Colston Budd Rogers& Kafes Pty Ltd
as Trustee for C & B Unit Trust
ABN 27 623 918 759

Our Ref: TR\12473\mc

14 May, 2025

Transport Planning
Traffic Studies
Parking Studies

McDonald's Australia Limited
21-29 Central Avenue
THORNLEIGH NSW 2120

Attention: Stewart Floresta
Email: Stewart.Floresta@au.mcd.com

Dear Sir,

RE: PROPOSED McDONALD'S, 37 ROSEBERRY STREET, BALGOWLAH
FURTHER RESPONSE TO TRAFFIC MATTERS

1. As requested, we have reviewed the traffic matters raised in Councils RFI email dated 11 April 2025. As requested by Council, concept sketches of the following roadworks have been prepared by Entec Consultants to test their feasibility:

   - mini-roundabout at the intersection of Hayes Street/Roseberry Street;
   - a 410 mm wide median (some 27 metres long) along the Roseberry Street frontage of the site; and
   - extension of the left turn lane on the Kenneth Road (east approach) to the intersection with Condamine Street.

2. Copies of these concept sketches are provided in Attachment A. The traffic matters raised by Council and our responses are set out below.

   Traffic Generation Rates
   Recent documents, including the TfNSW Guide to Transport Impact Assessment, indicate that during peak weekend hours, McDonald's generates 267 vehicle trips. This represents an increase of 87 vehicle trips compared to the CBRK report

   Response

3. For food service establishments the TfNSW *Guide to Transport Impact Assessment* provides sample traffic generation rates for various times (including weekday afternoon and weekend peak hour) for different types of fast food outlets including McDonalds. However, the Guide notes that it is recommended that due to the diversity of characteristics in fast food outlets, when estimating the trip generation, consideration should be given to the following:

- indoor/outdoor seating capacity;
- drive through capacity;
- exposure to frontage traffic;
- visible exposure to passing trade; and
- ease of site access/egress.

4. The proposed McDonald's at Balgowlah was determined to have:

- low to medium seating capacity;
- medium to high drive through capacity;
- no exposure to an arterial road (Condamine Street);
- visible exposure to passing trade (on Kenneth Road and Roseberry Street); and
- restricted ease of access/egress (left in/left out with a median on Roseberry Street as required by Council).

5. To determine appropriate weekday PM network peak hour and Saturday network peak hour traffic generation rates for the proposed Balgowlah McDonald's, a review of the surveys of the five metropolitan McDonald's sites reported in the 2016 study on which the rates set out in the *Transport for NSW Guide to Transport Impact Assessment* are based has been undertaken. The weekday PM and Saturday midday network peak traffic hour traffic generations of the five McDonald sites are summarised in Table I below.

Table 1:	**Summary of McDonald's Weekday PM and Saturday Midday Road Network Peak Hour Traffic Generations**	
Site	Weekday PM (vph)	Saturday Midday (vph)
Northmead	112	148
Liverpool	188	148
Rosehill	172	114
Stanmore	152	238
Haberfield	108	98
Average	146	149

6. Examination of Table 1 reveals that the average weekday PM and Saturday midday road network peak hour traffic generations of the five metropolitan McDonald's sites was some 140 to 150 vehicles per hour (two way). These are similar or lower to those adopted in the TIA for the proposed Balgowlah McDonald's (140 and 180 vehicles per hour (two way) in the weekday PM and Saturday midday road network peak hours) and the adopted generation rates are considered appropriate to use given the characteristics of the proposed Balgowlah McDonald's.

Traffic Distribution To/From the Development

The guideline states that 51 percent of the trips generated by the McDonald's development are classified as "pass-by trips." This means these trips are already part of the existing travel patterns. To account for this, the traffic generation numbers are halved and then distributed to the north and south. If we want to further reduce the impact on the network, it would involve a double reduction of the numbers, effectively doubling the effect of the pass-by trip

Response

7. The traffic distribution has been revised as a result of access to the site being limited to left in/left out on Roseberry Street as shown in Figures 1 and 2. Some 55% of traffic would arrive from the north and some 45% from the south. 50% passing trade has been applied to traffic turning left into the site from Roseberry Street. Figures 1 and 2 show the following increases in traffic on the adjacent road network in the weekday afternoon and Saturday midday peak hours:

- some 10 vehicles per hour (two way) on Condamine Street;
- some 15 to 25 vehicles per hour (two way) on Kenneth Road; and
- some 50 to 60 vehicles per hour (two way) on Roseberry Street (south of the site access) and some 65 to 85 vehicles per hour (two way) in the short section of Roseberry Street between the site access and Kenneth Road.

Signalised intersection of Condamine Street and Kenneth Road

The intersection is currently operating at maximum capacity based on the observations. It is essential to include calibration and validation for existing scenarios in relation to the observed delays and queues to provide a more accurate assessment. Notably, the eastern approach to the Condamine Street and Kenneth Road intersection is performing at an LoS "F." Any minor increases in traffic volumes associated with the McDonalds development are expected to significantly worsen the performance of this approach. Queuing beyond the Roseberry Street roundabout in the westbound and northbound directions is often observed and although it is noted that modelling has shown several instances of the right turn movement out of Kenneth St being oversaturated queue lengths do not appear to be as extensive as observed noting that the optimal phasing arrangement used may be part of the reason. 95th percentile queue lengths should be reported and not average back of queue. Review the eastern approach to more accurately reflect delays/queueing associated with the right turn bay onto Condamine Street queuing out and blocking access to the through lane

Response

8. The SIDRA modelling has been calibrated against measured cycle/phases times and observed delays and queues with updated movements summaries provided in Attachment B. These report 95% queue lengths and show that for the existing conditions, right turn on the Kenneth Road eastern approach operates at capacity in

the weekday PM and Saturday midday peak hours (LOS E/F) with the 95% queue extending back through the Roseberry Street roundabout.

Investigate an option to allow shifting the centreline and potentially minor road widening and/or minimal removal of parking to allow better separation of right turn movements from the centre (of 3 lanes) westbound and the centre lane eastbound on Kenneth Road and facilitate creation of a right through lane and concurrent right turn phases out of Kenneth Road into Condamine Street – see attached concept. This has previously been considered but rejected by TfNSW due to perceived conflict between the right turn phases. The above works would assist in better utilisation of the centre lane westbound and would assist in reducing delays and queuing for westbound traffic offsetting the increased traffic generation from McDonalds. This option should be tested using SIDRA Network Analysis

Response

9. The option to lengthen the kerb side on the Kenneth Road eastern approach with the removal of parking to allow better separation of right turn movements from the centre (of 3 lanes) westbound has been investigated and appears to be feasible without shifting the existing centreline. See attached Entec Consultants Sketch (SK 003 Rev A) in Attachment A.

10. With regards to the proposal to allow for twin right turns lane out of the Kenneth Road eastern approach (by making the centre lane a shared through and right turn lane), we note that significant modifications to the intersection would be required to allow for concurrent right turns out of Kenneth Road east and west with this arrangement. Setting aside this constraint we have modelled (using SIDRA) two options to allow for twin right turns out Kenneth Road eastern approach:

    A. diamond phasing with concurrent right turns out of Kenneth Road east and west; and
    B. split phasing for the Kenneth Road east and west.

11. For Option A, to allow for twin right turns out of the Kenneth Road eastern approach, the existing filter right turns on the Kenneth Road approaches would have to be removed, with the right turns operating in the current diamond phase and trailing right turn phase for the Kenneth Road east approach. With the change in line marking and phasing, the SIDRA model was rerun and found that the intersection of Kenneth Road/Condamine Street would operate at level of service (LOS) F with average delays of some 70 seconds per vehicle in the weekday PM peak hour.

12. With Option B, split phasing on the Kenneth Road approaches, the SIDRA model was rerun and found that the intersection of Kenneth Road/Condamine Street

would operate at LOS D with average delays of some 54 seconds per vehicle in the weekday PM peak hour.

13. For both options the intersection of Kenneth Road/Condamine Street would operate with longer average delays and a worse LOS in the weekday PM peak hour for the existing intersection layout/phasing – average delays of some 42 seconds per vehicle and LOS C/D.

Site Access (and updated SIDRA modelling)
An analysis of site access and any proposed layout changes should be included in the models.

Response

14. The updated SIDRA model includes an analysis of the site access and the road upgrades requested by Council as set out below.

- mini-roundabout at the intersection of Hayes Street/Roseberry Street;
- a 410 mm wide median (some 27 metres long) along the Roseberry Street frontage of the site; and
- extension of the left turn lane on the Kenneth Road (east approach) to the intersection with Condamine Street.

15. SIDRA movement summaries are provided in Attachment A and a summary of the SIDRA analysis is provided below in Table 2.

Table 2:	**Summary of Updated SIDRA Analysis (average delays per vehicle (AVD)/level of service (LOS)**			
Intersection	Weekday PM		Saturday Midday	
	Existing (AVD/LOS)	+ Dev (AVD/LOS)	Existing (AVD/LOS)	+ Dev (AVD/LOS)
Kenneth Rd/Condamine St (TS)	42/C	43/D	40/C	45/D
Kenneth Rd/Roseberry St (R)	16/B	16/B	17/B	25/B
Hayes St/Roseberry St (P/R)	19/B	8/A*	26/B	12/A*
Site Access (P) – LI/LO		10/A		9/A
*under roundabout control				

16. Examination Table 2 reveals that:

- the addition of development traffic has minimal impact on the operation of the adjacent road network. The SIDRA analysis found that with the suggested works in Kenneth Road, the existing 95% queue would extend by some 10 metres (about one vehicle) in the weekday PM and Saturday midday peak hours; and
- with a mini roundabout at the intersection of Hayes Street/Roseberry Street, the intersection would operate with an improved LOS (LOS B to LOS A).

On-street Parking (and median on Roseberry Street)
The removal of parking on Roseberry Street cannot be supported. A narrow median across the driveway is required. adjusting the kerb alignment along the Roseberry Street development frontage can be considered to accommodate the turning movements of larger vehicles. A median that is 300mm-500mm wide may still allow sufficient space for a travel lane in either direction. Keep Clear markings across the McDonald's driveway are not supported and are unlikely to be effective. This option is rejected.

Response

17. A concept sketch of a 410 mm wide median some 27 metres along the Roseberry Street frontage is shown in Entec Consultants Sketch SK002 REV and is provided in Attachment A. This shows that it appears feasible to provide a median opposite the site access to limit access to left in/left out and maintain one traffic lane in each direction and kerbside parking on the eastern side of Roseberry Street. The median does not impact access to other properties and starts some 10 metres south of the painted splitter island on the southern approach of the Kenneth Road roundabout, so as to not impact large trucks turning at the roundabout.

Proposed Roundabout (at Roseberry Street/Hayes Street)
Review the option for a mini roundabout on Roseberry Street at Hayes Ave (design details for the recently introduced roundabouts on Fisher Road at Lismore Ave and Tor Road are attached for comparison purposes.

Response

18. Concept sketches of a mini roundabout at the intersection of Roseberry Street and Hayes frontage have been prepared by Entec Consultants and are provided in Attachment A. The only difference between the sketches is the form of pedestrian treatment of the Hayes Street approach. B99 swept paths have been overlayed to one of the sketches showing that a B99 can undertake a u-turn from all approaches. The sketches are based on the design details of the plans provided by Council for the recently introduced roundabout on Fisher Road at Tor Road and shows that it appears feasible to provide a mini roundabout subject to:

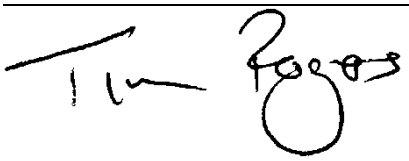
- form of pedestrian treatment on the Hayes Street approach. The options show retention of the existing raised pedestrian crossing or its replacement with a pedestrian refuge. It is not possible to relocate the existing raised crossing to the west along Hayes Street, due it existing trees, driveways and power poles;

- provision of painted splitter islands, to accommodate existing trucks turning at the intersection (this may impact provision of a pedestrian refuge on the Hayes Street approach); and

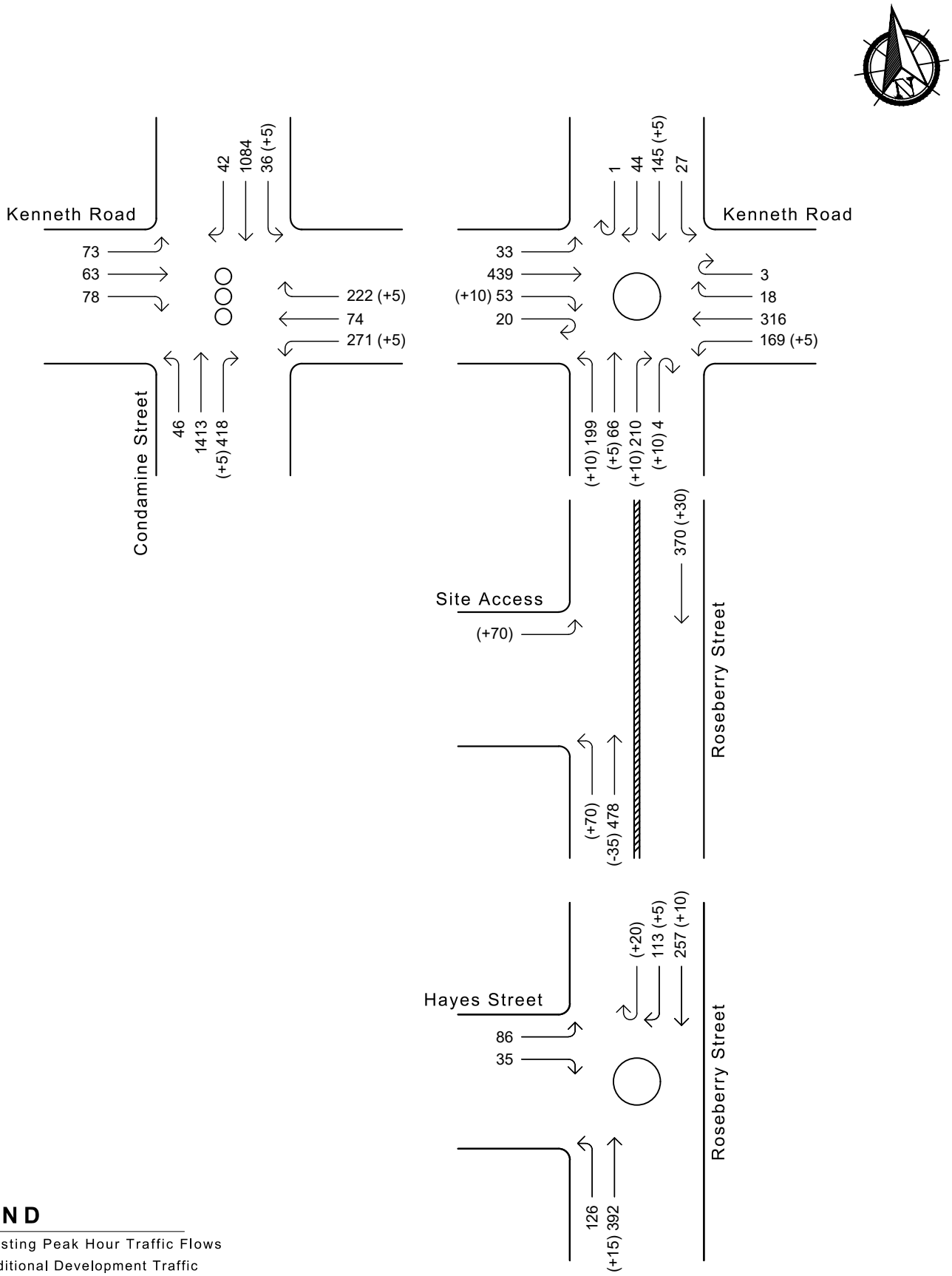
- loss of three parking spaces on the eastern side of Roseberry Street to accommodate the southern departure lane from the roundabout.

19. We trust the above provides the information you require. Finally, if you should have any queries, please do not hesitate to contact us.

Yours faithfully,
COLSTON BUDD ROGERS & KAFES PTY LTD



T Rogers
Director



LEGEND

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

Existing weekday afternoon peak hour traffic flows plus development traffic

Figure 1

Colston Budd Rogers & Kafes Pty Ltd

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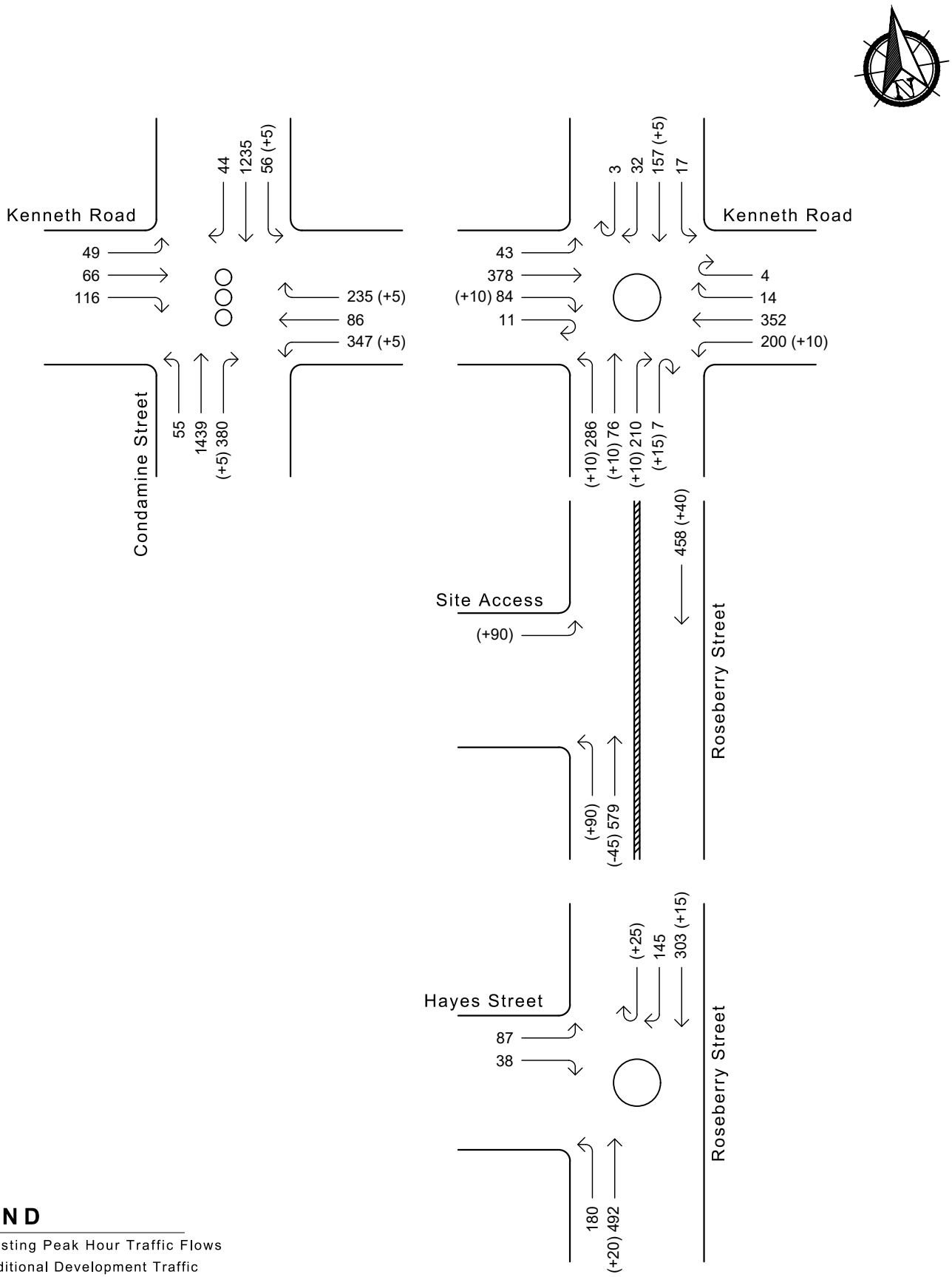

LEGEND

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

Existing Saturday midday peak hour traffic flows plus development traffic

Figure 2

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ATTACHMENT A

CONCEPT SKETCHES OF PROPOSED ROAD WORKS
(Prepared by Entec)

PROPOSED LINEMARKING TO MATCH INTO EXISTING MEDIAN KERB EXTENT

2.1m PARKING LANE

2,100 mm

3.5m TRAFFIC LANE

3,500 mm

3.2m TRAFFIC LANE

3,200 mm

3.5m TRAFFIC LANE

3,500 mm

ADUST ROUNDABOUT MEDIAN LINEMARKING TO SUIT PROPOSED LANE CONFIGURATION

KENNETH ROAD

ADUST EXISTING LINEMARKING TO FORMALISE TRAFFIC LANES ALONG KENNETH ROAD

PROPOSED NEW LINEMARKING AT ROUNDABOUT. REFER TO ROSEBERYY MEDIAN ISLAND SKETCH PLAN FOR ADDITIONAL INFORMATION

PROPOSED NEW CONCRETE MEDIAN. REFER TO ROSEBERYY MEDIAN ISLAND SKETCH PLAN FOR ADDITIONAL INFORMATION

PROPOSED McDONALD'S OPERATION

BIOMOD 380

LOT NO. 100

D.P. 1199949

GFA. 381.17m²

FFL. 8.000

CASHIER

SERVERY

3rD WINDOW

CORRAL

PLAYPLACE

EAVE OVER

NO ENTRY

BOUNDARY

McD's BALGOWLAH
PRELIMINARY LINEMARKING SKETCH
KENNETH ROAD
SK003 REV A
SCALE 1:200 @ A3
13/05/25

ENTEC CONSULTANTS

EXISTING PAINTED MEDIAN TO BE RETAINED

EXISTING PEDESTRIAN PRAM RAMPS TO BE RETAINED

PROVIDE LINEMARKING 10m FROM PAINTED MEDIAN TO NEW CENTRAL MEDIAN

PROPOSED 410mm WIDE MEDIAN, REFER TO DETAIL BELOW.

2.1m PARKING LANE

3.0m SOUTH BOUND TRAFFIC LANE

4.0m NORTH BOUND TRAFFIC LANE

PROPOSED DRIVEWAY ENTRY TO McDONALDS SITE

ROAD

STREET

ROSEBERRY

BOUNDARY

10,000 mm

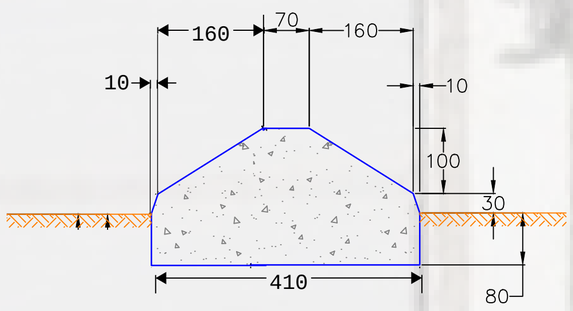
9,500 mm

4,000 mm

3,000 mm

2,100 mm

27,000 mm

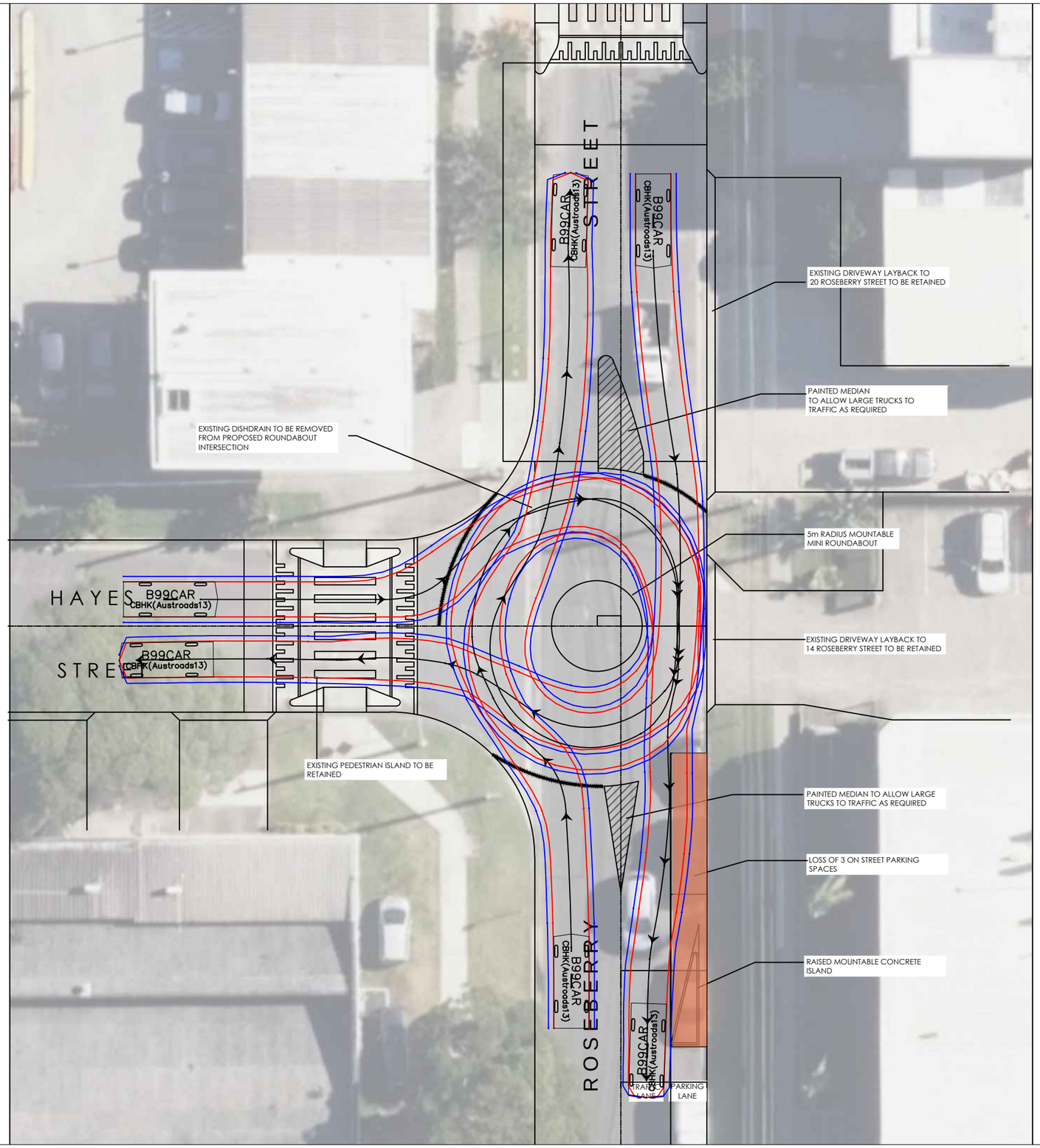


MEDIAN KERB DETAIL

ADJUSTED FROM NORTHERN BEACHES COUNCIL STANDARD MEDIAN KERB DETAIL

McD's BALGOWLAH
PRELIMINARY MEDIAN ISLAND SKETCH
ROSEBERRY STREET
SK002 REV B
SCALE 1:200 @ A3
13/05/25

ENTEC CONSULTANTS



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

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

B99 VEHICLE SWEPT PATHS

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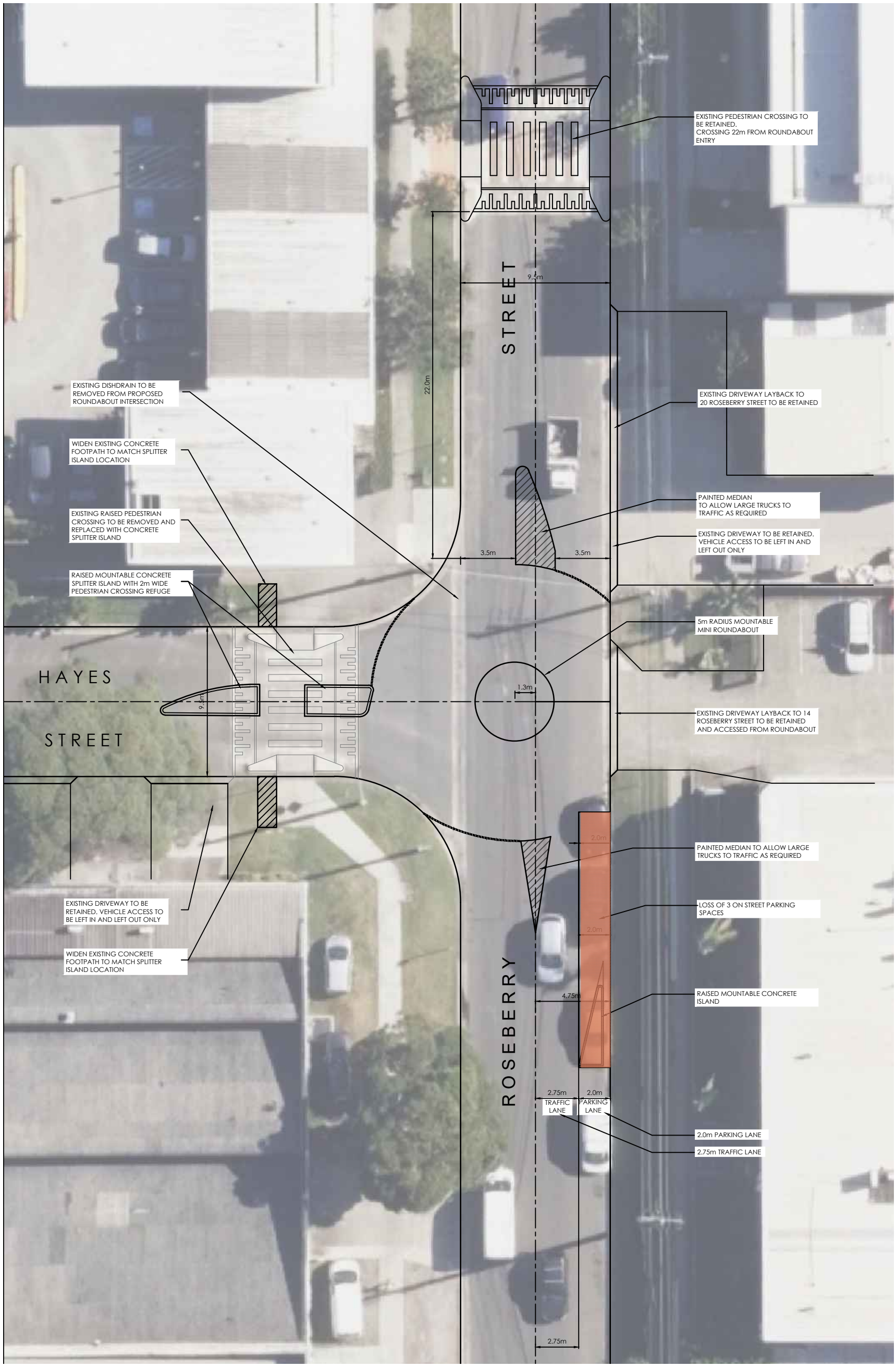
EXISTING PEDESTRIAN CROSSING TO BE RETAINED. CROSSING 22m FROM ROUNDABOUT ENTRY
STREET
9.5m
22.0m
EXISTING DISHDRAIN TO BE REMOVED FROM PROPOSED ROUNDABOUT INTERSECTION
EXISTING DRIVEWAY LAYBACK TO 20 ROSEBERRY STREET TO BE RETAINED
WIDEN EXISTING CONCRETE FOOTPATH TO MATCH SPLITTER ISLAND LOCATION
PAINTED MEDIAN TO ALLOW LARGE TRUCKS TO TRAFFIC AS REQUIRED
EXISTING RAISED PEDESTRIAN CROSSING TO BE REMOVED AND REPLACED WITH CONCRETE SPLITTER ISLAND
EXISTING DRIVEWAY TO BE RETAINED. VEHICLE ACCESS TO BE LEFT IN AND LEFT OUT ONLY
3.5m
3.5m
RAISED MOUNTABLE CONCRETE SPLITTER ISLAND WITH 2m WIDE PEDESTRIAN CROSSING REFUGE
5m RADIUS MOUNTABLE MINI ROUNDABOUT
HAYES
STREET
9.5m
1.3m
EXISTING DRIVEWAY LAYBACK TO 14 ROSEBERRY STREET TO BE RETAINED AND ACCESSED FROM ROUNDABOUT
2.0m
PAINTED MEDIAN TO ALLOW LARGE TRUCKS TO TRAFFIC AS REQUIRED
EXISTING DRIVEWAY TO BE RETAINED. VEHICLE ACCESS TO BE LEFT IN AND LEFT OUT ONLY
LOSS OF 3 ON STREET PARKING SPACES
2.0m
WIDEN EXISTING CONCRETE FOOTPATH TO MATCH SPLITTER ISLAND LOCATION
ROSEBERRY
4.75m
RAISED MOUNTABLE CONCRETE ISLAND
2.75m
2.0m
TRAFFIC LANE
PARKING LANE
2.0m PARKING LANE
2.75m TRAFFIC LANE
2.75m

Colston Budd Rogers & Kafes Pty Ltd

ATTACHMENT B

SIDRA MOVEMENT SUMMARIES

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [PM EX - Condamine Street - Kenneth Road (Site Folder: Weekday PM Existing)]

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

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C*, D*, D1, E, G, G2*
Output Phase Sequence: A, D1, E, G, G2*
(* 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: Condamine Street														
1	L2	48	2.2	48	2.2	0.081	15.7	LOS B	1.4	12.6	0.37	0.55	0.37	44.8
2	T1	1487	5.4	1487	5.4	0.711	4.0	LOS A	10.1	73.3	0.26	0.24	0.26	56.3
3	R2	440	1.0	440	1.0	* 0.957	82.5	LOS F	33.6	237.1	1.00	1.06	1.43	16.4
Approach		1976	4.3	1976	4.3	0.957	21.8	LOS B	33.6	237.1	0.43	0.43	0.52	42.7
East: Kenneth Road														
4	L2	285	1.5	285	1.5	0.275	18.7	LOS B	8.4	59.7	0.55	0.71	0.55	37.6
5	T1	78	1.4	78	1.4	0.152	36.0	LOS C	3.5	24.5	0.80	0.63	0.80	27.6
6	R2	234	1.4	234	1.4	* 0.900	66.6	LOS E	13.7	97.3	1.00	1.14	1.37	20.8
Approach		597	1.4	597	1.4	0.900	39.7	LOS C	13.7	97.3	0.76	0.87	0.90	27.5
North: Condamine Street														
7	L2	38	8.3	38	8.3	0.056	29.0	LOS C	1.3	10.0	0.64	0.69	0.64	31.0
8	T1	1141	6.3	1141	6.3	* 0.977	72.8	LOS F	43.7	322.0	1.00	1.20	1.39	27.3
9	R2	44	0.0	44	0.0	0.714	75.2	LOS F	2.9	20.1	1.00	0.81	1.24	25.7
Approach		1223	6.1	1223	6.1	0.977	71.6	LOS F	43.7	322.0	0.99	1.17	1.36	27.3
West: Kenneth Road														
10	L2	77	0.0	77	0.0	0.580	57.9	LOS E	8.1	56.5	0.98	0.80	0.98	29.4
11	T1	66	0.0	66	0.0	* 0.580	53.4	LOS D	8.1	56.5	0.98	0.80	0.98	20.1
12	R2	82	1.3	82	1.3	0.364	55.4	LOS D	4.5	31.5	0.94	0.77	0.94	29.6
Approach		225	0.5	225	0.5	0.580	55.7	LOS D	8.1	56.5	0.97	0.79	0.97	27.2
All Vehicles		4021	4.2	4021	4.2	0.977	41.5	LOS C	43.7	322.0	0.68	0.74	0.86	33.4

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

* Critical Movement (Signal Timing)

Site: 101 [PM EX - Kenneth Road - Roseberry Street (Site Folder: Weekday PM Existing)]

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

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	209	2.5	209	2.5	0.476	6.7	LOS A	4.0	28.4	0.78	0.74	0.78	32.1
2	T1	69	0.0	69	0.0	0.476	6.6	LOS A	4.0	28.4	0.78	0.74	0.78	43.3
3	R2	221	0.5	221	0.5	0.476	9.8	LOS A	4.0	28.4	0.78	0.74	0.78	43.1
3u	U	4	0.0	4	0.0	0.476	11.3	LOS A	4.0	28.4	0.78	0.74	0.78	32.1
Approach		504	1.3	504	1.3	0.476	8.1	LOS A	4.0	28.4	0.78	0.74	0.78	40.7
East: Kenneth Road														
4	L2	178	0.6	178	0.6	0.531	5.7	LOS A	4.0	27.9	0.65	0.64	0.65	42.3
5	T1	333	0.3	333	0.3	0.531	5.7	LOS A	4.0	27.9	0.65	0.64	0.65	42.3
6	R2	19	0.0	19	0.0	0.531	8.9	LOS A	4.0	27.9	0.65	0.64	0.65	45.8
6u	U	3	0.0	3	0.0	0.531	10.4	LOS A	4.0	27.9	0.65	0.64	0.65	46.4
Approach		533	0.4	533	0.4	0.531	5.8	LOS A	4.0	27.9	0.65	0.64	0.65	42.6
North: Roseberry Street														
7	L2	28	0.0	28	0.0	0.343	10.6	LOS A	2.8	19.8	0.88	0.81	0.88	42.9
8	T1	153	0.7	153	0.7	0.343	10.6	LOS A	2.8	19.8	0.88	0.81	0.88	38.5
9	R2	46	2.3	46	2.3	0.343	13.9	LOS A	2.8	19.8	0.88	0.81	0.88	38.5
9u	U	1	0.0	1	0.0	0.343	15.3	LOS B	2.8	19.8	0.88	0.81	0.88	43.9
Approach		228	0.9	228	0.9	0.343	11.3	LOS A	2.8	19.8	0.88	0.81	0.88	39.4
West: Kenneth Road														
10	L2	35	3.0	35	3.0	0.593	6.9	LOS A	4.8	33.9	0.52	0.66	0.56	42.1
11	T1	462	1.1	462	1.1	0.593	6.8	LOS A	4.8	33.9	0.52	0.66	0.56	43.2
12	R2	56	3.8	56	3.8	0.593	10.1	LOS A	4.8	33.9	0.52	0.66	0.56	26.3
12u	U	21	5.0	21	5.0	0.593	11.7	LOS A	4.8	33.9	0.52	0.66	0.56	26.3
Approach		574	1.7	574	1.7	0.593	7.3	LOS A	4.8	33.9	0.52	0.66	0.56	42.4
All Vehicles		1839	1.1	1839	1.1	0.593	7.6	LOS A	4.8	33.9	0.67	0.69	0.69	41.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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 [PM EX - Roseberry Street - Hayes Street (Site Folder: Weekday PM Existing)]

Network: 2 [Weekday PM 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: Roseberry Street														
1	L2	133	0.0	133	0.0	0.071	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	46.6
2	T1	413	1.5	413	1.5	0.215	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		545	1.2	545	1.2	0.215	1.2	NA	0.0	0.0	0.00	0.13	0.00	48.6
North: Roseberry Street														
8	T1	271	1.2	271	1.2	0.293	2.3	LOS A	1.6	11.1	0.41	0.23	0.45	46.2
9	R2	119	0.9	119	0.9	0.293	8.4	LOS A	1.6	11.1	0.41	0.23	0.45	44.9
Approach		389	1.1	389	1.1	0.293	4.2	NA	1.6	11.1	0.41	0.23	0.45	45.8
West: Hayes Street														
10	L2	91	0.0	91	0.0	0.245	7.5	LOS A	0.9	6.6	0.58	0.79	0.61	39.2
12	R2	37	0.0	37	0.0	0.245	16.8	LOS B	0.9	6.6	0.58	0.79	0.61	43.3
Approach		127	0.0	127	0.0	0.245	10.2	LOS A	0.9	6.6	0.58	0.79	0.61	40.9
All Vehicles		1062	1.0	1062	1.0	0.293	3.3	NA	1.6	11.1	0.22	0.25	0.24	46.4

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: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [Sat EX - Condamine Street - Kenneth Road (Site Folder: Saturday Midday Existing)]

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

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B*, C*, D*, D1*, E, G, G1*, G2*
Output Phase Sequence: A, E, G, G2*
(* 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: Condamine Street														
1	L2	58	0.0	58	0.0	0.057	18.7	LOS B	1.5	10.7	0.49	0.68	0.49	42.3
2	T1	1515	2.2	1515	2.2	0.731	4.0	LOS A	11.2	79.6	0.27	0.24	0.27	56.3
3	R2	400	1.3	400	1.3	* 0.971	89.3	LOS F	31.6	223.4	1.00	1.08	1.50	15.5
Approach		1973	2.0	1973	2.0	0.971	21.7	LOS B	31.6	223.4	0.42	0.43	0.52	42.9
East: Kenneth Road														
4	L2	365	0.3	365	0.3	0.418	22.4	LOS B	12.5	87.4	0.63	0.75	0.63	35.3
5	T1	91	1.2	91	1.2	0.188	38.0	LOS C	4.2	29.4	0.83	0.65	0.83	26.9
6	R2	247	0.9	247	0.9	* 0.948	84.8	LOS F	18.7	131.8	1.00	1.12	1.53	17.7
Approach		703	0.6	703	0.6	0.948	46.4	LOS D	18.7	131.8	0.79	0.86	0.98	25.4
North: Condamine Street														
7	L2	59	3.6	59	3.6	0.101	35.7	LOS C	2.4	17.2	0.73	0.72	0.73	27.9
8	T1	1300	2.0	1300	2.0	* 0.964	62.3	LOS E	47.6	339.0	0.98	1.13	1.30	29.7
9	R2	46	0.0	46	0.0	0.499	69.8	LOS E	2.8	19.9	1.00	0.74	1.00	26.6
Approach		1405	2.0	1405	2.0	0.964	61.5	LOS E	47.6	339.0	0.97	1.10	1.27	29.5
West: Kenneth Road														
10	L2	52	0.0	52	0.0	0.277	44.5	LOS D	5.8	40.5	0.86	0.72	0.86	33.1
11	T1	69	0.0	69	0.0	0.277	39.9	LOS C	5.8	40.5	0.86	0.72	0.86	23.6
12	R2	122	0.9	122	0.9	0.771	65.8	LOS E	7.7	54.1	1.00	0.92	1.21	27.3
Approach		243	0.4	243	0.4	0.771	53.9	LOS D	7.7	54.1	0.93	0.82	1.04	27.8
All Vehicles		4324	1.7	4324	1.7	0.971	40.4	LOS C	47.6	339.0	0.69	0.74	0.87	33.7

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 [Sat EX - Kenneth Road - Roseberry Street (Site Folder: Saturday Midday Existing)]

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

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	301	1.4	301	1.4	0.743	11.6	LOS A	8.0	56.2	0.87	0.94	1.17	26.8
2	T1	80	1.3	80	1.3	0.743	11.5	LOS A	8.0	56.2	0.87	0.94	1.17	40.2
3	R2	221	0.0	221	0.0	0.743	14.7	LOS B	8.0	56.2	0.87	0.94	1.17	40.0
3u	U	7	14.3	7	14.3	0.743	16.7	LOS B	8.0	56.2	0.87	0.94	1.17	26.8
Approach		609	1.0	609	1.0	0.743	12.7	LOS A	8.0	56.2	0.87	0.94	1.17	36.0
East: Kenneth Road														
4	L2	211	0.0	211	0.0	0.789	9.9	LOS A	7.2	50.4	0.71	0.82	0.94	39.4
5	T1	371	0.3	371	0.3	0.789	9.9	LOS A	7.2	50.4	0.71	0.82	0.94	39.4
6	R2	15	7.1	15	7.1	0.789	13.3	LOS A	7.2	50.4	0.71	0.82	0.94	43.9
6u	U	4	0.0	4	0.0	0.789	14.6	LOS B	7.2	50.4	0.71	0.82	0.94	44.5
Approach		600	0.4	600	0.4	0.789	10.0	LOS A	7.2	50.4	0.71	0.82	0.94	39.7
North: Roseberry Street														
7	L2	18	5.9	18	5.9	0.344	10.1	LOS A	2.5	17.7	0.84	0.79	0.84	43.2
8	T1	165	1.9	165	1.9	0.344	9.9	LOS A	2.5	17.7	0.84	0.79	0.84	39.1
9	R2	34	0.0	34	0.0	0.344	13.0	LOS A	2.5	17.7	0.84	0.79	0.84	39.1
9u	U	3	0.0	3	0.0	0.344	14.6	LOS B	2.5	17.7	0.84	0.79	0.84	44.3
Approach		220	1.9	220	1.9	0.344	10.5	LOS A	2.5	17.7	0.84	0.79	0.84	39.8
West: Kenneth Road														
10	L2	45	0.0	45	0.0	0.580	6.9	LOS A	4.5	32.0	0.53	0.68	0.56	42.0
11	T1	398	1.3	398	1.3	0.580	6.9	LOS A	4.5	32.0	0.53	0.68	0.56	43.1
12	R2	88	1.2	88	1.2	0.580	10.1	LOS A	4.5	32.0	0.53	0.68	0.56	26.0
12u	U	12	0.0	12	0.0	0.580	11.5	LOS A	4.5	32.0	0.53	0.68	0.56	26.0
Approach		543	1.2	543	1.2	0.580	7.5	LOS A	4.5	32.0	0.53	0.68	0.56	41.9
All Vehicles		1973	1.0	1973	1.0	0.789	10.2	LOS A	8.0	56.2	0.72	0.81	0.90	39.2

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 [Sat EX - Roseberry Street - Hayes Street (Site Folder: Saturday Midday Existing)]

Network: 3 [Saturfday 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: Roseberry Street														
1	L2	189	0.0	189	0.0	0.102	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	46.6
2	T1	518	1.0	518	1.0	0.268	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		707	0.7	707	0.7	0.268	1.3	NA	0.0	0.0	0.00	0.14	0.00	48.4
North: Roseberry Street														
8	T1	319	1.3	319	1.3	0.407	4.5	LOS A	3.0	21.1	0.59	0.29	0.79	44.1
9	R2	153	0.7	153	0.7	0.407	11.2	LOS A	3.0	21.1	0.59	0.29	0.79	43.0
Approach		472	1.1	472	1.1	0.407	6.7	NA	3.0	21.1	0.59	0.29	0.79	43.7
West: Hayes Street														
10	L2	92	1.1	92	1.1	0.350	10.1	LOS A	1.5	10.5	0.70	0.93	0.90	35.6
12	R2	40	2.6	40	2.6	0.350	26.4	LOS B	1.5	10.5	0.70	0.93	0.90	41.0
Approach		132	1.6	132	1.6	0.350	15.0	LOS B	1.5	10.5	0.70	0.93	0.90	37.9
All Vehicles		1311	1.0	1311	1.0	0.407	4.6	NA	3.0	21.1	0.28	0.27	0.37	45.3

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: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [PM EX + Dev - Condamine Street - Kenneth Road (Site Folder: Weekday PM Existing + Development)]

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

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C*, D*, D1, E, G, G2*
Output Phase Sequence: A, D1, E, G, G2*
(* 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: Condamine Street														
1	L2	48	2.2	48	2.2	0.081	15.7	LOS B	1.4	12.6	0.37	0.55	0.37	44.8
2	T1	1487	5.4	1487	5.4	0.711	4.0	LOS A	10.1	73.3	0.26	0.24	0.26	56.3
3	R2	445	0.9	445	0.9	* 0.969	87.2	LOS F	35.0	247.3	1.00	1.08	1.47	15.8
Approach		1981	4.3	1981	4.3	0.969	23.0	LOS B	35.0	247.3	0.43	0.44	0.54	42.1
East: Kenneth Road														
4	L2	291	1.4	291	1.4	0.280	18.7	LOS B	8.6	61.0	0.55	0.71	0.55	37.5
5	T1	78	1.4	78	1.4	0.152	36.0	LOS C	3.5	24.5	0.80	0.63	0.80	27.6
6	R2	239	1.3	239	1.3	* 0.920	70.4	LOS E	14.5	102.7	1.00	1.17	1.42	20.0
Approach		607	1.4	607	1.4	0.920	41.3	LOS C	14.5	102.7	0.76	0.88	0.93	27.0
North: Condamine Street														
7	L2	43	7.3	43	7.3	0.063	29.1	LOS C	1.5	11.4	0.64	0.70	0.64	31.0
8	T1	1141	6.3	1141	6.3	* 0.981	74.4	LOS F	44.3	326.7	1.00	1.21	1.40	27.0
9	R2	44	0.0	44	0.0	0.714	75.2	LOS F	2.9	20.1	1.00	0.81	1.24	25.7
Approach		1228	6.1	1228	6.1	0.981	72.8	LOS F	44.3	326.7	0.99	1.18	1.37	27.0
West: Kenneth Road														
10	L2	77	0.0	77	0.0	0.580	57.9	LOS E	8.1	56.5	0.98	0.80	0.98	29.4
11	T1	66	0.0	66	0.0	* 0.580	53.4	LOS D	8.1	56.5	0.98	0.80	0.98	20.1
12	R2	82	1.3	82	1.3	0.364	55.4	LOS D	4.5	31.5	0.94	0.77	0.94	29.6
Approach		225	0.5	225	0.5	0.580	55.7	LOS D	8.1	56.5	0.97	0.79	0.97	27.2
All Vehicles		4042	4.2	4042	4.2	0.981	42.7	LOS D	44.3	326.7	0.68	0.75	0.87	32.9

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

* Critical Movement (Signal Timing)

Site: 101 [PM EX + Dev - Kenneth Road - Roseberry Street (Site Folder: Weekday PM Existing + Development)]

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

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	220	2.4	220	2.4	0.526	5.5	LOS A	4.4	31.4	0.81	0.75	0.81	18.4
2	T1	75	0.0	75	0.0	0.526	5.6	LOS A	4.4	31.4	0.81	0.75	0.81	43.0
3	R2	232	0.5	232	0.5	0.526	8.5	LOS A	4.4	31.4	0.81	0.75	0.81	42.7
3u	U	15	0.0	15	0.0	0.526	10.0	LOS A	4.4	31.4	0.81	0.75	0.81	18.4
Approach		541	1.2	541	1.2	0.526	6.9	LOS A	4.4	31.4	0.81	0.75	0.81	39.1
East: Kenneth Road														
4	L2	183	0.6	183	0.6	0.571	6.1	LOS A	4.2	29.6	0.68	0.67	0.69	42.2
5	T1	333	0.3	333	0.3	0.571	6.0	LOS A	4.2	29.6	0.68	0.67	0.69	42.2
6	R2	19	0.0	19	0.0	0.571	9.2	LOS A	4.2	29.6	0.68	0.67	0.69	45.8
6u	U	3	0.0	3	0.0	0.571	10.7	LOS A	4.2	29.6	0.68	0.67	0.69	46.3
Approach		538	0.4	538	0.4	0.571	6.2	LOS A	4.2	29.6	0.68	0.67	0.69	42.5
North: Roseberry Street														
7	L2	28	0.0	28	0.0	0.372	11.0	LOS A	3.0	21.1	0.90	0.84	0.90	42.7
8	T1	158	0.7	158	0.7	0.372	11.0	LOS A	3.0	21.1	0.90	0.84	0.90	38.1
9	R2	46	2.3	46	2.3	0.372	14.3	LOS A	3.0	21.1	0.90	0.84	0.90	38.1
9u	U	1	0.0	1	0.0	0.372	15.7	LOS B	3.0	21.1	0.90	0.84	0.90	43.6
Approach		234	0.9	234	0.9	0.372	11.7	LOS A	3.0	21.1	0.90	0.84	0.90	39.1
West: Kenneth Road														
10	L2	35	3.0	35	3.0	0.626	7.6	LOS A	5.4	38.2	0.56	0.71	0.63	41.5
11	T1	462	1.1	462	1.1	0.626	7.5	LOS A	5.4	38.2	0.56	0.71	0.63	42.6
12	R2	66	3.2	66	3.2	0.626	10.8	LOS A	5.4	38.2	0.56	0.71	0.63	25.2
12u	U	21	5.0	21	5.0	0.626	12.3	LOS A	5.4	38.2	0.56	0.71	0.63	25.2
Approach		584	1.6	584	1.6	0.626	8.1	LOS A	5.4	38.2	0.56	0.71	0.63	41.7
All Vehicles		1897	1.1	1897	1.1	0.626	7.7	LOS A	5.4	38.2	0.71	0.72	0.73	41.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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 [PM EX + Dev - Roseberry Street - Site Access (Site Folder: Weekday PM Existing + Development)]

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

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: Roseberry Street														
1	L2	74	0.0	74	0.0	0.287	4.6	LOS A	0.0	0.0	0.00	0.07	0.00	48.5
2	T1	466	1.4	466	1.4	0.287	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	47.1
Approach		540	1.2	540	1.2	0.287	0.7	NA	0.0	0.0	0.00	0.07	0.00	47.7
North: Roseberry Street														
8	T1	421	1.0	421	1.0	0.218	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		421	1.0	421	1.0	0.218	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
West: Site Access														
10	L2	74	0.0	74	0.0	0.107	7.6	LOS A	0.4	2.7	0.50	0.70	0.50	41.5
Approach		74	0.0	74	0.0	0.107	7.6	LOS A	0.4	2.7	0.50	0.70	0.50	41.5
All Vehicles		1035	1.0	1035	1.0	0.287	0.9	NA	0.4	2.7	0.04	0.09	0.04	46.4

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 [PM EX + Dev - Roseberry Street - Hayes Street (Site Folder: Weekday PM Existing + Development)]

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

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	133	0.0	133	0.0	0.460	4.8	LOS A	4.0	28.3	0.49	0.50	0.49	45.8
2	T1	428	1.5	428	1.5	0.460	4.9	LOS A	4.0	28.3	0.49	0.50	0.49	43.1
Approach		561	1.1	561	1.1	0.460	4.9	LOS A	4.0	28.3	0.49	0.50	0.49	44.1
North: Roseberry Street														
8	T1	281	1.1	281	1.1	0.295	3.8	LOS A	2.2	15.5	0.20	0.48	0.20	45.3
9	R2	124	0.8	124	0.8	0.295	7.1	LOS A	2.2	15.5	0.20	0.48	0.20	45.0
9u	U	21	0.0	21	0.0	0.295	10.0	LOS A	2.2	15.5	0.20	0.48	0.20	34.1
Approach		426	1.0	426	1.0	0.295	5.1	LOS A	2.2	15.5	0.20	0.48	0.20	45.0
West: Hayes Street														
10	L2	91	0.0	91	0.0	0.154	6.7	LOS A	1.0	6.7	0.65	0.69	0.65	41.5
12	R2	37	0.0	37	0.0	0.154	10.1	LOS A	1.0	6.7	0.65	0.69	0.65	45.4
Approach		127	0.0	127	0.0	0.154	7.7	LOS A	1.0	6.7	0.65	0.69	0.65	43.1
All Vehicles		1115	0.9	1115	0.9	0.460	5.3	LOS A	4.0	28.3	0.40	0.52	0.40	44.3

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.

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [Sat EX + Dev - Condamine Street - Kenneth Road (Site Folder: Saturday Midday Existing + Development)]

Network: 5 [Saturfday Midday Existing + Development (Network Folder: Existing + Development)]

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B*, C*, D*, D1*, E, G, G1*, G2*
Output Phase Sequence: A, E, G, G2*
(* 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: Condamine Street														
1	L2	58	0.0	58	0.0	0.057	18.7	LOS B	1.5	10.7	0.49	0.68	0.49	42.3
2	T1	1515	2.2	1515	2.2	0.731	4.0	LOS A	11.2	79.6	0.27	0.24	0.27	56.3
3	R2	405	1.3	405	1.3	* 0.948	80.2	LOS F	30.2	213.8	1.00	1.05	1.42	16.8
Approach		1978	2.0	1978	2.0	0.948	20.0	LOS B	30.2	213.8	0.42	0.42	0.51	43.8
East: Kenneth Road														
4	L2	371	0.3	371	0.3	0.375	21.9	LOS B	12.5	87.4	0.63	0.75	0.63	35.6
5	T1	91	1.2	91	1.2	0.188	38.0	LOS C	4.2	29.4	0.83	0.65	0.83	26.9
6	R2	253	0.8	253	0.8	* 0.970	93.3	LOS F	20.1	141.9	1.00	1.16	1.61	16.6
Approach		714	0.6	714	0.6	0.970	49.2	LOS D	20.1	141.9	0.78	0.88	1.00	24.6
North: Condamine Street														
7	L2	6	33.3	6	33.3	0.015	35.8	LOS C	0.3	2.3	0.71	0.65	0.71	28.0
8	T1	1300	2.0	1300	2.0	* 0.952	58.7	LOS E	46.2	329.3	1.00	1.11	1.27	30.6
9	R2	46	0.0	46	0.0	0.499	69.8	LOS E	2.8	19.9	1.00	0.74	1.00	26.6
Approach		1353	2.1	1353	2.1	0.952	59.0	LOS E	46.2	329.3	1.00	1.10	1.26	30.4
West: Kenneth Road														
10	L2	52	0.0	52	0.0	0.277	44.5	LOS D	5.8	40.5	0.86	0.72	0.86	33.1
11	T1	69	0.0	69	0.0	0.277	39.9	LOS C	5.8	40.5	0.86	0.72	0.86	23.6
12	R2	122	0.9	122	0.9	0.774	66.0	LOS E	7.7	54.3	1.00	0.92	1.22	27.3
Approach		243	0.4	243	0.4	0.774	54.0	LOS D	7.7	54.3	0.93	0.82	1.04	27.7
All Vehicles		4287	1.7	4287	1.7	0.970	39.1	LOS C	46.2	329.3	0.69	0.73	0.86	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 EX + Dev - Kenneth Road - Roseberry Street (Site Folder: Saturday Midday Existing + Development)]

Network: 5 [Saturfday Midday Existing + Development (Network Folder: Existing + Development)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	312	1.4	312	1.4	0.860	17.0	LOS B	12.3	86.9	0.90	1.14	1.58	8.9
2	T1	91	1.2	91	1.2	0.860	17.2	LOS B	12.3	86.9	0.90	1.14	1.58	34.6
3	R2	232	0.0	232	0.0	0.860	20.0	LOS B	12.3	86.9	0.90	1.14	1.58	34.4
3u	U	23	4.5	23	4.5	0.860	21.7	LOS B	12.3	86.9	0.90	1.14	1.58	8.9
Approach		657	1.0	657	1.0	0.860	18.3	LOS B	12.3	86.9	0.90	1.14	1.58	27.2
East: Kenneth Road														
4	L2	221	0.0	221	0.0	0.900	18.1	LOS B	11.4	80.0	0.75	1.10	1.40	33.6
5	T1	371	0.3	371	0.3	0.900	18.1	LOS B	11.4	80.0	0.75	1.10	1.40	33.6
6	R2	15	7.1	15	7.1	0.900	21.5	LOS B	11.4	80.0	0.75	1.10	1.40	40.0
6u	U	4	0.0	4	0.0	0.900	22.8	LOS B	11.4	80.0	0.75	1.10	1.40	40.5
Approach		611	0.3	611	0.3	0.900	18.2	LOS B	11.4	80.0	0.75	1.10	1.40	33.9
North: Roseberry Street														
7	L2	18	5.9	18	5.9	0.383	10.5	LOS A	2.6	18.7	0.86	0.83	0.86	43.0
8	T1	171	1.9	171	1.9	0.383	10.3	LOS A	2.6	18.7	0.86	0.83	0.86	38.8
9	R2	34	0.0	34	0.0	0.383	13.4	LOS A	2.6	18.7	0.86	0.83	0.86	38.8
9u	U	3	0.0	3	0.0	0.383	14.9	LOS B	2.6	18.7	0.86	0.83	0.86	44.1
Approach		225	1.9	225	1.9	0.383	10.9	LOS A	2.6	18.7	0.86	0.83	0.86	39.5
West: Kenneth Road														
10	L2	45	0.0	45	0.0	0.622	7.8	LOS A	5.3	37.3	0.58	0.74	0.66	41.2
11	T1	398	1.3	398	1.3	0.622	7.8	LOS A	5.3	37.3	0.58	0.74	0.66	42.3
12	R2	99	1.1	99	1.1	0.622	11.0	LOS A	5.3	37.3	0.58	0.74	0.66	24.5
12u	U	12	0.0	12	0.0	0.622	12.5	LOS A	5.3	37.3	0.58	0.74	0.66	24.5
Approach		554	1.1	554	1.1	0.622	8.5	LOS A	5.3	37.3	0.58	0.74	0.66	40.9
All Vehicles		2046	0.9	2046	0.9	0.900	14.8	LOS B	12.3	86.9	0.77	0.99	1.20	34.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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 EX + Dev - Roseberry Street - Site Access (Site Folder: Saturday Midday Existing + Development)]

Network: 5 [Saturfday Midday Existing + Development (Network Folder: Existing + Development)]

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: Roseberry Street														
1	L2	95	0.0	95	0.0	0.452	4.6	LOS A	0.0	0.0	0.00	0.08	0.00	48.3
2	T1	562	1.1	562	1.1	0.452	0.1	LOS A	0.0	0.0	0.00	0.08	0.00	46.8
Approach		657	1.0	657	1.0	0.452	0.7	NA	0.0	0.0	0.00	0.08	0.00	47.4
North: Roseberry Street														
8	T1	524	1.0	524	1.0	0.272	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		524	1.0	524	1.0	0.272	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
West: Site Access														
10	L2	95	0.0	95	0.0	0.212	8.7	LOS A	0.6	4.0	0.55	0.79	0.55	40.5
Approach		95	0.0	95	0.0	0.212	8.7	LOS A	0.6	4.0	0.55	0.79	0.55	40.5
All Vehicles		1276	0.9	1276	0.9	0.452	1.0	NA	0.6	4.0	0.04	0.10	0.04	45.9

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 EX + Dev - Roseberry Street - Hayes Street (Site Folder: Saturday Midday Existing + Development)]

Network: 5 [Saturfday Midday Existing + Development (Network Folder: Existing + Development)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	189	0.0	189	0.0	0.614	5.5	LOS A	6.4	45.3	0.65	0.57	0.65	45.4
2	T1	539	1.0	539	1.0	0.614	5.6	LOS A	6.4	45.3	0.65	0.57	0.65	42.4
Approach		728	0.7	728	0.7	0.614	5.6	LOS A	6.4	45.3	0.65	0.57	0.65	43.6
North: Roseberry Street														
8	T1	335	1.3	335	1.3	0.356	3.9	LOS A	2.9	20.4	0.23	0.48	0.23	45.1
9	R2	153	0.7	153	0.7	0.356	7.2	LOS A	2.9	20.4	0.23	0.48	0.23	44.9
9u	U	26	0.0	26	0.0	0.356	10.1	LOS A	2.9	20.4	0.23	0.48	0.23	33.8
Approach		514	1.0	514	1.0	0.356	5.2	LOS A	2.9	20.4	0.23	0.48	0.23	44.8
West: Hayes Street														
10	L2	92	1.1	92	1.1	0.186	7.8	LOS A	1.2	8.6	0.74	0.76	0.74	40.4
12	R2	40	2.6	40	2.6	0.186	11.2	LOS A	1.2	8.6	0.74	0.76	0.74	44.8
Approach		132	1.6	132	1.6	0.186	8.8	LOS A	1.2	8.6	0.74	0.76	0.74	42.3
All Vehicles		1374	0.9	1374	0.9	0.614	5.8	LOS A	6.4	45.3	0.50	0.55	0.50	43.9

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

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [PM EX + Dev - Condamine Street - Kenneth Road (Site Folder: Weekday PM Existing + Development)]

Network: 6 [Weekday PM Existing + Development (2 Sites) (Network Folder: Existing + Development)]

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C*, D*, D1, E, G, G2*
Output Phase Sequence: A, D1, E, G, G2*
(* 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: Condamine Street														
1	L2	48	2.2	48	2.2	0.081	15.7	LOS B	1.4	12.6	0.37	0.55	0.37	44.8
2	T1	1487	5.4	1487	5.4	0.711	4.0	LOS A	10.1	73.3	0.26	0.24	0.26	56.3
3	R2	445	0.9	445	0.9	* 0.969	87.2	LOS F	35.0	247.3	1.00	1.08	1.47	15.8
Approach		1981	4.3	1981	4.3	0.969	23.0	LOS B	35.0	247.3	0.43	0.44	0.54	42.1
East: Kenneth Road														
4	L2	291	1.4	291	1.4	0.280	18.7	LOS B	8.6	61.0	0.55	0.71	0.55	37.5
5	T1	78	1.4	78	1.4	0.152	36.0	LOS C	3.5	24.5	0.80	0.63	0.80	27.6
6	R2	239	1.3	239	1.3	* 0.920	70.4	LOS E	14.5	102.7	1.00	1.17	1.42	20.0
Approach		607	1.4	607	1.4	0.920	41.3	LOS C	14.5	102.7	0.76	0.88	0.93	27.0
North: Condamine Street														
7	L2	43	7.3	43	7.3	0.063	29.1	LOS C	1.5	11.4	0.64	0.70	0.64	31.0
8	T1	1141	6.3	1141	6.3	* 0.981	74.4	LOS F	44.3	326.7	1.00	1.21	1.40	27.0
9	R2	44	0.0	44	0.0	0.714	75.2	LOS F	2.9	20.1	1.00	0.81	1.24	25.7
Approach		1228	6.1	1228	6.1	0.981	72.8	LOS F	44.3	326.7	0.99	1.18	1.37	27.0
West: Kenneth Road														
10	L2	77	0.0	77	0.0	0.580	57.9	LOS E	8.1	56.5	0.98	0.80	0.98	29.4
11	T1	66	0.0	66	0.0	* 0.580	53.4	LOS D	8.1	56.5	0.98	0.80	0.98	20.1
12	R2	82	1.3	82	1.3	0.364	55.4	LOS D	4.5	31.5	0.94	0.77	0.94	29.6
Approach		225	0.5	225	0.5	0.580	55.7	LOS D	8.1	56.5	0.97	0.79	0.97	27.2
All Vehicles		4042	4.2	4042	4.2	0.981	42.7	LOS D	44.3	326.7	0.68	0.75	0.87	32.9

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

* Critical Movement (Signal Timing)

Site: 101 [PM EX + Dev - Kenneth Road - Roseberry Street (Site Folder: Weekday PM Existing + Development)]

Network: 6 [Weekday PM Existing + Development (2 Sites) (Network Folder: Existing + Development)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	220	2.4	220	2.4	0.526	6.8	LOS A	4.4	31.4	0.81	0.75	0.81	40.8
2	T1	75	0.0	75	0.0	0.526	6.7	LOS A	4.4	31.4	0.81	0.75	0.81	45.1
3	R2	232	0.5	232	0.5	0.526	9.9	LOS A	4.4	31.4	0.81	0.75	0.81	44.9
3u	U	15	0.0	15	0.0	0.526	11.4	LOS A	4.4	31.4	0.81	0.75	0.81	45.4
Approach		541	1.2	541	1.2	0.526	8.3	LOS A	4.4	31.4	0.81	0.75	0.81	43.8
East: Kenneth Road														
4	L2	183	0.6	183	0.6	0.571	6.1	LOS A	4.2	29.6	0.68	0.67	0.69	45.2
5	T1	333	0.3	333	0.3	0.571	6.0	LOS A	4.2	29.6	0.68	0.67	0.69	42.2
6	R2	19	0.0	19	0.0	0.571	9.2	LOS A	4.2	29.6	0.68	0.67	0.69	45.8
6u	U	3	0.0	3	0.0	0.571	10.7	LOS A	4.2	29.6	0.68	0.67	0.69	46.3
Approach		538	0.4	538	0.4	0.571	6.2	LOS A	4.2	29.6	0.68	0.67	0.69	43.8
North: Roseberry Street														
7	L2	28	0.0	28	0.0	0.372	11.0	LOS A	3.0	21.1	0.90	0.84	0.90	42.7
8	T1	158	0.7	158	0.7	0.372	11.0	LOS A	3.0	21.1	0.90	0.84	0.90	43.4
9	R2	46	2.3	46	2.3	0.372	14.3	LOS A	3.0	21.1	0.90	0.84	0.90	38.1
9u	U	1	0.0	1	0.0	0.372	15.7	LOS B	3.0	21.1	0.90	0.84	0.90	43.6
Approach		234	0.9	234	0.9	0.372	11.7	LOS A	3.0	21.1	0.90	0.84	0.90	42.6
West: Kenneth Road														
10	L2	35	3.0	35	3.0	0.626	7.6	LOS A	5.4	38.2	0.56	0.71	0.63	41.5
11	T1	462	1.1	462	1.1	0.626	7.5	LOS A	5.4	38.2	0.56	0.71	0.63	42.6
12	R2	66	3.2	66	3.2	0.626	10.8	LOS A	5.4	38.2	0.56	0.71	0.63	42.3
12u	U	21	5.0	21	5.0	0.626	12.3	LOS A	5.4	38.2	0.56	0.71	0.63	25.2
Approach		584	1.6	584	1.6	0.626	8.1	LOS A	5.4	38.2	0.56	0.71	0.63	42.3
All Vehicles		1897	1.1	1897	1.1	0.626	8.0	LOS A	5.4	38.2	0.71	0.73	0.73	43.3

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.

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [Sat EX + Dev - Condamine Street - Kenneth Road (Site Folder: Saturday Midday Existing + Development)]

Network: 7 [Saturfday Midday Existing + Development (2 Sites) (Network Folder: Existing + Development)]

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, B*, C*, D*, D1*, E, G, G1*, G2*
Output Phase Sequence: A, E, G, G2*
(* 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: Condamine Street														
1	L2	58	0.0	58	0.0	0.057	18.7	LOS B	1.5	10.7	0.49	0.68	0.49	42.3
2	T1	1515	2.2	1515	2.2	0.731	4.0	LOS A	11.2	79.6	0.27	0.24	0.27	56.3
3	R2	405	1.3	405	1.3	* 0.948	80.2	LOS F	30.2	213.8	1.00	1.05	1.42	16.8
Approach		1978	2.0	1978	2.0	0.948	20.0	LOS B	30.2	213.8	0.42	0.42	0.51	43.8
East: Kenneth Road														
4	L2	371	0.3	371	0.3	0.375	21.9	LOS B	12.5	87.4	0.63	0.75	0.63	35.6
5	T1	91	1.2	91	1.2	0.188	38.0	LOS C	4.2	29.4	0.83	0.65	0.83	26.9
6	R2	253	0.8	253	0.8	* 0.970	93.3	LOS F	20.1	141.9	1.00	1.16	1.61	16.6
Approach		714	0.6	714	0.6	0.970	49.2	LOS D	20.1	141.9	0.78	0.88	1.00	24.6
North: Condamine Street														
7	L2	6	33.3	6	33.3	0.015	35.8	LOS C	0.3	2.3	0.71	0.65	0.71	28.0
8	T1	1300	2.0	1300	2.0	* 0.952	58.7	LOS E	46.2	329.3	1.00	1.11	1.27	30.6
9	R2	46	0.0	46	0.0	0.499	69.8	LOS E	2.8	19.9	1.00	0.74	1.00	26.6
Approach		1353	2.1	1353	2.1	0.952	59.0	LOS E	46.2	329.3	1.00	1.10	1.26	30.4
West: Kenneth Road														
10	L2	52	0.0	52	0.0	0.277	44.5	LOS D	5.8	40.5	0.86	0.72	0.86	33.1
11	T1	69	0.0	69	0.0	0.277	39.9	LOS C	5.8	40.5	0.86	0.72	0.86	23.6
12	R2	122	0.9	122	0.9	0.774	66.0	LOS E	7.7	54.3	1.00	0.92	1.22	27.3
Approach		243	0.4	243	0.4	0.774	54.0	LOS D	7.7	54.3	0.93	0.82	1.04	27.7
All Vehicles		4287	1.7	4287	1.7	0.970	39.1	LOS C	46.2	329.3	0.69	0.73	0.86	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 EX + Dev - Kenneth Road - Roseberry Street (Site Folder: Saturday Midday Existing + Development)]

Network: 7 [Saturfday Midday Existing + Development (2 Sites) (Network Folder: Existing + Development)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	312	1.4	312	1.4	0.860	18.3	LOS B	12.3	86.9	0.90	1.14	1.58	32.8
2	T1	91	1.2	91	1.2	0.860	18.3	LOS B	12.3	86.9	0.90	1.14	1.58	39.6
3	R2	232	0.0	232	0.0	0.860	21.4	LOS B	12.3	86.9	0.90	1.14	1.58	39.5
3u	U	23	4.5	23	4.5	0.860	23.1	LOS B	12.3	86.9	0.90	1.14	1.58	39.8
Approach		657	1.0	657	1.0	0.860	19.6	LOS B	12.3	86.9	0.90	1.14	1.58	37.2
East: Kenneth Road														
4	L2	221	0.0	221	0.0	0.900	18.1	LOS B	11.4	80.0	0.75	1.10	1.40	39.7
5	T1	371	0.3	371	0.3	0.900	18.1	LOS B	11.4	80.0	0.75	1.10	1.40	33.6
6	R2	15	7.1	15	7.1	0.900	21.5	LOS B	11.4	80.0	0.75	1.10	1.40	40.0
6u	U	4	0.0	4	0.0	0.900	22.8	LOS B	11.4	80.0	0.75	1.10	1.40	40.5
Approach		611	0.3	611	0.3	0.900	18.2	LOS B	11.4	80.0	0.75	1.10	1.40	36.8
North: Roseberry Street														
7	L2	18	5.9	18	5.9	0.383	10.5	LOS A	2.6	18.7	0.86	0.83	0.86	43.0
8	T1	171	1.9	171	1.9	0.383	10.3	LOS A	2.6	18.7	0.86	0.83	0.86	43.8
9	R2	34	0.0	34	0.0	0.383	13.4	LOS A	2.6	18.7	0.86	0.83	0.86	38.8
9u	U	3	0.0	3	0.0	0.383	14.9	LOS B	2.6	18.7	0.86	0.83	0.86	44.1
Approach		225	1.9	225	1.9	0.383	10.9	LOS A	2.6	18.7	0.86	0.83	0.86	43.3
West: Kenneth Road														
10	L2	45	0.0	45	0.0	0.622	7.8	LOS A	5.3	37.3	0.58	0.74	0.66	41.2
11	T1	398	1.3	398	1.3	0.622	7.8	LOS A	5.3	37.3	0.58	0.74	0.66	42.3
12	R2	99	1.1	99	1.1	0.622	11.0	LOS A	5.3	37.3	0.58	0.74	0.66	42.0
12u	U	12	0.0	12	0.0	0.622	12.5	LOS A	5.3	37.3	0.58	0.74	0.66	24.5
Approach		554	1.1	554	1.1	0.622	8.5	LOS A	5.3	37.3	0.58	0.74	0.66	42.0
All Vehicles		2046	0.9	2046	0.9	0.900	15.2	LOS B	12.3	86.9	0.77	0.99	1.20	38.8

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

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [PM EX - Condamine Street - Kenneth Road - Option A (Site Folder: Alternate Options)]

Network: 9 [Weekday PM Existing - Option A (Network Folder: Existing - KRCS Options)]

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C*, D*, D1, E, G, G2*
Output Phase Sequence: A, D*, D1, E, G, G2*
(* 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: Condamine Street														
1	L2	48	2.2	48	2.2	0.083	16.2	LOS B	1.5	13.0	0.39	0.56	0.39	44.5
2	T1	1487	5.4	1487	5.4	0.782	8.8	LOS A	20.3	147.2	0.52	0.47	0.52	52.4
3	R2	440	1.0	440	1.0	* 1.064	142.8	LOS F	44.9	316.8	1.00	1.26	1.90	10.5
Approach		1976	4.3	1976	4.3	1.064	38.8	LOS C	44.9	316.8	0.62	0.65	0.82	34.7
East: Kenneth Road														
4	L2	285	1.5	285	1.5	0.317	24.1	LOS B	9.9	70.1	0.64	0.74	0.64	34.4
5	T1	78	1.4	78	1.3	* 1.045	125.8	LOS F	10.6	74.9	1.00	1.27	2.04	12.7
6	R2	234	1.4	233	1.3	1.045	131.8	LOS F	18.5	131.2	1.00	1.30	1.97	12.7
Approach		597	1.4	596 N1	1.4	1.045	79.5	LOS F	18.5	131.2	0.83	1.03	1.34	18.1
North: Condamine Street														
7	L2	38	8.3	38	8.3	0.052	27.1	LOS B	1.3	9.6	0.61	0.69	0.61	32.1
8	T1	1141	6.3	1141	6.3	* 1.055	121.1	LOS F	55.9	412.4	1.00	1.47	1.74	19.8
9	R2	44	0.0	44	0.0	0.714	75.2	LOS F	2.9	20.1	1.00	0.81	1.24	25.7
Approach		1223	6.1	1223	6.1	1.055	116.6	LOS F	55.9	412.4	0.99	1.43	1.69	20.1
West: Kenneth Road														
10	L2	77	0.0	77	0.0	0.580	57.9	LOS E	8.1	56.5	0.98	0.80	0.98	29.4
11	T1	66	0.0	66	0.0	0.580	53.4	LOS D	8.1	56.5	0.98	0.80	0.98	20.1
12	R2	82	1.3	82	1.3	* 0.896	78.6	LOS F	5.6	39.4	1.00	1.00	1.54	24.9
Approach		225	0.5	225	0.5	0.896	64.1	LOS E	8.1	56.5	0.99	0.87	1.19	25.4
All Vehicles		4021	4.2	4020 N1	4.2	1.064	69.9	LOS E	55.9	412.4	0.78	0.95	1.18	25.5

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

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

Site: 101 [PM EX - Kenneth Road - Roseberry Street - Option A (Site Folder: Alternate Options)]

Network: 9 [Weekday PM Existing - Option A (Network Folder: Existing - KRCS Options)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	209	2.5	209	2.5	0.572	7.3	LOS A	4.3	30.5	0.78	0.77	0.83	31.4
2	T1	69	0.0	69	0.0	0.572	7.2	LOS A	4.3	30.5	0.78	0.77	0.83	43.0
3	R2	221	0.5	221	0.5	0.572	10.4	LOS A	4.3	30.5	0.78	0.77	0.83	42.7
3u	U	4	0.0	4	0.0	0.572	11.9	LOS A	4.3	30.5	0.78	0.77	0.83	31.4
Approach		504	1.3	504	1.3	0.572	8.7	LOS A	4.3	30.5	0.78	0.77	0.83	40.2
East: Kenneth Road														
4	L2	178	0.6	178	0.6	0.686	6.9	LOS A	4.6	32.5	0.64	0.69	0.72	42.1
5	T1	333	0.3	333	0.3	0.686	6.8	LOS A	4.6	32.5	0.64	0.69	0.72	42.1
6	R2	19	0.0	19	0.0	0.686	10.0	LOS A	4.6	32.5	0.64	0.69	0.72	45.7
6u	U	3	0.0	3	0.0	0.686	11.5	LOS A	4.6	32.5	0.64	0.69	0.72	46.2
Approach		533	0.4	533	0.4	0.686	7.0	LOS A	4.6	32.5	0.64	0.69	0.72	42.3
North: Roseberry Street														
7	L2	28	0.0	28	0.0	0.368	10.2	LOS A	2.7	18.8	0.86	0.80	0.86	43.1
8	T1	153	0.7	153	0.7	0.368	10.2	LOS A	2.7	18.8	0.86	0.80	0.86	38.8
9	R2	46	2.3	46	2.3	0.368	13.5	LOS A	2.7	18.8	0.86	0.80	0.86	38.8
9u	U	1	0.0	1	0.0	0.368	14.9	LOS B	2.7	18.8	0.86	0.80	0.86	44.1
Approach		228	0.9	228	0.9	0.368	10.9	LOS A	2.7	18.8	0.86	0.80	0.86	39.7
West: Kenneth Road														
10	L2	35	3.0	33	3.1	0.579	6.8	LOS A	4.4	31.1	0.51	0.65	0.53	42.2
11	T1	462	1.1	441	1.2	0.579	6.7	LOS A	4.4	31.1	0.51	0.65	0.53	43.4
12	R2	56	3.8	53	3.8	0.579	10.0	LOS A	4.4	31.1	0.51	0.65	0.53	26.6
12u	U	21	5.0	20	5.1	0.579	11.5	LOS A	4.4	31.1	0.51	0.65	0.53	26.6
Approach		574	1.7	547 N1	1.7	0.579	7.2	LOS A	4.4	31.1	0.51	0.65	0.53	42.5
All Vehicles		1839	1.1	1813 N1	1.1	0.686	8.0	LOS A	4.6	32.5	0.67	0.72	0.71	41.5

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.

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

Site: 101 [PM EX - Roseberry Street - Hayes Street - Option A (Site Folder: Alternate Options)]

Network: 9 [Weekday PM Existing - Option A (Network Folder: Existing - KRCS Options)]

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: Roseberry Street														
1	L2	133	0.0	133	0.0	0.071	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	46.6
2	T1	413	1.5	413	1.5	0.215	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		545	1.2	545	1.2	0.215	1.2	NA	0.0	0.0	0.00	0.13	0.00	48.6
North: Roseberry Street														
8	T1	271	1.2	269	1.2	0.291	2.3	LOS A	1.6	11.0	0.41	0.23	0.45	46.2
9	R2	119	0.9	118	0.9	0.291	8.4	LOS A	1.6	11.0	0.41	0.23	0.45	45.0
Approach		389	1.1	387 N1	1.1	0.291	4.1	NA	1.6	11.0	0.41	0.23	0.45	45.8
West: Hayes Street														
10	L2	91	0.0	91	0.0	0.245	7.5	LOS A	0.9	6.6	0.58	0.79	0.61	39.2
12	R2	37	0.0	37	0.0	0.245	16.7	LOS B	0.9	6.6	0.58	0.79	0.61	43.3
Approach		127	0.0	127	0.0	0.245	10.2	LOS A	0.9	6.6	0.58	0.79	0.61	41.0
All Vehicles		1062	1.0	1060 N 1	1.0	0.291	3.3	NA	1.6	11.0	0.22	0.24	0.24	46.4

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.

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

USER REPORT FOR NETWORK SITE

All Movement Classes

Project: 12473 Balgowlah McDonald's 250514

Template: Movement Summaries

Site: 101 [PM EX - Condamine Street - Kenneth Road - Option B (Site Folder: Alternate Options)]

Network: 10 [Weekday PM Existing - Option B (Network Folder: Existing - KRCS Options)]

New Site
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: Variable Phasing
Reference Phase: Phase A
Input Phase Sequence: A, C*, D, E, G, G2*
Output Phase Sequence: A, D, E, G, G2*
(* 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: Condamine Street														
1	L2	48	2.2	48	2.2	0.083	16.7	LOS B	1.5	13.4	0.40	0.56	0.40	44.3
2	T1	1487	5.4	1487	5.4	0.795	9.7	LOS A	22.1	159.8	0.56	0.51	0.56	51.7
3	R2	440	1.0	440	1.0	* 1.026	117.7	LOS F	40.5	286.0	1.00	1.18	1.72	12.4
Approach		1976	4.3	1976	4.3	1.026	33.9	LOS C	40.5	286.0	0.65	0.66	0.81	36.8
East: Kenneth Road														
4	L2	285	1.5	285	1.5	0.416	34.3	LOS C	12.3	87.1	0.79	0.79	0.79	29.6
5	T1	78	1.4	78	1.4	* 0.956	83.0	LOS F	11.5	81.5	1.00	1.15	1.63	17.1
6	R2	234	1.4	234	1.4	0.956	87.7	LOS F	11.5	81.5	1.00	1.13	1.63	17.4
Approach		597	1.4	596 N1	1.4	0.956	61.6	LOS E	12.3	87.1	0.90	0.97	1.23	21.6
North: Condamine Street														
7	L2	38	8.3	38	8.3	0.061	19.6	LOS B	0.9	6.5	0.67	0.69	0.67	36.8
8	T1	1141	6.3	1141	6.3	* 1.002	87.3	LOS F	48.0	354.2	1.00	1.28	1.49	24.7
9	R2	44	0.0	44	0.0	0.357	66.4	LOS E	2.6	18.3	0.99	0.74	0.99	27.4
Approach		1223	6.1	1223	6.1	1.002	84.4	LOS F	48.0	354.2	0.99	1.24	1.45	24.9
West: Kenneth Road														
10	L2	77	0.0	77	0.0	0.581	40.1	LOS C	6.3	44.0	0.99	0.79	0.99	34.3
11	T1	66	0.0	66	0.0	* 0.581	35.5	LOS C	6.3	44.0	0.99	0.79	0.99	24.8
12	R2	82	1.3	82	1.3	0.299	54.3	LOS D	4.4	30.9	0.93	0.76	0.93	29.8
Approach		225	0.5	225	0.5	0.581	43.9	LOS D	6.3	44.0	0.97	0.78	0.97	30.3
All Vehicles		4021	4.2	4021	4.2	1.026	53.9	LOS D	48.0	354.2	0.81	0.89	1.08	29.5

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: 101 [PM EX - Kenneth Road - Roseberry Street - Option B (Site Folder: Alternate Options)]

Network: 10 [Weekday PM Existing - Option B (Network Folder: Existing - KRCS Options)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Roseberry Street														
1	L2	209	2.5	209	2.5	0.454	6.7	LOS A	4.0	28.4	0.78	0.73	0.78	32.1
2	T1	69	0.0	69	0.0	0.454	6.6	LOS A	4.0	28.4	0.78	0.73	0.78	43.3
3	R2	221	0.5	221	0.5	0.454	9.8	LOS A	4.0	28.4	0.78	0.73	0.78	43.1
3u	U	4	0.0	4	0.0	0.454	11.3	LOS A	4.0	28.4	0.78	0.73	0.78	32.1
Approach		504	1.3	504	1.3	0.454	8.1	LOS A	4.0	28.4	0.78	0.73	0.78	40.7
East: Kenneth Road														
4	L2	178	0.6	178	0.6	0.495	5.7	LOS A	4.0	27.9	0.65	0.64	0.65	42.4
5	T1	333	0.3	333	0.3	0.495	5.7	LOS A	4.0	27.9	0.65	0.64	0.65	42.4
6	R2	19	0.0	19	0.0	0.495	8.9	LOS A	4.0	27.9	0.65	0.64	0.65	45.9
6u	U	3	0.0	3	0.0	0.495	10.4	LOS A	4.0	27.9	0.65	0.64	0.65	46.4
Approach		533	0.4	533	0.4	0.495	5.8	LOS A	4.0	27.9	0.65	0.64	0.65	42.6
North: Roseberry Street														
7	L2	28	0.0	28	0.0	0.331	10.4	LOS A	2.7	19.4	0.87	0.80	0.87	43.0
8	T1	153	0.7	153	0.7	0.331	10.4	LOS A	2.7	19.4	0.87	0.80	0.87	38.6
9	R2	46	2.3	46	2.3	0.331	13.7	LOS A	2.7	19.4	0.87	0.80	0.87	38.6
9u	U	1	0.0	1	0.0	0.331	15.1	LOS B	2.7	19.4	0.87	0.80	0.87	43.9
Approach		228	0.9	228	0.9	0.331	11.1	LOS A	2.7	19.4	0.87	0.80	0.87	39.5
West: Kenneth Road														
10	L2	35	3.0	34	3.1	0.580	6.8	LOS A	4.6	32.5	0.51	0.66	0.54	42.2
11	T1	462	1.1	453	1.1	0.580	6.7	LOS A	4.6	32.5	0.51	0.66	0.54	43.3
12	R2	56	3.8	55	3.8	0.580	10.0	LOS A	4.6	32.5	0.51	0.66	0.54	26.5
12u	U	21	5.0	21	5.0	0.580	11.6	LOS A	4.6	32.5	0.51	0.66	0.54	26.5
Approach		574	1.7	563 N1	1.7	0.580	7.2	LOS A	4.6	32.5	0.51	0.66	0.54	42.5
All Vehicles		1839	1.1	1828 N1	1.1	0.580	7.6	LOS A	4.6	32.5	0.67	0.69	0.68	41.6

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

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

Site: 101 [PM EX - Roseberry Street - Hayes Street - Option B (Site Folder: Alternate Options)]

Network: 10 [Weekday PM Existing - Option B (Network Folder: Existing - KRCS Options)]

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: Roseberry Street														
1	L2	133	0.0	133	0.0	0.071	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	46.6
2	T1	413	1.5	413	1.5	0.215	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		545	1.2	545	1.2	0.215	1.2	NA	0.0	0.0	0.00	0.13	0.00	48.6
North: Roseberry Street														
8	T1	271	1.2	270	1.2	0.292	2.3	LOS A	1.6	11.0	0.41	0.23	0.45	46.2
9	R2	119	0.9	119	0.9	0.292	8.4	LOS A	1.6	11.0	0.41	0.23	0.45	45.0
Approach		389	1.1	388 N1	1.1	0.292	4.1	NA	1.6	11.0	0.41	0.23	0.45	45.8
West: Hayes Street														
10	L2	91	0.0	91	0.0	0.245	7.5	LOS A	0.9	6.6	0.58	0.79	0.61	39.2
12	R2	37	0.0	37	0.0	0.245	16.8	LOS B	0.9	6.6	0.58	0.79	0.61	43.3
Approach		127	0.0	127	0.0	0.245	10.2	LOS A	0.9	6.6	0.58	0.79	0.61	40.9
All Vehicles		1062	1.0	1061 N 1	1.0	0.292	3.3	NA	1.6	11.0	0.22	0.24	0.24	46.4

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.

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

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