

5 SUMMARY & CONCLUSIONS

5.1 MODIFICATION 14

Modification 14 was determined in October 2017 and included approval for a range of upgrades to the existing site. These upgrades included the enclosure of the level 3 terrace to facilitate an expansion in gaming floor area and a new bar and restaurants, expansion of the level 3 pre-function space, changes to the Astral Hotel lobby and retail space, and alterations to internal vertical transportation, services and infrastructure, including the harbour heat rejection system.

The following mitigation strategies in that upgrade will contribute to limiting the environmental impacts of both modifications:

- SEGL to expand staff and visitor cycle parking and trip end facilities to encourage more travel to the site by active transport modes.
- SEGL to work with TfNSW and Parking Sense to upgrade the Pyrmont Parking Guidance System.
- SEGL to provide data feed to Parking Sense, and mobile parking apps, to continually update signage displays.
- SEGL to contribute to upgrade costs of the Pyrmont Parking Guidance System and lead resolution of the proposed signage.
- SEGL to provide 4 large coach parking spaces on the service road exit ramp leading up to Pirrama Road, including localised footpath widening at the service road exit to restrict illegal access and security monitoring to deter illegal parking practices.
- SEGL to upgrade the Star Loading dock on Jones Bay Road to increase storage and sorting areas.
- SEGL to increase resourcing of the Astral valet service to ensure quicker dispatching of vehicles and eliminate any potential for blocking of the Astral Hotel entry.
- SEGL to relocate the Pirrama Road taxi rank into the service road.
- SEGL to provide an electronic taxi call system in the Porte Cochere and removal of the Jones

Bay Road feeder rank.

- SEGL to submit the draft Star Travel Plan to the Department.

5.2 MODIFICATION 13

Modification 13 proposes the following mitigation strategies to limit the environmental impacts of the proposal, beyond what exists, up to and including Modification 14:

- SEGL to provide 220 parking spaces to ameliorate the parking impacts of Modification 13. However, the total parking provision on-site is not to exceed the 3,000-approved maximum parking limit set by MP08_0098.
- SEGL to expand and modify the Pyrmont Parking Guidance System proposed in Modification 14, to include additional signage and information specific to Modification 13.
- SEGL to provide a new Pyrmont Street access to the Level B1 car park. This new access is crucial to mitigating the traffic impacts of the development by spreading impacts more evenly across the road network.
- SEGL to provide a left-in and right-in access to the new Ritz Carlton Porte cochere entry. The right-in access from Pirrama Road is essential to allow Taxis queued on-site in the service road to access the Ritz Hotel.
- SEGL to upgrade the Star Events loading dock in the service road to accommodate the additional deliveries associated with the Ritz Carlton Hotel and Apartments located in the tower above.
- SEGL to produce Tower Loading Dock and Car Stacker Management Plans
- SEGL to provide 35 Class 1 bike spaces and 62 visitor bike spaces to encourage active transport and mitigate impacts of the development.
- SEGL to install bike parking upgrades as early works in Modification 13, to improve cycle parking opportunities during construction.
- SEGL to formalise the taxi parking scheme in

the service road.

- During construction, SEGL to restrict on-site parking for workers to 200 spaces. These spaces will be controlled using a booking system. Parking above this threshold will be actively discouraged through on-site parking fees.

5.3 CONSIDERATION OF SEARS

5.3.1 Trip Generation and Network Performance

The review of trip generation impacts and traffic network performance in Sections 4.2, 4.3, 4.13, 4.14 and 4.16 demonstrated that the additional traffic generated by the proposal during construction, and operation, would have limited environmental impacts on network performance and parking demand beyond what is currently experienced due to the existing development and operation of the site up to and including Modification 14.

This is achieved through mitigation strategies such as:

- Limitations on construction parking
- Heavy reliance on public transport services for workers travelling to the construction site
- Limited provision of on-site car parking targeted to the new Tower development
- Implementation of the Pyrmont Parking Guidance System to manage traffic movements in the precinct
- Relocation of taxi services into the service road
- Commitments to major increases in employee and visitor cycle parking facilities
- A traffic reassignment strategy during operation that redirect traffic away from critical parts of the road network towards a new car park access on Pyrmont

5.3.2 Cumulative Impacts

The review of cumulative impacts in Section 4.4 outlined the competing demands on the road network during construction and operation of the proposal. The proposal seeks to limit its competing demands on the network, during operation, through a traffic reassignment strategy that reduces both its current, and future, impacts on those parts of the road network most under pressure from other developments.

For example, the Pyrmont Bridge Road and Murray Street intersection is under significant pressure from development in Darling Harbour and Pyrmont. The traffic reassignment strategy will minimise traffic growth at the intersection to 14% in the AM peak, whilst maintaining or reducing current flows in the PM and Off-peak periods. A summary of the proposed traffic increases and reductions across the adjacent road network were presented in Tables 4.13 and 4.14.

5.3.3 Impacts on Public Transport

The review of public transport services in Sections 4.5 and 4.7 demonstrated that the site is well serviced by public transport and that the Modification 13 proposal seeks to maintain or improve site access to those services.

5.3.4 Impacts on Light Rail

Section 4.6 highlights the proposed improvements to the light rail interchange by opening the station entrance, improving pedestrian, taxi, cycle and coach linkages, increased station activation and passive surveillance, as well as providing cosmetic upgrades.

5.3.5 Sustainable Travel Initiatives

Section 4.8 details SEGL's commitment to sustainable travel initiatives, such as its Draft Star Travel Plan, which seeks to reduce the Star's long-term travel impacts on the Pyrmont area.

5.3.6 Parking and Access

Section 4.9 details current and proposed parking access arrangements. It demonstrates that the site will have sufficient on-site car parking to meet current and future needs. Section 4.11 also demonstrates SEGL's commitment to improving employee and visitor cycle parking facilities across the site, locating them adjacent to major interchanges and cycle access networks.

5.3.7 Service Road Access

Section 4.10 and 4.12 outlines the proposed improvements to the service road and Star Events loading docks. These improvements relocate taxis into the service road, thereby relieving pressure on Pirrama Road, and provide an upgrade of the loading facilities to accommodate the requirements of the new Tower development. This service road also provides the access point for the new car stacker parking system proposed to satisfy and mitigate the additional parking demands of the new Tower development.

5.3.8 Safety During Construction

Section 4.17 highlights how the proposal will limit environmental impacts on pedestrian access and safety during construction, and operation. Modification 13 includes proposals that have the potential to impact on pedestrian safety and access around the site, these include:

- The new Ritz Carlton Porte Cochere
- The new Pyrmont Street Car Park Entry

The Modification 13 proposals have sought to mitigate environmental impacts and improve upon current pedestrian access arrangements through a series of mitigation strategies, including:

- Locating new vehicle crossings away from pedestrian desire lines
- Relocating existing vehicle crossings away from pedestrian desire lines
- Transferring traffic movements away from heavy pedestrian demand flows at Pirrama Road to quieter pedestrian areas in Pyrmont Street
- Changes of paving material in public domain to clearly delineate roadway and footpath
- Header course or flush concrete kerb to

accentuate the edge of vehicle links

- Bollards for pedestrian/crash protection and to define the transition zone between pedestrian and vehicle access areas
- Sight lines clear of obstructions (e.g. Trees or street furniture) at entry and exit points in accordance with AS2890.1.

With the above mitigation strategies in place, the development proposed in Modification 13 will have a limited environmental impact, during construction and operation, beyond what exists, up to and including Modification 14.

5.4 CONCLUSION

After assessment of the development proposed in Modification 13 against the relevant SEAR's transport related requirements (refer Table 1.1), it is concluded that the proposed development will have a limited environmental impact, during construction and operation, beyond what exists, up to and including Modification 14.

APPENDIX A SIDRA ANALYSIS OF EXISTING NETWORK CONDITIONS

Summary of Results

Ref.	Intersection	AM Peak				PM Peak				Off-Peak			
		DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)	DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)	DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)
1	Pymont Street / Jones Bay Road	0.11	A	7.1	3.2	0.23	A	6.8	2.5	0.233	A	6.4	1.1
2	Pymont Street / Union Street	0.356	B	22.3	66.6	0.828	C	31.6	81.6	0.81	C	28.8	81.6
3	Pymont Street / Pymont Bridge Road	0.983	B	28.1	125.2	0.8	C	28.7	149.4	0.757	C	28	148.1
4	Union Street / Edward Street	0.167	B	20.5	23.8	0.285	C	24	35.4	0.207	C	21	28
5	Pymont Bridge Road / Union Street	0.131	A	8.7	1.1	0.168	A	8.5	45.7	0.261	A	5.9	76.3
6	Union Street / Murray Street / Darling Drive	1.017	C	41	98.9	0.846	C	33.2	84.5	0.926	C	34.6	133
7	Pirrama Road / Star Car Park Entrance	0.2	A	4.8	6.1	0.445	B	17	61.4	0.486	B	16.9	64.9
8	Jones Bay Road / Pirrama Road	0.242	A	11.3	9.7	0.4	B	12.2	16.2	0.482	B	13.8	21.1
9	Jones bay Road / Port Cochere Entry	0.144	A	4.7	0	0.268	A	4.6	0	0.318	A	4.6	0
10	Pymont Street / Port Cochere Exit	0.15	A	8.9	1.6	0.202	B	11.3	40.3	0.424	B	11.7	27.7
11	Pymont Bridge Road / Edward Street	0.164	A	5	0.5	0.135	A	4.9	20.1	0.139	A	5.2	47.1
12	Pirrama Road Pedestrian Crossing	0.324	A	4	41.3	0.387	A	3.5	71.2	0.446	A	3.3	75.9
-	Network	1.017	E	15		0.846	E	15.1		0.926	E	14.6	

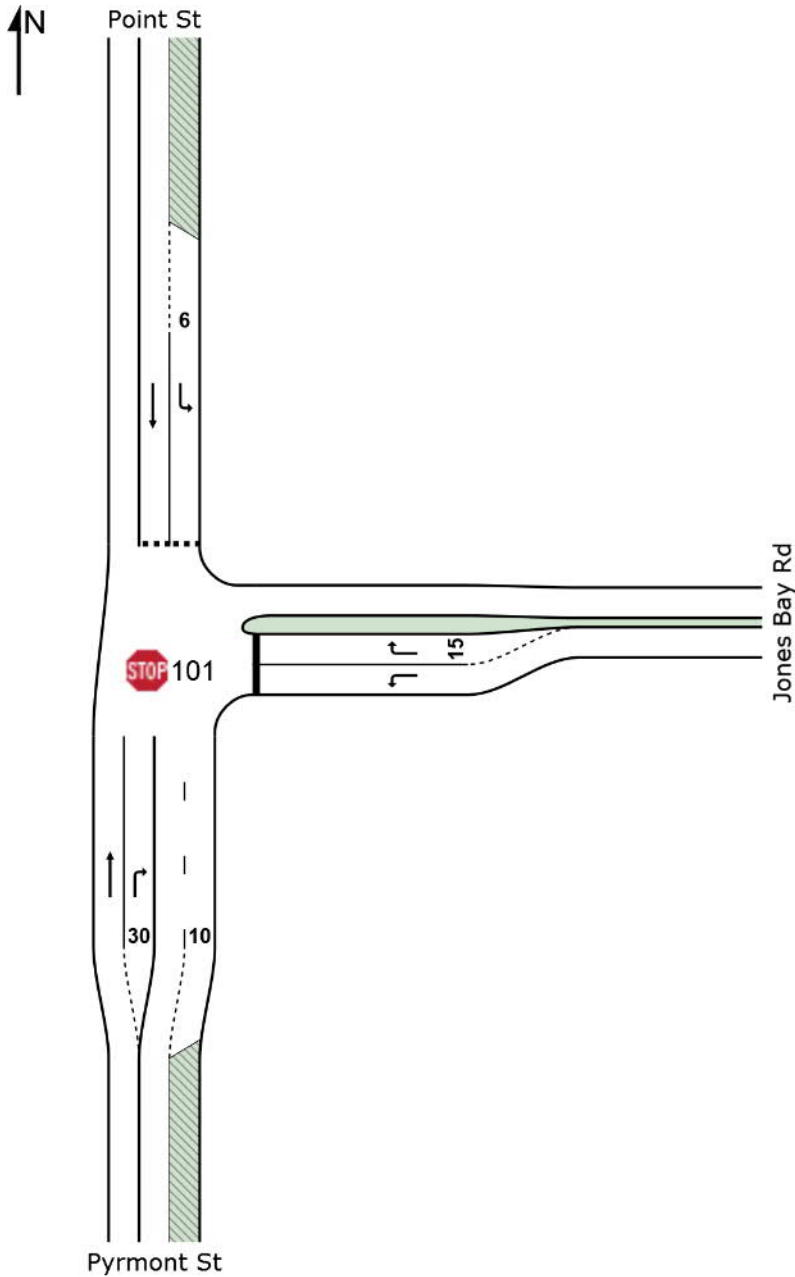
Observed Signal Timings Data

TCS	Description	Signal Timings (sec)	Phase Splits (observed)					Cycle Length (sec)
			A	B	C	D	E	
3063	Pymont St / Union St	AM (sec)	23	24	22			69
		PM (sec)	52	20	21			93
		OP (sec)	52	20	21			93
		Min. Green	5	5	5			
		Yellow	4	4	4			
		All-red	2	2	2			
1835	Pymont St / Pymont Bridge Rd	AM (sec)	34	50	23	24		131
		PM (sec)	21	67	21	25		134
		OP (sec)	21	67	21	25		134
		Min. Green	5	5	5	5		
		Yellow	4	4	4	4		
		All-red	2	2	2	2		
3203	Pirrama Rd / Star Car Park Entrance	AM (sec)	114	17				131
		PM (sec)	22	15				37
		OP (sec)	22	15				37
		Min. Green	5	5				
		Yellow	4	4				
		All-red	2	2				
3202	Union St / Edward St	AM (sec)	23	59				82
		PM (sec)	21	43				64
		OP (sec)	21	43				64
		Min. Green	5	5				
		Yellow	4	4				
		All-red	2	2				
2834	Union St / Murray St / Darling Drive	AM (sec)	29	24	20	0	13	86
		PM (sec)	35	23	29	17	18	122
		OP (sec)	35	23	29	17	18	122
		Min. Green	5	5	5	5	5	
		Yellow	4	4	4	4	4	
		All-red	2	2	2	2	2	

SITE LAYOUT

 Site: 101 [AM Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Jones Bay Rd]

 Network: 1 [AM Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	62	3.2	62	3.2	0.032	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	199	2.5	199	2.5	0.109	4.6	LOS A	0.0	0.0	0.00	0.53	36.7
Approach		261	2.7	261	2.7	0.109	3.5	NA	0.0	0.0	0.00	0.40	39.7
East: Jones Bay Rd													
4	L2	141	7.8	141	7.8	0.101	5.1	LOS A	0.0	0.0	0.00	1.02	17.1
6	R2	36	2.8	36	2.8	0.050	7.1	LOS A	0.2	1.2	0.43	0.91	20.5
Approach		177	6.8	176 ^{N1}	6.8	0.101	5.5	LOS A	0.2	1.2	0.09	1.00	18.2
North: Point St													
7	L2	64	0.0	64	0.0	0.046	4.3	LOS A	0.2	1.4	0.29	0.51	24.3
8	T1	137	1.5	137	1.5	0.110	3.3	LOS A	0.4	3.2	0.30	0.48	27.0
Approach		201	1.0	201	1.0	0.110	3.6	LOS A	0.4	3.2	0.30	0.49	26.0
All Vehicles		639	3.3	638 ^{N1}	3.3	0.110	4.1	NA	0.4	3.2	0.12	0.60	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

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

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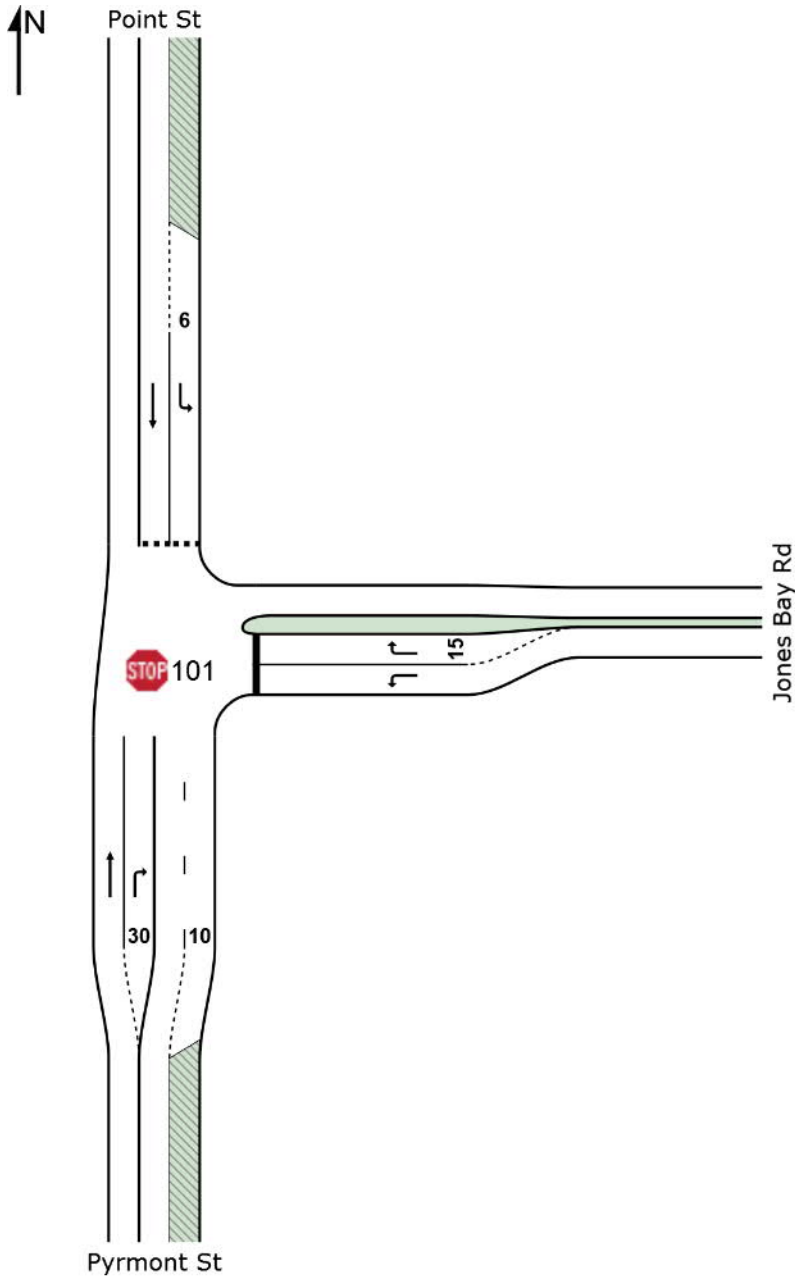
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 Site: 101 [PM Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Jones Bay Rd]

 Network: N101 [PM Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	152	0.0	152	0.0	0.078	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	108	0.0	108	0.0	0.058	4.6	LOS A	0.0	0.0	0.00	0.53	36.7
Approach		260	0.0	260	0.0	0.078	1.9	NA	0.0	0.0	0.00	0.22	44.2
East: Jones Bay Rd													
4	L2	330	0.9	330	0.9	0.230	5.0	LOS A	0.0	0.0	0.00	1.00	17.1
6	R2	65	0.0	65	0.0	0.085	6.8	LOS A	0.3	2.0	0.41	0.91	20.8
Approach		395	0.8	395	0.8	0.230	5.3	LOS A	0.3	2.0	0.07	0.99	18.1
North: Point St													
7	L2	66	0.0	66	0.0	0.044	4.0	LOS A	0.2	1.4	0.20	0.49	25.1
8	T1	115	2.6	115	2.6	0.089	3.1	LOS A	0.4	2.5	0.25	0.46	27.6
Approach		181	1.7	181	1.7	0.089	3.4	LOS A	0.4	2.5	0.23	0.47	26.6
All Vehicles		836	0.7	836	0.7	0.230	3.8	NA	0.4	2.5	0.08	0.64	31.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

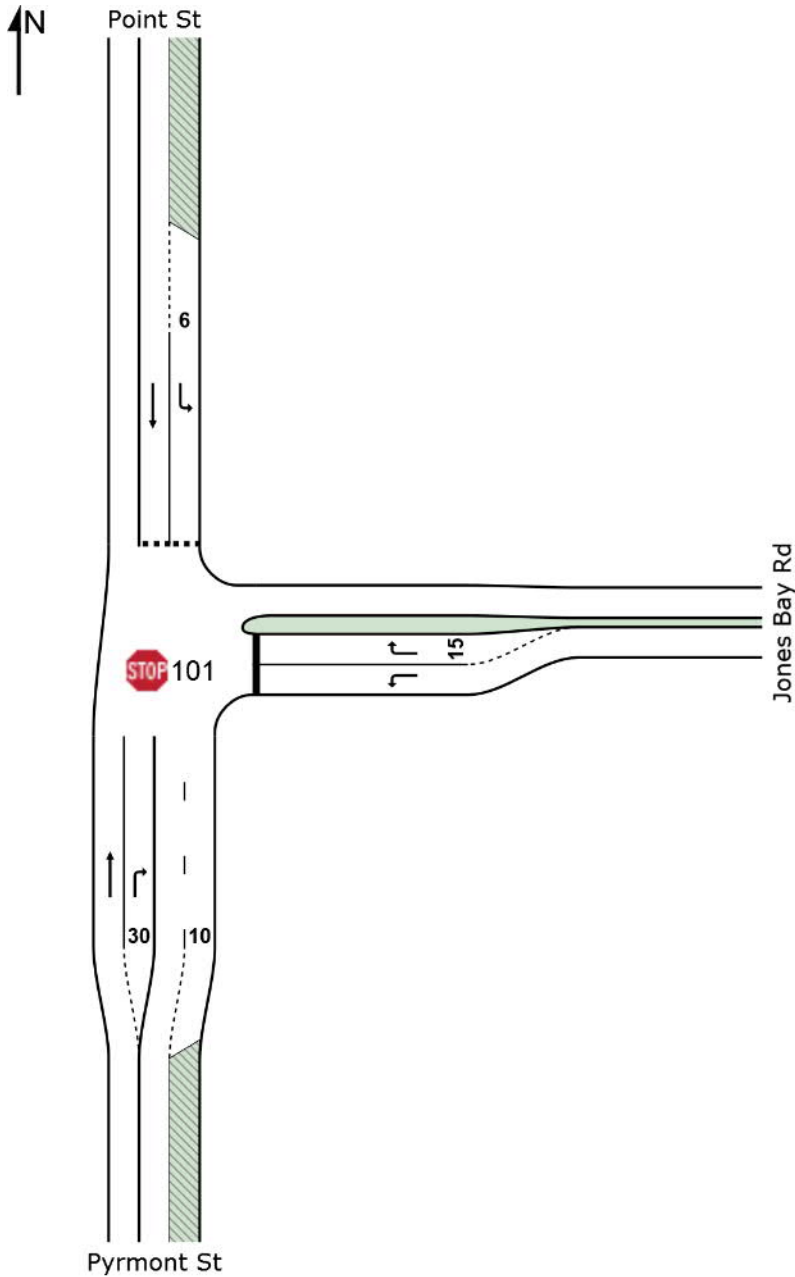
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 Site: 101 [OP Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Jones Bay Rd]

 Network: N101 [OP Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Pyrmont St													
2	T1	53	0.0	53	0.0	0.027	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	218	0.0	218	0.0	0.117	4.6	LOS A	0.0	0.0	0.00	0.53	36.7
Approach		271	0.0	271	0.0	0.117	3.7	NA	0.0	0.0	0.00	0.43	39.1
East: Jones Bay Rd													
4	L2	335	0.3	335	0.3	0.233	4.9	LOS A	0.0	0.0	0.00	1.00	17.1
6	R2	34	0.0	34	0.0	0.042	6.4	LOS A	0.1	1.0	0.37	0.88	21.4
Approach		369	0.3	369	0.3	0.233	5.1	LOS A	0.1	1.0	0.03	0.99	17.8
North: Point St													
7	L2	49	0.0	49	0.0	0.036	4.3	LOS A	0.2	1.1	0.30	0.51	24.2
8	T1	45	0.0	45	0.0	0.036	3.3	LOS A	0.1	1.0	0.29	0.47	27.1
Approach		94	0.0	94	0.0	0.036	3.8	LOS A	0.2	1.1	0.30	0.49	25.5
All Vehicles		734	0.1	734	0.1	0.233	4.4	NA	0.2	1.1	0.06	0.72	30.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

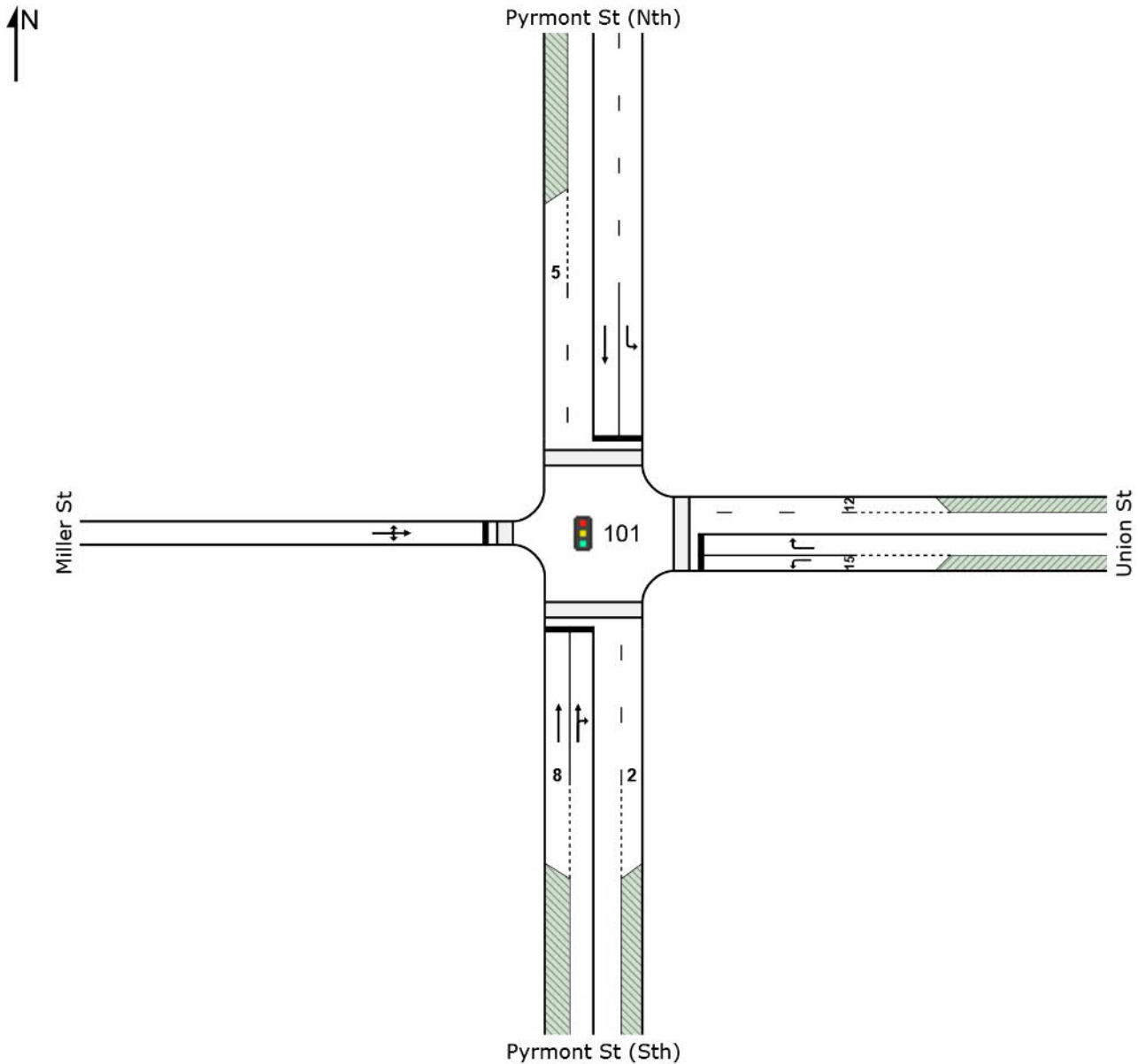
Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 **Site: 101 [AM Pyrmont St/Union St]**

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Union St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St (Sth)													
2	T1	247	2.8	247	2.8	0.356	19.5	LOS B	6.5	46.6	0.64	0.55	14.5
3	R2	29	3.4	29	3.4	0.356	25.3	LOS B	6.5	46.6	0.66	0.58	13.9
Approach		276	2.9	276	2.9	0.356	20.1	LOS B	6.5	46.6	0.64	0.55	14.4
East: Union St													
4	L2	38	7.9	38	7.9	0.189	48.7	LOS D	1.8	13.6	0.98	0.74	5.3
6	R2	16	6.3	16	6.3	0.055	42.4	LOS C	0.7	5.2	0.93	0.70	5.9
Approach		54	7.4	54	7.4	0.189	46.8	LOS D	1.8	13.6	0.97	0.73	5.5
North: Pyrmont St (Nth)													
7	L2	42	7.1	42	7.1	0.037	10.1	LOS A	0.7	5.2	0.36	0.61	16.0
8	T1	294	3.4	294	3.4	0.342	19.1	LOS B	9.2	66.6	0.69	0.59	9.7
Approach		336	3.9	336	3.9	0.342	18.0	LOS B	9.2	66.6	0.65	0.60	10.2
West: Miller St													
10	L2	9	0.0	9	0.0	0.130	40.8	LOS C	1.7	12.5	0.87	0.70	4.0
11	T1	14	0.0	14	0.0	0.130	37.6	LOS C	1.7	12.5	0.87	0.70	4.0
12	R2	19	5.3	19	5.3	0.130	40.7	LOS C	1.7	12.5	0.87	0.70	4.0
Approach		42	2.4	42	2.4	0.130	39.7	LOS C	1.7	12.5	0.87	0.70	4.0
All Vehicles		708	3.7	708	3.7	0.356	22.3	LOS B	9.2	66.6	0.69	0.59	10.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate	
		ped/h	sec		Pedestrian	m		per ped	
P1	South Full Crossing	196	43.6	LOS E	0.5	0.5	0.94	0.94	
P2	East Full Crossing	42	43.3	LOS E	0.1	0.1	0.93	0.93	
P3	North Full Crossing	937	45.0	LOS E	2.6	2.6	0.97	0.97	
P4	West Full Crossing	65	43.4	LOS E	0.2	0.2	0.93	0.93	
All Pedestrians		1240	44.6	LOS E			0.96	0.96	

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

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

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

Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:21:59

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

PHASING SUMMARY

 Site: 101 [AM Pyrmont St/Union St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

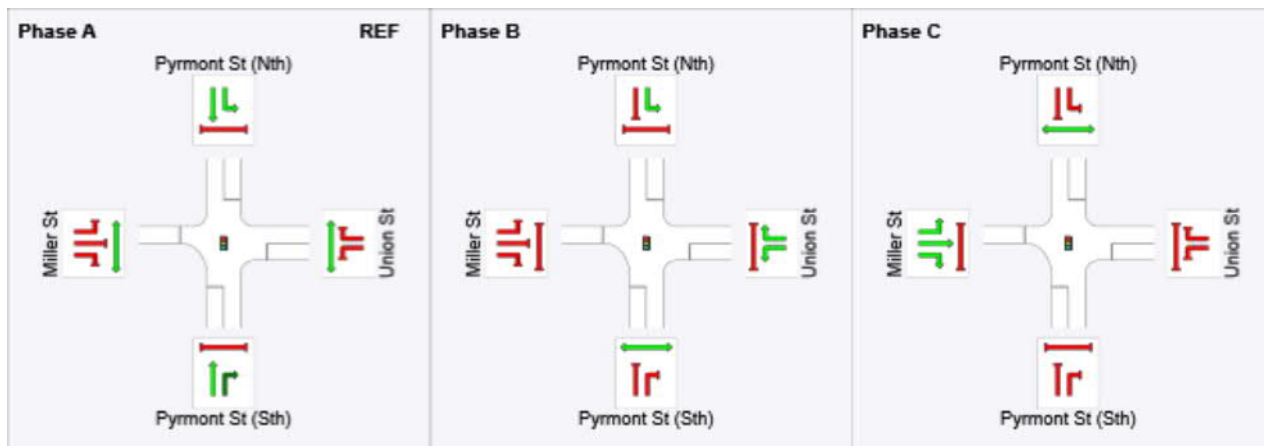
Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	51	74
Green Time (sec)	45	17	20
Phase Time (sec)	51	23	26
Phase Split	51 %	23 %	26 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:21:59

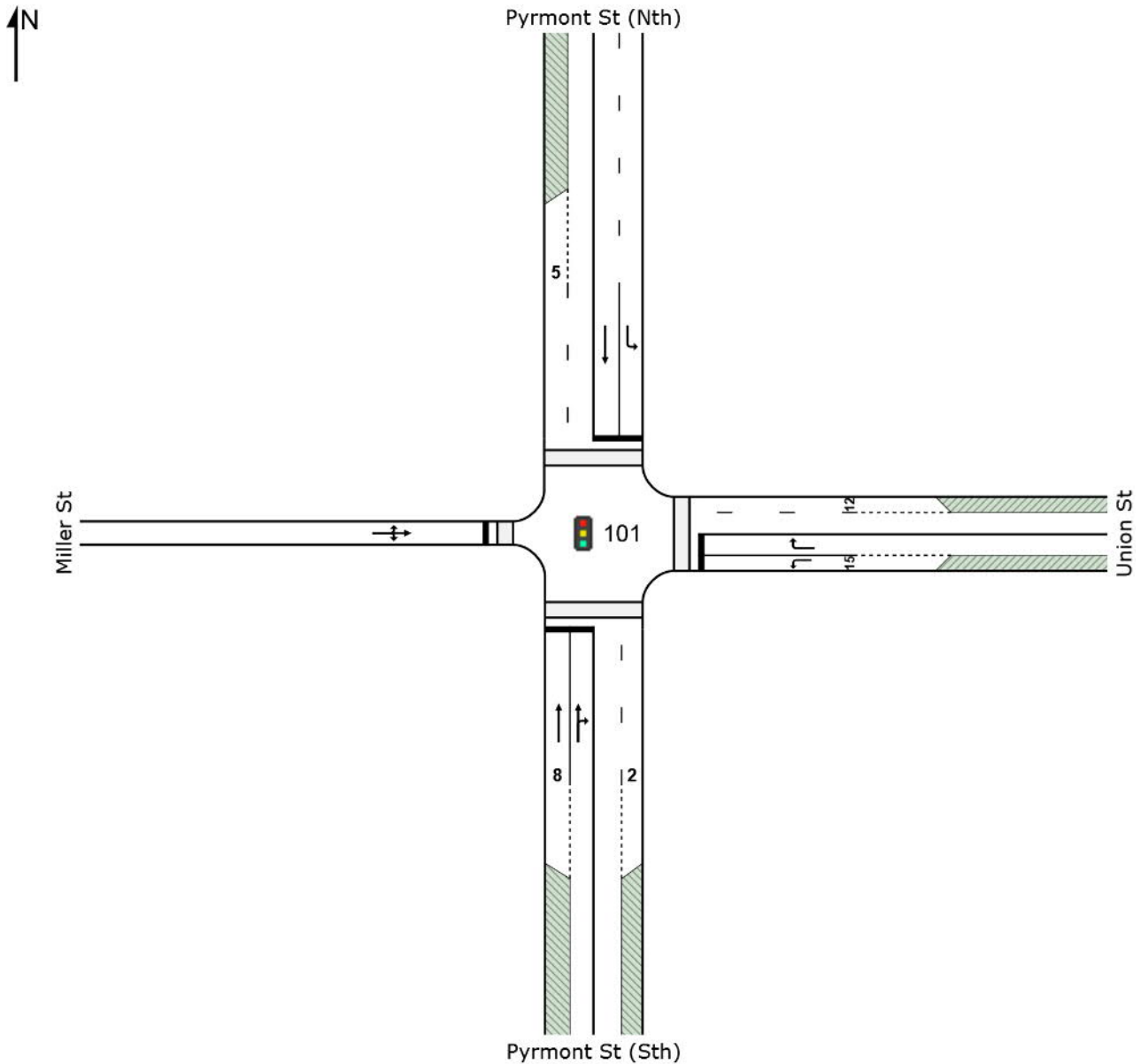
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [PM Pyrmont St/Union St]**

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Union St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St (Sth)													
2	T1	214	0.0	214	0.0	0.649	21.7	LOS C	5.5	38.2	0.56	0.47	13.4
3	R2	41	0.0	41	0.0	0.649	44.0	LOS D	5.5	38.2	0.88	0.74	8.3
Approach		255	0.0	255	0.0	0.649	25.3	LOS C	5.5	38.2	0.61	0.51	12.2
East: Union St													
4	L2	99	0.0	99	0.0	0.770	56.4	LOS E	5.3	37.4	1.00	0.90	4.7
6	R2	35	0.0	35	0.0	0.114	47.4	LOS D	1.6	11.3	0.97	0.74	5.3
Approach		134	0.0	134	0.0	0.770	54.1	LOS D	5.3	37.4	0.99	0.86	4.8
North: Pyrmont St (Nth)													
7	L2	74	0.0	74	0.0	0.058	8.8	LOS A	1.1	7.7	0.33	0.61	17.5
8	T1	467	1.1	467	1.1	0.828	31.4	LOS C	11.6	81.6	0.92	0.94	6.4
Approach		541	0.9	541	0.9	0.828	28.3	LOS C	11.6	81.6	0.84	0.89	7.0
West: Miller St													
10	L2	6	0.0	6	0.0	0.165	45.7	LOS D	1.3	9.1	0.91	0.71	3.5
11	T1	5	0.0	5	0.0	0.165	42.5	LOS D	1.3	9.1	0.91	0.71	3.5
12	R2	18	0.0	18	0.0	0.165	45.7	LOS D	1.3	9.1	0.91	0.71	3.5
Approach		29	0.0	29	0.0	0.165	45.1	LOS D	1.3	9.1	0.91	0.71	3.5
All Vehicles		959	0.5	959	0.5	0.828	31.6	LOS C	11.6	81.6	0.80	0.78	7.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	85	43.4	LOS E	0.2	0.2	0.93	0.93
P2	East Full Crossing	61	43.4	LOS E	0.2	0.2	0.93	0.93
P3	North Full Crossing	986	45.1	LOS E	2.7	2.7	0.97	0.97
P4	West Full Crossing	65	43.4	LOS E	0.2	0.2	0.93	0.93
All Pedestrians		1198	44.8	LOS E			0.96	0.96

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

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

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

Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:44:17

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

PHASING SUMMARY

 Site: 101 [PM Pyrmont St/Union St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

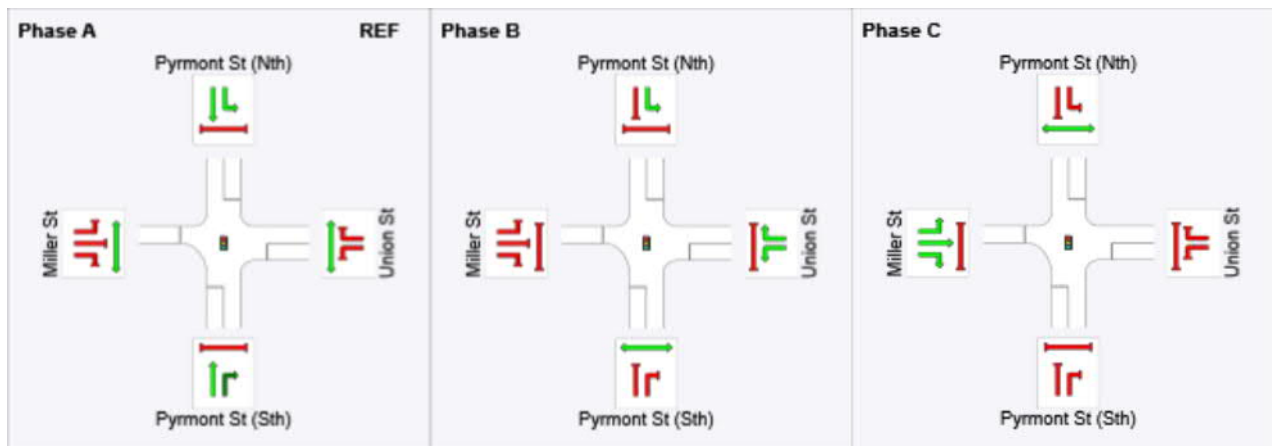
Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	55	78
Green Time (sec)	50	17	16
Phase Time (sec)	56	23	21
Phase Split	56 %	23 %	21 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:44:17

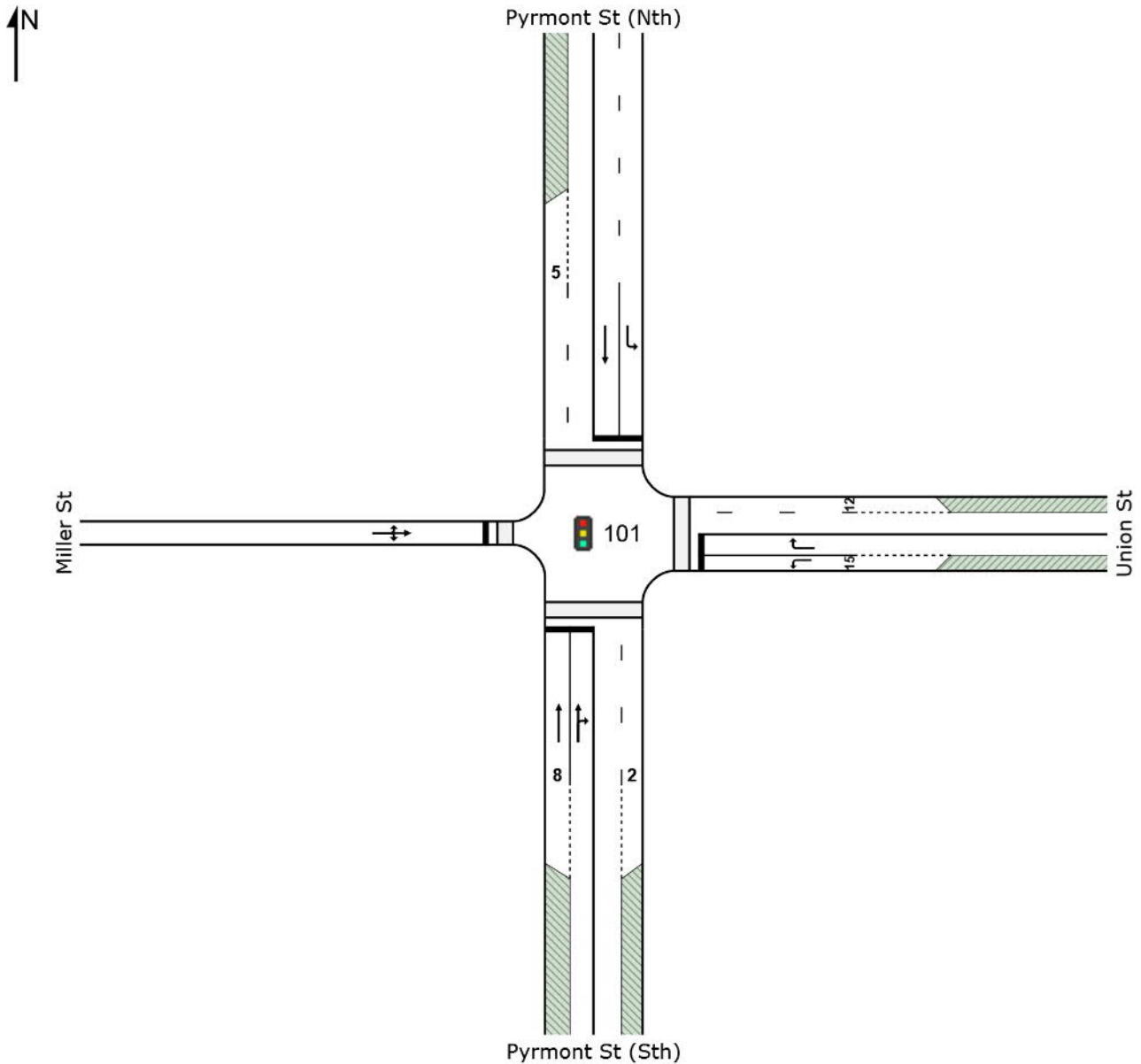
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [OP Pyrmont St/Union St]**

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Union St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
South: Pyrmont St (Sth)													
2	T1	238	0.0	238	0.0	0.490	21.4	LOS C	6.0	42.0	0.55	0.47	13.6
3	R2	28	0.0	28	0.0	0.490	36.7	LOS D	6.0	42.0	0.78	0.66	9.9
Approach		266	0.0	266	0.0	0.490	23.0	LOS C	6.0	42.0	0.58	0.49	13.1
East: Union St													
4	L2	105	0.0	105	0.0	0.739	60.4	LOS E	5.6	39.2	1.00	0.86	4.4
6	R2	21	0.0	21	0.0	0.078	50.6	LOS D	1.0	7.2	1.00	0.72	5.0
Approach		126	0.0	126	0.0	0.739	58.7	LOS E	5.6	39.2	1.00	0.84	4.5
North: Pyrmont St (Nth)													
7	L2	80	0.0	80	0.0	0.062	8.5	LOS A	1.2	8.1	0.32	0.61	17.9
8	T1	493	0.4	493	0.4	0.810	27.1	LOS C	11.6	81.6	0.89	0.89	7.2
Approach		573	0.3	573	0.3	0.810	24.5	LOS C	11.6	81.6	0.81	0.85	7.9
West: Miller St													
10	L2	1	0.0	1	0.0	0.076	42.7	LOS D	0.7	5.0	0.88	0.66	3.9
11	T1	8	12.5	8	12.5	0.076	39.5	LOS D	0.7	5.0	0.88	0.66	3.9
12	R2	7	0.0	7	0.0	0.076	42.6	LOS D	0.7	5.0	0.88	0.66	3.9
Approach		16	6.3	16	6.3	0.076	41.1	LOS D	0.7	5.0	0.88	0.66	3.9
All Vehicles		981	0.3	981	0.3	0.810	28.8	LOS C	11.6	81.6	0.77	0.74	8.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		Pedestrian	m		per ped
P1	South Full Crossing	28	43.3	LOS E	0.1	0.1	0.93	0.93
P2	East Full Crossing	61	43.4	LOS E	0.2	0.2	0.93	0.93
P3	North Full Crossing	343	43.9	LOS E	0.9	0.9	0.94	0.94
P4	West Full Crossing	71	43.4	LOS E	0.2	0.2	0.93	0.93
All Pedestrians		503	43.7	LOS E			0.94	0.94

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.

Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:53:41

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

PHASING SUMMARY

 Site: 101 [OP Pyrmont St/Union St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

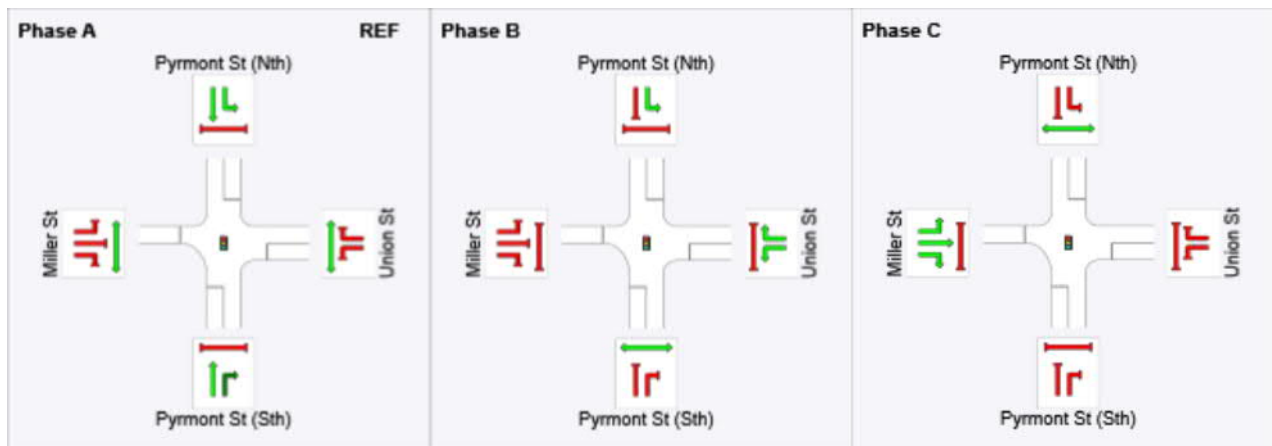
Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	58	79
Green Time (sec)	53	15	16
Phase Time (sec)	59	20	21
Phase Split	59 %	20 %	21 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:53:41

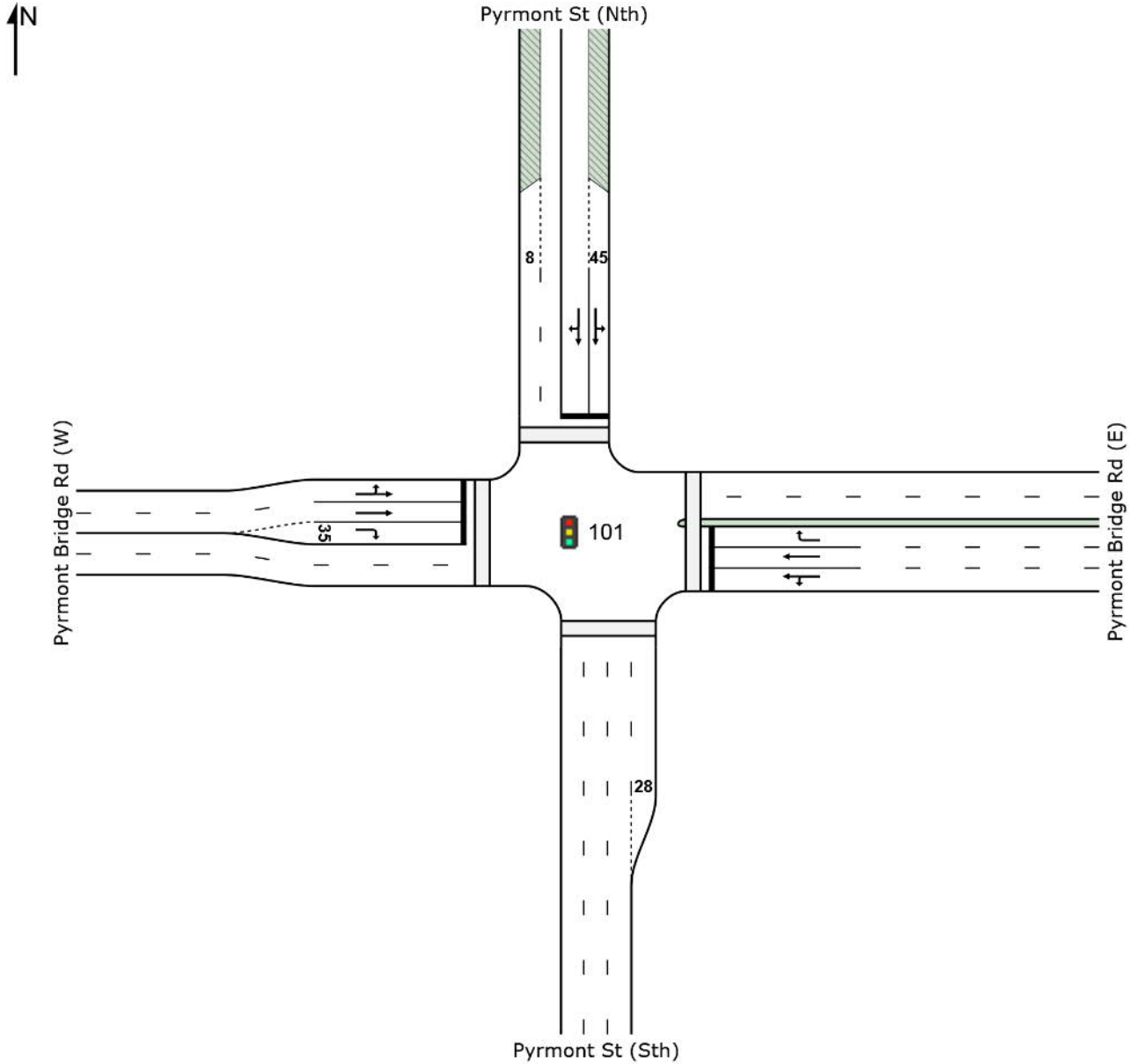
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 Site: 101 [AM Pyrmont St/Pyrmont Bridge Rd]

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Pyrmont Bridge Rd]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Rd (E)													
4	L2	27	7.4	27	7.4	0.240	36.9	LOS C	3.7	27.4	0.79	0.65	6.5
5	T1	190	7.4	190	7.4	0.240	32.1	LOS C	4.0	30.0	0.76	0.62	10.2
6	R2	43	2.3	43	2.3	0.106	32.5	LOS C	1.4	10.0	0.69	0.68	4.1
Approach		260	6.5	260	6.5	0.240	32.7	LOS C	4.0	30.0	0.75	0.63	8.9
North: Pyrmont St (Nth)													
7	L2	5	20.0	5	20.0	0.190	46.2	LOS D	3.7	26.4	1.00	0.78	8.5
8	T1	227	0.9	227	0.9	0.766	47.8	LOS D	13.0	94.4	1.00	0.85	9.1
9	R2	104	9.6	104	9.6	0.766	55.5	LOS D	13.0	94.4	1.00	0.88	9.8
Approach		336	3.9	336	3.9	0.766	50.2	LOS D	13.0	94.4	1.00	0.86	9.4
West: Pyrmont Bridge Rd (W)													
10	L2	240	3.8	240	3.8	0.371	8.4	LOS A	4.0	29.1	0.29	0.48	25.1
11	T1	607	4.6	607	4.6	0.371	3.8	LOS A	4.2	30.4	0.23	0.27	29.6
12	R2	409	2.7	409	2.7	0.983	54.7	LOS D	17.5	125.2	1.00	1.05	6.6
Approach		1256	3.8	1256	3.8	0.983	21.2	LOS B	17.5	125.2	0.49	0.56	12.4
All Vehicles		1852	4.2	1852	4.2	0.983	28.1	LOS B	17.5	125.2	0.62	0.62	10.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	174	43.6	LOS E	0.5	0.5	0.94	0.94	
P2	East Full Crossing	51	43.3	LOS E	0.1	0.1	0.93	0.93	
P3	North Full Crossing	413	44.0	LOS E	1.1	1.1	0.95	0.95	
P4	West Full Crossing	83	43.4	LOS E	0.2	0.2	0.93	0.93	
All Pedestrians		720	43.8	LOS E			0.94	0.94	

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.

PHASING SUMMARY

 Site: 101 [AM Pyrmont St/Pyrmont Bridge Rd]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

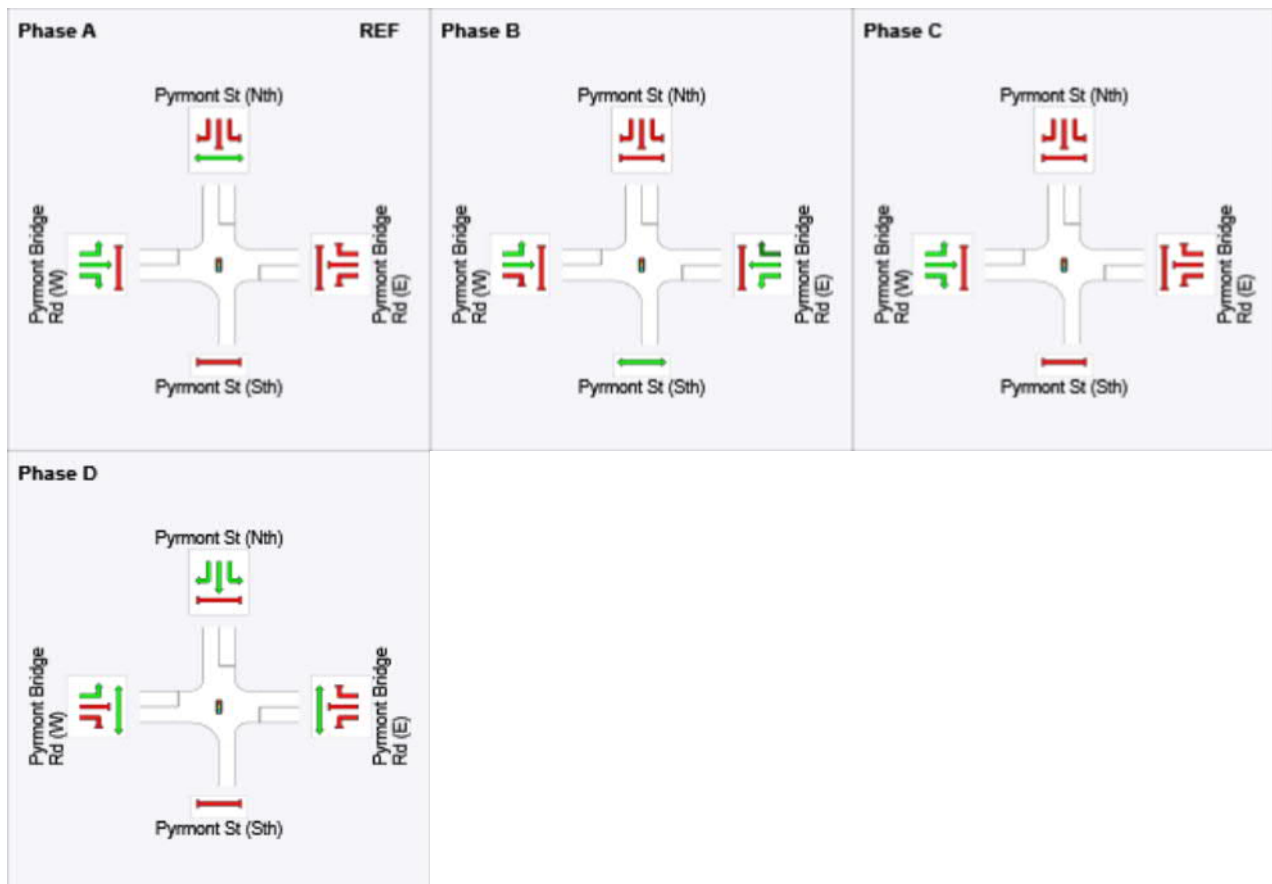
Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	21	53	71
Green Time (sec)	15	27	12	23
Phase Time (sec)	20	33	18	29
Phase Split	20 %	33 %	18 %	29 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

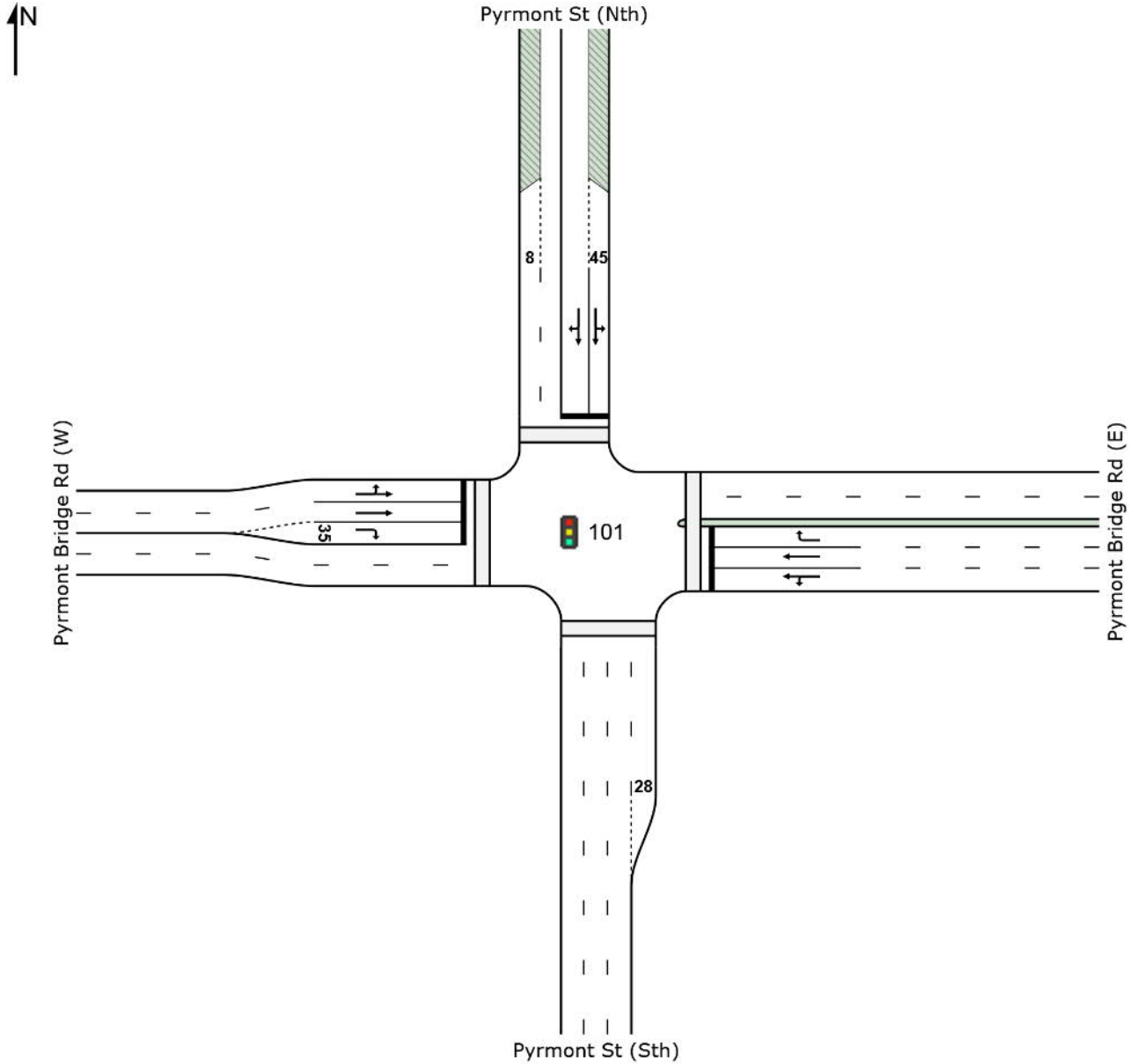
	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SITE LAYOUT

 Site: 101 [PM Pyrmont St/Pyrmont Bridge Rd]

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec	veh	m				
East: Pyrmont Bridge Rd (E)													
4	L2	54	5.6	54	5.6	0.554	47.5	LOS D	5.7	40.8	0.95	0.77	5.2
5	T1	285	1.4	285	1.4	0.554	41.7	LOS D	5.8	40.8	0.93	0.76	8.3
6	R2	81	0.0	81	0.0	0.269	40.9	LOS D	3.2	22.7	0.84	0.74	3.3
Approach		420	1.7	420	1.7	0.554	42.3	LOS D	5.8	40.8	0.91	0.76	7.0
North: Pyrmont St (Nth)													
7	L2	7	0.0	7	0.0	0.198	30.6	LOS C	5.5	38.6	0.86	0.71	12.2
8	T1	355	1.1	355	1.1	0.800	33.6	LOS C	21.2	149.4	0.95	0.84	11.9
9	R2	217	0.5	217	0.5	0.800	42.6	LOS D	21.2	149.4	1.00	0.91	11.8
Approach		579	0.9	579	0.9	0.800	36.9	LOS D	21.2	149.4	0.96	0.87	11.9
West: Pyrmont Bridge Rd (W)													
10	L2	181	0.0	181	0.0	0.373	15.4	LOS B	6.4	45.4	0.51	0.58	16.4
11	T1	506	2.0	506	2.0	0.373	11.1	LOS B	7.2	51.5	0.46	0.44	17.8
12	R2	301	1.0	301	1.0	0.754	31.7	LOS C	10.2	71.8	0.99	0.89	10.2
Approach		988	1.3	988	1.3	0.754	18.2	LOS B	10.2	71.8	0.63	0.60	13.8
All Vehicles		1987	1.3	1987	1.3	0.800	28.7	LOS C	21.2	149.4	0.79	0.71	11.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	213	43.6	LOS E	0.6	0.6	0.94	0.94	
P2	East Full Crossing	149	43.5	LOS E	0.4	0.4	0.94	0.94	
P3	North Full Crossing	448	44.1	LOS E	1.2	1.2	0.95	0.95	
P4	West Full Crossing	81	43.4	LOS E	0.2	0.2	0.93	0.93	
All Pedestrians		892	43.8	LOS E			0.94	0.94	

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.

PHASING SUMMARY

 Site: 101 [PM Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

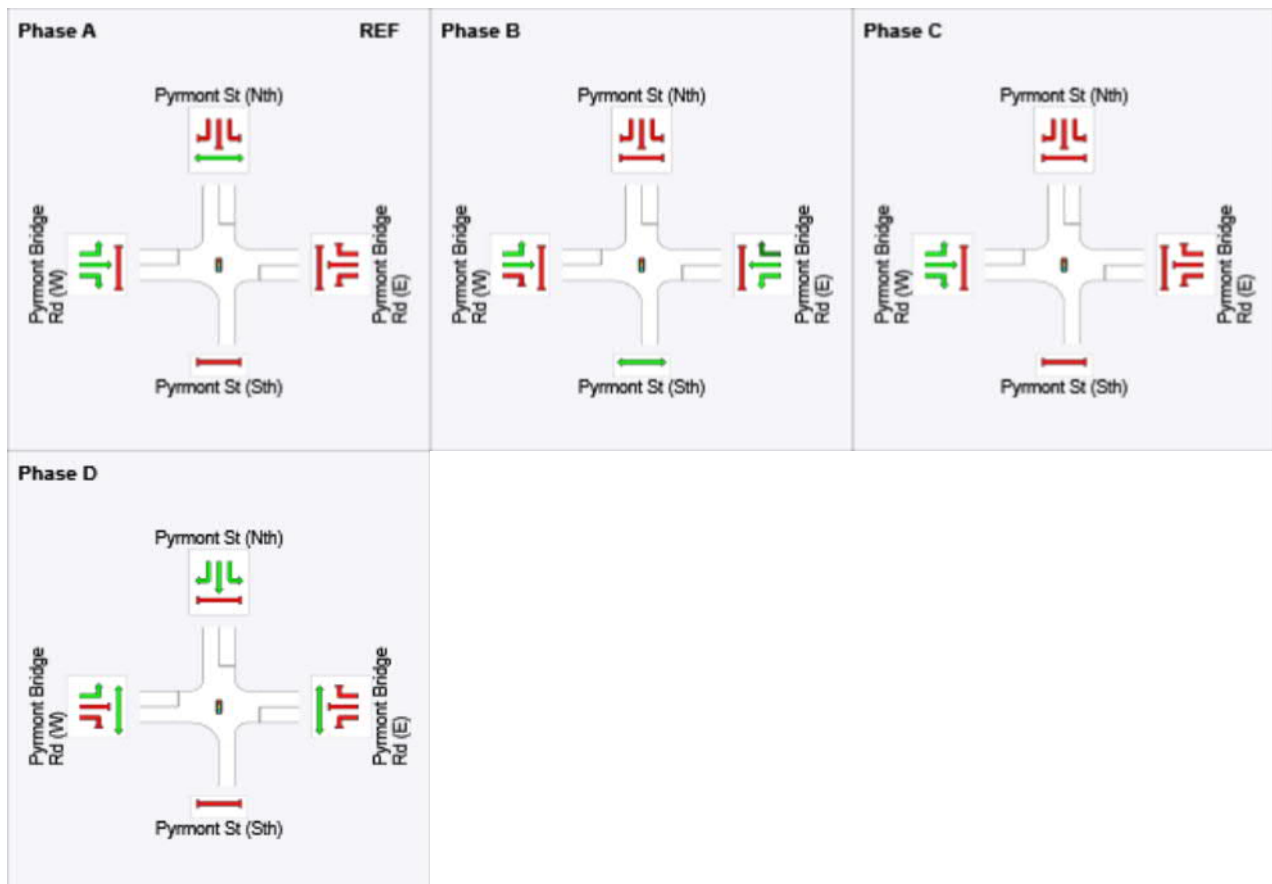
Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	23	48	58
Green Time (sec)	17	19	5	38
Phase Time (sec)	23	24	9	44
Phase Split	23 %	24 %	9 %	44 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

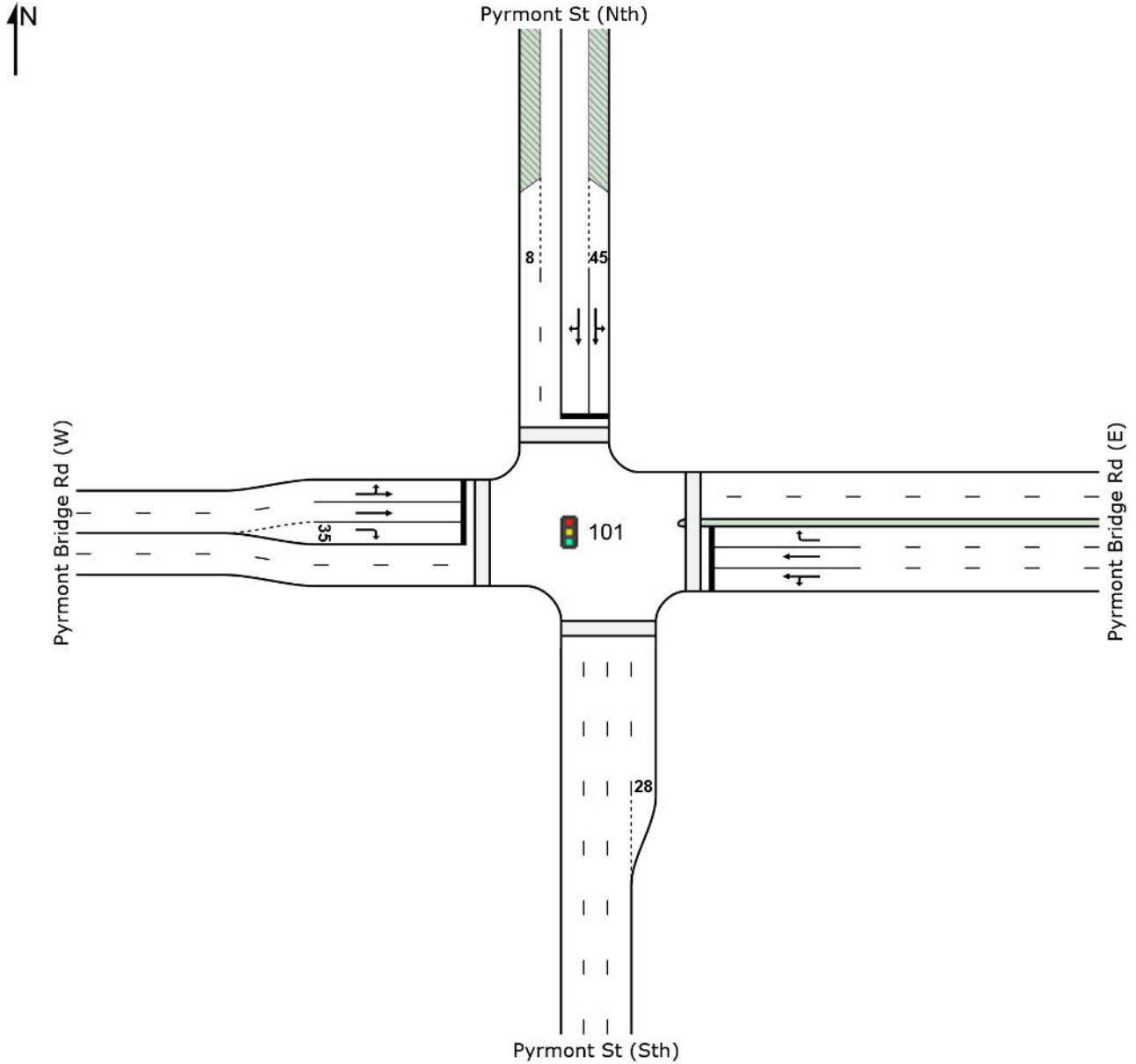
	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SITE LAYOUT

 Site: 101 [OP Pyrmont St/Pyrmont Bridge Rd]

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed Rate km/h			
		veh/h	%	veh/h	%	v/c	sec						
East: Pyrmont Bridge Rd (E)													
4	L2	57	1.8	57	1.8	0.680	44.7	LOS D	5.8	40.8	0.95	0.82	5.5
5	T1	471	0.2	471	0.2	0.680	40.5	LOS D	5.8	40.8	0.94	0.81	8.5
6	R2	65	0.0	65	0.0	0.190	37.5	LOS D	2.4	16.9	0.78	0.72	3.5
Approach		593	0.3	593	0.3	0.680	40.6	LOS D	5.8	40.8	0.93	0.80	7.7
North: Pyrmont St (Nth)													
7	L2	12	0.0	12	0.0	0.188	29.4	LOS C	5.3	37.1	0.84	0.69	12.6
8	T1	299	0.0	299	0.0	0.757	30.0	LOS C	21.1	148.1	0.92	0.80	12.8
9	R2	288	0.7	288	0.7	0.757	38.3	LOS D	21.1	148.1	0.98	0.88	12.6
Approach		599	0.3	599	0.3	0.757	34.0	LOS C	21.1	148.1	0.94	0.84	12.7
West: Pyrmont Bridge Rd (W)													
10	L2	207	0.0	207	0.0	0.403	15.6	LOS B	7.2	50.4	0.52	0.60	16.2
11	T1	523	1.1	523	1.1	0.403	12.3	LOS B	8.3	58.8	0.50	0.47	16.7
12	R2	128	0.8	128	0.8	0.414	26.7	LOS C	3.5	24.7	0.94	0.78	11.6
Approach		858	0.8	858	0.8	0.414	15.2	LOS B	8.3	58.8	0.57	0.55	15.3
All Vehicles		2050	0.5	2050	0.5	0.757	28.0	LOS C	21.1	148.1	0.78	0.71	11.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Prop. Queued	Effective Stop Rate per ped		
P1	South Full Crossing	73	43.4	LOS E	0.2	0.2	0.93	0.93	
P2	East Full Crossing	66	43.4	LOS E	0.2	0.2	0.93	0.93	
P3	North Full Crossing	91	43.4	LOS E	0.2	0.2	0.93	0.93	
P4	West Full Crossing	48	43.3	LOS E	0.1	0.1	0.93	0.93	
All Pedestrians		278	43.4	LOS E			0.93	0.93	

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.

PHASING SUMMARY

 Site: 101 [OP Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

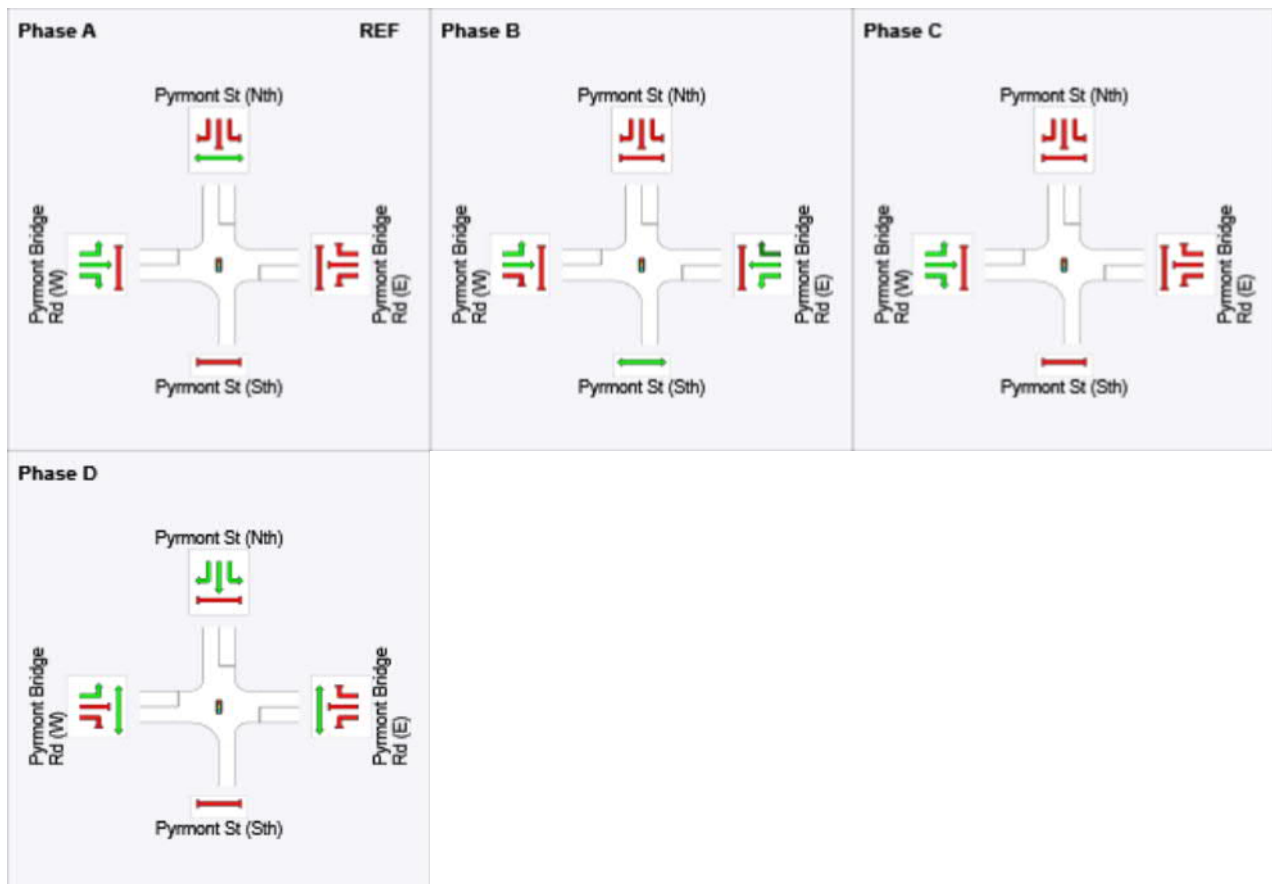
Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	18	45	56
Green Time (sec)	12	22	5	40
Phase Time (sec)	17	28	9	46
Phase Split	17 %	28 %	9 %	46 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

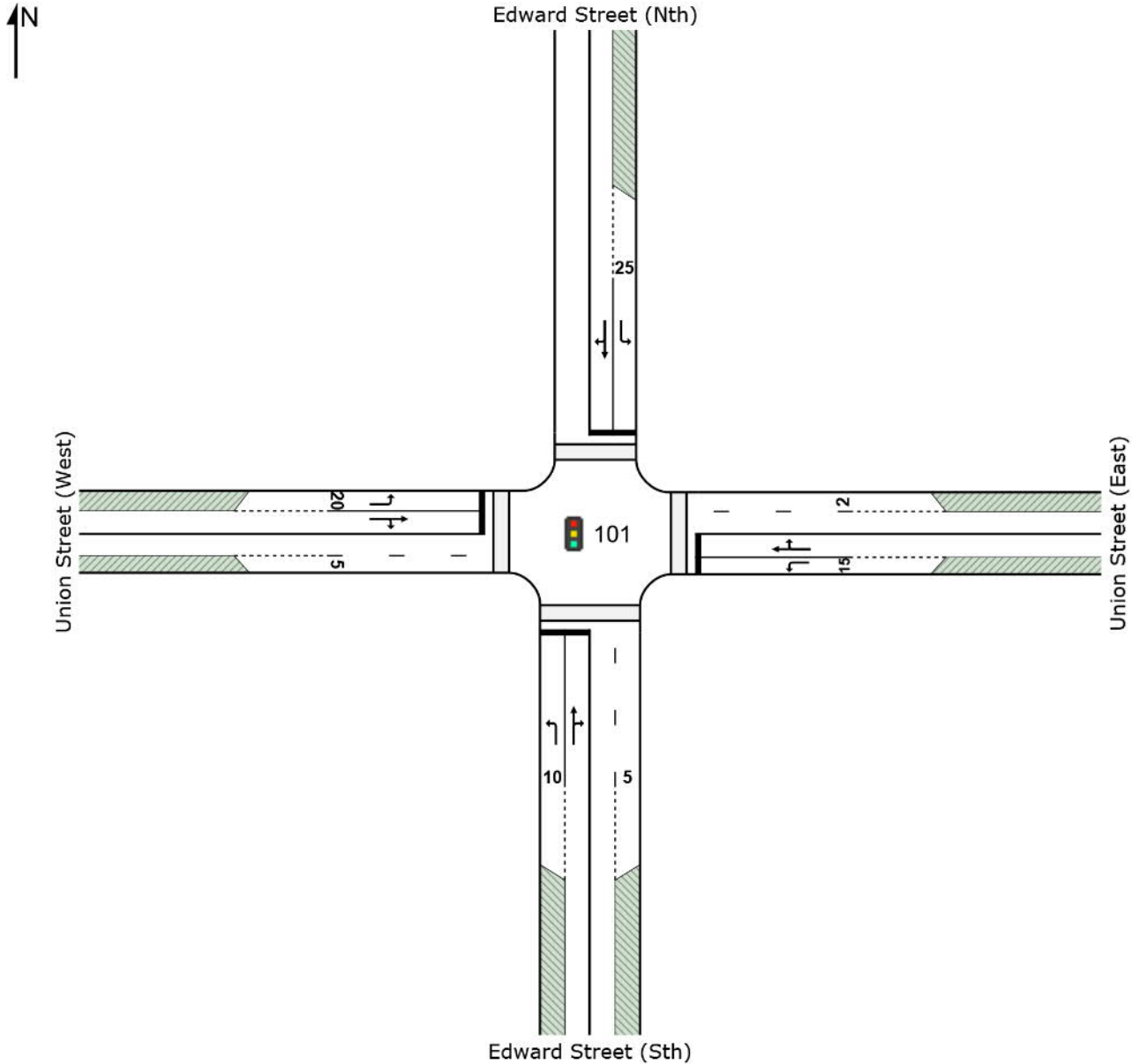
	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SITE LAYOUT

 **Site: 101 [AM Union St/Edward St]**

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [AM Union St/Edward St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Edward Street (Sth)													
1	L2	9	0.0	9	0.0	0.009	15.1	LOS B	0.2	1.1	0.38	0.59	15.1
2	T1	162	0.6	162	0.6	0.165	10.9	LOS A	3.4	23.8	0.44	0.38	26.8
3	R2	9	0.0	9	0.0	0.165	15.5	LOS B	3.4	23.8	0.44	0.38	18.3
Approach		180	0.6	180	0.6	0.165	11.3	LOS A	3.4	23.8	0.43	0.39	26.0
East: Union Street (East)													
4	L2	6	0.0	6	0.0	0.012	31.4	LOS C	0.2	1.4	0.73	0.64	8.6
5	T1	12	16.7	12	16.7	0.075	37.3	LOS C	0.9	6.6	0.86	0.66	7.1
6	R2	9	0.0	9	0.0	0.075	41.8	LOS C	0.9	6.6	0.86	0.66	12.2
Approach		27	7.4	27	7.4	0.075	37.5	LOS C	0.9	6.6	0.83	0.65	9.3
North: Edward Street (Nth)													
7	L2	11	9.1	11	9.1	0.012	16.8	LOS B	0.3	1.9	0.50	0.62	15.6
8	T1	11	0.0	11	0.0	0.064	11.7	LOS A	1.0	7.7	0.50	0.60	16.6
9	R2	34	8.8	34	8.8	0.064	16.3	LOS B	1.0	7.7	0.50	0.60	16.6
Approach		56	7.1	56	7.1	0.064	15.5	LOS B	1.0	7.7	0.50	0.60	16.4
West: Union Street (West)													
10	L2	48	8.3	48	8.3	0.167	43.5	LOS D	2.1	15.7	0.91	0.74	10.8
11	T1	27	0.0	27	0.0	0.075	30.3	LOS C	1.4	9.7	0.85	0.65	7.8
12	R2	8	0.0	8	0.0	0.075	34.8	LOS C	1.4	9.7	0.85	0.65	7.8
Approach		83	4.8	83	4.8	0.167	38.3	LOS C	2.1	15.7	0.89	0.70	9.8
All Vehicles		346	3.2	346	3.2	0.167	20.5	LOS B	3.4	23.8	0.58	0.52	16.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	66	43.4	LOS E	0.2	0.2	0.93	0.93
P2	East Full Crossing	72	43.4	LOS E	0.2	0.2	0.93	0.93
P3	North Full Crossing	1257	45.6	LOS E	3.5	3.5	0.98	0.98
P4	West Full Crossing	53	43.3	LOS E	0.1	0.1	0.93	0.93
All Pedestrians		1447	45.3	LOS E			0.97	0.97

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.

PHASING SUMMARY

 Site: 101 [AM Union St/Edward St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

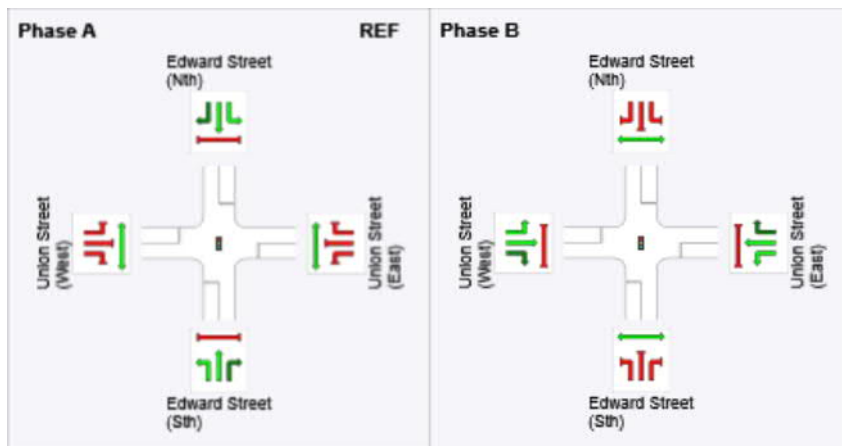
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	62
Green Time (sec)	56	32
Phase Time (sec)	62	38
Phase Split	62 %	38 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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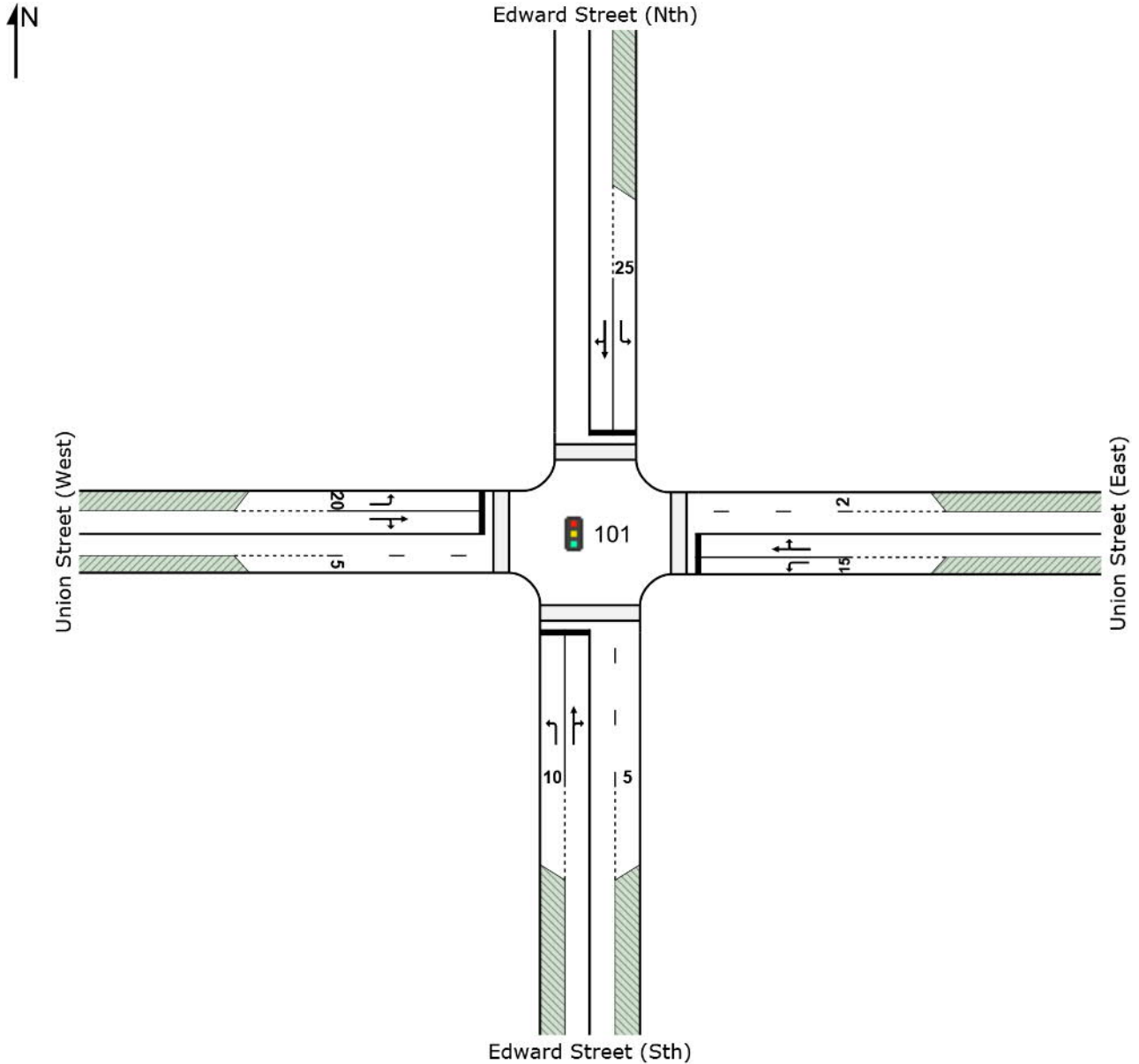
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 Site: 101 [PM Union St/Edward St]

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [PM Union St/Edward St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Edward Street (Sth)													
1	L2	17	0.0	17	0.0	0.026	19.2	LOS B	0.3	2.4	0.44	0.61	12.7
2	T1	133	0.8	133	0.8	0.190	17.0	LOS B	3.1	22.0	0.50	0.41	21.5
3	R2	4	0.0	4	0.0	0.190	21.6	LOS C	3.1	22.0	0.50	0.41	13.6
Approach		154	0.6	154	0.6	0.190	17.3	LOS B	3.1	22.0	0.49	0.44	20.5
East: Union Street (East)													
4	L2	5	0.0	5	0.0	0.006	19.9	LOS B	0.1	0.9	0.56	0.61	12.4
5	T1	14	0.0	14	0.0	0.040	22.8	LOS C	0.7	5.1	0.69	0.57	10.5
6	R2	9	0.0	9	0.0	0.040	27.4	LOS C	0.7	5.1	0.69	0.57	16.9
Approach		28	0.0	28	0.0	0.040	23.8	LOS C	0.7	5.1	0.66	0.58	13.2
North: Edward Street (Nth)													
7	L2	36	2.8	36	2.8	0.057	27.5	LOS C	1.2	8.3	0.69	0.68	10.8
8	T1	40	0.0	40	0.0	0.285	24.8	LOS C	5.1	35.4	0.75	0.72	10.5
9	R2	104	0.0	104	0.0	0.285	29.3	LOS C	5.1	35.4	0.75	0.72	10.5
Approach		180	0.6	180	0.6	0.285	28.0	LOS C	5.1	35.4	0.74	0.71	10.6
West: Union Street (West)													
10	L2	54	0.0	54	0.0	0.089	35.0	LOS C	2.2	15.6	0.89	0.74	12.8
11	T1	56	0.0	56	0.0	0.070	19.2	LOS B	2.1	14.9	0.76	0.61	11.5
12	R2	5	0.0	5	0.0	0.070	23.8	LOS C	2.1	14.9	0.76	0.61	11.5
Approach		115	0.0	115	0.0	0.089	26.8	LOS C	2.2	15.6	0.82	0.67	12.3
All Vehicles		477	0.4	477	0.4	0.285	24.0	LOS C	5.1	35.4	0.68	0.61	14.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	66	43.4	LOS E	0.2	0.2	0.93	0.93
P2	East Full Crossing	129	43.5	LOS E	0.3	0.3	0.94	0.94
P3	North Full Crossing	1652	46.4	LOS E	4.7	4.7	1.00	1.00
P4	West Full Crossing	103	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		1951	46.0	LOS E			0.99	0.99

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.

PHASING SUMMARY

 Site: 101 [PM Union St/Edward St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

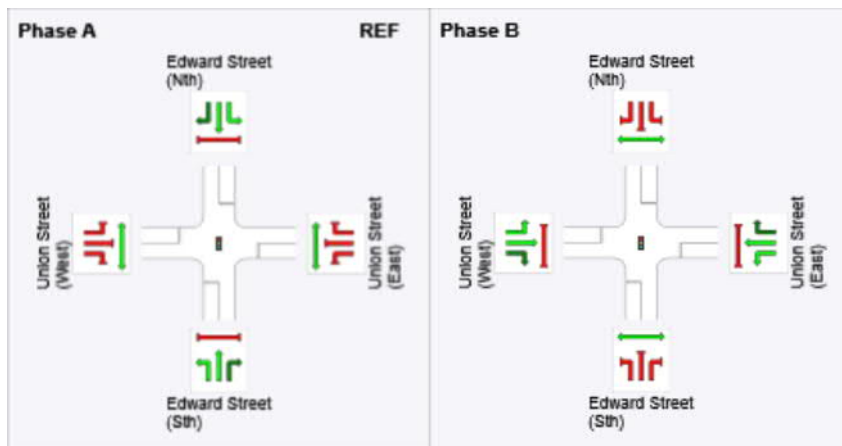
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	45
Green Time (sec)	39	49
Phase Time (sec)	45	55
Phase Split	45 %	55 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:44:17

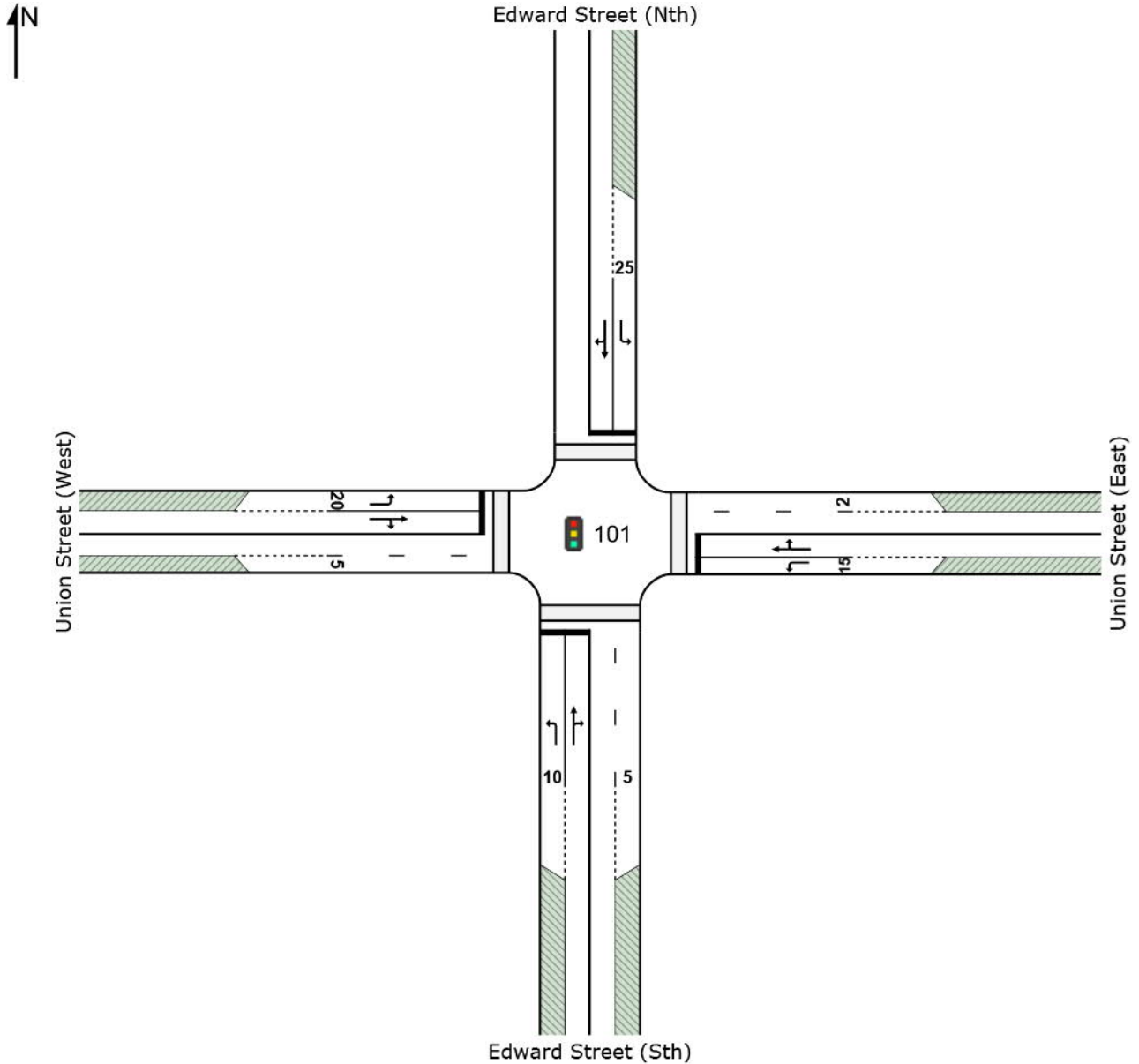
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 Site: 101 [OP Union St/Edward St]

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [OP Union St/Edward St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Edward Street (Sth)													
1	L2	15	0.0	15	0.0	0.018	12.5	LOS B	0.2	1.4	0.29	0.58	17.1
2	T1	79	0.0	79	0.0	0.090	9.0	LOS A	1.2	8.3	0.31	0.27	29.1
3	R2	4	0.0	4	0.0	0.090	13.6	LOS B	1.2	8.3	0.31	0.27	20.5
Approach		98	0.0	98	0.0	0.090	9.7	LOS A	1.2	8.3	0.31	0.32	27.2
East: Union Street (East)													
4	L2	7	0.0	7	0.0	0.010	24.9	LOS C	0.2	1.5	0.64	0.63	10.4
5	T1	12	0.0	12	0.0	0.044	29.0	LOS C	0.7	4.8	0.77	0.60	8.8
6	R2	7	0.0	7	0.0	0.044	33.5	LOS C	0.7	4.8	0.77	0.60	14.6
Approach		26	0.0	26	0.0	0.044	29.1	LOS C	0.7	4.8	0.73	0.61	11.0
North: Edward Street (Nth)													
7	L2	28	3.6	28	3.6	0.034	20.2	LOS C	0.7	5.3	0.57	0.65	13.7
8	T1	37	0.0	37	0.0	0.207	16.7	LOS B	4.0	28.0	0.62	0.67	13.6
9	R2	103	0.0	103	0.0	0.207	21.3	LOS C	4.0	28.0	0.62	0.67	13.6
Approach		168	0.6	168	0.6	0.207	20.1	LOS C	4.0	28.0	0.61	0.67	13.6
West: Union Street (West)													
10	L2	31	3.2	31	3.2	0.074	37.2	LOS D	1.3	9.3	0.89	0.72	12.2
11	T1	71	0.0	71	0.0	0.128	26.7	LOS C	3.2	22.5	0.85	0.68	8.8
12	R2	11	0.0	11	0.0	0.128	31.2	LOS C	3.2	22.5	0.85	0.68	8.8
Approach		113	0.9	113	0.9	0.128	30.0	LOS C	3.2	22.5	0.86	0.69	10.0
All Vehicles		405	0.5	405	0.5	0.207	20.9	LOS C	4.0	28.0	0.62	0.58	14.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	14	43.3	LOS E	0.0	0.0	0.93	0.93
P2	East Full Crossing	54	43.3	LOS E	0.1	0.1	0.93	0.93
P3	North Full Crossing	740	44.6	LOS E	2.0	2.0	0.96	0.96
P4	West Full Crossing	52	43.3	LOS E	0.1	0.1	0.93	0.93
All Pedestrians		859	44.4	LOS E			0.96	0.96

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

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

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

PHASING SUMMARY

 Site: 101 [OP Union St/Edward St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

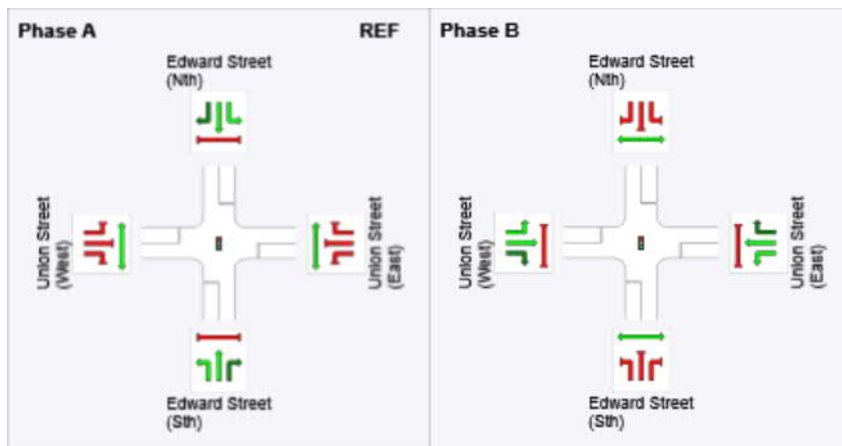
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	55
Green Time (sec)	49	39
Phase Time (sec)	55	45
Phase Split	55 %	45 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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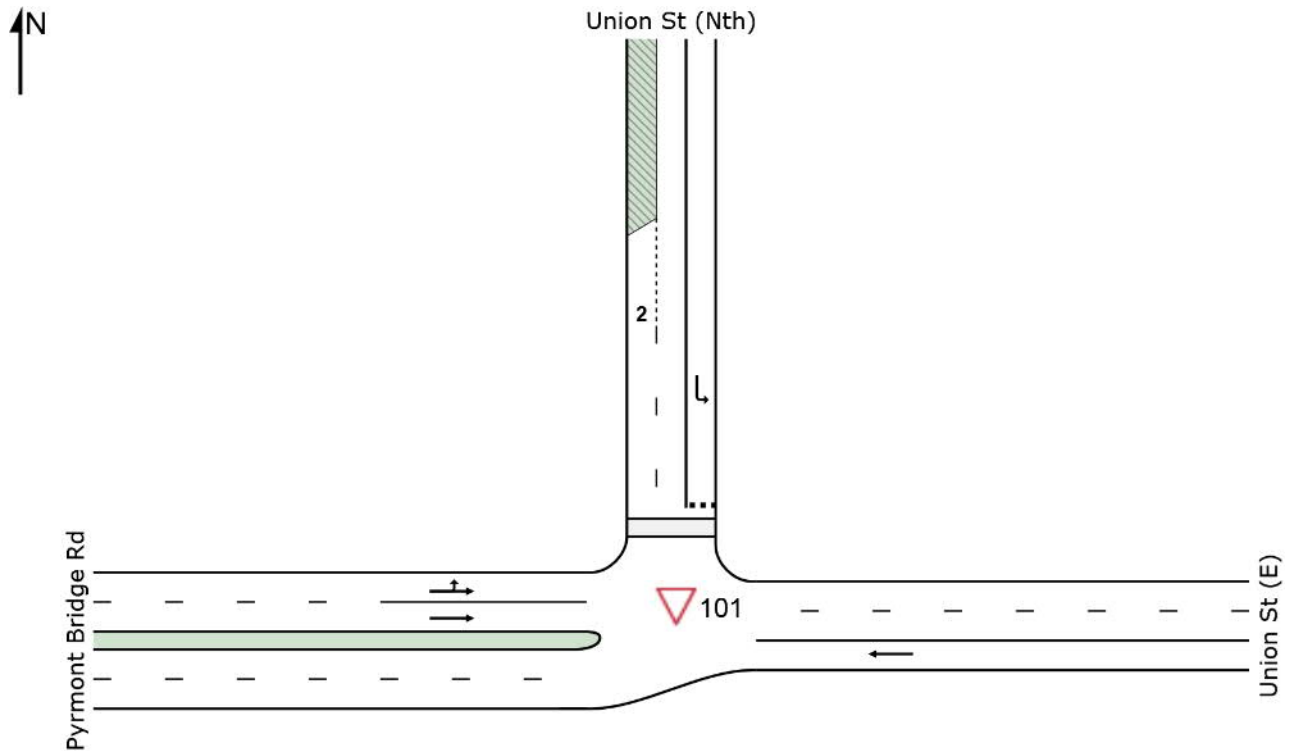
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

▽ Site: 101 [AM Pyrmont Bridge Rd/Union St]

No Project
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [AM Pyrmont Bridge Rd/Union St]

Network: 1 [AM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
East: Union St (E)													
5	T1	207	8.2	207	8.2	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		207	8.2	207	8.2	0.112	0.0	NA	0.0	0.0	0.00	0.00	50.0
North: Union St (Nth)													
7	L2	33	3.0	33	3.0	0.078	8.7	LOS A	0.2	1.1	0.57	0.74	21.4
Approach		33	3.0	33	3.0	0.078	8.7	LOS A	0.2	1.1	0.57	0.74	21.4
West: Pyrmont Bridge Rd													
10	L2	24	4.2	24	4.2	0.131	4.8	LOS A	0.0	0.0	0.00	0.12	47.0
11	T1	374	7.8	374	7.8	0.131	0.1	LOS A	0.0	0.0	0.00	0.04	48.9
Approach		398	7.5	398	7.5	0.131	0.3	NA	0.0	0.0	0.00	0.05	48.8
All Vehicles		638	7.5	638	7.5	0.131	0.7	NA	0.2	1.1	0.03	0.07	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

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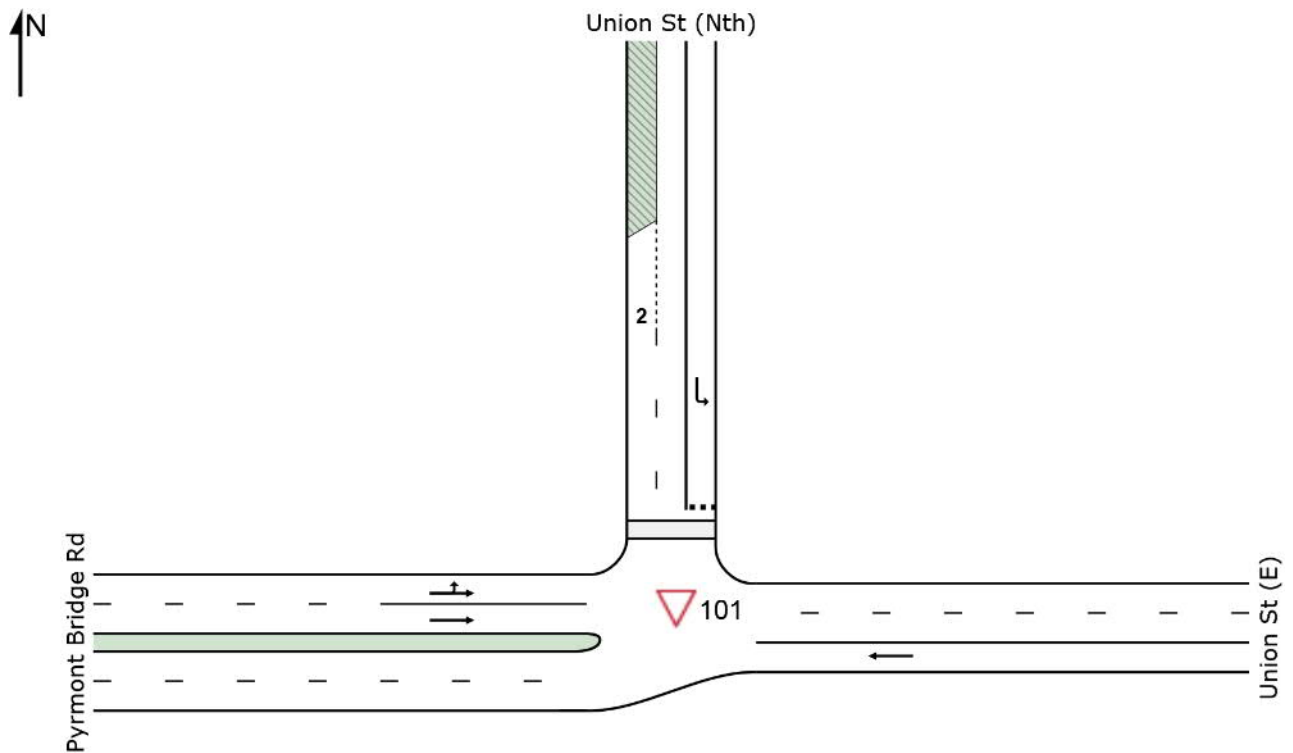
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

▽ Site: 101 [PM Pyrmont Bridge Rd/Union St]

No Project
Giveaway / Yield (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont Bridge Rd/Union St]

 Network: N101 [PM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Union St (E)													
5	T1	326	0.9	326	0.9	0.168	0.0	LOS A	6.5	45.7	0.00	0.00	50.0
Approach		326	0.9	326	0.9	0.168	0.0	NA	6.5	45.7	0.00	0.00	50.0
North: Union St (Nth)													
7	L2	80	0.0	80	0.0	0.106	8.5	LOS A	0.4	2.6	0.56	0.75	21.7
Approach		80	0.0	80	0.0	0.106	8.5	LOS A	0.4	2.6	0.56	0.75	21.7
West: Pyrmont Bridge Rd													
10	L2	23	0.0	23	0.0	0.098	4.7	LOS A	0.0	0.0	0.00	0.09	47.6
11	T1	353	2.5	353	2.5	0.098	0.1	LOS A	0.0	0.0	0.00	0.04	48.9
Approach		376	2.4	376	2.4	0.098	0.3	NA	0.0	0.0	0.00	0.05	48.8
All Vehicles		782	1.5	782	1.5	0.168	1.0	NA	6.5	45.7	0.06	0.10	43.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

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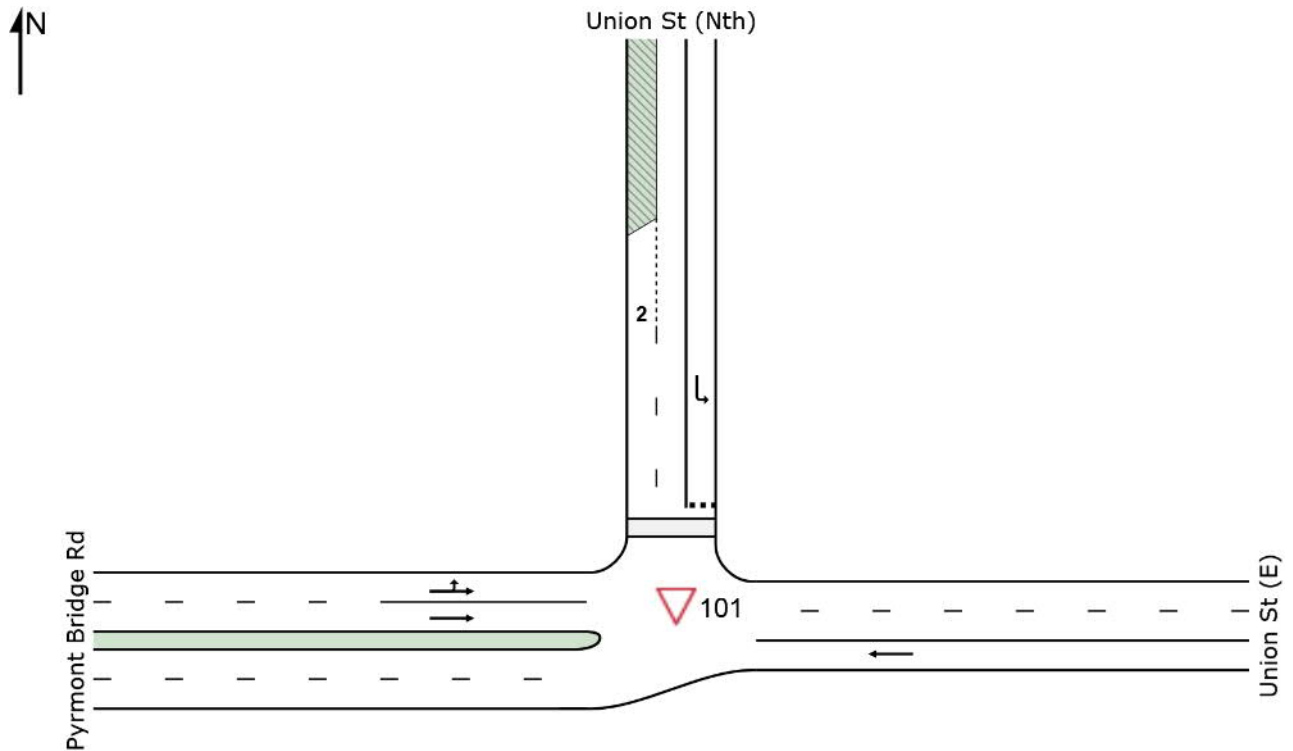
Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:44:17

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

▽ Site: 101 [OP Pyrmont Bridge Rd/Union St]

No Project
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [OP Pyrmont Bridge Rd/Union St]

Network: N101 [OP Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
East: Union St (E)													
5	T1	508	0.4	508	0.4	0.261	0.0	LOS A	11.1	78.1	0.00	0.00	50.0
Approach		508	0.4	508	0.4	0.261	0.0	NA	11.1	78.1	0.00	0.00	50.0
North: Union St (Nth)													
7	L2	84	0.0	84	0.0	0.086	5.9	LOS A	0.3	1.9	0.31	0.57	26.3
Approach		84	0.0	84	0.0	0.086	5.9	LOS A	0.3	1.9	0.31	0.57	26.3
West: Pyrmont Bridge Rd													
10	L2	24	0.0	24	0.0	0.162	4.7	LOS A	0.0	0.0	0.00	0.07	48.2
11	T1	448	1.8	448	1.8	0.162	0.1	LOS A	0.0	0.0	0.00	0.04	49.0
Approach		472	1.7	472	1.7	0.162	0.3	NA	0.0	0.0	0.00	0.04	49.0
All Vehicles		1064	0.9	1064	0.9	0.261	0.6	NA	11.1	78.1	0.02	0.06	46.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:53:41

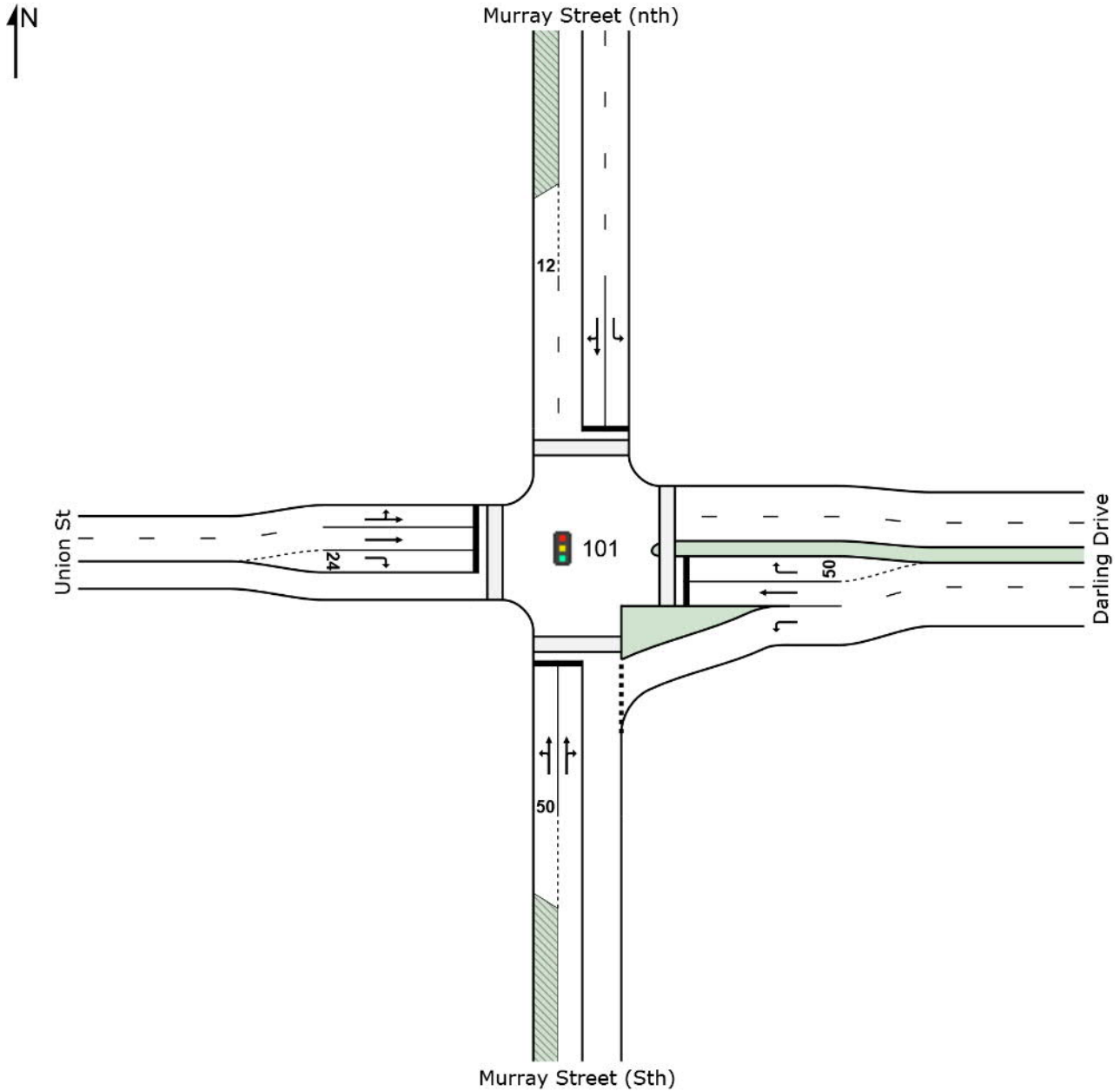
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [AM Union St/Murray St/Darling Drive]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Union St/Murray St/Darling Drive]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Murray Street (Sth)													
1	L2	36	5.6	36	5.6	0.084	21.2	LOS B	0.8	5.7	0.81	0.70	16.6
2	T1	90	2.2	90	2.2	0.347	38.6	LOS C	5.2	38.6	0.91	0.74	10.8
3	R2	30	23.3	30	23.3	0.347	43.3	LOS D	5.2	38.6	0.91	0.74	26.9
Approach		156	7.1	156	7.1	0.347	35.5	LOS C	5.2	38.6	0.89	0.73	16.7
East: Darling Drive													
4	L2	136	5.9	136	5.9	0.094	5.6	LOS A	0.9	6.4	0.21	0.56	44.4
5	T1	144	11.1	144	11.1	0.497	42.5	LOS D	6.6	50.7	0.96	0.77	23.3
6	R2	205	2.0	205	2.0	1.017	87.0	LOS F	13.9	98.9	1.00	1.13	14.9
Approach		485	5.8	485	5.8	1.017	51.0	LOS D	13.9	98.9	0.77	0.86	21.9
North: Murray Street (nth)													
7	L2	37	8.1	37	8.1	0.052	21.3	LOS B	0.8	6.2	0.49	0.64	33.7
8	T1	71	2.8	71	2.8	0.184	27.5	LOS B	3.3	23.1	0.68	0.60	20.1
9	R2	32	0.0	32	0.0	0.184	32.1	LOS C	3.3	23.1	0.68	0.60	13.0
Approach		140	3.6	140	3.6	0.184	26.9	LOS B	3.3	23.1	0.63	0.61	23.6
West: Union St													
10	L2	165	4.8	165	4.8	0.373	29.1	LOS C	7.0	51.5	1.00	0.82	5.7
11	T1	153	11.8	153	11.8	0.373	35.4	LOS C	7.0	51.5	0.93	0.74	26.1
12	R2	85	3.5	85	3.5	0.436	50.1	LOS D	4.1	29.3	0.98	0.77	10.1
Approach		403	7.2	403	7.2	0.436	35.9	LOS C	7.0	51.5	0.97	0.78	17.4
All Vehicles		1184	6.2	1184	6.2	1.017	41.0	LOS C	13.9	98.9	0.83	0.79	20.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	281	43.8	LOS E	0.8	0.8	0.94	0.94
P2	East Full Crossing	576	44.3	LOS E	1.6	1.6	0.95	0.95
P3	North Full Crossing	1523	46.2	LOS E	4.3	4.3	0.99	0.99
P4	West Full Crossing	281	43.8	LOS E	0.8	0.8	0.94	0.94
All Pedestrians		2661	45.3	LOS E			0.97	0.97

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.

PHASING SUMMARY

 Site: 101 [AM Union St/Murray St/Darling Drive]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

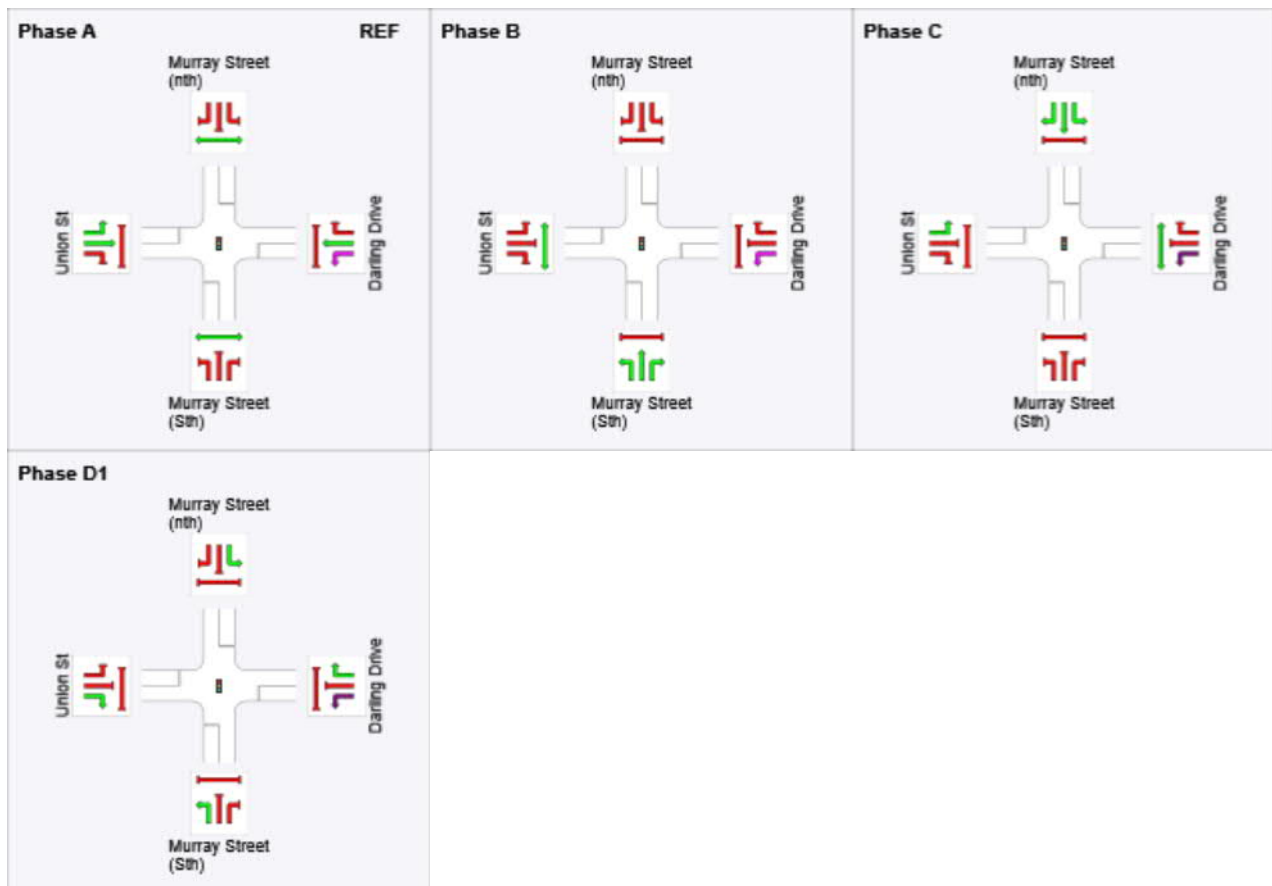
Input Phase Sequence: A, B, C, D1

Output Phase Sequence: A, B, C, D1

Phase Timing Results

Phase	A	B	C	D1
Phase Change Time (sec)	0	22	47	83
Green Time (sec)	16	19	30	11
Phase Time (sec)	22	25	36	17
Phase Split	22 %	25 %	36 %	17 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement



Other Movement Class (MC) Stopped



Phase Transition Applied

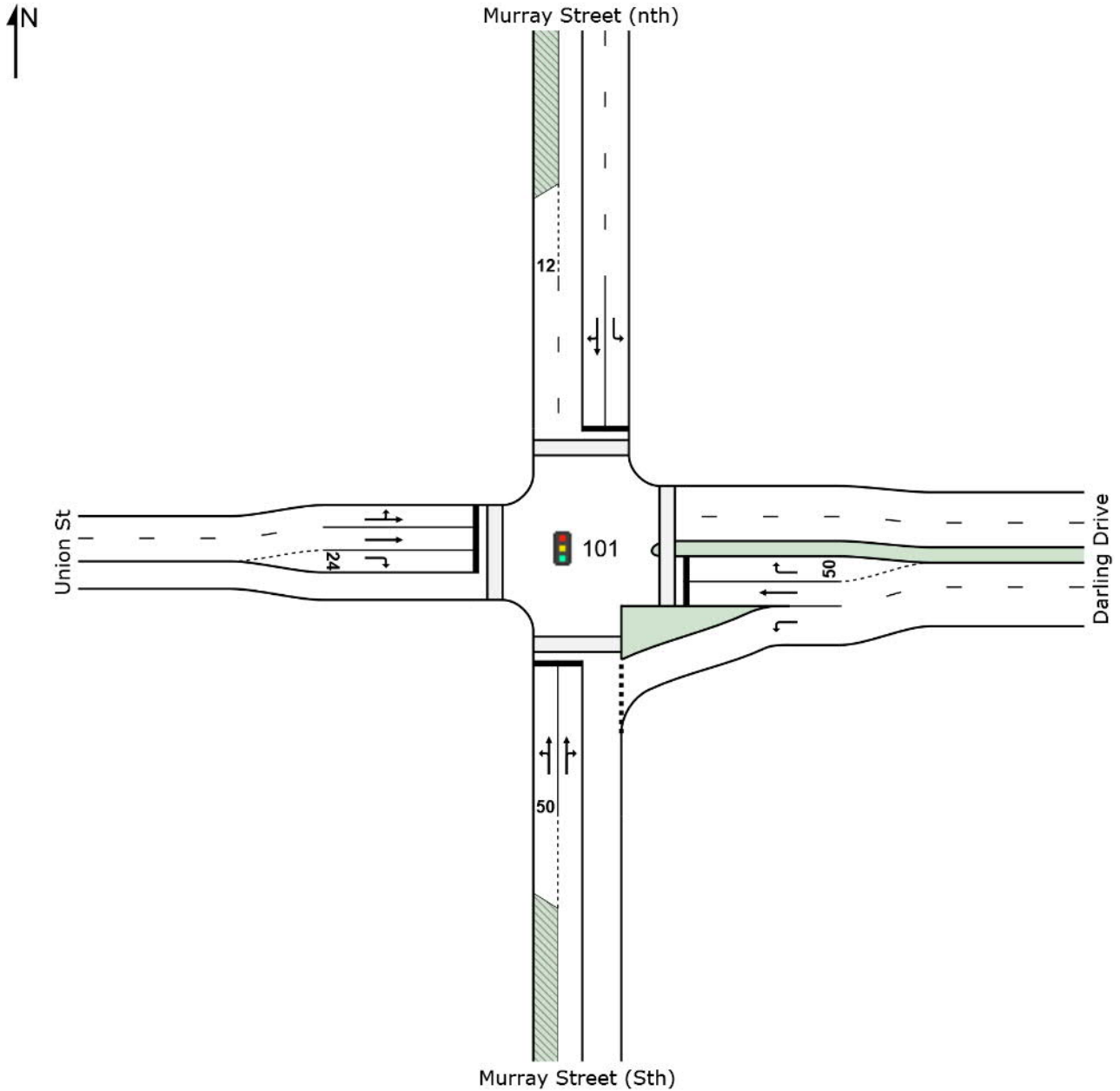
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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [PM Union St/Murray St/Darling Drive]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Union St/Murray St/Darling Drive]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Murray Street (Sth)													
1	L2	48	0.0	48	0.0	0.113	21.7	LOS C	1.0	7.3	0.82	0.71	16.3
2	T1	114	0.9	114	0.9	0.480	41.4	LOS D	7.0	49.6	0.95	0.78	10.2
3	R2	41	2.4	41	2.4	0.480	46.0	LOS D	7.0	49.6	0.95	0.78	26.2
Approach		203	1.0	203	1.0	0.480	37.7	LOS D	7.0	49.6	0.92	0.76	16.2
East: Darling Drive													
4	L2	145	0.7	145	0.7	0.099	6.4	LOS A	1.3	9.3	0.26	0.58	44.0
5	T1	165	1.2	165	1.2	0.343	33.4	LOS C	6.7	47.1	0.87	0.71	26.3
6	R2	170	2.4	170	2.4	0.846	59.7	LOS E	9.2	65.9	1.00	0.95	19.2
Approach		480	1.5	480	1.5	0.846	34.6	LOS C	9.2	65.9	0.73	0.76	26.9
North: Murray Street (nth)													
7	L2	131	5.3	131	5.3	0.218	28.7	LOS C	3.9	28.4	0.64	0.71	30.4
8	T1	166	0.0	166	0.0	0.648	38.2	LOS D	12.0	84.5	0.92	0.79	16.4
9	R2	113	1.8	113	1.8	0.648	42.7	LOS D	12.0	84.5	0.92	0.79	10.1
Approach		410	2.2	410	2.2	0.648	36.4	LOS D	12.0	84.5	0.83	0.77	20.4
West: Union St													
10	L2	228	2.6	228	2.6	0.355	15.4	LOS B	3.6	25.9	0.66	0.72	9.6
11	T1	116	0.9	116	0.9	0.243	32.4	LOS C	4.1	29.1	0.76	0.61	27.5
12	R2	79	1.3	79	1.3	0.398	49.8	LOS D	3.7	26.5	0.97	0.76	10.2
Approach		423	1.9	423	1.9	0.398	26.5	LOS C	4.1	29.1	0.75	0.70	18.2
All Vehicles		1516	1.7	1516	1.7	0.846	33.2	LOS C	12.0	84.5	0.79	0.74	22.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	156	43.5	LOS E	0.4	0.4	0.94	0.94
P2	East Full Crossing	371	43.9	LOS E	1.0	1.0	0.94	0.94
P3	North Full Crossing	889	44.9	LOS E	2.4	2.4	0.97	0.97
P4	West Full Crossing	201	43.6	LOS E	0.5	0.5	0.94	0.94
All Pedestrians		1617	44.4	LOS E			0.95	0.95

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

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

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

PHASING SUMMARY

 Site: 101 [PM Union St/Murray St/Darling Drive]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

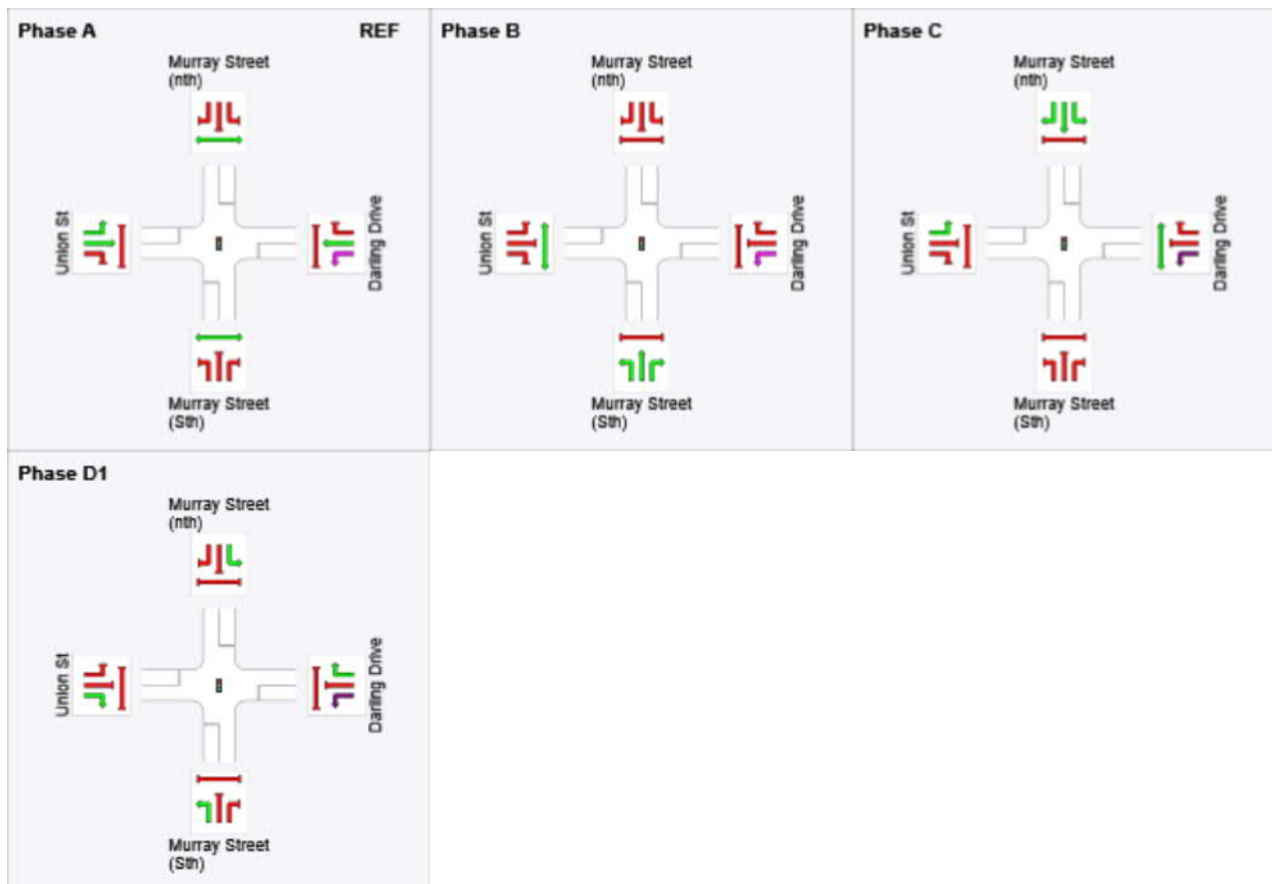
Input Phase Sequence: A, B, C, D1

Output Phase Sequence: A, B, C, D1

Phase Timing Results

Phase	A	B	C	D1
Phase Change Time (sec)	0	31	54	83
Green Time (sec)	25	17	23	11
Phase Time (sec)	31	23	29	17
Phase Split	31 %	23 %	29 %	17 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

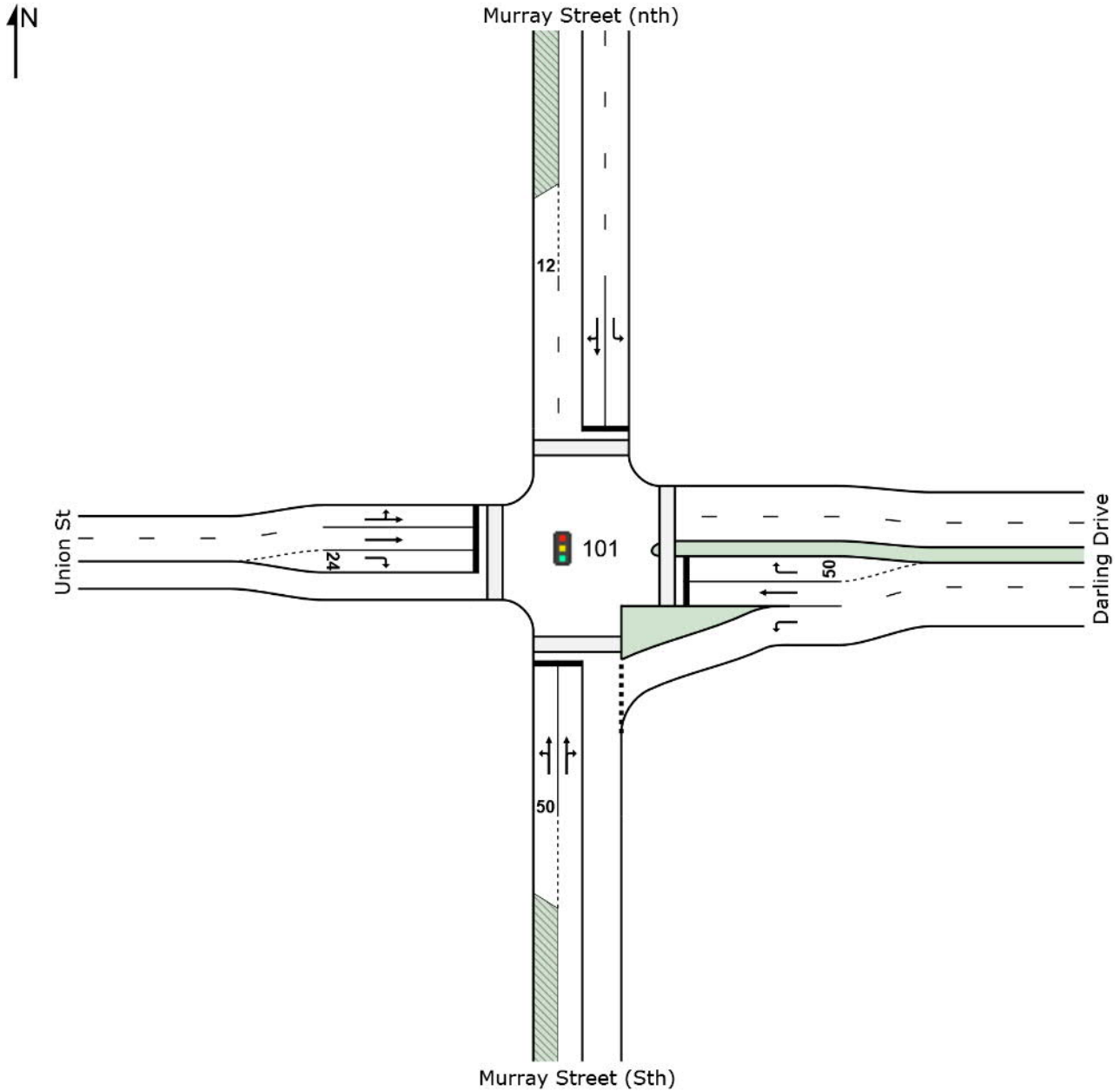
	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SITE LAYOUT

 **Site: 101 [OP Union St/Murray St/Darling Drive]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Union St/Murray St/Darling Drive]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Murray Street (Sth)													
1	L2	87	0.0	87	0.0	0.205	22.1	LOS C	1.9	13.2	0.84	0.74	16.1
2	T1	129	0.0	129	0.0	0.538	40.2	LOS D	8.8	61.4	0.95	0.79	10.4
3	R2	66	0.0	66	0.0	0.538	44.7	LOS D	8.8	61.4	0.95	0.79	26.4
Approach		282	0.0	282	0.0	0.538	35.7	LOS D	8.8	61.4	0.92	0.77	17.5
East: Darling Drive													
4	L2	107	0.0	107	0.0	0.072	6.0	LOS A	0.8	5.9	0.24	0.57	44.4
5	T1	165	0.0	165	0.0	0.425	38.3	LOS D	7.2	50.1	0.92	0.75	24.6
6	R2	154	0.6	154	0.6	0.926	68.2	LOS E	9.0	63.4	1.00	1.03	17.6
Approach		426	0.2	426	0.2	0.926	41.0	LOS D	9.0	63.4	0.78	0.80	24.6
North: Murray Street (nth)													
7	L2	220	0.0	220	0.0	0.324	27.0	LOS C	6.5	45.2	0.64	0.73	31.2
8	T1	146	0.0	146	0.0	0.792	38.7	LOS D	18.9	133.0	0.95	0.88	15.9
9	R2	265	0.8	265	0.8	0.792	43.3	LOS D	18.9	133.0	0.95	0.88	9.7
Approach		631	0.3	631	0.3	0.792	36.6	LOS D	18.9	133.0	0.84	0.83	20.1
West: Union St													
10	L2	317	2.5	317	2.5	0.493	16.2	LOS B	5.7	40.7	0.72	0.75	9.2
11	T1	163	0.0	163	0.0	0.452	38.3	LOS D	6.7	46.9	0.87	0.71	25.4
12	R2	57	0.0	57	0.0	0.348	51.6	LOS D	2.7	19.2	0.98	0.75	9.9
Approach		537	1.5	537	1.5	0.493	26.7	LOS C	6.7	46.9	0.80	0.74	18.4
All Vehicles		1876	0.6	1876	0.6	0.926	34.6	LOS C	18.9	133.0	0.83	0.79	20.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	156	43.5	LOS E	0.4	0.4	0.94	0.94
P2	East Full Crossing	371	43.9	LOS E	1.0	1.0	0.94	0.94
P3	North Full Crossing	889	44.9	LOS E	2.4	2.4	0.97	0.97
P4	West Full Crossing	201	43.6	LOS E	0.5	0.5	0.94	0.94
All Pedestrians		1617	44.4	LOS E			0.95	0.95

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

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

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

PHASING SUMMARY

 Site: 101 [OP Union St/Murray St/Darling Drive]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

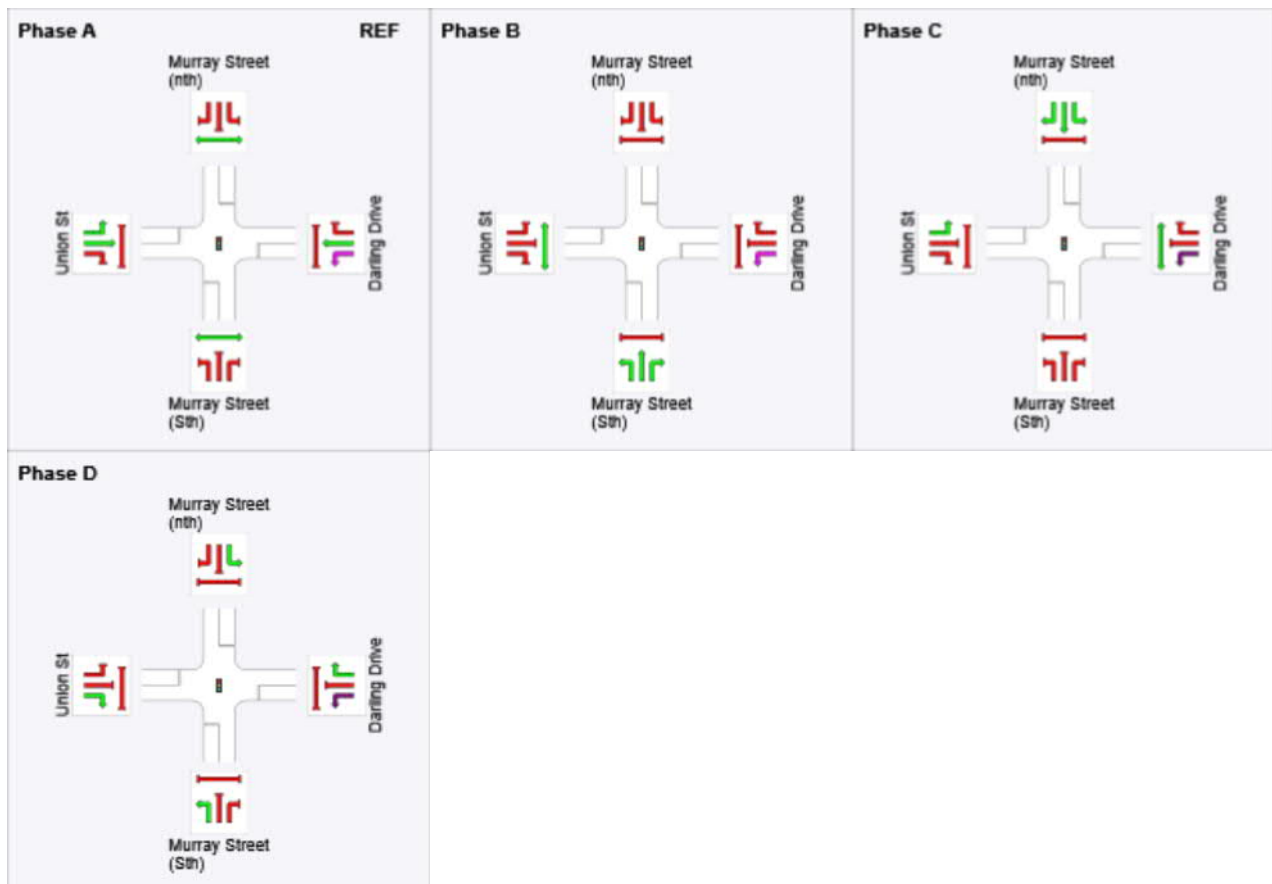
Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	26	51	85
Green Time (sec)	20	19	28	9
Phase Time (sec)	26	25	34	15
Phase Split	26 %	25 %	34 %	15 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

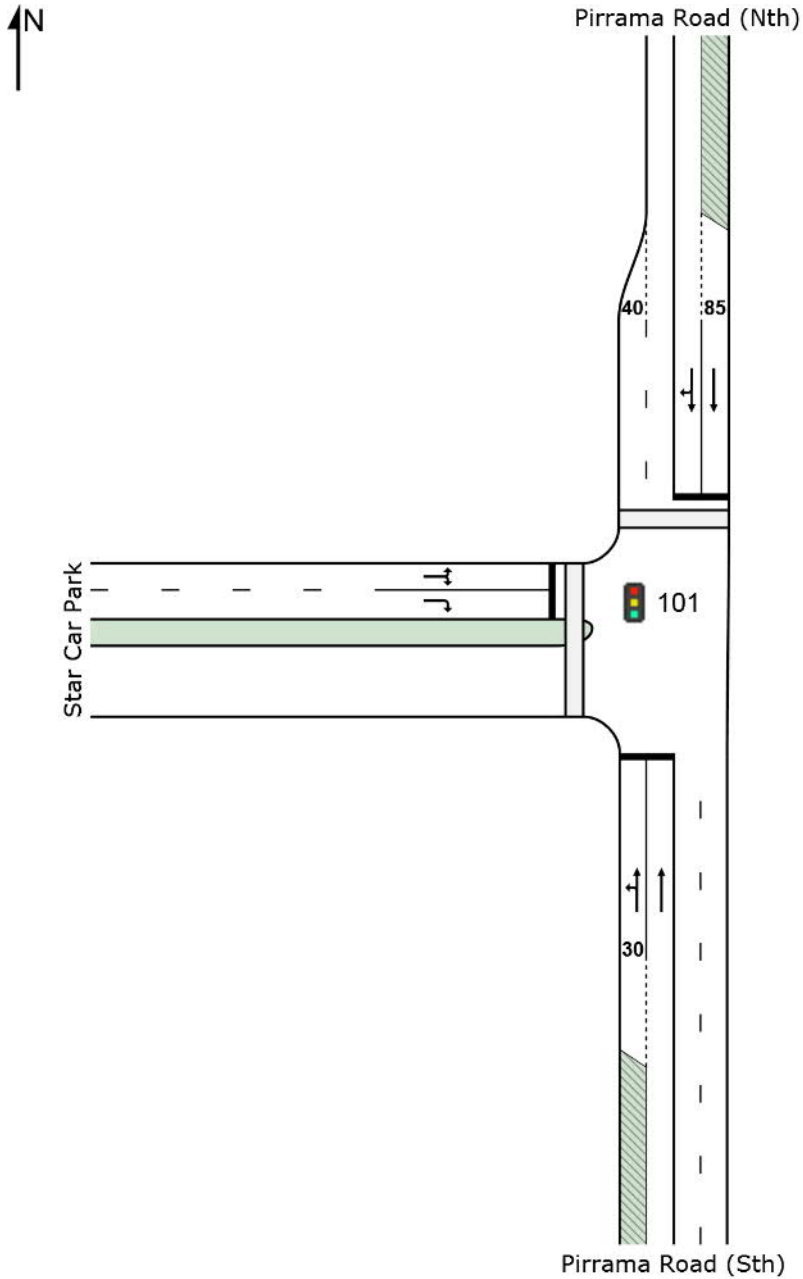
	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

SITE LAYOUT

 **Site: 101 [AM Pirrama Rd/Star Car Park Entrance]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Pirrama Rd/Star Car Park Entrance]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	135	0.7	134	0.7	0.110	6.9	LOS A	0.8	5.3	0.13	0.57	25.4
2	T1	276	6.5	274	6.5	0.200	0.4	LOS A	0.3	2.4	0.03	0.02	48.0
Approach		411	4.6	408 ^{N1}	4.6	0.200	2.5	LOS A	0.8	5.3	0.06	0.20	35.6
North: Pirrama Road (Nth)													
8	T1	94	8.5	94	8.5	0.050	4.0	LOS A	0.9	6.6	0.30	0.28	39.7
9	R2	20	0.0	20	0.0	0.050	9.9	LOS A	0.7	5.0	0.33	0.43	32.1
Approach		114	7.0	114	7.0	0.050	5.0	LOS A	0.9	6.6	0.30	0.31	37.9
West: Star Car Park													
10	L2	4	0.0	4	0.0	0.052	41.8	LOS C	0.5	3.5	0.90	0.62	4.0
12	R2	21	0.0	21	0.0	0.052	41.1	LOS C	0.6	4.0	0.90	0.62	4.2
Approach		25	0.0	25	0.0	0.052	41.2	LOS C	0.6	4.0	0.90	0.62	4.1
All Vehicles		550	4.9	547 ^{N1}	4.9	0.200	4.8	LOS A	0.9	6.6	0.15	0.24	32.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
P4	West Full Crossing	126	43.5	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		232	43.5	LOS E			0.93	0.93

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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PHASING SUMMARY

 Site: 101 [AM Pirrama Rd/Star Car Park Entrance]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

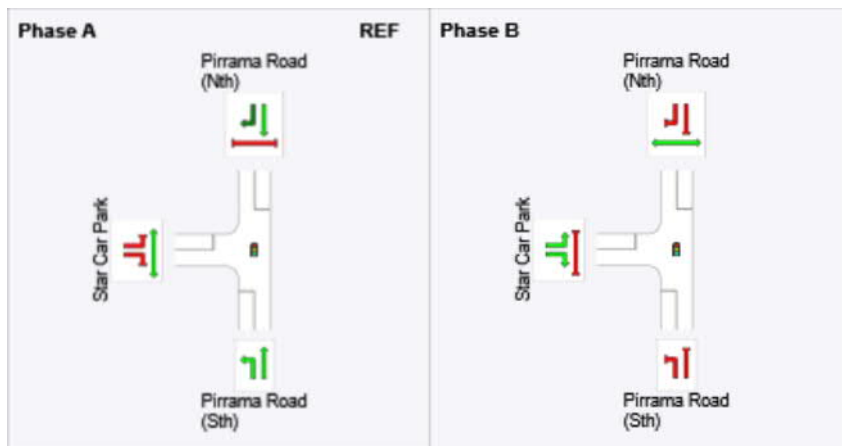
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	80
Green Time (sec)	74	14
Phase Time (sec)	80	20
Phase Split	80 %	20 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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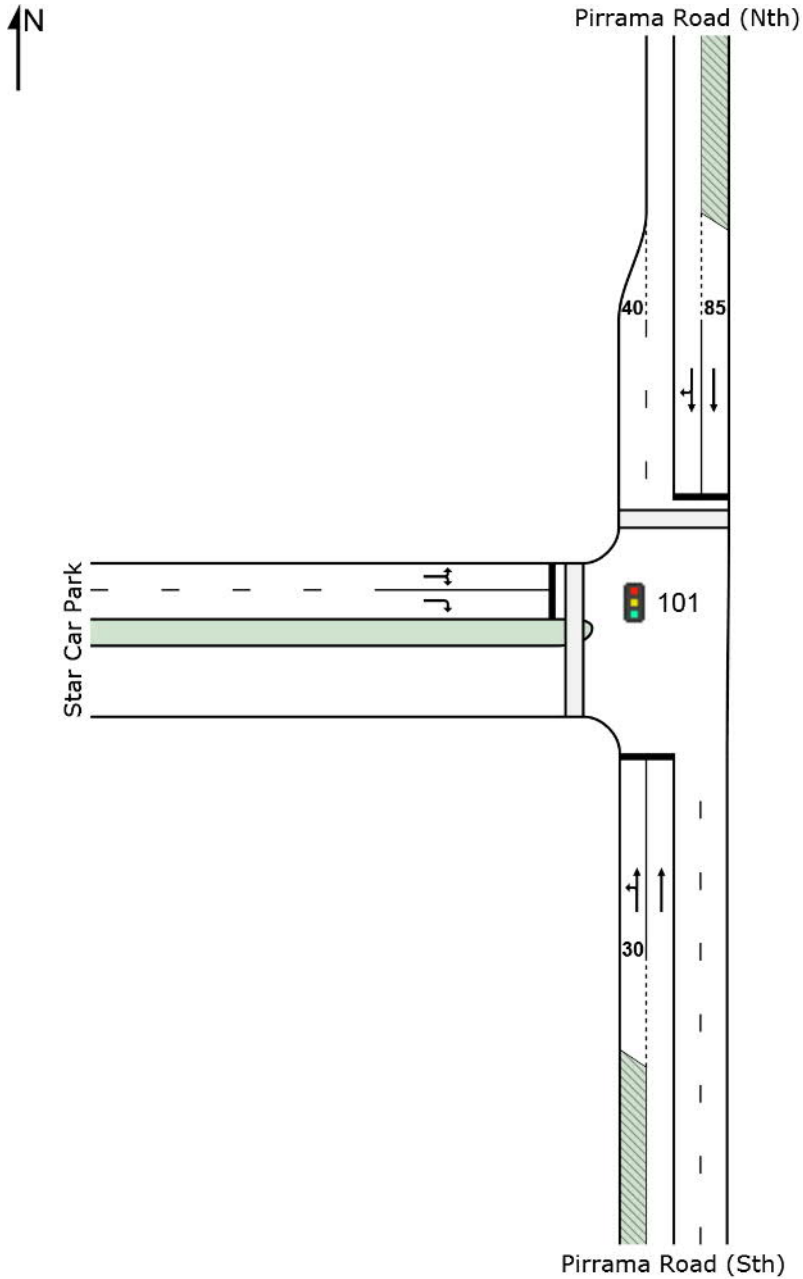
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [PM Pirrama Rd/Star Car Park Entrance]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Pirrama Rd/Star Car Park Entrance]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	163	0.6	163	0.6	0.129	11.1	LOS B	2.4	17.0	0.36	0.61	21.8
2	T1	341	5.0	341	5.0	0.445	16.7	LOS B	8.4	61.4	0.56	0.50	17.2
Approach		504	3.6	504	3.6	0.445	14.9	LOS B	8.4	61.4	0.50	0.53	18.7
North: Pirrama Road (Nth)													
8	T1	232	6.0	232	6.0	0.180	19.1	LOS B	4.3	31.9	0.66	0.55	23.9
9	R2	24	0.0	24	0.0	0.180	25.8	LOS C	3.4	24.9	0.68	0.60	22.0
Approach		256	5.5	256	5.5	0.180	19.8	LOS B	4.3	31.9	0.66	0.56	23.6
West: Star Car Park													
10	L2	47	0.0	47	0.0	0.142	19.7	LOS B	3.2	22.6	0.66	0.53	7.0
12	R2	176	0.0	176	0.0	0.142	18.4	LOS B	3.4	23.5	0.64	0.52	7.4
Approach		223	0.0	223	0.0	0.142	18.7	LOS B	3.4	23.5	0.64	0.52	7.3
All Vehicles		983	3.3	983	3.3	0.445	17.0	LOS B	8.4	61.4	0.57	0.54	17.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	217	43.6	LOS E	0.6	0.6	0.94	0.94
P4	West Full Crossing	263	43.7	LOS E	0.7	0.7	0.94	0.94
All Pedestrians		480	43.7	LOS E			0.94	0.94

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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PHASING SUMMARY

 Site: 101 [PM Pirrama Rd/Star Car Park Entrance]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

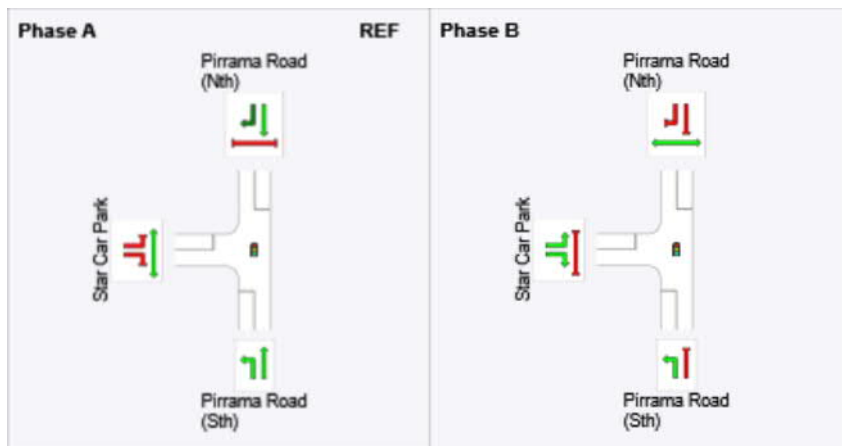
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	50
Green Time (sec)	44	44
Phase Time (sec)	50	50
Phase Split	50 %	50 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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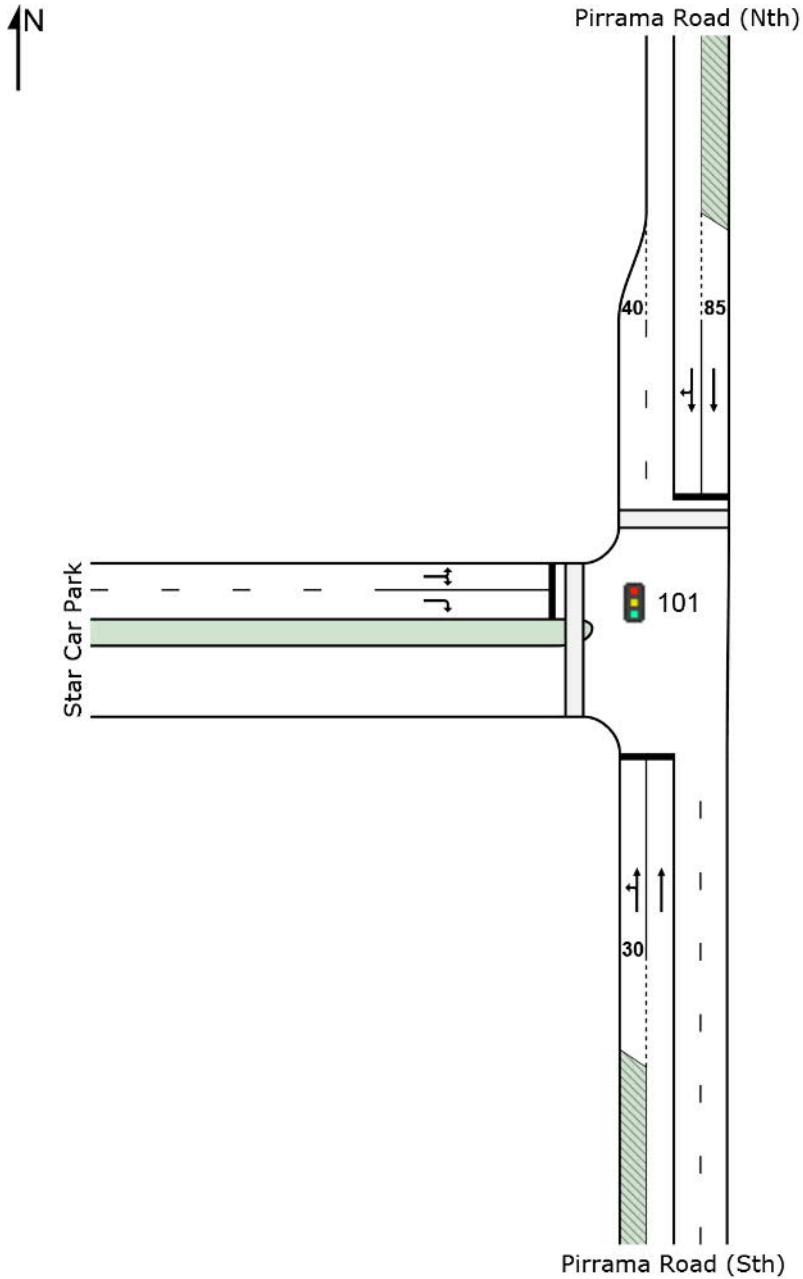
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [OP Pirrama Rd/Star Car Park Entrance]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Pirrama Rd/Star Car Park Entrance]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	163	1.2	163	1.2	0.141	12.2	LOS B	2.9	20.3	0.40	0.60	21.2
2	T1	427	1.4	427	1.4	0.486	13.2	LOS B	9.2	64.9	0.50	0.46	19.7
Approach		590	1.4	590	1.4	0.486	13.0	LOS B	9.2	64.9	0.47	0.50	20.2
North: Pirrama Road (Nth)													
8	T1	335	1.2	335	1.2	0.236	16.9	LOS B	6.2	43.5	0.63	0.55	25.4
9	R2	36	0.0	36	0.0	0.236	24.4	LOS C	4.6	32.7	0.67	0.60	22.7
Approach		371	1.1	371	1.1	0.236	17.7	LOS B	6.2	43.5	0.64	0.55	25.0
West: Star Car Park													
10	L2	39	0.0	39	0.0	0.250	23.5	LOS C	5.6	39.5	0.73	0.61	6.3
12	R2	309	0.0	309	0.0	0.250	22.6	LOS C	5.9	41.5	0.72	0.60	6.5
Approach		348	0.0	348	0.0	0.250	22.7	LOS C	5.9	41.5	0.72	0.60	6.4
All Vehicles		1309	0.9	1309	0.9	0.486	16.9	LOS B	9.2	64.9	0.59	0.54	17.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	278	43.8	LOS E	0.7	0.7	0.94	0.94
P4	West Full Crossing	546	44.3	LOS E	1.5	1.5	0.95	0.95
All Pedestrians		824	44.1	LOS E			0.95	0.95

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

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

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

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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

PHASING SUMMARY

 Site: 101 [OP Pirrama Rd/Star Car Park Entrance]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

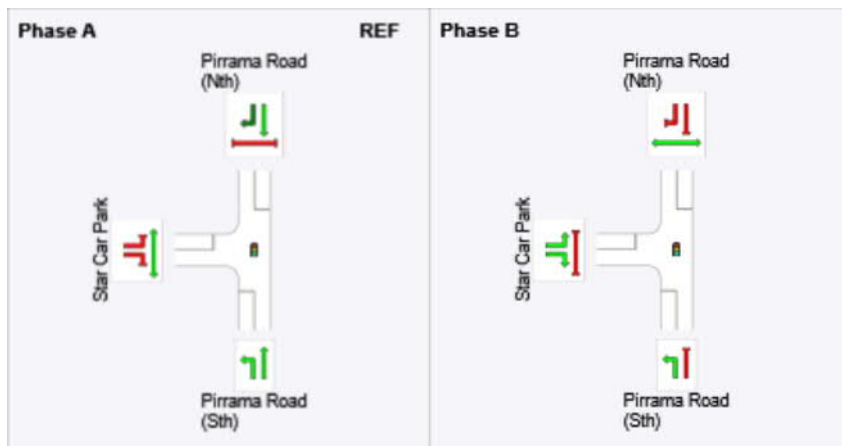
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	55
Green Time (sec)	49	39
Phase Time (sec)	55	45
Phase Split	55 %	45 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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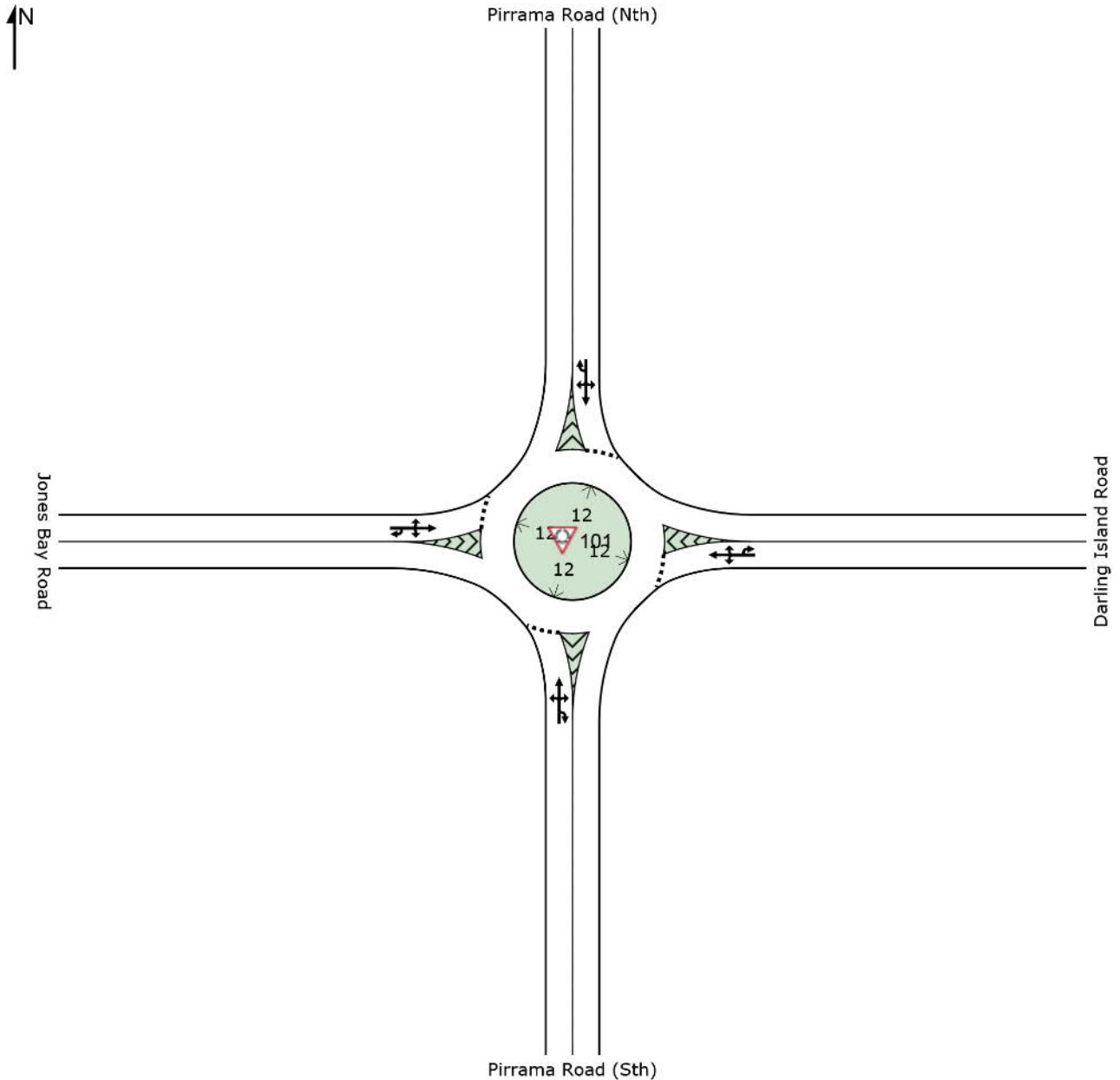
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 Site: 101 [AM Jones Bay Rd/Pirrama Rd]

No Project
Roundabout



MOVEMENT SUMMARY

 Site: 101 [AM Jones Bay Rd/Pirrama Rd]

 Network: 1 [AM Star Casino Network]

No Project
Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	94	8.5	93	8.5	0.242	4.3	LOS A	1.2	8.9	0.28	0.54	37.8
2	T1	89	7.9	88	7.9	0.242	4.2	LOS A	1.2	8.9	0.28	0.54	45.5
3	R2	92	5.4	91	5.5	0.242	7.7	LOS A	1.2	8.9	0.28	0.54	34.8
3u	U	11	10.0	10	10.0	0.242	9.4	LOS A	1.2	8.9	0.28	0.54	37.8
Approach		286	7.4	283 ^{N1}	7.4	0.242	5.6	LOS A	1.2	8.9	0.28	0.54	40.6
East: Darling Island Road													
4	L2	18	0.0	18	0.0	0.070	5.2	LOS A	0.3	2.3	0.34	0.53	30.6
5	T1	41	12.2	41	12.2	0.070	5.3	LOS A	0.3	2.3	0.34	0.53	30.6
6	R2	7	0.0	7	0.0	0.070	8.9	LOS A	0.3	2.3	0.34	0.53	50.2
6u	U	1	0.0	1	0.0	0.070	10.7	LOS A	0.3	2.3	0.34	0.53	24.7
Approach		67	7.5	67	7.5	0.070	5.8	LOS A	0.3	2.3	0.34	0.53	35.9
North: Pirrama Road (Nth)													
7	L2	11	0.0	11	0.0	0.111	5.9	LOS A	0.6	4.3	0.44	0.62	40.3
8	T1	43	14.0	43	14.0	0.111	6.4	LOS A	0.6	4.3	0.44	0.62	47.6
9	R2	44	2.3	44	2.3	0.111	9.7	LOS A	0.6	4.3	0.44	0.62	47.6
9u	U	4	0.0	4	0.0	0.111	11.3	LOS A	0.6	4.3	0.44	0.62	52.9
Approach		102	6.8	102	6.8	0.111	8.0	LOS A	0.6	4.3	0.44	0.62	46.9
West: Jones Bay Road													
10	L2	87	0.0	87	0.0	0.224	5.7	LOS A	1.4	9.7	0.43	0.59	48.6
11	T1	86	3.5	86	3.5	0.224	5.9	LOS A	1.4	9.7	0.43	0.59	28.2
12	R2	34	0.0	34	0.0	0.224	9.4	LOS A	1.4	9.7	0.43	0.59	32.1
12u	U	28	3.7	28	3.7	0.224	11.2	LOS A	1.4	9.7	0.43	0.59	32.1
Approach		235	1.7	235	1.7	0.224	7.0	LOS A	1.4	9.7	0.43	0.59	39.7
All Vehicles		690	5.4	688 ^{N1}	5.4	0.242	6.4	LOS A	1.4	9.7	0.36	0.57	41.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

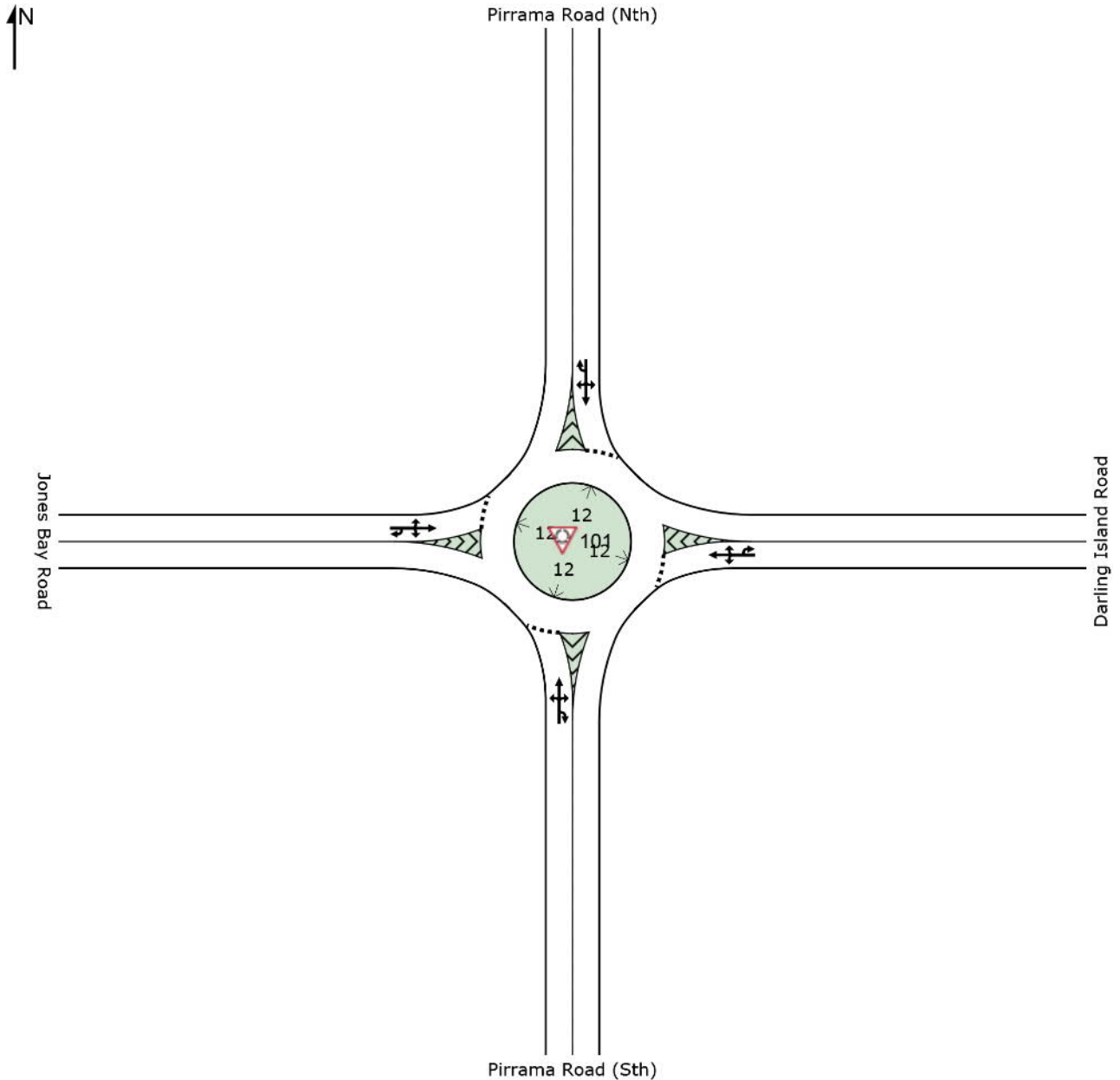
Number of Iterations: 10 (maximum specified: 10)

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

SITE LAYOUT

 Site: 101 [PM Jones Bay Rd/Pirrama Rd]

No Project
Roundabout



MOVEMENT SUMMARY

 Site: 101 [PM Jones Bay Rd/Pirrama Rd]

 Network: N101 [PM Star Casino Network]

No Project
Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	213	1.4	213	1.4	0.400	5.6	LOS A	2.2	16.2	0.48	0.64	36.6
2	T1	101	14.9	101	14.9	0.400	5.9	LOS A	2.2	16.2	0.48	0.64	44.8
3	R2	34	0.0	34	0.0	0.400	9.0	LOS A	2.2	16.2	0.48	0.64	34.1
3u	U	44	4.8	44	4.8	0.400	10.7	LOS B	2.2	16.2	0.48	0.64	36.6
Approach		392	5.1	392	5.1	0.400	6.5	LOS A	2.2	16.2	0.48	0.64	40.0
East: Darling Island Road													
4	L2	57	0.0	57	0.0	0.201	6.7	LOS A	1.0	7.1	0.57	0.67	28.2
5	T1	92	0.0	92	0.0	0.201	6.8	LOS A	1.0	7.1	0.57	0.67	28.2
6	R2	14	0.0	14	0.0	0.201	10.5	LOS B	1.0	7.1	0.57	0.67	49.0
6u	U	1	0.0	1	0.0	0.201	12.2	LOS B	1.0	7.1	0.57	0.67	23.8
Approach		164	0.0	164	0.0	0.201	7.1	LOS A	1.0	7.1	0.57	0.67	32.9
North: Pirrama Road (Nth)													
7	L2	20	0.0	20	0.0	0.297	5.9	LOS A	1.8	13.0	0.46	0.64	40.2
8	T1	113	10.6	113	10.6	0.297	6.3	LOS A	1.8	13.0	0.46	0.64	47.4
9	R2	154	0.6	154	0.6	0.297	9.6	LOS A	1.8	13.0	0.46	0.64	47.4
9u	U	6	0.0	6	0.0	0.297	11.3	LOS B	1.8	13.0	0.46	0.64	52.8
Approach		293	4.4	293	4.4	0.297	8.1	LOS A	1.8	13.0	0.46	0.64	46.9
West: Jones Bay Road													
10	L2	65	1.5	65	1.5	0.185	5.7	LOS A	1.1	7.7	0.43	0.62	47.9
11	T1	41	0.0	41	0.0	0.185	5.8	LOS A	1.1	7.7	0.43	0.62	27.9
12	R2	55	0.0	55	0.0	0.185	9.4	LOS A	1.1	7.7	0.43	0.62	31.3
12u	U	32	0.0	32	0.0	0.185	11.1	LOS B	1.1	7.7	0.43	0.62	31.3
Approach		193	0.5	193	0.5	0.185	7.6	LOS A	1.1	7.7	0.43	0.62	39.5
All Vehicles		1042	3.3	1042	3.3	0.400	7.3	LOS A	2.2	16.2	0.48	0.64	41.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: Same as Sign Control.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

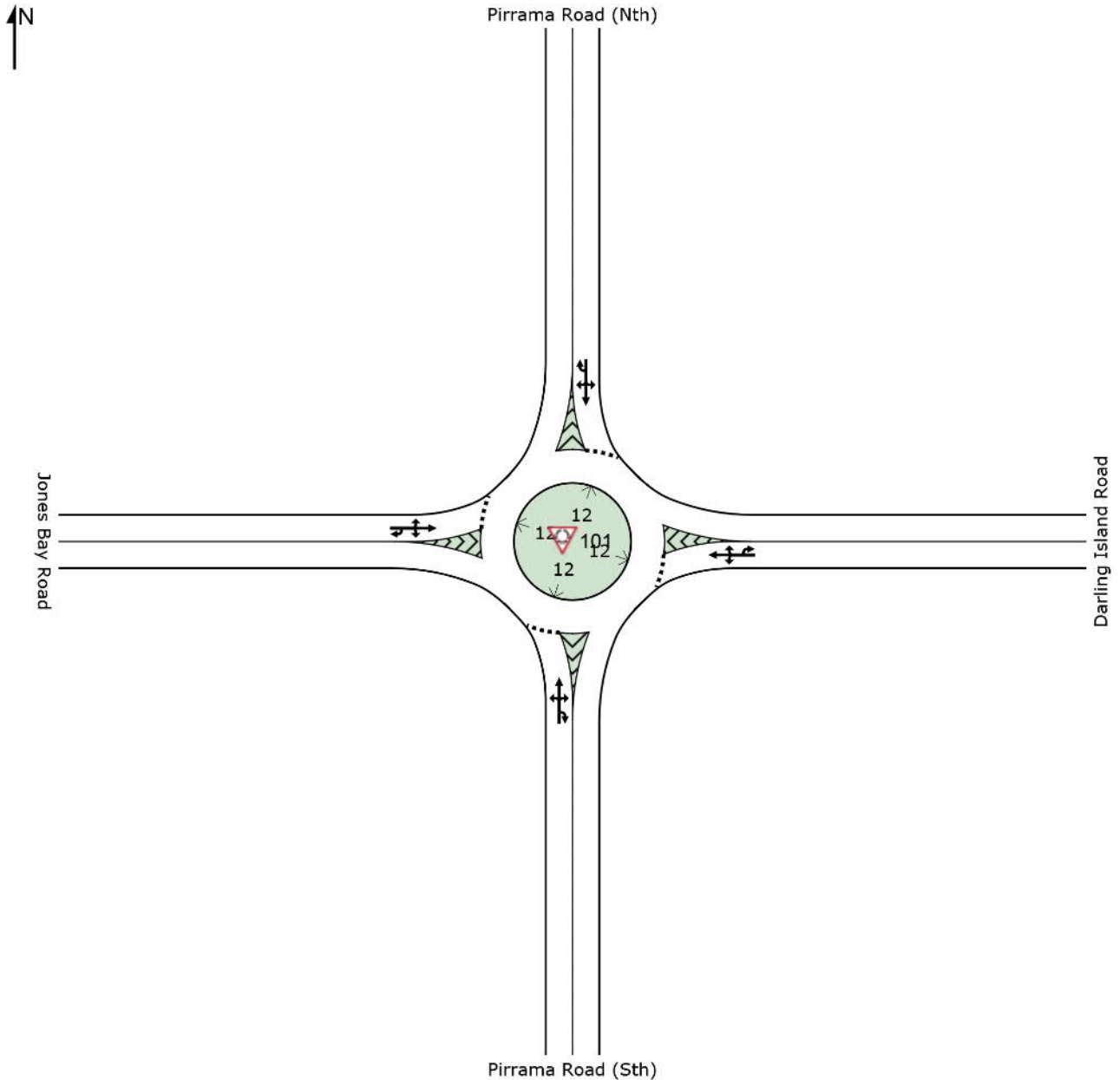
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 **Site: 101 [OP Jones Bay Rd/Pirrama Rd]**

No Project
Roundabout



MOVEMENT SUMMARY

 Site: 101 [OP Jones Bay Rd/Pirrama Rd]

 Network: N101 [OP Star Casino Network]

No Project
Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	278	0.7	278	0.7	0.482	5.9	LOS A	3.0	21.1	0.54	0.68	35.7
2	T1	72	4.2	72	4.2	0.482	6.0	LOS A	3.0	21.1	0.54	0.68	44.4
3	R2	24	0.0	24	0.0	0.482	9.4	LOS A	3.0	21.1	0.54	0.68	33.5
3u	U	105	1.0	105	1.0	0.482	11.0	LOS B	3.0	21.1	0.54	0.68	35.7
Approach		479	1.3	479	1.3	0.482	7.2	LOS A	3.0	21.1	0.54	0.68	38.1
East: Darling Island Road													
4	L2	34	0.0	34	0.0	0.124	8.3	LOS A	0.7	5.0	0.68	0.72	25.6
5	T1	48	0.0	48	0.0	0.124	8.4	LOS A	0.7	5.0	0.68	0.72	25.6
6	R2	9	0.0	9	0.0	0.124	12.1	LOS B	0.7	5.0	0.68	0.72	47.5
6u	U	1	0.0	1	0.0	0.124	13.8	LOS B	0.7	5.0	0.68	0.72	22.7
Approach		92	0.0	92	0.0	0.124	8.8	LOS A	0.7	5.0	0.68	0.72	30.9
North: Pirrama Road (Nth)													
7	L2	7	0.0	7	0.0	0.396	7.2	LOS A	2.6	18.1	0.62	0.73	39.6
8	T1	180	2.2	180	2.2	0.396	7.4	LOS A	2.6	18.1	0.62	0.73	46.4
9	R2	152	0.0	152	0.0	0.396	10.9	LOS B	2.6	18.1	0.62	0.73	46.4
9u	U	9	0.0	9	0.0	0.396	12.6	LOS B	2.6	18.1	0.62	0.73	52.1
Approach		348	1.1	348	1.1	0.396	9.0	LOS A	2.6	18.1	0.62	0.73	46.5
West: Jones Bay Road													
10	L2	33	3.0	33	3.0	0.244	5.9	LOS A	1.5	10.8	0.47	0.66	46.4
11	T1	25	0.0	25	0.0	0.244	6.0	LOS A	1.5	10.8	0.47	0.66	27.0
12	R2	87	0.0	87	0.0	0.244	9.5	LOS A	1.5	10.8	0.47	0.66	29.3
12u	U	105	0.0	105	0.0	0.244	11.2	LOS B	1.5	10.8	0.47	0.66	29.3
Approach		250	0.4	250	0.4	0.244	9.4	LOS A	1.5	10.8	0.47	0.66	33.6
All Vehicles		1170	0.9	1170	0.9	0.482	8.4	LOS A	3.0	21.1	0.56	0.69	40.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: Same as Sign Control.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

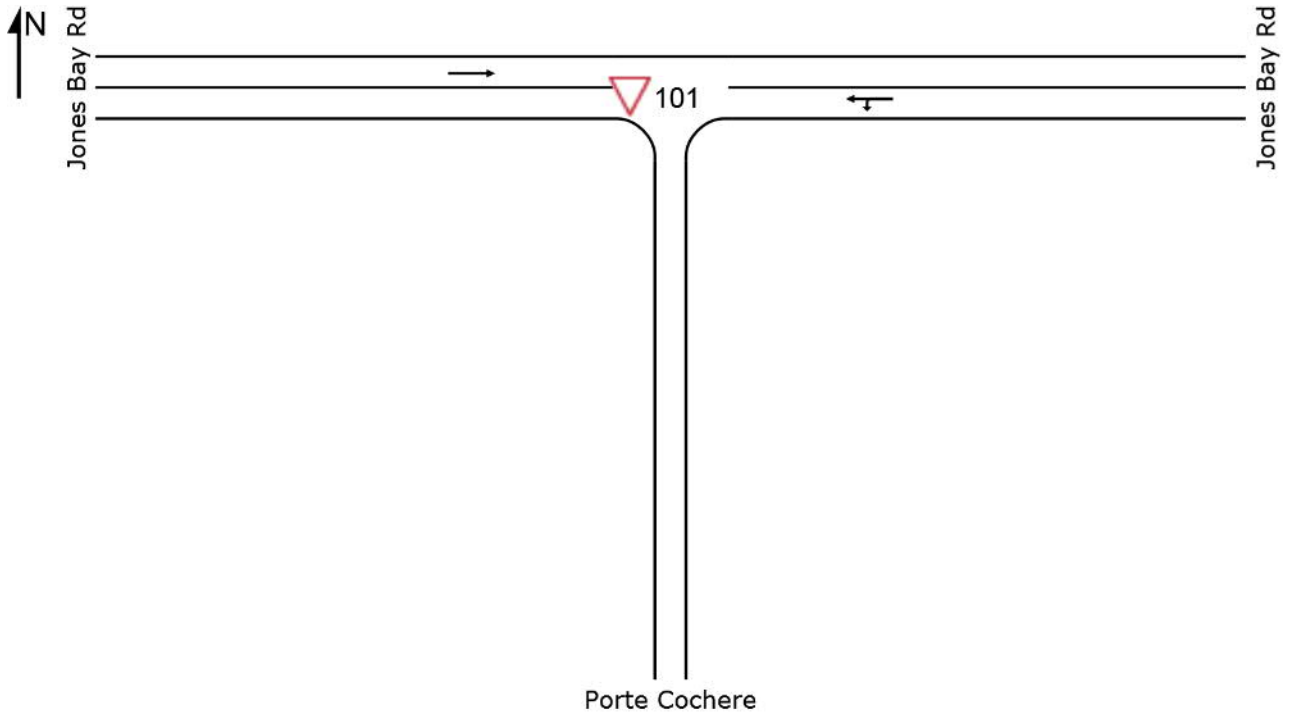
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

▽ Site: 101 [AM Jones Bay Rd/Port Cochere Entry]

New Site
Giveaway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [AM Jones Bay Rd/Port Cochere Entry]

Network: 1 [AM Star Casino Network]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Jones Bay Rd													
4	L2	31	10.3	30	10.4	0.117	4.7	LOS A	0.0	0.0	0.00	0.08	46.9
5	T1	186	6.8	186	6.8	0.117	0.0	LOS A	0.0	0.0	0.00	0.08	46.9
Approach		217	7.3	216 ^{N1}	7.3	0.117	0.7	NA	0.0	0.0	0.00	0.08	46.9
West: Jones Bay Rd													
11	T1	277	1.9	277	1.9	0.144	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		277	1.9	277	1.9	0.144	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		494	4.3	493 ^{N1}	4.3	0.144	0.3	NA	0.0	0.0	0.00	0.03	47.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

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

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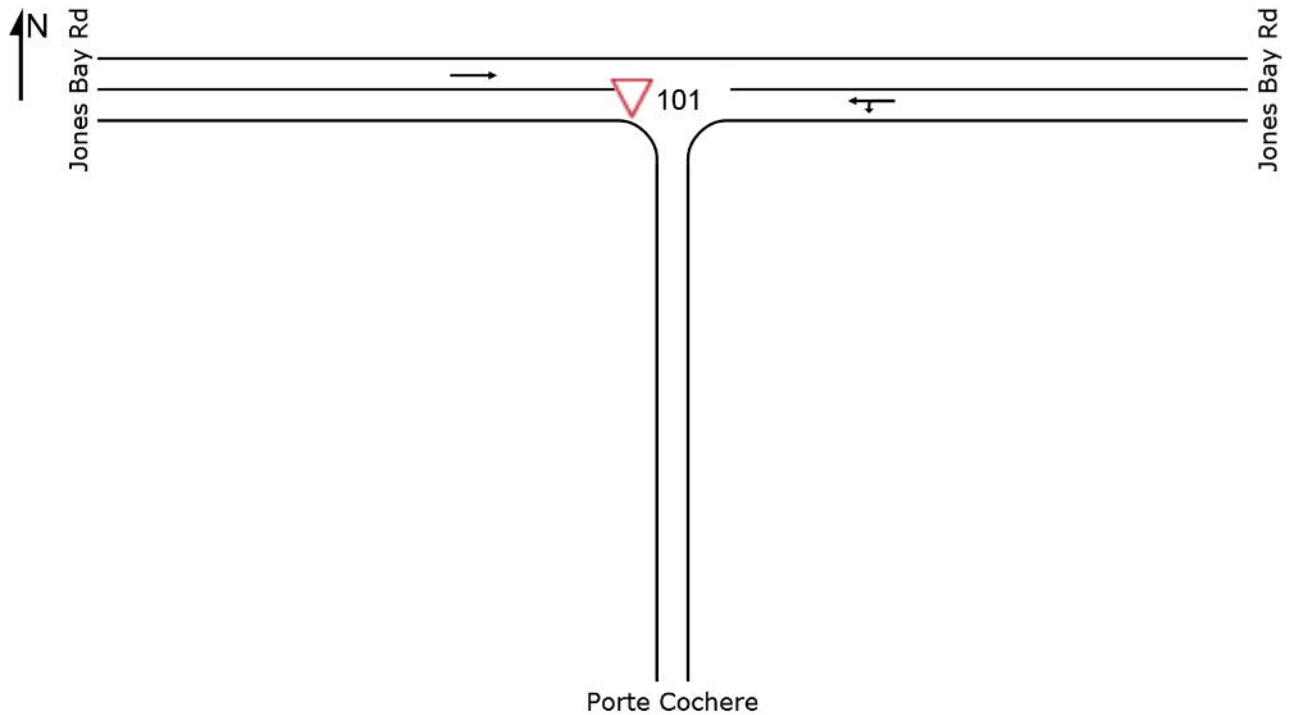
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

▽ Site: 101 [PM Jones Bay Rd/Port Cochere Entry]

New Site
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [PM Jones Bay Rd/Port Cochere Entry]

 Network: N101 [PM Star Casino Network]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Jones Bay Rd													
4	L2	99	1.1	99	1.1	0.268	4.6	LOS A	0.0	0.0	0.00	0.10	45.7
5	T1	416	0.8	416	0.8	0.268	0.0	LOS A	0.0	0.0	0.00	0.10	45.7
Approach		515	0.8	515	0.8	0.268	0.9	NA	0.0	0.0	0.00	0.10	45.7
West: Jones Bay Rd													
11	T1	229	0.0	229	0.0	0.118	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		229	0.0	229	0.0	0.118	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		744	0.6	744	0.6	0.268	0.6	NA	0.0	0.0	0.00	0.07	46.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

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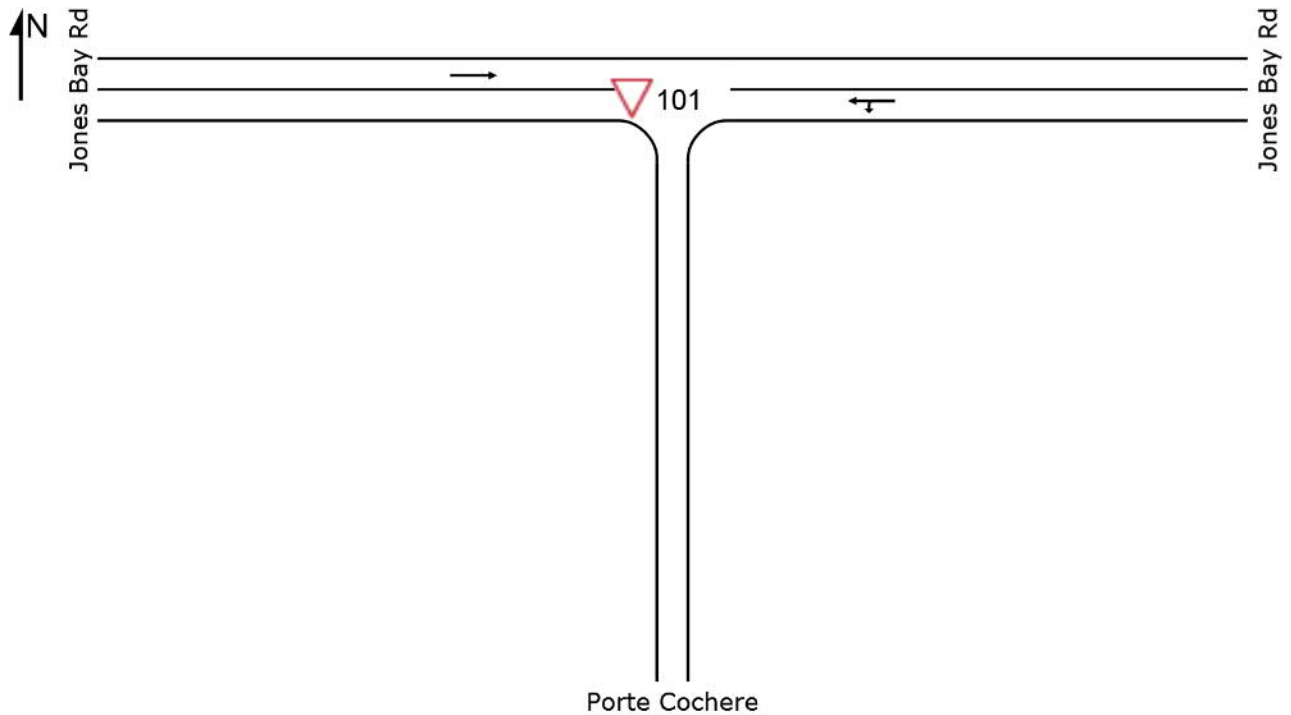
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SITE LAYOUT

▽ Site: 101 [OP Jones Bay Rd/Port Cochere Entry]

New Site
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [OP Jones Bay Rd/Port Cochere Entry]

Network: N101 [OP Star Casino Network]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Jones Bay Rd													
4	L2	220	0.5	220	0.5	0.318	4.6	LOS A	0.0	0.0	0.00	0.20	42.6
5	T1	388	0.3	388	0.3	0.318	0.0	LOS A	0.0	0.0	0.00	0.20	42.6
Approach		608	0.3	608	0.3	0.318	1.7	NA	0.0	0.0	0.00	0.20	42.6
West: Jones Bay Rd													
11	T1	281	0.0	281	0.0	0.144	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		281	0.0	281	0.0	0.144	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		889	0.2	889	0.2	0.318	1.1	NA	0.0	0.0	0.00	0.13	43.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

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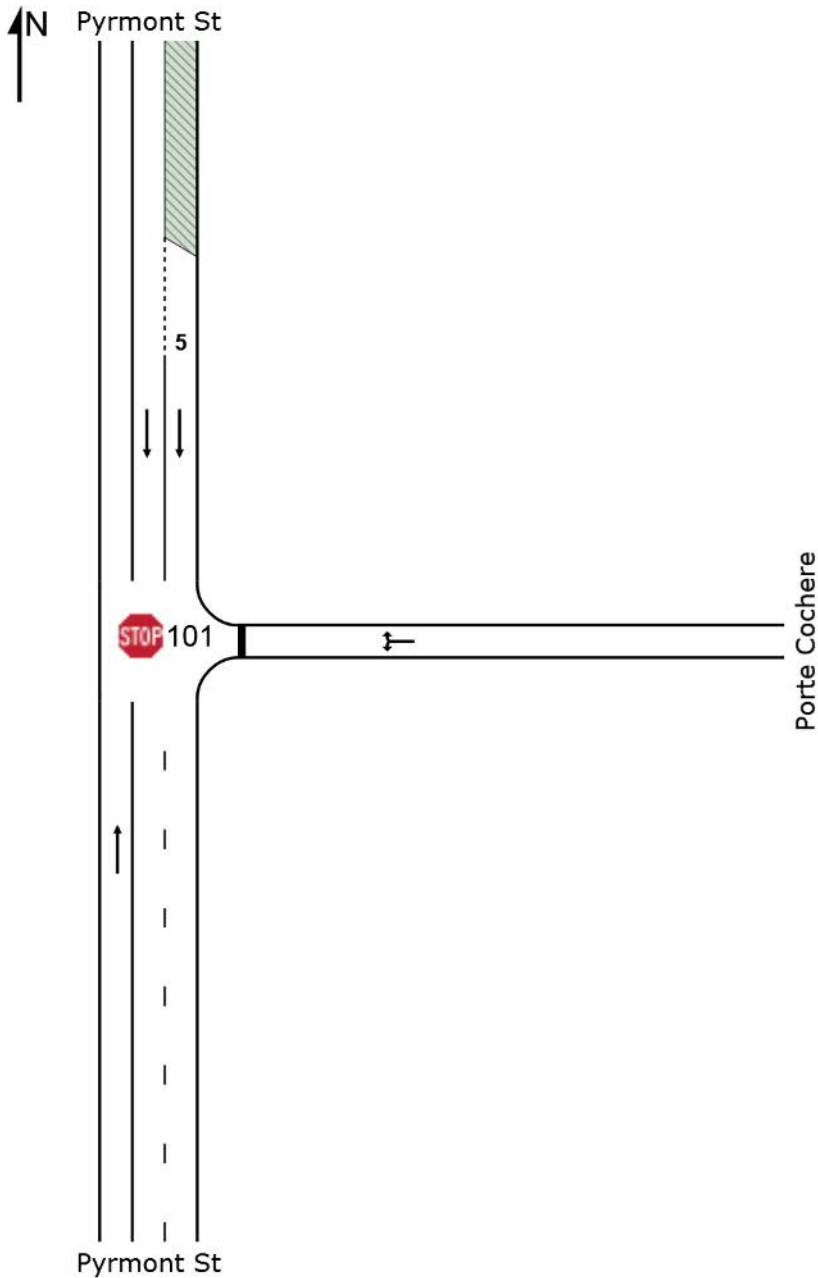
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SITE LAYOUT

 **Site: 101 [AM Pyrmont St/Port Cochere Exit]**

New Site
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Port Cochere Exit]

 Network: 1 [AM Star Casino Network]

New Site
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Pyrmont St													
2	T1	286	2.9	286	2.9	0.150	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		286	2.9	286	2.9	0.150	0.0	NA	0.0	0.0	0.00	0.00	50.0
East: Porte Cochere													
4	L2	62	1.7	62	1.7	0.082	4.8	LOS A	0.2	1.6	0.29	0.88	18.0
6	R2	3	0.0	3	0.0	0.082	8.9	LOS A	0.2	1.6	0.29	0.88	18.0
Approach		65	1.6	65	1.6	0.082	5.0	LOS A	0.2	1.6	0.29	0.88	18.0
North: Pyrmont St													
8	T1	293	4.7	292	4.7	0.091	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		293	4.7	292 ^{N1}	4.7	0.091	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		644	3.6	644	3.6	0.150	0.5	NA	0.2	1.6	0.03	0.09	38.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

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

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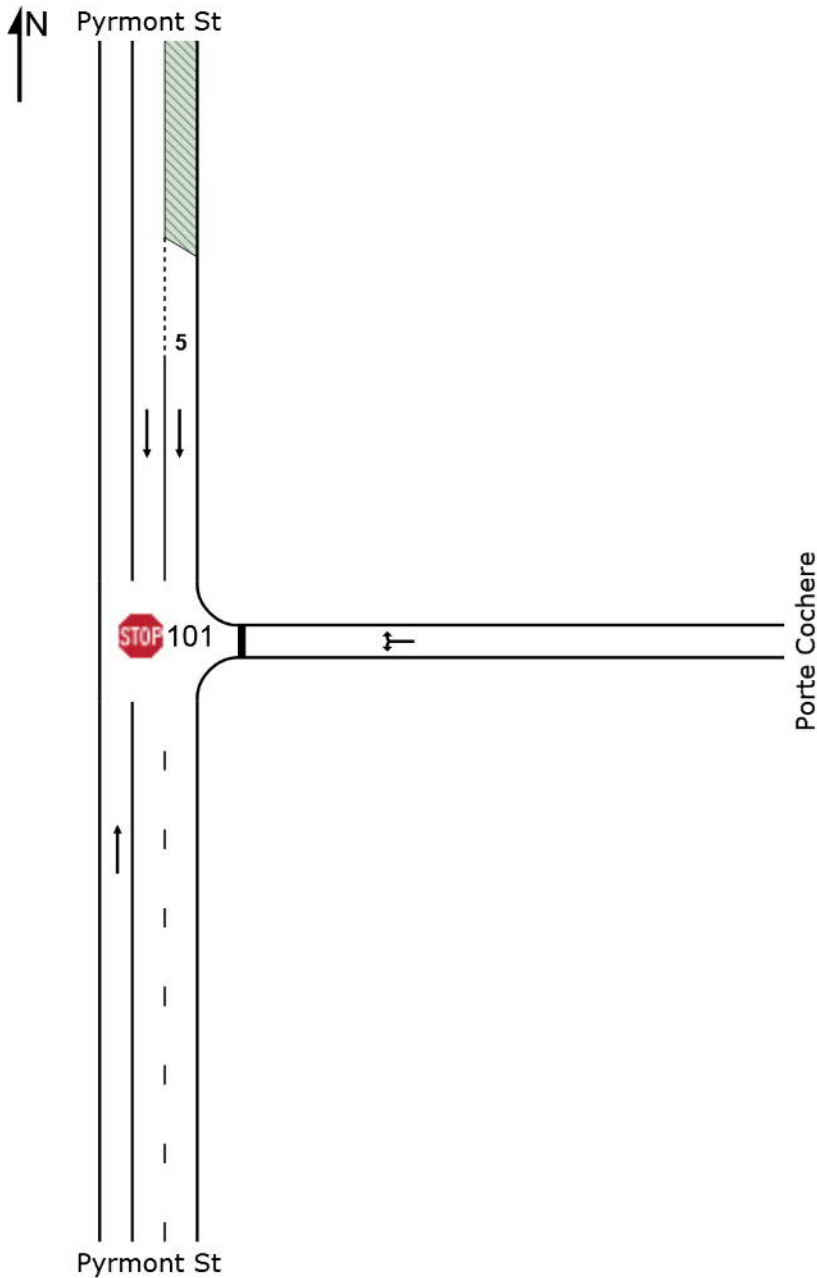
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SITE LAYOUT

 **Site: 101 [PM Pyrmont St/Port Cochere Exit]**

New Site
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Port Cochere Exit]

 Network: N101 [PM Star Casino Network]

New Site
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
South: Pyrmont St													
2	T1	268	0.0	268	0.0	0.138	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		268	0.0	268	0.0	0.138	0.0	NA	0.0	0.0	0.00	0.00	50.0
East: Porte Cochere													
4	L2	103	1.0	103	1.0	0.202	5.1	LOS A	0.4	2.9	0.36	0.90	17.9
6	R2	5	0.0	5	0.0	0.202	11.3	LOS B	0.4	2.9	0.36	0.90	17.9
Approach		108	1.0	108	1.0	0.202	5.4	LOS A	0.4	2.9	0.36	0.90	17.9
North: Pyrmont St													
8	T1	468	1.3	468	1.3	0.121	0.0	LOS A	5.7	40.3	0.00	0.00	50.0
Approach		468	1.3	468	1.3	0.121	0.0	NA	5.7	40.3	0.00	0.00	50.0
All Vehicles		845	0.9	845	0.9	0.202	0.7	NA	5.7	40.3	0.05	0.11	36.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

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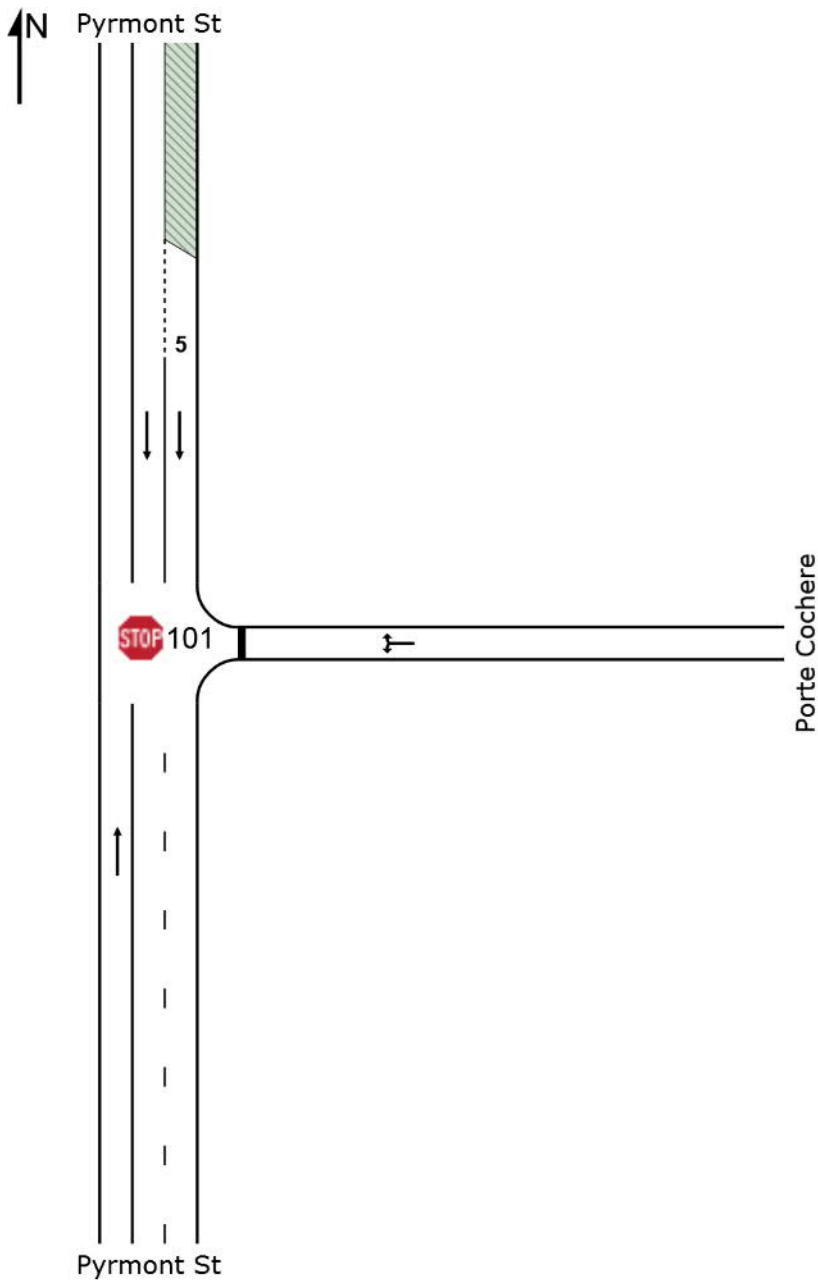
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SITE LAYOUT

 **Site: 101 [OP Pyrmont St/Port Cochere Exit]**

New Site
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Port Cochere Exit]

 Network: N101 [OP Star Casino Network]

New Site
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
South: Pyrmont St													
2	T1	274	0.0	274	0.0	0.140	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		274	0.0	274	0.0	0.140	0.0	NA	0.0	0.0	0.00	0.00	50.0
East: Porte Cochere													
4	L2	203	0.5	203	0.5	0.424	5.5	LOS A	1.2	8.1	0.37	0.94	17.6
6	R2	24	0.0	24	0.0	0.424	11.7	LOS B	1.2	8.1	0.37	0.94	17.6
Approach		227	0.5	227	0.5	0.424	6.1	LOS A	1.2	8.1	0.37	0.94	17.6
North: Pyrmont St													
8	T1	400	0.3	400	0.3	0.103	0.0	LOS A	3.9	27.7	0.00	0.00	50.0
Approach		400	0.3	400	0.3	0.103	0.0	NA	3.9	27.7	0.00	0.00	50.0
All Vehicles		901	0.2	901	0.2	0.424	1.6	NA	3.9	27.7	0.09	0.24	29.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

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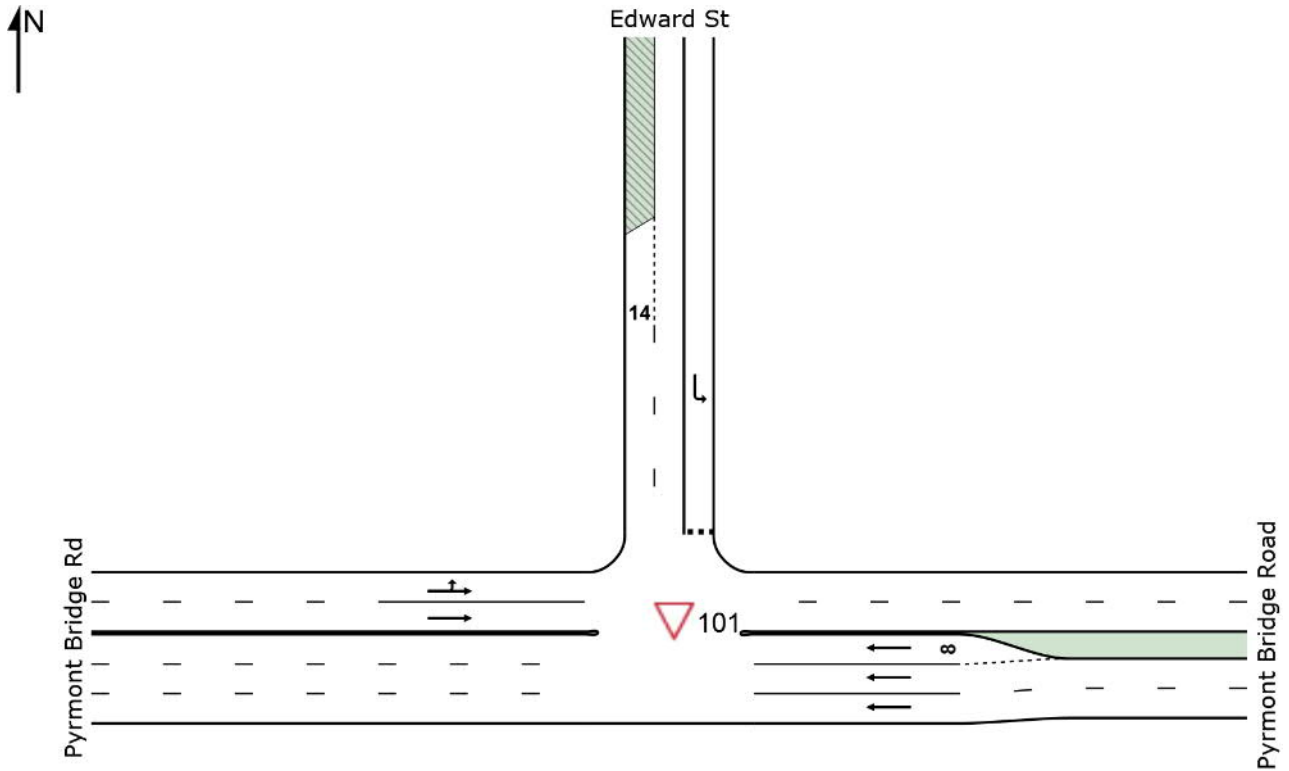
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SITE LAYOUT

▽ Site: 101 [AM Pyrmont Bridge Rd/Edward St]

No Project
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [AM Pyrmont Bridge Rd/Edward St]

Network: 1 [AM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Road													
5	T1	260	6.5	260	6.5	0.052	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		260	6.5	260	6.5	0.052	0.0	NA	0.0	0.0	0.00	0.00	50.0
North: Edward St													
7	L2	25	0.0	25	0.0	0.021	5.0	LOS A	0.1	0.5	0.16	0.51	27.8
Approach		25	0.0	25	0.0	0.021	5.0	LOS A	0.1	0.5	0.16	0.51	27.8
West: Pyrmont Bridge Rd													
10	L2	180	0.6	180	0.6	0.164	2.8	LOS A	0.0	0.0	0.00	0.30	31.5
11	T1	432	6.5	432	6.5	0.164	0.0	LOS A	0.0	0.0	0.00	0.09	42.6
Approach		612	4.7	612	4.7	0.164	0.8	NA	0.0	0.0	0.00	0.15	38.5
All Vehicles		897	5.1	897	5.1	0.164	0.7	NA	0.1	0.5	0.00	0.12	43.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

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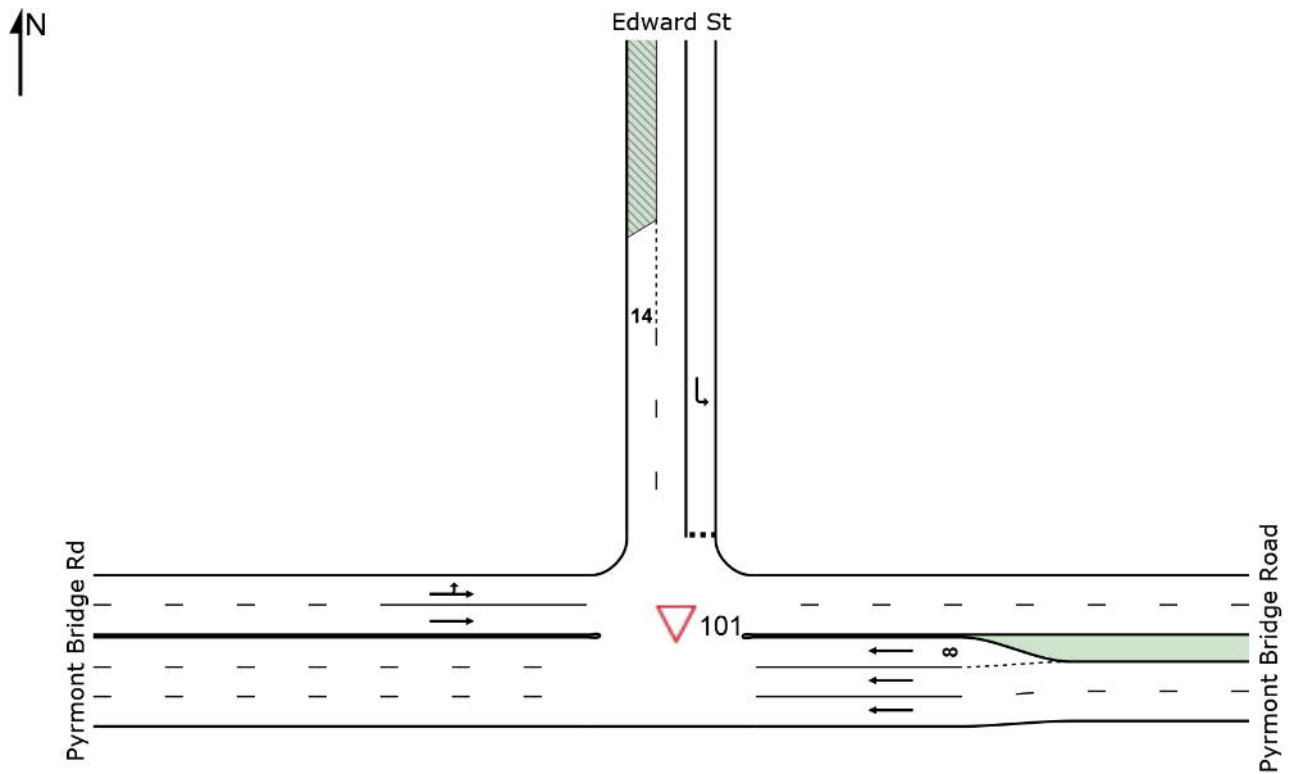
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SITE LAYOUT

▽ Site: 101 [PM Pyrmont Bridge Rd/Edward St]

No Project
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [PM Pyrmont Bridge Rd/Edward St]

Network: N101 [PM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Road													
5	T1	420	1.7	420	1.7	0.073	0.0	LOS A	2.8	20.1	0.00	0.00	50.0
Approach		420	1.7	420	1.7	0.073	0.0	NA	2.8	20.1	0.00	0.00	50.0
North: Edward St													
7	L2	50	0.0	50	0.0	0.041	4.9	LOS A	0.1	1.0	0.14	0.51	28.0
Approach		50	0.0	50	0.0	0.041	4.9	LOS A	0.1	1.0	0.14	0.51	28.0
West: Pyrmont Bridge Rd													
10	L2	154	0.6	154	0.6	0.135	2.8	LOS A	0.0	0.0	0.00	0.31	31.4
11	T1	359	2.5	359	2.5	0.135	0.0	LOS A	0.0	0.0	0.00	0.09	42.8
Approach		513	1.9	513	1.9	0.135	0.8	NA	0.0	0.0	0.00	0.15	38.5
All Vehicles		983	1.7	983	1.7	0.135	0.7	NA	2.8	20.1	0.01	0.11	44.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

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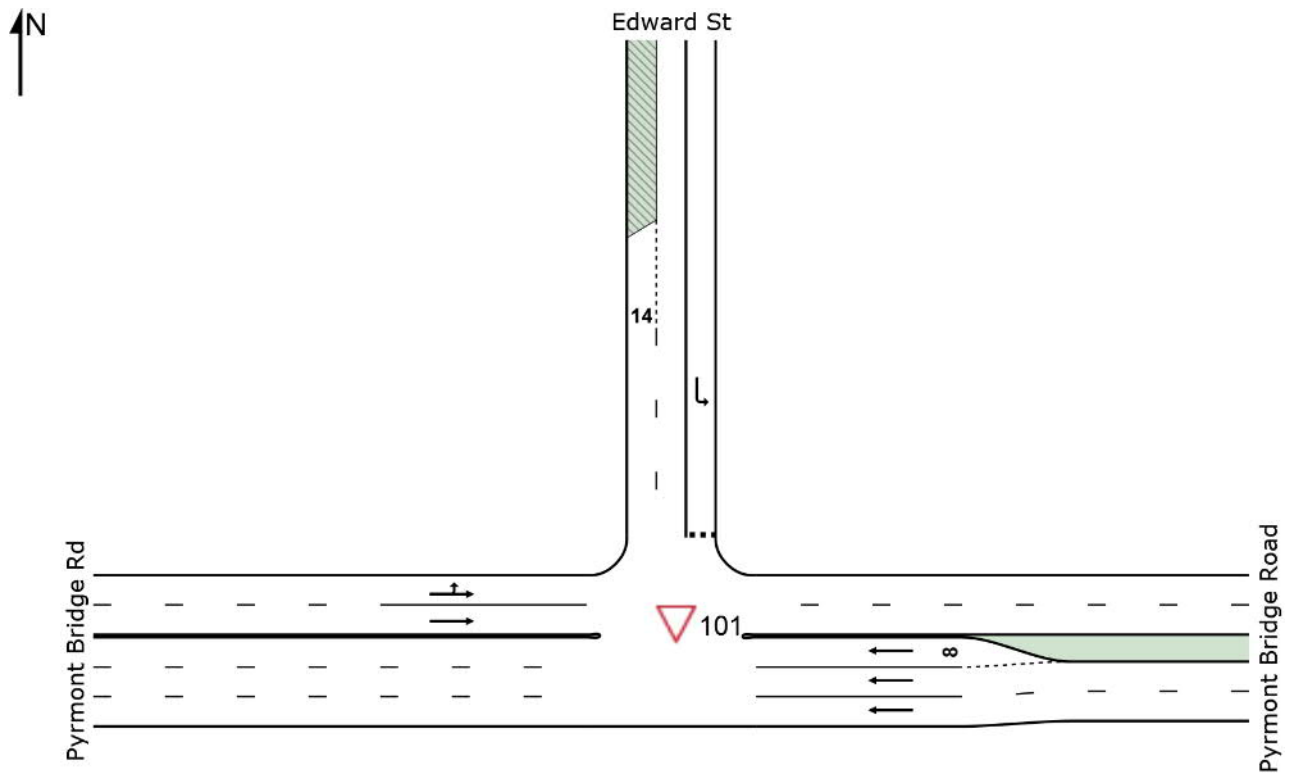
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SITE LAYOUT

▽ Site: 101 [OP Pyrmont Bridge Rd/Edward St]

No Project
Giveway / Yield (Two-Way)



MOVEMENT SUMMARY

Site: 101 [OP Pyrmont Bridge Rd/Edward St]

Network: N101 [OP Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Road													
5	T1	593	0.3	593	0.3	0.102	0.0	LOS A	6.7	47.1	0.00	0.00	50.0
Approach		593	0.3	593	0.3	0.102	0.0	NA	6.7	47.1	0.00	0.00	50.0
North: Edward St													
7	L2	55	0.0	55	0.0	0.048	5.2	LOS A	0.2	1.1	0.19	0.52	27.5
Approach		55	0.0	55	0.0	0.048	5.2	LOS A	0.2	1.1	0.19	0.52	27.5
West: Pyrmont Bridge Rd													
10	L2	98	0.0	98	0.0	0.139	2.8	LOS A	0.0	0.0	0.00	0.19	36.6
11	T1	437	1.4	437	1.4	0.139	0.0	LOS A	0.0	0.0	0.00	0.07	43.8
Approach		535	1.1	535	1.1	0.139	0.5	NA	0.0	0.0	0.00	0.09	42.2
All Vehicles		1183	0.7	1183	0.7	0.139	0.5	NA	6.7	47.1	0.01	0.07	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

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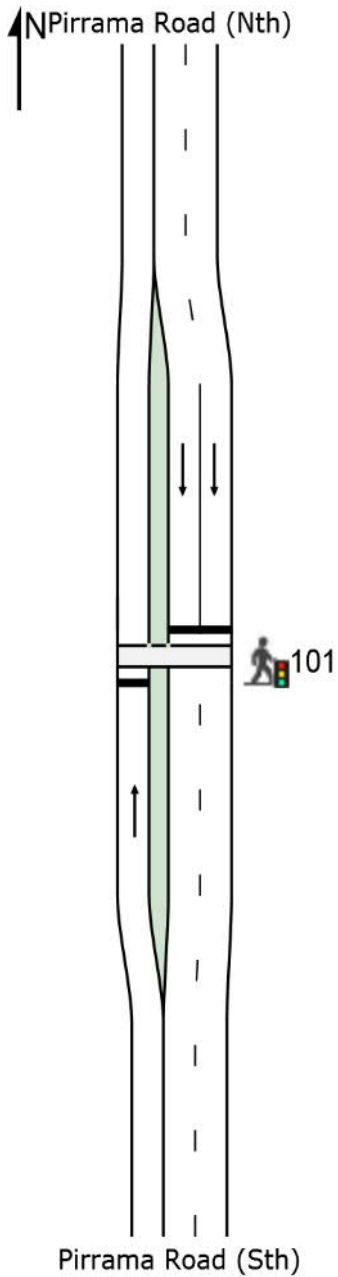
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [AM Pirrama Rd Pedestrian Crossing]**

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Pirrama Rd Pedestrian Crossing]

 Network: 1 [AM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h		veh/h		v/c	sec		veh	m			
South: Pirrama Road (Sth)													
2	T1	433	4.6	429	4.6	0.324	4.8	LOS A	5.7	41.3	0.30	0.26	33.0
Approach		433	4.6	429 ^{N1}	4.6	0.324	4.8	LOS A	5.7	41.3	0.30	0.26	33.0
North: Pirrama Road (Nth)													
8	T1	121	7.0	121	7.0	0.046	1.2	LOS A	0.2	1.5	0.07	0.06	43.4
Approach		121	7.0	121	7.0	0.046	1.2	LOS A	0.2	1.5	0.07	0.06	43.4
All Vehicles		554	5.1	550 ^{N1}	5.2	0.324	4.0	LOS A	5.7	41.3	0.25	0.22	34.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.4 %

Number of Iterations: 10 (maximum specified: 10)

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		105	43.4	LOS E			0.93	0.93

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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PHASING SUMMARY

 Site: 101 [AM Pirrama Rd Pedestrian Crossing]

 Network: 1 [AM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: Two-Phase

Reference Phase: Phase A

Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	76
Green Time (sec)	70	18
Phase Time (sec)	76	24
Phase Split	76 %	24 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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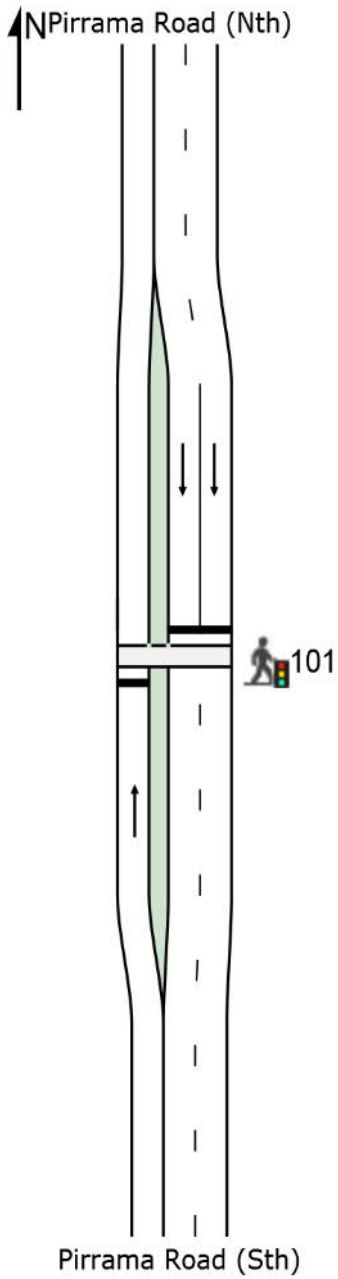
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

SITE LAYOUT

 **Site: 101 [PM Pirrama Rd Pedestrian Crossing]**

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Pirrama Rd Pedestrian Crossing]

 Network: N101 [PM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
South: Pirrama Road (Sth)													
2	T1	531	3.6	531	3.6	0.387	5.7	LOS A	9.9	71.2	0.42	0.37	31.0
Approach		531	3.6	531	3.6	0.387	5.7	LOS A	9.9	71.2	0.42	0.37	31.0
North: Pirrama Road (Nth)													
8	T1	429	3.4	429	3.4	0.156	0.8	LOS A	0.5	3.5	0.05	0.04	45.8
Approach		429	3.4	429	3.4	0.156	0.8	LOS A	0.5	3.5	0.05	0.04	45.8
All Vehicles		960	3.5	960	3.5	0.387	3.5	LOS A	9.9	71.2	0.25	0.23	35.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 11.2 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		105	43.4	LOS E			0.93	0.93

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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PHASING SUMMARY

 Site: 101 [PM Pirrama Rd Pedestrian Crossing]

 Network: N101 [PM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Two-Phase

Reference Phase: Phase A

Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	77
Green Time (sec)	72	17
Phase Time (sec)	78	22
Phase Split	78 %	22 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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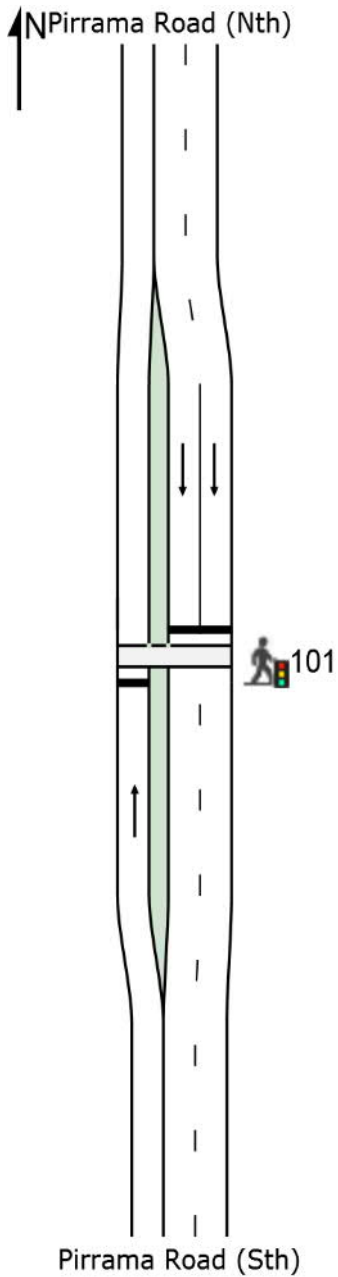
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SITE LAYOUT

 **Site: 101 [OP Pirrama Rd Pedestrian Crossing]**

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Pirrama Rd Pedestrian Crossing]

 Network: N101 [OP Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Pirrama Road (Sth)													
2	T1	621	1.4	621	1.4	0.446	6.0	LOS A	10.7	75.9	0.39	0.35	30.5
Approach		621	1.4	621	1.4	0.446	6.0	LOS A	10.7	75.9	0.39	0.35	30.5
North: Pirrama Road (Nth)													
8	T1	678	0.6	678	0.6	0.261	0.8	LOS A	0.9	6.6	0.06	0.05	45.4
Approach		678	0.6	678	0.6	0.261	0.8	LOS A	0.9	6.6	0.06	0.05	45.4
All Vehicles		1299	1.0	1299	1.0	0.446	3.3	LOS A	10.7	75.9	0.22	0.19	36.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 21.8 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		105	43.4	LOS E			0.93	0.93

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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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

PHASING SUMMARY

 Site: 101 [OP Pirrama Rd Pedestrian Crossing]

 Network: N101 [OP Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Two-Phase

Reference Phase: Phase A

Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	77
Green Time (sec)	72	17
Phase Time (sec)	78	22
Phase Split	78 %	22 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 20:53:41

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180115 Existing.sip7

APPENDIX B SIDRA ANALYSIS OF NETWORK CONDITIONS WITH MODIFICATION 14

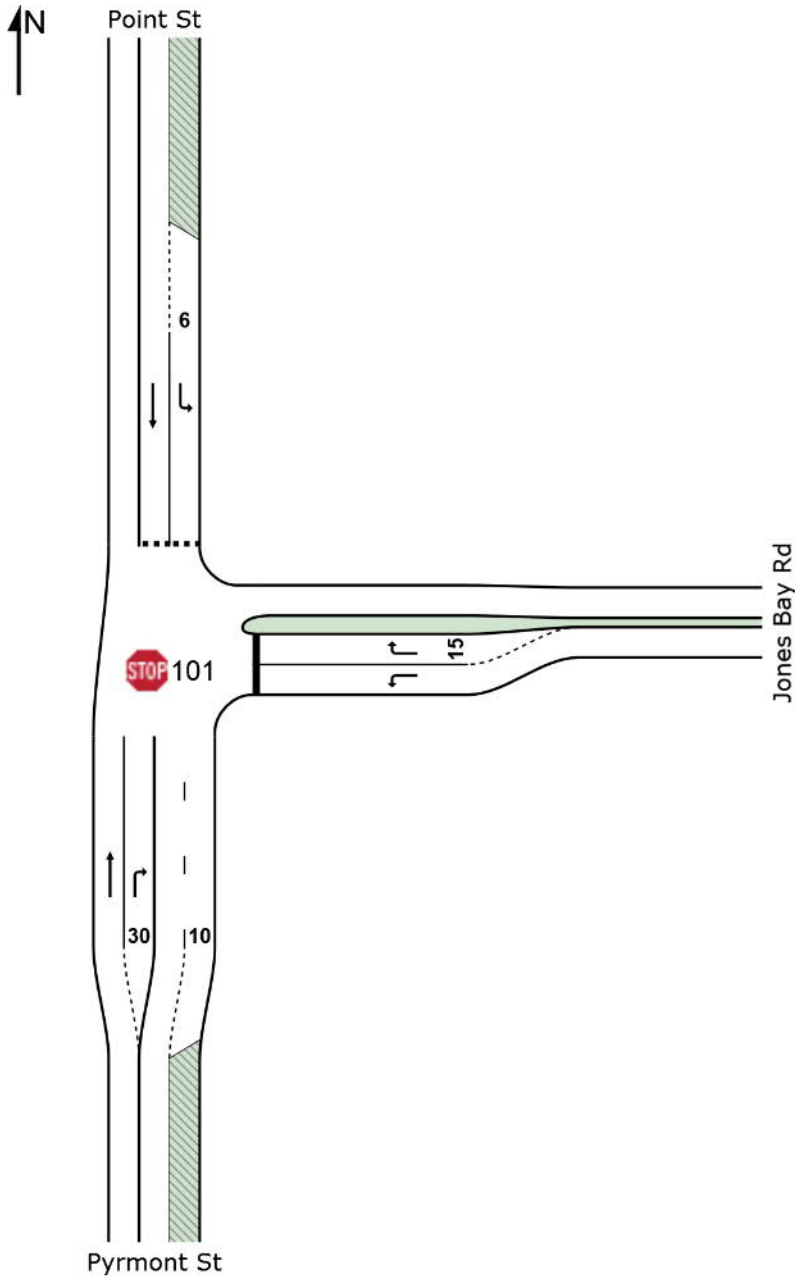
Summary of Results

Ref.	Intersection	AM Peak				PM Peak				Off-Peak			
		DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)	DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)	DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)
1	Pymont Street / Jones Bay Road	0.11	A	7.1	3.2	0.23	A	6.8	2.5	0.233	A	6.4	1.1
2	Pymont Street / Union Street	0.357	B	22.4	67.4	0.605	C	30.5	81.6	0.473	C	22	81.6
3	Pymont Street / Pymont Bridge Road	0.984	B	28.1	125.6	0.935	C	23.5	125.6	0.726	C	26.9	116.1
4	Union Street / Edward Street	0.172	B	20.3	25.1	0.205	C	26.4	43.5	0.591	C	24.7	28.7
5	Pymont Bridge Road / Union Street	0.137	A	8.7	1.1	0.174	A	8.6	2.6	0.269	A	5.9	63.2
6	Union Street / Murray Street / Darling Drive	0.937	C	38.6	87.3	0.861	C	33.1	74.3	0.95	C	34.8	135.7
7	Pirrama Road / Star Car Park Entrance	0.202	A	4.9	6.6	0.469	B	12.6	42.1	0.586	B	14.4	63
8	Jones Bay Road / Pirrama Road	0.244	A	11.3	9.7	0.403	B	12.2	16.4	0.485	B	13.8	21.2
9	Jones bay Road / Port Cochere Entry	0.144	A	4.7	0	0.27	A	4.6	0	0.32	A	4.6	0
10	Pymont Street / Port Cochere Exit	0.15	A	8.9	1.7	0.204	B	10.9	32.3	0.426	B	11.1	11.2
11	Pymont Bridge Road / Edward Street	0.168	A	5	0.5	0.139	A	4.9	1	0.142	A	5.2	25.7
12	Pirrama Road Pedestrian Crossing	0.332	A	4.4	45.7	0.405	A	4	73.9	0.465	A	3.8	87.6
-	Network	0.984	E	14.6		0.935	E	13.9		0.95	E	13.9	

SITE LAYOUT

 Site: 101 [AM Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Jones Bay Rd]

 Network: 1 [AM Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	62	3.2	62	3.2	0.032	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	199	2.5	199	2.5	0.109	4.6	LOS A	0.0	0.0	0.00	0.53	36.7
Approach		261	2.7	261	2.7	0.109	3.5	NA	0.0	0.0	0.00	0.40	39.7
East: Jones Bay Rd													
4	L2	141	7.8	141	7.8	0.102	5.1	LOS A	0.0	0.0	0.00	1.02	17.1
6	R2	36	2.8	36	2.8	0.050	7.1	LOS A	0.2	1.2	0.43	0.91	20.5
Approach		177	6.8	177	6.8	0.102	5.5	LOS A	0.2	1.2	0.09	1.00	18.2
North: Point St													
7	L2	64	0.0	64	0.0	0.046	4.3	LOS A	0.2	1.4	0.29	0.51	24.3
8	T1	137	1.5	137	1.5	0.110	3.3	LOS A	0.4	3.2	0.30	0.48	27.0
Approach		201	1.0	201	1.0	0.110	3.6	LOS A	0.4	3.2	0.30	0.49	26.0
All Vehicles		639	3.3	639	3.3	0.110	4.1	NA	0.4	3.2	0.12	0.60	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

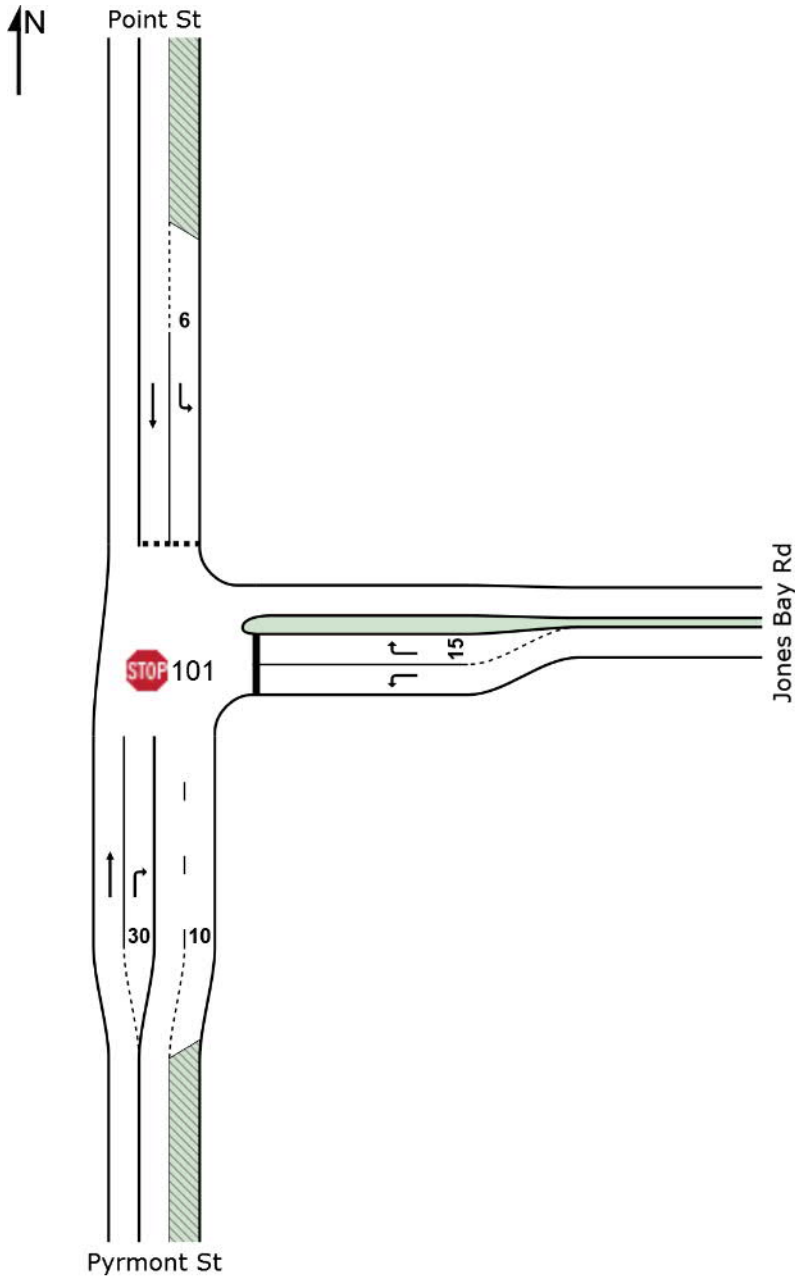
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 Site: 101 [PM Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Jones Bay Rd]

 Network: N101 [PM Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Pyrmont St													
2	T1	152	0.0	152	0.0	0.078	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	108	0.0	108	0.0	0.058	4.6	LOS A	0.0	0.0	0.00	0.53	36.7
Approach		260	0.0	260	0.0	0.078	1.9	NA	0.0	0.0	0.00	0.22	44.2
East: Jones Bay Rd													
4	L2	330	0.9	330	0.9	0.230	5.0	LOS A	0.0	0.0	0.00	1.00	17.1
6	R2	65	0.0	65	0.0	0.085	6.8	LOS A	0.3	2.0	0.41	0.91	20.8
Approach		395	0.8	395	0.8	0.230	5.3	LOS A	0.3	2.0	0.07	0.99	18.1
North: Point St													
7	L2	66	0.0	66	0.0	0.044	4.0	LOS A	0.2	1.4	0.20	0.49	25.1
8	T1	115	2.6	115	2.6	0.089	3.1	LOS A	0.4	2.5	0.25	0.46	27.6
Approach		181	1.7	181	1.7	0.089	3.4	LOS A	0.4	2.5	0.23	0.47	26.6
All Vehicles		836	0.7	836	0.7	0.230	3.8	NA	0.4	2.5	0.08	0.64	31.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

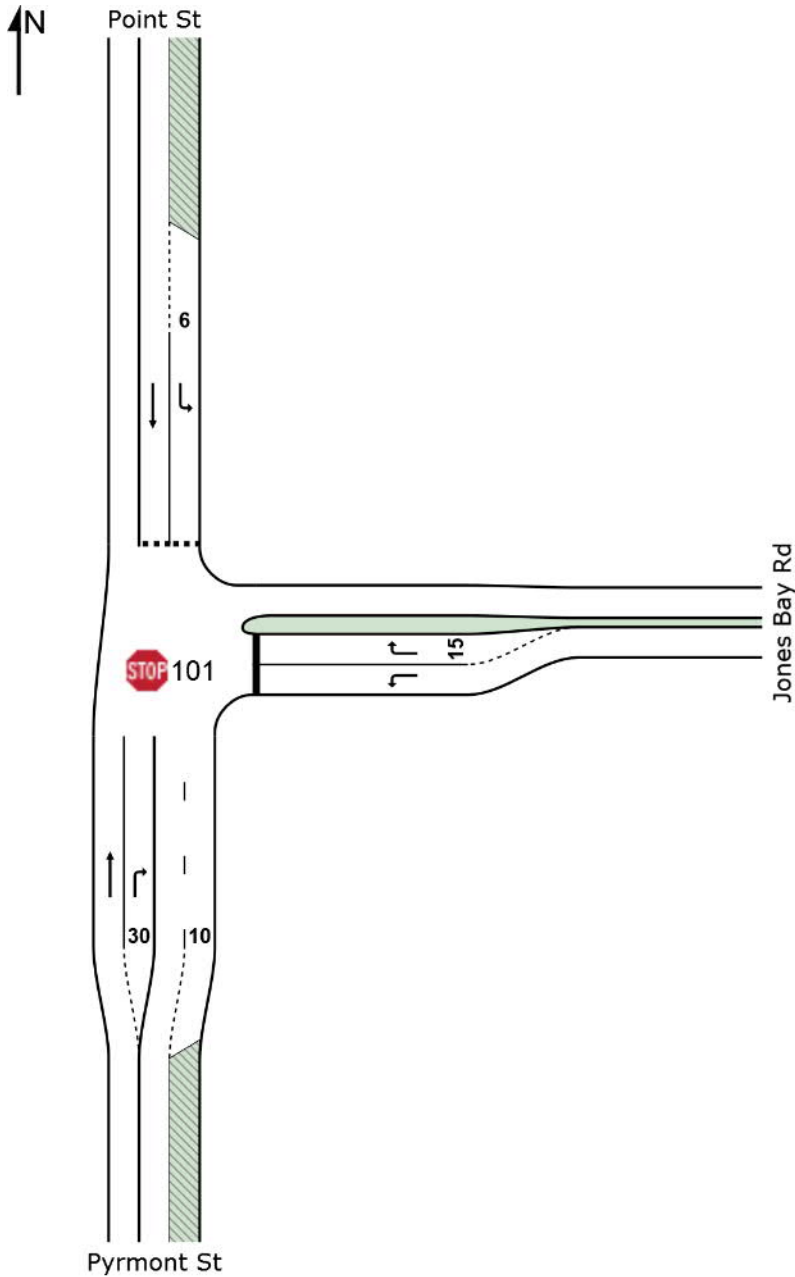
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 Site: 101 [OP Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Jones Bay Rd]

 Network: N101 [OP Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	53	0.0	53	0.0	0.027	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	218	0.0	218	0.0	0.117	4.6	LOS A	0.0	0.0	0.00	0.53	36.7
Approach		271	0.0	271	0.0	0.117	3.7	NA	0.0	0.0	0.00	0.43	39.1
East: Jones Bay Rd													
4	L2	335	0.3	335	0.3	0.233	4.9	LOS A	0.0	0.0	0.00	1.00	17.1
6	R2	34	0.0	34	0.0	0.042	6.4	LOS A	0.1	1.0	0.37	0.88	21.4
Approach		369	0.3	369	0.3	0.233	5.1	LOS A	0.1	1.0	0.03	0.99	17.8
North: Point St													
7	L2	49	0.0	49	0.0	0.036	4.3	LOS A	0.2	1.1	0.30	0.51	24.2
8	T1	45	0.0	45	0.0	0.036	3.3	LOS A	0.1	1.0	0.29	0.47	27.1
Approach		94	0.0	94	0.0	0.036	3.8	LOS A	0.2	1.1	0.30	0.49	25.5
All Vehicles		734	0.1	734	0.1	0.233	4.4	NA	0.2	1.1	0.06	0.72	30.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

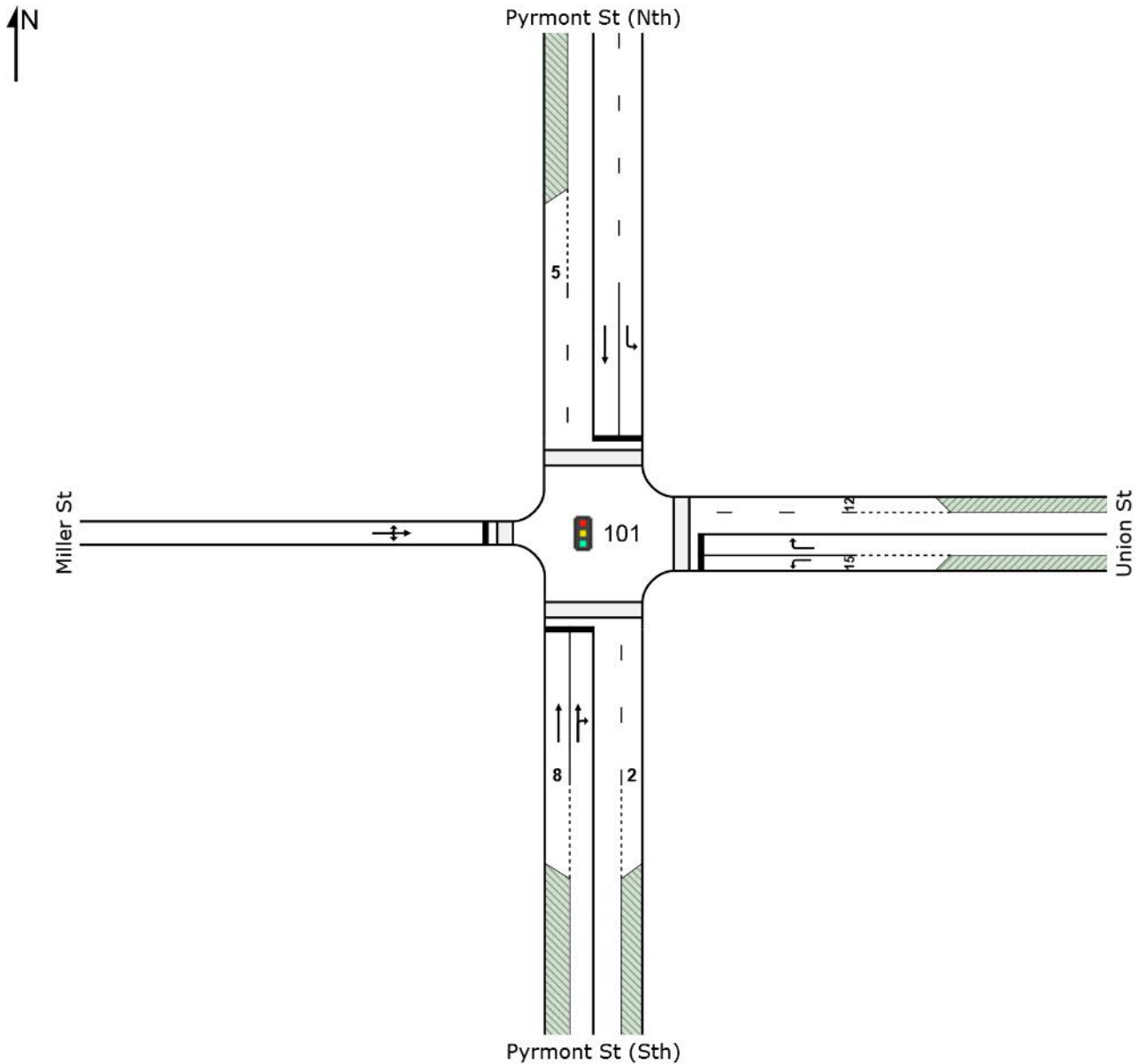
Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 **Site: 101 [AM Pyrmont St/Union St]**

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Union St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Pyrmont St (Sth)													
2	T1	247	2.8	247	2.8	0.357	19.5	LOS B	6.5	46.6	0.64	0.55	14.5
3	R2	29	3.4	29	3.4	0.357	25.3	LOS B	6.5	46.6	0.66	0.58	13.9
Approach		276	2.9	276	2.9	0.357	20.1	LOS B	6.5	46.6	0.64	0.55	14.4
East: Union St													
4	L2	40	7.5	40	7.5	0.201	48.8	LOS D	1.9	14.3	0.98	0.74	5.3
6	R2	16	6.3	16	6.3	0.055	42.4	LOS C	0.7	5.2	0.93	0.70	5.9
Approach		56	7.1	56	7.1	0.201	47.0	LOS D	1.9	14.3	0.97	0.73	5.5
North: Pyrmont St (Nth)													
7	L2	42	7.1	42	7.1	0.037	10.1	LOS A	0.7	5.2	0.36	0.61	16.0
8	T1	296	3.4	296	3.4	0.349	19.2	LOS B	9.4	67.4	0.70	0.60	9.6
Approach		338	3.8	338	3.8	0.349	18.0	LOS B	9.4	67.4	0.65	0.60	10.2
West: Miller St													
10	L2	9	0.0	9	0.0	0.130	40.8	LOS C	1.7	12.5	0.87	0.70	4.0
11	T1	14	0.0	14	0.0	0.130	37.6	LOS C	1.7	12.5	0.87	0.70	4.0
12	R2	19	5.3	19	5.3	0.130	40.7	LOS C	1.7	12.5	0.87	0.70	4.0
Approach		42	2.4	42	2.4	0.130	39.7	LOS C	1.7	12.5	0.87	0.70	4.0
All Vehicles		712	3.7	712	3.7	0.357	22.4	LOS B	9.4	67.4	0.69	0.60	10.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Prop. Queued	Effective Stop Rate		
		ped/h	sec		Pedestrian ped		per ped		
P1	South Full Crossing	196	43.6	LOS E	0.5	0.5	0.94	0.94	
P2	East Full Crossing	42	43.3	LOS E	0.1	0.1	0.93	0.93	
P3	North Full Crossing	937	45.0	LOS E	2.6	2.6	0.97	0.97	
P4	West Full Crossing	65	43.4	LOS E	0.2	0.2	0.93	0.93	
All Pedestrians		1240	44.6	LOS E			0.96	0.96	

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

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

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

Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:19:31

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [AM Pyrmont St/Union St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

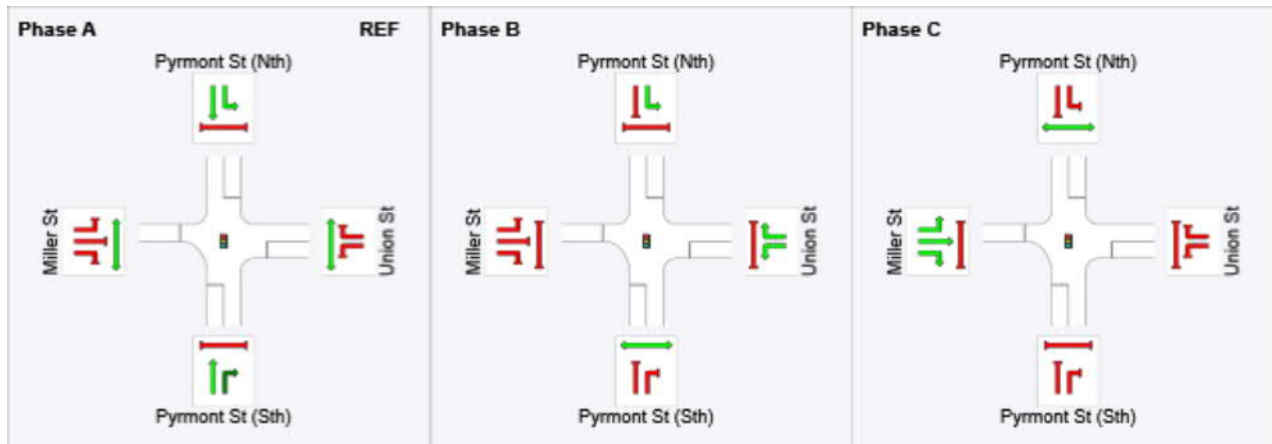
Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	51	74
Green Time (sec)	45	17	20
Phase Time (sec)	51	23	26
Phase Split	51 %	23 %	26 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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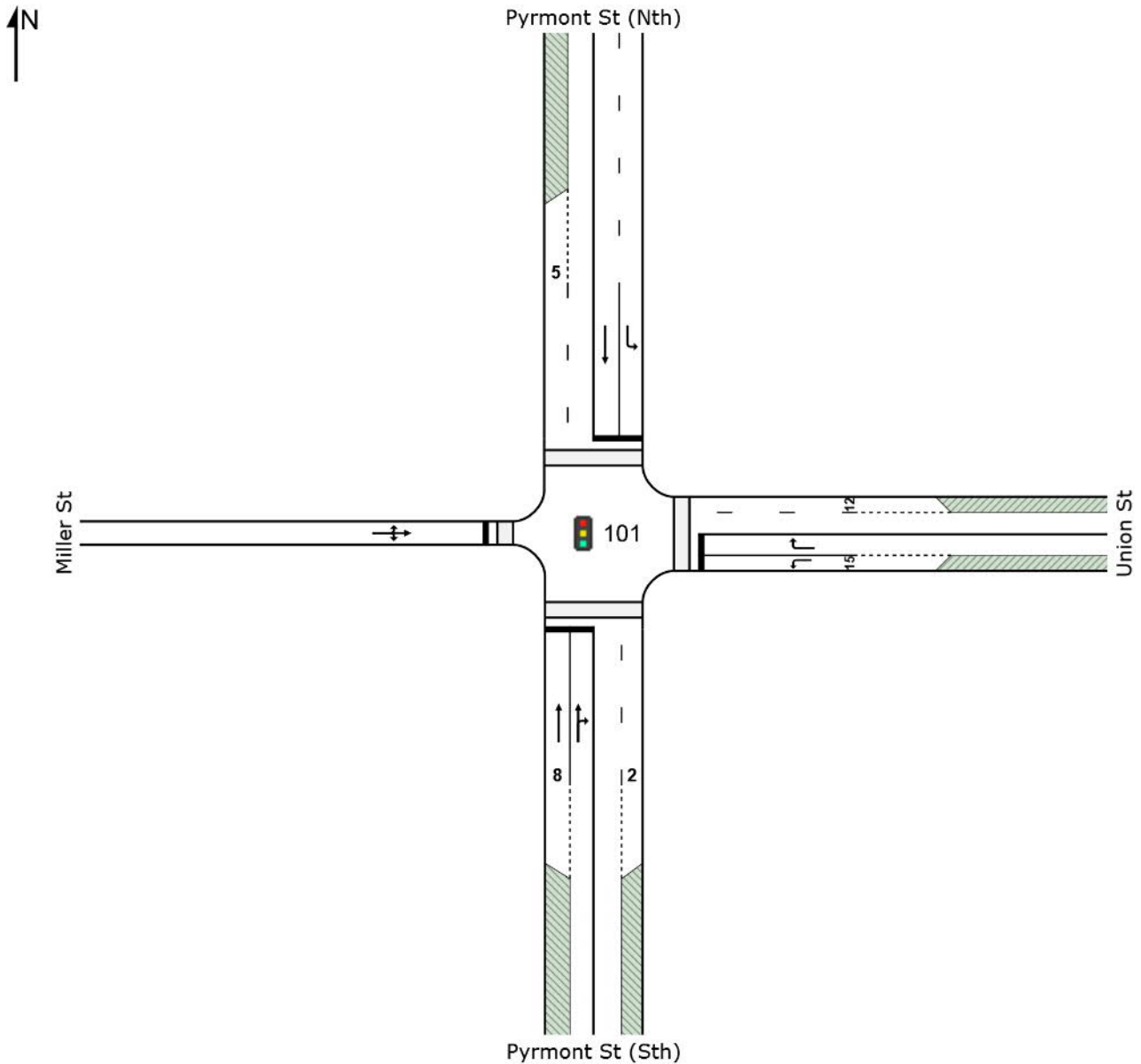
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [PM Pyrmont St/Union St]**

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Union St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Pyrmont St (Sth)													
2	T1	214	0.0	214	0.0	0.604	41.8	LOS D	10.4	72.6	1.00	0.82	8.1
3	R2	41	0.0	41	0.0	0.604	49.3	LOS D	10.4	72.6	1.00	0.84	7.6
Approach		255	0.0	255	0.0	0.604	43.0	LOS D	10.4	72.6	1.00	0.82	8.0
East: Union St													
4	L2	104	0.0	104	0.0	0.138	29.3	LOS C	4.0	28.3	0.85	0.76	8.3
6	R2	35	0.0	35	0.0	0.057	29.9	LOS C	1.4	9.6	0.84	0.73	7.9
Approach		139	0.0	139	0.0	0.138	29.4	LOS C	4.0	28.3	0.85	0.76	8.2
North: Pyrmont St (Nth)													
7	L2	74	0.0	74	0.0	0.109	25.9	LOS C	2.4	16.5	0.69	0.70	7.7
8	T1	469	1.1	469	1.1	0.605	25.5	LOS C	11.6	81.6	0.85	0.75	7.6
Approach		543	0.9	543	0.9	0.605	25.6	LOS C	11.6	81.6	0.83	0.74	7.6
West: Miller St													
10	L2	6	0.0	6	0.0	0.044	19.6	LOS B	0.8	5.5	0.59	0.62	7.6
11	T1	5	0.0	5	0.0	0.044	16.4	LOS B	0.8	5.5	0.59	0.62	7.6
12	R2	18	0.0	18	0.0	0.044	19.5	LOS B	0.8	5.5	0.59	0.62	7.6
Approach		29	0.0	29	0.0	0.044	19.0	LOS B	0.8	5.5	0.59	0.62	7.6
All Vehicles		966	0.5	966	0.5	0.605	30.5	LOS C	11.6	81.6	0.87	0.76	7.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	85	43.4	LOS E	0.2	0.2	0.93	0.93
P2	East Full Crossing	61	43.4	LOS E	0.2	0.2	0.93	0.93
P3	North Full Crossing	986	45.1	LOS E	2.7	2.7	0.97	0.97
P4	West Full Crossing	65	43.4	LOS E	0.2	0.2	0.93	0.93
All Pedestrians		1198	44.8	LOS E			0.96	0.96

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

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

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

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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [PM Pyrmont St/Union St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: CCG Phasing

Reference Phase: Phase A

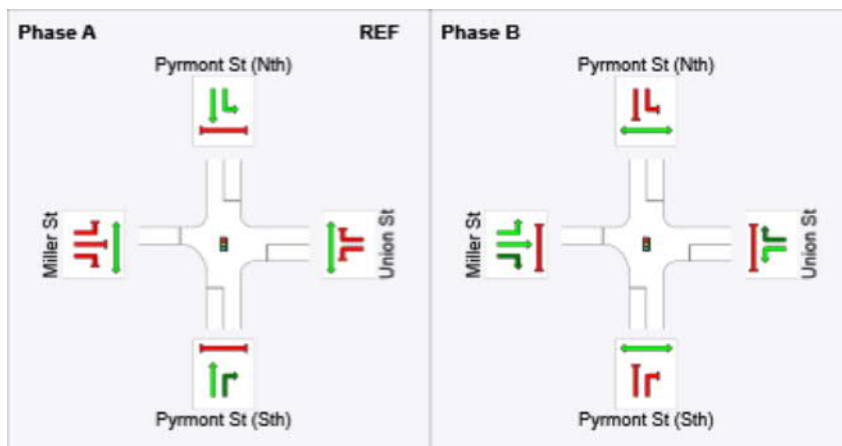
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	46
Green Time (sec)	40	48
Phase Time (sec)	46	54
Phase Split	46 %	54 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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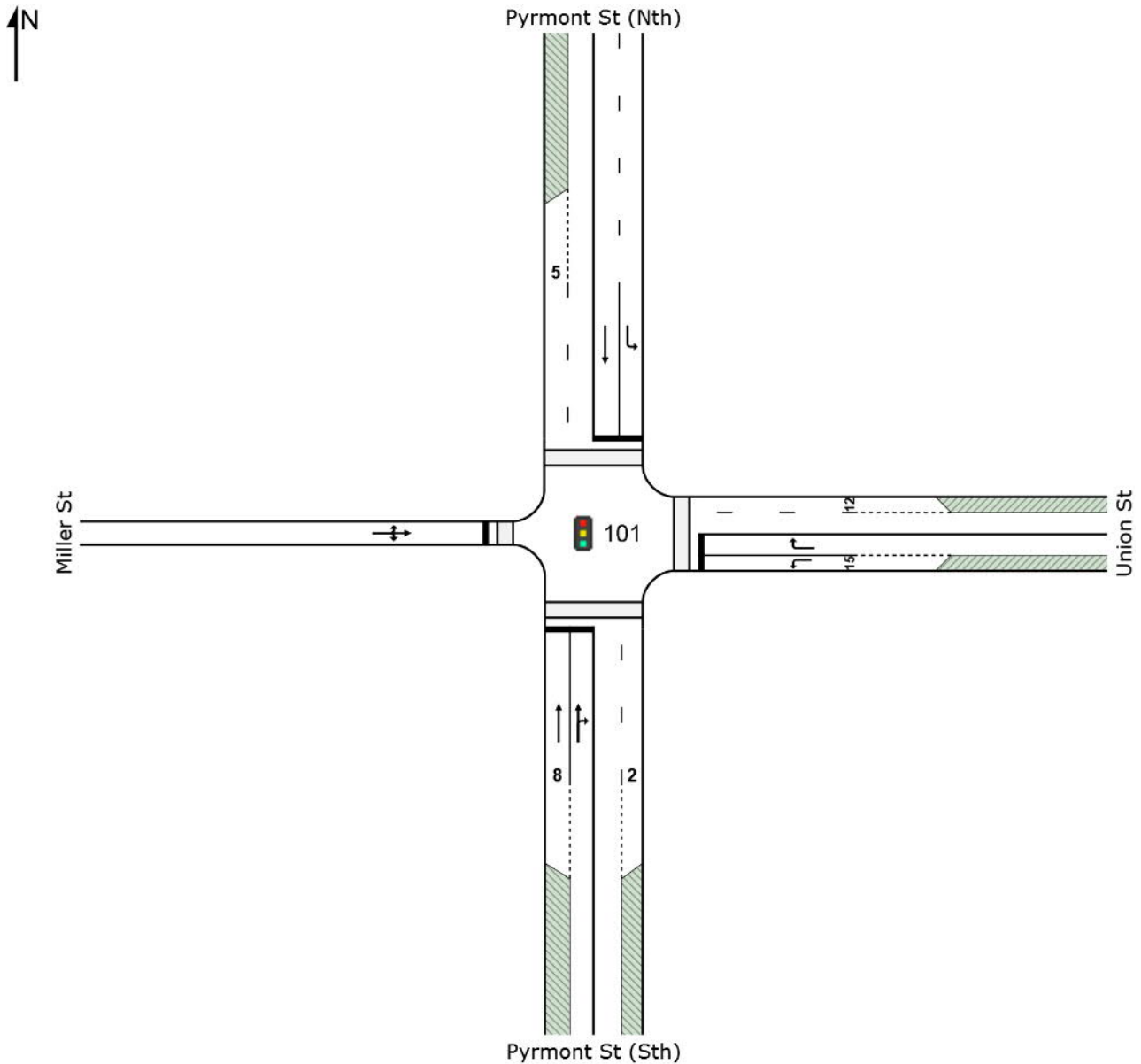
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [OP Pyrmont St/Union St]**

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Union St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St (Sth)													
2	T1	238	0.0	238	0.0	0.286	29.1	LOS C	9.8	68.9	1.00	0.82	10.8
3	R2	28	0.0	28	0.0	0.286	35.6	LOS D	9.8	68.9	1.00	0.84	10.3
Approach		266	0.0	266	0.0	0.286	29.8	LOS C	9.8	68.9	1.00	0.83	10.8
East: Union St													
4	L2	110	0.0	110	0.0	0.196	34.2	LOS C	4.6	32.2	0.90	0.78	7.3
6	R2	21	0.0	21	0.0	0.050	38.7	LOS D	0.9	6.3	0.91	0.71	6.4
Approach		131	0.0	131	0.0	0.196	34.9	LOS C	4.6	32.2	0.90	0.77	7.1
North: Pyrmont St (Nth)													
7	L2	80	0.0	80	0.0	0.086	17.1	LOS B	2.0	13.8	0.54	0.67	10.8
8	T1	497	0.4	497	0.4	0.473	15.1	LOS B	11.6	81.6	0.66	0.59	11.6
Approach		577	0.3	577	0.3	0.473	15.4	LOS B	11.6	81.6	0.65	0.60	11.5
West: Miller St													
10	L2	1	0.0	1	0.0	0.034	28.9	LOS C	0.5	4.0	0.72	0.60	5.6
11	T1	8	12.5	8	12.5	0.034	25.7	LOS C	0.5	4.0	0.72	0.60	5.6
12	R2	7	0.0	7	0.0	0.034	28.8	LOS C	0.5	4.0	0.72	0.60	5.6
Approach		16	6.3	16	6.3	0.034	27.3	LOS C	0.5	4.0	0.72	0.60	5.6
All Vehicles		990	0.3	990	0.3	0.473	22.0	LOS C	11.6	81.6	0.78	0.68	10.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	28	43.3	LOS E	0.1	0.1	0.93	0.93
P2	East Full Crossing	61	43.4	LOS E	0.2	0.2	0.93	0.93
P3	North Full Crossing	343	43.9	LOS E	0.9	0.9	0.94	0.94
P4	West Full Crossing	71	43.4	LOS E	0.2	0.2	0.93	0.93
All Pedestrians		503	43.7	LOS E			0.94	0.94

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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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [OP Pyrmont St/Union St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: CCG Phasing

Reference Phase: Phase A

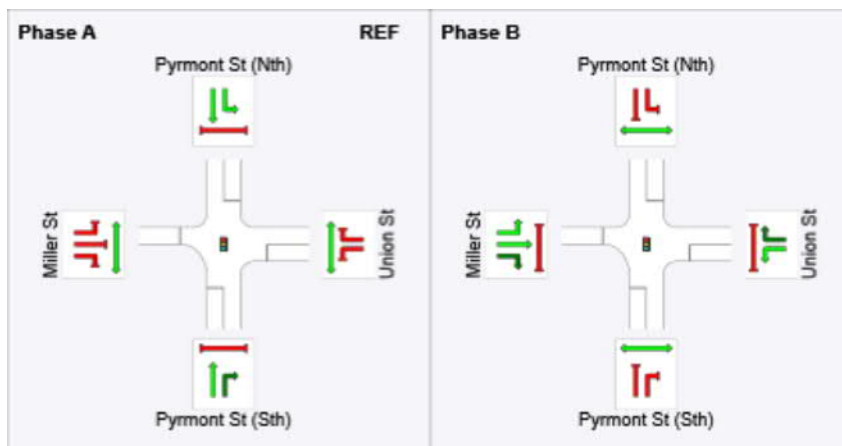
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	60
Green Time (sec)	54	34
Phase Time (sec)	60	40
Phase Split	60 %	40 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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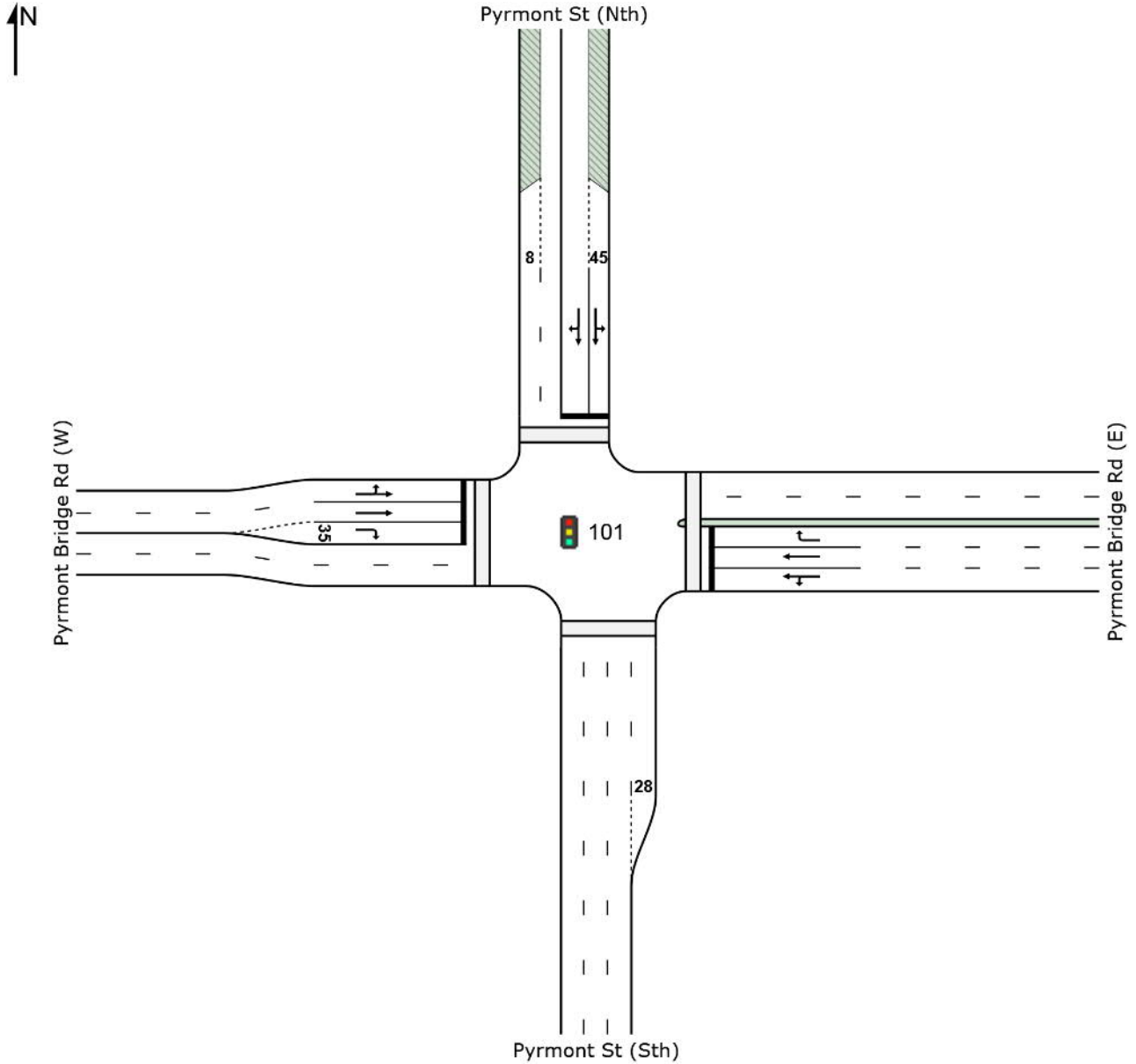
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 Site: 101 [AM Pyrmont St/Pyrmont Bridge Rd]

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Pyrmont Bridge Rd]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Rd (E)													
4	L2	28	7.1	28	7.1	0.242	36.9	LOS C	3.7	27.4	0.79	0.66	6.5
5	T1	190	7.4	190	7.4	0.242	32.1	LOS C	4.1	30.3	0.76	0.62	10.2
6	R2	43	2.3	43	2.3	0.106	32.5	LOS C	1.4	10.0	0.69	0.68	4.1
Approach		261	6.5	261	6.5	0.242	32.7	LOS C	4.1	30.3	0.75	0.63	8.9
North: Pyrmont St (Nth)													
7	L2	5	20.0	5	20.0	0.193	46.3	LOS D	3.8	26.9	1.00	0.78	8.5
8	T1	228	0.9	228	0.9	0.779	48.1	LOS D	13.2	95.9	1.00	0.85	9.1
9	R2	107	9.3	107	9.3	0.779	55.9	LOS D	13.2	95.9	1.00	0.88	9.7
Approach		340	3.8	340	3.8	0.779	50.5	LOS D	13.2	95.9	1.00	0.86	9.3
West: Pyrmont Bridge Rd (W)													
10	L2	240	3.8	240	3.8	0.377	8.4	LOS A	4.1	29.8	0.29	0.47	25.1
11	T1	622	4.5	622	4.5	0.377	3.8	LOS A	4.3	31.2	0.23	0.27	29.6
12	R2	409	2.7	409	2.7	0.984	55.1	LOS D	17.5	125.6	1.00	1.05	6.6
Approach		1271	3.8	1271	3.8	0.984	21.2	LOS B	17.5	125.6	0.49	0.56	12.4
All Vehicles		1872	4.2	1872	4.2	0.984	28.1	LOS B	17.5	125.6	0.62	0.62	10.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	174	43.6	LOS E	0.5	0.5	0.94	0.94	
P2	East Full Crossing	51	43.3	LOS E	0.1	0.1	0.93	0.93	
P3	North Full Crossing	413	44.0	LOS E	1.1	1.1	0.95	0.95	
P4	West Full Crossing	83	43.4	LOS E	0.2	0.2	0.93	0.93	
All Pedestrians		720	43.8	LOS E			0.94	0.94	

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.

PHASING SUMMARY

 Site: 101 [AM Pyrmont St/Pyrmont Bridge Rd]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

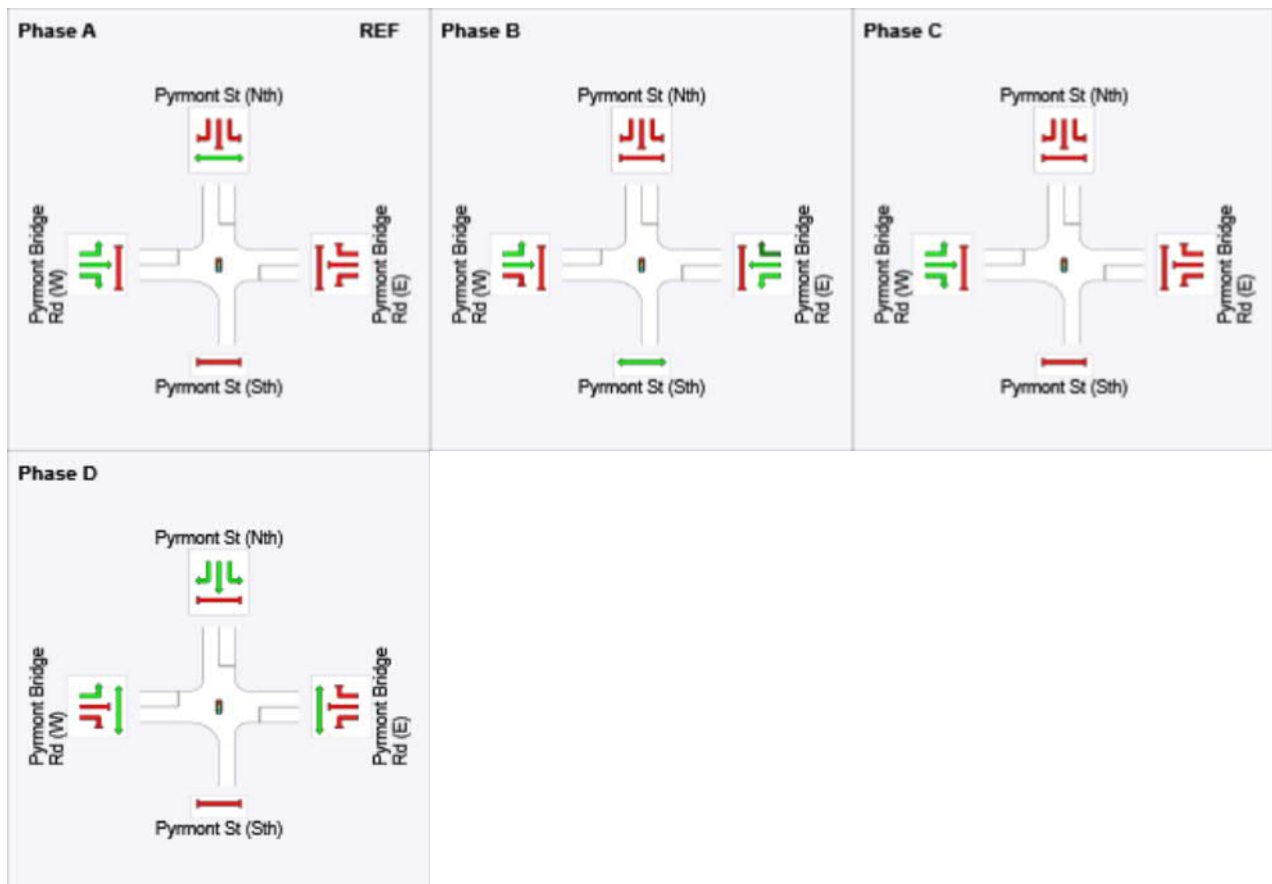
Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	21	53	71
Green Time (sec)	15	27	12	23
Phase Time (sec)	20	33	18	29
Phase Split	20 %	33 %	18 %	29 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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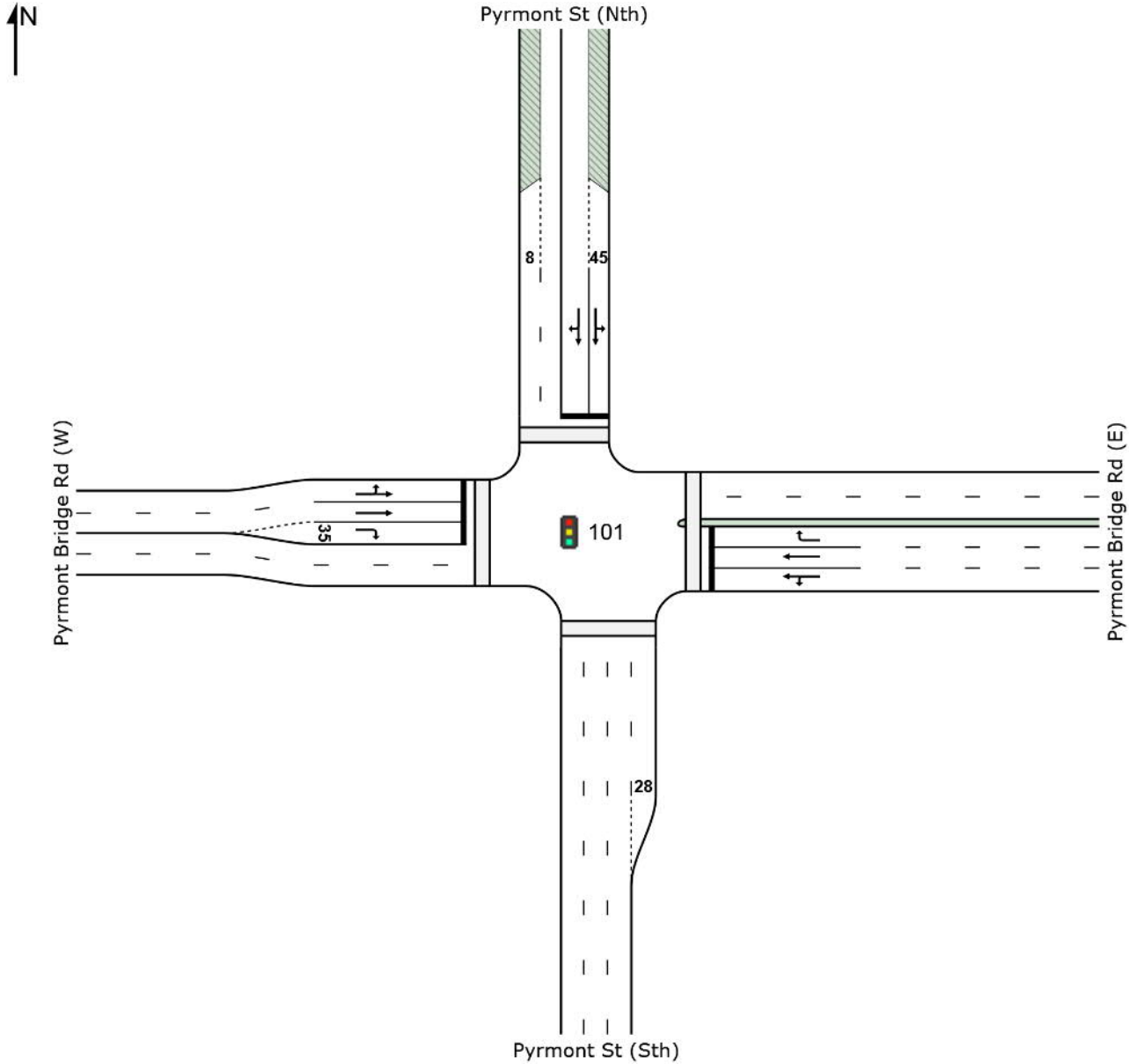
Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [PM Pyrmont St/Pyrmont Bridge Rd]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Pyrmont Bridge Rd (E)													
4	L2	56	5.4	56	5.4	0.203	19.1	LOS B	3.8	27.3	0.51	0.51	11.2
5	T1	291	1.4	291	1.4	0.203	14.0	LOS B	3.8	27.3	0.47	0.42	18.4
6	R2	81	0.0	81	0.0	0.313	31.6	LOS C	2.8	19.4	0.71	0.72	4.2
Approach		428	1.6	428	1.6	0.313	18.0	LOS B	3.8	27.3	0.52	0.49	13.8
North: Pyrmont St (Nth)													
7	L2	7	0.0	7	0.0	0.175	14.3	LOS B	2.0	14.2	0.34	0.30	23.0
8	T1	358	1.1	358	1.1	0.705	12.0	LOS B	12.4	87.7	0.51	0.51	22.4
9	R2	221	0.5	221	0.5	0.705	17.7	LOS B	12.4	87.7	0.59	0.63	20.6
Approach		586	0.9	586	0.9	0.705	14.2	LOS B	12.4	87.7	0.54	0.55	21.6
West: Pyrmont Bridge Rd (W)													
10	L2	181	0.0	181	0.0	0.457	24.9	LOS C	10.1	71.3	0.65	0.66	11.2
11	T1	519	1.9	519	1.9	0.457	16.1	LOS B	10.1	71.3	0.56	0.51	14.0
12	R2	301	1.0	301	1.0	0.935	61.3	LOS E	17.8	125.6	0.90	1.02	6.0
Approach		1001	1.3	1001	1.3	0.935	31.3	LOS C	17.8	125.6	0.68	0.69	9.2
All Vehicles		2015	1.2	2015	1.2	0.935	23.5	LOS C	17.8	125.6	0.60	0.61	13.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	213	43.6	LOS E	0.6	0.6	0.94	0.94	
P2	East Full Crossing	149	43.5	LOS E	0.4	0.4	0.94	0.94	
P3	North Full Crossing	448	44.1	LOS E	1.2	1.2	0.95	0.95	
P4	West Full Crossing	81	43.4	LOS E	0.2	0.2	0.93	0.93	
All Pedestrians		892	43.8	LOS E			0.94	0.94	

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.

PHASING SUMMARY

 Site: 101 [PM Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: CCG Phasing

Reference Phase: Phase A

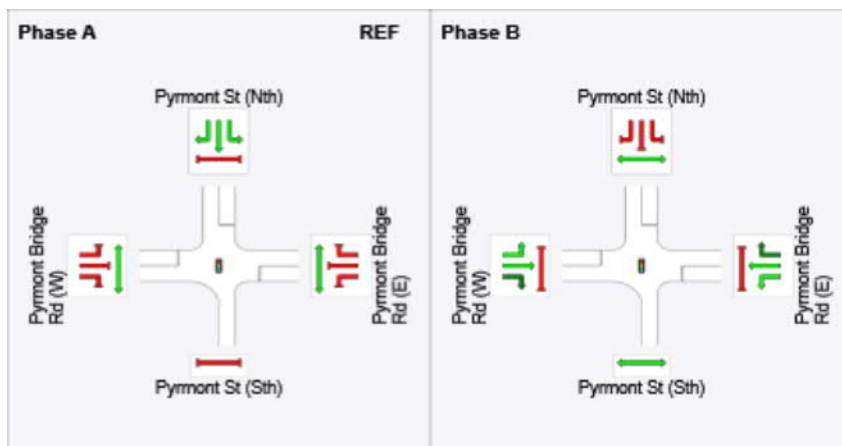
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	46
Green Time (sec)	40	48
Phase Time (sec)	46	54
Phase Split	46 %	54 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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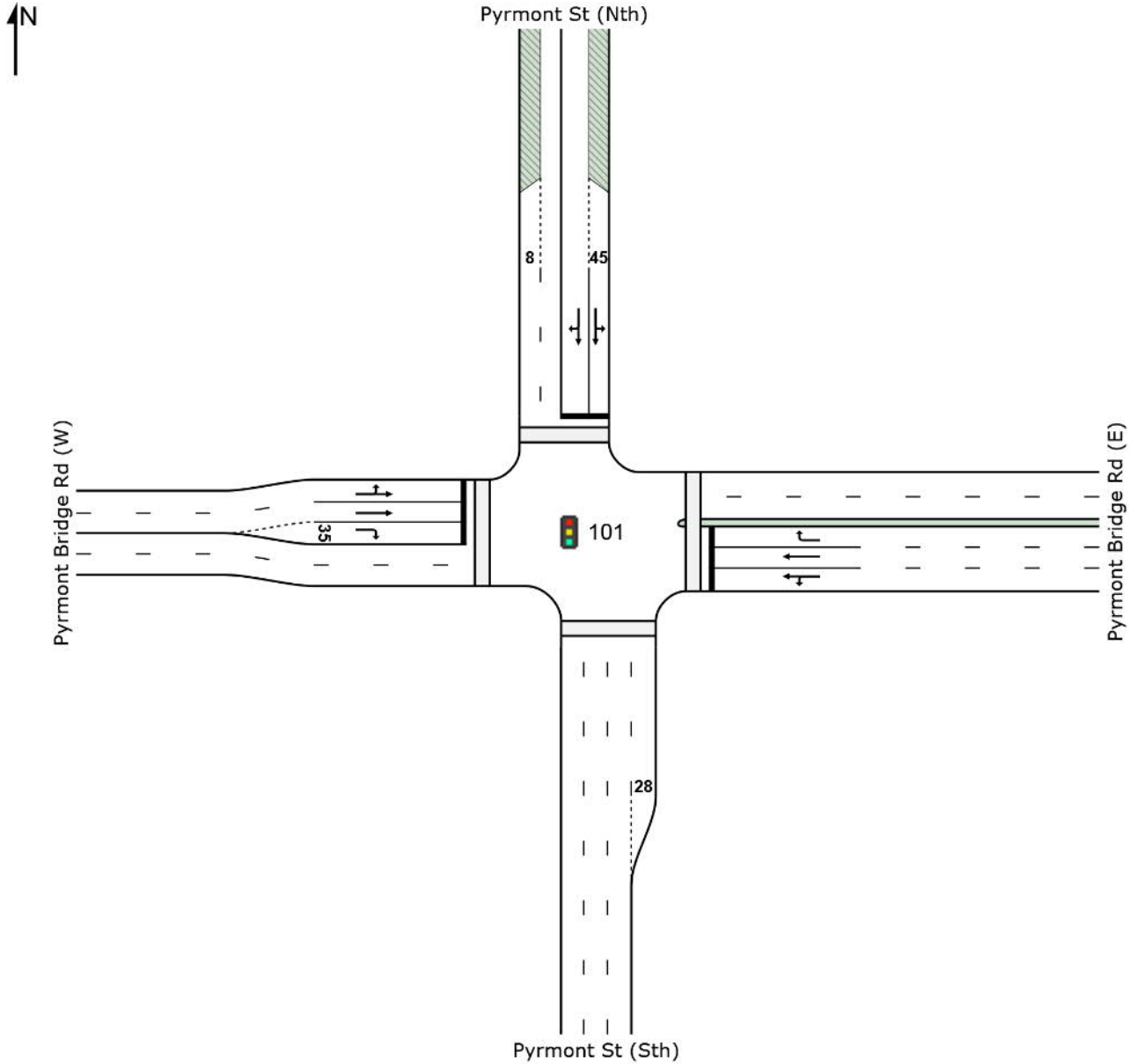
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 Site: 101 [OP Pyrmont St/Pyrmont Bridge Rd]

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Pyrmont Bridge Rd (E)													
4	L2	57	1.8	57	1.8	0.440	31.0	LOS C	5.8	40.8	0.75	0.66	7.6
5	T1	487	0.2	487	0.2	0.440	27.1	LOS C	5.8	40.8	0.74	0.64	11.7
6	R2	65	0.0	65	0.0	0.504	50.5	LOS D	3.1	21.9	0.96	0.77	2.7
Approach		609	0.3	609	0.3	0.504	30.0	LOS C	5.8	40.8	0.76	0.65	10.0
North: Pyrmont St (Nth)													
7	L2	12	0.0	12	0.0	0.124	12.9	LOS B	1.8	12.4	0.32	0.29	24.6
8	T1	302	0.0	302	0.0	0.502	10.0	LOS A	10.0	70.4	0.41	0.48	24.0
9	R2	294	0.7	294	0.7	0.502	15.5	LOS B	10.0	70.4	0.46	0.58	21.7
Approach		608	0.3	608	0.3	0.502	12.7	LOS B	10.0	70.4	0.43	0.52	22.7
West: Pyrmont Bridge Rd (W)													
10	L2	207	0.0	207	0.0	0.726	39.8	LOS D	16.5	116.1	0.91	0.83	7.4
11	T1	531	1.1	531	1.1	0.726	30.8	LOS C	16.5	116.1	0.82	0.74	8.6
12	R2	128	0.8	128	0.8	0.560	43.0	LOS D	5.8	40.8	0.93	0.81	8.1
Approach		866	0.8	866	0.8	0.726	34.8	LOS C	16.5	116.1	0.86	0.77	8.2
All Vehicles		2083	0.5	2083	0.5	0.726	26.9	LOS C	16.5	116.1	0.71	0.66	11.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	73	43.4	LOS E	0.2	0.2	0.93	0.93	
P2	East Full Crossing	66	43.4	LOS E	0.2	0.2	0.93	0.93	
P3	North Full Crossing	91	43.4	LOS E	0.2	0.2	0.93	0.93	
P4	West Full Crossing	48	43.3	LOS E	0.1	0.1	0.93	0.93	
All Pedestrians		278	43.4	LOS E			0.93	0.93	

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.

PHASING SUMMARY

 Site: 101 [OP Pyrmont St/Pyrmont Bridge Rd]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: CCG Phasing

Reference Phase: Phase A

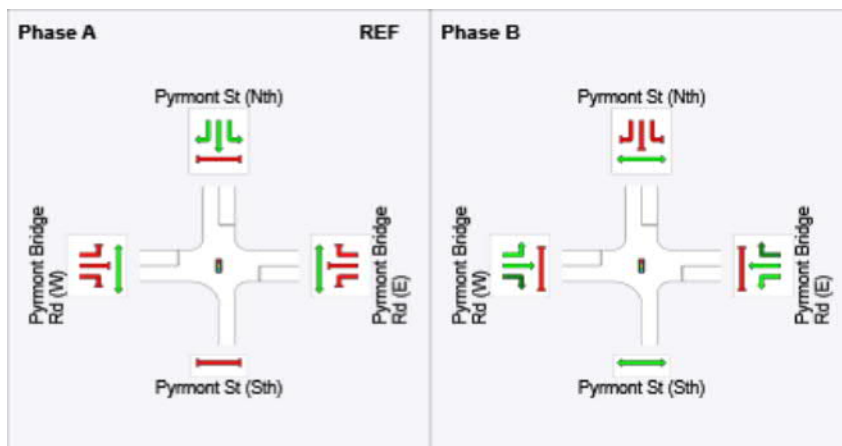
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	60
Green Time (sec)	54	34
Phase Time (sec)	60	40
Phase Split	60 %	40 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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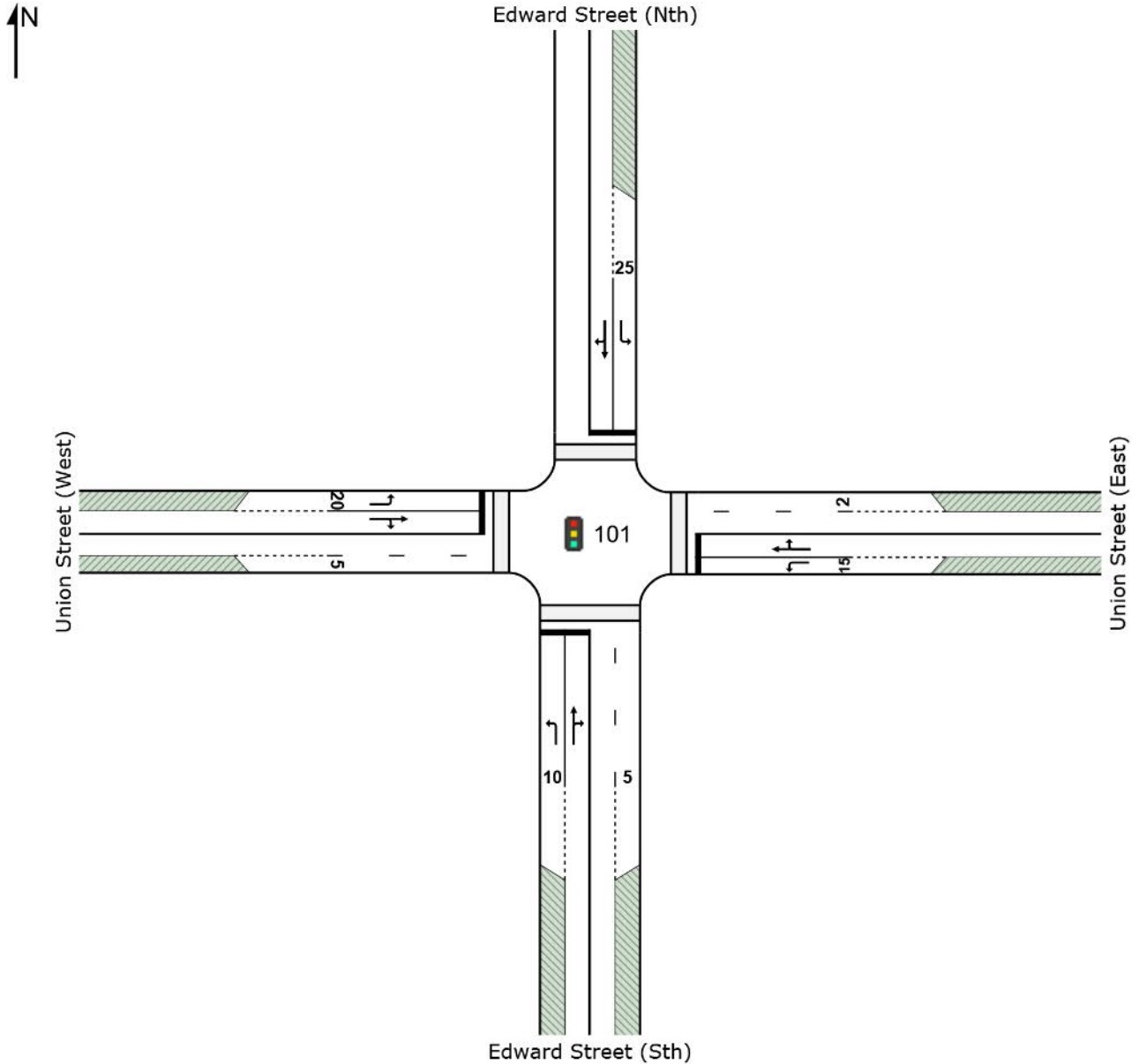
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 Site: 101 [AM Union St/Edward St]

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [AM Union St/Edward St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Edward Street (Sth)													
1	L2	9	0.0	9	0.0	0.009	15.1	LOS B	0.2	1.1	0.39	0.59	15.1
2	T1	170	0.6	170	0.6	0.172	11.0	LOS A	3.6	25.1	0.44	0.38	26.8
3	R2	9	0.0	9	0.0	0.172	15.5	LOS B	3.6	25.1	0.44	0.38	18.2
Approach		188	0.5	188	0.5	0.172	11.4	LOS A	3.6	25.1	0.44	0.39	25.9
East: Union Street (East)													
4	L2	6	0.0	6	0.0	0.012	31.4	LOS C	0.2	1.4	0.73	0.64	8.6
5	T1	12	16.7	12	16.7	0.075	37.3	LOS C	0.9	6.6	0.86	0.66	7.1
6	R2	9	0.0	9	0.0	0.075	41.8	LOS C	0.9	6.6	0.86	0.66	12.2
Approach		27	7.4	27	7.4	0.075	37.5	LOS C	0.9	6.6	0.83	0.65	9.3
North: Edward Street (Nth)													
7	L2	11	9.1	11	9.1	0.012	16.8	LOS B	0.3	1.9	0.50	0.62	15.6
8	T1	11	0.0	11	0.0	0.068	11.7	LOS A	1.1	8.0	0.50	0.60	16.5
9	R2	36	8.3	36	8.3	0.068	16.3	LOS B	1.1	8.0	0.50	0.60	16.5
Approach		58	6.9	58	6.9	0.068	15.5	LOS B	1.1	8.0	0.50	0.60	16.3
West: Union Street (West)													
10	L2	48	8.3	48	8.3	0.167	43.5	LOS D	2.1	15.7	0.91	0.74	10.8
11	T1	27	0.0	27	0.0	0.075	30.3	LOS C	1.4	9.7	0.85	0.65	7.8
12	R2	8	0.0	8	0.0	0.075	34.8	LOS C	1.4	9.7	0.85	0.65	7.8
Approach		83	4.8	83	4.8	0.167	38.3	LOS C	2.1	15.7	0.89	0.70	9.8
All Vehicles		356	3.1	356	3.1	0.172	20.3	LOS B	3.6	25.1	0.58	0.52	17.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	66	43.4	LOS E	0.2	0.2	0.93	0.93
P2	East Full Crossing	72	43.4	LOS E	0.2	0.2	0.93	0.93
P3	North Full Crossing	1257	45.6	LOS E	3.5	3.5	0.98	0.98
P4	West Full Crossing	53	43.3	LOS E	0.1	0.1	0.93	0.93
All Pedestrians		1447	45.3	LOS E			0.97	0.97

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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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [AM Union St/Edward St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

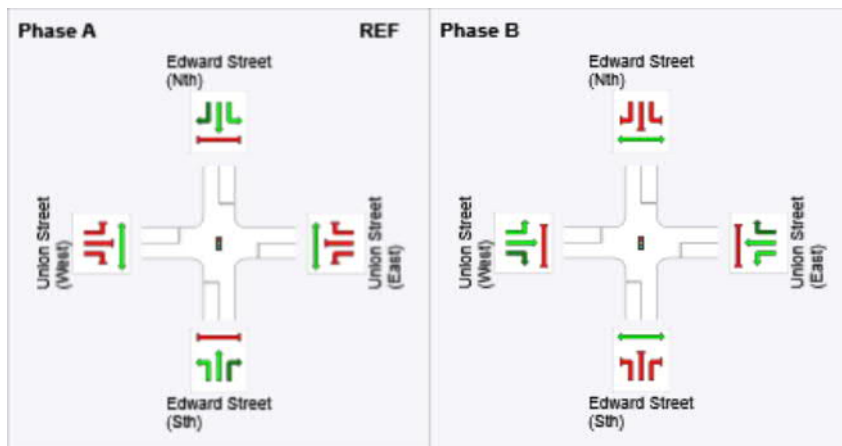
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

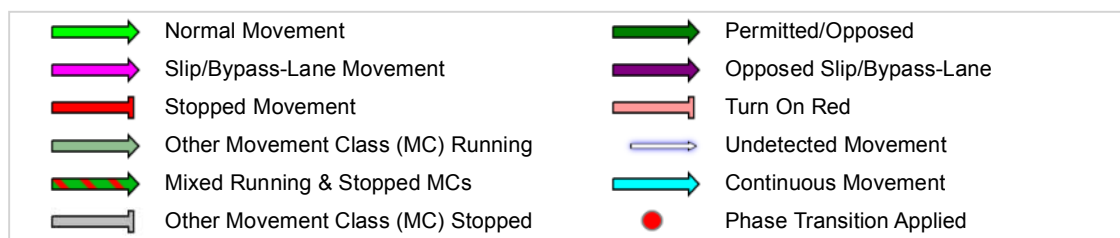
Phase	A	B
Phase Change Time (sec)	0	62
Green Time (sec)	56	32
Phase Time (sec)	62	38
Phase Split	62 %	38 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase



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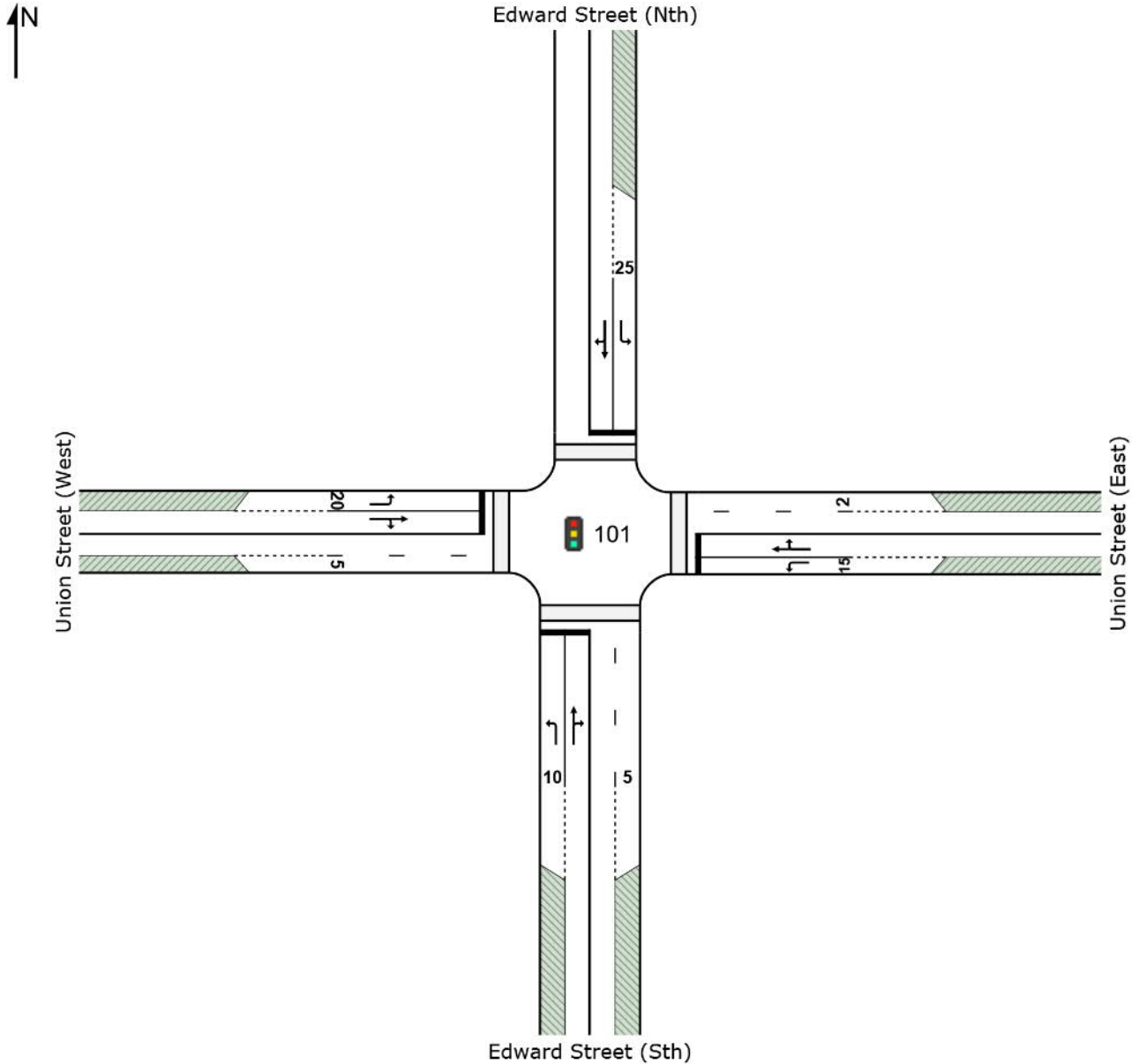
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 Site: 101 [PM Union St/Edward St]

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [PM Union St/Edward St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Edward Street (Sth)													
1	L2	17	0.0	17	0.0	0.017	27.3	LOS C	0.8	5.3	0.97	0.72	9.7
2	T1	140	0.7	140	0.7	0.140	21.2	LOS C	6.2	43.5	0.95	0.78	18.9
3	R2	4	0.0	4	0.0	0.140	25.7	LOS C	6.2	43.5	0.95	0.78	11.6
Approach		161	0.6	161	0.6	0.140	21.9	LOS C	6.2	43.5	0.95	0.78	17.7
East: Union Street (East)													
4	L2	5	0.0	5	0.0	0.010	32.9	LOS C	0.2	1.2	0.75	0.63	8.3
5	T1	14	0.0	14	0.0	0.087	39.2	LOS D	1.0	6.8	0.88	0.66	6.9
6	R2	9	0.0	9	0.0	0.087	43.8	LOS D	1.0	6.8	0.88	0.66	11.8
Approach		28	0.0	28	0.0	0.087	39.6	LOS D	1.0	6.8	0.86	0.66	8.9
North: Edward Street (Nth)													
7	L2	36	2.8	36	2.8	0.037	15.9	LOS B	0.8	5.8	0.49	0.64	16.2
8	T1	40	0.0	40	0.0	0.205	13.3	LOS B	3.8	26.7	0.56	0.64	15.5
9	R2	109	0.0	109	0.0	0.205	17.8	LOS B	3.8	26.7	0.56	0.64	15.5
Approach		185	0.5	185	0.5	0.205	16.5	LOS B	3.8	26.7	0.55	0.64	15.6
West: Union Street (West)													
10	L2	54	0.0	54	0.0	0.201	51.9	LOS D	2.7	18.6	1.00	0.76	9.5
11	T1	56	0.0	56	0.0	0.119	39.3	LOS D	2.9	20.5	1.00	0.77	6.4
12	R2	5	0.0	5	0.0	0.119	43.8	LOS D	2.9	20.5	1.00	0.77	6.4
Approach		115	0.0	115	0.0	0.201	45.4	LOS D	2.9	20.5	1.00	0.77	8.1
All Vehicles		489	0.4	489	0.4	0.205	26.4	LOS C	6.2	43.5	0.80	0.72	13.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	66	43.4	LOS E	0.2	0.2	0.93	0.93
P2	East Full Crossing	129	43.5	LOS E	0.3	0.3	0.94	0.94
P3	North Full Crossing	1652	46.4	LOS E	4.7	4.7	1.00	1.00
P4	West Full Crossing	103	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		1951	46.0	LOS E			0.99	0.99

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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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [PM Union St/Edward St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

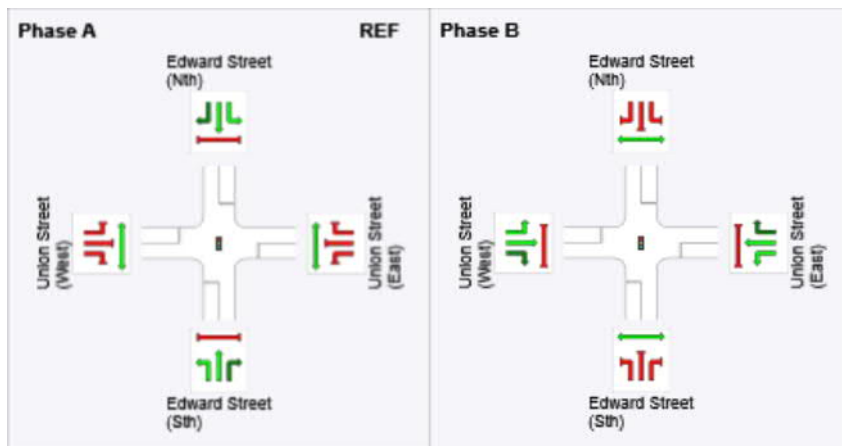
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

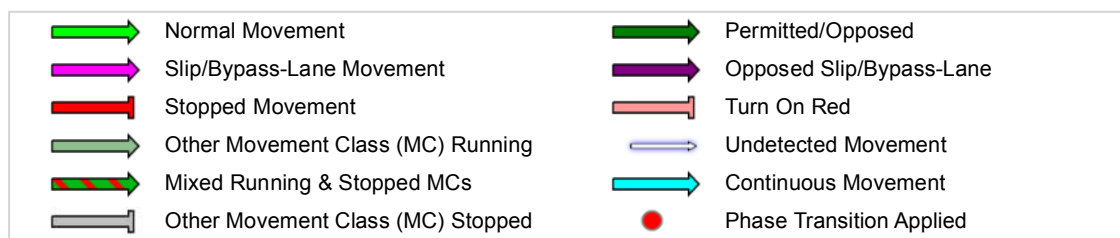
Phase	A	B
Phase Change Time (sec)	0	64
Green Time (sec)	58	30
Phase Time (sec)	64	36
Phase Split	64 %	36 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase



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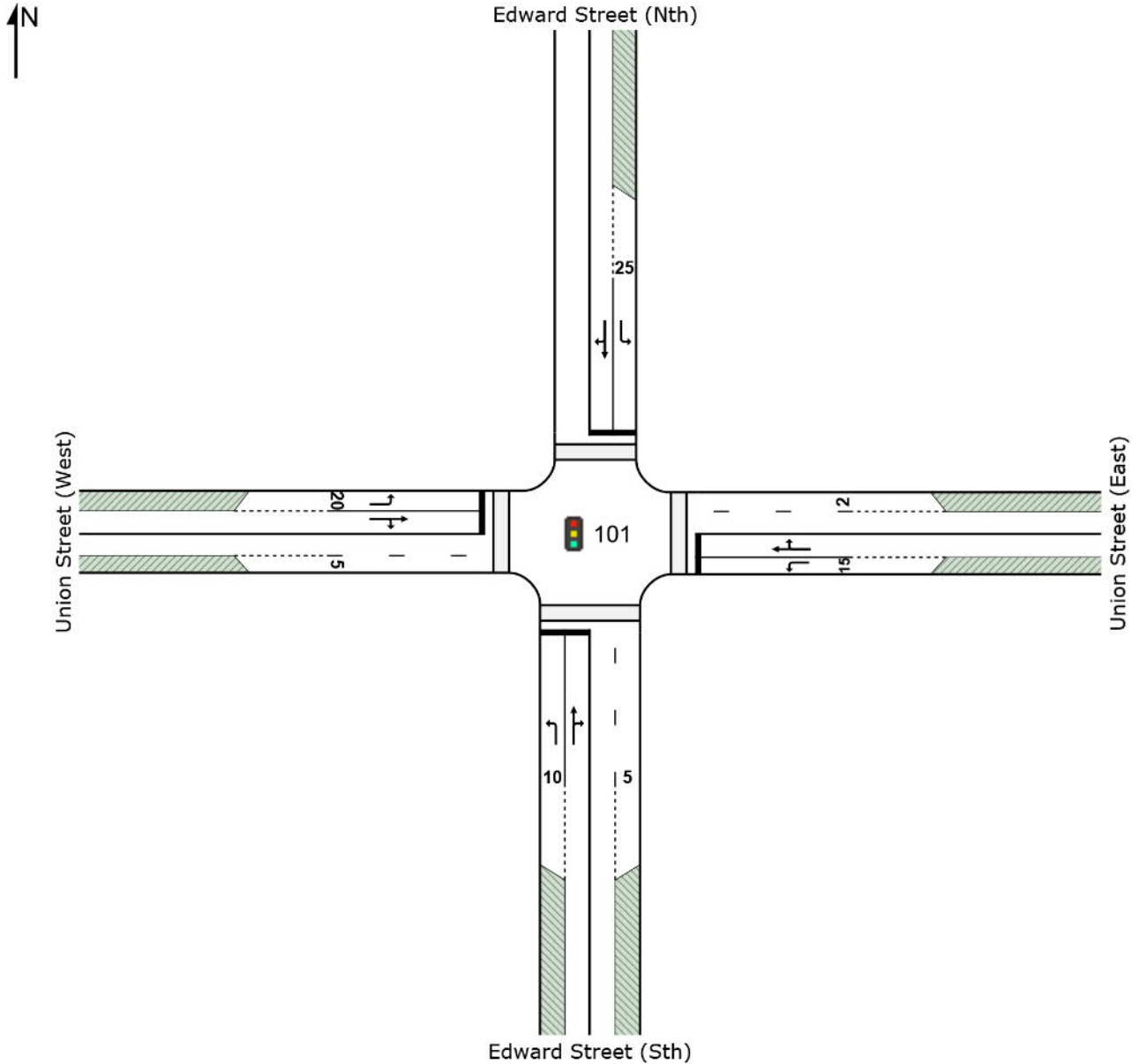
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 Site: 101 [OP Union St/Edward St]

No Project

Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [OP Union St/Edward St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Edward Street (Sth)													
1	L2	15	0.0	15	0.0	0.011	18.2	LOS B	0.6	4.4	0.93	0.71	13.2
2	T1	83	0.0	83	0.0	0.065	12.2	LOS B	3.6	24.9	0.91	0.73	25.5
3	R2	4	0.0	4	0.0	0.065	16.8	LOS B	3.6	24.9	0.91	0.73	17.0
Approach		102	0.0	102	0.0	0.065	13.3	LOS B	3.6	24.9	0.91	0.73	23.4
East: Union Street (East)													
4	L2	7	0.0	7	0.0	0.030	46.0	LOS D	0.3	2.1	0.90	0.66	6.2
5	T1	12	0.0	12	0.0	0.204	51.9	LOS D	1.0	6.7	0.98	0.70	5.4
6	R2	7	0.0	7	0.0	0.204	56.5	LOS E	1.0	6.7	0.98	0.70	9.6
Approach		26	0.0	26	0.0	0.204	51.5	LOS D	1.0	6.7	0.96	0.68	6.9
North: Edward Street (Nth)													
7	L2	28	3.6	28	3.6	0.022	9.1	LOS A	0.4	2.8	0.31	0.60	22.9
8	T1	37	0.0	37	0.0	0.143	4.6	LOS A	2.2	15.2	0.33	0.55	24.1
9	R2	108	0.0	108	0.0	0.143	9.2	LOS A	2.2	15.2	0.33	0.55	24.1
Approach		173	0.6	173	0.6	0.143	8.2	LOS A	2.2	15.2	0.33	0.56	23.9
West: Union Street (West)													
10	L2	31	3.2	31	3.2	0.591	63.3	LOS E	1.7	12.3	1.00	0.75	8.0
11	T1	71	0.0	71	0.0	0.368	50.1	LOS D	4.1	28.7	1.00	0.78	5.1
12	R2	11	0.0	11	0.0	0.368	54.6	LOS D	4.1	28.7	1.00	0.78	5.1
Approach		113	0.9	113	0.9	0.591	54.1	LOS D	4.1	28.7	1.00	0.77	6.1
All Vehicles		414	0.5	414	0.5	0.591	24.7	LOS C	4.1	28.7	0.69	0.67	12.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	14	43.3	LOS E	0.0	0.0	0.93	0.93
P2	East Full Crossing	54	43.3	LOS E	0.1	0.1	0.93	0.93
P3	North Full Crossing	740	44.6	LOS E	2.0	2.0	0.96	0.96
P4	West Full Crossing	52	43.3	LOS E	0.1	0.1	0.93	0.93
All Pedestrians		859	44.4	LOS E			0.96	0.96

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

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

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

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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [OP Union St/Edward St]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

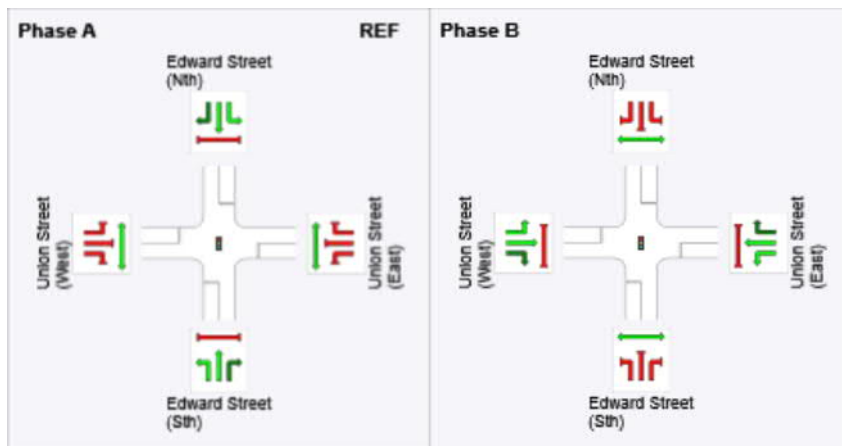
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	80
Green Time (sec)	74	14
Phase Time (sec)	80	20
Phase Split	80 %	20 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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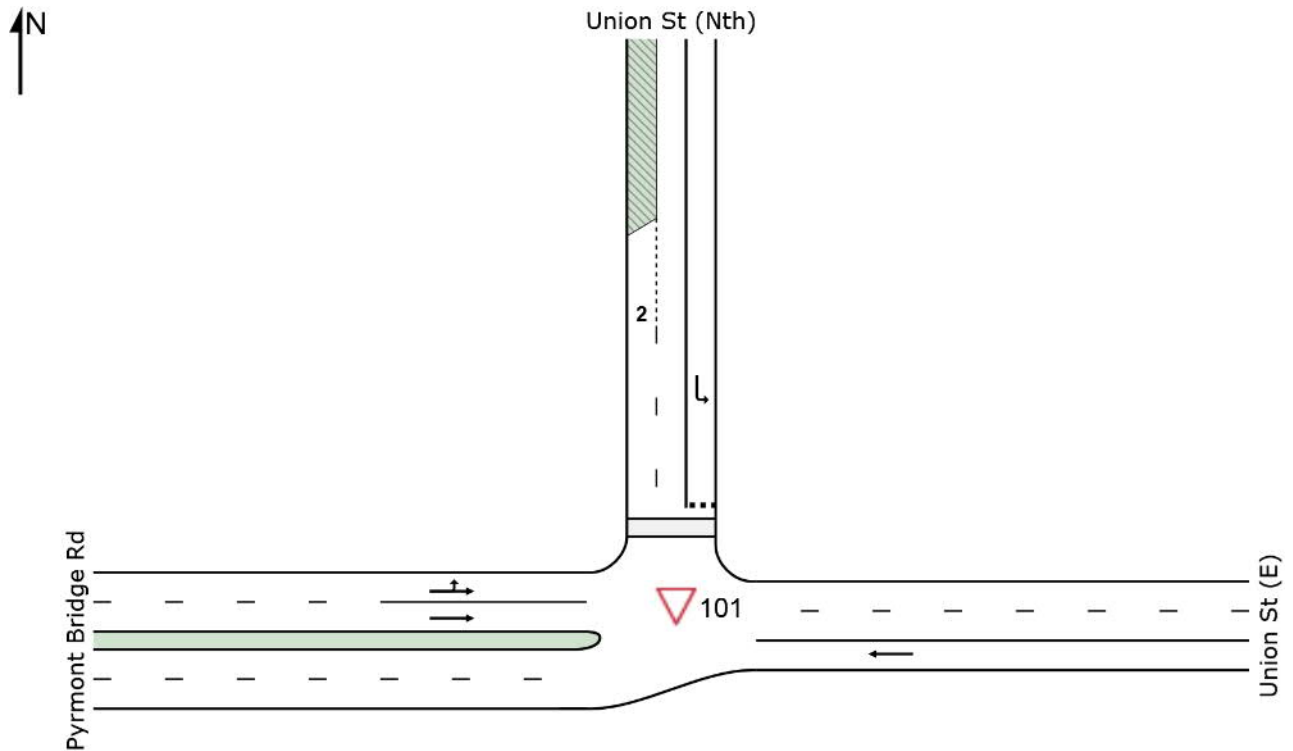
Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:54:43

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

▽ Site: 101 [AM Pyrmont Bridge Rd/Union St]

No Project
Giveaway / Yield (Two-Way)



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Organisation: MOTT MACDONALD | Created: 16 February 2018 19:22:56

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

Site: 101 [AM Pyrmont Bridge Rd/Union St]

Network: 1 [AM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
East: Union St (E)													
5	T1	208	8.2	208	8.2	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		208	8.2	208	8.2	0.112	0.0	NA	0.0	0.0	0.00	0.00	50.0
North: Union St (Nth)													
7	L2	33	3.0	33	3.0	0.085	8.7	LOS A	0.2	1.1	0.57	0.75	21.5
Approach		33	3.0	33	3.0	0.085	8.7	LOS A	0.2	1.1	0.57	0.75	21.5
West: Pyrmont Bridge Rd													
10	L2	24	4.2	24	4.2	0.137	4.8	LOS A	0.0	0.0	0.00	0.12	46.9
11	T1	381	7.6	381	7.6	0.137	0.1	LOS A	0.0	0.0	0.00	0.04	48.9
Approach		405	7.4	405	7.4	0.137	0.3	NA	0.0	0.0	0.00	0.04	48.8
All Vehicles		646	7.4	646	7.4	0.137	0.7	NA	0.2	1.1	0.03	0.07	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

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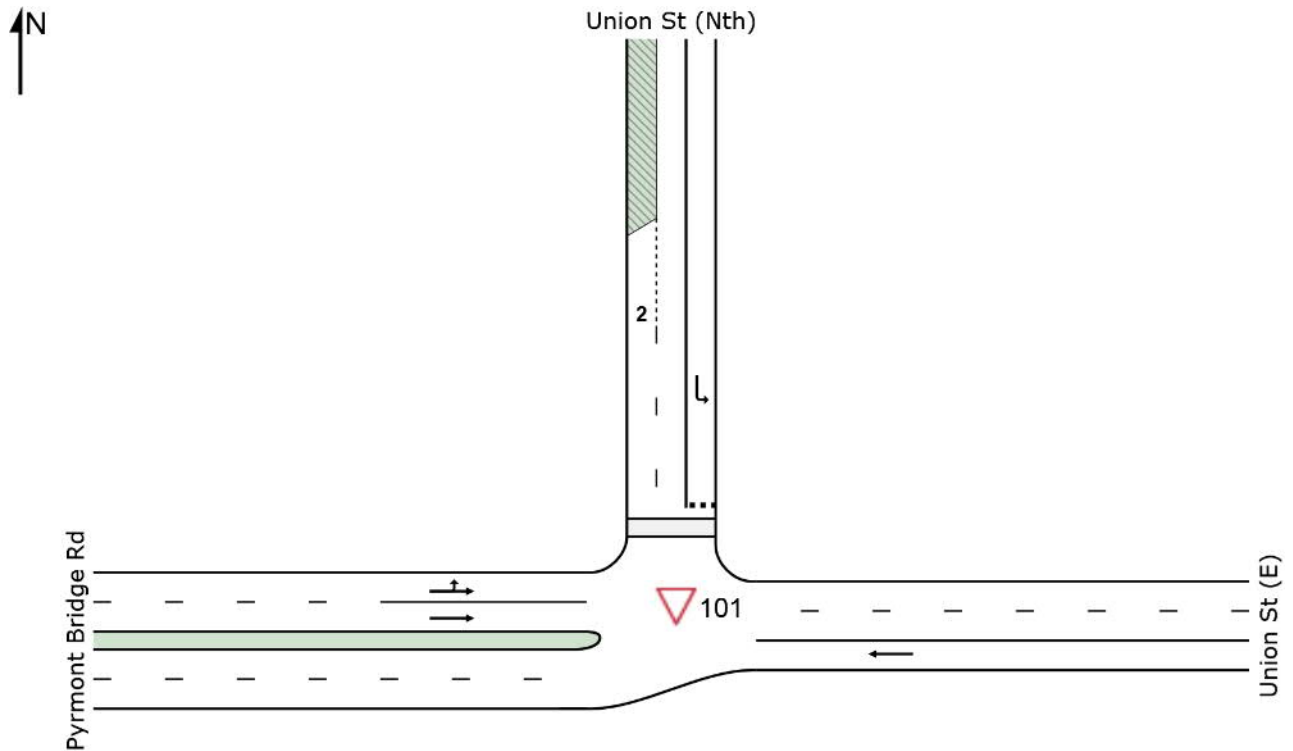
Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:19:31

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

▽ Site: 101 [PM Pyrmont Bridge Rd/Union St]

No Project
Giveaway / Yield (Two-Way)



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Organisation: MOTT MACDONALD | Created: 16 February 2018 19:42:52

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

Site: 101 [PM Pyrmont Bridge Rd/Union St]

Network: N101 [PM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Union St (E)													
5	T1	337	0.9	337	0.9	0.174	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		337	0.9	337	0.9	0.174	0.0	NA	0.0	0.0	0.00	0.00	50.0
North: Union St (Nth)													
7	L2	80	0.0	80	0.0	0.107	8.6	LOS A	0.4	2.6	0.57	0.75	21.6
Approach		80	0.0	80	0.0	0.107	8.6	LOS A	0.4	2.6	0.57	0.75	21.6
West: Pyrmont Bridge Rd													
10	L2	23	0.0	23	0.0	0.102	4.7	LOS A	0.0	0.0	0.00	0.09	47.7
11	T1	359	2.5	359	2.5	0.102	0.1	LOS A	0.0	0.0	0.00	0.04	48.9
Approach		382	2.4	382	2.4	0.102	0.3	NA	0.0	0.0	0.00	0.05	48.8
All Vehicles		799	1.5	799	1.5	0.174	1.0	NA	0.4	2.6	0.06	0.10	43.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

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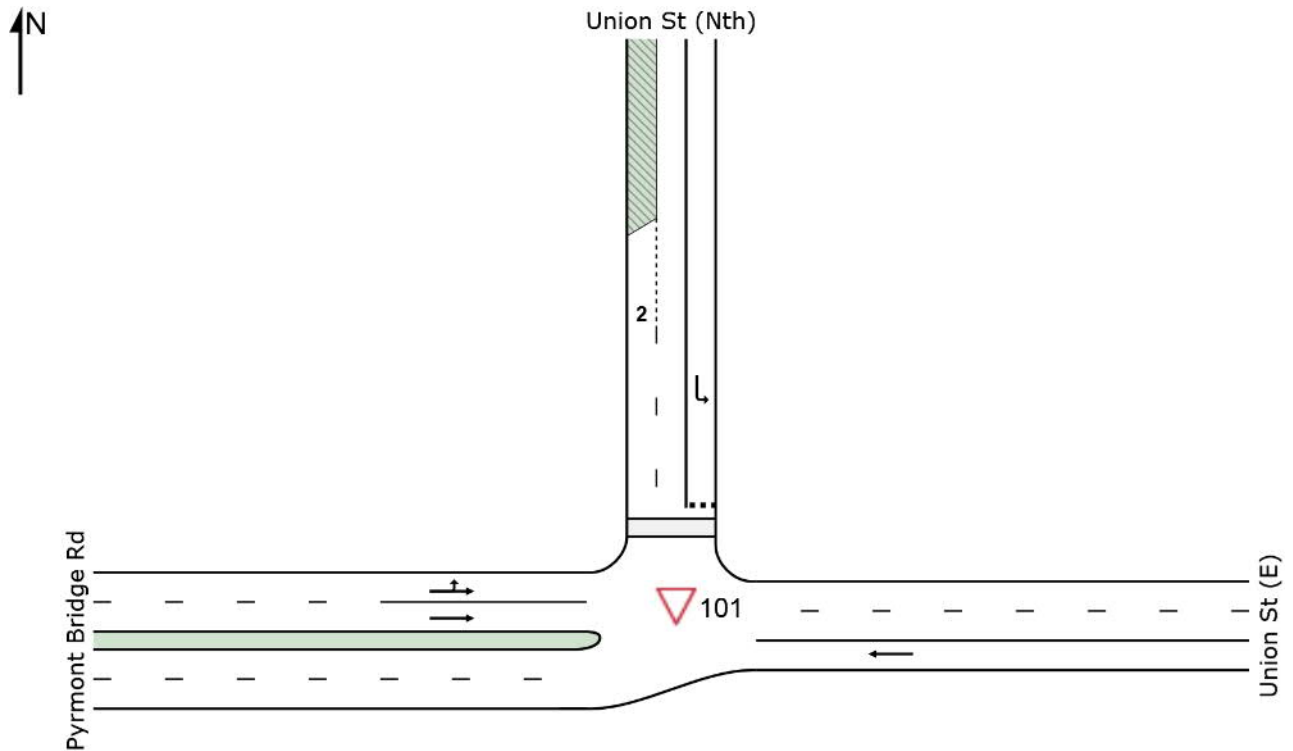
Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:34:09

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

▽ Site: 101 [OP Pyrmont Bridge Rd/Union St]

No Project
Giveaway / Yield (Two-Way)



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Organisation: MOTT MACDONALD | Created: 16 February 2018 20:00:25

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

Site: 101 [OP Pyrmont Bridge Rd/Union St]

Network: N101 [OP Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
East: Union St (E)													
5	T1	524	0.4	524	0.4	0.269	0.0	LOS A	9.0	63.2	0.00	0.00	50.0
Approach		524	0.4	524	0.4	0.269	0.0	NA	9.0	63.2	0.00	0.00	50.0
North: Union St (Nth)													
7	L2	84	0.0	84	0.0	0.088	5.9	LOS A	0.3	1.9	0.31	0.57	26.3
Approach		84	0.0	84	0.0	0.088	5.9	LOS A	0.3	1.9	0.31	0.57	26.3
West: Pyrmont Bridge Rd													
10	L2	24	0.0	24	0.0	0.167	4.7	LOS A	0.0	0.0	0.00	0.07	48.2
11	T1	452	1.8	452	1.8	0.167	0.1	LOS A	0.0	0.0	0.00	0.04	49.0
Approach		476	1.7	476	1.7	0.167	0.3	NA	0.0	0.0	0.00	0.04	49.0
All Vehicles		1084	0.9	1084	0.9	0.269	0.6	NA	9.0	63.2	0.02	0.06	46.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

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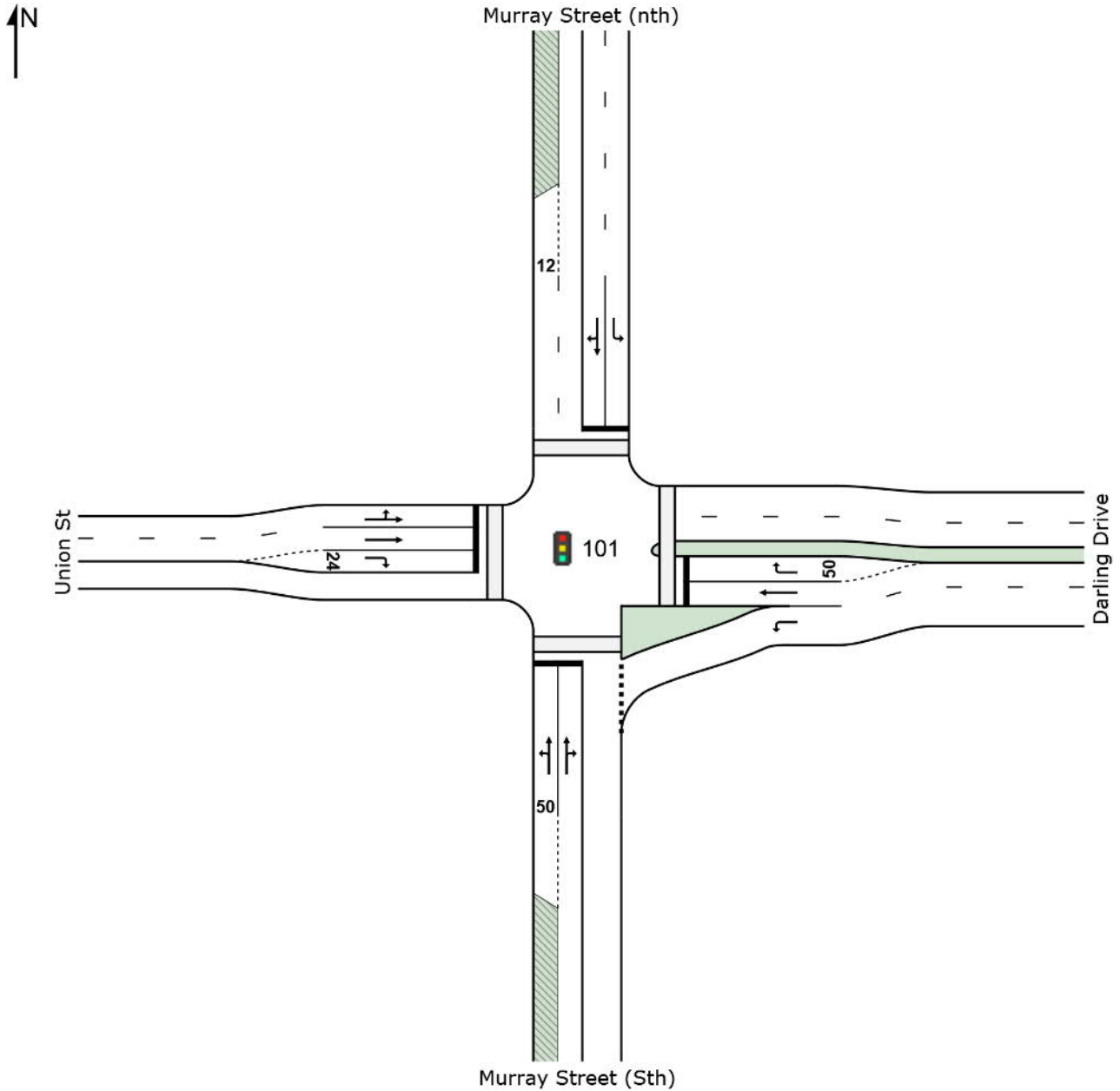
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [AM Union St/Murray St/Darling Drive]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Union St/Murray St/Darling Drive]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Murray Street (Sth)													
1	L2	36	5.6	36	5.6	0.081	20.8	LOS B	0.8	5.7	0.79	0.70	16.8
2	T1	90	2.2	90	2.2	0.347	38.6	LOS C	5.2	38.6	0.91	0.74	10.8
3	R2	30	23.3	30	23.3	0.347	43.3	LOS D	5.2	38.6	0.91	0.74	26.9
Approach		156	7.1	156	7.1	0.347	35.4	LOS C	5.2	38.6	0.88	0.73	16.7
East: Darling Drive													
4	L2	136	5.9	136	5.9	0.094	5.6	LOS A	0.9	6.4	0.21	0.56	44.5
5	T1	144	11.1	144	11.1	0.531	43.7	LOS D	6.7	51.4	0.97	0.78	23.0
6	R2	206	1.9	206	1.9	0.937	68.8	LOS E	12.3	87.3	1.00	1.04	17.5
Approach		486	5.8	486	5.8	0.937	43.7	LOS D	12.3	87.3	0.77	0.83	23.9
North: Murray Street (nth)													
7	L2	37	8.1	37	8.1	0.051	20.5	LOS B	0.8	6.0	0.47	0.64	34.1
8	T1	71	2.8	71	2.8	0.188	27.5	LOS B	3.3	23.6	0.68	0.60	20.1
9	R2	34	0.0	34	0.0	0.188	32.1	LOS C	3.3	23.6	0.68	0.60	12.9
Approach		142	3.5	142	3.5	0.188	26.8	LOS B	3.3	23.6	0.63	0.61	23.6
West: Union St													
10	L2	172	4.7	172	4.7	0.396	33.1	LOS C	7.4	54.4	0.98	0.85	5.1
11	T1	153	11.8	153	11.8	0.396	37.6	LOS C	7.4	54.4	0.93	0.76	25.4
12	R2	85	3.5	85	3.5	0.399	48.8	LOS D	4.0	28.8	0.97	0.77	10.3
Approach		410	7.1	410	7.1	0.399	38.1	LOS C	7.4	54.4	0.96	0.80	16.6
All Vehicles		1194	6.1	1194	6.1	0.937	38.6	LOS C	12.3	87.3	0.83	0.78	20.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	281	43.8	LOS E	0.8	0.8	0.94	0.94
P2	East Full Crossing	576	44.3	LOS E	1.6	1.6	0.95	0.95
P3	North Full Crossing	1523	46.2	LOS E	4.3	4.3	0.99	0.99
P4	West Full Crossing	281	43.8	LOS E	0.8	0.8	0.94	0.94
All Pedestrians		2661	45.3	LOS E			0.97	0.97

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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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [AM Union St/Murray St/Darling Drive]

 Network: 1 [AM Star Casino Network]

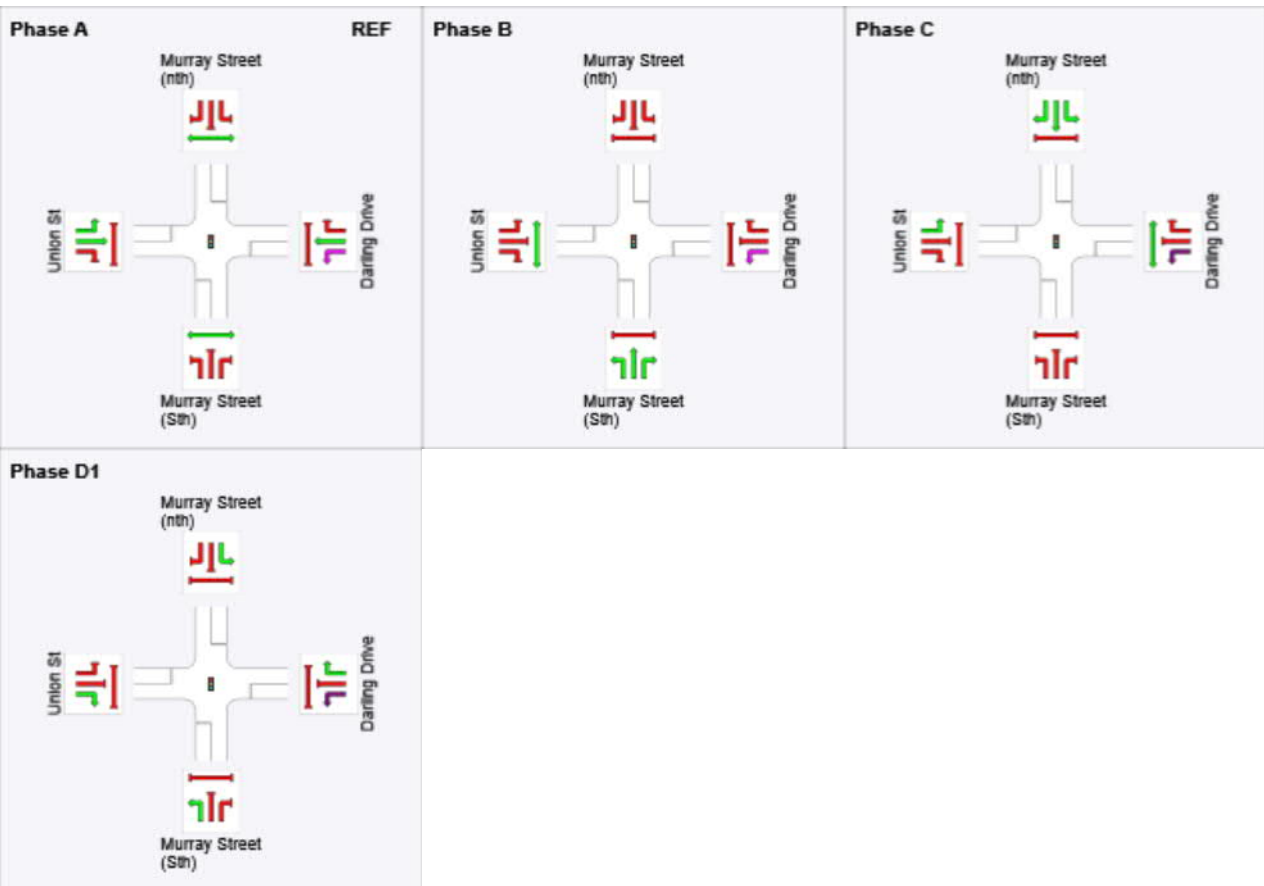
No Project
Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Existing Phasing - AM
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D1
Output Phase Sequence: A, B, C, D1

Phase Timing Results

Phase	A	B	C	D1
Phase Change Time (sec)	0	21	46	82
Green Time (sec)	15	19	30	12
Phase Time (sec)	21	25	36	18
Phase Split	21 %	25 %	36 %	18 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase
VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement



Other Movement Class (MC) Stopped



Phase Transition Applied

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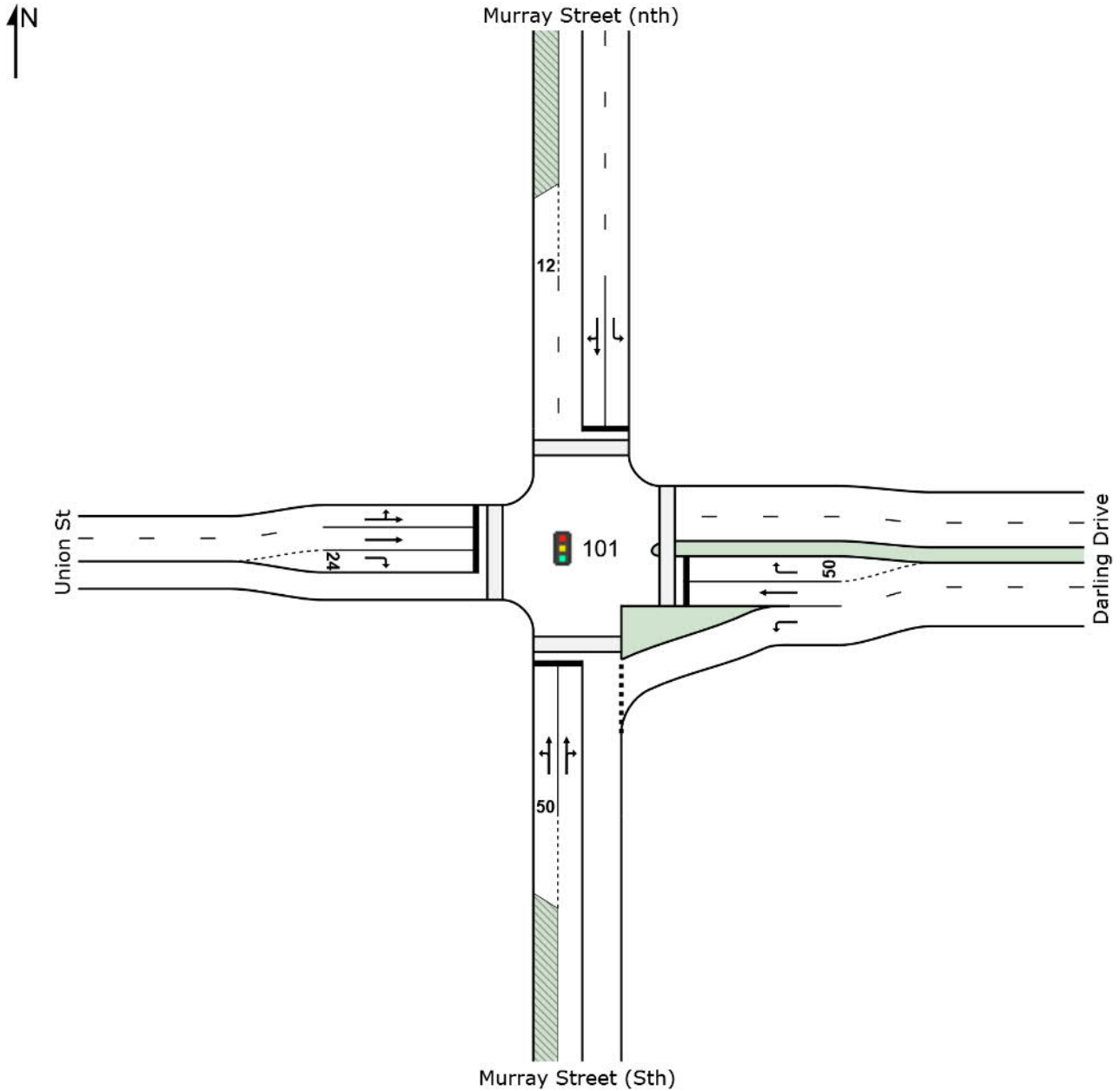
Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [PM Union St/Murray St/Darling Drive]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Union St/Murray St/Darling Drive]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Murray Street (Sth)													
1	L2	48	0.0	48	0.0	0.104	20.8	LOS C	1.0	7.3	0.80	0.71	16.7
2	T1	114	0.9	114	0.9	0.430	39.2	LOS D	6.8	48.2	0.93	0.76	10.6
3	R2	41	2.4	41	2.4	0.430	43.8	LOS D	6.8	48.2	0.93	0.76	26.8
Approach		203	1.0	203	1.0	0.430	35.8	LOS D	6.8	48.2	0.90	0.75	16.8
East: Darling Drive													
4	L2	145	0.7	145	0.7	0.101	6.2	LOS A	1.2	8.7	0.25	0.58	44.2
5	T1	165	1.2	165	1.2	0.536	42.7	LOS D	7.6	53.8	0.97	0.78	23.3
6	R2	173	2.3	173	2.3	0.861	60.7	LOS E	9.5	67.8	1.00	0.96	19.0
Approach		483	1.4	483	1.4	0.861	38.2	LOS D	9.5	67.8	0.76	0.79	25.6
North: Murray Street (nth)													
7	L2	133	5.3	133	5.3	0.183	22.4	LOS C	3.2	23.8	0.53	0.68	33.2
8	T1	167	0.0	167	0.0	0.508	30.9	LOS C	10.5	74.3	0.80	0.72	18.6
9	R2	118	1.7	118	1.7	0.508	35.5	LOS D	10.5	74.3	0.80	0.72	11.8
Approach		418	2.2	418	2.2	0.508	29.5	LOS C	10.5	74.3	0.72	0.71	22.9
West: Union St													
10	L2	234	2.6	234	2.6	0.385	16.7	LOS B	4.0	28.6	0.70	0.73	9.0
11	T1	116	0.9	116	0.9	0.380	41.5	LOS D	5.0	35.0	0.90	0.71	24.4
12	R2	79	1.3	79	1.3	0.398	49.8	LOS D	3.7	26.5	0.97	0.76	10.2
Approach		429	1.9	429	1.9	0.398	29.5	LOS C	5.0	35.0	0.80	0.73	16.9
All Vehicles		1533	1.7	1533	1.7	0.861	33.1	LOS C	10.5	74.3	0.78	0.75	22.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	156	43.5	LOS E	0.4	0.4	0.94	0.94
P2	East Full Crossing	371	43.9	LOS E	1.0	1.0	0.94	0.94
P3	North Full Crossing	889	44.9	LOS E	2.4	2.4	0.97	0.97
P4	West Full Crossing	201	43.6	LOS E	0.5	0.5	0.94	0.94
All Pedestrians		1617	44.4	LOS E			0.95	0.95

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

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

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

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:34:09

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [PM Union St/Murray St/Darling Drive]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

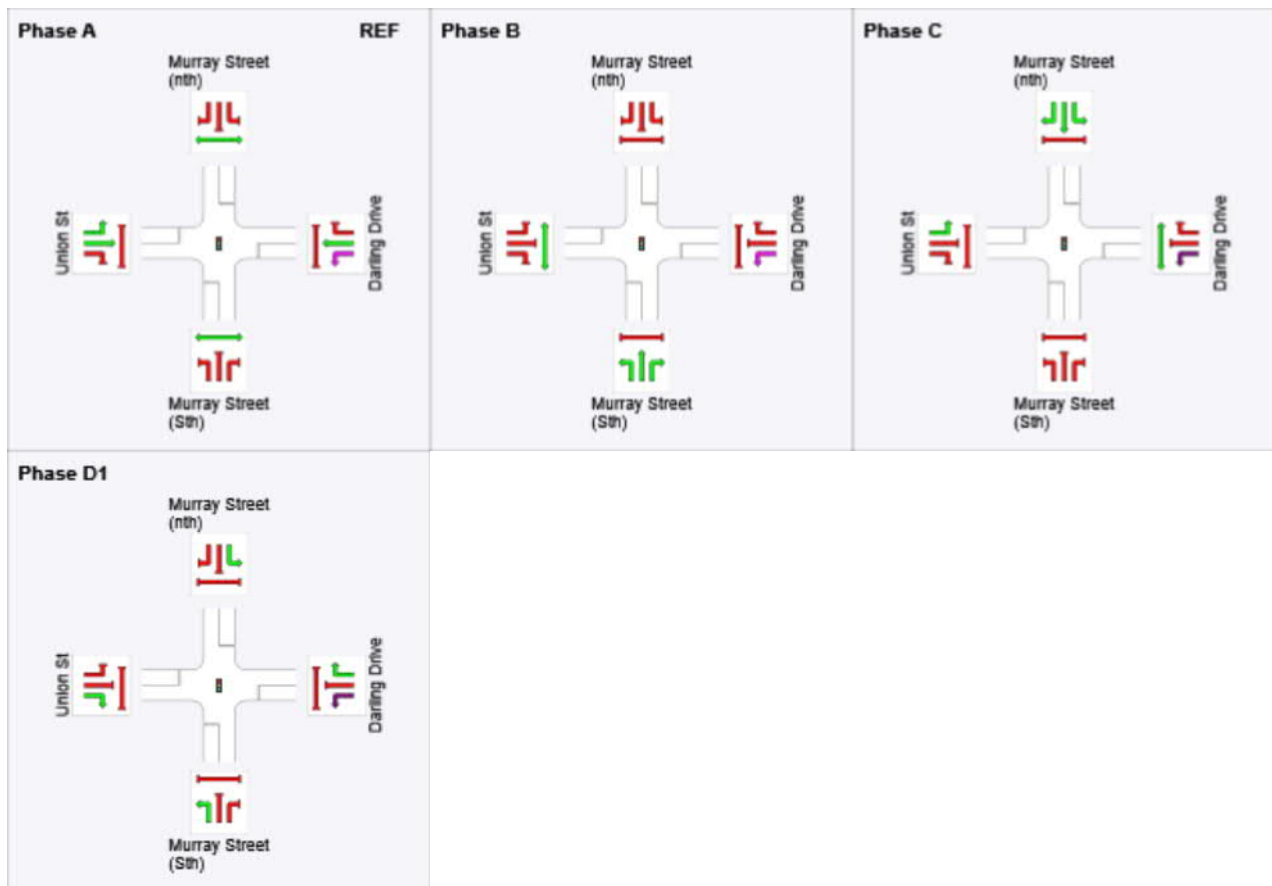
Input Phase Sequence: A, B, C, D1

Output Phase Sequence: A, B, C, D1

Phase Timing Results

Phase	A	B	C	D1
Phase Change Time (sec)	0	22	47	83
Green Time (sec)	16	19	30	11
Phase Time (sec)	22	25	36	17
Phase Split	22 %	25 %	36 %	17 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:34:09

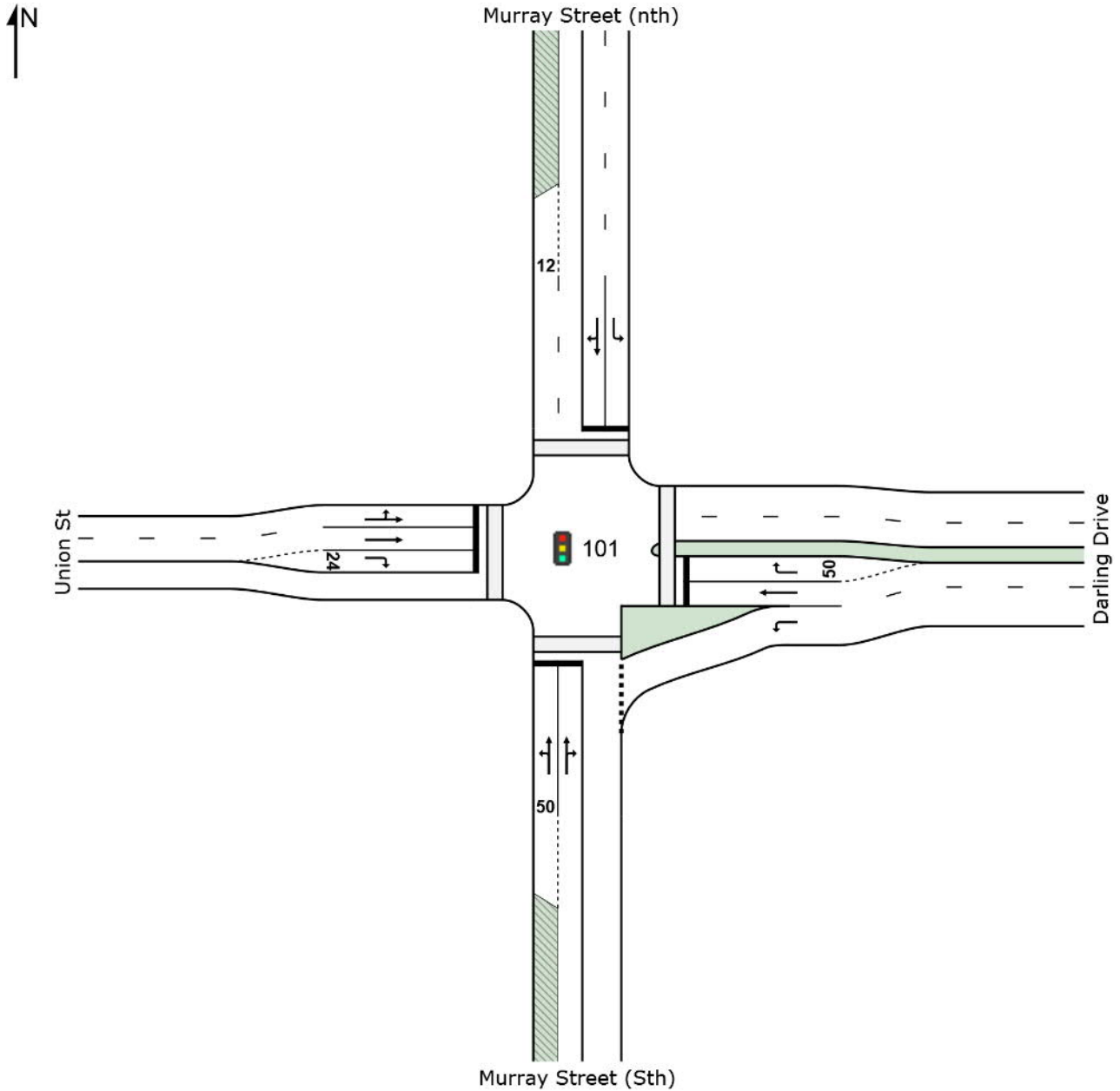
Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [OP Union St/Murray St/Darling Drive]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Union St/Murray St/Darling Drive]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Murray Street (Sth)													
1	L2	87	0.0	87	0.0	0.205	22.1	LOS C	1.9	13.5	0.84	0.74	16.1
2	T1	129	0.0	129	0.0	0.538	40.2	LOS D	8.8	61.4	0.95	0.79	10.4
3	R2	66	0.0	66	0.0	0.538	44.7	LOS D	8.8	61.4	0.95	0.79	26.4
Approach		282	0.0	282	0.0	0.538	35.7	LOS D	8.8	61.4	0.92	0.77	17.5
East: Darling Drive													
4	L2	107	0.0	107	0.0	0.073	6.0	LOS A	0.8	5.9	0.24	0.57	44.4
5	T1	165	0.0	165	0.0	0.448	39.4	LOS D	7.3	50.9	0.93	0.76	24.3
6	R2	158	0.6	158	0.6	0.950	71.8	LOS E	9.5	67.1	1.00	1.05	17.1
Approach		430	0.2	430	0.2	0.950	43.0	LOS D	9.5	67.1	0.78	0.82	24.0
North: Murray Street (nth)													
7	L2	223	0.0	223	0.0	0.319	26.1	LOS C	6.4	44.7	0.63	0.72	31.5
8	T1	147	0.0	147	0.0	0.789	37.7	LOS D	19.3	135.7	0.94	0.88	16.1
9	R2	277	0.7	277	0.7	0.789	42.2	LOS D	19.3	135.7	0.94	0.88	9.9
Approach		647	0.3	647	0.3	0.789	35.6	LOS D	19.3	135.7	0.83	0.83	20.3
West: Union St													
10	L2	321	2.5	321	2.5	0.499	16.3	LOS B	5.8	41.3	0.73	0.75	9.1
11	T1	163	0.0	163	0.0	0.479	39.4	LOS D	6.8	47.8	0.89	0.72	25.1
12	R2	57	0.0	57	0.0	0.348	51.6	LOS D	2.7	19.2	0.98	0.75	9.9
Approach		541	1.5	541	1.5	0.499	27.0	LOS C	6.8	47.8	0.80	0.74	18.2
All Vehicles		1900	0.6	1900	0.6	0.950	34.8	LOS C	19.3	135.7	0.83	0.79	20.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	156	43.5	LOS E	0.4	0.4	0.94	0.94
P2	East Full Crossing	371	43.9	LOS E	1.0	1.0	0.94	0.94
P3	North Full Crossing	889	44.9	LOS E	2.4	2.4	0.97	0.97
P4	West Full Crossing	201	43.6	LOS E	0.5	0.5	0.94	0.94
All Pedestrians		1617	44.4	LOS E			0.95	0.95

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

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

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

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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [OP Union St/Murray St/Darling Drive]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

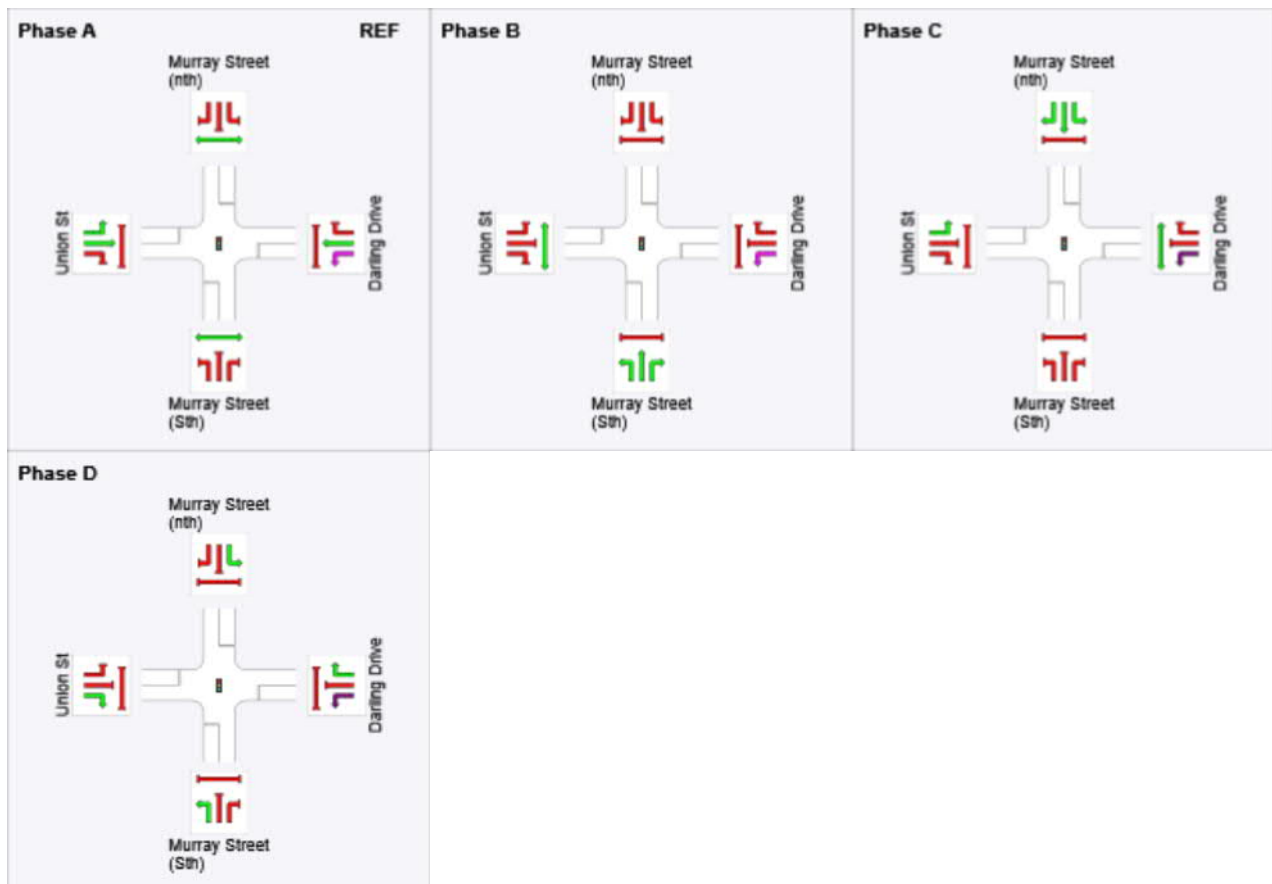
Input Phase Sequence: A, B, C, D

Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	25	50	85
Green Time (sec)	19	19	29	9
Phase Time (sec)	25	25	35	15
Phase Split	25 %	25 %	35 %	15 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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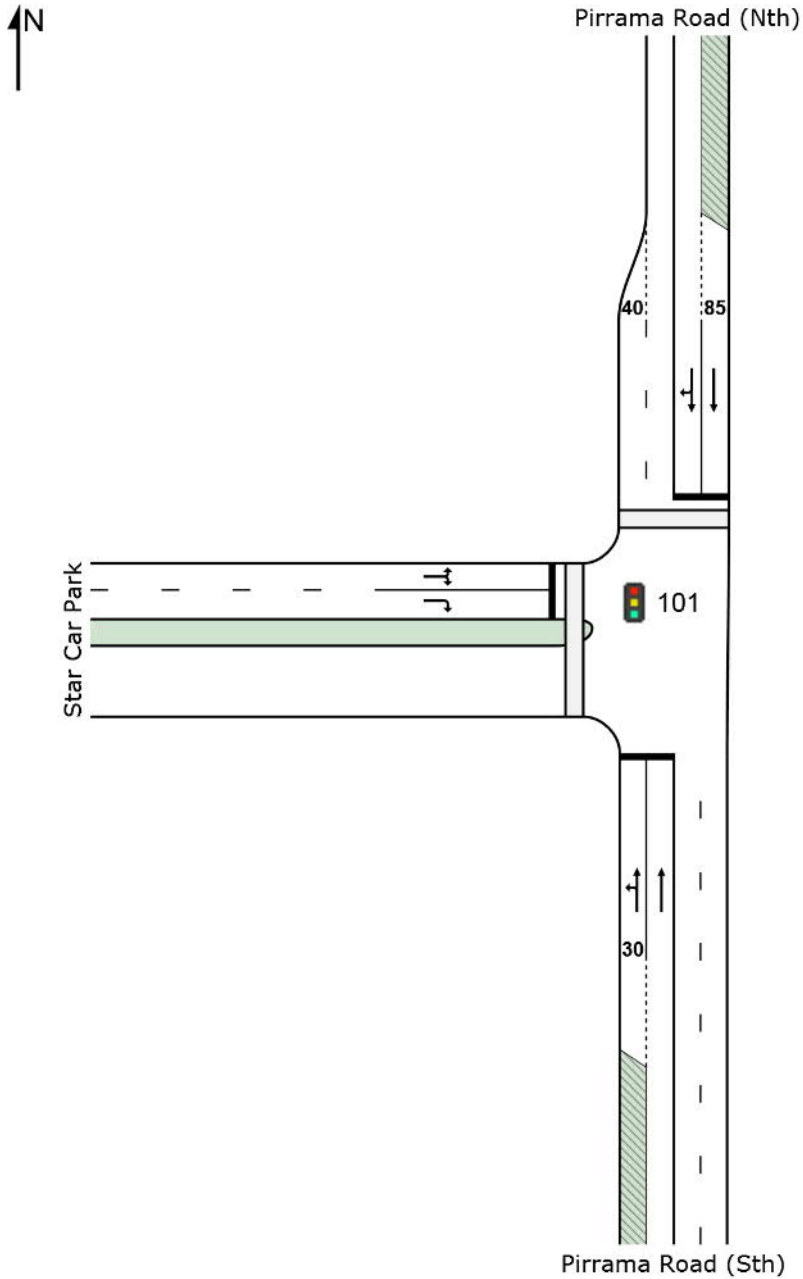
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SITE LAYOUT

 **Site: 101 [AM Pirrama Rd/Star Car Park Entrance]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Pirrama Rd/Star Car Park Entrance]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	142	0.7	142	0.7	0.117	6.9	LOS A	0.8	5.7	0.13	0.57	25.4
2	T1	277	6.5	277	6.5	0.202	0.4	LOS A	0.3	2.4	0.03	0.02	48.0
Approach		419	4.5	419	4.5	0.202	2.6	LOS A	0.8	5.7	0.06	0.21	35.3
North: Pirrama Road (Nth)													
8	T1	94	8.5	94	8.5	0.051	4.0	LOS A	0.9	6.6	0.30	0.28	39.7
9	R2	20	0.0	20	0.0	0.051	9.9	LOS A	0.7	4.9	0.33	0.43	32.1
Approach		114	7.0	114	7.0	0.051	5.0	LOS A	0.9	6.6	0.30	0.31	37.9
West: Star Car Park													
10	L2	4	0.0	4	0.0	0.054	41.8	LOS C	0.5	3.7	0.90	0.63	4.0
12	R2	22	0.0	22	0.0	0.054	41.1	LOS C	0.6	4.2	0.90	0.63	4.2
Approach		26	0.0	26	0.0	0.054	41.2	LOS C	0.6	4.2	0.90	0.63	4.1
All Vehicles		559	4.8	559	4.8	0.202	4.9	LOS A	0.9	6.6	0.15	0.25	31.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
P4	West Full Crossing	126	43.5	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		232	43.5	LOS E			0.93	0.93

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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PHASING SUMMARY

 Site: 101 [AM Pirrama Rd/Star Car Park Entrance]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

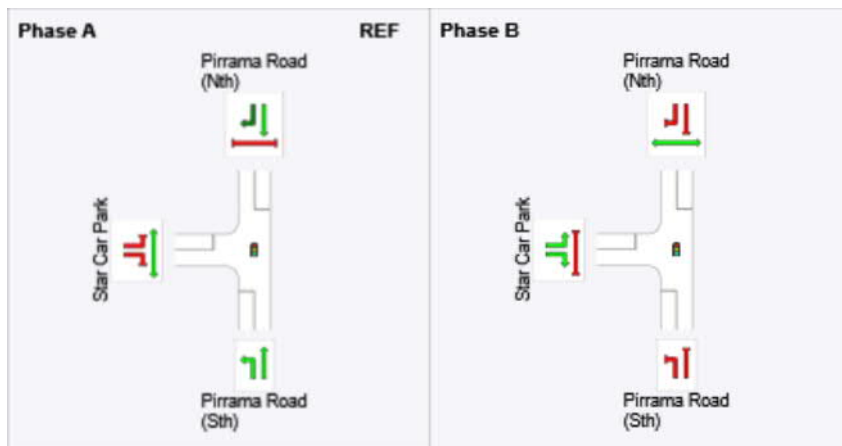
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	80
Green Time (sec)	74	14
Phase Time (sec)	80	20
Phase Split	80 %	20 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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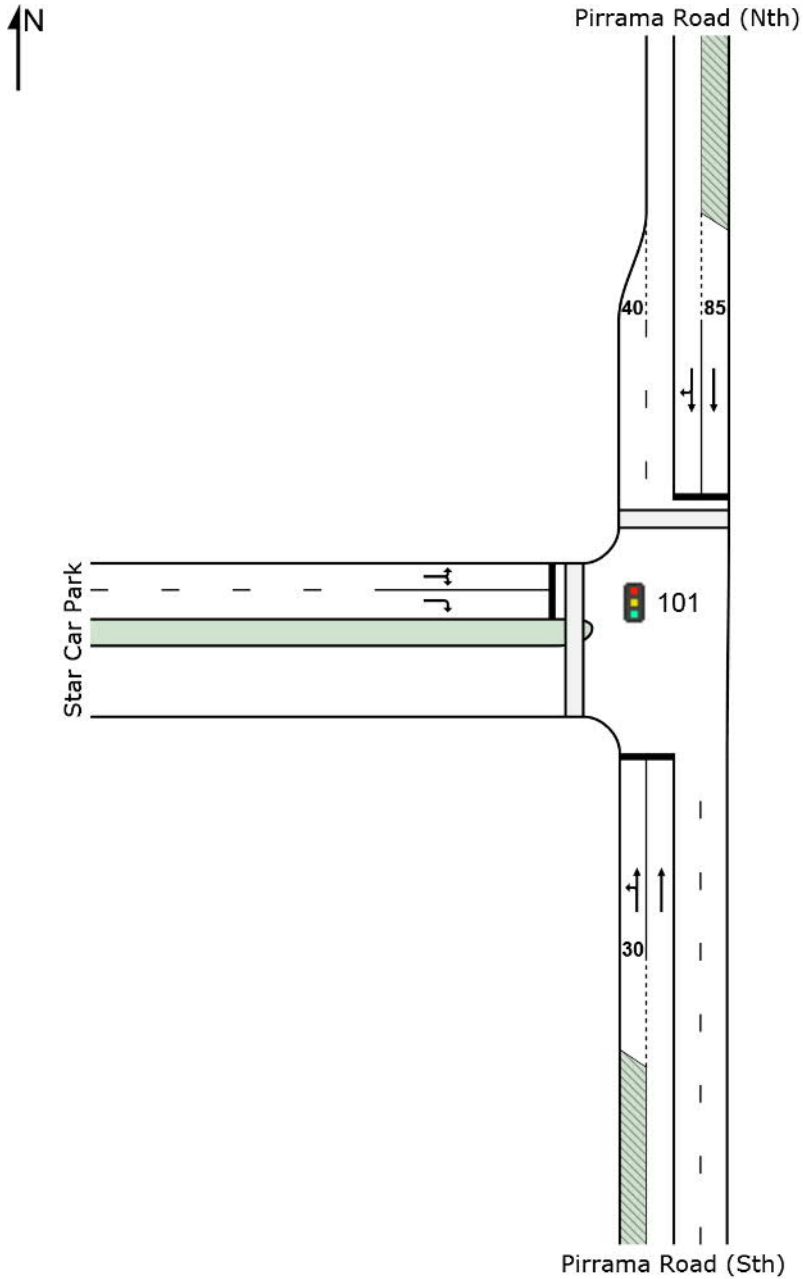
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [PM Pirrama Rd/Star Car Park Entrance]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Pirrama Rd/Star Car Park Entrance]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	169	0.6	169	0.6	0.121	4.8	LOS A	0.1	0.8	0.02	0.54	28.0
2	T1	341	5.0	341	5.0	0.250	0.5	LOS A	0.6	4.2	0.04	0.03	47.1
Approach		510	3.5	510	3.5	0.250	1.9	LOS A	0.6	4.2	0.03	0.20	37.1
North: Pirrama Road (Nth)													
8	T1	232	6.0	232	6.0	0.107	4.5	LOS A	2.0	14.9	0.32	0.30	39.1
9	R2	24	0.0	24	0.0	0.107	10.1	LOS B	1.7	12.6	0.34	0.37	33.1
Approach		256	5.5	256	5.5	0.107	5.0	LOS A	2.0	14.9	0.32	0.30	38.4
West: Star Car Park													
10	L2	47	0.0	47	0.0	0.469	46.1	LOS D	4.8	33.6	0.98	0.77	3.7
12	R2	185	0.0	185	0.0	0.469	44.0	LOS D	6.0	42.1	0.97	0.77	3.9
Approach		232	0.0	232	0.0	0.469	44.4	LOS D	6.0	42.1	0.97	0.77	3.9
All Vehicles		998	3.2	998	3.2	0.469	12.6	LOS B	6.0	42.1	0.33	0.36	20.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	217	43.6	LOS E	0.6	0.6	0.94	0.94
P4	West Full Crossing	263	43.7	LOS E	0.7	0.7	0.94	0.94
All Pedestrians		480	43.7	LOS E			0.94	0.94

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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PHASING SUMMARY

 Site: 101 [PM Pirrama Rd/Star Car Park Entrance]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

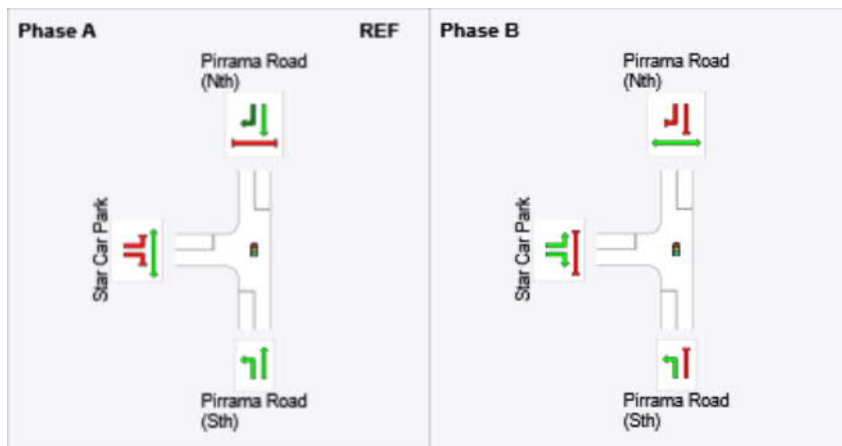
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	79
Green Time (sec)	73	15
Phase Time (sec)	79	21
Phase Split	79 %	21 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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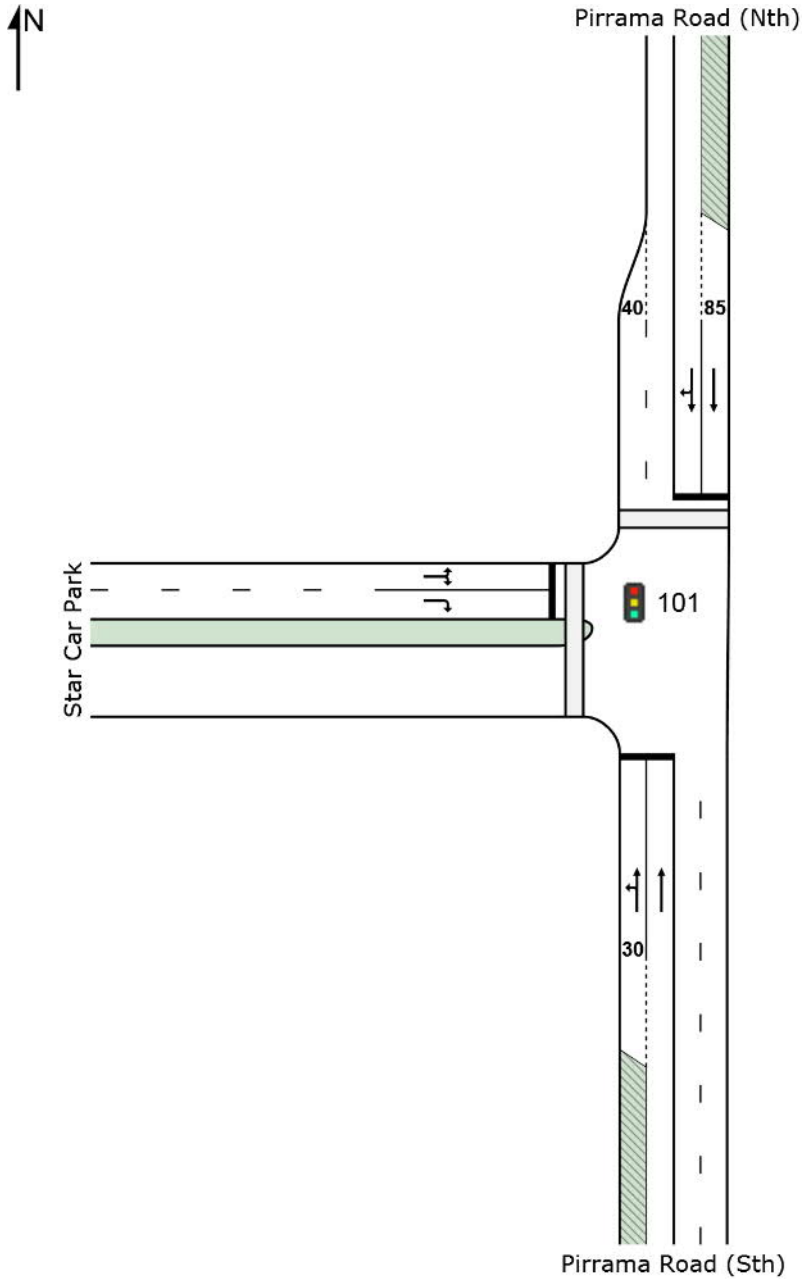
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [OP Pirrama Rd/Star Car Park Entrance]**

No Project

Signals - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Pirrama Rd/Star Car Park Entrance]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	167	1.2	167	1.2	0.121	4.8	LOS A	0.1	0.8	0.02	0.54	28.0
2	T1	431	1.4	431	1.4	0.322	1.6	LOS A	2.0	14.0	0.10	0.09	42.4
Approach		598	1.3	598	1.3	0.322	2.5	LOS A	2.0	14.0	0.08	0.22	36.2
North: Pirrama Road (Nth)													
8	T1	335	1.2	335	1.2	0.162	5.9	LOS A	3.5	24.8	0.38	0.35	37.0
9	R2	36	0.0	36	0.0	0.162	11.8	LOS B	2.8	19.9	0.40	0.42	31.3
Approach		371	1.1	371	1.1	0.162	6.5	LOS A	3.5	24.8	0.38	0.35	36.2
West: Star Car Park													
10	L2	39	0.0	39	0.0	0.586	43.3	LOS D	7.8	54.6	0.98	0.79	4.0
12	R2	324	0.0	324	0.0	0.586	42.2	LOS D	9.0	63.0	0.97	0.80	4.1
Approach		363	0.0	363	0.0	0.586	42.3	LOS D	9.0	63.0	0.97	0.80	4.1
All Vehicles		1332	0.9	1332	0.9	0.586	14.4	LOS B	9.0	63.0	0.41	0.41	19.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	278	43.8	LOS E	0.7	0.7	0.94	0.94
P4	West Full Crossing	546	44.3	LOS E	1.5	1.5	0.95	0.95
All Pedestrians		824	44.1	LOS E			0.95	0.95

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

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

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

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PHASING SUMMARY

 Site: 101 [OP Pirrama Rd/Star Car Park Entrance]

 Network: N101 [OP Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

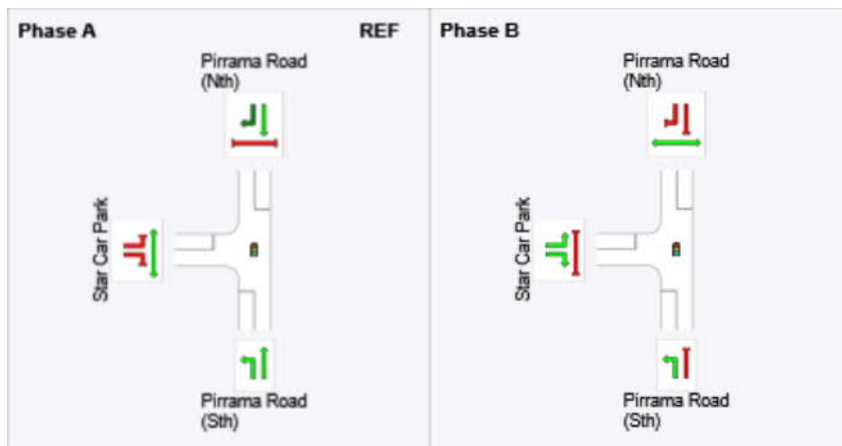
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	76
Green Time (sec)	70	18
Phase Time (sec)	76	24
Phase Split	76 %	24 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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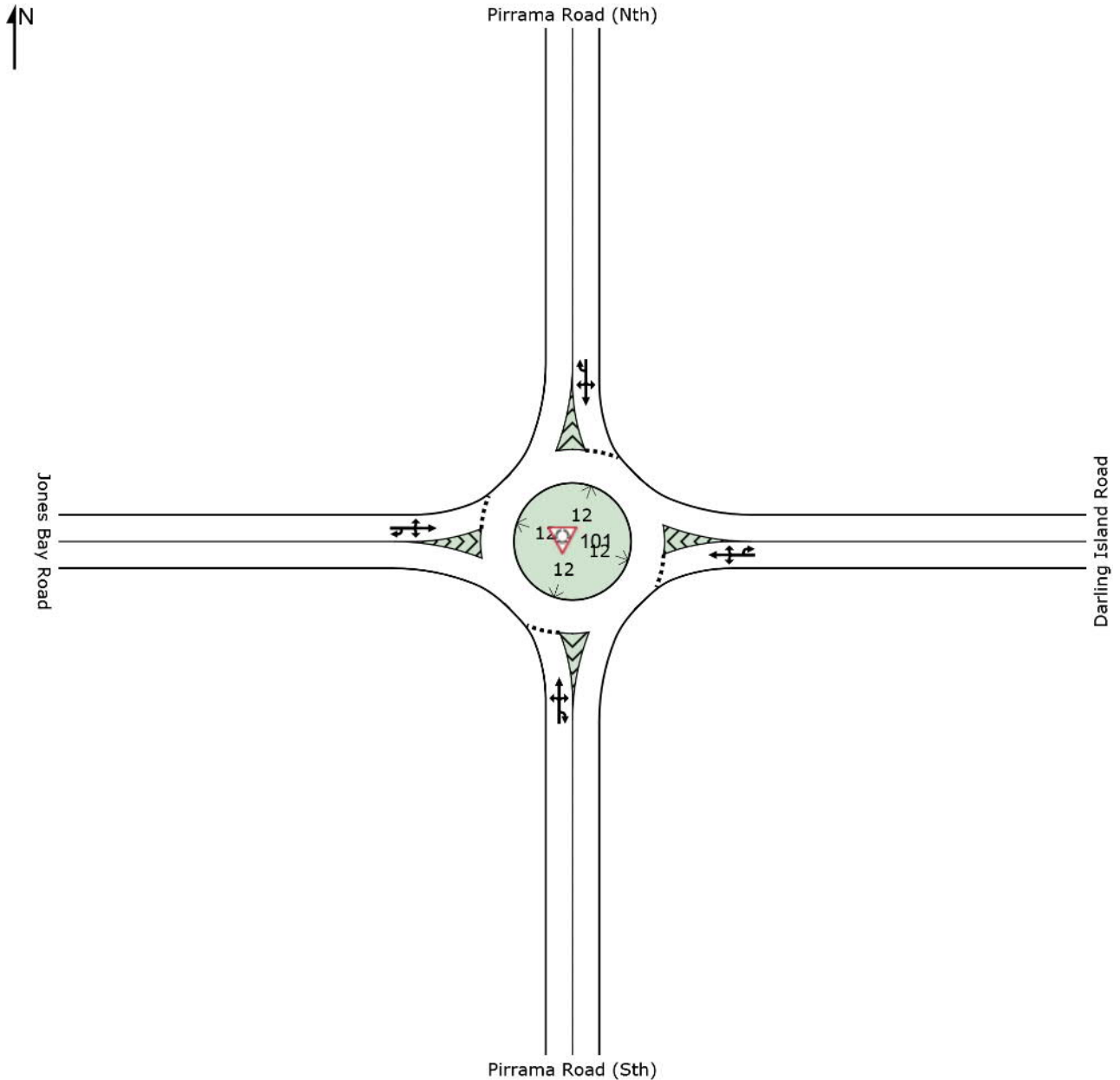
Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:54:43

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 Site: 101 [AM Jones Bay Rd/Pirrama Rd]

No Project
Roundabout



MOVEMENT SUMMARY

 Site: 101 [AM Jones Bay Rd/Pirrama Rd]

 Network: 1 [AM Star Casino Network]

No Project
Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	95	8.4	95	8.4	0.244	4.3	LOS A	1.2	9.0	0.28	0.54	37.8
2	T1	89	7.9	89	7.9	0.244	4.2	LOS A	1.2	9.0	0.28	0.54	45.5
3	R2	92	5.4	92	5.4	0.244	7.7	LOS A	1.2	9.0	0.28	0.54	34.8
3u	U	11	10.0	11	10.0	0.244	9.4	LOS A	1.2	9.0	0.28	0.54	37.8
Approach		287	7.3	287	7.3	0.244	5.6	LOS A	1.2	9.0	0.28	0.54	40.6
East: Darling Island Road													
4	L2	18	0.0	18	0.0	0.070	5.2	LOS A	0.3	2.3	0.34	0.53	30.6
5	T1	41	12.2	41	12.2	0.070	5.3	LOS A	0.3	2.3	0.34	0.53	30.6
6	R2	7	0.0	7	0.0	0.070	8.9	LOS A	0.3	2.3	0.34	0.53	50.2
6u	U	1	0.0	1	0.0	0.070	10.7	LOS A	0.3	2.3	0.34	0.53	24.7
Approach		67	7.5	67	7.5	0.070	5.8	LOS A	0.3	2.3	0.34	0.53	35.9
North: Pirrama Road (Nth)													
7	L2	11	0.0	11	0.0	0.111	5.9	LOS A	0.6	4.3	0.44	0.62	40.3
8	T1	43	14.0	43	14.0	0.111	6.4	LOS A	0.6	4.3	0.44	0.62	47.6
9	R2	44	2.3	44	2.3	0.111	9.7	LOS A	0.6	4.3	0.44	0.62	47.6
9u	U	4	0.0	4	0.0	0.111	11.3	LOS A	0.6	4.3	0.44	0.62	52.9
Approach		102	6.8	102	6.8	0.111	8.0	LOS A	0.6	4.3	0.44	0.62	46.9
West: Jones Bay Road													
10	L2	87	0.0	87	0.0	0.224	5.7	LOS A	1.4	9.7	0.44	0.60	48.6
11	T1	86	3.5	86	3.5	0.224	5.9	LOS A	1.4	9.7	0.44	0.60	28.2
12	R2	34	0.0	34	0.0	0.224	9.4	LOS A	1.4	9.7	0.44	0.60	32.1
12u	U	28	3.7	28	3.7	0.224	11.2	LOS A	1.4	9.7	0.44	0.60	32.1
Approach		235	1.7	235	1.7	0.224	7.0	LOS A	1.4	9.7	0.44	0.60	39.7
All Vehicles		691	5.4	691	5.4	0.244	6.4	LOS A	1.4	9.7	0.36	0.57	41.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

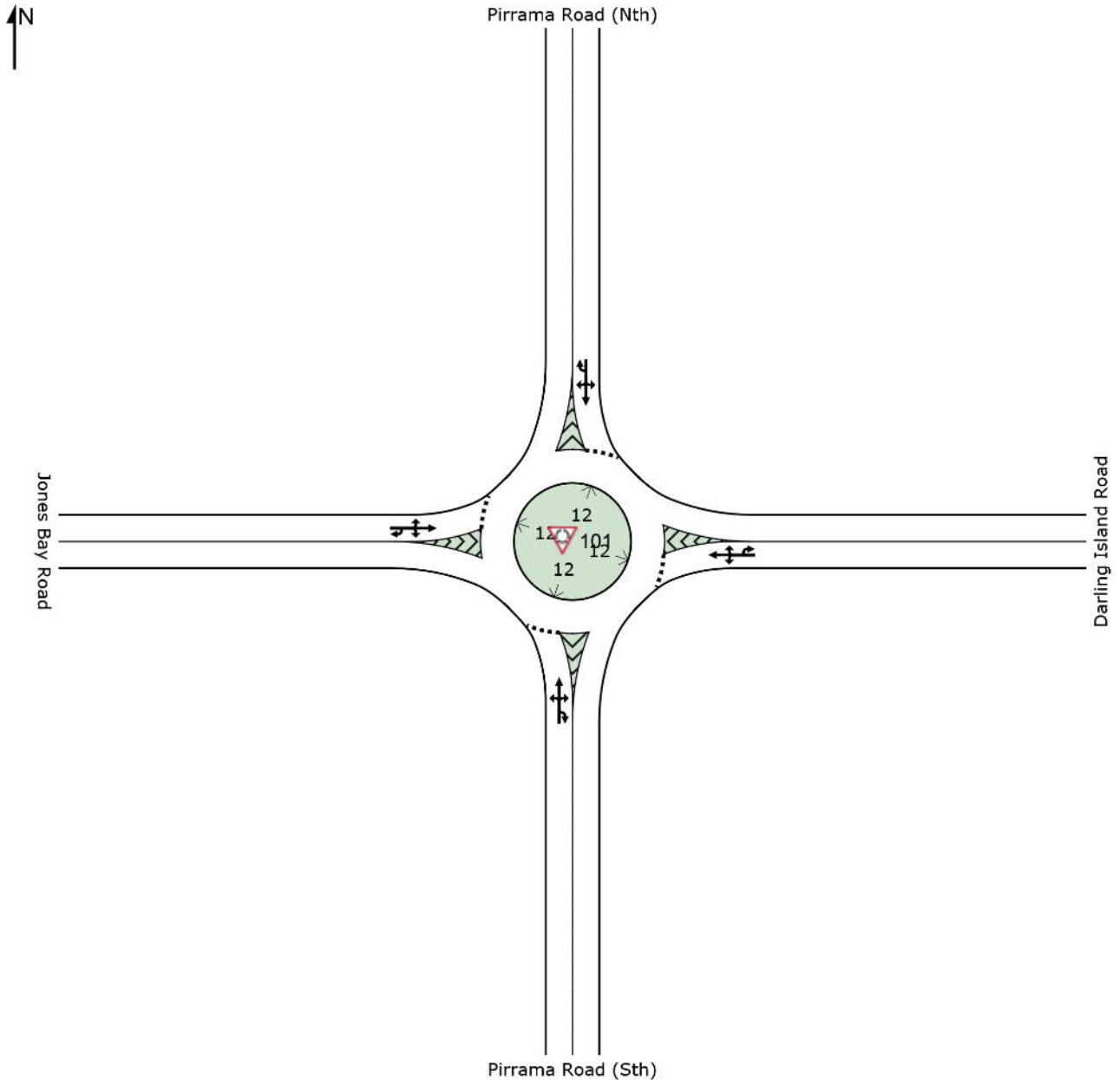
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 Site: 101 [PM Jones Bay Rd/Pirrama Rd]

No Project
Roundabout



MOVEMENT SUMMARY

 Site: 101 [PM Jones Bay Rd/Pirrama Rd]

 Network: N101 [PM Star Casino Network]

No Project
Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	216	1.4	216	1.4	0.403	5.6	LOS A	2.2	16.4	0.49	0.64	36.6
2	T1	101	14.9	101	14.9	0.403	5.9	LOS A	2.2	16.4	0.49	0.64	44.8
3	R2	34	0.0	34	0.0	0.403	9.0	LOS A	2.2	16.4	0.49	0.64	34.1
3u	U	44	4.8	44	4.8	0.403	10.7	LOS B	2.2	16.4	0.49	0.64	36.6
Approach		395	5.1	395	5.1	0.403	6.5	LOS A	2.2	16.4	0.49	0.64	40.0
East: Darling Island Road													
4	L2	57	0.0	57	0.0	0.201	6.7	LOS A	1.0	7.1	0.57	0.67	28.2
5	T1	92	0.0	92	0.0	0.201	6.8	LOS A	1.0	7.1	0.57	0.67	28.2
6	R2	14	0.0	14	0.0	0.201	10.5	LOS B	1.0	7.1	0.57	0.67	49.0
6u	U	1	0.0	1	0.0	0.201	12.2	LOS B	1.0	7.1	0.57	0.67	23.8
Approach		164	0.0	164	0.0	0.201	7.1	LOS A	1.0	7.1	0.57	0.67	32.9
North: Pirrama Road (Nth)													
7	L2	20	0.0	20	0.0	0.297	5.9	LOS A	1.8	13.0	0.46	0.64	40.2
8	T1	113	10.6	113	10.6	0.297	6.3	LOS A	1.8	13.0	0.46	0.64	47.4
9	R2	154	0.6	154	0.6	0.297	9.6	LOS A	1.8	13.0	0.46	0.64	47.4
9u	U	6	0.0	6	0.0	0.297	11.3	LOS B	1.8	13.0	0.46	0.64	52.8
Approach		293	4.4	293	4.4	0.297	8.1	LOS A	1.8	13.0	0.46	0.64	46.9
West: Jones Bay Road													
10	L2	65	1.5	65	1.5	0.185	5.7	LOS A	1.1	7.7	0.43	0.62	47.9
11	T1	41	0.0	41	0.0	0.185	5.8	LOS A	1.1	7.7	0.43	0.62	27.9
12	R2	55	0.0	55	0.0	0.185	9.4	LOS A	1.1	7.7	0.43	0.62	31.3
12u	U	32	0.0	32	0.0	0.185	11.1	LOS B	1.1	7.7	0.43	0.62	31.3
Approach		193	0.5	193	0.5	0.185	7.6	LOS A	1.1	7.7	0.43	0.62	39.5
All Vehicles		1045	3.3	1045	3.3	0.403	7.3	LOS A	2.2	16.4	0.48	0.64	41.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: Same as Sign Control.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

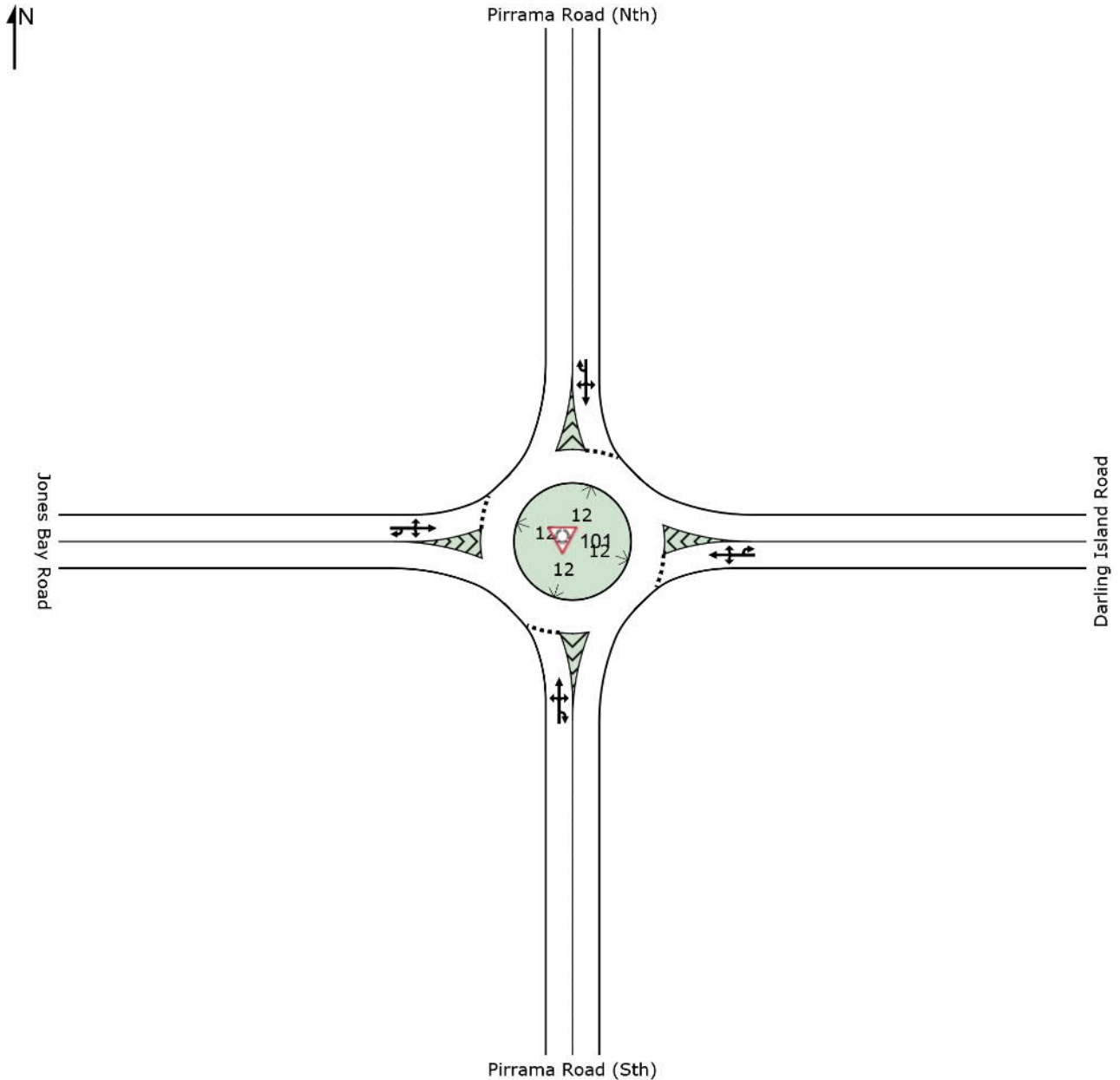
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

 Site: 101 [OP Jones Bay Rd/Pirrama Rd]

No Project
Roundabout



MOVEMENT SUMMARY

 Site: 101 [OP Jones Bay Rd/Pirrama Rd]

 Network: N101 [OP Star Casino Network]

No Project
Roundabout

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
1	L2	281	0.7	281	0.7	0.485	5.9	LOS A	3.0	21.2	0.54	0.68	35.7
2	T1	72	4.2	72	4.2	0.485	6.0	LOS A	3.0	21.2	0.54	0.68	44.4
3	R2	24	0.0	24	0.0	0.485	9.4	LOS A	3.0	21.2	0.54	0.68	33.5
3u	U	105	1.0	105	1.0	0.485	11.0	LOS B	3.0	21.2	0.54	0.68	35.7
Approach		482	1.3	482	1.3	0.485	7.2	LOS A	3.0	21.2	0.54	0.68	38.1
East: Darling Island Road													
4	L2	34	0.0	34	0.0	0.124	8.3	LOS A	0.7	5.0	0.68	0.72	25.6
5	T1	48	0.0	48	0.0	0.124	8.4	LOS A	0.7	5.0	0.68	0.72	25.6
6	R2	9	0.0	9	0.0	0.124	12.1	LOS B	0.7	5.0	0.68	0.72	47.5
6u	U	1	0.0	1	0.0	0.124	13.8	LOS B	0.7	5.0	0.68	0.72	22.7
Approach		92	0.0	92	0.0	0.124	8.8	LOS A	0.7	5.0	0.68	0.72	30.9
North: Pirrama Road (Nth)													
7	L2	7	0.0	7	0.0	0.396	7.2	LOS A	2.6	18.1	0.62	0.73	39.6
8	T1	180	2.2	180	2.2	0.396	7.4	LOS A	2.6	18.1	0.62	0.73	46.4
9	R2	152	0.0	152	0.0	0.396	10.9	LOS B	2.6	18.1	0.62	0.73	46.4
9u	U	9	0.0	9	0.0	0.396	12.6	LOS B	2.6	18.1	0.62	0.73	52.1
Approach		348	1.1	348	1.1	0.396	9.0	LOS A	2.6	18.1	0.62	0.73	46.5
West: Jones Bay Road													
10	L2	33	3.0	33	3.0	0.244	5.9	LOS A	1.5	10.8	0.47	0.66	46.4
11	T1	25	0.0	25	0.0	0.244	6.0	LOS A	1.5	10.8	0.47	0.66	27.0
12	R2	87	0.0	87	0.0	0.244	9.5	LOS A	1.5	10.8	0.47	0.66	29.3
12u	U	105	0.0	105	0.0	0.244	11.2	LOS B	1.5	10.8	0.47	0.66	29.3
Approach		250	0.4	250	0.4	0.244	9.4	LOS A	1.5	10.8	0.47	0.66	33.6
All Vehicles		1173	0.9	1173	0.9	0.485	8.4	LOS A	3.0	21.2	0.56	0.69	40.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: Same as Sign Control.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

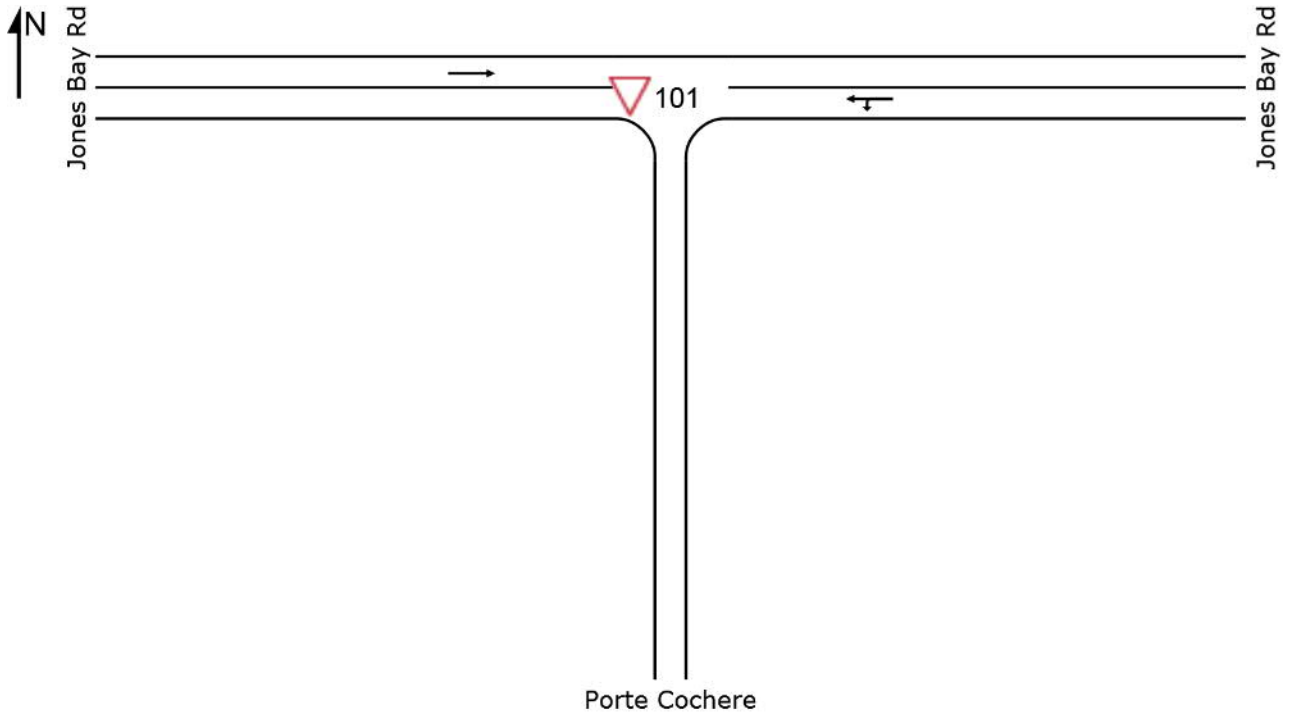
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

SITE LAYOUT

▽ Site: 101 [AM Jones Bay Rd/Port Cochere Entry]

New Site
Giveaway / Yield (Two-Way)



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Organisation: MOTT MACDONALD | Created: 16 February 2018 19:23:14

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

Site: 101 [AM Jones Bay Rd/Port Cochere Entry]

Network: 1 [AM Star Casino Network]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Jones Bay Rd													
4	L2	32	10.0	32	10.0	0.118	4.7	LOS A	0.0	0.0	0.00	0.08	46.8
5	T1	186	6.8	186	6.8	0.118	0.0	LOS A	0.0	0.0	0.00	0.08	46.8
Approach		218	7.2	218	7.2	0.118	0.7	NA	0.0	0.0	0.00	0.08	46.8
West: Jones Bay Rd													
11	T1	277	1.9	277	1.9	0.144	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		277	1.9	277	1.9	0.144	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		495	4.3	495	4.3	0.144	0.3	NA	0.0	0.0	0.00	0.03	47.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

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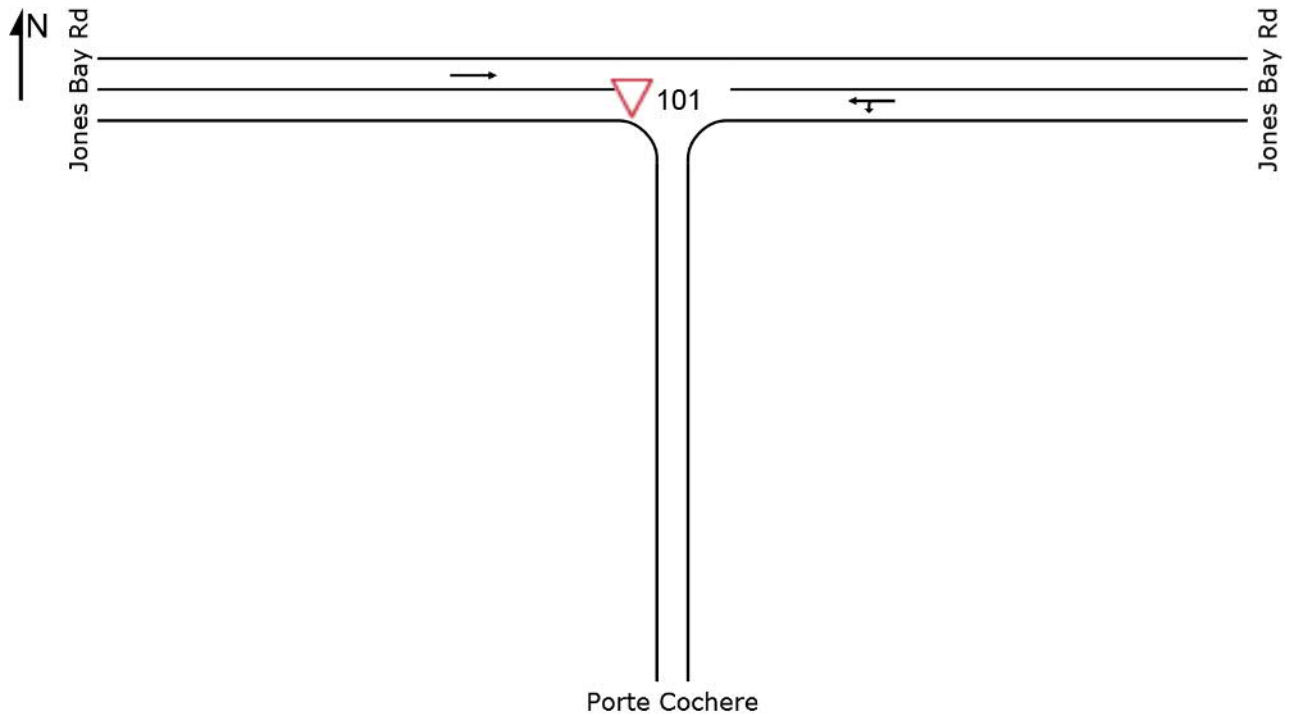
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SITE LAYOUT

▽ Site: 101 [PM Jones Bay Rd/Port Cochere Entry]

New Site
Giveway / Yield (Two-Way)



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Organisation: MOTT MACDONALD | Created: 16 February 2018 19:42:37

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

 Site: 101 [PM Jones Bay Rd/Port Cochere Entry]

 Network: N101 [PM Star Casino Network]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Jones Bay Rd													
4	L2	102	1.0	102	1.0	0.270	4.6	LOS A	0.0	0.0	0.00	0.11	45.6
5	T1	416	0.8	416	0.8	0.270	0.0	LOS A	0.0	0.0	0.00	0.11	45.6
Approach		518	0.8	518	0.8	0.270	0.9	NA	0.0	0.0	0.00	0.11	45.6
West: Jones Bay Rd													
11	T1	229	0.0	229	0.0	0.118	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		229	0.0	229	0.0	0.118	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		747	0.6	747	0.6	0.270	0.6	NA	0.0	0.0	0.00	0.07	46.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

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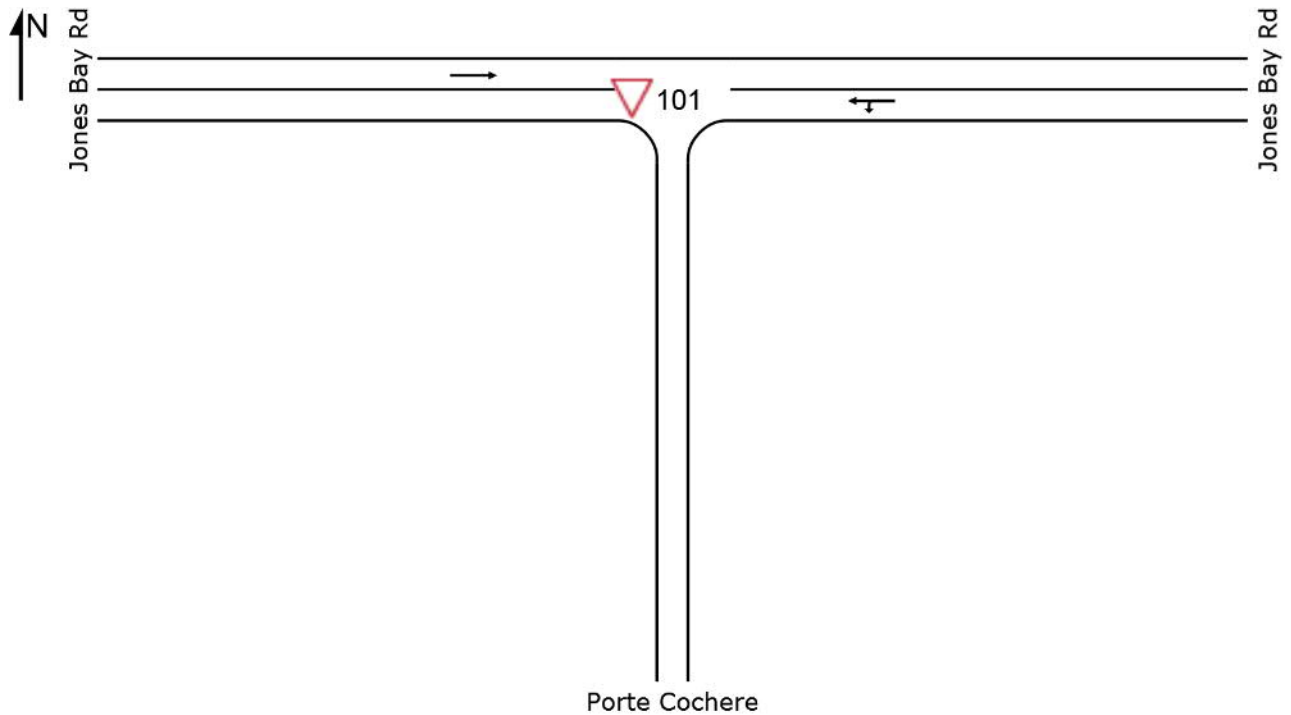
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

▽ Site: 101 [OP Jones Bay Rd/Port Cochere Entry]

New Site
Giveaway / Yield (Two-Way)



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Organisation: MOTT MACDONALD | Created: 16 February 2018 20:00:10

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

 Site: 101 [OP Jones Bay Rd/Port Cochere Entry]

 Network: N101 [OP Star Casino Network]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Jones Bay Rd													
4	L2	223	0.5	223	0.5	0.320	4.6	LOS A	0.0	0.0	0.00	0.20	42.5
5	T1	388	0.3	388	0.3	0.320	0.0	LOS A	0.0	0.0	0.00	0.20	42.5
Approach		612	0.3	612	0.3	0.320	1.7	NA	0.0	0.0	0.00	0.20	42.5
West: Jones Bay Rd													
11	T1	281	0.0	281	0.0	0.144	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		281	0.0	281	0.0	0.144	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		893	0.2	893	0.2	0.320	1.1	NA	0.0	0.0	0.00	0.14	43.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

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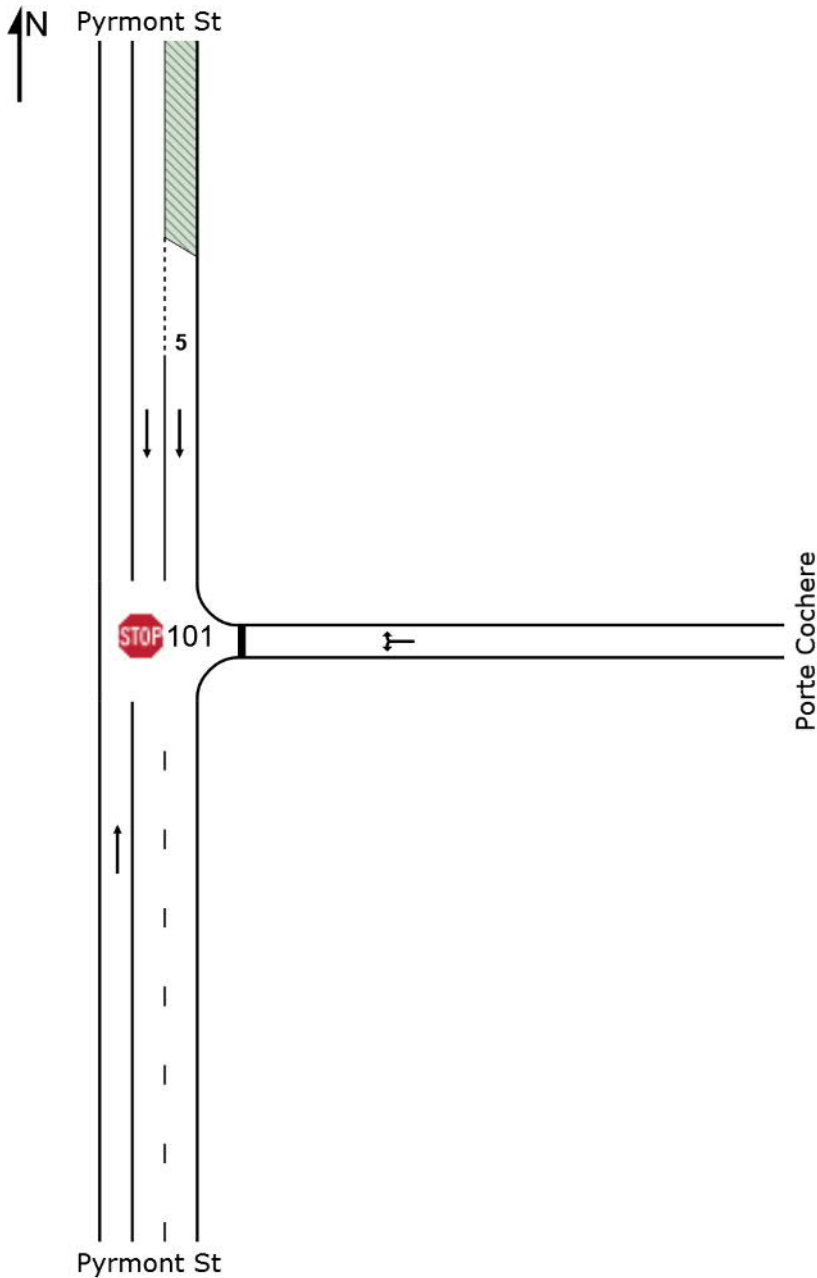
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [AM Pyrmont St/Port Cochere Exit]**

New Site
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Port Cochere Exit]

 Network: 1 [AM Star Casino Network]

New Site
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	286	2.9	286	2.9	0.150	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		286	2.9	286	2.9	0.150	0.0	NA	0.0	0.0	0.00	0.00	50.0
East: Porte Cochere													
4	L2	64	1.6	64	1.6	0.086	4.8	LOS A	0.2	1.7	0.29	0.88	18.0
6	R2	3	0.0	3	0.0	0.086	8.9	LOS A	0.2	1.7	0.29	0.88	18.0
Approach		67	1.6	67	1.6	0.086	5.0	LOS A	0.2	1.7	0.29	0.88	18.0
North: Pyrmont St													
8	T1	293	4.7	293	4.7	0.092	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		293	4.7	293	4.7	0.092	0.0	NA	0.0	0.0	0.00	0.00	50.0
All Vehicles		646	3.6	646	3.6	0.150	0.5	NA	0.2	1.7	0.03	0.09	37.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

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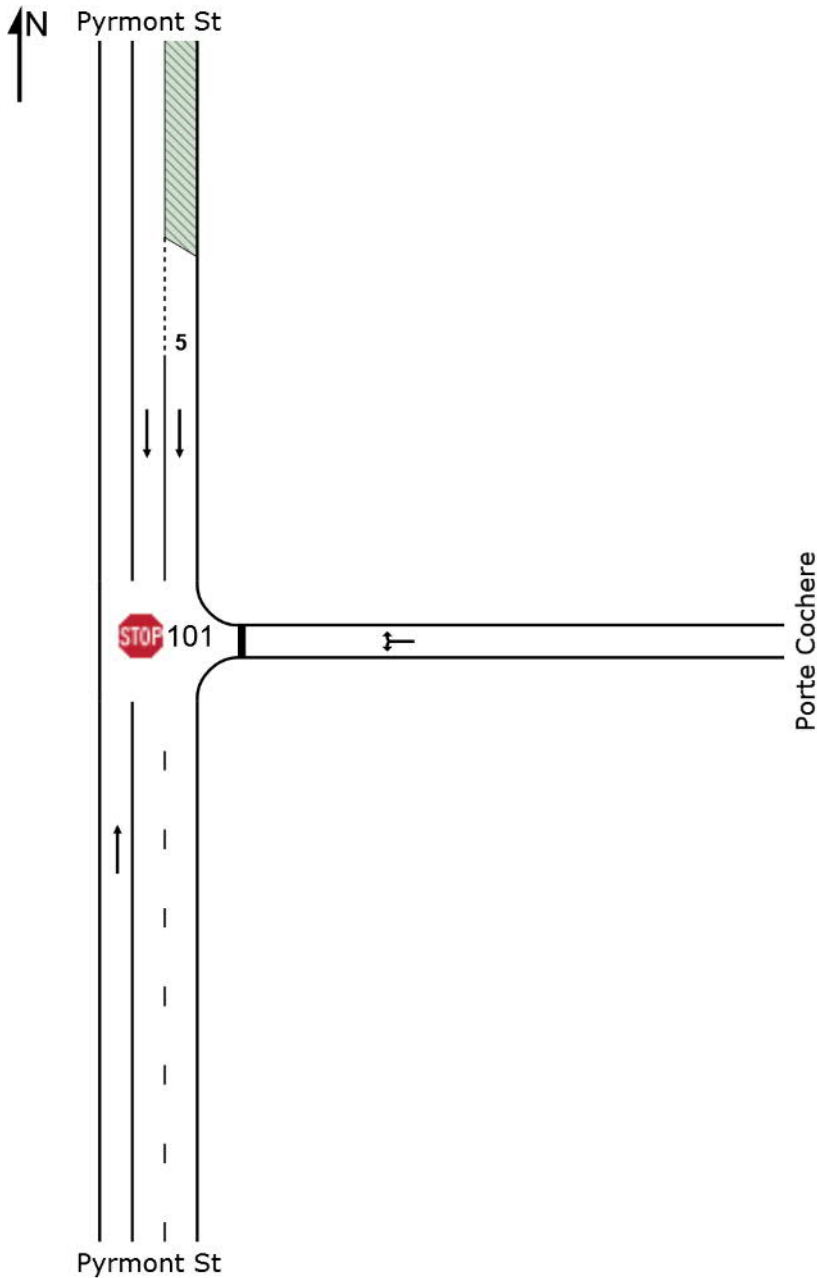
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [PM Pyrmont St/Port Cochere Exit]**

New Site
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Port Cochere Exit]

 Network: N101 [PM Star Casino Network]

New Site
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
South: Pyrmont St													
2	T1	268	0.0	268	0.0	0.138	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		268	0.0	268	0.0	0.138	0.0	NA	0.0	0.0	0.00	0.00	50.0
East: Porte Cochere													
4	L2	105	1.0	105	1.0	0.204	5.1	LOS A	0.4	3.0	0.36	0.90	17.9
6	R2	5	0.0	5	0.0	0.204	10.9	LOS B	0.4	3.0	0.36	0.90	17.9
Approach		111	1.0	111	1.0	0.204	5.4	LOS A	0.4	3.0	0.36	0.90	17.9
North: Pyrmont St													
8	T1	468	1.3	468	1.3	0.121	0.0	LOS A	4.6	32.3	0.00	0.00	50.0
Approach		468	1.3	468	1.3	0.121	0.0	NA	4.6	32.3	0.00	0.00	50.0
All Vehicles		847	0.9	847	0.9	0.204	0.7	NA	4.6	32.3	0.05	0.12	36.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

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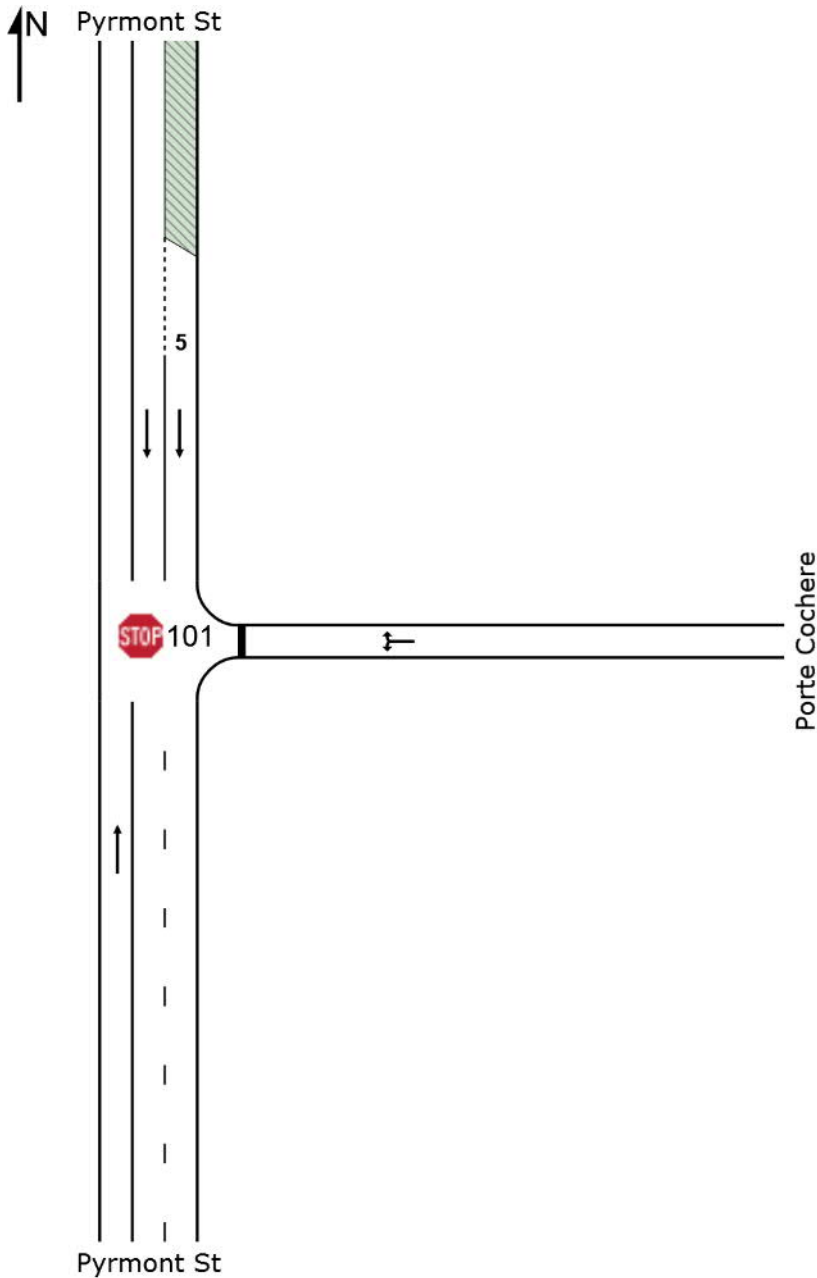
Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:34:09

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [OP Pyrmont St/Port Cochere Exit]**

New Site
Stop (Two-Way)



MOVEMENT SUMMARY

 Site: 101 [OP Pyrmont St/Port Cochere Exit]

 Network: N101 [OP Star Casino Network]

New Site
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		veh/h		v/c	sec		veh	m		per veh	km/h
South: Pyrmont St													
2	T1	274	0.0	274	0.0	0.140	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		274	0.0	274	0.0	0.140	0.0	NA	0.0	0.0	0.00	0.00	50.0
East: Porte Cochere													
4	L2	207	0.5	207	0.5	0.426	5.4	LOS A	1.2	8.1	0.37	0.93	17.6
6	R2	24	0.0	24	0.0	0.426	11.1	LOS B	1.2	8.1	0.37	0.93	17.6
Approach		232	0.5	232	0.5	0.426	6.0	LOS A	1.2	8.1	0.37	0.93	17.6
North: Pyrmont St													
8	T1	400	0.3	400	0.3	0.103	0.0	LOS A	1.6	11.2	0.00	0.00	50.0
Approach		400	0.3	400	0.3	0.103	0.0	NA	1.6	11.2	0.00	0.00	50.0
All Vehicles		905	0.2	905	0.2	0.426	1.5	NA	1.6	11.2	0.09	0.24	29.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

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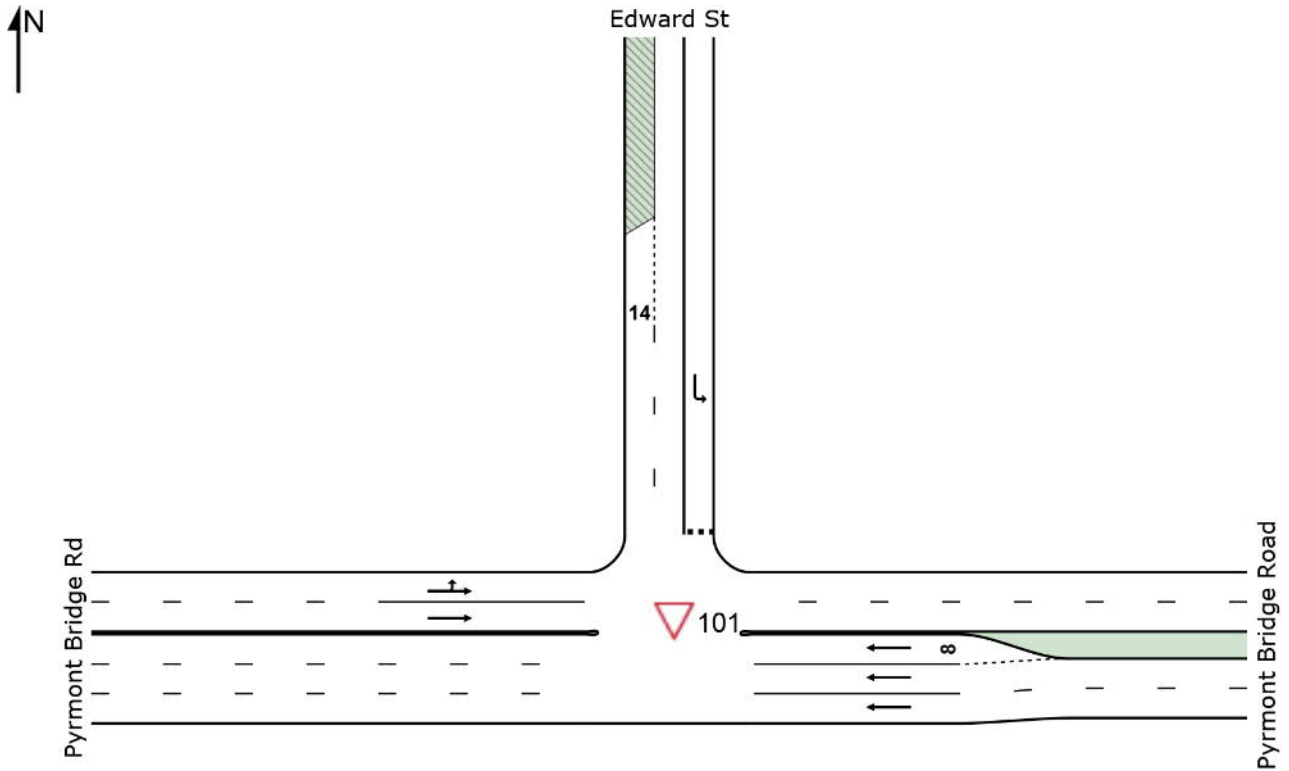
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

▽ Site: 101 [AM Pyrmont Bridge Rd/Edward St]

No Project
Giveway / Yield (Two-Way)



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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

Site: 101 [AM Pyrmont Bridge Rd/Edward St]

Network: 1 [AM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Road													
5	T1	263	6.5	263	6.5	0.053	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		263	6.5	263	6.5	0.053	0.0	NA	0.0	0.0	0.00	0.00	50.0
North: Edward St													
7	L2	25	0.0	25	0.0	0.021	5.0	LOS A	0.1	0.5	0.16	0.51	27.8
Approach		25	0.0	25	0.0	0.021	5.0	LOS A	0.1	0.5	0.16	0.51	27.8
West: Pyrmont Bridge Rd													
10	L2	189	0.5	189	0.5	0.168	2.8	LOS A	0.0	0.0	0.00	0.31	31.3
11	T1	439	6.4	439	6.4	0.168	0.0	LOS A	0.0	0.0	0.00	0.09	42.6
Approach		628	4.6	628	4.6	0.168	0.8	NA	0.0	0.0	0.00	0.15	38.3
All Vehicles		916	5.0	916	5.0	0.168	0.7	NA	0.1	0.5	0.00	0.12	43.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

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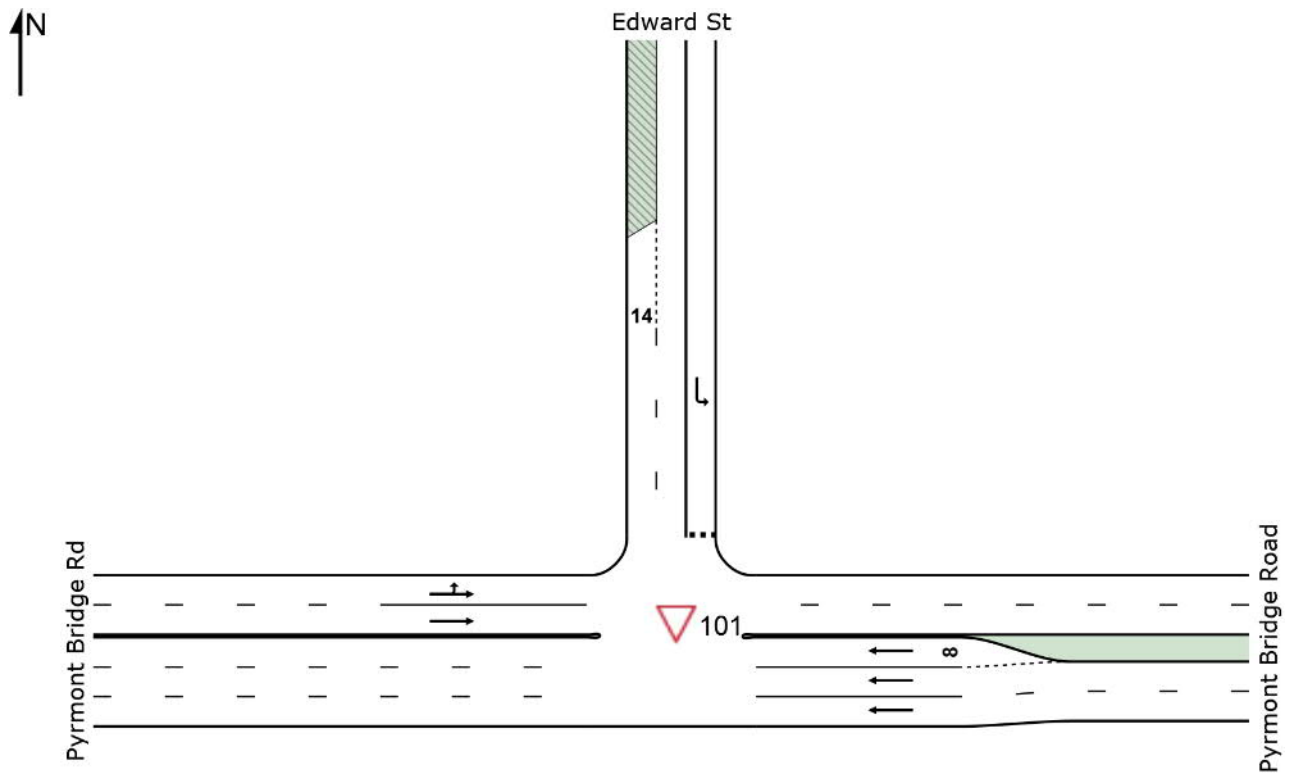
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

▽ Site: 101 [PM Pyrmont Bridge Rd/Edward St]

No Project
Giveway / Yield (Two-Way)



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MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont Bridge Rd/Edward St]

 Network: N101 [PM Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Road													
5	T1	431	1.6	431	1.6	0.080	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
Approach		431	1.6	431	1.6	0.080	0.0	NA	0.0	0.0	0.00	0.00	50.0
North: Edward St													
7	L2	50	0.0	50	0.0	0.041	4.9	LOS A	0.1	1.0	0.14	0.51	28.0
Approach		50	0.0	50	0.0	0.041	4.9	LOS A	0.1	1.0	0.14	0.51	28.0
West: Pyrmont Bridge Rd													
10	L2	161	0.6	161	0.6	0.139	2.8	LOS A	0.0	0.0	0.00	0.31	31.2
11	T1	365	2.5	365	2.5	0.139	0.0	LOS A	0.0	0.0	0.00	0.09	42.8
Approach		526	1.9	526	1.9	0.139	0.8	NA	0.0	0.0	0.00	0.16	38.3
All Vehicles		1007	1.7	1007	1.7	0.139	0.7	NA	0.1	1.0	0.01	0.11	44.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

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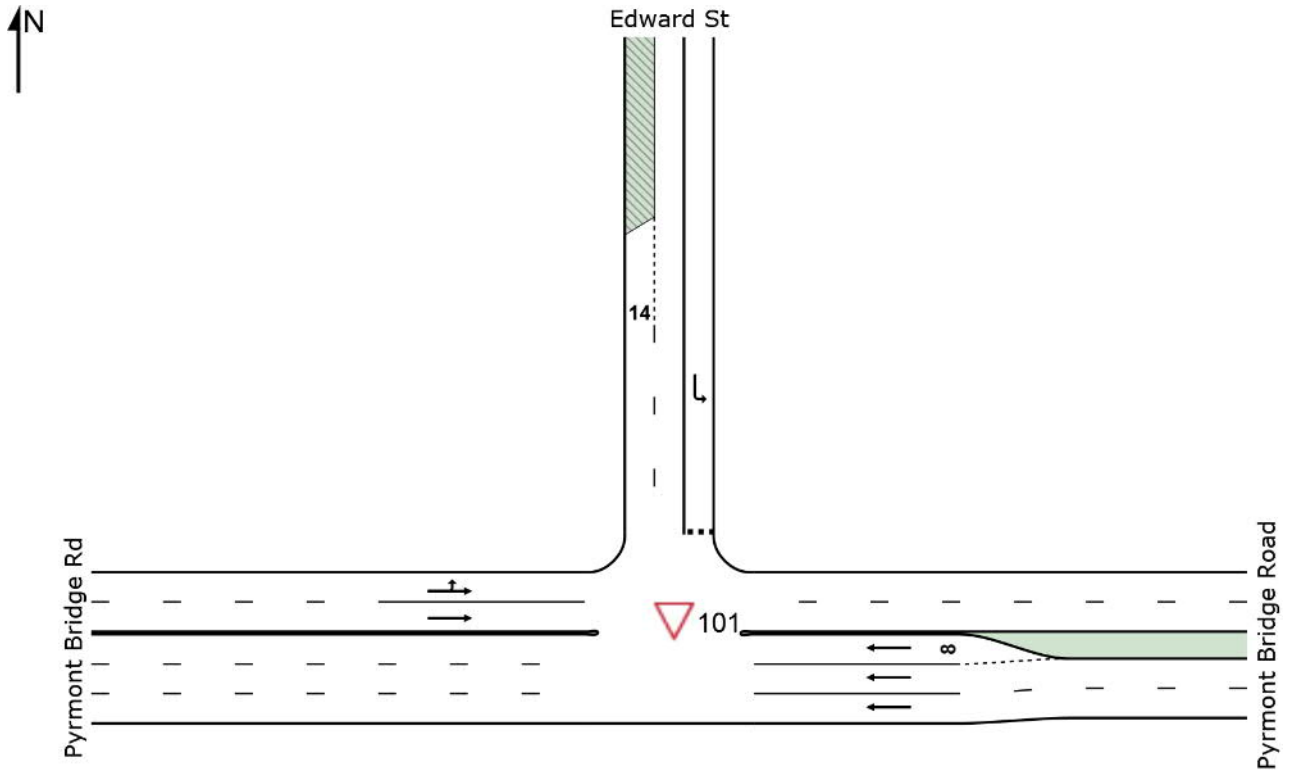
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

▽ Site: 101 [OP Pyrmont Bridge Rd/Edward St]

No Project
Giveway / Yield (Two-Way)



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Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

MOVEMENT SUMMARY

Site: 101 [OP Pyrmont Bridge Rd/Edward St]

Network: N101 [OP Star Casino Network]

No Project
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
East: Pyrmont Bridge Road													
5	T1	609	0.3	609	0.3	0.104	0.0	LOS A	3.7	25.7	0.00	0.00	50.0
Approach		609	0.3	609	0.3	0.104	0.0	NA	3.7	25.7	0.00	0.00	50.0
North: Edward St													
7	L2	55	0.0	55	0.0	0.048	5.2	LOS A	0.2	1.1	0.19	0.52	27.5
Approach		55	0.0	55	0.0	0.048	5.2	LOS A	0.2	1.1	0.19	0.52	27.5
West: Pyrmont Bridge Rd													
10	L2	102	0.0	102	0.0	0.142	2.8	LOS A	0.0	0.0	0.00	0.19	36.4
11	T1	441	1.4	441	1.4	0.142	0.0	LOS A	0.0	0.0	0.00	0.07	43.7
Approach		543	1.1	543	1.1	0.142	0.5	NA	0.0	0.0	0.00	0.10	42.1
All Vehicles		1207	0.7	1207	0.7	0.142	0.5	NA	3.7	25.7	0.01	0.07	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

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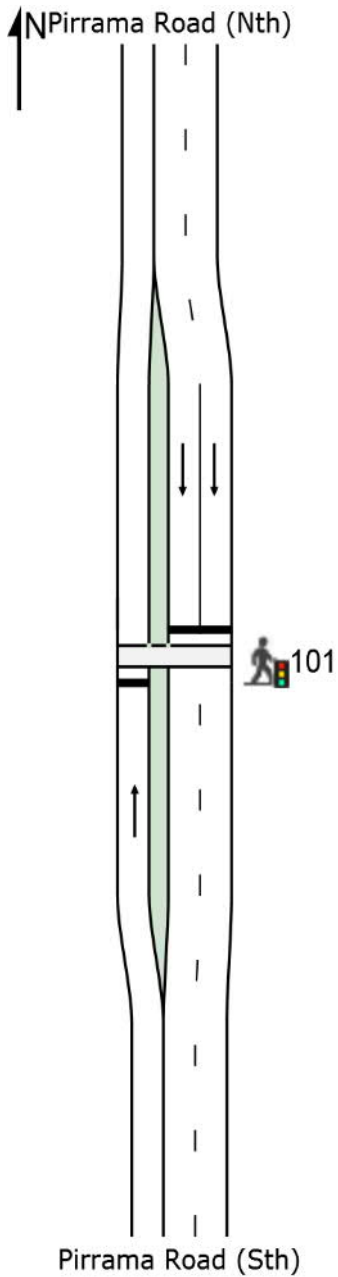
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [AM Pirrama Rd Pedestrian Crossing]**

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [AM Pirrama Rd Pedestrian Crossing]

 Network: 1 [AM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pirrama Road (Sth)													
2	T1	440	4.5	440	4.5	0.332	5.2	LOS A	6.3	45.7	0.32	0.28	32.0
Approach		440	4.5	440	4.5	0.332	5.2	LOS A	6.3	45.7	0.32	0.28	32.0
North: Pirrama Road (Nth)													
8	T1	122	6.9	122	6.9	0.047	1.2	LOS A	0.2	1.5	0.07	0.06	43.4
Approach		122	6.9	122	6.9	0.047	1.2	LOS A	0.2	1.5	0.07	0.06	43.4
All Vehicles		562	5.1	562	5.1	0.332	4.4	LOS A	6.3	45.7	0.27	0.23	33.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.9 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		105	43.4	LOS E			0.93	0.93

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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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [AM Pirrama Rd Pedestrian Crossing]

 Network: 1 [AM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times determined by the program

Green Split Priority applies

Phase Sequence: Two-Phase

Reference Phase: Phase A

Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	76
Green Time (sec)	70	18
Phase Time (sec)	76	24
Phase Split	76 %	24 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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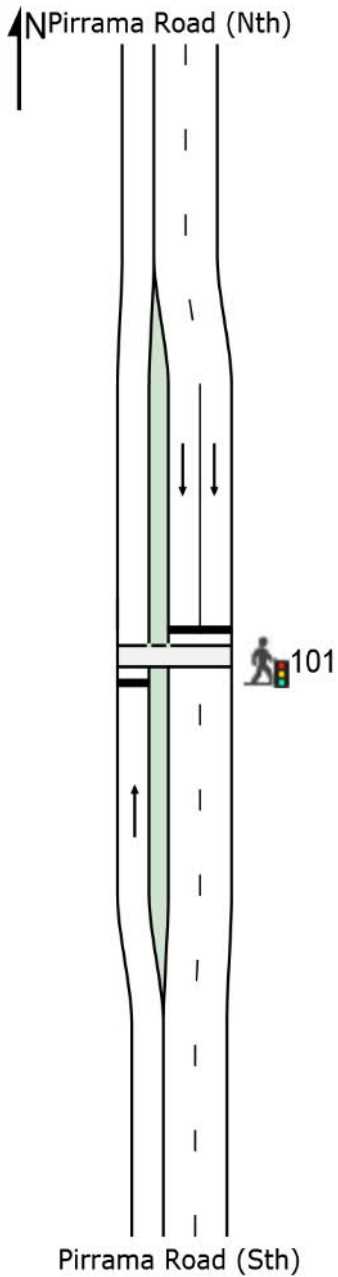
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [PM Pirrama Rd Pedestrian Crossing]**

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [PM Pirrama Rd Pedestrian Crossing]

 Network: N101 [PM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Pirrama Road (Sth)													
2	T1	540	3.5	540	3.5	0.405	6.2	LOS A	10.2	73.9	0.43	0.38	30.1
Approach		540	3.5	540	3.5	0.405	6.2	LOS A	10.2	73.9	0.43	0.38	30.1
North: Pirrama Road (Nth)													
8	T1	439	3.4	439	3.4	0.164	1.4	LOS A	0.8	6.0	0.08	0.07	42.9
Approach		439	3.4	439	3.4	0.164	1.4	LOS A	0.8	6.0	0.08	0.07	42.9
All Vehicles		979	3.4	979	3.4	0.405	4.0	LOS A	10.2	73.9	0.27	0.24	34.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.6 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		105	43.4	LOS E			0.93	0.93

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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Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:34:09

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [PM Pirrama Rd Pedestrian Crossing]

 Network: N101 [PM Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Two-Phase

Reference Phase: Phase A

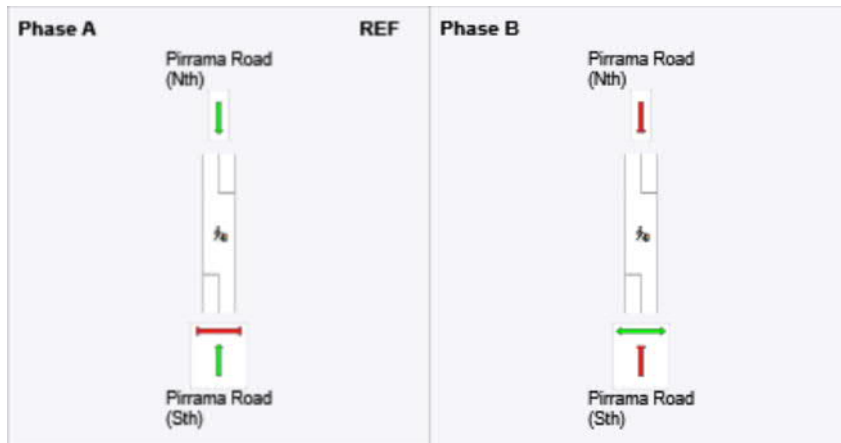
Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	76
Green Time (sec)	70	18
Phase Time (sec)	76	24
Phase Split	76 %	24 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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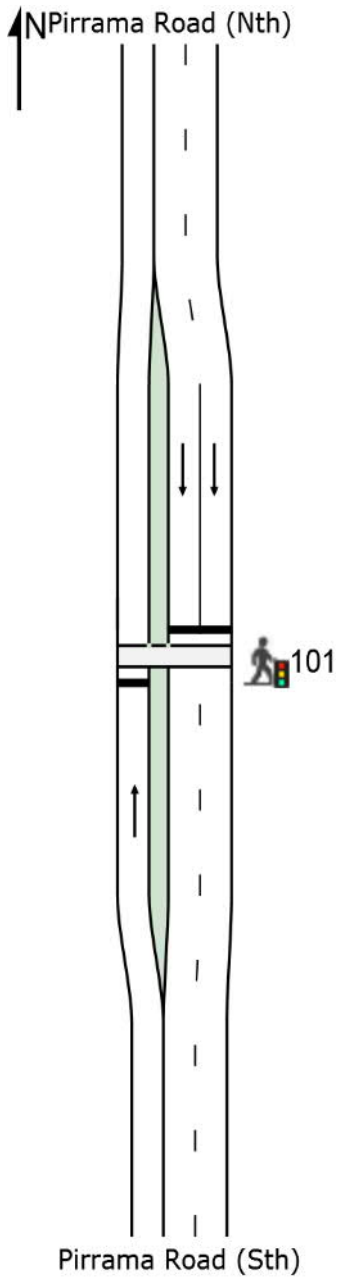
Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

SITE LAYOUT

 **Site: 101 [OP Pirrama Rd Pedestrian Crossing]**

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated



MOVEMENT SUMMARY

 Site: 101 [OP Pirrama Rd Pedestrian Crossing]

 Network: N101 [OP Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV %	Arrival Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
South: Pirrama Road (Sth)													
2	T1	629	1.3	629	1.3	0.465	6.4	LOS A	12.4	87.6	0.44	0.40	29.7
Approach		629	1.3	629	1.3	0.465	6.4	LOS A	12.4	87.6	0.44	0.40	29.7
North: Pirrama Road (Nth)													
8	T1	694	0.6	694	0.6	0.277	1.5	LOS A	1.6	11.5	0.10	0.08	42.3
Approach		694	0.6	694	0.6	0.277	1.5	LOS A	1.6	11.5	0.10	0.08	42.3
All Vehicles		1323	1.0	1323	1.0	0.465	3.8	LOS A	12.4	87.6	0.26	0.24	34.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.4 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Back of Queue Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P1	South Full Crossing	105	43.4	LOS E	0.3	0.3	0.93	0.93
All Pedestrians		105	43.4	LOS E			0.93	0.93

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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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

PHASING SUMMARY

 Site: 101 [OP Pirrama Rd Pedestrian Crossing]

 Network: N101 [OP Star Casino Network]

No Project

Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Two-Phase

Reference Phase: Phase A

Input Phase Sequence: A, B

Output Phase Sequence: A, B

Phase Timing Results

Phase	A	B
Phase Change Time (sec)	0	76
Green Time (sec)	70	18
Phase Time (sec)	76	24
Phase Split	76 %	24 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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Organisation: MOTT MACDONALD | Processed: 16 February 2018 19:54:43

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\180119 Existing+Mod 14 (5% Inc).sip7

APPENDIX C SIDRA ANALYSIS OF NETWORK CONDITIONS WITH MODIFICATION 13

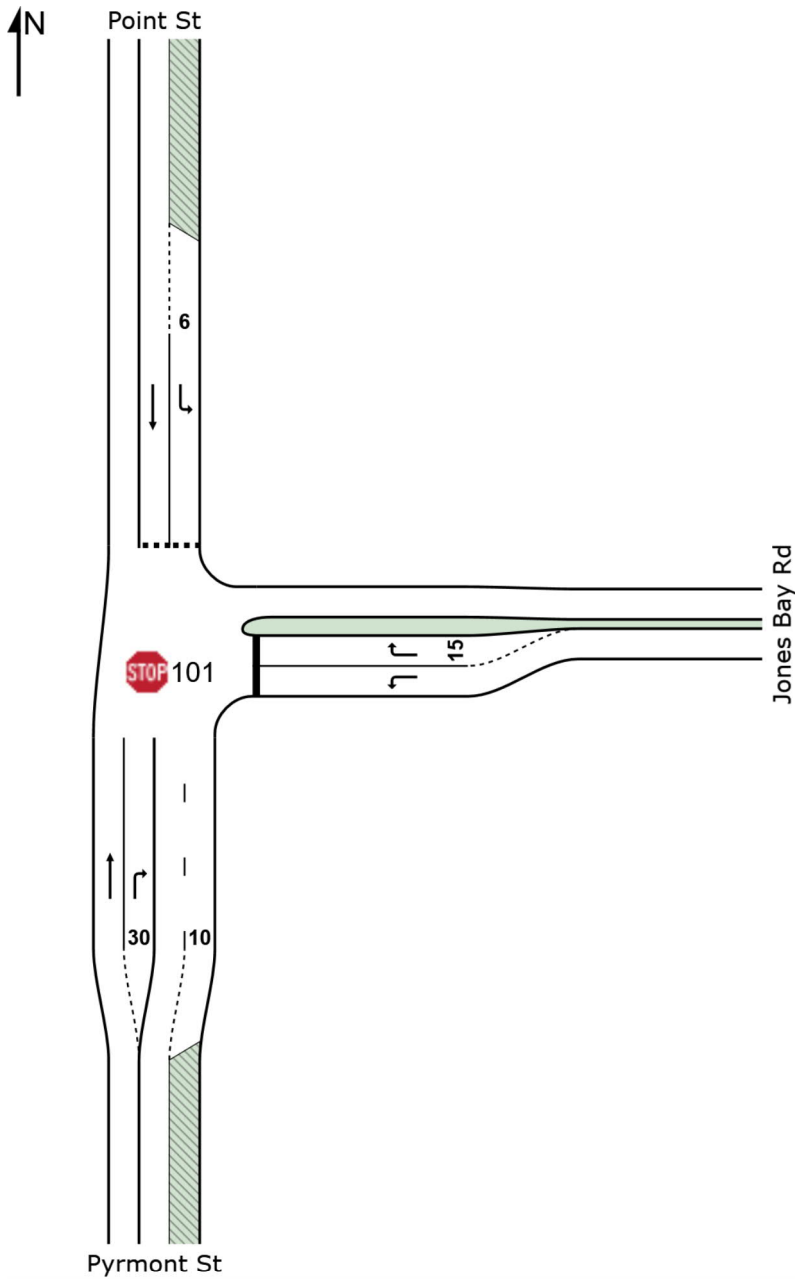
Summary of Results

Ref.	Intersection	AM Peak				PM Peak				Off-Peak			
		DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)	DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)	DoS	LOS	Avg. Delay (s)	95% Back of Queue (m)
1	Pymont Street / Jones Bay Road	0.131	A	7.4	3.3	0.25	A	6.8	2.5	0.178	A	6.7	1.1
2	Pymont Street / Union Street	0.883	C	30.3	146.7	0.764	C	25.4	107.5	0.752	C	27.1	109.2
3	Pymont Street / Pymont Bridge Road	0.775	B	20.5	73	1.243	D	46.1	171.7	0.763	C	22.3	114.8
4	Union Street / Edward Street	0.172	B	23.5	24.1	0.223	C	24.3	25.5	0.817	B	19.4	17.5
5	Pymont Bridge Road / Union Street	0.187	A	9.7	1.2	0.139	A	8.6	2.9	0.232	A	6.2	1.8
6	Union Street / Murray Street / Darling Drive	0.947	C	34.6	83.2	0.681	C	30.3	61	0.686	C	30.5	82.8
7	Pirrama Road / Star Car Park Entrance	0.199	A	6.1	10.1	0.291	A	9	23.3	0.348	B	10.1	30.2
8	Jones Bay Road / Pirrama Road	0.263	A	11.5	11.8	0.381	B	12.2	15.2	0.394	B	13.7	17.4
9	Jones bay Road / Port Cochere Entry	0.164	A	4.6	0	0.261	A	4.6	0	0.270	A	4.6	0
10	Pymont Street / Port Cochere Exit	0.252	A	11.4	2.8	0.223	C	17.5	69.8	0.206	B	14.5	70.8
11	Pymont Bridge Road / Edward Street	0.16	A	5.2	0.5	0.134	A	5	52.6	0.155	A	5.4	2
12	Pirrama Road Pedestrian Crossing	0.365	A	5.7	70.7	0.371	A	5.2	70.3	0.409	A	5	86.5
13	Pymont Street / Proposed Car Park	0.165	A	11.4	4.2	0.226	B	14.2	150.9	0.164	B	10.5	152.2
-	Network	0.947	E	12.6		1.243	E	16.3		0.817	E	12.2	

SITE LAYOUT

 Site: 101 [AM Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY



Site: 101 [AM Pyrmont St/Jones Bay Rd]



Network: 1 [AM Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	61	3.3	61	3.3	0.032	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	239	2.1	239	2.1	0.131	4.6	LOS A	0.0	0.0	0.00	0.53	34.1
Approach		300	2.3	300	2.3	0.131	3.7	NA	0.0	0.0	0.00	0.42	37.0
East: Jones Bay Rd													
4	L2	159	6.9	159	6.9	0.114	5.1	LOS A	0.0	0.0	0.00	1.02	17.1
6	R2	41	2.4	41	2.4	0.059	7.4	LOS A	0.2	1.4	0.45	0.92	20.1
Approach		200	6.0	200	6.0	0.114	5.5	LOS A	0.2	1.4	0.09	1.00	18.1
North: Point St													
7	L2	61	0.0	61	0.0	0.046	4.4	LOS A	0.2	1.4	0.32	0.52	24.0
8	T1	140	1.4	140	1.4	0.117	3.5	LOS A	0.5	3.3	0.33	0.50	26.7
Approach		201	1.0	201	1.0	0.117	3.8	LOS A	0.5	3.3	0.33	0.51	25.8
All Vehicles		701	3.0	701	3.0	0.131	4.2	NA	0.5	3.3	0.12	0.61	30.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 13.9 %

Number of Iterations: 10 (maximum specified: 10)

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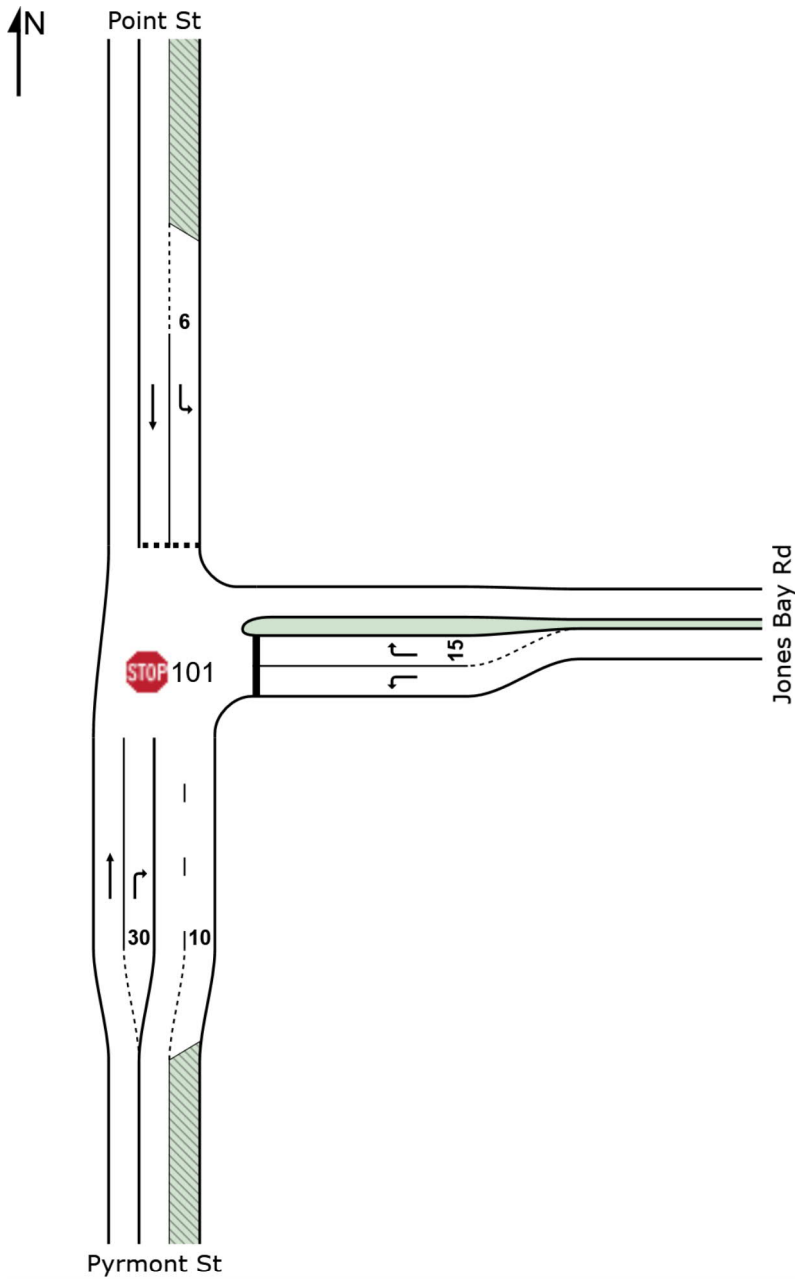
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\181024 Existing+Mod14+Mod 13_MVS.sip7

SITE LAYOUT

 **Site: 101 [PM Pyrmont St/Jones Bay Rd]**

No Project
Stop (Two-Way)



MOVEMENT SUMMARY



Site: 101 [PM Pyrmont St/Jones Bay Rd]



Network: N101 [PM Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	111	0.0	111	0.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	149	0.0	149	0.0	0.080	4.6	LOS A	0.0	0.0	0.00	0.53	34.1
Approach		260	0.0	260	0.0	0.080	2.6	NA	0.0	0.0	0.00	0.30	40.4
East: Jones Bay Rd													
4	L2	359	0.8	359	0.8	0.250	4.9	LOS A	0.0	0.0	0.00	1.00	17.1
6	R2	62	0.0	62	0.0	0.081	6.8	LOS A	0.3	1.9	0.41	0.91	20.8
Approach		421	0.7	421	0.7	0.250	5.2	LOS A	0.3	1.9	0.06	0.99	18.0
North: Point St													
7	L2	70	0.0	70	0.0	0.048	4.1	LOS A	0.2	1.5	0.24	0.50	24.7
8	T1	111	2.7	111	2.7	0.088	3.2	LOS A	0.3	2.5	0.27	0.47	27.3
Approach		181	1.7	181	1.7	0.088	3.5	LOS A	0.3	2.5	0.26	0.48	26.2
All Vehicles		862	0.7	862	0.7	0.250	4.1	NA	0.3	2.5	0.08	0.67	28.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %

Number of Iterations: 10 (maximum specified: 10)

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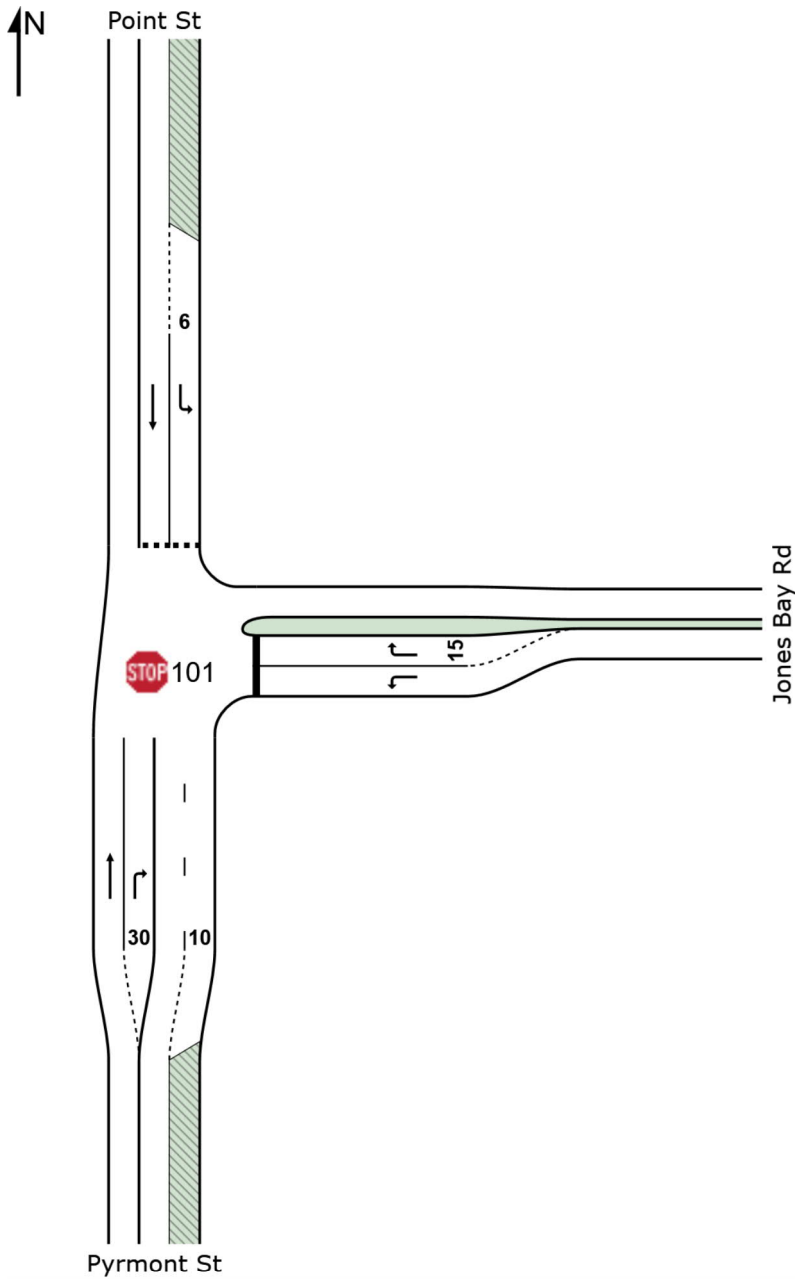
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\181024 Existing+Mod14+Mod 13_MVS.sip7

SITE LAYOUT

 Site: 101 [OP Pyrmont St/Jones Bay Rd]

No Project
Stop (Two-Way)



MOVEMENT SUMMARY



Site: 101 [OP Pyrmont St/Jones Bay Rd]



Network: N101 [OP Star Casino Network]

No Project
Stop (Two-Way)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St													
2	T1	53	0.0	53	0.0	0.027	0.0	LOS A	0.0	0.0	0.00	0.00	50.0
3	R2	274	0.0	274	0.0	0.148	4.6	LOS A	0.0	0.0	0.00	0.53	34.1
Approach		327	0.0	327	0.0	0.148	3.8	NA	0.0	0.0	0.00	0.44	36.4
East: Jones Bay Rd													
4	L2	256	0.4	256	0.4	0.178	4.9	LOS A	0.0	0.0	0.00	1.00	17.1
6	R2	34	0.0	34	0.0	0.044	6.7	LOS A	0.2	1.1	0.40	0.89	20.9
Approach		290	0.3	290	0.3	0.178	5.1	LOS A	0.2	1.1	0.05	0.99	17.9
North: Point St													
7	L2	44	0.0	44	0.0	0.034	4.5	LOS A	0.1	1.0	0.34	0.52	23.8
8	T1	48	0.0	48	0.0	0.041	3.5	LOS A	0.2	1.1	0.33	0.49	26.7
Approach		92	0.0	92	0.0	0.041	4.0	LOS A	0.2	1.1	0.33	0.51	25.2
All Vehicles		709	0.1	709	0.1	0.178	4.4	NA	0.2	1.1	0.06	0.67	29.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 100.0 %

Number of Iterations: 10 (maximum specified: 10)

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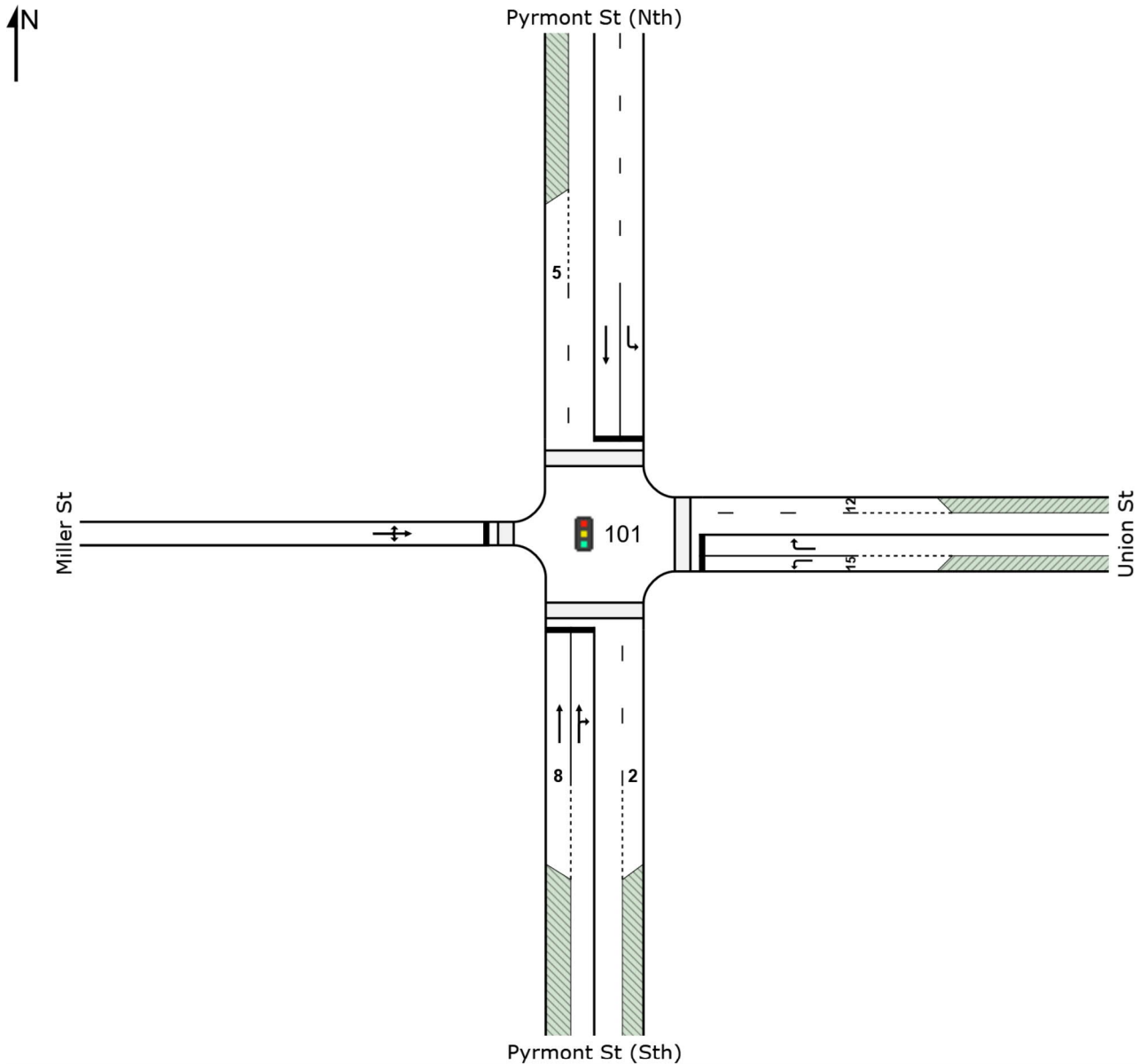
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Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\181024 Existing+Mod14+Mod 13_MVS.sip7

SITE LAYOUT

 **Site: 101 [AM Pyrmont St/Union St]**

No Project
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [AM Pyrmont St/Union St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 90 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Arrival Flows HV Total	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Prop. Queued	Effective Stop Rate	Average Speed			
		veh/h	%	veh/h	%	v/c	sec		veh	m	per veh	km/h	
South: Pyrmont St (Sth)													
2	T1	430	1.6	430	1.6	0.883	36.1	LOS C	20.7	146.7	0.94	0.95	9.1
3	R2	57	1.8	57	1.8	0.883	42.8	LOS D	20.7	146.7	0.96	1.00	8.7
Approach		487	1.6	487	1.6	0.883	36.9	LOS C	20.7	146.7	0.94	0.96	9.1
East: Union St													
4	L2	15	20.0	15	20.0	0.073	47.4	LOS D	0.7	5.5	1.00	0.70	5.5
6	R2	15	6.7	15	6.7	0.046	42.9	LOS D	0.6	4.7	0.99	0.70	5.8
Approach		30	13.3	30	13.3	0.073	45.2	LOS D	0.7	5.5	1.00	0.70	5.6
North: Pyrmont St (Nth)													
7	L2	35	8.6	35	8.6	0.032	10.4	LOS A	0.6	4.2	0.39	0.61	15.7
8	T1	338	3.0	338	3.0	0.442	21.2	LOS B	10.8	77.7	0.78	0.67	8.9
Approach		373	3.5	373	3.5	0.442	20.2	LOS B	10.8	77.7	0.74	0.66	9.3
West: Miller St													
10	L2	8	0.0	8	0.0	0.112	36.3	LOS C	1.4	10.1	0.86	0.69	4.5
11	T1	14	0.0	14	0.0	0.112	33.1	LOS C	1.4	10.1	0.86	0.69	4.5
12	R2	16	6.3	16	6.3	0.112	36.2	LOS C	1.4	10.1	0.86	0.69	4.5
Approach		38	2.6	38	2.6	0.112	35.0	LOS C	1.4	10.1	0.86	0.69	4.5
All Vehicles		928	2.8	928	2.8	0.883	30.3	LOS C	20.7	146.7	0.86	0.82	8.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 13.9 %

Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue	Prop. Queued	Effective Stop Rate		
		ped/h	sec		Pedestrian		per ped		
P1	South Full Crossing	196	38.6	LOS D	0.5	0.5	0.93	0.93	
P2	East Full Crossing	42	38.3	LOS D	0.1	0.1	0.92	0.92	
P3	North Full Crossing	937	39.8	LOS D	2.3	2.3	0.96	0.96	
P4	West Full Crossing	65	38.4	LOS D	0.2	0.2	0.92	0.92	
All Pedestrians		1240	39.5	LOS D			0.95	0.95	

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

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

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

Organisation: MOTT MACDONALD | Processed: Tuesday, October 30, 2018 4:04:49 PM

Project: P:\Sydney\Projects\35xxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\181024 Existing+Mod14+Mod 13_MVS.sip7

PHASING SUMMARY

 Site: 101 [AM Pyrmont St/Union St]

 Network: 1 [AM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 90 seconds (Network Cycle Time - User-Given)

Phase Times specified by the user

Phase Sequence: Existing Phasing - AM

Reference Phase: Phase A

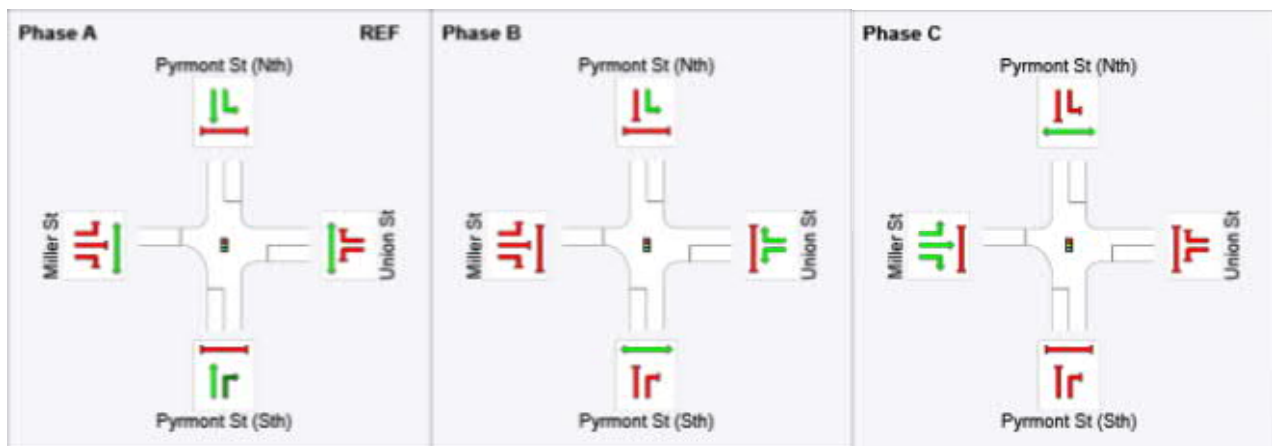
Input Phase Sequence: A, B, C

Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	42	65
Green Time (sec)	36	17	19
Phase Time (sec)	42	23	25
Phase Split	47 %	26 %	28 %

See the Phase Information section in the Detailed Output report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase

VAR: Variable Phase

	Normal Movement		Permitted/Opposed
	Slip/Bypass-Lane Movement		Opposed Slip/Bypass-Lane
	Stopped Movement		Turn On Red
	Other Movement Class (MC) Running		Undetected Movement
	Mixed Running & Stopped MCs		Continuous Movement
	Other Movement Class (MC) Stopped		Phase Transition Applied

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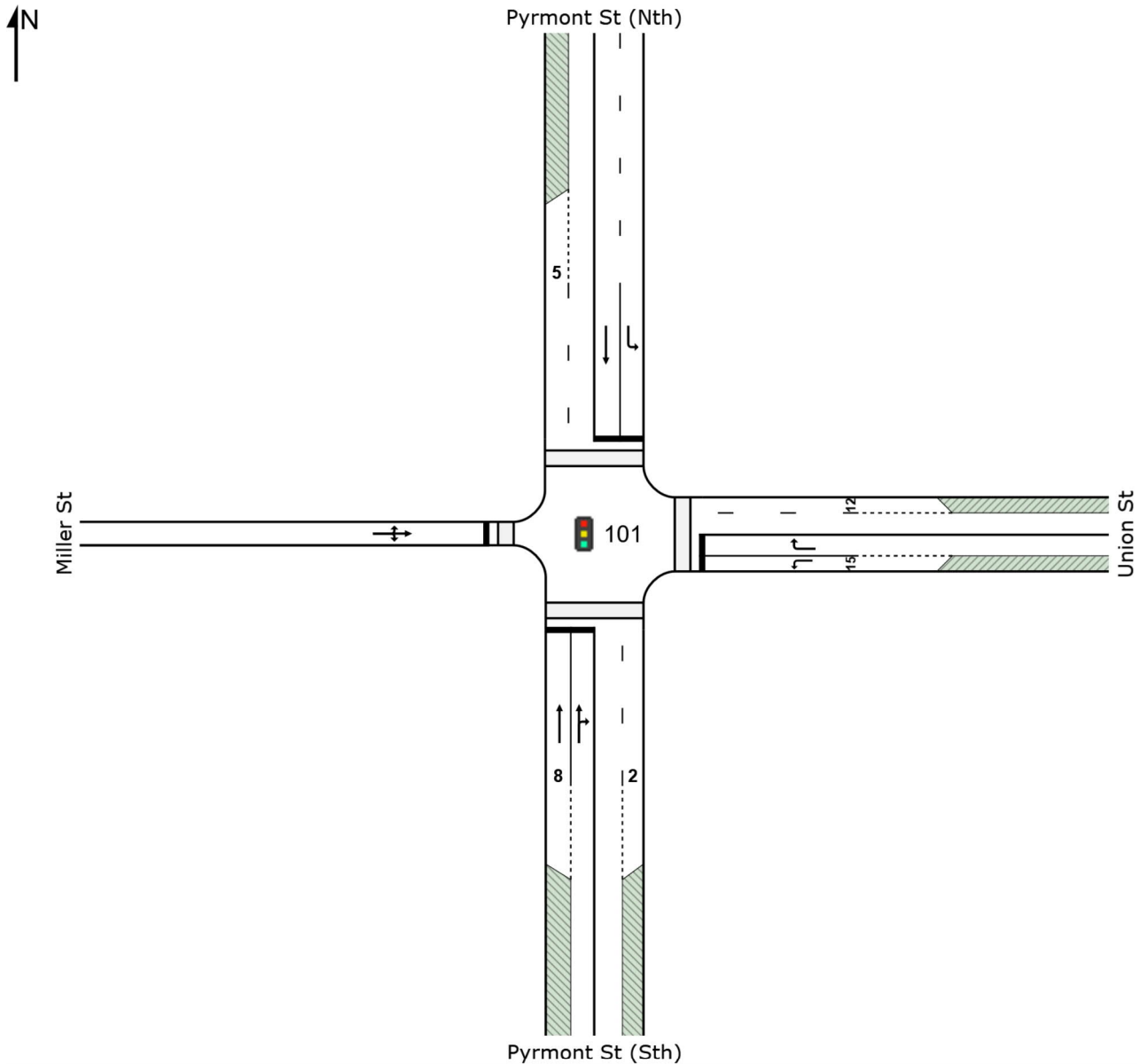
Organisation: MOTT MACDONALD | Processed: Tuesday, October 30, 2018 4:04:49 PM

Project: P:\Sydney\Projects\35xxxx\358488\04 Working\06 Traffic\MOD 13\DataRefresh\Sidra\181024 Existing+Mod14+Mod 13_MVS.sip7

SITE LAYOUT

 **Site: 101 [PM Pymont St/Union St]**

No Project
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

 Site: 101 [PM Pyrmont St/Union St]

 Network: N101 [PM Star Casino Network]

No Project

Signals - Fixed Time Coordinated Cycle Time = 85 seconds (Network Cycle Time - User-Given)

Common Control Group: CCG1 [CCGName]

Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Flows Total	Flows HV %	Arrival Flows Total	Flows HV %	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Pyrmont St (Sth)													
2	T1	410	0.0	372	0.0	0.764	34.9	LOS C	15.4	107.5	0.96	0.85	9.4
3	R2	52	0.0	47	0.0	0.764	43.3	LOS D	15.4	107.5	1.00	0.90	8.6
Approach		462	0.0	420 ^{N1}	0.0	0.764	35.8	LOS D	15.4	107.5	0.97	0.86	9.3
East: Union St													
4	L2	99	0.0	99	0.0	0.176	34.5	LOS C	3.8	26.5	0.96	0.79	7.2
6	R2	35	0.0	35	0.0	0.078	34.5	LOS C	1.3	9.3	0.95	0.74	7.0
Approach		134	0.0	134	0.0	0.176	34.5	LOS C	3.8	26.5	0.96	0.78	7.2
North: Pyrmont St (Nth)													
7	L2	64	0.0	64	0.0	0.076	17.6	LOS B	1.5	10.3	0.59	0.67	10.6
8	T1	661	0.8	659	0.8	0.688	17.7	LOS B	11.6	81.6	0.83	0.74	10.3
Approach		725	0.7	723 ^{N1}	0.7	0.688	17.7	LOS B	11.6	81.6	0.80	0.73	10.3
West: Miller St													
10	L2	5	0.0	5	0.0	0.057	24.2	LOS C	0.8	5.6	0.71	0.65	6.3
11	T1	5	0.0	5	0.0	0.057	21.0	LOS C	0.8	5.6	0.71	0.65	6.3
12	R2	18	0.0	18	0.0	0.057	24.1	LOS C	0.8	5.6	0.71	0.65	6.3
Approach		28	0.0	28	0.0	0.057	23.6	LOS C	0.8	5.6	0.71	0.65	6.3
All Vehicles		1349	0.4	1305 ^{N1}	0.4	0.764	25.4	LOS C	15.4	107.5	0.87	0.78	9.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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

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

Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 140.1 %

Number of Iterations: 10 (maximum specified: 10)

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	85	35.9	LOS D	0.2	0.2	0.92	0.92
P2	East Full Crossing	61	35.9	LOS D	0.1	0.1	0.92	0.92
P3	North Full Crossing	986	37.3	LOS D	2.3	2.3	0.96	0.96
P4	West Full Crossing	65	35.9	LOS D	0.1	0.1	0.92	0.92
All Pedestrians		1198	37.1	LOS D			0.95	0.95

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

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

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

