FABCOT PTY LTD

UPDATED TRAFFIC IMPACT ASSESSMENT FOR PLANNING PROPOSAL FOR PROPOSED MIXED USE DEVELOPMENT, RAMSGATE

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Previous report dated December 2023

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1. INTRODUCTION

1.1 Colston Budd Rogers and Kafes Pty Ltd has been commissioned by Fabcot Pty Ltd to prepare an updated Traffic Impact Assessment (TIA) 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 to address matters raised by TfNSW and Council.

1.2 Traffic matters raised by TfNSW and Council with regard to the planning proposal have been addressed in this updated TIA with a summary provided in Sections 3.37 to 3.46 and Attachments A and B.

1.3 In August 2022, the Sydney South Planning Panel recommended that a planning proposal for a mixed-use development on the site (185 units and 7,644m^2 retail) not proceed to a Gateway determination. While the panel considered the planning proposal had strategic merit, it did not have site specific merit. One of the site specific merit issues related to traffic impacts:

There was inadequate justification provided to demonstrate that the traffic impacts of the proposal could be managed to support the increased density and uses on this site, in particular, the scale of the intensification of use associated with the extent of the full line supermarket, the mini major, and associated ground floor retail were of concern.

1.4 This planning proposal responds to the above concern with a reduced scale of development (141 units and 3,978m^2 retail), which represents some 50% reduction in retail area (and some 24% reduction in the number of residential units) compared to the previous (2022) planning proposal.

1.5 In response to other traffic matters raised with previous (2022) planning proposal, the following changes have been made to this planning proposal:

- truck access relocated to Ramsgate Road, resulting in no heavy vehicles accessing the site via residential streets;
- all car park access from Targo Road (Ramsgate Road car park access removed); and
- Ramsgate Road access modified to separate and improve access to adjoining property to the east.

1.6 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.

2. 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 In order to gauge traffic conditions, counts were undertaken during weekday morning, afternoon and Saturday midday peak periods, which are busy times for the road network when traffic from the proposed development will combine with other commuter and retail traffic. Traffic counts were undertaken on Saturday 14 October (between 11:00am - 1:00pm) and Thursday October 19 (between 7:00am – 9:00am and 4:00pm – 6:00pm) at the following intersections:

- The Promenade/Torwood Street;
- Ramsgate Road/Targo Road/The Promenade.
- Ramsgate Road/Dalkeith Street;
- Rocky Point Road/Ramsgate Road;
- Rocky Point Road/Targo Road;
- Rocky Point Road/Hastings Street;
- Hastings Street/Burgess Street; and
- Burgess Street/Targo Road.

2.6 Traffic flows are shown in Figures 2 to 4 and summarised in Table 2.1.

Table 2.1: Existing Hourly Two-Way Traffic Flows			
Location	**Weekday AM**	**Weekday PM**	**Saturday Midday**
Rocky Point Road			
- north of Hastings Street	1931	2055	1443
- north of Targo Road	1936	2032	1448
- north of Ramsgate Road	1922	2047	1426
- south Ramsgate Road	2551	2599	1958
Targo Road			
- west Rocky Point Road	50	69	77
- west Burgess Street	50	83	93
- north of Ramsgate Road	51	81	84
Ramsgate Road			
- east of Rocky Point Road	783	908	1026
- west of Rocky Point Road	1426	1434	1586
- west of Dalkeith Street	1432	1471	1590
- west of Targo Road	1803	1878	2050
The Promenade			
- south of Ramsgate Road	411	464	490
- south of Torwood Street	429	499	507
Burgess Street			
- north of Hastings Street	69	86	89
- north of Targo Road	57	77	95
- south of Targo Road	3	7	11
Hastings Street			
- west of Rocky Point Road	43	63	51
Dalkeith Street			
- south of Ramsgate Road	48	133	95
Torwood Street			
- east of The Promenade	29	51	43

2.8. Examination of Table 2.1 reveals that:

- Rocky Point Road carried some 1,425 to 2,600 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods. Traffic flows were highest south of Ramsgate Road;

- Targo Road carried some 50 to 95 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods;

- Ramsgate Road carried some 785 to 2,050 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods. Traffic flows were highest west of Targo Road;

- The Promenade carried some 410 to 505 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods;

- Dalkeith Street carried some 50 to 135 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods;

- Torwood Street carried some 30 to 50 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods;

- Hastings Street carried some 45 to 65 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods; and

- Burgess Street carried some 5 to 95 vehicles per hour (two way) during the weekday morning, afternoon and Saturday midday peak periods.

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:

0 to 14	=	“A”	Good
15 to 28	=	“B”	Good with minimal delays and spare capacity
29 to 42	=	“C”	Satisfactory with spare capacity
43 to 56	=	“D”	Satisfactory but operating near capacity
57 to 70	=	“E”	At capacity and incidents will cause excessive delays. Roundabouts require other control mode.
>70	=	"F"	Unsatisfactory and requires additional capacity

- 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
>70	=	"F"	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 priority controlled intersection of Hastings Street and Rocky Point Road operates with average delays (for the movement with the highest delay, right turn out of Hastings Street) 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 Hastings Street 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 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 signalised intersection of Rocky Point Road and Ramsgate Road operates with average delays of less than 35 seconds per vehicle during weekday morning, afternoon and Saturday midday peak periods. This represents level of service C, a satisfactory level of service;

- the priority controlled intersection of Ramsgate Road and Dalkeith Street operates with average delays (for the movement with the highest delay, right turn out of Dalkeith Street) of some than 50 seconds per vehicle during weekday morning, afternoon and Saturday midday peak periods. This represents level of service D, nearing capacity;

- the priority controlled intersection of Ramsgate Road, The Promenade and Targo Road operates with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during weekday morning, afternoon and Saturday midday peak periods. This represents level of service A/B, a good level of service;

- the priority controlled intersection of The Promenade and Torwood Street operates with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during weekday morning, afternoon and Saturday midday peak periods. This represents level of service A/B, a good level of service;

- the priority controlled intersection of Burgess Street and Targo Road operates with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during weekday morning, afternoon and Saturday midday peak periods. This represents level of service A.B, a good level of service; and

- the roundabout controlled intersection of Burgess Street and Hastings Street operates with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during weekday morning, afternoon and Saturday midday peak periods. This represents level of service A/B, a good level of service.

2.13 SIDRA movement summaries are provided in Attachment B.

Public Transport

2.14 Transport NSW operates bus services along Rocky Point Road and Ramsgate Road. These services connect the site, to the Kogarah, Sans Souci, Dolls Point, Rockdale and Miranda. Services include:

- Route 476: Rockdale to Dolls Point;
- Route 477: Rockdale to Miranda (Loop Service); and
- Route 947: Kogarah to Hurstville via Dolls Point.

2.15 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.

2.16 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:

- 141 units (30 x 1 bed, 89 x 2 bed and 22 x 3 bed);
- 3,719m^2 GFA supermarket;
- 152m^2 GFA Direct to Boot (DTB); and
- 125m^2 GFA BWS.

3.2 Access is proposed from Targo Road. Loading dock access is proposed from Ramsgate Road. Basement parking will be provided.

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;
- response to matters raised by TfNSW;
- response to matters raised by Council: and
- summary.

Public Transport

3.4 As noted in Chapter 2, the site is accessible by buses operating along Rocky Point Road and Ramsgate 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 use 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.

3.7 As part of the proposed traffic signals, the bus stops on both sides of Ramsgate Road, either side of the intersection of Targo Road, and the bus stop located on the western side of Rocky Point Road (north of the existing pedestrian signals) may need to be relocated. The possible relocation of these bus stops would be undertaken in consultation with TfNSW, Council and the bus operators as part a future DA. .

Parking Provision

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

- residential units:
    - 1 space per one or two bed unit;
    - 2 spaces per 3 bed unit; and
    - 1 visitor space per 5 units.
- retail premises (> 800 metres from a railway station) – 1 space per 40m^2 GFA;
- supermarkets – 1 space per 20m^2 GLA; and
- direct to boot (DTB) – 1 space per 100m^2 GFA.

3.9 Applying these rates the proposed development would require 393 spaces (201 residential spaces (including 28 visitor spaces), 3 retail spaces, 186 supermarket spaces and 2 DTB spaces).

3.10 By way of comparison, TfNSW guidelines, which are based on extensive surveys, recommend the following rates;

- High density residential units within metropolitan areas:
    - 0.6 spaces per one bed units;
    - 0.9 spaces per two bed units;
    - 1.4 spaces per 3 bed unit; and
    - 1 visitor space per 5 units.
- supermarkets – 4.2 space per 100m^2 GLA;
- specialty retail (BWS) – 4.5 spaces per 100m^2 GLA; and
- direct to boot (DTB) – 1 space per 300m^2 GFA.

3.11 Applying TfNSW Guidelines, the proposed development would require 320 spaces (157 residential spaces (including 28 visitor spaces), 6 retail spaces, 156 supermarket spaces and one DTB space). The provision of 437 parking spaces (192 retail spaces (Including 6 DTB spaces) and 245 residential spaces) satisfies Council and TfNSW guidelines plus the replacement of 21 on street parking spaces (to accommodate proposed traffic signals).

3.12 The DTB (six spaces) would be used by some 30 vehicles per hour, which would normally park in the car park. The shopper spaces in the car park have turnover of some 30 minutes duration. Hence the 30 vehicles per hour using the DTB reduce the required parking provision by 15. No reduction in parking has been accounted for as a result of the DTB facility.

3.13 DCP 2021 sets out the following rates for bicycle parking:

- retail premises – 1 space per 5 car spaces; and
- residential – 1 space per 3 dwellings plus 1 space per 10 dwellings (visitor).

3.14 Applying these rates, the proposed development would require 99 bicycle spaces (61 residential bicycle spaces (including 14 visitor spaces) and 38 retail bicycle spaces). A minimum of 99 bicycle spaces will be provided. Appropriate end of trip and storage facilities will be provided as set out in DCP 2021.

Access, Servicing and Internal Layout

3.15 Access to the car park is proposed via Targo Road. Parking will be in provided a multi-level basement. Loading dock access is provided via Ramsgate Road and is restricted to left in / left out. Truck access will be managed via a Loading Dock

Management Plan (LDMP) that sets out trucks routes and restricts access to left in/left out.

3.16 Access driveways and car parking areas will be designed to comply with AS2890.1 and AS2890.6 with respect to parking bay dimensions, aisle widths, ramp grades and height clearances.

3.17 Service areas will be designed to comply with AS2890.2. Service vehicles for the supermarket and BWS will be limited to trucks up to 12.5 metre long rigid trucks. The service areas will be designed such that all manoeuvring occurs on site, with a turn table provided to allow trucks to enter and depart the site in forward direction. Servicing of the residential component will be undertaken by vehicles up to 8.8 medium rigid trucks with the provision of a separate loading bay.

3.18 The access driveway to the loading docks will be designed to allow the largest truck to turn from the kerbside lane off Ramsgate Road.

3.19 Detailed design of the access driveways, car park and service areas will be provided at DA stage.

3.20 With regards to access to the adjacent properties to the east, the concept plan shows access to the subject site along the eastern boundary to the loading dock. The driveway provides sufficient width for:

- truck to enter and depart the subject site without encroaching into the adjacent site; and
- a truck to enter the subject site when a car is exiting the adjacent site.

3.21 Vehicle swept paths are provided in Attachment D.

Traffic Effects

3.22 Traffic generated by the proposed development will have its greatest effects during the weekday morning, afternoon and Saturday peak periods.

3.23 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 141 residential units would generate some 40 vehicles per hour (two way) in the weekday morning, afternoon and Saturday midday peak hours.

3.24 TfNSW's "Guide to Traffic Generating Developments" indicates the following two-way peak hour traffic generation rates:

Weekday Afternoon

- supermarket – 15.5 vehicles per hour per 100m^2;
- specialty retail (BWS) - 4.6 vehicles per hour per 100m^2;

Saturday Midday

- supermarket – 14.7 vehicles per hour per 100m^2;
- specialty retail (BWS) - 10.7 vehicles per hour per 100m^2.

3.25 Using these rates the proposed supermarket/specialty shop would generate some 620 and 500 vehicles per hour (two-way) in the weekday afternoon and Saturday midday peak hours respectively. Traffic generated by the retail component in the weekday morning peak period would be half of the afternoon generation.

3.26 Based on the above, the proposed development would generate some 330, 660 and 540 vehicles per hour (two-way) in the weekday morning, afternoon and Saturday midday peak hours respectively. 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.

3.27 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 through movement from The Promenade into Targo Road (the right turn out of The Promenade would remain banned), 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. 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 (some 7 spaces in the AM peak period, some 14 spaces in the PM peak period and some 21 spaces at other times) on Rocky Point Road (between Ramsgate Road and Targo Road) to accommodate the new traffic signals at Targo Road (see Attachment E). To allow for southbound through traffic on Rocky Point Road to bypass vehicles turning right into Targo Road, no parking restrictions would be required for 50 metres north of Targo Road outside of the weekday afternoon clearway.

3.28 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.*

3.29 A detailed warrant assessment is provided in Attachment A. Based on this assessment, the warrant for two new sets of traffic signals is met in accordance with TfNSW guidelines.

3.30 Development traffic has been assigned to the road network based on accessibility to the site, the catchment area and existing traffic flows as set out below.

- 30% from the north/northeast
- 25% from the south/southeast
- 20% from the west
- 10% from the east
- 10% from the northwest
- 5% from southwest

3.31 Due to the right turn ban from Ramsgate Road (eastbound) into Rocky Point Road (northbound), traffic accessing the site from the east would travel along Ramsgate Road, turn left into Dalkeith Street, right into Torwood Street, right into The Promenade and use the new traffic signals to access Targo Road.

3.32 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 to 4 and summarised in Table 3.1.

Table 3.1: Existing Weekday Morning, Afternoon & Saturday Midday + Development Two Way (sum of both directions) Traffic Flows

Location	Weekday AM		Weekday PM		Saturday	
	Ex	+Dev	Ex	+Dev	Ex	+Dev
Rocky Point Road						
- north of Hastings Street	1931	+80	2055	+155	1443	+130
- north of Targo Road	1936	+80	2032	+155	1448	+130
- north of Ramsgate Road	1922	+80	2047	+145	1426	+130
- south of Ramsgate Road	2551	+65	2599	+120	1958	+115
Targo Road						
- west of Rocky Point Road	50	+200	69	+400	77	+330
- west of site access	50	+130	69	+260	77	+210
- west of Burgess Street	50	+100	83	+200	93	+150
- north of Ramsgate Road	51	+100	81	+200	84	+150
Ramsgate Road						
- east of Rocky Point Road	783	+25	908	+45	1026	+30
- west of Rocky Point Road	1426	+10	1434	+20	1586	+15
- west of Dalkeith Street	1432	-5	1471	-15	1590	-10
- west of Targo Road	1803	+65	1878	+115	2050	+85
The Promenade						
- south of Ramsgate Road	411	+30	464	+70	490	+55
- south of Torwood Street	429	+15	499	+35	507	+30
Burgess Street						
- north of Hastings Street	69	+30	86	+60	89	+50
- north of Targo Road	57	+30	77	+60	95	+50
- south of Targo Road	3	+0	7	+0	11	+0

Hastings Street - west of Rocky Point Road	43	+0	63	+0	51	+0
Dalkeith Street - south of Ramsgate Road	48	+15	133	+35	95	+25
Torwood Street - east of The Promenade	29	+15	51	+35	43	+25
Site Access - south of Targo Road	0	+330	0	+660	0	+540

3.33 Examination of Table 3.1 shows that:

- traffic flows on Rocky Point Road would increase by some 65 to 155 vehicles per hour (two way) during peak periods;
- traffic flows on the Ramsgate Road would increase by some 25 to 115 vehicles per hour (two way) during the peak periods;

- traffic flows in the short section of Targo Road (between the site access and Rocky Point Road) would increase by some 200 and 400 vehicles per hour (two way) during peak periods. West of the site access, the increase in traffic is lower at some 130 to 260 vehicles per hour (two way);

- traffic on The Promenade would increase by some 15 and 70 vehicles per hour (two way) during peak periods;

- traffic on Dalkeith Street would increase by some 15 and 35 vehicles per hour (two way) during peak periods;

- traffic on Burgess Street would increase by some 30 to 60 vehicles per hour (two way) during peak periods;

- the site access would generate some 330 to 660 vehicles per hour (two-way) during the peak periods.

3.34 The intersections previously analysed in Chapter 2 have been reanalysed with SIDRA with the additional development traffic flows shown in Figures 2 to 4 and the proposed modifications to the road network set out in Section 3.26. The analysis found that:

- the priority controlled intersection of Hastings Street and Rocky Point Road will continue to operate with average delays (for the movement with the highest delay, right turn out of Hastings Street) 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 Hastings Street 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 signalised intersection of Rocky Point Road and Targo Road will operate with average of less than 20 seconds per vehicle during the weekday afternoon and Saturday midday peak periods. This represents level of service B, an acceptable level of service;

- the signalised intersection of Rocky Point Road and Ramsgate Road will continue to operate with average delays of less than 35 seconds per vehicle during weekday afternoon and Saturday midday peak periods. This represents level of service C, a satisfactory level of service;

- the priority controlled intersection of Ramsgate Road and Dalkeith Street will continue to operate with average delays (for the movement with the highest delay, right turn out of Dalkeith Street) of less than 35 seconds per vehicle during weekday afternoon and Saturday midday peak periods. This represents level of service C, a satisfactory level of service;

- the signalised intersection of Ramsgate Road, The Promenade and Targo Road operates with average delays (for the movement with the highest delay) of less than 28 seconds per vehicle during weekday afternoon and Saturday midday peak periods. This represents level of service B, an acceptable level of service;

- the priority controlled intersection of The Promenade and Torwood Street will continue to operate with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during weekday afternoon and Saturday midday peak periods. This represents level of service A/B, a good level of service;

- the priority controlled intersection of Burgess Street and Targo Road will continue to operate with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during weekday afternoon and Saturday midday peak periods. This represents level of service A/B, a good level of service;

- the roundabout controlled intersection of Burgess Street and Hastings Street will continue to operate with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during weekday afternoon and Saturday midday peak periods. This represents level of service A/B, a good level of service; and

- the site access will operate with average delays (for the movement with the highest delay) of less than 15 seconds per vehicle during the weekday afternoon and Saturday midday peak periods. This represents a level of service A/B, a good level of service.

3.35 Therefore, with the proposed traffic management measures set out in Section 3.26, the adjacent road network will accommodate the additional traffic generated by the proposed development.

3.36 With regards to the proposed traffic signals at the intersection of Targo Road/Rocky Point Road, for the previous planning proposal, TfNSW had advised that the right turn into Targo Road should be banned in weekday PM peak period (3pm to 7pm). With the smaller scale of development (and hence lower traffic generation) the SIDRA modelling has shown that no right turn ban is required.

Response to Matters Raised by TfNSW

3.37 The updated TIA responds to traffic matters raised by TfNSW. Traffic matters raised by TfNSW in a letter dated 15 April 2024 have been addressed in this updated traffic report with a summary provided in Table B1 in Attachment B.

3.38 Further traffic matters were raised by TfNSW in a letter dated 17 October 2024. In the letter dated 17 October 2024, TfNSW confirms that the warrants for traffic signals are met and provides in-principal support for the proposed signals subject to the following:

Rocky Point Road/Targo Road Intersection

- *The proponent can demonstrate that the site can be operated safely and efficiently.*
- *Both Bayside Council and Georges River Council does not object to the loss of parking on Rocky Point Road.*
- *Consultation is undertaken with the community / businesses on the eastern side of Rocky Point Road regarding restricting existing driveway opposite Targo Road to left in/left out (LILO) only.*
- *Sidra modelling is refined addressing the issues raised in Appendix B and submitted to TfNSW for review post exhibition of any planning proposal.*

3.39 With respect to these matters:

- the updated SIDRA modelling shows that the traffic signals would operate at a satisfactory or better level of service with all movements permitted at the intersection;
- with parking on the eastern side of Rocky Point Road banned for some 50 metres north of Targo Road, the right turn movement would not block southbound through traffic;
- separate directional splits for the retail and residential components;
- loss of on street parking has been updated as shown in Appendix E;
- further consultation will be undertaken regarding the loss of on street parking should the Planning Proposal go on exhibition, noting all parking lost, will be replaced within the proposed development;
- SIDRA modelling has been updated to address the matters raised in Annexure B of the TfNSW letter.

Ramsgate Road/Targo Road/The Promenade Intersection

- *The proponent can demonstrate that the site can be operated safely and efficiently.*
- *Sidra modelling is refined addressing the issues raised in Appendix B and submitted to TfNSW for review post exhibition of any planning proposal*.

3.40 With respect to these matters:

- the updated SIDRA modelling shows that the traffic signals would operate at a satisfactory or better level of service with all movements permitted at the intersection;
- separate directional splits for the retail and residential components; and
- SIDRA modelling has been updated to address the matters raised in Annexure B of the TfNSW letter.

Response to Matters Raised by Council

3.41 The updated TIA responds to traffic matters raised by Council. Traffic matters raised by Council in an email dated 22 April 2024 have been addressed in this updated traffic report with a summary provided in Table B1 in Attachment B.

3.42 Further traffic matters were raised by Council in its email of 19 December 2024 are summarized below along with our responses. It is also noted that in an email dated 22 January 2025, Council has advised that it supports the provision of the right turn into Targo Road from Rocky Point Road with the proposed traffic signals.

1. Loading Dock Access from Ramsgate Road

3.43 Council has requested that the dock access be modified so that trucks turning left off Ramsgate Road do so only from the kerb side lane (no straddling of the kerb and adjacent lane while turning). Updated swept paths show that truck turning left off Ramsgate Road as required by Council. Hence the suggested slip lane is not required.

2. Location of Building C Lobby

3.44 Council has requested that the lobby for Building C not front Ramsgate Road (or no access to the lobby be provided from Ramsgate Road) due to safety concerns as set out below.

- Persons entering/exiting the lobby will be close proximity to vehicles accessing the loading dock
  Response: Not the case as the pedestrian access from Building C lobby is onto a forecourt that connects to the footpath on Ramsgate Road, hence no conflict;
- The loading dock driveway will be used as a drop off/pick up area for people accessing Building C
  Response: The driveway will be clearly signposted as access 24 hours and keep clear at all times;
- Potential for westbound vehicles on Ramsgate Road to stop opposite the site to drop off/pick up persons accessing Building C which would be unsafe **-**
  Response: The site provides appropriate resident and visitor parking on site for Building C.

3. Banning the Right Turn onto Ramsgate Road from Targo Road (with the new traffic signals)

3.45 Banning the right turn onto Targo Road defeats the primary purpose of the new signals (that is to allow the customers who have accessed the site from the west to return to the west by the most direct route). Banning the right turn would result in:

- lack of convenient access for customers;
- no requirement for the traffic signals as part of the planning proposal; and
- Increased traffic in residential streets to the north and west as traffic finds alternate routes to depart the site to return to the west (resulting in the outcome Council is trying to avoid by banning the right turn).

3.46 To address any increase in traffic Council had previously requested traffic calming measures in the local streets which Woolworths did not oppose as part of the Planning Proposal. This would complement existing traffic calming measures in Burgess Street (roundabouts with Hastings Road and Weeney Street) and the narrowness of Burgess Street (one traffic lane with cars parked on street) between Hastings Road and Targo Road. The following traffic calming measures could be implemented if required by Council:

- Roundabout at the intersection of Targo Road Burgess Street;
- Speed hump or road narrowing measure on:
    - Targo Road (between Burgess Street/Ramsgate Road and between Burgess Street/the access to the proposed development);
    - Burgess Street (between Hastings Road/Targo Road)

3.47 The above responses to the matters raised were discussed with Council officers in a meeting on 29 January 2025. At the meeting, Council advised that it was generally satisfied that the responses addressed the matters raised.

Summary

3.48 In summary, the main points relating to the traffic implications of the planning proposal are as follows:

i) the planning proposal responds to traffic matters raised with the previous (2022) planning proposal by:

- reducing the scale of development (some 24% reduction in the number of residential units and some 50% reduction in retail area) compared to the previous (2022) planning proposal;
- removing truck access from Targo Road; and
- separating and improving access to the adjoining property east of the site.

ii) the proposed development will be accessible by public transport;

iii) parking provision is appropriate satisfying both TfNSW and the DCP requirements;

iv) vehicular access, internal circulation and servicing arrangements will be provided in accordance with AS 2890.1, AS2890.6and AS 2890.2;

v) removal of parking along Rocky Point Road (between Targo Road and Ramsgate Road) is suggested to improve the operation of the Ramsgate Road/Rocky Point Road intersection;

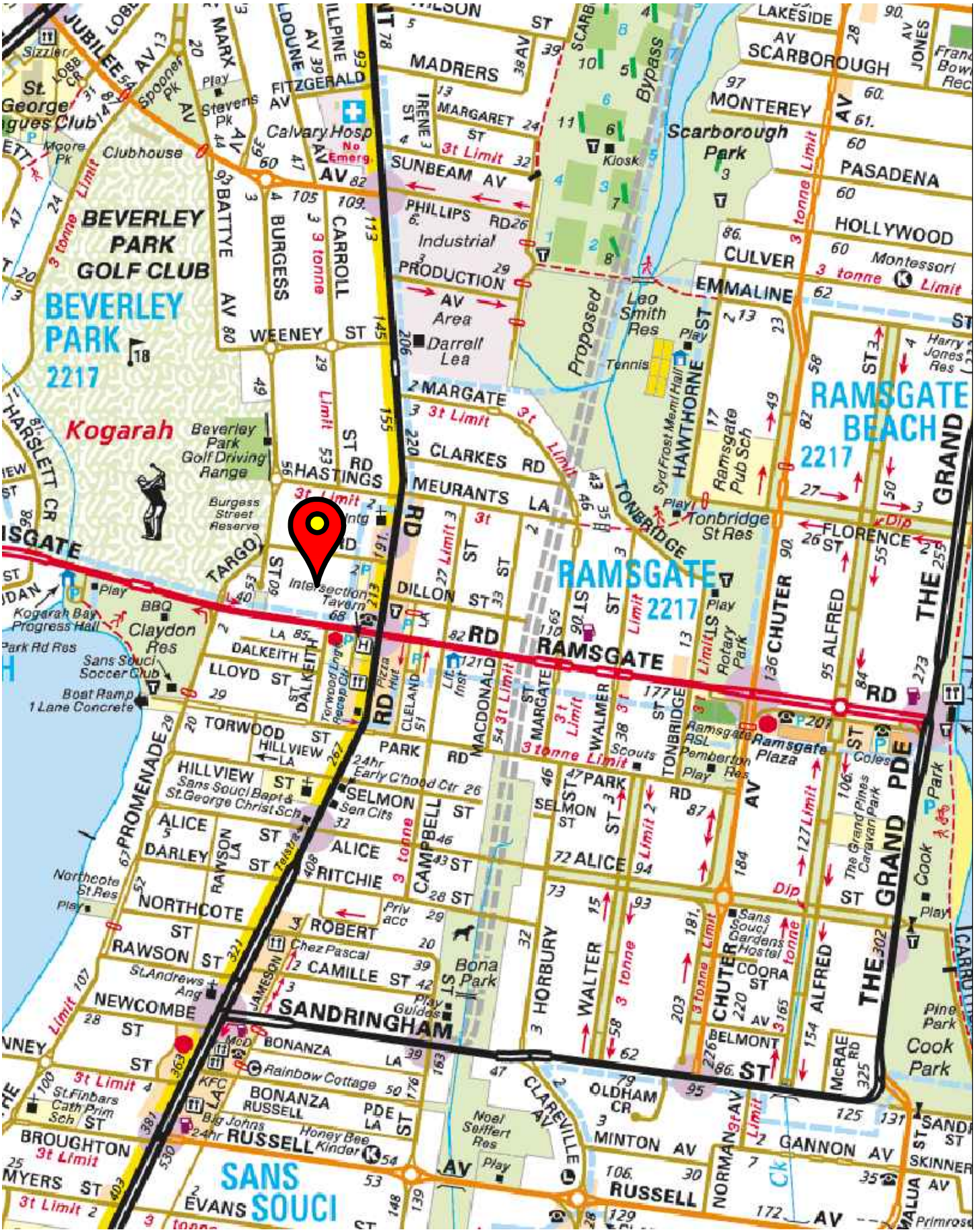
vi) traffic signals at the intersections of Targo Road/Rocky Road and Targo Road/Ramsgate Road are proposed to cater for traffic generated by the proposed development;

vii) 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;

viii) TfNSW warrants for traffic signals are satisfied;

ix) with the proposed modifications, the road network will be able to cater for the traffic generated by the proposed development; and

x) matters raised by TfNSW and Council have been addressed.

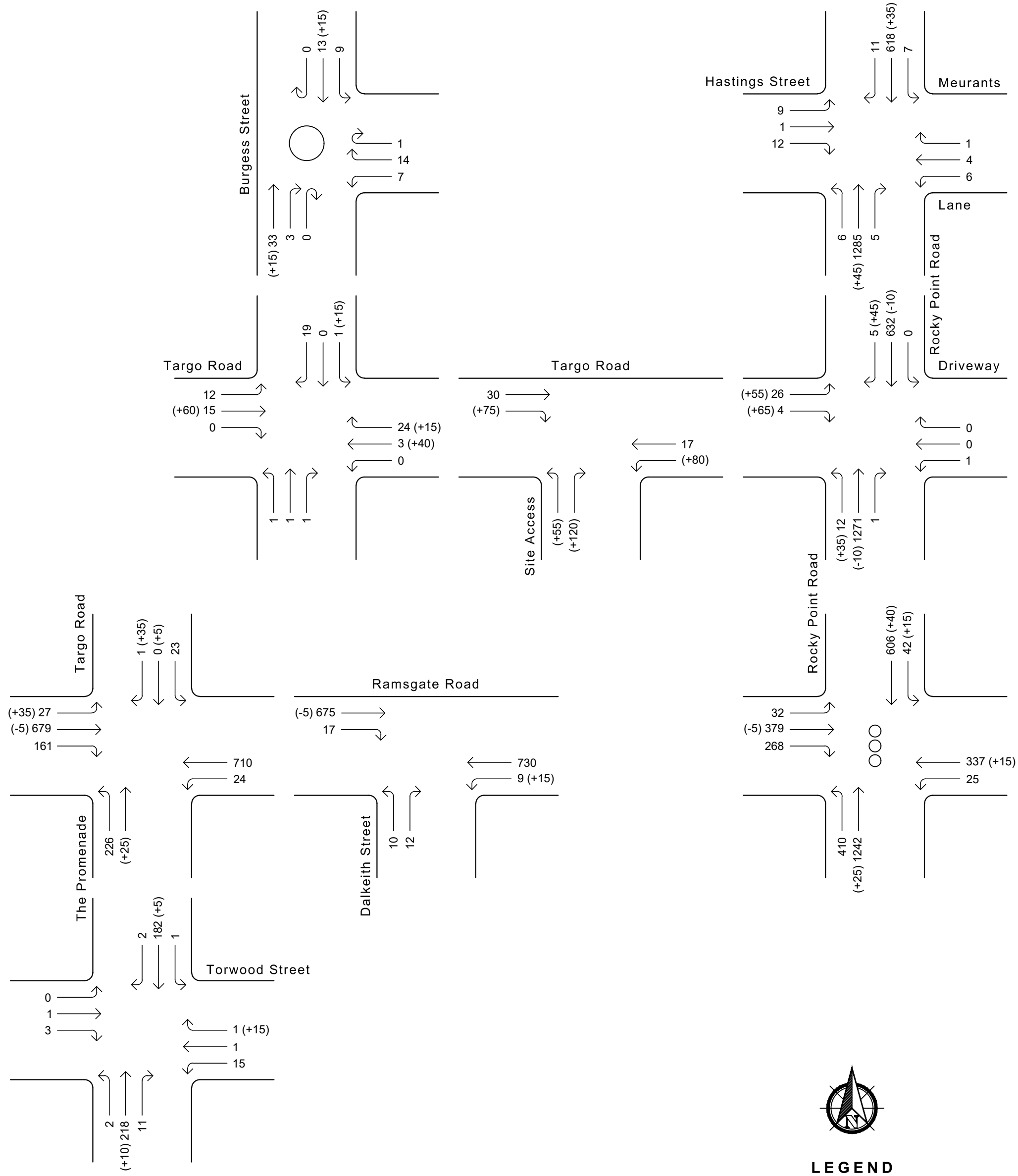


Location Plan

Colston Budd Rogers & Kafes Pty Ltd

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 28.01.2025

Figure 1



LEGEND

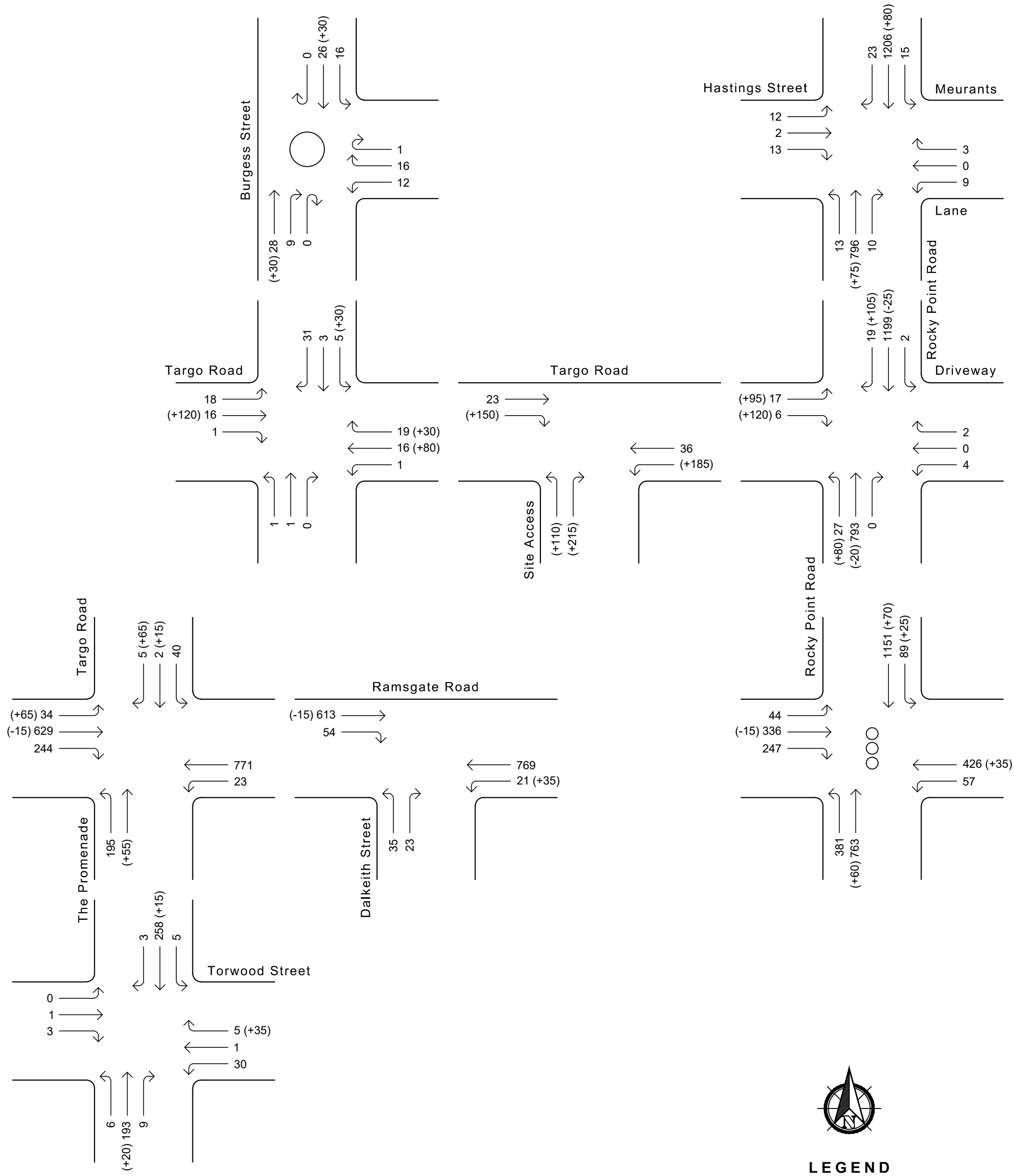
100 - Existing Peak Hour Traffic Flows
(+10) - Additional Development Traffic
- Traffic Signals
- Roundabout

Existing weekday morning peak hour traffic flows plus development traffic

Figure 2

Colston Budd Rogers & Kafes Pty Ltd

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 28.01.2025



LEGEND

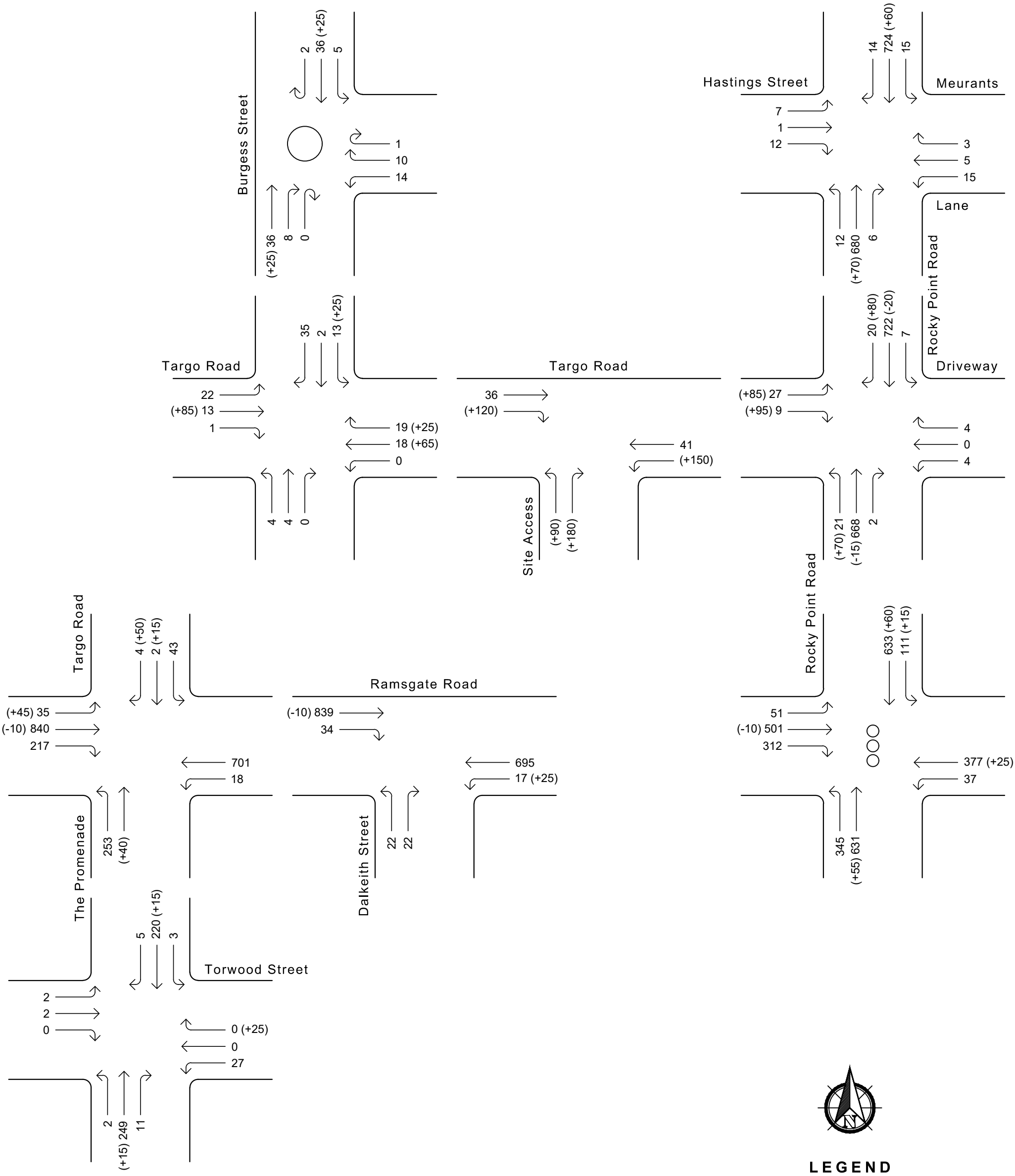
100 - Existing Peak Hour Traffic Flows
(+10) - Additional Development Traffic
- Traffic Signals
- Roundabout

Colston Budd Rogers & Kafes Pty Ltd

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 28.01.2025

Existing weekday afternoon peak hour traffic flows plus development traffic

Figure 3



LEGEND

100 - Existing Peak Hour Traffic Flows
(+10) - Additional Development Traffic
- Traffic Signals
- Roundabout

Existing Saturday midday peak hour traffic flows plus development traffic

Figure 4

Colston Budd Rogers & Kafes Pty Ltd

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 28.01.2025

ATTACHMENT A

TfNSW TRAFFIC SIGNAL
WARRANTS ASSESSMENT

TRAFFIC SIGNAL WARRANT ASSESSMENT

1. An assessment of the proposed traffic signals at the intersections of Ramsgate Road/Targo Road/The Promenade and Rocky Point Road/Targo Road against the TfNSW warrants for traffic signals is set out below. 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.*

2. Existing traffic flows for the two intersections for the four hours between 2pm and 6pm are set out below (traffic counts undertaken on Thursday 19 September 2024).

Table 1 - Summary of Traffic Counts (vehicles per hour)				
Intersection	**2-3pm**	**3-4pm**	**4-5pm**	**5-6pm**
Rocky Point Road / Targo Road				
West Approach**	28	18	20	19
North Approach*	811	973	1155	1093
South Approach*	722	796	774	721
Ramsgate Road / The Promenade				
East Approach*	696	774	783	789
South Approach**	170	249	171	180
West Approach*	747	916	920	868

*major road flow
**minor road flow

3. Estimates of development traffic are based on TfNSW Guidelines. For supermarkets TfNSW Guidelines suggest a generation rate of 15.5 vehicles per 100m^2 in the Thursday afternoon peak hour. With some 3,978m2, the proposed supermarket at

Ramsgate would generate some 616 vehicles per hour (two way) in the Thursday afternoon peak hour. Note this is conservatively low, as it excludes traffic generated by the residential component. A survey of the traffic generation (between 2pm and 6pm) of an existing standalone Woolworths supermarket at Granville was used to estimate traffic generation of the proposed Ramsgate supermarket between 2pm and 6pm. The results of the Granville survey are set out in Table 2. Also set out in Table 2 are estimates of the Ramsgate supermarket traffic generation between 2pm and 6pm.

Table 2 - Summary of Supermarket Traffic Generation (vehicles per hour)

	2-3pm	**3-4pm**	**4-5pm**	**5-6pm**
Granville				
In	215	216	221	217
Out	216	207	229	223
Total	431	423	450	440
Ramsgate				
In	295	295	302	296
Out	296	284	314	308
Total	591	579	616	604

4. The traffic generated by the proposed supermarket has been assigned to the road network as set in our traffic report. Taking into account passing trade the existing plus development traffic flows are summarised in Table 3.

Table 3 - Summary of Existing + Dev Traffic Flows (vehicles per hour)				
Intersection	**2-3pm**	**3-4pm**	**4-5pm**	**5-6pm**
Rock Point Road / Targo Road				
West Approach**				
Existing	28	18	20	19
+ Development	+192	+185	+204	+200
Total	220	203	224	219
North Approach*				
Existing	811	973	1155	1093
+ Development	+66	+66	+68	+67
Total	877	1039	1223	1160
South Approach*				
Existing	722	796	774	721
+ Development	+55	+55	+57	+55
Total	777	751	831	776
Ramsgate Road / The Promenade				
East Approach*				
Existing	696	774	783	789
+ Development	+0	+0	+0	+0
Total	696	774	783	789
South Approach**				
Existing	170	249	171	180
+ Development	+44	+44	+45	+44
Total	214	293	216	224
West Approach*				
Existing	747	916	920	868
+ Development	+44	+44	+45	+44
Total	791	1040	965	912

*major road flow

**minor road flow

5. Examination of Table 3 shows that traffic flows in both direction on the major roads at the two intersections exceed 600 vehicles per hour for four separate hours (see flows highlighted in green) and that traffic flows on the minor road at the two intersections exceeds 200 vehicles per hour in one direction for separate hours. Note

the development traffic flows do not include traffic generated by the residential component of the proposed development.

6. In summary the above demonstrates that with development traffic in place, the traffic demand warrants are satisfied for traffic signals at the intersections of Rocky Point Road/Targo Road and Ramsgate Road/Targo Road/The Promenade.

ATTACHMENT B

TABLE OF RESPONSES TO MATTERS RAISED BY AUTHORITIES

Table B1 - Ramsgate Planning Proposal – Response to Traffic Matters		
Matters Raised by TfNSW		
A. Rocky Point Road/Targo Road Intersection		
1.	***Warrants for Traffic Signals***	**CBRK Response**
Item	Issue	
i)	Warrant Assessment	A warrants assessment is provided in Attachment A.
ii)	Date of Traffic Counts	Saturday 14 October and Thursday 19 October 2023 (see Section 2.5)
2.	***Safety at the Intersection***	
i)	Ban RT into Targo Road with or without signals	Updated traffic assessment supports retaining the right turn and addresses matters raised by TfNSW.
ii)	Impact of N/B queues on Ramsgate Road/Rocky Point Road intersection	Updated SIDRA modelling (which is based on a smaller scale of development generating less traffic than the previous proposal) shows that the N/B queue does NOT extend past Ramsgate Road.
iii)	Electronic copy of SIDRA model required for review	SIDRA movement summaries are provided in Attachment C.
iv)	Existing driveways on eastern side of intersection.	This is an existing situation. However, we note that one of sites that has access at this location is being redeveloped with alternate access and the existing driveway to be closed. It is also noted the majority of movements at this driveway is left in/left out.
v)	Right turns into driveway from Rocky Point Road	See above response.
3.	***Distance to Existing Signals***	
i)	Proposed signals on Targo Road are less than 130m from existing signals on Ramsgate Road	Proposed signals on Targo Road are some 105 metres from Ramsgate Road. It is noted that there are many examples of traffic signals less than 130 metres apart within the Sydney Road network. The future design of the signals will incorporate measures used by TfNSW to minimise the 'see though effect' of traffic signals located less than 130m.
B. The Promenade/Ramsgate Road/ Targo Road Intersection		
i)	Warrant Assessment	A warrants assessment is provided in Attachment A of this report.
ii)	Impact of signals on Ramsgate Road / The Promenade / Targo Road intersection and NRT ban for westbound traffic on Ramsgate Road is maintained	SIDRA modelling has found that proposed signals at this intersection would operate with satisfactory or better Levels of service. NRT ban for westbound traffic on Ramsgate Road will be maintained.

4.	***Loss of Parking***	
i)	Traffic Signals at Rocky Point Road/Targo Road required to allow right turn out of Targo Road. TfNSW view that alternate access is provided via Targo Road/Ramsgate Road.	Under the current priority control, the intersection of Targo Road/Rocky Point Road currently operates at LOS F (for the movement with the highest delay, right turn out of Targo Road). The alternate route suggested by TfNSW would be longer, less convenient for drivers and result in additional traffic (additional 100 vph) in the streets within the residential precinct to the west of Rocky Point Road.
ii)	TfNSW require Bayside Council support for the proposed signals and loss of parking on the eastern side of Rocky Point Road prior to determination of the Planning Proposal	Noted. A meeting was held with Bayside Council on Thursday 9 May 2024. While Council advised it will provide formal comment on the proposed signals and loss of parking on the eastern side of Rocky Point Road once the Planning Proposal goes on exhibition, its initial view was that it would be unlikely to object to the provision of the new signals and loss of 4 parking spaces, subject to replacement of the lost spaces within the new basement parking area.
iii)	Clarify number of parking lost on the western side of Rocky Point Road	Figures illustrating the loss of parking during the weekday morning, afternoon and off peak periods are provided in Attachment E. the figures show: • a net loss of 7 spaces in the morning peak; • a net loss of 17 spaces in the afternoon peak; and • a net loss of 21 spaces all other times.
5.	***Loading Dock/Access Driveway***	
i)	Turn paths to show truck able to straddle lanes on Ramsgate Road and turn left into the site when another vehicle is exiting	Updated swept paths provided in Attachment D showing a truck able to turn left into the site from the kerbside lane of Ramsgate Road whilst another vehicle is exiting from the adjacent property (Figures D6 and D7)
ii)	Clarification on use of Ramsgate Road access	The proposed access on Ramsgate Road will provide service vehicle access only to the subject site. It will also provide access to the adjoining sites (201-209 Rocky Point Road).
iii)	Service access for residential component	Dock has been modified to provide a separate residential bay (to accommodate an 8.8m truck) clear of the Woolworths dock. See attached swept paths (Figure D5).
iv)	Management of LI/LO access on Ramsgate Road.	Noted. The measures suggested by TfNSW are being considered.

v)	Truck access if turntable is not working	Should the turntable not be working, access to the dock will be limited to one truck using the eastern dock. A truck using the eastern dock can enter/depart site in forward direction without use of the turntable. See attached swept paths (Figure D8)
vi)	Truck to turn from/into kerbside lane	Updated swept paths show truck turning from kerbside lane on Ramsgate Road. Exiting trucks will use the two eastbound lanes on Ramsgate Road to exit the dock.
6.	***General***	
i)	Traffic Report to be updated to provide: • SIDRA outputs • Raw traffic data • Clarify existing turn bans	TIA has been updated to provide: • SIDRA outputs • Raw traffic data (previously sent to TfNSW) • Right turn ban is westbound on Ramsgate Road
ii)	Electronic copy of SIDRA model required for review	Noted – provided
iii)	Proposed Signals to have Bayside and Georges River Council support prior to determination of the Planning Proposal	Noted.
iv)	Relocation of bus stops	Noted. Updated TIA addresses relocation of bus stops.
Matters Raised by Council		
1.	Parking Provision	Coordinator Traffic and Transport
i)	Parking does not satisfy DCP requirements	The plans have been amended to provide 3 levels of basement parking with a total of 437 parking spaces (192 retail and 245 residential). This provision satisfies the DCP requirement of 393 spaces (191 retail and 201residential). This provision can also accommodate the parking lost on Rocky Point Road (21 spaces) to provide the new signals at Targo Road.
2.	Traffic Data	
	Date of traffic counts	Saturday 14 October and Thursday 19 October 2023.
3.	Traffic Impact and Road Network Upgrade	
i)	• New traffic signals at intersections of Targo Road with Rocky Point Road and Ramsgate Road;	• New traffic signals at intersections of Targo Road with Rocky Point Road and Ramsgate Road are proposed; • Existing pedestrian signals to be removed;

	• Removal of existing pedestrian signals • Concrete median at Ramsgate Road access; • Roundabout at Targo Road/Burgess Street; • New traffic signals at Rocky Point Road /Torwood Street	• Measures being investigated to limit Ramsgate Road access to LI/LO; • Roundabout at Targo Road/Burgess Street addressed in Updated TIA. • No nexus between proposed development and new traffic signals at Rocky Point Road /Torwood Street. Therefore, not proposed.
4.	Commercial dock	
i)	Service access to be provided from Targo Road	Service access was relocated from Targo Road to Ramsgate Road in response to concerns raised in submissions/Council with heavy vehicles using Targo Road.
ii)	Truck to turn from/into kerbside lane	Updated swept paths show truck turning from kerbside lane on Ramsgate Road. Exiting trucks will use the two eastbound lanes on Ramsgate Road to exit the dock, which is a legal manoeuvre.
1.	Parking Provision	Senior Traffic and Transport Assessment Officer
i)	Parking does not satisfy DCP requirements	The plans have been amended to provide 3 levels of basement parking with a total of 437 parking spaces (192 retail and 245 residential). This provision satisfies the DCP requirement of 393 spaces (191 retail and 201 residential).
2.	Provision for Bicycles	
i)	No bicycle parking provided	TIA notes requirement for bicycle parking. Updated plans show location of bicycle parking.
3.	***Service vehicle access - Ramsgate Road***	
	Service vehicle access not supported from Ramsgate Road. • access not wide enough. • increased accidents • wide splay • next to bus zone	Service access was relocated from Targo Road to Ramsgate Road: • in response to concerns raised by submissions/Council with heavy vehicles using Targo Road in the previous planning proposal; • to separate service vehicle access from car park access noting there is insufficient frontage in Targo Road to provide separate service and carpark driveways. With regards to the matters raised by Council: • access can accommodate 12.5m truck. • turns are limited to low frequency left turns. • splay has been narrowed. • no impact on bus stop

	• will be used for drop off	• driveway will be clearly sign posted no parking. • access will be shared with a widened access to 201-219 Rocky Point Road. Thus, no additional driveway is provided on Ramsgate Road.
	Additional Comments	
(1)	Through Site Link	
	The location of the through site link on the western boundary is unsatisfactory. It should be provided centrally within the site in more open and visible location.	The through site link on the western boundary has been deleted. It is not practical to relocate to the centre of the site as this would pass through the middle of Woolworths
(2)	Vehicular Access – Targo Road Street Trees	
	The proposed car park access on Targo Street will result in the loss of a significant street tree which is not supported.	The proposed car park access on Targo Street has been located so as avoid the loss of the significant street tree.
(3)	Bus Stop Relocation – Rocky Point Road west side south of Hastings Street	
	If the new traffic signals are provided at the intersection of Targo Road/Rocky Point Road and the existing pedestrian signals removed, the existing northbound bus stop on Rocky Point Road should be relocated close to the new signals	Noted. If the new traffic signals are provided at the intersection of Targo Road/Rocky Point Road, the existing northbound bus stop on Rocky Point Road should be relocated close to the new signals.
(4)	Retail Traffic Generation Rates	
	Any assessment of the traffic effects of the proposed supermarket that is not based on standard TfNSW traffic generation rates, must be justified	The traffic assessment has been updated using standard TfNSW traffic generation rates for a supermarket.
(5)	Potential Development Site – 201-219 Rocky Point Road Ramsgate	
	As part of the planning proposal, access to existing and future development on 201-219 Rocky Point Road via a ROC with a minimum width of 6m (including the existing 3.66m access on 201-219 Rocky Point Road).	Noted. A 2.34m wide ROC will be provided along the eastern side of the 6m wide access driveway from Ramsgate Road. When combined with the existing 3.66m wide access within 201-219 Rocky Point Road, a 6m wide access will be provided to existing and future development on 201-219 Rocky Point Road.

(6)	Proposal for traffic signals at the intersection of Ramsgate Road/Trago Road/The Promenade	
	The provision of a right turn from Targo Road onto Ramsgate Road (westbound) may encourage traffic to rat run through the residential streets to the north. This matter should be discussed with Council's traffic engineer.	As part of the previous planning proposal, to manage any increased traffic flows in the residential precinct north of Ramsgate Road and west of Rocky Point Road, Council identified that LATM measures would be required. The current planning proposal proposes a similar approach and will work with Council to develop appropriate LATM measures in the precinct as set out in the updated TIA
(7)	Proposed median island – Ramsgate Road, west of Rocky Point Road	
	Should a central median be installed on Ramsgate Road opposite the site access, and extend to west of Dalkeith Street, consideration be given to reinstating the right turn from The Promenade onto Ramsgate Road (eastbound) as part of the new traffic signals	No median is proposed on Ramsgate Road opposite the site access. As the access is for service vehicles only with low traffic flows, left in/left out access will be managed by signage and through a loading dock management plan.

ATTACHMENT C

SIDRA MOVEMENT SUMMARIES

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12175 Ramsgate Planning Proposal 250128

Template: Movement Summaries

Site: 101 [Thu AM EX - The Promenade - Torwood Street (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	2	0.0	2	0.0	0.128	5.2	LOS A	0.1	0.7	0.04	0.03	0.04	49.2
2	T1	229	1.4	229	1.4	0.128	0.0	LOS A	0.1	0.7	0.04	0.03	0.04	49.4
3	R2	12	0.0	12	0.0	0.128	5.2	LOS A	0.1	0.7	0.04	0.03	0.04	48.7
Approach		243	1.3	243	1.3	0.128	0.3	NA	0.1	0.7	0.04	0.03	0.04	49.4
East: Torwood Street														
4	L2	16	0.0	16	0.0	0.014	5.1	LOS A	0.1	0.4	0.28	0.52	0.28	46.0
5	T1	1	0.0	1	0.0	0.014	5.1	LOS A	0.1	0.4	0.28	0.52	0.28	46.1
6	R2	1	0.0	1	0.0	0.014	6.9	LOS A	0.1	0.4	0.28	0.52	0.28	43.4
Approach		18	0.0	18	0.0	0.014	5.2	LOS A	0.1	0.4	0.28	0.52	0.28	45.9
North: The Promenade														
7	L2	1	0.0	1	0.0	0.103	5.6	LOS A	0.0	0.2	0.01	0.01	0.01	49.2
8	T1	192	1.6	192	1.6	0.103	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.9
9	R2	2	50.0	2	50.0	0.103	6.3	LOS A	0.0	0.2	0.01	0.01	0.01	47.2
Approach		195	2.2	195	2.2	0.103	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.9
West: Torwood Street														
10	L2	2	0.0	2	0.0	0.004	5.2	LOS A	0.0	0.1	0.35	0.52	0.35	43.4
11	T1	1	0.0	1	0.0	0.004	5.0	LOS A	0.0	0.1	0.35	0.52	0.35	46.1
12	R2	1	0.0	1	0.0	0.004	7.0	LOS A	0.0	0.1	0.35	0.52	0.35	45.6
Approach		4	0.0	4	0.0	0.004	5.6	LOS A	0.0	0.1	0.35	0.52	0.35	45.0
All Vehicles		460	1.6	460	1.6	0.128	0.5	NA	0.1	0.7	0.04	0.05	0.04	49.3

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

Site: 101 [Thu AM EX - Ramsgate Road - Targo Road - The Promenade (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	238	1.3	238	1.3	0.206	7.2	LOS A	0.8	6.0	0.28	0.54	0.28	48.6
Approach		238	1.3	238	1.3	0.206	7.2	LOS A	0.8	6.0	0.28	0.54	0.28	48.6
East: Ramsgate Road														
4	L2	25	0.0	25	0.0	0.094	5.5	LOS A	0.0	0.0	0.00	0.09	0.00	56.0
5	T1	747	4.6	747	4.6	0.334	0.4	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Approach		773	4.5	773	4.5	0.334	0.6	NA	0.0	0.0	0.00	0.02	0.00	59.5
North: Targo Road														
7	L2	24	4.3	24	4.3	0.047	9.7	LOS A	0.2	1.1	0.62	0.80	0.62	26.0
Approach		24	4.3	24	4.3	0.047	9.7	LOS A	0.2	1.1	0.62	0.80	0.62	26.0
West: Ramsgate Road														
10	L2	28	3.7	28	3.7	0.422	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	59.3
11	T1	715	6.3	715	6.3	0.422	0.2	LOS A	0.0	0.0	0.00	0.02	0.00	59.3
12	R2	169	2.5	169	2.5	0.307	12.1	LOS A	1.3	9.6	0.70	0.92	0.83	43.0
Approach		913	5.5	913	5.5	0.422	2.6	NA	1.3	9.6	0.13	0.19	0.15	55.4
All Vehicles		1947	4.6	1947	4.6	0.422	2.4	NA	1.3	9.6	0.10	0.17	0.11	55.8

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.

Site: 101 [Thu AM EX - Ramsgate Road - Dalkeith Street (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: Existing)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Dalkeith Street														
1	L2	11	0.0	11	0.0	0.143	6.2	LOS A	0.4	2.9	0.75	0.80	0.75	30.6
3	R2	13	8.3	13	8.3	0.143	37.8	LOS C	0.4	2.9	0.75	0.80	0.75	30.6
Approach		23	4.5	23	4.5	0.143	23.5	LOS B	0.4	2.9	0.75	0.80	0.75	30.6
East: Ramsgate Road														
4	L2	9	0.0	9	0.0	0.208	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.0
5	T1	768	4.5	768	4.5	0.208	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.2
Approach		778	4.5	778	4.5	0.208	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.1
West: Ramsgate Road														
11	T1	711	6.4	711	6.4	0.313	0.4	LOS A	0.5	3.5	0.05	0.02	0.06	57.0
12	R2	18	5.9	18	5.9	0.313	11.2	LOS A	0.5	3.5	0.09	0.03	0.11	50.2
Approach		728	6.4	728	6.4	0.313	0.6	NA	0.5	3.5	0.05	0.02	0.07	56.4
All Vehicles		1529	5.4	1529	5.4	0.313	0.7	NA	0.5	3.5	0.04	0.02	0.04	55.1

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

Site: 101 [Thu AM EX - Rocky Point Road - Ramsgate Road (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: 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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	432	5.9	432	5.9	0.484	10.2	LOS A	7.7	56.9	0.34	0.68	0.34	45.2
2	T1	1307	3.9	1307	3.9	* 0.871	33.9	LOS C	46.8	338.7	0.86	0.87	0.97	28.6
Approach		1739	4.4	1739	4.4	0.871	28.0	LOS B	46.8	338.7	0.73	0.82	0.82	31.5
East: Ramsgate Road														
4	L2	26	4.0	26	4.0	0.903	77.7	LOS F	12.6	90.3	1.00	1.04	1.42	27.3
5	T1	355	3.0	355	3.0	* 0.903	69.8	LOS E	13.2	94.4	1.00	1.04	1.42	18.4
Approach		381	3.0	381	3.0	0.903	70.3	LOS E	13.2	94.4	1.00	1.04	1.42	19.2
North: Rocky Point Road														
7	L2	44	11.9	44	11.9	0.378	10.9	LOS A	4.0	30.3	0.22	0.26	0.22	48.7
8	T1	638	8.4	638	8.4	0.378	5.9	LOS A	4.0	30.3	0.21	0.21	0.21	52.4
Approach		682	8.6	682	8.6	0.378	6.2	LOS A	4.0	30.3	0.21	0.22	0.21	52.1
West: Ramsgate Road														
10	L2	34	6.3	34	6.3	0.652	38.9	LOS C	20.9	152.5	0.89	0.79	0.89	9.9
11	T1	399	4.7	399	4.7	0.652	33.4	LOS C	20.9	152.5	0.89	0.79	0.89	31.3
12	R2	282	9.3	282	9.3	* 0.751	57.8	LOS E	14.7	111.3	0.99	1.03	1.05	22.7
Approach		715	6.6	715	6.6	0.751	43.3	LOS D	20.9	152.5	0.93	0.88	0.95	26.6
All Vehicles		3517	5.5	3517	5.5	0.903	31.5	LOS C	46.8	338.7	0.70	0.74	0.79	30.8

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)

Site: 101 [Thu AM EX - Rocky Point Road - Targo Road (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	16	0.0	16	0.0	0.373	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	58.6
2	T1	1338	3.8	1338	3.8	0.373	0.0	LOS A	0.0	0.2	0.00	0.01	0.00	59.1
3	R2	1	0.0	1	0.0	0.373	12.0	LOS A	0.0	0.2	0.00	0.00	0.01	56.5
Approach		1355	3.7	1355	3.7	0.373	0.1	NA	0.0	0.2	0.00	0.01	0.00	59.1
East: Driveway														
4	L2	1	0.0	1	0.0	0.055	7.9	LOS A	0.2	1.1	0.92	0.90	0.92	19.2
5	T1	1	0.0	1	0.0	0.055	77.1	LOS F	0.2	1.1	0.92	0.90	0.92	19.2
6	R2	1	0.0	1	0.0	0.055	111.8	LOS F	0.2	1.1	0.92	0.90	0.92	19.2
Approach		3	0.0	3	0.0	0.055	65.6	LOS E	0.2	1.1	0.92	0.90	0.92	19.2
North: Rocky Point Road														
7	L2	2	0.0	2	0.0	0.272	3.3	LOS A	0.0	0.0	0.00	0.00	0.00	56.9
8	T1	665	8.7	665	8.7	0.272	0.6	LOS A	0.3	1.9	0.03	0.01	0.03	51.8
9	R2	5	0.0	5	0.0	0.272	14.3	LOS A	0.3	1.9	0.09	0.02	0.11	39.5
Approach		673	8.6	673	8.6	0.272	0.8	NA	0.3	1.9	0.03	0.01	0.03	51.9
West: Targo Road														
10	L2	27	3.8	27	3.8	0.164	8.5	LOS A	0.5	3.7	0.76	0.85	0.76	21.6
12	R2	4	0.0	4	0.0	0.164	112.4	LOS F	0.5	3.7	0.76	0.85	0.76	21.6
Approach		32	3.3	32	3.3	0.164	22.3	LOS B	0.5	3.7	0.76	0.85	0.76	21.6
All Vehicles		2062	5.3	2062	5.3	0.373	0.8	NA	0.5	3.7	0.02	0.02	0.03	53.5

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: 1 [Thu AM EX - Rocky Point Road (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning 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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
2	T1	1365	3.8	1365	3.8	* 0.464	0.4	LOS A	1.4	10.4	0.04	0.04	0.04	52.5
Approach		1365	3.8	1365	3.8	0.464	0.4	LOS A	1.4	10.4	0.04	0.04	0.04	52.5
North: Rocky Point Road														
8	T1	673	8.6	673	8.6	0.239	0.7	LOS A	0.5	3.8	0.03	0.02	0.03	56.0
Approach		673	8.6	673	8.6	0.239	0.7	LOS A	0.5	3.8	0.03	0.02	0.03	56.0
All Vehicles		2038	5.4	2038	5.4	0.464	0.5	LOS A	1.4	10.4	0.04	0.03	0.04	54.1

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 [Thu AM EX - Rocky Point Road - Hastings Street (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	6	0.0	6	0.0	0.365	4.8	LOS A	0.0	0.0	0.00	0.01	0.00	59.2
2	T1	1353	3.8	1353	3.8	0.365	0.1	LOS A	0.1	1.0	0.01	0.01	0.01	59.8
3	R2	5	0.0	5	0.0	0.365	10.1	LOS A	0.1	1.0	0.02	0.00	0.02	49.7
Approach		1364	3.8	1364	3.8	0.365	0.1	NA	0.1	1.0	0.01	0.01	0.01	59.7
East: Meurants Lane														
4	L2	6	16.7	6	16.7	0.170	7.3	LOS A	0.5	3.5	0.88	0.84	0.88	19.4
5	T1	4	0.0	4	0.0	0.170	136.8	LOS F	0.5	3.5	0.88	0.84	0.88	19.4
Approach		11	10.0	11	10.0	0.170	59.1	LOS E	0.5	3.5	0.88	0.84	0.88	19.4
North: Rocky Point Road														
7	L2	7	14.3	7	14.3	0.209	5.8	LOS A	0.0	0.0	0.00	0.01	0.00	57.5
8	T1	651	9.2	651	9.2	0.209	1.9	LOS A	0.9	6.6	0.09	0.02	0.10	56.4
9	R2	12	0.0	12	0.0	0.209	24.9	LOS B	0.9	6.6	0.20	0.03	0.22	52.8
Approach		669	9.1	669	9.1	0.209	2.3	NA	0.9	6.6	0.09	0.02	0.10	56.4
West: Hastings Street														
10	L2	9	0.0	9	0.0	0.826	184.9	LOS F	2.8	19.9	0.98	1.16	1.57	7.5
11	T1	1	0.0	1	0.0	0.826	317.6	LOS F	2.8	19.9	0.98	1.16	1.57	7.5
12	R2	13	0.0	13	0.0	0.826	387.9	LOS F	2.8	19.9	0.98	1.16	1.57	2.6
Approach		23	0.0	23	0.0	0.826	301.7	LOS F	2.8	19.9	0.98	1.16	1.57	4.9
All Vehicles		2067	5.5	2067	5.5	0.826	4.5	NA	2.8	19.9	0.05	0.03	0.06	52.9

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 [Thu AM EX - Burgess Street - Hastings Street (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: Existing)]

Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
2	T1	35	0.0	35	0.0	0.029	4.9	LOS A	0.1	0.9	0.09	0.51	0.09	51.0
3	R2	3	0.0	3	0.0	0.029	7.8	LOS A	0.1	0.9	0.09	0.51	0.09	34.4
3u	U	1	0.0	1	0.0	0.029	9.3	LOS A	0.1	0.9	0.09	0.51	0.09	34.4
Approach		39	0.0	39	0.0	0.029	5.2	LOS A	0.1	0.9	0.09	0.51	0.09	50.4
East: Hastings Street														
4	L2	7	0.0	7	0.0	0.018	5.1	LOS A	0.1	0.6	0.08	0.62	0.08	39.7
6	R2	15	0.0	15	0.0	0.018	7.8	LOS A	0.1	0.6	0.08	0.62	0.08	50.0
6u	U	1	0.0	1	0.0	0.018	9.3	LOS A	0.1	0.6	0.08	0.62	0.08	39.7
Approach		23	0.0	23	0.0	0.018	7.0	LOS A	0.1	0.6	0.08	0.62	0.08	48.1
North: Burgess Street														
7	L2	6	0.0	6	0.0	0.016	5.1	LOS A	0.1	0.5	0.04	0.52	0.04	51.3
8	T1	14	7.7	14	7.7	0.016	4.9	LOS A	0.1	0.5	0.04	0.52	0.04	51.3
9u	U	1	0.0	1	0.0	0.016	9.2	LOS A	0.1	0.5	0.04	0.52	0.04	54.4
Approach		21	5.0	21	5.0	0.016	5.2	LOS A	0.1	0.5	0.04	0.52	0.04	51.5
All Vehicles		83	1.3	83	1.3	0.029	5.7	LOS A	0.1	0.9	0.07	0.54	0.07	50.0

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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 101 [Thu AM EX - Targo Road - Burgess Street (Site Folder: Weekday Morning Existing)]

Network: 2 [Weekday Morning Existing (Network Folder: Existing)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
1b	L3	1	0.0	1	0.0	0.002	5.5	LOS A	0.0	0.1	0.10	0.50	0.10	44.3
2	T1	1	0.0	1	0.0	0.002	3.3	LOS A	0.0	0.1	0.10	0.50	0.10	44.3
3	R2	1	0.0	1	0.0	0.002	4.7	LOS A	0.0	0.1	0.10	0.50	0.10	44.3
Approach		3	0.0	3	0.0	0.002	4.5	LOS A	0.0	0.1	0.10	0.50	0.10	44.3
East: Targo Road														
4	L2	1	0.0	1	0.0	0.026	4.6	LOS A	0.1	0.6	0.07	0.53	0.07	45.3
4a	L1	3	0.0	3	0.0	0.026	3.6	LOS A	0.1	0.6	0.07	0.53	0.07	39.0
6	R2	25	0.0	25	0.0	0.026	4.8	LOS A	0.1	0.6	0.07	0.53	0.07	39.0
Approach		29	0.0	29	0.0	0.026	4.6	LOS A	0.1	0.6	0.07	0.53	0.07	39.5
North: Burgess Street														
7	L2	1	0.0	1	0.0	0.013	4.6	LOS A	0.1	0.4	0.07	0.45	0.07	34.5
8	T1	1	0.0	1	0.0	0.013	0.0	LOS A	0.1	0.4	0.07	0.45	0.07	46.1
9a	R1	20	5.3	20	5.3	0.013	3.7	LOS A	0.1	0.4	0.07	0.45	0.07	34.5
Approach		22	4.8	22	4.8	0.013	3.6	NA	0.1	0.4	0.07	0.45	0.07	36.4
SouthWest: Targo Road														
30a	L1	13	0.0	13	0.0	0.016	4.4	LOS A	0.1	0.5	0.02	0.51	0.02	35.7
32a	R1	16	0.0	16	0.0	0.016	3.6	LOS A	0.1	0.5	0.02	0.51	0.02	35.7
32b	R3	1	0.0	1	0.0	0.016	5.2	LOS A	0.1	0.5	0.02	0.51	0.02	44.6
Approach		29	0.0	29	0.0	0.016	4.0	NA	0.1	0.5	0.02	0.51	0.02	36.7
All Vehicles		84	1.3	84	1.3	0.026	4.1	NA	0.1	0.6	0.05	0.50	0.05	38.5

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.

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12175 Ramsgate Planning Proposal 250128

Template: Movement Summaries

Site: 101 [Thu PM EX - The Promenade - Torwood Street (Site Folder: Weekday Afternoon Existing)]

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

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	6	0.0	6	0.0	0.116	5.3	LOS A	0.1	0.7	0.05	0.04	0.05	49.2
2	T1	203	1.6	203	1.6	0.116	0.1	LOS A	0.1	0.7	0.05	0.04	0.05	49.3
3	R2	9	0.0	9	0.0	0.116	5.6	LOS A	0.1	0.7	0.05	0.04	0.05	48.7
Approach		219	1.4	219	1.4	0.116	0.5	NA	0.1	0.7	0.05	0.04	0.05	49.2
East: Torwood Street														
4	L2	32	0.0	32	0.0	0.034	5.4	LOS A	0.1	0.9	0.35	0.56	0.35	45.8
5	T1	1	0.0	1	0.0	0.034	5.5	LOS A	0.1	0.9	0.35	0.56	0.35	45.9
6	R2	5	0.0	5	0.0	0.034	7.4	LOS A	0.1	0.9	0.35	0.56	0.35	43.1
Approach		38	0.0	38	0.0	0.034	5.7	LOS A	0.1	0.9	0.35	0.56	0.35	45.6
North: The Promenade														
7	L2	5	0.0	5	0.0	0.145	4.9	LOS A	0.0	0.2	0.01	0.02	0.01	49.1
8	T1	272	0.8	272	0.8	0.145	0.0	LOS A	0.0	0.2	0.01	0.02	0.01	49.8
9	R2	3	0.0	3	0.0	0.145	5.3	LOS A	0.0	0.2	0.01	0.02	0.01	48.4
Approach		280	0.8	280	0.8	0.145	0.2	NA	0.0	0.2	0.01	0.02	0.01	49.8
West: Torwood Street														
10	L2	1	0.0	1	0.0	0.007	5.1	LOS A	0.0	0.2	0.41	0.58	0.41	42.4
11	T1	1	0.0	1	0.0	0.007	5.4	LOS A	0.0	0.2	0.41	0.58	0.41	45.5
12	R2	3	0.0	3	0.0	0.007	7.5	LOS A	0.0	0.2	0.41	0.58	0.41	45.0
Approach		5	0.0	5	0.0	0.007	6.6	LOS A	0.0	0.2	0.41	0.58	0.41	44.8
All Vehicles		542	1.0	542	1.0	0.145	0.7	NA	0.1	0.9	0.05	0.07	0.05	49.1

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

Site: 101 [Thu PM EX - Ramsgate Road - Targo Road - The Promenade (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	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	205	1.5	205	1.5	0.180	7.4	LOS A	0.7	5.1	0.28	0.55	0.28	48.6
Approach		205	1.5	205	1.5	0.180	7.4	LOS A	0.7	5.1	0.28	0.55	0.28	48.6
East: Ramsgate Road														
4	L2	24	0.0	24	0.0	0.099	5.5	LOS A	0.0	0.0	0.00	0.08	0.00	56.5
5	T1	812	1.7	812	1.7	0.352	0.4	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Approach		836	1.6	836	1.6	0.352	0.6	NA	0.0	0.0	0.00	0.02	0.00	59.5
North: Targo Road														
7	L2	42	0.0	42	0.0	0.070	8.7	LOS A	0.2	1.6	0.57	0.77	0.57	27.4
Approach		42	0.0	42	0.0	0.070	8.7	LOS A	0.2	1.6	0.57	0.77	0.57	27.4
West: Ramsgate Road														
10	L2	36	0.0	36	0.0	0.376	5.6	LOS A	0.0	0.0	0.00	0.03	0.00	59.2
11	T1	662	1.1	662	1.1	0.376	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	59.2
12	R2	257	0.8	257	0.8	0.498	14.9	LOS B	2.7	18.8	0.78	1.03	1.19	40.4
Approach		955	1.0	955	1.0	0.498	4.3	NA	2.7	18.8	0.21	0.30	0.32	52.6
All Vehicles		2038	1.3	2038	1.3	0.498	3.2	NA	2.7	18.8	0.14	0.22	0.19	54.8

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.

Site: 101 [Thu PM EX - Ramsgate Road - Dalkeith Street (Site Folder: Weekday Afternoon Existing)]

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

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Dalkeith Street														
1	L2	37	2.9	37	2.9	0.227	6.9	LOS A	0.8	5.6	0.67	0.78	0.69	33.7
3	R2	24	0.0	24	0.0	0.227	34.7	LOS C	0.8	5.6	0.67	0.78	0.69	33.7
Approach		61	1.7	61	1.7	0.227	17.9	LOS B	0.8	5.6	0.67	0.78	0.69	33.7
East: Ramsgate Road														
4	L2	22	0.0	22	0.0	0.217	5.5	LOS A	0.0	0.0	0.00	0.03	0.00	56.8
5	T1	809	1.8	809	1.8	0.217	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	58.5
Approach		832	1.8	832	1.8	0.217	0.2	NA	0.0	0.0	0.00	0.02	0.00	58.3
West: Ramsgate Road														
11	T1	645	1.1	645	1.1	0.232	0.9	LOS A	1.1	8.0	0.14	0.05	0.15	53.1
12	R2	57	0.0	57	0.0	0.232	10.8	LOS A	1.1	8.0	0.32	0.12	0.33	48.0
Approach		702	1.0	702	1.0	0.232	1.7	NA	1.1	8.0	0.16	0.06	0.16	51.8
All Vehicles		1595	1.5	1595	1.5	0.232	1.5	NA	1.1	8.0	0.09	0.06	0.10	50.8

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.

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

Network: 1 [Weekday Afternoon Existing (Network Folder: 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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	401	1.0	401	1.0	0.467	14.6	LOS B	9.9	69.9	0.46	0.72	0.46	40.7
2	T1	803	3.3	803	3.3	0.709	27.7	LOS B	22.2	159.6	0.79	0.70	0.80	31.9
Approach		1204	2.5	1204	2.5	0.709	23.3	LOS B	22.2	159.6	0.68	0.70	0.69	34.4
East: Ramsgate Road														
4	L2	60	0.0	60	0.0	* 0.796	56.1	LOS D	14.2	100.9	0.96	0.90	1.11	31.9
5	T1	448	2.3	448	2.3	0.796	49.9	LOS D	14.8	105.6	0.95	0.89	1.10	22.8
Approach		508	2.1	508	2.1	0.796	50.7	LOS D	14.8	105.6	0.95	0.89	1.10	24.3
North: Rocky Point Road														
7	L2	94	2.2	94	2.2	* 0.821	23.9	LOS B	24.2	171.4	0.75	0.72	0.78	38.2
8	T1	1212	1.4	1212	1.4	0.821	17.6	LOS B	24.2	171.4	0.74	0.70	0.77	40.3
Approach		1305	1.5	1305	1.5	0.821	18.1	LOS B	24.2	171.4	0.74	0.70	0.77	40.2
West: Ramsgate Road														
10	L2	46	0.0	46	0.0	0.468	28.8	LOS C	15.8	111.4	0.73	0.66	0.73	13.1
11	T1	354	0.9	354	0.9	0.468	23.4	LOS B	15.8	111.4	0.73	0.66	0.73	36.3
12	R2	260	1.6	260	1.6	* 0.578	46.6	LOS D	12.7	89.8	0.93	0.94	0.93	25.8
Approach		660	1.1	660	1.1	0.578	32.9	LOS C	15.8	111.4	0.81	0.77	0.81	30.4
All Vehicles		3678	1.8	3678	1.8	0.821	27.0	LOS B	24.2	171.4	0.76	0.74	0.79	33.5

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

* Critical Movement (Signal Timing)

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	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	28	0.0	28	0.0	0.238	5.5	LOS A	0.0	0.0	0.00	0.04	0.00	56.8
2	T1	835	3.2	835	3.2	0.238	0.1	LOS A	0.1	0.5	0.01	0.02	0.01	57.5
3	R2	1	0.0	1	0.0	0.238	22.5	LOS B	0.1	0.5	0.01	0.00	0.01	56.3
Approach		864	3.0	864	3.0	0.238	0.3	NA	0.1	0.5	0.01	0.02	0.01	57.4
East: Driveway														
4	L2	4	0.0	4	0.0	0.246	22.3	LOS B	0.4	3.0	0.94	0.99	0.99	15.4
5	T1	1	0.0	1	0.0	0.246	139.8	LOS F	0.4	3.0	0.94	0.99	0.99	15.4
6	R2	2	0.0	2	0.0	0.246	197.0	LOS F	0.4	3.0	0.94	0.99	0.99	15.4
Approach		7	0.0	7	0.0	0.246	89.0	LOS F	0.4	3.0	0.94	0.99	0.99	15.4
North: Rocky Point Road														
7	L2	2	0.0	2	0.0	0.355	3.3	LOS A	3.1	21.9	0.00	0.00	0.00	56.8
8	T1	1262	1.4	1262	1.4	0.355	0.3	LOS A	4.5	31.5	0.04	0.01	0.05	51.9
9	R2	20	0.0	20	0.0	0.355	9.9	LOS A	4.5	31.5	0.09	0.02	0.11	45.5
Approach		1284	1.4	1284	1.4	0.355	0.4	NA	4.5	31.5	0.04	0.01	0.05	51.9
West: Targo Road														
10	L2	18	0.0	18	0.0	0.676	144.8	LOS F	2.1	15.0	0.90	1.10	1.46	3.6
12	R2	6	16.7	6	16.7	0.676	422.1	LOS F	2.1	15.0	0.90	1.10	1.46	3.6
Approach		24	4.3	24	4.3	0.676	217.2	LOS F	2.1	15.0	0.90	1.10	1.46	3.6
All Vehicles		2180	2.1	2180	2.1	0.676	3.1	NA	4.5	31.5	0.04	0.03	0.05	35.9

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

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
2	T1	855	3.1	855	3.1	0.481	0.7	LOS A	1.5	11.1	0.04	0.03	0.04	52.7
Approach		855	3.1	855	3.1	0.481	0.7	LOS A	1.5	11.1	0.04	0.03	0.04	52.7
North: Rocky Point Road														
8	T1	1284	1.4	1284	1.4	* 0.610	0.6	LOS A	2.0	14.3	0.05	0.05	0.05	53.8
Approach		1284	1.4	1284	1.4	0.610	0.6	LOS A	2.0	14.3	0.05	0.05	0.05	53.8
All Vehicles		2139	2.1	2139	2.1	0.610	0.6	LOS A	2.0	14.3	0.05	0.04	0.05	53.5

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

* Critical Movement (Signal Timing)

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

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

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	14	0.0	14	0.0	0.341	4.8	LOS A	0.0	0.0	0.00	0.01	0.00	58.5
2	T1	838	3.3	838	3.3	0.341	1.0	LOS A	0.6	4.3	0.05	0.02	0.06	58.5
3	R2	11	0.0	11	0.0	0.341	17.2	LOS B	0.6	4.3	0.18	0.03	0.23	46.5
Approach		862	3.2	862	3.2	0.341	1.3	NA	0.6	4.3	0.05	0.02	0.06	58.4
East: Meurants Lane														
4	L2	9	0.0	9	0.0	0.053	8.3	LOS A	0.2	1.1	0.75	0.80	0.75	32.4
5	T1	1	0.0	1	0.0	0.053	127.1	LOS F	0.2	1.1	0.75	0.80	0.75	32.4
Approach		11	0.0	11	0.0	0.053	20.1	LOS B	0.2	1.1	0.75	0.80	0.75	32.4
North: Rocky Point Road														
7	L2	16	0.0	16	0.0	0.358	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	58.0
8	T1	1269	1.5	1269	1.5	0.358	0.5	LOS A	0.8	5.9	0.06	0.02	0.08	58.4
9	R2	24	0.0	24	0.0	0.358	14.7	LOS B	0.8	5.9	0.13	0.03	0.17	57.1
Approach		1309	1.4	1309	1.4	0.358	0.9	NA	0.8	5.9	0.06	0.02	0.08	58.3
West: Hastings Street														
10	L2	13	0.0	13	0.0	0.854	180.4	LOS F	3.2	22.4	0.98	1.22	1.73	8.0
11	T1	2	0.0	2	0.0	0.854	307.1	LOS F	3.2	22.4	0.98	1.22	1.73	8.1
12	R2	14	0.0	14	0.0	0.854	365.0	LOS F	3.2	22.4	0.98	1.22	1.73	2.8
Approach		28	0.0	28	0.0	0.854	278.7	LOS F	3.2	22.4	0.98	1.22	1.73	5.7
All Vehicles		2211	2.1	2211	2.1	0.854	4.7	NA	3.2	22.4	0.07	0.04	0.10	52.4

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

Site: 101 [Thu PM EX - Burgess Street - Hastings Street (Site Folder: Weekday Afternoon Existing)]

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

Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
2	T1	29	0.0	29	0.0	0.030	4.9	LOS A	0.1	1.0	0.09	0.54	0.09	50.5
3	R2	9	0.0	9	0.0	0.030	7.8	LOS A	0.1	1.0	0.09	0.54	0.09	33.3
3u	U	1	0.0	1	0.0	0.030	9.3	LOS A	0.1	1.0	0.09	0.54	0.09	33.3
Approach		40	0.0	40	0.0	0.030	5.7	LOS A	0.1	1.0	0.09	0.54	0.09	48.8
East: Hastings Street														
4	L2	13	0.0	13	0.0	0.024	5.2	LOS A	0.1	0.8	0.12	0.60	0.12	39.9
6	R2	17	0.0	17	0.0	0.024	7.8	LOS A	0.1	0.8	0.12	0.60	0.12	50.1
6u	U	1	0.0	1	0.0	0.024	9.3	LOS A	0.1	0.8	0.12	0.60	0.12	39.9
Approach		31	0.0	31	0.0	0.024	6.8	LOS A	0.1	0.8	0.12	0.60	0.12	47.6
North: Burgess Street														
7	L2	17	0.0	17	0.0	0.033	5.1	LOS A	0.2	1.1	0.07	0.51	0.07	51.3
8	T1	27	0.0	27	0.0	0.033	4.8	LOS A	0.2	1.1	0.07	0.51	0.07	51.3
9u	U	1	0.0	1	0.0	0.033	9.2	LOS A	0.2	1.1	0.07	0.51	0.07	54.4
Approach		45	0.0	45	0.0	0.033	5.0	LOS A	0.2	1.1	0.07	0.51	0.07	51.4
All Vehicles		116	0.0	116	0.0	0.033	5.7	LOS A	0.2	1.1	0.09	0.54	0.09	49.5

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

Site: 101 [Thu PM EX - Targo Road - Burgess Street (Site Folder: Weekday Afternoon Existing)]

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

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
1b	L3	1	0.0	1	0.0	0.003	5.5	LOS A	0.0	0.1	0.13	0.50	0.13	44.2
2	T1	1	0.0	1	0.0	0.003	3.4	LOS A	0.0	0.1	0.13	0.50	0.13	44.2
3	R2	1	0.0	1	0.0	0.003	4.8	LOS A	0.0	0.1	0.13	0.50	0.13	44.2
Approach		3	0.0	3	0.0	0.003	4.6	LOS A	0.0	0.1	0.13	0.50	0.13	44.2
East: Targo Road														
4	L2	1	0.0	1	0.0	0.030	4.6	LOS A	0.1	0.8	0.10	0.51	0.10	45.5
4a	L1	17	0.0	17	0.0	0.030	3.7	LOS A	0.1	0.8	0.10	0.51	0.10	39.4
6	R2	20	0.0	20	0.0	0.030	4.9	LOS A	0.1	0.8	0.10	0.51	0.10	39.4
Approach		38	0.0	38	0.0	0.030	4.3	LOS A	0.1	0.8	0.10	0.51	0.10	39.8
North: Burgess Street														
7	L2	5	0.0	5	0.0	0.023	4.6	LOS A	0.1	0.7	0.07	0.43	0.07	34.6
8	T1	3	0.0	3	0.0	0.023	0.0	LOS A	0.1	0.7	0.07	0.43	0.07	46.1
9a	R1	33	0.0	33	0.0	0.023	3.7	LOS A	0.1	0.7	0.07	0.43	0.07	34.6
Approach		41	0.0	41	0.0	0.023	3.5	NA	0.1	0.7	0.07	0.43	0.07	37.5
SouthWest: Targo Road														
30a	L1	19	0.0	19	0.0	0.020	4.4	LOS A	0.1	0.6	0.04	0.50	0.04	35.3
32a	R1	17	0.0	17	0.0	0.020	3.6	LOS A	0.1	0.6	0.04	0.50	0.04	35.3
32b	R3	1	0.0	1	0.0	0.020	5.2	LOS A	0.1	0.6	0.04	0.50	0.04	44.5
Approach		37	0.0	37	0.0	0.020	4.1	NA	0.1	0.6	0.04	0.50	0.04	36.2
All Vehicles		119	0.0	119	0.0	0.030	4.0	NA	0.1	0.8	0.07	0.48	0.07	38.5

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.

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12175 Ramsgate Planning Proposal 250128

Template: Movement Summaries

Site: 101 [Sat MD EX - The Promenade - Torwood Street (Site Folder: Saturday Midday Existing)]

Network: 3 [Saturday Midday Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	2	0.0	2	0.0	0.144	5.3	LOS A	0.1	0.7	0.04	0.03	0.04	49.2
2	T1	262	0.4	262	0.4	0.144	0.1	LOS A	0.1	0.7	0.04	0.03	0.04	49.5
3	R2	12	0.0	12	0.0	0.144	5.4	LOS A	0.1	0.7	0.04	0.03	0.04	48.8
Approach		276	0.4	276	0.4	0.144	0.3	NA	0.1	0.7	0.04	0.03	0.04	49.4
East: Torwood Street														
4	L2	28	3.7	28	3.7	0.028	5.3	LOS A	0.1	0.8	0.33	0.54	0.33	45.8
5	T1	1	100.0	1	100.0	0.028	10.2	LOS A	0.1	0.8	0.33	0.54	0.33	44.8
6	R2	1	100.0	1	100.0	0.028	13.5	LOS A	0.1	0.8	0.33	0.54	0.33	43.1
Approach		31	10.3	31	10.3	0.028	5.8	LOS A	0.1	0.8	0.33	0.54	0.33	45.7
North: The Promenade														
7	L2	3	0.0	3	0.0	0.125	5.2	LOS A	0.1	0.4	0.02	0.02	0.02	49.0
8	T1	232	0.9	232	0.9	0.125	0.0	LOS A	0.1	0.4	0.02	0.02	0.02	49.7
9	R2	5	0.0	5	0.0	0.125	5.5	LOS A	0.1	0.4	0.02	0.02	0.02	48.3
Approach		240	0.9	240	0.9	0.125	0.2	NA	0.1	0.4	0.02	0.02	0.02	49.7
West: Torwood Street														
10	L2	2	0.0	2	0.0	0.006	5.3	LOS A	0.0	0.1	0.40	0.54	0.40	43.2
11	T1	2	0.0	2	0.0	0.006	5.4	LOS A	0.0	0.1	0.40	0.54	0.40	45.9
12	R2	1	0.0	1	0.0	0.006	7.6	LOS A	0.0	0.1	0.40	0.54	0.40	45.5
Approach		5	0.0	5	0.0	0.006	5.8	LOS A	0.0	0.1	0.40	0.54	0.40	45.1
All Vehicles		552	1.1	552	1.1	0.144	0.6	NA	0.1	0.8	0.05	0.06	0.05	49.1

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

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

Network: 3 [Saturday Midday Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	266	0.8	266	0.8	0.230	7.2	LOS A	1.0	6.8	0.28	0.55	0.28	48.6
Approach		266	0.8	266	0.8	0.230	7.2	LOS A	1.0	6.8	0.28	0.55	0.28	48.6
East: Ramsgate Road														
4	L2	19	0.0	19	0.0	0.089	5.5	LOS A	0.0	0.0	0.00	0.07	0.00	56.9
5	T1	738	1.6	738	1.6	0.318	0.4	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Approach		757	1.5	757	1.5	0.318	0.5	NA	0.0	0.0	0.00	0.01	0.00	59.6
North: Targo Road														
7	L2	45	0.0	45	0.0	0.113	12.1	LOS A	0.4	2.5	0.73	0.87	0.73	23.2
Approach		45	0.0	45	0.0	0.113	12.1	LOS A	0.4	2.5	0.73	0.87	0.73	23.2
West: Ramsgate Road														
10	L2	37	0.0	37	0.0	0.498	5.7	LOS A	0.0	0.0	0.00	0.02	0.00	59.2
11	T1	884	1.2	884	1.2	0.498	0.2	LOS A	0.0	0.0	0.00	0.02	0.00	59.2
12	R2	228	1.4	228	1.4	0.393	12.5	LOS A	1.9	13.8	0.71	0.96	0.95	42.7
Approach		1149	1.2	1149	1.2	0.498	2.8	NA	1.9	13.8	0.14	0.21	0.19	54.9
All Vehicles		2218	1.2	2218	1.2	0.498	2.8	NA	1.9	13.8	0.12	0.20	0.15	55.3

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

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

Network: 3 [Saturday Midday Existing (Network Folder: Existing)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Dalkeith Street														
1	L2	23	4.5	23	4.5	0.312	10.5	LOS A	1.0	7.0	0.76	0.87	0.90	27.3
3	R2	23	0.0	23	0.0	0.312	51.0	LOS D	1.0	7.0	0.76	0.87	0.90	27.3
Approach		46	2.3	46	2.3	0.312	30.8	LOS C	1.0	7.0	0.76	0.87	0.90	27.3
East: Ramsgate Road														
4	L2	18	0.0	18	0.0	0.195	5.5	LOS A	0.0	0.0	0.00	0.03	0.00	56.8
5	T1	732	1.4	732	1.4	0.195	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	58.7
Approach		749	1.4	749	1.4	0.195	0.1	NA	0.0	0.0	0.00	0.01	0.00	58.5
West: Ramsgate Road														
11	T1	883	1.1	883	1.1	0.367	0.6	LOS A	1.0	6.8	0.08	0.03	0.11	55.7
12	R2	36	2.9	36	2.9	0.367	11.0	LOS A	1.0	6.8	0.15	0.04	0.19	49.7
Approach		919	1.1	919	1.1	0.367	1.0	NA	1.0	6.8	0.09	0.03	0.11	54.8
All Vehicles		1715	1.3	1715	1.3	0.367	1.4	NA	1.0	7.0	0.07	0.04	0.08	51.8

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.

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

Network: 3 [Saturday Midday Existing (Network Folder: 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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	363	2.3	363	2.3	0.359	12.0	LOS A	7.4	53.0	0.38	0.69	0.38	43.3
2	T1	664	2.1	664	2.1	* 0.655	32.4	LOS C	20.1	143.3	0.84	0.73	0.84	29.4
Approach		1027	2.2	1027	2.2	0.655	25.2	LOS B	20.1	143.3	0.68	0.71	0.68	33.2
East: Ramsgate Road														
4	L2	39	0.0	39	0.0	* 0.657	58.8	LOS E	11.7	82.3	0.99	0.83	1.00	31.9
5	T1	397	0.5	397	0.5	0.657	50.3	LOS D	12.5	88.2	0.98	0.82	0.99	22.7
Approach		436	0.5	436	0.5	0.657	51.1	LOS D	12.5	88.2	0.98	0.82	0.99	23.9
North: Rocky Point Road														
7	L2	117	0.0	117	0.0	0.597	28.0	LOS B	14.3	101.8	0.69	0.67	0.69	34.3
8	T1	666	2.5	666	2.5	0.597	22.0	LOS B	14.4	103.1	0.67	0.61	0.67	37.3
Approach		783	2.2	783	2.2	0.597	22.9	LOS B	14.4	103.1	0.67	0.62	0.67	36.8
West: Ramsgate Road														
10	L2	54	0.0	54	0.0	0.560	25.3	LOS B	21.1	148.9	0.72	0.66	0.72	14.9
11	T1	527	1.0	527	1.0	0.560	20.9	LOS B	21.1	148.9	0.73	0.68	0.73	37.9
12	R2	328	1.3	328	1.3	* 0.560	38.6	LOS C	15.1	107.1	0.85	0.95	0.85	28.7
Approach		909	1.0	909	1.0	0.560	27.6	LOS B	21.1	148.9	0.77	0.78	0.77	33.3
All Vehicles		3156	1.6	3156	1.6	0.657	28.9	LOS C	21.1	148.9	0.75	0.72	0.75	32.3

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

* Critical Movement (Signal Timing)

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

Network: 3 [Saturday Midday Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	22	0.0	22	0.0	0.201	5.5	LOS A	0.0	0.0	0.00	0.04	0.00	57.1
2	T1	703	1.9	703	1.9	0.201	0.1	LOS A	0.1	0.9	0.02	0.02	0.02	56.8
3	R2	7	0.0	7	0.0	0.201	10.6	LOS A	0.1	0.9	0.05	0.01	0.05	55.6
Approach		733	1.9	733	1.9	0.201	0.4	NA	0.1	0.9	0.02	0.02	0.02	56.7
East: Driveway														
4	L2	4	0.0	4	0.0	0.056	9.3	LOS A	0.2	1.2	0.85	0.92	0.85	32.8
5	T1	1	0.0	1	0.0	0.056	29.6	LOS C	0.2	1.2	0.85	0.92	0.85	32.8
6	R2	4	0.0	4	0.0	0.056	40.7	LOS C	0.2	1.2	0.85	0.92	0.85	32.8
Approach		9	0.0	9	0.0	0.056	25.5	LOS B	0.2	1.2	0.85	0.92	0.85	32.8
North: Rocky Point Road														
7	L2	7	0.0	7	0.0	0.458	8.7	LOS A	0.7	5.4	0.07	0.02	0.10	55.9
8	T1	760	2.4	760	2.4	0.458	0.4	LOS A	0.7	5.4	0.07	0.02	0.10	47.3
9	R2	21	0.0	21	0.0	0.458	9.1	LOS A	0.7	5.4	0.07	0.02	0.10	47.3
Approach		788	2.3	788	2.3	0.458	0.7	NA	0.7	5.4	0.07	0.02	0.10	48.0
West: Targo Road														
10	L2	28	0.0	28	0.0	0.114	5.8	LOS A	0.4	2.7	0.61	0.65	0.61	27.1
12	R2	9	0.0	9	0.0	0.114	39.7	LOS C	0.4	2.7	0.61	0.65	0.61	27.1
Approach		38	0.0	38	0.0	0.114	14.3	LOS A	0.4	2.7	0.61	0.65	0.61	27.1
All Vehicles		1568	2.0	1568	2.0	0.458	1.0	NA	0.7	5.4	0.07	0.04	0.08	49.6

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

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

Network: 3 [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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
2	T1	728	1.9	728	1.9	0.397	0.5	LOS A	1.1	8.1	0.03	0.03	0.03	53.8
Approach		728	1.9	728	1.9	0.397	0.5	LOS A	1.1	8.1	0.03	0.03	0.03	53.8
North: Rocky Point Road														
8	T1	783	2.3	783	2.3	* 0.514	0.4	LOS A	1.8	12.9	0.04	0.04	0.04	55.0
Approach		783	2.3	783	2.3	0.514	0.4	LOS A	1.8	12.9	0.04	0.04	0.04	55.0
All Vehicles		1512	2.1	1512	2.1	0.514	0.5	LOS A	1.8	12.9	0.04	0.04	0.04	54.5

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

* Critical Movement (Signal Timing)

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

Network: 3 [Saturday Midday Existing (Network Folder: Existing)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	13	0.0	13	0.0	0.198	4.7	LOS A	0.0	0.0	0.00	0.02	0.00	58.0
2	T1	716	1.9	716	1.9	0.198	0.6	LOS A	0.2	1.6	0.03	0.02	0.03	59.3
3	R2	9	0.0	9	0.0	0.198	10.4	LOS A	0.2	1.6	0.06	0.02	0.06	49.2
Approach		738	1.9	738	1.9	0.198	0.8	NA	0.2	1.6	0.03	0.02	0.03	59.2
East: Meurants Lane														
4	L2	16	0.0	16	0.0	0.067	6.6	LOS A	0.2	1.5	0.40	0.54	0.40	36.1
5	T1	5	0.0	5	0.0	0.067	42.1	LOS C	0.2	1.5	0.40	0.54	0.40	36.1
Approach		21	0.0	21	0.0	0.067	15.5	LOS B	0.2	1.5	0.40	0.54	0.40	36.1
North: Rocky Point Road														
7	L2	16	0.0	16	0.0	0.072	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	57.7
8	T1	762	2.3	762	2.3	0.360	0.6	LOS A	0.4	2.8	0.05	0.02	0.06	58.8
9	R2	15	0.0	15	0.0	0.360	12.2	LOS A	0.4	2.8	0.06	0.01	0.08	58.8
Approach		793	2.3	793	2.3	0.360	0.9	NA	0.4	2.8	0.05	0.02	0.06	58.7
West: Hastings Street														
10	L2	7	0.0	7	0.0	0.203	8.7	LOS A	0.6	4.3	0.87	0.90	0.90	29.6
11	T1	1	0.0	1	0.0	0.203	45.2	LOS D	0.6	4.3	0.87	0.90	0.90	29.8
12	R2	13	0.0	13	0.0	0.203	59.3	LOS E	0.6	4.3	0.87	0.90	0.90	14.5
Approach		21	0.0	21	0.0	0.203	40.9	LOS C	0.6	4.3	0.87	0.90	0.90	22.2
All Vehicles		1573	2.0	1573	2.0	0.360	1.6	NA	0.6	4.3	0.06	0.04	0.06	57.5

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 [Sat MD EX - Burgess Street - Hastings Street (Site Folder: Saturday Midday Existing)]

Network: 3 [Saturday Midday Existing (Network Folder: Existing)]

Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
2	T1	38	0.0	38	0.0	0.035	4.8	LOS A	0.2	1.1	0.08	0.53	0.08	50.8
3	R2	8	0.0	8	0.0	0.035	7.7	LOS A	0.2	1.1	0.08	0.53	0.08	33.9
3u	U	1	0.0	1	0.0	0.035	9.2	LOS A	0.2	1.1	0.08	0.53	0.08	33.9
Approach		47	0.0	47	0.0	0.035	5.5	LOS A	0.2	1.1	0.08	0.53	0.08	49.6
East: Hastings Street														
4	L2	15	0.0	15	0.0	0.021	5.2	LOS A	0.1	0.7	0.15	0.58	0.15	40.3
6	R2	11	0.0	11	0.0	0.021	7.9	LOS A	0.1	0.7	0.15	0.58	0.15	50.4
6u	U	1	0.0	1	0.0	0.021	9.4	LOS A	0.1	0.7	0.15	0.58	0.15	40.3
Approach		26	0.0	26	0.0	0.021	6.5	LOS A	0.1	0.7	0.15	0.58	0.15	46.6
North: Burgess Street														
7	L2	5	0.0	5	0.0	0.033	5.1	LOS A	0.1	1.0	0.06	0.51	0.06	51.3
8	T1	38	0.0	38	0.0	0.033	4.8	LOS A	0.1	1.0	0.06	0.51	0.06	51.3
9u	U	2	0.0	2	0.0	0.033	9.2	LOS A	0.1	1.0	0.06	0.51	0.06	54.4
Approach		45	0.0	45	0.0	0.033	5.1	LOS A	0.1	1.0	0.06	0.51	0.06	51.5
All Vehicles		119	0.0	119	0.0	0.035	5.5	LOS A	0.2	1.1	0.09	0.53	0.09	49.8

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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Site: 101 [Sat MD EX - Targo Road - Burgess Street (Site Folder: Saturday Midday Existing)]

Network: 3 [Saturday Midday Existing (Network Folder: Existing)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
1b	L3	4	0.0	4	0.0	0.007	5.5	LOS A	0.0	0.2	0.14	0.49	0.14	44.2
2	T1	4	0.0	4	0.0	0.007	3.4	LOS A	0.0	0.2	0.14	0.49	0.14	44.2
3	R2	1	0.0	1	0.0	0.007	4.8	LOS A	0.0	0.2	0.14	0.49	0.14	44.2
Approach		9	0.0	9	0.0	0.007	4.5	LOS A	0.0	0.2	0.14	0.49	0.14	44.2
East: Targo Road														
4	L2	1	0.0	1	0.0	0.032	4.6	LOS A	0.1	0.8	0.10	0.51	0.10	45.5
4a	L1	19	0.0	19	0.0	0.032	3.7	LOS A	0.1	0.8	0.10	0.51	0.10	39.4
6	R2	20	0.0	20	0.0	0.032	4.9	LOS A	0.1	0.8	0.10	0.51	0.10	39.4
Approach		40	0.0	40	0.0	0.032	4.3	LOS A	0.1	0.8	0.10	0.51	0.10	39.9
North: Burgess Street														
7	L2	14	0.0	14	0.0	0.029	4.6	LOS A	0.1	0.9	0.06	0.46	0.06	34.0
8	T1	2	0.0	2	0.0	0.029	0.0	LOS A	0.1	0.9	0.06	0.46	0.06	45.9
9a	R1	37	0.0	37	0.0	0.029	3.6	LOS A	0.1	0.9	0.06	0.46	0.06	34.0
Approach		53	0.0	53	0.0	0.029	3.7	NA	0.1	0.9	0.06	0.46	0.06	35.7
SouthWest: Targo Road														
30a	L1	23	0.0	23	0.0	0.020	4.5	LOS A	0.1	0.5	0.03	0.51	0.03	35.1
32a	R1	14	0.0	14	0.0	0.020	3.6	LOS A	0.1	0.5	0.03	0.51	0.03	35.1
32b	R3	1	0.0	1	0.0	0.020	5.2	LOS A	0.1	0.5	0.03	0.51	0.03	44.4
Approach		38	0.0	38	0.0	0.020	4.2	NA	0.1	0.5	0.03	0.51	0.03	36.0
All Vehicles		140	0.0	140	0.0	0.032	4.1	NA	0.1	0.9	0.07	0.49	0.07	38.5

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.

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12175 Ramsgate Planning Proposal 250128

Template: Movement Summaries

Site: 101 [Thu AM EX + Dev - The Promenade - Torwood Street (Site Folder: Weekday Morning Existing + Development + Upgrades)]

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	2	0.0	2	0.0	0.134	5.2	LOS A	0.1	0.8	0.04	0.03	0.04	49.2
2	T1	240	1.3	240	1.3	0.134	0.1	LOS A	0.1	0.8	0.04	0.03	0.04	49.4
3	R2	12	0.0	12	0.0	0.134	5.3	LOS A	0.1	0.8	0.04	0.03	0.04	48.7
Approach		254	1.2	254	1.2	0.134	0.3	NA	0.1	0.8	0.04	0.03	0.04	49.4
East: Torwood Street														
4	L2	16	0.0	16	0.0	0.036	5.2	LOS A	0.1	0.9	0.32	0.57	0.32	45.8
5	T1	1	0.0	1	0.0	0.036	5.1	LOS A	0.1	0.9	0.32	0.57	0.32	45.8
6	R2	17	0.0	17	0.0	0.036	6.9	LOS A	0.1	0.9	0.32	0.57	0.32	43.0
Approach		34	0.0	34	0.0	0.036	6.1	LOS A	0.1	0.9	0.32	0.57	0.32	44.8
North: The Promenade														
7	L2	1	0.0	1	0.0	0.106	5.7	LOS A	0.0	0.2	0.01	0.01	0.01	49.2
8	T1	197	1.6	197	1.6	0.106	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.9
9	R2	2	50.0	2	50.0	0.106	6.4	LOS A	0.0	0.2	0.01	0.01	0.01	47.2
Approach		200	2.1	200	2.1	0.106	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.9
West: Torwood Street														
10	L2	2	0.0	2	0.0	0.004	5.3	LOS A	0.0	0.1	0.36	0.52	0.36	43.4
11	T1	1	0.0	1	0.0	0.004	5.0	LOS A	0.0	0.1	0.36	0.52	0.36	46.1
12	R2	1	0.0	1	0.0	0.004	6.9	LOS A	0.0	0.1	0.36	0.52	0.36	45.6
Approach		4	0.0	4	0.0	0.004	5.6	LOS A	0.0	0.1	0.36	0.52	0.36	45.0
All Vehicles		492	1.5	492	1.5	0.134	0.7	NA	0.1	0.9	0.05	0.06	0.05	49.1

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

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

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + 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: Convert Function Default
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	238	1.3	238	1.3	0.402	39.8	LOS C	10.7	75.7	0.82	0.79	0.82	30.0
2	T1	26	0.0	26	0.0	0.111	50.9	LOS D	1.4	9.7	0.92	0.67	0.92	10.8
Approach		264	1.2	264	1.2	0.402	40.9	LOS C	10.7	75.7	0.83	0.78	0.83	28.5
East: Ramsgate Road														
4	L2	25	0.0	25	0.0	0.169	19.8	LOS B	5.2	37.9	0.58	0.52	0.58	26.7
5	T1	747	4.6	747	4.6	* 0.591	23.5	LOS B	28.6	208.5	0.83	0.75	0.83	38.7
Approach		773	4.5	773	4.5	0.591	23.4	LOS B	28.6	208.5	0.82	0.74	0.82	38.5
North: Targo Road														
7	L2	24	4.3	24	4.3	0.188	63.2	LOS E	1.4	10.1	0.97	0.71	0.97	7.1
8	T1	5	0.0	5	0.0	0.401	60.0	LOS E	2.6	17.9	0.99	0.75	0.99	6.9
9	R2	38	0.0	38	0.0	* 0.401	64.6	LOS E	2.6	17.9	0.99	0.75	0.99	21.7
Approach		67	1.6	67	1.6	0.401	63.7	LOS E	2.6	17.9	0.98	0.74	0.98	16.6
West: Ramsgate Road														
10	L2	65	1.6	65	1.6	0.569	11.3	LOS A	17.9	131.6	0.44	0.43	0.44	49.9
11	T1	709	6.4	709	6.4	0.569	5.7	LOS A	17.9	131.6	0.44	0.43	0.44	49.9
12	R2	169	2.5	169	2.5	* 0.349	27.4	LOS B	6.8	48.5	0.75	0.79	0.75	31.7
Approach		944	5.4	944	5.4	0.569	10.0	LOS A	17.9	131.6	0.49	0.50	0.49	45.2
All Vehicles		2048	4.4	2048	4.4	0.591	20.8	LOS B	28.6	208.5	0.68	0.63	0.68	37.7

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

* Critical Movement (Signal Timing)

Site: 101 [Thu AM EX + Dev - Ramsgate Road - Dalkeith Street (Site Folder: Weekday Morning Existing + Development + Upgrades)]

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Dalkeith Street														
1	L2	11	0.0	11	0.0	0.128	6.4	LOS A	0.4	2.6	0.73	0.79	0.73	31.8
3	R2	13	8.3	13	8.3	0.128	33.5	LOS C	0.4	2.6	0.73	0.79	0.73	31.8
Approach		23	4.5	23	4.5	0.128	21.2	LOS B	0.4	2.6	0.73	0.79	0.73	31.8
East: Ramsgate Road														
4	L2	25	0.0	25	0.0	0.228	5.5	LOS A	0.0	0.0	0.00	0.04	0.00	56.7
5	T1	768	4.5	768	4.5	0.228	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	58.2
Approach		794	4.4	794	4.4	0.228	0.2	NA	0.0	0.0	0.00	0.02	0.00	58.0
West: Ramsgate Road														
11	T1	705	6.4	705	6.4	0.312	0.4	LOS A	0.4	3.2	0.06	0.02	0.07	56.9
12	R2	18	5.9	18	5.9	0.312	11.4	LOS A	0.4	3.2	0.10	0.03	0.11	50.1
Approach		723	6.4	723	6.4	0.312	0.7	NA	0.4	3.2	0.06	0.02	0.07	56.3
All Vehicles		1540	5.3	1540	5.3	0.312	0.7	NA	0.4	3.2	0.04	0.03	0.04	55.0

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 (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + 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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	432	5.9	432	5.9	0.502	10.6	LOS A	8.0	59.0	0.35	0.68	0.35	44.8
2	T1	1334	3.8	1334	3.8	* 0.886	36.9	LOS C	49.9	360.4	0.87	0.90	1.01	27.3
Approach		1765	4.3	1765	4.3	0.886	30.5	LOS C	49.9	360.4	0.74	0.85	0.85	30.2
East: Ramsgate Road														
4	L2	26	4.0	26	4.0	0.908	78.9	LOS F	13.2	94.4	1.00	1.05	1.43	27.3
5	T1	371	2.8	371	2.8	* 0.908	70.1	LOS E	13.8	98.7	1.00	1.05	1.43	18.3
Approach		397	2.9	397	2.9	0.908	70.7	LOS F	13.8	98.7	1.00	1.05	1.43	19.1
North: Rocky Point Road														
7	L2	60	8.8	60	8.8	0.141	12.1	LOS A	1.5	11.1	0.23	0.43	0.23	44.5
8	T1	680	7.9	680	7.9	0.675	6.2	LOS A	11.0	82.1	0.32	0.31	0.32	51.3
Approach		740	8.0	740	8.0	0.675	6.7	LOS A	11.0	82.1	0.31	0.32	0.31	50.7
West: Ramsgate Road														
10	L2	34	6.3	34	6.3	0.645	38.7	LOS C	20.6	150.1	0.88	0.78	0.88	10.0
11	T1	394	4.8	394	4.8	0.645	33.3	LOS C	20.6	150.1	0.88	0.78	0.88	31.3
12	R2	282	9.3	282	9.3	* 0.769	59.1	LOS E	15.0	113.5	0.99	1.05	1.08	22.4
Approach		709	6.7	709	6.7	0.769	43.8	LOS D	20.6	150.1	0.93	0.89	0.96	26.5
All Vehicles		3612	5.4	3612	5.4	0.908	32.6	LOS C	49.9	360.4	0.72	0.77	0.83	30.2

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

* Critical Movement (Signal Timing)

Site: 102 [Thu AM EX + Dev - Rocky Point Road - Targo Road (Site Folder: Weekday Morning Existing + Development + Upgrades)]

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + 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 A
Input Phase Sequence: A, B*, C
Output Phase Sequence: A, C
(* Variable Phase)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	49	0.0	49	0.0	* 0.524	6.1	LOS A	1.6	11.8	0.05	0.09	0.05	52.5
2	T1	1327	3.8	1327	3.8	0.524	0.6	LOS A	1.6	11.8	0.05	0.06	0.05	54.0
Approach		1377	3.7	1377	3.7	0.524	0.8	LOS A	1.6	11.8	0.05	0.06	0.05	54.0
East: Driveway														
4	L2	1	0.0	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
Approach		1	0.0	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
North: Rocky Point Road														
7	L2	2	0.0	2	0.0	0.394	6.5	LOS A	1.6	11.9	0.06	0.06	0.06	56.0
8	T1	655	8.8	655	8.8	0.394	1.5	LOS A	2.1	15.5	0.09	0.11	0.09	48.1
9	R2	53	0.0	53	0.0	0.394	8.7	LOS A	2.1	15.5	0.18	0.28	0.18	37.4
Approach		709	8.2	709	8.2	0.394	2.0	LOS A	2.1	15.5	0.10	0.12	0.10	47.2
West: Targo Road														
10	L2	85	1.2	85	1.2	0.384	57.3	LOS E	4.7	33.4	0.96	0.77	0.96	3.8
12	R2	73	0.0	73	0.0	0.372	57.6	LOS E	4.0	28.3	0.96	0.77	0.96	3.5
Approach		158	0.7	158	0.7	0.384	57.5	LOS E	4.7	33.4	0.96	0.77	0.96	3.7
All Vehicles		2245	4.9	2245	4.9	0.524	5.2	LOS A	4.7	33.4	0.13	0.13	0.13	34.3

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

* Critical Movement (Signal Timing)

Site: 101 [Thu AM EX + Dev - Rocky Point Road - Hastings Street (Site Folder: Weekday Morning Existing + Development + Upgrades)]

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	6	0.0	6	0.0	0.378	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	59.3
2	T1	1400	3.7	1400	3.7	0.378	0.1	LOS A	0.2	1.2	0.01	0.00	0.01	59.8
3	R2	5	0.0	5	0.0	0.378	12.1	LOS A	0.2	1.2	0.02	0.00	0.03	50.3
Approach		1412	3.7	1412	3.7	0.378	0.1	NA	0.2	1.2	0.01	0.00	0.01	59.7
East: Meurants Lane														
4	L2	6	16.7	6	16.7	0.174	6.6	LOS A	0.5	3.6	0.73	0.67	0.73	19.1
5	T1	4	0.0	4	0.0	0.174	143.2	LOS F	0.5	3.6	0.73	0.67	0.73	19.1
Approach		11	10.0	11	10.0	0.174	61.2	LOS E	0.5	3.6	0.73	0.67	0.73	19.1
North: Rocky Point Road														
7	L2	7	14.3	7	14.3	0.074	5.7	LOS A	0.0	0.0	0.00	0.03	0.00	57.3
8	T1	687	8.7	687	8.7	0.368	2.4	LOS A	1.4	10.2	0.12	0.02	0.15	55.1
9	R2	12	0.0	12	0.0	0.368	32.1	LOS C	1.4	10.2	0.14	0.01	0.19	54.2
Approach		706	8.6	706	8.6	0.368	3.0	NA	1.4	10.2	0.12	0.02	0.15	55.1
West: Hastings Street														
10	L2	9	0.0	9	0.0	0.857	204.7	LOS F	3.1	21.4	0.99	1.18	1.63	7.0
11	T1	1	0.0	1	0.0	0.857	344.2	LOS F	3.1	21.4	0.99	1.18	1.63	7.0
12	R2	13	0.0	13	0.0	0.857	417.4	LOS F	3.1	21.4	0.99	1.18	1.63	2.4
Approach		23	0.0	23	0.0	0.857	327.1	LOS F	3.1	21.4	0.99	1.18	1.63	4.6
All Vehicles		2152	5.3	2152	5.3	0.857	4.9	NA	3.1	21.4	0.06	0.02	0.08	52.7

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

Site: 101 [Thu AM EX + Dev - Burgess Street - Hastings Street (Site Folder: Weekday Morning Existing + Development + Upgrades)]

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
2	T1	51	0.0	51	0.0	0.040	4.9	LOS A	0.2	1.3	0.09	0.50	0.09	51.1
3	R2	3	0.0	3	0.0	0.040	7.8	LOS A	0.2	1.3	0.09	0.50	0.09	34.6
3u	U	1	0.0	1	0.0	0.040	9.3	LOS A	0.2	1.3	0.09	0.50	0.09	34.6
Approach		55	0.0	55	0.0	0.040	5.1	LOS A	0.2	1.3	0.09	0.50	0.09	50.7
East: Hastings Street														
4	L2	7	0.0	7	0.0	0.018	5.2	LOS A	0.1	0.6	0.12	0.61	0.12	39.5
6	R2	15	0.0	15	0.0	0.018	7.8	LOS A	0.1	0.6	0.12	0.61	0.12	49.9
6u	U	1	0.0	1	0.0	0.018	9.3	LOS A	0.1	0.6	0.12	0.61	0.12	39.5
Approach		23	0.0	23	0.0	0.018	7.1	LOS A	0.1	0.6	0.12	0.61	0.12	47.9
North: Burgess Street														
7	L2	6	0.0	6	0.0	0.026	5.1	LOS A	0.1	0.9	0.04	0.51	0.04	51.5
8	T1	29	3.6	29	3.6	0.026	4.8	LOS A	0.1	0.9	0.04	0.51	0.04	51.5
9u	U	1	0.0	1	0.0	0.026	9.2	LOS A	0.1	0.9	0.04	0.51	0.04	54.5
Approach		37	2.9	37	2.9	0.026	5.0	LOS A	0.1	0.9	0.04	0.51	0.04	51.6
All Vehicles		115	0.9	115	0.9	0.040	5.5	LOS A	0.2	1.3	0.08	0.52	0.08	50.4

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

Site: 101 [Thu AM EX + Dev - Targo Road - Burgess Street (Site Folder: Weekday Morning Existing + Development + Upgrades)]

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
1b	L3	1	0.0	1	0.0	0.003	5.6	LOS A	0.0	0.1	0.17	0.50	0.17	44.0
2	T1	1	0.0	1	0.0	0.003	3.5	LOS A	0.0	0.1	0.17	0.50	0.17	44.0
3	R2	1	0.0	1	0.0	0.003	5.3	LOS A	0.0	0.1	0.17	0.50	0.17	44.0
Approach		3	0.0	3	0.0	0.003	4.8	LOS A	0.0	0.1	0.17	0.50	0.17	44.0
East: Targo Road														
4	L2	1	0.0	1	0.0	0.070	4.6	LOS A	0.3	1.9	0.09	0.51	0.09	45.2
4a	L1	45	0.0	45	0.0	0.070	3.7	LOS A	0.3	1.9	0.09	0.51	0.09	36.9
6	R2	41	0.0	41	0.0	0.070	5.1	LOS A	0.3	1.9	0.09	0.51	0.09	36.9
Approach		87	0.0	87	0.0	0.070	4.4	LOS A	0.3	1.9	0.09	0.51	0.09	37.2
North: Burgess Street														
7	L2	17	0.0	17	0.0	0.022	4.7	LOS A	0.1	0.8	0.16	0.44	0.16	32.5
8	T1	1	0.0	1	0.0	0.022	0.2	LOS A	0.1	0.8	0.16	0.44	0.16	45.3
9a	R1	20	5.3	20	5.3	0.022	3.9	LOS A	0.1	0.8	0.16	0.44	0.16	32.5
Approach		38	2.8	38	2.8	0.022	4.2	NA	0.1	0.8	0.16	0.44	0.16	33.7
SouthWest: Targo Road														
30a	L1	13	0.0	13	0.0	0.052	4.5	LOS A	0.2	1.5	0.05	0.48	0.05	36.1
32a	R1	79	0.0	79	0.0	0.052	3.6	LOS A	0.2	1.5	0.05	0.48	0.05	36.1
32b	R3	1	0.0	1	0.0	0.052	5.2	LOS A	0.2	1.5	0.05	0.48	0.05	44.7
Approach		93	0.0	93	0.0	0.052	3.8	NA	0.2	1.5	0.05	0.48	0.05	36.4
All Vehicles		221	0.5	221	0.5	0.070	4.1	NA	0.3	1.9	0.09	0.48	0.09	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.
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 AM EX + Dev - Targo Road - Site Access (Site Folder: Weekday Morning Existing + Development + Upgrades)]

Network: 7 [Weekday Morning Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access														
1	L2	58	0.0	58	0.0	0.151	0.1	LOS A	0.6	4.0	0.12	0.19	0.12	19.8
3	R2	126	0.0	126	0.0	0.151	1.6	LOS A	0.6	4.0	0.12	0.19	0.12	19.8
Approach		184	0.0	184	0.0	0.151	1.1	LOS A	0.6	4.0	0.12	0.19	0.12	19.8
East: Targo Road														
4	L2	84	0.0	84	0.0	0.062	3.9	LOS A	0.0	0.0	0.00	0.40	0.00	45.9
5	T1	28	0.0	28	0.0	0.062	0.0	LOS A	0.0	0.0	0.00	0.40	0.00	30.7
Approach		113	0.0	113	0.0	0.062	2.9	NA	0.0	0.0	0.00	0.40	0.00	45.0
West: Targo Road														
11	T1	32	3.3	32	3.3	0.066	0.3	LOS A	0.3	2.2	0.22	0.40	0.22	37.2
12	R2	79	0.0	79	0.0	0.066	5.1	LOS A	0.3	2.2	0.22	0.40	0.22	23.0
Approach		111	1.0	111	1.0	0.066	3.7	NA	0.3	2.2	0.22	0.40	0.22	23.9
All Vehicles		407	0.3	407	0.3	0.151	2.3	NA	0.6	4.0	0.11	0.30	0.11	24.3

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

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12175 Ramsgate Planning Proposal 250128

Template: Movement Summaries

Site: 101 [Thu PM EX + Dev - The Promenade - Torwood Street (Site Folder: Weekday Afternoon Existing + Development + Upgrades)]

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	6	0.0	6	0.0	0.127	5.4	LOS A	0.1	0.8	0.05	0.04	0.05	49.2
2	T1	224	1.4	224	1.4	0.127	0.1	LOS A	0.1	0.8	0.05	0.04	0.05	49.3
3	R2	9	0.0	9	0.0	0.127	5.7	LOS A	0.1	0.8	0.05	0.04	0.05	48.7
Approach		240	1.3	240	1.3	0.127	0.4	NA	0.1	0.8	0.05	0.04	0.05	49.3
East: Torwood Street														
4	L2	32	0.0	32	0.0	0.088	5.6	LOS A	0.3	2.4	0.41	0.62	0.41	45.4
5	T1	1	0.0	1	0.0	0.088	5.6	LOS A	0.3	2.4	0.41	0.62	0.41	45.5
6	R2	42	0.0	42	0.0	0.088	7.5	LOS A	0.3	2.4	0.41	0.62	0.41	42.4
Approach		75	0.0	75	0.0	0.088	6.7	LOS A	0.3	2.4	0.41	0.62	0.41	44.2
North: The Promenade														
7	L2	5	0.0	5	0.0	0.153	4.9	LOS A	0.0	0.2	0.01	0.02	0.01	49.1
8	T1	287	0.7	287	0.7	0.153	0.0	LOS A	0.0	0.2	0.01	0.02	0.01	49.8
9	R2	3	0.0	3	0.0	0.153	5.4	LOS A	0.0	0.2	0.01	0.02	0.01	48.4
Approach		296	0.7	296	0.7	0.153	0.2	NA	0.0	0.2	0.01	0.02	0.01	49.8
West: Torwood Street														
10	L2	1	0.0	1	0.0	0.007	5.2	LOS A	0.0	0.2	0.42	0.57	0.42	42.5
11	T1	1	0.0	1	0.0	0.007	5.3	LOS A	0.0	0.2	0.42	0.57	0.42	45.5
12	R2	3	0.0	3	0.0	0.007	7.4	LOS A	0.0	0.2	0.42	0.57	0.42	45.1
Approach		5	0.0	5	0.0	0.007	6.5	LOS A	0.0	0.2	0.42	0.57	0.42	44.9
All Vehicles		616	0.9	616	0.9	0.153	1.1	NA	0.3	2.4	0.08	0.10	0.08	48.7

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

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

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + 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: Convert Function Default
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	205	1.5	205	1.5	0.278	31.7	LOS C	7.8	55.7	0.70	0.75	0.70	33.4
2	T1	58	0.0	58	0.0	0.184	46.7	LOS D	2.9	20.6	0.90	0.69	0.90	11.5
Approach		263	1.2	263	1.2	0.278	35.0	LOS C	7.8	55.7	0.74	0.74	0.74	29.3
East: Ramsgate Road														
4	L2	24	0.0	24	0.0	0.207	24.7	LOS B	6.0	42.3	0.61	0.54	0.61	22.7
5	T1	812	1.7	807	1.7	* 0.725	31.2	LOS C	33.9	240.5	0.90	0.81	0.90	34.6
Approach		836	1.6	831 N1	1.6	0.725	31.0	LOS C	33.9	240.5	0.89	0.80	0.89	34.5
North: Targo Road														
7	L2	42	0.0	42	0.0	0.201	57.5	LOS E	2.3	16.0	0.94	0.73	0.94	7.7
8	T1	18	0.0	18	0.0	0.595	56.0	LOS D	5.3	37.2	0.98	0.80	1.02	7.3
9	R2	74	0.0	74	0.0	* 0.595	60.6	LOS E	5.3	37.2	0.98	0.80	1.02	22.6
Approach		134	0.0	134	0.0	0.595	59.0	LOS E	5.3	37.2	0.97	0.78	0.99	17.3
West: Ramsgate Road														
10	L2	104	0.0	104	0.0	0.561	13.6	LOS A	19.9	140.8	0.50	0.50	0.50	46.6
11	T1	646	1.1	646	1.1	0.561	8.1	LOS A	19.9	140.8	0.50	0.50	0.50	46.6
12	R2	257	0.8	257	0.8	* 0.519	40.6	LOS C	12.2	86.2	0.90	0.91	0.90	25.9
Approach		1007	0.9	1007	0.9	0.561	16.9	LOS B	19.9	140.8	0.60	0.61	0.60	38.7
All Vehicles		2240	1.2	2235 N1	1.2	0.725	26.8	LOS B	33.9	240.5	0.75	0.71	0.75	33.8

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

* Critical Movement (Signal Timing)
N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

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

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Dalkeith Street														
1	L2	37	2.9	37	2.9	0.220	7.0	LOS A	0.7	5.1	0.67	0.79	0.68	34.6
3	R2	24	0.0	24	0.0	0.220	30.8	LOS C	0.7	5.1	0.67	0.79	0.68	34.6
Approach		61	1.7	61	1.7	0.220	16.4	LOS B	0.7	5.1	0.67	0.79	0.68	34.6
East: Ramsgate Road														
4	L2	59	0.0	59	0.0	0.260	5.5	LOS A	0.0	0.0	0.00	0.07	0.00	56.2
5	T1	809	1.8	805	1.8	0.260	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
Approach		868	1.7	863 N1	1.7	0.260	0.4	NA	0.0	0.0	0.00	0.04	0.00	56.5
West: Ramsgate Road														
11	T1	629	1.2	629	1.2	0.268	1.1	LOS A	1.1	8.0	0.15	0.06	0.17	52.3
12	R2	57	0.0	57	0.0	0.268	11.4	LOS A	1.1	8.0	0.35	0.13	0.38	47.6
Approach		686	1.1	686	1.1	0.268	1.9	NA	1.1	8.0	0.17	0.06	0.19	51.1
All Vehicles		1616	1.4	1611 N1	1.4	0.268	1.7	NA	1.1	8.0	0.10	0.08	0.11	50.6

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.

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

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

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + 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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	401	1.0	401	1.0	0.446	13.3	LOS A	9.2	64.6	0.43	0.71	0.43	42.0
2	T1	866	3.0	866	3.0	0.641	21.2	LOS B	21.2	152.4	0.72	0.63	0.72	35.5
Approach		1267	2.4	1267	2.4	0.641	18.7	LOS B	21.2	152.4	0.62	0.65	0.62	37.3
East: Ramsgate Road														
4	L2	60	0.0	60	0.0	1.011	115.3	LOS F	23.7	168.2	1.00	1.28	1.77	21.0
5	T1	485	2.2	485	2.2	* 1.011	109.5	LOS F	25.2	179.7	1.00	1.29	1.76	13.1
Approach		545	1.9	545	1.9	1.011	110.1	LOS F	25.2	179.7	1.00	1.29	1.76	14.2
North: Rocky Point Road														
7	L2	120	1.8	120	1.8	0.765	15.0	LOS B	19.4	137.2	0.52	0.53	0.52	45.0
8	T1	1285	1.3	1283	1.3	* 0.765	9.0	LOS A	19.4	137.2	0.51	0.49	0.51	47.8
Approach		1405	1.3	1402 N1	1.4	0.765	9.5	LOS A	19.4	137.2	0.51	0.49	0.51	47.5
West: Ramsgate Road														
10	L2	46	0.0	46	0.0	0.527	36.3	LOS C	18.2	128.1	0.87	0.77	0.87	10.5
11	T1	338	0.9	338	0.9	0.527	31.0	LOS C	18.2	128.1	0.87	0.77	0.87	32.3
12	R2	260	1.6	260	1.6	* 0.823	65.9	LOS E	14.9	105.8	1.00	1.07	1.18	21.0
Approach		644	1.1	644	1.1	0.823	45.5	LOS D	18.2	128.1	0.92	0.89	0.99	25.7
All Vehicles		3862	1.7	3859 N1	1.7	1.011	32.7	LOS C	25.2	179.7	0.69	0.72	0.81	30.5

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

* Critical Movement (Signal Timing)
N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Site: 102 [Thu PM EX + Dev - Rocky Point Road - Targo Road (Site Folder: Weekday Afternoon Existing + Development + Upgrades)]

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + 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 A
Input Phase Sequence: A, B*, C
Output Phase Sequence: A, B*, C
(* Variable Phase)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	113	0.0	113	0.0	0.476	9.9	LOS A	5.0	35.5	0.20	0.29	0.20	33.4
2	T1	814	3.2	814	3.2	0.476	5.0	LOS A	5.1	37.0	0.20	0.23	0.20	35.2
Approach		926	2.8	926	2.8	0.476	5.6	LOS A	5.1	37.0	0.20	0.24	0.20	35.0
East: Driveway														
4	L2	4	0.0	4	0.0	0.003	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
Approach		4	0.0	4	0.0	0.003	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
North: Rocky Point Road														
7	L2	2	0.0	2	0.0	* 0.886	21.6	LOS B	26.5	187.7	0.54	0.58	0.63	40.7
8	T1	1236	1.4	1233	1.5	0.886	20.2	LOS B	26.6	187.7	0.62	0.68	0.74	16.1
9	R2	131	0.0	130	0.0	* 0.886	32.8	LOS C	26.6	187.7	0.77	0.86	0.92	12.6
Approach		1368	1.3	1365 N1	1.3	0.886	21.4	LOS B	26.6	187.7	0.64	0.70	0.76	15.8
West: Targo Road														
10	L2	118	0.0	118	0.0	0.179	32.7	LOS C	4.6	32.4	0.72	0.73	0.72	6.6
12	R2	133	0.8	133	0.8	* 0.689	57.9	LOS E	7.8	55.2	0.99	0.86	1.08	3.5
Approach		251	0.4	251	0.4	0.689	46.1	LOS D	7.8	55.2	0.86	0.80	0.91	4.5
All Vehicles		2549	1.8	2546 N1	1.8	0.886	18.0	LOS B	26.6	187.7	0.50	0.54	0.57	17.0

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.

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

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	14	0.0	14	0.0	0.292	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	58.7
2	T1	917	3.0	917	3.0	0.292	1.5	LOS A	0.8	5.8	0.06	0.02	0.07	58.2
3	R2	11	0.0	11	0.0	0.292	22.7	LOS B	0.8	5.8	0.14	0.02	0.17	47.7
Approach		941	2.9	941	2.9	0.292	1.8	NA	0.8	5.8	0.06	0.02	0.07	58.1
East: Meurants Lane														
4	L2	9	0.0	9	0.0	0.107	9.5	LOS A	0.2	1.4	0.83	0.92	0.83	29.1
5	T1	1	0.0	1	0.0	0.107	181.3	LOS F	0.2	1.4	0.83	0.92	0.83	29.1
Approach		11	0.0	11	0.0	0.107	26.7	LOS B	0.2	1.4	0.83	0.92	0.83	29.1
North: Rocky Point Road														
7	L2	16	0.0	16	0.0	0.647	6.0	LOS A	0.0	0.0	0.00	0.01	0.00	57.3
8	T1	1354	1.4	1354	1.4	0.647	1.0	LOS A	1.1	8.0	0.06	0.02	0.10	57.6
9	R2	24	0.0	24	0.0	0.647	15.6	LOS B	1.1	8.0	0.14	0.03	0.25	56.1
Approach		1394	1.4	1394	1.4	0.647	1.3	NA	1.1	8.0	0.06	0.02	0.11	57.5
West: Hastings Street														
10	L2	13	0.0	13	0.0	1.785	908.3	LOS F	11.3	79.4	1.00	1.96	4.13	2.4
11	T1	2	0.0	2	0.0	1.785	1010.0	LOS F	11.3	79.4	1.00	1.96	4.13	2.4
12	R2	14	0.0	14	0.0	1.785	1060.5	LOS F	11.3	79.4	1.00	1.96	4.13	0.8
Approach		28	0.0	28	0.0	1.785	989.1	LOS F	11.3	79.4	1.00	1.96	4.13	1.6
All Vehicles		2374	2.0	2374	2.0	1.785	13.5	NA	11.3	79.4	0.07	0.04	0.14	42.2

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

Site: 101 [Thu PM EX + Dev - Burgess Street - Hastings Street (Site Folder: Weekday Afternoon Existing + Development + Upgrades)]

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
2	T1	61	0.0	61	0.0	0.052	4.9	LOS A	0.3	1.8	0.09	0.51	0.09	50.9
3	R2	9	0.0	9	0.0	0.052	7.8	LOS A	0.3	1.8	0.09	0.51	0.09	34.1
3u	U	1	0.0	1	0.0	0.052	9.3	LOS A	0.3	1.8	0.09	0.51	0.09	34.1
Approach		72	0.0	72	0.0	0.052	5.3	LOS A	0.3	1.8	0.09	0.51	0.09	50.0
East: Hastings Street														
4	L2	13	0.0	13	0.0	0.025	5.3	LOS A	0.1	0.8	0.18	0.59	0.18	39.5
6	R2	17	0.0	17	0.0	0.025	8.0	LOS A	0.1	0.8	0.18	0.59	0.18	49.9
6u	U	1	0.0	1	0.0	0.025	9.5	LOS A	0.1	0.8	0.18	0.59	0.18	39.5
Approach		31	0.0	31	0.0	0.025	6.9	LOS A	0.1	0.8	0.18	0.59	0.18	47.4
North: Burgess Street														
7	L2	17	0.0	17	0.0	0.054	5.1	LOS A	0.3	1.8	0.07	0.50	0.07	51.4
8	T1	59	0.0	59	0.0	0.054	4.8	LOS A	0.3	1.8	0.07	0.50	0.07	51.4
9u	U	1	0.0	1	0.0	0.054	9.2	LOS A	0.3	1.8	0.07	0.50	0.07	54.5
Approach		77	0.0	77	0.0	0.054	4.9	LOS A	0.3	1.8	0.07	0.50	0.07	51.5
All Vehicles		179	0.0	179	0.0	0.054	5.4	LOS A	0.3	1.8	0.10	0.52	0.10	50.2

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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
1b	L3	1	0.0	1	0.0	0.003	5.8	LOS A	0.0	0.1	0.26	0.50	0.26	43.7
2	T1	1	0.0	1	0.0	0.003	3.8	LOS A	0.0	0.1	0.26	0.50	0.26	43.7
3	R2	1	0.0	1	0.0	0.003	6.0	LOS A	0.0	0.1	0.26	0.50	0.26	43.7
Approach		3	0.0	3	0.0	0.003	5.2	LOS A	0.0	0.1	0.26	0.50	0.26	43.7
East: Targo Road														
4	L2	1	0.0	1	0.0	0.121	4.6	LOS A	0.5	3.4	0.14	0.50	0.14	45.2
4a	L1	101	0.0	101	0.0	0.121	3.7	LOS A	0.5	3.4	0.14	0.50	0.14	36.8
6	R2	52	0.0	52	0.0	0.121	5.6	LOS A	0.5	3.4	0.14	0.50	0.14	36.8
Approach		154	0.0	154	0.0	0.121	4.4	LOS A	0.5	3.4	0.14	0.50	0.14	37.0
North: Burgess Street														
7	L2	37	0.0	37	0.0	0.042	4.9	LOS A	0.2	1.4	0.22	0.42	0.22	32.0
8	T1	3	0.0	3	0.0	0.042	0.4	LOS A	0.2	1.4	0.22	0.42	0.22	45.2
9a	R1	33	0.0	33	0.0	0.042	4.0	LOS A	0.2	1.4	0.22	0.42	0.22	32.0
Approach		73	0.0	73	0.0	0.042	4.3	NA	0.2	1.4	0.22	0.42	0.22	33.9
SouthWest: Targo Road														
30a	L1	19	0.0	19	0.0	0.093	4.6	LOS A	0.4	2.7	0.09	0.47	0.09	35.8
32a	R1	143	0.0	143	0.0	0.093	3.7	LOS A	0.4	2.7	0.09	0.47	0.09	35.8
32b	R3	1	0.0	1	0.0	0.093	5.2	LOS A	0.4	2.7	0.09	0.47	0.09	44.6
Approach		163	0.0	163	0.0	0.093	3.8	NA	0.4	2.7	0.09	0.47	0.09	36.0
All Vehicles		393	0.0	393	0.0	0.121	4.1	NA	0.5	3.4	0.13	0.47	0.13	36.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
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 + Dev - Targo Road - Site Access (Site Folder: Weekday Afternoon Existing + Development + Upgrades)]

Network: 4 [Weekday Afternoon Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access														
1	L2	116	0.0	116	0.0	0.337	0.1	LOS A	1.4	9.6	0.15	0.22	0.15	19.6
3	R2	232	0.0	232	0.0	0.337	2.5	LOS A	1.4	9.6	0.15	0.22	0.15	19.6
Approach		347	0.0	347	0.0	0.337	1.7	LOS A	1.4	9.6	0.15	0.22	0.15	19.6
East: Targo Road														
4	L2	189	0.0	189	0.0	0.125	3.9	LOS A	0.0	0.0	0.00	0.44	0.00	45.5
5	T1	38	0.0	38	0.0	0.125	0.0	LOS A	0.0	0.0	0.00	0.44	0.00	29.5
Approach		227	0.0	227	0.0	0.125	3.2	NA	0.0	0.0	0.00	0.44	0.00	45.0
West: Targo Road														
11	T1	24	4.3	24	4.3	0.122	0.8	LOS A	0.6	4.4	0.34	0.50	0.34	34.8
12	R2	158	0.0	158	0.0	0.122	5.6	LOS A	0.6	4.4	0.34	0.50	0.34	22.8
Approach		182	0.6	182	0.6	0.122	4.9	NA	0.6	4.4	0.34	0.50	0.34	23.1
All Vehicles		757	0.1	757	0.1	0.337	2.9	NA	1.4	9.6	0.15	0.35	0.15	24.4

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.

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12175 Ramsgate Planning Proposal 250128

Template: Movement Summaries

Site: 101 [Sat MD EX + Dev - The Promenade - Torwood Street (Site Folder: Saturday Midday Existing + Development + Upgrades)]

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	2	0.0	2	0.0	0.152	5.5	LOS A	0.1	0.9	0.04	0.03	0.04	49.2
2	T1	278	0.4	278	0.4	0.152	0.1	LOS A	0.1	0.9	0.04	0.03	0.04	49.5
3	R2	12	0.0	12	0.0	0.152	5.5	LOS A	0.1	0.9	0.04	0.03	0.04	48.8
Approach		292	0.4	292	0.4	0.152	0.3	NA	0.1	0.9	0.04	0.03	0.04	49.4
East: Torwood Street														
4	L2	28	3.7	28	3.7	0.066	5.4	LOS A	0.3	1.8	0.37	0.60	0.37	45.4
5	T1	1	100.0	1	100.0	0.066	10.1	LOS A	0.3	1.8	0.37	0.60	0.37	44.5
6	R2	26	4.0	26	4.0	0.066	7.8	LOS A	0.3	1.8	0.37	0.60	0.37	42.4
Approach		56	5.7	56	5.7	0.066	6.6	LOS A	0.3	1.8	0.37	0.60	0.37	44.4
North: The Promenade														
7	L2	3	0.0	3	0.0	0.134	5.3	LOS A	0.0	0.3	0.02	0.02	0.02	49.1
8	T1	247	0.9	247	0.9	0.134	0.0	LOS A	0.0	0.3	0.02	0.02	0.02	49.8
9	R2	5	0.0	5	0.0	0.134	5.6	LOS A	0.0	0.3	0.02	0.02	0.02	48.4
Approach		256	0.8	256	0.8	0.134	0.2	NA	0.0	0.3	0.02	0.02	0.02	49.7
West: Torwood Street														
10	L2	2	0.0	2	0.0	0.006	5.4	LOS A	0.0	0.1	0.41	0.54	0.41	43.2
11	T1	2	0.0	2	0.0	0.006	5.4	LOS A	0.0	0.1	0.41	0.54	0.41	45.9
12	R2	1	0.0	1	0.0	0.006	7.5	LOS A	0.0	0.1	0.41	0.54	0.41	45.5
Approach		5	0.0	5	0.0	0.006	5.8	LOS A	0.0	0.1	0.41	0.54	0.41	45.1
All Vehicles		608	1.0	608	1.0	0.152	0.9	NA	0.3	1.8	0.07	0.08	0.07	48.9

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 + Dev - Ramsgate Road - Targo Road - The Promenade (Site Folder: Saturday Midday Existing + Development + Upgrades)]

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + 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: Convert Function Default
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: The Promenade														
1	L2	266	0.8	266	0.8	0.366	33.1	LOS C	10.8	75.8	0.74	0.77	0.74	32.6
2	T1	42	0.0	42	0.0	0.141	47.2	LOS D	2.1	15.0	0.90	0.67	0.90	11.4
Approach		308	0.7	308	0.7	0.366	35.1	LOS C	10.8	75.8	0.76	0.76	0.76	30.3
East: Ramsgate Road														
4	L2	19	0.0	19	0.0	0.185	26.2	LOS B	6.3	44.6	0.70	0.61	0.70	21.7
5	T1	738	1.6	738	1.6	0.647	33.5	LOS C	30.8	218.6	0.92	0.82	0.92	33.6
Approach		757	1.5	757	1.5	0.647	33.3	LOS C	30.8	218.6	0.91	0.81	0.91	33.4
North: Targo Road														
7	L2	45	0.0	45	0.0	0.232	58.8	LOS E	2.5	17.5	0.95	0.74	0.95	7.6
8	T1	28	0.0	28	0.0	0.568	56.4	LOS D	4.9	34.6	0.99	0.79	1.00	7.3
9	R2	57	0.0	57	0.0	* 0.568	61.0	LOS E	4.9	34.6	0.99	0.79	1.00	22.7
Approach		131	0.0	131	0.0	0.568	59.3	LOS E	4.9	34.6	0.97	0.77	0.98	15.5
West: Ramsgate Road														
10	L2	89	0.0	89	0.0	* 0.807	14.9	LOS B	30.6	216.2	0.60	0.58	0.60	45.4
11	T1	874	1.2	874	1.2	0.807	9.3	LOS A	30.6	216.2	0.60	0.58	0.60	45.4
12	R2	228	1.4	228	1.4	0.438	34.1	LOS C	10.7	75.9	0.86	0.83	0.86	28.5
Approach		1192	1.1	1192	1.1	0.807	14.5	LOS B	30.6	216.2	0.65	0.63	0.65	40.8
All Vehicles		2387	1.1	2387	1.1	0.807	25.6	LOS B	30.8	218.6	0.77	0.71	0.77	34.3

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

* Critical Movement (Signal Timing)

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

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Dalkeith Street														
1	L2	23	4.5	23	4.5	0.275	8.7	LOS A	0.8	5.7	0.73	0.84	0.83	30.2
3	R2	23	0.0	23	0.0	0.275	40.1	LOS C	0.8	5.7	0.73	0.84	0.83	30.2
Approach		46	2.3	46	2.3	0.275	24.4	LOS B	0.8	5.7	0.73	0.84	0.83	30.2
East: Ramsgate Road														
4	L2	44	0.0	44	0.0	0.222	5.5	LOS A	0.0	0.0	0.00	0.06	0.00	56.4
5	T1	732	1.4	732	1.4	0.222	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	57.1
Approach		776	1.4	776	1.4	0.222	0.3	NA	0.0	0.0	0.00	0.03	0.00	56.9
West: Ramsgate Road														
11	T1	873	1.1	873	1.1	0.294	0.5	LOS A	7.8	54.9	0.07	0.03	0.08	56.2
12	R2	36	2.9	36	2.9	0.294	10.6	LOS A	0.7	4.9	0.21	0.07	0.23	49.1
Approach		908	1.2	908	1.2	0.294	0.9	NA	7.8	54.9	0.08	0.03	0.09	55.2
All Vehicles		1731	1.3	1731	1.3	0.294	1.3	NA	7.8	54.9	0.06	0.05	0.07	52.6

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

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

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + 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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	363	2.3	363	2.3	0.329	11.2	LOS A	7.0	49.9	0.36	0.69	0.36	44.1
2	T1	722	1.9	722	1.9	0.479	20.1	LOS B	16.9	120.2	0.68	0.59	0.68	36.3
Approach		1085	2.0	1085	2.0	0.479	17.1	LOS B	16.9	120.2	0.57	0.62	0.57	38.6
East: Ramsgate Road														
4	L2	39	0.0	39	0.0	0.965	94.1	LOS F	17.0	119.4	1.00	1.16	1.61	24.6
5	T1	423	0.5	423	0.5	* 0.965	84.6	LOS F	18.0	126.2	1.00	1.16	1.60	16.0
Approach		462	0.5	462	0.5	0.965	85.4	LOS F	18.0	126.2	1.00	1.16	1.60	16.9
North: Rocky Point Road														
7	L2	133	0.0	133	0.0	0.165	13.9	LOS A	2.0	14.2	0.27	0.63	0.27	42.4
8	T1	729	2.3	729	2.3	* 0.787	8.8	LOS A	20.4	145.3	0.52	0.48	0.52	48.5
Approach		862	2.0	862	2.0	0.787	9.6	LOS A	20.4	145.3	0.48	0.50	0.48	47.5
West: Ramsgate Road														
10	L2	54	0.0	54	0.0	0.778	40.0	LOS C	22.0	155.0	0.95	0.86	0.96	9.6
11	T1	517	1.0	517	1.0	0.778	34.8	LOS C	22.0	155.0	0.95	0.86	0.96	30.7
12	R2	328	1.3	328	1.3	* 0.813	60.6	LOS E	17.8	125.6	1.00	1.08	1.13	22.2
Approach		899	1.1	899	1.1	0.813	44.5	LOS D	22.0	155.0	0.97	0.94	1.02	26.2
All Vehicles		3308	1.5	3308	1.5	0.965	32.1	LOS C	22.0	155.0	0.72	0.75	0.81	30.7

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

* Critical Movement (Signal Timing)

Site: 102 [Sat MD EX + Dev - Rocky Point Road - Targo Road (Site Folder: Saturday Midday Existing + Development + Upgrades)]

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + 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 A
Input Phase Sequence: A, B*, C
Output Phase Sequence: A, C
(* Variable Phase)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	96	0.0	96	0.0	* 0.353	6.1	LOS A	0.7	4.6	0.03	0.18	0.03	46.6
2	T1	687	2.0	687	2.0	0.353	1.0	LOS A	0.7	5.0	0.03	0.09	0.03	51.1
Approach		783	1.7	783	1.7	0.353	1.7	LOS A	0.7	5.0	0.03	0.10	0.03	50.5
East: Driveway														
4	L2	4	0.0	4	0.0	0.002	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
Approach		4	0.0	4	0.0	0.002	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.9
North: Rocky Point Road														
7	L2	7	0.0	7	0.0	0.545	13.7	LOS A	12.0	86.1	0.37	0.34	0.37	47.5
8	T1	739	2.4	739	2.4	0.545	9.2	LOS A	12.0	86.1	0.40	0.39	0.40	26.3
9	R2	111	0.0	111	0.0	* 0.545	19.3	LOS B	7.3	51.5	0.54	0.60	0.54	19.1
Approach		857	2.1	857	2.1	0.545	10.5	LOS A	12.0	86.1	0.42	0.41	0.42	25.6
West: Targo Road														
10	L2	118	0.0	118	0.0	0.271	44.7	LOS D	5.6	39.3	0.85	0.76	0.85	4.9
12	R2	109	0.0	109	0.0	0.466	47.2	LOS D	5.7	39.7	0.90	0.80	0.90	4.2
Approach		227	0.0	227	0.0	0.466	45.9	LOS D	5.7	39.7	0.88	0.78	0.88	4.6
All Vehicles		1872	1.7	1872	1.7	0.545	11.1	LOS A	12.0	86.1	0.31	0.33	0.31	23.5

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

* Critical Movement (Signal Timing)

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

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Rocky Point Road														
1	L2	13	0.0	13	0.0	0.209	5.5	LOS A	0.0	0.0	0.00	0.02	0.00	58.5
2	T1	789	1.7	789	1.7	0.209	0.5	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach		802	1.7	802	1.7	0.209	0.6	NA	0.0	0.0	0.00	0.01	0.00	59.7
East: Meurants Lane														
4	L2	16	0.0	16	0.0	0.121	6.9	LOS A	0.4	2.6	0.51	0.59	0.51	31.8
5	T1	5	0.0	5	0.0	0.121	45.7	LOS D	0.4	2.6	0.51	0.59	0.51	31.8
6	R2	3	0.0	3	0.0	0.121	61.1	LOS E	0.4	2.6	0.51	0.59	0.51	40.5
Approach		24	0.0	24	0.0	0.121	22.4	LOS B	0.4	2.6	0.51	0.59	0.51	33.5
North: Rocky Point Road														
7	L2	16	0.0	16	0.0	0.078	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	57.8
8	T1	831	2.2	831	2.2	0.389	0.6	LOS A	0.4	3.2	0.05	0.02	0.06	58.8
9	R2	15	0.0	15	0.0	0.389	12.6	LOS A	0.4	3.2	0.06	0.01	0.08	58.8
Approach		861	2.1	861	2.1	0.389	0.9	NA	0.4	3.2	0.05	0.02	0.06	58.8
West: Hastings Street														
10	L2	7	0.0	7	0.0	0.220	10.1	LOS A	0.7	4.7	0.87	0.90	0.92	28.3
11	T1	1	0.0	1	0.0	0.220	49.8	LOS D	0.7	4.7	0.87	0.90	0.92	28.4
12	R2	13	0.0	13	0.0	0.220	65.2	LOS E	0.7	4.7	0.87	0.90	0.92	13.5
Approach		21	0.0	21	0.0	0.220	45.2	LOS D	0.7	4.7	0.87	0.90	0.92	20.9
All Vehicles		1708	1.8	1708	1.8	0.389	1.6	NA	0.7	4.7	0.04	0.03	0.05	57.6

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

Site: 101 [Sat MD EX + Dev - Burgess Street - Hastings Street (Site Folder: Saturday Midday Existing + Development + Upgrades)]

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
2	T1	64	0.0	64	0.0	0.053	4.8	LOS A	0.3	1.8	0.08	0.51	0.08	51.0
3	R2	8	0.0	8	0.0	0.053	7.7	LOS A	0.3	1.8	0.08	0.51	0.08	34.4
3u	U	1	0.0	1	0.0	0.053	9.2	LOS A	0.3	1.8	0.08	0.51	0.08	34.4
Approach		74	0.0	74	0.0	0.053	5.2	LOS A	0.3	1.8	0.08	0.51	0.08	50.3
East: Hastings Street														
4	L2	15	0.0	15	0.0	0.022	5.4	LOS A	0.1	0.7	0.19	0.58	0.19	40.0
6	R2	11	0.0	11	0.0	0.022	8.0	LOS A	0.1	0.7	0.19	0.58	0.19	50.2
6u	U	1	0.0	1	0.0	0.022	9.5	LOS A	0.1	0.7	0.19	0.58	0.19	40.0
Approach		26	0.0	26	0.0	0.022	6.6	LOS A	0.1	0.7	0.19	0.58	0.19	46.4
North: Burgess Street														
7	L2	5	0.0	5	0.0	0.050	5.1	LOS A	0.2	1.6	0.06	0.50	0.06	51.4
8	T1	64	0.0	64	0.0	0.050	4.8	LOS A	0.2	1.6	0.06	0.50	0.06	51.4
9u	U	2	0.0	2	0.0	0.050	9.2	LOS A	0.2	1.6	0.06	0.50	0.06	54.5
Approach		72	0.0	72	0.0	0.050	5.0	LOS A	0.2	1.6	0.06	0.50	0.06	51.5
All Vehicles		172	0.0	172	0.0	0.053	5.3	LOS A	0.3	1.8	0.09	0.52	0.09	50.3

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.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Burgess Street														
1b	L3	4	0.0	4	0.0	0.008	5.7	LOS A	0.0	0.2	0.23	0.50	0.23	43.9
2	T1	4	0.0	4	0.0	0.008	3.7	LOS A	0.0	0.2	0.23	0.50	0.23	43.9
3	R2	1	0.0	1	0.0	0.008	5.8	LOS A	0.0	0.2	0.23	0.50	0.23	43.9
Approach		9	0.0	9	0.0	0.008	4.8	LOS A	0.0	0.2	0.23	0.50	0.23	43.9
East: Targo Road														
4	L2	1	0.0	1	0.0	0.105	4.6	LOS A	0.4	3.0	0.13	0.50	0.13	45.2
4a	L1	87	0.0	87	0.0	0.105	3.7	LOS A	0.4	3.0	0.13	0.50	0.13	36.8
6	R2	46	0.0	46	0.0	0.105	5.5	LOS A	0.4	3.0	0.13	0.50	0.13	36.8
Approach		135	0.0	135	0.0	0.105	4.3	LOS A	0.4	3.0	0.13	0.50	0.13	37.0
North: Burgess Street														
7	L2	29	0.0	29	0.0	0.039	4.8	LOS A	0.2	1.4	0.20	0.43	0.20	32.2
8	T1	2	0.0	2	0.0	0.039	0.3	LOS A	0.2	1.4	0.20	0.43	0.20	45.2
9a	R1	37	0.0	37	0.0	0.039	3.9	LOS A	0.2	1.4	0.20	0.43	0.20	32.2
Approach		68	0.0	68	0.0	0.039	4.2	NA	0.2	1.4	0.20	0.43	0.20	33.6
SouthWest: Targo Road														
30a	L1	23	0.0	23	0.0	0.075	4.5	LOS A	0.3	2.1	0.07	0.47	0.07	35.8
32a	R1	108	0.0	108	0.0	0.075	3.7	LOS A	0.3	2.1	0.07	0.47	0.07	35.8
32b	R3	1	0.0	1	0.0	0.075	5.2	LOS A	0.3	2.1	0.07	0.47	0.07	44.6
Approach		133	0.0	133	0.0	0.075	3.8	NA	0.3	2.1	0.07	0.47	0.07	36.1
All Vehicles		345	0.0	345	0.0	0.105	4.1	NA	0.4	3.0	0.13	0.48	0.13	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.
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 + Dev - Targo Road - Site Access (Site Folder: Saturday Midday Existing + Development + Upgrades)]

Network: 8 [Saturday Midday Existing + Development + Upgrades (Network Folder: Existing + Development + Upgrades)]

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

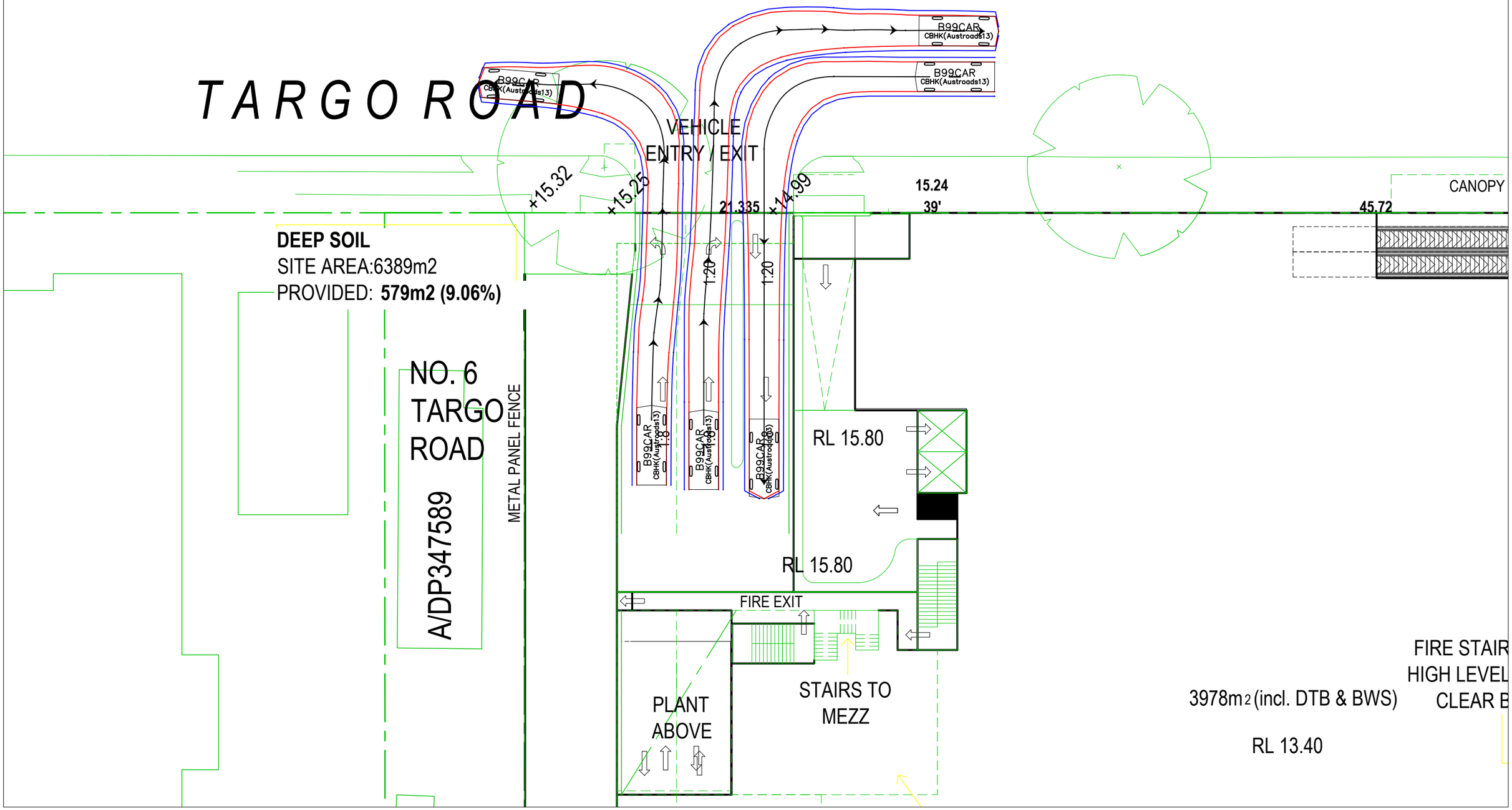
Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Site Access														
1	L2	95	0.0	95	0.0	0.245	0.1	LOS A	1.0	7.3	0.15	0.21	0.15	19.7
3	R2	189	0.0	189	0.0	0.245	2.2	LOS A	1.0	7.3	0.15	0.21	0.15	19.7
Approach		284	0.0	284	0.0	0.245	1.5	LOS A	1.0	7.3	0.15	0.21	0.15	19.7
East: Targo Road														
4	L2	163	0.0	163	0.0	0.111	3.9	LOS A	0.0	0.0	0.00	0.43	0.00	45.6
5	T1	39	0.0	39	0.0	0.111	0.0	LOS A	0.0	0.0	0.00	0.43	0.00	29.8
Approach		202	0.0	202	0.0	0.111	3.1	NA	0.0	0.0	0.00	0.43	0.00	45.0
West: Targo Road														
11	T1	38	2.8	38	2.8	0.100	0.7	LOS A	0.5	3.8	0.32	0.43	0.32	36.0
12	R2	121	0.0	121	0.0	0.100	5.5	LOS A	0.5	3.8	0.32	0.43	0.32	22.9
Approach		159	0.7	159	0.7	0.100	4.3	NA	0.5	3.8	0.32	0.43	0.32	23.5
All Vehicles		645	0.2	645	0.2	0.245	2.7	NA	1.0	7.3	0.14	0.33	0.14	24.8

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.

ATTACHMENT D

VEHICLE SWEPT PATHS



NOTE:
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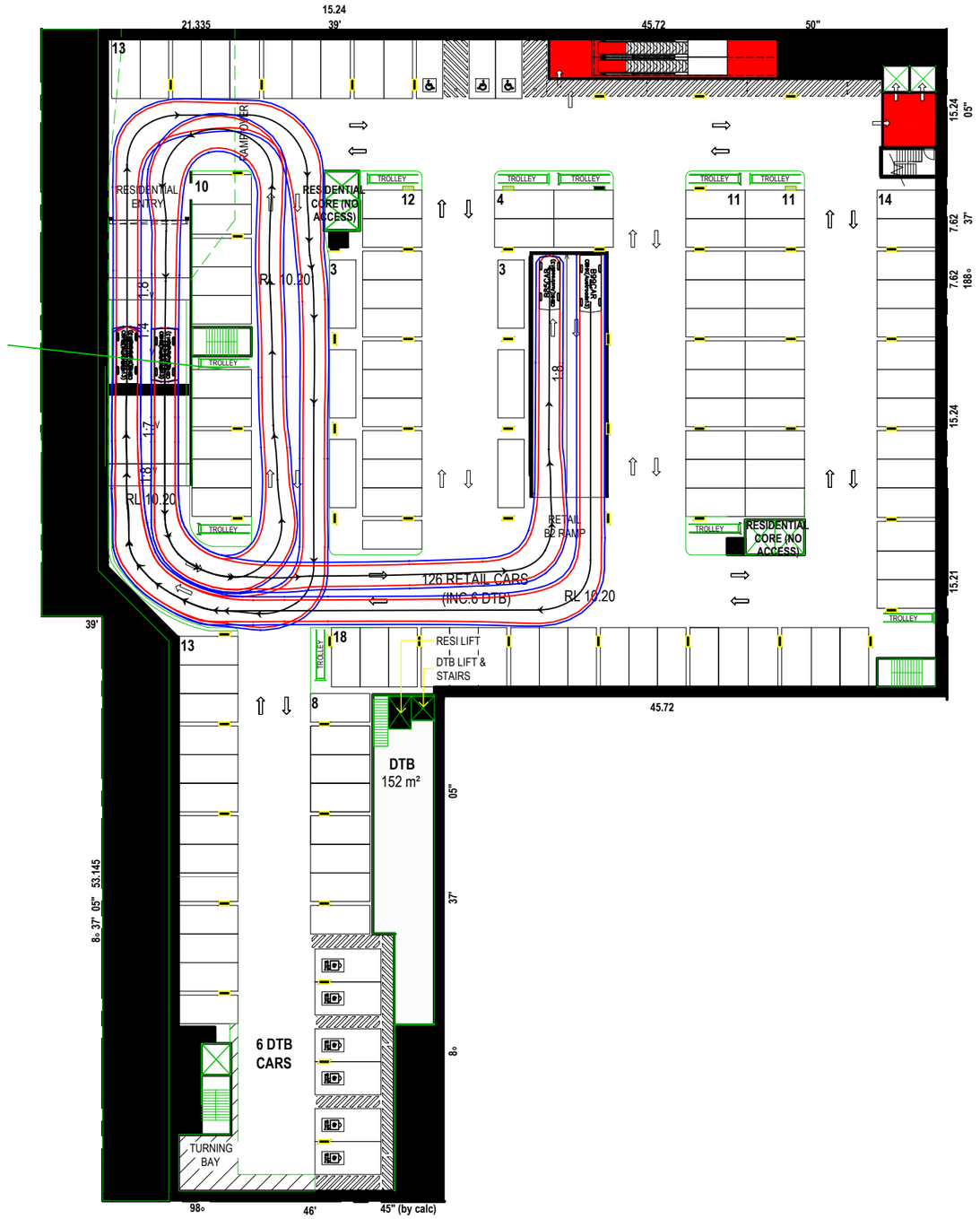
Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

B99 VEHICLE SWEPT PATHS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D1



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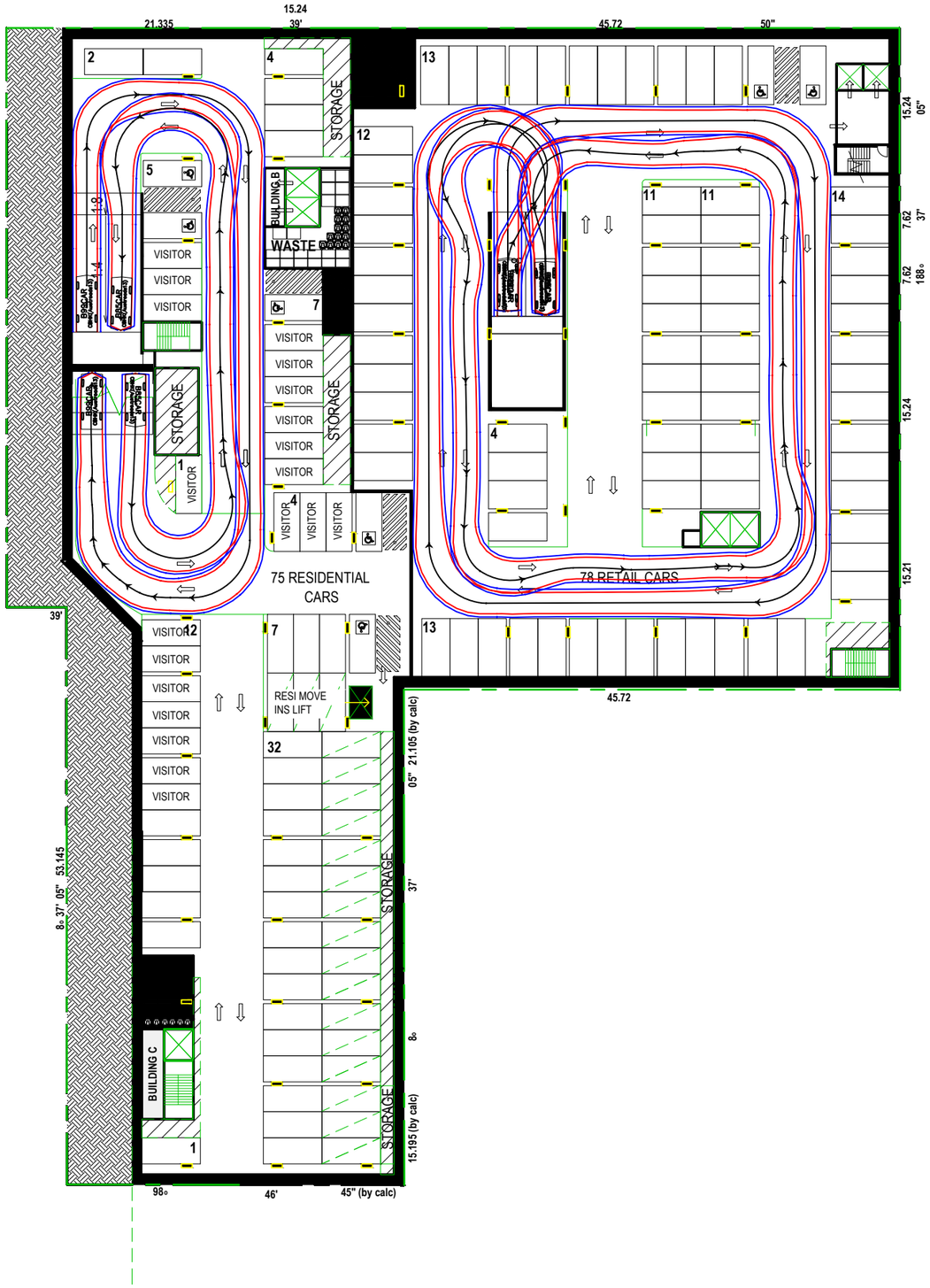
Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

B85 & B99 VEHICLE SWEPT PATHS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D2



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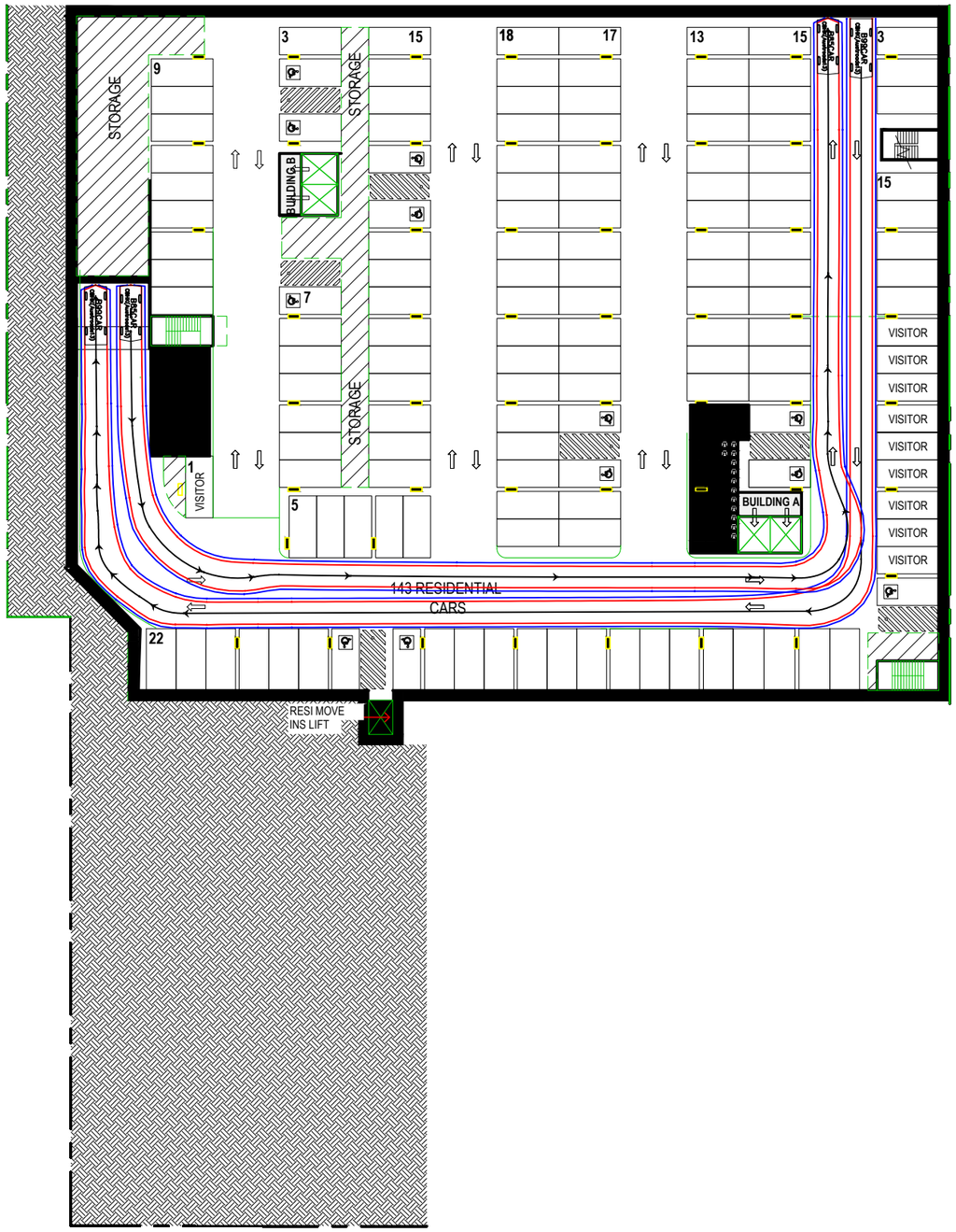
Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

B85 & B99 VEHICLE SWEPT PATHS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D3



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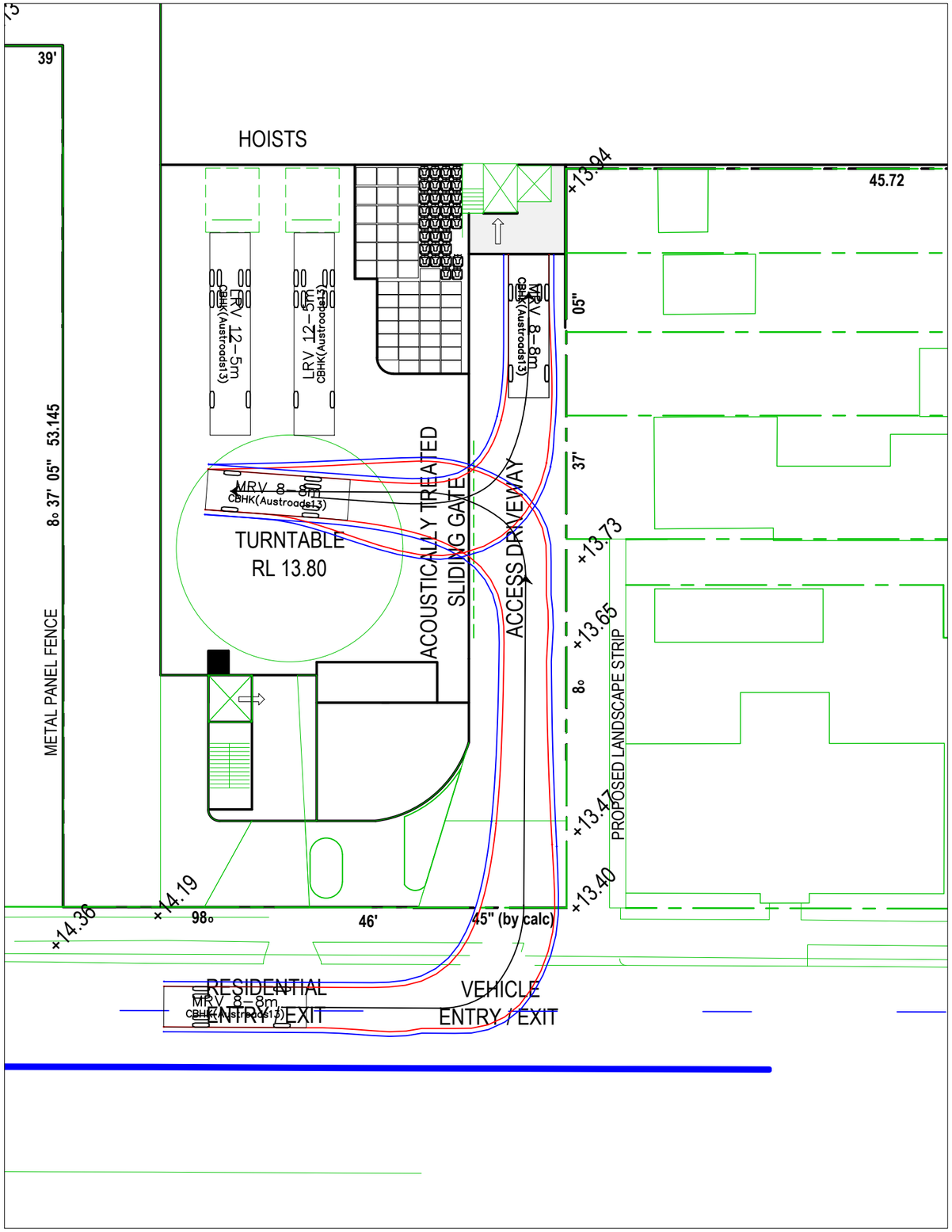
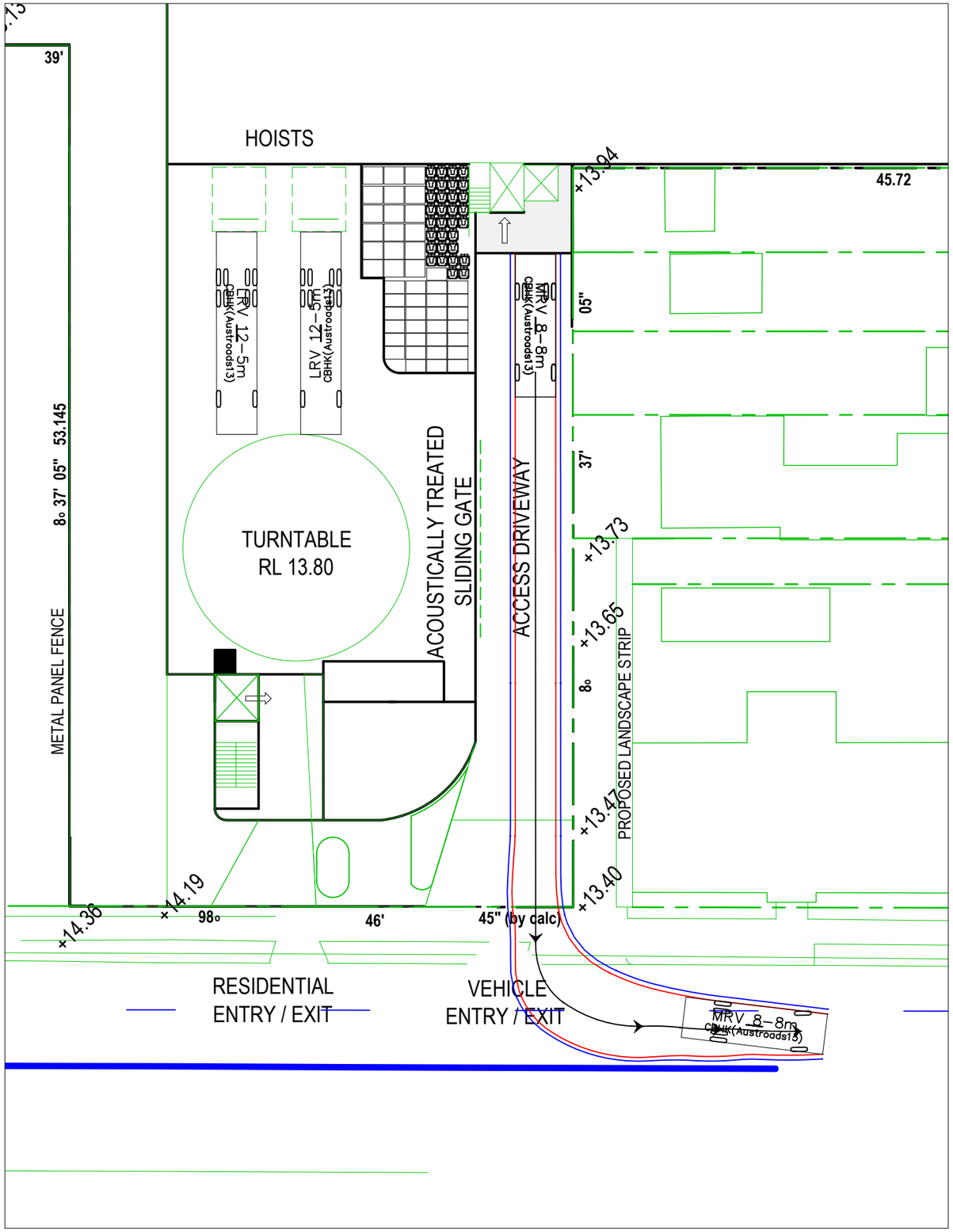
Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

B85 & B99 VEHICLE SWEPT PATHS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D4





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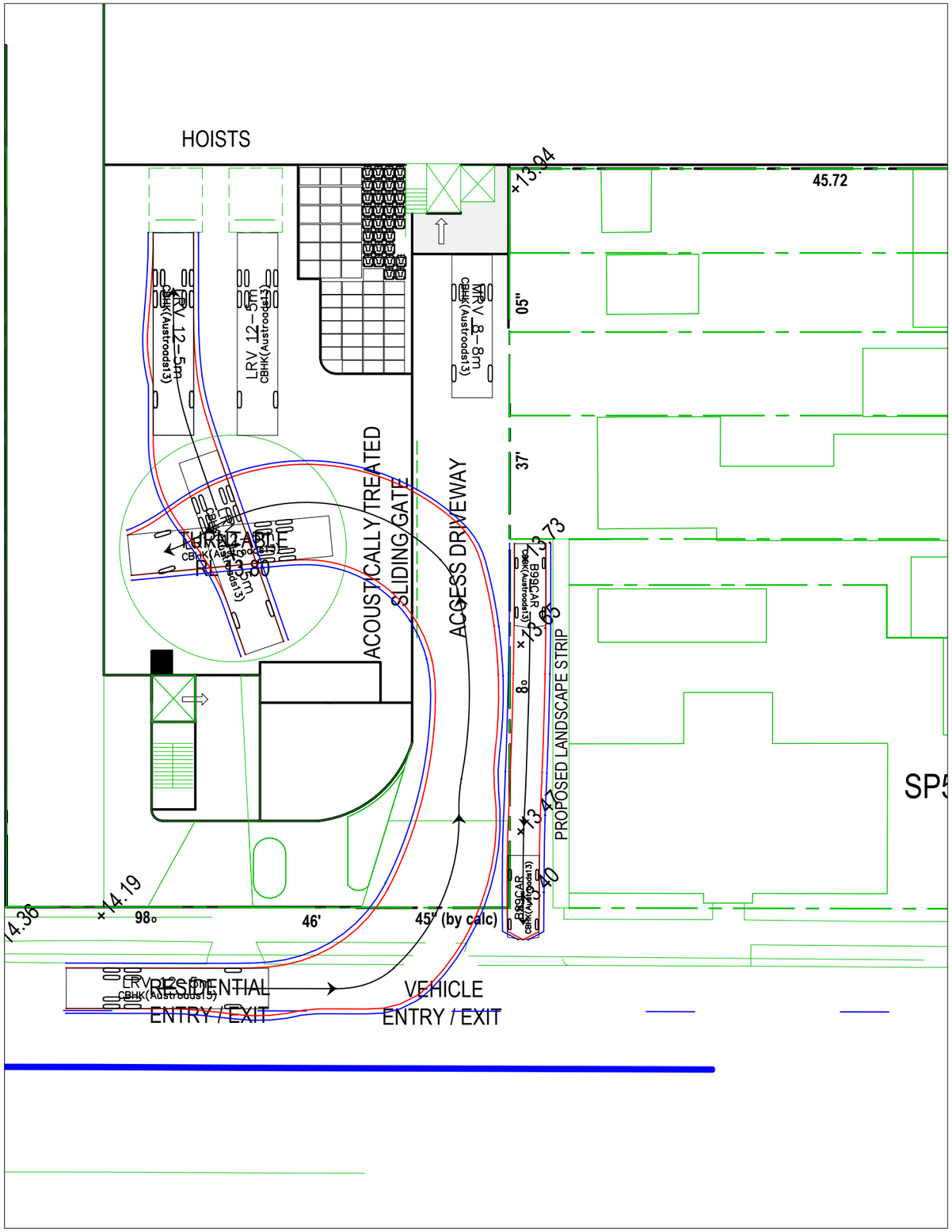
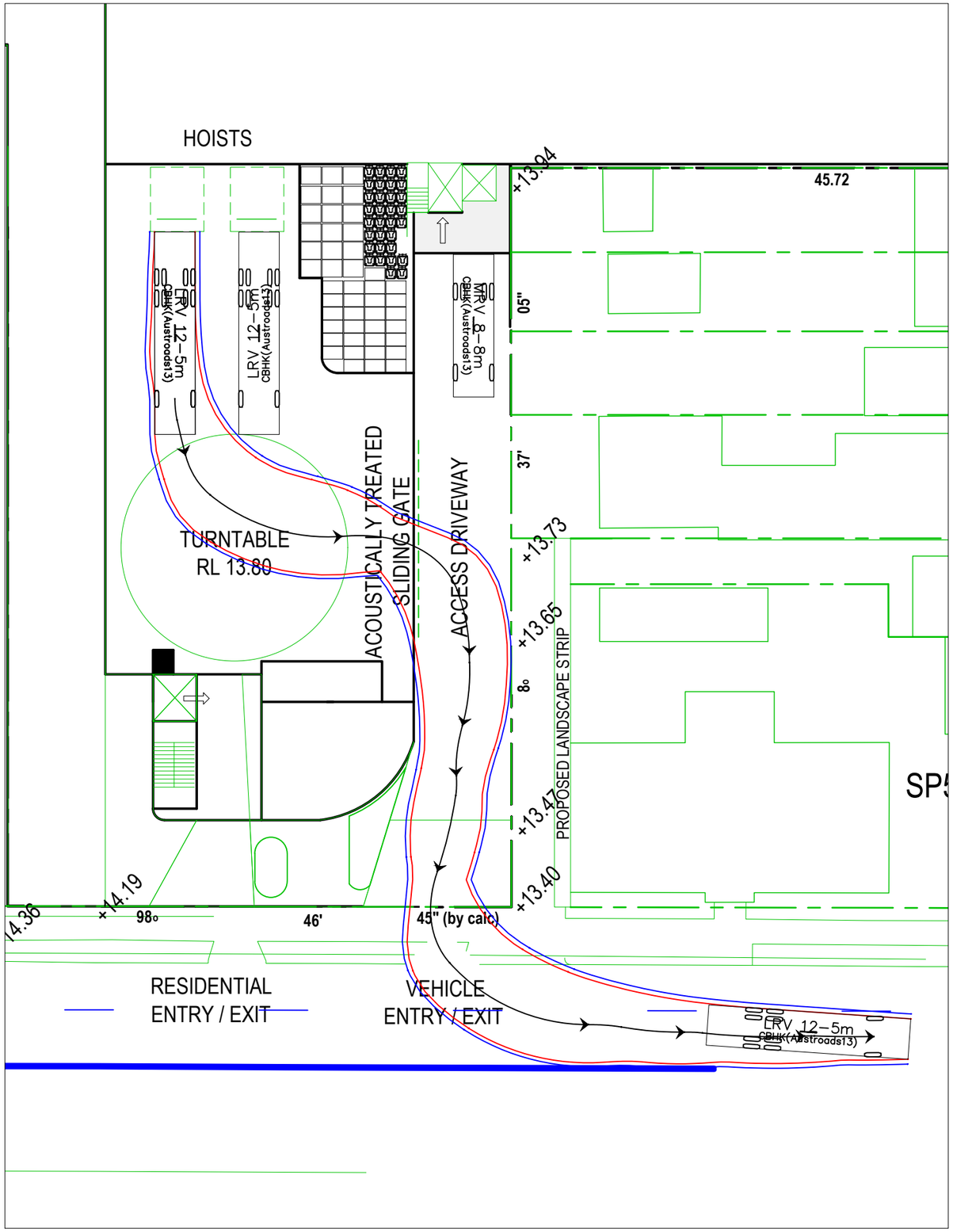
Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

8.8m MEDIUM RIGID VEHICLE SWEPT PATHS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D5





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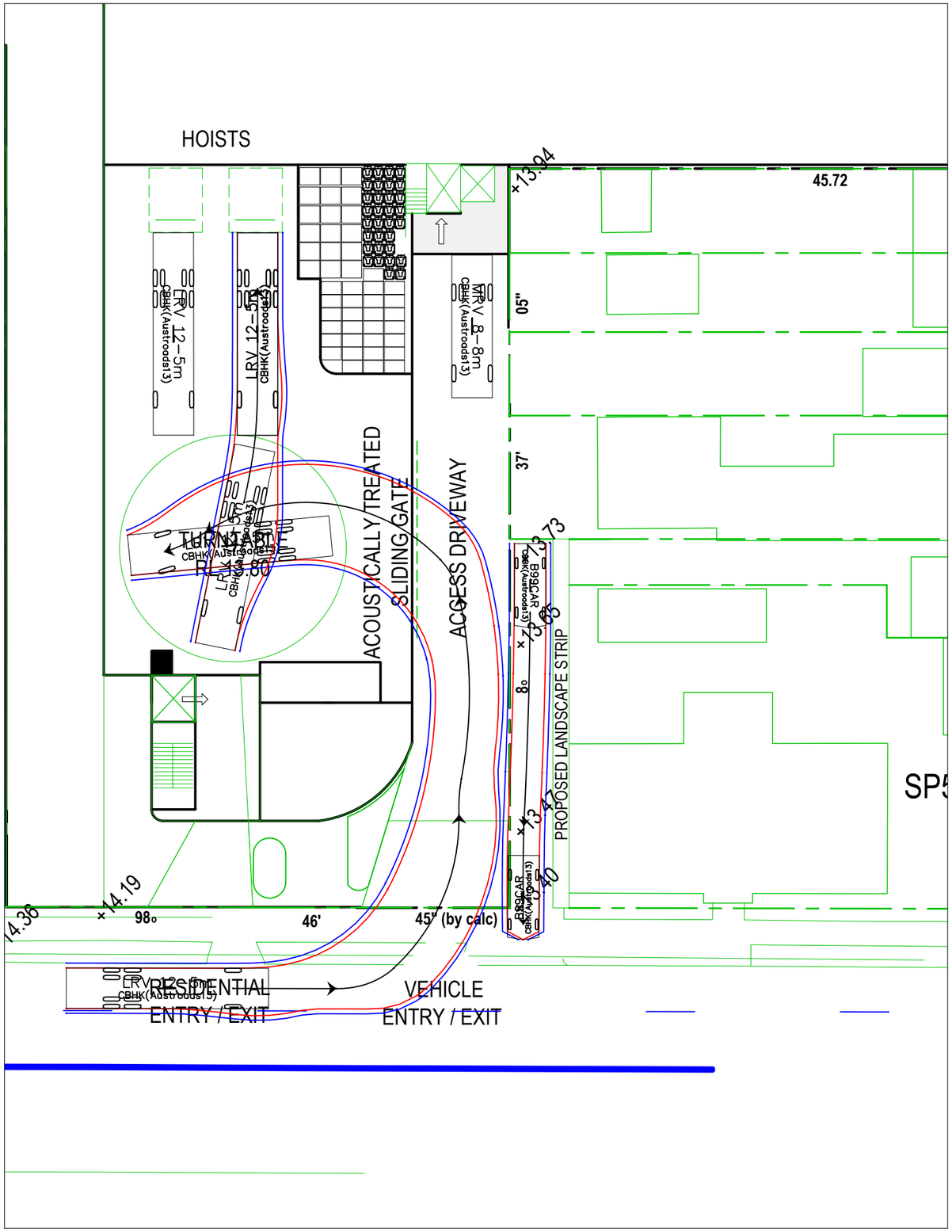
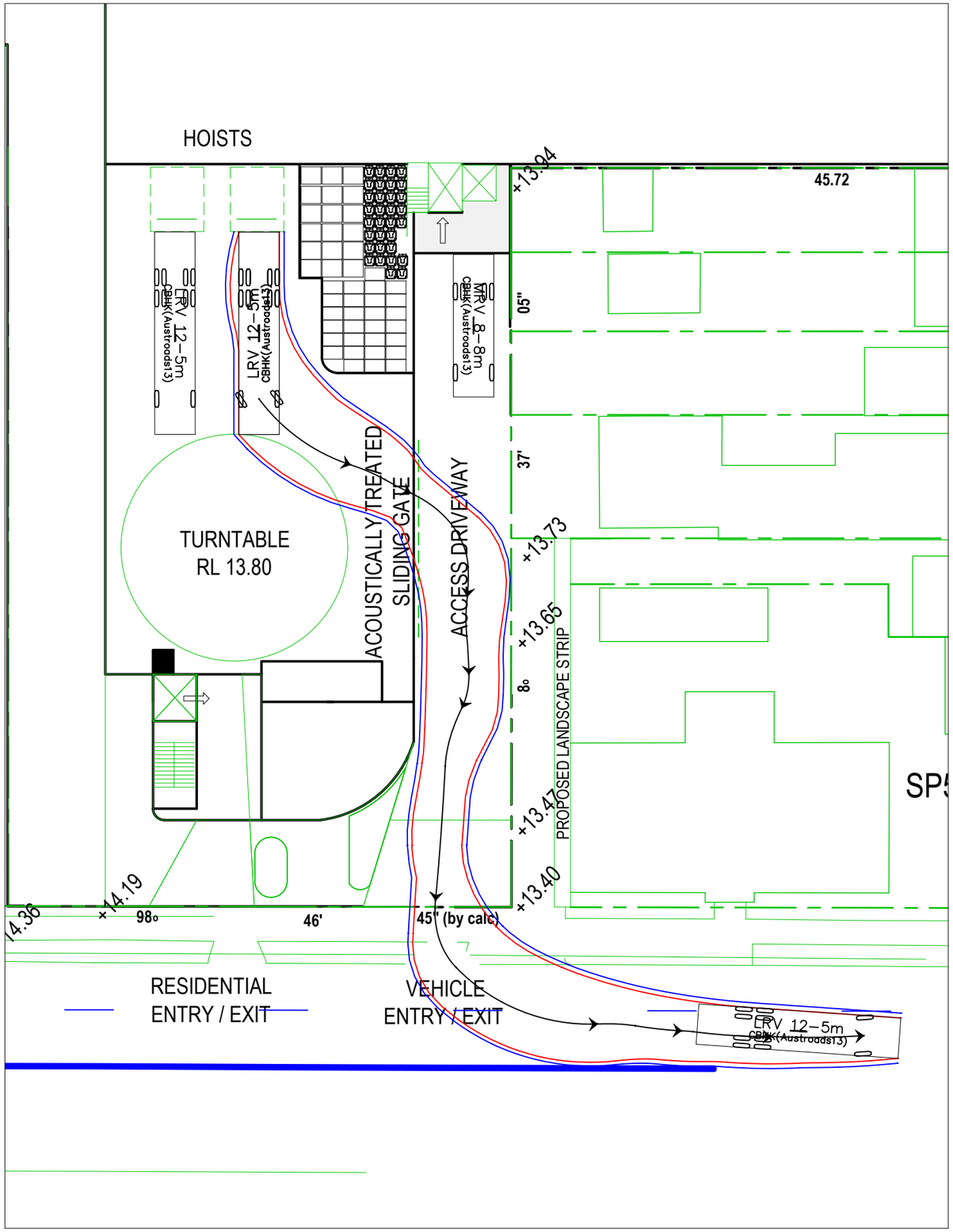
Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

B99 & 12.5m LARGE RIGID VEHICLE SWEPT PATHS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D6





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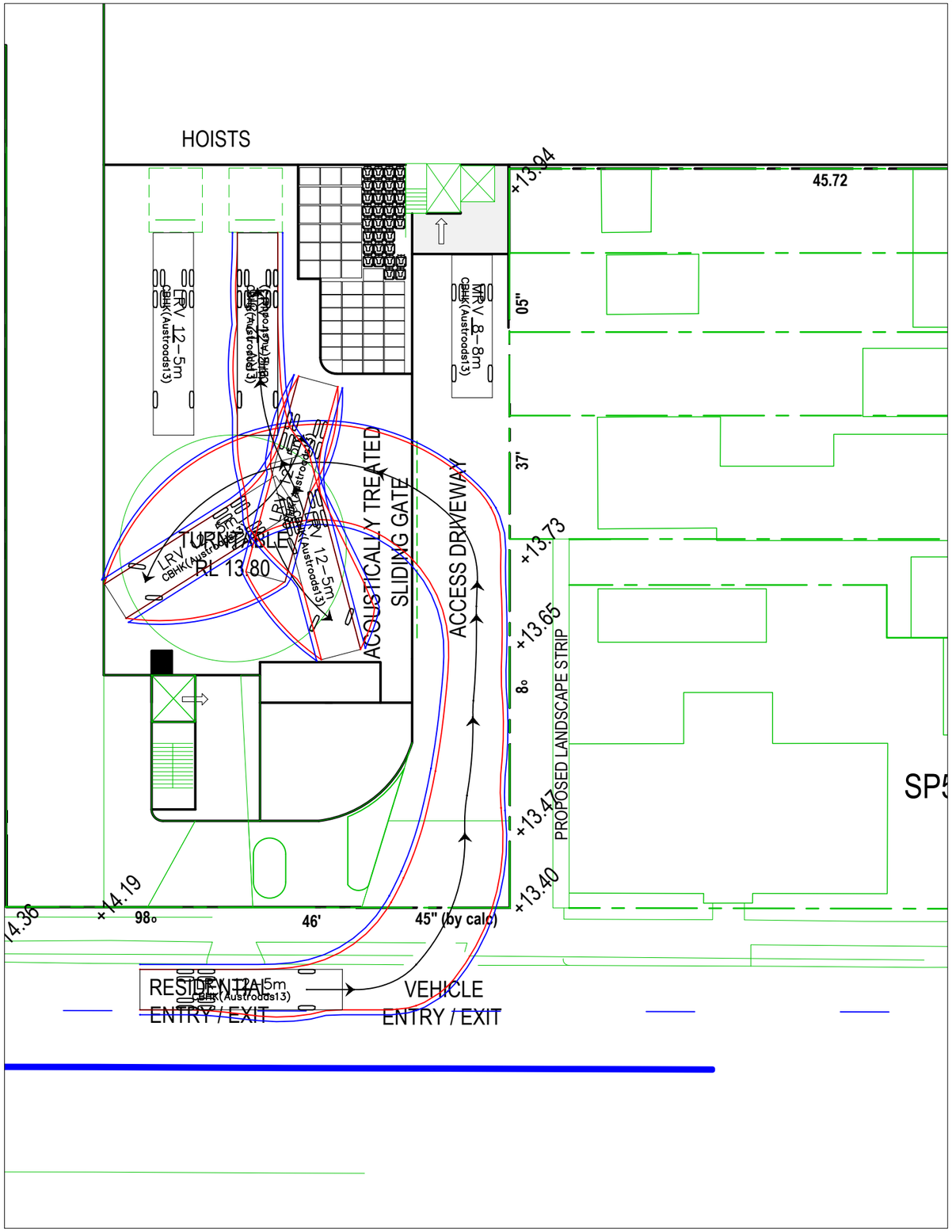
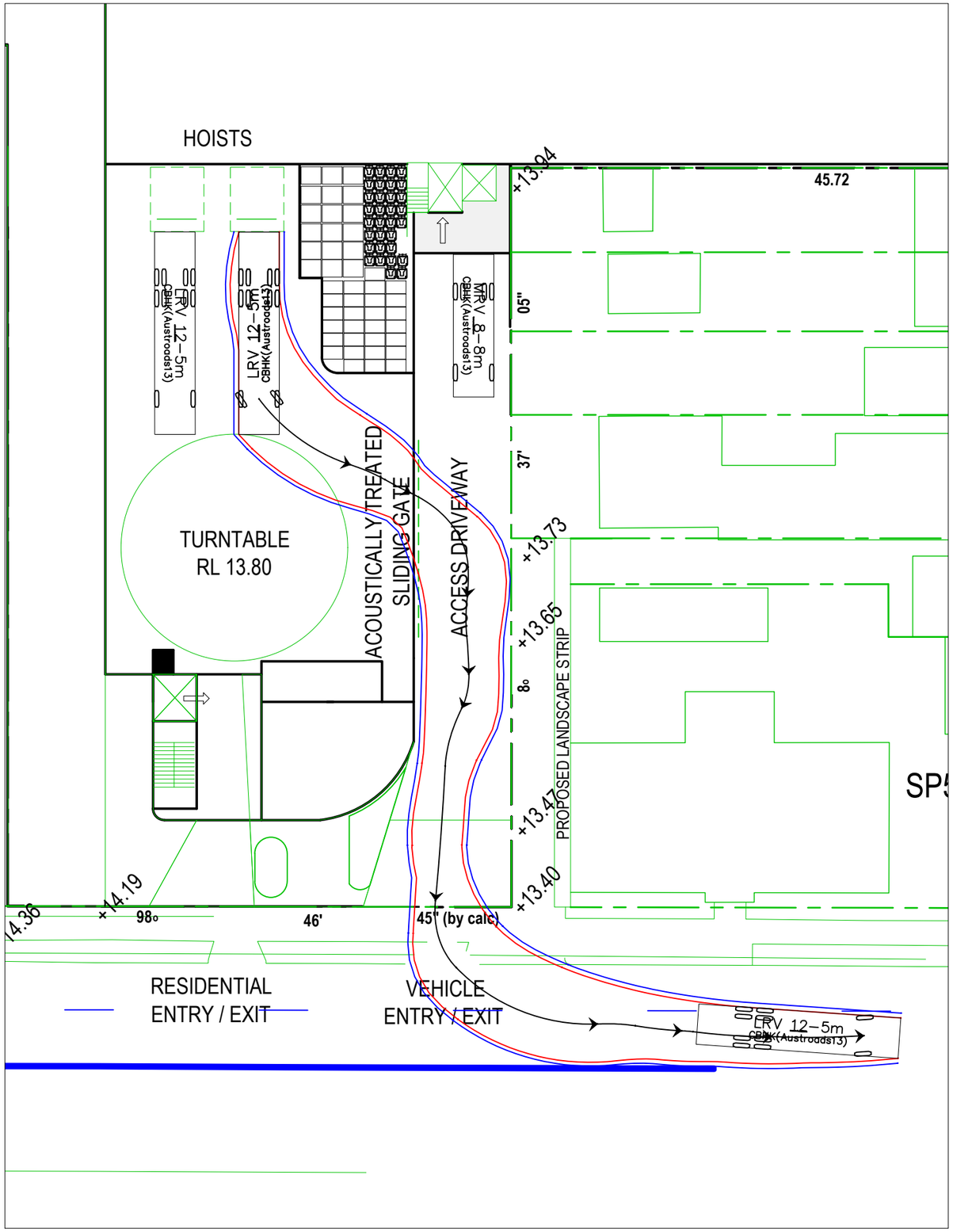
Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

B99 & 12.5m LARGE RIGID VEHICLE SWEPT PATHS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D7





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Swept Path of Vehicle Body
Swept Path of Clearance to Vehicle Body

B99 & 12.5m LARGE RIGID VEHICLE SWEPT PATHS (NO TURNTABLE)

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 9.01.2025

D8

ATTACHMENT E

ON-STREET PARKING LOSSES

LEGEND

LOST SPACE -

GAINED SPACE -

Loss of On-Street Parking	
Loss	7
Gain	0
Net	-7

NOTE:
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Lost Parking Space

WEEKDAY MORNING PEAK PERIOD LOSS OF PARKING FROM PROPOSED SIGNALS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 28.01.2025

E1

LEGEND

LOST SPACE -

GAINED SPACE -

Loss of On-Street Parking	
Loss	14
Gain	0
Net	-14

NOTE:
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Lost Parking Space

WEEKDAY AFTERNOON PEAK PERIOD LOSS OF PARKING FROM PROPOSED SIGNALS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 28.01.2025

E2

LEGEND

LOST SPACE -

GAINED SPACE -

Loss of On-Street Parking	
Loss	21
Gain	0
Net	-21

NOTE:
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Lost Parking Space

OFF PEAK WEEKDAY AND WEEKEND LOSS OF PARKING FROM PROPOSED SIGNALS

DRAWN BY CBRK Pty Ltd_mc Ref: 12175 28.01.2025

E3