## TIME & PLACE

TRAFFIC REPORT FOR PLANNING PROPOSAL FOR PROPOSED MIXED USE DEVELOPMENT, RAMSGATE

OCTOBER 2021

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# Colston Budd Rogers & Kafes Pty Ltd

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#### I. INTRODUCTION

- 1.1 Colston Budd Rogers and Kafes Pty Ltd has been commissioned by Time & Place to prepare a traffic report for a planning proposal for a mixed use development (retail and residential) at 193-199 Rocky Point Road, 2-6 Targo Road and 66-68 Ramsgate Road, Ramsgate.
- 1.2 During preparation of the traffic report, consultation was undertaken with TfNSW regarding possible changes to the road network and possible access from Ramsgate Road. Matters raised by TfNSW with regards to a previous planning proposal for the site have been considered.
- 1.3 This report assesses the traffic and parking implications of the planning proposal through the following chapters:
  - □ Chapter 2 describing the existing conditions; and
  - Chapter 3 assessing the traffic and parking implications of the planning proposal.

#### EXISTING CONDITIONS

#### Site Location and Road Network

- 2.1 The site is located on the southwestern corner of the intersection of Rocky Point Road and Targo Road as shown in Figure 1. It also has frontage to Ramsgate Road. The site is currently occupied by ground floor retail with upper level commercial/residential along Rocky Point Road and detached residential dwellings along Targo Road/Ramsgate Road. Surrounding land use is residential to the north, south and west.
- 2.2 The road network in the vicinity of the site comprises Rocky Point Road, Ramsgate Road and Targo Road. Rocky Point Road is a classified road that runs in a north-south direction. In the vicinity of the site it provides a four lane undivided carriageway with two lanes in each direction. Weekday morning and afternoon clearway restrictions apply in the northbound and southbound directions respectively. Outside these times the kerbside lane is used for parking. A signalised pedestrian crossing is located on Rocky Point Road some 30 metres north of Targo Road.
- 2.3 Ramsgate Road is a classified road that runs in an east-west direction. In the vicinity of the site it provides a four lane undivided carriageway with a traffic and parking lane in each direction. The intersection of Rocky Point Road and Ramsgate Road is traffic signal controlled. Right turn movements on northern, eastern and southern approaches to the intersection are banned.

2.4 Targo Road is a local road that runs in an east-west direction. In the vicinity of the site it provides one traffic lane in each direction with kerbside parking. Targo Road connects to Rocky Point Road at a priority controlled T-intersection, with Rocky Point Road the major road. Targo Road connects Ramsgate Road at a priority controlled four way intersection (with The Promenade), with Ramsgate Road the major road. Turning movements to/from Targo Road at this intersection are limited to left in/left out. The right turn out of The Promenade is also banned.

#### **Traffic Flows**

- 2.5 Traffic counts at the following intersections were undertaken in the weekday afternoon (4.00pm to 6.00pm) and Saturday midday (11.00am to 1.00pm) peak periods for the traffic report for a previous planning proposal for the site (Ramsgate Proposed Mixed Use Development Planning Proposal, TTPP August 2019):
  - Rocky Point Road/Ramsgate Road;
  - Rocky Point Road/Targo Road; and
  - Ramsgate Road/Targo Road/The Promenade.
- 2.6 Traffic flows are shown in Figures 2 and 3, and summarised in Table 2.1.

Table 2.1: Existing Hourly	Two-Way Traffic Flows	
Location	Weekday Afternoon	Saturday Midday
Rocky Point Road		
- north of Targo Street	2,020	1,445
- north of Ramsgate Road	1,975	1,475
- south Ramsgate Road	2,615	2,000
Targo Road		
- west Rocky Point Road	45	60
- north of Ramsgate Road	65	90
Ramsgate Road		
- east of Rocky Point Road	890	1,135
- west of Rocky Point Road	1,485	1,635
- west of Targo Road	1,780	2,075
The Promenade		
- south of Ramsgate Road	355	590

#### 2.8. Examination of Table 2.1 reveals that:

- Rocky Point Road carried some 1,445 to 2,615 vehicles per hour (two way)
   during the weekday afternoon and Saturday midday. Traffic flows were
   highest south of Ramsgate Road;
- □ Targo Road carried some 45 to 90 vehicles per hour (two way) during the weekday afternoon and Saturday midday;
- Ramsgate Road carried some 890 to 2,075 vehicles per hour (two way) during the weekday afternoon and Saturday midday. Traffic flows were highest west of Targo Road; and
- □ The Promenade carried some 355 to 590 vehicles per hour (two way) during the weekday afternoon and Saturday midday.

### Intersection Operations

- 2.9 The capacity of the road network is largely determined by the capacity of its intersections to cater for peak period traffic flows. The intersections along Ramsgate Road and Rocky Point Road have been analysed using the SIDRA 9 Network Model with the traffic flows shown in Figures 2 and 3.
- 2.10 SIDRA simulates the operations of intersections to provide a number of performance measures. The most useful measure provided is average delay per vehicle expressed in seconds per vehicle. Based on average delay per vehicle, SIDRA estimates the following levels of service (LOS):
  - For traffic signals, the average delay per vehicle in seconds is calculated as delay/(all vehicles), for roundabouts the average delay per vehicle in seconds is selected for the movement with the highest average delay per vehicle, equivalent to the following LOS:

 For give way and stop signs, the average delay per vehicle in seconds is selected from the movement with the highest average delay per vehicle, equivalent to following LOS:

```
0 to 14
                   "A"
                         Good
15 to 28
                   "B"
                         Acceptable delays and spare capacity
29 to 42
                   "C"
                         Satisfactory but accident study required
43 to 56
                   "D"
                         Near capacity and accident study required
57 to 70
                   "E"
                         At capacity and requires other control mode
                   "F"
>70
                         Unsatisfactory and requires other control mode
```

2.11 It should be noted that for roundabouts, give way and stop signs, in some circumstances, simply examining the highest individual average delay can be misleading. The size of the movement with the highest average delay per vehicle should also be taken into account. Thus, for example, an intersection where all movements are operating at a level of service A, except one which is at level of service E, may not necessarily define the intersection level of service as E if that movement is very small. That is, longer delays to a small number of vehicles may not justify upgrading an intersection unless a safety issue was also involved.

#### 2.12 The SIDRA analysis found that:

- the traffic signal controlled intersection of Rocky Point Road and Ramsgate
  Road operates with average delays of less than 35 seconds per vehicle in the
  weekday afternoon peak period. This represents level of service C, a
  satisfactory level of intersection operation. In the Saturday midday peak
  period the intersection operates with average delays of less than 55 seconds
  per vehicle. This represents level of service D, near to capacity;
- the priority controlled intersection of Targo Road and Rocky Point Road operates with average delays (for the movement with the highest delay, right

turn out of Targo Road) of more than 70 seconds per vehicle in the peak periods, representing level of service F, unsatisfactory level operation. It is noted that the volume of traffic turning right from Targo Road is low (less than 10 vehicles per hour). Other movements operate with average delays per vehicle of less than 20 seconds per vehicle. This represents level of service B, satisfactory operation;

• the priority controlled intersection of Ramsgate Road with Targo Road and The Promenade operates with average delays (for the movement with the highest delay, right turn into The Promenade) of less than 15 seconds per vehicle in the peak periods. This represents level of service A/B, good level of operation.

# 2.13 Based on the above analysis:

- the intersection of Rocky Point Road and Ramsgate Road is operating at near
  to capacity in the Saturday midday peak period. This is due to parking on
  Rocky Point Road (between Ramsgate Road and the existing pedestrian
  signals) reducing capacity at the intersection; and
- the right out of Targo Road onto Rocky Point Road has limited capacity to accommodate increased traffic flows.
- 2.14 Measures to address these constraints are discussed in Chapter 3.
- 2.15 SIDRA movement summaries are provided in Attachment A.

# Public Transport

- 2.16 Sydney buses operate the 476 and 477 routes along Rocky Point Road past the site, with bus stops located either side of Ramsgate Road. These services connect the site, to the Kogarah, Sans Souci, Dolls Point, Rockdale and Miranda. In the weekday morning and afternoon peak periods, these services operate every 15 to 30 minutes. At other times services operate every 30 to 60 minutes. Pedestrian access to the bus stops is provided at the traffic signal controlled intersection with Ramsgate Road and at the pedestrian signals, north of Targo Road.
- 2.17 The site is therefore accessible by public transport.

#### 3. IMPLICATIONS OF PLANNING PROPOSAL

- 3.1 The planning proposal relates to a mixed use development comprising residential and retail uses. An indicative scale of development is set out below:
  - 185 units (50 x 1 bed, 96 x 2 bed and 39 x 3 bed);
  - 3,826m<sup>2</sup> GLA (4,192m<sup>2</sup> GFA) supermarket;
  - 1,413m<sup>2</sup> GLA (1,660m<sup>2</sup> GFA) Dan Murphy's; and
  - 2,405m<sup>2</sup> GLA (2,514m<sup>2</sup>) specialty retail.
- 3.2 Access is proposed from Targo Road (car park entry/exit and service vehicle exit) and Ramsgate Road (car park and service vehicle entry). Basement parking will be provided. These arrangements are a result of discussions with TfNSW.
- 3.3 This chapter assesses the implications of the proposed development through the following sections:
  - public transport;
  - parking provision;
  - access, servicing and internal layout;
  - □ traffic effects:
  - □ consultation with TfNSW; and
  - summary.

### **Public Transport**

- 3.4 As noted in Chapter 2, the site is accessible by buses operating along Rocky Point Road. Pedestrian access is provided by footpaths along Rocky Point Road, Ramsgate Road and Targo Road and across Rocky Point Road via traffic signals.
- 3.5 The proposed development will provide increased residential, retail and employment uses adjacent to public transport services, which will strengthen the demand for these services.
- 3.6 The proposed development is therefore consistent with government objectives and planning principles of:
  - (a) improving accessibility to employment and services by walking, cycling, and public transport;
  - (b) improving the choice of transport and reducing dependence solely on cars for travel purposes;
  - (c) moderating growth in the demand for travel and the distances travelled, especially by car; and
  - (d) supporting the efficient and viable operation of public transport services.

# Parking Provision

3.7 Section 3.13 of George River Council DCP 2021 sets out the following car parking rates for residential and retail development:

- residential units:
  - I space per one or two bed unit;
  - o 2 spaces per 3 bed unit; and
  - I visitor space per 5 units.
- retail premises (> 800 metres from a railway station) I space per 40m<sup>2</sup>
   GFA; and
- supermarkets I space per 20m² GLA.
- 3.8 Applying these rates the proposed development would require 556 spaces (261 residential spaces (including 37 visitor spaces), 104 retail spaces and 191 supermarket spaces). A minimum of 556 spaces will be provided. Section 3.17 of DCP 2020 suggests that 1-2% of commercial parking spaces commercial should be accessible spaces (2 to 4 spaces) with one accessible space per adaptable residential unit.
- 3.9 DCP 2021 sets out the following rates for bicycle parking:
  - retail premises I space per 5 car spaces; and
  - residential I space per 3 dwellings plus I space per 10 dwellings (visitor).
- 3.10 Applying these rates the proposed development would require 111 bicycle spaces (73 residential bicycle spaces (including 17 visitor spaces) and 38 retail bicycle spaces). A minimum of 111 bicycle spaces will be provided. Appropriate end of trip and storage facilities will be provided as set out in DCP 2020.

#### Access, Servicing and Internal Layout

- 3.11 Access is proposed from Targo Road (car park entry/exit and service vehicle exit) and Ramsgate Road (car park and service vehicle entry). Parking will be in provided a multi-level basement.
- 3.12 Access driveways and car parking areas will be designed to comply with AS2890.1-2004 and AS2890.6-2009 with respect to parking bay dimensions, aisle widths, ramp grades and height clearances.
- 3.13 Service areas will be designed to comply with AS2890.2-2018. Service vehicles will be limited to 12.5 metre long rigid trucks. The service areas will be designed such that all manoeuvring occurs on site, with trucks entering and departing the site in forward direction. On exiting the site, trucks would be directed to turn right onto Targo Road.
- 3.14 Detailed design of the access driveways, car park and service areas will be provided at DA stage.

#### Traffic Effects

- 3.15 Traffic generated by the proposed development will have its greatest effects during the weekday afternoon and Saturday peak periods.
- 3.16 For the residential component a generation rate of 0.29 vehicles per unit (two way) has been used, based on TfNSW Guidelines. Applying this rate the 185 residential units would generate some 55 vehicles per hour (two way) in the weekday afternoon and Saturday midday peak hours.

3.17 Estimates of traffic generated by the retail have been based on the supermarket/specialty retail rates used for the similar South Village mixed residential site at Kirrawee and surveys of a Dan Murphy's store. For supermarkets/specialty retail, the South Village site used the following rates:

#### Weekday Afternoon

- o supermarket 14.0 vehicles per hour per 100m<sup>2</sup>;
- specialty retail 4.1 vehicles per hour per 100m<sup>2</sup>;

### Saturday Midday

- supermarket 13.2 vehicles per hour per 100m²;
- o specialty retail 9.6 vehicles per hour per 100m<sup>2</sup>.
- 3.18 Using these rates the proposed supermarket/specialty shops would generate some 635 and 735 vehicles per hour (two-way) in the weekday afternoon and Saturday midday peak hours.
- 3.19 For Dan Murphy's, estimates of traffic generation are based on surveys of a free standing Dan Murphy's store at Wentworthville. These surveys found a generation rate of 10.8 vehicles per 100m² in the weekday afternoon peak hour and 12.2 vehicles per 100m² in the Saturday midday peak hour. Using these rates the proposed Dan Murphy's (some 1,413m²) would generate some 155 and 170 vehicles per hour (two-way) in the weekday afternoon and Saturday midday peak hours. A proportion of Dan Murphy's customers would also shop at the supermarket. Some 25% of Dan Murphy's customers would typically also shop at the supermarket. Thus, the additional traffic generated by Dan Murphy's would

be some 115 and 130 vehicles per hour (two way) in the weekday afternoon and Saturday midday peak hours.

- 3.20 Based on the above, the proposed development would generate some 805 and 920 vehicles per hour (two-way) in the weekday afternoon and Saturday midday peak hours respectively hour. TfNSW Guidelines suggests that some 25 per cent of retail trips are likely to be passing trade, i.e. customers who would have driven past the development regardless of their visit to the development.
- 3.21 The existing road network has a number of constraints for traffic departing the site to travel west along Ramsgate Road (no right turn permitted from Targo Road or Rocky Point Road) or to travel south along Rocky Point Road (the existing right turn out of Targo Road currently operates at capacity). To address these constraints the following works are proposed to cater for development traffic and improve access to/from the subject site:
  - install traffic signals at the intersection of Ramsgate Road/Targo Road/The Promenade. This would allow for all movements out of Targo Road and The Promenade, retain the existing right turn into The Promenade and retain banning the right turn into Targo Road;
  - install traffic signals at the intersection of Rocky Point Road/Targo Road. All
    movements would be retained at this intersection. The provision of traffic
    signals would provide capacity for right turns out of Targo Road;
  - remove the existing pedestrian signals on Rocky Point Road (located some 30 metres north of Targo Road). Pedestrian access across Rocky Point Road would be provided at the new signals at Targo Road; and
  - removal of parking (total some 14 spaces) on Rocky Point Road (between Ramsgate Road and Targo Road) and on Targo Road (immediately west of

Rocky Point Road to accommodate the new traffic signals at Targo Road (see Figure 4).

3.22 The TfNSW traffic demand warrant for the installation of traffic signals (as set out in Traffic Signal Design – Section 2 Warrants) is as follows:

For each of four one hour periods of an average day:

- the major road flow exceeds 600 vehicles/hour in each direction; and
- the minor road flow exceeds 200 vehicles/hour in one direction.
- 3.23 As noted in following Chapter 2, existing traffic flows along Ramsgate Road and Rocky Point Road (the major roads) exceed 600 vehicles per hour in each direction in the weekday afternoon and Saturday peak periods. Existing traffic flows on The Promenade exceed 200 vehicles per hour in one direction in the weekday afternoon and Saturday peak periods. Future traffic flows along Targo Road will exceed 200 vehicles per hour in one direction in the weekday afternoon and Saturday peak periods. Thus the TfNSW warrant for the two proposed traffic signals is satisfied.
- The additional development traffic has been assigned to the road network taking into account passing trade and the above changes to the road network. Existing peak hour flows plus additional development traffic are shown in Figures 2 and 3, and summarised in Table 3.1.

Table 3.1: Existing + Dev	elopment Ho	urly Two Wa	y Traffic Flo	ws
Location	Weekday	Afternoon	Saturda	y Midday
	Existing	+ Dev	Existing	+ Dev
Rocky Point Road				
- north of Targo Street	2,020	+150	1,445	+190
- north of Ramsgate Road	1,975	+190	1,475	+265
- south Ramsgate Road	2,615	+170	2,000	+230
Targo Road				
- west Rocky Point Road	45	+480	60	+560
- north of Ramsgate Road	65	+160	90	+170
Ramsgate Road				
- east of Rocky Point Road	890	-20	1,135	-25
- west of Rocky Point Road	1,485	-30	1,635	-35
- west of Targo Road	1,780	+130	2,075	+135
The Promenade				
- south of Ramsgate Road	355	+80	590	+90

#### 3.25 Examination of Table 3.1 shows that:

- traffic flows on the Rocky Point Road would increase by some 150 to 265 vehicles per hour (two way) during peak periods;
- traffic flows on the Ramsgate Road (east of site access) would decrease by some 20 to 35 vehicles per hour (two way) during peak periods (as a result of passing trade that diverts to the proposed shopping centre). West of Targo Road, traffic flows would increase by some 130 vehicles per hour (two way) during the peak periods; and
- traffic flows in the short section of Targo Road (between the site access and Rocky Point Road) would increase by 480 and 560 vehicles per hour (two way) during peak periods. North of Ramsgate Road, the increase in traffic is lower at some 160 vehicles per hour (two way).

- 3.26 The intersections previously analysed in Chapter 2 have been reanalysed with SIDRA with the additional development traffic flows shown in Figures 2 and 3 and the proposed modifications to the road network set out in Section 3.21. The analysis found that:
  - the traffic signal controlled intersection of Rocky Point Road and Ramsgate Road would operate with average delays of less than 35 seconds per vehicle in both the weekday afternoon and Saturday midday peak periods. This represents level of service C, a satisfactory level of intersection operation;
  - the traffic signal controlled intersection of Targo Road and Rocky Point Road would operate with with average delays of less than 20 seconds per vehicle in both the weekday afternoon and Saturday midday peak periods. This represents level of service B, a good level of intersection operation; and
  - the traffic signal controlled intersection of Targo Road, Ramsgate Road and The Promenade would operate with with average delays of less than 25 seconds per vehicle in the weekday afternoon and Saturday midday peak periods. This represents level of service B, a good level of intersection operation
- 3.27 Therefore with the proposed modifications, the road network can cater for traffic generated by the proposed development.
- 3.28 An assessment of 2031 traffic conditions has also been undertaken. To account for background growth, traffic flows along Ramsgate Road and Rocky Point Road have

been increased by 1% per year. This growth rate is based on traffic growth projections from the Sydney Strategic Travel Model (STM).

3.29 The intersections have been reanalyzed for 2031 traffic conditions with and without development traffic. Results of the SIDRA analysis are set out below:

203 I No Development (existing road network)

- the traffic signal controlled intersection of Rocky Point Road and Ramsgate Road would operate with average delays of less than 50 seconds per vehicle in the weekday afternoon peak period. This represents level of service D, a satisfactory level of intersection operation. In the Saturday midday peak period the intersection would operate with average delays of more than 70 seconds per vehicle. This represents level of service F, unsatisfactory;
- the priority controlled intersection of Targo Road and Rocky Point Road would operate with average delays (for the movement with the highest delay, right turn out of Targo Road) of more than 70 seconds per vehicle in the peak periods. This represents level of service F, an unsatisfactory level of intersection operation; and
- the priority controlled intersection of Ramsgate Road with Targo Road and The Promenade would operate with average delays (for the movement with the highest delay, right turn into The Promenade) of less than 15 seconds per vehicle in the peak periods. This represents level of service A/B, a good level of intersection operation.

2031 Plus Development (with proposed road network modifications set out in paragraph 3.21)

- the traffic signal controlled intersection of Rocky Point Road and Ramsgate Road would operate with average delays of less than 50 seconds per vehicle in the weekday afternoon peak period. This represents level of service D, a satisfactory level of intersection operation. In the Saturday midday peak period the intersection would operate with average delays of less than 35 seconds per vehicle. This represents level of service C, a satisfactory level of intersection operation;
- the traffic signal controlled intersection of Targo Road and Rocky Point Road would operate with with average delays of less than 20 seconds per vehicle in both the weekday afternoon and Saturday peak periods. This represents level of service B, an good level of intersection operation; and
- the traffic signal controlled intersection of Targo Road, Ramsgate Road and The Promenade would operate with with average delays of less than 30 seconds per vehicle in both the weekday afternoon and Saturday peak periods. This represents level of service B/C, a satisfactory level of intersection operation.
- 3.30 The above analysis shows that with the proposed modifications, in 2031, the road network can cater for traffic generated by the proposed development.

#### Consultation with TfNSW

- 3.31 TfNSW provided comments on the previous proposal as set out in a letter dated 2 October 2020. A copy of the TfNSW letter is provided in Attachment B. The matters raised by TfNSW are summarised below:
  - the traffic assessment should compare existing and existing with development (as well as future base with and without development);
  - assess the impact of development traffic without the proposed traffic signals (to determine whether traffic signals are required in addition to consideration of traffic signal warrants);
  - car parking provision to consider requirements under Kogarah DCP 2013; and
  - SIDRA modelling to be updated to take into account the matters raised by TfNSW.
- 3.32 A meeting with TfNSW was held on 9 July 2021 to discuss the current planning proposal and the matters raised by TfNSW on the previous proposal. A summary of the meeting is provided in Attachment C. The key outcomes of the meeting are set out below:
  - TfNSW does not object to the left in from Ramsgate Road to the subject site.
     However, left out to Ramsgate Road is not supported due to the proximity of the access to the intersection with Rocky Point Road;
  - TfNSW advised that satisfying warrants does not guarantee traffic signals.
     Need to demonstrate that any new signals do not have a major impact on the operation of the road network; and

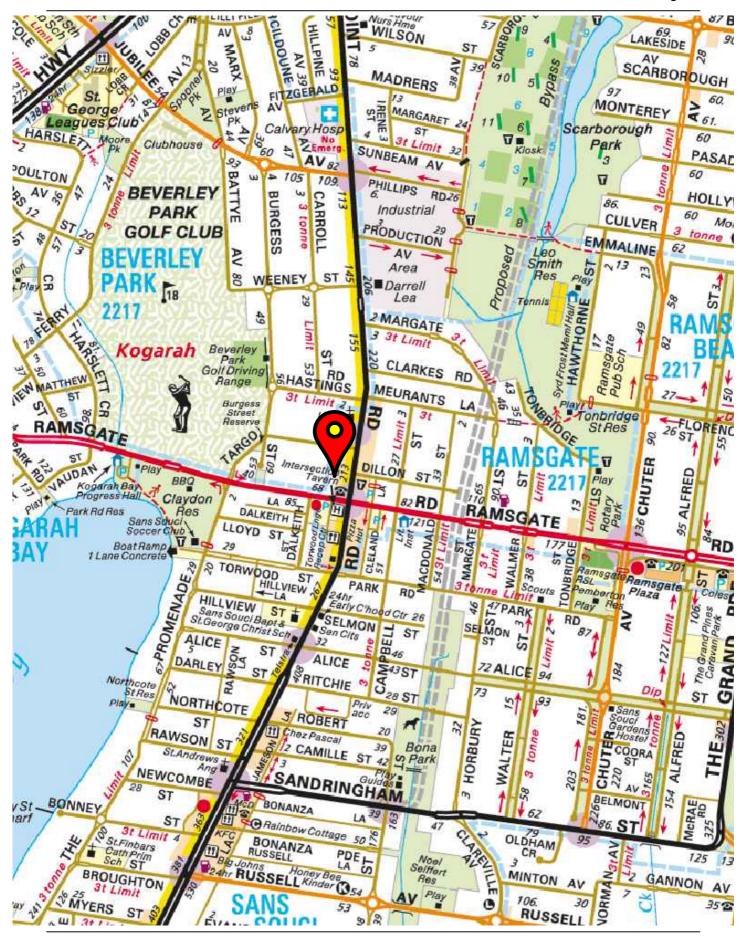
- as traffic counts are at least two years old, updated traffic counts should be undertaken. This could be undertaken as part of an updated traffic report with the DA; and
- the issues identified in the previous SIDRA modelling should be addressed in updated modelling.
- Responses to the matters raised by TfNSW for the previous planning proposal, and discussed at the meeting on 9 July 2021, are set out below:
  - the traffic assessment in this report compares existing and existing plus development traffic conditions;
  - an assessment of existing plus development traffic conditions, without proposed changes to the road network, has been undertaken. The assessment found that without these changes, traffic was unable to turn right out of Targo Road (with long delays and queues) and some 200 vehicles per hour (in both weekday afternoon and Saturday peak periods) were unable to travel through the network;
  - car parking will provided that satisfies the requirements of Georges River
     Council DCP 2020 (this replaces Kogarah DCP 2013);
  - SIDRA modelling includes the changes recommended by TfNSW;
  - with the proposed modifications to the road network set down in paragraph
     3.21, the road network can cater for development traffic now and in the future;
  - with the new traffic signals at the intersection of Targo Road/Rocky Point Road, vehicles are able to turn right out of Targo Road;
  - TfNSW warrants for traffic signals are satisfied;

- removal of parking along Rocky Point Road to improve the operation of the Ramsgate Road/Rocky Point Road intersection is required now and in the future, regardless of whether the proposed development proceeds; and
- updated traffic counts and assessment would be undertaken as part of the DA submission.

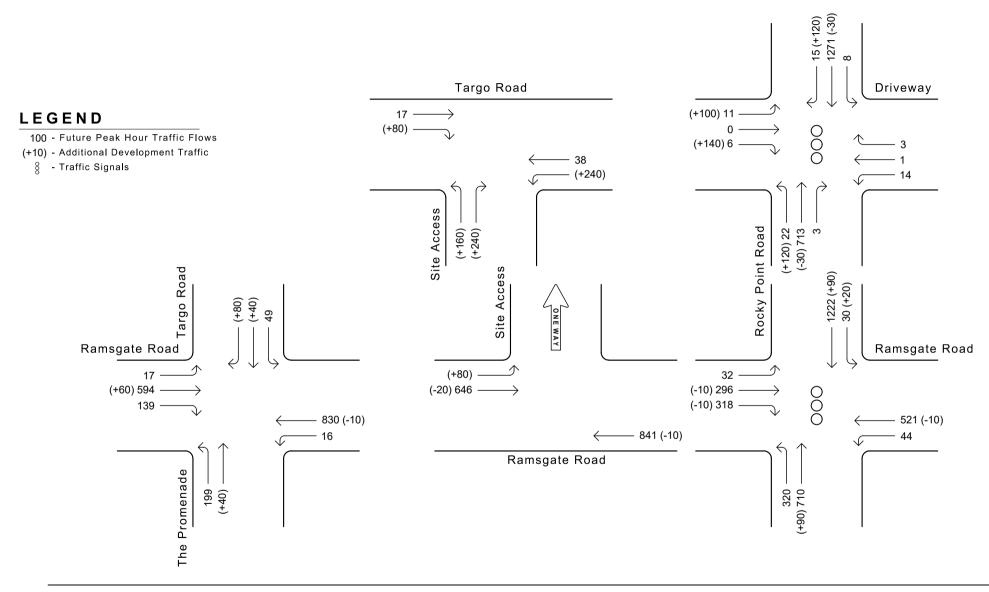
### **Summary**

- In summary, the main points relating to the traffic implications of the planning proposal are as follows:
  - i) the proposed development will be accessible by public transport;
  - ii) parking provision will be provided that satisfies the requirements of Georges River Council DCP 2020;
  - iii) vehicular access, internal circulation and servicing arrangements will be provided in accordance with AS 2890.1-2004, AS2890.6-2009 and AS 2890.2-2018;
  - iv) removal of parking along Rocky Point Road to improve the operation of the Ramsgate Road/Rocky Point Road intersection is required now and in the future, regardless of whether the proposed development proceeds;
  - v) traffic signals at the intersections of Targo Road/Rocky Point Road and Ramsgate Road are proposed to cater for traffic generated by the proposed development;

- vi) existing pedestrian signals on Rocky Point Road (north of Targo Road) are proposed to be removed, with pedestrian facilities provided at the new traffic signals at the intersection with Targo Road;
- vii) TfNSW warrants for traffic signals are satisfied;
- viii) with the proposed modifications, the road network will be able to cater for the traffic generated of the proposed development; and
  - ix) matters raised by TfNSW have been addressed.

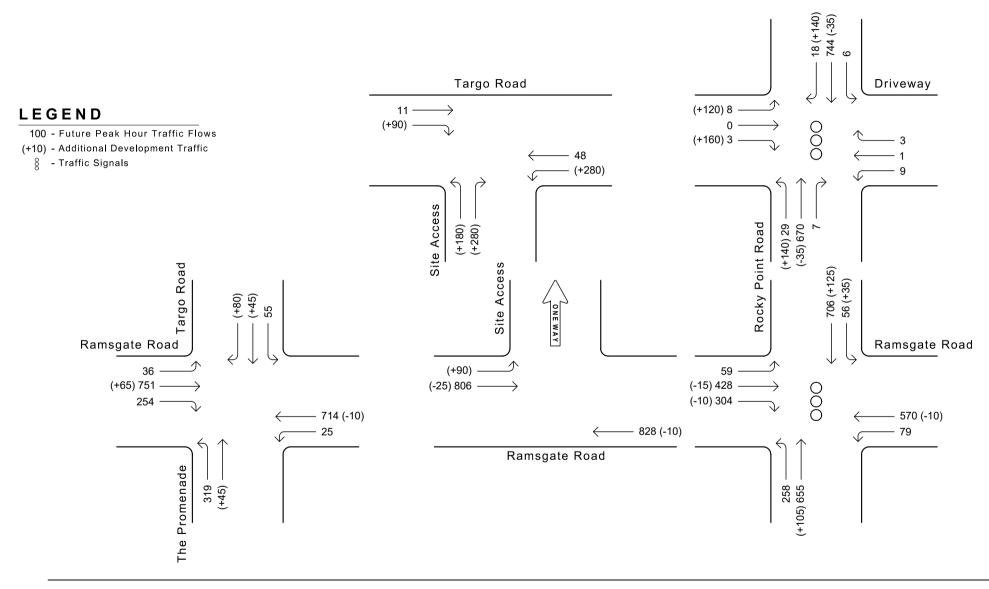


**Location Plan** 



Weekday afternoon peak hour traffic flows plus development Figure 2

7.09.2021



Saturday midday peak hour traffic flows plus development Figure 3

7.09.2021

11771 - Ramsgate Colston Budd Rogers & Kafes Pty Ltd



SKETCH PLAN ONLY. PROPERTY BOUNDARIES, UTILITIES, KERBLINES & DIMENSIONS ARE SUBJECT TO SURVEY AND FINAL DESIGN. TRAFFIC MEASURES PROPOSED IN THIS PLAN ARE CONCEPT ONLY AND ARE SUBJECT TO FINAL DESIGN BY CIVIL ENGINEERS. THIS PLAN SHOULD NOT BE USED FOR COMPLIANCE CERTIFICATION OR FOR CONSTRUCTION.

Lost Parking Space

LOSS OF PARKING FROM PROPOSED SIGNALS

# ATTACHMENT A

SIDRA MOVEMENT SUMMARIES

### **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks

**Template: Movement** 

**Summaries** 

V Site: 101 [Thu PM EX - Ramsgate Road -Targo Road - The Promenade (Site Folder:

■■ Network: 1 [Weekday Afternoon Existing (Network Folder: Existing)]

Weekday Afternoon Existing)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	ce									
Mov ID	Turn	DEM/ FLO\ [ Total veh/h		ARRI FLO [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	h: The F	Promena	de											
1	L2	209	2.0	209	2.0	0.185	7.8	LOS A	0.8	6.0	0.30	0.54	0.30	48.9
Appr	oach	209	2.0	209	2.0	0.185	7.8	LOS A	0.8	6.0	0.30	0.54	0.30	48.9
East:	Ramsg	jate Road	b											
4	L2	19	2.0	19	2.0	0.105	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	57.2
5	T1	874	2.0	874	2.0	0.374	0.6	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Appr	oach	893	2.0	893	2.0	0.374	0.7	NA	0.0	0.0	0.00	0.01	0.00	59.6
North	n: Targo	Road												
7	L2	52	2.0	52	2.0	0.082	8.5	LOS A	0.3	2.0	0.55	0.77	0.55	40.7
Appr	oach	52	2.0	52	2.0	0.082	8.5	LOS A	0.3	2.0	0.55	0.77	0.55	40.7
West	: Rams	gate Roa	ıd											
10	L2	18	2.0	18	2.0	0.348	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	57.9
11	T1	625	2.0	625	2.0	0.348	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.5
12	R2	146	2.0	146	2.0	0.267	12.1	LOS A	1.2	8.3	0.69	0.90	0.77	45.4
Appr	oach	789	2.0	789	2.0	0.348	2.5	NA	1.2	8.3	0.13	0.18	0.14	54.3
All Ve	ehicles	1943	2.0	1943	2.0	0.374	2.4	NA	1.2	8.3	0.10	0.16	0.10	55.5

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.

Site: 101 [Thu PM EX - Rocky Point Road - Ramsgate Road (Site Folder: Weekday

Afternoon Existing)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

■■ Network: 1 [Weekday Afternoon Existing

(Network Folder: Existing)]

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Veh	icle Mo	vement	Perfo	rmano	e									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sou	th: Rock	y Point R	load											
1 2	L2 T1	337 747	2.0 2.0	337 747	2.0	0.298 * 0.846	12.6 35.2	LOS A LOS C	7.1 33.7	50.9 239.6	0.40 0.88	0.69 0.83	0.40 0.95	42.7 28.2
_	roach	1084	2.0	1084		0.846	28.1	LOS B	33.7	239.6	0.00	0.83	0.95	31.5
East	t: Ramsg	ate Road	d											
4	L2	46	2.0	46	2.0	* 0.823	61.8	LOS E	17.7	125.8	1.00	0.95	1.16	30.5
5	T1	548	2.0	548	2.0	0.823	55.8	LOS D	18.7	133.4	1.00	0.95	1.16	21.3
App	roach	595	2.0	595	2.0	0.823	56.2	LOS D	18.7	133.4	1.00	0.95	1.16	22.3
Nort	h: Rocky	Point R	oad											
7	L2	32	2.0	32	2.0	0.836	24.6	LOS B	24.1	171.4	0.77	0.73	0.80	38.3
8	T1	1286	2.0	1286	2.0	0.836	18.8	LOS B	24.1	171.4	0.77	0.72	0.80	39.7
App	roach	1318	2.0	1318	2.0	0.836	19.0	LOS B	24.1	171.4	0.77	0.73	0.80	39.7
Wes	t: Rams	gate Roa	ıd											
10	L2	34	2.0	34	2.0	0.300	28.1	LOS B	9.3	66.0	0.66	0.59	0.66	28.0
11	T1	312	2.0	312	2.0	0.860	30.9	LOS C	23.0	163.9	0.75	0.74	0.80	36.0
12	R2	335	2.0	335	2.0	* 0.860	61.9	LOS E	23.0	163.9	1.00	1.13	1.17	26.3
App	roach	680	2.0	680	2.0	0.860	46.0	LOS D	23.0	163.9	0.87	0.93	0.98	30.2
All V	/ehicles	3677	2.0	3677	2.0	0.860	32.7	LOSC	33.7	239.6	0.81	0.82	0.89	31.6

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)

V Site: 101 [Thu PM EX - Rocky Point Road - Targo Road (Site Folder: Weekday Afternoon Existing)]

■■ Network: 1 [Weekday Afternoon Existing (Network Folder: Existing)]

Site Category: (None) Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEM/ FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		BACK OF UEUE Dist] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R	oad											
1	L2	23	2.0	23	2.0	0.208	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
2	T1	751	2.0	751	2.0	0.208	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	58.5
Appro	oach	774	2.0	774	2.0	0.208	0.2	NA	0.0	0.0	0.00	0.02	0.00	58.3
North	: Rocky	/ Point R	oad											
8	T1	1338	2.0	1338	2.0	0.370	0.2	LOS A	4.6	33.0	0.03	0.01	0.04	54.6
9	R2	16	2.0	16	2.0	0.370	8.9	LOS A	4.6	33.0	0.06	0.01	0.07	48.2
Appro	oach	1354	2.0	1354	2.0	0.370	0.3	NA	4.6	33.0	0.03	0.01	0.04	53.7
West	: Targo	Road												
10	L2	12	2.0	12	2.0	0.282	15.0	LOS B	0.6	4.4	0.81	0.82	0.89	20.6
12	R2	6	2.0	6	2.0	0.282	122.5	LOS F	0.6	4.4	0.81	0.82	0.89	20.6
Appro	oach	18	2.0	18	2.0	0.282	52.9	LOS D	0.6	4.4	0.81	0.82	0.89	20.6
All Ve	hicles	2145	2.0	2145	2.0	0.370	0.7	NA	4.6	33.0	0.02	0.02	0.03	51.7

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).

 $\label{eq:holes} \mbox{HV (\%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.}$ 

Site: 1 [Thu PM EX - Rocky Point Road (Site Network: 1 [Weekday Afternoon Existing (Network Folder: Existing)]

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network

User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Two-Phase Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

Vehi	Vehicle Movement Performance													
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R	oad											
2	T1	765	2.0	765	2.0	0.423	0.6	LOS A	1.2	8.9	0.03	0.03	0.03	59.4
Appro	oach	765	2.0	765	2.0	0.423	0.6	LOS A	1.2	8.9	0.03	0.03	0.03	59.4
North	: Rocky	Point R	oad											
8	T1	1362	2.0	1362	2.0	<b>*</b> 0.589	0.5	LOS A	1.9	13.2	0.05	0.05	0.05	59.0
Appro	oach	1362	2.0	1362	2.0	0.589	0.5	LOS A	1.9	13.2	0.05	0.05	0.05	59.0
All Ve	hicles	2127	2.0	2127	2.0	0.589	0.6	LOSA	1.9	13.2	0.05	0.04	0.05	59.1

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)

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Project: G:\Traffic\SIDRA 9.0\11771 Ramsgate\11771 Ramsgate Networks.sip9

#### **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks

Template: Movement Summaries

V Site: 101 [Sat MD EX - Ramsgate Road - Targo Road - The Promenade (Site Folder:

■■ Network: 2 [Saturday Midday Existing (Network Folder: Existing)]

Saturday Midday Existing)]

Site Category: (None) Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEM/ FLO\ [ Total veh/h	AND	ARRI FLO\ [ Total veh/h	VAL WS HV]	Deg. Satn v/c		Level of Service		BACK OF UEUE Dist ] m	Prop. Que	Effective A Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: The F	Promena	de											
1	L2	336	2.0	336	2.0	0.287	7.6	LOS A	1.5	10.5	0.29	0.53	0.29	48.9
Appro	oach	336	2.0	336	2.0	0.287	7.6	LOS A	1.5	10.5	0.29	0.53	0.29	48.9
East:	Ramsg	ate Road	b											
4	L2	26	2.0	26	2.0	0.091	5.6	LOS A	0.0	0.0	0.00	0.09	0.00	56.8
5	T1	752	2.0	752	2.0	0.326	0.5	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Appro	oach	778	2.0	778	2.0	0.326	0.6	NA	0.0	0.0	0.00	0.02	0.00	59.5
North	: Targo	Road												
7	L2	58	2.0	58	2.0	0.124	10.8	LOS A	0.4	2.9	0.67	0.85	0.67	38.8
Appro	oach	58	2.0	58	2.0	0.124	10.8	LOS A	0.4	2.9	0.67	0.85	0.67	38.8
West	: Rams	gate Roa	ıd											
10	L2	38	2.0	38	2.0	0.449	5.7	LOS A	0.0	0.0	0.00	0.03	0.00	57.7
11	T1	791	2.0	791	2.0	0.449	0.2	LOS A	0.0	0.0	0.00	0.03	0.00	59.2
12	R2	267	2.0	267	2.0	0.414	12.1	LOS A	2.4	17.0	0.69	0.96	0.94	45.4
Appro	oach	1096	2.0	1096	2.0	0.449	3.3	NA	2.4	17.0	0.17	0.25	0.23	53.0
All Ve	hicles	2267	2.0	2267		0.449	3.2	NA	2.4	17.0	0.14	0.23	0.17	53.9

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.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 101 [Sat MD EX - Rocky Point Road - Ramsgate Road (Site Folder: Saturday Midday Existing)]

ate Road (Site Folder: Saturday Midday (Network Folder: Existing)]

■■ Network: 2 [Saturday Midday Existing

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Veh	icle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLOV [ Total		ARRI FLO' [ Total	WS	Deg. Satn		Level of Service	95% B <i>A</i> QUE [ Veh.		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
Sout	h: Rock	y Point R	oad											
1	L2	272	2.0	272	2.0	0.219	12.3	LOS A	5.5	39.2	0.38	0.69	0.38	43.0
2	T1	689	2.0	689	2.0	0.822	35.2	LOS C	30.4	216.6	0.88	0.82	0.94	28.1
Appr	oach	961	2.0	961	2.0	0.822	28.7	LOSC	30.4	216.6	0.74	0.78	0.78	31.2
East	: Ramsg	gate Road	l											
4	L2	83	2.0	83	2.0	0.961	90.9	LOS F	24.9	177.5	1.00	1.18	1.51	25.1
5	T1	600	2.0	600	2.0	<b>*</b> 0.961	81.1	LOS F	27.4	194.9	1.00	1.18	1.49	16.5
Appr	oach	683	2.0	683	2.0	0.961	82.3	LOS F	27.4	194.9	1.00	1.18	1.49	17.8
Nortl	h: Rocky	Point Ro	oad											
7	L2	59	2.0	59	2.0	0.204	22.2	LOS B	3.5	25.1	0.46	0.53	0.46	37.2
8	T1	743	2.0	743	2.0	* 0.976	42.8	LOS D	24.1	171.4	0.83	0.96	1.08	27.8
Appr	oach	802	2.0	802	2.0	0.976	41.3	LOS C	24.1	171.4	0.81	0.93	1.04	28.4
Wes	t: Rams	gate Roa	d											
10	L2	62	2.0	62	2.0	0.346	26.7	LOS B	11.0	78.4	0.65	0.61	0.65	28.5
11	T1	451	2.0	451	2.0	0.993	54.5	LOS D	41.4	295.1	0.81	0.94	1.05	27.9
12	R2	320	2.0	320	2.0	* 0.993	102.5	LOS F	41.4	295.1	1.00	1.35	1.54	19.4
Appr	oach	833	2.0	833	2.0	0.993	70.9	LOS F	41.4	295.1	0.87	1.07	1.21	23.7
All V	ehicles	3279	2.0	3279	2.0	0.993	53.7	LOS D	41.4	295.1	0.84	0.97	1.10	24.6

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)

V Site: 101 [Sat MD EX - Rocky Point Road - Targo Road (Site Folder: Saturday Midday

Existing)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	е									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		BACK OF JEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	ı: Rock	y Point R	oad											
1	L2	31	2.0	31	2.0	0.198	5.6	LOS A	0.0	0.0	0.00	0.05	0.00	56.4
2	T1	705	2.0	705	2.0	0.198	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	58.1
Appro	oach	736	2.0	736	2.0	0.198	0.2	NA	0.0	0.0	0.00	0.02	0.00	57.7
North	: Rocky	/ Point Re	oad											
8	T1	783	2.0	783	2.0	0.446	0.4	LOS A	8.0	57.1	0.06	0.01	0.08	49.4
9	R2	19	2.0	19	2.0	0.446	9.3	LOS A	8.0	57.1	0.06	0.01	0.08	48.2
Appro	oach	802	2.0	802	2.0	0.446	0.6	NA	8.0	57.1	0.06	0.01	0.08	49.1
West	Targo	Road												
10	L2	8	2.0	8	2.0	0.035	5.7	LOS A	0.1	0.5	0.54	0.61	0.54	38.0
12	R2	3	2.0	3	2.0	0.035	27.7	LOS B	0.1	0.5	0.54	0.61	0.54	38.0
Appro	oach	12	2.0	12	2.0	0.035	11.7	LOS A	0.1	0.5	0.54	0.61	0.54	38.0
All Ve	hicles	1549	2.0	1549	2.0	0.446	0.5	NA	8.0	57.1	0.04	0.02	0.05	53.8

■■ Network: 2 [Saturday Midday Existing

(Network Folder: Existing)]

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).

Site: 1 [Sat MD EX - Rocky Point Road (Site Network: 2 [Saturday Midday Existing (Network Folder: Existing)]

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network

User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Two-Phase Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

Vehic	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLOV [Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R		V 011//11		1,0			7011	- '''				1011//11
2	T1	717	2.0	717	2.0	0.388	0.5	LOS A	1.1	7.8	0.03	0.03	0.03	59.4
Appro	oach	717	2.0	717	2.0	0.388	0.5	LOS A	1.1	7.8	0.03	0.03	0.03	59.4
North	: Rocky	Point R	oad											
8	T1	808	2.0	808	2.0	<b>*</b> 1.051	98.0	LOS F	87.5	623.1	1.00	1.50	1.70	14.3
Appro	oach	808	2.0	808	2.0	1.051	98.0	LOS F	87.5	623.1	1.00	1.50	1.70	14.3
All Ve	hicles	1525	2.0	1525	2.0	1.051	52.2	LOS D	87.5	623.1	0.55	0.81	0.91	22.6

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)

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Project: G:\Traffic\SIDRA 9.0\11771 Ramsgate\11771 Ramsgate Networks.sip9

## **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks

Template: Movement Summaries

Site: 101 [Thu PM EX + Dev - Ramsgate Road - Targo Road - The Promenade (Site Folder: Weekday Afternoon Existing + Development)]

■■ Network: 3 [Weekday Afternoon Existing + Development (Network Folder: Existing + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

**Phase Sequence: Convert Function Default** 

Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLOV [ Total	VS HV]	ARRI FLO' [ Total	WS HV]	Deg. Satn	Delay	Level of Service	95% B <i>A</i> QUE [ Veh.	EUE Dist ]	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	
South	n. The F	veh/h Promenad	% le	veh/h	%	v/c	sec		veh	m				km/h
1	L2	209	2.0	209	2.0	0.431	38.6	LOS C	8.5	60.5	0.84	0.78	0.84	35.0
2	T1	42	2.0	42	2.0	0.431	41.2	LOS C	1.9	13.4	0.89	0.78	0.89	32.0
Appro		252	2.0	252	2.0	0.139	39.1	LOS C	8.5	60.5	0.85	0.07	0.85	34.4
Дррг	Jacii	202	2.0	202	2.0	0.401	00.1	2000	0.0	00.0	0.00	0.70	0.00	54.4
East:	Ramsg	gate Road	l											
4	L2	19	2.0	19	2.0	0.181	19.5	LOS B	6.2	43.8	0.67	0.58	0.67	40.4
5	T1	863	2.0	863	2.0	* 0.634	26.0	LOS B	31.3	222.7	0.91	0.82	0.91	37.9
Appro	oach	882	2.0	882	2.0	0.634	25.9	LOS B	31.3	222.7	0.90	0.82	0.90	38.0
North	: Targo	Road												
7	L2	52	2.0	52	2.0	0.180	46.2	LOS D	2.3	16.6	0.90	0.74	0.90	22.3
8	T1	42	2.0	42	2.0	0.611	45.6	LOS D	6.2	44.4	0.97	0.81	1.00	30.0
9	R2	84	2.0	84	2.0	<b>*</b> 0.611	50.2	LOS D	6.2	44.4	0.97	0.81	1.00	30.9
Appro	oach	178	2.0	178	2.0	0.611	48.0	LOS D	6.2	44.4	0.95	0.79	0.97	28.7
West	: Rams	gate Roa	d											
10	L2	18	2.0	18	2.0	0.613	12.4	LOS A	15.8	112.7	0.48	0.45	0.48	48.9
11	T1	688	2.0	688	2.0	0.613	6.8	LOS A	15.8	112.7	0.48	0.45	0.48	48.9
12	R2	146	2.0	146	2.0	* 0.446	33.4	LOS C	6.1	43.5	0.87	0.81	0.87	36.0
Appro	oach	853	2.0	853	2.0	0.613	11.5	LOS A	15.8	112.7	0.55	0.51	0.55	44.3
All Ve	ehicles	2164	2.0	2164	2.0	0.634	23.6	LOS B	31.3	222.7	0.76	0.69	0.76	37.9

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.

Site: 101 [Thu PM EX + Dev - Rocky Point Road - Ramsgate Road (Site Folder: Weekday Afternoon Existing + Development)]

■■ Network: 3 [Weekday Afternoon Existing + Development (Network Folder: Existing + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Vehi	icle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	h: Rock	y Point R	oad											
1	L2	337	2.0	337	2.0	0.289	11.5	LOS A	6.2	43.9	0.39	0.69	0.39	43.7
2	T1	842	2.0	842	2.0	* 0.908	49.7	LOS D	28.2	200.6	0.87	1.02	1.23	23.0
Appr	oach	1179	2.0	1179	2.0	0.908	38.8	LOS C	28.2	200.6	0.74	0.93	0.99	26.6
East	: Ramsg	gate Road	t											
4	L2	46	2.0	46	2.0	0.901	65.5	LOS E	16.9	120.3	1.00	1.06	1.38	29.6
5	T1	538	2.0	538	2.0	<b>*</b> 0.901	59.5	LOS E	18.3	130.0	1.00	1.06	1.37	20.5
Appr	oach	584	2.0	584	2.0	0.901	60.0	LOS E	18.3	130.0	1.00	1.06	1.37	21.4
North	h: Rocky	Point R	oad											
7	L2	53	2.0	53	2.0	0.848	11.5	LOS A	14.9	106.0	0.41	0.42	0.44	49.1
8	T1	1381	2.0	1381	2.0	0.848	5.8	LOS A	15.0	106.5	0.41	0.41	0.44	51.6
Appr	oach	1434	2.0	1434	2.0	0.848	6.0	LOS A	15.0	106.5	0.41	0.41	0.44	51.5
Wes	t: Rams	gate Roa	d											
10	L2	34	2.0	34	2.0	0.447	27.6	LOS B	12.7	90.7	0.80	0.70	0.80	10.9
11	T1	301	2.0	301	2.0	0.447	22.9	LOS B	12.7	90.7	0.80	0.70	0.80	36.1
12	R2	324	2.0	324	2.0	<b>*</b> 0.797	53.1	LOS D	15.4	109.8	1.00	1.06	1.13	23.4
Appr	oach	659	2.0	659	2.0	0.797	38.0	LOS C	15.4	109.8	0.90	0.88	0.96	27.8
All V	ehicles	3856	2.0	3856	2.0	0.908	29.7	LOSC	28.2	200.6	0.68	0.75	0.84	32.0

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.

Site: 101 [Thu PM EX + Dev - Rocky Point Road - Targo Road (Site Folder: Weekday Afternoon Existing + Development)]

■■ Network: 3 [Weekday Afternoon Existing + Development (Network Folder: Existing + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vehi	cle Mo	vement	Perfo	rmano	ce									
Mov ID	Turn	DEM/ FLO\ [ Total veh/h	AND	ARRI FLO' [ Total veh/h	VAL WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R	oad											
1	L2	149	2.0	149	2.0	0.796	28.2	LOS B	17.2	122.6	0.81	0.77	0.84	13.2
2	T1	719	2.0	719	2.0	<b>*</b> 0.796	22.9	LOS B	17.8	126.8	0.82	0.75	0.84	36.8
Appro	oach	868	2.0	868	2.0	0.796	23.8	LOS B	17.8	126.8	0.82	0.75	0.84	34.4
North	: Rocky	Point R	oad											
8	T1	1306	2.0	1306	2.0	0.604	8.2	LOS A	17.8	127.1	0.54	0.53	0.54	46.7
9	R2	142	2.0	142	2.0	* 0.604	18.4	LOS B	17.8	127.1	0.67	0.70	0.67	41.0
Appro	oach	1448	2.0	1448	2.0	0.604	9.2	LOS A	17.8	127.1	0.55	0.55	0.55	46.1
West	: Targo	Road												
10	L2	117	2.0	117	2.0	0.112	14.9	LOS B	2.6	18.3	0.46	0.66	0.46	40.5
12	R2	154	2.0	154	2.0	* 0.809	59.7	LOS E	8.6	61.1	1.00	0.92	1.26	3.4
Appro	oach	271	2.0	271	2.0	0.809	40.3	LOSC	8.6	61.1	0.77	0.81	0.92	17.3
All Ve	ehicles	2587	2.0	2587	2.0	0.809	17.4	LOS B	17.8	127.1	0.66	0.64	0.69	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.

V Site: 101 [Thu PM EX + Dev - Ramsgate Road - Site Access (Site Folder: Weekday Afternoon Existing + Development)]

■■ Network: 3 [Weekday Afternoon Existing + Development (Network Folder: Existing + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
East:	Ramsg	gate Road	t											
5	T1	875	2.0	875	2.0	0.242	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Appro	oach	875	2.0	875	2.0	0.242	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
West	: Rams	gate Roa	d											
10	L2	84	2.0	84	2.0	0.310	5.6	LOS A	0.0	0.0	0.00	0.12	0.00	56.1
11	T1	659	2.0	659	2.0	0.310	0.1	LOS A	0.0	0.0	0.00	0.06	0.00	57.3
Appro	oach	743	2.0	743	2.0	0.310	0.7	NA	0.0	0.0	0.00	0.07	0.00	57.0
All Ve	ehicles	1618	2.0	1618	2.0	0.310	0.3	NA	0.0	0.0	0.00	0.03	0.00	57.7

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).

V Site: 101 [Thu PM EX + Dev - Targo Road - Site Access (Site Folder: Weekday Afternoon Existing + Development)]

■■ Network: 3 [Weekday Afternoon Existing + Development (Network Folder: Existing + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rman	се									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Site A	Access												
1	L2	168	2.0	168	2.0	0.426	0.2	LOS A	1.9	13.2	0.15	0.19	0.15	27.9
3	R2	253	2.0	253	2.0	0.426	2.2	LOS A	1.9	13.2	0.15	0.19	0.15	19.7
Appro	oach	421	2.0	421	2.0	0.426	1.4	LOS A	1.9	13.2	0.15	0.19	0.15	23.7
East:	Targo I	Road												
4	L2	253	2.0	253	2.0	0.164	3.9	LOS A	0.0	0.0	0.00	0.45	0.00	45.3
5	T1	40	2.0	40	2.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	46.1
Appro	oach	293	2.0	293	2.0	0.164	3.4	NA	0.0	0.0	0.00	0.45	0.00	45.4
West	: Targo	Road												
11	T1	18	2.0	18	2.0	0.074	1.0	LOS A	0.4	2.9	0.39	0.47	0.39	43.7
12	R2	84	2.0	84	2.0	0.074	5.9	LOS A	0.4	2.9	0.39	0.47	0.39	27.9
Appro	oach	102	2.0	102	2.0	0.074	5.0	NA	0.4	2.9	0.39	0.47	0.39	28.9
All Ve	hicles	816	2.0	816	2.0	0.426	2.6	NA	1.9	13.2	0.12	0.32	0.12	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.

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.

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## **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks

Template: Movement

**Summaries** 

Site: 101 [Sat MD EX + Dev - Ramsgate Road - Targo Road - The Promenade (Site Folder: Saturday Midday Existing + Development)]

■■ Network: 4 [Saturday Midday Existing + Development (Network Folder: Existing + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

**Phase Sequence: Convert Function Default** 

Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vok	olo Ma	vement	Dorfo	rmore	20 -									
									050/-	1 OK OF-		- · · ·		
Mov ID	Turn	DEMA FLOV		ARRI FLO		Deg. Satn		Level of Service		ACK OF EUE	Prop. Que	EffectiveA Stop	ver. No. Cycles	Aver. Speed
יוו		[ Total	HV ]	[ Total		Jalii	Delay	Service	[ Veh.	Dist ]	Que	Rate	Cycles	Speed
		veh/h	%	veh/h		v/c	sec		veh	m m		11410		km/h
Sout	h: The F	Promenac	le											
1	L2	336	2.0	336	2.0	0.498	29.6	LOS C	11.7	83.3	0.76	0.78	0.76	38.2
2	T1	47	2.0	47	2.0	0.169	40.8	LOS C	2.1	14.7	0.91	0.68	0.91	32.1
Appr	oach	383	2.0	383	2.0	0.498	31.0	LOS C	11.7	83.3	0.78	0.77	0.78	37.3
East	Ramsg	gate Road	i											
4	L2	26	2.0	26	2.0	0.199	27.0	LOS B	6.3	44.8	0.82	0.69	0.82	36.1
5	T1	741	2.0	741	2.0	0.697	34.5	LOS C	27.8	198.0	0.96	0.86	0.96	33.7
Appr	oach	767	2.0	767	2.0	0.697	34.3	LOSC	27.8	198.0	0.96	0.85	0.96	33.8
North	n: Targo	Road												
7	L2	58	2.0	58	2.0	0.218	45.8	LOS D	2.5	18.1	0.92	0.74	0.92	22.4
8	T1	47	2.0	47	2.0	0.787	50.3	LOS D	7.4	52.7	1.00	0.95	1.26	28.9
9	R2	95	2.0	95	2.0	<b>*</b> 0.787	54.9	LOS D	7.4	52.7	1.00	0.95	1.26	29.7
Appr	oach	200	2.0	200	2.0	0.787	51.2	LOS D	7.4	52.7	0.97	0.89	1.16	27.9
West	: Rams	gate Roa	d											
10	L2	38	2.0	38	2.0	0.817	14.9	LOS B	24.0	171.0	0.57	0.55	0.59	47.3
11	T1	859	2.0	859	2.0	<b>*</b> 0.817	9.3	LOS A	24.0	171.0	0.57	0.55	0.59	45.7
12	R2	267	2.0	267	2.0	0.515	33.6	LOS C	10.4	74.0	0.88	0.89	0.88	35.9
Appr	oach	1164	2.0	1164	2.0	0.817	15.1	LOS B	24.0	171.0	0.64	0.63	0.66	41.7
All V	ehicles	2515	2.0	2515	2.0	0.817	26.2	LOS B	27.8	198.0	0.79	0.74	0.81	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.

Site: 101 [Sat MD EX + Dev - Rocky Point Road - Ramsgate Road (Site Folder: Saturday Midday Existing + Development)]

■■ Network: 4 [Saturday Midday Existing + Development (Network Folder: Existing + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Vehi	cle Mo	vement	Perfo	ormano	се									
Mov ID	Turn	DEMA FLOV [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	h: Rock	y Point R	oad											
1 2	L2 T1	272 800	2.0 2.0	272 800	2.0 2.0	0.243 0.795	14.1 34.5	LOS A LOS C	5.7 21.6	40.6 154.1	0.47 0.91	0.71 0.86	0.47 1.02	41.2 28.3
Appro		1072	2.0	1072		0.795	29.3	LOSC	21.6	154.1	0.80	0.82	0.88	30.8
East:	Ramsg	ate Road	i											
4 5	L2 T1	83 589	2.0 2.0	83 589	2.0 2.0	* 0.756 0.756	50.7 40.6	LOS D LOS C	15.4 16.8	109.9 119.4	0.99 0.99	0.90 0.90	1.07 1.06	34.6 25.8
Appro	oach	673	2.0	673	2.0	0.756	41.8	LOS C	16.8	119.4	0.99	0.90	1.07	27.3
North	n: Rocky	Point Ro	oad											
7 8	L2 T1	96 875	2.0 2.0	96 875	2.0 2.0	* 0.788 0.788	23.2 18.4	LOS B LOS B	16.8 17.2	119.6 122.4	0.76 0.75	0.72 0.69	0.78 0.77	38.5 40.8
Appro	oach	971	2.0	971	2.0	0.788	18.9	LOS B	17.2	122.4	0.75	0.69	0.77	40.6
West	: Rams	gate Roa	d											
10	L2	62	2.0	62	2.0	0.511	19.7	LOS B	13.5	96.1	0.60	0.56	0.60	15.0
11	T1	440	2.0	440	2.0	0.511	15.0	LOS B	13.5	96.1	0.60	0.56	0.60	41.6
12	R2	309	2.0	309	2.0	* 0.605	37.8	LOS C	11.8	84.3	0.90	0.95	0.90	28.2
Appro	oach	812	2.0	812	2.0	0.605	24.0	LOS B	13.5	96.1	0.71	0.71	0.71	34.2
All Ve	ehicles	3526	2.0	3526	2.0	0.795	27.6	LOS B	21.6	154.1	0.80	0.77	0.85	33.1

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.

Site: 101 [Sat MD EX + Dev - Rocky Point Road - Targo Road (Site Folder: Saturday Midday Existing + Development)]

■■ Network: 4 [Saturday Midday Existing + Development (Network Folder: Existing + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vehi	cle Mo	vement	Perfo	rmano	e									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rocky	y Point R	oad											
1	L2	178	2.0	178	2.0	0.695	21.1	LOS B	12.4	88.3	0.65	0.65	0.65	17.3
2	T1	668	2.0	668	2.0	* 0.695	16.2	LOS B	13.2	94.0	0.66	0.61	0.66	41.5
Appro	oach	846	2.0	846	2.0	0.695	17.3	LOS B	13.2	94.0	0.66	0.62	0.66	38.8
North	: Rocky	Point R	oad											
8	T1	746	2.0	746	2.0	0.487	9.1	LOS A	12.1	86.1	0.55	0.51	0.55	45.5
9	R2	166	2.0	166	2.0	* 0.487	20.3	LOS B	12.1	86.1	0.73	0.71	0.73	38.3
Appro	oach	913	2.0	913	2.0	0.487	11.1	LOS A	12.1	86.1	0.58	0.55	0.58	44.0
West	: Targo	Road												
10	L2	135	2.0	135	2.0	0.138	16.5	LOS B	3.2	22.4	0.52	0.68	0.52	39.2
12	R2	172	2.0	172	2.0	<b>*</b> 0.702	49.4	LOS D	8.5	60.3	0.99	0.86	1.09	4.1
Appro	oach	306	2.0	306	2.0	0.702	34.9	LOSC	8.5	60.3	0.78	0.78	0.84	19.2
All Ve	hicles	2065	2.0	2065	2.0	0.702	17.2	LOS B	13.2	94.0	0.64	0.61	0.65	37.6

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.

V Site: 101 [Sat MD EX + Dev - Ramsgate Road - Site Access (Site Folder: Saturday Midday Existing + Development)]

■■ Network: 4 [Saturday Midday Existing + Development (Network Folder: Existing + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. Que	Effective A Stop Rate	ver. No. Cycles	Aver. Speed km/h
East:	Ramsg	gate Road	ł											
5	T1	872	2.0	872	2.0	0.234	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Appro	oach	872	2.0	872	2.0	0.234	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
West	: Rams	gate Roa	d											
10	L2	95	2.0	95	2.0	0.340	5.6	LOS A	0.0	0.0	0.00	0.13	0.00	55.9
11	T1	848	2.0	848	2.0	0.340	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	57.7
Appro	oach	943	2.0	943	2.0	0.340	0.6	NA	0.0	0.0	0.00	0.06	0.00	57.2
All Ve	hicles	1815	2.0	1815	2.0	0.340	0.3	NA	0.0	0.0	0.00	0.03	0.00	57.7

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).

V Site: 101 [Sat MD EX + Dev - Targo Road - Site Access (Site Folder: Saturday Midday Existing + Development)]

■■ Network: 4 [Saturday Midday Existing + Development (Network Folder: Existing + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rman	ce									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO [ Total veh/h	WS IHV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF JEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Site A	ccess												
1	L2	189	2.0	189	2.0	0.484	0.5	LOS A	2.6	18.7	0.20	0.24	0.21	27.8
3	R2	295	2.0	295	2.0	0.484	2.9	LOS A	2.6	18.7	0.20	0.24	0.21	19.6
Appro	oach	484	2.0	484	2.0	0.484	2.0	LOS A	2.6	18.7	0.20	0.24	0.21	23.5
East:	Targo F	Road												
4	L2	295	2.0	295	2.0	0.193	3.9	LOS A	0.0	0.0	0.00	0.45	0.00	45.3
5	T1	51	2.0	51	2.0	0.193	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	46.2
Appro	oach	345	2.0	345	2.0	0.193	3.3	NA	0.0	0.0	0.00	0.45	0.00	45.5
West	: Targo	Road												
11	T1	12	2.0	12	2.0	0.081	1.3	LOS A	0.4	2.9	0.43	0.54	0.43	43.3
12	R2	95	2.0	95	2.0	0.081	6.1	LOS A	0.4	2.9	0.43	0.54	0.43	27.8
Appro	oach	106	2.0	106	2.0	0.081	5.6	NA	0.4	2.9	0.43	0.54	0.43	28.4
All Ve	ehicles	936	2.0	936	2.0	0.484	2.9	NA	2.6	18.7	0.15	0.35	0.16	28.5

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.

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## **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks **Template: Movement** 

**Summaries** 

V Site: 101 [Thu PM EX + Dev - Ramsgate Road - Targo Road - The Promenade (Site Folder: Weekday Afternoon Existing + **Development (No Upgrades))]** 

■■ Network: 5 [Weekday Afternoon Existing + **Development (No Upgrades) (Network Folder:** Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rman	се									
Mov ID	Turn	DEMA FLOV [Total veh/h		ARRI FLO [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	h: The F	Promena	de											
1	L2	209	2.0	209	2.0	0.187	7.8	LOS A	0.8	5.4	0.30	0.56	0.30	48.9
Appr	oach	209	2.0	209	2.0	0.187	7.8	LOS A	0.8	5.4	0.30	0.56	0.30	48.9
East	Ramsg	jate Road	b											
4	L2	19	2.0	19	2.0	0.104	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	56.9
5	T1	863	2.0	863	2.0	0.370	0.5	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Appr	oach	882	2.0	882	2.0	0.370	0.6	NA	0.0	0.0	0.00	0.01	0.00	59.6
North	n: Targo	Road												
7	L2	52	2.0	52	2.0	0.089	9.1	LOS A	0.3	2.1	0.58	0.80	0.58	40.2
Appr	oach	52	2.0	52	2.0	0.089	9.1	LOS A	0.3	2.1	0.58	0.80	0.58	40.2
West	: Rams	gate Roa	d											
10	L2	18	2.0	18	2.0	0.382	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	57.9
11	T1	688	2.0	688	2.0	0.382	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.5
12	R2	146	2.0	146	2.0	0.311	13.7	LOS A	1.3	8.9	0.75	0.94	0.89	44.5
Appr	oach	853	2.0	853	2.0	0.382	2.6	NA	1.3	8.9	0.13	0.17	0.15	54.2
All Ve	ehicles	1996	2.0	1996	2.0	0.382	2.4	NA	1.3	8.9	0.10	0.16	0.11	55.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

Site: 101 [Thu PM EX + Dev - Rocky Point Road - Ramsgate Road (Site Folder: Weekday Afternoon Existing + Development (No Upgrades))]

■■ Network: 5 [Weekday Afternoon Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Vehi	cle Mo	vement	Perfo	ormano	се									
Mov ID	Turn	DEMA FLOV [ Total veh/h		ARRI FLO¹ [ Total veh/h	WS HV]	Deg. Satn v/c	Delay	Level of Service		ACK OF EUE Dist ]	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R		ven/n	70	V/C	sec	_	ven	m		_		KIII/II
1	L2	337	2.0	337	2.0	0.285	11.8	LOS A	6.7	48.0	0.38	0.69	0.38	43.4
2	T1	842	2.0	842	2.0	* 0.896	39.2	LOS C	41.4	294.9	0.87	0.89	1.01	26.5
Appro	oach	1179	2.0	1179	2.0	0.896	31.4	LOSC	41.4	294.9	0.73	0.83	0.83	29.9
East:	Ramsg	ate Road	I											
4	L2	46	2.0	46	2.0	<b>*</b> 0.884	69.6	LOS E	18.6	132.6	1.00	1.03	1.29	28.7
5	T1	538	2.0	538	2.0	0.884	63.5	LOS E	19.9	141.8	1.00	1.03	1.29	19.6
Appro	oach	584	2.0	584	2.0	0.884	64.0	LOS E	19.9	141.8	1.00	1.03	1.29	20.5
North	: Rocky	Point Ro	oad											
7	L2	53	2.0	45	2.0	0.765	18.3	LOS B	21.3	151.7	0.61	0.57	0.61	42.8
8	T1	1465	2.0	1254		0.765	12.6	LOS A	21.6	153.7	0.61	0.56	0.61	44.6
Appro	oach	1518	2.0	1299 <sup>N</sup>	2.0	0.765	12.8	LOS A	21.6	153.7	0.61	0.56	0.61	44.5
West	: Rams	gate Roa	d											
10	L2	34	2.0	34	2.0	0.318	30.3	LOS C	9.7	69.0	0.70	0.62	0.70	10.5
11	T1	301	2.0	301	2.0	0.912	35.6	LOS C	16.0	114.2	0.78	0.77	0.86	29.3
12	R2	324	2.0	324	2.0	* 0.912	72.7	LOS F	16.0	114.2	1.00	1.19	1.30	19.4
Appro	oach	659	2.0	659	2.0	0.912	53.6	LOS D	16.0	114.2	0.88	0.97	1.07	22.9
All Ve	hicles	3940	2.0	3721 <sup>N</sup>	2.1	0.912	34.0	LOSC	41.4	294.9	0.76	0.79	0.87	29.9

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.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

<sup>\*</sup> Critical Movement (Signal Timing)

V Site: 101 [Thu PM EX + Dev - Rocky Point Road - Targo Road (Site Folder: Weekday Afternoon Existing + Development (No Upgrades))]

■■ Network: 5 [Weekday Afternoon Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	:e									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF IEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	i: Rocky	y Point R	oad											
1 2	L2 T1	149 719	2.0 2.0	149 719	2.0 2.0	0.235 0.235	5.6 0.0	LOS A LOS A	0.0 0.0	0.0 0.0	0.00 0.00	0.21 0.08	0.00 0.00	47.0 54.0
Appro	oach	868	2.0	868	2.0	0.235	1.0	NA	0.0	0.0	0.00	0.10	0.00	52.7
North	: Rocky	Point R	oad											
8	T1 R2	1306 142	2.0 2.0	1306 142	2.0	0.720 0.720	2.4 13.0	LOS A LOS A	6.0 6.0	42.4 42.4	0.19 0.52	0.08 0.23	0.42 1.14	28.6 15.3
Appro		1448	2.0	1448		0.720	3.5	NA	6.0	42.4	0.22	0.10	0.49	26.3
West	Targo	Road												
10	L2	117	2.0	117	2.0	16.228	13743.5	LOS F	17.5	124.3	1.00	3.48	8.99	0.0
12	R2	238	2.0	238	2.0	16.228	13754.0	LOS F	17.5	124.3	1.00	3.48	8.99	0.0
Appro	oach	355	2.0	355	2.0	16.228	13750.5	LOS F	17.5	124.3	1.00	3.48	8.99	0.0
All Ve	hicles	2672	2.0	2672	2.0	16.228	1828.0	NA	17.5	124.3	0.25	0.55	1.46	0.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

V Site: 101 [Thu PM EX + Dev - Ramsgate Road - Site Access (Site Folder: Weekday Afternoon Existing + Development (No Upgrades))]

■■ Network: 5 [Weekday Afternoon Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	ce									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
East:	Ramsg	ate Road	t											
5	T1	875	2.0	875	2.0	0.235	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Appro	oach	875	2.0	875	2.0	0.235	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
West	: Rams	gate Roa	d											
10	L2	84	2.0	84	2.0	0.203	5.6	LOS A	0.0	0.0	0.00	0.14	0.00	55.9
11	T1	659	2.0	659	2.0	0.203	0.0	LOS A	8.8	62.3	0.00	0.06	0.00	57.6
Appro	oach	743	2.0	743	2.0	0.203	0.7	NA	8.8	62.3	0.00	0.07	0.00	57.1
All Ve	ehicles	1618	2.0	1618	2.0	0.235	0.3	NA	8.8	62.3	0.00	0.03	0.00	57.8

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).

V Site: 101 [Thu PM EX + Dev - Targo Road - Site Access (Site Folder: Weekday Afternoon Existing + Development (No Upgrades))]

■■ Network: 5 [Weekday Afternoon Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	ce									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF IEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Site A	Access												
1	L2	168	2.0	168	2.0	0.739	2.9	LOS A	209.5	1491.6	0.20	0.36	0.32	27.3
3	R2	337	2.0	337	2.0	0.739	5.2	LOS A	209.5	1491.6	0.20	0.36	0.32	19.1
Appro	oach	505	2.0	505	2.0	0.739	4.4	LOS A	209.5	1491.6	0.20	0.36	0.32	22.4
East:	Targo	Road												
4	L2	253	2.0	253	2.0	0.164	3.9	LOS A	0.0	0.0	0.00	0.45	0.00	45.3
5	T1	40	2.0	40	2.0	0.164	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	46.1
Appro	oach	293	2.0	293	2.0	0.164	3.4	NA	0.0	0.0	0.00	0.45	0.00	45.4
West	: Targo	Road												
11	T1	18	2.0	18	2.0	0.072	1.0	LOS A	11.1	79.2	0.39	0.50	0.39	43.7
12	R2	84	2.0	84	2.0	0.072	5.8	LOS A	11.1	79.2	0.39	0.50	0.39	27.9
Appro	oach	102	2.0	102	2.0	0.072	5.0	NA	11.1	79.2	0.39	0.50	0.39	28.9
All Ve	ehicles	900	2.0	900	2.0	0.739	4.2	NA	209.5	1491.6	0.16	0.41	0.23	27.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

Site: 1 [Thu PM EX + Dev - Rocky Point Road (Site Folder: Weekday Afternoon Existing + Development (No Upgrades))]

■■ Network: 5 [Weekday Afternoon Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog Phase Times determined by the program Downstream lane blockage effects included in determining phase times Phase Sequence: Two-Phase

Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

Vehi	cle Mo	vement	Perfo	rmanc	:e									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRIN FLOV [ Total veh/h	VS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	h: Rocky	y Point R	oad											
2	T1	839	2.0		2.0	0.403	0.6	LOS A	1.1	8.2	0.03	0.03	0.03	59.4
Appr	oach	839	2.0	730 <sup>N1</sup>	2.0	0.403	0.6	LOS A	1.1	8.2	0.03	0.03	0.03	59.4
North	n: Rocky	Point R	oad											
8	T1	1457	2.0	1457	2.0	<b>*</b> 0.505	0.5	LOS A	1.7	12.3	0.04	0.04	0.04	59.1
Appr	oach	1457	2.0	1457	2.0	0.505	0.5	LOS A	1.7	12.3	0.04	0.04	0.04	59.1
All Ve	ehicles	2296	2.0	2187 <sup>N</sup>	2.1	0.505	0.5	LOSA	1.7	12.3	0.04	0.04	0.04	59.2

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)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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## **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks **Template: Movement** 

**Summaries** 

V Site: 101 [Sat MD EX + Dev - Ramsgate Road - Targo Road - The Promenade (Site Folder: Saturday Midday Existing + **Development (No Upgrades))]** 

■■ Network: 6 [Saturday Midday Existing + **Development (No Upgrades) (Network Folder:** Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	h: The F	romenac	de											
1	L2	336	2.0	336	2.0	0.290	7.5	LOS A	1.3	9.3	0.29	0.55	0.29	49.0
Appr	oach	336	2.0	336	2.0	0.290	7.5	LOS A	1.3	9.3	0.29	0.55	0.29	49.0
East:	Ramsg	ate Road	b											
4	L2	26	2.0	26	2.0	0.090	5.6	LOS A	0.0	0.0	0.00	0.09	0.00	56.5
5	T1	741	2.0	741	2.0	0.322	0.4	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Appr	oach	767	2.0	767	2.0	0.322	0.6	NA	0.0	0.0	0.00	0.02	0.00	59.5
North	n: Targo	Road												
7	L2	58	2.0	58	2.0	0.136	11.8	LOS A	0.4	3.2	0.71	0.86	0.71	38.0
Appr	oach	58	2.0	58	2.0	0.136	11.8	LOS A	0.4	3.2	0.71	0.86	0.71	38.0
West	:: Rams	gate Roa	d											
10	L2	38	2.0	38	2.0	0.486	5.7	LOS A	0.0	0.0	0.00	0.03	0.00	57.7
11	T1	859	2.0	859	2.0	0.486	0.2	LOS A	0.0	0.0	0.00	0.03	0.00	59.2
12	R2	267	2.0	267	2.0	0.471	13.5	LOS A	2.4	17.4	0.74	1.00	1.08	44.6
Appr	oach	1164	2.0	1164	2.0	0.486	3.4	NA	2.4	17.4	0.17	0.25	0.25	52.9
	ehicles	2325	2.0	2325		0.486	3.3	NA	2.4	17.4	0.15	0.23	0.18	53.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

Site: 101 [Sat MD EX + Dev - Rocky Point Road - Ramsgate Road (Site Folder: Saturday Midday Existing + Development (No Upgrades))]

■■ Network: 6 [Saturday Midday Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLOV [Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	h: Rock	y Point R	oad											
1	L2	272	2.0	272	2.0	0.224	13.0	LOS A	5.8	41.4	0.40	0.69	0.40	42.2
2	T1	800	2.0	800	2.0	0.827	29.9	LOS C	33.4	238.1	0.84	0.78	0.88	30.6
Appr	oach	1072	2.0	1072	2.0	0.827	25.6	LOS B	33.4	238.1	0.73	0.76	0.76	32.9
East	Ramso	jate Road	t											
4	L2	83	2.0	83	2.0	<b>*</b> 0.871	69.6	LOS E	20.7	147.4	1.00	1.01	1.24	29.4
5	T1	589	2.0	589	2.0	0.871	59.4	LOS E	22.6	160.9	1.00	1.01	1.23	20.5
Appr	oach	673	2.0	673	2.0	0.871	60.6	LOS E	22.6	160.9	1.00	1.01	1.23	21.9
North	n: Rocky	/ Point Ro	oad											
7	L2	96	2.0	78	2.0	0.185	18.6	LOS B	3.0	21.3	0.37	0.53	0.37	39.4
8	T1	969	2.0	790	2.0	* 0.885	17.7	LOS B	24.1	171.4	0.65	0.66	0.71	40.6
Appr	oach	1065	2.0	868 <sup>N1</sup>	2.0	0.885	17.8	LOS B	24.1	171.4	0.62	0.64	0.68	40.4
West	: Rams	gate Roa	d											
10	L2	62	2.0	62	2.0	0.623	35.2	LOS C	16.0	114.2	0.84	0.76	0.84	9.0
11	T1	440	2.0	440	2.0	0.877	29.8	LOS C	16.0	114.2	0.84	0.77	0.85	32.1
12	R2	309	2.0	309	2.0	<b>*</b> 0.877	68.9	LOS E	16.0	114.2	1.00	1.14	1.26	19.9
Appr	oach	812	2.0	812	2.0	0.877	45.2	LOS D	16.0	114.2	0.90	0.91	1.01	25.1
All Ve	ehicles	3621	2.0	3424 <sup>N</sup>	2.1	0.885	35.1	LOSC	33.4	238.1	0.80	0.81	0.89	29.3

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.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

<sup>\*</sup> Critical Movement (Signal Timing)

V Site: 101 [Sat MD EX + Dev - Rocky Point Road - Targo Road (Site Folder: Saturday Midday Existing + Development (No Upgrades))]

■■ Network: 6 [Saturday Midday Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		BACK OF UEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R	oad											
1 2	L2 T1	178 668	2.0 2.0	178 668	2.0 2.0	0.229 0.229	5.6 0.0	LOS A LOS A	0.0 0.0	0.0 0.0	0.00	0.25 0.09	0.00	44.9 53.4
Appro	oach	846	2.0	846	2.0	0.229	1.2	NA	0.0	0.0	0.00	0.12	0.00	51.3
North	: Rocky	Point R	oad											
8	T1 R2	746 166	2.0 2.0	746 166	2.0 2.0	0.653 0.653	5.0 13.6	LOS A LOS A	7.6 7.6	53.8 53.8	0.57 0.57	0.18 0.18	1.01 1.01	17.5 17.5
Appro	oach	913	2.0	913	2.0	0.653	6.6	NA	7.6	53.8	0.57	0.18	1.01	17.5
West	Targo	Road												
10	L2	135	2.0	135	2.0	4.217	2911.2	LOS F	17.5	124.3	1.00	8.03	22.54	0.1
12	R2	266	2.0	266	2.0	4.217	2922.1	LOS F	17.5	124.3	1.00	8.03	22.54	0.1
Appro	oach	401	2.0	401	2.0	4.217	2918.5	LOS F	17.5	124.3	1.00	8.03	22.54	0.1
All Ve	hicles	2160	2.0	2160	2.0	4.217	545.1	NA	17.5	124.3	0.43	1.61	4.61	0.5

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).

V Site: 101 [Sat MD EX + Dev - Ramsgate Road - Site Access (Site Folder: Saturday Midday Existing + Development (No Upgrades))]

■■ Network: 6 [Saturday Midday Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	ce									
Mov ID	Turn	DEMA FLOV [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
East	Ramsg	gate Road	d											
5	T1	861	2.0	861	2.0	0.231	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Appr	oach	861	2.0	861	2.0	0.231	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
West	:: Rams	gate Roa	ıd											
10	L2	95	2.0	95	2.0	0.247	5.6	LOS A	6.2	44.3	0.00	0.12	0.00	56.1
11	T1	822	2.0	822	2.0	0.247	0.0	LOS A	6.2	44.3	0.00	0.05	0.00	57.7
Appr	oach	917	2.0	917	2.0	0.247	0.6	NA	6.2	44.3	0.00	0.06	0.00	57.3
All Ve	ehicles	1778	2.0	1778	2.0	0.247	0.3	NA	6.2	44.3	0.00	0.03	0.00	57.8

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).

V Site: 101 [Sat MD EX + Dev - Targo Road - Site Access (Site Folder: Saturday Midday Existing + Development (No Upgrades))]

■■ Network: 6 [Saturday Midday Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rman	ce									
Mov ID	Turn	DEM/ FLO\ [ Total veh/h		ARRI FLO [ Total veh/h	WS IHV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF JEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Site A	Access												
1	L2	189	2.0	189	2.0	0.686	2.2	LOS A	173.0	1231.6	0.21	0.35	0.32	27.4
3	R2	295	2.0	295	2.0	0.686	4.8	LOS A	173.0	1231.6	0.21	0.35	0.32	19.2
Appro	oach	484	2.0	484	2.0	0.686	3.8	LOS A	173.0	1231.6	0.21	0.35	0.32	23.1
East:	Targo I	Road												
4	L2	295	2.0	295	2.0	0.193	3.9	LOS A	0.0	0.0	0.00	0.45	0.00	45.3
5	T1	51	2.0	51	2.0	0.193	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	46.2
Appro	oach	345	2.0	345	2.0	0.193	3.3	NA	0.0	0.0	0.00	0.45	0.00	45.5
West	: Targo	Road												
11	T1	12	2.0	12	2.0	0.081	1.3	LOS A	6.8	48.4	0.42	0.56	0.42	43.3
12	R2	95	2.0	95	2.0	0.081	6.1	LOS A	6.8	48.4	0.42	0.56	0.42	27.8
Appro	oach	106	2.0	106	2.0	0.081	5.5	NA	6.8	48.4	0.42	0.56	0.42	28.4
All Ve	hicles	936	2.0	936	2.0	0.686	3.8	NA	173.0	1231.6	0.16	0.41	0.21	28.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

Site: 1 [Sat MD EX + Dev - Rocky Point Road (Site Folder: Saturday Midday Existing + Development (No Upgrades))]

■■ Network: 6 [Saturday Midday Existing + Development (No Upgrades) (Network Folder: Existing + Development (No Upgrades))]

Site Category: (None)

Pedestrian Crossing (Signalised) - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog Phase Times determined by the program Downstream lane blockage effects included in determining phase times Phase Sequence: Two-Phase

Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

Vehi	cle Mo	vement	Perfo	rmano	:e									
Mov ID	Turn	DEMA FLO\ [ Total veh/h	AND	ARRI\ FLO\ [ Total veh/h	VAL WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	h: Rocky	y Point R	load											
2	T1	806	2.0	707	2.0	0.383	0.5	LOS A	1.1	7.7	0.03	0.03	0.03	59.4
Appr	oach	806	2.0	707 <sup>N1</sup>	2.0	0.383	0.5	LOS A	1.1	7.7	0.03	0.03	0.03	59.4
North	n: Rocky	Point R	oad											
8	T1	919	2.0	919	2.0	<b>*</b> 0.779	0.7	LOS A	4.5	32.0	0.09	0.09	0.09	58.6
Appr	oach	919	2.0	919	2.0	0.779	0.7	LOS A	4.5	32.0	0.09	0.09	0.09	58.6
All Ve	ehicles	1725	2.0	1625 <sup>N</sup>	2.1	0.779	0.6	LOSA	4.5	32.0	0.07	0.06	0.07	59.0

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)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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## **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks **Template: Movement** 

**Summaries** 

V Site: 101 [Thu PM 2031 - Ramsgate Road -Targo Road - The Promenade (Site Folder:

Weekday Afternoon 2031)]

■■ Network: 7 [Weekday Afternoon 2031 (Network Folder: 2031)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rman	ce									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	h: The F	Promenac	de											
1	L2	209	2.0	209	2.0	0.189	8.6	LOS A	0.9	6.1	0.32	0.55	0.32	48.9
Appr	oach	209	2.0	209	2.0	0.189	8.6	LOS A	0.9	6.1	0.32	0.55	0.32	48.9
East:	Ramsg	ate Road	b											
4	L2	19	2.0	19	2.0	0.117	5.6	LOS A	0.0	0.0	0.00	0.05	0.00	57.3
5	T1	980	2.0	980	2.0	0.419	0.7	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Appr	oach	999	2.0	999	2.0	0.419	0.8	NA	0.0	0.0	0.00	0.01	0.00	59.6
North	n: Targo	Road												
7	L2	52	2.0	52	2.0	0.095	9.5	LOS A	0.3	2.2	0.61	0.82	0.61	39.9
Appr	oach	52	2.0	52	2.0	0.095	9.5	LOS A	0.3	2.2	0.61	0.82	0.61	39.9
West	:: Rams	gate Roa	d											
10	L2	18	2.0	18	2.0	0.393	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.9
11	T1	707	2.0	707	2.0	0.393	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.5
12	R2	146	2.0	146	2.0	0.312	14.2	LOS A	1.4	9.9	0.75	0.95	0.90	44.2
Appr	oach	872	2.0	872	2.0	0.393	2.6	NA	1.4	9.9	0.13	0.17	0.15	54.2
	ehicles	2132	2.0	2132		0.419	2.5	NA	1.4	9.9	0.10	0.15	0.11	55.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

Site: 101 [Thu PM 2031 - Rocky Point Road - Ramsgate Road (Site Folder: Weekday

Afternoon 2031)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

■ Network: 7 [Weekday Afternoon 2031

(Network Folder: 2031)]

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Vehi	icle Mo	vement	Perfo	rmano	:e									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA0 QUE <sup>l</sup> [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	h: Rocky	/ Point R	oad											
1 2	L2 T1	377 837	2.0 2.0	377 837	2.0 2.0	0.343 * 0.964	12.4 60.4	LOS A LOS E	8.0 51.4	56.9 365.7	0.40 0.92	0.70 1.06	0.40 1.23	42.9 20.4
Appr	oach	1214	2.0	1214	2.0	0.964	45.5	LOS D	51.4	365.7	0.76	0.95	0.97	24.3
East	Ramsg	ate Road	d											
4	L2	52	2.0	52	2.0	0.963	88.0	LOS F	24.7	176.0	1.00	1.18	1.51	25.1
5	T1	615	2.0	615	2.0	* 0.963	82.0	LOS F	26.4	187.8	1.00	1.18	1.50	16.4
Appr	oach	666	2.0	666	2.0	0.963	82.5	LOS F	26.4	187.8	1.00	1.18	1.51	17.2
North	n: Rocky	Point R	oad											
7	L2	36	2.0	36	2.0	0.937	36.8	LOS C	24.1	171.4	0.94	0.97	1.09	31.7
8	T1	1441	2.0	1441	2.0	0.937	30.7	LOS C	24.1	171.4	0.94	0.97	1.09	32.8
Appr	oach	1477	2.0	1477	2.0	0.937	30.9	LOS C	24.1	171.4	0.94	0.97	1.09	32.7
West	t: Rams	gate Roa	d											
10	L2	38	2.0	38	2.0	0.336	28.8	LOS C	10.6	75.6	0.68	0.61	0.68	27.7
11	T1	349	2.0	349	2.0	0.965	38.7	LOS C	33.4	237.6	0.77	0.79	0.89	32.9
12	R2	375	2.0	375	2.0	* 0.965	88.6	LOS F	33.4	237.6	1.00	1.26	1.45	21.2
Appr	oach	762	2.0	762	2.0	0.965	62.7	LOS E	33.4	237.6	0.88	1.01	1.15	25.7
All V	ehicles	4119	2.0	4119	2.0	0.965	49.4	LOS D	51.4	365.7	0.88	1.01	1.13	25.5

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.

V Site: 101 [Thu PM 2031 - Rocky Point Road - Targo Road (Site Folder: Weekday Afternoon 2031)]

Network: 7 [Weekday Afternoon 2031 (Network Folder: 2031)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEM/ FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		BACK OF JEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R	oad											
1	L2	23	2.0	23	2.0	0.233	5.6	LOS A	0.0	0.0	0.00	0.03	0.00	56.7
2	T1	844	2.0	844	2.0	0.233	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	58.7
Appro	oach	867	2.0	867	2.0	0.233	0.2	NA	0.0	0.0	0.00	0.02	0.00	58.4
North	: Rocky	Point R	oad											
8	T1	1497	2.0	1497	2.0	0.413	0.2	LOS A	8.0	57.1	0.03	0.01	0.04	53.8
9	R2	16	2.0	16	2.0	0.413	10.4	LOS A	8.0	57.1	0.06	0.01	0.08	48.1
Appro	oach	1513	2.0	1513	2.0	0.413	0.3	NA	8.0	57.1	0.03	0.01	0.04	53.1
West	Targo	Road												
10	L2	12	2.0	12	2.0	0.492	70.5	LOS F	1.1	8.2	0.89	0.95	1.13	10.6
12	R2	6	2.0	6	2.0	0.492	258.5	LOS F	1.1	8.2	0.89	0.95	1.13	10.6
Appro	oach	18	2.0	18	2.0	0.492	136.9	LOS F	1.1	8.2	0.89	0.95	1.13	10.6
All Ve	hicles	2398	2.0	2398	2.0	0.492	1.3	NA	8.0	57.1	0.03	0.02	0.03	46.8

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).

 $\label{eq:holes} \mbox{HV (\%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.}$ 

Site: 1 [Thu PM 2031 - Rocky Point Road (Site Folder: Weekday Afternoon 2031)]

Site Category: (None)

■ Network: 7 [Weekday Afternoon 2031

(Network Folder: 2031)]

User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Two-Phase Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

Vehi	cle Mo	vement	Perfo	rmano	е									
Mov ID	Turn	DEMA FLOV [Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh	ACK OF EUE Dist ] m	Prop. Que	Effective A Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R	load											
2	T1	859	2.0	859	2.0	0.475	0.7	LOS A	1.5	10.9	0.04	0.03	0.04	59.3
Appro	oach	859	2.0	859	2.0	0.475	0.7	LOS A	1.5	10.9	0.04	0.03	0.04	59.3
North	: Rocky	Point R	oad											
8	T1	1521	2.0	1521	2.0	<b>*</b> 1.009	68.9	LOS E	73.6	523.7	1.00	1.35	1.50	18.4
Appro	oach	1521	2.0	1521	2.0	1.009	68.9	LOS E	73.6	523.7	1.00	1.35	1.50	18.4
All Ve	ehicles	2380	2.0	2380	2.0	1.009	44.3	LOS D	73.6	523.7	0.65	0.87	0.97	24.9

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)

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Project: G:\Traffic\SIDRA 9.0\11771 Ramsgate\11771 Ramsgate Networks.sip9

# **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks

Template: Movement Summaries

V Site: 101 [Sat MD 2031 - Ramsgate Road - Targo Road - The Promenade (Site Folder:

■■ Network: 8 [Saturday Midday 2031 (Network

Folder: 2031)]

Saturday Midday 2031)]

Site Category: (None) Give-Way (Two-Way)

Vehi	icle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEM/ FLO\ [ Total veh/h		ARRI FLO [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		BACK OF UEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	h: The F	Promenad	de											
1	L2	336	2.0	336	2.0	0.291	8.0	LOS A	1.5	10.6	0.31	0.54	0.31	48.9
Appr	oach	336	2.0	336	2.0	0.291	8.0	LOS A	1.5	10.6	0.31	0.54	0.31	48.9
East	: Ramso	gate Road	b											
4	L2	26	2.0	25	2.0	0.099	5.6	LOS A	0.0	0.0	0.00	0.08	0.00	57.0
5	T1	856	2.0	815	2.0	0.352	0.6	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Appr	oach	882	2.0	<mark>840</mark> <sup>N1</sup>	2.0	0.352	0.7	NA	0.0	0.0	0.00	0.02	0.00	59.5
North	h: Targo	Road												
7	L2	58	2.0	58	2.0	0.151	12.7	LOS A	0.5	3.4	0.74	0.88	0.74	37.3
Appr	oach	58	2.0	58	2.0	0.151	12.7	LOS A	0.5	3.4	0.74	0.88	0.74	37.3
Wes	t: Rams	gate Roa	d											
10	L2	38	2.0	38	2.0	0.502	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	57.7
11	T1	889	2.0	889	2.0	0.502	0.2	LOS A	0.0	0.0	0.00	0.02	0.00	59.1
12	R2	267	2.0	267	2.0	0.450	13.4	LOS A	2.6	18.7	0.72	0.99	1.04	44.7
Appr	oach	1195	2.0	1195	2.0	0.502	3.3	NA	2.6	18.7	0.16	0.24	0.23	53.0
All V	ehicles	2471	2.0	2428 <sup>N</sup>	2.0	0.502	3.3	NA	2.6	18.7	0.14	0.22	0.18	54.0

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.

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 (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 101 [Sat MD 2031 - Rocky Point Road - Network: 8 [Saturday Midday 2031 (Network Ramsgate Road (Site Folder: Saturday Midday Folder: 2031)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Ver	icle Mo	vement	Perfo	rmano	e									
Mov ID	/ Turn	DEMA FLOV [Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sou	th: Rock	y Point R	load											
1	L2	304	2.0	304	2.0	0.254	12.4	LOS A	6.3	44.9	0.39	0.69	0.39	42.8
2	T1	773	2.0	773	2.0	0.938	53.6	LOS D	44.1	314.3	0.93	1.01	1.17	22.0
App	roach	1077	2.0	1077	2.0	0.938	42.0	LOSC	44.1	314.3	0.77	0.92	0.95	25.5
Eas	t: Ramsg	ate Road	d											
4	L2	93	2.0	93	2.0	1.075	155.5	LOS F	38.0	270.4	1.00	1.49	1.99	17.1
5	T1	672	2.0	672	2.0	<b>*</b> 1.075	145.6	LOS F	41.8	297.5	1.00	1.50	1.97	10.3
App	roach	764	2.0	764	2.0	1.075	146.8	LOS F	41.8	297.5	1.00	1.50	1.98	11.2
Nor	th: Rocky	Point R	oad											
7	L2	66	2.0	66	2.0	0.230	22.4	LOS B	4.0	28.8	0.47	0.54	0.47	37.1
8	T1	833	2.0	833	2.0	<b>*</b> 1.097	115.2	LOS F	24.1	171.4	0.91	1.44	1.67	14.5
App	roach	899	2.0	899	2.0	1.097	108.3	LOS F	24.1	171.4	0.88	1.37	1.58	15.1
Wes	st: Rams	gate Roa	ıd											
10	L2	69	2.0	69	2.0	0.381	27.4	LOS B	12.4	88.1	0.67	0.62	0.67	28.2
11	T1	504	2.0	504	2.0	1.094	67.8	LOS E	58.2	414.1	0.82	0.92	1.28	21.3
12	R2	358	2.0	358	2.0	<b>*</b> 1.094	129.0	LOS F	58.2	414.1	1.00	1.27	2.00	13.4
App	roach	932	2.0	932	2.0	1.094	88.3	LOS F	58.2	414.1	0.88	1.03	1.51	17.3
All ۱	/ehicles	3672	2.0	3672	2.0	1.097	91.8	LOS F	58.2	414.1	0.87	1.18	1.46	16.3

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.

V Site: 101 [Sat MD 2031 - Rocky Point Road - ■■ Network: 8 [Saturday Midday 2031 (Network Targo Road (Site Folder: Saturday Midday Folder: 2031)]

Site Category: (None) Give-Way (Two-Way)

Vehic	cle Mo	vement	Perfo	rman	се									
Mov ID	Turn	DEMA FLOV [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		BACK OF JEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	i: Rocky	y Point R	oad											
1	L2	31	2.0	31	2.0	0.222	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.5
2	T1	796	2.0	796	2.0	0.222	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	58.2
Appro	oach	826	2.0	826	2.0	0.222	0.2	NA	0.0	0.0	0.00	0.02	0.00	57.9
North	: Rocky	Point Ro	oad											
8	T1	880	2.0	880	2.0	0.500	0.4	LOS A	8.0	57.1	0.07	0.01	0.09	48.1
9	R2	19	2.0	19	2.0	0.500	11.1	LOS A	8.0	57.1	0.07	0.01	0.09	48.1
Appro	oach	899	2.0	899	2.0	0.500	0.7	NA	8.0	57.1	0.07	0.01	0.09	48.1
West	Targo	Road												
10	L2	8	2.0	8	2.0	0.039	5.9	LOS A	0.2	1.3	0.59	0.63	0.59	37.2
12	R2	3	2.0	3	2.0	0.039	31.1	LOS C	0.2	1.3	0.59	0.63	0.59	37.2
Appro	oach	12	2.0	12	2.0	0.039	12.8	LOS A	0.2	1.3	0.59	0.63	0.59	37.2
All Ve	hicles	1737	2.0	1737	2.0	0.500	0.5	NA	8.0	57.1	0.04	0.02	0.05	53.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

Site: 1 [Sat MD 2031 - Rocky Point Road (Site Folder: Saturday Midday 2031)] Network: 8 [Saturday Midday 2031 (Network Folder: 2031)]

Site Category: (None)

User-Given Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Two-Phase Reference Phase: Phase A Input Phase Sequence: A, B Output Phase Sequence: A, B

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEM/ FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	Effective A Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rocky	y Point R		VC(1)/11	70	V/C	300		VCII					KIII/II
2	T1	807	2.0	807	2.0	0.437	0.6	LOS A	1.3	9.6	0.04	0.03	0.04	59.4
Appro	oach	807	2.0	807	2.0	0.437	0.6	LOS A	1.3	9.6	0.04	0.03	0.04	59.4
North	: Rocky	Point R	oad											
8	T1	905	2.0	905	2.0	<b>*</b> 1.177	200.1	LOS F	129.1	919.3	1.00	2.02	2.33	8.0
Appro	oach	905	2.0	905	2.0	1.177	200.1	LOS F	129.1	919.3	1.00	2.02	2.33	8.0
All Ve	hicles	1713	2.0	1713	2.0	1.177	106.1	LOS F	129.1	919.3	0.55	1.08	1.25	13.8

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)

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Project: G:\Traffic\SIDRA 9.0\11771 Ramsgate\11771 Ramsgate Networks.sip9

## **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks

Summaries

Site: 101 [Thu PM 2031 + Dev - Ramsgate Road - Targo Road - The Promenade (Site

Folder: Weekday Afternoon 2031 +

Development)]

■■ Network: 9 [Weekday Afternoon 2031 +

Development (Network Folder: 2031 +

Development)]

**Template: Movement** 

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Convert Function Default

Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vohi	iclo Mo	vement	Porfo	rman	20									
Mov ID		DEM <i>A</i> FLO\	AND WS	ARRI FLO	VAL WS	Deg. Satn		Level of Service	QU	ACK OF EUE	Prop. Que	Effective A Stop	ver. No. Cycles	Aver. Speed
		[ Total veh/h	HV] %	[ Total veh/h		v/c	sec		[ Veh. veh	Dist ] m		Rate		km/h
Sout	h: The F	Promenac	de											
1	L2	209	2.0	209	2.0	0.418	42.3	LOS C	9.5	67.6	0.82	0.78	0.82	34.0
2	T1	42	2.0	42	2.0	0.151	48.3	LOS D	2.2	15.5	0.91	0.68	0.91	30.1
Appr	oach	252	2.0	252	2.0	0.418	43.3	LOS D	9.5	67.6	0.84	0.77	0.84	33.3
East:	: Ramso	gate Road	t											
4	L2	19	2.0	18	2.0	0.197	20.1	LOS B	7.1	50.5	0.62	0.54	0.62	40.1
5	T1	969	2.0	946	2.0	<b>*</b> 0.690	29.5	LOS C	38.9	277.0	0.90	0.82	0.90	36.2
Appr	oach	988	2.0	964 <sup>N1</sup>	2.0	0.690	29.3	LOSC	38.9	277.0	0.89	0.81	0.89	36.3
North	n: Targo	Road												
7	L2	52	2.0	52	2.0	0.194	53.4	LOS D	2.7	19.1	0.91	0.74	0.91	20.5
8	T1	42	2.0	42	2.0	0.687	54.8	LOS D	7.3	52.3	0.98	0.85	1.08	27.9
9	R2	84	2.0	84	2.0	<b>*</b> 0.687	59.3	LOS E	7.3	52.3	0.98	0.85	1.08	28.7
Appr	oach	178	2.0	178	2.0	0.687	56.5	LOS E	7.3	52.3	0.96	0.82	1.03	26.6
West	t: Rams	gate Roa	d											
10	L2	18	2.0	18	2.0	0.654	12.4	LOS A	19.6	139.5	0.47	0.44	0.47	48.9
11	T1	771	2.0	771	2.0	0.654	6.9	LOS A	19.6	139.5	0.47	0.44	0.47	48.9
12	R2	146	2.0	146	2.0	<b>*</b> 0.417	39.1	LOS C	7.3	51.8	0.89	0.82	0.89	34.1
Appr	oach	935	2.0	935	2.0	0.654	12.0	LOS A	19.6	139.5	0.54	0.50	0.54	43.8
All Ve	ehicles	2353	2.0	2329 <sup>N</sup>	2.0	0.690	26.0	LOS B	38.9	277.0	0.75	0.68	0.75	36.7

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.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

<sup>\*</sup> Critical Movement (Signal Timing)

Site: 101 [Thu PM 2031 + Dev - Rocky Point Road - Ramsgate Road (Site Folder: Weekday Afternoon 2031 + Development)]

■■ Network: 9 [Weekday Afternoon 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Optimum Cycle Time - Minimum Delay)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Vehi	cle Mo	vement	Perfo	rmano	се									
Mov ID	Turn	DEMA FLOV [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	h: Rock	y Point R	oad											
1 2	L2 T1	377 932	2.0 2.0	377 932	2.0 2.0	0.531 * 0.999	12.0 93.2	LOS A LOS F	7.8 39.6	55.3 282.0	0.39 0.88	0.69 1.25	0.39 1.51	43.3 14.9
Appr	oach	1308	2.0	1308	2.0	0.999	69.8	LOS E	39.6	282.0	0.74	1.09	1.18	18.4
East:	Ramsg	ate Road	l											
4 5	L2 T1	52 604	2.0 2.0	52 604	2.0 2.0	0.992 * 0.992	101.6 95.6	LOS F LOS F	26.2 28.1	186.6 200.0	1.00 1.00	1.25 1.25	1.63 1.63	22.9 14.6
Appr	oach	656	2.0	656	2.0	0.992	96.1	LOS F	28.1	200.0	1.00	1.25	1.63	15.4
North	n: Rocky	Point Ro	oad											
7 8	L2 T1	57 1536	2.0 2.0	57 1536	2.0 2.0	0.905 0.905	12.7 6.9	LOS A LOS A	19.1 19.1	136.3 136.3	0.39 0.39	0.43 0.41	0.44 0.43	47.8 50.4
Appr	oach	1593	2.0	1593	2.0	0.905	7.1	LOS A	19.1	136.3	0.39	0.41	0.43	50.3
West	: Rams	gate Roa	d											
10	L2	38	2.0	38	2.0	0.506	32.0	LOS C	16.0	114.2	0.83	0.73	0.83	9.5
11	T1	339	2.0	339	2.0	0.506	27.3	LOS B	16.0	114.2	0.83	0.73	0.83	33.5
12	R2	364	2.0	364	2.0	<b>*</b> 0.898	70.2	LOS E	16.0	114.2	1.00	1.15	1.28	19.6
Appr	oach	741	2.0	741	2.0	0.898	48.6	LOS D	16.0	114.2	0.91	0.94	1.05	24.2
All Ve	ehicles	4298	2.0	4298	2.0	0.999	46.9	LOS D	39.6	282.0	0.68	0.83	0.95	25.2

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.

Site: 101 [Thu PM 2031 + Dev - Rocky Point Road - Targo Road (Site Folder: Weekday

Afternoon 2031 + Development)]

■ Network: 9 [Weekday Afternoon 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vehi	cle Mo	vement	Perfo	rmano	:e									
Mov ID	Turn	DEM/ FLO\ [ Total veh/h		ARRI\ FLO\ [ Total veh/h	NS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South	n: Rock	y Point R	oad											
1 2 Appro	L2 T1 pach	149 813 962	2.0 2.0 2.0	139 754 893 <sup>N1</sup>	2.0 2.0 2.0	0.804 * 0.804 0.804	31.0 25.5 26.4	LOS C LOS B	20.2 20.8 20.8	144.1 147.8 147.8	0.81 0.82 0.82	0.77 0.75 0.76	0.84 0.84 0.84	12.1 35.2 33.1
	,	/ Point R												
8 9	T1 R2	1465 142	2.0 2.0		2.0	0.615 * 0.615	8.5 19.2	LOS A	21.7 21.7	154.8 154.8	0.52 0.66	0.52 0.71	0.52 0.66	46.4 40.5
Appro	oach	1607	2.0	1607	2.0	0.615	9.5	LOS A	21.7	154.8	0.54	0.54	0.54	45.8
West	: Targo	Road												
10	L2	117	2.0	117	2.0	0.110	15.9	LOS B	2.9	20.4	0.45	0.65	0.45	39.8
12	R2	154	2.0	154	2.0	* 0.800	66.4	LOS E	9.6	68.4	1.00	0.90	1.22	3.1
Appro	oach	271	2.0	271	2.0	0.800	44.6	LOS D	9.6	68.4	0.76	0.79	0.89	16.1
All Ve	hicles	2840	2.0	2771 <sup>N</sup>	2.1	0.804	18.3	LOS B	21.7	154.8	0.65	0.63	0.67	37.1

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)

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

V Site: 101 [Thu PM 2031 + Dev - Ramsgate Road - Site Access (Site Folder: Weekday Afternoon 2031 + Development)]

■■ Network: 9 [Weekday Afternoon 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehi	cle Mo	vement	Perfo	rmano	ce									
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
East:	Ramsg	jate Road	t											
5	T1	981	2.0	929	2.0	0.286	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Appro	oach	981	2.0	929 <sup>N1</sup>	2.0	0.286	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
West	: Rams	gate Roa	d											
10	L2	84	2.0	84	2.0	0.281	5.6	LOS A	0.0	0.0	0.00	0.17	0.00	55.5
11	T1	741	2.0	741	2.0	0.281	0.0	LOS A	9.6	68.2	0.00	0.05	0.00	57.9
Appro	oach	825	2.0	825	2.0	0.281	0.6	NA	9.6	68.2	0.00	0.06	0.00	57.2
All Ve	ehicles	1806	2.0	1754 <sup>N</sup>	2.1	0.286	0.3	NA	9.6	68.2	0.00	0.03	0.00	57.8

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.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

V Site: 101 [Thu PM 2031 + Dev - Targo Road - Site Access (Site Folder: Weekday Afternoon 2031 + Development)]

■■ Network: 9 [Weekday Afternoon 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF JEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South: Site Access														
1	L2	168	2.0	168	2.0	0.446	0.2	LOS A	1.8	12.9	0.15	0.19	0.15	27.9
3	R2	253	2.0	253	2.0	0.446	2.2	LOS A	1.8	12.9	0.15	0.19	0.15	19.7
Appro	oach	421	2.0	421	2.0	0.446	1.4	LOS A	1.8	12.9	0.15	0.19	0.15	23.7
East:	Targo F	Road												
4	L2	253	2.0	245	2.0	0.159	3.9	LOS A	0.0	0.0	0.00	0.45	0.00	45.3
5	T1	40	2.0	39	2.0	0.159	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	46.1
Appro	oach	293	2.0	283 <sup>N1</sup>	2.0	0.159	3.4	NA	0.0	0.0	0.00	0.45	0.00	45.4
West	: Targo	Road												
11	T1	18	2.0	18	2.0	0.075	1.0	LOS A	0.4	2.8	0.38	0.48	0.38	43.7
12	R2	84	2.0	84	2.0	0.075	5.8	LOS A	0.4	2.8	0.38	0.48	0.38	27.9
Appro	oach	102	2.0	102	2.0	0.075	5.0	NA	0.4	2.8	0.38	0.48	0.38	28.9
All Ve	hicles	816	2.0	807 <sup>N1</sup>	2.0	0.446	2.5	NA	1.8	12.9	0.12	0.32	0.12	28.5

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.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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# **USER REPORT FOR NETWORK SITE**

**All Movement Classes** 

Project: 11771 Ramsgate Networks

Template: Movement Summaries

Site: 101 [Sat MD 2031 + Dev - Ramsgate

Road - Targo Road - The Promenade (Site

Folder: Saturday Midday 2031 + Development)]

Publication 

Network: 10 [Saturday Midday 2031 + Development]

Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

**Phase Sequence: Convert Function Default** 

Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID		DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn		Level of Service		ACK OF EUE	Prop. Que	EffectiveA Stop	ver. No. Cycles	Aver. Speed
		[ Total veh/h	HV ] %	[ Total veh/h	HV]	v/c	sec		[ Veh. veh	Dist ] m		Rate	-,	km/h
Sout	h: The F	Promenac	le											
1	L2	336	2.0	336	2.0	0.537	32.8	LOS C	12.3	87.8	0.80	0.80	0.80	37.2
2	T1	47	2.0	47	2.0	0.181	41.8	LOSC	2.1	14.9	0.92	0.69	0.92	31.8
Appr	oach	383	2.0	383	2.0	0.537	33.9	LOS C	12.3	87.8	0.82	0.78	0.82	36.5
East	East: Ramsgate Road													
4	L2	26	2.0	26	2.0	0.212	24.2	LOS B	6.6	47.1	0.76	0.65	0.76	37.6
5	T1	845	2.0	845	2.0	0.743	33.3	LOS C	31.4	223.9	0.95	0.85	0.95	34.3
Appr	oach	872	2.0	872	2.0	0.743	33.1	LOSC	31.4	223.9	0.95	0.85	0.95	34.4
North	h: Targo	Road												
7	L2	58	2.0	58	2.0	0.233	46.9	LOS D	2.6	18.4	0.93	0.74	0.93	22.1
8	T1	47	2.0	47	2.0	0.836	54.2	LOS D	7.7	55.0	1.00	1.00	1.37	28.0
9	R2	95	2.0	95	2.0	* 0.836	58.8	LOS E	7.7	55.0	1.00	1.00	1.37	28.8
Appr	oach	200	2.0	200	2.0	0.836	54.3	LOS D	7.7	55.0	0.98	0.93	1.24	27.2
Wes	t: Rams	gate Roa	d											
10	L2	38	2.0	38	2.0	0.879	22.7	LOS B	34.5	246.0	0.61	0.65	0.71	42.9
11	T1	958	2.0	958	2.0	<b>*</b> 0.879	17.2	LOS B	34.5	246.0	0.61	0.65	0.71	38.3
12	R2	267	2.0	267	2.0	0.571	37.4	LOS C	10.8	76.8	0.92	0.93	0.92	34.6
Appr	oach	1263	2.0	1263	2.0	0.879	21.6	LOS B	34.5	246.0	0.67	0.71	0.75	37.2
All V	ehicles	2718	2.0	2718	2.0	0.879	29.4	LOSC	34.5	246.0	0.80	0.78	0.86	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)

Site: 101 [Sat MD 2031 + Dev - Rocky Point Road - Ramsgate Road (Site Folder: Saturday Midday 2031 + Development)]

■■ Network: 10 [Saturday Midday 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time - Minimum Delay)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase C Input Phase Sequence: A, B\*, C Output Phase Sequence: A, B\*, C

(\* Variable Phase)

Vehicle Movement Performance														
Mov ID	Turn	DEMA FLO\ [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
Sout	y Point R	oad												
1	L2	304	2.0	304	2.0	0.277	13.4	LOS A	6.2	43.9	0.45	0.71	0.45	41.9
2	T1	883	2.0	883	2.0	* 0.892	44.6	LOS D	26.9	191.6	0.90	1.00	1.20	24.5
Appr	oach	1187	2.0	1187	2.0	0.892	36.6	LOSC	26.9	191.6	0.79	0.92	1.01	27.5
East	East: Ramsgate Road													
4	L2	93	2.0	93	2.0	0.924	70.5	LOS F	21.6	153.7	1.00	1.12	1.42	29.4
5	T1	661	2.0	661	2.0	* 0.924	59.4	LOS E	23.9	170.4	1.00	1.13	1.41	20.4
Appr	oach	754	2.0	754	2.0	0.924	60.8	LOS E	23.9	170.4	1.00	1.12	1.41	21.9
North	n: Rocky	/ Point Ro	oad											
7	L2	103	2.0	103	2.0	0.752	17.2	LOS B	14.5	103.0	0.60	0.59	0.61	42.9
8	T1	964	2.0	964	2.0	0.752	13.1	LOS A	14.5	103.0	0.59	0.55	0.59	45.8
Appr	oach	1067	2.0	1067	2.0	0.752	13.5	LOS A	14.5	103.0	0.59	0.55	0.59	45.5
Wes	t: Rams	gate Roa	d											
10	L2	69	2.0	69	2.0	0.636	24.3	LOS B	16.0	114.2	0.72	0.66	0.72	12.3
11	T1	488	2.0	488	2.0	0.636	19.6	LOS B	16.0	114.2	0.72	0.66	0.72	38.1
12	R2	347	2.0	347	2.0	<b>*</b> 0.813	50.1	LOS D	15.4	109.7	1.00	1.06	1.15	24.2
Appr	oach	905	2.0	905	2.0	0.813	31.7	LOS C	16.0	114.2	0.83	0.82	0.88	30.2
All V	ehicles	3914	2.0	3914	2.0	0.924	33.8	LOSC	26.9	191.6	0.78	0.84	0.94	30.1

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)

Site: 101 [Sat MD 2031 + Dev - Rocky Point Road - Targo Road (Site Folder: Saturday

Midday 2031 + Development)]

■■ Network: 10 [Saturday Midday 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Network Optimum Cycle Time -

Minimum Delay)

Timings based on settings in the Network Timing dialog Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: Split Phasing Reference Phase: Phase A Input Phase Sequence: A, B, C Output Phase Sequence: A, B, C

Vehicle Movement Performance														
Mov ID	Turn	DEMA FLOV [ Total veh/h		ARRI FLO\ [ Total veh/h	WS HV]	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BA QUE [ Veh. veh		Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	178	2.0	178	2.0	0.746	21.2	LOS B	14.5	103.4	0.68	0.68	0.69	17.0
2	T1	759	2.0	759	2.0	* 0.746	16.1	LOS B	15.2	108.1	0.69	0.64	0.70	41.5
Appro	oach	937	2.0	937	2.0	0.746	17.0	LOS B	15.2	108.1	0.69	0.65	0.69	39.1
North	: Rocky	Point Ro	oad											
8	T1	843	2.0	843	2.0	0.543	9.7	LOS A	13.4	95.3	0.57	0.54	0.57	44.9
9	R2	166	2.0	166	2.0	* 0.543	22.0	LOS B	13.4	95.3	0.74	0.76	0.74	37.2
Appro	oach	1009	2.0	1009	2.0	0.543	11.7	LOS A	13.4	95.3	0.60	0.58	0.60	43.4
West	: Targo	Road												
10	L2	133	2.0	133	2.0	0.138	17.3	LOS B	3.2	22.6	0.53	0.68	0.53	38.8
12	R2	172	2.0	172	2.0	<b>*</b> 0.748	51.8	LOS D	8.8	62.3	1.00	0.89	1.16	3.9
Appro	oach	304	2.0	304	2.0	0.748	36.8	LOSC	8.8	62.3	0.79	0.80	0.88	18.5
All Ve	hicles	2251	2.0	2251	2.0	0.748	17.3	LOS B	15.2	108.1	0.66	0.64	0.68	37.6

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)

V Site: 101 [Sat MD 2031 + Dev - Ramsgate Road - Site Access (Site Folder: Saturday Midday 2031 + Development)]

■■ Network: 10 [Saturday Midday 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehi	Vehicle Movement Performance														
Mov ID	Turn	DEMA FLOV [ Total veh/h		ARRI FLO' [ Total veh/h	WS HV]	Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh	ACK OF EUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h	
East:	East: Ramsgate Road														
5	T1	965	2.0	965	2.0	0.268	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8	
Appro	oach	965	2.0	965	2.0	0.268	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8	
West	: Rams	gate Roa	d												
10	L2	55	2.0	55	2.0	0.330	5.6	LOS A	0.9	6.6	0.00	0.05	0.00	56.8	
11	T1	921	2.0	921	2.0	0.330	0.1	LOS A	0.9	6.6	0.00	0.03	0.00	58.5	
Appro	oach	976	2.0	976	2.0	0.330	0.4	NA	0.9	6.6	0.00	0.03	0.00	58.2	
All Ve	ehicles	1941	2.0	1941	2.0	0.330	0.2	NA	0.9	6.6	0.00	0.02	0.00	58.6	

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

V Site: 101 [Sat MD 2031 + Dev - Targo Road - Site Access (Site Folder: Saturday Midday 2031 + Development)]

■■ Network: 10 [Saturday Midday 2031 + Development (Network Folder: 2031 + Development)]

Site Category: (None) Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS [Total HV] veh/h %				Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF JEUE Dist ] m	Prop. Que	EffectiveA Stop Rate	ver. No. Cycles	Aver. Speed km/h
South: Site Access														
1	L2	189	2.0	189	2.0	0.512	0.7	LOS A	2.8	20.1	0.19	0.25	0.22	27.8
3	R2	295	2.0	295	2.0	0.512	3.0	LOS A	2.8	20.1	0.19	0.25	0.22	19.6
Appro	oach	484	2.0	484	2.0	0.512	2.1	LOS A	2.8	20.1	0.19	0.25	0.22	23.4
East:	Targo F	Road												
4	L2	295	2.0	295	2.0	0.193	3.9	LOS A	0.0	0.0	0.00	0.45	0.00	45.3
5	T1	51	2.0	51	2.0	0.193	0.0	LOS A	0.0	0.0	0.00	0.45	0.00	46.2
Appro	oach	345	2.0	345	2.0	0.193	3.3	NA	0.0	0.0	0.00	0.45	0.00	45.5
West	: Targo	Road												
11	T1	12	2.0	12	2.0	0.081	1.3	LOS A	0.4	3.0	0.43	0.53	0.43	43.3
12	R2	95	2.0	95	2.0	0.081	6.1	LOS A	0.4	3.0	0.43	0.53	0.43	27.8
Appro	oach	106	2.0	106	2.0	0.081	5.6	NA	0.4	3.0	0.43	0.53	0.43	28.4
All Ve	ehicles	936	2.0	936	2.0	0.512	3.0	NA	2.8	20.1	0.15	0.35	0.16	28.4

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.

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# ATTACHMENT B

LETTER FROM TfNSW (Dated 2<sup>nd</sup> October 2020)



2 October 2020

TfNSW Reference: SYD17/00417/03

Michael Lee Director, MLA Transport Planning Zenith Towers, Tower A, Level 20 821 Pacific Highway, Chatswood NSW 2067

Dear Michael,

# PLANNING PROPOSAL FOR PROPOSED MIXED USE DEVELOPMENT – 193-201 ROCKY POINT ROAD, 2-6 TARGO ROAD & 66-68 RAMSGATE ROAD, RAMSGATE

Transport for NSW (TfNSW) appreciates the opportunity to provide early comment on the above pre-Gateway proposal which was referred to us by correspondence dated 17 July 2020.

It is noted that the traffic and parking assessment report relates to the planning proposal for a mixed use development located at 193-201 Rocky Point Road, 2-6 Targo Road, and 66-68 Ramsgate Road, Ramsgate. The planning proposal seeks to rezone the site from R3 Medium Density & B2 Local Centre to B2 Local Centre and increase the FSR from 1.5:1 and 2.5:1 to approximately 3.2:1 across the site, to facilitate a higher density residential development with ground floor and lower ground floor retail shops, supermarket and commercial uses.

TfNSWs' preliminary comments on the proposal are provided in **Attachment A** and the SIDRA model review comments are provided in **Attachment B** for your consideration, noting we require further information to fully assess access constraints and proposed mitigation measures. We request that these matters are addressed prior to public exhibition of the planning proposal (following the issue of a Gateway determination). A binding agreement may be required to ensure the delivery of any State/regional road mitigation works to support the future development and should be exhibited with the planning proposal should it proceed.

Should you have any questions or further enquiries in relation to this matter, Rachel Davis would be pleased to take your call on phone (02) 8849 2702 or email: development.sydney@transport.nsw.gov.au

Yours sincerely,

**Cheramie Marsden** 

/ Wanden

**Senior Manager Strategic Land Use** 

Land Use, Networks & Development, Greater Sydney Division

# Attachment A: TfNSW Comments on 193-201 Rocky Point Road, 2-6 Targo Road & 66-68 Ramsgate Road, Ramsgate Planning Proposal (pre-Gateway)

Please note that the comments provided below are of a preliminary nature. They are not to be interpreted as binding upon TfNSW and may change following review of the formal planning proposal referred from the appropriate planning authority.

It is strongly recommended the proponent seeks the appropriate preliminary approvals on the proposal from Council and the Department of Planning, Industry and Environment prior to commencing further detailed studies.

TfNSW provides the following comments on the planning proposal:

# **Traffic and Parking Impact Assessment Report**

The report shows future base with development compared to future base case without development, which is not an adequate comparison. The report should show existing compared to existing with development, and show what improvements are proposed for the intersection of Ramsgate Road and Rocky Point Road intersection to maintain existing Back of Queue/delays rather than overall intersection LoS (Level of Service).

# **Traffic Signals**

The Traffic Signal Warrant Assessment is limited in detail. It should be noted that meeting a warrant means consideration may be given for a signalised intersection, rather than evidence for the requirement of a signalised intersection. Assessments should be undertaken of alternative arrangements at the intersection of Rocky Point Road and Targo Road, as well as the intersection of Ramsgate Road and Targo Road. This would include a channelised right turn, basic right turn arrangement and/or right turn restrictions, in order to provide a comparison and determine whether signals are the optimum treatment.

Furthermore, additional signals on Rocky Point Road when the report states that the southbound queues on Rocky Point Road extend past Targo Road ,would mean further queuing on Rocky Point Road. This cannot be supported without justification for signals which is to be supplemented by road widening to ensure the network has adequate capacity to cater for the proposed traffic demand.

### Car Parking

According to the submitted documents we note the current parking rates (minimum) proposed are summarised by Table 4.1, totalling a minimum of 475 car parking spaces including 265 residential spaces, 39 residential visitor spaces and 171 retail customer spaces. The non-residential minimum parking rates should be reviewed and updated to be in accordance with Kogarah City Council Development Control Plan (DCP) 2013, highlighting supermarket parking rates as 1 space/20m² and speciality stores as 1 space/25m². Consideration of suitable maximum car parking controls including on-street parking for the subject site should occur, to promote the use of public transport and limit reliance on private vehicles.

Feedback on the traffic models and other specific documents provided for review that require addressing, are detailed in **Attachment B**.

# ATTACHMENT C

SUMMARY OF MEETING WITH TINSW

# **Tim Rogers**

From: Tim Rogers

Sent: Tuesday, 7 September 2021 11:58 AM

To: James Hall (James.HALL@transport.nsw.gov.au); Dipen Nathwani

(Dipen.Nathwani@transport.nsw.gov.au)

Cc: Nicholas Steele (Contractor) (nsteele1@woolworths.com.au); Kim Zoljalali

(Kim.Zoljalali@timeplace.com.au)

**Subject:** Ramsgate PP - Summary of Meeting with TfNSW (9 July 2021) **Attachments:** fig 1 210603 (lost parking spaces).pdf; LILO Driveway.pdf

# James/Dipen

Please find below a summary of our meeting on 9 July 2021 to discuss traffic aspects of the planning proposal. I have included your comments received on 19 August and included the 2 attachments.

Planning Proposal - 193-201 Rocky Point Rd, 66-68 Ramsgate Rd and 2-6 Targo Rd, Ramsgate Summary of Meeting with TfNSW 2pm Friday 9 July 2021

## **Attendees**

Tim Rogers (TR) – CBRK
Nick Steele (NS) – Woolworths
Vijay Prabhu (VP) – Urbis
Kim Zoljalai (KZ) – Time & Place
Marcus Lewin (ML) - Time & Place
James Hall (JH) – TfNSW
Dipen Nathwani (DP) – TfNSW

- TR gave an overview of the new planning proposal with reference to the matters raised by TfNSW on the previous planning proposal in its letter dated 2 October 2020.
- TR advised the following access arrangements/road works
  - o Car park access on Ramsgate Road (left in/left out)
  - Car park access on Targo Road (all movements)
  - o Loading dock access on Targo Road (left in/right out)
  - o Traffic signals at intersection of Targo Road/Rocky Point Road (all movements) the existing pedestrian signals on Rocky Point Road (north of Targo Road) would be relocated to Targo Road.
  - Traffic signals at intersection of Targo Road/Ramsgate Road (no right turn into Targo Road)
- JH advised that TfNSW did not object to left in ingress from Ramsgate Road. TR noted that a median could not be provided in Ramsgate Road and that left in would managed by the design of the driveway (see attached example provided by TfNSW on another project).
- JH advised that TFNSW would not support left out from the development onto Ramsgate Road due to
  proximity of access to intersection with Rocky Point Road, with queues on Ramsgate Road extending back
  past the site, and potential safety concerns regarding weaving movements resulting from traffic exiting the
  site. However, TFNSW may consider left out access for low traffic volumes such as service vehicles or
  residential traffic only, subject to a merit based traffic and road safety assessment.
- TR/NS advised that 12.5m trucks would be servicing the site, unlike 19m semi-trailers that were envisaged in the previous planning proposal. It was noted that typically around 15-25 deliveries to the site daily (including 4 to 6 by large trucks) and a turntable may be provided internally to ensure forward exit from the site.
- TR noted that traffic signals at intersection of Targo Road/Rocky Point Road are required to allow right turn out of Targo Road. Provision of traffic signals at this intersection would require removal some existing parking on Rocky Point Road and Targo Road (see attached plan). The relocation of the existing pedestrian signals may allow for reinstatement of some parking on Rocky Point Road. TR noted that parking on the eastern side of Rocky Point Road is located in the Bayside LGA, while the subject site is located in the

Georges River LGA. If traffic signals were provided would the removal of parking be addressed as part of a WAD? NS advised that parking on Rocky Point Road may be removed as part of the M6 works. JH/DP were not aware if this was the case. JH/DP would investigate on whether parking will removed as part of the M6 works and the process for removing parking as part of any traffic signals at the intersection of Targo Road/Rocky Point Road.

- TR noted that traffic signals at intersection of Targo Road/Ramsgate Road are required to allow traffic to travel to the west from the site. No right turn into Targo Road from Ramsgate Road (westbound) is proposed due to geometric constraints. JH agreed with banning this movement
- TR advised that TfNSW warrants for traffic signals would be satisfied at both proposed traffic signals (with no egress onto Ramsgate Road)
- JH noted that as per the previous TfNSW advice satisfying warrants does not guarantee traffic signals. Need to demonstrate that any new signals do not have a major impact on the operation of the classified roads.
- TR noted that preliminary modelling had found that in 2031, the intersection of Ramsgate Road/Rocky Point Road (without development) operates at or near capacity in the peak periods. Does TfNSW have any plans to upgrade this intersection given that no additional lanes/works are possible without land acquisition? Would the M6 reduce traffic through the intersection? JH/DP note aware of either of these issues. JH/DP advised that they would review and get back to us on these matters however it was unlikely traffic volumes at the intersection would be reduced once the Stage-1 M6 project becomes operational given that it terminates at the President Avenue, Kogarah. JH advised that it was unlikely that TfNSW would require the development to upgrade the intersection as third party land acquisition would be required.
- JH advised it is uncertain what impact Stage-2 M6 project will have on the surrounding area as investigation has not commenced. With regards to the road reserve on the southern side of Ramsgate Road at Rocky Point Road, it was advised that there are no at-grade intersection upgrades planned however the area is within the broader investigation area of the Stage-2 M6 project.
- TR advised that a updated traffic assessment was being prepared and would address the issues raised with the SIDRA modelling in the TFNSW letter dated 2 October 2020.
- DP asked whether updated traffic counts had been undertaken given concerns with previous counts. TR advised that no new counts had been undertaken due to impact of COVID. However concerns with previous counts have been addressed. On this basis it was agreed that the updated traffic assessment would be a preliminary assessment with further work undertaken (based on updated counts) at a later time (DA?).

## Regards

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Colston Budd Rogers & Kafes Pty Ltd

# LOSS OF PARKING FROM PROPOSED SIGNALS

Dillon Street

Rocky Point Road

Targo Road

SKETCH PLAN ONLY. PROPERTY BOUNDARIES, UTILITIES, KERBLINES & DIMENSIONS ARE SUBJECT TO SURVEY AND FINAL DESIGN. TRAFFIC MEASURES PROPOSED IN THIS PLAN ARE CONCEPT ONLY AND ARE SUBJECT TO FINAL DESIGN BY CIVIL ENGINEERS. THIS PLAN SHOULD NOT BE USED FOR COMPLIANCE CERTIFICATION OR FOR CONSTRUCTION.

Ramsgate Road

