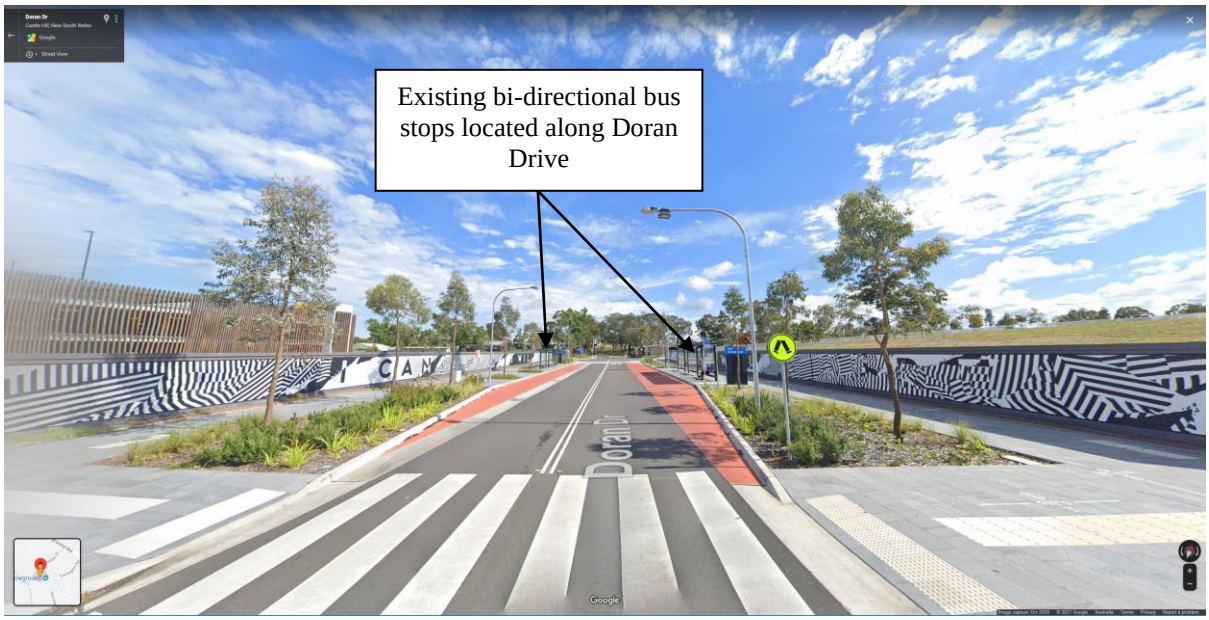
Sydney's first metro line, the Metro North West, opened on 26 May 2019. Services at the 13 metro stations operate every four minutes in the peak in each direction on Australia's first driverless railway. The line is being extended into the Sydney CBD and beyond, to open in 2024.



Sydney Metro Network **Source:** ***Sydney Metro West Scoping Report (June 2021)***

A bus interchange is located adjacent the Hills Showground Station with direct access to the bus services, listed as follows. It is noted that Figure 5 is the most recent version currently available online for download (access date January 24th 2021).

- 601 – Rouse Hill Station to Parramatta via Hills Showground
- 604 – Dural to Parramatta via Castle Hill
- 626 – Pennant Hills to Kellyville Station via Cherrybrook
- 633 – Pennant Hills to Rouse Hill Station via Kellyville & Castle Hill
- 651 – Epping to Rouse Hill Station via Castle Hill
- 730 – Castle Hill to Blacktown via Glenwood
- N92 – City Town Hall to Tallawong Station (Night Service)



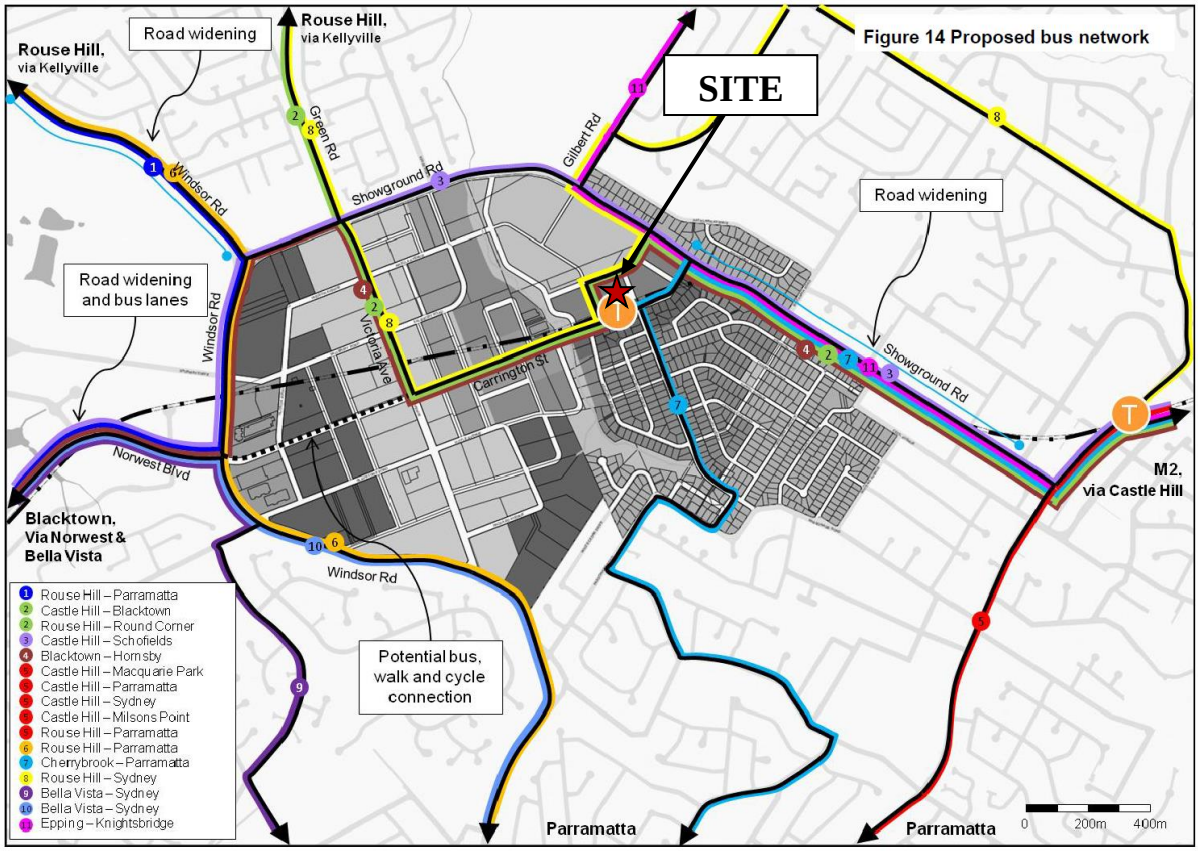
Southern end of Doran Drive at the Mandala Parade intersection – site located on the eastern side



Northern end of Doran Drive at the De Clambe Drive intersection - site located on the western side

Other bi-directional bus stops in the vicinity of the site are also located on Middleton Avenue (around 50m south of the Carrington Road / Middleton Avenue intersection), Carrington Road (around 75m southwest of the Carrington Road / Showground Road intersection) and Showground Road (around 70m of the Carrington Road / Showground Road intersection).

In addition, improved service routing and frequencies are also planned for the precinct to increase the accessibility to the Precinct and the rail station for residents and workers in the region. Utilising Sydney's Bus Future, a proposed future bus network is illustrated in the figure below.

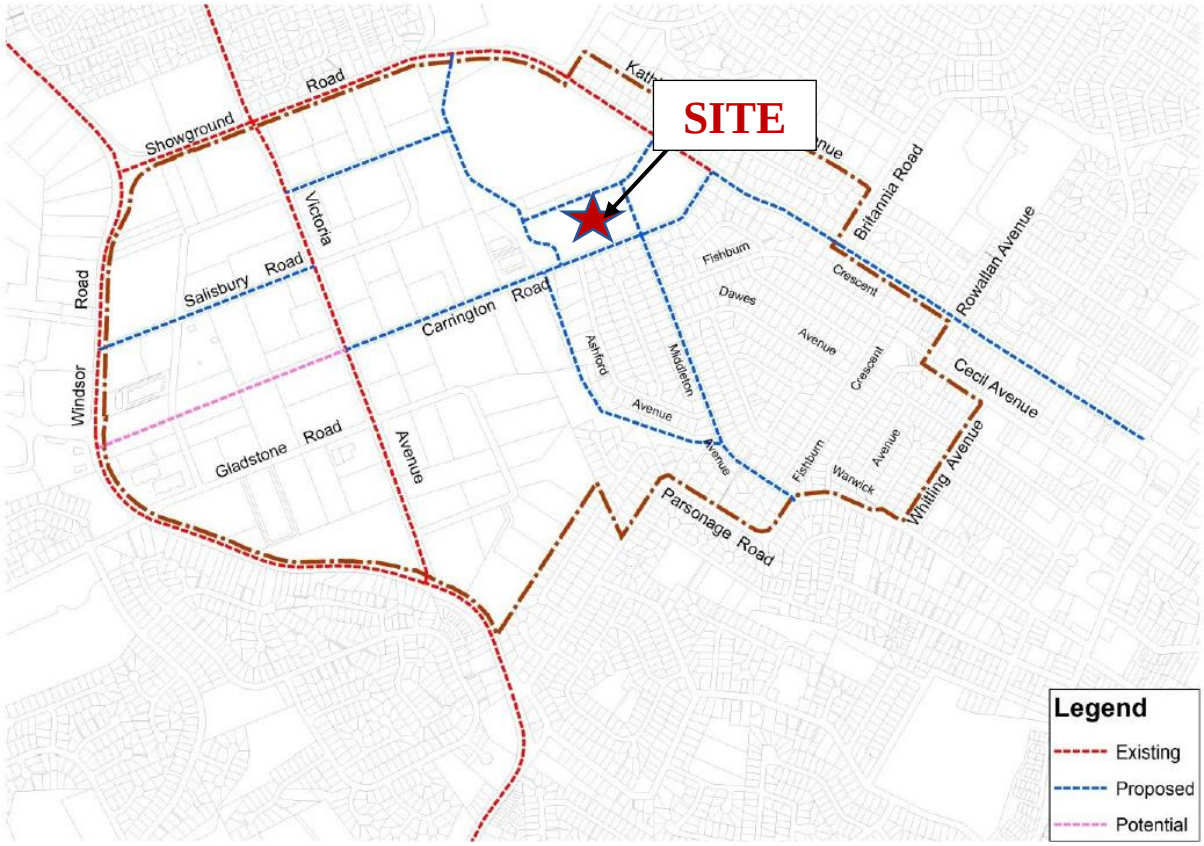


Source: Showground Station Precinct Transport Plan - Dec 2015

Walking and Cycling Infrastructure

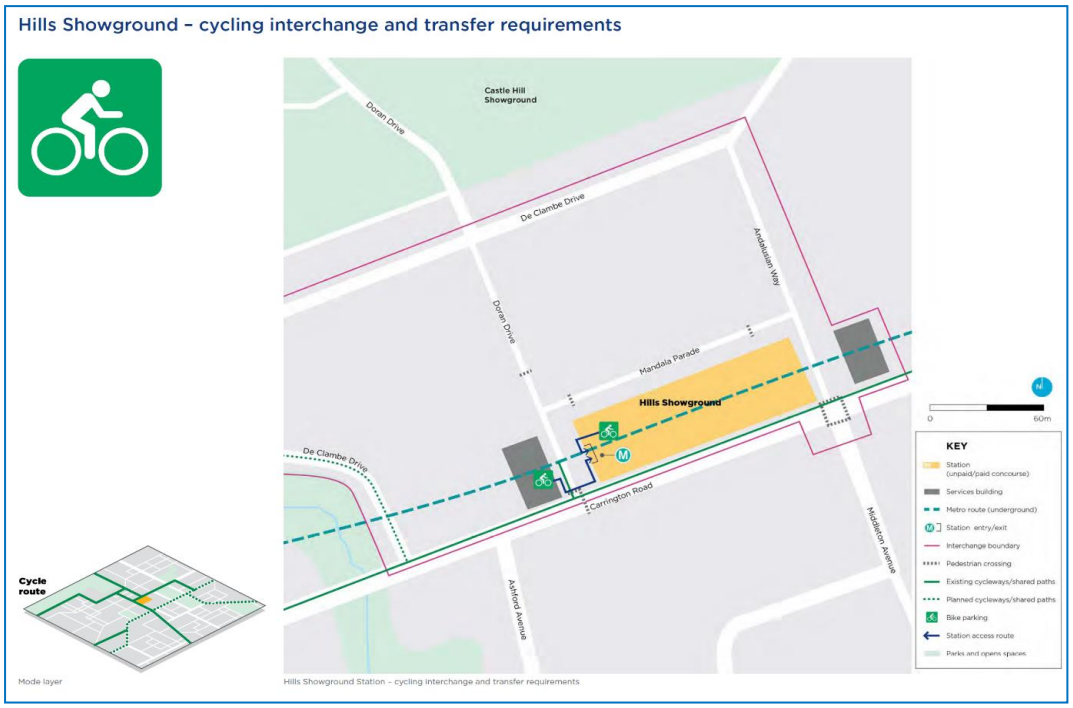
As part of the development of the Hills Showground Station Precinct, a pedestrian and cycle strategy was developed by Council which identified preliminary options for improvements to on and off-road cycle and pedestrian networks.

The existing cycleways in the immediate vicinity of the site are shown below, with Showground Road and Carrington Road forming the major cycling network in the local area. Carrington Road, De Clambe Drive (along Cattai Creek) and Showground Road in the vicinity of the site all have off-road shared paths connecting to the wider cycling network.

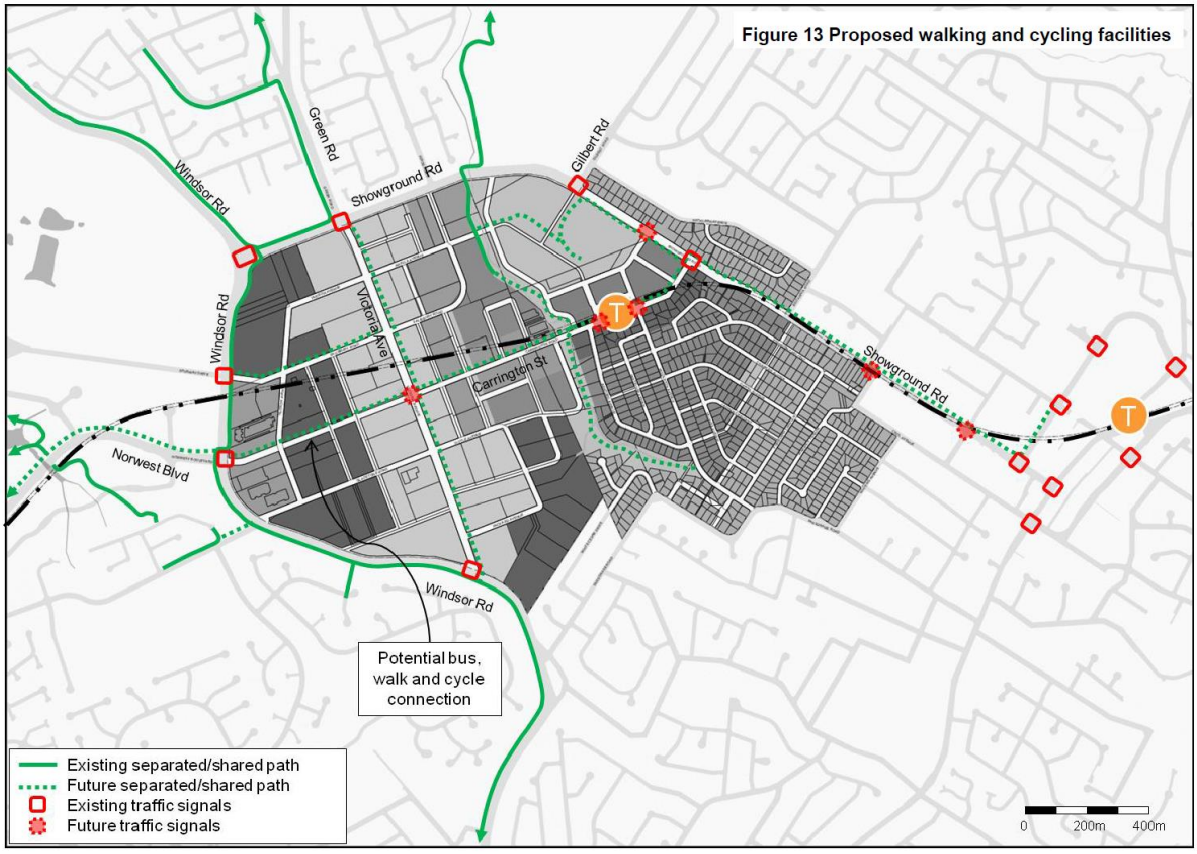


Source: Showground Station Precinct DCP (September 2018)

In addition, the Hills Showground Interchange Access Plan, which illustrates the cycling access for the station precinct as well as the future proposed walking and cycling network improvements, have been reproduced in the figures on the following page.



Source: Interchange Access Plan - Sydney Metro Northwest - Hills Showground, cycling interchange



Source: Showground Station Precinct Transport Plan - Dec 2015

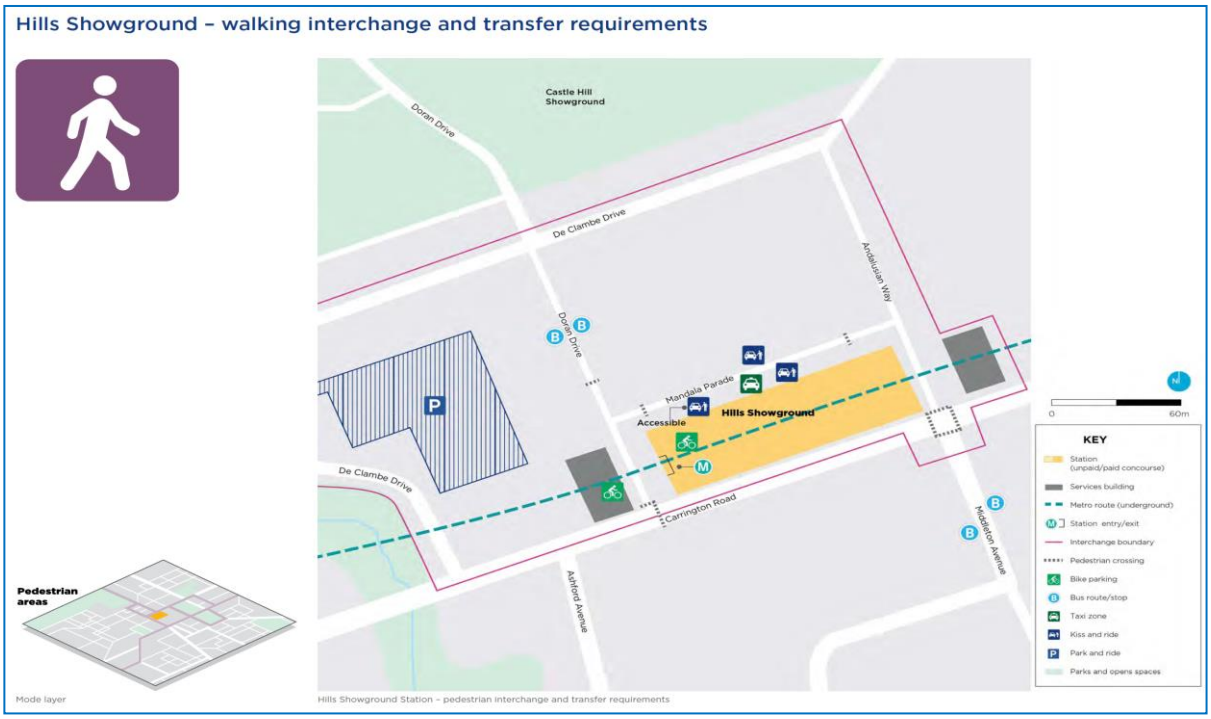
An off-road cycle path exists on Carrington Road and main cycling routes connecting to the station are provided along Cattai Creek to the west of the site. Planned new cycle routes include a 2.5m wide shared path from Carrington Road at De Clambe Drive to the existing pathway at the northern boundary of the site.

Existing Pedestrian Infrastructure

Hills Showground Station is an origin station, meaning that in the morning peak, the majority of trips are from Hills Showground Station to other stations on the metro due to the predominately existing and future residential nature of land uses around the station.

Pedestrian activity clusters around the station entry points and dissipates further afield from those entrance points. Adequate pedestrian facilities are provided to connect to the surrounding land uses in a safe and convenient manner.

The Hills Showground Interchange Access Plan which describes walking access requirements for the station precinct has been reproduced below.



Source: Interchange Access Plan - Sydney Metro Northwest - Hills Showground, pedestrian interchange

Pedestrian infrastructure includes a footpath network that provides safe and accessible access for pedestrians to station entry points, including:

- Footpaths along both sides of the new local roads created surrounding the metro station including Doran Drive, Andalusian Way and Mandala Parade;
- A shared path (off-road), linking Carrington Road to Cattai Creek in the west;
- A shared 2.5m wide pathway from Carrington Road at De Clambe Drive to the existing pathways at the site;
- Multiple crossings on Doran Drive and Mandala Parade; and
- Signalised pedestrian crossings at the intersection of Showground Road / De Clambe Drive, Showground Road / Carrington Road, Doran Drive / Carrington Road, Andalusian Way / Carrington Road, connecting residents from surrounding areas (including the site) to the station via these crossing points along Showground Road and Carrington Road.

In addition to the above, Council has developed a draft Concept Master Plan for Cattai Creek Corridor, between Middleton Avenue and Showground Road in Castle Hill. The draft Concept Masterplan shows Council's vision for the creek, which is to connect the community and deliver environmental, social and recreational benefits to the community.

This will include areas for:

- recreational activities such as walking and running
- enjoying the natural and environment of the Creek
- play spaces
- picnic and rest area
- shared pathways.

The project will also improve access to the Cattai Creek Corridor while protecting the natural environment that makes the Creek so special. The aim of the Masterplan is to create a link between the Creek and the Castle Hill Showground as well as existing open spaces in the area.

Car Share Services

Car sharing is becoming increasingly popular in Sydney and offers a convenient, affordable and sustainable alternate transport option for residents and businesses located in close proximity to public transport.

Car sharing encourages more sustainable travel habits and helps keep everyone connected. It also makes more efficient use of available parking by allowing a single vehicle to be used by a large number of people. This reduces road congestion and the competition for parking spaces, which ultimately benefits all road users.

In this regard, given the *Hills Showground Station Precinct* is newly established, no existing car share operators are currently available in the vicinity of the site, however as part of the development proposal the site will provide 8 x car share spaces, thereby encouraging car sharing opportunities in the development.

The proposed dedicated car share spaces within basement level 3 will be retained as common property managed by the Owners Corporation of the site. In addition, on-street designated car share spaces will also be provided for the specific use of visitors and/or customers, which is subject to implementation by Council's Local Traffic Committee.

3.5 Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 6. Key features of those parking restrictions are:

- CLEARWAY restrictions along both sides of the Showground Road, between 6am-7pm, Monday to Fridays and 8am-8pm, Saturdays, Sundays & Public Holidays

- generally NO STOPPING / NO PARKING restrictions along both sides of Showground Road at all other times

- generally 2 HOUR PARKING restrictions along both sides of Andalusian Way and along the southern side of De Clambe Drive, in the vicinity of the site

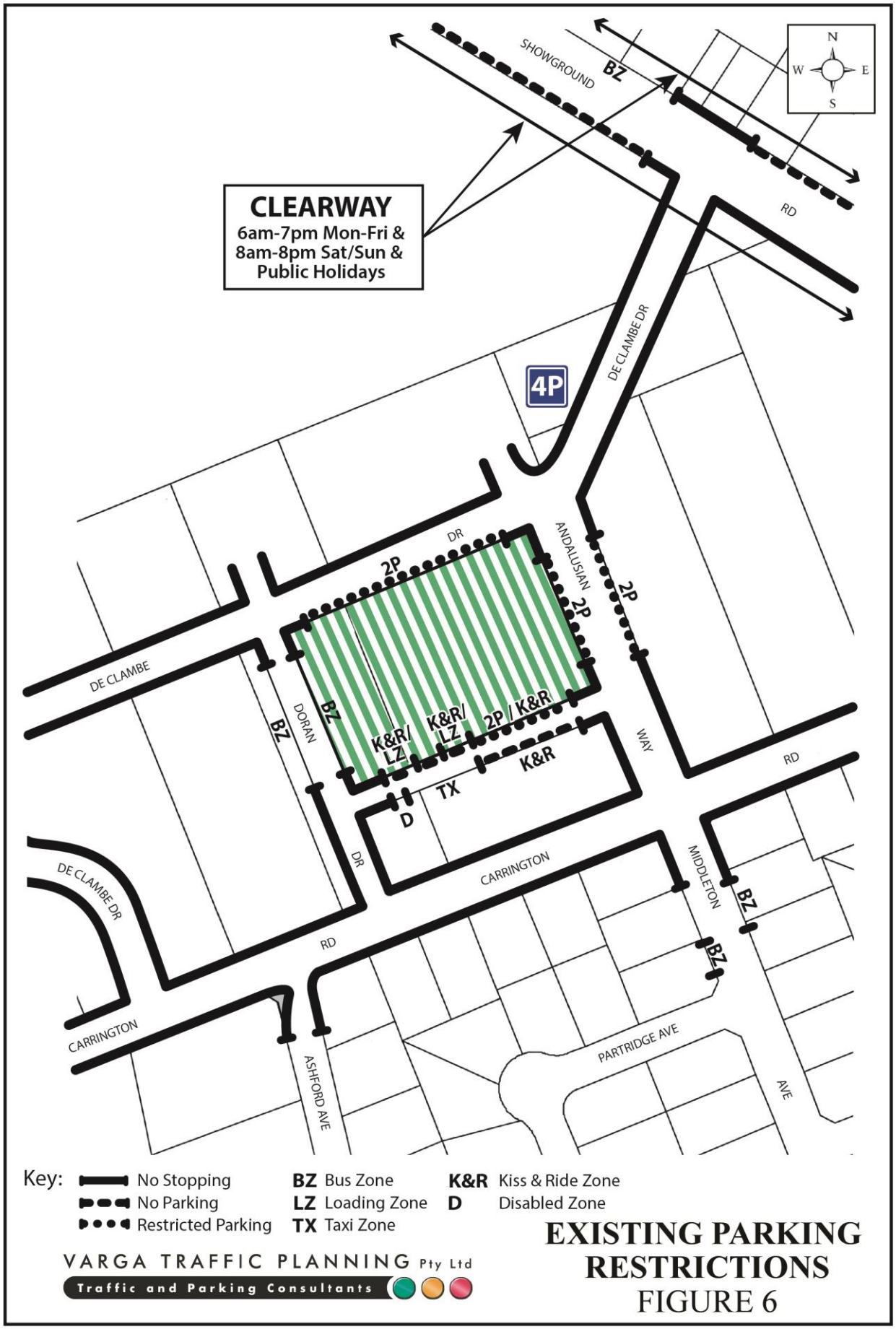
- KISS & RIDE restrictions along the northern side of Mandala Parade, including along the entire site frontage, during the *commuter* peak periods

- 2 HOUR PARKING restrictions along the northern side of Mandala Parade, extending along the eastern portion of the site frontage at all other times

- LOADING ZONE restrictions along the northern side of Mandala Parade, extending along the western portion of the site frontage at all other times

- KISS & RIDE restrictions along the southern side of Mandala Parade, extending along the eastern end of the site, at all times

- DISABLED / TAXI ZONE restrictions along the southern side of Mandala Parade, extending along the western end of the site, outside the entrance of the Hills Showground Station


CLEARWAY
6am-7pm Mon-Fri &
8am-8pm Sat/Sun &
Public Holidays
SHOWGROUND
BZ
RD
N
W
E
S
4P
DE CLAMBE DR
DR
ANDALUSIAN
2P
2P
2P
DE CLAMBE
BZ
DORAN
K&R/
LZ
K&R/
LZ
2P / K&R
K&R
TX
D
WAY
RD
DE CLAMBE DR
DR
CARRINGTON
MIDDLETON
BZ
BZ
RD
CARRINGTON
ASHFORD AVE
PARTRIDGE AVE
AVE
Key:
No Stopping
No Parking
Restricted Parking
BZ Bus Zone
LZ Loading Zone
TX Taxi Zone
K&R Kiss & Ride Zone
D Disabled Zone
VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants
EXISTING PARKING
RESTRICTIONS
FIGURE 6

- generally NO STOPPING / NO PARKING restrictions elsewhere along all other local roads within the surrounding Hills Showground Precinct area

- BUS ZONES located at regular intervals along both sides of Showground Road, Doran Drive including directly outside the site, and also along Middleton Avenue.

3.6 Existing Traffic Conditions

An indication of the existing traffic conditions on the road network in the vicinity of the site is provided by peak period traffic surveys undertaken as part of this traffic study.

The traffic surveys were undertaken at the following intersections in early 2021:

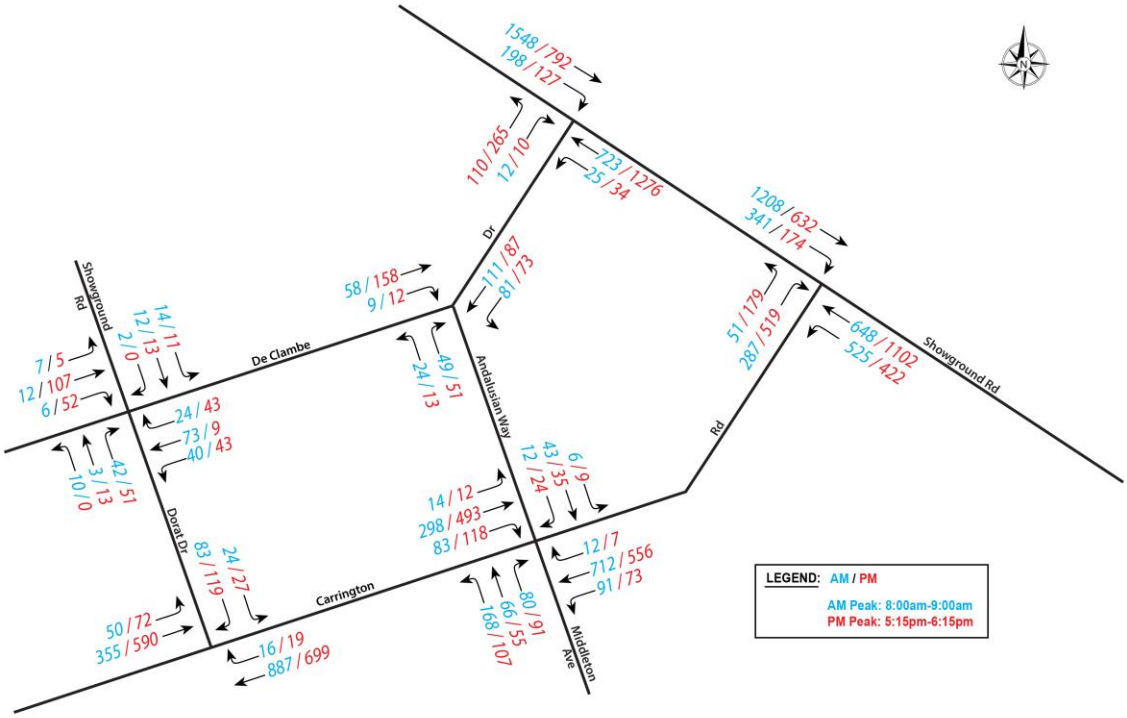
- Showground Road & Carrington Road
- Showground Road & De Clambe Drive
- Carrington Road & Andalusian Way/Middleton Avenue
- Carrington Road & Doran Drive
- De Clambe Drive & Andalusian Way/Middleton Avenue
- De Clambe Drive & Doran Drive

The results of the traffic surveys are summarised on Figure 7 on the following page and reproduced in full in **Appendix A**, revealing that:

- the *morning* network peak period occurred between 8am and 9am whilst the *afternoon* network peak period occurred between 5:15pm and 6:15pm

- two-way traffic flows along the Showground Road in the vicinity of the De Clambe Drive intersection are typically in the order of 2,300 vehicles per hour (vph) during peak periods

- two-way traffic flows along the Showground Road in the vicinity of the Carrington Road intersection are typically in the order of 1,900 vehicles per hour (vph) during peak periods



EXISTING 2021 PEAK TRAFFIC VOLUMES
FIGURE 7

- two-way traffic flows in Carrington Road, between Showground Road and Andalusian Way/Middleton Avenue are typically in the order of 1,300 vph during the *morning* network peak period, increasing to 2,100 vph during the *afternoon* network peak period

- two-way traffic flows in De Clambe Drive, between Showground Road and Andalusian Way intersection are significantly lower in the order of 330-370 vph during the peak periods

- two-way traffic flows in De Clambe Drive, past the Andalusian Way intersection are lower still in the order of 200-255 vph during the peak periods

- two-way traffic flows in Andalusian Way are even lower in the order of 100-200 vph during the peak periods

- two-way traffic flows in Doran Drive are also typically in the order of 100-200 vph during the peak periods.

4.0 PROPOSED DEVELOPMENT

4.1 Overview of Proposed Development

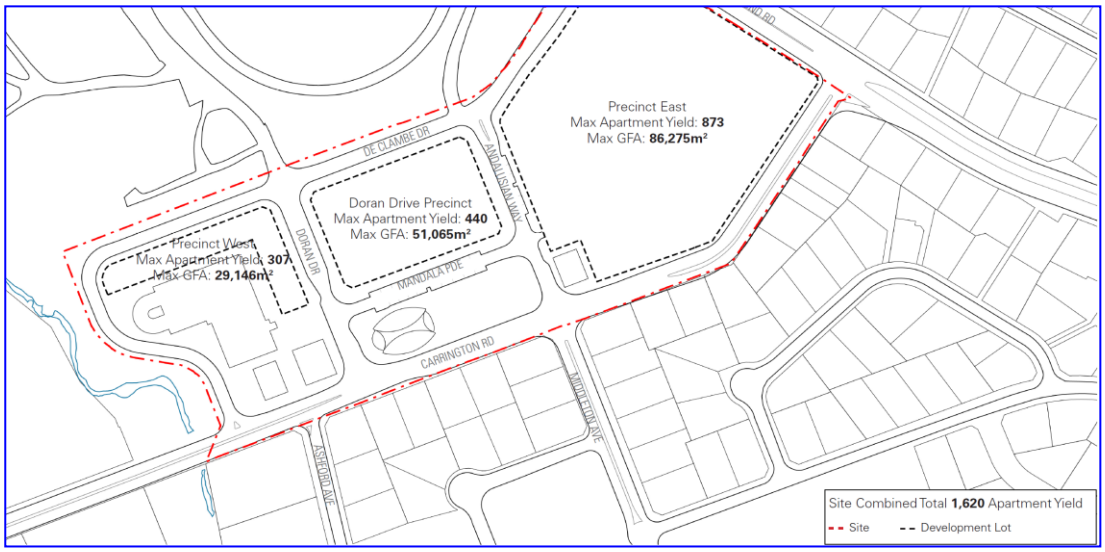
The proposed development involves the construction of a new mixed use development on the Doran Drive Precinct site, comprising a large format retail/commercial component, including a supermarket located on the ground and upper floor levels of the development. Key development statistics of the proposed development are detailed in the table below.

	Proposed Development	
Residential	**1 bedroom apartments:**	77 apartments
	2 bedroom apartments:	311 apartments
	3 bedroom apartments:	43 apartments
	TOTAL APARTMENTS:	**431 apartments**
Non-Residential	**Specialty Retail:**	3,177m^2
	Supermarket:	4,065m^2
	Food & Beverage, Restaurant, Cafe	1,264m^2
	Medical/Radiology (15 suites & 30 staff):	820m^2
	Community:	545m^2
	Childcare (90 children & 11 staff):	1,064m^2
	TOTAL FLOOR AREA:	**10,935m^2**

Off-street parking is to be provided for a total of 772 cars, in a new six-level basement car parking area in accordance with Council's and *Deicorp's* modification application (SSD-9653) to amend the *Hills Showground Station Precinct: Urban Design Guidelines* requirements in relation to the non-residential car parking rates, noting the residential component complies with these rates. Vehicular access to the site is to be provided via a new entry/exit driveway located towards the eastern end of the De Clambe Drive site frontage.

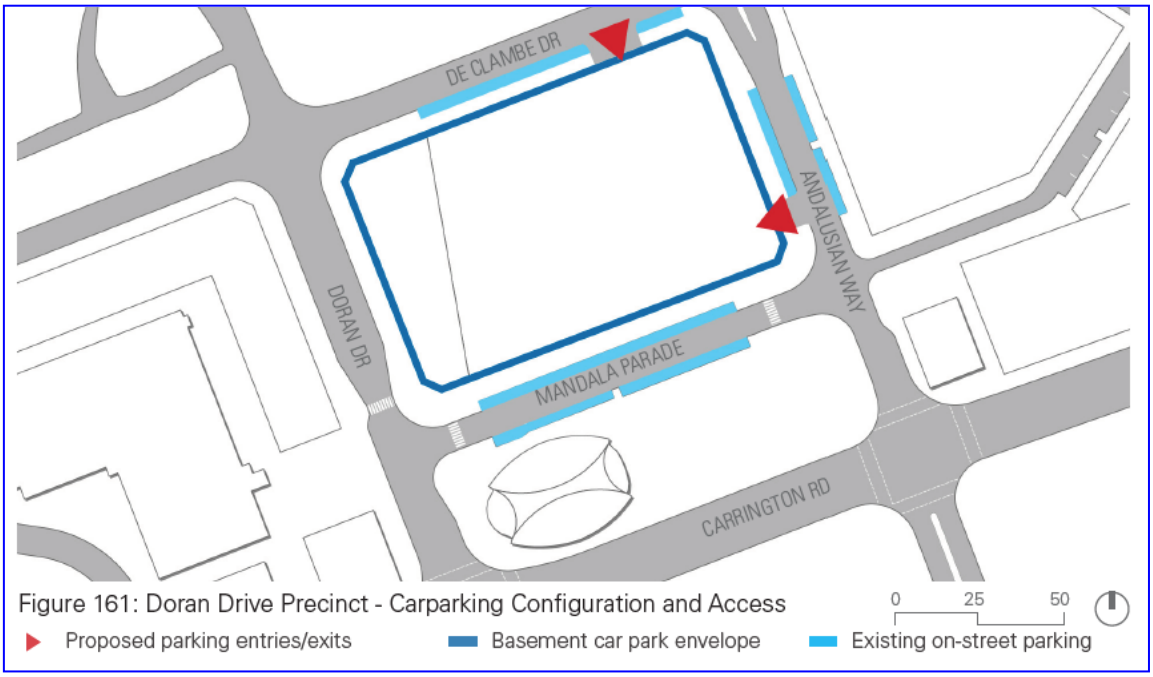
Loading/servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles and rigid trucks up to and including 12.5m HRV trucks. A dedicated service area is to be located on the ground floor level (Level 01) at the rear of the retail shop, which will be capable of accommodating 3 x 12.5m long HRV trucks. A truck turntable is provided to allow these trucks to enter and exit the loading dock whilst travelling in forward gear at all times. All of these trucks can access each of the loading bays *independently*, with the retail tenancies typically using trucks ranging from small and medium trucks up to and including 8.8m in length. Vehicular access to the loading dock is to be provided via a new service driveway located at the southern end of the Andalusian Way site frontage.

In this regard, it is noted that the proposed development yields have been designed in accordance with the Hills Showground Station Precinct Concept Approval (SSD 9653) and comply with the maximum yields imposed within the Doran Drive Precinct, as reproduced below.



Source: COX Architecture Concept Plan Approval

Furthermore, it is also noted that the proposed vehicular access arrangements are also in accordance with 'Car Parking Configuration and Access' plan as specified within the Hills Showground Station Precinct: Site Urban Design Guidelines, which has also been reproduced below.



Source: Showground Station Precinct: Site Urban Design Guidelines (June 2020)

Architectural plans of the development proposal have been prepared by *Turner Studio* and are reproduced in **Appendix B**.

4.2 Projected Traffic Generation Potential

The traffic implications of the development proposal primarily concern the effects of the *additional* traffic flows generated as a result of the development and its impact on the operational performance of the adjacent road network.

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in RMS *Technical Direction (TDT 2013/04a)* document.

The *TDT 2013/04a* document specifies that it replaces those sections of the RMS *Guidelines* indicated, and that it must be followed when RMS is undertaken trip generation and/or parking demand assessments.

The RMS *Guidelines* and the updated *TDT 2013/04a* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the residential component of the proposed development:

High Density Residential Flat Dwellings

AM: 0.19 peak hour vehicle trips per unit

PM: 0.15 peak hour vehicle trips per unit

Shopping Centres (0-10,000m^2)

12.3 peak hour vehicle trips per 100m^2 GLFA

Notwithstanding, the RMS *Guidelines* and their *TDT 2013/04a* only specifies a traffic generation rate for the evening or midday peak of Thursday through to Sunday, however, does not specify the morning road network peak trip generation rate.

As such, in accordance with the *SCT Consulting* report conducted for the approved concept SSDA undertaken at the Hills Showground Station Precinct, the raw survey information adopted from the *TDT 2013/04a* has been used to estimate the typical Thursday AM peak generation, all of which has been reproduced in the table on the following page.

Range in floor area (m^2 GLFA)	Trip generation rate per 100m^2 GLFA				
	Thursday PM peak	Friday PM peak	Saturday midday	Sunday midday	Thursday AM peak
0-10,000	**12.3**	12.5	16.3	-	**5.9**
10,000 – 20,000	7.6	6.2	7.5	6.6	Not estimated
20,000 – 30,000	5.9	5.6	7.5	6.3	Not estimated
30,000 – 40,000	4.6	3.7	6.1	-	Not estimated

Source: Roads and Maritime Service, analysis by SCT Consulting (Thursday AM peak), 2019

In addition to the above, the 'Shopping Centres' trip generation rate nominated in the *TDT 2013/04a* are based on GLFA, which provides a better indication of trip generation than GFA. As a general guide, 100m² GFA is the equivalent of approximately 75m² GLFA.

Furthermore, given the site is located in the heart of the Hills Showground Station Precinct, with a large existing and future residential catchment located within the precinct itself, it is reasonable to assume that a proportion of the traffic generated by the proposed development will comprise *passing traffic* and *linked trips*, that is, customers drawn from *within* the precinct such that that component of traffic flows will already using the adjacent road network.

Reference to the RMS *Guidelines* and the *approved* concept SSDA report indicates that the *passing traffic* component of the development proposal is likely to contribute to a 25% discount to the overall estimated traffic generation of the site.

Application therefore of the above traffic generation rates to the various components of the development proposal yields a traffic generation potential of 444 vph during the AM peak period and 821 vph during the PM peak period, as set out below:

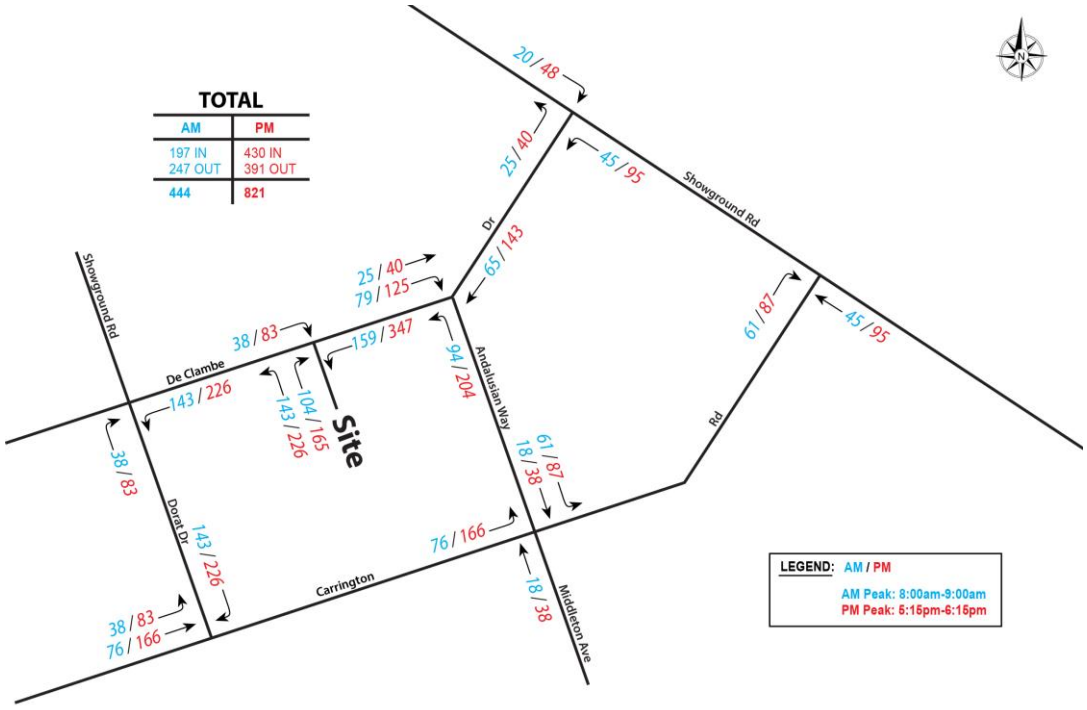
Projected Traffic Generation Potential of Proposed Development

	AM	**PM**
Residential (431 apartments):	82 vph	65 vph
Retail shops & supermarket (8,200m^2 GLFA*):	362 vph^	756 vph^
TOTAL TRAFFIC GENERATION POTENTIAL:	**444 vph**	**821 vph**

*Assuming GLFA: GFA=0.75:1 (refer to Section 3.6.1, Guide to Traffic Generating Development)

^25% reduction factor (refer to Section 3.6.1 Guide to Traffic Generating Development)

The distribution of those volumes onto the surrounding road network is shown on Figure 8.



PROJECTED ADDITIONAL PEAK TRAFFIC VOLUMES
FIGURE 8

That projected increase in traffic activity as a consequence of the development proposal is consistent with the *approved* Concept SSDA for the Hills Showground Precinct site, and it is therefore considered that the proposal will not have any unacceptable traffic implications in terms of road network capacity, as is demonstrated in the following section of this report.

4.3 Traffic Implications - Road Network Capacity

The traffic implications of development proposals primarily concern the effects that any *additional* traffic flows may have on the operational performance of the nearby road network.

Those effects can be assessed using the SIDRA NETWORK 9 program which is widely used by the TfNSW and many LGA's for this purpose. Criteria for evaluating the results of the analysis are reproduced in the following pages. The Movement Summaries for the traffic analysis are reproduced in **Appendix C**.

The results of the SIDRA capacity analysis of the 6 intersections surrounding the development proposal, plus the proposed site access driveway off De Clambe Drive, are summarised in the table on the following pages. The existing Traffic Control Signal plans of the signalised intersections included in the SIDRA model are reproduced in **Appendix D**.

4.4 Intersection Operations

Table 3: Network Performance in 2021 under Modelled Scenarios

Intersection	Existing Volumes			Existing Volumes + Development		
	AVD	LoS	DoS	AVD	LoS	DoS
2021 AM PEAK (EXISTING TRAFFIC DEMAND)						
Showground Road & Carrington Road	18.7	B	0.439	20.8	B	0.454
Showground Road & De Clambe Drive	5.1	A	0.464	5.4	A	0.464
Carrington Road & Andalusian Way/Middleton Avenue	15.6	B	0.507	16.4	B	0.528
De Clambe Drive & Andalusian Way	2.2	A	0.105	2.7	A	0.138
Doran Drive & Carrington Road	12.2	A	0.405	16.4	B	0.519
Doran Drive & De Clambe Drive	3.9	A	0.077	4.4	A	0.155
De Clambe Drive & Proposed Site Access Driveway	-	-	-	1.8	A	0.206
2021 PM PEAK (EXISTING TRAFFIC DEMAND)						
Showground Road & Carrington Road	23.0	B	0.586	24.4	B	0.663
Showground Road & De Clambe Drive	9.9	A	0.626	10.5	A	0.636
Carrington Road & Andalusian Way/Middleton Avenue	14.3	A	0.458	15.6	B	0.568
De Clambe Drive & Andalusian Way	1.8	A	0.093	2.8	A	0.232
Doran Drive & Carrington Road	13.0	A	0.419	19.3	B	0.752
Doran Drive & De Clambe Drive	4.1	A	0.089	5.0	A	0.202
De Clambe Drive & Proposed Site Access Driveway	-	-	-	2.6	A	0.360

Table 4: Network Performance in 2026 under Modelled Scenarios

Intersection	Existing Volumes with background growth			Existing Volumes with background growth + Development		
	AVD	LoS	DoS	AVD	LoS	DoS
2026 AM PEAK (FUTURE 5+ YEAR DEMAND)						
Showground Road & Carrington Road	19.7	B	0.527	21.6	B	0.514
Showground Road & De Clambe Drive	5.3	A	0.531	5.7	A	0.532
Carrington Road & Andalusian Way/Middleton Avenue	15.4	B	0.541	16.3	B	0.563
De Clambe Drive & Andalusian Way	2.2	A	0.105	2.7	A	0.138
Doran Drive & Carrington Road	11.9	A	0.423	16.1	B	0.558
Doran Drive & De Clambe Drive	3.9	A	0.077	4.4	A	0.155
De Clambe Drive & Proposed Site Access Driveway	-	-	-	1.8	A	0.206
2026 PM PEAK (FUTURE 5+ YEAR DEMAND)						
Showground Road & Carrington Road	23.1	B	0.665	25.1	B	0.745
Showground Road & De Clambe Drive	9.7	A	0.646	11.1	A	0.636
Carrington Road & Andalusian Way/Middleton Avenue	14.0	A	0.482	15.4	B	0.600
De Clambe Drive & Andalusian Way	1.8	A	0.093	2.8	A	0.230
Doran Drive & Carrington Road	13.3	A	0.454	19.8	B	0.752
Doran Drive & De Clambe Drive	4.1	A	0.089	5.0	A	0.202
De Clambe Drive & Proposed Site Access Driveway	-	-	-	2.6	A	0.360

Table 5: Network Performance in 2031 under Modelled Scenarios

Intersection	Existing Volumes with background growth			Existing Volumes with background growth + Development		
	AVD	LoS	DoS	AVD	LoS	DoS
2031 AM PEAK (FUTURE 10+ YEAR DEMAND)						
Showground Road & Carrington Road	21.0	B	0.606	22.6	B	0.609
Showground Road & De Clambe Drive	5.7	A	0.599	6.1	A	0.599
Carrington Road & Andalusian Way/Middleton Avenue	14.8	B	0.584	16.0	B	0.610
De Clambe Drive & Andalusian Way	2.2	A	0.105	2.7	A	0.138
Doran Drive & Carrington Road	12.1	A	0.441	16.3	B	0.563
Doran Drive & De Clambe Drive	3.9	A	0.077	4.4	A	0.155
De Clambe Drive & Proposed Site Access Driveway	-	-	-	1.8	A	0.206
2031 PM PEAK (FUTURE 10+ YEAR DEMAND)						
Showground Road & Carrington Road	24.0	B	0.761	27.6	B	0.833
Showground Road & De Clambe Drive	10.4	A	0.646	11.9	A	0.705
Carrington Road & Andalusian Way/Middleton Avenue	13.8	A	0.508	15.7	B	0.625
De Clambe Drive & Andalusian Way	1.8	A	0.093	2.8	A	0.230
Doran Drive & Carrington Road	13.4	A	0.496	20.5	B	0.785
Doran Drive & De Clambe Drive	4.1	A	0.089	5.0	A	0.202
De Clambe Drive & Proposed Site Access Driveway	-	-	-	2.6	A	0.360

In essence, the capacity analysis has found that all intersections will continue to operate at the same *Levels of Service* as the existing scenarios, with *negligible* increases in average vehicle delays, if any.

On the above basis, it is clear that the surrounding road network will operate at satisfactory *Levels of Service* in all three scenarios – i.e. 2021, 2026 & 2031 – and that the proposed development will not result in any unacceptable traffic implications in terms of road network capacity.

Criteria for Interpreting Results of Sidra Analysis

1. Level of Service (LOS)

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good operation.	Good operation.
'B'	Good with acceptable delays and spare capacity.	Acceptable delays and spare capacity.
'C'	Satisfactory.	Satisfactory but accident study required.
'D'	Operating near capacity.	Near capacity and accident study required.
'E'	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode.	At capacity and requires other control mode.
'F'	Unsatisfactory and requires additional capacity.	Unsatisfactory and requires other control mode.

2. Average Vehicle Delay (AVD)

The AVD provides a measure of the operational performance of an intersection as indicated on the table below which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (i.e. inner-city conditions) and on some roads (i.e. minor side street intersecting with a major arterial route).

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

3. Degree of Saturation (DS)

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by traffic signals[1] both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a roundabout or GIVE WAY or STOP signs, satisfactory intersection operation is indicated by a DS of 0.8 or less.

[1] *The values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs.*

4.5 Parking Assessment

The off-street parking rates and parking objectives applicable to the development proposal are specified in Council's *DCP 2012, Part D, Section 19 – Showground Station Precinct (September 2018)* document in the following terms.

5.11 Parking Rates and Access

Objectives

a. To provide sufficient parking spaces for development while encouraging public transport use.
b. To ensure that car parking is appropriately located and visual impacts of access and parking facilities on the public realm are minimised.
c. To ensure vehicles enter and exit developments in a safe and efficient manner.
d. Pedestrian and cycle access to, from and through development is simple, safe and direct.
e. To ensure that bicycle parking is considered and provided appropriately in all development.
f. To ensure that end of trip facilities such as change rooms, showers and secure areas for bicycle parking are provided in new buildings featuring employment uses.

Controls

Car Parking

1. Car parking spaces are to be provided at the rates specified in the parking rates table below. For any use not specified, the car parking rates in The Hills Development Control Plan 2012 (Part C Section 1 – Parking) shall apply.

Table 8 Car Parking Rates

Land Use	Rate
Residential flat buildings and dwellings in shop top housing	1 resident space per unit. 1 visitor space per 5 units.
Retail and commercial use in B2 Local Centre zone	To be determined by a merit based assessment. Development applications are to be accompanied by a traffic and parking study which demonstrates that the parking provision is sufficient to meet the forecast demand.
All other uses	To comply with the rates in The Hills DCP 2012 Part C Section 1 – Parking.

2. Car parking shall not be located on the roof of buildings.

Notwithstanding the above table with respect to residential visitor parking, development consent condition No.B1(a) of the SSD 9653 consent notes that developments located on the Doran Drive Precinct and Precinct West *"remove the visitor car parking rates".*

Furthermore, based on the above table, reference is made to *The Hills Shire Council DCP 2012, Part C, Section 1 – Parking* document, with relevant extracts reproduced on the following page.

Shops * # (including shopping centres and general business retail)	1 space per 18.5m^2 GLFA
Take-away food and drink premises* (No seating)	1 space per 18.5m^2 GFA.
Restaurant or cafe within a retail shopping complex	1 space per 18.5m^2 of GLFA.
Medical Centres, Health consulting rooms	3 spaces per consulting room plus 1 space per support employee
Child Care Centre# (including Kindergartens, Crèches)	1 space per employee plus 1 space per 6 children enrolled for visitors and/or parent parking Also see section 2.1.1(e)

Whilst *DCP 2012* does not specify an off-street parking rate for "community" uses, for the purposes of this assessment, the "function centre" parking rate has been adopted.

Function Centre	1 space per 3 seats, or 15 spaces per 100m^2 GFA, whichever is the greater. These rates apply to both indoor and outdoor seating.

By way of comparison, reference is also made to the *Hills Showground Station Precinct Site Urban Design Guidelines* document which specifies the following parking rates.

Table 7: Doran Drive Precinct Residential Car Parking Spaces

	Minimum (per unit)	Maximum (per unit)
1 bedroom units	0.4	Average of 1 across all bedroom apartment mix
2 bedroom units	0.7	
3 bedroom units	1.0	
	Minimum (per area)	Maximum (per area GFA)
Retail	1 space per 130m^2 GFA	1 space per 60m^2 GFA
Commercial	1 space per 145m^2 GFA	1 space per 100m^2 GFA

As noted in Table 8 of *DCP 2012, Part D, Section 19 – Showground Station Precinct (September 2018)*, parking for retail and commercial use in B2 Local Centre zone is to be determined by a merit-based assessment.

Accordingly, reference is made to communications advised from *Woolworths Group* to *Shiprock Advisory*, pertaining to the supermarket tenancy within the proposed development, whom has agreed to a 'flat total' of 341 retail car spaces, based on Agreement of Lease (AOL) with Woolworths and Retail.

Further reference on the parking rates subject is made to the *Hill PDA Consulting* report, dated April 2021, which provides a comprehensive assessment on the retail parking rates necessary to ensure the retention of the anchor tenant and in turn a viable shopping centre overall.

The study compared existing shopping centres in the surrounding locality, as well as developments in the pipeline for Woolworths. In summary, the average parking rate for the existing five centres was *1 space per 21.6m^2* whilst the average parking rate for the developments in the pipeline was *1 space per 21m^2*.

The study also noted the importance of an anchor tenant and the important role they play in ensuring the success of the centre, and ultimately concluded that if insufficient retail parking was provided:

- residents beyond 400m radius and the potential wider trade area will choose alternative destinations to do their food and grocery shopping
- these residents will need to travel further which will undermine transport sustainability objectives
- reduce the viability of the anchor tenant and in turn the specialty stores
- it would increase the risk of an anchor tenant vacancy, resulting in a "white elephant" and adverse consequences on the marketing of the residential apartments

A summary therefore of the off-street car parking rates in relation to the development proposal is set out below:

Land Use		Proposed Units/Floor Area	Parking Rate Applied	Required Parking (maximum)
Residential	**1-bedroom**	77	1/dwelling (max)	77
	2-bedroom	311	1/dwelling (max)	311
	3-bedroom	43	1/dwelling (max)	43
Residential Sub-Total		**431**		**431**
Retail/Commercial		**10,935m²**	1 space per 32m² GFA	**341**
Retail/Commercial Sub-Total				**341**
TOTAL OFF-STREET PARKING REQUIREMENT				**772**

*Assuming GLFA: GFA=0.75:1 (refer to Section 3.6.1, Guide to Traffic Generating Development)

The proposed development makes provision for a total of 772 off-street parking spaces, comprising 431 residential spaces and 341 retail/commercial spaces, thereby satisfying both Council's DCP and the *Hills Showground Station Precinct: Urban Design Guidelines* parking rates. The basement car parking area has also been designed to accommodate 38 x electrical charging stations and 8 x car share spaces.

4.6 Residential Parking Provision

The proposed provision of 431 residential parking spaces for 431 apartments equates to a parking rate of *1 space per dwelling* which is in accordance with the Approved Concept SSDA as well as the *Hills Showground Station Precinct: Urban Design Guidelines* document and will cater for the requirements of the residential component of the development.

4.7 Non-Residential Parking Provision

The proposed provision of 341 retail parking spaces for 10,935m^2 GFA of non-residential floor space equates to a *maximum* parking rate of approximately *1 space per 32m^2 GFA* which is considered necessary to cater for the requirements of the retail component of the development for the following reasons:

- the proposed car parking provision is in line with the *Woolworths* car parking average of *1 space per 21m²* as outlined within the *Hill PDA Consulting Report*

- the proposed provision of 341 retail car parking spaces is in line with the minimum parking requirements set out in many other Greater Sydney Council's *DCPs* which typically require *1 space per 25m^2 GFA*

- the site is ideally located within a transit-oriented area, with the Hills Showground Station located directly opposite the site. The ready accessibility of the site by public transport will facilitate reduced car usage by employees and customers of the development proposal.

4.8 Off-Street Bicycle Parking Provisions

The off-street bicycle parking rates applicable to the development proposal are specified in Table 8 of the *Hills Showground Station Precinct: Urban Design Guidelines* document in the following terms:

Table 8: Doran Drive Precinct Bicycle Parking Facility Rates

	Rate (minimum)
Residential flat buildings	1 resident space per 3 apartments 1 visitor space per 12 apartments
Commercial use	1 space per 600m² GFA for staff
Retail use	1 space per 450m² GFA for staff

Application of the above bicycle parking rates to the various components of the development proposal yields an off-street bicycle requirement of 144 residential spaces, 36 visitor spaces and 24 retail staff spaces.

The proposed development makes provision for 144 residential spaces in private storage cages, 36 visitor spaces and 24 retail staff spaces with end-of-trip facilities, thereby satisfying the bicycle parking requirement.

In this regard, these end-of-trip facilities include separate male and female amenities comprising secured lockers, change rooms, toilets and shower facilities within the upper basement level as well as Class B/Class C bicycle parking facilities in accordance with *AS2890.3* for the respective users of the development located within the basement parking levels.

4.9 Australian Standards Design Requirements

The geometric design layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* in respect of ramp gradients, parking bay dimensions, aisle widths, overhead clearances etc.

The vehicular access arrangements have been designed to accommodate the swept turning path requirements of the B99 design vehicle as specified in *AS2890.1*, allowing them to circulate the internal ramps without difficulty, and to enter and exit the site in a forward direction at all times.

The geometric design layout of the proposed loading facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2* in respect of loading dock dimensions and service area requirements for HRV trucks.

The vehicular access arrangements have been designed to accommodate the swept turning path requirements of the 12.5m HRV truck as specified in *AS2890.2*, allowing it to enter and exit the site in a forward direction at all times via the mechanical turntable.

5.0 CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

This Traffic and Parking Assessment Report has been prepared in accordance with the Planning Secretary's Environmental Assessment Requirements (SEARs), Council's *DCP/ LEP* and the RMS *Guidelines*, to accompany an Environmental Impact Statement to the *NSW Department of Planning, Infrastructure and Environment* for a proposed mixed use development.

The parking requirements of the proposed development have been designed in accordance with the approved concept SSDA rates, *The Hills DCP 2012*, and the *Urban Design Guidelines*.

The proposed *maximum* provision of 772 car parking spaces, comprising 431 residential spaces for 431 apartments and 341 retail/commercial spaces for 10,935m^2 GFA of retail floor area is considered sufficient to satisfy the anticipated *actual* parking likely to be generated by the development to ensure its viability.

In addition, an extensive amount of bicycle parking is proposed to be provided, in addition to excellent end-of-trip facilities, ensuring the development is encouraging the use of active transport modes of travel for future building occupants, residents, visitors, employees and customers.

Extensive traffic surveys and SIDRA modelling were also undertaken at the following intersections in early 2021:

- Showground Road & Carrington Road
- Showground Road & De Clambe Drive
- Carrington Road & Andalusian Way/Middleton Avenue
- Carrington Road & Doran Drive
- De Clambe Drive & Andalusian Way/Middleton Avenue
- De Clambe Drive & Doran Drive

The SIDRA analysis confirmed that the surrounding road network will operate at satisfactory *Levels of Service* in all three scenarios – i.e. 2021, 2026 & 2031 – and that the proposed development will not result in any unacceptable traffic implications in terms of road network capacity.

In terms of the geometric design layout of the vehicular access, parking and loading facilities, the proposed arrangements have been designed in accordance with the *AS2890* series. Importantly, all vehicles are able to enter and exit the site in a forward direction at all times.

In the circumstances it is therefore concluded that the proposed mixed use development is generally consistent with the approved Concept Masterplan and suitable in terms of associated traffic impact, car and bicycle parking provision and pedestrian amenity.

APPENDIX A

TRAFFIC SURVEY DATA

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.Mob.0418-239019

Client : Varga Traffic Planning
Job No/Name : 7525 CASTLE HILL Showground Rd
Day/Date : Tuesday 4th May 2021

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	337	76	15	0	5	139	**572**
0745 - 0800	341	78	24	0	4	133	**580**
0800 - 0815	392	80	20	0	7	172	**671**
0815 - 0830	342	44	30	0	4	169	**589**
0830 - 0845	382	34	20	1	3	170	**610**
0845 - 0900	413	36	31	1	2	200	**683**
0900 - 0915	269	29	25	0	2	152	**477**
0915 - 0930	313	33	15	1	4	140	**506**
Per End	**2789**	**410**	**180**	**3**	**31**	**1275**	**4688**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	4	0	0	0	0	1	**5**
0745 - 0800	2	0	0	0	0	2	**4**
0800 - 0815	2	0	0	0	0	2	**4**
0815 - 0830	3	0	1	0	0	1	**5**
0830 - 0845	3	0	0	0	1	1	**5**
0845 - 0900	1	0	1	0	0	2	**4**
0900 - 0915	1	0	0	0	0	2	**3**
0915 - 0930	4	0	0	0	0	4	**8**
Per End	**20**	**0**	**2**	**0**	**1**	**15**	**38**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	3	2	2	5	1	1	**14**
0745 - 0800	2	1	2	2	3	1	**11**
0800 - 0815	4	1	1	3	2	3	**14**
0815 - 0830	2	1	2	3	2	1	**11**
0830 - 0845	3	1	2	1	2	1	**10**
0845 - 0900	1	1	2	3	2	1	**10**
0900 - 0915	2	2	2	2	2	0	**10**
0915 - 0930	1	2	2	3	3	1	**12**
Per End	**18**	**11**	**15**	**22**	**17**	**9**	**92**

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	1412	278	89	0	20	613	**2412**
0745 - 0845	1457	236	94	1	18	644	**2450**
0800 - 0900	1529	194	101	2	16	711	**2553**
0815 - 0915	1406	143	106	2	11	691	**2359**
0830 - 0930	1377	132	91	3	11	662	**2276**
PEAK HR	**1529**	**194**	**101**	**2**	**16**	**711**	**2553**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	11	0	1	0	0	6	**18**
0745 - 0845	10	0	1	0	1	6	**18**
0800 - 0900	9	0	2	0	1	6	**18**
0815 - 0915	8	0	2	0	1	6	**17**
0830 - 0930	9	0	1	0	1	9	**20**
PEAK HR	**9**	**0**	**2**	**0**	**1**	**6**	**18**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	11	5	7	13	8	6	**50**
0745 - 0845	11	4	7	9	9	6	**46**
0800 - 0900	10	4	7	10	8	6	**45**
0815 - 0915	8	5	8	9	8	3	**41**
0830 - 0930	7	6	8	9	9	3	**42**
PEAK HR	**10**	**4**	**7**	**10**	**8**	**6**	**45**

R.O.A.R. DATA

Reliable, Original & Authentic Results

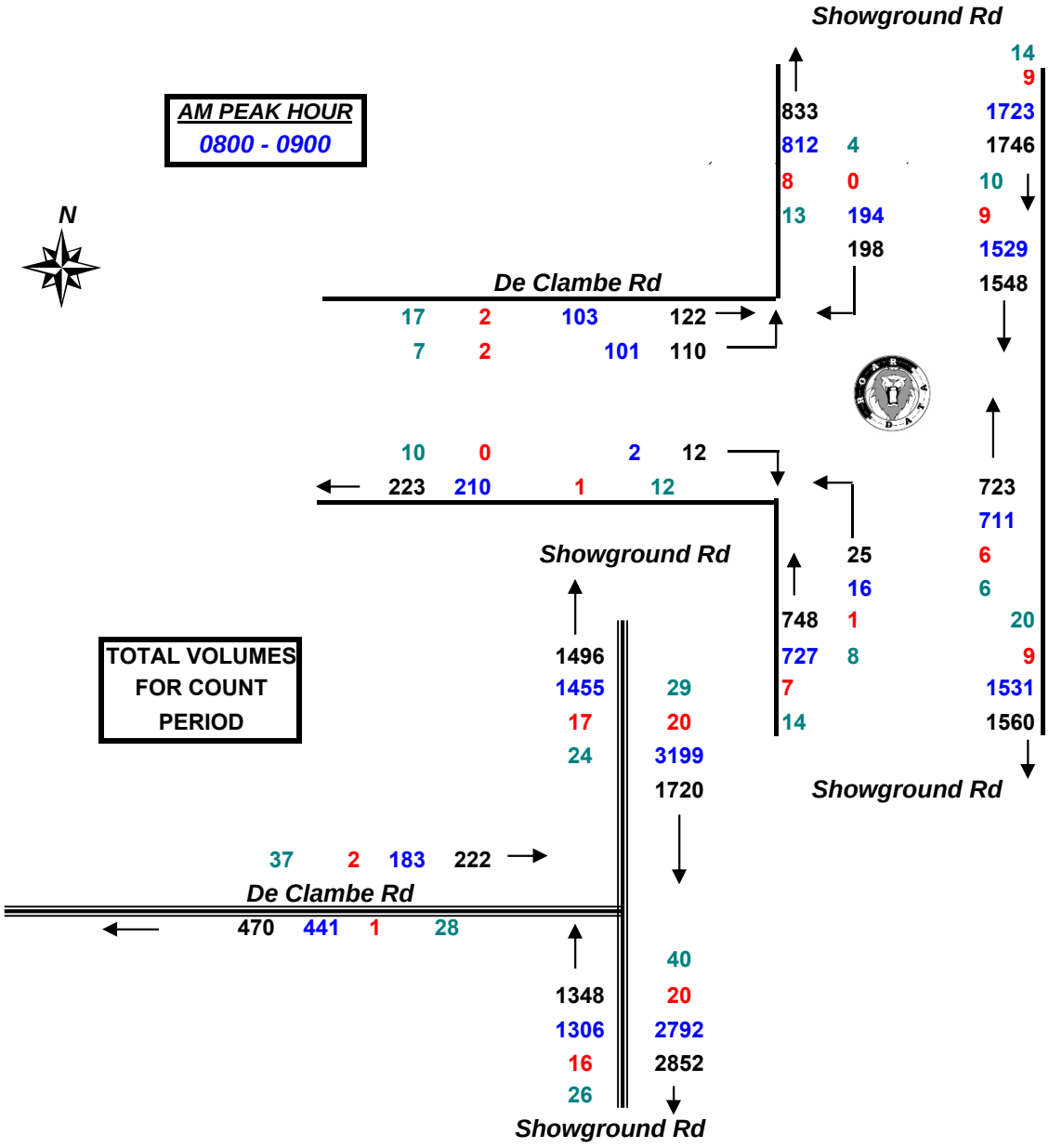
Ph.Mob.0418-239019

Client	: Varga Traffic Planning
Job No/Name	: 7525 CASTLE HILL Showground Rd
Day/Date	: Tuesday 4th May 2021

Combined	NORTH		WEST		SOUTH		
	Showgroun		De Clambe		Showgroun		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	344	78	17	5	6	141	**591**
0745 - 0800	345	79	26	2	7	136	**595**
0800 - 0815	398	81	21	3	9	177	**689**
0815 - 0830	347	45	33	3	6	171	**605**
0830 - 0845	388	35	22	2	6	172	**625**
0845 - 0900	415	37	34	4	4	203	**697**
0900 - 0915	272	31	27	2	4	154	**490**
0915 - 0930	318	35	17	4	7	145	**526**
Per End	**2827**	**421**	**197**	**25**	**49**	**1299**	**4818**

Combined	NORTH		WEST		SOUTH		
	Showgroun		De Clambe		Showgroun		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	1434	283	97	13	28	625	**2480**
0745 - 0845	1478	240	102	10	28	656	**2514**
0800 - 0900	1548	198	110	12	25	723	**2616**
0815 - 0915	1422	148	116	11	20	700	**2417**
0830 - 0930	1393	138	100	12	21	674	**2338**

PEAK HR	1548	198	110	12	25	723	2616



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.Mob.0418-239019

Client : Varga Traffic Planning
Job No/Name : 7525 CASTLE HILL Showground Rd
Day/Date : Tuesday 4th May 2021

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
1630 - 1645	240	23	41	0	3	359	**666**
1645 - 1700	227	36	41	0	4	278	**586**
1700 - 1715	240	18	47	0	1	336	**642**
1715 - 1730	196	27	57	0	3	358	**641**
1730 - 1745	183	23	62	0	4	337	**609**
1745 - 1800	200	35	79	1	9	285	**609**
1800 - 1815	204	34	62	0	8	286	**594**
1815 - 1830	169	29	64	0	8	316	**586**
Per End	**1659**	**225**	**453**	**1**	**40**	**2555**	**4933**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
1630 - 1645	2	0	0	0	0	2	**4**
1645 - 1700	2	0	0	0	0	1	**3**
1700 - 1715	1	0	0	0	0	2	**3**
1715 - 1730	0	0	0	0	0	2	**2**
1730 - 1745	1	0	0	0	0	0	**1**
1745 - 1800	1	0	0	0	0	2	**3**
1800 - 1815	0	0	0	0	0	2	**2**
1815 - 1830	1	0	0	0	0	2	**3**
Per End	**8**	**0**	**0**	**0**	**0**	**13**	**21**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
1630 - 1645	2	2	1	3	2	1	**11**
1645 - 1700	2	1	3	1	3	1	**11**
1700 - 1715	2	2	0	3	3	2	**12**
1715 - 1730	3	2	2	2	2	1	**12**
1730 - 1745	1	2	1	1	3	0	**8**
1745 - 1800	1	1	1	3	2	1	**9**
1800 - 1815	2	3	1	3	3	2	**14**
1815 - 1830	1	1	3	2	2	0	**9**
Per End	**14**	**14**	**12**	**18**	**20**	**8**	**86**

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
1630 - 1730	903	104	186	0	11	1331	**2535**
1645 - 1745	846	104	207	0	12	1309	**2478**
1700 - 1800	819	103	245	1	17	1316	**2501**
1715 - 1815	783	119	260	1	24	1266	**2453**
1730 - 1830	756	121	267	1	29	1224	**2398**
PEAK HR	**903**	**104**	**186**	**0**	**11**	**1331**	**2535**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
1630 - 1730	5	0	0	0	0	7	**12**
1645 - 1745	4	0	0	0	0	5	**9**
1700 - 1800	3	0	0	0	0	6	**9**
1715 - 1815	2	0	0	0	0	6	**8**
1730 - 1830	3	0	0	0	0	6	**9**
PEAK HR	**5**	**0**	**0**	**0**	**0**	**7**	**12**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*De Clambe*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
1630 - 1730	9	7	6	9	10	5	**46**
1645 - 1745	8	7	6	7	11	4	**43**
1700 - 1800	7	7	4	9	10	4	**41**
1715 - 1815	7	8	5	9	10	4	**43**
1730 - 1830	5	7	6	9	10	3	**40**
PEAK HR	**9**	**7**	**6**	**9**	**10**	**5**	**46**

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.Mob.0418-239019

Client : Varga Traffic Planning

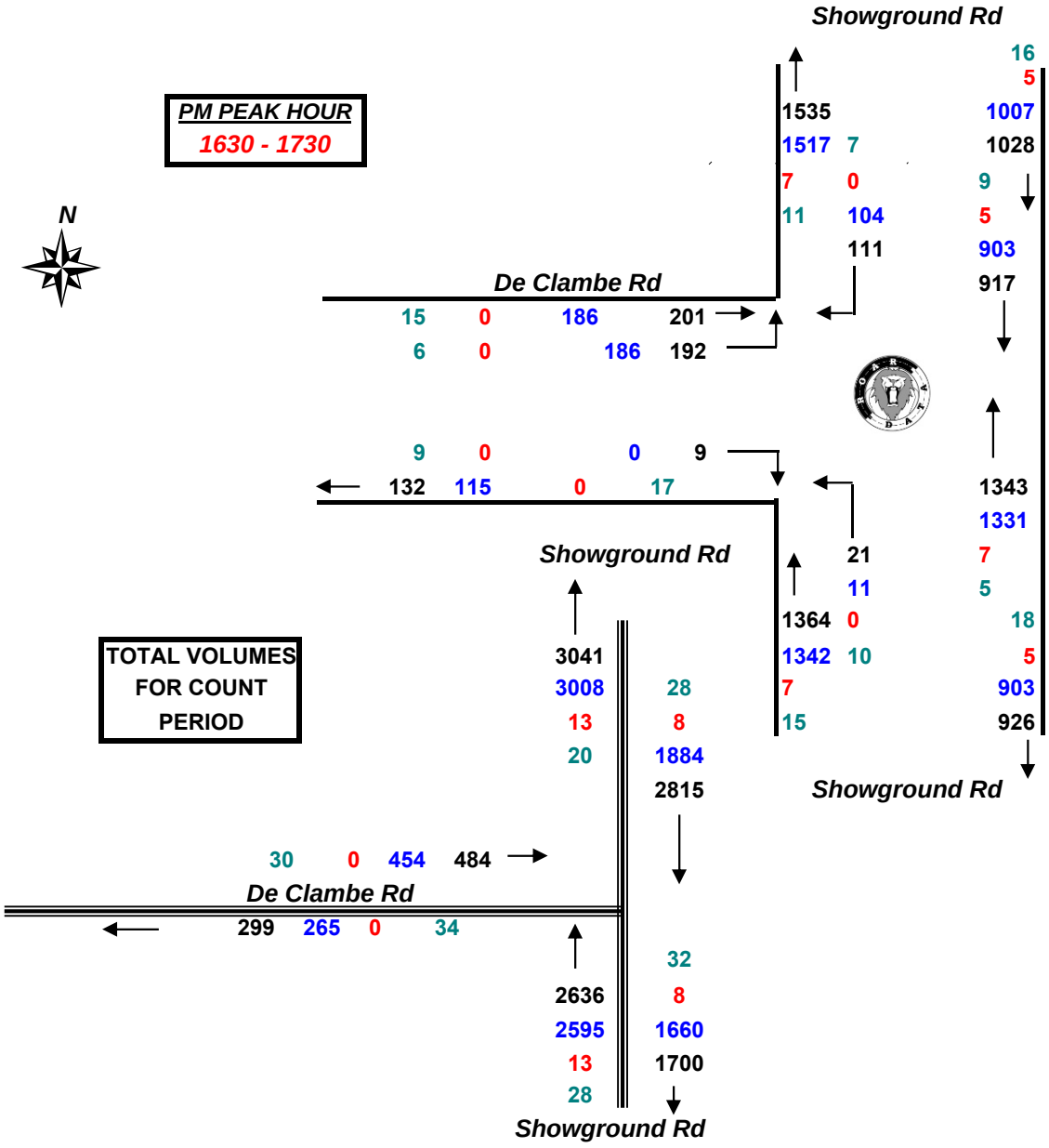
Job No/Name : 7525 CASTLE HILL Showground Rd

Day/Date : Tuesday 4th May 2021

Combined	NORTH		WEST		SOUTH		
	Showgroun		De Clambe		Showgroun		
Time Per	T	R	L	R	L	T	TOT
1630 - 1645	244	25	42	3	5	362	**681**
1645 - 1700	231	37	44	1	7	280	**600**
1700 - 1715	243	20	47	3	4	340	**657**
1715 - 1730	199	29	59	2	5	361	**655**
1730 - 1745	185	25	63	1	7	337	**618**
1745 - 1800	202	36	80	4	11	288	**621**
1800 - 1815	206	37	63	3	11	290	**610**
1815 - 1830	171	30	67	2	10	318	**598**
Per End	**1681**	**239**	**465**	**19**	**60**	**2576**	**5040**

Combined	NORTH		WEST		SOUTH		
	Showgroun		De Clambe		Showgroun		
Peak Per	T	R	L	R	L	T	TOT
1630 - 1730	917	111	192	9	21	1343	**2593**
1645 - 1745	858	111	213	7	23	1318	**2530**
1700 - 1800	829	110	249	10	27	1326	**2551**
1715 - 1815	792	127	265	10	34	1276	**2504**
1730 - 1830	764	128	273	10	39	1233	**2447**

PEAK HR	917	111	192	9	21	1343	2593



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.Mob.0418-239019

Client : Varga Traffic Planning

Job No/Name : 7525 CASTLE HILL Showground Rd

Day/Date : Tuesday 4th May 2021

Peds	NORTH	WEST	SOUTH	
	Showgrond Rd	*De Clambe Rd*	*Showground Rd*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOTAL
0730 - 0745	3	0	0	**3**
0745 - 0800	2	0	0	**2**
0800 - 0815	0	0	0	**0**
0815 - 0830	0	1	0	**1**
0830 - 0845	3	0	0	**3**
0845 - 0900	1	3	0	**4**
0900 - 0915	2	0	0	**2**
0915 - 0930	0	0	0	**0**
Period End	**11**	**4**	**0**	**15**

PEAK HOUR
0800 - 0900

Peds	NORTH	WEST	SOUTH	
	Showgrond Rd	*De Clambe Rd*	*Showground Rd*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
0730 - 0830	5	1	0	**6**
0745 - 0845	5	1	0	**6**
0800 - 0900	4	4	0	**8**
0815 - 0915	6	4	0	**10**
0830 - 0930	6	3	0	**9**
PEAK HR	**4**	**4**	**0**	**8**

Peds	NORTH	EAST	SOUTH	
	Showgrond Rd	*De Clambe Rd*	*Showground Rd*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOTAL
1630 - 1645	0	0	0	**0**
1645 - 1700	0	0	0	**0**
1700 - 1715	0	0	0	**0**
1715 - 1730	1	0	0	**1**
1730 - 1745	1	1	0	**2**
1745 - 1800	1	0	0	**1**
1800 - 1815	0	0	0	**0**
1815 - 1830	0	0	0	**0**
Period End	**3**	**1**	**0**	**4**

PEAK HOUR
1630 - 1730

Peds	NORTH	EAST	SOUTH	
	Showgrond Rd	*De Clambe Rd*	*Showground Rd*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1630 - 1730	1	0	0	**1**
1645 - 1745	2	1	0	**3**
1700 - 1800	3	1	0	**4**
1715 - 1815	3	1	0	**4**
1730 - 1830	2	1	0	**3**
PEAK HR	**1**	**0**	**0**	**1**

R.O.A.R. DATA

Reliable, Original & Authentic Results

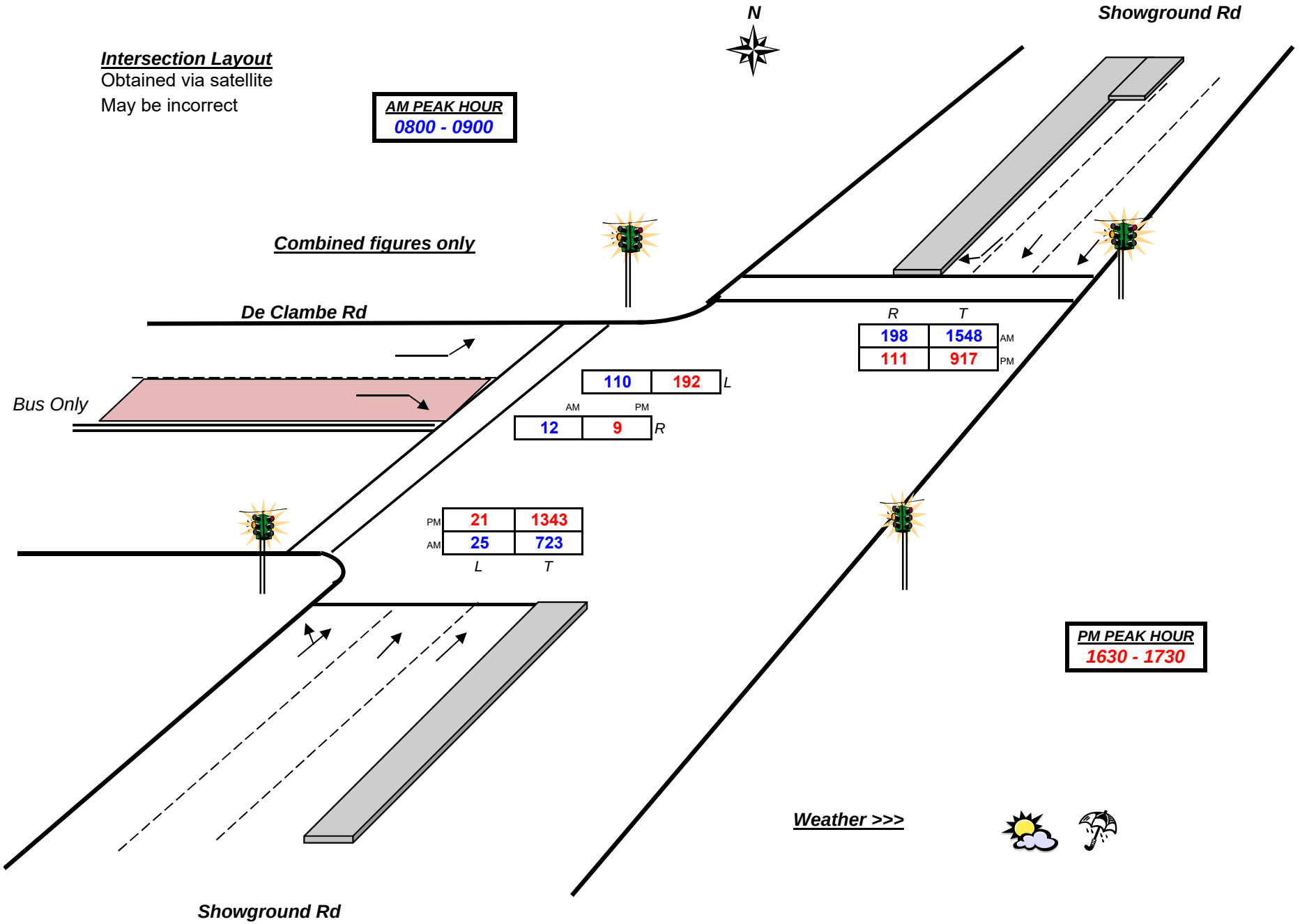
Ph.Mob.0418-239019

Client : Varga Traffic Planning
Job No/Name : 7525 CASTLE HILL Showground Rd
Day/Date : Tuesday 4th May 2021

Intersection Layout
Obtained via satellite
May be incorrect

AM PEAK HOUR
0800 - 0900

Combined figures only



PM PEAK HOUR
1630 - 1730

Weather >>>

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph. Mob. 0418 239019

Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Lights

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	2	5	9	5	36	3	17	11	6	12	95	8	**209**
0745 - 0800	4	3	7	7	51	11	34	19	11	15	158	5	**325**
0800 - 0815	1	8	5	8	75	20	37	20	14	20	156	3	**367**
0815 - 0830	3	11	1	2	67	18	38	18	11	20	171	4	**364**
0830 - 0845	1	15	5	3	95	21	38	17	36	20	181	4	**436**
0845 - 0900	1	9	1	1	61	21	50	10	18	30	203	1	**406**
0900 - 0915	2	10	7	2	62	19	41	8	7	17	169	3	**347**
0915 - 0930	0	1	5	0	63	22	25	2	7	17	132	1	**275**
Period End	**14**	**62**	**40**	**28**	**510**	**135**	**280**	**105**	**110**	**151**	**1265**	**29**	**2729**

Lights

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	10	27	22	22	229	52	126	68	42	67	580	20	**1265**
0745 - 0845	9	37	18	20	288	70	147	74	72	75	666	16	**1492**
0800 - 0900	6	43	12	14	298	80	163	65	79	90	711	12	**1573**
0815 - 0915	7	45	14	8	285	79	167	53	72	87	724	12	**1553**
0830 - 0930	4	35	18	6	281	83	154	37	68	84	685	9	**1464**
PEAK HOUR	**6**	**43**	**12**	**14**	**298**	**80**	**163**	**65**	**79**	**90**	**711**	**12**	**1573**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0745 - 0800	0	0	0	0	0	0	0	0	1	0	0	0	**1**
0800 - 0815	0	0	0	0	0	0	0	0	0	0	1	0	**1**
0815 - 0830	0	0	0	0	0	0	0	0	1	1	0	0	**2**
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0845 - 0900	0	0	0	0	0	0	0	1	0	0	0	0	**1**
0900 - 0915	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0915 - 0930	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Period End	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**1**	**1**	**0**	**5**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	0	0	0	0	0	0	0	0	2	1	1	0	**4**
0745 - 0845	0	0	0	0	0	0	0	0	2	1	1	0	**4**
0800 - 0900	0	0	0	0	0	0	0	1	1	1	1	0	**4**
0815 - 0915	0	0	0	0	0	0	0	1	1	1	0	0	**3**
0830 - 0930	0	0	0	0	0	0	0	1	0	0	0	0	**1**
PEAK HOUR	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**0**	**4**

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Client : Varga Traffic Planning

Job No/Name : 7506 CASTLE HILL Traffic Counts

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Buses	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	0	0	0	0	0	0	1	0	0	0	0	0	**1**
0745 - 0800	0	0	0	0	0	1	0	0	0	0	0	0	**1**
0800 - 0815	0	0	0	0	0	1	2	0	0	0	0	0	**3**
0815 - 0830	0	0	0	0	0	0	2	0	0	0	0	0	**2**
0830 - 0845	0	0	0	0	0	1	0	0	0	0	0	0	**1**
0845 - 0900	0	0	0	0	0	1	1	0	0	0	0	0	**2**
0900 - 0915	0	0	0	0	0	0	1	0	0	0	0	0	**1**
0915 - 0930	0	0	0	0	0	1	0	0	0	0	0	0	**1**
Period End	**0**	**0**	**0**	**0**	**0**	**5**	**7**	**0**	**0**	**0**	**0**	**0**	**12**

Buses	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	0	0	0	0	0	2	5	0	0	0	0	0	**7**
0745 - 0845	0	0	0	0	0	3	4	0	0	0	0	0	**7**
0800 - 0900	0	0	0	0	0	3	5	0	0	0	0	0	**8**
0815 - 0915	0	0	0	0	0	2	4	0	0	0	0	0	**6**
0830 - 0930	0	0	0	0	0	3	2	0	0	0	0	0	**5**
PEAK HOUR	**0**	**0**	**0**	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**0**	**0**	**8**

COMBINED	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	2	5	9	5	36	3	18	11	6	12	95	8	**210**
0745 - 0800	4	3	7	7	51	12	34	19	12	15	158	5	**327**
0800 - 0815	1	8	5	8	75	21	39	20	14	20	157	3	**371**
0815 - 0830	3	11	1	2	67	18	40	18	12	21	171	4	**368**
0830 - 0845	1	15	5	3	95	22	38	17	36	20	181	4	**437**
0845 - 0900	1	9	1	1	61	22	51	11	18	30	203	1	**409**
0900 - 0915	2	10	7	2	62	19	42	8	7	17	169	3	**348**
0915 - 0930	0	1	5	0	63	23	25	2	7	17	132	1	**276**
Period End	**14**	**62**	**40**	**28**	**510**	**140**	**287**	**106**	**112**	**152**	**1266**	**29**	**2746**

COMBINED	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	10	27	22	22	229	54	131	68	44	68	581	20	**1276**
0745 - 0845	9	37	18	20	288	73	151	74	74	76	667	16	**1503**
0800 - 0900	6	43	12	14	298	83	168	66	80	91	712	12	**1585**
0815 - 0915	7	45	14	8	285	81	171	54	73	88	724	12	**1562**
0830 - 0930	4	35	18	6	281	86	156	38	68	84	685	9	**1470**
PEAK HOUR	**6**	**43**	**12**	**14**	**298**	**83**	**168**	**66**	**80**	**91**	**712**	**12**	**1585**

R.O.A.R DATA

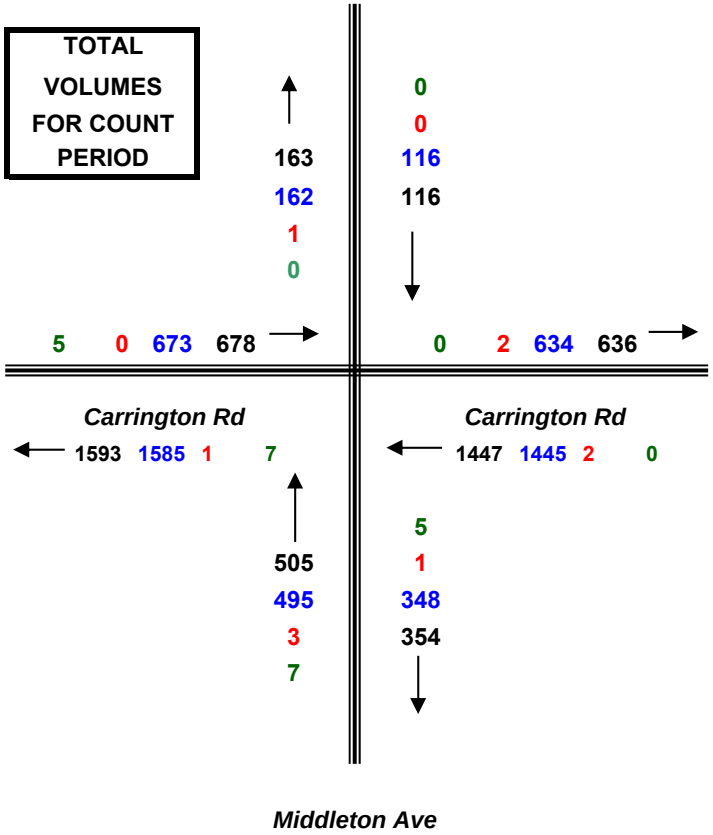
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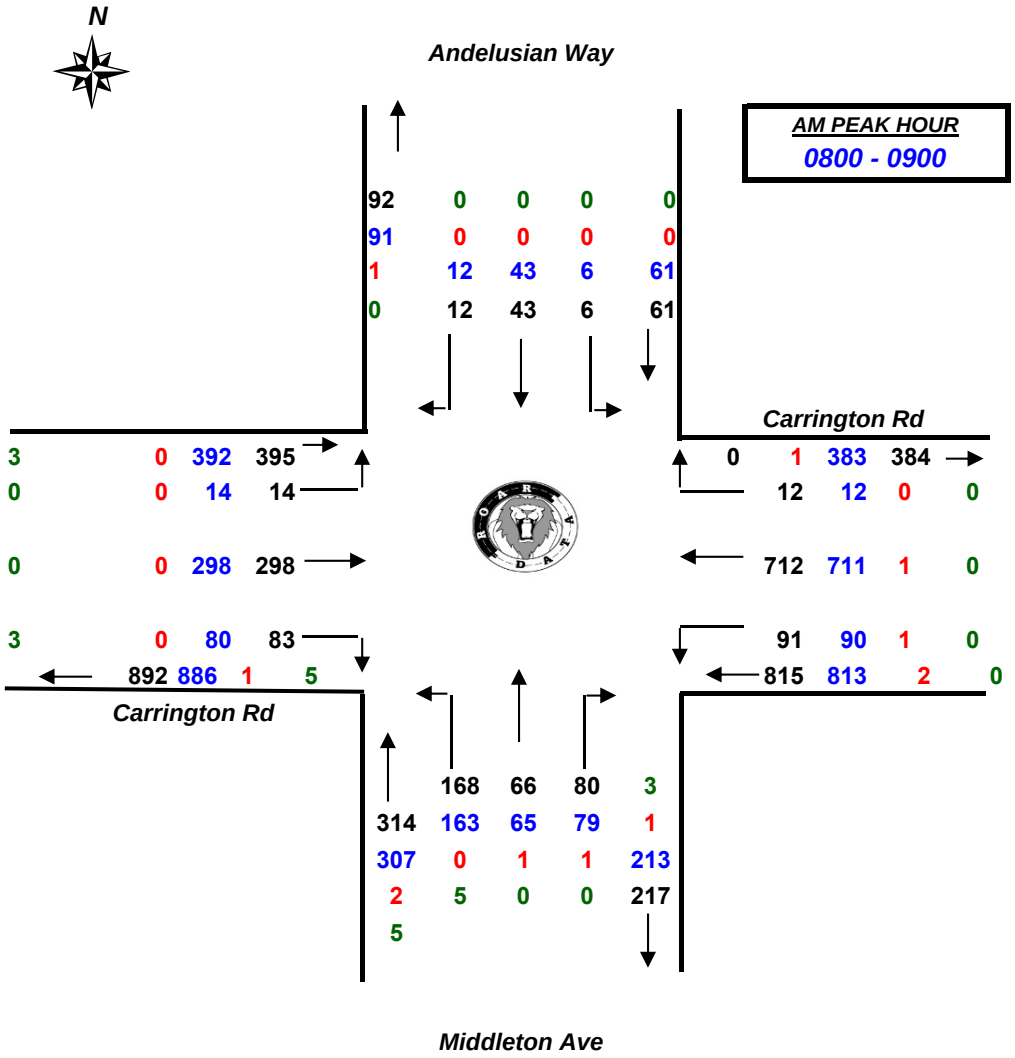
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Lights

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	0	7	5	3	124	39	27	14	18	8	111	1	**357**
1645 - 1700	1	6	2	2	151	31	32	12	8	12	103	2	**362**
1700 - 1715	3	12	5	3	145	29	24	13	13	18	90	0	**355**
1715 - 1730	1	6	7	4	120	23	30	13	23	20	127	0	**374**
1730 - 1745	0	11	6	5	127	32	24	9	24	19	113	0	**370**
1745 - 1800	3	7	8	0	124	27	28	16	27	18	171	4	**433**
1800 - 1815	5	11	3	3	121	32	23	17	17	16	145	3	**396**
1815 - 1830	1	8	10	6	125	38	22	16	21	14	111	2	**374**
Period End	**14**	**68**	**46**	**26**	**1037**	**251**	**210**	**110**	**151**	**125**	**971**	**12**	**3021**

Lights

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	5	31	19	12	540	122	113	52	62	58	431	3	**1448**
1645 - 1745	5	35	20	14	543	115	110	47	68	69	433	2	**1461**
1700 - 1800	7	36	26	12	516	111	106	51	87	75	501	4	**1532**
1715 - 1815	9	35	24	12	492	114	105	55	91	73	556	7	**1573**
1730 - 1830	9	37	27	14	497	129	97	58	89	67	540	9	**1573**
PEAK HOUR	**9**	**37**	**27**	**14**	**497**	**129**	**97**	**58**	**89**	**67**	**540**	**9**	**1573**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1730 - 1745	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1800 - 1815	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1815 - 1830	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Period End	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1645 - 1745	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1700 - 1800	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1715 - 1815	0	0	0	0	1	0	0	0	0	0	0	0	**1**
1730 - 1830	0	0	0	0	1	0	0	0	0	0	0	0	**1**
PEAK HOUR	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

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Buses

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	0	0	0	0	0	1	1	0	0	0	0	0	**2**
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1700 - 1715	0	0	0	0	0	1	1	0	0	0	0	0	**2**
1715 - 1730	0	0	0	0	0	1	0	0	0	0	0	0	**1**
1730 - 1745	0	0	0	0	0	1	0	0	0	0	0	0	**1**
1745 - 1800	0	0	0	0	0	1	1	0	0	0	0	0	**2**
1800 - 1815	0	0	0	0	0	1	1	0	0	0	0	0	**2**
1815 - 1830	0	0	0	0	0	1	0	0	0	0	0	0	**1**
Period End	**0**	**0**	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**0**	**0**	**0**	**11**

Buses

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	0	0	0	0	0	3	2	0	0	0	0	0	**5**
1645 - 1745	0	0	0	0	0	3	1	0	0	0	0	0	**4**
1700 - 1800	0	0	0	0	0	4	2	0	0	0	0	0	**6**
1715 - 1815	0	0	0	0	0	4	2	0	0	0	0	0	**6**
1730 - 1830	0	0	0	0	0	4	2	0	0	0	0	0	**6**
PEAK HOUR	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**6**

COMBINED

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	0	7	5	3	124	40	28	14	18	8	111	1	**359**
1645 - 1700	1	6	2	2	151	31	32	12	8	12	103	2	**362**
1700 - 1715	3	12	5	3	145	30	25	13	13	18	90	0	**357**
1715 - 1730	1	6	7	4	120	24	30	13	23	20	127	0	**375**
1730 - 1745	0	11	6	5	128	33	24	9	24	19	113	0	**372**
1745 - 1800	3	7	8	0	124	28	29	16	27	18	171	4	**435**
1800 - 1815	5	11	3	3	121	33	24	17	17	16	145	3	**398**
1815 - 1830	1	8	10	6	125	39	22	16	21	14	111	2	**375**
Period End	**14**	**68**	**46**	**26**	**1038**	**258**	**214**	**110**	**151**	**125**	**971**	**12**	**3033**

COMBINED

	NORTH			WEST			SOUTH			EAST			
	Andelusian Way			*Carrington Rd*			*Middleton Ave*			*Carrington Rd*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	5	31	19	12	540	125	115	52	62	58	431	3	**1453**
1645 - 1745	5	35	20	14	544	118	111	47	68	69	433	2	**1466**
1700 - 1800	7	36	26	12	517	115	108	51	87	75	501	4	**1539**
1715 - 1815	9	35	24	12	493	118	107	55	91	73	556	7	**1580**
1730 - 1830	9	37	27	14	498	133	99	58	89	67	540	9	**1580**
PEAK HOUR	**9**	**37**	**27**	**14**	**498**	**133**	**99**	**58**	**89**	**67**	**540**	**9**	**1580**

R.O.A.R DATA

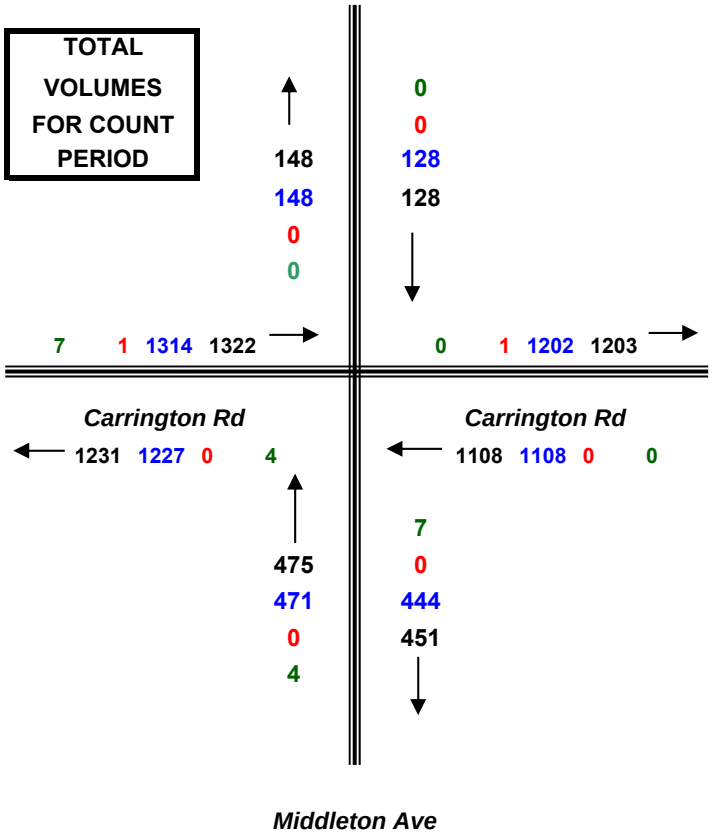
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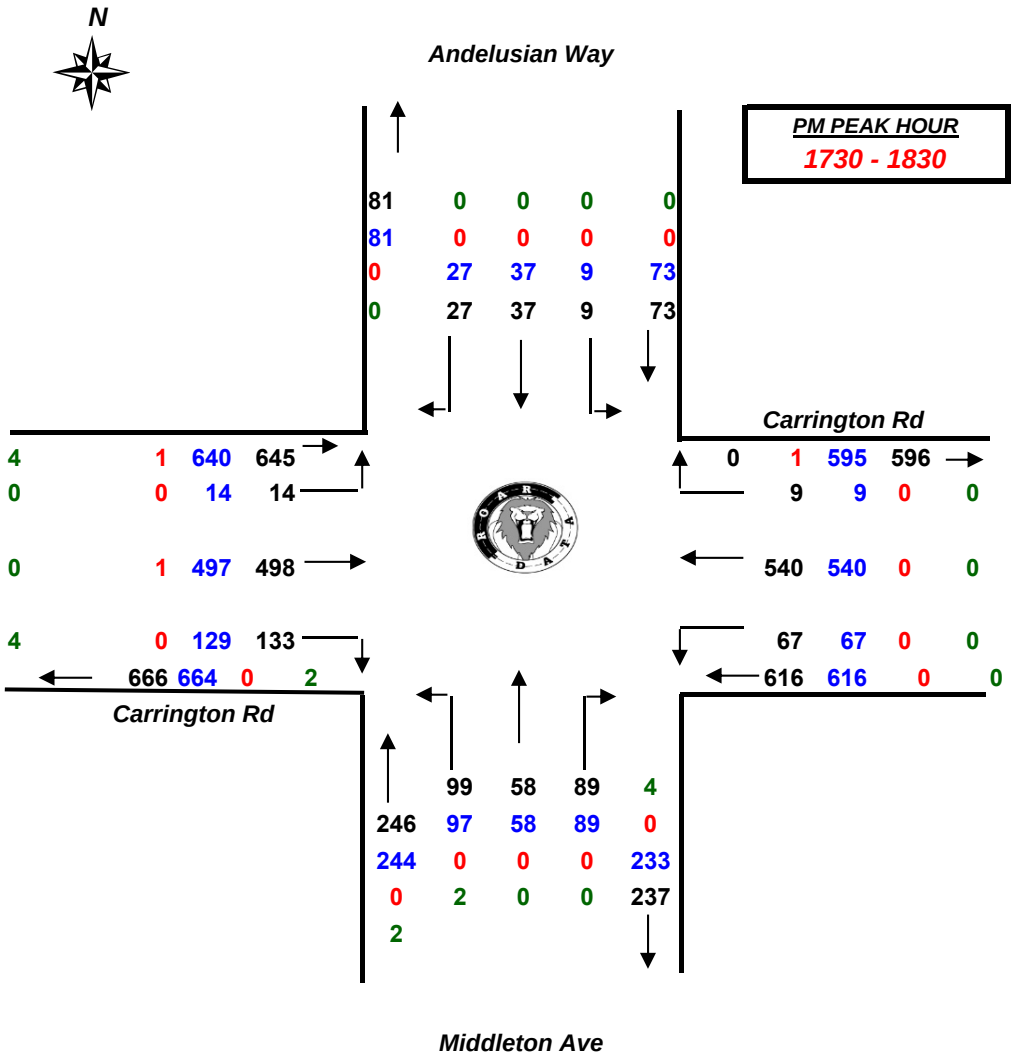
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Peds	NORTH	WEST	SOUTH	EAST	
	Andelusian Way	*Carrington Rd*	*Middleton Ave*	*Carrington Rd*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOTAL
0700 - 0715	2	4	4	2	**12**
0715 - 0730	1	4	3	4	**12**
0730 - 0745	2	4	2	4	**12**
0745 - 0800	1	6	1	2	**10**
0800 - 0815	1	11	2	1	**15**
0815 - 0830	1	4	0	2	**7**
0830 - 0845	1	5	0	2	**8**
0845 - 0900	1	4	0	3	**8**
Period End	**10**	**42**	**12**	**20**	**84**

PEAK HOUR
0800 - 0900

Peds	NORTH	WEST	SOUTH	EAST	
	Andelusian	*Carrington Rd*	*Middleton Ave*	*Carrington Rd*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
0730 - 0830	6	18	10	12	**46**
0745 - 0845	5	25	8	11	**49**
0800 - 0900	5	25	5	9	**44**
0815 - 0915	4	26	3	7	**40**
0830 - 0930	4	24	2	8	**38**
PEAK HR	**5**	**25**	**5**	**9**	**44**

Peds	NORTH	WEST	SOUTH	EAST	
	Andelusian Way	*Carrington Rd*	*Middleton Ave*	*Carrington Rd*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOTAL
1600 - 1615	2	4	4	3	**13**
1615 - 1630	1	7	0	1	**9**
1630 - 1645	0	4	1	0	**5**
1645 - 1700	2	6	1	4	**13**
1700 - 1715	0	5	0	1	**6**
1715 - 1730	4	5	3	5	**17**
1730 - 1745	0	8	1	0	**9**
1745 - 1800	1	2	0	2	**5**
Period End	**10**	**41**	**10**	**16**	**77**

PEAK HOUR
1730 - 1830

Peds	NORTH	WEST	SOUTH	EAST	
	Andelusian	*Carrington Rd*	*Middleton Ave*	*Carrington Rd*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1630 - 1730	5	21	6	8	**40**
1645 - 1745	3	22	2	6	**33**
1700 - 1800	6	20	5	10	**41**
1715 - 1815	6	24	5	10	**45**
1730 - 1830	5	20	4	8	**37**
PEAK HR	**5**	**20**	**4**	**8**	**37**

R.O.A.R. DATA

Reliable, Original & Authentic Results

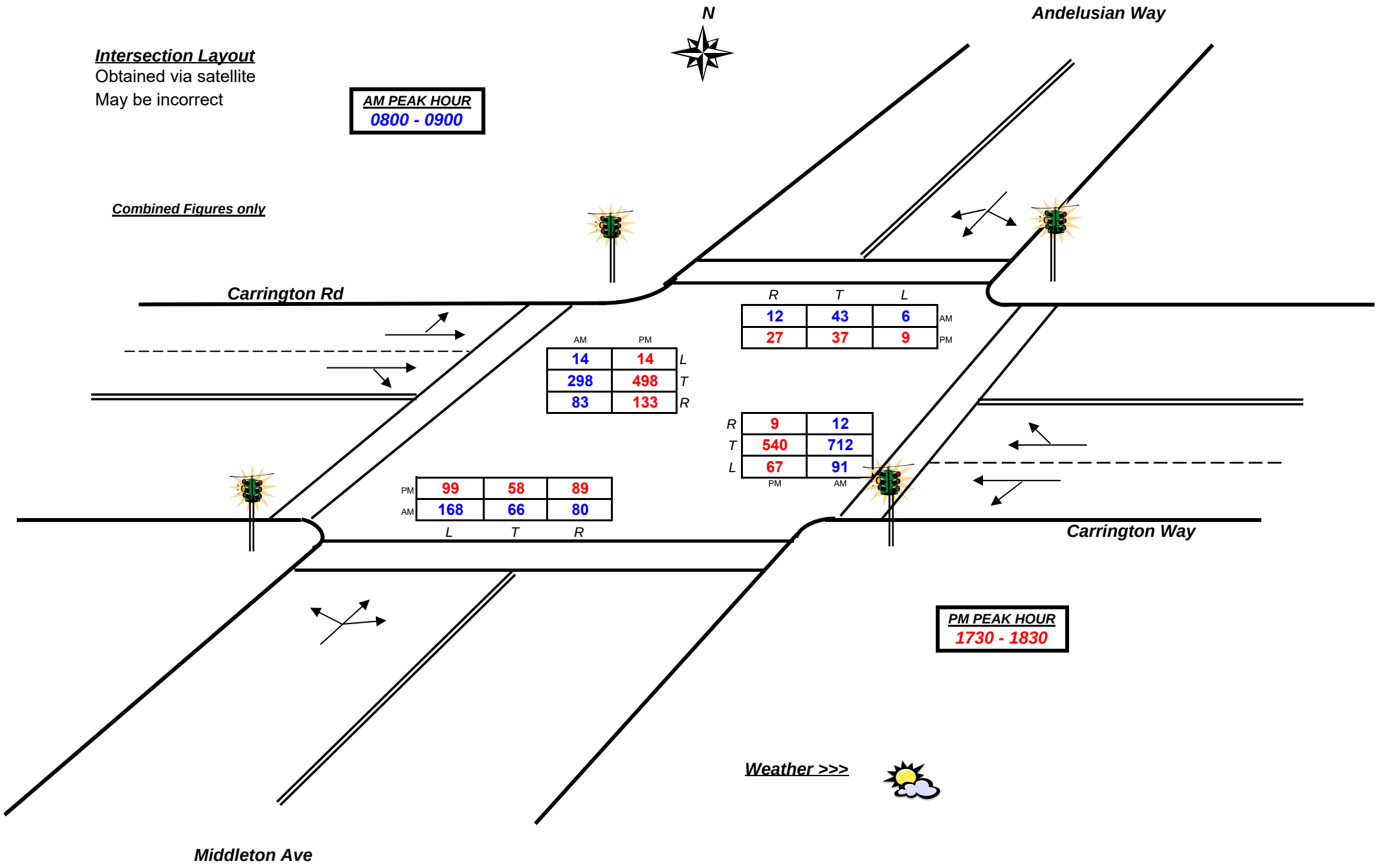
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Intersection Layout
Obtained via satellite
May be incorrect

AM PEAK HOUR
0800 - 0900

Combined Figures only



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Lights

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0745	16	2	8	8	18	63	**115**
0745 - 0800	11	1	11	8	22	49	**102**
0800 - 0815	10	1	9	16	23	35	**94**
0815 - 0830	8	4	8	10	17	21	**68**
0830 - 0845	4	3	7	13	23	22	**72**
0845 - 0900	17	1	0	10	18	19	**65**
0900 - 0915	5	7	9	5	12	19	**57**
0915 - 0930	18	3	1	2	7	10	**41**
Per End	**89**	**22**	**53**	**72**	**140**	**238**	**614**

Heavy

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0745	0	0	0	0	0	0	**0**
0745 - 0800	0	0	0	0	0	0	**0**
0800 - 0815	0	0	0	0	0	0	**0**
0815 - 0830	0	0	0	0	0	0	**0**
0830 - 0845	0	0	0	0	0	0	**0**
0845 - 0900	0	0	0	0	0	1	**1**
0900 - 0915	0	0	0	0	0	0	**0**
0915 - 0930	0	0	0	0	0	0	**0**
Per End	**0**	**0**	**0**	**0**	**0**	**1**	**1**

Bus

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0745	5	0	0	0	0	4	**9**
0745 - 0800	2	0	0	0	0	2	**4**
0800 - 0815	6	0	0	0	0	3	**9**
0815 - 0830	5	0	0	0	0	4	**9**
0830 - 0845	3	0	0	0	0	3	**6**
0845 - 0900	5	0	0	0	0	3	**8**
0900 - 0915	7	0	0	0	0	3	**10**
0915 - 0930	4	0	0	0	0	6	**10**
Per End	**37**	**0**	**0**	**0**	**0**	**28**	**65**

Lights

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0830	45	8	36	42	80	168	**379**
0745 - 0845	33	9	35	47	85	127	**336**
0800 - 0900	39	9	24	49	81	97	**299**
0815 - 0915	34	15	24	38	70	81	**262**
0830 - 0930	44	14	17	30	60	70	**235**

Heavy

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0830	0	0	0	0	0	0	**0**
0745 - 0845	0	0	0	0	0	0	**0**
0800 - 0900	0	0	0	0	0	1	**1**
0815 - 0915	0	0	0	0	0	1	**1**
0830 - 0930	0	0	0	0	0	1	**1**

Bus

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0830	18	0	0	0	0	13	**31**
0745 - 0845	16	0	0	0	0	12	**28**
0800 - 0900	19	0	0	0	0	13	**32**
0815 - 0915	20	0	0	0	0	13	**33**
0830 - 0930	19	0	0	0	0	15	**34**

PEAK HR	**45**	**8**	**36**	**42**	**80**	**168**	

PEAK HR	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PEAK HR	**18**	**0**	**0**	**0**	**0**	**13**	**31**

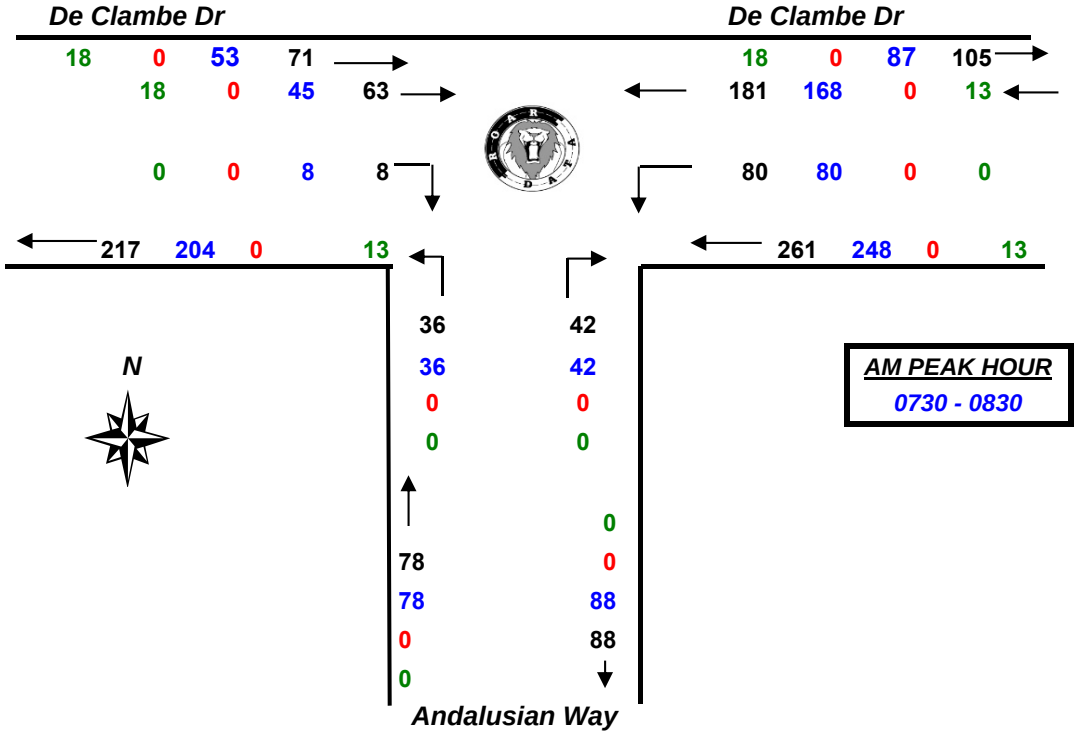
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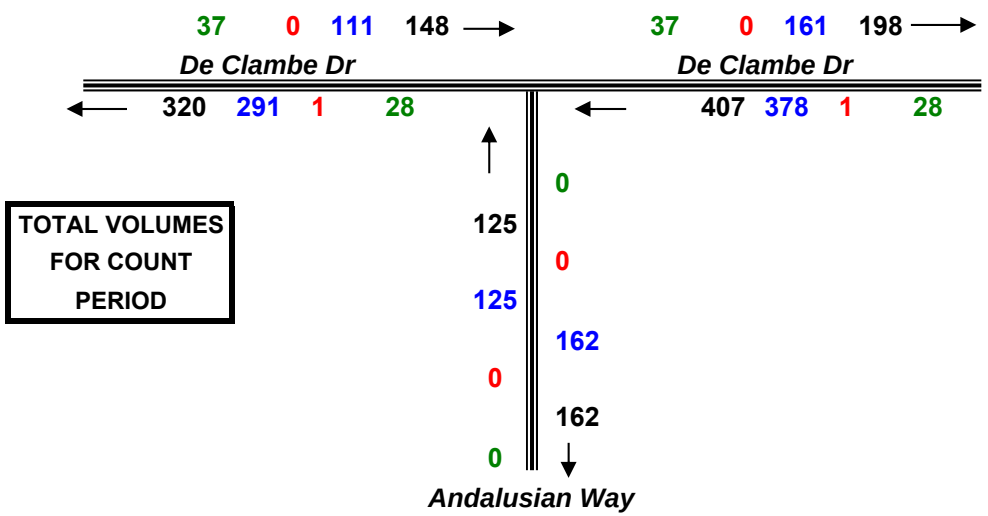
Client	: Varga Traffic Planning
Job No/Name	: 7506 CASTLE HILL Traffic Counts
Day/Date	: Thursday 25th March 2021

Combined	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0745	21	2	8	8	18	67	**124**
0745 - 0800	13	1	11	8	22	51	**106**
0800 - 0815	16	1	9	16	23	38	**103**
0815 - 0830	13	4	8	10	17	25	**77**
0830 - 0845	7	3	7	13	23	25	**78**
0845 - 0900	22	1	0	10	18	23	**74**
0900 - 0915	12	7	9	5	12	22	**67**
0915 - 0930	22	3	1	2	7	16	**51**
Per End	**126**	**22**	**53**	**72**	**140**	**267**	**680**



Combined	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
0730 - 0830	63	8	36	42	80	181	**410**
0745 - 0845	49	9	35	47	85	139	**364**
0800 - 0900	58	9	24	49	81	111	**332**
0815 - 0915	54	15	24	38	70	95	**296**
0830 - 0930	63	14	17	30	60	86	**270**

PEAK HR	63	8	36	42	80	181	410



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Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
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Lights

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	25	6	4	13	13	9	**70**
1645 - 1700	32	4	0	8	5	13	**62**
1700 - 1715	34	4	2	16	13	9	**78**
1715 - 1730	28	4	2	11	16	17	**78**
1730 - 1745	30	1	1	13	17	17	**79**
1745 - 1800	38	3	3	12	20	7	**83**
1800 - 1815	49	4	7	15	20	28	**123**
1815 - 1830	56	6	8	18	25	24	**137**
Per End	**292**	**32**	**27**	**106**	**129**	**124**	**710**

Heavy

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	0	0	0	0	0	0	**0**
1645 - 1700	0	0	0	0	0	0	**0**
1700 - 1715	0	0	0	0	0	0	**0**
1715 - 1730	0	0	0	0	0	0	**0**
1730 - 1745	0	0	0	0	0	0	**0**
1745 - 1800	0	0	0	0	0	0	**0**
1800 - 1815	0	0	0	0	0	0	**0**
1815 - 1830	0	0	0	0	0	0	**0**
Per End	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Bus

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	4	0	0	0	0	4	**8**
1645 - 1700	2	0	0	0	0	4	**6**
1700 - 1715	5	0	0	0	0	4	**9**
1715 - 1730	2	0	0	0	0	5	**7**
1730 - 1745	3	0	0	0	0	4	**7**
1745 - 1800	4	0	0	0	0	4	**8**
1800 - 1815	4	0	0	0	0	5	**9**
1815 - 1830	5	0	0	0	0	7	**12**
Per End	**29**	**0**	**0**	**0**	**0**	**37**	**66**

Lights

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	119	18	8	48	47	48	**288**
1645 - 1745	124	13	5	48	51	56	**297**
1700 - 1800	130	12	8	52	66	50	**318**
1715 - 1815	145	12	13	51	73	69	**363**
1730 - 1830	173	14	19	58	82	76	**422**
PEAK HR	**173**	**14**	**19**	**58**	**82**	**76**	**422**

Heavy

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	0	0	0	0	0	0	**0**
1645 - 1745	0	0	0	0	0	0	**0**
1700 - 1800	0	0	0	0	0	0	**0**
1715 - 1815	0	0	0	0	0	0	**0**
1730 - 1830	0	0	0	0	0	0	**0**
PEAK HR	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Bus

	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	13	0	0	0	0	17	**30**
1645 - 1745	12	0	0	0	0	17	**29**
1700 - 1800	14	0	0	0	0	17	**31**
1715 - 1815	13	0	0	0	0	18	**31**
1730 - 1830	16	0	0	0	0	20	**36**
PEAK HR	**16**	**0**	**0**	**0**	**0**	**20**	**36**

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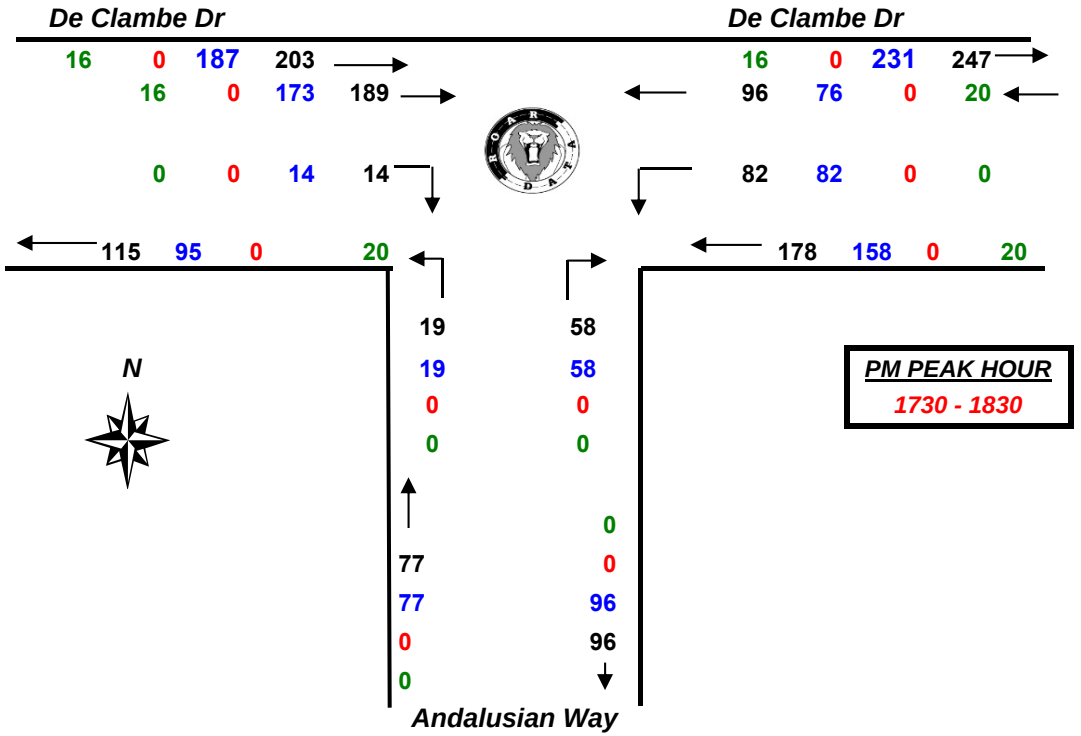
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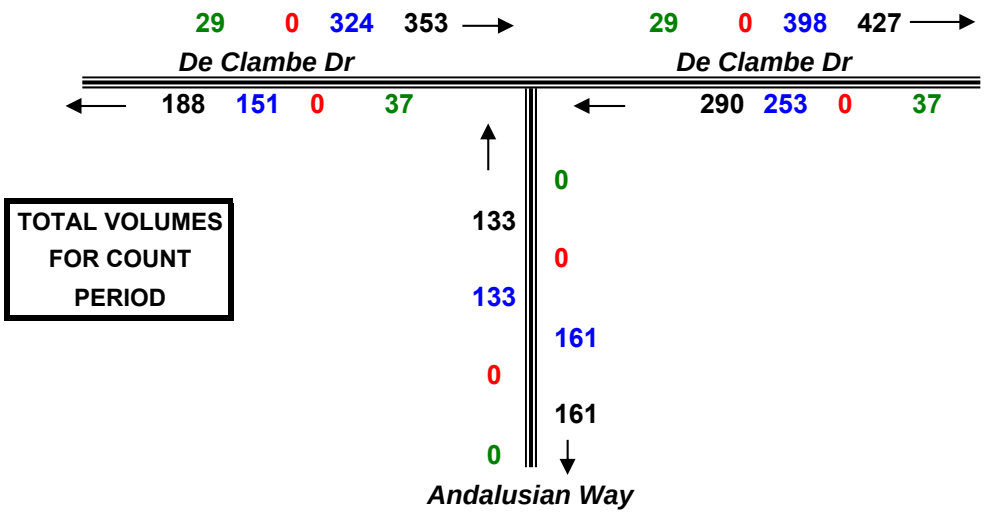
Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Combined	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	29	6	4	13	13	13	**78**
1645 - 1700	34	4	0	8	5	17	**68**
1700 - 1715	39	4	2	16	13	13	**87**
1715 - 1730	30	4	2	11	16	22	**85**
1730 - 1745	33	1	1	13	17	21	**86**
1745 - 1800	42	3	3	12	20	11	**91**
1800 - 1815	53	4	7	15	20	33	**132**
1815 - 1830	61	6	8	18	25	31	**149**
Per End	**321**	**32**	**27**	**106**	**129**	**161**	**776**

Combined	WEST		SOUTH		EAST		
	De Clambe		*Andalusian*		*De Clambe*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	132	18	8	48	47	65	**318**
1645 - 1745	136	13	5	48	51	73	**326**
1700 - 1800	144	12	8	52	66	67	**349**
1715 - 1815	158	12	13	51	73	87	**394**
1730 - 1830	189	14	19	58	82	96	**458**

PEAK HR	189	14	19	58	82	96	458





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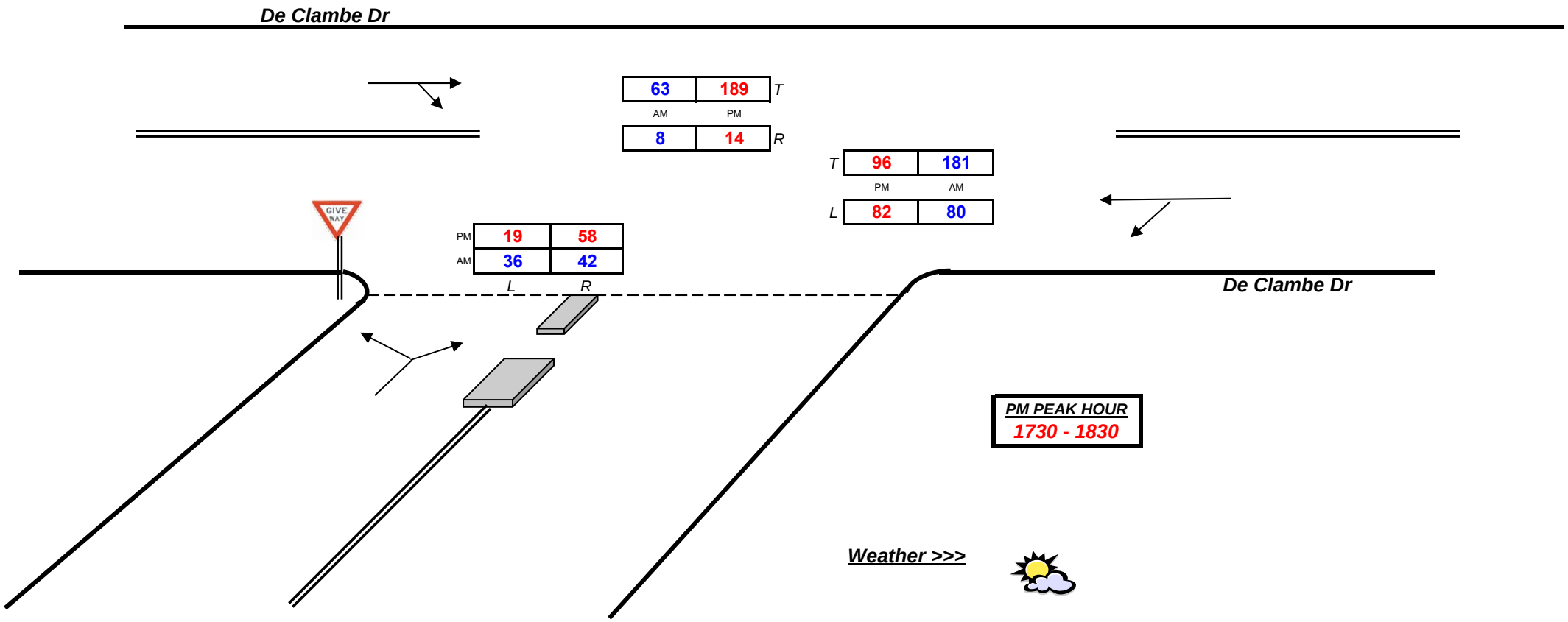
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Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Intersection Details
Obtained via satellite
May be incorrect

AM PEAK HOUR
0730 - 0830

Combined Figures only



R.O.A.R. DATA

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Client : Varga Traffic Planning

Job No/Name : 7506 CASTLE HILL Traffic Counts

Day/Date : Thursday 25th March 2021

Peds	WEST	SOUTH	EAST	
	De Cambe Dr	*Andalusian Way*	*De Cambe Dr*	
Time Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOTAL**
0730 - 0745	0	0	0	**0**
0745 - 0800	1	1	2	**4**
0800 - 0815	0	0	1	**1**
0815 - 0830	3	0	1	**4**
0830 - 0845	1	0	1	**2**
0845 - 0900	2	1	0	**3**
0900 - 0915	4	0	2	**6**
0915 - 0930	5	0	1	**6**
Period End	**16**	**2**	**8**	**26**

PEAK HOUR
0730 - 0830

Peds	WEST	SOUTH	EAST	
	De Cambe Dr	*Andalusian Way*	*De Cambe Dr*	
Peak Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
0730 - 0830	4	1	4	**9**
0745 - 0845	5	1	5	**11**
0800 - 0900	6	1	3	**10**
0815 - 0915	10	1	4	**15**
0830 - 0930	12	1	4	**17**
PEAK HR	**4**	**1**	**4**	**9**

Peds	WEST	SOUTH	EAST	
	De Cambe Dr	*Andalusian Way*	*De Cambe Dr*	
Time Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOTAL**
1630 - 1645	3	0	0	**3**
1645 - 1700	1	0	0	**1**
1700 - 1715	1	1	1	**3**
1715 - 1730	0	0	1	**1**
1730 - 1745	1	0	1	**2**
1745 - 1800	0	0	2	**2**
1800 - 1815	3	0	0	**3**
1815 - 1830	3	0	0	**3**
Period End	**12**	**1**	**5**	**18**

PEAK HOUR
1730 - 1830

Peds	WEST	SOUTH	EAST	
	De Cambe Dr	*Andalusian Way*	*De Cambe Dr*	
Peak Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
1630 - 1730	5	1	2	**8**
1645 - 1745	3	1	3	**7**
1700 - 1800	2	1	5	**8**
1715 - 1815	4	0	4	**8**
1730 - 1830	7	0	3	**10**
PEAK HR	**5**	**1**	**2**	**8**

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Job No/Name : 7506 CASTLE HILL Traffic Counts
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Lights

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	0	0	0	0	4	3	1	2	11	3	68	7	**99**
0745 - 0800	0	1	0	0	2	2	1	1	10	5	57	4	**83**
0800 - 0815	2	3	1	2	2	2	2	1	8	8	32	6	**69**
0815 - 0830	5	2	0	0	3	2	6	0	4	7	15	8	**52**
0830 - 0845	3	3	0	3	3	1	2	1	2	9	15	4	**46**
0845 - 0900	4	4	1	2	4	1	0	1	9	3	10	6	**45**
0900 - 0915	4	3	2	4	7	4	2	2	2	14	7	8	**59**
0915 - 0930	7	4	0	2	5	3	1	3	7	2	2	8	**44**
Period End	**25**	**20**	**4**	**13**	**30**	**18**	**15**	**11**	**53**	**51**	**206**	**51**	**497**

Lights

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	7	6	1	2	11	9	10	4	33	23	172	25	**303**
0745 - 0845	10	9	1	5	10	7	11	3	24	29	119	22	**250**
0800 - 0900	14	12	2	7	12	6	10	3	23	27	72	24	**212**
0815 - 0915	16	12	3	9	17	8	10	4	17	33	47	26	**202**
0830 - 0930	18	14	3	11	19	9	5	7	20	28	34	26	**194**
PEAK HOUR	**7**	**6**	**1**	**2**	**11**	**9**	**10**	**4**	**33**	**23**	**172**	**25**	**303**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0845 - 0900	0	0	0	0	0	0	0	0	0	0	1	0	**1**
0900 - 0915	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0915 - 0930	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Period End	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0745 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0800 - 0900	0	0	0	0	0	0	0	0	0	0	1	0	**1**
0815 - 0915	0	0	0	0	0	0	0	0	0	0	1	0	**1**
0830 - 0930	0	0	0	0	0	0	0	0	0	0	1	0	**1**
PEAK HOUR	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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Client : Varga Traffic Planning

Job No/Name : 7506 CASTLE HILL Traffic Counts

Day/Date : Thursday 25th March 2021

Buses

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	0	0	0	0	0	0	0	0	5	3	0	0	**8**
0745 - 0800	0	0	0	0	0	0	0	0	2	3	0	0	**5**
0800 - 0815	0	0	0	0	0	0	0	0	6	3	0	0	**9**
0815 - 0830	0	0	0	0	0	0	0	0	4	4	0	0	**8**
0830 - 0845	0	0	0	0	0	0	0	0	3	3	0	0	**6**
0845 - 0900	0	0	0	0	0	0	0	0	6	3	0	0	**9**
0900 - 0915	0	0	0	0	0	0	0	0	6	3	0	0	**9**
0915 - 0930	0	0	0	0	0	0	0	0	5	6	0	0	**11**
Period End	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**37**	**28**	**0**	**0**	**65**

Buses

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	0	0	0	0	0	0	0	0	17	13	0	0	**30**
0745 - 0845	0	0	0	0	0	0	0	0	15	13	0	0	**28**
0800 - 0900	0	0	0	0	0	0	0	0	19	13	0	0	**32**
0815 - 0915	0	0	0	0	0	0	0	0	19	13	0	0	**32**
0830 - 0930	0	0	0	0	0	0	0	0	20	15	0	0	**35**
PEAK HOUR	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**13**	**0**	**0**	**30**

COMBINED

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0745	0	0	0	0	4	3	1	2	16	6	68	7	**107**
0745 - 0800	0	1	0	0	2	2	1	1	12	8	57	4	**88**
0800 - 0815	2	3	1	2	2	2	2	1	14	11	32	6	**78**
0815 - 0830	5	2	0	0	3	2	6	0	8	11	15	8	**60**
0830 - 0845	3	3	0	3	3	1	2	1	5	12	15	4	**52**
0845 - 0900	4	4	1	2	4	1	0	1	15	6	11	6	**55**
0900 - 0915	4	3	2	4	7	4	2	2	8	17	7	8	**68**
0915 - 0930	7	4	0	2	5	3	1	3	12	8	2	8	**55**
Period End	**25**	**20**	**4**	**13**	**30**	**18**	**15**	**11**	**90**	**79**	**207**	**51**	**563**

COMBINED

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
0730 - 0830	7	6	1	2	11	9	10	4	50	36	172	25	**333**
0745 - 0845	10	9	1	5	10	7	11	3	39	42	119	22	**278**
0800 - 0900	14	12	2	7	12	6	10	3	42	40	73	24	**245**
0815 - 0915	16	12	3	9	17	8	10	4	36	46	48	26	**235**
0830 - 0930	18	14	3	11	19	9	5	7	40	43	35	26	**230**
PEAK HOUR	**7**	**6**	**1**	**2**	**11**	**9**	**10**	**4**	**50**	**36**	**172**	**25**	**333**

R.O.A.R DATA

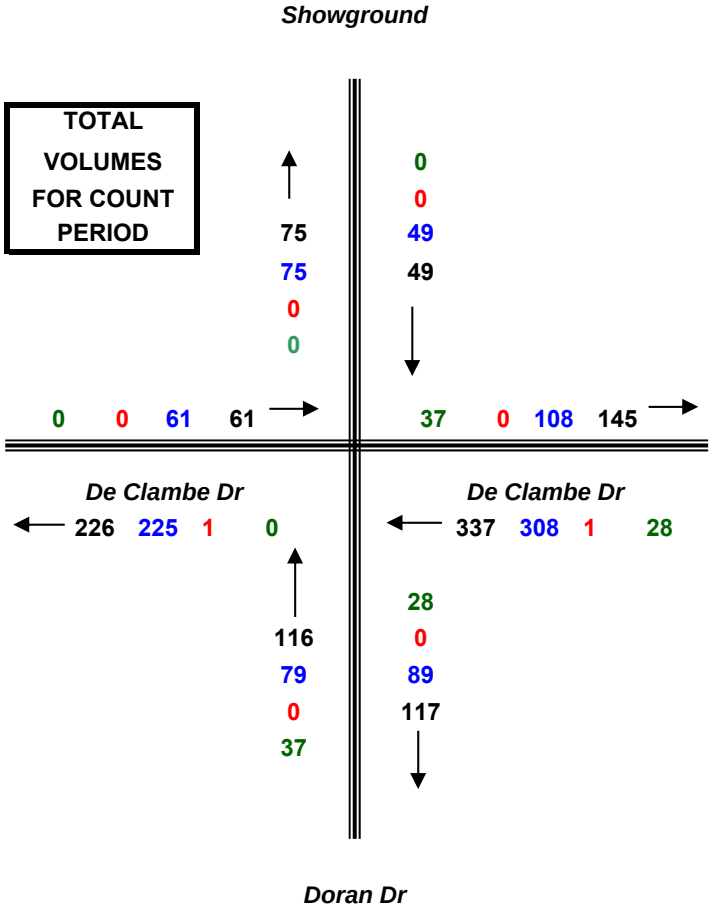
Reliable, Original & Authentic Results

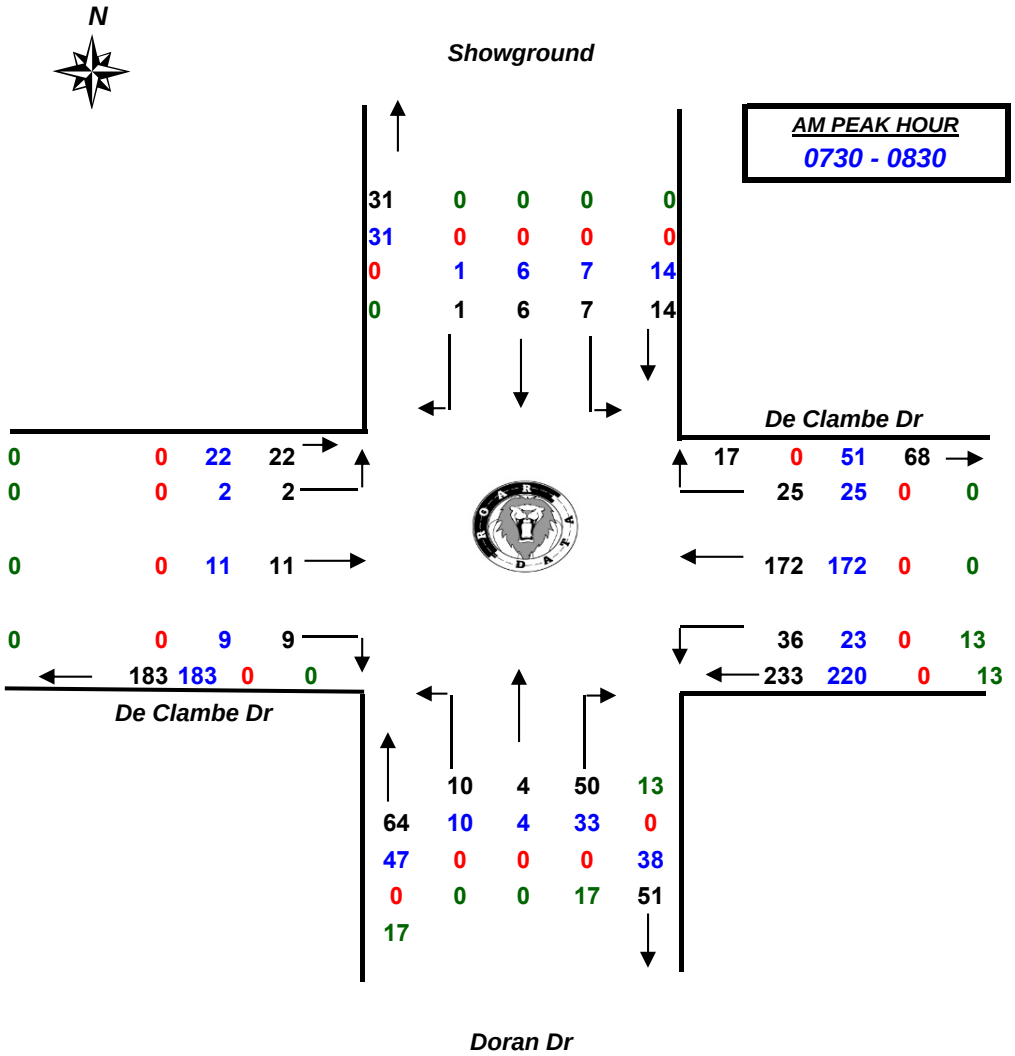
Ph. Mob. 0418 239019

Client : Varga Traffic Planning

Job No/Name : 7506 CASTLE HILL Traffic Counts

Day/Date : Thursday 25th March 2021





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Ph. Mob. 0418 239019

Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Lights

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	2	9	0	0	26	10	0	2	11	4	1	8	**73**
1645 - 1700	4	3	0	0	18	6	0	0	5	7	1	4	**48**
1700 - 1715	5	4	0	1	18	8	1	5	15	3	3	5	**68**
1715 - 1730	4	5	0	1	16	9	0	2	10	7	3	7	**64**
1730 - 1745	3	3	0	0	23	12	0	3	8	9	3	6	**70**
1745 - 1800	2	1	0	1	30	17	0	3	8	4	1	7	**74**
1800 - 1815	2	4	0	3	38	14	0	5	12	5	2	23	**108**
1815 - 1830	6	1	1	5	32	17	1	8	14	6	1	23	**115**
Period End	**28**	**30**	**1**	**11**	**201**	**93**	**2**	**28**	**83**	**45**	**15**	**83**	**620**

Lights

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	15	21	0	2	78	33	1	9	41	21	8	24	**253**
1645 - 1745	16	15	0	2	75	35	1	10	38	26	10	22	**250**
1700 - 1800	14	13	0	3	87	46	1	13	41	23	10	25	**276**
1715 - 1815	11	13	0	5	107	52	0	13	38	25	9	43	**316**
1730 - 1830	13	9	1	9	123	60	1	19	42	24	7	59	**367**
PEAK HOUR	**13**	**9**	**1**	**9**	**123**	**60**	**1**	**19**	**42**	**24**	**7**	**59**	**367**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1800 - 1815	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1815 - 1830	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Period End	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Heavies

	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1645 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1715 - 1815	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1730 - 1830	0	0	0	0	0	0	0	0	0	0	0	0	**0**
PEAK HOUR	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

R.O.A.R. DATA

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Ph. Mob. 0418 239019

Client : Varga Traffic Planning

Job No/Name : 7506 CASTLE HILL Traffic Counts

Day/Date : Thursday 25th March 2021

Buses	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	0	0	0	0	0	0	0	0	5	5	0	0	**10**
1645 - 1700	0	0	0	0	0	0	0	0	1	4	0	0	**5**
1700 - 1715	0	0	0	0	0	0	0	0	5	4	0	0	**9**
1715 - 1730	0	0	0	0	0	0	0	0	2	5	0	0	**7**
1730 - 1745	0	0	0	0	0	0	0	0	5	3	0	0	**8**
1745 - 1800	0	0	0	0	0	0	0	0	2	4	0	0	**6**
1800 - 1815	0	0	0	0	0	0	0	0	4	6	0	0	**10**
1815 - 1830	0	0	0	0	0	0	0	0	5	6	0	0	**11**
Period End	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29**	**37**	**0**	**0**	**66**

Buses	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	0	0	0	0	0	0	0	0	13	18	0	0	**31**
1645 - 1745	0	0	0	0	0	0	0	0	13	16	0	0	**29**
1700 - 1800	0	0	0	0	0	0	0	0	14	16	0	0	**30**
1715 - 1815	0	0	0	0	0	0	0	0	13	18	0	0	**31**
1730 - 1830	0	0	0	0	0	0	0	0	16	19	0	0	**35**
PEAK HOUR	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**19**	**0**	**0**	**35**

COMBINED	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Time Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1645	2	9	0	0	26	10	0	2	16	9	1	8	**83**
1645 - 1700	4	3	0	0	18	6	0	0	6	11	1	4	**53**
1700 - 1715	5	4	0	1	18	8	1	5	20	7	3	5	**77**
1715 - 1730	4	5	0	1	16	9	0	2	12	12	3	7	**71**
1730 - 1745	3	3	0	0	23	12	0	3	13	12	3	6	**78**
1745 - 1800	2	1	0	1	30	17	0	3	10	8	1	7	**80**
1800 - 1815	2	4	0	3	38	14	0	5	16	11	2	23	**118**
1815 - 1830	6	1	1	5	32	17	1	8	19	12	1	23	**126**
Period End	**28**	**30**	**1**	**11**	**201**	**93**	**2**	**28**	**112**	**82**	**15**	**83**	**686**

COMBINED	NORTH			WEST			SOUTH			EAST			
	Showground			*De Clambe Dr*			*Doran Dr*			*De Clambe Dr*			
Peak Period	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**L**	**T**	**R**	**TOT**
1630 - 1730	15	21	0	2	78	33	1	9	54	39	8	24	**284**
1645 - 1745	16	15	0	2	75	35	1	10	51	42	10	22	**279**
1700 - 1800	14	13	0	3	87	46	1	13	55	39	10	25	**306**
1715 - 1815	11	13	0	5	107	52	0	13	51	43	9	43	**347**
1730 - 1830	13	9	1	9	123	60	1	19	58	43	7	59	**402**
PEAK HOUR	**13**	**9**	**1**	**9**	**123**	**60**	**1**	**19**	**58**	**43**	**7**	**59**	**402**

R.O.A.R DATA

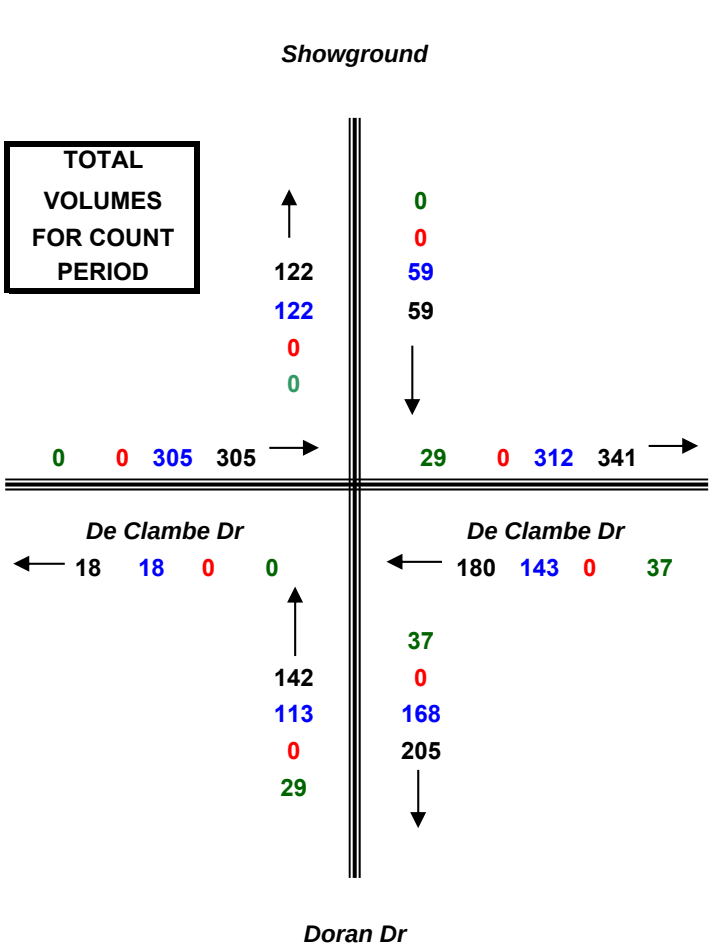
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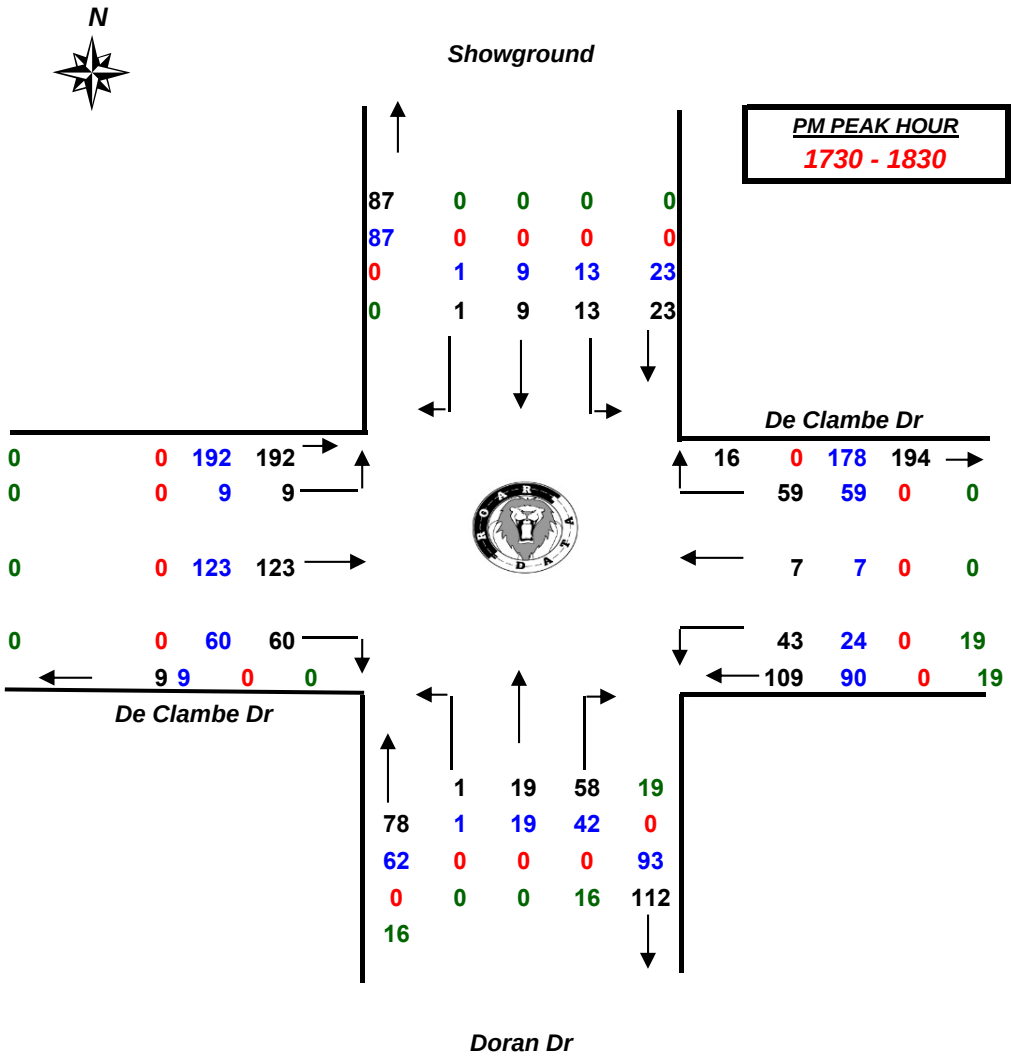
Ph. Mob. 0418 239019

Client : Varga Traffic Planning

Job No/Name : 7506 CASTLE HILL Traffic Counts

Day/Date : Thursday 25th March 2021





R.O.A.R. DATA

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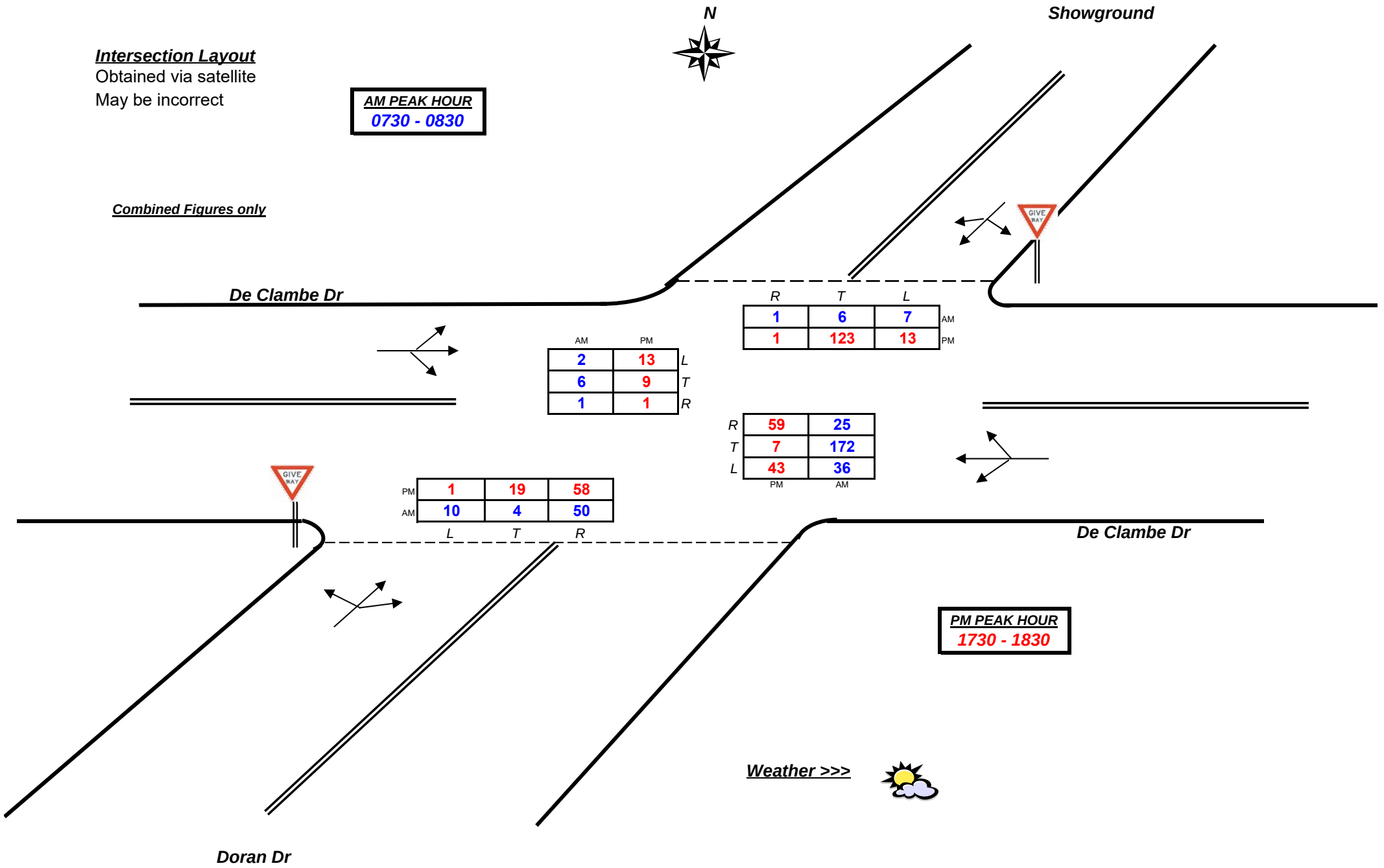
Ph. Mob. 0418 239019

Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Intersection Layout
Obtained via satellite
May be incorrect

AM PEAK HOUR
0730 - 0830

Combined Figures only



PM PEAK HOUR
1730 - 1830

Weather >>>

R.O.A.R. DATA

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Ph. Mob. 0418 239019

Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Peds	NORTH	WEST	SOUTH	EAST	
	Showground	*De Clambe Dr*	*Doran Dr*	*De Clambe Dr*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOTAL
0700 - 0715	0	1	0	1	**2**
0715 - 0730	0	0	1	2	**3**
0730 - 0745	0	0	0	0	**0**
0745 - 0800	0	0	0	2	**2**
0800 - 0815	0	0	0	0	**0**
0815 - 0830	3	3	1	3	**10**
0830 - 0845	0	0	0	4	**4**
0845 - 0900	0	1	0	2	**3**
Period End	**3**	**5**	**2**	**14**	**24**

PEAK HOUR
0730 - 0830

Peds	NORTH	WEST	SOUTH	EAST	
	Showground	*De Clambe Dr*	*Doran Dr*	*De Clambe Dr*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
0730 - 0830	0	1	1	5	**7**
0745 - 0845	0	0	1	4	**5**
0800 - 0900	3	3	1	5	**12**
0815 - 0915	3	3	1	9	**16**
0830 - 0930	3	4	1	9	**17**
PEAK HR	**0**	**1**	**1**	**5**	**7**

Peds	NORTH	WEST	SOUTH	EAST	
	Showground	*De Clambe Dr*	*Doran Dr*	*De Clambe Dr*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOTAL
1600 - 1615	0	0	2	5	**7**
1615 - 1630	0	0	0	1	**1**
1630 - 1645	0	0	0	0	**0**
1645 - 1700	0	0	0	2	**2**
1700 - 1715	0	0	0	2	**2**
1715 - 1730	0	0	0	5	**5**
1730 - 1745	0	1	0	4	**5**
1745 - 1800	1	1	1	3	**6**
Period End	**1**	**2**	**3**	**22**	**28**

PEAK HOUR
1730 - 1830

Peds	NORTH	WEST	SOUTH	EAST	
	Showground	*De Clambe Dr*	*Doran Dr*	*De Clambe Dr*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1630 - 1730	0	0	2	8	**10**
1645 - 1745	0	0	0	5	**5**
1700 - 1800	0	0	0	9	**9**
1715 - 1815	0	1	0	13	**14**
1730 - 1830	1	2	1	14	**18**
PEAK HR	**1**	**2**	**1**	**14**	**18**

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.Mob.0418-239019

Client : Varga Traffic Planning
Job No/Name : 7525 CASTLE HILL Showground Rd
Day/Date : Tuesday 4th May 2021

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	258	63	18	40	64	128	**571**
0745 - 0800	305	74	15	58	102	134	**688**
0800 - 0815	267	74	12	68	91	146	**658**
0815 - 0830	305	81	10	54	127	156	**733**
0830 - 0845	291	87	15	97	147	159	**796**
0845 - 0900	318	98	13	66	159	168	**822**
0900 - 0915	221	62	8	62	147	146	**646**
0915 - 0930	277	53	12	51	72	117	**582**
Per End	**2242**	**592**	**103**	**496**	**909**	**1154**	**5496**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	3	0	0	0	0	2	**5**
0745 - 0800	2	1	0	0	2	2	**7**
0800 - 0815	1	0	0	0	0	1	**2**
0815 - 0830	3	0	0	0	0	1	**4**
0830 - 0845	3	0	0	0	1	2	**6**
0845 - 0900	1	0	1	0	0	1	**3**
0900 - 0915	2	1	0	0	0	3	**6**
0915 - 0930	3	1	0	1	0	4	**9**
Per End	**18**	**3**	**1**	**1**	**3**	**16**	**42**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	7	0	0	0	1	2	**10**
0745 - 0800	4	0	0	0	0	4	**8**
0800 - 0815	8	0	0	1	0	4	**13**
0815 - 0830	1	1	0	0	0	4	**6**
0830 - 0845	7	0	0	1	0	3	**11**
0845 - 0900	3	0	0	0	0	3	**6**
0900 - 0915	6	0	0	0	1	2	**9**
0915 - 0930	3	0	0	0	0	4	**7**
Per End	**39**	**1**	**0**	**2**	**2**	**26**	**70**

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	1135	292	55	220	384	564	**2650**
0745 - 0845	1168	316	52	277	467	595	**2875**
0800 - 0900	1181	340	50	285	524	629	**3009**
0815 - 0915	1135	328	46	279	580	629	**2997**
0830 - 0930	1107	300	48	276	525	590	**2846**
PEAK HR	**1181**	**340**	**50**	**285**	**524**	**629**	**3009**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	9	1	0	0	2	6	**18**
0745 - 0845	9	1	0	0	3	6	**19**
0800 - 0900	8	0	1	0	1	5	**15**
0815 - 0915	9	1	1	0	1	7	**19**
0830 - 0930	9	2	1	1	1	10	**24**
PEAK HR	**8**	**0**	**1**	**0**	**1**	**5**	**15**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	20	1	0	1	1	14	**37**
0745 - 0845	20	1	0	2	0	15	**38**
0800 - 0900	19	1	0	2	0	14	**36**
0815 - 0915	17	1	0	1	1	12	**32**
0830 - 0930	19	0	0	1	1	12	**33**
PEAK HR	**19**	**1**	**0**	**2**	**0**	**14**	**36**

R.O.A.R. DATA

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Client : Varga Traffic Planning

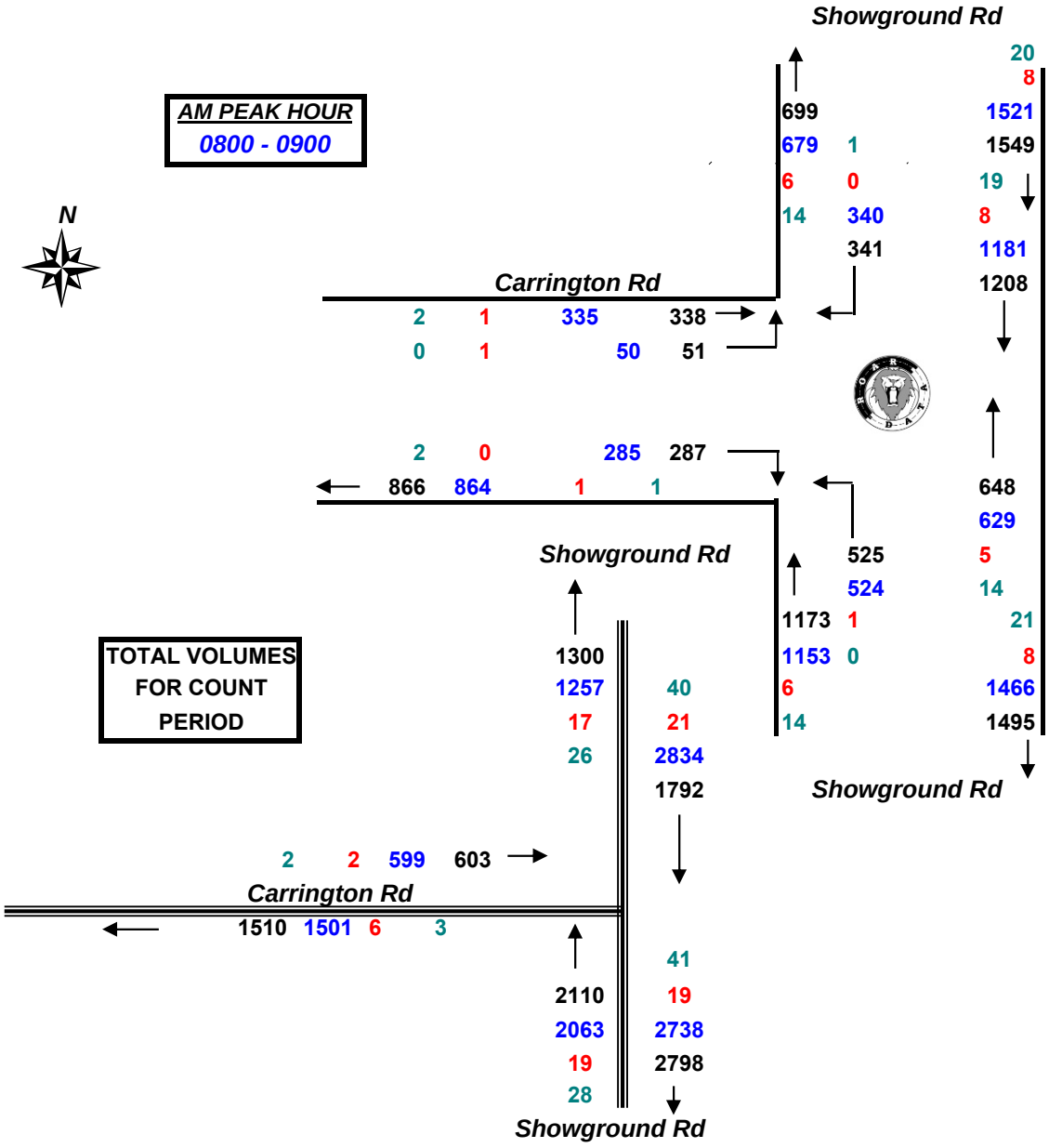
Job No/Name : 7525 CASTLE HILL Showground Rd

Day/Date : Tuesday 4th May 2021

Combined	NORTH		WEST		SOUTH		
	Showgroun		Carrington		Showgroun		
Time Per	T	R	L	R	L	T	TOT
0730 - 0745	268	63	18	40	65	132	**586**
0745 - 0800	311	75	15	58	104	140	**703**
0800 - 0815	276	74	12	69	91	151	**673**
0815 - 0830	309	82	10	54	127	161	**743**
0830 - 0845	301	87	15	98	148	164	**813**
0845 - 0900	322	98	14	66	159	172	**831**
0900 - 0915	229	63	8	62	148	151	**661**
0915 - 0930	283	54	12	52	72	125	**598**
Per End	**2299**	**596**	**104**	**499**	**914**	**1196**	**5608**

Combined	NORTH		WEST		SOUTH		
	Showgroun		Carrington		Showgroun		
Peak Per	T	R	L	R	L	T	TOT
0730 - 0830	1164	294	55	221	387	584	**2705**
0745 - 0845	1197	318	52	279	470	616	**2932**
0800 - 0900	1208	341	51	287	525	648	**3060**
0815 - 0915	1161	330	47	280	582	648	**3048**
0830 - 0930	1135	302	49	278	527	612	**2903**

PEAK HR	1208	341	51	287	525	648	3060



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.Mob.0418-239019

Client : Varga Traffic Planning
Job No/Name : 7525 CASTLE HILL Showground Rd
Day/Date : Tuesday 4th May 2021

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	193	43	29	117	90	315	**787**
1645 - 1700	190	39	24	100	96	258	**707**
1700 - 1715	205	35	48	141	108	267	**804**
1715 - 1730	153	32	47	134	108	279	**753**
1730 - 1745	157	41	41	128	106	310	**783**
1745 - 1800	148	54	44	128	105	250	**729**
1800 - 1815	155	47	47	129	103	243	**724**
1815 - 1830	135	29	51	116	95	247	**673**
Per End	**1336**	**320**	**331**	**993**	**811**	**2169**	**5960**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	2	0	0	0	0	2	**4**
1645 - 1700	2	0	0	0	0	1	**3**
1700 - 1715	1	0	0	0	0	2	**3**
1715 - 1730	0	0	0	0	0	2	**2**
1730 - 1745	1	0	0	0	0	0	**1**
1745 - 1800	1	0	0	0	0	2	**3**
1800 - 1815	0	0	0	0	0	2	**2**
1815 - 1830	1	0	0	0	0	2	**3**
Per End	**8**	**0**	**0**	**0**	**0**	**13**	**21**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	6	0	0	0	0	4	**10**
1645 - 1700	3	0	0	0	0	3	**6**
1700 - 1715	4	0	0	0	0	6	**10**
1715 - 1730	6	0	0	0	0	3	**9**
1730 - 1745	2	0	0	0	0	3	**5**
1745 - 1800	3	0	0	0	0	3	**6**
1800 - 1815	6	0	0	0	0	5	**11**
1815 - 1830	3	0	0	0	0	2	**5**
Per End	**33**	**0**	**0**	**0**	**0**	**29**	**62**

Lights

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	741	149	148	492	402	1119	**3051**
1645 - 1745	705	147	160	503	418	1114	**3047**
1700 - 1800	663	162	180	531	427	1106	**3069**
1715 - 1815	613	174	179	519	422	1082	**2989**
1730 - 1830	595	171	183	501	409	1050	**2909**
PEAK HR	1626	396	429	1238	1009	2659	**7357**

Heavies

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	5	0	0	0	0	7	**12**
1645 - 1745	4	0	0	0	0	5	**9**
1700 - 1800	3	0	0	0	0	6	**9**
1715 - 1815	2	0	0	0	0	6	**8**
1730 - 1830	3	0	0	0	0	6	**9**
PEAK HR	**3**	**0**	**0**	**0**	**0**	**6**	**9**

Buses

	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	19	0	0	0	0	16	**35**
1645 - 1745	15	0	0	0	0	15	**30**
1700 - 1800	15	0	0	0	0	15	**30**
1715 - 1815	17	0	0	0	0	14	**31**
1730 - 1830	14	0	0	0	0	13	**27**
PEAK HR	**15**	**0**	**0**	**0**	**0**	**15**	**30**

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Client : Varga Traffic Planning

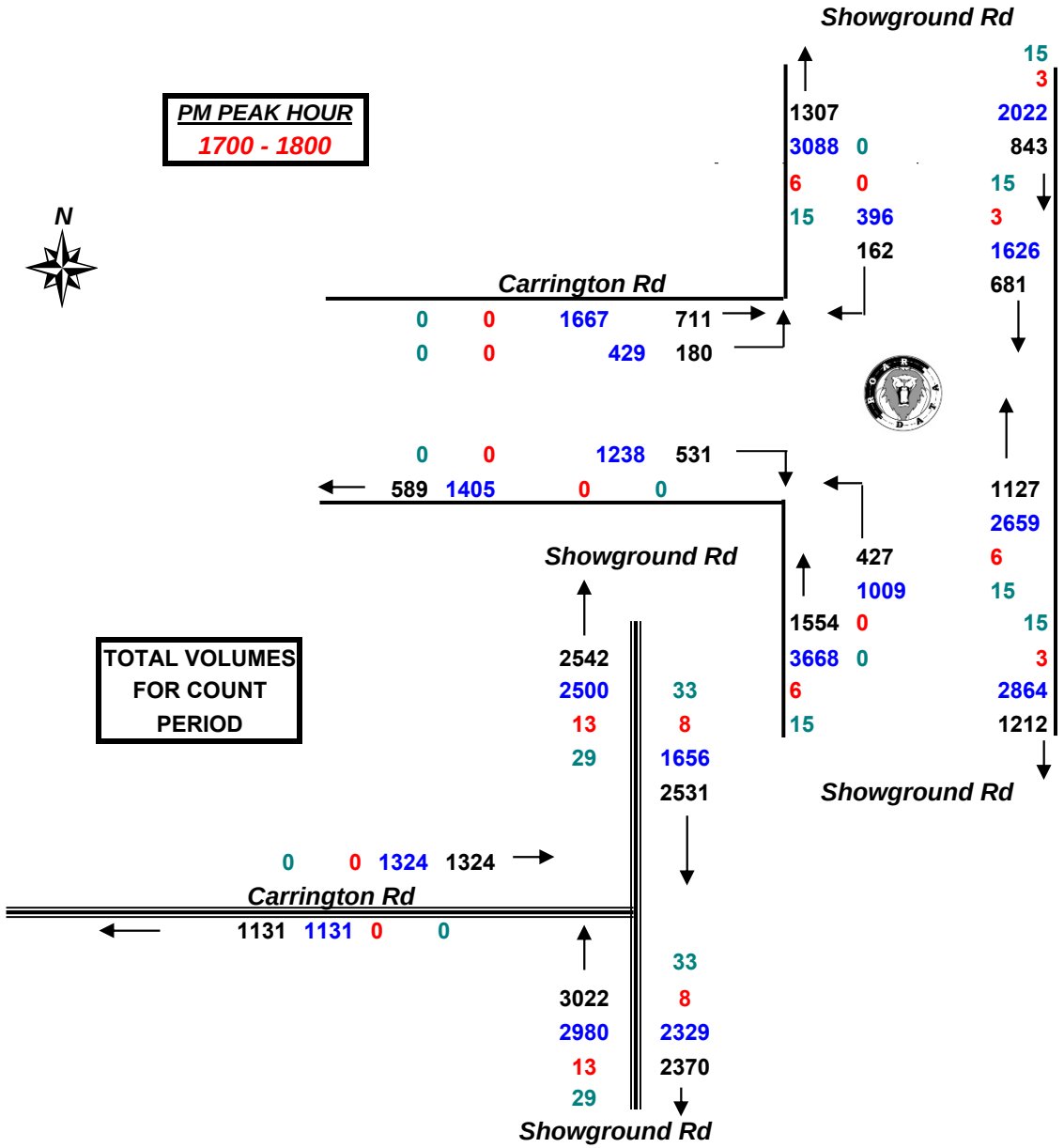
Job No/Name : 7525 CASTLE HILL Showground Rd

Day/Date : Tuesday 4th May 2021

Combined	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1645	201	43	29	117	90	321	**801**
1645 - 1700	195	39	24	100	96	262	**716**
1700 - 1715	210	35	48	141	108	275	**817**
1715 - 1730	159	32	47	134	108	284	**764**
1730 - 1745	160	41	41	128	106	313	**789**
1745 - 1800	152	54	44	128	105	255	**738**
1800 - 1815	161	47	47	129	103	250	**737**
1815 - 1830	139	29	51	116	95	251	**681**
Per End	**1377**	**320**	**331**	**993**	**811**	**2211**	**6043**

Combined	NORTH		WEST		SOUTH		
	Showgroun		*Carrington*		*Showgroun*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOT**
1630 - 1730	765	149	148	492	402	1142	**3098**
1645 - 1745	724	147	160	503	418	1134	**3086**
1700 - 1800	681	162	180	531	427	1127	**3108**
1715 - 1815	632	174	179	519	422	1102	**3028**
1730 - 1830	612	171	183	501	409	1069	**2945**

PEAK HR	681	162	180	531	427	1127	3108



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.Mob.0418-239019

Client : Varga Traffic Planning

Job No/Name : 7525 CASTLE HILL Showground Rd

Day/Date : Tuesday 4th May 2021

Peds	NORTH	WEST	SOUTH	
	Shoeground Rd	*Carrington Rd*	*Showground Rd*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	**TOTAL**
0730 - 0745	1	1	0	**2**
0745 - 0800	0	0	0	**0**
0800 - 0815	2	2	0	**4**
0815 - 0830	1	1	0	**2**
0830 - 0845	0	0	0	**0**
0845 - 0900	1	1	0	**2**
0900 - 0915	1	2	0	**3**
0915 - 0930	1	1	0	**2**
Period End	**7**	**8**	**0**	**15**

PEAK HOUR
0800 - 0900

Peds	NORTH	WEST	SOUTH	
	Shoeground Rd	*Carrington Rd*	*Showground Rd*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	**TOT**
0730 - 0830	4	4	0	**8**
0745 - 0845	3	3	0	**6**
0800 - 0900	4	4	0	**8**
0815 - 0915	3	4	0	**7**
0830 - 0930	3	4	0	**7**
PEAK HR	**4**	**4**	**0**	**8**

Peds	NORTH	WEST	SOUTH	
	Shoeground Rd	*Carrington Rd*	*Showground Rd*	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	**TOTAL**
1630 - 1645	0	0	0	**0**
1645 - 1700	1	1	0	**2**
1700 - 1715	0	0	0	**0**
1715 - 1730	3	3	0	**6**
1730 - 1745	0	1	0	**1**
1745 - 1800	0	0	0	**0**
1800 - 1815	0	0	0	**0**
1815 - 1830	0	0	0	**0**
Period End	**4**	**5**	**0**	**9**

PEAK HOUR
1700 - 1800

Peds	NORTH	WEST	SOUTH	
	Shoeground Rd	*Carrington Rd*	*Showground Rd*	
Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	**TOT**
1630 - 1730	4	4	0	**8**
1645 - 1745	4	5	0	**9**
1700 - 1800	3	4	0	**7**
1715 - 1815	3	4	0	**7**
1730 - 1830	0	1	0	**1**
PEAK HR	**3**	**4**	**0**	**7**

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Reliable, Original & Authentic Results

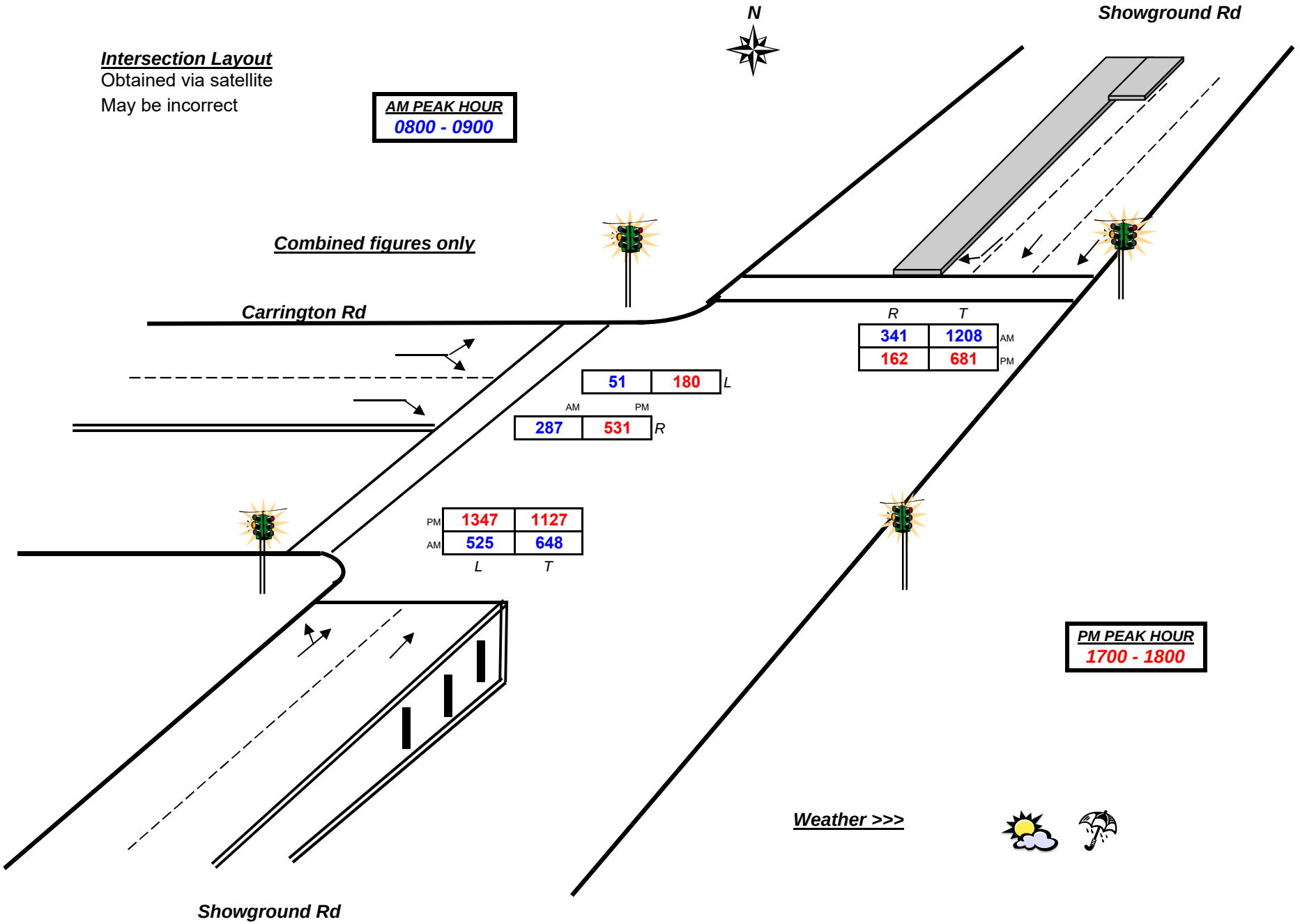
Ph.Mob.0418-239019

Client : Varga Traffic Planning
Job No/Name : 7525 CASTLE HILL Showground Rd
Day/Date : Tuesday 4th May 2021

Intersection Layout
Obtained via satellite
May be incorrect

AM PEAK HOUR
0800 - 0900

Combined figures only



PM PEAK HOUR
1700 - 1800

Weather >>>

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph. Mob. 0418 239019

Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Lights

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Time Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
0730 - 0745	31	21	18	3	1	106	**180**
0745 - 0800	64	16	28	8	1	218	**335**
0800 - 0815	85	15	25	8	2	200	**335**
0815 - 0830	84	7	14	2	1	194	**302**
0830 - 0845	109	6	16	8	6	229	**374**
0845 - 0900	76	8	17	4	4	263	**372**
0900 - 0915	80	10	19	6	1	225	**341**
0915 - 0930	92	7	8	8	0	180	**295**
Per End	**621**	**90**	**145**	**47**	**16**	**1615**	**2534**

Heavies

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Time Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
0730 - 0745	0	0	0	0	0	0	**0**
0745 - 0800	0	0	0	0	0	0	**0**
0800 - 0815	0	0	0	0	0	1	**1**
0815 - 0830	0	0	0	0	0	0	**0**
0830 - 0845	0	0	0	0	0	0	**0**
0845 - 0900	0	0	0	0	0	0	**0**
0900 - 0915	0	0	0	0	0	0	**0**
0915 - 0930	0	0	0	0	0	0	**0**
Per End	**0**	**0**	**0**	**0**	**0**	**1**	**1**

Buses

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Time Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
0730 - 0745	0	3	3	1	1	0	**180**
0745 - 0800	0	4	1	0	1	1	**335**
0800 - 0815	0	4	4	1	0	0	**336**
0815 - 0830	1	2	1	0	2	0	**302**
0830 - 0845	0	2	2	1	0	0	**374**
0845 - 0900	0	6	4	0	1	0	**372**
0900 - 0915	0	5	4	0	0	0	**341**
0915 - 0930	0	4	3	1	1	0	**295**
Per End	**1**	**30**	**22**	**4**	**6**	**1**	**2535**

Lights

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Peak Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
0730 - 0830	264	59	85	21	5	718	**1152**
0745 - 0845	342	44	83	26	10	841	**1346**
0800 - 0900	354	36	72	22	13	886	**1383**
0815 - 0915	349	31	66	20	12	911	**1389**
0830 - 0930	357	31	60	26	11	897	**1382**
PEAK HR	**349**	**31**	**66**	**20**	**12**	**911**	**1389**

Heavies

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Peak Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
0730 - 0830	0	0	0	0	0	1	**1**
0745 - 0845	0	0	0	0	0	1	**1**
0800 - 0900	0	0	0	0	0	1	**1**
0815 - 0915	0	0	0	0	0	0	**0**
0830 - 0930	0	0	0	0	0	0	**0**
PEAK HR	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Buses

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Peak Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
0730 - 0830	1	13	9	2	4	1	**30**
0745 - 0845	1	12	8	2	3	1	**27**
0800 - 0900	1	14	11	2	3	0	**31**
0815 - 0915	1	15	11	1	3	0	**31**
0830 - 0930	0	17	13	2	2	0	**34**
PEAK HR	**1**	**15**	**11**	**1**	**3**	**0**	**31**

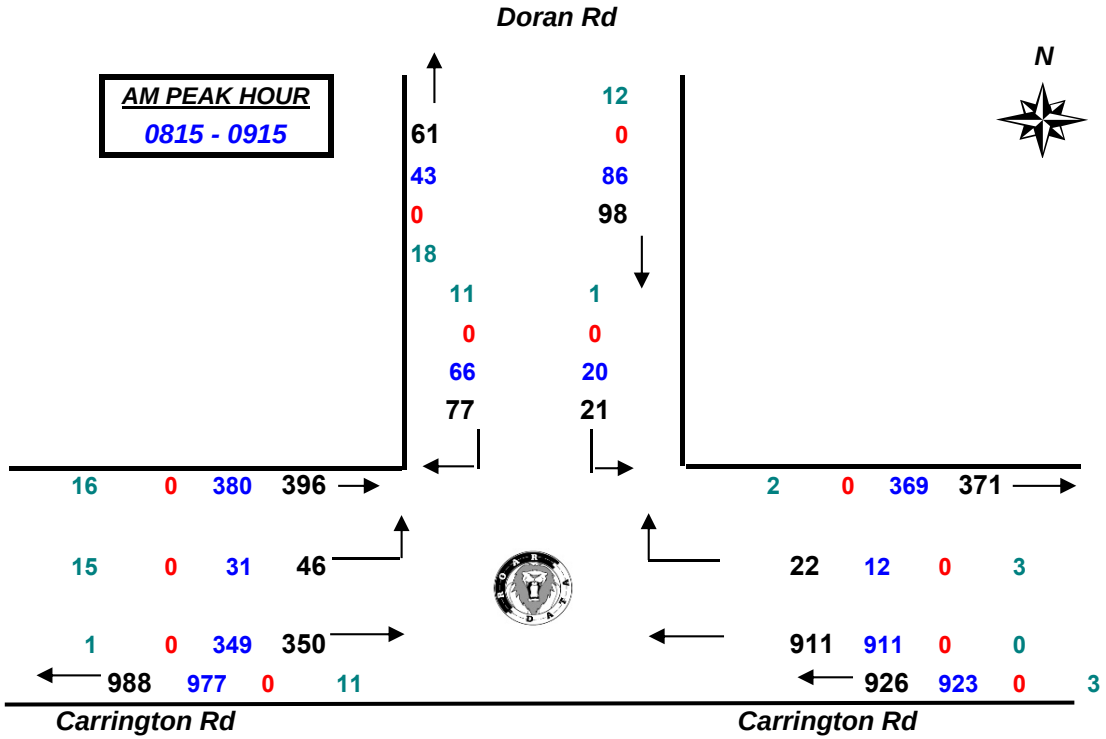
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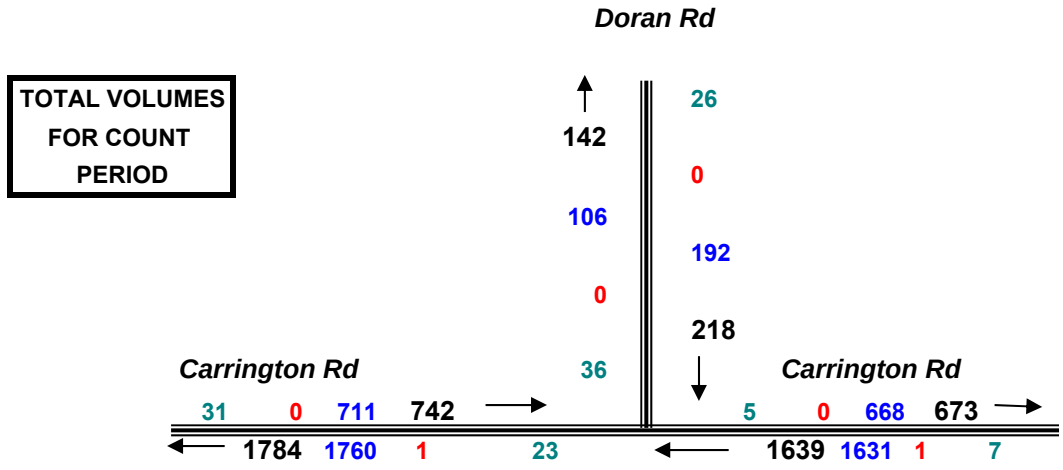
Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Combined	WEST		NORTH		EAST		
	Carrington		Doran Rd		Carrington		
Time Per	T	L	R	L	R	T	TOT
0730 - 0745	31	24	21	4	2	106	188
0745 - 0800	64	20	29	8	2	219	342
0800 - 0815	85	19	29	9	2	201	345
0815 - 0830	85	9	15	2	3	194	308
0830 - 0845	109	8	18	9	6	229	379
0845 - 0900	76	14	21	4	5	263	383
0900 - 0915	80	15	23	6	1	225	350
0915 - 0930	92	11	11	9	1	180	304
Per End	622	120	167	51	22	1617	2599



Combined	WEST		NORTH		EAST		
	Carrington		Doran Rd		Carrington		
Peak Per	T	L	R	L	R	T	TOT
0730 - 0830	265	72	94	23	9	720	1183
0745 - 0845	343	56	91	28	13	843	1374
0800 - 0900	355	50	83	24	16	887	1415
0815 - 0915	350	46	77	21	15	911	1420
0830 - 0930	357	48	73	28	13	897	1416

PEAK HR	350	46	77	21	15	911	1420



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Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Lights

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Time Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1645	181	16	23	7	3	156	**386**
1645 - 1700	190	15	22	6	3	156	**392**
1700 - 1715	158	17	17	5	0	106	**303**
1715 - 1730	132	12	25	5	7	157	**338**
1730 - 1745	162	12	20	4	3	146	**347**
1745 - 1800	149	15	35	6	7	208	**420**
1800 - 1815	146	22	24	8	0	188	**388**
1815 - 1830	150	23	31	11	9	130	**354**
Per End	**1268**	**132**	**197**	**52**	**32**	**1247**	**2928**

Heavies

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Time Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1645	0	0	0	0	0	0	**0**
1645 - 1700	0	0	0	0	0	0	**0**
1700 - 1715	0	0	0	0	0	0	**0**
1715 - 1730	0	0	0	0	0	0	**0**
1730 - 1745	1	0	0	0	0	0	**1**
1745 - 1800	0	0	0	0	0	0	**0**
1800 - 1815	0	0	0	0	0	0	**0**
1815 - 1830	0	0	0	0	0	0	**0**
Per End	**1**	**0**	**0**	**0**	**0**	**0**	**1**

Buses

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Time Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1645	0	4	2	1	1	0	**386**
1645 - 1700	0	2	5	0	0	0	**392**
1700 - 1715	0	4	2	1	1	0	**303**
1715 - 1730	0	1	4	1	0	0	**338**
1730 - 1745	0	5	3	1	1	0	**348**
1745 - 1800	0	2	5	1	0	0	**420**
1800 - 1815	0	3	3	1	1	0	**388**
1815 - 1830	0	4	5	1	0	0	**354**
Per End	**0**	**25**	**29**	**7**	**4**	**0**	**2929**

Lights

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Peak Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1730	661	60	87	23	13	575	**1419**
1645 - 1745	642	56	84	20	13	565	**1380**
1700 - 1800	601	56	97	20	17	617	**1408**
1715 - 1815	589	61	104	23	17	699	**1493**
1730 - 1830	607	72	110	29	19	672	**1509**
PEAK HR	**607**	**72**	**110**	**29**	**19**	**672**	**1509**

Heavies

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Peak Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1730	0	0	0	0	0	0	**0**
1645 - 1745	1	0	0	0	0	0	**1**
1700 - 1800	1	0	0	0	0	0	**1**
1715 - 1815	1	0	0	0	0	0	**1**
1730 - 1830	1	0	0	0	0	0	**1**
PEAK HR	**1**	**0**	**0**	**0**	**0**	**0**	**1**

Buses

	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Peak Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1730	0	11	13	3	2	0	**29**
1645 - 1745	0	12	14	3	2	0	**31**
1700 - 1800	0	12	14	4	2	0	**32**
1715 - 1815	0	11	15	4	2	0	**32**
1730 - 1830	0	14	16	4	2	0	**36**
PEAK HR	**0**	**14**	**16**	**4**	**2**	**0**	**36**

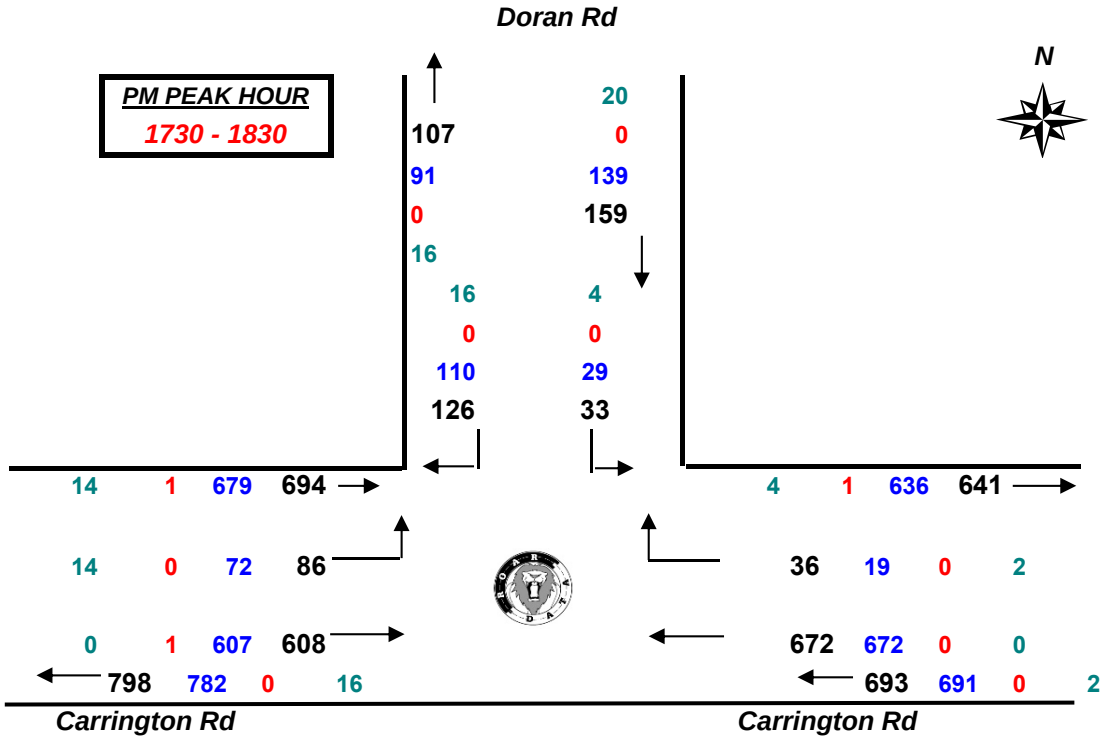
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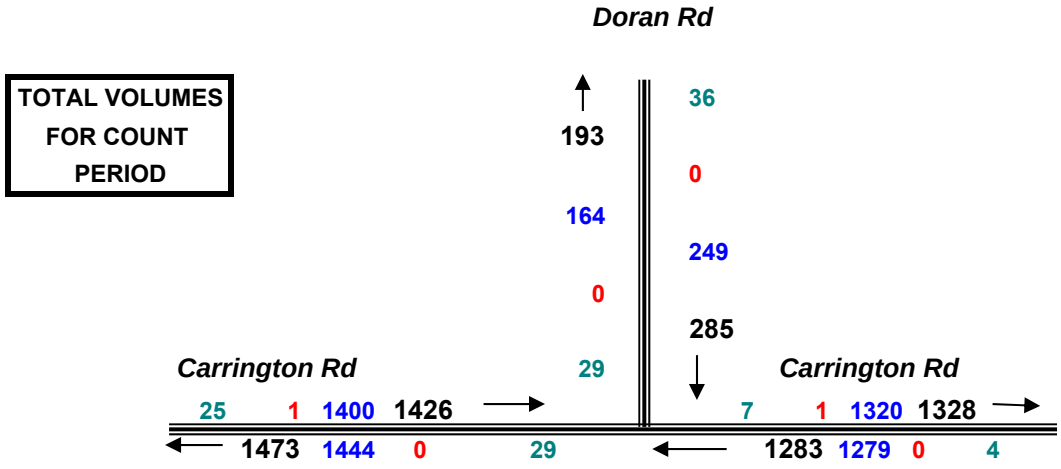
Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Combined	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Time Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1645	181	20	25	8	4	156	**394**
1645 - 1700	190	17	27	6	3	156	**399**
1700 - 1715	158	21	19	6	1	106	**311**
1715 - 1730	132	13	29	6	7	157	**344**
1730 - 1745	163	17	23	5	4	146	**358**
1745 - 1800	149	17	40	7	7	208	**428**
1800 - 1815	146	25	27	9	1	188	**396**
1815 - 1830	150	27	36	12	9	130	**364**
Per End	**1269**	**157**	**226**	**59**	**36**	**1247**	**2994**



Combined	WEST		NORTH		EAST		
	Carrington		*Doran Rd*		*Carrington*		
Peak Per	**T**	**L**	**R**	**L**	**R**	**T**	**TOT**
1630 - 1730	661	71	100	26	15	575	**1448**
1645 - 1745	643	68	98	23	15	565	**1412**
1700 - 1800	602	68	111	24	19	617	**1441**
1715 - 1815	590	72	119	27	19	699	**1526**
1730 - 1830	608	86	126	33	21	672	**1546**

PEAK HR	**608**	**86**	**126**	**33**	**21**	**672**	**1546**



R.O.A.R. DATA

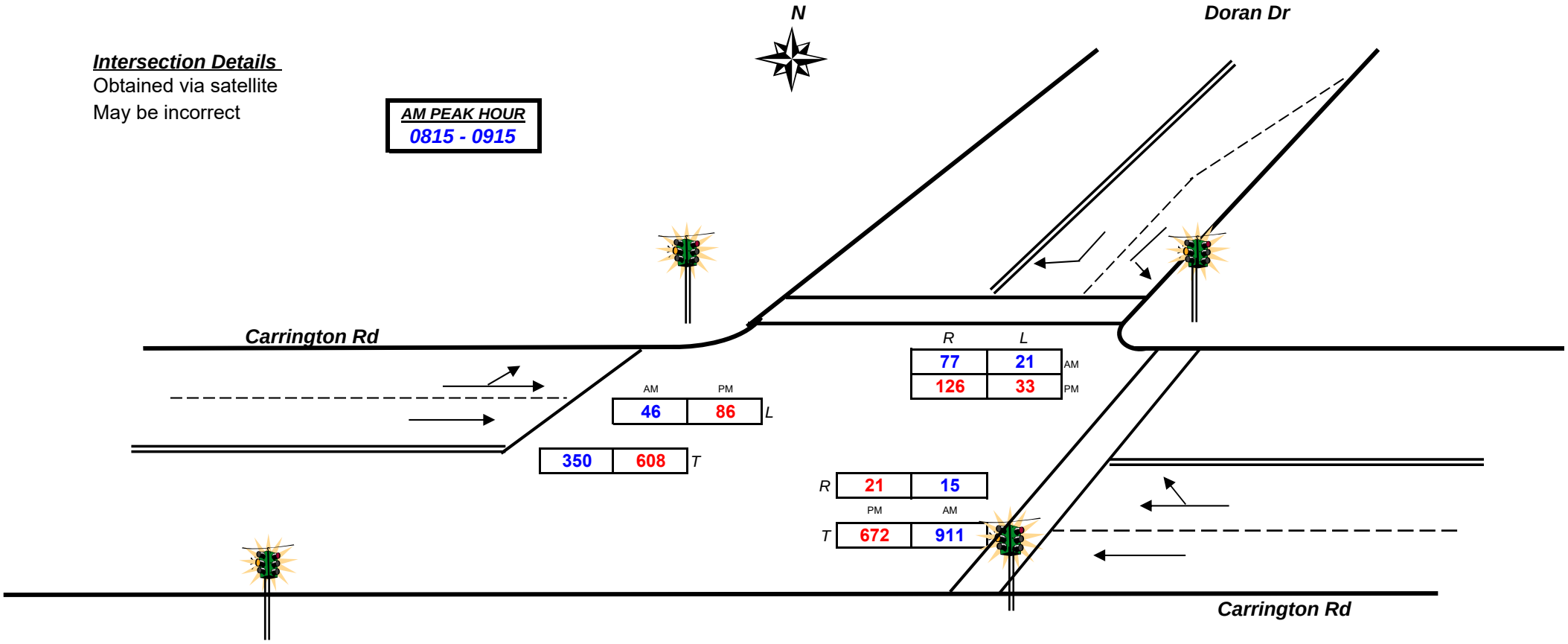
Reliable, Original & Authentic Results

Ph. Mob. 0418 239019

Client : Varga Traffic Planning
Job No/Name : 7506 CASTLE HILL Traffic Counts
Day/Date : Thursday 25th March 2021

Intersection Details
Obtained via satellite
May be incorrect

AM PEAK HOUR
0815 - 0915



Combined Figures only

PM PEAK HOUR
1730 - 1830

Weather >>>

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph. Mob. 0418 239019

Client : Varga Traffic Planning

Job No/Name : 7506 CASTLE HILL Traffic Counts

Day/Date : Thursday 25th March 2021

Peds	WEST	MORTH	EAST	
	Carrington Rd	*Doran Dr*	*Carrington Rd*	
Time Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOTAL**
0730 - 0745	0	11	2	**13**
0745 - 0800	1	11	3	**15**
0800 - 0815	0	9	6	**15**
0815 - 0830	0	17	10	**27**
0830 - 0845	0	4	10	**14**
0845 - 0900	0	9	1	**10**
0900 - 0915	0	11	4	**15**
0915 - 0930	1	6	1	**8**
Period End	**2**	**78**	**37**	**117**

PEAK HOUR
0815 - 0915

Peds	NORTH	EAST	SOUTH	
	Carrington Rd	*Doran Dr*	*Carrington Rd*	
Time Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOTAL**
1630 - 1645	0	14	11	**25**
1645 - 1700	0	8	3	**11**
1700 - 1715	0	9	6	**15**
1715 - 1730	0	8	5	**13**
1730 - 1745	0	9	1	**10**
1745 - 1800	0	7	7	**14**
1800 - 1815	0	1	1	**2**
1815 - 1830	1	4	3	**8**
Period End	**1**	**60**	**37**	**98**

PEAK HOUR
1730 - 1830

Peds	WEST	MORTH	EAST	
	Carrington Rd	*Doran Dr*	*Carrington Rd*	
Peak Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
0730 - 0830	1	48	21	**70**
0745 - 0845	1	41	29	**71**
0800 - 0900	0	39	27	**66**
0815 - 0915	0	41	25	**66**
0830 - 0930	1	30	16	**47**
PEAK HR	**0**	**41**	**25**	**66**

Peds	NORTH	EAST	SOUTH	
	Carrington Rd	*Doran Dr*	*Carrington Rd*	
Peak Period	**UNCLASSIFIED**	**UNCLASSIFIED**	**UNCLASSIFIED**	**TOT**
1630 - 1730	0	39	25	**64**
1645 - 1745	0	34	15	**49**
1700 - 1800	0	33	19	**52**
1715 - 1815	0	25	14	**39**
1730 - 1830	1	21	12	**34**
PEAK HR	**1**	**21**	**12**	**34**

APPENDIX B

ARCHITECTURAL PLANS



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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 094 691 911

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Deicorp

Rev	Date	Approved by	Revision Notes
a	07.06.21	JMC	Draft DA for Review
01	25.06.21	JMC	Retail Update
02	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 06

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-002
Drawn by: AM, YT, JL, JE
Rev: 02
North

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Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

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a	07.06.21	JMC	Draft DA for Review
01	25.06.21	JMC	Retail Update
02	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 05

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-003
Drawn by: AM, VT, JL, JE
Rev: 02
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Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

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Rev	Date	Approved by	Revision Notes
a	07.06.21	JMC	Draft DA for Review
01	25.06.21	JMC	Retail Update
02	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 04

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-004
Drawn by: AM, VT, JL, JE
Rev: 02
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Nominated Architect: Nicholas Turner 6685, ABN 86 094 694 911

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Rev	Date	Approved by	Revision Notes
a	07.06.21	JMC	Draft DA for Review
01	25.06.21	JMC	Retail Update
02	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 03

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-005
Drawn by: AM, YT, JL, JE
Rev: 02
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Nominated Architect: Nicholas Turner 6695, ABN 86 094 694 911

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Rev	Date	Approved by	Revision Notes
a	07.06.21	JMC	Draft DA for Review
01	25.06.21	JMC	Retail Update
02	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 02

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-006
Drawn by: AM, YT, JL, JE
Rev: 02
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Rev	Date	Approved by	Revision Notes
a	07.06.21	JMC	Draft DA for Review
01	25.06.21	JMC	Retail Update
02	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Basement 01

Scale: 1:200 @A1, 50%@A3
Project No.: 19068
Drawn by: AM, VT, JL, JE
North
Status: DA Submission
Dwg No.: DA-110-007
Rev: 02

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DE CLAMBE DRIVE

DORAN DRIVE

MANDALA PARADE

Site Boundary

EL 90.180

EL 91.530

Bollard

Boundary Boundary

REDUCED HEAD HEIGHT

Ramp 1:100

RL 90.300

Ramp 1:25

SP PLANT
2300 CLR HH
57.72 m²
88.200

88.200

FS_01

Reduced HH
2300 CLR

LIQUOR
4050CLR HH
199.43 m²

SUPERMARKET
BOH STAFF
196.77 m²

FFL 89.900

Reduced head height
3000 CLR

FS_15

88.950

89.150

COMBINED FIRE HYD & SPRINKLER PUMP
12500x5500 OPTION 1
132.18 m²

MECH SUPPLY PLANT
35.66 m²

FS_02

89.150

RAMP 1:6

10.000

RAMP 1:6

RL 88.150

RAMP 1:6

FFL 89.900

TENANCY
4100 CLR HH
82.41 m²

RL 89.900

Public Art

EL 89.300

Travelator UP from B1-GF

Travelator DOWN from GF-B1

RL 89.900

Awnings above shown dashed

KIOSK
4100 CLR HH
10.08 m²

8x2m
Promo
Area

6m Kiosk Free Zone &
Casula Mall Exclusion Zone

TENANCY
4100 CLR HH
193.04 m²

RL 89.900

FFL 89.900

RL 89.970

Ramp 1:20

RL 90.135

Reduced
head height
4000 CLR

RL 90.135

Tank Hatch

RL 89.900

MAIL BOXES

LOBBY B
3630 CLR HH
67.27 m²

TENANCY
3700 CLR HH
46.04 m²

AIRLOCK
Ramp 1:20

RL 90.135

RL 90.275

RL 90.300

BOH
27.31 m²

TENANCY
4100 CLR HH
121.83 m²

RL 90.275

Ramp 1:20

90.450

Pit

Tank
Hatch

RL 90.250

Tank Hatch

OSD tank below
shown dashed

RL 91.250

SW tank below
shown dashed
RL 92.050

FS_03

RL 89.900

FS_12

Planter

RL 92.000

EL 89.900

EL 90.200

EL 90.500

EL 90.700

EL 91.000

EL 91.200

EL 91.750

EL 92.000

EL 92.000

EL 93.020

SUPERMARKET
TRADING FLOOR
2,187.06 m²

SUPERMARKET
DELI PREP
103.18 m²

SUPERMARKET
SEAFOOD PREP
75.21 m²

SUPERMARKET
SEAFOOD COOLROOM
48.69 m²
Reduced
head height
3650 CLR

SUPERMARKET
PRODUCE PREP AND COOLROOM
60.33 m²
Reduced
head height
4100 CLR

SUPERMARKET
MEAT COOLROOM
31.27 m²

SUPERMARKET
FROZEN FOOD FREEZER
37.79 m²

CSA Above
25.12 m²

CPE
23.89 m²

FS_13

Hoist Mech Room
12.28 m²

SUPERMARKET
BOH STOCK AREA
436.37 m²

FS_14

SUPERMARKET
CHILLED COOLROOM
22.90 m²

SUPERMARKET
BAKERY PREP.
133.32 m²

SUPERMARKET
P/U STAGING AREA
45.95 m²

SUPERMARKET
COMMS
44.47 m²

SUPERMARKET
Deli Coolroom
23.95 m²

Site Boundary

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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

CLIENT
Deicorp

Rev	Date	Approved by	Revision Notes
01	07.06.21	JMC	Draft DA for Review
02	25.06.21	JMC	Retail Update
03	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Ground Level

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-008
Drawn by: AM, VT, JL, JE
Rev: 03
North

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1 Access/Egress Fire Control Room

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01	07.06.21	JMC	Draft DA for Review
02	25.06.21	JMC	Retail Update
03	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Upper Level

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-009
Drawn by: AM, VT, A., JE
Rev: 03
North

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Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

CLIENT
Deicorp

Rev	Date	Approved by	Revision Notes
01	07.06.21	JMC	Draft DA for Review
02	25.06.21	JMC	Retail Update
03	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Level 01

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-110-010
Drawn by: AM, VT, JL, JE
Rev: 03
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Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

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04	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA PLANS
Level 02

Scale
1:200 @A1, 50%@A3
Status
DA Submission

Project No.
19068
Dwg No.
DA-110-020
Drawn by
AM, VT, JL, JE
Rev
04
North

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Legend:

- BAL1 — Semi-frameless full height clear glass balustrade system with 150mm wide top rail. Framing System, aluminium powder coat finish. Colour to match PCF1
- BAL2 — Vertical 10 x 100 Steel Balustrade. Powder coat finish, colour and finish to match PCF1
- BW1 — Brick Work Type 1 Light Grey Brick, Pgh Bricks "Dark-and-stormy, lightning" or Similar Stretcher Bond
- BW2 — Brick Work Type 2 Light Grey Brick, Pgh Bricks "Dark-and-stormy, lightning" or Similar Monk Bond Protruding Bricks
- BW3 — Brick Work Type 2 Red-blue Brick, Austral Bricks "Bowral Blue" or Similar, Stretcher Bond
- BW4 — Brick Work Type 3 Red-blue Brick, Austral Bricks "Bowral Blue" or Similar, Soldier Bond
- BW5 — Brick Work Type 4 Pink Brick, Austral Bricks "Allure Capri White" or Similar, Stretcher Bond
- BW6 — Brick Work Type 5 Pink Brick, Austral Bricks "Allure Capri White" or Similar, Soldier Bond
- BW7 — Brick Work Type 6 Light Orange, Austral Bricks "Simmental Silver" or Similar, Stretcher Bond
- BW8 — Brick Work Type 7 Orange Brick, Austral Bricks "UrbanOneLathe" or Similar, Stretcher Bond
- BW9 — Brick Work Type 9 Green Glazed Brick, Pyrolave "Oregon" or Similar, Stretcher Bond
- COF1 — Off form Concrete with natural finish. Penetrating Clear matt sealer over
- COF2 — Off form Concrete with Charcoal finish. Penetrating Clear matt sealer over
- COF3 — Off form Concrete with White finish. Penetrating Clear matt sealer over
- CPC1 — Smooth Finish Concrete precast wall element. Pigmented white
- CPC2 — Decorative profile finish concrete precast spandrel, finish to match CCF1
- CPC3 — Smooth finish concrete precast Wall Element, Dark Grey finish
- CPC4 — Smooth finish concrete precast Wall Element, Natural finish
- CPC5 — Smooth finish concrete precast Wall Element, Charcoal finish
- CPC6 — Decorative profile finish concrete precast spandrel, pigmented white
- CLD1 — Profile Metal Cladding colour to match PCF2
- PCF1 — Powder coat Finish: Colour to match Dulux " Domino"
- PCF2 — Powder coat Finish: Colour to match Dulux " Eternity Gold Pearl" or Similar
- PCF3 — Powder coat finish: Colour to match Dulux "Dulux Natural White" or Similar
- PCF4 — Powder coat finish: Colour to match Dulux "Dulux Eternity Pewter Pearl" or Similar
- SC1 — Vertical steel screen, Detailing, material and finish to match BAL2
- SC2 — Horizontal Aluminium Louver screen, finish to match PCF1
- SC3 — Horizontal Aluminium Louver screen, finish to match PCF2
- SC4 — Vertical Aluminium Batten screen, finish to match PCF2
- SC5 — Horizontal Aluminium Louver screen, finish to match PCF4
- GC1 — Glass clear, Framing System, aluminium, Powder coat finish, Framing colour to match PCF1
- GC2 — Glass clear, Framing System, aluminium, Powder coat finish, Framing colour to match PCF2
- GC3 — Glass clear, Framing System, aluminium, Powder coat finish, Framing colour to match PCF4
- GC4 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF2, Colour back panel to match PF1
- GC5 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF2
- GC6 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF3
- GC7 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF1
- GC8 — Glass clear Louvers, Framing System, aluminium, Powder coat finish, Framing colour to match PCF1
- GC9 — Glass clear Curtain Wall System
- PF1 — Paint finish Dark grey Colour to match Dulux "Domino" or Similar
- PF2 — Paint Finish: Colour to match Dulux "Eternity Gold Pearl" or Similar
- PF3 — Paint finish White Colour to match Dulux "Dulux Natural White" or Similar
- SG1 — External Sign - The corner of Doran Drive and Mandala Parade
- SG2 — External Sign - The corner of Doran Drive and De Clambe Drive
- SG3 — External Sign - The corner of Andalusian Way and De Clambe Drive
- SG5 — Mall/Car park directional :
- SG6 — Car park Entry/Exit Signag
- SG7 — External Sign - Online Pic Signage

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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6926, ABN 88 094 684 911

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01	07.06.21	JMC	Draft DA for Review
02	01.07.21	JMC	For Coordination
03	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA ELEVATIONS
North Elevation

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-210-101
Drawn by: AG, VT, JB
Rev: 03

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Legend:

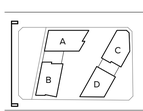
- BAL1 — Semi-frameless full height clear glass balustrade system with 150mm wide top rail. Framing System, aluminium powder coat finish. Colour to match PCF1
- BAL2 — Vertical 10 x 100 Steel Balustrade. Powder coat finish, colour and finish to match PCF1
- BW1 — Brick Work Type 1 Light Grey Brick, Pgh Bricks "Dark-and-stormy, lightning" or Similar Stretcher Bond
- BW2 — Brick Work Type 2 Light Grey Brick, Pgh Bricks "Dark-and-stormy, lightning" or Similar Monk Bond Protruding Bricks
- BW3 — Brick Work Type 2 Red-blue Brick, Austral Bricks "Bowral Blue" or Similar, Stretcher Bond
- BW4 — Brick Work Type 3 Red-blue Brick, Austral Bricks "Bowral Blue" or Similar, Soldier Bond
- BW5 — Brick Work Type 4 Pink Brick, Austral Bricks "Allure Capri White" or Similar, Stretcher Bond
- BW6 — Brick Work Type 5 Pink Brick, Austral Bricks "Allure Capri White" or Similar, Soldier Bond
- BW7 — Brick Work Type 6 Light Orange, Austral Bricks "Simmental Silver" or Similar, Stretcher Bond
- BW8 — Brick Work Type 7 Orange Brick, Austral Bricks "UrbanOneLatte" or Similar, Stretcher Bond
- BW9 — Brick Work Type 9 Green Glazed Brick, Pyrolave "Oregon" or Similar, Stretcher Bond
- COF1 — Off form Concrete with natural finish. Penetrating Clear matt sealer over
- COF2 — Off form Concrete with Charcoal finish. Penetrating Clear matt sealer over
- COF3 — Off form Concrete with White finish. Penetrating Clear matt sealer over
- CPC1 — Smooth Finish Concrete precast wall element. Pigmented white
- CPC2 — Decorative profile finish concrete precast spandrel, finish to match COF1
- CPC3 — Smooth finish concrete precast Wall Element, Dark Grey finish
- CPC4 — Smooth finish concrete precast Wall Element, Natural finish
- CPC5 — Smooth finish concrete precast Wall Element, Charcoal finish
- CPC6 — Decorative profile finish concrete precast spandrel, pigmented white
- CLD1 — Profile Metal Cladding colour to match PCF2
- PCF1 — Powder coat Finish: Colour to match Dulux " Domino" or Similar
- PCF2 — Powder coat Finish: Colour to match Dulux " Eternity Gold Pearl" or Similar
- PCF3 — Powder coat finish: Colour to match Dulux "Dulux Natural White" or Similar
- PCF4 — Powder coat finish: Colour to match Dulux "Dulux Eternity Pewter Pearl" or Similar
- SC1 — Vertical steel screen, Detailing, material and finish to match BAL2
- SC2 — Horizontal Aluminium Louver screen, finish to match PCF1
- SC3 — Horizontal Aluminium Louver screen, finish to match PCF2
- SC4 — Vertical Aluminium Batten screen, finish to match PCF2
- SC5 — Horizontal Aluminium Louver screen, finish to match PCF4
- GC1 — Glass clear, Framing System, aluminium, Powder coat finish, Framing colour to match PCF1
- GC2 — Glass clear, Framing System, aluminium, Powder coat finish, Framing colour to match PCF2
- GC3 — Glass clear, Framing System, aluminium, Powder coat finish, Framing colour to match PCF4
- GC4 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF2, Colour back panel to match PF1
- GC5 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF2
- GC6 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF3
- GC7 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF1
- GC8 — Glass clear Louvers, Framing System, aluminium, Powder coat finish, Framing colour to match PCF1
- GC9 — Glass clear Curtain Wall System
- PF1 — Paint finish Dark grey Colour to match Dulux "Domino" or Similar
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- PF3 — Paint finish White Colour to match Dulux "Dulux Natural White" or Similar
- SG1 — External Sign - The corner of Doran Drive and Mandala Parade
- SG2 — External Sign - The corner of Doran Drive and De Clambe Drive
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NOTES

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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

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Rev	Date	Approved by	Revision Notes
01	07.06.21	JMC	Draft DA for Review
02	01.07.21	JMC	For Coordination
03	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA ELEVATIONS
West Elevation

Scale: 1:200 @A1, 50%@A3
Status: **DA Submission**
Project No.: **19068**
Dwg No.: **DA-210-201**
Drawn by: AG, VT, JB
Rev: **03**

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Legend:

- BAL1 — Semi-frameless full height clear glass balustrade system with 150mm wide top rail. Framing System, aluminium powder coat finish. Colour to match PCF1
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- BW4 — Brick Work Type 3 Red-blue Brick, Austral Bricks "Bowral Blue" or Similar, Soldier Bond
- BW5 — Brick Work Type 4 Pink Brick, Austral Bricks "Allure Capri White" or Similar, Stretcher Bond
- BW6 — Brick Work Type 5 Pink Brick, Austral Bricks "Allure Capri White" or Similar, Soldier Bond
- BW7 — Brick Work Type 6 Light Orange, Austral Bricks "Simmental Silver" or Similar, Stretcher Bond
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- GC4 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF2, Colour back panel to match PF1
- GC5 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF2
- GC6 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF3
- GC7 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1, Colour back panel to match PF1
- GC8 — Glass clear Louvers, Framing System, aluminium, Powder coat finish, Framing colour to match PCF1
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DLCS Quality Endorsed Company: ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6665, ABN 86 064 084 911

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Rev	Date	Approved by	Revision Notes
01	07.06.21	JMC	Draft DA for Review
02	01.07.21	JMC	For Coordination
03	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA ELEVATIONS
South Elevation

Scale: 1:200 @A1, 50%@A3
Status: DA Submission
Project No.: 19068
Dwg No.: DA-210-301
Drawn by: AG, VT, JB
Rev: 03

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- SC3 — Horizontal Aluminium Louver screen, finish to match PCF2
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- SC5 — Horizontal Aluminium Louver screen, finish to match PCF4
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- GC3 — Glass clear, Framing System, aluminium, Powder coat finish, Framing colour to match PCF4
- GC4 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF2. Colour back panel to match PF1
- GC5 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1. Colour back panel to match PF2
- GC6 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1. Colour back panel to match PF3
- GC7 — Colour-back glass panel Framing System, aluminium, Powder coat finish, Framing colour to match PCF1. Colour back panel to match PF1
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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6685, ABN 86 064 094 911

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Rev	Date	Approved by	Revision Notes
01	07.06.21	JMC	Draft DA for Review
02	01.07.21	JMC	For Coordination
03	06.07.21	JMC	DA Submission

Project Title
Doran Drive
Doran Drive, Castle Hill Castle Hill NSW 2154 Australia

Drawing Title
GA ELEVATIONS
East Elevation

Scale	Project No.	Drawn by
1:200 @A1, 50%@A3	19068	AG, VT, JB
Status	Dwg No.	Rev
DA Submission	DA-210-401	03

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APPENDIX C

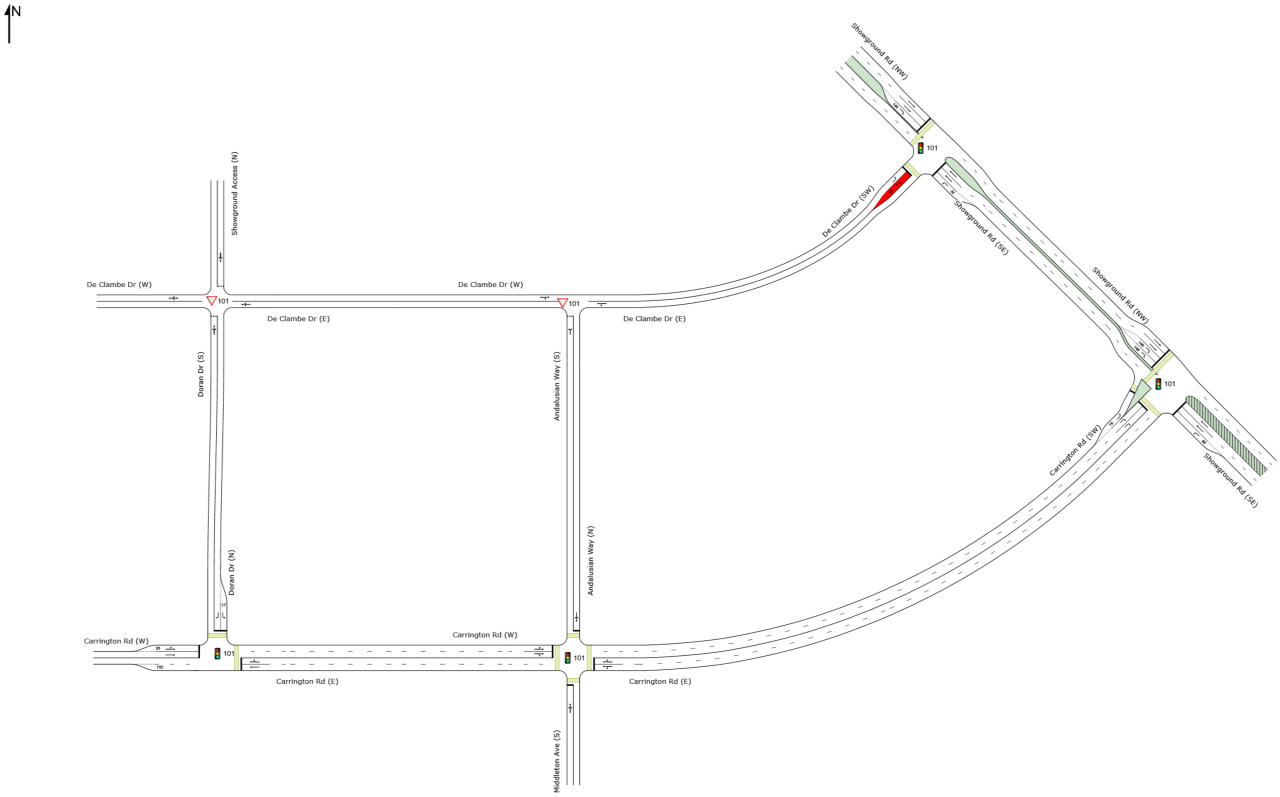
SIDRA RESULTS

NETWORK LAYOUT

Network: N101 [Existing Network AM 2021 (Network Folder: General)]

New Network
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Carrington Rd & Doran Dr Existing AM 2021
101	NA	Carrington Rd & Andalusian Way Existing AM 2021
101	NA	De Clambe Dr & Doran Dr Existing AM 2021
101	NA	De Clambe Dr & Andalusian Way Existing AM 2021
101	NA	Showground Rd & DeClambe Dr Existing AM 2021
101	NA	Showground Rd & Carrington Rd Existing AM 2021

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing AM 2021 (Site Folder: General)]

Network: N101 [Existing Network AM 2021 (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	887	0.0	887	0.0	0.405	6.6	LOS A	7.3	51.2	0.51	0.45	0.51	44.2
6	R2	16	18.8	16	18.8	* 0.405	11.5	LOS A	7.3	51.2	0.57	0.50	0.57	27.5
Approach		903	0.3	903	0.3	0.405	6.7	LOS A	7.3	51.2	0.51	0.45	0.51	44.1
North: Doran Dr (N)														
7	L2	24	8.3	24	8.3	0.026	10.5	LOS A	0.3	2.5	0.49	0.59	0.49	21.9
9	R2	83	13.3	83	13.3	* 0.367	30.8	LOS C	2.4	18.5	0.95	0.76	0.95	28.6
Approach		107	12.1	107	12.1	0.367	26.3	LOS B	2.4	18.5	0.85	0.72	0.85	28.1
West: Carrington Rd (W)														
10	L2	50	28.0	50	28.0	0.403	24.9	LOS B	4.9	36.3	0.87	0.73	0.87	31.9
11	T1	355	0.6	355	0.6	* 0.403	20.1	LOS B	5.2	36.4	0.87	0.72	0.87	32.2
Approach		405	4.0	405	4.0	0.403	20.7	LOS B	5.2	36.4	0.87	0.72	0.87	32.2
All Vehicles		1415	2.3	1415	2.3	0.405	12.2	LOS A	7.3	51.2	0.64	0.55	0.64	38.9

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	26	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	43	24.3	LOS C	0.1	0.1	0.90	0.90	187.3	211.9	1.13
All Pedestrians		69	24.3	LOS C	0.1	0.1	0.90	0.90	188.3	213.2	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing PM 2021 (Site Folder: General)]

Network: N101 [Existing Network PM 2021 (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	699	0.0	699	0.0	0.386	9.2	LOS A	6.6	46.1	0.59	0.51	0.59	41.8
6	R2	19	10.5	19	10.5	* 0.386	17.2	LOS B	6.6	46.1	0.72	0.63	0.72	19.9
Approach		718	0.3	718	0.3	0.386	9.4	LOS A	6.6	46.1	0.60	0.52	0.60	41.6
North: Doran Dr (N)														
7	L2	27	14.8	27	14.8	0.042	16.0	LOS B	0.5	3.9	0.65	0.64	0.65	17.7
9	R2	119	12.6	119	12.6	* 0.419	29.1	LOS C	3.3	25.7	0.94	0.77	0.94	29.2
Approach		146	13.0	146	13.0	0.419	26.7	LOS B	3.3	25.7	0.89	0.75	0.89	28.4
West: Carrington Rd (W)														
10	L2	72	15.3	72	15.3	0.415	18.2	LOS B	6.8	49.2	0.75	0.67	0.75	36.0
11	T1	590	0.2	590	0.2	* 0.415	13.5	LOS A	7.1	49.4	0.75	0.65	0.75	36.4
Approach		662	1.8	662	1.8	0.415	14.0	LOS A	7.1	49.4	0.75	0.65	0.75	36.3
All Vehicles		1526	2.2	1526	2.2	0.419	13.0	LOS A	7.1	49.4	0.69	0.60	0.69	37.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
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East: Carrington Rd (E)											
P2	Full	15	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	26	24.3	LOS C	0.0	0.0	0.90	0.90	187.3	211.9	1.13
All Pedestrians		41	24.3	LOS C	0.0	0.0	0.90	0.90	188.2	213.1	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing AM 2021 (Site Folder: General)]

Network: N101 [Existing Network AM 2021 (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	168	3.0	168	3.0	0.507	20.9	LOS B	7.3	52.4	0.83	0.79	0.83	32.4
2	T1	66	1.5	66	1.5	0.507	17.6	LOS B	7.3	52.4	0.83	0.79	0.83	32.4
3	R2	80	1.3	80	1.3	* 0.507	20.9	LOS B	7.3	52.4	0.83	0.79	0.83	32.4
Approach		314	2.2	314	2.2	0.507	20.2	LOS B	7.3	52.4	0.83	0.79	0.83	32.4
East: Carrington Rd (E)														
4	L2	91	1.1	91	1.1	0.496	18.0	LOS B	8.9	62.3	0.77	0.69	0.77	39.1
5	T1	712	0.1	712	0.1	0.496	13.4	LOS A	8.9	62.3	0.77	0.68	0.77	28.2
6	R2	12	0.0	12	0.0	* 0.496	18.0	LOS B	8.6	60.4	0.77	0.67	0.77	28.5
Approach		815	0.2	815	0.2	0.496	14.0	LOS A	8.9	62.3	0.77	0.68	0.77	30.5
North: Andalusian Way (N)														
7	L2	6	0.0	6	0.0	0.104	17.8	LOS B	1.2	8.6	0.71	0.59	0.71	18.4
8	T1	43	0.0	43	0.0	0.104	14.4	LOS A	1.2	8.6	0.71	0.59	0.71	36.6
9	R2	12	0.0	12	0.0	0.104	17.8	LOS B	1.2	8.6	0.71	0.59	0.71	18.4
Approach		61	0.0	61	0.0	0.104	15.4	LOS B	1.2	8.6	0.71	0.59	0.71	33.7
West: Carrington Rd (W)														
10	L2	14	0.0	14	0.0	0.352	16.9	LOS B	5.9	41.1	0.71	0.61	0.71	19.9
11	T1	298	0.0	298	0.0	0.352	12.7	LOS A	5.9	41.1	0.72	0.62	0.72	19.4
12	R2	83	3.6	83	3.6	0.352	23.5	LOS B	2.4	17.3	0.82	0.75	0.82	32.5
Approach		395	0.8	395	0.8	0.352	15.1	LOS B	5.9	41.1	0.74	0.64	0.74	25.5
All Vehicles		1585	0.8	1585	0.8	0.507	15.6	LOS B	8.9	62.3	0.77	0.69	0.77	30.2

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	5	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	9	24.3	LOS C	0.0	0.0	0.90	0.90	189.8	215.2	1.13
North: Andalusian Way (N)											
P3	Full	5	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13

West: Carrington Rd (W)										
P4 Full	26	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	46	24.3	LOS C	0.0	0.0	0.90	0.90	188.7	213.7	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing PM 2021 (Site Folder: General)]

Network: N101 [Existing Network PM 2021 (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	107	1.9	107	1.9	0.458	22.0	LOS B	6.0	42.3	0.83	0.78	0.83	31.8
2	T1	55	0.0	55	0.0	0.458	18.7	LOS B	6.0	42.3	0.83	0.78	0.83	31.8
3	R2	91	0.0	91	0.0	* 0.458	22.0	LOS B	6.0	42.3	0.83	0.78	0.83	31.8
Approach		253	0.8	253	0.8	0.458	21.3	LOS B	6.0	42.3	0.83	0.78	0.83	31.8
East: Carrington Rd (E)														
4	L2	73	0.0	73	0.0	0.358	15.7	LOS B	6.1	42.7	0.68	0.62	0.68	40.4
5	T1	556	0.0	556	0.0	0.358	11.1	LOS A	6.1	42.7	0.68	0.60	0.68	30.4
6	R2	7	0.0	7	0.0	0.358	15.7	LOS B	5.9	41.6	0.68	0.59	0.68	30.8
Approach		636	0.0	636	0.0	0.358	11.7	LOS A	6.1	42.7	0.68	0.60	0.68	32.6
North: Andalusian Way (N)														
7	L2	9	0.0	9	0.0	0.135	19.5	LOS B	1.5	10.2	0.75	0.64	0.75	16.9
8	T1	35	0.0	35	0.0	0.135	16.1	LOS B	1.5	10.2	0.75	0.64	0.75	35.2
9	R2	24	0.0	24	0.0	0.135	19.6	LOS B	1.5	10.2	0.75	0.64	0.75	16.9
Approach		68	0.0	68	0.0	0.135	17.8	LOS B	1.5	10.2	0.75	0.64	0.75	29.6
West: Carrington Rd (W)														
10	L2	12	0.0	12	0.0	0.456	16.4	LOS B	8.3	58.1	0.72	0.63	0.72	20.5
11	T1	493	0.2	493	0.2	0.456	12.4	LOS A	8.3	58.1	0.73	0.65	0.73	19.6
12	R2	118	3.4	118	3.4	* 0.456	19.4	LOS B	4.7	33.4	0.78	0.73	0.78	35.3
Approach		623	0.8	623	0.8	0.456	13.8	LOS A	8.3	58.1	0.74	0.66	0.74	26.0
All Vehicles		1580	0.4	1580	0.4	0.458	14.3	LOS A	8.3	58.1	0.73	0.66	0.73	30.2

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	5	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	11	24.3	LOS C	0.0	0.0	0.90	0.90	189.8	215.2	1.13
North: Andalusian Way (N)											
P3	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13

West: Carrington Rd (W)										
P4 Full	25	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	47	24.3	LOS C	0.0	0.0	0.90	0.90	188.6	213.6	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing AM 2021 (Site Folder: General)]

Network: N101 [Existing Network AM 2021 (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	10	0.0	10	0.0	0.065	5.8	LOS A	0.2	1.7	0.18	0.58	0.18	49.6
2	T1	3	0.0	3	0.0	0.065	4.7	LOS A	0.2	1.7	0.18	0.58	0.18	38.6
3	R2	42	45.2	42	45.2	0.065	7.1	LOS A	0.2	1.7	0.18	0.58	0.18	33.8
Approach		55	34.5	55	34.5	0.065	6.7	LOS A	0.2	1.7	0.18	0.58	0.18	40.5
East: De Clambe Dr (E)														
4	L2	40	32.5	40	32.5	0.077	5.9	LOS A	0.2	1.3	0.04	0.27	0.04	45.9
5	T1	73	1.4	73	1.4	0.077	0.0	LOS A	0.2	1.3	0.04	0.27	0.04	56.4
6	R2	24	0.0	24	0.0	0.077	5.5	LOS A	0.2	1.3	0.04	0.27	0.04	40.6
Approach		137	10.2	137	10.2	0.077	2.7	NA	0.2	1.3	0.04	0.27	0.04	53.2
North: Showground Access (N)														
7	L2	14	0.0	14	0.0	0.021	5.6	LOS A	0.1	0.5	0.05	0.55	0.05	33.8
8	T1	12	0.0	12	0.0	0.021	4.7	LOS A	0.1	0.5	0.05	0.55	0.05	33.8
9	R2	2	0.0	2	0.0	0.021	6.0	LOS A	0.1	0.5	0.05	0.55	0.05	49.7
Approach		28	0.0	28	0.0	0.021	5.2	LOS A	0.1	0.5	0.05	0.55	0.05	37.3
West: De Clambe Dr (W)														
10	L2	7	0.0	7	0.0	0.014	5.7	LOS A	0.0	0.3	0.14	0.28	0.14	44.1
11	T1	12	0.0	12	0.0	0.014	0.1	LOS A	0.0	0.3	0.14	0.28	0.14	54.0
12	R2	6	0.0	6	0.0	0.014	5.8	LOS A	0.0	0.3	0.14	0.28	0.14	54.0
Approach		25	0.0	25	0.0	0.014	3.1	NA	0.0	0.3	0.14	0.28	0.14	50.4
All Vehicles		245	13.5	245	13.5	0.077	3.9	NA	0.2	1.7	0.08	0.37	0.08	49.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing PM 2021 (Site Folder: General)]

Network: N101 [Existing Network PM 2021 (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	1	0.0	1	0.0	0.082	5.6	LOS A	0.2	1.9	0.21	0.61	0.21	49.2
2	T1	13	0.0	13	0.0	0.082	5.1	LOS A	0.2	1.9	0.21	0.61	0.21	38.0
3	R2	51	25.5	51	25.5	0.082	7.5	LOS A	0.2	1.9	0.21	0.61	0.21	32.9
Approach		65	20.0	65	20.0	0.082	7.0	LOS A	0.2	1.9	0.21	0.61	0.21	34.9
East: De Clambe Dr (E)														
4	L2	43	41.9	43	41.9	0.058	6.2	LOS A	0.2	1.8	0.18	0.48	0.18	35.3
5	T1	9	0.0	9	0.0	0.058	0.3	LOS A	0.2	1.8	0.18	0.48	0.18	52.3
6	R2	43	0.0	43	0.0	0.058	5.8	LOS A	0.2	1.8	0.18	0.48	0.18	35.3
Approach		95	18.9	95	18.9	0.058	5.4	NA	0.2	1.8	0.18	0.48	0.18	38.6
North: Showground Access (N)														
7	L2	11	0.0	11	0.0	0.021	5.8	LOS A	0.1	0.5	0.23	0.54	0.23	32.5
8	T1	13	0.0	13	0.0	0.021	5.2	LOS A	0.1	0.5	0.23	0.54	0.23	32.5
9	R2	1	0.0	1	0.0	0.021	6.5	LOS A	0.1	0.5	0.23	0.54	0.23	49.2
Approach		25	0.0	25	0.0	0.021	5.5	LOS A	0.1	0.5	0.23	0.54	0.23	34.7
West: De Clambe Dr (W)														
10	L2	5	0.0	5	0.0	0.089	5.7	LOS A	0.3	2.1	0.10	0.20	0.10	45.1
11	T1	107	0.0	107	0.0	0.089	0.1	LOS A	0.3	2.1	0.10	0.20	0.10	55.8
12	R2	52	0.0	52	0.0	0.089	5.6	LOS A	0.3	2.1	0.10	0.20	0.10	55.8
Approach		164	0.0	164	0.0	0.089	2.0	NA	0.3	2.1	0.10	0.20	0.10	55.3
All Vehicles		349	8.9	349	8.9	0.089	4.1	NA	0.3	2.1	0.15	0.38	0.15	48.3

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing AM 2021 (Site Folder: General)]

Network: N101 [Existing Network AM 2021 (Network Folder: General)]

De Clambe Dr & Andalusian Way
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	24	0.0	24	0.0	0.063	3.8	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
3	R2	49	0.0	49	0.0	0.063	4.4	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
Approach		73	0.0	73	0.0	0.063	4.2	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
East: De Clambe Dr (E)														
4	L2	81	0.0	81	0.0	0.105	4.6	LOS A	0.0	0.0	0.00	0.23	0.00	41.6
5	T1	111	11.7	111	11.7	0.105	0.0	LOS A	0.0	0.0	0.00	0.23	0.00	41.6
Approach		192	6.8	192	6.8	0.105	1.9	NA	0.0	0.0	0.00	0.23	0.00	41.6
West: De Clambe Dr (W)														
11	T1	58	32.8	58	32.8	0.042	0.1	LOS A	0.1	0.6	0.09	0.08	0.09	44.5
12	R2	9	11.1	9	11.1	0.042	5.3	LOS A	0.1	0.6	0.09	0.08	0.09	44.5
Approach		67	29.9	67	29.9	0.042	0.8	NA	0.1	0.6	0.09	0.08	0.09	44.5
All Vehicles		332	9.9	332	9.9	0.105	2.2	NA	0.2	1.3	0.06	0.26	0.06	38.8

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing PM 2021 (Site Folder: General)]

Network: N101 [Existing Network PM 2021 (Network Folder: General)]

De Clambe Dr & Andalusian Way
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	13	0.0	13	0.0	0.060	3.7	LOS A	0.2	1.2	0.19	0.51	0.19	29.6
3	R2	51	0.0	51	0.0	0.060	4.7	LOS A	0.2	1.2	0.19	0.51	0.19	29.6
Approach		64	0.0	64	0.0	0.060	4.5	LOS A	0.2	1.2	0.19	0.51	0.19	29.6
East: De Clambe Dr (E)														
4	L2	73	0.0	73	0.0	0.090	4.6	LOS A	0.0	0.0	0.00	0.25	0.00	40.7
5	T1	87	20.7	87	20.7	0.090	0.0	LOS A	0.0	0.0	0.00	0.25	0.00	40.7
Approach		160	11.3	160	11.3	0.090	2.1	NA	0.0	0.0	0.00	0.25	0.00	40.7
West: De Clambe Dr (W)														
11	T1	158	8.2	158	8.2	0.093	0.1	LOS A	0.1	0.7	0.05	0.04	0.05	47.2
12	R2	12	0.0	12	0.0	0.093	5.1	LOS A	0.1	0.7	0.05	0.04	0.05	47.2
Approach		170	7.6	170	7.6	0.093	0.4	NA	0.1	0.7	0.05	0.04	0.05	47.2
All Vehicles		394	7.9	394	7.9	0.093	1.8	NA	0.2	1.2	0.05	0.20	0.05	40.4

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.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing AM 2021 (Site Folder: General)]

Network: N101 [Existing Network AM 2021 (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	25	36.0	25	36.0	0.028	13.0	LOS A	0.4	3.3	0.24	0.61	0.24	27.3
22	T1	723	1.7	723	1.7	0.364	4.9	LOS A	5.6	39.6	0.19	0.16	0.19	50.8
Approach		748	2.8	748	2.8	0.364	5.1	LOS A	5.6	39.6	0.19	0.18	0.19	50.2
NorthWest: Showground Rd (NW)														
28	T1	1548	1.2	1548	1.2	* 0.464	2.2	LOS A	11.0	78.0	0.25	0.23	0.25	53.3
29	R2	198	2.0	198	2.0	0.225	9.1	LOS A	3.3	23.5	0.33	0.67	0.33	39.3
Approach		1746	1.3	1746	1.3	0.464	3.0	LOS A	11.0	78.0	0.26	0.28	0.26	51.2
SouthWest: De Clambe Dr (SW)														
30	L2	110	8.2	110	8.2	0.160	31.8	LOS C	4.5	33.4	0.68	0.72	0.68	25.0
32	R2	12	100.0	12	100.0	* 0.240	76.4	LOS F	0.8	10.5	0.99	0.69	0.99	6.1
Approach		122	17.2	122	17.2	0.240	36.2	LOS C	4.5	33.4	0.71	0.72	0.71	22.4
All Vehicles		2616	2.5	2616	2.5	0.464	5.1	LOS A	11.0	78.0	0.26	0.27	0.26	47.5

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		8	59.1	LOS E	0.0	0.0	0.95	0.95	224.9	215.5	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing PM 2021 (Site Folder: General)]

Network: N101 [Existing Network PM 2021 (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	34	29.4	34	29.4	0.029	9.8	LOS A	0.5	4.4	0.25	0.62	0.25	31.6
22	T1	1276	0.8	1276	0.8	* 0.499	5.4	LOS A	15.9	112.1	0.24	0.22	0.24	50.0
Approach		1310	1.5	1310	1.5	0.499	5.5	LOS A	15.9	112.1	0.24	0.23	0.24	49.7
NorthWest: Showground Rd (NW)														
28	T1	792	1.1	792	1.1	0.237	1.6	LOS A	4.2	30.0	0.19	0.17	0.19	54.8
29	R2	127	6.3	127	6.3	* 0.283	14.2	LOS A	3.6	26.5	0.50	0.72	0.50	33.1
Approach		919	1.8	919	1.8	0.283	3.4	LOS A	4.2	30.0	0.23	0.24	0.23	50.2
SouthWest: De Clambe Dr (SW)														
30	L2	265	1.9	265	1.9	0.626	52.3	LOS D	15.1	107.1	0.95	0.83	0.95	18.7
32	R2	10	100.0	10	100.0	* 0.200	76.1	LOS F	0.7	8.7	0.99	0.69	0.99	6.1
Approach		275	5.5	275	5.5	0.626	53.2	LOS D	15.1	107.1	0.95	0.82	0.95	18.2
All Vehicles		2504	2.1	2504	2.1	0.626	9.9	LOS A	15.9	112.1	0.31	0.30	0.31	41.4

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	1	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		4	59.1	LOS E	0.0	0.0	0.95	0.95	226.2	217.2	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing AM 2021 (Site Folder: General)]

Network: N101 [Existing Network AM 2021 (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	525	0.2	525	0.2	0.435	16.0	LOS B	15.0	105.4	0.50	0.74	0.50	39.6
22	T1	648	2.9	648	2.9	0.380	25.5	LOS B	13.5	96.9	0.71	0.62	0.71	33.0
Approach		1173	1.7	1173	1.7	0.435	21.2	LOS B	15.0	105.4	0.62	0.67	0.62	35.7
NorthWest: Showground Rd (NW)														
28	T1	1208	2.2	1208	2.2	* 0.430	6.7	LOS A	12.2	87.0	0.35	0.32	0.35	51.6
29	R2	341	0.3	341	0.3	0.278	19.9	LOS B	5.2	36.6	0.53	0.73	0.53	21.0
Approach		1549	1.8	1549	1.8	0.430	9.6	LOS A	12.2	87.0	0.39	0.41	0.39	46.9
SouthWest: Carrington Rd (SW)														
30	L2	51	2.0	51	2.0	0.060	24.9	LOS B	1.7	12.4	0.58	0.66	0.58	21.6
32	R2	287	0.7	287	0.7	* 0.439	56.6	LOS E	8.2	57.9	0.94	0.79	0.94	25.6
Approach		338	0.9	338	0.9	0.439	51.8	LOS D	8.2	57.9	0.89	0.77	0.89	25.3
All Vehicles		3060	1.7	3060	1.7	0.439	18.7	LOS B	15.0	105.4	0.53	0.55	0.53	38.3

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	53	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		61	59.3	LOS E	0.2	0.2	0.96	0.96	218.0	206.3	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing PM 2021 (Site Folder: General)]

Network: N101 [Existing Network PM 2021 (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	422	0.0	422	0.0	0.271	7.8	LOS A	5.4	38.1	0.23	0.65	0.23	47.9
22	T1	1102	1.8	1102	1.8	* 0.583	19.3	LOS B	25.5	181.5	0.68	0.61	0.68	37.0
Approach		1524	1.3	1524	1.3	0.583	16.1	LOS B	25.5	181.5	0.55	0.62	0.55	39.5
NorthWest: Showground Rd (NW)														
28	T1	632	3.0	632	3.0	0.247	8.7	LOS A	6.6	47.6	0.36	0.32	0.36	49.5
29	R2	174	0.0	174	0.0	* 0.338	34.3	LOS C	4.2	29.3	0.80	0.79	0.80	14.3
Approach		806	2.4	806	2.4	0.338	14.2	LOS A	6.6	47.6	0.46	0.42	0.46	42.4
SouthWest: Carrington Rd (SW)														
30	L2	179	0.0	179	0.0	0.272	36.5	LOS C	8.0	56.2	0.76	0.75	0.76	17.1
32	R2	519	0.0	519	0.0	* 0.586	52.0	LOS D	14.6	102.5	0.94	0.83	0.94	26.8
Approach		698	0.0	698	0.0	0.586	48.0	LOS D	14.6	102.5	0.89	0.81	0.89	25.2
All Vehicles		3028	1.3	3028	1.3	0.586	23.0	LOS B	25.5	181.5	0.61	0.61	0.61	35.0

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	53	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		60	59.3	LOS E	0.2	0.2	0.96	0.96	217.8	206.0	0.95

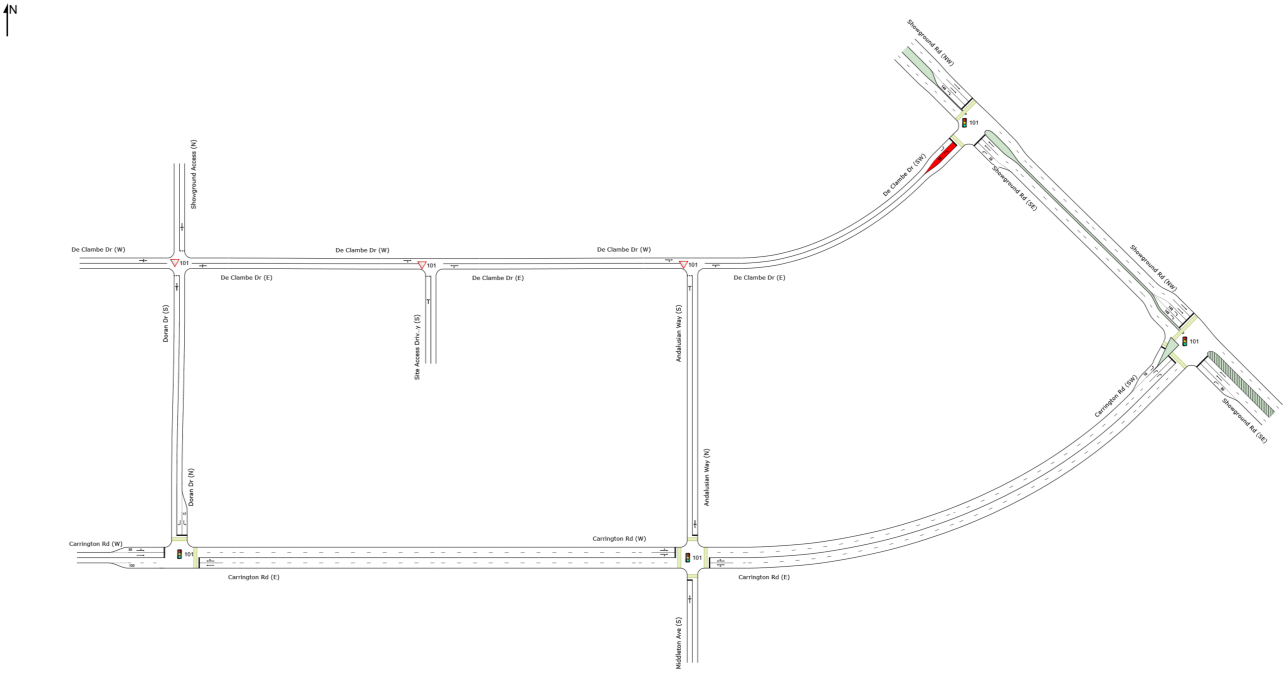
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

New Network
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Carrington Rd & Doran Dr Existing AM 2021 with Development
101	NA	Carrington Rd & Andalusian Way Existing AM 2021 with Development
101	NA	De Clambe Dr & Doran Dr Existing AM 2021 with Development
101	NA	De Clambe Dr & Site Access Driveway Existing (No Upgrades) AM 2021 with Development
101	NA	De Clambe Dr & Andalusian Way Existing AM 2021 with Development
101	NA	Showground Rd & DeClambe Dr Existing AM 2021 with Development
101	NA	Showground Rd & Carrington Rd Existing AM 2021 with Development

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	887	0.0	887	0.0	0.498	11.2	LOS A	9.3	65.6	0.67	0.59	0.67	40.8
6	R2	16	18.8	16	18.8	* 0.498	16.2	LOS B	9.3	65.6	0.73	0.64	0.73	21.2
Approach		903	0.3	903	0.3	0.498	11.3	LOS A	9.3	65.6	0.68	0.59	0.68	40.7
North: Doran Dr (N)														
7	L2	24	8.3	24	8.3	0.026	10.5	LOS A	0.3	2.5	0.49	0.59	0.49	21.9
9	R2	226	4.9	226	4.9	* 0.519	25.1	LOS B	5.9	43.0	0.91	0.79	0.91	30.8
Approach		250	5.2	250	5.2	0.519	23.7	LOS B	5.9	43.0	0.87	0.77	0.87	30.5
West: Carrington Rd (W)														
10	L2	88	15.9	88	15.9	0.515	25.5	LOS B	6.5	47.8	0.90	0.77	0.90	31.2
11	T1	431	0.5	431	0.5	* 0.515	20.8	LOS B	6.9	48.2	0.90	0.76	0.90	31.7
Approach		519	3.1	519	3.1	0.515	21.6	LOS B	6.9	48.2	0.90	0.76	0.90	31.6
All Vehicles		1672	1.9	1672	1.9	0.519	16.4	LOS B	9.3	65.6	0.77	0.67	0.77	36.0

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	26	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	43	24.3	LOS C	0.1	0.1	0.90	0.90	187.3	211.9	1.13
All Pedestrians		69	24.3	LOS C	0.1	0.1	0.90	0.90	188.3	213.2	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	699	0.0	699	0.0	0.446	12.5	LOS A	7.3	51.4	0.69	0.60	0.69	39.8
6	R2	19	10.5	19	10.5	* 0.446	19.0	LOS B	7.3	51.4	0.78	0.67	0.78	18.4
Approach		718	0.3	718	0.3	0.446	12.7	LOS A	7.3	51.4	0.69	0.60	0.69	39.5
North: Doran Dr (N)														
7	L2	27	14.8	27	14.8	0.034	12.8	LOS A	0.4	3.4	0.56	0.61	0.56	20.0
9	R2	345	4.3	345	4.3	* 0.752	28.2	LOS B	10.2	74.1	0.96	0.92	1.11	29.6
Approach		372	5.1	372	5.1	0.752	27.1	LOS B	10.2	74.1	0.93	0.89	1.07	29.3
West: Carrington Rd (W)														
10	L2	155	7.1	155	7.1	0.714	25.1	LOS B	12.2	87.6	0.93	0.86	1.00	31.4
11	T1	756	0.1	756	0.1	* 0.714	20.4	LOS B	12.6	88.5	0.93	0.86	0.99	31.9
Approach		911	1.3	911	1.3	0.714	21.2	LOS B	12.6	88.5	0.93	0.86	0.99	31.8
All Vehicles		2001	1.6	2001	1.6	0.752	19.3	LOS B	12.6	88.5	0.85	0.77	0.90	33.8

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	15	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	26	24.3	LOS C	0.0	0.0	0.90	0.90	187.3	211.9	1.13
All Pedestrians		41	24.3	LOS C	0.0	0.0	0.90	0.90	188.2	213.1	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	168	3.0	168	3.0	0.528	20.4	LOS B	7.7	55.0	0.82	0.79	0.82	32.8
2	T1	84	1.2	84	1.2	0.528	17.1	LOS B	7.7	55.0	0.82	0.79	0.82	32.8
3	R2	80	1.3	80	1.3	* 0.528	20.4	LOS B	7.7	55.0	0.82	0.79	0.82	32.8
Approach		332	2.1	332	2.1	0.528	19.6	LOS B	7.7	55.0	0.82	0.79	0.82	32.8
East: Carrington Rd (E)														
4	L2	91	1.1	91	1.1	0.517	18.8	LOS B	9.2	64.3	0.79	0.71	0.79	38.6
5	T1	712	0.1	712	0.1	0.517	14.2	LOS A	9.2	64.3	0.79	0.70	0.79	27.5
6	R2	12	0.0	12	0.0	* 0.517	18.8	LOS B	8.9	62.2	0.79	0.69	0.79	27.8
Approach		815	0.2	815	0.2	0.517	14.8	LOS B	9.2	64.3	0.79	0.70	0.79	29.9
North: Andalusian Way (N)														
7	L2	67	0.0	67	0.0	0.211	17.7	LOS B	2.9	20.0	0.72	0.66	0.72	17.9
8	T1	61	0.0	61	0.0	0.211	14.3	LOS A	2.9	20.0	0.72	0.66	0.72	36.1
9	R2	12	0.0	12	0.0	0.211	17.7	LOS B	2.9	20.0	0.72	0.66	0.72	17.9
Approach		140	0.0	140	0.0	0.211	16.2	LOS B	2.9	20.0	0.72	0.66	0.72	29.4
West: Carrington Rd (W)														
10	L2	90	0.0	90	0.0	0.422	18.1	LOS B	7.1	49.8	0.75	0.68	0.75	18.1
11	T1	298	0.0	298	0.0	0.422	14.5	LOS A	7.1	49.8	0.77	0.69	0.77	17.2
12	R2	83	3.6	83	3.6	0.422	23.8	LOS B	3.3	23.5	0.85	0.75	0.85	32.9
Approach		471	0.6	471	0.6	0.422	16.8	LOS B	7.1	49.8	0.78	0.70	0.78	23.2
All Vehicles		1758	0.7	1758	0.7	0.528	16.4	LOS B	9.2	64.3	0.79	0.71	0.79	29.2

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	5	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	9	24.3	LOS C	0.0	0.0	0.90	0.90	189.8	215.2	1.13
North: Andalusian Way (N)											

P3 Full	5	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
West: Carrington Rd (W)										
P4 Full	26	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	46	24.3	LOS C	0.0	0.0	0.90	0.90	188.7	213.7	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	107	1.9	107	1.9	0.568	23.6	LOS B	7.4	51.8	0.88	0.80	0.88	31.1
2	T1	93	0.0	93	0.0	0.568	20.3	LOS B	7.4	51.8	0.88	0.80	0.88	31.1
3	R2	91	0.0	91	0.0	* 0.568	23.6	LOS B	7.4	51.8	0.88	0.80	0.88	31.1
Approach		291	0.7	291	0.7	0.568	22.6	LOS B	7.4	51.8	0.88	0.80	0.88	31.1
East: Carrington Rd (E)														
4	L2	73	0.0	73	0.0	0.361	15.7	LOS B	6.1	43.0	0.68	0.62	0.68	40.4
5	T1	556	0.0	556	0.0	0.361	11.2	LOS A	6.1	43.0	0.68	0.60	0.68	30.4
6	R2	7	0.0	7	0.0	0.361	15.7	LOS B	5.9	41.4	0.68	0.59	0.68	30.8
Approach		636	0.0	636	0.0	0.361	11.7	LOS A	6.1	43.0	0.68	0.60	0.68	32.6
North: Andalusian Way (N)														
7	L2	96	0.0	96	0.0	0.341	20.7	LOS B	4.4	31.1	0.81	0.72	0.81	16.1
8	T1	73	0.0	73	0.0	0.341	17.3	LOS B	4.4	31.1	0.81	0.72	0.81	34.4
9	R2	24	0.0	24	0.0	0.341	20.8	LOS B	4.4	31.1	0.81	0.72	0.81	16.1
Approach		193	0.0	193	0.0	0.341	19.5	LOS B	4.4	31.1	0.81	0.72	0.81	26.3
West: Carrington Rd (W)														
10	L2	178	0.0	178	0.0	0.552	17.1	LOS B	10.5	73.6	0.77	0.72	0.77	18.6
11	T1	493	0.2	493	0.2	0.552	13.3	LOS A	10.5	73.6	0.78	0.73	0.78	17.9
12	R2	118	3.4	118	3.4	* 0.552	19.4	LOS B	6.8	48.2	0.81	0.74	0.81	35.7
Approach		789	0.6	789	0.6	0.552	15.1	LOS B	10.5	73.6	0.78	0.73	0.78	23.7
All Vehicles		1909	0.4	1909	0.4	0.568	15.6	LOS B	10.5	73.6	0.77	0.70	0.77	28.6

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	5	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	11	24.3	LOS C	0.0	0.0	0.90	0.90	189.8	215.2	1.13
North: Andalusian Way (N)											

P3 Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
West: Carrington Rd (W)										
P4 Full	25	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	47	24.3	LOS C	0.0	0.0	0.90	0.90	188.6	213.6	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	10	0.0	10	0.0	0.114	5.8	LOS A	0.3	2.8	0.22	0.61	0.22	49.0
2	T1	3	0.0	3	0.0	0.114	5.1	LOS A	0.3	2.8	0.22	0.61	0.22	37.8
3	R2	80	23.8	80	23.8	0.114	7.3	LOS A	0.3	2.8	0.22	0.61	0.22	32.6
Approach		93	20.4	93	20.4	0.114	7.1	LOS A	0.3	2.8	0.22	0.61	0.22	37.3
East: De Clambe Dr (E)														
4	L2	183	7.1	183	7.1	0.155	4.7	LOS A	0.2	1.4	0.02	0.42	0.02	35.3
5	T1	73	1.4	73	1.4	0.155	0.0	LOS A	0.2	1.4	0.02	0.42	0.02	54.5
6	R2	24	0.0	24	0.0	0.155	4.7	LOS A	0.2	1.4	0.02	0.42	0.02	35.2
Approach		280	5.0	280	5.0	0.155	3.5	NA	0.2	1.4	0.02	0.42	0.02	46.5
North: Showground Access (N)														
7	L2	14	0.0	14	0.0	0.023	5.6	LOS A	0.1	0.6	0.04	0.55	0.04	33.0
8	T1	12	0.0	12	0.0	0.023	5.4	LOS A	0.1	0.6	0.04	0.55	0.04	33.0
9	R2	2	0.0	2	0.0	0.023	6.0	LOS A	0.1	0.6	0.04	0.55	0.04	49.4
Approach		28	0.0	28	0.0	0.023	5.5	LOS A	0.1	0.6	0.04	0.55	0.04	36.6
West: De Clambe Dr (W)														
10	L2	7	0.0	7	0.0	0.014	6.0	LOS A	0.0	0.3	0.22	0.27	0.22	46.6
11	T1	12	0.0	12	0.0	0.014	0.4	LOS A	0.0	0.3	0.22	0.27	0.22	53.5
12	R2	6	0.0	6	0.0	0.014	6.2	LOS A	0.0	0.3	0.22	0.27	0.22	53.5
Approach		25	0.0	25	0.0	0.014	3.4	NA	0.0	0.3	0.22	0.27	0.22	51.1
All Vehicles		426	7.7	426	7.7	0.155	4.4	NA	0.3	2.8	0.08	0.46	0.08	44.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	1	0.0	1	0.0	0.202	5.6	LOS A	0.6	4.7	0.33	0.69	0.33	48.0
2	T1	13	0.0	13	0.0	0.202	5.9	LOS A	0.6	4.7	0.33	0.69	0.33	36.2
3	R2	134	9.7	134	9.7	0.202	8.1	LOS A	0.6	4.7	0.33	0.69	0.33	30.6
Approach		148	8.8	148	8.8	0.202	7.9	LOS A	0.6	4.7	0.33	0.69	0.33	31.6
East: De Clambe Dr (E)														
4	L2	269	6.7	269	6.7	0.182	4.8	LOS A	0.3	2.4	0.08	0.51	0.08	30.7
5	T1	9	0.0	9	0.0	0.182	0.4	LOS A	0.3	2.4	0.08	0.51	0.08	52.7
6	R2	43	0.0	43	0.0	0.182	5.1	LOS A	0.3	2.4	0.08	0.51	0.08	33.0
Approach		321	5.6	321	5.6	0.182	4.7	NA	0.3	2.4	0.08	0.51	0.08	33.2
North: Showground Access (N)														
7	L2	11	0.0	11	0.0	0.025	5.8	LOS A	0.1	0.6	0.25	0.56	0.25	31.4
8	T1	13	0.0	13	0.0	0.025	6.4	LOS A	0.1	0.6	0.25	0.56	0.25	31.4
9	R2	1	0.0	1	0.0	0.025	6.5	LOS A	0.1	0.6	0.25	0.56	0.25	48.7
Approach		25	0.0	25	0.0	0.025	6.2	LOS A	0.1	0.6	0.25	0.56	0.25	33.6
West: De Clambe Dr (W)														
10	L2	5	0.0	5	0.0	0.096	6.5	LOS A	0.4	2.6	0.27	0.21	0.27	47.3
11	T1	107	0.0	107	0.0	0.096	0.5	LOS A	0.4	2.6	0.27	0.21	0.27	54.7
12	R2	52	0.0	52	0.0	0.096	6.5	LOS A	0.4	2.6	0.27	0.21	0.27	54.7
Approach		164	0.0	164	0.0	0.096	2.6	NA	0.4	2.6	0.27	0.21	0.27	54.4
All Vehicles		658	4.7	658	4.7	0.202	5.0	NA	0.6	4.7	0.19	0.48	0.19	42.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing (No Upgrades) AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	143	0.0	143	0.0	0.206	0.5	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
3	R2	104	0.0	104	0.0	0.206	2.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
Approach		247	0.0	247	0.0	0.206	1.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
East: De Clambe Dr (E)														
4	L2	159	0.0	159	0.0	0.155	3.9	LOS A	0.0	0.0	0.00	0.29	0.00	46.7
5	T1	135	0.0	135	0.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	34.1
Approach		294	0.0	294	0.0	0.155	2.1	NA	0.0	0.0	0.00	0.29	0.00	45.2
West: De Clambe Dr (W)														
11	T1	67	0.0	67	0.0	0.063	0.6	LOS A	0.2	1.7	0.28	0.21	0.28	33.8
12	R2	38	0.0	38	0.0	0.063	5.6	LOS A	0.2	1.7	0.28	0.21	0.28	21.6
Approach		105	0.0	105	0.0	0.063	2.4	NA	0.2	1.7	0.28	0.21	0.28	23.2
All Vehicles		646	0.0	646	0.0	0.206	1.8	NA	0.8	5.9	0.15	0.25	0.15	25.8

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing (No Upgrades) PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	226	0.0	226	0.0	0.360	0.5	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
3	R2	165	0.0	165	0.0	0.360	3.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
Approach		391	0.0	391	0.0	0.360	1.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
East: De Clambe Dr (E)														
4	L2	347	0.0	347	0.0	0.238	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	45.7
5	T1	100	0.0	100	0.0	0.238	0.0	LOS A	0.0	0.0	0.00	0.41	0.00	30.2
Approach		447	0.0	447	0.0	0.238	3.0	NA	0.0	0.0	0.00	0.41	0.00	45.0
West: De Clambe Dr (W)														
11	T1	170	0.0	170	0.0	0.161	1.1	LOS A	0.7	5.0	0.36	0.21	0.36	33.0
12	R2	83	0.0	83	0.0	0.161	6.5	LOS A	0.7	5.0	0.36	0.21	0.36	21.5
Approach		253	0.0	253	0.0	0.161	2.8	NA	0.7	5.0	0.36	0.21	0.36	23.3
All Vehicles		1091	0.0	1091	0.0	0.360	2.6	NA	1.7	11.8	0.18	0.30	0.18	26.7

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

De Clambe Dr & Andalusian Way
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	118	0.0	118	0.0	0.138	4.0	LOS A	0.5	3.3	0.22	0.50	0.22	29.9
3	R2	49	0.0	49	0.0	0.138	5.3	LOS A	0.5	3.3	0.22	0.50	0.22	29.9
Approach		167	0.0	167	0.0	0.138	4.4	LOS A	0.5	3.3	0.22	0.50	0.22	29.9
East: De Clambe Dr (E)														
4	L2	81	0.0	81	0.0	0.138	4.6	LOS A	0.0	0.0	0.00	0.17	0.00	43.5
5	T1	176	7.4	176	7.4	0.138	0.0	LOS A	0.0	0.0	0.00	0.17	0.00	43.5
Approach		257	5.1	257	5.1	0.138	1.4	NA	0.0	0.0	0.00	0.17	0.00	43.5
West: De Clambe Dr (W)														
11	T1	83	22.9	83	22.9	0.109	0.7	LOS A	0.5	4.0	0.33	0.31	0.33	28.4
12	R2	88	1.1	88	1.1	0.109	4.8	LOS A	0.5	4.0	0.33	0.31	0.33	28.4
Approach		171	11.7	171	11.7	0.109	2.8	NA	0.5	4.0	0.33	0.31	0.33	28.4
All Vehicles		595	5.5	595	5.5	0.138	2.7	NA	0.5	4.0	0.16	0.30	0.16	35.3

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

De Clambe Dr & Andalusian Way
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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	217	0.0	217	0.0	0.232	4.3	LOS A	0.9	6.3	0.27	0.53	0.27	29.2
3	R2	51	0.0	51	0.0	0.232	6.9	LOS A	0.9	6.3	0.27	0.53	0.27	29.2
Approach		268	0.0	268	0.0	0.232	4.8	LOS A	0.9	6.3	0.27	0.53	0.27	29.2
East: De Clambe Dr (E)														
4	L2	73	0.0	73	0.0	0.163	4.6	LOS A	0.0	0.0	0.00	0.13	0.00	44.8
5	T1	230	7.8	230	7.8	0.163	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	44.8
Approach		303	5.9	303	5.9	0.163	1.1	NA	0.0	0.0	0.00	0.13	0.00	44.8
West: De Clambe Dr (W)														
11	T1	198	6.6	198	6.6	0.206	0.8	LOS A	1.1	7.7	0.35	0.25	0.35	30.3
12	R2	137	0.0	137	0.0	0.206	5.1	LOS A	1.1	7.7	0.35	0.25	0.35	30.3
Approach		335	3.9	335	3.9	0.206	2.6	NA	1.1	7.7	0.35	0.25	0.35	30.3
All Vehicles		906	3.4	906	3.4	0.232	2.8	NA	1.1	7.7	0.21	0.29	0.21	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.
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.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	70	12.9	70	12.9	0.069	11.5	LOS A	0.8	6.3	0.20	0.62	0.20	28.8
22	T1	723	1.7	723	1.7	0.375	4.7	LOS A	5.4	38.5	0.18	0.15	0.18	51.0
Approach		793	2.6	793	2.6	0.375	5.3	LOS A	5.4	38.5	0.18	0.20	0.18	49.6
NorthWest: Showground Rd (NW)														
28	T1	1548	1.2	1548	1.2	* 0.464	2.2	LOS A	11.0	78.0	0.25	0.23	0.25	53.3
29	R2	218	1.8	218	1.8	0.245	9.1	LOS A	3.7	26.5	0.34	0.68	0.34	39.4
Approach		1766	1.3	1766	1.3	0.464	3.0	LOS A	11.0	78.0	0.26	0.29	0.26	51.1
SouthWest: De Clambe Dr (SW)														
30	L2	135	6.7	135	6.7	0.187	30.8	LOS C	5.4	40.0	0.68	0.73	0.68	25.4
32	R2	12	100.0	12	100.0	* 0.240	76.4	LOS F	0.8	10.5	0.99	0.69	0.99	6.1
Approach		147	14.3	147	14.3	0.240	34.5	LOS C	5.4	40.0	0.70	0.72	0.70	23.2
All Vehicles		2706	2.4	2706	2.4	0.464	5.4	LOS A	11.0	78.0	0.26	0.28	0.26	46.9

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		8	59.1	LOS E	0.0	0.0	0.95	0.95	224.9	215.5	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	129	7.8	129	7.8	0.100	10.8	LOS A	2.0	14.7	0.26	0.64	0.26	29.7
22	T1	1276	0.8	1276	0.8	* 0.542	5.3	LOS A	14.8	104.4	0.23	0.20	0.23	50.1
Approach		1405	1.4	1405	1.4	0.542	5.8	LOS A	14.8	104.4	0.23	0.24	0.23	48.8
NorthWest: Showground Rd (NW)														
28	T1	792	1.1	792	1.1	0.237	1.6	LOS A	4.2	30.0	0.19	0.17	0.19	54.8
29	R2	175	4.6	175	4.6	* 0.358	16.2	LOS B	6.5	47.4	0.64	0.78	0.64	31.1
Approach		967	1.8	967	1.8	0.358	4.3	LOS A	6.5	47.4	0.27	0.28	0.27	48.1
SouthWest: De Clambe Dr (SW)														
30	L2	305	1.6	305	1.6	0.636	49.5	LOS D	17.0	120.7	0.93	0.83	0.93	19.4
32	R2	10	100.0	10	100.0	* 0.200	76.1	LOS F	0.7	8.7	0.99	0.69	0.99	6.1
Approach		315	4.8	315	4.8	0.636	50.3	LOS D	17.0	120.7	0.94	0.83	0.94	18.9
All Vehicles		2687	1.9	2687	1.9	0.636	10.5	LOS A	17.0	120.7	0.33	0.33	0.33	40.4

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	1	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		4	59.1	LOS E	0.0	0.0	0.95	0.95	226.2	217.2	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing AM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2021 with Development (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	525	0.2	525	0.2	0.409	14.6	LOS B	14.0	97.9	0.46	0.73	0.46	40.8
22	T1	693	2.7	693	2.7	* 0.431	27.3	LOS B	15.6	111.5	0.74	0.65	0.74	32.0
Approach		1218	1.6	1218	1.6	0.431	21.8	LOS B	15.6	111.5	0.62	0.68	0.62	35.3
NorthWest: Showground Rd (NW)														
28	T1	1208	2.2	1208	2.2	0.454	9.0	LOS A	14.4	102.8	0.42	0.38	0.42	49.2
29	R2	341	0.3	341	0.3	* 0.308	25.9	LOS B	6.5	45.5	0.64	0.76	0.64	17.5
Approach		1549	1.8	1549	1.8	0.454	12.7	LOS A	14.4	102.8	0.47	0.46	0.47	43.7
SouthWest: Carrington Rd (SW)														
30	L2	51	2.0	51	2.0	0.058	23.7	LOS B	1.7	12.1	0.56	0.65	0.56	22.2
32	R2	348	0.6	348	0.6	* 0.437	52.4	LOS D	9.6	67.7	0.92	0.80	0.92	26.7
Approach		399	0.8	399	0.8	0.437	48.7	LOS D	9.6	67.7	0.87	0.78	0.87	26.4
All Vehicles		3166	1.6	3166	1.6	0.454	20.8	LOS B	15.6	111.5	0.58	0.59	0.58	36.9

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	53	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		61	59.3	LOS E	0.2	0.2	0.96	0.96	218.0	206.3	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing PM 2021 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2021 with Development (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	422	0.0	422	0.0	0.269	7.6	LOS A	5.2	36.2	0.21	0.64	0.21	48.1
22	T1	1197	1.7	1197	1.7	* 0.646	20.1	LOS B	29.9	212.1	0.71	0.64	0.71	36.5
Approach		1619	1.2	1619	1.2	0.646	16.9	LOS B	29.9	212.1	0.58	0.64	0.58	38.9
NorthWest: Showground Rd (NW)														
28	T1	632	2.7	632	2.7	0.249	9.1	LOS A	6.8	48.7	0.37	0.33	0.37	49.1
29	R2	174	0.0	174	0.0	* 0.386	40.0	LOS C	4.6	32.4	0.87	0.81	0.87	12.6
Approach		806	2.1	806	2.1	0.386	15.8	LOS B	6.8	48.7	0.48	0.43	0.48	41.1
SouthWest: Carrington Rd (SW)														
30	L2	179	0.0	179	0.0	0.272	36.5	LOS C	8.0	56.2	0.76	0.75	0.76	17.1
32	R2	606	0.0	606	0.0	* 0.663	52.3	LOS D	17.4	121.8	0.96	0.84	0.96	26.7
Approach		785	0.0	785	0.0	0.663	48.7	LOS D	17.4	121.8	0.91	0.82	0.91	25.4
All Vehicles		3210	1.2	3210	1.2	0.663	24.4	LOS B	29.9	212.1	0.64	0.63	0.64	34.2

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	53	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		60	59.3	LOS E	0.2	0.2	0.96	0.96	217.8	206.0	0.95

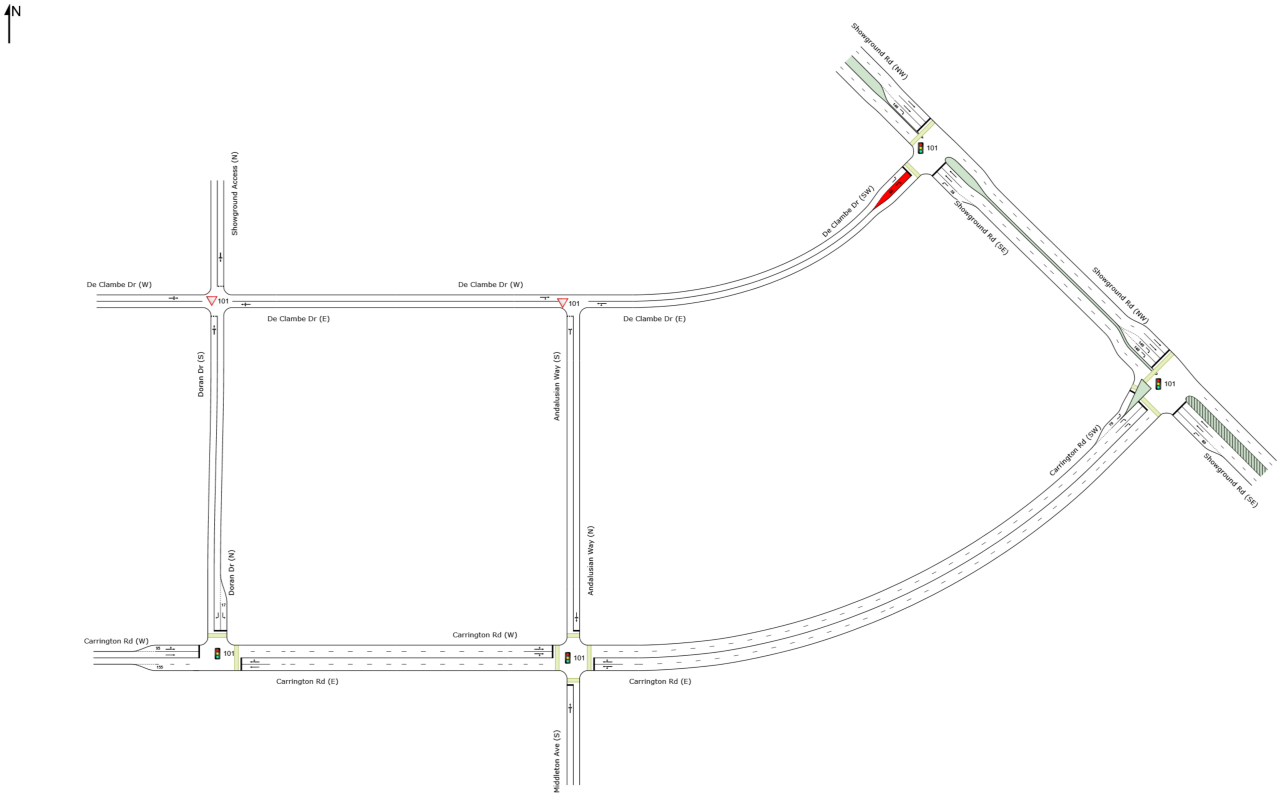
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [Existing Network AM 2026 (Network Folder: General)]

New Network
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Carrington Rd & Doran Dr Existing AM 2026
101	NA	Carrington Rd & Andalusian Way Existing AM 2026
101	NA	De Clambe Dr & Doran Dr Existing AM 2026
101	NA	De Clambe Dr & Andalusian Way Existing AM 2026
101	NA	Showground Rd & DeClambe Dr Existing AM 2026
101	NA	Showground Rd & Carrington Rd Existing AM 2026

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Organisation: VARGA TRAFFIC PLANNING | Licence: NETWORK / 1PC | Created: Monday, 19 July 2021 14:23:06 PM
Project: Z:\DATA\Data\Jobs01\Jobs\20work\20417_DoranDriveCastleHill\SIDRA\210719\Existing Network 2026.sip9

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing AM 2026 (Site Folder: General)]

Network: N101 [Existing Network AM 2026 (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	931	0.0	931	0.0	0.417	6.2	LOS A	7.4	52.3	0.50	0.44	0.50	44.6
6	R2	17	18.7	17	18.7	* 0.417	11.1	LOS A	7.4	52.3	0.55	0.50	0.55	28.3
Approach		948	0.3	948	0.3	0.417	6.3	LOS A	7.4	52.3	0.50	0.44	0.50	44.5
North: Doran Dr (N)														
7	L2	24	8.3	24	8.3	0.026	11.0	LOS A	0.3	2.6	0.51	0.60	0.51	21.4
9	R2	83	13.3	83	13.3	* 0.419	32.2	LOS C	2.4	19.0	0.97	0.76	0.97	28.1
Approach		107	12.1	107	12.1	0.419	27.4	LOS B	2.4	19.0	0.87	0.72	0.87	27.6
West: Carrington Rd (W)														
10	L2	56	28.0	56	28.0	0.423	24.2	LOS B	5.4	40.1	0.86	0.73	0.86	32.3
11	T1	396	0.6	396	0.6	* 0.423	19.4	LOS B	5.7	40.2	0.86	0.72	0.86	32.6
Approach		452	4.0	452	4.0	0.423	20.0	LOS B	5.7	40.2	0.86	0.72	0.86	32.5
All Vehicles		1507	2.3	1507	2.3	0.423	11.9	LOS A	7.4	52.3	0.63	0.55	0.63	39.1

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	29	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	47	24.3	LOS C	0.1	0.1	0.90	0.90	187.3	211.9	1.13
All Pedestrians		76	24.3	LOS C	0.1	0.1	0.90	0.90	188.3	213.2	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing PM 2026 (Site Folder: General)]

Network: N101 [Existing Network PM 2026 (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	783	0.0	783	0.0	0.427	9.3	LOS A	7.5	52.5	0.60	0.53	0.60	41.9
6	R2	21	10.5	21	10.5	* 0.427	16.9	LOS B	7.5	52.5	0.73	0.63	0.73	20.3
Approach		804	0.3	804	0.3	0.427	9.5	LOS A	7.5	52.5	0.61	0.53	0.61	41.6
North: Doran Dr (N)														
7	L2	27	14.8	27	14.8	0.040	15.3	LOS B	0.5	3.8	0.63	0.63	0.63	18.1
9	R2	119	12.6	119	12.6	* 0.419	29.1	LOS C	3.3	25.7	0.94	0.77	0.94	29.2
Approach		146	13.0	146	13.0	0.419	26.5	LOS B	3.3	25.7	0.88	0.75	0.88	28.4
West: Carrington Rd (W)														
10	L2	76	15.3	76	15.3	0.454	19.1	LOS B	7.5	53.8	0.78	0.69	0.78	35.3
11	T1	619	0.2	619	0.2	* 0.454	14.4	LOS A	7.7	54.1	0.78	0.68	0.78	35.7
Approach		695	1.8	695	1.8	0.454	15.0	LOS B	7.7	54.1	0.78	0.68	0.78	35.7
All Vehicles		1645	2.1	1645	2.1	0.454	13.3	LOS A	7.7	54.1	0.70	0.61	0.70	37.7

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	16	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	29	24.3	LOS C	0.0	0.0	0.90	0.90	187.3	211.9	1.13
All Pedestrians		45	24.3	LOS C	0.0	0.0	0.90	0.90	188.2	213.1	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing AM 2026 (Site Folder: General)]

Network: N101 [Existing Network AM 2026 (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	168	3.0	168	3.0	0.529	21.8	LOS B	7.5	53.8	0.85	0.79	0.85	31.9
2	T1	66	1.5	66	1.5	0.529	18.5	LOS B	7.5	53.8	0.85	0.79	0.85	31.9
3	R2	80	1.3	80	1.3	* 0.529	21.8	LOS B	7.5	53.8	0.85	0.79	0.85	31.9
Approach		314	2.2	314	2.2	0.529	21.1	LOS B	7.5	53.8	0.85	0.79	0.85	31.9
East: Carrington Rd (E)														
4	L2	103	1.1	103	1.1	0.541	17.7	LOS B	10.1	71.0	0.78	0.70	0.78	39.2
5	T1	805	0.1	805	0.1	0.541	13.1	LOS A	10.1	71.0	0.78	0.69	0.78	28.5
6	R2	14	0.0	14	0.0	* 0.541	17.7	LOS B	9.8	68.5	0.78	0.68	0.78	28.8
Approach		921	0.2	921	0.2	0.541	13.7	LOS A	10.1	71.0	0.78	0.69	0.78	30.8
North: Andalusian Way (N)														
7	L2	6	0.0	6	0.0	0.110	19.3	LOS B	1.3	9.0	0.74	0.61	0.74	17.5
8	T1	43	0.0	43	0.0	0.110	15.9	LOS B	1.3	9.0	0.74	0.61	0.74	35.7
9	R2	12	0.0	12	0.0	0.110	19.4	LOS B	1.3	9.0	0.74	0.61	0.74	17.5
Approach		61	0.0	61	0.0	0.110	16.9	LOS B	1.3	9.0	0.74	0.61	0.74	32.8
West: Carrington Rd (W)														
10	L2	16	0.0	16	0.0	0.397	16.6	LOS B	6.9	48.3	0.71	0.62	0.71	20.2
11	T1	334	0.0	334	0.0	0.397	12.1	LOS A	6.9	48.3	0.71	0.62	0.71	20.2
12	R2	93	3.6	93	3.6	0.397	24.0	LOS B	2.4	17.1	0.84	0.77	0.84	32.0
Approach		442	0.8	442	0.8	0.397	14.7	LOS B	6.9	48.3	0.74	0.65	0.74	25.8
All Vehicles		1738	0.7	1738	0.7	0.541	15.4	LOS B	10.1	71.0	0.78	0.70	0.78	30.2

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	10	24.3	LOS C	0.0	0.0	0.90	0.90	189.8	215.2	1.13
North: Andalusian Way (N)											
P3	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13

West: Carrington Rd (W)										
P4 Full	29	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	51	24.3	LOS C	0.0	0.0	0.90	0.90	188.7	213.7	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing PM 2026 (Site Folder: General)]

Network: N101 [Existing Network PM 2026 (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	107	1.9	107	1.9	0.482	23.0	LOS B	6.2	43.5	0.85	0.79	0.85	31.3
2	T1	55	0.0	55	0.0	0.482	19.7	LOS B	6.2	43.5	0.85	0.79	0.85	31.3
3	R2	91	0.0	91	0.0	* 0.482	22.9	LOS B	6.2	43.5	0.85	0.79	0.85	31.3
Approach		253	0.8	253	0.8	0.482	22.2	LOS B	6.2	43.5	0.85	0.79	0.85	31.3
East: Carrington Rd (E)														
4	L2	82	0.0	82	0.0	0.388	15.3	LOS B	6.8	47.5	0.68	0.62	0.68	40.6
5	T1	623	0.0	623	0.0	0.388	10.7	LOS A	6.8	47.5	0.68	0.60	0.68	30.8
6	R2	8	0.0	8	0.0	0.388	15.3	LOS B	6.6	46.2	0.68	0.59	0.68	31.2
Approach		712	0.0	712	0.0	0.388	11.3	LOS A	6.8	47.5	0.68	0.60	0.68	33.1
North: Andalusian Way (N)														
7	L2	9	0.0	9	0.0	0.143	20.4	LOS B	1.5	10.5	0.76	0.65	0.76	16.5
8	T1	35	0.0	35	0.0	0.143	17.0	LOS B	1.5	10.5	0.76	0.65	0.76	34.8
9	R2	24	0.0	24	0.0	0.143	20.4	LOS B	1.5	10.5	0.76	0.65	0.76	16.5
Approach		68	0.0	68	0.0	0.143	18.6	LOS B	1.5	10.5	0.76	0.65	0.76	29.1
West: Carrington Rd (W)														
10	L2	13	0.0	13	0.0	0.478	15.9	LOS B	8.9	62.7	0.72	0.63	0.72	21.0
11	T1	518	0.2	518	0.2	0.478	11.9	LOS A	8.9	62.7	0.73	0.65	0.73	20.0
12	R2	124	3.4	124	3.4	* 0.478	19.7	LOS B	4.7	33.2	0.79	0.74	0.79	35.1
Approach		654	0.8	654	0.8	0.478	13.4	LOS A	8.9	62.7	0.74	0.66	0.74	26.3
All Vehicles		1687	0.4	1687	0.4	0.482	14.1	LOS A	8.9	62.7	0.73	0.66	0.73	30.3

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	12	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Andalusian Way (N)											
P3	Full	7	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13

West: Carrington Rd (W)										
P4 Full	28	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	52	24.3	LOS C	0.0	0.0	0.90	0.90	188.6	213.6	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing AM 2026 (Site Folder: General)]

Network: N101 [Existing Network AM 2026 (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	10	0.0	10	0.0	0.065	5.8	LOS A	0.2	1.7	0.19	0.58	0.19	49.6
2	T1	3	0.0	3	0.0	0.065	4.7	LOS A	0.2	1.7	0.19	0.58	0.19	38.6
3	R2	42	45.2	42	45.2	0.065	7.1	LOS A	0.2	1.7	0.19	0.58	0.19	33.8
Approach		55	34.5	55	34.5	0.065	6.7	LOS A	0.2	1.7	0.19	0.58	0.19	40.5
East: De Clambe Dr (E)														
4	L2	40	32.5	40	32.5	0.077	5.9	LOS A	0.2	1.3	0.04	0.27	0.04	45.9
5	T1	73	1.4	73	1.4	0.077	0.0	LOS A	0.2	1.3	0.04	0.27	0.04	56.4
6	R2	24	0.0	24	0.0	0.077	5.5	LOS A	0.2	1.3	0.04	0.27	0.04	40.6
Approach		137	10.2	137	10.2	0.077	2.7	NA	0.2	1.3	0.04	0.27	0.04	53.2
North: Showground Access (N)														
7	L2	14	0.0	14	0.0	0.021	5.6	LOS A	0.1	0.5	0.05	0.55	0.05	33.8
8	T1	12	0.0	12	0.0	0.021	4.7	LOS A	0.1	0.5	0.05	0.55	0.05	33.8
9	R2	2	0.0	2	0.0	0.021	6.0	LOS A	0.1	0.5	0.05	0.55	0.05	49.7
Approach		28	0.0	28	0.0	0.021	5.2	LOS A	0.1	0.5	0.05	0.55	0.05	37.3
West: De Clambe Dr (W)														
10	L2	7	0.0	7	0.0	0.014	5.7	LOS A	0.0	0.3	0.14	0.28	0.14	44.1
11	T1	12	0.0	12	0.0	0.014	0.1	LOS A	0.0	0.3	0.14	0.28	0.14	54.0
12	R2	6	0.0	6	0.0	0.014	5.8	LOS A	0.0	0.3	0.14	0.28	0.14	54.0
Approach		25	0.0	25	0.0	0.014	3.1	NA	0.0	0.3	0.14	0.28	0.14	50.4
All Vehicles		245	13.5	245	13.5	0.077	3.9	NA	0.2	1.7	0.08	0.37	0.08	49.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing PM 2026 (Site Folder: General)]

Network: N101 [Existing Network PM 2026 (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	1	0.0	1	0.0	0.082	5.6	LOS A	0.2	1.9	0.21	0.61	0.21	49.2
2	T1	13	0.0	13	0.0	0.082	5.1	LOS A	0.2	1.9	0.21	0.61	0.21	38.0
3	R2	51	25.5	51	25.5	0.082	7.5	LOS A	0.2	1.9	0.21	0.61	0.21	32.9
Approach		65	20.0	65	20.0	0.082	7.0	LOS A	0.2	1.9	0.21	0.61	0.21	34.9
East: De Clambe Dr (E)														
4	L2	43	41.9	43	41.9	0.058	6.2	LOS A	0.2	1.8	0.18	0.48	0.18	35.3
5	T1	9	0.0	9	0.0	0.058	0.3	LOS A	0.2	1.8	0.18	0.48	0.18	52.3
6	R2	43	0.0	43	0.0	0.058	5.8	LOS A	0.2	1.8	0.18	0.48	0.18	35.3
Approach		95	18.9	95	18.9	0.058	5.4	NA	0.2	1.8	0.18	0.48	0.18	38.6
North: Showground Access (N)														
7	L2	11	0.0	11	0.0	0.021	5.8	LOS A	0.1	0.5	0.23	0.54	0.23	32.5
8	T1	13	0.0	13	0.0	0.021	5.2	LOS A	0.1	0.5	0.23	0.54	0.23	32.5
9	R2	1	0.0	1	0.0	0.021	6.5	LOS A	0.1	0.5	0.23	0.54	0.23	49.2
Approach		25	0.0	25	0.0	0.021	5.5	LOS A	0.1	0.5	0.23	0.54	0.23	34.7
West: De Clambe Dr (W)														
10	L2	5	0.0	5	0.0	0.089	5.7	LOS A	0.3	2.1	0.10	0.20	0.10	45.1
11	T1	107	0.0	107	0.0	0.089	0.1	LOS A	0.3	2.1	0.10	0.20	0.10	55.8
12	R2	52	0.0	52	0.0	0.089	5.6	LOS A	0.3	2.1	0.10	0.20	0.10	55.8
Approach		164	0.0	164	0.0	0.089	2.0	NA	0.3	2.1	0.10	0.20	0.10	55.3
All Vehicles		349	8.9	349	8.9	0.089	4.1	NA	0.3	2.1	0.15	0.38	0.15	48.3

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing AM 2026 (Site Folder: General)]

Network: N101 [Existing Network AM 2026 (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	24	0.0	24	0.0	0.062	3.8	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
3	R2	49	0.0	49	0.0	0.062	4.4	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
Approach		73	0.0	73	0.0	0.062	4.2	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
East: De Clambe Dr (E)														
4	L2	81	0.0	81	0.0	0.105	4.6	LOS A	0.0	0.0	0.00	0.23	0.00	41.6
5	T1	111	11.7	111	11.7	0.105	0.0	LOS A	0.0	0.0	0.00	0.23	0.00	41.6
Approach		192	6.8	192	6.8	0.105	1.9	NA	0.0	0.0	0.00	0.23	0.00	41.6
West: De Clambe Dr (W)														
11	T1	58	32.8	58	32.8	0.042	0.1	LOS A	0.1	0.6	0.09	0.08	0.09	44.5
12	R2	9	11.1	9	11.1	0.042	5.3	LOS A	0.1	0.6	0.09	0.08	0.09	44.5
Approach		67	29.9	67	29.9	0.042	0.8	NA	0.1	0.6	0.09	0.08	0.09	44.5
All Vehicles		332	9.9	332	9.9	0.105	2.2	NA	0.2	1.3	0.06	0.26	0.06	38.8

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing PM 2026 (Site Folder: General)]

Network: N101 [Existing Network PM 2026 (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	13	0.0	13	0.0	0.060	3.7	LOS A	0.2	1.2	0.19	0.51	0.19	29.6
3	R2	51	0.0	51	0.0	0.060	4.7	LOS A	0.2	1.2	0.19	0.51	0.19	29.6
Approach		64	0.0	64	0.0	0.060	4.5	LOS A	0.2	1.2	0.19	0.51	0.19	29.6
East: De Clambe Dr (E)														
4	L2	73	0.0	73	0.0	0.090	4.6	LOS A	0.0	0.0	0.00	0.25	0.00	40.7
5	T1	87	20.7	87	20.7	0.090	0.0	LOS A	0.0	0.0	0.00	0.25	0.00	40.7
Approach		160	11.3	160	11.3	0.090	2.1	NA	0.0	0.0	0.00	0.25	0.00	40.7
West: De Clambe Dr (W)														
11	T1	158	8.2	158	8.2	0.093	0.1	LOS A	0.1	0.7	0.05	0.04	0.05	47.2
12	R2	12	0.0	12	0.0	0.093	5.1	LOS A	0.1	0.7	0.05	0.04	0.05	47.2
Approach		170	7.6	170	7.6	0.093	0.4	NA	0.1	0.7	0.05	0.04	0.05	47.2
All Vehicles		394	7.9	394	7.9	0.093	1.8	NA	0.2	1.2	0.05	0.20	0.05	40.4

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.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing AM 2026 (Site Folder: General)]

Network: N101 [Existing Network AM 2026 (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	28	36.0	28	36.0	0.031	13.2	LOS A	0.4	3.8	0.25	0.62	0.25	27.1
22	T1	813	1.7	813	1.7	0.409	5.3	LOS A	6.9	48.9	0.21	0.18	0.21	50.1
Approach		842	2.8	842	2.8	0.409	5.6	LOS A	6.9	48.9	0.21	0.20	0.21	49.6
NorthWest: Showground Rd (NW)														
28	T1	1772	1.2	1772	1.2	* 0.532	2.4	LOS A	14.0	98.9	0.28	0.26	0.28	52.7
29	R2	227	2.0	227	2.0	0.269	9.9	LOS A	4.4	31.5	0.38	0.69	0.38	38.3
Approach		1999	1.3	1999	1.3	0.532	3.3	LOS A	14.0	98.9	0.29	0.31	0.29	50.5
SouthWest: De Clambe Dr (SW)														
30	L2	110	8.2	110	8.2	0.160	31.8	LOS C	4.5	33.4	0.68	0.72	0.68	25.0
32	R2	12	100.0	12	100.0	* 0.240	76.4	LOS F	0.8	10.5	0.99	0.69	0.99	6.1
Approach		122	17.2	122	17.2	0.240	36.2	LOS C	4.5	33.4	0.71	0.72	0.71	22.4
All Vehicles		2963	2.4	2963	2.4	0.532	5.3	LOS A	14.0	98.9	0.28	0.29	0.28	47.3

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		9	59.1	LOS E	0.0	0.0	0.95	0.95	224.9	215.5	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing PM 2026 (Site Folder: General)]

Network: N101 [Existing Network PM 2026 (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	39	29.4	39	29.4	0.033	9.5	LOS A	0.6	4.9	0.25	0.62	0.25	32.0
22	T1	1461	0.8	1461	0.8	* 0.567	5.4	LOS A	19.0	133.8	0.25	0.23	0.25	49.9
Approach		1500	1.5	1500	1.5	0.567	5.5	LOS A	19.0	133.8	0.25	0.24	0.25	49.6
NorthWest: Showground Rd (NW)														
28	T1	887	1.1	887	1.1	0.266	1.7	LOS A	4.9	34.7	0.19	0.17	0.19	54.7
29	R2	142	6.3	142	6.3	* 0.361	18.7	LOS B	5.7	42.2	0.68	0.79	0.68	28.9
Approach		1029	1.8	1029	1.8	0.361	4.0	LOS A	5.7	42.2	0.26	0.26	0.26	48.6
SouthWest: De Clambe Dr (SW)														
30	L2	265	1.9	265	1.9	0.646	53.3	LOS D	15.2	108.3	0.96	0.83	0.96	18.5
32	R2	10	100.0	10	100.0	* 0.200	76.1	LOS F	0.7	8.7	0.99	0.69	0.99	6.1
Approach		275	5.5	275	5.5	0.646	54.2	LOS D	15.2	108.3	0.96	0.83	0.96	18.0
All Vehicles		2804	2.0	2804	2.0	0.646	9.8	LOS A	19.0	133.8	0.32	0.30	0.32	41.7

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	1	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		5	59.1	LOS E	0.0	0.0	0.95	0.95	226.2	217.2	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing AM 2026 (Site Folder: General)]

Network: N101 [Existing Network AM 2026 (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	591	0.2	591	0.2	* 0.527	15.0	LOS B	16.5	116.0	0.49	0.74	0.49	40.4
22	T1	729	2.9	729	2.9	0.425	25.4	LOS B	15.6	111.9	0.72	0.63	0.72	33.1
Approach		1320	1.7	1320	1.7	0.527	20.8	LOS B	16.5	116.0	0.62	0.68	0.62	36.0
NorthWest: Showground Rd (NW)														
28	T1	1383	2.2	1383	2.2	0.503	8.1	LOS A	16.2	115.4	0.41	0.37	0.41	50.1
29	R2	390	0.3	390	0.3	* 0.358	27.3	LOS B	8.3	58.2	0.71	0.79	0.71	16.9
Approach		1774	1.8	1774	1.8	0.503	12.3	LOS A	16.2	115.4	0.48	0.47	0.48	44.1
SouthWest: Carrington Rd (SW)														
30	L2	57	2.0	57	2.0	0.069	25.6	LOS B	2.0	14.2	0.59	0.66	0.59	21.3
32	R2	321	0.7	321	0.7	0.452	55.1	LOS D	9.1	64.2	0.93	0.80	0.93	26.0
Approach		379	0.9	379	0.9	0.452	50.6	LOS D	9.1	64.2	0.88	0.78	0.88	25.7
All Vehicles		3472	1.7	3472	1.7	0.527	19.7	LOS B	16.5	116.0	0.57	0.58	0.57	37.5

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	58	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		67	59.3	LOS E	0.2	0.2	0.96	0.96	218.0	206.3	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing PM 2026 (Site Folder: General)]

Network: N101 [Existing Network PM 2026 (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	483	0.0	483	0.0	0.307	7.7	LOS A	6.2	43.4	0.22	0.65	0.22	48.0
22	T1	1262	1.8	1262	1.8	* 0.665	18.7	LOS B	31.6	224.7	0.69	0.63	0.69	37.5
Approach		1745	1.3	1745	1.3	0.665	15.6	LOS B	31.6	224.7	0.56	0.63	0.56	39.9
NorthWest: Showground Rd (NW)														
28	T1	708	3.0	708	3.0	0.270	8.0	LOS A	7.2	51.6	0.35	0.31	0.35	50.2
29	R2	195	0.0	195	0.0	* 0.448	42.2	LOS C	5.6	39.1	0.92	0.83	0.92	12.1
Approach		903	2.4	903	2.4	0.448	15.4	LOS B	7.2	51.6	0.48	0.42	0.48	41.4
SouthWest: Carrington Rd (SW)														
30	L2	188	0.0	188	0.0	0.306	39.1	LOS C	8.8	61.6	0.79	0.76	0.79	16.3
32	R2	545	0.0	545	0.0	* 0.658	54.5	LOS D	15.9	111.1	0.97	0.84	0.97	26.1
Approach		733	0.0	733	0.0	0.658	50.5	LOS D	15.9	111.1	0.92	0.82	0.92	24.6
All Vehicles		3381	1.3	3381	1.3	0.665	23.1	LOS B	31.6	224.7	0.62	0.62	0.62	34.9

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	58	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		66	59.3	LOS E	0.2	0.2	0.96	0.96	217.8	206.0	0.95

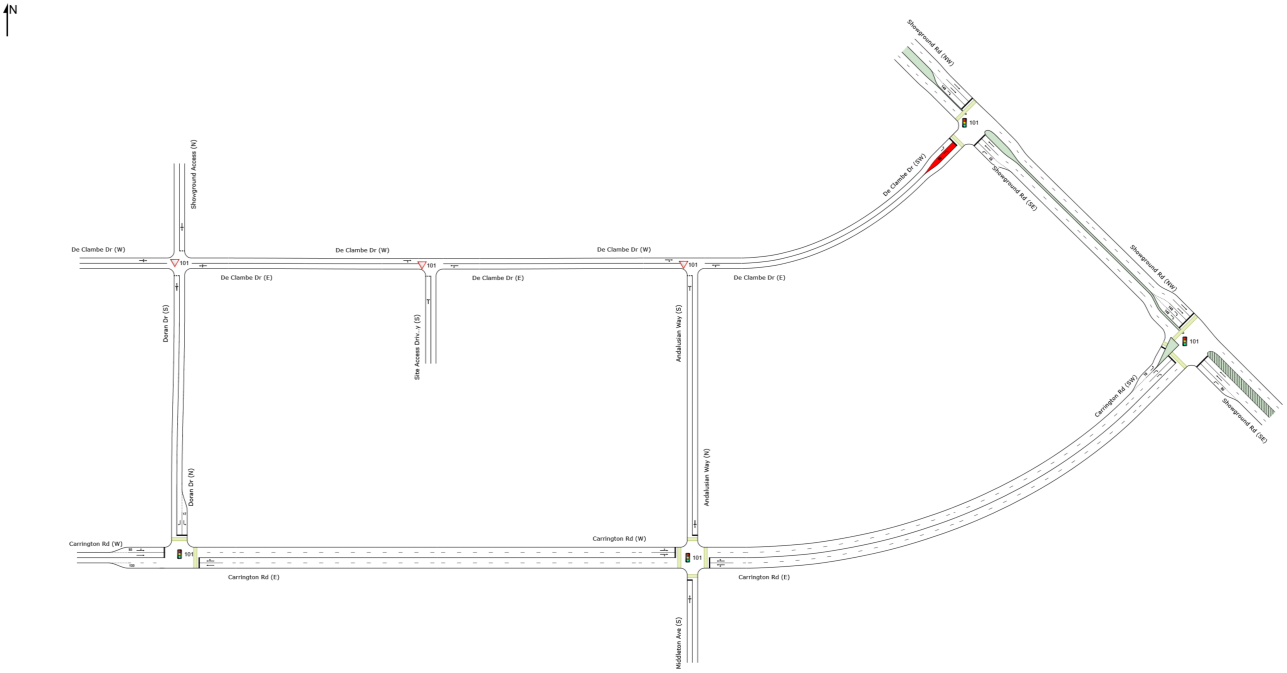
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

New Network
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Carrington Rd & Doran Dr Existing AM 2026 with Development
101	NA	Carrington Rd & Andalusian Way Existing AM 2026 with Development
101	NA	De Clambe Dr & Doran Dr Existing AM 2026 with Development
101	NA	De Clambe Dr & Site Access Driveway Existing AM 2026 with Development
101	NA	De Clambe Dr & Andalusian Way Existing AM 2026 with Development
101	NA	Showground Rd & DeClambe Dr Existing AM 2026 with Development
101	NA	Showground Rd & Carrington Rd Existing AM 2026 with Development

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	931	0.0	931	0.0	0.510	10.8	LOS A	9.6	67.6	0.66	0.58	0.66	41.2
6	R2	17	18.7	17	18.7	* 0.510	15.7	LOS B	9.6	67.6	0.72	0.63	0.72	21.7
Approach		948	0.3	948	0.3	0.510	10.9	LOS A	9.6	67.6	0.66	0.58	0.66	41.0
North: Doran Dr (N)														
7	L2	24	8.3	24	8.3	0.026	11.0	LOS A	0.3	2.6	0.51	0.60	0.51	21.4
9	R2	226	4.9	226	4.9	* 0.558	26.2	LOS B	6.1	44.2	0.93	0.80	0.93	30.4
Approach		250	5.2	250	5.2	0.558	24.7	LOS B	6.1	44.2	0.89	0.78	0.89	30.1
West: Carrington Rd (W)														
10	L2	98	15.9	98	15.9	0.540	24.9	LOS B	7.2	52.9	0.90	0.77	0.90	31.5
11	T1	481	0.5	481	0.5	* 0.540	20.2	LOS B	7.6	53.4	0.90	0.76	0.90	32.0
Approach		579	3.1	579	3.1	0.540	21.0	LOS B	7.6	53.4	0.90	0.76	0.90	31.9
All Vehicles		1777	1.9	1777	1.9	0.558	16.1	LOS B	9.6	67.6	0.77	0.67	0.77	36.2

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	29	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	47	24.3	LOS C	0.1	0.1	0.90	0.90	187.3	211.9	1.13
All Pedestrians		76	24.3	LOS C	0.1	0.1	0.90	0.90	188.3	213.2	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	783	0.0	783	0.0	0.499	13.1	LOS A	8.4	59.2	0.71	0.62	0.71	39.5
6	R2	21	10.5	21	10.5	* 0.499	19.4	LOS B	8.4	59.2	0.80	0.69	0.80	18.1
Approach		804	0.3	804	0.3	0.499	13.3	LOS A	8.4	59.2	0.71	0.62	0.71	39.3
North: Doran Dr (N)														
7	L2	27	14.8	27	14.8	0.034	12.8	LOS A	0.4	3.4	0.56	0.61	0.56	20.0
9	R2	345	4.3	345	4.3	* 0.752	28.2	LOS B	10.2	74.1	0.96	0.92	1.11	29.6
Approach		372	5.1	372	5.1	0.752	27.1	LOS B	10.2	74.1	0.93	0.89	1.07	29.3
West: Carrington Rd (W)														
10	L2	163	7.1	163	7.1	0.749	26.3	LOS B	13.4	95.7	0.95	0.90	1.05	30.7
11	T1	794	0.1	794	0.1	* 0.749	21.6	LOS B	13.8	96.7	0.95	0.90	1.05	31.3
Approach		957	1.3	957	1.3	0.749	22.4	LOS B	13.8	96.7	0.95	0.90	1.05	31.2
All Vehicles		2133	1.6	2133	1.6	0.752	19.8	LOS B	13.8	96.7	0.86	0.79	0.93	33.6

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	16	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	29	24.3	LOS C	0.0	0.0	0.90	0.90	187.3	211.9	1.13
All Pedestrians		45	24.3	LOS C	0.0	0.0	0.90	0.90	188.2	213.1	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	168	3.0	168	3.0	0.553	21.3	LOS B	7.9	56.6	0.85	0.79	0.85	32.2
2	T1	84	1.2	84	1.2	0.553	18.0	LOS B	7.9	56.6	0.85	0.79	0.85	32.2
3	R2	80	1.3	80	1.3	* 0.553	21.3	LOS B	7.9	56.6	0.85	0.79	0.85	32.2
Approach		332	2.1	332	2.1	0.553	20.5	LOS B	7.9	56.6	0.85	0.79	0.85	32.2
East: Carrington Rd (E)														
4	L2	103	1.1	103	1.1	0.563	18.5	LOS B	10.5	73.5	0.80	0.72	0.80	38.8
5	T1	805	0.1	805	0.1	0.563	13.9	LOS A	10.5	73.5	0.80	0.71	0.80	27.7
6	R2	14	0.0	14	0.0	* 0.563	18.5	LOS B	10.1	70.6	0.80	0.70	0.80	28.0
Approach		921	0.2	921	0.2	0.563	14.5	LOS B	10.5	73.5	0.80	0.71	0.80	30.1
North: Andalusian Way (N)														
7	L2	67	0.0	67	0.0	0.221	18.5	LOS B	2.9	20.6	0.74	0.67	0.74	17.4
8	T1	61	0.0	61	0.0	0.221	15.0	LOS B	2.9	20.6	0.74	0.67	0.74	35.7
9	R2	12	0.0	12	0.0	0.221	18.5	LOS B	2.9	20.6	0.74	0.67	0.74	17.4
Approach		140	0.0	140	0.0	0.221	17.0	LOS B	2.9	20.6	0.74	0.67	0.74	28.9
West: Carrington Rd (W)														
10	L2	101	0.0	101	0.0	0.477	17.8	LOS B	8.4	59.1	0.76	0.69	0.76	18.4
11	T1	334	0.0	334	0.0	0.477	14.1	LOS A	8.4	59.1	0.77	0.70	0.77	17.6
12	R2	93	3.6	93	3.6	0.477	25.2	LOS B	3.4	24.1	0.87	0.77	0.87	32.0
Approach		528	0.6	528	0.6	0.477	16.7	LOS B	8.4	59.1	0.79	0.71	0.79	23.3
All Vehicles		1920	0.7	1920	0.7	0.563	16.3	LOS B	10.5	73.5	0.80	0.72	0.80	29.0

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	10	24.3	LOS C	0.0	0.0	0.90	0.90	189.8	215.2	1.13
North: Andalusian Way (N)											

P3 Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
West: Carrington Rd (W)										
P4 Full	29	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	51	24.3	LOS C	0.0	0.0	0.90	0.90	188.7	213.7	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	107	1.9	107	1.9	0.600	24.6	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
2	T1	93	0.0	93	0.0	0.600	21.3	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
3	R2	91	0.0	91	0.0	* 0.600	24.6	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
Approach		291	0.7	291	0.7	0.600	23.6	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
East: Carrington Rd (E)														
4	L2	82	0.0	82	0.0	0.390	15.3	LOS B	6.8	47.9	0.68	0.62	0.68	40.6
5	T1	623	0.0	623	0.0	0.390	10.7	LOS A	6.8	47.9	0.68	0.60	0.68	30.8
6	R2	8	0.0	8	0.0	0.390	15.3	LOS B	6.6	46.0	0.68	0.59	0.68	31.2
Approach		712	0.0	712	0.0	0.390	11.3	LOS A	6.8	47.9	0.68	0.61	0.68	33.0
North: Andalusian Way (N)														
7	L2	96	0.0	96	0.0	0.360	21.6	LOS B	4.6	31.9	0.83	0.73	0.83	15.7
8	T1	73	0.0	73	0.0	0.360	18.2	LOS B	4.6	31.9	0.83	0.73	0.83	33.9
9	R2	24	0.0	24	0.0	0.360	21.7	LOS B	4.6	31.9	0.83	0.73	0.83	15.7
Approach		193	0.0	193	0.0	0.360	20.4	LOS B	4.6	31.9	0.83	0.73	0.83	25.8
West: Carrington Rd (W)														
10	L2	187	0.0	187	0.0	0.577	16.7	LOS B	11.3	79.4	0.77	0.72	0.77	19.0
11	T1	518	0.2	518	0.2	0.577	13.1	LOS A	11.3	79.4	0.78	0.73	0.78	18.1
12	R2	124	3.4	124	3.4	* 0.577	19.6	LOS B	6.9	48.9	0.82	0.75	0.82	35.5
Approach		828	0.6	828	0.6	0.577	14.9	LOS B	11.3	79.4	0.79	0.73	0.79	23.9
All Vehicles		2025	0.4	2025	0.4	0.600	15.4	LOS B	11.3	79.4	0.77	0.70	0.77	28.7

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	12	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Andalusian Way (N)											

P3 Full	7	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
West: Carrington Rd (W)										
P4 Full	28	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	52	24.3	LOS C	0.0	0.0	0.90	0.90	188.6	213.6	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	10	0.0	10	0.0	0.114	5.8	LOS A	0.3	2.8	0.22	0.62	0.22	49.0
2	T1	3	0.0	3	0.0	0.114	5.1	LOS A	0.3	2.8	0.22	0.62	0.22	37.8
3	R2	80	23.8	80	23.8	0.114	7.3	LOS A	0.3	2.8	0.22	0.62	0.22	32.6
Approach		93	20.4	93	20.4	0.114	7.1	LOS A	0.3	2.8	0.22	0.62	0.22	37.3
East: De Clambe Dr (E)														
4	L2	183	7.1	183	7.1	0.155	4.7	LOS A	0.2	1.4	0.02	0.42	0.02	35.3
5	T1	73	1.4	73	1.4	0.155	0.0	LOS A	0.2	1.4	0.02	0.42	0.02	54.5
6	R2	24	0.0	24	0.0	0.155	4.7	LOS A	0.2	1.4	0.02	0.42	0.02	35.2
Approach		280	5.0	280	5.0	0.155	3.5	NA	0.2	1.4	0.02	0.42	0.02	46.5
North: Showground Access (N)														
7	L2	14	0.0	14	0.0	0.023	5.6	LOS A	0.1	0.6	0.04	0.55	0.04	33.0
8	T1	12	0.0	12	0.0	0.023	5.4	LOS A	0.1	0.6	0.04	0.55	0.04	33.0
9	R2	2	0.0	2	0.0	0.023	6.0	LOS A	0.1	0.6	0.04	0.55	0.04	49.4
Approach		28	0.0	28	0.0	0.023	5.5	LOS A	0.1	0.6	0.04	0.55	0.04	36.6
West: De Clambe Dr (W)														
10	L2	7	0.0	7	0.0	0.014	6.0	LOS A	0.0	0.3	0.22	0.27	0.22	46.6
11	T1	12	0.0	12	0.0	0.014	0.4	LOS A	0.0	0.3	0.22	0.27	0.22	53.5
12	R2	6	0.0	6	0.0	0.014	6.2	LOS A	0.0	0.3	0.22	0.27	0.22	53.5
Approach		25	0.0	25	0.0	0.014	3.4	NA	0.0	0.3	0.22	0.27	0.22	51.1
All Vehicles		426	7.7	426	7.7	0.155	4.4	NA	0.3	2.8	0.08	0.46	0.08	44.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	1	0.0	1	0.0	0.202	5.6	LOS A	0.6	4.7	0.33	0.69	0.33	48.0
2	T1	13	0.0	13	0.0	0.202	5.9	LOS A	0.6	4.7	0.33	0.69	0.33	36.2
3	R2	134	9.7	134	9.7	0.202	8.1	LOS A	0.6	4.7	0.33	0.69	0.33	30.6
Approach		148	8.8	148	8.8	0.202	7.9	LOS A	0.6	4.7	0.33	0.69	0.33	31.6
East: De Clambe Dr (E)														
4	L2	269	6.7	269	6.7	0.182	4.8	LOS A	0.3	2.4	0.08	0.51	0.08	30.7
5	T1	9	0.0	9	0.0	0.182	0.4	LOS A	0.3	2.4	0.08	0.51	0.08	52.7
6	R2	43	0.0	43	0.0	0.182	5.1	LOS A	0.3	2.4	0.08	0.51	0.08	33.0
Approach		321	5.6	321	5.6	0.182	4.7	NA	0.3	2.4	0.08	0.51	0.08	33.2
North: Showground Access (N)														
7	L2	11	0.0	11	0.0	0.025	5.8	LOS A	0.1	0.6	0.25	0.56	0.25	31.4
8	T1	13	0.0	13	0.0	0.025	6.4	LOS A	0.1	0.6	0.25	0.56	0.25	31.4
9	R2	1	0.0	1	0.0	0.025	6.5	LOS A	0.1	0.6	0.25	0.56	0.25	48.7
Approach		25	0.0	25	0.0	0.025	6.2	LOS A	0.1	0.6	0.25	0.56	0.25	33.6
West: De Clambe Dr (W)														
10	L2	5	0.0	5	0.0	0.096	6.5	LOS A	0.4	2.6	0.27	0.21	0.27	47.3
11	T1	107	0.0	107	0.0	0.096	0.5	LOS A	0.4	2.6	0.27	0.21	0.27	54.7
12	R2	52	0.0	52	0.0	0.096	6.5	LOS A	0.4	2.6	0.27	0.21	0.27	54.7
Approach		164	0.0	164	0.0	0.096	2.6	NA	0.4	2.6	0.27	0.21	0.27	54.4
All Vehicles		658	4.7	658	4.7	0.202	5.0	NA	0.6	4.7	0.19	0.48	0.19	42.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	143	0.0	143	0.0	0.206	0.5	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
3	R2	104	0.0	104	0.0	0.206	2.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
Approach		247	0.0	247	0.0	0.206	1.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
East: De Clambe Dr (E)														
4	L2	159	0.0	159	0.0	0.155	3.9	LOS A	0.0	0.0	0.00	0.29	0.00	46.7
5	T1	135	0.0	135	0.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	34.1
Approach		294	0.0	294	0.0	0.155	2.1	NA	0.0	0.0	0.00	0.29	0.00	45.2
West: De Clambe Dr (W)														
11	T1	67	0.0	67	0.0	0.063	0.6	LOS A	0.2	1.7	0.28	0.21	0.28	33.8
12	R2	38	0.0	38	0.0	0.063	5.6	LOS A	0.2	1.7	0.28	0.21	0.28	21.6
Approach		105	0.0	105	0.0	0.063	2.4	NA	0.2	1.7	0.28	0.21	0.28	23.2
All Vehicles		646	0.0	646	0.0	0.206	1.8	NA	0.8	5.9	0.15	0.25	0.15	25.8

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	226	0.0	226	0.0	0.360	0.5	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
3	R2	165	0.0	165	0.0	0.360	3.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
Approach		391	0.0	391	0.0	0.360	1.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
East: De Clambe Dr (E)														
4	L2	347	0.0	347	0.0	0.238	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	45.7
5	T1	100	0.0	100	0.0	0.238	0.0	LOS A	0.0	0.0	0.00	0.41	0.00	30.2
Approach		447	0.0	447	0.0	0.238	3.0	NA	0.0	0.0	0.00	0.41	0.00	45.0
West: De Clambe Dr (W)														
11	T1	170	0.0	170	0.0	0.161	1.1	LOS A	0.7	5.0	0.36	0.21	0.36	33.0
12	R2	83	0.0	83	0.0	0.161	6.5	LOS A	0.7	5.0	0.36	0.21	0.36	21.5
Approach		253	0.0	253	0.0	0.161	2.8	NA	0.7	5.0	0.36	0.21	0.36	23.3
All Vehicles		1091	0.0	1091	0.0	0.360	2.6	NA	1.7	11.8	0.18	0.30	0.18	26.7

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	118	0.0	118	0.0	0.138	4.0	LOS A	0.5	3.4	0.22	0.50	0.22	29.9
3	R2	49	0.0	49	0.0	0.138	5.3	LOS A	0.5	3.4	0.22	0.50	0.22	29.9
Approach		167	0.0	167	0.0	0.138	4.4	LOS A	0.5	3.4	0.22	0.50	0.22	29.9
East: De Clambe Dr (E)														
4	L2	81	0.0	81	0.0	0.138	4.6	LOS A	0.0	0.0	0.00	0.17	0.00	43.5
5	T1	176	7.4	176	7.4	0.138	0.0	LOS A	0.0	0.0	0.00	0.17	0.00	43.5
Approach		257	5.1	257	5.1	0.138	1.4	NA	0.0	0.0	0.00	0.17	0.00	43.5
West: De Clambe Dr (W)														
11	T1	83	22.9	83	22.9	0.109	0.7	LOS A	0.5	4.0	0.33	0.31	0.33	28.4
12	R2	88	1.1	88	1.1	0.109	4.8	LOS A	0.5	4.0	0.33	0.31	0.33	28.4
Approach		171	11.7	171	11.7	0.109	2.8	NA	0.5	4.0	0.33	0.31	0.33	28.4
All Vehicles		595	5.5	595	5.5	0.138	2.7	NA	0.5	4.0	0.16	0.30	0.16	35.3

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	217	0.0	217	0.0	0.230	4.3	LOS A	0.9	6.4	0.27	0.52	0.27	29.2
3	R2	51	0.0	51	0.0	0.230	6.8	LOS A	0.9	6.4	0.27	0.52	0.27	29.2
Approach		268	0.0	268	0.0	0.230	4.8	LOS A	0.9	6.4	0.27	0.52	0.27	29.2
East: De Clambe Dr (E)														
4	L2	73	0.0	73	0.0	0.163	4.6	LOS A	0.0	0.0	0.00	0.13	0.00	44.8
5	T1	230	7.8	230	7.8	0.163	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	44.8
Approach		303	5.9	303	5.9	0.163	1.1	NA	0.0	0.0	0.00	0.13	0.00	44.8
West: De Clambe Dr (W)														
11	T1	198	6.6	198	6.6	0.206	0.9	LOS A	1.1	8.0	0.36	0.25	0.36	30.3
12	R2	137	0.0	137	0.0	0.206	5.1	LOS A	1.1	8.0	0.36	0.25	0.36	30.3
Approach		335	3.9	335	3.9	0.206	2.6	NA	1.1	8.0	0.36	0.25	0.36	30.3
All Vehicles		906	3.4	906	3.4	0.230	2.8	NA	1.1	8.0	0.21	0.29	0.21	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.
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.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	79	12.9	79	12.9	0.079	12.3	LOS A	1.0	7.9	0.22	0.62	0.22	27.8
22	T1	813	1.7	813	1.7	0.428	5.8	LOS A	7.2	51.4	0.22	0.20	0.22	49.3
Approach		892	2.6	892	2.6	0.428	6.4	LOS A	7.2	51.4	0.22	0.23	0.22	47.9
NorthWest: Showground Rd (NW)														
28	T1	1772	1.2	1772	1.2	* 0.532	2.4	LOS A	14.0	98.9	0.28	0.26	0.28	52.7
29	R2	250	1.8	250	1.8	0.290	10.3	LOS A	5.3	37.9	0.41	0.70	0.41	37.7
Approach		2022	1.3	2022	1.3	0.532	3.4	LOS A	14.0	98.9	0.29	0.31	0.29	50.2
SouthWest: De Clambe Dr (SW)														
30	L2	135	6.7	135	6.7	0.183	30.1	LOS C	5.3	39.5	0.67	0.73	0.67	25.7
32	R2	12	100.0	12	100.0	* 0.240	76.4	LOS F	0.8	10.5	0.99	0.69	0.99	6.1
Approach		147	14.3	147	14.3	0.240	33.9	LOS C	5.3	39.5	0.70	0.72	0.70	23.5
All Vehicles		3061	2.3	3061	2.3	0.532	5.7	LOS A	14.0	98.9	0.29	0.31	0.29	46.3

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		9	59.1	LOS E	0.0	0.0	0.95	0.95	224.9	215.5	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	148	7.8	148	7.8	0.115	10.3	LOS A	2.3	17.4	0.27	0.65	0.27	30.5
22	T1	1461	0.8	1461	0.8	* 0.628	6.1	LOS A	18.3	129.1	0.28	0.25	0.28	48.8
Approach		1609	1.4	1609	1.4	0.628	6.5	LOS A	18.3	129.1	0.28	0.29	0.28	47.7
NorthWest: Showground Rd (NW)														
28	T1	887	1.1	887	1.1	0.266	1.7	LOS A	4.9	34.7	0.19	0.17	0.19	54.7
29	R2	196	4.6	196	4.6	* 0.436	27.7	LOS B	10.6	76.9	0.90	0.91	0.90	23.2
Approach		1083	1.8	1083	1.8	0.436	6.4	LOS A	10.6	76.9	0.32	0.31	0.32	43.8
SouthWest: De Clambe Dr (SW)														
30	L2	305	1.6	305	1.6	0.636	49.5	LOS D	17.0	120.7	0.93	0.83	0.93	19.4
32	R2	10	100.0	10	100.0	* 0.200	76.1	LOS F	0.7	8.7	0.99	0.69	0.99	6.1
Approach		315	4.8	315	4.8	0.636	50.3	LOS D	17.0	120.7	0.94	0.83	0.94	18.9
All Vehicles		3007	1.9	3007	1.9	0.636	11.1	LOS A	18.3	129.1	0.36	0.35	0.36	39.8

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	1	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		5	59.1	LOS E	0.0	0.0	0.95	0.95	226.2	217.2	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing AM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2026 with Development (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	591	0.2	591	0.2	0.513	14.6	LOS B	16.1	113.0	0.48	0.73	0.48	40.8
22	T1	780	2.7	780	2.7	* 0.496	26.6	LOS B	18.9	135.1	0.75	0.65	0.75	32.4
Approach		1370	1.6	1370	1.6	0.513	21.4	LOS B	18.9	135.1	0.63	0.69	0.63	35.5
NorthWest: Showground Rd (NW)														
28	T1	1383	2.2	1383	2.2	0.514	9.1	LOS A	17.3	123.2	0.44	0.40	0.44	49.1
29	R2	390	0.3	390	0.3	* 0.378	33.7	LOS C	9.1	63.5	0.78	0.84	0.78	14.5
Approach		1774	1.8	1774	1.8	0.514	14.5	LOS B	17.3	123.2	0.51	0.50	0.51	42.1
SouthWest: Carrington Rd (SW)														
30	L2	57	2.0	57	2.0	0.068	25.0	LOS B	2.0	14.0	0.58	0.66	0.58	21.6
32	R2	390	0.6	390	0.6	* 0.507	54.1	LOS D	11.0	77.7	0.94	0.81	0.94	26.2
Approach		447	0.8	447	0.8	0.507	50.4	LOS D	11.0	77.7	0.89	0.79	0.89	26.0
All Vehicles		3591	1.6	3591	1.6	0.514	21.6	LOS B	18.9	135.1	0.60	0.61	0.60	36.3

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	58	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		67	59.3	LOS E	0.2	0.2	0.96	0.96	218.0	206.3	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing PM 2026 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2026 with Development (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 5

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	483	0.0	483	0.0	0.305	7.5	LOS A	5.9	41.2	0.21	0.65	0.21	48.3
22	T1	1371	1.7	1371	1.7	* 0.745	20.4	LOS B	38.2	271.0	0.75	0.68	0.75	36.3
Approach		1854	1.2	1854	1.2	0.745	17.1	LOS B	38.2	271.0	0.61	0.67	0.61	38.8
NorthWest: Showground Rd (NW)														
28	T1	708	2.7	708	2.7	0.276	8.9	LOS A	7.6	54.5	0.37	0.33	0.37	49.3
29	R2	195	0.0	195	0.0	* 0.520	51.2	LOS D	6.2	43.4	1.00	0.85	1.00	10.4
Approach		903	2.1	903	2.1	0.520	18.0	LOS B	7.6	54.5	0.51	0.44	0.51	39.3
SouthWest: Carrington Rd (SW)														
30	L2	188	0.0	188	0.0	0.299	38.3	LOS C	8.7	60.9	0.78	0.76	0.78	16.6
32	R2	636	0.0	636	0.0	* 0.729	54.6	LOS D	19.2	134.5	0.98	0.86	1.00	26.1
Approach		824	0.0	824	0.0	0.729	50.9	LOS D	19.2	134.5	0.93	0.84	0.95	24.8
All Vehicles		3581	1.2	3581	1.2	0.745	25.1	LOS B	38.2	271.0	0.66	0.65	0.66	33.8

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	3	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.1	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	58	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		66	59.3	LOS E	0.2	0.2	0.96	0.96	217.8	206.0	0.95

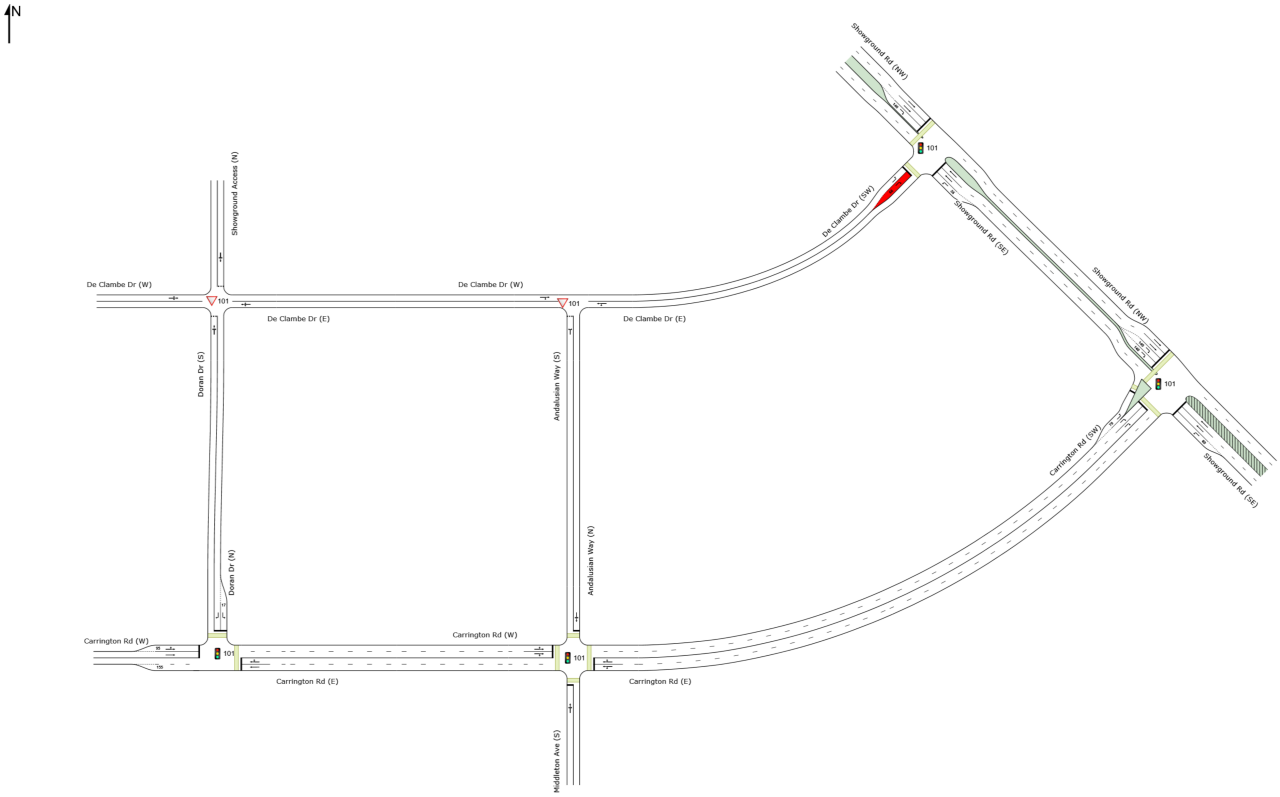
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [Existing Network AM 2031 (Network Folder: General)]

New Network
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Carrington Rd & Doran Dr Existing AM 2031
101	NA	Carrington Rd & Andalusian Way Existing AM 2031
101	NA	De Clambe Dr & Doran Dr Existing AM 2031
101	NA	De Clambe Dr & Andalusian Way Existing AM 2031
101	NA	Showground Rd & DeClambe Dr Existing AM 2031
101	NA	Showground Rd & Carrington Rd Existing AM 2031

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing AM 2031 (Site Folder: General)]

Network: N101 [Existing Network AM 2031 (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	976	0.0	976	0.0	0.439	6.7	LOS A	8.2	57.4	0.52	0.46	0.52	44.3
6	R2	18	18.8	18	18.8	* 0.439	11.7	LOS A	8.2	57.4	0.58	0.52	0.58	27.2
Approach		993	0.3	993	0.3	0.439	6.8	LOS A	8.2	57.4	0.52	0.46	0.52	44.2
North: Doran Dr (N)														
7	L2	24	8.3	24	8.3	0.027	11.6	LOS A	0.4	2.7	0.53	0.60	0.53	20.9
9	R2	83	13.3	83	13.3	* 0.419	32.2	LOS C	2.4	19.0	0.97	0.76	0.97	28.1
Approach		107	12.1	107	12.1	0.419	27.5	LOS B	2.4	19.0	0.87	0.72	0.87	27.6
West: Carrington Rd (W)														
10	L2	62	28.0	62	28.0	0.441	23.5	LOS B	5.9	43.7	0.85	0.73	0.85	32.6
11	T1	437	0.6	437	0.6	* 0.441	18.7	LOS B	6.2	43.8	0.85	0.72	0.85	33.0
Approach		498	4.0	498	4.0	0.441	19.3	LOS B	6.2	43.8	0.85	0.72	0.85	32.9
All Vehicles		1598	2.3	1598	2.3	0.441	12.1	LOS A	8.2	57.4	0.65	0.56	0.65	39.0

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	32	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	52	24.4	LOS C	0.1	0.1	0.90	0.90	187.4	211.9	1.13
All Pedestrians		83	24.3	LOS C	0.1	0.1	0.90	0.90	188.3	213.2	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing PM 2031 (Site Folder: General)]

Network: N101 [Existing Network PM 2031 (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	867	0.0	867	0.0	0.452	8.8	LOS A	8.2	57.5	0.59	0.52	0.59	42.4
6	R2	24	10.5	24	10.5	* 0.452	15.8	LOS B	8.2	57.5	0.71	0.62	0.71	21.4
Approach		890	0.3	890	0.3	0.452	9.0	LOS A	8.2	57.5	0.59	0.52	0.59	42.2
North: Doran Dr (N)														
7	L2	27	14.8	27	14.8	0.039	14.7	LOS B	0.5	3.7	0.62	0.63	0.62	18.6
9	R2	119	12.6	119	12.6	* 0.466	30.3	LOS C	3.4	26.3	0.96	0.78	0.96	28.8
Approach		146	13.0	146	13.0	0.466	27.4	LOS B	3.4	26.3	0.89	0.75	0.89	28.1
West: Carrington Rd (W)														
10	L2	79	15.3	79	15.3	0.496	20.1	LOS B	8.1	58.6	0.81	0.72	0.81	34.7
11	T1	649	0.2	649	0.2	* 0.496	15.5	LOS B	8.4	59.0	0.81	0.70	0.81	35.0
Approach		728	1.8	728	1.8	0.496	16.0	LOS B	8.4	59.0	0.81	0.71	0.81	35.0
All Vehicles		1765	2.0	1765	2.0	0.496	13.4	LOS A	8.4	59.0	0.71	0.62	0.71	37.7

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	18	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	32	24.3	LOS C	0.0	0.0	0.90	0.90	187.3	211.9	1.13
All Pedestrians		49	24.3	LOS C	0.0	0.0	0.90	0.90	188.2	213.1	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing AM 2031 (Site Folder: General)]

Network: N101 [Existing Network AM 2031 (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	168	3.0	168	3.0	0.584	23.7	LOS B	8.0	56.9	0.89	0.81	0.89	30.9
2	T1	66	1.5	66	1.5	0.584	20.4	LOS B	8.0	56.9	0.89	0.81	0.89	30.9
3	R2	80	1.3	80	1.3	* 0.584	23.7	LOS B	8.0	56.9	0.89	0.81	0.89	30.9
Approach		314	2.2	314	2.2	0.584	23.0	LOS B	8.0	56.9	0.89	0.81	0.89	30.9
East: Carrington Rd (E)														
4	L2	115	1.1	115	1.1	0.560	16.5	LOS B	10.9	76.7	0.76	0.70	0.76	39.9
5	T1	897	0.1	897	0.1	0.560	12.0	LOS A	10.9	76.7	0.76	0.68	0.76	29.5
6	R2	15	0.0	15	0.0	* 0.560	16.5	LOS B	10.6	74.5	0.76	0.67	0.76	29.9
Approach		1027	0.2	1027	0.2	0.560	12.5	LOS A	10.9	76.7	0.76	0.68	0.76	31.8
North: Andalusian Way (N)														
7	L2	6	0.0	6	0.0	0.123	21.0	LOS B	1.4	9.5	0.78	0.63	0.78	16.6
8	T1	43	0.0	43	0.0	0.123	17.6	LOS B	1.4	9.5	0.78	0.63	0.78	34.8
9	R2	12	0.0	12	0.0	0.123	21.0	LOS B	1.4	9.5	0.78	0.63	0.78	16.6
Approach		61	0.0	61	0.0	0.123	18.6	LOS B	1.4	9.5	0.78	0.63	0.78	31.8
West: Carrington Rd (W)														
10	L2	17	0.0	17	0.0	0.411	15.4	LOS B	7.4	51.6	0.69	0.60	0.69	21.4
11	T1	370	0.0	370	0.0	0.411	10.9	LOS A	7.4	51.6	0.69	0.60	0.69	21.4
12	R2	103	3.6	103	3.6	0.452	24.5	LOS B	2.6	19.1	0.85	0.78	0.85	31.8
Approach		490	0.8	490	0.8	0.452	13.9	LOS A	7.4	51.6	0.72	0.64	0.72	26.5
All Vehicles		1892	0.7	1892	0.7	0.584	14.8	LOS B	10.9	76.7	0.77	0.69	0.77	30.5

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	11	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Andalusian Way (N)											
P3	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13

West: Carrington Rd (W)										
P4 Full	32	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	56	24.3	LOS C	0.0	0.0	0.90	0.90	188.7	213.7	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing PM 2031 (Site Folder: General)]

Network: N101 [Existing Network PM 2031 (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	107	1.9	107	1.9	0.508	23.9	LOS B	6.3	44.7	0.87	0.79	0.87	30.8
2	T1	55	0.0	55	0.0	0.508	20.6	LOS B	6.3	44.7	0.87	0.79	0.87	30.8
3	R2	91	0.0	91	0.0	* 0.508	23.9	LOS B	6.3	44.7	0.87	0.79	0.87	30.8
Approach		253	0.8	253	0.8	0.508	23.2	LOS B	6.3	44.7	0.87	0.79	0.87	30.8
East: Carrington Rd (E)														
4	L2	91	0.0	91	0.0	0.416	14.8	LOS B	7.5	52.3	0.67	0.62	0.67	40.9
5	T1	689	0.0	689	0.0	0.416	10.3	LOS A	7.5	52.3	0.67	0.60	0.67	31.3
6	R2	9	0.0	9	0.0	0.416	14.9	LOS B	7.2	50.7	0.67	0.59	0.67	31.7
Approach		789	0.0	789	0.0	0.416	10.9	LOS A	7.5	52.3	0.67	0.61	0.67	33.5
North: Andalusian Way (N)														
7	L2	9	0.0	9	0.0	0.152	21.2	LOS B	1.5	10.7	0.78	0.66	0.78	16.1
8	T1	35	0.0	35	0.0	0.152	17.8	LOS B	1.5	10.7	0.78	0.66	0.78	34.3
9	R2	24	0.0	24	0.0	0.152	21.3	LOS B	1.5	10.7	0.78	0.66	0.78	16.1
Approach		68	0.0	68	0.0	0.152	19.5	LOS B	1.5	10.7	0.78	0.66	0.78	28.6
West: Carrington Rd (W)														
10	L2	13	0.0	13	0.0	0.501	15.4	LOS B	9.6	67.3	0.71	0.63	0.71	21.5
11	T1	542	0.2	542	0.2	0.501	11.4	LOS A	9.6	67.3	0.72	0.64	0.72	20.5
12	R2	130	3.4	130	3.4	* 0.501	19.9	LOS B	4.6	32.7	0.80	0.75	0.80	34.8
Approach		685	0.8	685	0.8	0.501	13.1	LOS A	9.6	67.3	0.74	0.66	0.74	26.6
All Vehicles		1795	0.4	1795	0.4	0.508	13.8	LOS A	9.6	67.3	0.73	0.66	0.73	30.5

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	13	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Andalusian Way (N)											
P3	Full	8	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13

West: Carrington Rd (W)										
P4 Full	30	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	57	24.3	LOS C	0.0	0.0	0.90	0.90	188.6	213.6	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing AM 2031 (Site Folder: General)]

Network: N101 [Existing Network AM 2031 (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	10	0.0	10	0.0	0.065	5.8	LOS A	0.2	1.7	0.18	0.58	0.18	49.6
2	T1	3	0.0	3	0.0	0.065	4.7	LOS A	0.2	1.7	0.18	0.58	0.18	38.6
3	R2	42	45.2	42	45.2	0.065	7.1	LOS A	0.2	1.7	0.18	0.58	0.18	33.8
Approach		55	34.5	55	34.5	0.065	6.7	LOS A	0.2	1.7	0.18	0.58	0.18	40.5
East: De Clambe Dr (E)														
4	L2	40	32.5	40	32.5	0.077	5.9	LOS A	0.2	1.3	0.04	0.27	0.04	45.9
5	T1	73	1.4	73	1.4	0.077	0.0	LOS A	0.2	1.3	0.04	0.27	0.04	56.4
6	R2	24	0.0	24	0.0	0.077	5.5	LOS A	0.2	1.3	0.04	0.27	0.04	40.6
Approach		137	10.2	137	10.2	0.077	2.7	NA	0.2	1.3	0.04	0.27	0.04	53.2
North: Showground Access (N)														
7	L2	14	0.0	14	0.0	0.021	5.6	LOS A	0.1	0.5	0.05	0.55	0.05	33.8
8	T1	12	0.0	12	0.0	0.021	4.7	LOS A	0.1	0.5	0.05	0.55	0.05	33.8
9	R2	2	0.0	2	0.0	0.021	6.0	LOS A	0.1	0.5	0.05	0.55	0.05	49.7
Approach		28	0.0	28	0.0	0.021	5.2	LOS A	0.1	0.5	0.05	0.55	0.05	37.3
West: De Clambe Dr (W)														
10	L2	7	0.0	7	0.0	0.014	5.7	LOS A	0.0	0.3	0.14	0.28	0.14	44.1
11	T1	12	0.0	12	0.0	0.014	0.1	LOS A	0.0	0.3	0.14	0.28	0.14	54.0
12	R2	6	0.0	6	0.0	0.014	5.8	LOS A	0.0	0.3	0.14	0.28	0.14	54.0
Approach		25	0.0	25	0.0	0.014	3.1	NA	0.0	0.3	0.14	0.28	0.14	50.4
All Vehicles		245	13.5	245	13.5	0.077	3.9	NA	0.2	1.7	0.08	0.37	0.08	49.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing PM 2031 (Site Folder: General)]

Network: N101 [Existing Network PM 2031 (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	1	0.0	1	0.0	0.082	5.6	LOS A	0.2	1.9	0.21	0.61	0.21	49.2
2	T1	13	0.0	13	0.0	0.082	5.1	LOS A	0.2	1.9	0.21	0.61	0.21	38.0
3	R2	51	25.5	51	25.5	0.082	7.5	LOS A	0.2	1.9	0.21	0.61	0.21	32.9
Approach		65	20.0	65	20.0	0.082	7.0	LOS A	0.2	1.9	0.21	0.61	0.21	34.9
East: De Clambe Dr (E)														
4	L2	43	41.9	43	41.9	0.058	6.2	LOS A	0.2	1.8	0.18	0.48	0.18	35.3
5	T1	9	0.0	9	0.0	0.058	0.3	LOS A	0.2	1.8	0.18	0.48	0.18	52.3
6	R2	43	0.0	43	0.0	0.058	5.8	LOS A	0.2	1.8	0.18	0.48	0.18	35.3
Approach		95	18.9	95	18.9	0.058	5.4	NA	0.2	1.8	0.18	0.48	0.18	38.6
North: Showground Access (N)														
7	L2	11	0.0	11	0.0	0.021	5.8	LOS A	0.1	0.5	0.23	0.54	0.23	32.5
8	T1	13	0.0	13	0.0	0.021	5.2	LOS A	0.1	0.5	0.23	0.54	0.23	32.5
9	R2	1	0.0	1	0.0	0.021	6.5	LOS A	0.1	0.5	0.23	0.54	0.23	49.2
Approach		25	0.0	25	0.0	0.021	5.5	LOS A	0.1	0.5	0.23	0.54	0.23	34.7
West: De Clambe Dr (W)														
10	L2	5	0.0	5	0.0	0.089	5.7	LOS A	0.3	2.1	0.10	0.20	0.10	45.1
11	T1	107	0.0	107	0.0	0.089	0.1	LOS A	0.3	2.1	0.10	0.20	0.10	55.8
12	R2	52	0.0	52	0.0	0.089	5.6	LOS A	0.3	2.1	0.10	0.20	0.10	55.8
Approach		164	0.0	164	0.0	0.089	2.0	NA	0.3	2.1	0.10	0.20	0.10	55.3
All Vehicles		349	8.9	349	8.9	0.089	4.1	NA	0.3	2.1	0.15	0.38	0.15	48.3

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing AM 2031 (Site Folder: General)]

Network: N101 [Existing Network AM 2031 (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	24	0.0	24	0.0	0.062	3.8	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
3	R2	49	0.0	49	0.0	0.062	4.4	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
Approach		73	0.0	73	0.0	0.062	4.2	LOS A	0.2	1.3	0.18	0.49	0.18	30.1
East: De Clambe Dr (E)														
4	L2	81	0.0	81	0.0	0.105	4.6	LOS A	0.0	0.0	0.00	0.23	0.00	41.6
5	T1	111	11.7	111	11.7	0.105	0.0	LOS A	0.0	0.0	0.00	0.23	0.00	41.6
Approach		192	6.8	192	6.8	0.105	1.9	NA	0.0	0.0	0.00	0.23	0.00	41.6
West: De Clambe Dr (W)														
11	T1	58	32.8	58	32.8	0.042	0.1	LOS A	0.1	0.6	0.09	0.08	0.09	44.5
12	R2	9	11.1	9	11.1	0.042	5.3	LOS A	0.1	0.6	0.09	0.08	0.09	44.5
Approach		67	29.9	67	29.9	0.042	0.8	NA	0.1	0.6	0.09	0.08	0.09	44.5
All Vehicles		332	9.9	332	9.9	0.105	2.2	NA	0.2	1.3	0.06	0.26	0.06	38.8

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing PM 2031 (Site Folder: General)]

Network: N101 [Existing Network PM 2031 (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	13	0.0	13	0.0	0.060	3.7	LOS A	0.2	1.2	0.18	0.51	0.18	29.6
3	R2	51	0.0	51	0.0	0.060	4.6	LOS A	0.2	1.2	0.18	0.51	0.18	29.6
Approach		64	0.0	64	0.0	0.060	4.4	LOS A	0.2	1.2	0.18	0.51	0.18	29.6
East: De Clambe Dr (E)														
4	L2	73	0.0	73	0.0	0.090	4.6	LOS A	0.0	0.0	0.00	0.25	0.00	40.7
5	T1	87	20.7	87	20.7	0.090	0.0	LOS A	0.0	0.0	0.00	0.25	0.00	40.7
Approach		160	11.3	160	11.3	0.090	2.1	NA	0.0	0.0	0.00	0.25	0.00	40.7
West: De Clambe Dr (W)														
11	T1	158	8.2	158	8.2	0.093	0.1	LOS A	0.1	0.8	0.05	0.04	0.05	47.2
12	R2	12	0.0	12	0.0	0.093	5.1	LOS A	0.1	0.8	0.05	0.04	0.05	47.2
Approach		170	7.6	170	7.6	0.093	0.4	NA	0.1	0.8	0.05	0.04	0.05	47.2
All Vehicles		394	7.9	394	7.9	0.093	1.8	NA	0.2	1.2	0.05	0.20	0.05	40.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing AM 2031 (Site Folder: General)]

Network: N101 [Existing Network AM 2031 (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	31	36.0	31	36.0	0.035	14.0	LOS A	0.5	4.6	0.27	0.62	0.27	26.2
22	T1	904	1.7	904	1.7	0.463	6.4	LOS A	9.1	64.9	0.25	0.22	0.25	48.4
Approach		935	2.8	935	2.8	0.463	6.7	LOS A	9.1	64.9	0.25	0.24	0.25	47.9
NorthWest: Showground Rd (NW)														
28	T1	1997	1.2	1997	1.2	* 0.599	2.7	LOS A	17.6	124.8	0.31	0.29	0.31	51.9
29	R2	255	2.0	255	2.0	0.313	11.4	LOS A	6.3	44.7	0.46	0.72	0.46	36.3
Approach		2252	1.3	2252	1.3	0.599	3.7	LOS A	17.6	124.8	0.33	0.34	0.33	49.5
SouthWest: De Clambe Dr (SW)														
30	L2	110	8.2	110	8.2	0.157	31.1	LOS C	4.4	33.0	0.68	0.72	0.68	25.3
32	R2	12	100.0	12	100.0	* 0.240	76.4	LOS F	0.8	10.5	0.99	0.69	0.99	6.1
Approach		122	17.2	122	17.2	0.240	35.6	LOS C	4.4	33.0	0.71	0.72	0.71	22.7
All Vehicles		3309	2.3	3309	2.3	0.599	5.7	LOS A	17.6	124.8	0.32	0.33	0.32	46.5

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	222.2	211.9	0.95
All Pedestrians		10	59.2	LOS E	0.0	0.0	0.95	0.95	224.9	215.5	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing PM 2031 (Site Folder: General)]

Network: N101 [Existing Network PM 2031 (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	44	29.4	44	29.4	0.037	9.5	LOS A	0.6	5.6	0.25	0.62	0.25	31.9
22	T1	1646	0.8	1646	0.8	* 0.640	6.3	LOS A	23.6	166.0	0.30	0.28	0.30	48.6
Approach		1690	1.5	1690	1.5	0.640	6.4	LOS A	23.6	166.0	0.30	0.29	0.30	48.4
NorthWest: Showground Rd (NW)														
28	T1	982	1.1	982	1.1	0.294	1.7	LOS A	5.6	39.7	0.20	0.18	0.20	54.5
29	R2	157	6.3	157	6.3	* 0.436	30.3	LOS C	9.0	66.3	0.94	0.90	0.94	21.9
Approach		1140	1.8	1140	1.8	0.436	5.7	LOS A	9.0	66.3	0.30	0.28	0.30	45.2
SouthWest: De Clambe Dr (SW)														
30	L2	265	1.9	265	1.9	0.646	53.3	LOS D	15.2	108.3	0.96	0.83	0.96	18.5
32	R2	10	100.0	10	100.0	* 0.200	76.1	LOS F	0.7	8.7	0.99	0.69	0.99	6.1
Approach		275	5.5	275	5.5	0.646	54.2	LOS D	15.2	108.3	0.96	0.83	0.96	18.0
All Vehicles		3104	2.0	3104	2.0	0.646	10.4	LOS A	23.6	166.0	0.36	0.33	0.36	41.0

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	1	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		5	59.1	LOS E	0.0	0.0	0.95	0.95	226.2	217.2	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing AM 2031 (Site Folder: General)]

Network: N101 [Existing Network AM 2031 (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	656	0.2	656	0.2	* 0.606	14.1	LOS A	17.9	125.7	0.48	0.74	0.48	41.2
22	T1	810	2.9	810	2.9	0.510	24.8	LOS B	20.0	143.5	0.73	0.64	0.73	33.4
Approach		1466	1.7	1466	1.7	0.606	20.0	LOS B	20.0	143.5	0.62	0.68	0.62	36.5
NorthWest: Showground Rd (NW)														
28	T1	1558	2.2	1558	2.2	0.573	9.3	LOS A	20.5	146.2	0.46	0.42	0.46	48.9
29	R2	440	0.3	440	0.3	* 0.457	38.3	LOS C	10.5	73.4	0.81	0.90	0.81	13.1
Approach		1998	1.8	1998	1.8	0.573	15.7	LOS B	20.5	146.2	0.54	0.53	0.54	41.1
SouthWest: Carrington Rd (SW)														
30	L2	63	2.0	63	2.0	0.079	26.9	LOS B	2.3	16.2	0.61	0.67	0.61	20.7
32	R2	356	0.7	356	0.7	0.481	54.6	LOS D	10.1	71.0	0.94	0.80	0.94	26.1
Approach		419	0.9	419	0.9	0.481	50.4	LOS D	10.1	71.0	0.89	0.78	0.89	25.7
All Vehicles		3884	1.7	3884	1.7	0.606	21.0	LOS B	20.5	146.2	0.60	0.61	0.60	36.6

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	63	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		73	59.3	LOS E	0.2	0.2	0.96	0.96	218.0	206.3	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing PM 2031 (Site Folder: General)]

Network: N101 [Existing Network PM 2031 (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	544	0.0	544	0.0	0.343	7.6	LOS A	6.9	48.6	0.22	0.65	0.22	48.2
22	T1	1422	1.8	1422	1.8	* 0.761	18.6	LOS B	40.3	286.8	0.73	0.67	0.73	37.6
Approach		1966	1.3	1966	1.3	0.761	15.5	LOS B	40.3	286.8	0.59	0.66	0.59	40.0
NorthWest: Showground Rd (NW)														
28	T1	784	3.0	784	3.0	0.293	7.3	LOS A	7.7	55.3	0.34	0.30	0.34	50.9
29	R2	216	0.0	216	0.0	* 0.589	54.2	LOS D	6.9	48.5	1.00	0.90	1.00	9.9
Approach		999	2.4	999	2.4	0.589	17.5	LOS B	7.7	55.3	0.48	0.43	0.48	39.8
SouthWest: Carrington Rd (SW)														
30	L2	197	0.0	197	0.0	0.376	42.3	LOS C	9.8	68.3	0.83	0.78	0.83	15.5
32	R2	571	0.0	571	0.0	* 0.740	58.4	LOS E	17.5	122.5	0.99	0.87	1.04	25.2
Approach		768	0.0	768	0.0	0.740	54.3	LOS D	17.5	122.5	0.95	0.85	0.99	23.6
All Vehicles		3733	1.3	3733	1.3	0.761	24.0	LOS B	40.3	286.8	0.64	0.64	0.64	34.4

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	63	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		72	59.3	LOS E	0.2	0.2	0.96	0.96	217.8	206.0	0.95

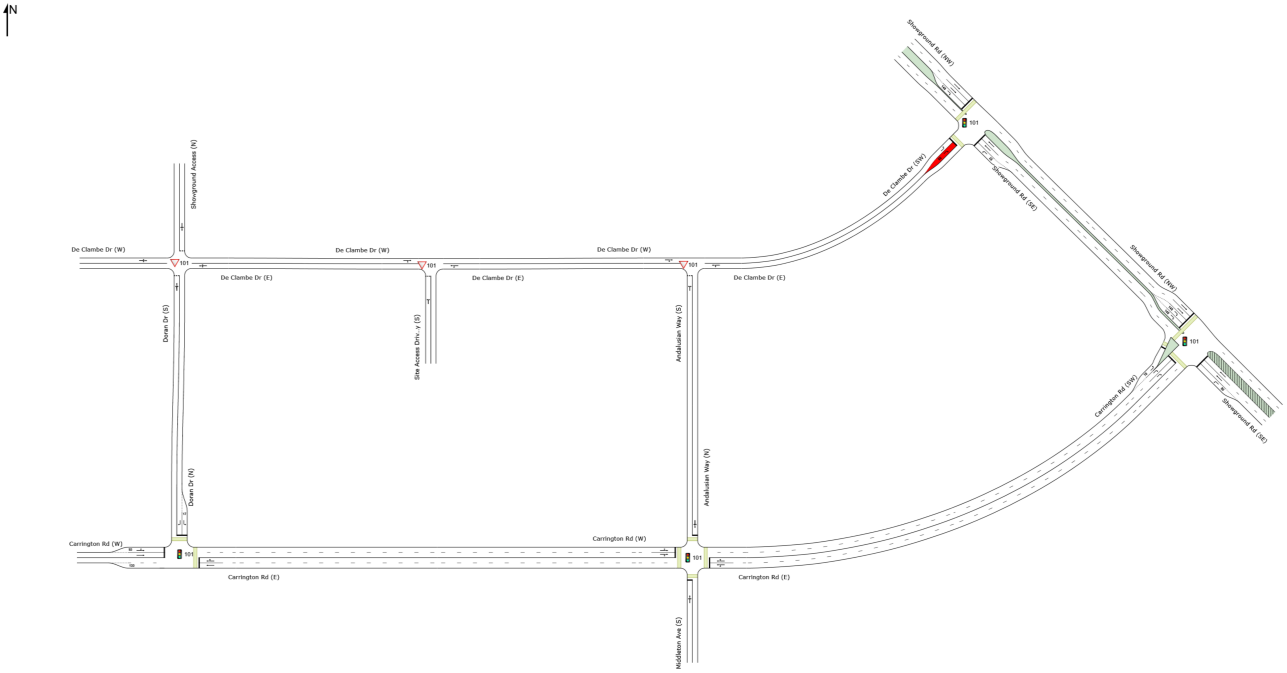
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

New Network
Network Category: (None)

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



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
101	NA	Carrington Rd & Doran Dr Existing AM 2031 with Development
101	NA	Carrington Rd & Andalusian Way Existing AM 2031 with Development
101	NA	De Clambe Dr & Doran Dr Existing AM 2031 with Development
101	NA	De Clambe Dr & Site Access Driveway Existing AM 2031 with Development
101	NA	De Clambe Dr & Andalusian Way Existing AM 2031 with Development
101	NA	Showground Rd & DeClambe Dr Existing AM 2031 with Development
101	NA	Showground Rd & Carrington Rd Existing AM 2031 with Development

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MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	976	0.0	976	0.0	0.538	11.4	LOS A	10.4	73.3	0.68	0.60	0.68	40.8
6	R2	18	18.7	18	18.7	* 0.538	16.5	LOS B	10.4	73.3	0.75	0.66	0.75	20.8
Approach		993	0.3	993	0.3	0.538	11.5	LOS A	10.4	73.3	0.68	0.60	0.68	40.7
North: Doran Dr (N)														
7	L2	24	8.3	24	8.3	0.027	11.6	LOS A	0.4	2.7	0.53	0.60	0.53	20.9
9	R2	226	4.9	226	4.9	* 0.558	26.2	LOS B	6.1	44.2	0.93	0.80	0.93	30.4
Approach		250	5.2	250	5.2	0.558	24.8	LOS B	6.1	44.2	0.89	0.78	0.89	30.1
West: Carrington Rd (W)														
10	L2	108	15.9	108	15.9	0.563	24.3	LOS B	7.9	58.0	0.89	0.78	0.89	31.9
11	T1	530	0.5	530	0.5	* 0.563	19.6	LOS B	8.3	58.5	0.89	0.76	0.89	32.4
Approach		638	3.1	638	3.1	0.563	20.4	LOS B	8.3	58.5	0.89	0.77	0.89	32.3
All Vehicles		1882	1.9	1882	1.9	0.563	16.3	LOS B	10.4	73.3	0.78	0.68	0.78	36.1

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	32	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	52	24.4	LOS C	0.1	0.1	0.90	0.90	187.4	211.9	1.13
All Pedestrians		83	24.3	LOS C	0.1	0.1	0.90	0.90	188.3	213.2	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Doran Dr Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

Carrington Rd & Doran Dr, Showground
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Carrington Rd (E)														
5	T1	867	0.0	867	0.0	0.553	13.7	LOS A	9.6	67.4	0.73	0.64	0.73	39.3
6	R2	24	10.5	24	10.5	* 0.553	19.9	LOS B	9.6	67.4	0.82	0.72	0.82	17.8
Approach		890	0.3	890	0.3	0.553	13.9	LOS A	9.6	67.4	0.74	0.64	0.74	39.1
North: Doran Dr (N)														
7	L2	27	14.8	27	14.8	0.034	12.8	LOS A	0.4	3.4	0.56	0.61	0.56	20.0
9	R2	345	4.3	345	4.3	* 0.752	28.2	LOS B	10.2	74.1	0.96	0.92	1.11	29.6
Approach		372	5.1	372	5.1	0.752	27.1	LOS B	10.2	74.1	0.93	0.89	1.07	29.3
West: Carrington Rd (W)														
10	L2	171	7.1	171	7.1	0.785	27.8	LOS B	14.7	105.0	0.96	0.95	1.11	30.0
11	T1	832	0.1	832	0.1	* 0.785	23.1	LOS B	15.1	106.0	0.96	0.95	1.11	30.5
Approach		1002	1.3	1002	1.3	0.785	23.9	LOS B	15.1	106.0	0.96	0.95	1.11	30.4
All Vehicles		2264	1.5	2264	1.5	0.785	20.5	LOS B	15.1	106.0	0.87	0.82	0.96	33.3

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Carrington Rd (E)											
P2	Full	18	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Doran Dr (N)											
P3	Full	32	24.3	LOS C	0.0	0.0	0.90	0.90	187.3	211.9	1.13
All Pedestrians		49	24.3	LOS C	0.0	0.0	0.90	0.90	188.2	213.1	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	168	3.0	168	3.0	0.610	23.2	LOS B	8.4	60.0	0.89	0.81	0.89	31.2
2	T1	84	1.2	84	1.2	0.610	19.9	LOS B	8.4	60.0	0.89	0.81	0.89	31.2
3	R2	80	1.3	80	1.3	* 0.610	23.2	LOS B	8.4	60.0	0.89	0.81	0.89	31.2
Approach		332	2.1	332	2.1	0.610	22.4	LOS B	8.4	60.0	0.89	0.81	0.89	31.2
East: Carrington Rd (E)														
4	L2	115	1.1	115	1.1	0.586	17.4	LOS B	11.5	80.5	0.79	0.72	0.79	39.4
5	T1	897	0.1	897	0.1	0.586	13.2	LOS A	11.5	80.5	0.79	0.71	0.79	28.4
6	R2	15	0.0	15	0.0	* 0.586	18.0	LOS B	11.1	77.9	0.80	0.70	0.80	28.5
Approach		1027	0.2	1027	0.2	0.586	13.7	LOS A	11.5	80.5	0.79	0.71	0.79	30.8
North: Andalusian Way (N)														
7	L2	67	0.0	67	0.0	0.244	20.1	LOS B	3.1	21.7	0.78	0.69	0.78	16.5
8	T1	61	0.0	61	0.0	0.244	16.7	LOS B	3.1	21.7	0.78	0.69	0.78	34.8
9	R2	12	0.0	12	0.0	0.244	20.2	LOS B	3.1	21.7	0.78	0.69	0.78	16.5
Approach		140	0.0	140	0.0	0.244	18.6	LOS B	3.1	21.7	0.78	0.69	0.78	27.8
West: Carrington Rd (W)														
10	L2	112	0.0	112	0.0	0.513	16.8	LOS B	9.6	67.0	0.75	0.69	0.75	19.3
11	T1	370	0.0	370	0.0	0.513	12.7	LOS A	9.6	67.0	0.76	0.69	0.76	18.8
12	R2	103	3.6	103	3.6	0.513	25.6	LOS B	3.3	23.5	0.88	0.78	0.88	31.6
Approach		584	0.6	584	0.6	0.513	15.8	LOS B	9.6	67.0	0.78	0.71	0.78	24.0
All Vehicles		2083	0.6	2083	0.6	0.610	16.0	LOS B	11.5	80.5	0.80	0.72	0.80	29.1

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	11	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Andalusian Way (N)											

P3 Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
West: Carrington Rd (W)										
P4 Full	32	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	56	24.3	LOS C	0.0	0.0	0.90	0.90	188.7	213.7	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Carrington Rd & Andalusian Way Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

Carrington Rd, Andalusian Way & Middleton Ave
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Middleton Ave (S)														
1	L2	107	1.9	107	1.9	0.600	24.6	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
2	T1	93	0.0	93	0.0	0.600	21.3	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
3	R2	91	0.0	91	0.0	* 0.600	24.6	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
Approach		291	0.7	291	0.7	0.600	23.6	LOS B	7.6	53.2	0.91	0.81	0.91	30.6
East: Carrington Rd (E)														
4	L2	91	0.0	91	0.0	0.434	15.6	LOS B	7.8	54.7	0.70	0.64	0.70	40.5
5	T1	689	0.0	689	0.0	0.434	11.4	LOS A	7.8	54.7	0.71	0.63	0.71	30.1
6	R2	9	0.0	9	0.0	0.434	16.2	LOS B	7.6	53.3	0.71	0.62	0.71	30.3
Approach		789	0.0	789	0.0	0.434	11.9	LOS A	7.8	54.7	0.71	0.63	0.71	32.5
North: Andalusian Way (N)														
7	L2	96	0.0	96	0.0	0.360	21.6	LOS B	4.6	31.9	0.83	0.73	0.83	15.7
8	T1	73	0.0	73	0.0	0.360	18.2	LOS B	4.6	31.9	0.83	0.73	0.83	33.9
9	R2	24	0.0	24	0.0	0.360	21.7	LOS B	4.6	31.9	0.83	0.73	0.83	15.7
Approach		193	0.0	193	0.0	0.360	20.4	LOS B	4.6	31.9	0.83	0.73	0.83	25.8
West: Carrington Rd (W)														
10	L2	196	0.0	196	0.0	0.625	17.1	LOS B	12.7	89.0	0.79	0.74	0.79	18.7
11	T1	542	0.2	542	0.2	0.625	13.7	LOS A	12.7	89.0	0.81	0.75	0.82	17.7
12	R2	130	3.4	130	3.4	* 0.625	21.1	LOS B	7.2	50.9	0.85	0.78	0.87	34.7
Approach		868	0.6	868	0.6	0.625	15.6	LOS B	12.7	89.0	0.81	0.75	0.82	23.4
All Vehicles		2141	0.4	2141	0.4	0.625	15.7	LOS B	12.7	89.0	0.79	0.71	0.79	28.3

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Middleton Ave (S)											
P1	Full	6	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
East: Carrington Rd (E)											
P2	Full	13	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
North: Andalusian Way (N)											

P3 Full	8	24.3	LOS C	0.0	0.0	0.90	0.90	184.8	208.6	1.13
West: Carrington Rd (W)										
P4 Full	30	24.3	LOS C	0.0	0.0	0.90	0.90	189.9	215.2	1.13
All Pedestrians	57	24.3	LOS C	0.0	0.0	0.90	0.90	188.6	213.6	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	10	0.0	10	0.0	0.114	5.8	LOS A	0.3	2.8	0.22	0.61	0.22	49.0
2	T1	3	0.0	3	0.0	0.114	5.1	LOS A	0.3	2.8	0.22	0.61	0.22	37.8
3	R2	80	23.8	80	23.8	0.114	7.3	LOS A	0.3	2.8	0.22	0.61	0.22	32.6
Approach		93	20.4	93	20.4	0.114	7.1	LOS A	0.3	2.8	0.22	0.61	0.22	37.3
East: De Clambe Dr (E)														
4	L2	183	7.1	183	7.1	0.155	4.7	LOS A	0.2	1.4	0.02	0.42	0.02	35.3
5	T1	73	1.4	73	1.4	0.155	0.0	LOS A	0.2	1.4	0.02	0.42	0.02	54.5
6	R2	24	0.0	24	0.0	0.155	4.7	LOS A	0.2	1.4	0.02	0.42	0.02	35.2
Approach		280	5.0	280	5.0	0.155	3.5	NA	0.2	1.4	0.02	0.42	0.02	46.5
North: Showground Access (N)														
7	L2	14	0.0	14	0.0	0.023	5.6	LOS A	0.1	0.6	0.04	0.55	0.04	33.0
8	T1	12	0.0	12	0.0	0.023	5.4	LOS A	0.1	0.6	0.04	0.55	0.04	33.0
9	R2	2	0.0	2	0.0	0.023	6.0	LOS A	0.1	0.6	0.04	0.55	0.04	49.4
Approach		28	0.0	28	0.0	0.023	5.5	LOS A	0.1	0.6	0.04	0.55	0.04	36.6
West: De Clambe Dr (W)														
10	L2	7	0.0	7	0.0	0.014	6.0	LOS A	0.0	0.3	0.22	0.27	0.22	46.6
11	T1	12	0.0	12	0.0	0.014	0.4	LOS A	0.0	0.3	0.22	0.27	0.22	53.5
12	R2	6	0.0	6	0.0	0.014	6.2	LOS A	0.0	0.3	0.22	0.27	0.22	53.5
Approach		25	0.0	25	0.0	0.014	3.4	NA	0.0	0.3	0.22	0.27	0.22	51.1
All Vehicles		426	7.7	426	7.7	0.155	4.4	NA	0.3	2.8	0.08	0.46	0.08	44.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Doran Dr Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

De Clambe Dr, Doran Dr & Showground Access
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Doran Dr (S)														
1	L2	1	0.0	1	0.0	0.202	5.6	LOS A	0.6	4.7	0.33	0.69	0.33	48.0
2	T1	13	0.0	13	0.0	0.202	5.9	LOS A	0.6	4.7	0.33	0.69	0.33	36.2
3	R2	134	9.7	134	9.7	0.202	8.1	LOS A	0.6	4.7	0.33	0.69	0.33	30.6
Approach		148	8.8	148	8.8	0.202	7.9	LOS A	0.6	4.7	0.33	0.69	0.33	31.6
East: De Clambe Dr (E)														
4	L2	269	6.7	269	6.7	0.182	4.8	LOS A	0.3	2.4	0.08	0.51	0.08	30.7
5	T1	9	0.0	9	0.0	0.182	0.4	LOS A	0.3	2.4	0.08	0.51	0.08	52.7
6	R2	43	0.0	43	0.0	0.182	5.1	LOS A	0.3	2.4	0.08	0.51	0.08	33.0
Approach		321	5.6	321	5.6	0.182	4.7	NA	0.3	2.4	0.08	0.51	0.08	33.2
North: Showground Access (N)														
7	L2	11	0.0	11	0.0	0.025	5.8	LOS A	0.1	0.6	0.25	0.56	0.25	31.4
8	T1	13	0.0	13	0.0	0.025	6.4	LOS A	0.1	0.6	0.25	0.56	0.25	31.4
9	R2	1	0.0	1	0.0	0.025	6.5	LOS A	0.1	0.6	0.25	0.56	0.25	48.7
Approach		25	0.0	25	0.0	0.025	6.2	LOS A	0.1	0.6	0.25	0.56	0.25	33.6
West: De Clambe Dr (W)														
10	L2	5	0.0	5	0.0	0.096	6.5	LOS A	0.4	2.6	0.27	0.21	0.27	47.3
11	T1	107	0.0	107	0.0	0.096	0.5	LOS A	0.4	2.6	0.27	0.21	0.27	54.7
12	R2	52	0.0	52	0.0	0.096	6.5	LOS A	0.4	2.6	0.27	0.21	0.27	54.7
Approach		164	0.0	164	0.0	0.096	2.6	NA	0.4	2.6	0.27	0.21	0.27	54.4
All Vehicles		658	4.7	658	4.7	0.202	5.0	NA	0.6	4.7	0.19	0.48	0.19	42.5

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.
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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	143	0.0	143	0.0	0.206	0.5	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
3	R2	104	0.0	104	0.0	0.206	2.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
Approach		247	0.0	247	0.0	0.206	1.1	LOS A	0.8	5.9	0.28	0.22	0.28	19.7
East: De Clambe Dr (E)														
4	L2	159	0.0	159	0.0	0.155	3.9	LOS A	0.0	0.0	0.00	0.29	0.00	46.7
5	T1	135	0.0	135	0.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.29	0.00	34.1
Approach		294	0.0	294	0.0	0.155	2.1	NA	0.0	0.0	0.00	0.29	0.00	45.2
West: De Clambe Dr (W)														
11	T1	67	0.0	67	0.0	0.063	0.6	LOS A	0.2	1.7	0.28	0.21	0.28	33.8
12	R2	38	0.0	38	0.0	0.063	5.6	LOS A	0.2	1.7	0.28	0.21	0.28	21.6
Approach		105	0.0	105	0.0	0.063	2.4	NA	0.2	1.7	0.28	0.21	0.28	23.2
All Vehicles		646	0.0	646	0.0	0.206	1.8	NA	0.8	5.9	0.15	0.25	0.15	25.8

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Site Access Driveway Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

De Clambe Dr & Site Access Driveway
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access Driveway (S)														
1	L2	226	0.0	226	0.0	0.360	0.5	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
3	R2	165	0.0	165	0.0	0.360	3.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
Approach		391	0.0	391	0.0	0.360	1.9	LOS A	1.7	11.8	0.26	0.23	0.27	19.6
East: De Clambe Dr (E)														
4	L2	347	0.0	347	0.0	0.238	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	45.7
5	T1	100	0.0	100	0.0	0.238	0.0	LOS A	0.0	0.0	0.00	0.41	0.00	30.2
Approach		447	0.0	447	0.0	0.238	3.0	NA	0.0	0.0	0.00	0.41	0.00	45.0
West: De Clambe Dr (W)														
11	T1	170	0.0	170	0.0	0.161	1.1	LOS A	0.7	5.0	0.36	0.21	0.36	33.0
12	R2	83	0.0	83	0.0	0.161	6.5	LOS A	0.7	5.0	0.36	0.21	0.36	21.5
Approach		253	0.0	253	0.0	0.161	2.8	NA	0.7	5.0	0.36	0.21	0.36	23.3
All Vehicles		1091	0.0	1091	0.0	0.360	2.6	NA	1.7	11.8	0.18	0.30	0.18	26.7

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	118	0.0	118	0.0	0.138	4.0	LOS A	0.5	3.4	0.22	0.50	0.22	29.9
3	R2	49	0.0	49	0.0	0.138	5.3	LOS A	0.5	3.4	0.22	0.50	0.22	29.9
Approach		167	0.0	167	0.0	0.138	4.4	LOS A	0.5	3.4	0.22	0.50	0.22	29.9
East: De Clambe Dr (E)														
4	L2	81	0.0	81	0.0	0.138	4.6	LOS A	0.0	0.0	0.00	0.17	0.00	43.5
5	T1	176	7.4	176	7.4	0.138	0.0	LOS A	0.0	0.0	0.00	0.17	0.00	43.5
Approach		257	5.1	257	5.1	0.138	1.4	NA	0.0	0.0	0.00	0.17	0.00	43.5
West: De Clambe Dr (W)														
11	T1	83	22.9	83	22.9	0.109	0.7	LOS A	0.5	4.1	0.33	0.30	0.33	28.4
12	R2	88	1.1	88	1.1	0.109	4.8	LOS A	0.5	4.1	0.33	0.30	0.33	28.4
Approach		171	11.7	171	11.7	0.109	2.8	NA	0.5	4.1	0.33	0.30	0.33	28.4
All Vehicles		595	5.5	595	5.5	0.138	2.7	NA	0.5	4.1	0.16	0.30	0.16	35.3

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.

MOVEMENT SUMMARY

Site: 101 [De Clambe Dr & Andalusian Way Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

De Clambe Dr & Andalusian Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Andalusian Way (S)														
1	L2	217	0.0	217	0.0	0.230	4.3	LOS A	0.9	6.5	0.27	0.52	0.27	29.2
3	R2	51	0.0	51	0.0	0.230	6.8	LOS A	0.9	6.5	0.27	0.52	0.27	29.2
Approach		268	0.0	268	0.0	0.230	4.8	LOS A	0.9	6.5	0.27	0.52	0.27	29.2
East: De Clambe Dr (E)														
4	L2	73	0.0	73	0.0	0.163	4.6	LOS A	0.0	0.0	0.00	0.13	0.00	44.8
5	T1	230	7.8	230	7.8	0.163	0.0	LOS A	0.0	0.0	0.00	0.13	0.00	44.8
Approach		303	5.9	303	5.9	0.163	1.1	NA	0.0	0.0	0.00	0.13	0.00	44.8
West: De Clambe Dr (W)														
11	T1	198	6.6	198	6.6	0.206	0.9	LOS A	1.1	8.0	0.36	0.25	0.36	30.3
12	R2	137	0.0	137	0.0	0.206	5.1	LOS A	1.1	8.0	0.36	0.25	0.36	30.3
Approach		335	3.9	335	3.9	0.206	2.6	NA	1.1	8.0	0.36	0.25	0.36	30.3
All Vehicles		906	3.4	906	3.4	0.230	2.8	NA	1.1	8.0	0.21	0.29	0.21	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.
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.

MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	88	12.9	88	12.9	0.088	12.8	LOS A	1.2	9.4	0.23	0.63	0.23	27.3
22	T1	904	1.7	904	1.7	0.479	6.6	LOS A	9.0	64.0	0.26	0.23	0.26	48.2
Approach		991	2.6	991	2.6	0.479	7.2	LOS A	9.0	64.0	0.26	0.26	0.26	46.8
NorthWest: Showground Rd (NW)														
28	T1	1997	1.2	1997	1.2	* 0.599	2.7	LOS A	17.6	124.8	0.31	0.29	0.31	51.9
29	R2	281	1.8	281	1.8	0.340	12.1	LOS A	7.9	55.9	0.51	0.74	0.51	35.3
Approach		2278	1.3	2278	1.3	0.599	3.9	LOS A	17.6	124.8	0.34	0.35	0.34	49.0
SouthWest: De Clambe Dr (SW)														
30	L2	135	6.7	135	6.7	0.183	30.1	LOS C	5.3	39.5	0.67	0.73	0.67	25.7
32	R2	12	100.0	12	100.0	* 0.240	76.4	LOS F	0.8	10.5	0.99	0.69	0.99	6.1
Approach		147	14.3	147	14.3	0.240	33.9	LOS C	5.3	39.5	0.70	0.72	0.70	23.5
All Vehicles		3416	2.3	3416	2.3	0.599	6.1	LOS A	17.6	124.8	0.33	0.34	0.33	45.7

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	222.2	211.9	0.95
All Pedestrians		10	59.2	LOS E	0.0	0.0	0.95	0.95	224.9	215.5	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Showground Rd & DeClambe Dr Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

Showground Rd & DeClambe Dr
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	166	7.8	166	7.8	0.128	10.2	LOS A	2.7	19.9	0.28	0.65	0.28	30.6
22	T1	1646	0.8	1646	0.8	* 0.705	7.0	LOS A	22.1	155.5	0.34	0.31	0.34	47.6
Approach		1812	1.4	1812	1.4	0.705	7.3	LOS A	22.1	155.5	0.33	0.34	0.33	46.6
NorthWest: Showground Rd (NW)														
28	T1	982	1.1	982	1.1	0.294	1.7	LOS A	5.6	39.7	0.20	0.18	0.20	54.5
29	R2	217	4.6	217	4.6	* 0.531	39.5	LOS C	12.1	88.0	0.94	0.99	0.94	18.4
Approach		1199	1.8	1199	1.8	0.531	8.6	LOS A	12.1	88.0	0.33	0.33	0.33	40.1
SouthWest: De Clambe Dr (SW)														
30	L2	305	1.6	305	1.6	0.654	50.5	LOS D	17.2	122.1	0.94	0.84	0.94	19.1
32	R2	10	100.0	10	100.0	* 0.200	76.1	LOS F	0.7	8.7	0.99	0.69	0.99	6.1
Approach		315	4.8	315	4.8	0.654	51.3	LOS D	17.2	122.1	0.94	0.83	0.94	18.7
All Vehicles		3327	1.9	3327	1.9	0.705	11.9	LOS A	22.1	155.5	0.39	0.38	0.39	38.8

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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	227.6	219.0	0.96
SouthWest: De Clambe Dr (SW)											
P8	Full	1	59.1	LOS E	0.0	0.0	0.95	0.95	222.1	211.9	0.95
All Pedestrians		5	59.1	LOS E	0.0	0.0	0.95	0.95	226.2	217.2	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing AM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network AM 2031 with Development (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	656	0.2	656	0.2	* 0.609	14.1	LOS A	17.9	125.7	0.48	0.74	0.48	41.2
22	T1	866	2.7	866	2.7	0.568	26.1	LOS B	22.9	164.3	0.75	0.66	0.75	32.7
Approach		1523	1.6	1523	1.6	0.609	20.9	LOS B	22.9	164.3	0.63	0.70	0.63	35.9
NorthWest: Showground Rd (NW)														
28	T1	1558	2.2	1558	2.2	0.579	9.8	LOS A	21.2	151.0	0.48	0.44	0.48	48.4
29	R2	440	0.3	440	0.3	* 0.469	42.0	LOS C	10.9	76.6	0.84	0.93	0.84	12.2
Approach		1998	1.8	1998	1.8	0.579	16.9	LOS B	21.2	151.0	0.56	0.55	0.56	40.1
SouthWest: Carrington Rd (SW)														
30	L2	63	2.0	63	2.0	0.077	26.3	LOS B	2.3	16.0	0.60	0.67	0.60	21.0
32	R2	432	0.6	432	0.6	0.562	54.7	LOS D	12.4	87.2	0.95	0.82	0.95	26.1
Approach		495	0.8	495	0.8	0.562	51.1	LOS D	12.4	87.2	0.91	0.80	0.91	25.8
All Vehicles		4015	1.6	4015	1.6	0.609	22.6	LOS B	22.9	164.3	0.63	0.63	0.63	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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	63	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		73	59.3	LOS E	0.2	0.2	0.96	0.96	218.0	206.3	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 101 [Showground Rd & Carrington Rd Existing PM 2031 with Development (Site Folder: General)]

Network: N101 [Existing Network PM 2031 with Development (Network Folder: General)]

Showground Rd & Carrington Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Network User-Given Cycle Time)
Design Life Analysis: Constant Number of Years = 10

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	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Showground Rd (SE)														
21	L2	544	0.0	544	0.0	0.340	7.4	LOS A	6.6	46.0	0.21	0.65	0.21	48.4
22	T1	1544	1.7	1544	1.7	* 0.833	22.6	LOS B	47.8	339.1	0.79	0.74	0.81	34.8
Approach		2089	1.2	2089	1.2	0.833	18.7	LOS B	47.8	339.1	0.64	0.72	0.66	37.5
NorthWest: Showground Rd (NW)														
28	T1	784	2.7	784	2.7	0.299	8.2	LOS A	8.2	58.6	0.36	0.32	0.36	50.0
29	R2	216	0.0	216	0.0	* 0.680	65.0	LOS E	7.3	51.0	1.00	0.95	1.11	8.5
Approach		999	2.1	999	2.1	0.680	20.4	LOS B	8.2	58.6	0.50	0.46	0.52	37.6
SouthWest: Carrington Rd (SW)														
30	L2	197	0.0	197	0.0	0.345	41.1	LOS C	9.5	66.8	0.81	0.77	0.81	15.8
32	R2	667	0.0	667	0.0	* 0.833	62.4	LOS E	22.7	158.7	1.00	0.93	1.14	24.3
Approach		864	0.0	864	0.0	0.833	57.6	LOS E	22.7	158.7	0.96	0.89	1.07	23.1
All Vehicles		3951	1.2	3951	1.2	0.833	27.6	LOS B	47.8	339.1	0.67	0.69	0.71	32.4

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.
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.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
NorthWest: Showground Rd (NW)											
P7	Full	4	59.1	LOS E	0.0	0.0	0.95	0.95	230.7	223.0	0.97
SouthWest: Carrington Rd (SW)											
P8	Full	5	59.2	LOS E	0.0	0.0	0.95	0.95	224.7	215.2	0.96
P8B	Slip/ Bypass	63	59.3	LOS E	0.2	0.2	0.96	0.96	216.4	204.3	0.94
All Pedestrians		72	59.3	LOS E	0.2	0.2	0.96	0.96	217.8	206.0	0.95

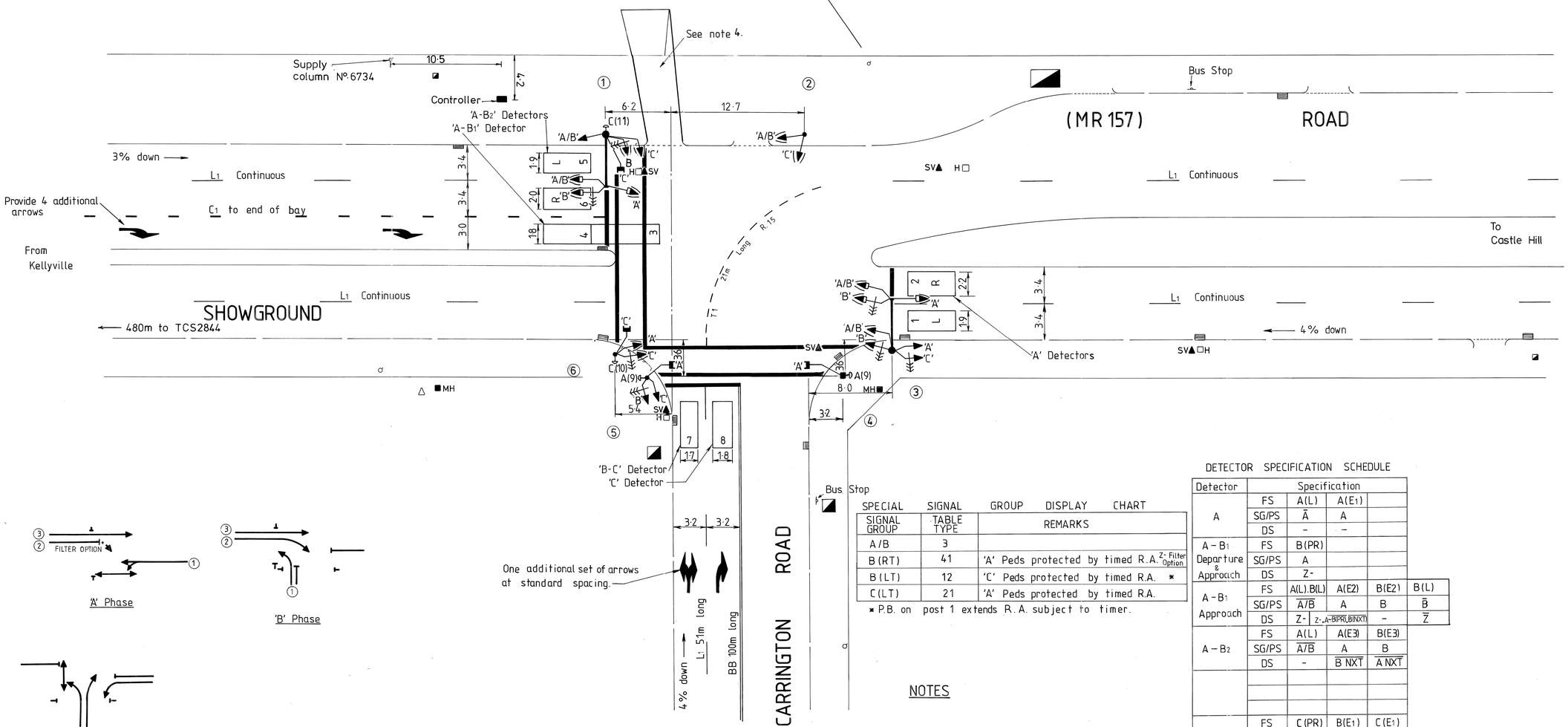
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

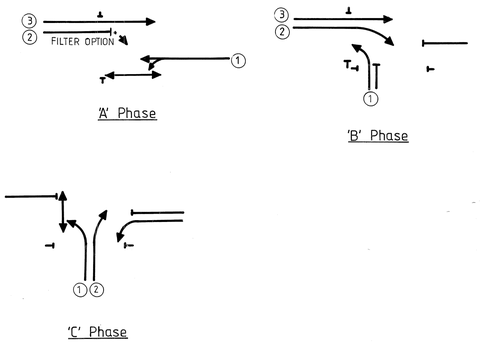
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APPENDIX D

TRAFFIC CONTROL SIGNAL PLANS

Date in Service.....





MOVEMENTS

POSTS

POST	TYPE	LENGTH	REMARKS
1	5L	-	EXISTING
2	2	4·1	"
3	5L	-	"
4	6	-	"
5	2	4·1	"
6	2	4·1	"

SPECIAL SIGNAL GROUP	SIGNAL TABLE TYPE	GROUP DISPLAY CHART REMARKS
A/B	3	
B(RT)	41	'A' Peds protected by timed R.A. Z- Filter Option
B(LT)	12	'C' Peds protected by timed R.A. *
C(LT)	21	'A' Peds protected by timed R.A.

* P.B. on post 1 extends R.A. subject to timer.

NOTES

1. Site to be connected to SCATS.
2. Special STOP sign (R1-202) placed on post 5.
3. Provide kerb ramps at ends of crossings.
4. Driveway to be constructed as shown.

DETECTOR SPECIFICATION SCHEDULE

Detector		Specification			
A	FS	A(L)	A(E1)		
	SG/PS	$\overline{A}$	A		
	DS	-	-		
A-B1 Departure & Approach	FS	B(PR)			
	SG/PS	A			
	DS	Z-			
A-B1 Approach	FS	A(L).B(L)	A(E2)	B(E2)	B(L)
	SG/PS	$\overline{A/B}$	A	B	$\overline{B}$
	DS	Z-	Z-,A-B(PR),B NXT	-	$\overline{Z}$
A-B2	FS	A(L)	A(E3)	B(E3)	
	SG/PS	$\overline{A/B}$	A	B	
	DS	-	$\overline{B}$ NXT	$\overline{A}$ NXT	
B-C	FS	C(PR)	B(E1)	C(E1)	
	SG/PS	$\overline{C}$	B	C	
	DS	—	$\overline{C}$ NXT, B-C(PR)		
C	FS	C(L)	C(E2)		
	SG/PS	$\overline{C}$	C		
	DS	-	-		
A ped	FS	A(PB)	C(L)		
	SG/PS	$\overline{A}$ WLK	A.$\overline{A}$ WLK		
	DS	—	$\overline{B}$.$\overline{C}$		
C ped	FS	C(PB)	A(L)		
	SG/PS	$\overline{C}$ WLK	C.$\overline{C}$ WLK		
	DS	—	$\overline{A}$.$\overline{B}$		

A ORIGINAL ISSUE
B ISSUE J1 SW0582 16 MAE. POST 4 WAS TYPE 2 VSC 5/95
C ISSUE J1 SW1262 14-04-97 Provide dual R.T. pavement arrows in Carrington Road and turning lines. After the detector logic and signal groups Split the C pushbuttons. A.C. 21-05-97.

REFERENCE PLANS	
Symbols & Abb.	BD003.5
Standard Posit.	BD001.3
Pres. Detectors	2C005.9
Type 2 Posts	PM202.1
Det. Schedule Expl.	VD018.7

SURVEYOR D.ROBINSON
DATE.....
FLD. BK. AF. MOD 54
U.B.D. REF MAP 150, M 12
DESIGNED S.CLARK
CHECKED D.LAMOURY
PASSED

THESE DRAWINGS HAVE BEEN TAKEN TO THE SITE OF THE WORK AND ARE RECOMMENDED.
SUPERVISING ENGINEER
DATE 16 JUL 1987

APPROVED
DIVISIONAL ENGINEER
DATE 29-7-87

ROADS & TRAFFIC AUTHORITY OF N.S.W.

SHIRE OF BAULKHAM HILLS
MR157 SHOWGROUND ROAD
SIGNALS AT JUNCTION WITH
CARRINGTON ROAD AT CASTLE HILL
T.C.S. No. 2666

DESIGN OFFICE PARRAMATTA-SYDNEY TECHNICAL SERVICES
FILE No. 31TS265
No. OF SHEETS
SHEET No. 1
SUPERSEDES
ISSUE A B C
SCALE 1:200 0 1 2 3 4 5 10
Reg. No. 0157·031·VV2666

SD 6286

SD 6286 - TRAFFIC CONTROL SYSTEM LAYOUT DRAWING SHEET ISSUED FEB 1977

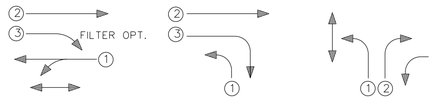
VV2666-1

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DATE IN SERVICE : 06-01-2014

NSW GOVERNMENT Transport Roads & Maritime Services

0157.031.VV.4569

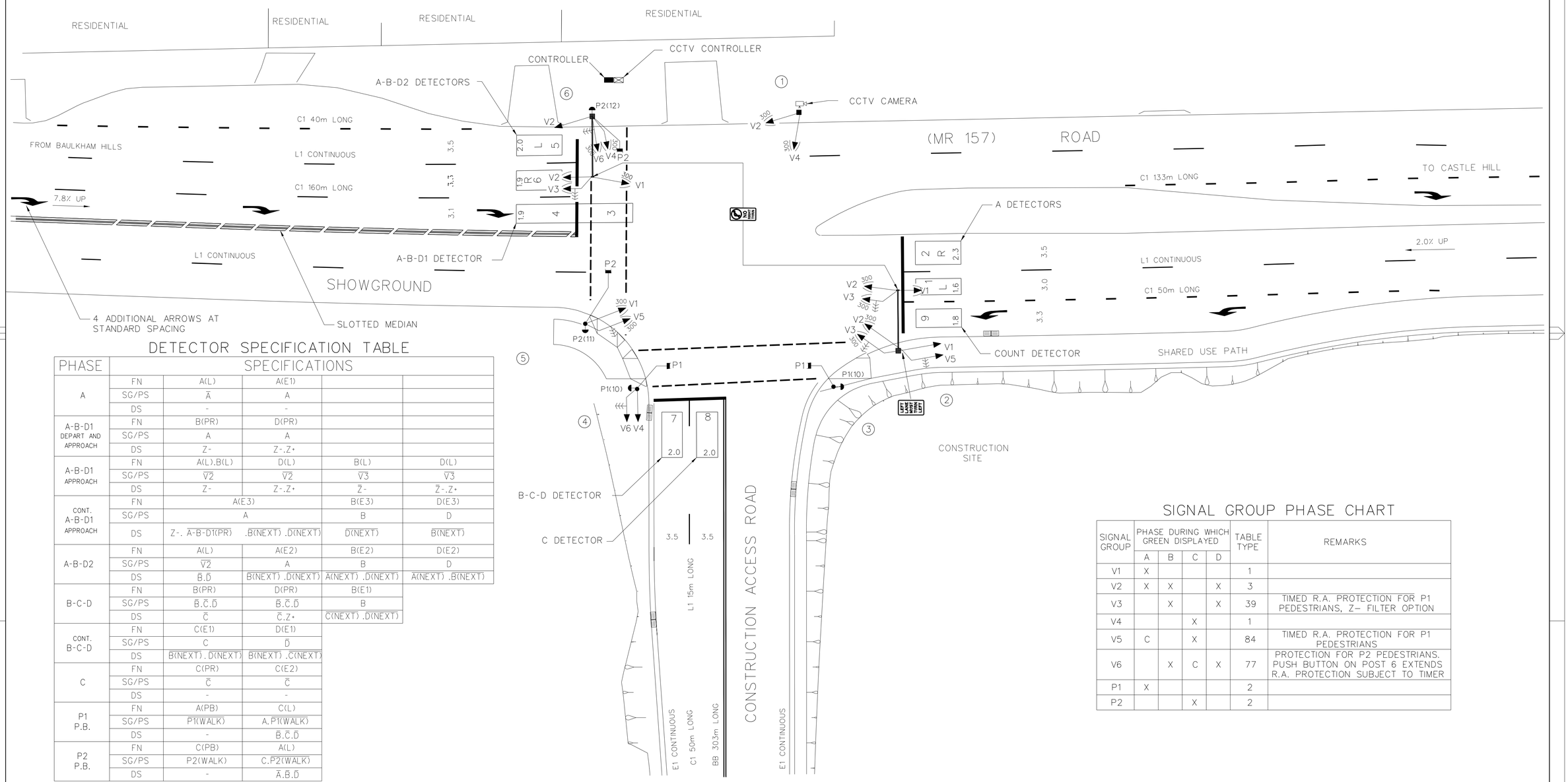


MOVEMENTS

POSTS				
POST	TYPE	LENGTH	OFFSET	REMARKS
1	6	-	1.0	EXISTING
2	9	-	1.0	EX (6.0 ARM)
3	2	3.2	1.0	EXISTING
4	2	4.1	1.0	EXISTING
5	2	4.1	1.0	EXISTING
6	9	-	1.0	EX (6.0 ARM)

NOTES

1. THIS SITE IS SCATS LINKED.
2. SPECIAL STOP SIGN (R1-4) IS PLACED ON POST 4.
3. ALL PUSH BUTTONS ARE AUDIO TACTILE.
4. CCTV CAMERA MOUNTED ON POST 1.



DETECTOR SPECIFICATION TABLE

PHASE		SPECIFICATIONS			
A	FN	A(L)	A(E1)		
	SG/PS	$\overline{A}$	A		
	DS	-	-		
A-B-D1 DEPART AND APPROACH	FN	B(PR)	D(PR)		
	SG/PS	A	A		
	DS	Z-	Z-.Z+		
A-B-D1 APPROACH	FN	A(L).B(L)	D(L)	B(L)	D(L)
	SG/PS	$\overline{V2}$	$\overline{V2}$	$\overline{V3}$	$\overline{V3}$
	DS	Z-	Z-.Z+	$\overline{Z}$-	$\overline{Z}$-.Z+
CONT. A-B-D1 APPROACH	FN	A(E3)		B(E3)	D(E3)
	SG/PS	A		B	D
	DS	Z-. $\overline{A\text{-}B\text{-}D1(PR)}$	.$\overline{B(NEXT)}$.$\overline{D(NEXT)}$	$\overline{D(NEXT)}$	$\overline{B(NEXT)}$
A-B-D2	FN	A(L)	A(E2)	B(E2)	D(E2)
	SG/PS	$\overline{V2}$	A	B	D
	DS	$\overline{B}$.$\overline{D}$	$\overline{B(NEXT)}$.$\overline{D(NEXT)}$	A(NEXT) .$\overline{D(NEXT)}$	A(NEXT) .$\overline{B(NEXT)}$
B-C-D	FN	B(PR)	D(PR)	B(E1)	
	SG/PS	$\overline{B}$.$\overline{C}$.$\overline{D}$	$\overline{B}$.$\overline{C}$.$\overline{D}$	B	
	DS	$\overline{C}$	$\overline{C}$.Z+	$\overline{C(NEXT)}$.$\overline{D(NEXT)}$	
CONT. B-C-D	FN	C(E1)	D(E1)		
	SG/PS	C	$\overline{D}$		
	DS	$\overline{B(NEXT)}$.$\overline{D(NEXT)}$	$\overline{B(NEXT)}$.$\overline{C(NEXT)}$		
C	FN	C(PR)	C(E2)		
	SG/PS	$\overline{C}$	$\overline{C}$		
	DS	-	-		
P1 P.B.	FN	A(PB)	C(L)		
	SG/PS	$\overline{P1(WALK)}$	A.$\overline{P1(WALK)}$		
	DS	-	$\overline{B}$.$\overline{C}$.$\overline{D}$		
P2 P.B.	FN	C(PB)	A(L)		
	SG/PS	$\overline{P2(WALK)}$	C.$\overline{P2(WALK)}$		
	DS	-	$\overline{A}$.$\overline{B}$.$\overline{D}$		

SIGNAL GROUP PHASE CHART

SIGNAL GROUP	PHASE DURING WHICH GREEN DISPLAYED				TABLE TYPE	REMARKS
	A	B	C	D		
V1	X				1	
V2	X	X		X	3	
V3		X		X	39	TIMED R.A. PROTECTION FOR P1 PEDESTRIANS, Z– FILTER OPTION
V4			X		1	
V5	C		X		84	TIMED R.A. PROTECTION FOR P1 PEDESTRIANS
V6		X	C	X	77	PROTECTION FOR P2 PEDESTRIANS. PUSH BUTTON ON POST 6 EXTENDS R.A. PROTECTION SUBJECT TO TIMER
P1	X				2	
P2			X		2	

A ORIGINAL ISSUE

'B' ISSUE – WAE
New site WAE. Minor post positional changes & relocation of controller
TL NSW 01/2014

PUBLIC UTILITY LEGEND	
HYDRANT	
STOP VALVE	
GAS VALVE	
SEWER MANHOLE	
TELECOM PIT	
ELECT LIGHT POLE	
POWER POLE	
STAY POLE	
TELEPHONE BOX	
TELECOM PILLAR	

REFERENCE PLANS	
SYMBOLS/ABBS.	VD003-6
STD POSIT	VD001-5
PRES. DETECT	VC005-17
VEH. GROUP OP	TS-TN-019
DET. LOGIC OP	TS-TN-020
PED. MOVEMNT OP	TS-TN-021
CABLE INSTALL	SHEET 3
CABLE CHART	SHEET 4
SURVEYOR : WHELANS	
DATE : NOV 2011	

U.B.D. Ref. Map 150 M11
I.S.G. CO-ORDS E: 298867 N: 1266806
DESIGNED N.VUKIC
CHECKED N.Vukic
N.VUKIC
SITE CHECKED
N.Vukic
RECOMMENDED

DESIGN APPROVAL
APPROVED
A JACKSON
POSITION PROJECT MANAGER
DATE 02.10.13
DESIGN PREPARED BY SMEC AUSTRALIA PTY LTD.
SMEC

RMS ACCEPTANCE
RECOMMENDED
POSITION NETWORK OPERATIONS LEADER
DATE 24/7/13
ACCEPTED
POSITION RNMar
DATE 24/07/13

ROADS AND MARITIME SERVICES

THE HILLS SHIRE COUNCIL AREA
TRAFFIC SIGNALS AT THE INTERSECTION OF SHOWGROUND ROAD (MR 157) AND CONSTRUCTION ACCESS ROAD, CASTLE HILL

DESIGN LAYOUT TCS No 4569

EXISTING ☒ PROPOSED ☐
CADD FILE: VV4569_1B.dgn
SCALE 5 0 (1:200) 5 10
ISSUE B
FILE 31 TS 353
SUPERSEDES SHEET/ISSUE -
REGN. 0157.031.VV.4569
SHEET 1

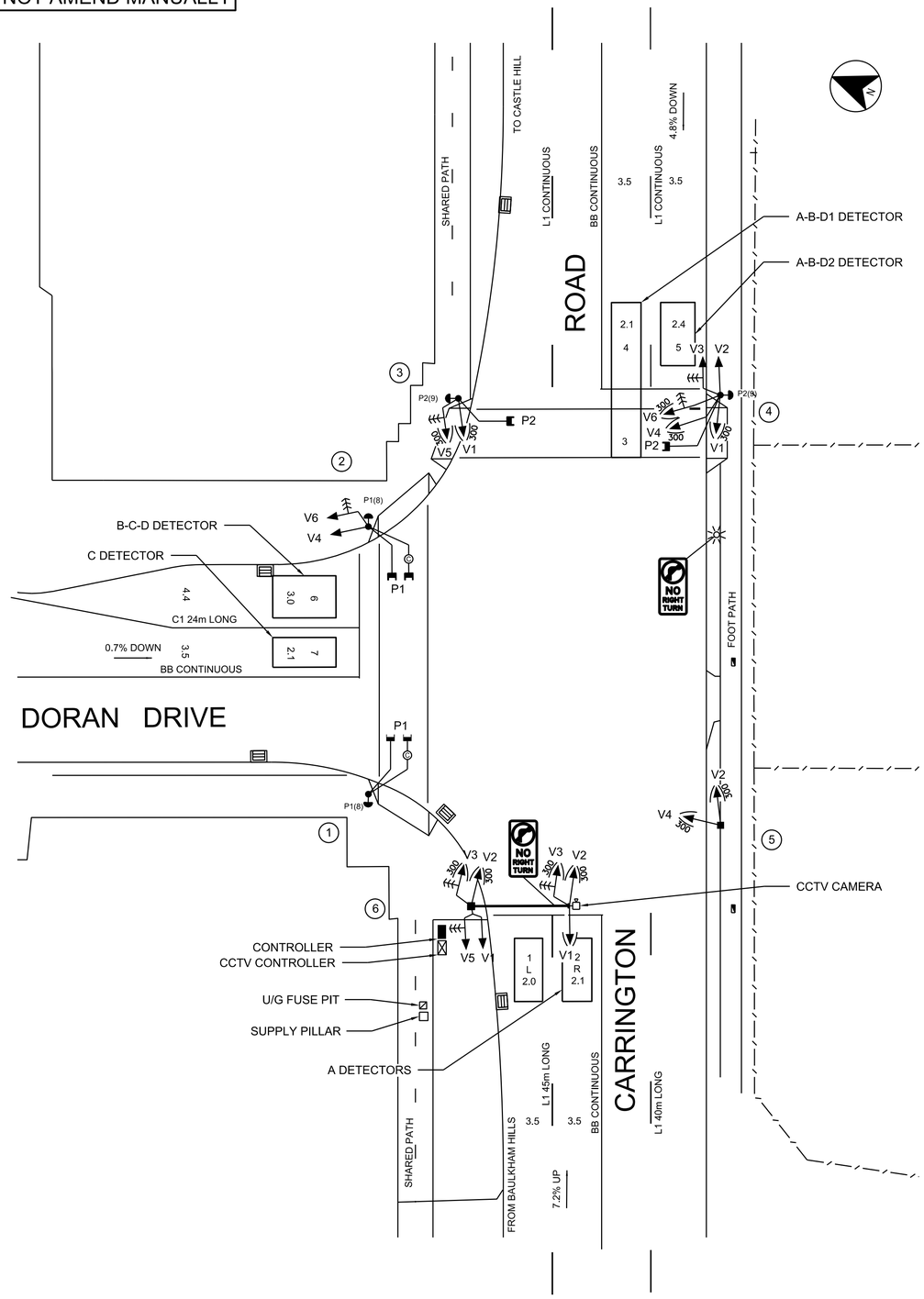
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TCS 4699

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DATE IN SERVICE : 27/03/2019

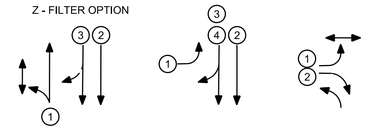
Transport Roads & Maritime Services



DETECTOR SPECIFICATION

DETECTOR		SPECIFICATION				
A	FN	A(L)	A(E1)			
	SG/PS	$\overline{A}$	A			
	DS	-	-			
A-B-D1 DEPARTURE & APPROACH	FN	B(PR)	D(PR)	B(E4)	D(E4)	
	SG/PS	A	A	B	D	
	DS	-	Z+	A(NEXT)	A(NEXT)	
A-B-D1 APPROACH	FN	A(L) . B(L)	D(L)	A(E3)		
	SG/PS	$\overline{V2}$	$\overline{V2}$	A		
	DS	-	Z+	$\overline{A\text{-}B\text{-}D1(PR)}$. $\overline{B(NEXT)}$. $\overline{D(NEXT)}$		
CONT. A-B-D1 APPROACH	FN	B(E3)		D(E3)		
	SG/PS	B		D		
	DS	$\overline{A(NEXT)}$. $\overline{D(NEXT)}$		$\overline{A(NEXT)}$. $\overline{B(NEXT)}$		
A-B-D2	FN	A(L)	A(E2)	B(E2)	D(E2)	
	SG/PS	$\overline{V2}$	A	B	D	
	DS	$\overline{B}$. $\overline{D}$	$\frac{\overline{B(NEXT)}}{D(NEXT)}$.	$\frac{\overline{A(NEXT)}}{D(NEXT)}$.	$\frac{\overline{A(NEXT)}}{B(NEXT)}$.	
B-C-D	FN	B(PR)	D(PR)	B(E1)	C(E1)	D(E1)
	SG/PS	$\overline{B}$. $\overline{C}$. $\overline{D}$	$\overline{B}$. $\overline{C}$. $\overline{D}$	B	C	D
	DS	$\overline{C}$	Z+ . $\overline{C}$	$\frac{\overline{C(NEXT)}}{D(NEXT)}$.	$\frac{\overline{B(NEXT)}}{D(NEXT)}$.	$\frac{\overline{B(NEXT)}}{C(NEXT)}$.
C	FN	C(PR)	C(E2)			
	SG/PS	$\overline{C}$	C			
	DS	-	-			
P1(PB)	FN	A(PB)	C(L)			
	SG/PS	$\overline{P1(WALK)}$	A . $\overline{P1(WALK)}$			
	DS	-	$\overline{B}$. $\overline{C}$. $\overline{D}$			
P2(PB)	FN	C(PB)	A(L)			
	SG/PS	$\overline{P2(WALK)}$	C . $\overline{P2(WALK)}$			
	DS		$\overline{A}$. $\overline{B}$. $\overline{D}$			

Z - FILTER OPTION



A PHASE B & D PHASE C PHASE

MOVEMENTS

SIGNAL GROUP PHASE CHART

SIGNAL GROUP	PHASE DURING WHICH GREEN IS DISPLAYED				TABLE	REMARKS
	A	B	C	D		
V1	X				1	
V2	X	X		X	3	
V3		X		X	39	Z- filter option Timed RA protection for P1 ped
V4			X		1	
V5			X		21	Timed RA protection for P1 ped
V6		X	C	X	14	Timed RA protection for P2 ped
P1	X				2	
P2			X		2	

POST CHART

POST	TYPE	LENGTH	OFFSET	REMARKS
1	2	3.2	1.0	EXISTING
2	2	4.1	1.0	EXISTING
3	2	4.1	1.0	EXISTING
4	2	4.1	1.0	EXISTING (ON TYPE 6 BASE)
5	6	-	1.0	EXISTING
6	9	-	1.0	EXISTING (7m OUTREACH)

NOTES

1. THIS SITE IS SCATS LINKED.
2. SPECIAL STOP SIGN (R1-4) PLACED ON POST 2.
3. AUDIO TACTILE PUSH BUTTON PROVIDED ON POST 1, 2, 3 AND 4.
4. KERB RAMPS ARE PROVIDED AT ALL PEDESTRIAN CROSSINGS IN ACCORDANCE WITH RMS STANDARD (ROAD) DRAWING R0300-11.
5. CCTV CAMERA MOUNTED ON POST 6.
7. PROVISION MADE IN CABLE & DUCTING FOR FUTURE PEDESTRIAN CROSSING ACROSS CARRINGTON ROAD SOUTHERN APPROACH.

A ORIGINAL ISSUE

B ISSUE WAE 28/03/2019
PQ 14/06/2019

C ISSUE OFFICE INSTRUCTION NSS
Westbound right turn lane changed to
shared lane.
Amended: pavement marking: Detector
Spec: movements.
PQ 14/06/2019

'D' ISSUE:- W.A.E
SITE IMPLEMENTED AS PER
ISSUE 'C': 16-03-2020
JJ MM

PUBLIC UTILITY LEGEND		REFERENCE PLANS	
HYDRANT	□	SYMBOLS/ABRVS	VD003-6
STOP VALVE	▲	STD POSN CMPT	VD001-5
GAS VALVE	#	INSTL STOP DET	VC005-17
SEWER MANHOLE	⊛	VEH GROUP OP	TS-TN-019
COMMS PIT	◪	DET LOGIC OP	TS-TN-020
ELECT LIGHT POLE	○	PED MVT OP	TS-TN-021
POWER POLE	○		
STAY POLE	⊘		
TELEPHONE BOX	▯	SURVEYOR : NRT IJV	
COMMS PILLAR	◕	DATE : 08/09/2015	

U,B,D, Ref, MAP 150 L13
I.S.G CO-ORDS E: 298 660 N: 1 266 530

DESIGNED M.STEPHENS
CHECKED R.SRITHAR

SITE CHECKED

RECOMMENDED

DESIGN APPROVAL
APPROVED
N. CUMMINGS
POSITION DESIGN MANAGER
DATE 12/10/16

DESIGN PREPARED BY
northwest rapid transit

RMS ACCEPTANCE
RECOMMENDED
A. PAUL
POSITION NETWORK OPERATIONS TEAM LEADER
DATE 27/11/2017
ACCEPTED
P. CARRUTHERS
POSITION NETWORK AND SAFETY SERVICES MANAGER
DATE 29/11/2017

ROADS AND MARITIME SERVICES

THE HILLS COUNCIL AREA
TRAFFIC SIGNALS AT
CARRINGTON ROAD AND
DORAN DRIVE
CASTLE HILL

DESIGN LAYOUT

EXISTING ☒ PROPOSED ☐

CADD FILE: VV4699_1D_DES.dgn

SCALE 5 0 (1:200) 5 10

ISSUE D

FILE SF2015/123222

SUPERSEDES SHEET/ISSUE 1/C

REG No. DS2015/002607

TCS No. 4699

SHEET 1

Revision 3 - December 2015

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TCS 4700

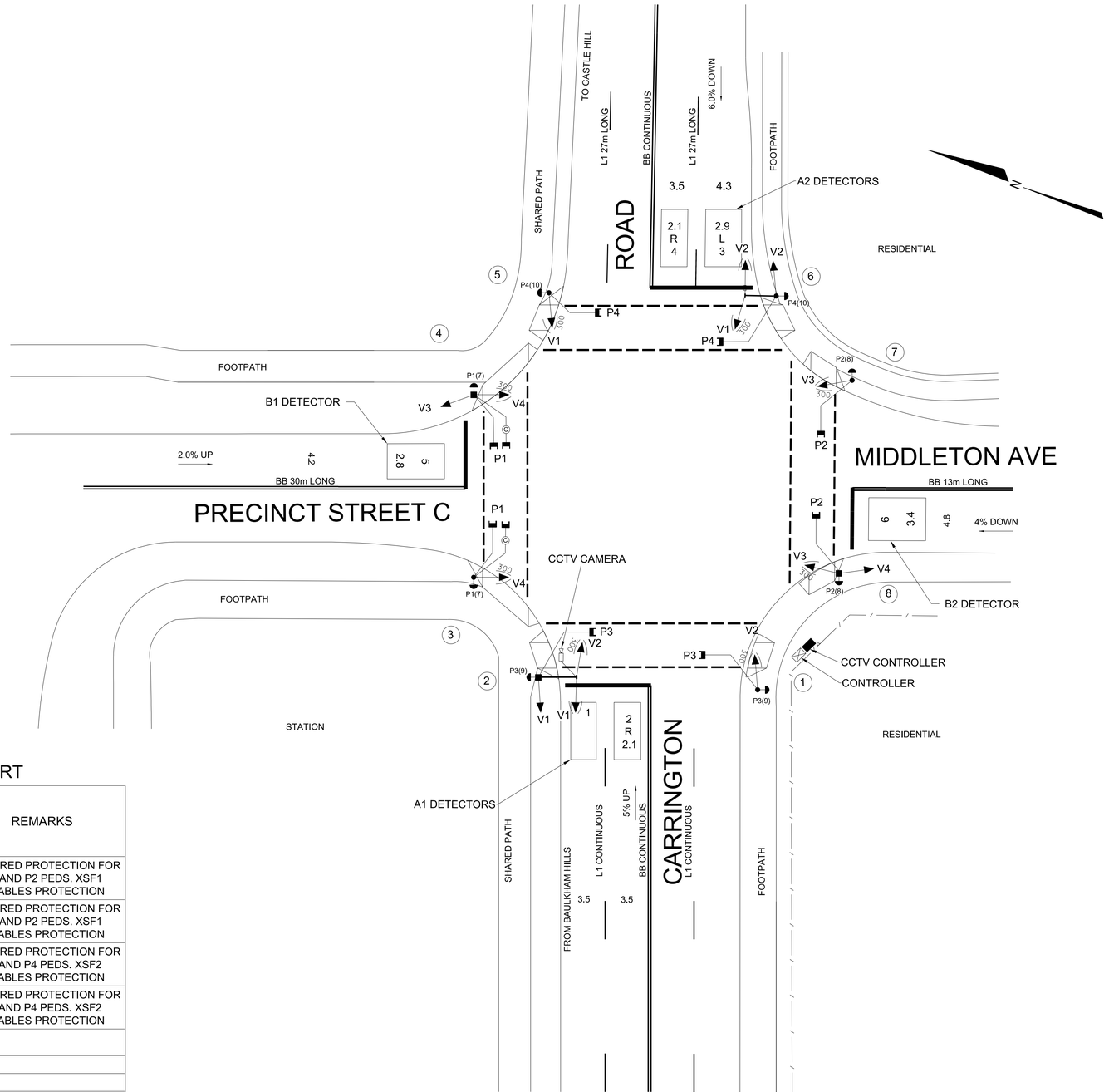
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DATE IN SERVICE : 27/03/2019

NSW GOVERNMENT | Transport Roads & Maritime Services



MOVEMENTS



POST CHART

POST	TYPE	LENGTH	OFFSET	REMARKS
1	2	4.1	1.0	EXISTING
2	9	-	1.6	EXISTING, 3m OUTREACH ON TYPE-10 BASE
3	2	4.1	1.0	EXISTING
4	6	-	1.0	EXISTING
5	2	4.1	1.2	EXISTING O/S BASE PLATE *
6	5S	-	1.5	EXISTING O/S BASE PLATE **
7	2	4.1	1.0	EXISTING
8	2	-	1.0	EXISTING

* 0.35m BASE PLATE
** 1.5m BASE PLATE

SIGNAL GROUP PHASE CHART

SIGNAL GROUP	PHASE DURING WHICH GREEN IS DISPLAYED		STANDARD TABLE	REMARKS
	A	B		
V1	C		94	TIMED RED PROTECTION FOR P1 AND P2 PEDS. XSF1 DISABLES PROTECTION
V2	C		94	TIMED RED PROTECTION FOR P1 AND P2 PEDS. XSF1 DISABLES PROTECTION
V3		C	94	TIMED RED PROTECTION FOR P3 AND P4 PEDS. XSF2 DISABLES PROTECTION
V4		C	94	TIMED RED PROTECTION FOR P3 AND P4 PEDS. XSF2 DISABLES PROTECTION
P1	X		1	
P2	X		1	
P3		X	1	
P3		X	1	

NOTES

1. THIS SITE IS SCATS LINKED.
2. SPECIAL STOP SIGN (R1-4) PLACED ON POSTS 4 AND 8.
3. ALL PUSH BUTTONS ARE AUDIO TACTILE.
4. CCTV CAMERA IS MOUNTED ON POST 2.

A ORIGINAL ISSUE
B ISSUE WAE
ADJUSTMENTS
MINOR POST RELOCATION
TL NSW 03/2019

PUBLIC UTILITY LEGEND		REFERENCE PLANS	
HYDRANT		SYMBOLS/ABRVS	VD003-6
STOP VALVE		STD POSN CMPT	VD001-5
GAS VALVE		INSTL STOP DET	VC005-17
SEWER MANHOLE		VEH GROUP OP	TS-TN-019
COMMS PIT		DET LOGIC OP	TS-TN-020
ELECT LIGHT POLE		PED MVT OP	TS-TN-021
POWER POLE		CABLE INSTALL	SHEET 2
STAY POLE		CABLE CHART	SHEET 3
TELEPHONE BOX		SURVEYOR : NRT IJV	
COMMS PILLAR		DATE : 08/09/2015	

U,B,D, Ref. Map 150 M12
I,S,G CO-ORDS E: 298790 N: 1 266 560

DESIGNED M.STEPHENS
CHECKED R.SRITHAR
SITE CHECKED
RECOMMENDED

DESIGN APPROVAL
APPROVED
N. CUMMINGS
POSITION DESIGN MANAGER
DATE 12/10/16
DESIGN PREPARED BY
northwest rapid transit caring for life's journeys

RMS ACCEPTANCE
RECOMMENDED
A. FAIR
POSITION NETWORK OPERATIONS TEAM LEADER
DATE 25/01/2018
ACCEPTED
D. CARRUTHERS
POSITION NETWORK AND SAFETY SERVICES MANAGER, NW/CANBERRA
DATE 30/01/2018

ROADS AND MARITIME SERVICES

THE HILLS SHIRE COUNCIL
TRAFFIC SIGNALS AT THE INTERSECTION OF CARRINGTON ROAD, MIDDLETON AVENUE AND PRECINCT STREET C
CASTLE HILL

DESIGN LAYOUT

EXISTING ☒ PROPOSED ☐
CADD FILE: VV4700_1B.dgn
SCALE 5 0 (1:200) 5 10
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