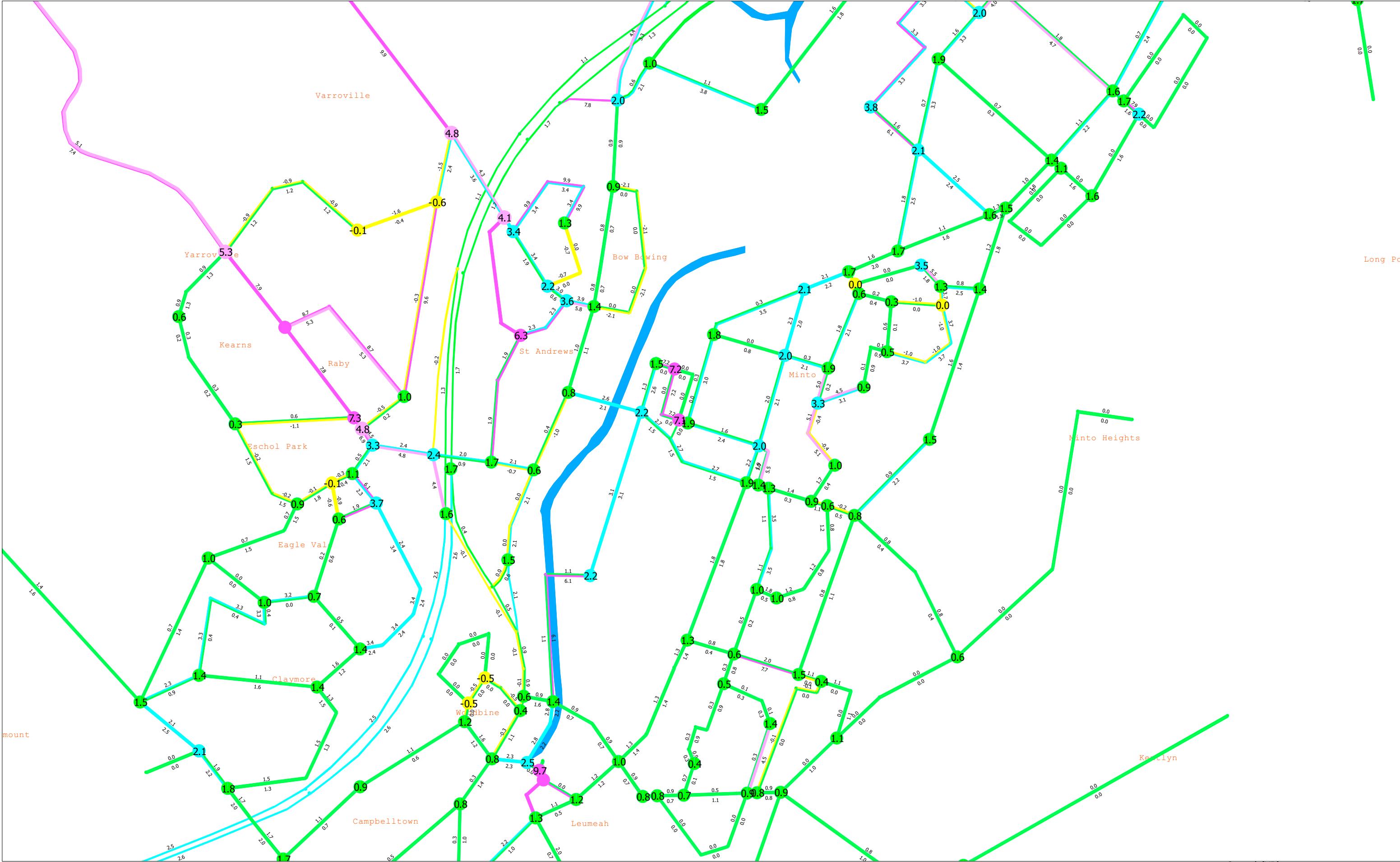
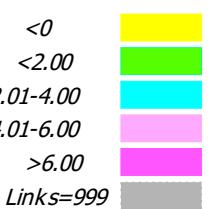


# ROAD TRAFFIC GROWTH (%YR, 2HRSPK) LINKS & INTERSECTIONS

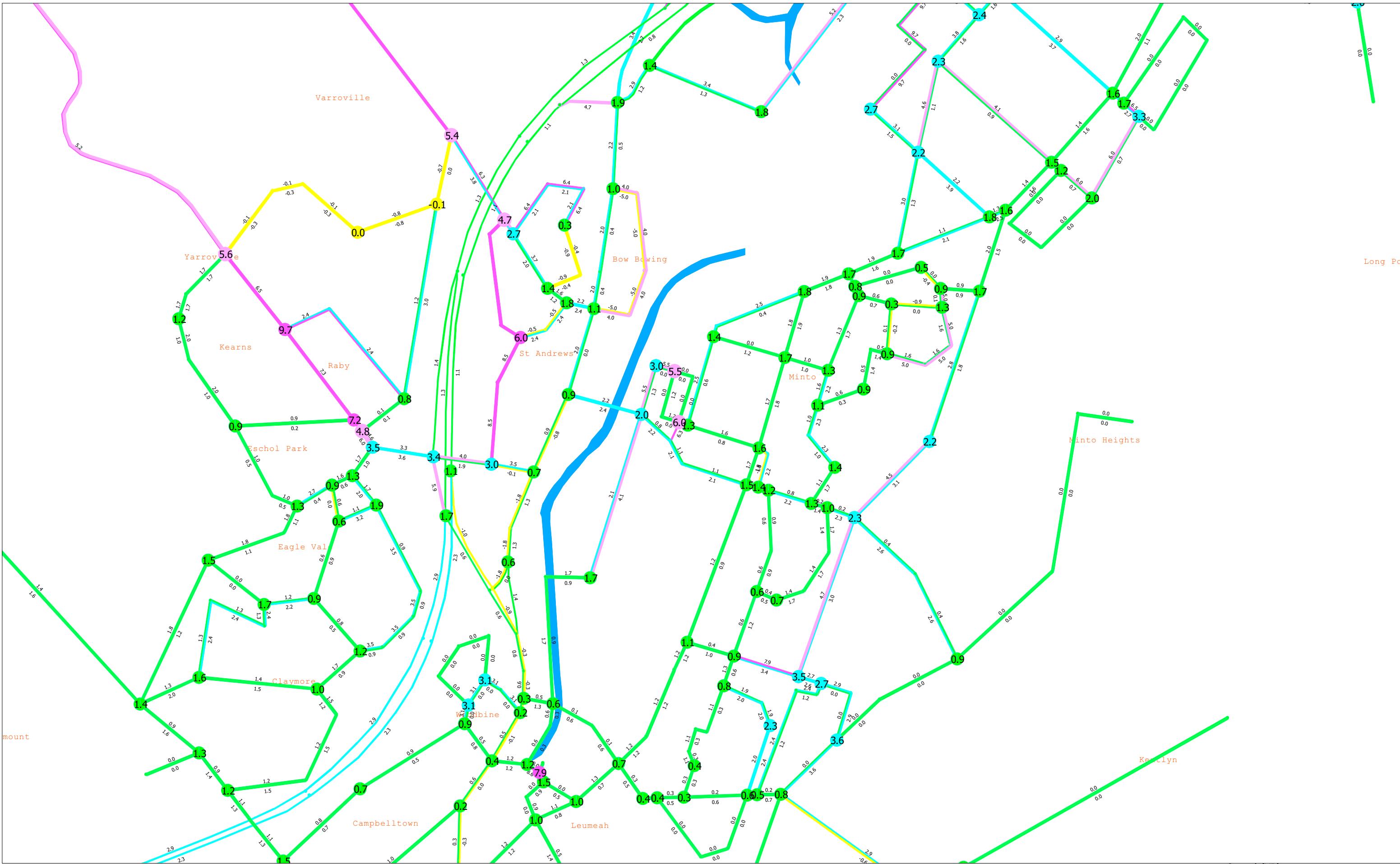


SYDNEY GMA STRATEGIC TRAFFIC FORECASTING MODEL(STFM)  
Scenario 2031: 2031 SYDTRAFFICFORECASTMODEL(TZ16STMV3.8FMMV7.1)-7-9AM(mf35)  
2020-12-15 11:36

Growth(YR):

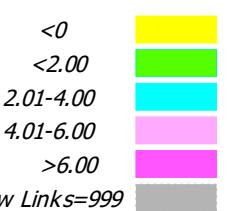


# ROAD TRAFFIC GROWTH (%YR, 2HRSPK) LINKS & INTERSECTIONS



SYDNEY GMA STRATEGIC TRAFFIC FORECASTING MODEL(STFM)  
Scenario 20310: 2031 SYDTRAFFICFORECASTMODEL(TZ16STMV3.8FMMV7.1)-4-6PM(mf55)  
2020-12-15 11:36

Growth(YR):



**TABLE C2: SIDRA INTERSECTION PERFORMANCE 2021 VOLUMES**

Intersection	Peak Hour	Degree of Saturation <sup>(1)</sup>	Average Delay <sup>(2)</sup> (sec/veh)	Level of Service <sup>(3)</sup>	Control Type	Worst Movement
<b>EXISTING PERFORMANCE - 2021</b>						
Airds Rd /Montore Rd	AM	0.18	1.1 (Worst: 8.8)	<b>NA</b> (Worst: A)	Give Way	RT from Montore Rd
	PM	0.25	1.4 (Worst: 10.4)	<b>NA</b> (Worst: A)		RT from Montore Rd
Ben Lomond Rd /Airds Rd	AM	0.64	7.1 (Worst: 16.5)	<b>A</b> (Worst: B)	Roundabout	RT from Airds Road
	PM	0.77	9.8 (Worst: 32.6)	<b>A</b> (Worst: C)		RT from Airds Road
Ben Lomond Rd /Pembroke Rd	AM	0.78	10.5 (Worst: 19)	<b>A</b> (Worst: B)	Roundabout	RT from Pembroke Rd
	PM	1.17	47.4 (Worst: >70)	<b>D</b> (Worst: F)		RT from Pembroke Rd
Pembroke Rd (NE)/ Rose Payten Dr (NW)	AM	0.69	25.7	<b>B</b>	Signals	T from Smiths Creek Bypass (SE)
	PM	0.96	42.6	<b>D</b>		T from Rose Payten Dr (NW)
Campbelltown Rd /Rose Payton Dr	AM	0.72	23.9	<b>B</b>	Signals	RT from Campbelltown Rd
	PM	0.75	17	<b>B</b>		RT from Campbelltown Rd
<b>FUTURE PERFORMANCE - 2021</b>						
Airds Rd /Montore Rd	AM	0.20	1.8 (Worst: 12.5)	<b>NA</b> (Worst: A)	Give Way	RT from Montore Rd
	PM	0.26	1.9 (Worst: 13.7)	<b>NA</b> (Worst: A)		RT from Montore Rd
Ben Lomond Rd /Airds Rd	AM	0.64	7.2 (Worst: 16.7)	<b>A</b> (Worst: B)	Roundabout	RT from Airds Road
	PM	0.78	10 (Worst: 33.7)	<b>A</b> (Worst: C)		RT from Airds Road
Ben Lomond Rd /Pembroke Rd	AM	0.79	10.7 (Worst: 19.6)	<b>A</b> (Worst: B)	Roundabout	RT from Pembroke Rd
	PM	1.19	50.3 (Worst: >70)	<b>D</b> (Worst: F)		RT from Pembroke Rd
Pembroke Rd (NE)/ Rose Payten Dr (NW)	AM	0.71	26	<b>B</b>	Signals	T from Smiths Creek Bypass (SE)
	PM	0.96	42.9	<b>D</b>		T from Rose Payten Dr (NW)
Campbelltown Rd /Rose Payton Dr	AM	0.72	24.1	<b>B</b>	Signals	RT from Campbelltown Rd
	PM	0.76	17.1	<b>B</b>		RT from Campbelltown Rd

NOTES:

(1) The Degree of Saturation is the ratio of demand to capacity for the most disadvantaged movement.  
(2) The average delay is the delay experienced on average by all vehicles. The value in brackets represents the delay to the most disadvantaged movement.

(3) The Level of Service is a qualitative measure of performance describing operational conditions. There are six levels of service, designated from A to F, with A representing the best operational condition and level of service F the worst. The LoS of the intersection is shown in bold, and the LoS of the most disadvantaged movement is shown in brackets.

(4) No overall Level of Service is provided for Give Way and Stop controlled intersections as the low delays associated with the dominant movements skew the average delay of the intersection. The Level of Service of the worst approach is an indicator of the operation of the intersection, with a worse Level of Service corresponding to long delays and reduced safety outcomes for that approach.

**TABLE C3: SIDRA INTERSECTION PERFORMANCE 2031 GROWTH**

Intersection	Peak Hour	Degree of Saturation <sup>(1)</sup>	Average Delay <sup>(2)</sup> (sec/veh)	Level of Service <sup>(3)</sup>	Control Type	Worst Movement
<b>2031 GROWTH PERFORMANCE – No Development</b>						
Airds Rd /Montore Rd	AM	0.25	1.2 (Worst: 10.6)	<b>NA</b> (Worst: A)	Give Way	RT from Montore Rd
	PM	0.30	1.5 (Worst: 13.4)	<b>NA</b> (Worst: A)		RT from Montore Rd
Ben Lomond Rd /Airds Rd	AM	0.84	10.4 (Worst: 37.5)	<b>A</b> (Worst: C)	Roundabout	RT from Airds Road
	PM	1.42	49.7 (Worst: >70)	<b>D</b> (Worst: F)		RT from Airds Road
Ben Lomond Rd /Pembroke Rd	AM	1.05	27.8 (Worst: >70)	<b>B</b> (Worst: F)	Roundabout	RT from Pembroke Rd
	PM	1.71	152 (Worst: >70)	<b>F</b> (Worst: F)		RT from Pembroke Rd
Pembroke Rd (NE)/ Rose Payten Dr (NW)	AM	0.85	28.1	<b>B</b>	Signals	T from Smiths Creek Bypass (SE)
	PM	1.03	57.0	<b>E</b>		T from Rose Payten Dr (NW)
Campbelltown Rd /Rose Payton Dr	AM	0.79	25.7	<b>B</b>	Signals	RT from Campbelltown Rd
	PM	0.77	18.2	<b>B</b>		RT from Campbelltown Rd
<b>2031 GROWTH PERFORMANCE – With Development</b>						
Airds Rd /Montore Rd	AM	0.26	1.9 (Worst: 16.4)	<b>NA</b> (Worst: B)	Give Way	RT from Montore Rd
	PM	0.31	2.1 (Worst: 19)	<b>NA</b> (Worst: B)		RT from Montore Rd
Ben Lomond Rd /Airds Rd	AM	0.85	10.9 (Worst: 40.5)	<b>A</b> (Worst: C)	Roundabout	RT from Airds Road
	PM	1.44	52.2 (Worst: >70)	<b>D</b> (Worst: F)		RT from Airds Road
Ben Lomond Rd /Pembroke Rd	AM	1.06	30.4 (Worst: >70)	<b>C</b> (Worst: F)	Roundabout	RT from Pembroke Rd
	PM	1.74	156.2 (Worst: >70)	<b>F</b> (Worst: F)		RT from Pembroke Rd
Pembroke Rd (NE)/ Rose Payten Dr (NW)	AM	0.85	28.1	<b>B</b>	Signals	T from Smiths Creek Bypass (SE)
	PM	1.03	57.4	<b>E</b>		T from Rose Payten Dr (NW)
Campbelltown Rd /Rose Payton Dr	AM	0.79	25.7	<b>B</b>	Signals	RT from Campbelltown Rd
	PM	0.81	21.1	<b>B</b>		RT from Campbelltown Rd

**NOTES:**

- (1) The Degree of Saturation is the ratio of demand to capacity for the most disadvantaged movement.
- (2) The average delay is the delay experienced on average by all vehicles. The value in brackets represents the delay to the most disadvantaged movement.
- (3) The Level of Service is a qualitative measure of performance describing operational conditions. There are six levels of service, designated from A to F, with A representing the best operational condition and level of service F the worst. The LoS of the intersection is shown in bold, and the LoS of the most disadvantaged movement is shown in brackets.
- (4) No overall Level of Service is provided for Give Way and Stop controlled intersections as the low delays associated with the dominant movements skew the average delay of the intersection. The Level of Service of the worst approach is an indicator of the operation of the intersection, with a worse Level of Service corresponding to long delays and reduced safety outcomes for that approach.

## MOVEMENT SUMMARY

### ▼ Site: 101 [Airds Rd / Montore Rd EX AM (Site Folder: 2021)]

Airds Road / Montore Road

Existing conditions

AM peak period

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay v/c	Level of Service sec	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
South: Airds Rd (S)														
1	L2	24	4	25	16.7	0.161	5.8	LOS A	0.0	0.0	0.00	0.05	0.00	57.0
2	T1	246	36	259	14.6	0.161	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	59.4
Approach		270	40	284	14.8	0.161	0.6	NA	0.0	0.0	0.00	0.05	0.00	59.2
North: Airds Rd (N)														
8	T1	256	27	269	10.5	0.183	0.3	LOS A	0.4	3.0	0.14	0.08	0.14	58.7
9	R2	40	5	42	12.5	0.183	7.0	LOSA	0.4	3.0	0.14	0.08	0.14	55.9
Approach		296	32	312	10.8	0.183	1.2	NA	0.4	3.0	0.14	0.08	0.14	58.3
West: Montore Rd (W)														
10	L2	13	1	14	7.7	0.024	6.6	LOS A	0.1	0.6	0.38	0.62	0.38	51.9
12	R2	8	1	8	12.5	0.024	8.8	LOSA	0.1	0.6	0.38	0.62	0.38	51.2
Approach		21	2	22	9.5	0.024	7.4	LOS A	0.1	0.6	0.38	0.62	0.38	51.7
All Vehicles		587	74	618	12.6	0.183	1.1	NA	0.4	3.0	0.09	0.09	0.09	58.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

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Project: \\mteserver\\mte storage\\Jobs\\2021\\210276\\MTE SIDRA\\21 06 10\\21 06 16.sip9

## MOVEMENT SUMMARY

### ▼ Site: 101 [Airds Rd / Montore Rd EX PM (Site Folder: 2021)]

Airds Road / Montore Road

Existing conditions

PM peak period

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay v/c	Level of Service sec	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	HV ]	[ Total veh/h ]	%				[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	21	8	22	38.1	0.246	6.0	LOS A	0.0	0.0	0.00	0.03	0.00	56.2
2	T1	408	30	429	7.4	0.246	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	59.7
Approach		429	38	452	8.9	0.246	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.5
North: Airds Rd (N)														
8	T1	281	34	296	12.1	0.192	0.4	LOS A	0.3	2.6	0.13	0.06	0.13	58.9
9	R2	28	2	29	7.1	0.192	7.9	LOS A	0.3	2.6	0.13	0.06	0.13	56.4
Approach		309	36	325	11.7	0.192	1.1	NA	0.3	2.6	0.13	0.06	0.13	58.7
West: Montore Rd (W)														
10	L2	60	3	63	5.0	0.103	7.4	LOS A	0.4	2.7	0.49	0.71	0.49	51.5
12	R2	21	1	22	4.8	0.103	10.4	LOS A	0.4	2.7	0.49	0.71	0.49	51.0
Approach		81	4	85	4.9	0.103	8.2	LOS A	0.4	2.7	0.49	0.71	0.49	51.3
All Vehicles		819	78	862	9.5	0.246	1.4	NA	0.4	2.7	0.10	0.11	0.10	58.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

Site: 101 [Ben Lomond Rd / Airds Rd EX AM (Site Folder: 2021)]

Ben Lomond Road / Airds Road

Existing Conditions

AM peak period

Site Category: (None)

Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist [ m ]				
South: Airds Rd (S)														
1	L2	143	34	151	23.8	0.208	7.5	LOS A	0.9	7.8	0.64	0.82	0.64	52.0
2	T1	53	6	56	11.3	0.207	7.5	LOS A	0.9	6.9	0.64	0.83	0.64	51.7
3	R2	85	6	89	7.1	0.207	12.0	LOS A	0.9	6.9	0.64	0.83	0.64	51.7
Approach		281	46	296	16.4	0.208	8.9	LOS A	0.9	7.8	0.64	0.82	0.64	51.9
East: Ben Lomond Rd (E)														
4	L2	106	7	112	6.6	0.414	6.3	LOS A	2.4	17.8	0.55	0.60	0.55	52.8
5	T1	665	38	700	5.7	0.414	5.9	LOS A	2.4	17.8	0.56	0.61	0.56	54.0
6	R2	43	3	45	7.0	0.414	10.7	LOS A	2.4	17.5	0.56	0.61	0.56	53.6
Approach		814	48	857	5.9	0.414	6.2	LOS A	2.4	17.8	0.56	0.61	0.56	53.8
North: Airds Road (N)														
7	L2	14	5	15	35.7	0.081	14.9	LOS B	0.5	4.2	0.86	0.84	0.86	47.2
8	T1	27	5	28	18.5	0.256	12.9	LOS A	2.0	16.0	0.90	0.86	0.90	48.5
9	R2	129	24	136	18.6	0.256	16.5	LOS B	2.0	16.0	0.94	0.89	0.94	47.8
Approach		170	34	179	20.0	0.256	15.8	LOS B	2.0	16.0	0.93	0.88	0.93	47.9
West: Ben Lomond Rd (W)														
10	L2	191	21	201	11.0	0.113	3.8	LOS A	0.0	0.0	0.00	0.46	0.00	55.8
11	T1	691	24	727	3.5	0.636	5.5	LOS A	6.3	45.8	0.62	0.57	0.62	53.5
12	R2	161	21	169	13.0	0.636	10.4	LOS A	6.3	45.8	0.62	0.57	0.62	53.0
Approach		1043	66	1098	6.3	0.636	6.0	LOS A	6.3	45.8	0.51	0.55	0.51	53.8
All Vehicles		2308	194	2429	8.4	0.636	7.1	LOS A	6.3	45.8	0.57	0.63	0.57	53.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

Site: 101 [Ben Lomond Rd / Airds Rd EX PM (Site Folder: 2021)]

Ben Lomond Road / Airds Road  
Existing Conditions  
PM peak period  
Site Category: (None)  
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV ]	[ Total veh/h ]	[ HV ] %	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	308	26	324	8.4	0.446	8.6	LOS A	2.6	19.2	0.76	0.92	0.87	51.6
2	T1	29	5	31	17.2	0.337	9.3	LOS A	1.6	11.8	0.73	0.91	0.76	50.1
3	R2	157	6	165	3.8	0.337	13.3	LOS A	1.6	11.8	0.73	0.91	0.76	50.3
Approach		494	37	520	7.5	0.446	10.1	LOS A	2.6	19.2	0.75	0.92	0.83	51.1
East: Ben Lomond Rd (E)														
4	L2	90	0	95	0.0	0.484	6.7	LOS A	3.2	22.6	0.64	0.65	0.65	52.6
5	T1	791	25	833	3.2	0.484	6.5	LOS A	3.2	22.6	0.64	0.67	0.66	53.7
6	R2	22	7	23	31.8	0.484	12.2	LOS A	3.1	22.8	0.65	0.68	0.67	52.4
Approach		903	32	951	3.5	0.484	6.7	LOS A	3.2	22.8	0.64	0.67	0.66	53.6
North: Airds Road (N)														
7	L2	31	1	33	3.2	0.179	19.0	LOS B	1.3	9.4	1.00	0.95	1.00	45.1
8	T1	63	6	66	9.5	0.568	25.7	LOS B	6.3	47.4	1.00	1.10	1.29	41.6
9	R2	169	16	178	9.5	0.568	32.6	LOS C	6.3	47.4	1.00	1.16	1.40	40.1
Approach		263	23	277	8.7	0.568	29.3	LOS C	6.3	47.4	1.00	1.12	1.33	41.0
West: Ben Lomond Rd (W)														
10	L2	92	18	97	19.6	0.057	3.8	LOS A	0.0	0.0	0.00	0.46	0.00	55.6
11	T1	845	33	889	3.9	0.771	7.0	LOS A	10.8	79.7	0.81	0.68	0.87	52.7
12	R2	150	30	158	20.0	0.771	12.1	LOS A	10.8	79.7	0.81	0.68	0.87	52.0
Approach		1087	81	1144	7.5	0.771	7.5	LOS A	10.8	79.7	0.74	0.66	0.80	52.8
All Vehicles		2747	173	2892	6.3	0.771	9.8	LOS A	10.8	79.7	0.74	0.75	0.81	51.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

Site: 101 [Pembroke Rd / Ben Lomond Rd EX AM (Site Folder: 2021)]

Pembroke Road / Ben Lomond Road

Existing Conditions

AM peak period

Site Category: (None)

Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist [ m ]				
South: Pembroke Rd (S)														
1	L2	105	18	111	17.1	0.435	7.7	LOS A	2.7	19.9	0.75	0.77	0.82	52.5
2	T1	427	10	449	2.3	0.435	7.4	LOS A	2.7	19.9	0.75	0.82	0.83	53.8
3	R2	134	2	141	1.5	0.435	13.6	LOS A	2.6	18.3	0.75	0.88	0.84	53.0
Approach		666	30	701	4.5	0.435	8.7	LOS A	2.7	19.9	0.75	0.82	0.83	53.4
East: Ben Lomond Rd (E)														
4	L2	129	4	136	3.1	0.451	9.1	LOS A	3.2	23.1	0.85	0.87	0.94	52.4
5	T1	334	14	352	4.2	0.451	8.5	LOS A	3.2	23.1	0.84	0.91	0.94	53.2
6	R2	120	5	126	4.2	0.451	14.9	LOS B	2.9	21.3	0.84	0.96	0.95	52.2
Approach		583	23	614	3.9	0.451	9.9	LOS A	3.2	23.1	0.84	0.91	0.94	52.8
North: Pembroke Rd (N)														
7	L2	53	0	56	0.0	0.323	9.4	LOS A	1.8	13.0	0.73	0.81	0.73	52.8
8	T1	419	13	441	3.1	0.777	12.1	LOS A	10.9	78.0	0.90	1.03	1.22	50.4
9	R2	396	11	417	2.8	0.777	19.0	LOS B	10.9	78.0	0.98	1.14	1.45	49.0
Approach		868	24	914	2.8	0.777	15.1	LOS B	10.9	78.0	0.92	1.07	1.29	49.9
West: Ben Lomond Rd (W)														
10	L2	339	11	357	3.2	0.444	7.0	LOS A	2.5	18.1	0.70	0.85	0.76	53.6
11	T1	377	8	397	2.1	0.512	6.5	LOS A	3.3	24.2	0.72	0.73	0.81	54.0
12	R2	100	12	105	12.0	0.512	12.5	LOS A	3.3	24.2	0.72	0.73	0.81	53.9
Approach		816	31	859	3.8	0.512	7.4	LOS A	3.3	24.2	0.71	0.78	0.79	53.8
All Vehicles		2933	108	3087	3.7	0.777	10.5	LOS A	10.9	78.0	0.81	0.90	0.98	52.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

▼ Site: 101 [Pembroke Rd / Ben Lomond Rd EX PM (Site Folder: 2021)]

Pembroke Road / Ben Lomond Road

Existing Conditions

PM peak period

Site Category: (None)

Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	[ Dist m ]				
South: Pembroke Rd (S)														
1	L2	177	16	186	9.0	0.489	7.3	LOS A	3.2	23.2	0.74	0.79	0.84	52.8
2	T1	403	5	424	1.2	0.489	7.3	LOS A	3.2	23.2	0.74	0.84	0.85	53.8
3	R2	211	6	222	2.8	0.489	13.6	LOS A	3.0	21.7	0.75	0.91	0.86	52.5
Approach		791	27	833	3.4	0.489	9.0	LOS A	3.2	23.2	0.74	0.84	0.85	53.2
East: Ben Lomond Rd (E)														
4	L2	129	3	136	2.3	0.428	8.2	LOS A	2.9	20.7	0.81	0.79	0.86	52.7
5	T1	385	12	405	3.1	0.428	7.6	LOS A	2.9	20.7	0.81	0.83	0.87	53.7
6	R2	86	0	91	0.0	0.428	13.7	LOS A	2.7	19.2	0.80	0.87	0.88	53.3
Approach		600	15	632	2.5	0.428	8.6	LOS A	2.9	20.7	0.81	0.83	0.87	53.4
North: Pembroke Rd (N)														
7	L2	87	2	92	2.3	0.487	17.9	LOS B	3.6	25.4	0.93	1.03	1.13	47.9
8	T1	441	3	464	0.7	1.170	148.1	LOS F	88.8	626.6	0.98	3.30	6.85	17.9
9	R2	356	4	375	1.1	1.170	193.6	LOS F	88.8	626.6	1.00	3.98	8.58	15.1
Approach		884	9	931	1.0	1.170	153.6	LOS F	88.8	626.6	0.98	3.35	6.99	17.6
West: Ben Lomond Rd (W)														
10	L2	365	7	384	1.9	0.512	7.8	LOS A	3.2	22.4	0.74	0.90	0.86	53.0
11	T1	585	12	616	2.1	0.767	9.6	LOS A	7.7	56.6	0.87	1.07	1.23	52.9
12	R2	113	23	119	20.4	0.767	15.9	LOS B	7.7	56.6	0.87	1.07	1.23	52.6
Approach		1063	42	1119	4.0	0.767	9.7	LOS A	7.7	56.6	0.83	1.01	1.10	52.9
All Vehicles		3338	93	3514	2.8	1.170	47.4	LOS D	88.8	626.6	0.85	1.56	2.56	34.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

# MOVEMENT SUMMARY

 Site: 1 [Rose Payten Dr / Pembroke Rd EX AM (Site Folder: 2021)]

Rose Payten Drive / Pembroke Road

## Existing conditions

### AM peak period

Site Category: (None)

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec	veh.	[ Veh. Dist ] m					
SouthEast: Smiths Creek Bypass (SE)														
4	L2	215	8	226	3.7	0.227	14.0	LOS A	4.1	29.7	0.46	0.68	0.46	49.4
5	T1	295	8	311	2.7	* 0.683	47.1	LOS D	8.4	60.0	0.99	0.84	1.08	33.9
6	R2	24	2	25	8.3	0.085	35.9	LOS C	0.9	7.1	0.86	0.70	0.86	37.3
Approach		534	18	562	3.4	0.683	33.3	LOS C	8.4	60.0	0.77	0.77	0.82	39.0
NorthEast: Pembroke Rd (NE)														
7	L2	19	1	20	5.3	0.016	7.0	LOS A	0.1	0.9	0.23	0.59	0.23	53.0
8	T1	638	19	672	3.0	* 0.688	29.2	LOS C	19.3	138.7	0.87	0.75	0.87	40.9
9	R2	219	26	231	11.9	* 0.441	19.0	LOS B	5.4	41.3	0.77	0.78	0.77	44.9
Approach		876	46	922	5.3	0.688	26.2	LOS B	19.3	138.7	0.83	0.76	0.83	42.1
NorthWest: Rose Payten Dr (NW)														
10	L2	349	32	367	9.2	0.355	9.4	LOS A	5.5	41.2	0.40	0.68	0.40	51.1
11	T1	175	6	184	3.4	0.371	44.2	LOS D	4.2	30.6	0.96	0.75	0.96	34.9
12	R2	114	3	120	2.6	* 0.465	38.6	LOS C	4.8	34.3	0.96	0.78	0.96	36.4
Approach		638	41	672	6.4	0.465	24.2	LOS B	5.5	41.2	0.65	0.71	0.65	42.6
SouthWest: Pembroke Rd (SW)														
1	L2	219	5	231	2.3	0.216	9.1	LOS A	2.7	19.3	0.40	0.67	0.40	51.6
2	T1	553	18	582	3.3	0.509	27.0	LOS B	13.2	94.7	0.82	0.70	0.82	41.7
3	R2	117	6	123	5.1	0.252	19.6	LOS B	2.6	19.3	0.76	0.75	0.76	44.8
Approach		889	29	936	3.3	0.509	21.6	LOS B	13.2	94.7	0.71	0.70	0.71	44.2
All Vehicles		2937	134	3092	4.6	0.688	25.7	LOS B	19.3	138.7	0.75	0.73	0.75	42.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

#### **Queue Model: SIDRA Standard.**

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

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

#### \* Critical Movement (Signal Timing)

P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
<b>SouthWest: Pembroke Rd (SW)</b>												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
All Pedestrians		150	158	39.7	LOS D	0.1	0.1	0.89	0.89	69.3	38.5	0.56

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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# MOVEMENT SUMMARY

 Site: 1 [Rose Payten Dr / Pembroke Rd EX PM (Site Folder: 2021)]

Rose Payten Drive / Pembroke Road

## Existing conditions

### PM peak period

Site Category: (None)

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec	veh.	[ Veh. Dist ]	m				
SouthEast: Smiths Creek Bypass (SE)														
4	L2	165	3	174	1.8	0.231	19.5	LOS B	4.0	28.7	0.59	0.71	0.59	46.7
5	T1	224	4	236	1.8	0.461	40.6	LOS C	6.8	48.3	0.93	0.74	0.93	36.1
6	R2	21	1	22	4.8	0.051	25.8	LOS B	0.6	4.6	0.81	0.68	0.81	41.6
Approach		410	8	432	2.0	0.461	31.4	LOS C	6.8	48.3	0.79	0.72	0.79	40.0
NorthEast: Pembroke Rd (NE)														
7	L2	18	0	19	0.0	0.017	10.9	LOS A	0.3	2.0	0.40	0.62	0.40	50.3
8	T1	580	9	611	1.6	* 0.959	59.7	LOS E	28.0	198.5	0.97	1.07	1.33	30.6
9	R2	270	22	284	8.1	* 0.799	36.3	LOS C	10.8	80.7	1.00	0.90	1.16	37.1
Approach		868	31	914	3.6	0.959	51.4	LOS D	28.0	198.5	0.97	1.01	1.26	32.7
NorthWest: Rose Payten Dr (NW)														
10	L2	252	24	265	9.5	0.268	10.7	LOS A	4.3	32.4	0.42	0.67	0.42	50.1
11	T1	416	6	438	1.4	* 0.955	71.0	LOS F	20.2	142.8	0.98	1.15	1.63	27.8
12	R2	341	3	359	0.9	* 0.685	29.2	LOS C	12.7	89.9	0.93	0.83	0.93	40.1
Approach		1009	33	1062	3.3	0.955	41.8	LOS C	20.2	142.8	0.82	0.92	1.09	35.4
SouthWest: Pembroke Rd (SW)														
1	L2	214	5	225	2.3	0.207	9.8	LOS A	3.1	22.4	0.40	0.67	0.40	51.1
2	T1	586	5	617	0.9	0.908	55.6	LOS D	23.5	165.7	0.97	1.06	1.37	31.5
3	R2	221	4	233	1.8	0.647	30.2	LOS C	7.5	53.4	0.97	0.81	0.98	39.7
Approach		1021	14	1075	1.4	0.908	40.5	LOS C	23.5	165.7	0.85	0.92	1.08	36.0
All Vehicles		3308	86	3482	2.6	0.959	42.6	LOS D	28.0	198.5	0.87	0.92	1.10	35.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

#### Queue Model: SIDRA Standard

Gap-Accentuation Capacity: SIDBA Standard (Akcelik M3D)

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation Cap Acceptance Capacity (SDT Standard) (in MIL MIL).

#### \* Critical Movement (Signal Timing)

P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
<b>SouthWest: Pembroke Rd (SW)</b>												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
All Pedestrians		150	158	43.0	LOS E	0.1	0.1	0.93	0.93	72.7	38.5	0.53

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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## MOVEMENT SUMMARY

 Site: 101 [Campbelltown Rd/ Rose Payten Dr EX AM (Site Folder: 2021)]

Campbelltown Road / Rose Payten Drive

Existing Conditions

AM peak period

Site Category: (None)

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1177	45	1239	3.8	0.460	8.0	LOS A	15.4	111.0	0.47	0.42	0.47	53.1
3	R2	327	21	344	6.4	*0.684	60.8	LOS E	10.0	73.9	1.00	0.84	1.05	29.7
Approach		1504	66	1583	4.4	0.684	19.5	LOS B	15.4	111.0	0.58	0.51	0.60	45.3
East: Rose Payton Dr (E)														
4	L2	34	11	36	32.4	0.057	13.3	LOS A	0.7	6.4	0.41	0.64	0.41	47.9
6	R2	452	48	476	10.6	*0.719	56.9	LOS E	13.6	103.9	0.99	0.86	1.05	30.6
Approach		486	59	512	12.1	0.719	53.9	LOS D	13.6	103.9	0.95	0.84	1.00	31.4
North: Campbelltown Rd (N)														
7	L2	482	71	507	14.7	0.392	8.0	LOS A	6.6	51.8	0.31	0.65	0.31	51.9
8	T1	1330	53	1400	4.0	*0.713	23.6	LOS B	31.0	224.2	0.83	0.75	0.83	43.3
Approach		1812	124	1907	6.8	0.713	19.4	LOS B	31.0	224.2	0.69	0.72	0.69	45.3
All Vehicles		3802	249	4002	6.5	0.719	23.9	LOS B	31.0	224.2	0.68	0.66	0.69	42.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed		
		ped/h	ped/h	sec	[ Ped ped ]	m		sec	m	m/sec		
South: Campbelltown Rd (S)												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	87.2	42.8	0.49
East: Rose Payton Dr (E)												
P2	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	82.1	36.2	0.44
All Pedestrians		100	105	54.3	LOS E	0.2	0.2	0.95	0.95	84.7	39.5	0.47

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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## MOVEMENT SUMMARY

### Site: 101 [Campbelltown Rd/ Rose Payten Dr EX PM (Site Folder: 2021)]

Campbelltown Road / Rose Payten Drive

Existing Conditions

PM peak period

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	HV [ veh/h ]	[ Total veh/h ]	HV %	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1441	19	1517	1.3	0.569	7.6	LOS A	16.8	119.2	0.55	0.51	0.55	53.4
3	R2	201	7	212	3.5	* 0.751	54.8	LOS D	5.1	36.5	1.00	0.87	1.24	31.2
Approach		1642	26	1728	1.6	0.751	13.4	LOS A	16.8	119.2	0.61	0.55	0.64	49.1
East: Rose Payton Dr (E)														
4	L2	71	4	75	5.6	0.115	13.7	LOS A	1.4	10.2	0.51	0.68	0.51	48.3
6	R2	445	30	468	6.7	* 0.743	46.9	LOS D	10.5	77.9	1.00	0.88	1.12	33.4
Approach		516	34	543	6.6	0.743	42.3	LOS C	10.5	77.9	0.93	0.86	1.04	34.9
North: Campbelltown Rd (N)														
7	L2	713	51	751	7.2	0.540	7.5	LOS A	7.8	58.1	0.37	0.67	0.37	52.5
8	T1	1504	14	1583	0.9	* 0.750	16.9	LOS B	26.6	188.0	0.83	0.76	0.83	47.0
Approach		2217	65	2334	2.9	0.750	13.9	LOS A	26.6	188.0	0.68	0.73	0.68	48.6
All Vehicles		4375	125	4605	2.9	0.751	17.0	LOS B	26.6	188.0	0.69	0.68	0.71	46.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[ Ped ped ]	Dist ] m			sec	m	m/sec
South: Campbelltown Rd (S)												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	72.2	42.8	0.59
East: Rose Payton Dr (E)												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	67.1	36.2	0.54
All Pedestrians		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	69.7	39.5	0.57

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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## MOVEMENT SUMMARY

### ▼ Site: 101 [Airds Rd / Montore Rd FUT AM (Site Folder: 2021)]

Airds Road / Montore Road

Future conditions

AM peak period

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay v/c	Level of Service sec	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	HV ]	[ Total veh/h ]	%				[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	38	11	40	28.9	0.171	5.9	LOS A	0.0	0.0	0.00	0.08	0.00	56.3
2	T1	246	36	259	14.6	0.171	0.0	LOS A	0.0	0.0	0.00	0.08	0.00	59.3
Approach		284	47	299	16.5	0.171	0.8	NA	0.0	0.0	0.00	0.08	0.00	58.9
North: Airds Rd (N)														
8	T1	256	27	269	10.5	0.196	0.5	LOS A	0.5	4.2	0.18	0.10	0.18	58.5
9	R2	47	13	49	27.7	0.196	7.6	LOS A	0.5	4.2	0.18	0.10	0.18	55.0
Approach		303	40	319	13.2	0.196	1.6	NA	0.5	4.2	0.18	0.10	0.18	58.0
West: Montore Rd (W)														
10	L2	21	9	22	42.9	0.079	7.4	LOS A	0.3	2.8	0.47	0.69	0.47	49.2
12	R2	22	15	23	68.2	0.079	12.5	LOS A	0.3	2.8	0.47	0.69	0.47	47.6
Approach		43	24	45	55.8	0.079	10.0	LOS A	0.3	2.8	0.47	0.69	0.47	48.4
All Vehicles		630	111	663	17.6	0.196	1.8	NA	0.5	4.2	0.12	0.13	0.12	57.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

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Project: \\mteserver\\mte storage\\Jobs\\2021\\210276\\MTE SIDRA\\21 06 10\\21 06 16.sip9

## MOVEMENT SUMMARY

### ▼ Site: 101 [Airds Rd / Montore Rd FUT PM (Site Folder: 2021)]

Airds Road / Montore Road

Future conditions

PM peak period

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay v/c	Level of Service sec	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]				[ Veh. veh ]	[ Dist m ]				
South: Airds Rd (S)														
1	L2	30	17	32	56.7	0.255	6.3	LOS A	0.0	0.0	0.00	0.04	0.00	55.3
2	T1	408	30	429	7.4	0.255	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.7
Approach		438	47	461	10.7	0.255	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.4
North: Airds Rd (N)														
8	T1	281	34	296	12.1	0.207	0.6	LOS A	0.5	4.0	0.18	0.07	0.18	58.6
9	R2	35	9	37	25.7	0.207	8.9	LOSA	0.5	4.0	0.18	0.07	0.18	55.2
Approach		316	43	333	13.6	0.207	1.6	NA	0.5	4.0	0.18	0.07	0.18	58.2
West: Montore Rd (W)														
10	L2	64	7	67	10.9	0.159	7.7	LOS A	0.6	4.6	0.54	0.75	0.54	50.3
12	R2	33	13	35	39.4	0.159	13.7	LOSA	0.6	4.6	0.54	0.75	0.54	48.7
Approach		97	20	102	20.6	0.159	9.7	LOSA	0.6	4.6	0.54	0.75	0.54	49.7
All Vehicles		851	110	896	12.9	0.255	1.9	NA	0.6	4.6	0.13	0.13	0.13	57.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

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Project: \\mteserver\\mte storage\\Jobs\\2021\\210276\\MTE SIDRA\\21 06 10\\21 06 16.sip9

## MOVEMENT SUMMARY

Site: 101 [Ben Lomond Rd / Airds Rd FUT AM (Site Folder: 2021)]

Ben Lomond Road / Airds Road  
Future Conditions  
AM peak period  
Site Category: (None)  
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV ]	[ Total veh/h ]	[ HV ] %	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	143	34	151	23.8	0.238	8.1	LOS A	1.0	8.8	0.66	0.83	0.66	51.6
2	T1	53	6	56	11.3	0.198	7.0	LOS A	0.9	7.0	0.64	0.81	0.64	51.9
3	R2	93	13	98	14.0	0.198	11.8	LOS A	0.9	7.0	0.64	0.81	0.64	51.6
Approach		289	53	304	18.3	0.238	9.1	LOS A	1.0	8.8	0.65	0.82	0.65	51.6
East: Ben Lomond Rd (E)														
4	L2	113	14	119	12.4	0.419	6.4	LOS A	2.5	18.3	0.56	0.60	0.56	52.6
5	T1	665	38	700	5.7	0.419	6.0	LOS A	2.5	18.3	0.56	0.61	0.56	54.0
6	R2	43	3	45	7.0	0.419	10.7	LOS A	2.4	17.8	0.56	0.62	0.56	53.6
Approach		821	55	864	6.7	0.419	6.3	LOS A	2.5	18.3	0.56	0.61	0.56	53.8
North: Airds Road (N)														
7	L2	14	5	15	35.7	0.082	15.2	LOS B	0.5	4.3	0.87	0.84	0.87	47.1
8	T1	27	5	28	18.5	0.262	13.2	LOS A	2.0	16.5	0.91	0.87	0.91	48.4
9	R2	129	24	136	18.6	0.262	16.7	LOS B	2.0	16.5	0.95	0.90	0.95	47.7
Approach		170	34	179	20.0	0.262	16.0	LOS B	2.0	16.5	0.93	0.89	0.93	47.7
West: Ben Lomond Rd (W)														
10	L2	191	21	201	11.0	0.113	3.8	LOS A	0.0	0.0	0.00	0.46	0.00	55.8
11	T1	691	24	727	3.5	0.643	5.6	LOS A	6.4	46.5	0.64	0.58	0.64	53.4
12	R2	161	21	169	13.0	0.643	10.5	LOS A	6.4	46.5	0.64	0.58	0.64	52.9
Approach		1043	66	1098	6.3	0.643	6.0	LOS A	6.4	46.5	0.52	0.56	0.52	53.7
All Vehicles		2323	208	2445	9.0	0.643	7.2	LOS A	6.4	46.5	0.58	0.63	0.58	53.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

Site: 101 [Ben Lomond Rd / Airds Rd FUT PM (Site Folder: 2021)]

Ben Lomond Road / Airds Road  
Future Conditions  
PM peak period  
Site Category: (None)  
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV ]	[ Total veh/h ]	[ HV ] %	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	308	26	324	8.4	0.447	8.6	LOS A	2.6	19.3	0.76	0.92	0.87	51.6
2	T1	29	5	31	17.2	0.349	9.4	LOS A	1.7	12.6	0.73	0.92	0.78	50.0
3	R2	161	10	169	6.2	0.349	13.5	LOS A	1.7	12.6	0.73	0.92	0.78	50.1
Approach		498	41	524	8.2	0.447	10.2	LOS A	2.6	19.3	0.75	0.92	0.84	51.0
East: Ben Lomond Rd (E)														
4	L2	97	7	102	7.2	0.489	7.0	LOS A	3.2	23.3	0.64	0.66	0.66	52.3
5	T1	791	25	833	3.2	0.489	6.6	LOS A	3.2	23.3	0.65	0.68	0.67	53.7
6	R2	22	7	23	31.8	0.489	12.3	LOS A	3.2	23.3	0.65	0.69	0.68	52.4
Approach		910	39	958	4.3	0.489	6.7	LOS A	3.2	23.3	0.65	0.67	0.67	53.5
North: Airds Road (N)														
7	L2	31	1	33	3.2	0.182	19.2	LOS B	1.3	9.6	1.00	0.96	1.00	45.0
8	T1	63	6	66	9.5	0.577	26.6	LOS B	6.4	48.8	1.00	1.11	1.31	41.2
9	R2	169	16	178	9.5	0.577	33.7	LOS C	6.4	48.8	1.00	1.17	1.42	39.6
Approach		263	23	277	8.7	0.577	30.3	LOS C	6.4	48.8	1.00	1.13	1.35	40.5
West: Ben Lomond Rd (W)														
10	L2	92	18	97	19.6	0.057	3.8	LOS A	0.0	0.0	0.00	0.46	0.00	55.6
11	T1	845	33	889	3.9	0.776	7.3	LOS A	11.1	82.0	0.83	0.70	0.89	52.6
12	R2	150	30	158	20.0	0.776	12.4	LOS A	11.1	82.0	0.83	0.70	0.89	51.9
Approach		1087	81	1144	7.5	0.776	7.7	LOS A	11.1	82.0	0.76	0.68	0.82	52.7
All Vehicles		2758	184	2903	6.7	0.776	10.0	LOS A	11.1	82.0	0.74	0.76	0.82	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

▼ Site: 101 [Pembroke Rd / Ben Lomond Rd FUT AM (Site Folder: 2021)]

Pembroke Road / Ben Lomond Road

Future Conditions

AM peak period

Site Category: (None)

Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist [ m ]				
South: Pembroke Rd (S)														
1	L2	110	23	116	20.9	0.441	7.9	LOS A	2.8	20.6	0.75	0.78	0.83	52.4
2	T1	427	10	449	2.3	0.441	7.5	LOS A	2.8	20.6	0.75	0.83	0.84	53.8
3	R2	134	2	141	1.5	0.441	13.7	LOS A	2.6	18.7	0.75	0.89	0.85	53.0
Approach		671	35	706	5.2	0.441	8.8	LOS A	2.8	20.6	0.75	0.83	0.84	53.4
East: Ben Lomond Rd (E)														
4	L2	129	4	136	3.1	0.457	9.2	LOS A	3.3	23.8	0.85	0.89	0.95	52.3
5	T1	336	16	354	4.8	0.457	8.7	LOS A	3.3	23.8	0.85	0.92	0.96	53.1
6	R2	120	5	126	4.2	0.457	15.0	LOS B	3.0	21.9	0.84	0.97	0.96	52.1
Approach		585	25	616	4.3	0.457	10.1	LOS A	3.3	23.8	0.85	0.92	0.96	52.7
North: Pembroke Rd (N)														
7	L2	53	0	56	0.0	0.327	9.5	LOS A	1.9	13.2	0.74	0.82	0.74	52.7
8	T1	419	13	441	3.1	0.786	12.5	LOS A	11.3	81.1	0.91	1.05	1.25	50.1
9	R2	396	11	417	2.8	0.786	19.6	LOS B	11.3	81.1	0.99	1.16	1.50	48.6
Approach		868	24	914	2.8	0.786	15.6	LOS B	11.3	81.1	0.93	1.09	1.33	49.6
West: Ben Lomond Rd (W)														
10	L2	339	11	357	3.2	0.445	7.0	LOS A	2.5	18.2	0.70	0.85	0.77	53.6
11	T1	379	10	399	2.6	0.525	6.6	LOS A	3.5	25.6	0.72	0.75	0.82	53.9
12	R2	105	17	111	16.2	0.525	12.7	LOS A	3.5	25.6	0.72	0.75	0.82	53.7
Approach		823	38	866	4.6	0.525	7.6	LOS A	3.5	25.6	0.71	0.79	0.80	53.8
All Vehicles		2947	122	3102	4.1	0.786	10.7	LOS A	11.3	81.1	0.81	0.91	1.00	52.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

▼ Site: 101 [Pembroke Rd / Ben Lomond Rd FUT PM (Site Folder: 2021)]

Pembroke Road / Ben Lomond Road

Future Conditions

PM peak period

Site Category: (None)

Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV ]	[ Total veh/h ]	[ HV ] %	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Pembroke Rd (S)														
1	L2	182	21	192	11.5	0.494	7.4	LOS A	3.2	23.7	0.74	0.80	0.84	52.8
2	T1	403	5	424	1.2	0.494	7.3	LOS A	3.2	23.7	0.74	0.84	0.85	53.8
3	R2	211	6	222	2.8	0.494	13.6	LOS A	3.1	22.0	0.75	0.91	0.87	52.5
Approach		796	32	838	4.0	0.494	9.0	LOS A	3.2	23.7	0.75	0.85	0.85	53.2
East: Ben Lomond Rd (E)														
4	L2	129	3	136	2.3	0.428	8.2	LOS A	2.9	20.7	0.81	0.79	0.86	52.7
5	T1	387	14	407	3.6	0.428	7.6	LOS A	2.9	20.7	0.80	0.83	0.86	53.7
6	R2	86	0	91	0.0	0.428	13.6	LOS A	2.7	19.3	0.80	0.87	0.87	53.3
Approach		602	17	634	2.8	0.428	8.6	LOS A	2.9	20.7	0.80	0.82	0.86	53.4
North: Pembroke Rd (N)														
7	L2	87	2	92	2.3	0.494	18.3	LOS B	3.7	26.0	0.93	1.03	1.15	47.7
8	T1	441	3	464	0.7	1.187	159.0	LOS F	93.9	662.3	0.98	3.41	7.15	17.0
9	R2	356	4	375	1.1	1.187	207.9	LOS F	93.9	662.3	1.00	4.13	8.97	14.3
Approach		884	9	931	1.0	1.187	164.8	LOS F	93.9	662.3	0.99	3.47	7.29	16.7
West: Ben Lomond Rd (W)														
10	L2	365	7	384	1.9	0.513	7.9	LOS A	3.2	22.6	0.74	0.90	0.86	53.0
11	T1	587	14	618	2.4	0.777	9.8	LOS A	8.0	59.0	0.88	1.08	1.25	52.7
12	R2	116	26	122	22.4	0.777	16.3	LOS B	8.0	59.0	0.88	1.08	1.25	52.3
Approach		1068	47	1124	4.4	0.777	9.9	LOS A	8.0	59.0	0.83	1.02	1.12	52.8
All Vehicles		3350	105	3526	3.1	1.187	50.3	LOS D	93.9	662.3	0.85	1.59	2.64	33.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

# MOVEMENT SUMMARY

 Site: 1 [Rose Payten Dr / Pembroke Rd FUT AM (Site Folder: 2021)]

Rose Payten Drive / Pembroke Road

## Future conditions

### AM peak period

Site Category: (None)

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec	veh.	[ Veh. Dist ]	m				
SouthEast: Smiths Creek Bypass (SE)														
4	L2	215	8	226	3.7	0.228	14.4	LOS A	4.2	30.5	0.47	0.68	0.47	49.2
5	T1	295	8	311	2.7	* 0.678	47.0	LOS D	8.3	59.4	0.99	0.84	1.07	34.0
6	R2	24	2	25	8.3	0.085	35.9	LOS C	0.9	7.1	0.86	0.70	0.86	37.3
Approach		534	18	562	3.4	0.678	33.4	LOS C	8.3	59.4	0.78	0.77	0.82	39.0
NorthEast: Pembroke Rd (NE)														
7	L2	19	1	20	5.3	0.016	7.0	LOS A	0.1	0.9	0.23	0.59	0.23	53.0
8	T1	638	19	672	3.0	* 0.709	30.2	LOS C	19.7	141.1	0.89	0.77	0.89	40.5
9	R2	224	31	236	13.8	* 0.450	19.1	LOS B	5.5	43.1	0.78	0.78	0.78	44.8
Approach		881	51	927	5.8	0.709	26.9	LOS B	19.7	141.1	0.84	0.76	0.84	41.7
NorthWest: Rose Payten Dr (NW)														
10	L2	354	37	373	10.5	0.339	9.1	LOS A	5.4	41.0	0.39	0.67	0.39	51.2
11	T1	175	6	184	3.4	0.371	44.2	LOS D	4.2	30.6	0.96	0.75	0.96	34.9
12	R2	114	3	120	2.6	* 0.465	38.6	LOS C	4.8	34.3	0.96	0.78	0.96	36.4
Approach		643	46	677	7.2	0.465	23.9	LOS B	5.4	41.0	0.65	0.71	0.65	42.7
SouthWest: Pembroke Rd (SW)														
1	L2	219	5	231	2.3	0.217	9.1	LOS A	2.7	19.4	0.40	0.67	0.40	51.5
2	T1	553	18	582	3.3	0.526	27.9	LOS B	13.4	96.6	0.83	0.71	0.83	41.3
3	R2	117	6	123	5.1	0.247	19.6	LOS B	2.6	19.2	0.76	0.75	0.76	44.8
Approach		889	29	936	3.3	0.526	22.2	LOS B	13.4	96.6	0.72	0.70	0.72	43.9
All Vehicles		2947	144	3102	4.9	0.709	26.0	LOS B	19.7	141.1	0.75	0.74	0.76	42.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

#### **Queue Model: SIDRA Standard.**

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

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

#### \* Critical Movement (Signal Timing)

P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
<b>SouthWest: Pembroke Rd (SW)</b>												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
All Pedestrians		150	158	39.9	LOS D	0.1	0.1	0.89	0.89	69.6	38.5	0.55

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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# MOVEMENT SUMMARY

 Site: 1 [Rose Payten Dr / Pembroke Rd FUT PM (Site Folder: 2021)]

Rose Payten Drive / Pembroke Road

### Future conditions

### PM peak period

Site Category: (None)

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec	veh.	[ Veh. Dist ] m					
SouthEast: Smiths Creek Bypass (SE)														
4	L2	165	3	174	1.8	0.231	19.5	LOS B	4.0	28.7	0.59	0.71	0.59	46.7
5	T1	224	4	236	1.8	0.461	40.6	LOS C	6.8	48.3	0.93	0.74	0.93	36.1
6	R2	21	1	22	4.8	0.051	25.8	LOS B	0.6	4.6	0.81	0.68	0.81	41.6
Approach		410	8	432	2.0	0.461	31.4	LOS C	6.8	48.3	0.79	0.72	0.79	40.0
NorthEast: Pembroke Rd (NE)														
7	L2	18	0	19	0.0	0.017	10.9	LOS A	0.3	2.0	0.40	0.62	0.40	50.3
8	T1	580	9	611	1.6	* 0.959	59.7	LOS E	28.0	198.6	0.97	1.07	1.33	30.6
9	R2	273	25	287	9.2	* 0.813	37.4	LOS C	11.1	84.1	1.00	0.92	1.18	36.7
Approach		871	34	917	3.9	0.959	51.7	LOS D	28.0	198.6	0.97	1.01	1.27	32.6
NorthWest: Rose Payten Dr (NW)														
10	L2	257	29	271	11.3	0.275	10.8	LOS A	4.4	33.7	0.42	0.67	0.42	50.1
11	T1	416	6	438	1.4	* 0.960	72.7	LOS F	20.5	145.3	0.98	1.16	1.65	27.5
12	R2	341	3	359	0.9	* 0.685	29.2	LOS C	12.7	89.9	0.93	0.83	0.93	40.1
Approach		1014	38	1067	3.7	0.960	42.4	LOS C	20.5	145.3	0.82	0.93	1.10	35.2
SouthWest: Pembroke Rd (SW)														
1	L2	214	5	225	2.3	0.208	9.8	LOS A	3.1	22.4	0.40	0.67	0.40	51.1
2	T1	586	5	617	0.9	0.908	55.6	LOS D	23.5	165.7	0.97	1.06	1.37	31.5
3	R2	221	4	233	1.8	0.647	30.3	LOS C	7.5	53.4	0.97	0.81	0.98	39.7
Approach		1021	14	1075	1.4	0.908	40.5	LOS C	23.5	165.7	0.85	0.92	1.08	36.0
All Vehicles		3316	94	3491	2.8	0.960	42.9	LOS D	28.0	198.6	0.87	0.92	1.10	35.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

#### Queue Model: SIDRA Standard.

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

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

#### \* Critical Movement (Signal Timing)

P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
<b>SouthWest: Pembroke Rd (SW)</b>												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	73.9	38.5	0.52
All Pedestrians		150	158	43.0	LOS E	0.1	0.1	0.93	0.93	72.7	38.5	0.53

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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## MOVEMENT SUMMARY

### Site: 101 [Campbelltown Rd/ Rose Payten Dr FUT AM (Site Folder: 2021)]

Campbelltown Road / Rose Payten Drive

Future Conditions

AM peak period

Site Category: (None)

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

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1177	45	1239	3.8	0.465	8.4	LOS A	15.8	114.2	0.48	0.44	0.48	52.7
3	R2	327	21	344	6.4	* 0.684	60.8	LOS E	10.0	73.9	1.00	0.84	1.05	29.7
Approach		1504	66	1583	4.4	0.684	19.8	LOS B	15.8	114.2	0.59	0.52	0.61	45.1
East: Rose Payton Dr (E)														
4	L2	47	24	49	51.1	0.085	14.1	LOS A	1.1	10.6	0.43	0.64	0.43	47.0
6	R2	458	54	482	11.8	* 0.704	55.6	LOS D	13.6	104.8	0.99	0.85	1.03	30.9
Approach		505	78	532	15.4	0.704	51.8	LOS D	13.6	104.8	0.94	0.83	0.97	31.9
North: Campbelltown Rd (N)														
7	L2	501	90	527	18.0	0.416	8.1	LOS A	7.0	56.9	0.32	0.65	0.32	51.7
8	T1	1330	53	1400	4.0	* 0.724	24.4	LOS B	31.5	228.2	0.84	0.76	0.84	42.9
Approach		1831	143	1927	7.8	0.724	20.0	LOS B	31.5	228.2	0.70	0.73	0.70	45.0
All Vehicles		3840	287	4042	7.5	0.724	24.1	LOS B	31.5	228.2	0.69	0.66	0.70	42.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed	
		ped/h	ped/h	sec	[ Ped ped ]	m		sec	m	m/sec	
South: Campbelltown Rd (S)											
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	87.2	42.8
East: Rose Payton Dr (E)											
P2	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	82.1	36.2
All Pedestrians		100	105	54.3	LOS E	0.2	0.2	0.95	0.95	84.7	39.5

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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## MOVEMENT SUMMARY

### Site: 101 [Campbelltown Rd/ Rose Payten Dr FUT PM (Site Folder: 2021)]

Campbelltown Road / Rose Payten Drive

Future Conditions

PM peak period

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1441	19	1517	1.3	0.569	7.6	LOS A	16.8	119.2	0.55	0.51	0.55	53.4
3	R2	201	7	212	3.5	* 0.751	54.8	LOS D	5.1	36.5	1.00	0.87	1.24	31.2
Approach		1642	26	1728	1.6	0.751	13.4	LOS A	16.8	119.2	0.61	0.55	0.64	49.1
East: Rose Payton Dr (E)														
4	L2	81	14	85	17.3	0.141	14.0	LOS A	1.6	13.1	0.52	0.68	0.52	47.8
6	R2	450	35	474	7.8	* 0.757	47.4	LOS D	10.7	80.2	1.00	0.89	1.14	33.3
Approach		531	49	559	9.2	0.757	42.3	LOS C	10.7	80.2	0.93	0.86	1.05	34.9
North: Campbelltown Rd (N)														
7	L2	727	65	765	8.9	0.556	7.5	LOS A	8.2	61.6	0.38	0.67	0.38	52.4
8	T1	1504	14	1583	0.9	* 0.750	16.9	LOS B	26.6	188.0	0.83	0.76	0.83	47.0
Approach		2231	79	2348	3.5	0.750	13.9	LOS A	26.6	188.0	0.69	0.73	0.69	48.6
All Vehicles		4404	154	4636	3.5	0.757	17.1	LOS B	26.6	188.0	0.69	0.68	0.71	46.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed	
		ped/h	ped/h	sec	[ Ped ped ]	m		sec	m	m/sec	
South: Campbelltown Rd (S)											
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	72.2	42.8
East: Rose Payton Dr (E)											
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	67.1	36.2
All Pedestrians		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	69.7	39.5

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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## MOVEMENT SUMMARY

▼ Site: 101 [Airds Rd / Montore Rd 2031 AM - without dev (Site Folder: 2031)]

Airds Road / Montore Road

2031 without development

AM peak period

Site Category: (None)

Give-Way (Two-Way)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	24	4	33	16.7	0.210	5.8	LOS A	0.0	0.0	0.00	0.05	0.00	57.0
2	T1	246	36	339	14.6	0.210	0.1	LOS A	0.0	0.0	0.00	0.05	0.00	59.4
Approach		270	40	372	14.8	0.210	0.6	NA	0.0	0.0	0.00	0.05	0.00	59.2
North: Airds Rd (N)														
8	T1	256	27	353	10.5	0.245	0.5	LOS A	0.6	4.7	0.18	0.09	0.18	58.5
9	R2	40	5	55	12.5	0.245	7.8	LOS A	0.6	4.7	0.18	0.09	0.18	55.7
Approach		296	32	408	10.8	0.245	1.5	NA	0.6	4.7	0.18	0.09	0.18	58.1
West: Montore Rd (W)														
10	L2	13	1	14	7.7	0.029	6.9	LOS A	0.1	0.7	0.46	0.66	0.46	51.3
12	R2	8	1	8	12.5	0.029	10.6	LOS A	0.1	0.7	0.46	0.66	0.46	50.6
Approach		21	2	22	9.5	0.029	8.3	LOS A	0.1	0.7	0.46	0.66	0.46	51.0
All Vehicles		587	74	803	12.6	0.245	1.2	NA	0.6	4.7	0.11	0.09	0.11	58.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

▼ Site: 101 [Airds Rd / Montore Rd 2031 PM - without dev (Site Folder: 2031)]

Airds Road / Montore Road

2031 without development

PM peak period

Site Category: (None)

Give-Way (Two-Way)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ % ]	v/c	sec		[ Veh. veh ]	[ Dist m ]				
South: Airds Rd (S)														
1	L2	21	8	27	38.1	0.298	6.1	LOS A	0.0	0.0	0.00	0.03	0.00	56.2
2	T1	408	30	520	7.4	0.298	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	59.6
Approach		429	38	546	8.9	0.298	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.5
North: Airds Rd (N)														
8	T1	281	34	417	12.1	0.276	0.6	LOS A	0.6	4.8	0.16	0.06	0.17	58.6
9	R2	28	2	42	7.1	0.276	9.1	LOS A	0.6	4.8	0.16	0.06	0.17	56.1
Approach		309	36	459	11.7	0.276	1.4	NA	0.6	4.8	0.16	0.06	0.17	58.4
West: Montore Rd (W)														
10	L2	60	3	63	5.0	0.126	8.0	LOS A	0.4	3.2	0.55	0.77	0.55	50.6
12	R2	21	1	22	4.8	0.126	13.4	LOS A	0.4	3.2	0.55	0.77	0.55	50.1
Approach		81	4	85	4.9	0.126	9.4	LOS A	0.4	3.2	0.55	0.77	0.55	50.5
All Vehicles		819	78	1090	9.7	0.298	1.5	NA	0.6	4.8	0.11	0.10	0.12	58.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

Site: 101 [Ben Lomond Rd / Airds Rd 2031 AM - without dev  
 (Site Folder: 2031)]

Ben Lomond Road / Airds Road

2031 without development

AM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	143	34	197	23.8	0.306	8.2	LOS A	1.5	12.4	0.72	0.86	0.72	51.5
2	T1	53	6	73	11.3	0.311	8.4	LOS A	1.5	11.1	0.72	0.88	0.73	51.2
3	R2	85	6	117	7.1	0.311	12.8	LOS A	1.5	11.1	0.72	0.88	0.73	51.2
Approach		281	46	387	16.4	0.311	9.6	LOS A	1.5	12.4	0.72	0.87	0.73	51.4
East: Ben Lomond Rd (E)														
4	L2	106	7	128	6.6	0.512	7.4	LOS A	3.5	25.6	0.66	0.71	0.70	52.3
5	T1	665	38	805	5.7	0.512	7.0	LOS A	3.5	25.6	0.66	0.73	0.71	53.5
6	R2	43	3	52	7.0	0.512	11.8	LOS A	3.4	25.3	0.67	0.74	0.72	53.1
Approach		814	48	985	5.9	0.512	7.3	LOS A	3.5	25.6	0.66	0.73	0.71	53.3
North: Airds Road (N)														
7	L2	14	5	19	35.7	0.183	23.1	LOS B	1.3	10.8	1.00	0.99	1.00	42.9
8	T1	27	5	36	18.5	0.583	26.6	LOS B	6.3	50.8	1.00	1.07	1.18	41.2
9	R2	129	24	171	18.6	0.583	37.5	LOS C	6.3	50.8	1.00	1.17	1.41	37.8
Approach		170	34	225	20.0	0.583	34.6	LOS C	6.3	50.8	1.00	1.14	1.34	38.6
West: Ben Lomond Rd (W)														
10	L2	191	21	253	11.0	0.142	3.9	LOS A	0.0	0.0	0.00	0.46	0.00	55.8
11	T1	691	24	916	3.5	0.840	9.1	LOS A	15.1	110.7	0.92	0.79	1.08	51.9
12	R2	161	21	214	13.0	0.840	14.1	LOS A	15.1	110.7	0.92	0.79	1.08	51.5
Approach		1043	66	1383	6.3	0.840	8.9	LOS A	15.1	110.7	0.75	0.73	0.88	52.5
All Vehicles		2308	194	2982	8.5	0.840	10.4	LOS A	15.1	110.7	0.74	0.78	0.84	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

▼ Site: 101 [Ben Lomond Rd / Airds Rd 2031 PM - without dev  
 (Site Folder: 2031)]

Ben Lomond Road / Airds Road

2031 without development

PM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	308	26	392	8.4	0.600	10.7	LOS A	4.0	30.2	0.84	1.01	1.10	50.1
2	T1	29	5	37	17.2	0.462	11.1	LOS A	2.5	18.2	0.79	0.98	0.95	49.0
3	R2	157	6	200	3.8	0.462	15.1	LOS B	2.5	18.2	0.79	0.98	0.95	49.1
Approach		494	37	629	7.5	0.600	12.1	LOS A	4.0	30.2	0.82	1.00	1.04	49.7
East: Ben Lomond Rd (E)														
4	L2	90	0	116	0.0	0.584	7.5	LOS A	4.5	32.2	0.68	0.74	0.75	52.4
5	T1	791	25	1016	3.2	0.584	7.3	LOS A	4.5	32.2	0.69	0.76	0.77	53.5
6	R2	22	7	28	31.8	0.584	13.1	LOS A	4.4	32.2	0.69	0.78	0.78	52.2
Approach		903	32	1160	3.5	0.584	7.5	LOS A	4.5	32.2	0.69	0.76	0.76	53.4
North: Airds Road (N)														
7	L2	31	1	37	3.2	0.445	48.5	LOS D <sup>11</sup>	3.1	22.6	1.00	1.08	1.25	33.0
8	T1	63	6	75	9.5	1.415	346.0	LOS F <sup>11</sup>	61.3	463.7	1.00	2.47	5.12	9.0
9	R2	169	16	201	9.5	1.415	474.3	LOS F <sup>11</sup>	61.3	463.7	1.00	3.06	6.73	6.9
Approach		263	23	313	8.7	1.415	393.4	LOS F <sup>11</sup>	61.3	463.7	1.00	2.68	5.70	8.1
West: Ben Lomond Rd (W)														
10	L2	92	18	118	19.6	0.070	3.8	LOS A	0.0	0.0	0.00	0.46	0.00	55.6
11	T1	845	33	1085	3.9	0.982	25.9	LOS B	42.7	315.2	1.00	1.32	2.00	42.3
12	R2	150	30	193	20.0	0.982	31.3	LOS C	42.7	315.2	1.00	1.32	2.00	41.9
Approach		1087	81	1396	7.5	0.982	24.8	LOS B	42.7	315.2	0.92	1.24	1.83	43.1
All Vehicles		2747	173	3498	6.3	1.415	49.7	LOS D <sup>11</sup>	61.3	463.7	0.83	1.17	1.68	33.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

## MOVEMENT SUMMARY

Site: 101 [Pembroke Rd / Ben Lomond Rd 2031 AM - without dev (Site Folder: 2031)]

Pembroke Road / Ben Lomond Road

2031 without development

AM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Pembroke Rd (S)														
1	L2	105	18	130	17.1	0.567	9.6	LOS A	4.2	31.4	0.84	0.97	1.05	51.8
2	T1	427	10	530	2.3	0.567	9.4	LOS A	4.2	31.4	0.84	0.99	1.05	52.8
3	R2	134	2	166	1.5	0.567	15.8	LOS B	3.9	28.0	0.83	1.00	1.06	51.6
Approach		666	30	827	4.5	0.567	10.7	LOS A	4.2	31.4	0.84	0.99	1.06	52.4
East: Ben Lomond Rd (E)														
4	L2	129	4	162	3.1	0.596	11.8	LOS A	5.0	36.0	0.93	1.05	1.18	51.0
5	T1	334	14	418	4.2	0.596	11.3	LOS A	5.0	36.0	0.92	1.05	1.18	51.4
6	R2	120	5	150	4.2	0.596	17.9	LOS B	4.5	32.4	0.91	1.05	1.18	50.1
Approach		583	23	730	3.9	0.596	12.8	LOS A	5.0	36.0	0.92	1.05	1.18	51.1
North: Pembroke Rd (N)														
7	L2	53	0	61	0.0	0.436	12.9	LOS A	3.0	21.2	0.86	0.95	0.97	50.6
8	T1	419	13	485	3.1	1.047	62.0	LOSE <sup>11</sup>	52.3	375.3	0.95	2.15	3.85	30.3
9	R2	396	11	459	2.8	1.047	90.8	LOSF <sup>11</sup>	52.3	375.3	1.00	2.71	5.21	25.5
Approach		868	24	1005	2.8	1.047	72.2	LOSF <sup>11</sup>	52.3	375.3	0.97	2.33	4.30	28.5
West: Ben Lomond Rd (W)														
10	L2	339	11	453	3.2	0.626	9.3	LOS A	4.5	32.5	0.82	0.98	1.05	51.9
11	T1	377	8	504	2.1	0.710	9.0	LOS A	6.3	45.5	0.86	1.02	1.16	53.0
12	R2	100	12	134	12.0	0.710	15.0	LOS B	6.3	45.5	0.86	1.02	1.16	53.0
Approach		816	31	1091	3.8	0.710	9.9	LOS A	6.3	45.5	0.85	1.00	1.11	52.5
All Vehicles		2933	108	3653	3.7	1.047	27.8	LOS B	52.3	375.3	0.89	1.37	1.99	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

## MOVEMENT SUMMARY

Site: 101 [Pembroke Rd / Ben Lomond Rd 2031 PM - without dev (Site Folder: 2031)]

Pembroke Road / Ben Lomond Road

2031 without development

PM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Pembroke Rd (S)														
1	L2	177	16	214	9.0	0.579	8.2	LOS A	4.3	30.9	0.79	0.89	0.97	52.4
2	T1	403	5	488	1.2	0.579	8.2	LOS A	4.3	30.9	0.79	0.92	0.98	53.3
3	R2	211	6	255	2.8	0.579	14.6	LOS B	4.0	28.6	0.79	0.98	0.99	52.0
Approach		791	27	958	3.4	0.579	9.9	LOS A	4.3	30.9	0.79	0.93	0.98	52.8
East: Ben Lomond Rd (E)														
4	L2	129	3	163	2.3	0.470	7.9	LOS A	3.2	23.1	0.78	0.77	0.85	52.8
5	T1	385	12	486	3.1	0.470	7.3	LOS A	3.2	23.1	0.78	0.81	0.86	53.8
6	R2	86	0	109	0.0	0.470	13.3	LOS A	3.0	21.7	0.78	0.85	0.87	53.5
Approach		600	15	758	2.5	0.470	8.3	LOS A	3.2	23.1	0.78	0.81	0.86	53.6
North: Pembroke Rd (N)														
7	L2	87	2	108	2.3	0.713	32.8	LOS C	6.9	48.9	1.00	1.21	1.61	40.4
8	T1	441	3	548	0.7	1.713	514.2	LOS F <sup>11</sup>	244.4	1724.2	1.00	5.72	13.20	6.5
9	R2	356	4	442	1.1	1.713	669.2	LOS F <sup>11</sup>	244.4	1724.2	1.00	7.11	16.79	5.2
Approach		884	9	1098	1.0	1.713	529.3	LOS F <sup>11</sup>	244.4	1724.2	1.00	5.83	13.51	6.4
West: Ben Lomond Rd (W)														
10	L2	365	7	426	1.9	0.618	9.6	LOS A	4.3	30.9	0.82	0.98	1.05	51.7
11	T1	585	12	684	2.1	0.917	17.7	LOS B	14.9	108.6	1.00	1.41	2.07	47.5
12	R2	113	23	132	20.4	0.917	24.2	LOS B	14.9	108.6	1.00	1.41	2.07	47.2
Approach		1063	42	1242	4.0	0.917	15.6	LOS B	14.9	108.6	0.94	1.26	1.72	48.8
All Vehicles		3338	93	4055	2.8	1.713	152.0	LOS F <sup>11</sup>	244.4	1724.2	0.89	2.34	4.57	17.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

## MOVEMENT SUMMARY

### Site: 1 [Rose Payten Dr / Pembroke Rd 2031 AM - without dev (Site Folder: 2031)]

Rose Payten Drive / Pembroke Road

2031 without development

AM peak period

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
SouthEast: Smiths Creek Bypass (SE)														
4	L2	215	8	242	3.7	0.261	17.0	LOS B	5.2	37.4	0.54	0.70	0.54	47.9
5	T1	295	8	332	2.7	* 0.635	44.3	LOS D <sup>11</sup>	8.7	62.2	0.98	0.81	1.01	34.8
6	R2	24	2	27	8.3	0.086	34.3	LOS C	1.0	7.4	0.84	0.70	0.84	37.9
Approach		534	18	601	3.4	0.635	32.9	LOS C	8.7	62.2	0.80	0.76	0.81	39.3
NorthEast: Pembroke Rd (NE)														
7	L2	19	1	23	5.3	0.018	7.2	LOS A	0.2	1.2	0.24	0.59	0.24	52.9
8	T1	638	19	766	3.0	* 0.849	37.1	LOS C	26.6	191.0	0.93	0.89	1.04	37.7
9	R2	219	26	263	11.9	* 0.548	21.5	LOS B	6.6	50.6	0.86	0.81	0.86	43.6
Approach		876	46	1051	5.3	0.849	32.6	LOS C	26.6	191.0	0.90	0.86	0.98	39.3
NorthWest: Rose Payten Dr (NW)														
10	L2	349	32	400	9.2	0.383	10.3	LOS A	6.8	51.5	0.45	0.69	0.45	50.5
11	T1	175	6	201	3.4	0.351	42.2	LOS C	4.5	32.5	0.94	0.74	0.94	35.6
12	R2	114	3	131	2.6	* 0.481	37.1	LOS C	5.1	36.6	0.95	0.78	0.95	36.9
Approach		638	41	732	6.4	0.481	23.8	LOS B	6.8	51.5	0.67	0.72	0.67	42.8
SouthWest: Pembroke Rd (SW)														
1	L2	219	5	258	2.3	0.250	10.1	LOS A	3.4	24.4	0.46	0.69	0.46	50.9
2	T1	553	18	652	3.3	0.621	29.5	LOS C	16.2	116.3	0.87	0.74	0.87	40.5
3	R2	117	6	138	5.1	0.311	22.6	LOS B	3.1	22.9	0.84	0.77	0.84	43.2
Approach		889	29	1048	3.3	0.621	23.8	LOS B	16.2	116.3	0.76	0.73	0.76	43.0
All Vehicles		2937	134	3433	4.6	0.849	28.1	LOS B	26.6	191.0	0.79	0.78	0.82	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance													
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE			Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[ Ped ped ]	Dist ] m				sec	m	m/sec
SouthEast: Smiths Creek Bypass (SE)													
P2	Full	50	63	32.1	LOS D	0.1	0.1	0.80	0.80	61.7	38.5	0.62	

NorthEast: Pembroke Rd (NE)											
P3	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
SouthWest: Pembroke Rd (SW)											
P1	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
All Pedestrians		150	189	40.2	LOS E <sup>12</sup>	0.2	0.2	0.90	0.90	69.8	38.5 0.55

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

**12** Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.

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Project: \\mteserver\\mte storage\\Jobs\\2021\\210276\\MTE SIDRA\\21 06 10\\21 06 16.sip9

## MOVEMENT SUMMARY

### Site: 1 [Rose Payten Dr / Pembroke Rd 2031 PM - without dev (Site Folder: 2031)]

Rose Payten Drive / Pembroke Road

2031 without development

PM peak period

Site Category: (None)

Signals - EQUIST (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
SouthEast: Smiths Creek Bypass (SE)														
4	L2	165	3	182	1.8	0.255	22.0	LOS B	4.6	33.0	0.64	0.72	0.64	45.5
5	T1	224	4	248	1.8	0.523	41.9	LOS C	7.4	52.8	0.95	0.76	0.95	35.7
6	R2	21	1	23	4.8	0.055	26.9	LOS B	0.7	5.0	0.82	0.69	0.82	41.1
Approach		410	8	453	2.0	0.523	33.1	LOS C	7.4	52.8	0.82	0.74	0.82	39.4
NorthEast: Pembroke Rd (NE)														
7	L2	18	0	21	0.0	0.020	11.1	LOS A	0.3	2.3	0.41	0.62	0.41	50.3
8	T1	580	9	684	1.6	* 1.031	84.7	LOS F <sup>11</sup>	39.3	278.8	0.97	1.24	1.57	25.2
9	R2	270	22	318	8.1	* 0.848	40.9	LOS C	13.2	98.8	1.00	0.95	1.23	35.5
Approach		868	31	1023	3.6	1.031	69.6	LOS E <sup>11</sup>	39.3	278.8	0.97	1.14	1.44	28.0
NorthWest: Rose Payten Dr (NW)														
10	L2	252	24	268	9.5	0.280	11.9	LOS A	4.8	36.3	0.46	0.68	0.46	49.4
11	T1	416	6	442	1.4	* 1.019	101.7	LOS F <sup>11</sup>	24.3	172.4	1.00	1.31	1.95	22.5
12	R2	341	3	363	0.9	* 0.744	32.6	LOS C	13.9	98.1	0.96	0.87	1.02	38.7
Approach		1009	33	1073	3.3	1.019	55.9	LOS D <sup>11</sup>	24.3	172.4	0.85	1.00	1.26	31.1
SouthWest: Pembroke Rd (SW)														
1	L2	214	5	255	2.3	0.246	10.6	LOS A	3.9	28.2	0.44	0.68	0.44	50.5
2	T1	586	5	697	0.9	0.990	83.2	LOS F <sup>11</sup>	33.3	234.9	0.97	1.27	1.68	25.5
3	R2	221	4	263	1.8	0.673	29.2	LOS C	8.3	59.0	0.97	0.82	0.99	40.1
Approach		1021	14	1214	1.4	0.990	56.3	LOS D <sup>11</sup>	33.3	234.9	0.86	1.05	1.27	31.2
All Vehicles		3308	86	3764	2.6	1.031	57.0	LOS E <sup>11</sup>	39.3	278.8	0.88	1.02	1.26	31.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Aver. Delay	Level of Service	AVERAGE QUEUE	BACK OF QUEUE	Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[ Ped ped ]	Dist ] m			sec	m	m/sec
SouthEast: Smiths Creek Bypass (SE)												
P2	Full	50	63	39.7	LOS D	0.2	0.2	0.89	0.89	69.3	38.5	0.56

NorthEast: Pembroke Rd (NE)											
P3	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
SouthWest: Pembroke Rd (SW)											
P1	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
All Pedestrians		150	189	42.8	LOS E <sup>12</sup>	0.2	0.2	0.93	0.93	72.4	38.5 0.53

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

**12** Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.

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## MOVEMENT SUMMARY

### Site: 101 [Campbelltown Rd/ Rose Payten Dr 2031 AM - without dev (Site Folder: 2031)]

Campbelltown Road / Rose Payten Drive

2031 without development

AM peak period

Site Category: (None)

Signals - EQUIST (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1177	45	1313	3.8	0.499	9.2	LOS A	17.7	128.2	0.51	0.46	0.51	52.2
3	R2	327	21	365	6.4	* 0.770	64.4	LOSE <sup>11</sup>	11.1	81.9	1.00	0.88	1.15	28.8
Approach		1504	66	1678	4.4	0.770	21.2	LOS B	17.7	128.2	0.62	0.55	0.65	44.4
East: Rose Payton Dr (E)														
4	L2	34	11	42	32.4	0.066	15.8	LOS B	1.0	8.7	0.47	0.65	0.47	46.4
6	R2	452	48	552	10.6	* 0.767	57.4	LOSE <sup>11</sup>	16.1	123.2	1.00	0.89	1.09	30.5
Approach		486	59	593	12.1	0.767	54.5	LOSE D <sup>11</sup>	16.1	123.2	0.96	0.87	1.05	31.2
North: Campbelltown Rd (N)														
7	L2	482	71	553	14.7	0.430	8.1	LOS A	7.6	59.8	0.33	0.65	0.33	51.8
8	T1	1330	53	1526	4.0	* 0.790	25.8	LOS B	36.3	262.7	0.89	0.81	0.89	42.2
Approach		1812	124	2079	6.8	0.790	21.1	LOS B	36.3	262.7	0.74	0.77	0.74	44.4
All Vehicles		3802	249	4351	6.6	0.790	25.7	LOS B	36.3	262.7	0.72	0.70	0.75	42.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Input Crossing	Dem. Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed	
		ped/h	ped/h	sec		[ Ped ped ]	m		sec	m	m/sec	
South: Campbelltown Rd (S)												
P1	Full	50	63	54.3	LOSE <sup>12</sup>	0.2	0.2	0.95	0.95	87.2	42.8	0.49
East: Rose Payton Dr (E)												
P2	Full	50	63	54.3	LOSE <sup>12</sup>	0.2	0.2	0.95	0.95	82.1	36.2	0.44
All Pedestrians		100	126	54.3	LOSE <sup>12</sup>	0.2	0.2	0.95	0.95	84.7	39.5	0.47

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

**12** Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.

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## MOVEMENT SUMMARY

### Site: 101 [Campbelltown Rd/ Rose Payten Dr 2031 PM - without dev (Site Folder: 2031)]

Campbelltown Road / Rose Payten Drive

2031 without development

PM peak period

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1441	19	1562	1.3	0.606	8.9	LOS A	19.0	134.3	0.61	0.55	0.61	52.4
3	R2	201	7	218	3.5	* 0.773	55.3	LOS D <sup>11</sup>	5.3	37.9	1.00	0.89	1.28	31.1
Approach		1642	26	1780	1.6	0.773	14.6	LOS B	19.0	134.3	0.65	0.59	0.69	48.3
East: Rose Payton Dr (E)														
4	L2	71	4	84	5.6	0.123	13.7	LOS A	1.6	11.7	0.51	0.68	0.51	48.3
6	R2	445	30	529	6.7	* 0.747	45.4	LOS D <sup>11</sup>	11.8	87.1	1.00	0.89	1.11	33.9
Approach		516	34	614	6.6	0.747	41.1	LOS C	11.8	87.1	0.93	0.86	1.03	35.3
North: Campbelltown Rd (N)														
7	L2	713	51	728	7.2	0.527	7.4	LOS A	7.4	55.3	0.37	0.67	0.37	52.5
8	T1	1504	14	1536	0.9	* 0.759	18.2	LOS B	26.6	187.6	0.85	0.78	0.85	46.2
Approach		2217	65	2264	2.9	0.759	14.8	LOS B	26.6	187.6	0.70	0.74	0.70	48.1
All Vehicles		4375	125	4658	2.9	0.773	18.2	LOS B	26.6	187.6	0.71	0.70	0.74	46.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance													
Mov ID	Input Crossing	Dem. Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE			Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[ Ped ped ]	Dist ] m				sec	m	m/sec
South: Campbelltown Rd (S)													
P1	Full	50	63	39.3	LOS D	0.2	0.2	0.94	0.94	72.2	42.8	0.59	
East: Rose Payton Dr (E)													
P2	Full	50	63	39.3	LOS D	0.2	0.2	0.94	0.94	67.1	36.2	0.54	
All Pedestrians		100	126	39.3	LOS D	0.2	0.2	0.94	0.94	69.7	39.5	0.57	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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## MOVEMENT SUMMARY

### ▼ Site: 101 [Airds Rd / Montore Rd 2031 AM - with dev (Site Folder: 2031)]

Airds Road / Montore Road

2031 with development

AM peak period

Site Category: (None)

Give-Way (Two-Way)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	38	18	48	42.3	0.224	6.1	LOS A	0.0	0.0	0.00	0.07	0.00	55.8
2	T1	246	36	339	14.6	0.224	0.1	LOS A	0.0	0.0	0.00	0.07	0.00	59.4
Approach		284	54	387	18.1	0.224	0.8	NA	0.0	0.0	0.00	0.07	0.00	58.9
North: Airds Rd (N)														
8	T1	256	27	353	10.5	0.259	0.7	LOS A	0.8	6.1	0.22	0.10	0.22	58.4
9	R2	47	12	63	22.8	0.259	8.3	LOS A	0.8	6.1	0.22	0.10	0.22	55.1
Approach		303	39	416	12.4	0.259	1.9	NA	0.8	6.1	0.22	0.10	0.22	57.8
West: Montore Rd (W)														
10	L2	21	9	22	42.9	0.103	8.0	LOS A	0.3	3.5	0.56	0.74	0.56	47.7
12	R2	22	15	23	68.2	0.103	16.4	LOS B	0.3	3.5	0.56	0.74	0.56	46.3
Approach		43	24	45	55.8	0.103	12.3	LOS A	0.3	3.5	0.56	0.74	0.56	47.0
All Vehicles		630	117	848	17.3	0.259	1.9	NA	0.8	6.1	0.14	0.12	0.14	57.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

### ▼ Site: 101 [Airds Rd / Montore Rd 2031 PM - with dev (Site Folder: 2031)]

Airds Road / Montore Road

2031 with development

PM peak period

Site Category: (None)

Give-Way (Two-Way)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	30	17	36	54.3	0.306	6.2	LOS A	0.0	0.0	0.00	0.04	0.00	55.4
2	T1	408	30	520	7.4	0.306	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach		438	47	556	10.4	0.306	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.3
North: Airds Rd (N)														
8	T1	281	34	417	12.1	0.294	1.0	LOS A	0.9	7.2	0.20	0.07	0.23	58.2
9	R2	35	9	49	21.1	0.294	10.2	LOS A	0.9	7.2	0.20	0.07	0.23	55.0
Approach		316	43	466	13.0	0.294	1.9	NA	0.9	7.2	0.20	0.07	0.23	57.9
West: Montore Rd (W)														
10	L2	64	7	67	10.9	0.211	8.4	LOS A	0.7	6.0	0.63	0.82	0.64	48.8
12	R2	33	13	35	39.4	0.211	19.0	LOS B	0.7	6.0	0.63	0.82	0.64	47.2
Approach		97	20	102	20.6	0.211	12.0	LOS A	0.7	6.0	0.63	0.82	0.64	48.2
All Vehicles		851	110	1124	12.4	0.306	2.1	NA	0.9	7.2	0.14	0.12	0.15	57.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

Site: 101 [Ben Lomond Rd / Airds Rd 2031 AM - with dev (Site Folder: 2031)]

Ben Lomond Road / Airds Road

2031 with development

AM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	143	34	197	23.8	0.358	9.5	LOS A	1.8	14.8	0.74	0.89	0.80	50.6
2	T1	53	6	73	11.3	0.286	7.7	LOS A	1.4	10.9	0.72	0.86	0.72	51.5
3	R2	93	14	126	13.3	0.286	12.4	LOS A	1.4	10.9	0.72	0.86	0.72	51.2
Approach		289	54	396	18.1	0.358	10.1	LOS A	1.8	14.8	0.73	0.87	0.76	51.0
East: Ben Lomond Rd (E)														
4	L2	113	14	136	11.7	0.517	7.6	LOS A	3.6	26.4	0.66	0.72	0.71	52.1
5	T1	665	38	805	5.7	0.517	7.1	LOS A	3.6	26.4	0.67	0.74	0.72	53.5
6	R2	43	3	52	7.0	0.517	11.9	LOS A	3.5	25.9	0.67	0.75	0.72	53.1
Approach		821	55	993	6.6	0.517	7.4	LOS A	3.6	26.4	0.67	0.74	0.72	53.3
North: Airds Road (N)														
7	L2	14	5	19	35.7	0.190	23.7	LOS B	1.3	11.2	1.00	0.99	1.00	42.6
8	T1	27	5	36	18.5	0.603	28.2	LOS B	6.6	53.8	1.00	1.08	1.20	40.5
9	R2	129	24	171	18.6	0.603	40.5	LOS C	6.6	53.8	1.00	1.19	1.46	36.7
Approach		170	34	225	20.0	0.603	37.2	LOS C	6.6	53.8	1.00	1.15	1.38	37.6
West: Ben Lomond Rd (W)														
10	L2	191	21	253	11.0	0.142	3.9	LOS A	0.0	0.0	0.00	0.46	0.00	55.8
11	T1	691	24	916	3.5	0.849	9.8	LOS A	16.0	117.0	0.94	0.83	1.14	51.8
12	R2	161	21	214	13.0	0.849	14.7	LOS B	16.0	117.0	0.94	0.83	1.14	51.3
Approach		1043	66	1383	6.3	0.849	9.5	LOS A	16.0	117.0	0.77	0.76	0.93	52.4
All Vehicles		2323	209	2997	9.0	0.849	10.9	LOS A	16.0	117.0	0.75	0.80	0.87	51.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

## MOVEMENT SUMMARY

Site: 101 [Ben Lomond Rd / Airds Rd 2031 PM - with dev (Site Folder: 2031)]

Ben Lomond Road / Airds Road

2031 with development

PM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Airds Rd (S)														
1	L2	308	26	392	8.4	0.601	10.7	LOS A	4.0	30.3	0.84	1.01	1.10	50.1
2	T1	29	5	37	17.2	0.475	11.3	LOS A	2.6	19.1	0.80	0.98	0.96	48.8
3	R2	161	10	204	5.8	0.475	15.3	LOS B	2.6	19.1	0.80	0.98	0.96	48.9
Approach		498	41	633	8.1	0.601	12.2	LOS A	4.0	30.3	0.83	1.00	1.05	49.6
East: Ben Lomond Rd (E)														
4	L2	97	7	123	6.0	0.588	7.7	LOS A	4.6	32.9	0.68	0.75	0.76	52.2
5	T1	791	25	1016	3.2	0.588	7.3	LOS A	4.6	32.9	0.69	0.77	0.77	53.5
6	R2	22	7	28	31.8	0.588	13.1	LOS A	4.5	32.7	0.69	0.78	0.78	52.2
Approach		910	39	1167	4.2	0.588	7.5	LOS A	4.6	32.9	0.69	0.76	0.77	53.3
North: Airds Road (N)														
7	L2	31	1	37	3.2	0.454	50.0	LOS D <sup>11</sup>	3.1	22.7	1.00	1.09	1.26	32.6
8	T1	63	6	75	9.5	1.442	362.0	LOS F <sup>11</sup>	63.1	477.5	1.00	2.51	5.27	8.7
9	R2	169	16	201	9.5	1.442	495.7	LOS F <sup>11</sup>	63.1	477.5	1.00	3.11	6.93	6.7
Approach		263	23	313	8.7	1.442	411.1	LOS F <sup>11</sup>	63.1	477.5	1.00	2.73	5.86	7.8
West: Ben Lomond Rd (W)														
10	L2	92	18	118	19.6	0.070	3.8	LOS A	0.0	0.0	0.00	0.46	0.00	55.6
11	T1	845	33	1085	3.9	0.988	28.5	LOS C	45.2	333.9	1.00	1.39	2.14	41.1
12	R2	150	30	193	20.0	0.988	33.9	LOS C	45.2	333.9	1.00	1.39	2.14	40.7
Approach		1087	81	1396	7.5	0.988	27.2	LOS B	45.2	333.9	0.92	1.31	1.95	42.0
All Vehicles		2758	184	3509	6.6	1.442	52.2	LOS D <sup>11</sup>	63.1	477.5	0.83	1.20	1.75	32.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

## MOVEMENT SUMMARY

Site: 101 [Pembroke Rd / Ben Lomond Rd 2031 AM - with dev  
 (Site Folder: 2031)]

Pembroke Road / Ben Lomond Road

2031 with development

AM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Pembroke Rd (S)														
1	L2	110	23	136	20.4	0.572	9.7	LOS A	4.3	31.9	0.84	0.98	1.05	51.7
2	T1	427	10	530	2.3	0.572	9.5	LOS A	4.3	31.9	0.84	0.99	1.06	52.8
3	R2	134	2	166	1.5	0.572	15.8	LOS B	4.0	28.4	0.84	1.00	1.07	51.6
Approach		671	35	833	5.1	0.572	10.8	LOS A	4.3	31.9	0.84	0.99	1.06	52.4
East: Ben Lomond Rd (E)														
4	L2	129	4	162	3.1	0.596	11.8	LOS A	5.0	36.0	0.92	1.05	1.17	51.0
5	T1	336	16	420	4.7	0.596	11.3	LOS A	5.0	36.0	0.92	1.05	1.17	51.5
6	R2	120	5	150	4.2	0.596	17.8	LOS B	4.5	32.4	0.90	1.05	1.18	50.1
Approach		585	25	732	4.2	0.596	12.7	LOS A	5.0	36.0	0.92	1.05	1.17	51.1
North: Pembroke Rd (N)														
7	L2	53	0	61	0.0	0.443	13.2	LOS A	3.1	21.8	0.87	0.96	0.99	50.4
8	T1	419	13	485	3.1	1.064	70.5	LOSE <sup>11</sup>	58.0	416.0	0.96	2.29	4.21	28.4
9	R2	396	11	459	2.8	1.064	103.2	LOSF <sup>11</sup>	58.0	416.0	1.00	2.92	5.72	23.5
Approach		868	24	1005	2.8	1.064	81.9	LOSF <sup>11</sup>	58.0	416.0	0.97	2.50	4.70	26.6
West: Ben Lomond Rd (W)														
10	L2	339	11	453	3.2	0.628	9.4	LOS A	4.5	32.7	0.82	0.98	1.06	51.8
11	T1	379	10	506	2.5	0.724	9.3	LOS A	6.6	48.0	0.87	1.05	1.19	52.9
12	R2	105	17	139	15.3	0.724	15.5	LOS B	6.6	48.0	0.87	1.05	1.19	52.7
Approach		823	38	1098	4.4	0.724	10.1	LOS A	6.6	48.0	0.85	1.02	1.13	52.4
All Vehicles		2947	122	3668	4.1	1.064	30.4	LOS C	58.0	416.0	0.89	1.42	2.10	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

## MOVEMENT SUMMARY

▼ Site: 101 [Pembroke Rd / Ben Lomond Rd 2031 PM - with dev  
 (Site Folder: 2031)]

Pembroke Road / Ben Lomond Road

2031 with development

PM peak period

Site Category: (None)

Roundabout

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Pembroke Rd (S)														
1	L2	182	21	220	11.2	0.585	8.3	LOS A	4.3	31.7	0.80	0.89	0.98	52.4
2	T1	403	5	488	1.2	0.585	8.3	LOS A	4.3	31.7	0.80	0.93	0.98	53.3
3	R2	211	6	255	2.8	0.585	14.6	LOS B	4.1	29.1	0.80	0.99	1.00	52.0
Approach		796	32	963	3.9	0.585	10.0	LOS A	4.3	31.7	0.80	0.94	0.99	52.7
East: Ben Lomond Rd (E)														
4	L2	129	3	163	2.3	0.473	7.9	LOS A	3.2	23.3	0.78	0.77	0.85	52.8
5	T1	389	14	491	3.5	0.473	7.3	LOS A	3.2	23.3	0.78	0.81	0.86	53.8
6	R2	86	0	109	0.0	0.473	13.3	LOS A	3.1	21.9	0.78	0.85	0.87	53.5
Approach		604	17	763	2.8	0.473	8.3	LOS A	3.2	23.3	0.78	0.81	0.86	53.6
North: Pembroke Rd (N)														
7	L2	87	2	108	2.3	0.722	34.1	LOS C	7.1	50.2	1.00	1.22	1.64	39.9
8	T1	441	3	548	0.7	1.736	530.1	LOS F <sup>11</sup>	248.6	1754.0	1.00	5.74	13.29	6.4
9	R2	356	4	442	1.1	1.736	690.0	LOS F <sup>11</sup>	248.6	1754.0	1.00	7.14	16.89	5.1
Approach		884	9	1098	1.0	1.736	545.7	LOS F <sup>11</sup>	248.6	1754.0	1.00	5.86	13.59	6.2
West: Ben Lomond Rd (W)														
10	L2	365	7	426	1.9	0.620	9.6	LOS A	4.4	31.1	0.82	0.98	1.05	51.7
11	T1	587	14	686	2.4	0.928	19.3	LOS B	16.1	117.8	1.00	1.46	2.19	46.6
12	R2	116	26	135	22.2	0.928	25.8	LOS B	16.1	117.8	1.00	1.46	2.19	46.3
Approach		1068	47	1247	4.4	0.928	16.7	LOS B	16.1	117.8	0.94	1.29	1.80	48.1
All Vehicles		3352	105	4071	3.1	1.736	156.2	LOS F <sup>11</sup>	248.6	1754.0	0.89	2.35	4.61	17.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

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## MOVEMENT SUMMARY

### Site: 1 [Rose Payten Dr / Pembroke Rd 2031 AM - with dev (Site Folder: 2031)]

Rose Payten Drive / Pembroke Road

2031 with development

AM peak period

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
SouthEast: Smiths Creek Bypass (SE)														
4	L2	215	8	242	3.7	0.261	17.0	LOS B	5.2	37.4	0.53	0.70	0.53	47.9
5	T1	295	8	332	2.7	* 0.635	44.3	LOS D <sup>11</sup>	8.7	62.2	0.98	0.81	1.01	34.8
6	R2	24	2	27	8.3	0.086	34.3	LOS C	1.0	7.4	0.84	0.70	0.84	37.9
Approach		534	18	601	3.4	0.635	32.9	LOS C	8.7	62.2	0.80	0.76	0.81	39.3
NorthEast: Pembroke Rd (NE)														
7	L2	19	1	23	5.3	0.018	7.2	LOS A	0.2	1.2	0.24	0.59	0.24	52.9
8	T1	638	19	766	3.0	* 0.849	37.2	LOS C	26.6	191.0	0.93	0.89	1.04	37.7
9	R2	224	31	268	13.6	* 0.565	21.7	LOS B	6.7	52.7	0.87	0.81	0.87	43.5
Approach		881	51	1056	5.7	0.849	32.6	LOS C	26.6	191.0	0.90	0.87	0.98	39.2
NorthWest: Rose Payten Dr (NW)														
10	L2	354	37	406	10.3	0.420	10.7	LOS A	7.2	54.7	0.46	0.70	0.46	50.2
11	T1	175	6	201	3.4	0.351	42.2	LOS C	4.5	32.5	0.94	0.74	0.94	35.6
12	R2	114	3	131	2.6	* 0.481	37.1	LOS C	5.1	36.6	0.95	0.78	0.95	36.9
Approach		643	46	737	7.1	0.481	23.9	LOS B	7.2	54.7	0.68	0.72	0.68	42.7
SouthWest: Pembroke Rd (SW)														
1	L2	219	5	258	2.3	0.253	10.3	LOS A	3.4	24.5	0.47	0.69	0.47	50.7
2	T1	553	18	652	3.3	0.619	29.5	LOS C	16.1	115.9	0.87	0.74	0.87	40.5
3	R2	117	6	138	5.1	0.311	22.6	LOS B	3.1	22.9	0.84	0.77	0.84	43.2
Approach		889	29	1048	3.3	0.619	23.9	LOS B	16.1	115.9	0.77	0.73	0.77	43.0
All Vehicles		2947	144	3443	4.9	0.849	28.1	LOS B	26.6	191.0	0.79	0.78	0.82	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance													
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE			Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[ Ped ped ]	Dist ] m				sec	m	m/sec
SouthEast: Smiths Creek Bypass (SE)													
P2	Full	50	63	32.1	LOS D	0.1	0.1	0.80	0.80	61.7	38.5	0.62	

NorthEast: Pembroke Rd (NE)											
P3	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
SouthWest: Pembroke Rd (SW)											
P1	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
All Pedestrians		150	189	40.2	LOS E <sup>12</sup>	0.2	0.2	0.90	0.90	69.8	38.5 0.55

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

**12** Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.

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## MOVEMENT SUMMARY

### Site: 1 [Rose Payten Dr / Pembroke Rd 2031 PM - with dev (Site Folder: 2031)]

Rose Payten Drive / Pembroke Road

2031 with development

PM peak period

Site Category: (None)

Signals - EQUIST (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
SouthEast: Smiths Creek Bypass (SE)														
4	L2	165	3	182	1.8	0.255	22.0	LOS B	4.6	33.0	0.64	0.72	0.64	45.5
5	T1	224	4	248	1.8	0.523	41.9	LOS C	7.4	52.8	0.95	0.76	0.95	35.7
6	R2	21	1	23	4.8	0.055	26.9	LOS B	0.7	5.0	0.82	0.69	0.82	41.1
Approach		410	8	453	2.0	0.523	33.1	LOS C	7.4	52.8	0.82	0.74	0.82	39.4
NorthEast: Pembroke Rd (NE)														
7	L2	18	0	21	0.0	0.020	11.1	LOS A	0.3	2.3	0.41	0.62	0.41	50.3
8	T1	580	9	684	1.6	* 1.031	84.7	LOS F <sup>11</sup>	39.3	278.8	0.97	1.24	1.57	25.2
9	R2	273	25	321	9.1	* 0.861	42.4	LOS C	13.7	103.1	1.00	0.97	1.26	35.0
Approach		871	34	1026	3.9	1.031	69.9	LOS E <sup>11</sup>	39.3	278.8	0.97	1.14	1.45	28.0
NorthWest: Rose Payten Dr (NW)														
10	L2	257	29	273	11.3	0.288	11.9	LOS A	4.9	37.8	0.46	0.68	0.46	49.3
11	T1	416	6	442	1.4	* 1.023	104.5	LOS F <sup>11</sup>	24.8	176.0	1.00	1.32	1.97	22.1
12	R2	341	3	363	0.9	* 0.744	32.6	LOS C	13.9	98.1	0.96	0.87	1.02	38.7
Approach		1014	38	1078	3.7	1.023	56.8	LOS E <sup>11</sup>	24.8	176.0	0.85	1.01	1.27	30.8
SouthWest: Pembroke Rd (SW)														
1	L2	214	5	255	2.3	0.248	10.9	LOS A	4.1	29.0	0.45	0.68	0.45	50.3
2	T1	586	5	697	0.9	0.990	83.2	LOS F <sup>11</sup>	33.3	234.9	0.97	1.27	1.68	25.5
3	R2	221	4	263	1.8	0.673	29.2	LOS C	8.3	59.0	0.97	0.82	0.99	40.1
Approach		1021	14	1214	1.4	0.990	56.4	LOS D <sup>11</sup>	33.3	234.9	0.86	1.05	1.28	31.2
All Vehicles		3316	94	3772	2.8	1.031	57.4	LOS E <sup>11</sup>	39.3	278.8	0.88	1.02	1.27	30.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance													
Mov ID	Input Crossing	Dem. Vol.	Aver. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE			Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[ Ped ped ]	Dist ] m			sec	m	m/sec	
SouthEast: Smiths Creek Bypass (SE)													
P2	Full	50	63	39.7	LOS D	0.2	0.2	0.89	0.89	69.3	38.5	0.56	

NorthEast: Pembroke Rd (NE)											
P3	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
SouthWest: Pembroke Rd (SW)											
P1	Full	50	63	44.3	LOS E <sup>12</sup>	0.2	0.2	0.94	0.94	73.9	38.5 0.52
All Pedestrians		150	189	42.8	LOS E <sup>12</sup>	0.2	0.2	0.93	0.93	72.4	38.5 0.53

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

**12** Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.

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## MOVEMENT SUMMARY

### Site: 101 [Campbelltown Rd/ Rose Payten Dr 2031 AM - with dev (Site Folder: 2031)]

Campbelltown Road / Rose Payten Drive

2031 with development

AM peak period

Site Category: (None)

Signals - EQUIST (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1177	45	1313	3.8	0.499	9.2	LOS A	17.7	128.2	0.51	0.46	0.51	52.2
3	R2	327	21	365	6.4	* 0.770	64.4	LOSE <sup>11</sup>	11.1	81.9	1.00	0.88	1.15	28.8
Approach		1504	66	1678	4.4	0.770	21.2	LOS B	17.7	128.2	0.62	0.55	0.65	44.4
East: Rose Payton Dr (E)														
4	L2	47	24	55	49.1	0.096	16.3	LOS B	1.3	13.2	0.48	0.66	0.48	45.8
6	R2	458	54	558	11.6	* 0.781	58.2	LOSE <sup>11</sup>	16.5	127.0	1.00	0.89	1.11	30.3
Approach		505	78	613	15.0	0.781	54.4	LOSE D <sup>11</sup>	16.5	127.0	0.95	0.87	1.05	31.2
North: Campbelltown Rd (N)														
7	L2	501	90	573	17.7	0.453	8.3	LOS A	8.1	65.5	0.34	0.66	0.34	51.7
8	T1	1330	53	1526	4.0	* 0.790	25.8	LOS B	36.3	262.7	0.89	0.81	0.89	42.2
Approach		1831	143	2099	7.7	0.790	21.0	LOS B	36.3	262.7	0.74	0.77	0.74	44.4
All Vehicles		3840	287	4391	7.5	0.790	25.7	LOS B	36.3	262.7	0.72	0.70	0.75	41.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Input Crossing	Dem. Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed	
		ped/h	ped/h	sec		[ Ped ped ]	m		sec	m	m/sec	
South: Campbelltown Rd (S)												
P1	Full	50	63	54.3	LOSE <sup>12</sup>	0.2	0.2	0.95	0.95	87.2	42.8	0.49
East: Rose Payton Dr (E)												
P2	Full	50	63	54.3	LOSE <sup>12</sup>	0.2	0.2	0.95	0.95	82.1	36.2	0.44
All Pedestrians		100	126	54.3	LOSE <sup>12</sup>	0.2	0.2	0.95	0.95	84.7	39.5	0.47

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

**12** Level of Service is worse than the Pedestrian Level of Service Target specified in the Parameter Settings dialog.

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## MOVEMENT SUMMARY

### Site: 101 [Campbelltown Rd/ Rose Payten Dr 2031 PM - with dev (Site Folder: 2031)]

Campbelltown Road / Rose Payten Drive

2031 with development

PM peak period

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site User-Given Cycle Time)

Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[ Total veh/h ]	[ HV veh/h ]	[ Total veh/h ]	[ HV % ]	v/c	sec		[ Veh. veh ]	Dist ] m				
South: Campbelltown Rd (S)														
2	T1	1441	19	1562	1.3	0.638	10.8	LOS A	20.9	148.0	0.67	0.61	0.67	51.0
3	R2	201	7	218	3.5	* 0.773	55.3	LOS D <sup>11</sup>	5.3	37.9	1.00	0.89	1.28	31.1
Approach		1642	26	1780	1.6	0.773	16.3	LOS B	20.9	148.0	0.71	0.64	0.74	47.3
East: Rose Payton Dr (E)														
4	L2	81	14	95	16.1	0.138	14.9	LOS B	1.9	15.2	0.54	0.69	0.54	47.3
6	R2	550	35	654	6.3	* 0.788	44.9	LOS D <sup>11</sup>	14.8	108.9	1.00	0.91	1.14	34.0
Approach		631	49	749	7.5	0.788	41.1	LOS C	14.8	108.9	0.94	0.88	1.06	35.3
North: Campbelltown Rd (N)														
7	L2	727	65	743	9.0	0.548	7.5	LOS A	7.8	58.9	0.38	0.67	0.38	52.4
8	T1	1504	14	1536	0.9	* 0.810	23.6	LOS B	30.3	213.8	0.91	0.87	0.96	43.3
Approach		2231	79	2278	3.6	0.810	18.3	LOS B	30.3	213.8	0.74	0.81	0.77	45.9
All Vehicles		4504	154	4807	3.4	0.810	21.1	LOS B	30.3	213.8	0.76	0.76	0.81	44.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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).

Queue Model: SIDRA Standard.

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

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

<sup>11</sup> Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.

\* Critical Movement (Signal Timing)

Pedestrian Movement Performance													
Mov ID	Input Crossing	Dem. Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE			Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[ Ped ped ]	Dist ] m				sec	m	m/sec
South: Campbelltown Rd (S)													
P1	Full	50	63	39.3	LOS D	0.2	0.2	0.94	0.94	72.2	42.8	0.59	
East: Rose Payton Dr (E)													
P2	Full	50	63	39.3	LOS D	0.2	0.2	0.94	0.94	67.1	36.2	0.54	
All Pedestrians		100	126	39.3	LOS D	0.2	0.2	0.94	0.94	69.7	39.5	0.57	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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