

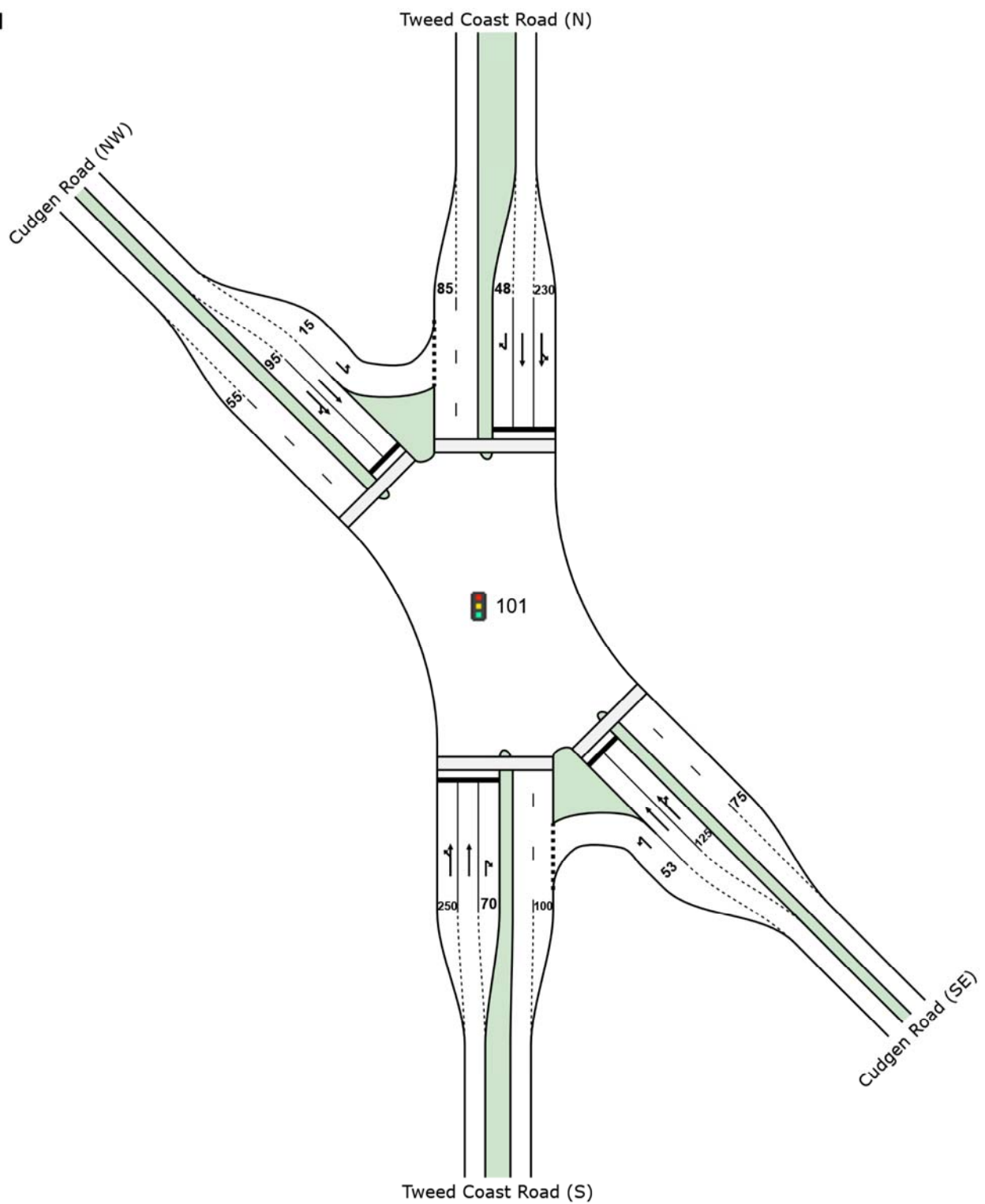
APPENDIX C

SIDRA MOVEMENT SUMMARIES

SITE LAYOUT

 **Site: 101 [2023 AM Background]**

Tweed Coast Road - Cudgen Road
2023 AM Peak
Background Traffic
Signals - Fixed Time Isolated



PHASING SUMMARY

 **Site: 101 [2023 AM Background]**

Tweed Coast Road - Cudgen Road

2023 AM Peak

Background Traffic

Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Phase Times determined by the program

Phase Sequence: Variable Phasing - Copy

Reference Phase: Phase A

Input Phase Sequence: A, D, E, F, F1*, F2*

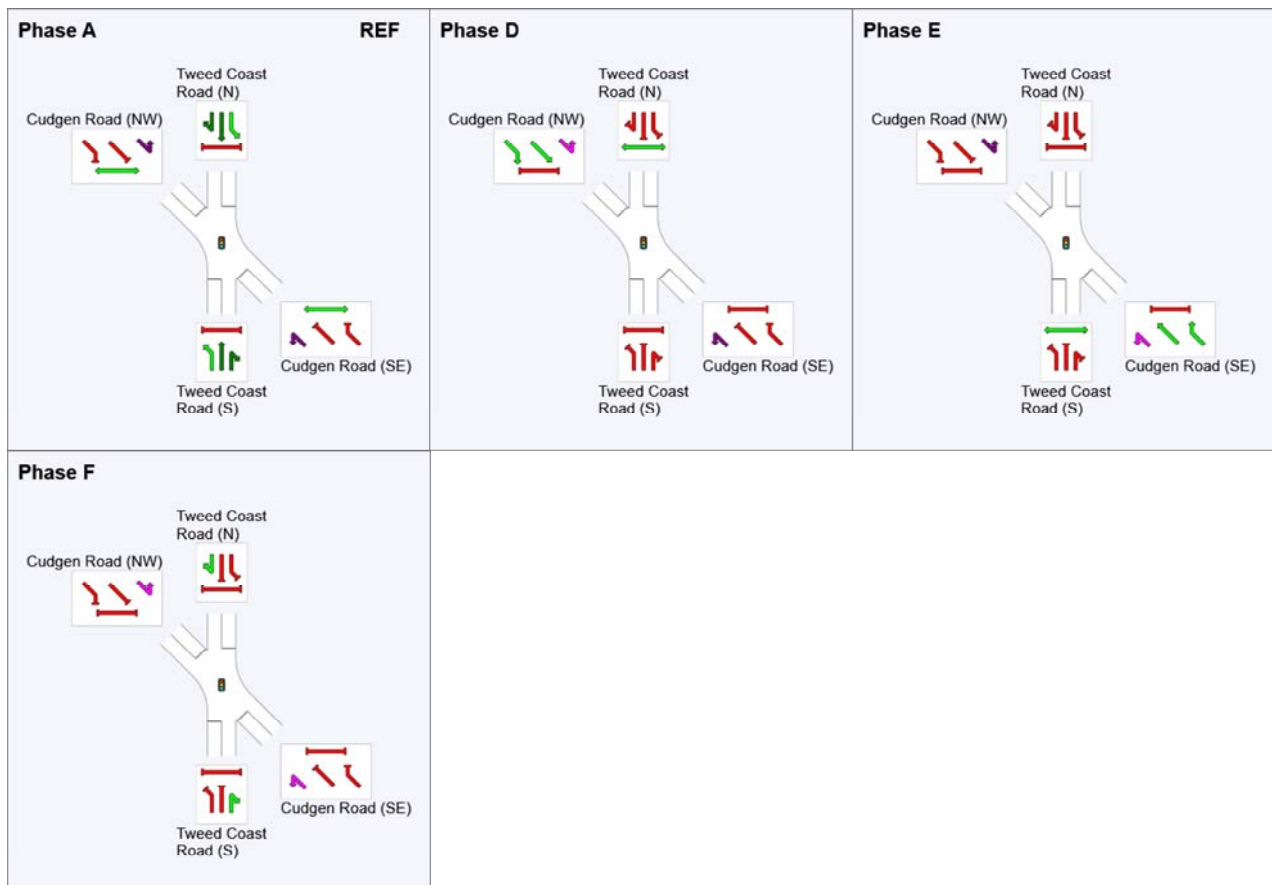
Output Phase Sequence: A, D, E, F

(* Variable Phase)

Phase Timing Results

Phase	A	D	E	F
Phase Change Time (sec)	0	57	73	112
Green Time (sec)	51	10	33	32
Phase Time (sec)	57	16	39	38
Phase Split	38%	11%	26%	25%

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

MOVEMENT SUMMARY

 **Site: 101 [2023 AM Background]**

Tweed Coast Road - Cudgen Road

2023 AM Peak

Background Traffic

Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1a	L1	28	4.0	0.462	45.9	LOS D	15.0	107.9	0.84	0.73	35.0
2	T1	595	3.0	0.969	71.2	LOS F	31.9	229.1	0.88	0.96	27.6
3b	R3	307	4.0	0.724	42.2	LOS C	14.3	103.4	0.97	0.89	35.0
Approach		931	3.4	0.969	60.8	LOS E	31.9	229.1	0.91	0.93	29.9
SouthEast: Cudgen Road (SE)											
21b	L3	125	5.0	0.093	9.1	LOS A	1.6	11.5	0.23	0.64	52.0
22	T1	118	3.0	0.285	52.2	LOS D	7.2	51.4	0.88	0.71	32.3
23a	R1	396	2.0	0.964	98.4	LOS F	36.6	260.5	1.00	1.09	23.0
Approach		639	2.8	0.964	72.4	LOS F	36.6	260.5	0.83	0.93	27.5
North: Tweed Coast Road (N)											
7a	L1	523	2.0	0.816	55.2	LOS D	35.8	255.2	0.98	0.90	31.0
8	T1	252	5.0	0.560	51.6	LOS D	15.8	115.0	0.91	0.77	32.5
9b	R3	31	7.0	0.065	24.3	LOS B	0.9	6.9	0.67	0.71	42.1
Approach		805	3.1	0.816	52.9	LOS D	35.8	255.2	0.95	0.85	31.8
NorthWest: Cudgen Road (NW)											
27b	L3	54	6.0	0.069	22.3	LOS B	1.7	12.8	0.52	0.69	43.9
28	T1	155	5.0	0.990	100.2	LOS F	11.6	84.9	1.00	0.98	22.6
29a	R1	20	6.0	0.990	117.0	LOS F	11.6	84.9	1.00	1.10	20.9
Approach		228	5.3	0.990	83.4	LOS F	11.6	84.9	0.89	0.92	25.4
All Vehicles		2603	3.3	0.990	63.2	LOS E	36.6	260.5	0.90	0.91	29.3

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	57.2	LOS E	0.0	0.0	0.87	0.87	
P5	SouthEast Full Crossing	5	40.3	LOS E	0.0	0.0	0.73	0.73	
P3	North Full Crossing	5	69.1	LOS F	0.0	0.0	0.96	0.96	
P7	NorthWest Full Crossing	5	40.3	LOS E	0.0	0.0	0.73	0.73	
All Pedestrians		21	51.8	LOS E			0.83	0.83	

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.

MOVEMENT SUMMARY

 **Site: 101 [2023 PM Background]**

Tweed Coast Road - Cudgen Road

2023 PM Peak

Background Traffic

Signals - Fixed Time Isolated Cycle Time = 140 seconds (Practical Cycle Time)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1a	L1	13	0.0	0.196	32.9	LOS C	5.3	38.1	0.68	0.58	40.1
2	T1	359	4.0	0.410	31.1	LOS C	12.2	88.1	0.74	0.63	39.7
3b	R3	133	7.0	0.632	43.1	LOS D	5.0	37.5	0.99	0.80	34.6
Approach		504	4.7	0.632	34.3	LOS C	12.2	88.1	0.80	0.68	38.2
SouthEast: Cudgen Road (SE)											
21b	L3	198	6.0	0.240	26.6	LOS B	7.6	55.9	0.61	0.73	41.8
22	T1	105	7.0	0.223	43.9	LOS D	5.6	41.8	0.83	0.67	34.9
23a	R1	428	2.0	0.893	70.7	LOS F	32.3	229.7	1.00	0.99	27.8
Approach		732	3.8	0.893	54.9	LOS D	32.3	229.7	0.87	0.87	31.6
North: Tweed Coast Road (N)											
7a	L1	424	3.0	0.558	38.4	LOS C	22.0	157.7	0.82	0.82	36.2
8	T1	633	2.0	0.952	70.6	LOS F	51.2	364.4	0.98	1.11	27.8
9b	R3	57	6.0	0.127	25.1	LOS B	1.9	13.9	0.67	0.72	41.8
Approach		1114	2.6	0.952	56.0	LOS D	51.2	364.4	0.91	0.98	31.1
NorthWest: Cudgen Road (NW)											
27b	L3	43	8.0	0.056	18.3	LOS B	1.2	8.6	0.46	0.68	46.1
28	T1	112	3.0	0.856	76.3	LOS F	7.6	56.5	1.00	0.86	26.5
29a	R1	33	18.0	0.856	84.4	LOS F	7.6	56.5	1.00	0.94	25.6
Approach		187	6.8	0.856	64.4	LOS E	7.6	56.5	0.88	0.83	29.2
All Vehicles		2537	3.7	0.952	52.0	LOS D	51.2	364.4	0.87	0.88	32.3

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

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

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

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.

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	South Full Crossing	5	49.7	LOS E	0.0	0.0	0.84	0.84
P5	SouthEast Full Crossing	5	31.6	LOS D	0.0	0.0	0.67	0.67
P3	North Full Crossing	5	64.1	LOS F	0.0	0.0	0.96	0.96
P7	NorthWest Full Crossing	5	31.6	LOS D	0.0	0.0	0.67	0.67
All Pedestrians		21	44.3	LOS E			0.79	0.79

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

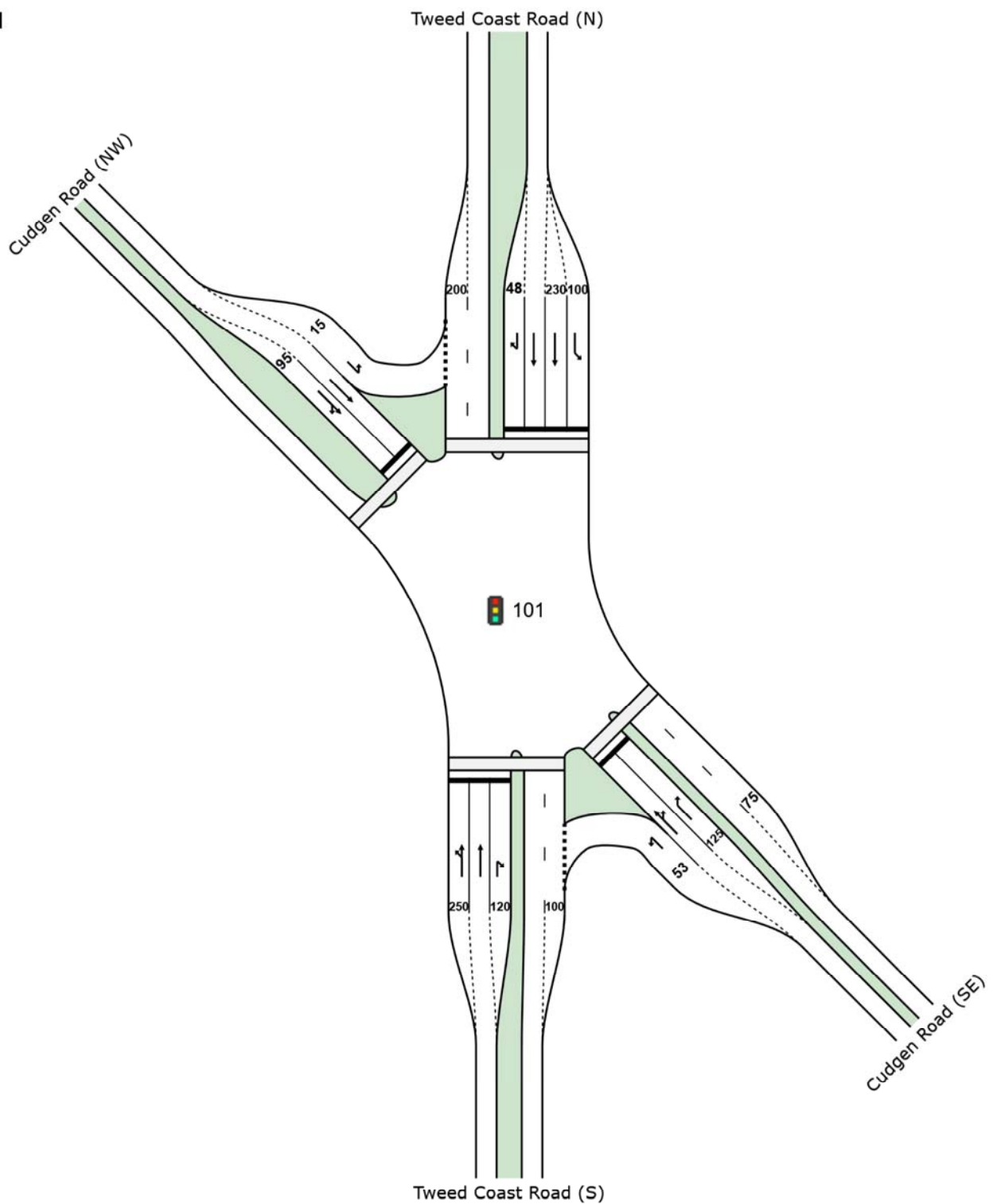
Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

SITE LAYOUT

 **Site: 101 [2023 Design MVT]**

Tweed Coast Road - Cudgen Road
2023 AM Peak
Design Traffic
Signals - Fixed Time Isolated



PHASING SUMMARY

 **Site: 101 [2023 Design MVT]**

Tweed Coast Road - Cudgen Road

2023 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Phase Times determined by the program

Phase Sequence: Variable Phasing - Copy

Reference Phase: Phase A

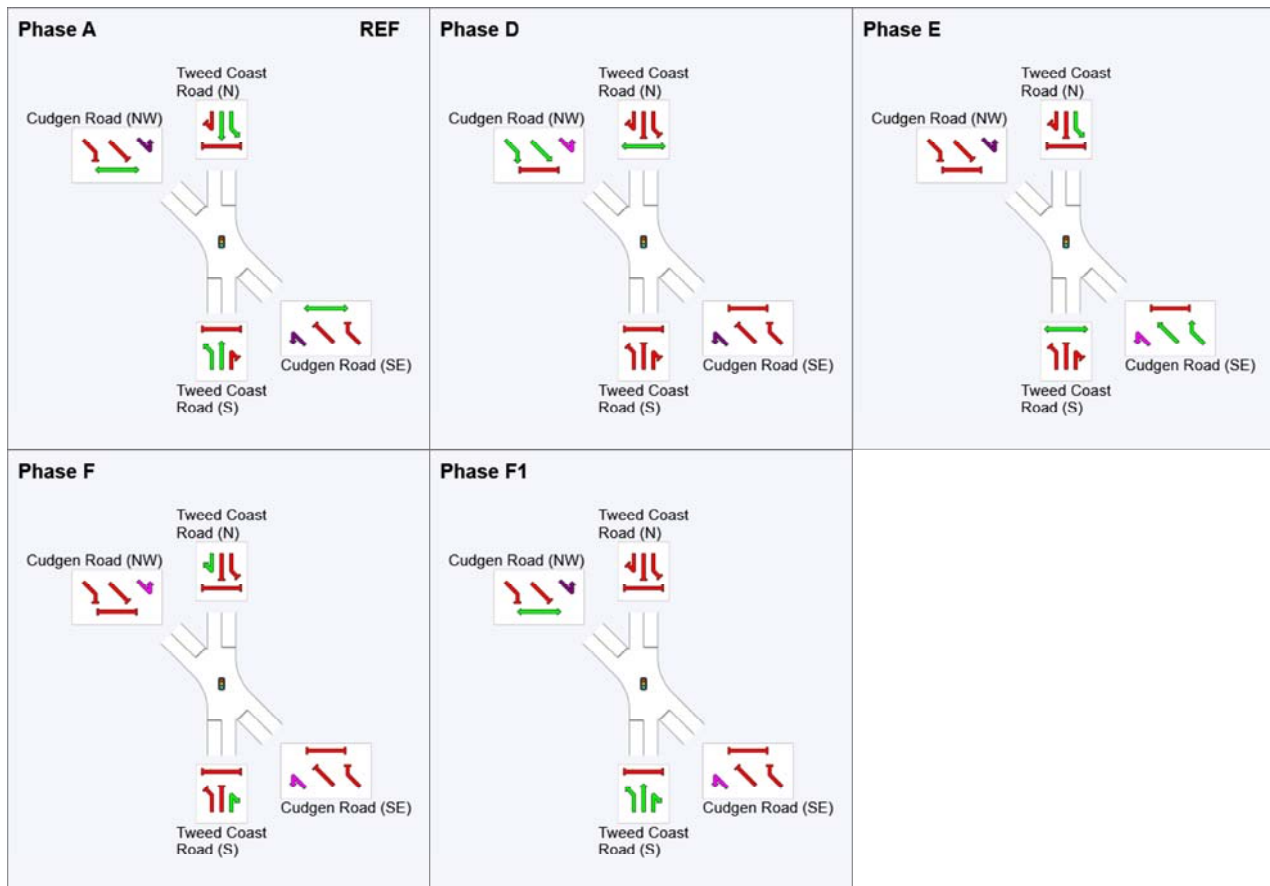
Input Phase Sequence: A, D, E, F, F1

Output Phase Sequence: A, D, E, F, F1

Phase Timing Results

Phase	A	D	E	F	F1
Phase Change Time (sec)	0	28	41	63	75
Green Time (sec)	22	7	16	6	9
Phase Time (sec)	28	13	22	12	15
Phase Split	31%	14%	24%	13%	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

MOVEMENT SUMMARY

 **Site: 101 [2023 Design MVT]**

Tweed Coast Road - Cudgen Road

2023 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1a	L1	28	4.0	0.401	24.7	LOS B	9.6	69.2	0.75	0.66	43.8
2	T1	595	3.0	0.401	20.1	LOS B	9.7	69.3	0.75	0.65	45.0
3b	R3	333	4.0	0.905	58.9	LOS E	18.0	130.5	1.00	1.02	30.2
Approach		956	3.4	0.905	33.7	LOS C	18.0	130.5	0.84	0.78	38.4
SouthEast: Cudgen Road (SE)											
21b	L3	136	5.0	0.103	8.1	LOS A	1.0	7.0	0.24	0.64	52.7
22	T1	119	3.0	0.861	47.7	LOS D	14.2	101.2	1.00	1.02	33.0
23a	R1	453	2.0	0.861	51.8	LOS D	14.2	101.2	1.00	1.02	32.7
Approach		707	2.7	0.861	42.7	LOS D	14.2	101.2	0.85	0.94	35.4
North: Tweed Coast Road (N)											
7a	L1	656	2.0	0.824	22.6	LOS B	19.1	135.7	0.95	0.91	43.0
8	T1	252	5.0	0.354	30.2	LOS C	6.0	43.5	0.86	0.69	40.1
9b	R3	31	7.0	0.298	53.3	LOS D	1.4	10.3	0.99	0.72	31.7
Approach		938	3.0	0.824	25.6	LOS B	19.1	135.7	0.93	0.85	41.7
NorthWest: Cudgen Road (NW)											
27b	L3	54	6.0	0.068	12.2	LOS A	0.8	5.8	0.43	0.67	49.8
28	T1	157	5.0	0.851	50.1	LOS D	6.2	45.0	1.00	0.88	32.8
29a	R1	20	6.0	0.851	57.0	LOS E	6.2	45.0	1.00	0.96	31.9
Approach		231	5.3	0.851	41.9	LOS C	6.2	45.0	0.86	0.84	35.6
All Vehicles		2832	3.2	0.905	34.0	LOS C	19.1	135.7	0.87	0.85	38.3

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	1	39.2	LOS D	0.0	0.0	0.93	0.93	
P5	SouthEast Full Crossing	1	34.7	LOS D	0.0	0.0	0.88	0.88	
P3	North Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93	
P7	NorthWest Full Crossing	1	22.8	LOS C	0.0	0.0	0.71	0.71	
All Pedestrians		8	36.6	LOS D			0.90	0.90	

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.

MOVEMENT SUMMARY

 **Site: 101 [2023 Design EVT]**

Tweed Coast Road - Cudgen Road

2023 PM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Tweed Coast Road (S)											
1a	L1	13	0.0	0.370	33.8	LOS C	6.7	48.6	0.86	0.71	39.6
2	T1	359	4.0	0.370	29.3	LOS C	6.7	48.6	0.86	0.71	40.5
3b	R3	157	7.0	0.830	56.2	LOS D	7.8	57.5	1.00	0.95	30.8
Approach		528	4.8	0.830	37.4	LOS C	7.8	57.5	0.90	0.78	37.0
SouthEast: Cudgen Road (SE)											
21b	L3	255	6.0	0.228	11.3	LOS A	3.7	27.1	0.42	0.70	50.4
22	T1	109	7.0	0.882	44.6	LOS D	18.8	135.5	0.97	1.05	33.8
23a	R1	729	2.0	0.882	48.8	LOS D	23.1	164.5	0.99	1.04	33.5
Approach		1094	3.4	0.882	39.6	LOS C	23.1	164.5	0.85	0.96	36.4
North: Tweed Coast Road (N)											
7a	L1	553	3.0	0.542	11.9	LOS A	9.0	64.6	0.69	0.77	49.1
8	T1	633	2.0	0.839	36.3	LOS C	18.4	130.8	0.95	0.89	37.6
9b	R3	57	6.0	0.300	47.3	LOS D	2.4	17.6	0.95	0.75	33.4
Approach		1242	2.6	0.839	25.9	LOS B	18.4	130.8	0.83	0.83	41.7
NorthWest: Cudgen Road (NW)											
27b	L3	43	8.0	0.053	14.1	LOS A	0.7	5.5	0.48	0.67	48.6
28	T1	113	3.0	0.826	50.0	LOS D	5.0	37.1	1.00	0.85	32.8
29a	R1	33	18.0	0.826	56.8	LOS E	5.0	37.1	1.00	0.93	31.7
Approach		188	6.7	0.826	42.9	LOS D	5.0	37.1	0.88	0.82	35.2
All Vehicles		3053	3.5	0.882	33.9	LOS C	23.1	164.5	0.86	0.87	38.4

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	34.7	LOS D	0.0	0.0	0.88	0.88	
P5	SouthEast Full Crossing	5	32.9	LOS D	0.0	0.0	0.86	0.86	
P3	North Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93	
P7	NorthWest Full Crossing	5	32.9	LOS D	0.0	0.0	0.86	0.86	
All Pedestrians		21	34.9	LOS D			0.88	0.88	

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.

MOVEMENT SUMMARY

 **Site: 101 [2023 Design PVT]**

Tweed Coast Road - Cudgen Road

2023 PM Peak - Development Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 90 seconds (Practical Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1a	L1	13	0.0	0.370	33.8	LOS C	6.7	48.6	0.86	0.71	39.6
2	T1	359	4.0	0.370	29.3	LOS C	6.7	48.6	0.86	0.71	40.5
3b	R3	178	7.0	0.863	58.1	LOS E	9.1	67.2	1.00	0.98	30.4
Approach		549	4.9	0.863	38.7	LOS C	9.1	67.2	0.91	0.80	36.5
SouthEast: Cudgen Road (SE)											
21b	L3	243	6.0	0.218	11.2	LOS A	3.5	25.6	0.42	0.69	50.5
22	T1	108	7.0	0.829	39.2	LOS C	16.5	119.1	0.97	0.97	35.6
23a	R1	666	2.0	0.829	43.6	LOS D	19.2	136.5	0.99	0.97	35.2
Approach		1018	3.5	0.829	35.4	LOS C	19.2	136.5	0.85	0.90	38.0
North: Tweed Coast Road (N)											
7a	L1	662	3.0	0.663	13.0	LOS A	12.3	88.2	0.77	0.81	48.4
8	T1	633	2.0	0.839	36.3	LOS C	18.4	130.8	0.95	0.89	37.6
9b	R3	57	6.0	0.275	46.0	LOS D	2.4	17.3	0.94	0.75	33.8
Approach		1352	2.7	0.839	25.3	LOS B	18.4	130.8	0.86	0.84	42.0
NorthWest: Cudgen Road (NW)											
27b	L3	43	8.0	0.051	13.3	LOS A	0.7	5.1	0.45	0.67	49.1
28	T1	115	3.0	0.837	50.3	LOS D	5.1	37.9	1.00	0.86	32.7
29a	R1	33	18.0	0.837	57.3	LOS E	5.1	37.9	1.00	0.94	31.6
Approach		191	6.7	0.837	43.1	LOS D	5.1	37.9	0.87	0.83	35.2
All Vehicles		3109	3.6	0.863	32.1	LOS C	19.2	136.5	0.87	0.85	39.1

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	35.6	LOS D	0.0	0.0	0.89	0.89	
P5	SouthEast Full Crossing	5	32.9	LOS D	0.0	0.0	0.86	0.86	
P3	North Full Crossing	5	39.2	LOS D	0.0	0.0	0.93	0.93	
P7	NorthWest Full Crossing	5	32.9	LOS D	0.0	0.0	0.86	0.86	
All Pedestrians		21	35.2	LOS D			0.88	0.88	

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

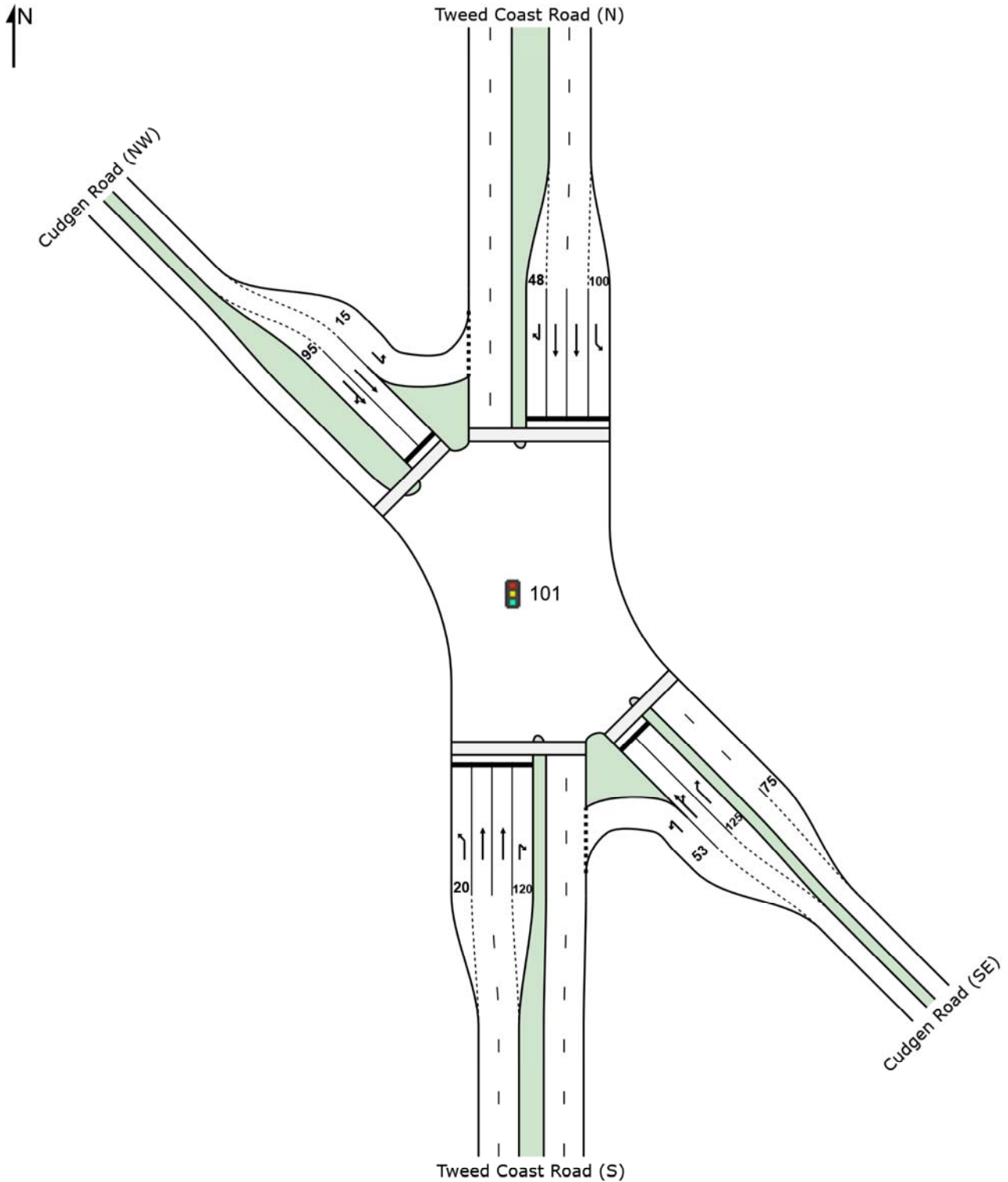
Pedestrian movement LOS values are based on average delay per pedestrian movement.

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

SITE LAYOUT

 **Site: 101 [2033 Design MVT - 4-Lane]**

Tweed Coast Road - Cudgen Road
2023 AM Peak
Design Traffic
Signals - Fixed Time Isolated



PHASING SUMMARY

 **Site: 101 [2033 Design MVT - 4-Lane]**

Tweed Coast Road - Cudgen Road

2023 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 150 seconds (User-Given Phase Times)

Phase Times specified by the user

Phase Sequence: Variable Phasing - Copy

Reference Phase: Phase A

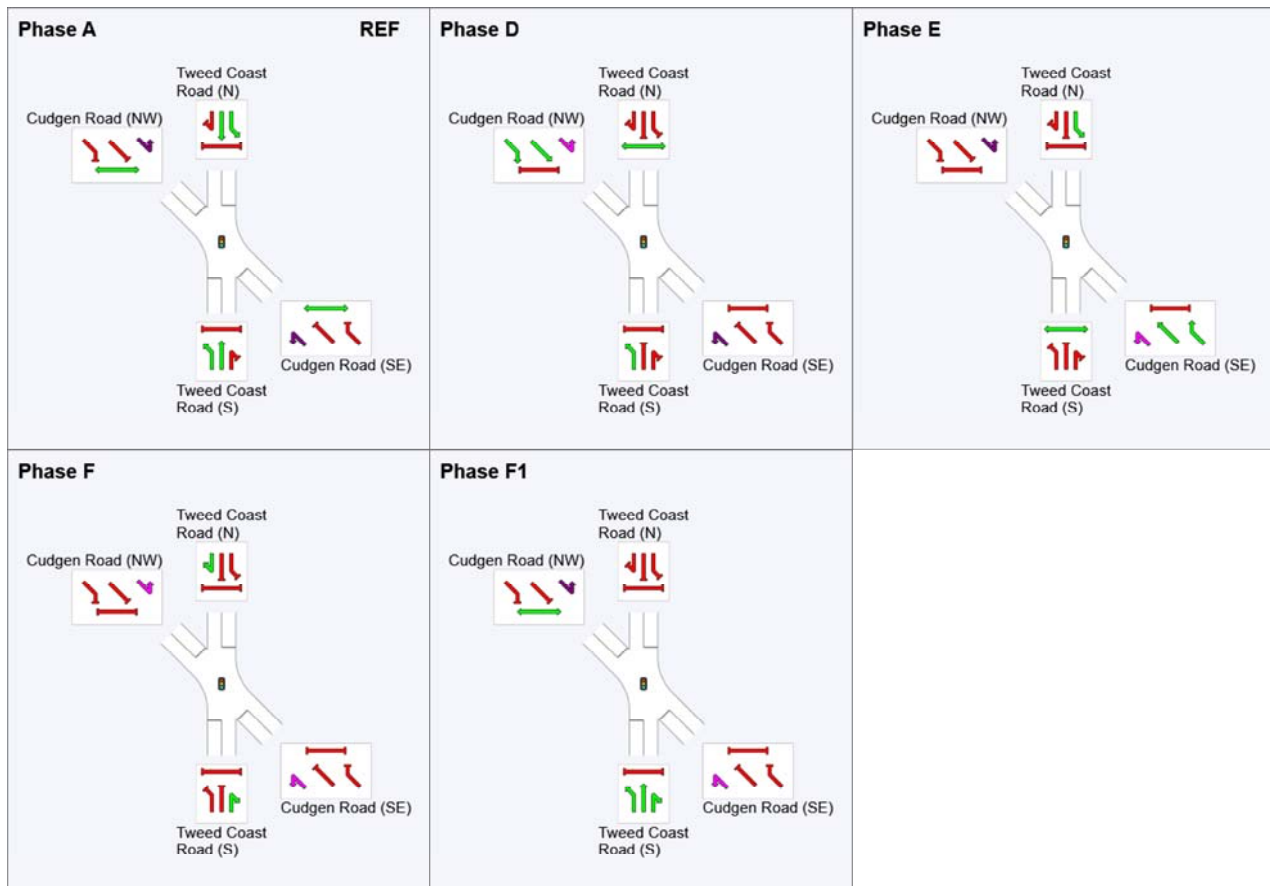
Input Phase Sequence: A, D, E, F, F1

Output Phase Sequence: A, D, E, F, F1

Phase Timing Results

Phase	A	D	E	F	F1
Phase Change Time (sec)	0	43	63	102	117
Green Time (sec)	37	14	35	9	27
Phase Time (sec)	43	18	41	15	33
Phase Split	29%	12%	27%	10%	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

MOVEMENT SUMMARY

 **Site: 101 [2033 Design MVT - 4-Lane]**

Tweed Coast Road - Cudgen Road

2023 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1a	L1	34	4.0	0.031	18.2	LOS B	1.0	7.3	0.44	0.64	45.0
2	T1	644	3.0	0.378	27.1	LOS B	15.5	111.3	0.69	0.60	41.5
3b	R3	394	4.0	0.892	76.7	LOS F	31.9	231.2	1.00	0.96	26.3
Approach		1072	3.4	0.892	45.1	LOS D	31.9	231.2	0.79	0.73	34.3
SouthEast: Cudgen Road (SE)											
21b	L3	161	5.0	0.114	7.8	LOS A	1.4	10.3	0.16	0.63	53.0
22	T1	141	3.0	0.868	67.6	LOS E	22.4	160.2	0.97	0.97	28.0
23a	R1	535	2.0	0.868	72.4	LOS F	29.3	208.3	0.99	0.96	27.6
Approach		837	2.7	0.868	59.2	LOS E	29.3	208.3	0.83	0.90	30.5
North: Tweed Coast Road (N)											
7a	L1	774	2.0	0.873	31.5	LOS C	38.1	271.5	0.95	0.91	38.9
8	T1	273	5.0	0.294	49.1	LOS D	8.1	59.1	0.86	0.70	33.2
9b	R3	37	7.0	0.399	84.0	LOS F	2.8	20.4	1.00	0.74	25.0
Approach		1083	2.9	0.873	37.7	LOS C	38.1	271.5	0.93	0.85	36.6
NorthWest: Cudgen Road (NW)											
27b	L3	64	6.0	0.088	16.3	LOS B	1.6	12.1	0.42	0.68	47.3
28	T1	186	5.0	0.871	79.1	LOS F	12.2	88.9	0.99	0.90	26.1
29a	R1	23	6.0	0.871	87.2	LOS F	12.2	88.9	1.00	0.97	25.3
Approach		274	5.3	0.871	65.0	LOS E	12.2	88.9	0.86	0.85	29.1
All Vehicles		3265	3.2	0.892	47.9	LOS D	38.1	271.5	0.85	0.83	33.4

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	1	57.2	LOS E	0.0	0.0	0.87	0.87	
P5	SouthEast Full Crossing	1	51.3	LOS E	0.0	0.0	0.83	0.83	
P3	North Full Crossing	5	69.1	LOS F	0.0	0.0	0.96	0.96	
P7	NorthWest Full Crossing	1	27.6	LOS C	0.0	0.0	0.61	0.61	
All Pedestrians		8	60.2	LOS F			0.89	0.89	

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.

MOVEMENT SUMMARY

 **Site: 101 [2033 Design EVT - 4-Lane]**

Tweed Coast Road - Cudgen Road

2023 PM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Tweed Coast Road (S)											
1a	L1	15	0.0	0.021	27.5	LOS B	0.5	3.4	0.65	0.66	40.4
2	T1	389	4.0	0.463	39.9	LOS C	9.3	67.2	0.91	0.75	36.3
3b	R3	185	7.0	0.879	69.3	LOS E	11.5	85.2	1.00	0.98	27.8
Approach		589	4.8	0.879	48.8	LOS D	11.5	85.2	0.93	0.82	33.2
SouthEast: Cudgen Road (SE)											
21b	L3	300	6.0	0.247	11.4	LOS A	5.1	37.2	0.36	0.68	50.4
22	T1	129	7.0	0.876	45.3	LOS D	22.1	159.5	0.88	0.96	33.6
23a	R1	856	2.0	0.876	49.6	LOS D	33.6	239.2	0.96	0.98	33.3
Approach		1285	3.4	0.876	40.3	LOS C	33.6	239.2	0.81	0.91	36.2
North: Tweed Coast Road (N)											
7a	L1	653	3.0	0.599	12.8	LOS A	13.5	96.8	0.69	0.78	48.5
8	T1	685	2.0	0.823	48.9	LOS D	20.1	142.8	1.00	0.95	33.3
9b	R3	68	6.0	0.324	54.4	LOS D	3.4	25.3	0.94	0.77	31.4
Approach		1406	2.7	0.823	32.4	LOS C	20.1	142.8	0.85	0.86	38.8
NorthWest: Cudgen Road (NW)											
27b	L3	52	8.0	0.067	17.2	LOS B	1.2	8.7	0.50	0.68	46.7
28	T1	134	3.0	0.715	55.0	LOS D	6.6	49.6	0.99	0.80	31.4
29a	R1	38	18.0	0.715	61.0	LOS E	6.6	49.6	1.00	0.85	30.6
Approach		223	6.7	0.715	47.3	LOS D	6.6	49.6	0.88	0.79	33.8
All Vehicles		3504	3.6	0.879	39.0	LOS C	33.6	239.2	0.85	0.87	36.5

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

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

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

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.

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	Distance m		per ped	
P1	South Full Crossing	5	34.4	LOS D	0.0	0.0	0.79	0.79	
P5	SouthEast Full Crossing	5	41.9	LOS E	0.0	0.0	0.87	0.87	
P3	North Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95	
P7	NorthWest Full Crossing	5	41.9	LOS E	0.0	0.0	0.87	0.87	
All Pedestrians		21	41.8	LOS E			0.87	0.87	

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.

MOVEMENT SUMMARY

 **Site: 101 [2033 Design PVT - 4-Lane]**

Tweed Coast Road - Cudgen Road

2023 PM Peak - Development Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Tweed Coast Road (S)											
1a	L1	15	0.0	0.021	35.6	LOS C	0.7	4.6	0.66	0.66	37.1
2	T1	389	4.0	0.429	50.9	LOS D	12.2	88.5	0.89	0.74	32.7
3b	R3	209	7.0	0.884	87.3	LOS F	17.2	127.5	1.00	0.95	24.5
Approach		614	4.9	0.884	63.0	LOS E	17.2	127.5	0.92	0.81	29.4
SouthEast: Cudgen Road (SE)											
21b	L3	286	6.0	0.235	12.4	LOS A	6.2	45.7	0.34	0.68	49.7
22	T1	128	7.0	0.869	53.7	LOS D	25.6	184.6	0.85	0.89	31.2
23a	R1	783	2.0	0.869	57.8	LOS E	38.2	272.2	0.92	0.92	31.0
Approach		1198	3.5	0.869	46.5	LOS D	38.2	272.2	0.78	0.86	34.1
North: Tweed Coast Road (N)											
7a	L1	778	3.0	0.677	15.3	LOS B	22.9	164.3	0.71	0.80	47.0
8	T1	685	2.0	0.788	58.5	LOS E	25.1	178.4	0.98	0.89	30.6
9b	R3	68	6.0	0.288	68.0	LOS E	4.5	33.2	0.93	0.77	28.1
Approach		1532	2.7	0.788	37.0	LOS C	25.1	178.4	0.84	0.84	37.0
NorthWest: Cudgen Road (NW)											
27b	L3	52	8.0	0.067	18.0	LOS B	1.4	10.6	0.45	0.68	46.2
28	T1	136	3.0	0.760	75.0	LOS F	9.2	68.4	0.99	0.82	26.8
29a	R1	38	18.0	0.760	81.7	LOS F	9.2	68.4	1.00	0.87	26.1
Approach		225	6.7	0.760	63.1	LOS E	9.2	68.4	0.87	0.80	29.5
All Vehicles		3568	3.6	0.884	46.3	LOS D	38.2	272.2	0.84	0.84	34.0

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	41.1	LOS E	0.0	0.0	0.74	0.74	
P5	SouthEast Full Crossing	5	51.3	LOS E	0.0	0.0	0.83	0.83	
P3	North Full Crossing	5	69.1	LOS F	0.0	0.0	0.96	0.96	
P7	NorthWest Full Crossing	5	51.3	LOS E	0.0	0.0	0.83	0.83	
All Pedestrians		21	53.2	LOS E			0.84	0.84	

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.

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens MVT - 4-Lane]**

Tweed Coast Road - Cudgen Road

2023 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Tweed Coast Road (S)											
1a	L1	34	4.0	0.031	18.2	LOS B	1.0	7.3	0.44	0.64	45.0
2	T1	644	3.0	0.378	27.1	LOS B	15.5	111.3	0.69	0.60	41.5
3b	R3	396	4.0	0.897	77.8	LOS F	32.4	234.5	1.00	0.96	26.1
Approach		1074	3.4	0.897	45.5	LOS D	32.4	234.5	0.80	0.73	34.2
SouthEast: Cudgen Road (SE)											
21b	L3	162	5.0	0.115	7.8	LOS A	1.4	10.4	0.16	0.63	53.0
22	T1	141	3.0	0.879	69.4	LOS E	23.0	164.1	0.97	0.99	27.7
23a	R1	542	2.0	0.879	74.0	LOS F	30.1	214.1	0.99	0.97	27.3
Approach		845	2.7	0.879	60.5	LOS E	30.1	214.1	0.83	0.91	30.2
North: Tweed Coast Road (N)											
7a	L1	788	2.0	0.890	34.9	LOS C	40.5	288.3	0.96	0.94	37.5
8	T1	273	5.0	0.294	49.1	LOS D	8.1	59.1	0.86	0.70	33.2
9b	R3	37	7.0	0.399	84.0	LOS F	2.8	20.4	1.00	0.74	25.0
Approach		1098	2.9	0.890	40.1	LOS C	40.5	288.3	0.94	0.87	35.8
NorthWest: Cudgen Road (NW)											
27b	L3	64	6.0	0.088	16.3	LOS B	1.6	12.1	0.42	0.68	47.3
28	T1	186	5.0	0.871	79.1	LOS F	12.2	88.9	0.99	0.90	26.1
29a	R1	23	6.0	0.871	87.2	LOS F	12.2	88.9	1.00	0.97	25.3
Approach		274	5.3	0.871	65.0	LOS E	12.2	88.9	0.86	0.85	29.1
All Vehicles		3291	3.2	0.897	49.2	LOS D	40.5	288.3	0.86	0.83	33.1

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

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

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

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.

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	Distance m		per ped	
P1	South Full Crossing	1	57.2	LOS E	0.0	0.0	0.87	0.87	
P5	SouthEast Full Crossing	1	51.3	LOS E	0.0	0.0	0.83	0.83	
P3	North Full Crossing	5	69.1	LOS F	0.0	0.0	0.96	0.96	
P7	NorthWest Full Crossing	1	27.6	LOS C	0.0	0.0	0.61	0.61	
All Pedestrians		8	60.2	LOS F			0.89	0.89	

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.

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens EVT - 4-Lane]**

Tweed Coast Road - Cudgen Road

2023 PM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 110 seconds (User-Given Phase Times)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
South: Tweed Coast Road (S)											
1a	L1	15	0.0	0.021	27.5	LOS B	0.5	3.4	0.65	0.66	40.4
2	T1	389	4.0	0.463	39.9	LOS C	9.3	67.2	0.91	0.75	36.3
3b	R3	186	7.0	0.884	69.9	LOS E	11.6	86.2	1.00	0.98	27.7
Approach		591	4.8	0.884	49.0	LOS D	11.6	86.2	0.93	0.82	33.1
SouthEast: Cudgen Road (SE)											
21b	L3	303	6.0	0.250	11.4	LOS A	5.1	37.7	0.36	0.68	50.4
22	T1	131	7.0	0.890	47.9	LOS D	23.2	167.2	0.89	0.99	32.8
23a	R1	871	2.0	0.890	52.0	LOS D	35.1	250.0	0.96	1.00	32.6
Approach		1304	3.4	0.890	42.2	LOS C	35.1	250.0	0.82	0.92	35.6
North: Tweed Coast Road (N)											
7a	L1	659	3.0	0.605	12.9	LOS A	13.7	98.3	0.69	0.78	48.5
8	T1	685	2.0	0.823	48.9	LOS D	20.1	142.8	1.00	0.95	33.3
9b	R3	68	6.0	0.324	54.4	LOS D	3.4	25.3	0.94	0.77	31.4
Approach		1413	2.7	0.823	32.4	LOS C	20.1	142.8	0.85	0.86	38.8
NorthWest: Cudgen Road (NW)											
27b	L3	52	8.0	0.067	17.2	LOS B	1.2	8.7	0.50	0.68	46.7
28	T1	134	3.0	0.715	55.0	LOS D	6.6	49.6	0.99	0.80	31.4
29a	R1	38	18.0	0.715	61.0	LOS E	6.6	49.6	1.00	0.85	30.6
Approach		223	6.7	0.715	47.3	LOS D	6.6	49.6	0.88	0.79	33.8
All Vehicles		3531	3.6	0.890	39.7	LOS C	35.1	250.0	0.85	0.87	36.2

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P1	South Full Crossing	5	34.4	LOS D	0.0	0.0	0.79	0.79	
P5	SouthEast Full Crossing	5	41.9	LOS E	0.0	0.0	0.87	0.87	
P3	North Full Crossing	5	49.2	LOS E	0.0	0.0	0.95	0.95	
P7	NorthWest Full Crossing	5	41.9	LOS E	0.0	0.0	0.87	0.87	
All Pedestrians		21	41.8	LOS E			0.87	0.87	

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.

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens PVT - 4-Lane]**

Tweed Coast Road - Cudgen Road

2023 PM Peak - Development Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 150 seconds (User-Given Phase Times)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
South: Tweed Coast Road (S)											
1a	L1	15	0.0	0.021	35.6	LOS C	0.7	4.6	0.66	0.66	37.1
2	T1	389	4.0	0.429	50.9	LOS D	12.2	88.5	0.89	0.74	32.7
3b	R3	213	7.0	0.897	89.6	LOS F	17.7	131.6	1.00	0.96	24.1
Approach		617	4.9	0.897	63.9	LOS E	17.7	131.6	0.92	0.82	29.2
SouthEast: Cudgen Road (SE)											
21b	L3	291	6.0	0.238	12.4	LOS A	6.3	46.5	0.34	0.68	49.7
22	T1	129	7.0	0.894	59.2	LOS E	27.9	201.5	0.86	0.93	29.8
23a	R1	802	2.0	0.894	62.8	LOS E	40.6	289.0	0.93	0.95	29.8
Approach		1222	3.5	0.894	50.4	LOS D	40.6	289.0	0.78	0.88	32.9
North: Tweed Coast Road (N)											
7a	L1	797	3.0	0.694	15.5	LOS B	23.9	171.2	0.73	0.80	46.9
8	T1	685	2.0	0.789	58.5	LOS E	25.0	178.3	0.98	0.89	30.6
9b	R3	68	6.0	0.288	68.0	LOS E	4.5	33.2	0.93	0.77	28.1
Approach		1551	2.7	0.789	36.8	LOS C	25.0	178.3	0.85	0.84	37.1
NorthWest: Cudgen Road (NW)											
27b	L3	52	8.0	0.067	18.4	LOS B	1.4	10.8	0.45	0.68	46.0
28	T1	136	3.0	0.760	75.0	LOS F	9.2	68.4	0.99	0.82	26.8
29a	R1	38	18.0	0.760	81.7	LOS F	9.2	68.4	1.00	0.87	26.1
Approach		225	6.7	0.760	63.2	LOS E	9.2	68.4	0.87	0.80	29.5
All Vehicles		3615	3.6	0.897	47.7	LOS D	40.6	289.0	0.84	0.85	33.5

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

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

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

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.

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	Distance m		per ped	
P1	South Full Crossing	5	41.1	LOS E	0.0	0.0	0.74	0.74	
P5	SouthEast Full Crossing	5	51.3	LOS E	0.0	0.0	0.83	0.83	
P3	North Full Crossing	5	69.1	LOS F	0.0	0.0	0.96	0.96	
P7	NorthWest Full Crossing	5	51.3	LOS E	0.0	0.0	0.83	0.83	
All Pedestrians		21	53.2	LOS E			0.84	0.84	

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.

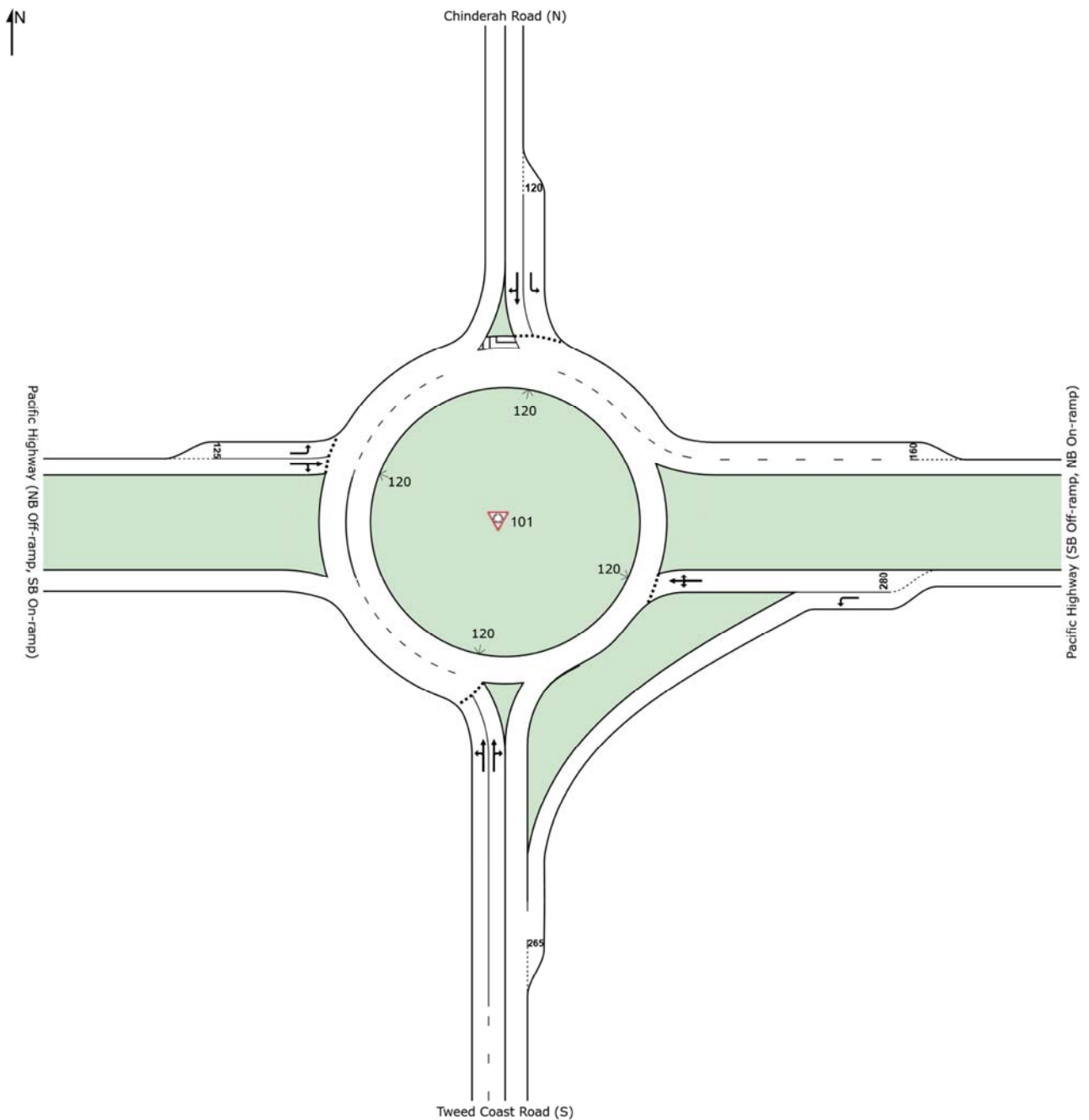
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT



Site: 101 [2023 Background AM]

Tweed Coast Road - Pacific Highway, Chinderah
2023 AM Peak
Background Traffic
Roundabout



MOVEMENT SUMMARY

 **Site: 101 [2023 Background AM]**

Tweed Coast Road - Pacific Highway, Chinderah
2023 AM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	92	7.0	0.088	3.1	LOS A	0.6	4.1	0.49	0.35	40.3
2	T1	36	3.0	0.088	3.3	LOS A	0.6	4.1	0.49	0.35	54.4
3	R2	943	4.0	0.535	10.5	LOS B	5.0	35.9	0.64	0.64	50.0
Approach		1071	4.2	0.535	9.7	LOS A	5.0	35.9	0.62	0.60	49.2
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	842	5.0	0.301	2.1	LOS A	2.2	16.4	0.16	0.27	59.2
5	T1	169	17.0	0.301	3.0	LOS A	2.2	16.4	0.47	0.36	46.9
6	R2	82	9.0	0.301	9.9	LOS A	2.2	16.4	0.47	0.36	67.0
Approach		1094	7.2	0.301	2.9	LOS A	2.2	16.4	0.24	0.29	57.5
North: Chinderah Road (N)											
7	L2	55	6.0	0.078	7.0	LOS A	0.7	5.0	0.97	0.74	48.8
8	T1	72	14.0	0.166	6.5	LOS A	1.6	13.5	1.00	0.78	50.2
9	R2	68	30.0	0.166	11.7	LOS B	1.6	13.5	1.00	0.78	40.8
Approach		195	17.4	0.166	8.5	LOS A	1.6	13.5	0.99	0.77	46.0
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	68	7.0	0.109	6.7	LOS A	0.6	4.7	0.79	0.75	51.9
11	T1	1	0.0	0.148	5.6	LOS A	1.0	7.4	0.82	0.79	48.3
12	R2	132	5.0	0.148	12.6	LOS B	1.0	7.4	0.82	0.79	59.6
Approach		201	5.7	0.148	10.5	LOS B	1.0	7.4	0.81	0.78	57.0
All Vehicles		2560	6.6	0.535	6.7	LOS A	5.0	35.9	0.50	0.50	52.4

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Background PM]**

Tweed Coast Road - Pacific Highway, Chinderah
2023 PM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	105	7.0	0.093	3.1	LOS A	0.6	4.4	0.48	0.35	40.3
2	T1	26	21.0	0.093	3.5	LOS A	0.6	4.4	0.48	0.35	54.5
3	R2	780	4.0	0.439	10.3	LOS B	3.8	27.2	0.58	0.62	50.3
Approach		912	4.8	0.439	9.3	LOS A	3.8	27.2	0.57	0.58	49.0
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1054	3.0	0.352	2.1	LOS A	2.6	18.9	0.17	0.27	59.1
5	T1	154	11.0	0.352	2.9	LOS A	2.6	18.9	0.44	0.36	47.2
6	R2	115	4.0	0.352	9.7	LOS A	2.6	18.9	0.44	0.36	67.2
Approach		1322	4.0	0.352	2.9	LOS A	2.6	18.9	0.22	0.29	58.1
North: Chinderah Road (N)											
7	L2	52	2.0	0.057	4.5	LOS A	0.4	3.2	0.84	0.61	49.8
8	T1	78	7.0	0.112	4.0	LOS A	1.0	7.5	0.88	0.58	51.1
9	R2	54	4.0	0.112	8.7	LOS A	1.0	7.5	0.88	0.58	42.2
Approach		183	4.7	0.112	5.5	LOS A	1.0	7.5	0.87	0.59	47.7
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	65	2.0	0.087	5.4	LOS A	0.5	3.3	0.71	0.62	52.3
11	T1	1	0.0	0.106	4.6	LOS A	0.6	4.7	0.72	0.73	48.8
12	R2	108	5.0	0.106	11.6	LOS B	0.6	4.7	0.72	0.73	60.2
Approach		175	3.8	0.106	9.2	LOS A	0.6	4.7	0.71	0.69	57.2
All Vehicles		2592	4.3	0.439	5.7	LOS A	3.8	27.2	0.42	0.44	53.3

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Background AM]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 AM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	100	7.0	0.097	3.2	LOS A	0.6	4.6	0.52	0.37	40.2
2	T1	39	3.0	0.097	3.4	LOS A	0.6	4.6	0.52	0.37	54.3
3	R2	1021	4.0	0.590	10.8	LOS B	5.8	41.7	0.69	0.66	49.8
Approach		1160	4.2	0.590	9.9	LOS A	5.8	41.7	0.67	0.62	48.9
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	913	5.0	0.328	2.2	LOS A	2.4	18.4	0.17	0.27	59.2
5	T1	184	17.0	0.328	3.1	LOS A	2.4	18.4	0.50	0.37	46.7
6	R2	89	9.0	0.328	10.0	LOS A	2.4	18.4	0.50	0.37	66.8
Approach		1186	7.2	0.328	2.9	LOS A	2.4	18.4	0.25	0.29	57.4
North: Chinderah Road (N)											
7	L2	59	6.0	0.098	8.8	LOS A	0.9	6.5	1.00	0.78	47.4
8	T1	77	14.0	0.207	8.3	LOS A	2.2	17.9	1.00	0.80	49.5
9	R2	74	30.0	0.207	13.5	LOS B	2.2	17.9	1.00	0.80	40.4
Approach		209	17.4	0.207	10.3	LOS B	2.2	17.9	1.00	0.79	45.3
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	74	7.0	0.130	7.4	LOS A	0.8	5.8	0.83	0.80	51.7
11	T1	1	0.0	0.175	6.2	LOS A	1.3	9.2	0.87	0.83	48.1
12	R2	142	5.0	0.175	13.2	LOS B	1.3	9.2	0.87	0.83	59.3
Approach		217	5.7	0.175	11.2	LOS B	1.3	9.2	0.86	0.82	56.7
All Vehicles		2773	6.6	0.590	7.0	LOS A	5.8	41.7	0.53	0.51	52.1

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Background PM]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 PM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	114	7.0	0.101	3.2	LOS A	0.6	4.9	0.51	0.37	40.3
2	T1	28	21.0	0.101	3.6	LOS A	0.6	4.9	0.51	0.37	54.4
3	R2	844	4.0	0.484	10.5	LOS B	4.3	31.4	0.63	0.64	50.1
Approach		986	4.8	0.484	9.5	LOS A	4.3	31.4	0.61	0.60	48.8
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1141	3.0	0.384	2.2	LOS A	2.9	21.5	0.18	0.28	59.0
5	T1	166	11.0	0.384	3.0	LOS A	2.9	21.5	0.48	0.37	47.0
6	R2	124	4.0	0.384	9.8	LOS A	2.9	21.5	0.48	0.37	66.9
Approach		1432	4.0	0.384	2.9	LOS A	2.9	21.5	0.24	0.29	58.0
North: Chinderah Road (N)											
7	L2	56	2.0	0.068	5.3	LOS A	0.6	4.0	0.90	0.67	49.5
8	T1	84	7.0	0.133	4.8	LOS A	1.3	9.5	0.95	0.65	50.8
9	R2	58	4.0	0.133	9.5	LOS A	1.3	9.5	0.95	0.65	42.0
Approach		198	4.7	0.133	6.3	LOS A	1.3	9.5	0.93	0.66	47.5
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	72	2.0	0.103	5.8	LOS A	0.6	4.1	0.75	0.68	52.1
11	T1	1	0.0	0.122	4.9	LOS A	0.8	5.7	0.76	0.75	48.5
12	R2	118	5.0	0.122	11.9	LOS B	0.8	5.7	0.76	0.75	59.9
Approach		191	3.8	0.122	9.6	LOS A	0.8	5.7	0.76	0.72	57.0
All Vehicles		2806	4.3	0.484	5.9	LOS A	4.3	31.4	0.46	0.46	53.2

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design MVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2023 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	111	7.0	0.102	3.1	LOS A	0.7	4.8	0.50	0.36	40.3
2	T1	37	3.0	0.102	3.3	LOS A	0.7	4.8	0.50	0.36	54.4
3	R2	980	4.0	0.558	10.6	LOS B	5.3	38.4	0.65	0.64	50.0
Approach		1127	4.3	0.558	9.6	LOS A	5.3	38.4	0.63	0.60	49.0
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	929	5.0	0.327	2.2	LOS A	2.4	18.1	0.18	0.28	59.1
5	T1	169	17.0	0.327	3.2	LOS A	2.4	18.1	0.51	0.38	46.7
6	R2	82	9.0	0.327	10.0	LOS B	2.4	18.1	0.51	0.38	66.8
Approach		1181	7.0	0.327	2.9	LOS A	2.4	18.1	0.25	0.30	57.5
North: Chinderah Road (N)											
7	L2	55	6.0	0.087	8.6	LOS A	0.8	5.7	1.00	0.77	47.6
8	T1	73	14.0	0.186	8.1	LOS A	1.9	15.7	1.00	0.79	49.6
9	R2	68	30.0	0.186	13.3	LOS B	1.9	15.7	1.00	0.79	40.5
Approach		196	17.4	0.186	10.1	LOS B	1.9	15.7	1.00	0.78	45.4
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	68	7.0	0.111	6.9	LOS A	0.7	4.9	0.81	0.76	51.8
11	T1	1	0.0	0.205	6.0	LOS A	1.5	10.6	0.85	0.82	48.1
12	R2	176	5.0	0.205	13.0	LOS B	1.5	10.6	0.85	0.82	59.4
Approach		245	5.5	0.205	11.2	LOS B	1.5	10.6	0.84	0.80	57.3
All Vehicles		2749	6.5	0.558	6.9	LOS A	5.3	38.4	0.51	0.50	52.4

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design EVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2023 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	205	7.0	0.166	3.2	LOS A	1.1	8.3	0.51	0.36	40.3
2	T1	31	21.0	0.166	3.6	LOS A	1.1	8.3	0.51	0.36	54.4
3	R2	976	4.0	0.551	10.5	LOS B	5.2	37.8	0.64	0.63	50.0
Approach		1212	4.9	0.551	9.1	LOS A	5.2	37.8	0.62	0.58	48.2
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1138	3.0	0.378	2.2	LOS A	2.9	20.9	0.19	0.28	59.0
5	T1	154	11.0	0.378	3.0	LOS A	2.9	20.9	0.49	0.37	47.0
6	R2	115	4.0	0.378	9.9	LOS A	2.9	20.9	0.49	0.37	66.9
Approach		1406	4.0	0.378	2.9	LOS A	2.9	20.9	0.25	0.30	58.0
North: Chinderah Road (N)											
7	L2	52	2.0	0.077	7.9	LOS A	0.7	4.9	1.00	0.75	48.2
8	T1	78	7.0	0.152	7.3	LOS A	1.6	11.8	1.00	0.75	50.1
9	R2	54	4.0	0.152	12.0	LOS B	1.6	11.8	1.00	0.75	41.5
Approach		183	4.7	0.152	8.8	LOS A	1.6	11.8	1.00	0.75	46.7
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	65	2.0	0.103	6.7	LOS A	0.6	4.3	0.80	0.76	51.9
11	T1	1	0.0	0.176	5.8	LOS A	1.2	8.9	0.84	0.81	48.2
12	R2	152	5.0	0.176	12.9	LOS B	1.2	8.9	0.84	0.81	59.5
Approach		218	4.1	0.176	11.0	LOS B	1.2	8.9	0.83	0.80	57.2
All Vehicles		3019	4.4	0.551	6.3	LOS A	5.2	37.8	0.48	0.47	52.5

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Tweed Coast Road - M1 Interchange\P3378.001M Tweed Coast Road - M1 Interchange.sip7

MOVEMENT SUMMARY

 **Site: 101 [2023 Design PVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2023 PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	184	7.0	0.151	3.1	LOS A	1.0	7.5	0.51	0.36	40.3
2	T1	29	21.0	0.151	3.5	LOS A	1.0	7.5	0.51	0.36	54.4
3	R2	936	4.0	0.531	10.5	LOS B	5.0	36.1	0.64	0.63	50.0
Approach		1149	4.9	0.531	9.1	LOS A	5.0	36.1	0.61	0.58	48.3
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1209	3.0	0.401	2.3	LOS A	3.2	23.0	0.21	0.28	58.9
5	T1	154	11.0	0.401	3.2	LOS A	3.2	23.0	0.53	0.39	46.8
6	R2	115	4.0	0.401	10.0	LOS B	3.2	23.0	0.53	0.39	66.6
Approach		1478	3.9	0.401	3.0	LOS A	3.2	23.0	0.27	0.30	57.9
North: Chinderah Road (N)											
7	L2	52	2.0	0.074	7.7	LOS A	0.7	4.7	0.99	0.75	48.3
8	T1	81	7.0	0.152	7.2	LOS A	1.6	11.8	1.00	0.75	50.1
9	R2	54	4.0	0.152	11.9	LOS B	1.6	11.8	1.00	0.75	41.5
Approach		186	4.8	0.152	8.7	LOS A	1.6	11.8	1.00	0.75	46.8
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	65	2.0	0.097	6.2	LOS A	0.6	4.1	0.79	0.73	51.9
11	T1	1	0.0	0.209	5.6	LOS A	1.5	10.6	0.83	0.80	48.2
12	R2	187	5.0	0.209	12.7	LOS B	1.5	10.6	0.83	0.80	59.5
Approach		254	4.2	0.209	11.0	LOS B	1.5	10.6	0.82	0.78	57.6
All Vehicles		3067	4.4	0.531	6.3	LOS A	5.0	36.1	0.49	0.47	52.8

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Tweed Coast Road - M1 Interchange\P3378.001M Tweed Coast Road - M1 Interchange.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design MVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	121	7.0	0.113	3.3	LOS A	0.7	5.5	0.53	0.37	40.2
2	T1	40	3.0	0.113	3.4	LOS A	0.7	5.5	0.53	0.37	54.3
3	R2	1064	4.0	0.617	10.9	LOS B	6.2	45.1	0.71	0.66	49.7
Approach		1225	4.3	0.617	9.9	LOS A	6.2	45.1	0.69	0.63	48.7
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1012	5.0	0.359	2.3	LOS A	2.8	20.7	0.19	0.28	59.0
5	T1	184	17.0	0.359	3.4	LOS A	2.8	20.7	0.55	0.39	46.5
6	R2	89	9.0	0.359	10.2	LOS B	2.8	20.7	0.55	0.39	66.4
Approach		1285	7.0	0.359	3.0	LOS A	2.8	20.7	0.27	0.30	57.3
North: Chinderah Road (N)											
7	L2	59	6.0	0.112	11.4	LOS B	1.1	7.9	1.00	0.79	45.6
8	T1	79	14.0	0.243	10.9	LOS B	2.6	22.0	1.00	0.82	48.0
9	R2	74	30.0	0.243	16.2	LOS B	2.6	22.0	1.00	0.82	39.3
Approach		212	17.3	0.243	12.9	LOS B	2.6	22.0	1.00	0.81	43.9
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	74	7.0	0.132	7.6	LOS A	0.8	6.1	0.85	0.81	51.6
11	T1	1	0.0	0.250	6.7	LOS A	1.9	13.7	0.91	0.87	47.9
12	R2	194	5.0	0.250	13.7	LOS B	1.9	13.7	0.91	0.87	59.1
Approach		268	5.5	0.250	12.0	LOS B	1.9	13.7	0.90	0.85	57.0
All Vehicles		2991	6.5	0.617	7.3	LOS A	6.2	45.1	0.55	0.52	52.0

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Tweed Coast Road - M1 Interchange\P3378.001M Tweed Coast Road - M1 Interchange.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design EVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	229	7.0	0.187	3.3	LOS A	1.3	9.6	0.54	0.38	40.2
2	T1	33	21.0	0.187	3.7	LOS A	1.3	9.6	0.54	0.38	54.2
3	R2	1072	4.0	0.617	10.8	LOS B	6.2	45.1	0.70	0.66	49.7
Approach		1334	4.9	0.617	9.3	LOS A	6.2	45.1	0.67	0.60	47.9
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1238	3.0	0.414	2.2	LOS A	3.3	23.9	0.20	0.28	58.9
5	T1	166	11.0	0.414	3.2	LOS A	3.3	23.9	0.53	0.39	46.8
6	R2	124	4.0	0.414	10.0	LOS B	3.3	23.9	0.53	0.39	66.5
Approach		1528	4.0	0.414	3.0	LOS A	3.3	23.9	0.26	0.30	57.9
North: Chinderah Road (N)											
7	L2	56	2.0	0.101	10.7	LOS B	1.0	6.9	1.00	0.78	46.2
8	T1	84	7.0	0.203	10.2	LOS B	2.3	17.0	1.00	0.78	48.6
9	R2	58	4.0	0.203	14.9	LOS B	2.3	17.0	1.00	0.78	40.4
Approach		198	4.7	0.203	11.7	LOS B	2.3	17.0	1.00	0.78	45.3
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	72	2.0	0.127	7.6	LOS A	0.8	5.6	0.86	0.81	51.6
11	T1	1	0.0	0.218	6.6	LOS A	1.6	11.7	0.91	0.86	47.9
12	R2	167	5.0	0.218	13.7	LOS B	1.6	11.7	0.91	0.86	59.1
Approach		240	4.1	0.218	11.8	LOS B	1.6	11.7	0.89	0.85	56.9
All Vehicles		3300	4.4	0.617	6.7	LOS A	6.2	45.1	0.52	0.49	52.1

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Tweed Coast Road - M1 Interchange\P3378.001M Tweed Coast Road - M1 Interchange.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design PVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	205	7.0	0.170	3.3	LOS A	1.2	8.8	0.54	0.38	40.2
2	T1	33	21.0	0.170	3.7	LOS A	1.2	8.8	0.54	0.38	54.2
3	R2	1023	4.0	0.591	10.7	LOS B	5.9	42.8	0.70	0.65	49.8
Approach		1261	4.9	0.591	9.3	LOS A	5.9	42.8	0.67	0.60	48.0
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1320	3.0	0.442	2.3	LOS A	3.7	26.7	0.22	0.29	58.8
5	T1	166	11.0	0.442	3.4	LOS A	3.7	26.7	0.58	0.41	46.6
6	R2	124	4.0	0.442	10.2	LOS B	3.7	26.7	0.58	0.41	66.1
Approach		1611	3.9	0.442	3.0	LOS A	3.7	26.7	0.29	0.31	57.8
North: Chinderah Road (N)											
7	L2	56	2.0	0.097	10.4	LOS B	0.9	6.6	1.00	0.77	46.4
8	T1	87	7.0	0.200	9.9	LOS A	2.3	16.7	1.00	0.78	48.8
9	R2	58	4.0	0.200	14.7	LOS B	2.3	16.7	1.00	0.78	40.5
Approach		201	4.7	0.200	11.4	LOS B	2.3	16.7	1.00	0.78	45.5
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	72	2.0	0.117	6.9	LOS A	0.7	5.1	0.84	0.79	51.7
11	T1	1	0.0	0.258	6.3	LOS A	1.9	13.8	0.89	0.85	47.9
12	R2	208	5.0	0.258	13.4	LOS B	1.9	13.8	0.89	0.85	59.2
Approach		281	4.2	0.258	11.7	LOS B	1.9	13.8	0.88	0.83	57.3
All Vehicles		3354	4.4	0.591	6.6	LOS A	5.9	42.8	0.52	0.49	52.5

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Tweed Coast Road - M1 Interchange\P3378.001M Tweed Coast Road - M1 Interchange.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens MVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	123	7.0	0.115	3.3	LOS A	0.8	5.6	0.53	0.37	40.2
2	T1	40	3.0	0.115	3.4	LOS A	0.8	5.6	0.53	0.37	54.3
3	R2	1068	4.0	0.620	10.9	LOS B	6.3	45.4	0.72	0.67	49.7
Approach		1232	4.3	0.620	9.9	LOS A	6.3	45.4	0.69	0.63	48.7
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1022	5.0	0.363	2.3	LOS A	2.8	21.1	0.20	0.28	59.0
5	T1	184	17.0	0.363	3.4	LOS A	2.8	21.1	0.56	0.39	46.5
6	R2	89	9.0	0.363	10.2	LOS B	2.8	21.1	0.56	0.39	66.4
Approach		1296	7.0	0.363	3.0	LOS A	2.8	21.1	0.27	0.31	57.3
North: Chinderah Road (N)											
7	L2	59	6.0	0.113	11.7	LOS B	1.1	8.0	1.00	0.79	45.4
8	T1	79	14.0	0.247	11.2	LOS B	2.7	22.4	1.00	0.82	47.8
9	R2	74	30.0	0.247	16.4	LOS B	2.7	22.4	1.00	0.82	39.2
Approach		212	17.3	0.247	13.2	LOS B	2.7	22.4	1.00	0.81	43.8
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	74	7.0	0.132	7.7	LOS A	0.8	6.1	0.86	0.82	51.6
11	T1	1	0.0	0.257	6.7	LOS A	1.9	14.1	0.92	0.87	47.8
12	R2	198	5.0	0.257	13.8	LOS B	1.9	14.1	0.92	0.87	59.0
Approach		273	5.5	0.257	12.1	LOS B	1.9	14.1	0.90	0.86	57.0
All Vehicles		3012	6.5	0.620	7.3	LOS A	6.3	45.4	0.55	0.52	52.0

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Tweed Coast Road - M1 Interchange\P3378.001M Tweed Coast Road - M1 Interchange.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens EVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	235	7.0	0.191	3.3	LOS A	1.3	9.9	0.54	0.38	40.2
2	T1	34	21.0	0.191	3.7	LOS A	1.3	9.9	0.54	0.38	54.2
3	R2	1081	4.0	0.622	10.8	LOS B	6.3	45.8	0.71	0.66	49.7
Approach		1349	4.9	0.622	9.3	LOS A	6.3	45.8	0.67	0.60	47.9
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1242	3.0	0.416	2.2	LOS A	3.3	24.1	0.20	0.28	58.9
5	T1	166	11.0	0.416	3.2	LOS A	3.3	24.1	0.53	0.39	46.8
6	R2	124	4.0	0.416	10.0	LOS B	3.3	24.1	0.53	0.39	66.5
Approach		1533	3.9	0.416	3.0	LOS A	3.3	24.1	0.27	0.30	57.9
North: Chinderah Road (N)											
7	L2	56	2.0	0.103	11.0	LOS B	1.0	7.1	1.00	0.78	45.9
8	T1	84	7.0	0.207	10.5	LOS B	2.4	17.5	1.00	0.78	48.4
9	R2	58	4.0	0.207	15.3	LOS B	2.4	17.5	1.00	0.78	40.3
Approach		198	4.7	0.207	12.1	LOS B	2.4	17.5	1.00	0.78	45.1
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	72	2.0	0.128	7.7	LOS A	0.8	5.7	0.86	0.82	51.6
11	T1	1	0.0	0.223	6.7	LOS A	1.7	12.1	0.91	0.87	47.9
12	R2	169	5.0	0.223	13.8	LOS B	1.7	12.1	0.91	0.87	59.1
Approach		242	4.1	0.223	11.9	LOS B	1.7	12.1	0.90	0.85	56.9
All Vehicles		3322	4.4	0.622	6.7	LOS A	6.3	45.8	0.52	0.49	52.1

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Tweed Coast Road - M1 Interchange\P3378.001M Tweed Coast Road - M1 Interchange.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens PVT]**

Tweed Coast Road - Pacific Highway, Chinderah
2033 PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Tweed Coast Road (S)											
1	L2	212	7.0	0.175	3.3	LOS A	1.2	9.0	0.55	0.38	40.2
2	T1	33	21.0	0.175	3.7	LOS A	1.2	9.0	0.55	0.38	54.2
3	R2	1036	4.0	0.599	10.7	LOS B	6.0	43.7	0.70	0.66	49.7
Approach		1280	4.9	0.599	9.3	LOS A	6.0	43.7	0.67	0.60	48.0
East: Pacific Highway (SB Off-ramp, NB On-ramp)											
4	L2	1333	3.0	0.446	2.3	LOS A	3.7	27.2	0.23	0.29	58.8
5	T1	166	11.0	0.446	3.4	LOS A	3.7	27.2	0.59	0.41	46.5
6	R2	124	4.0	0.446	10.2	LOS B	3.7	27.2	0.59	0.41	66.0
Approach		1623	3.9	0.446	3.0	LOS A	3.7	27.2	0.29	0.31	57.8
North: Chinderah Road (N)											
7	L2	56	2.0	0.100	10.9	LOS B	1.0	6.8	1.00	0.78	46.0
8	T1	88	7.0	0.209	10.6	LOS B	2.4	17.6	1.00	0.78	48.4
9	R2	58	4.0	0.209	15.3	LOS B	2.4	17.6	1.00	0.78	40.3
Approach		202	4.8	0.209	12.0	LOS B	2.4	17.6	1.00	0.78	45.1
West: Pacific Highway (NB Off-ramp, SB On-ramp)											
10	L2	72	2.0	0.118	7.0	LOS A	0.7	5.2	0.84	0.79	51.7
11	T1	1	0.0	0.269	6.5	LOS A	2.0	14.6	0.90	0.85	47.9
12	R2	215	5.0	0.269	13.5	LOS B	2.0	14.6	0.90	0.85	59.1
Approach		287	4.2	0.269	11.9	LOS B	2.0	14.6	0.89	0.84	57.3
All Vehicles		3393	4.4	0.599	6.7	LOS A	6.0	43.7	0.53	0.49	52.4

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

Roundabout LOS Method: SIDRA Roundabout LOS.

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.

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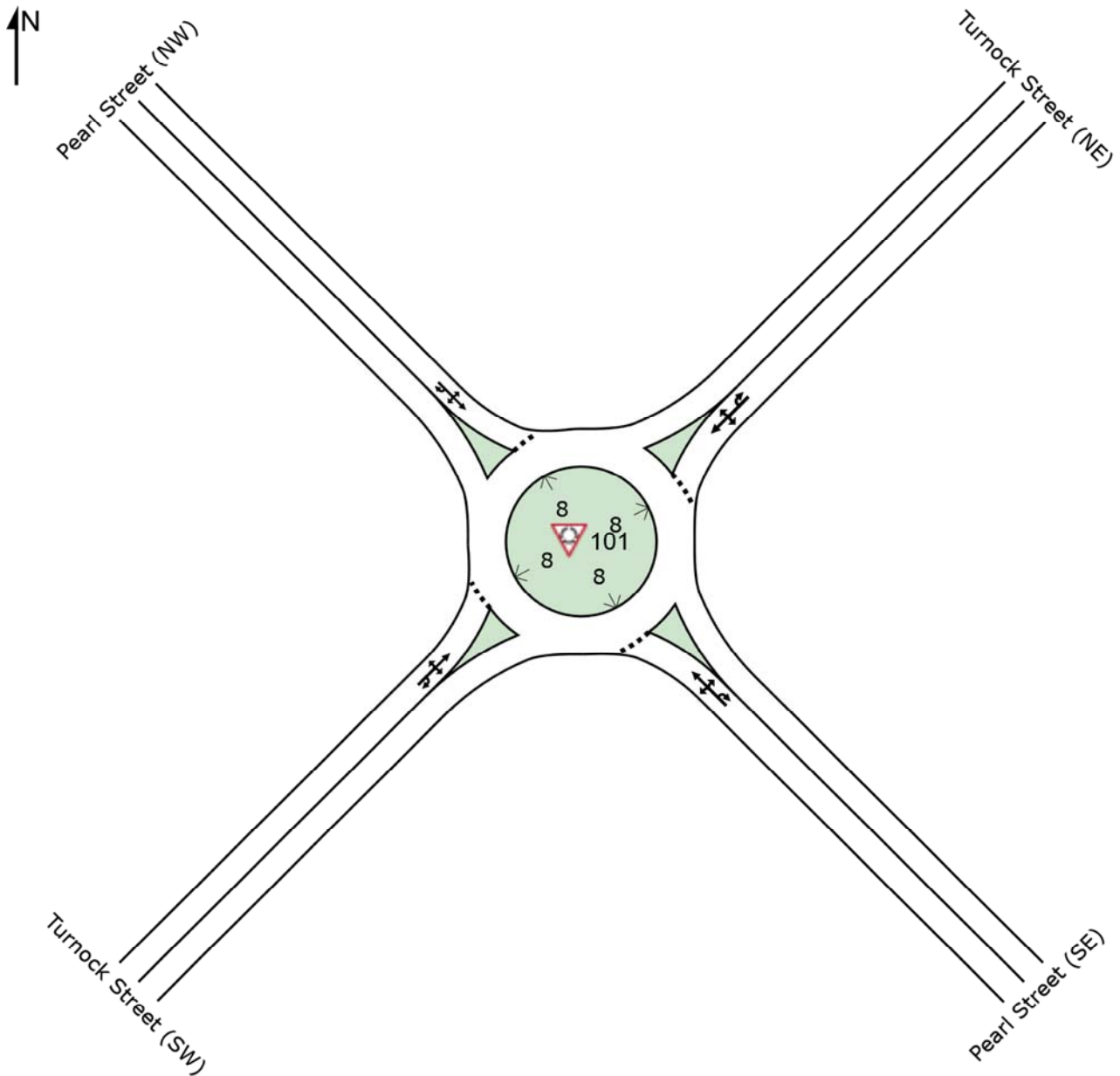
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SITE LAYOUT

 **Site: 101 [2023 Background AM]**

Turnock Street - Pearl Street, Kingscliff
2023 AM Peak
Background Traffic
Roundabout



MOVEMENT SUMMARY

 **Site: 101 [2023 Background AM]**

Turnock Street - Pearl Street, Kingscliff
2023 AM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
SouthEast: Pearl Street (SE)											
21	L2	64	10.0	0.517	4.8	LOS A	4.4	32.0	0.59	0.59	41.0
22	T1	307	4.0	0.517	4.4	LOS A	4.4	32.0	0.59	0.59	41.7
23	R2	183	3.0	0.517	7.3	LOS A	4.4	32.0	0.59	0.59	26.1
23u	U	9	0.0	0.517	8.4	LOS A	4.4	32.0	0.59	0.59	43.0
Approach		564	4.3	0.517	5.4	LOS A	4.4	32.0	0.59	0.59	37.2
NorthEast: Turnock Street (NE)											
24	L2	64	4.0	0.172	6.3	LOS A	1.0	7.2	0.60	0.66	35.5
25	T1	67	0.0	0.172	6.0	LOS A	1.0	7.2	0.60	0.66	43.3
26	R2	13	0.0	0.172	9.0	LOS A	1.0	7.2	0.60	0.66	42.9
26u	U	2	0.0	0.172	10.4	LOS A	1.0	7.2	0.60	0.66	10.5
Approach		146	1.8	0.172	6.5	LOS A	1.0	7.2	0.60	0.66	39.4
NorthWest: Pearl Street (NW)											
27	L2	15	0.0	0.364	8.0	LOS A	2.6	18.4	0.75	0.77	25.9
28	T1	171	2.0	0.364	8.0	LOS A	2.6	18.4	0.75	0.77	40.8
29	R2	92	0.0	0.364	10.9	LOS A	2.6	18.4	0.75	0.77	44.4
29u	U	4	0.0	0.364	12.3	LOS A	2.6	18.4	0.75	0.77	47.6
Approach		281	1.2	0.364	9.0	LOS A	2.6	18.4	0.75	0.77	41.3
SouthWest: Turnock Street (SW)											
30	L2	105	2.0	0.487	10.0	LOS A	4.0	28.4	0.84	0.90	43.1
31	T1	131	1.0	0.487	9.8	LOS A	4.0	28.4	0.84	0.90	26.1
32	R2	103	4.0	0.487	12.9	LOS A	4.0	28.4	0.84	0.90	39.8
32u	U	5	0.0	0.487	14.1	LOS A	4.0	28.4	0.84	0.90	46.5
Approach		344	2.2	0.487	10.9	LOS A	4.0	28.4	0.84	0.90	35.8
All Vehicles		1336	2.8	0.517	7.7	LOS A	4.4	32.0	0.69	0.71	37.9

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

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

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

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Background PM]**

Turnock Street - Pearl Street, Kingscliff
2023 PM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
SouthEast: Pearl Street (SE)											
21	L2	156	4.0	0.580	5.0	LOS A	5.3	38.0	0.66	0.61	41.0
22	T1	305	2.0	0.580	4.7	LOS A	5.3	38.0	0.66	0.61	41.6
23	R2	156	5.0	0.580	7.7	LOS A	5.3	38.0	0.66	0.61	26.0
23u	U	11	0.0	0.580	8.8	LOS A	5.3	38.0	0.66	0.61	43.0
Approach		627	3.2	0.580	5.6	LOS A	5.3	38.0	0.66	0.61	38.1
NorthEast: Turnock Street (NE)											
24	L2	51	0.0	0.159	5.8	LOS A	0.9	6.5	0.56	0.62	35.7
25	T1	78	0.0	0.159	5.7	LOS A	0.9	6.5	0.56	0.62	43.5
26	R2	14	0.0	0.159	8.7	LOS A	0.9	6.5	0.56	0.62	43.2
26u	U	1	0.0	0.159	10.1	LOS A	0.9	6.5	0.56	0.62	10.1
Approach		143	0.0	0.159	6.0	LOS A	0.9	6.5	0.56	0.62	40.5
NorthWest: Pearl Street (NW)											
27	L2	15	0.0	0.334	7.5	LOS A	2.4	16.8	0.71	0.74	26.1
28	T1	146	4.0	0.334	7.6	LOS A	2.4	16.8	0.71	0.74	41.0
29	R2	100	0.0	0.334	10.4	LOS A	2.4	16.8	0.71	0.74	44.6
29u	U	7	0.0	0.334	11.8	LOS A	2.4	16.8	0.71	0.74	47.8
Approach		268	2.2	0.334	8.7	LOS A	2.4	16.8	0.71	0.74	41.7
SouthWest: Turnock Street (SW)											
30	L2	126	0.0	0.477	9.3	LOS A	3.8	27.3	0.83	0.87	43.5
31	T1	151	0.0	0.477	9.2	LOS A	3.8	27.3	0.83	0.87	26.3
32	R2	68	7.0	0.477	12.5	LOS A	3.8	27.3	0.83	0.87	40.2
32u	U	1	0.0	0.477	13.6	LOS A	3.8	27.3	0.83	0.87	47.0
Approach		346	1.4	0.477	9.9	LOS A	3.8	27.3	0.83	0.87	35.6
All Vehicles		1385	2.2	0.580	7.3	LOS A	5.3	38.0	0.70	0.70	38.4

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

Site: 101 [2033 Background AM]

Turnock Street - Pearl Street, Kingscliff
2033 AM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m	per veh	km/h	
SouthEast: Pearl Street (SE)											
21	L2	76	10.0	0.637	5.8	LOS A	6.4	46.6	0.73	0.66	40.6
22	T1	365	4.0	0.637	5.3	LOS A	6.4	46.6	0.73	0.66	41.3
23	R2	218	3.0	0.637	8.2	LOS A	6.4	46.6	0.73	0.66	25.8
23u	U	11	0.0	0.637	9.3	LOS A	6.4	46.6	0.73	0.66	42.5
Approach		669	4.3	0.637	6.4	LOS A	6.4	46.6	0.73	0.66	36.8
NorthEast: Turnock Street (NE)											
24	L2	76	4.0	0.221	7.0	LOS A	1.4	9.7	0.67	0.71	35.0
25	T1	80	0.0	0.221	6.7	LOS A	1.4	9.7	0.67	0.71	42.7
26	R2	15	0.0	0.221	9.7	LOS A	1.4	9.7	0.67	0.71	42.4
26u	U	3	0.0	0.221	11.1	LOS A	1.4	9.7	0.67	0.71	10.4
Approach		174	1.7	0.221	7.1	LOS A	1.4	9.7	0.67	0.71	38.8
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.478	10.1	LOS A	3.9	27.8	0.85	0.89	25.3
28	T1	203	2.0	0.478	10.1	LOS A	3.9	27.8	0.85	0.89	39.8
29	R2	108	0.0	0.478	12.9	LOS A	3.9	27.8	0.85	0.89	43.3
29u	U	5	0.0	0.478	14.4	LOS A	3.9	27.8	0.85	0.89	46.3
Approach		335	1.2	0.478	11.1	LOS A	3.9	27.8	0.85	0.89	40.3
SouthWest: Turnock Street (SW)											
30	L2	125	2.0	0.664	16.1	LOS B	7.4	52.7	0.98	1.15	40.2
31	T1	155	1.0	0.664	15.9	LOS B	7.4	52.7	0.98	1.15	24.2
32	R2	122	4.0	0.664	19.1	LOS B	7.4	52.7	0.98	1.15	37.0
32u	U	6	0.0	0.664	20.2	LOS B	7.4	52.7	0.98	1.15	43.1
Approach		408	2.2	0.664	17.0	LOS B	7.4	52.7	0.98	1.15	33.4
All Vehicles		1586	2.8	0.664	10.2	LOS A	7.4	52.7	0.81	0.84	36.7

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

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

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

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.

MOVEMENT SUMMARY

 **Site: 101 [2033 Background PM]**

Turnock Street - Pearl Street, Kingscliff
2033 PM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles Distance veh m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
SouthEast: Pearl Street (SE)											
21	L2	185	4.0	0.718	7.5	LOS A	9.3	66.7	0.83	0.76	40.1
22	T1	362	2.0	0.718	7.1	LOS A	9.3	66.7	0.83	0.76	40.7
23	R2	185	5.0	0.718	10.1	LOS A	9.3	66.7	0.83	0.76	25.2
23u	U	13	0.0	0.718	11.2	LOS A	9.3	66.7	0.83	0.76	41.8
Approach		745	3.2	0.718	8.0	LOS A	9.3	66.7	0.83	0.76	37.2
NorthEast: Turnock Street (NE)											
24	L2	60	0.0	0.203	6.4	LOS A	1.2	8.7	0.63	0.67	35.4
25	T1	93	0.0	0.203	6.2	LOS A	1.2	8.7	0.63	0.67	43.2
26	R2	17	0.0	0.203	9.2	LOS A	1.2	8.7	0.63	0.67	42.8
26u	U	1	0.0	0.203	10.6	LOS A	1.2	8.7	0.63	0.67	10.0
Approach		171	0.0	0.203	6.6	LOS A	1.2	8.7	0.63	0.67	40.2
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.435	8.6	LOS A	3.3	23.3	0.81	0.82	25.7
28	T1	175	4.0	0.435	8.7	LOS A	3.3	23.3	0.81	0.82	40.4
29	R2	119	0.0	0.435	11.4	LOS A	3.3	23.3	0.81	0.82	44.0
29u	U	8	0.0	0.435	12.9	LOS A	3.3	23.3	0.81	0.82	47.1
Approach		320	2.2	0.435	9.8	LOS A	3.3	23.3	0.81	0.82	41.1
SouthWest: Turnock Street (SW)											
30	L2	149	0.0	0.650	14.7	LOS B	7.1	50.4	0.97	1.11	40.9
31	T1	178	0.0	0.650	14.6	LOS B	7.1	50.4	0.97	1.11	24.6
32	R2	82	7.0	0.650	18.0	LOS B	7.1	50.4	0.97	1.11	37.6
32u	U	1	0.0	0.650	19.0	LOS B	7.1	50.4	0.97	1.11	44.0
Approach		411	1.4	0.650	15.3	LOS B	7.1	50.4	0.97	1.11	33.4
All Vehicles		1646	2.2	0.718	10.0	LOS A	9.3	66.7	0.84	0.85	37.1

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design MVT]**

Turnock Street - Pearl Street, Kingscliff
2023 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
SouthEast: Pearl Street (SE)											
21	L2	72	10.0	0.529	4.9	LOS A	4.6	33.2	0.61	0.60	40.9
22	T1	307	4.0	0.529	4.5	LOS A	4.6	33.2	0.61	0.60	41.6
23	R2	183	3.0	0.529	7.4	LOS A	4.6	33.2	0.61	0.60	26.0
23u	U	9	0.0	0.529	8.5	LOS A	4.6	33.2	0.61	0.60	43.0
Approach		572	4.4	0.529	5.5	LOS A	4.6	33.2	0.61	0.60	37.2
NorthEast: Turnock Street (NE)											
24	L2	64	4.0	0.174	6.4	LOS A	1.0	7.3	0.60	0.66	35.4
25	T1	67	0.0	0.174	6.1	LOS A	1.0	7.3	0.60	0.66	43.2
26	R2	13	0.0	0.174	9.1	LOS A	1.0	7.3	0.60	0.66	42.9
26u	U	2	0.0	0.174	10.5	LOS A	1.0	7.3	0.60	0.66	10.5
Approach		146	1.8	0.174	6.5	LOS A	1.0	7.3	0.60	0.66	39.4
NorthWest: Pearl Street (NW)											
27	L2	15	0.0	0.375	8.1	LOS A	2.7	19.1	0.76	0.78	25.9
28	T1	171	2.0	0.375	8.1	LOS A	2.7	19.1	0.76	0.78	40.7
29	R2	99	0.0	0.375	11.0	LOS A	2.7	19.1	0.76	0.78	44.3
29u	U	4	0.0	0.375	12.4	LOS A	2.7	19.1	0.76	0.78	47.5
Approach		288	1.2	0.375	9.1	LOS A	2.7	19.1	0.76	0.78	41.3
SouthWest: Turnock Street (SW)											
30	L2	108	2.0	0.497	10.2	LOS A	4.2	29.6	0.85	0.91	43.0
31	T1	131	1.0	0.497	10.0	LOS A	4.2	29.6	0.85	0.91	26.0
32	R2	106	4.0	0.497	13.1	LOS A	4.2	29.6	0.85	0.91	39.7
32u	U	5	0.0	0.497	14.3	LOS A	4.2	29.6	0.85	0.91	46.4
Approach		351	2.2	0.497	11.1	LOS A	4.2	29.6	0.85	0.91	35.9
All Vehicles		1357	2.8	0.529	7.8	LOS A	4.6	33.2	0.70	0.72	37.9

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

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

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

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design EVT]**

Turnock Street - Pearl Street, Kingscliff
2023 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m	per veh	km/h	
SouthEast: Pearl Street (SE)											
21	L2	163	4.0	0.592	5.1	LOS A	5.5	39.3	0.68	41.0	
22	T1	305	2.0	0.592	4.8	LOS A	5.5	39.3	0.68	41.6	
23	R2	156	5.0	0.592	7.8	LOS A	5.5	39.3	0.68	25.9	
23u	U	11	0.0	0.592	8.9	LOS A	5.5	39.3	0.68	42.9	
Approach		635	3.2	0.592	5.7	LOS A	5.5	39.3	0.68	38.1	
NorthEast: Turnock Street (NE)											
24	L2	51	0.0	0.162	6.0	LOS A	1.0	6.7	0.57	35.6	
25	T1	78	0.0	0.162	5.8	LOS A	1.0	6.7	0.57	43.5	
26	R2	14	0.0	0.162	8.8	LOS A	1.0	6.7	0.57	43.1	
26u	U	1	0.0	0.162	10.2	LOS A	1.0	6.7	0.57	10.1	
Approach		143	0.0	0.162	6.2	LOS A	1.0	6.7	0.57	40.5	
NorthWest: Pearl Street (NW)											
27	L2	15	0.0	0.347	7.6	LOS A	2.5	17.6	0.73	26.0	
28	T1	146	4.0	0.347	7.8	LOS A	2.5	17.6	0.73	40.9	
29	R2	106	0.0	0.347	10.5	LOS A	2.5	17.6	0.73	44.5	
29u	U	7	0.0	0.347	12.0	LOS A	2.5	17.6	0.73	47.7	
Approach		275	2.1	0.347	8.9	LOS A	2.5	17.6	0.73	41.7	
SouthWest: Turnock Street (SW)											
30	L2	137	0.0	0.510	9.8	LOS A	4.4	30.9	0.85	43.2	
31	T1	151	0.0	0.510	9.7	LOS A	4.4	30.9	0.85	26.1	
32	R2	80	7.0	0.510	13.0	LOS A	4.4	30.9	0.85	39.9	
32u	U	1	0.0	0.510	14.1	LOS A	4.4	30.9	0.85	46.7	
Approach		368	1.5	0.510	10.5	LOS A	4.4	30.9	0.85	35.7	
All Vehicles		1421	2.2	0.592	7.6	LOS A	5.5	39.3	0.72	38.3	

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design PVT]**

Turnock Street - Pearl Street, Kingscliff
2023PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Pearl Street (SE)											
21	L2	168	4.0	0.602	5.2	LOS A	5.6	40.3	0.69	0.63	40.9
22	T1	305	2.0	0.602	4.9	LOS A	5.6	40.3	0.69	0.63	41.6
23	R2	156	5.0	0.602	7.9	LOS A	5.6	40.3	0.69	0.63	25.9
23u	U	11	0.0	0.602	9.0	LOS A	5.6	40.3	0.69	0.63	42.9
Approach		640	3.2	0.602	5.8	LOS A	5.6	40.3	0.69	0.63	38.1
NorthEast: Turnock Street (NE)											
24	L2	51	0.0	0.163	6.0	LOS A	1.0	6.7	0.58	0.64	35.6
25	T1	78	0.0	0.163	5.8	LOS A	1.0	6.7	0.58	0.64	43.4
26	R2	14	0.0	0.163	8.8	LOS A	1.0	6.7	0.58	0.64	43.1
26u	U	1	0.0	0.163	10.3	LOS A	1.0	6.7	0.58	0.64	10.1
Approach		143	0.0	0.163	6.2	LOS A	1.0	6.7	0.58	0.64	40.4
NorthWest: Pearl Street (NW)											
27	L2	15	0.0	0.355	7.7	LOS A	2.5	18.1	0.73	0.76	26.0
28	T1	146	4.0	0.355	7.8	LOS A	2.5	18.1	0.73	0.76	40.8
29	R2	113	0.0	0.355	10.6	LOS A	2.5	18.1	0.73	0.76	44.5
29u	U	7	0.0	0.355	12.0	LOS A	2.5	18.1	0.73	0.76	47.6
Approach		281	2.1	0.355	9.0	LOS A	2.5	18.1	0.73	0.76	41.7
SouthWest: Turnock Street (SW)											
30	L2	139	0.0	0.515	9.9	LOS A	4.5	31.6	0.86	0.91	43.2
31	T1	151	0.0	0.515	9.8	LOS A	4.5	31.6	0.86	0.91	26.1
32	R2	81	7.0	0.515	13.1	LOS A	4.5	31.6	0.86	0.91	39.8
32u	U	1	0.0	0.515	14.2	LOS A	4.5	31.6	0.86	0.91	46.6
Approach		372	1.5	0.515	10.6	LOS A	4.5	31.6	0.86	0.91	35.7
All Vehicles		1436	2.2	0.602	7.7	LOS A	5.6	40.3	0.73	0.73	38.4

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design MVT]**

Turnock Street - Pearl Street, Kingscliff
2033 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
SouthEast: Pearl Street (SE)											
21	L2	84	10.0	0.653	6.2	LOS A	7.0	50.5	0.76	0.69	40.5
22	T1	365	4.0	0.653	5.7	LOS A	7.0	50.5	0.76	0.69	41.1
23	R2	218	3.0	0.653	8.6	LOS A	7.0	50.5	0.76	0.69	25.7
23u	U	11	0.0	0.653	9.8	LOS A	7.0	50.5	0.76	0.69	42.4
Approach		678	4.4	0.653	6.8	LOS A	7.0	50.5	0.76	0.69	36.7
NorthEast: Turnock Street (NE)											
24	L2	76	4.0	0.224	7.1	LOS A	1.4	9.9	0.68	0.72	34.9
25	T1	80	0.0	0.224	6.8	LOS A	1.4	9.9	0.68	0.72	42.6
26	R2	15	0.0	0.224	9.8	LOS A	1.4	9.9	0.68	0.72	42.3
26u	U	3	0.0	0.224	11.2	LOS A	1.4	9.9	0.68	0.72	10.4
Approach		174	1.7	0.224	7.2	LOS A	1.4	9.9	0.68	0.72	38.7
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.493	10.4	LOS A	4.2	29.5	0.86	0.91	25.2
28	T1	203	2.0	0.493	10.5	LOS A	4.2	29.5	0.86	0.91	39.6
29	R2	117	0.0	0.493	13.3	LOS A	4.2	29.5	0.86	0.91	43.1
29u	U	5	0.0	0.493	14.7	LOS B	4.2	29.5	0.86	0.91	46.1
Approach		343	1.2	0.493	11.5	LOS A	4.2	29.5	0.86	0.91	40.2
SouthWest: Turnock Street (SW)											
30	L2	128	2.0	0.680	16.6	LOS B	7.8	55.6	0.99	1.17	39.9
31	T1	155	1.0	0.680	16.5	LOS B	7.8	55.6	0.99	1.17	24.0
32	R2	126	4.0	0.680	19.6	LOS B	7.8	55.6	0.99	1.17	36.8
32u	U	6	0.0	0.680	20.8	LOS B	7.8	55.6	0.99	1.17	42.9
Approach		416	2.2	0.680	17.6	LOS B	7.8	55.6	0.99	1.17	33.2
All Vehicles		1611	2.8	0.680	10.6	LOS A	7.8	55.6	0.83	0.86	36.6

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design EVT]**

Turnock Street - Pearl Street, Kingscliff
2033 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
Total veh/h	HV %						Vehicles veh	Distance m			
SouthEast: Pearl Street (SE)											
21	L2	193	4.0	0.733	8.0	LOS A	9.9	71.3	0.86	0.79	39.8
22	T1	362	2.0	0.733	7.6	LOS A	9.9	71.3	0.86	0.79	40.4
23	R2	185	5.0	0.733	10.6	LOS A	9.9	71.3	0.86	0.79	25.1
23u	U	13	0.0	0.733	11.7	LOS A	9.9	71.3	0.86	0.79	41.5
Approach		753	3.2	0.733	8.5	LOS A	9.9	71.3	0.86	0.79	37.0
NorthEast: Turnock Street (NE)											
24	L2	60	0.0	0.207	6.5	LOS A	1.3	8.9	0.64	0.69	35.3
25	T1	93	0.0	0.207	6.4	LOS A	1.3	8.9	0.64	0.69	43.1
26	R2	17	0.0	0.207	9.4	LOS A	1.3	8.9	0.64	0.69	42.7
26u	U	1	0.0	0.207	10.8	LOS A	1.3	8.9	0.64	0.69	10.0
Approach		171	0.0	0.207	6.7	LOS A	1.3	8.9	0.64	0.69	40.1
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.453	9.0	LOS A	3.5	25.2	0.83	0.85	25.6
28	T1	175	4.0	0.453	9.2	LOS A	3.5	25.2	0.83	0.85	40.2
29	R2	126	0.0	0.453	11.9	LOS A	3.5	25.2	0.83	0.85	43.8
29u	U	8	0.0	0.453	13.3	LOS A	3.5	25.2	0.83	0.85	46.8
Approach		327	2.1	0.453	10.3	LOS A	3.5	25.2	0.83	0.85	41.0
SouthWest: Turnock Street (SW)											
30	L2	163	0.0	0.695	16.3	LOS B	8.3	58.7	1.00	1.17	40.2
31	T1	178	0.0	0.695	16.2	LOS B	8.3	58.7	1.00	1.17	24.2
32	R2	95	7.0	0.695	19.6	LOS B	8.3	58.7	1.00	1.17	36.9
32u	U	1	0.0	0.695	20.5	LOS B	8.3	58.7	1.00	1.17	43.1
Approach		437	1.5	0.695	17.0	LOS B	8.3	58.7	1.00	1.17	33.1
All Vehicles		1687	2.2	0.733	10.9	LOS A	9.9	71.3	0.87	0.89	36.9

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

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

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

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design PVT]**

Turnock Street - Pearl Street, Kingscliff
2033PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Pearl Street (SE)											
21	L2	200	4.0	0.746	8.5	LOS A	10.5	75.7	0.88	0.82	39.6
22	T1	362	2.0	0.746	8.1	LOS A	10.5	75.7	0.88	0.82	40.2
23	R2	185	5.0	0.746	11.1	LOS A	10.5	75.7	0.88	0.82	24.9
23u	U	13	0.0	0.746	12.2	LOS A	10.5	75.7	0.88	0.82	41.2
Approach		760	3.2	0.746	9.0	LOS A	10.5	75.7	0.88	0.82	36.8
NorthEast: Turnock Street (NE)											
24	L2	60	0.0	0.209	6.6	LOS A	1.3	9.0	0.65	0.69	35.3
25	T1	93	0.0	0.209	6.4	LOS A	1.3	9.0	0.65	0.69	43.0
26	R2	17	0.0	0.209	9.4	LOS A	1.3	9.0	0.65	0.69	42.7
26u	U	1	0.0	0.209	10.9	LOS A	1.3	9.0	0.65	0.69	10.0
Approach		171	0.0	0.209	6.8	LOS A	1.3	9.0	0.65	0.69	40.1
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.462	9.2	LOS A	3.7	26.2	0.83	0.86	25.5
28	T1	175	4.0	0.462	9.3	LOS A	3.7	26.2	0.83	0.86	40.1
29	R2	133	0.0	0.462	12.1	LOS A	3.7	26.2	0.83	0.86	43.7
29u	U	8	0.0	0.462	13.5	LOS A	3.7	26.2	0.83	0.86	46.7
Approach		334	2.1	0.462	10.5	LOS A	3.7	26.2	0.83	0.86	40.9
SouthWest: Turnock Street (SW)											
30	L2	164	0.0	0.702	16.5	LOS B	8.5	60.0	1.00	1.17	40.0
31	T1	178	0.0	0.702	16.4	LOS B	8.5	60.0	1.00	1.17	24.1
32	R2	96	7.0	0.702	19.8	LOS B	8.5	60.0	1.00	1.17	36.8
32u	U	1	0.0	0.702	20.8	LOS B	8.5	60.0	1.00	1.17	43.0
Approach		439	1.5	0.702	17.2	LOS B	8.5	60.0	1.00	1.17	33.1
All Vehicles		1703	2.2	0.746	11.2	LOS A	10.5	75.7	0.88	0.90	36.8

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens MVT]**

Turnock Street - Pearl Street, Kingscliff
2033 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		Total veh/h	HV %				Vehicles veh	Distance m			
SouthEast: Pearl Street (SE)											
21	L2	85	10.0	0.654	6.3	LOS A	7.0	51.0	0.76	0.69	40.4
22	T1	365	4.0	0.654	5.8	LOS A	7.0	51.0	0.76	0.69	41.1
23	R2	218	3.0	0.654	8.7	LOS A	7.0	51.0	0.76	0.69	25.6
23u	U	11	0.0	0.654	9.8	LOS A	7.0	51.0	0.76	0.69	42.3
Approach		679	4.4	0.654	6.8	LOS A	7.0	51.0	0.76	0.69	36.7
NorthEast: Turnock Street (NE)											
24	L2	76	4.0	0.224	7.0	LOS A	1.4	9.9	0.68	0.72	34.9
25	T1	80	0.0	0.224	6.8	LOS A	1.4	9.9	0.68	0.72	42.7
26	R2	15	0.0	0.224	9.8	LOS A	1.4	9.9	0.68	0.72	42.3
26u	U	3	0.0	0.224	11.2	LOS A	1.4	9.9	0.68	0.72	10.4
Approach		174	1.7	0.224	7.2	LOS A	1.4	9.9	0.68	0.72	38.7
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.493	10.4	LOS A	4.2	29.5	0.86	0.91	25.2
28	T1	203	2.0	0.493	10.4	LOS A	4.2	29.5	0.86	0.91	39.6
29	R2	118	0.0	0.493	13.2	LOS A	4.2	29.5	0.86	0.91	43.2
29u	U	5	0.0	0.493	14.7	LOS B	4.2	29.5	0.86	0.91	46.1
Approach		344	1.2	0.493	11.4	LOS A	4.2	29.5	0.86	0.91	40.2
SouthWest: Turnock Street (SW)											
30	L2	126	2.0	0.673	16.4	LOS B	7.6	54.4	0.99	1.16	40.0
31	T1	155	1.0	0.673	16.2	LOS B	7.6	54.4	0.99	1.16	24.1
32	R2	124	4.0	0.673	19.4	LOS B	7.6	54.4	0.99	1.16	36.9
32u	U	6	0.0	0.673	20.5	LOS B	7.6	54.4	0.99	1.16	43.0
Approach		412	2.2	0.673	17.3	LOS B	7.6	54.4	0.99	1.16	33.3
All Vehicles		1608	2.8	0.673	10.5	LOS A	7.6	54.4	0.83	0.86	36.6

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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P3378.001M Turnock Street - Pearl Street.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens EVT]**

Turnock Street - Pearl Street, Kingscliff
2033 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Pearl Street (SE)											
21	L2	194	4.0	0.733	8.0	LOS A	9.9	71.4	0.86	0.79	39.8
22	T1	362	2.0	0.733	7.6	LOS A	9.9	71.4	0.86	0.79	40.4
23	R2	185	5.0	0.733	10.6	LOS A	9.9	71.4	0.86	0.79	25.0
23u	U	13	0.0	0.733	11.7	LOS A	9.9	71.4	0.86	0.79	41.5
Approach		754	3.2	0.733	8.5	LOS A	9.9	71.4	0.86	0.79	37.0
NorthEast: Turnock Street (NE)											
24	L2	60	0.0	0.205	6.4	LOS A	1.3	8.8	0.63	0.68	35.4
25	T1	93	0.0	0.205	6.3	LOS A	1.3	8.8	0.63	0.68	43.1
26	R2	17	0.0	0.205	9.3	LOS A	1.3	8.8	0.63	0.68	42.8
26u	U	1	0.0	0.205	10.7	LOS A	1.3	8.8	0.63	0.68	10.0
Approach		171	0.0	0.205	6.7	LOS A	1.3	8.8	0.63	0.68	40.2
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.446	8.7	LOS A	3.4	24.4	0.81	0.83	25.6
28	T1	175	4.0	0.446	8.9	LOS A	3.4	24.4	0.81	0.83	40.3
29	R2	126	0.0	0.446	11.6	LOS A	3.4	24.4	0.81	0.83	43.9
29u	U	8	0.0	0.446	13.0	LOS A	3.4	24.4	0.81	0.83	47.0
Approach		327	2.1	0.446	10.0	LOS A	3.4	24.4	0.81	0.83	41.1
SouthWest: Turnock Street (SW)											
30	L2	152	0.0	0.658	14.9	LOS B	7.3	51.8	0.98	1.12	40.8
31	T1	178	0.0	0.658	14.8	LOS B	7.3	51.8	0.98	1.12	24.6
32	R2	83	7.0	0.658	18.2	LOS B	7.3	51.8	0.98	1.12	37.5
32u	U	1	0.0	0.658	19.2	LOS B	7.3	51.8	0.98	1.12	43.8
Approach		414	1.4	0.658	15.6	LOS B	7.3	51.8	0.98	1.12	33.3
All Vehicles		1665	2.2	0.733	10.4	LOS A	9.9	71.4	0.86	0.87	37.0

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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P3378.001M Turnock Street - Pearl Street.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens PVT]**

Turnock Street - Pearl Street, Kingscliff
2033PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Pearl Street (SE)											
21	L2	201	4.0	0.748	8.6	LOS A	10.6	76.3	0.88	0.82	39.6
22	T1	362	2.0	0.748	8.2	LOS A	10.6	76.3	0.88	0.82	40.1
23	R2	185	5.0	0.748	11.2	LOS A	10.6	76.3	0.88	0.82	24.8
23u	U	13	0.0	0.748	12.2	LOS A	10.6	76.3	0.88	0.82	41.1
Approach		761	3.2	0.748	9.1	LOS A	10.6	76.3	0.88	0.82	36.8
NorthEast: Turnock Street (NE)											
24	L2	60	0.0	0.208	6.5	LOS A	1.3	9.0	0.64	0.69	35.3
25	T1	93	0.0	0.208	6.4	LOS A	1.3	9.0	0.64	0.69	43.1
26	R2	17	0.0	0.208	9.4	LOS A	1.3	9.0	0.64	0.69	42.7
26u	U	1	0.0	0.208	10.8	LOS A	1.3	9.0	0.64	0.69	10.0
Approach		171	0.0	0.208	6.8	LOS A	1.3	9.0	0.64	0.69	40.1
NorthWest: Pearl Street (NW)											
27	L2	18	0.0	0.459	9.0	LOS A	3.6	25.8	0.82	0.85	25.5
28	T1	175	4.0	0.459	9.2	LOS A	3.6	25.8	0.82	0.85	40.1
29	R2	134	0.0	0.459	11.9	LOS A	3.6	25.8	0.82	0.85	43.7
29u	U	8	0.0	0.459	13.3	LOS A	3.6	25.8	0.82	0.85	46.8
Approach		335	2.1	0.459	10.4	LOS A	3.6	25.8	0.82	0.85	41.0
SouthWest: Turnock Street (SW)											
30	L2	156	0.0	0.677	15.6	LOS B	7.8	55.1	0.99	1.14	40.5
31	T1	178	0.0	0.677	15.5	LOS B	7.8	55.1	0.99	1.14	24.4
32	R2	88	7.0	0.677	18.9	LOS B	7.8	55.1	0.99	1.14	37.3
32u	U	1	0.0	0.677	19.8	LOS B	7.8	55.1	0.99	1.14	43.5
Approach		423	1.5	0.677	16.2	LOS B	7.8	55.1	0.99	1.14	33.2
All Vehicles		1689	2.2	0.748	10.9	LOS A	10.6	76.3	0.87	0.89	36.9

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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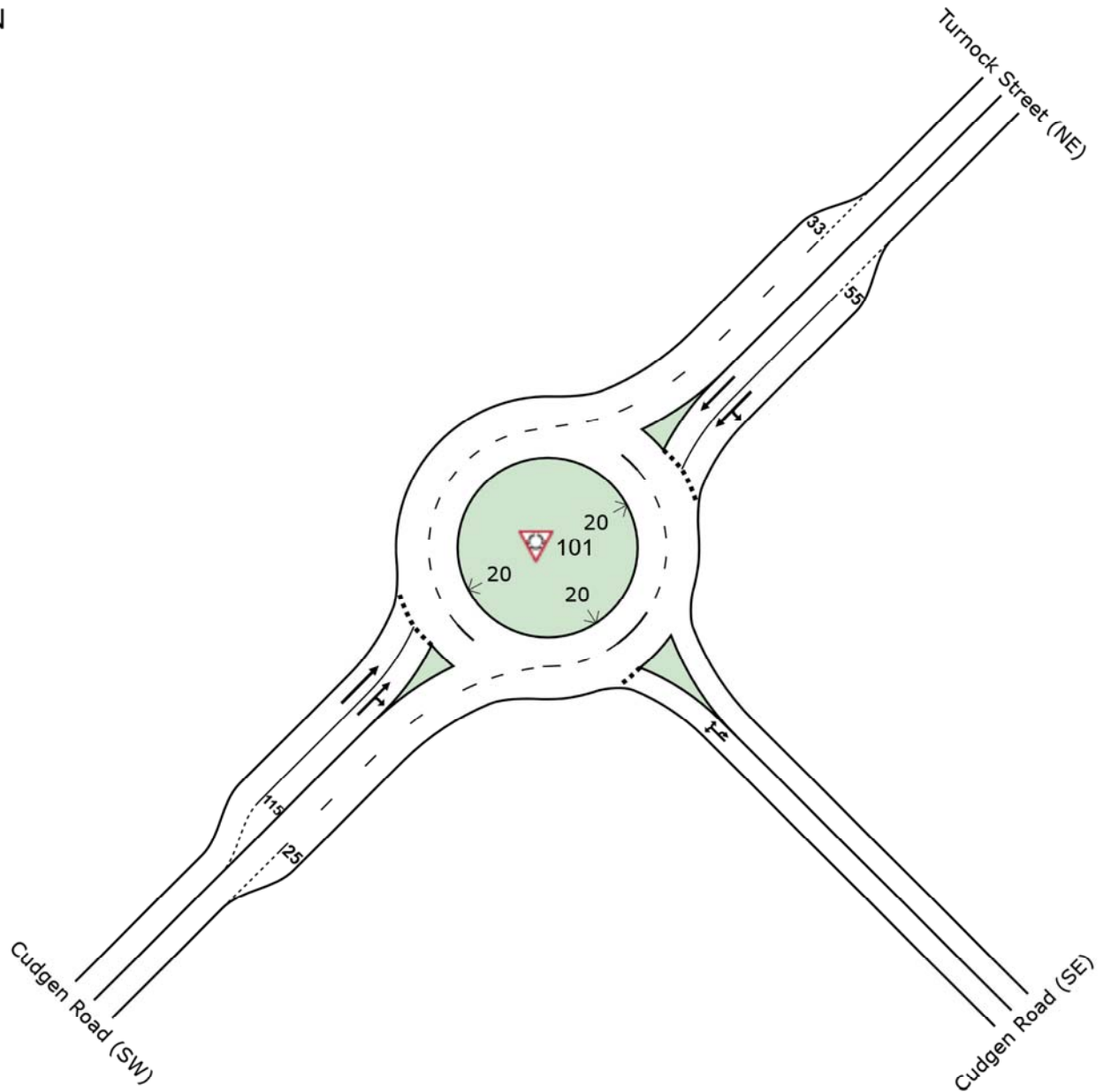
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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Turnock Street - Pearl Street
P3378.001M Turnock Street - Pearl Street.sip7

SITE LAYOUT

 **Site: 101 [2023 Background AM]**

Cudgen Road - Turnock Street
2023 AM Peak
Background Traffic
Roundabout



MOVEMENT SUMMARY

 **Site: 101 [2023 Background AM]**

Cudgen Road - Turnock Street
2023 AM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	525	2.0	0.590	4.6	LOS A	5.5	39.4	0.64	0.59	48.7
23	R2	97	2.0	0.590	9.1	LOS A	5.5	39.4	0.64	0.59	50.1
23u	U	9	0.0	0.590	10.9	LOS A	5.5	39.4	0.64	0.59	51.3
Approach		632	2.0	0.590	5.4	LOS A	5.5	39.4	0.64	0.59	49.0
NorthEast: Turnock Street (NE)											
24	L2	102	2.0	0.138	7.5	LOS A	0.8	5.4	0.63	0.70	48.8
25	T1	165	6.0	0.193	7.1	LOS A	1.1	8.3	0.64	0.67	53.1
Approach		267	4.5	0.193	7.2	LOS A	1.1	8.3	0.63	0.68	51.3
SouthWest: Cudgen Road (SW)											
31	T1	271	3.0	0.490	5.0	LOS A	4.2	30.4	0.40	0.54	53.0
32	R2	502	4.0	0.490	9.4	LOS A	4.2	30.4	0.42	0.59	48.7
Approach		773	3.6	0.490	7.9	LOS A	4.2	30.4	0.42	0.57	50.1
All Vehicles		1672	3.1	0.590	6.8	LOS A	5.5	39.4	0.53	0.60	49.9

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

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

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

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Background PM]**

Cudgen Road - Turnock Street
2023 PM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m		per veh	km/h
SouthEast: Cudgen Road (SE)											
21	L2	422	4.0	0.522	5.0	LOS A	4.2	30.6	0.64	0.63	48.6
23	R2	85	3.0	0.522	9.5	LOS A	4.2	30.6	0.64	0.63	50.0
23u	U	2	0.0	0.522	11.2	LOS A	4.2	30.6	0.64	0.63	51.2
Approach		509	3.8	0.522	5.8	LOS A	4.2	30.6	0.64	0.63	48.9
NorthEast: Turnock Street (NE)											
24	L2	63	6.0	0.107	8.0	LOS A	0.5	3.8	0.58	0.69	48.4
25	T1	218	1.0	0.223	6.3	LOS A	1.3	9.2	0.57	0.62	53.6
Approach		281	2.1	0.223	6.7	LOS A	1.3	9.2	0.58	0.63	52.2
SouthWest: Cudgen Road (SW)											
31	T1	323	2.0	0.447	4.7	LOS A	3.7	26.6	0.35	0.52	53.3
32	R2	399	5.0	0.447	9.3	LOS A	3.7	26.6	0.37	0.56	49.2
Approach		722	3.7	0.447	7.3	LOS A	3.7	26.6	0.36	0.55	50.9
All Vehicles		1513	3.4	0.522	6.6	LOS A	4.2	30.6	0.49	0.59	50.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
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.

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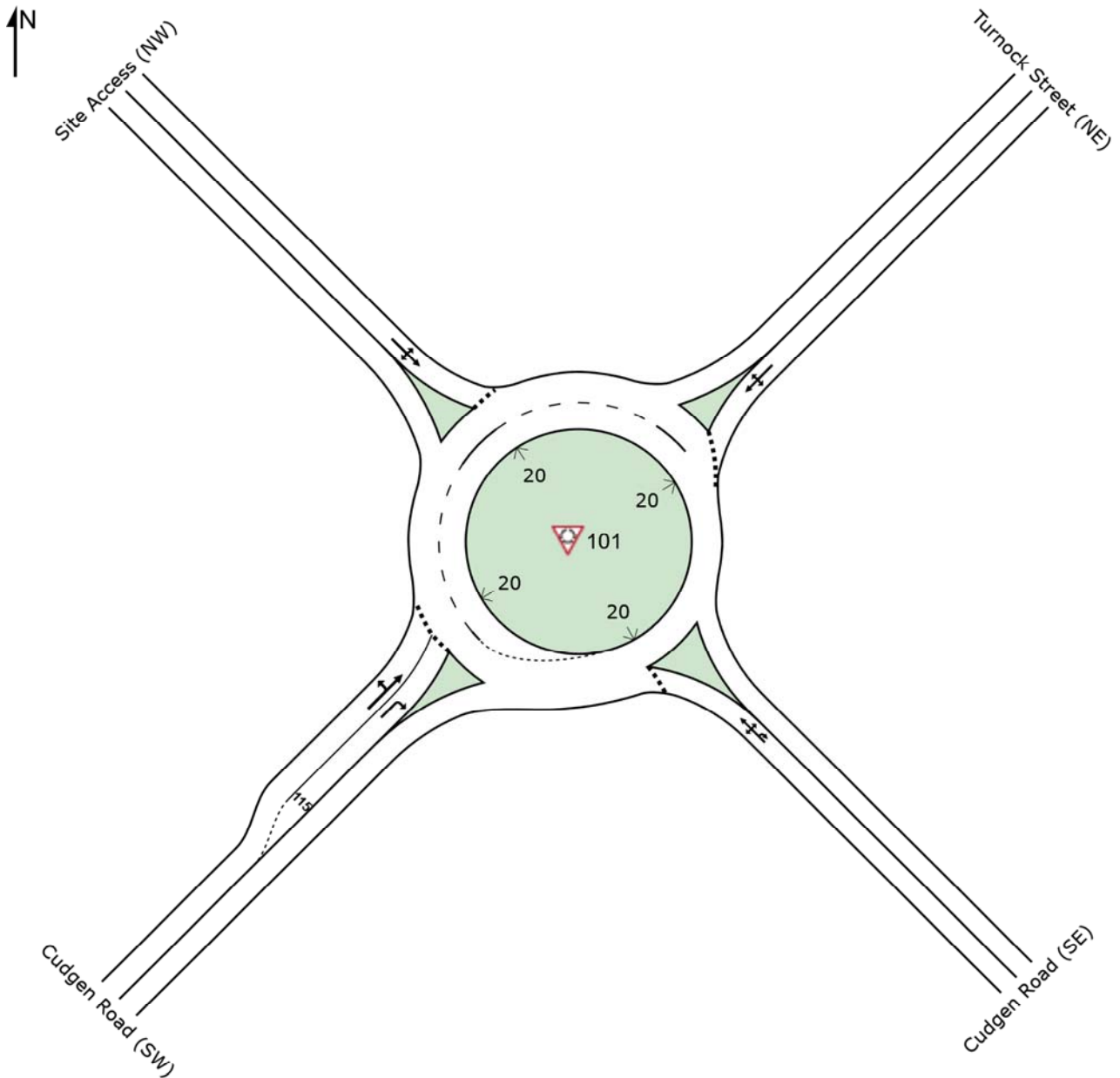
Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - Turnock Street\P3378.001M Cudgen Road - Turnock Street.sip7

SITE LAYOUT



Site: 101 [2023 Design MVT]

Cudgen Road - Turnock Street
2023 AM Peak
Design Traffic
Roundabout



MOVEMENT SUMMARY

 **Site: 101 [2023 Design MVT]**

Cudgen Road - Turnock Street
2023 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	526	2.0	0.578	5.2	LOS A	5.7	40.8	0.73	0.64	48.5
22	T1	2	2.0	0.578	5.1	LOS A	5.7	40.8	0.73	0.64	43.7
23	R2	97	2.0	0.578	9.7	LOS A	5.7	40.8	0.73	0.64	49.9
23u	U	9	0.0	0.578	11.4	LOS A	5.7	40.8	0.73	0.64	51.0
Approach		635	2.0	0.578	6.0	LOS A	5.7	40.8	0.73	0.64	48.7
NorthEast: Turnock Street (NE)											
24	L2	102	2.0	0.412	8.9	LOS A	2.7	19.4	0.76	0.83	47.8
25	T1	171	6.0	0.412	9.3	LOS A	2.7	19.4	0.76	0.83	51.8
26	R2	8	2.0	0.412	13.7	LOS A	2.7	19.4	0.76	0.83	46.8
Approach		281	4.4	0.412	9.2	LOS A	2.7	19.4	0.76	0.83	50.1
NorthWest: Site Access (NW)											
27	L2	3	2.0	0.072	5.4	LOS A	0.3	2.2	0.64	0.77	42.9
28	T1	1	2.0	0.072	5.0	LOS A	0.3	2.2	0.64	0.77	41.1
29	R2	41	2.0	0.072	9.3	LOS A	0.3	2.2	0.64	0.77	43.2
Approach		45	2.0	0.072	8.9	LOS A	0.3	2.2	0.64	0.77	43.1
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.264	4.9	LOS A	1.7	12.0	0.38	0.47	46.3
31	T1	273	3.0	0.264	4.9	LOS A	1.7	12.0	0.38	0.47	54.5
32	R2	503	4.0	0.400	9.5	LOS A	3.0	22.0	0.41	0.62	48.0
Approach		777	3.6	0.400	7.9	LOS A	3.0	22.0	0.40	0.56	50.1
All Vehicles		1738	3.1	0.578	7.4	LOS A	5.7	40.8	0.58	0.64	49.4

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design EVT]**

Cudgen Road - Turnock Street
2023 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	423	4.0	0.611	9.8	LOS A	6.5	47.1	0.88	0.92	45.7
22	T1	2	2.0	0.611	9.6	LOS A	6.5	47.1	0.88	0.92	40.8
23	R2	85	3.0	0.611	14.2	LOS A	6.5	47.1	0.88	0.92	47.1
23u	U	2	0.0	0.611	15.9	LOS B	6.5	47.1	0.88	0.92	48.2
Approach		513	3.8	0.611	10.6	LOS A	6.5	47.1	0.88	0.92	45.9
NorthEast: Turnock Street (NE)											
24	L2	63	6.0	0.440	10.4	LOS A	3.0	21.4	0.78	0.88	47.0
25	T1	221	1.0	0.440	10.3	LOS A	3.0	21.4	0.78	0.88	51.0
26	R2	8	2.0	0.440	15.0	LOS B	3.0	21.4	0.78	0.88	45.8
Approach		293	2.1	0.440	10.5	LOS A	3.0	21.4	0.78	0.88	49.9
NorthWest: Site Access (NW)											
27	L2	19	2.0	0.362	6.2	LOS A	1.8	12.9	0.70	0.88	42.4
28	T1	5	2.0	0.362	5.8	LOS A	1.8	12.9	0.70	0.88	40.7
29	R2	216	2.0	0.362	10.1	LOS A	1.8	12.9	0.70	0.88	42.6
Approach		240	2.0	0.362	9.7	LOS A	1.8	12.9	0.70	0.88	42.6
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.281	4.6	LOS A	1.9	13.7	0.35	0.45	46.4
31	T1	336	2.0	0.281	4.6	LOS A	1.9	13.7	0.35	0.45	54.7
32	R2	400	5.0	0.316	9.3	LOS A	2.3	16.6	0.35	0.61	48.2
Approach		737	3.6	0.316	7.2	LOS A	2.3	16.6	0.35	0.53	50.9
All Vehicles		1782	3.2	0.611	9.0	LOS A	6.5	47.1	0.62	0.75	48.2

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design PVT]**

Cudgen Road - Turnock Street
2023 Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	423	4.0	0.594	8.8	LOS A	6.1	44.3	0.86	0.88	46.3
22	T1	4	2.0	0.594	8.6	LOS A	6.1	44.3	0.86	0.88	41.5
23	R2	85	3.0	0.594	13.3	LOS A	6.1	44.3	0.86	0.88	47.7
23u	U	2	0.0	0.594	14.9	LOS B	6.1	44.3	0.86	0.88	48.8
Approach		515	3.8	0.594	9.6	LOS A	6.1	44.3	0.86	0.88	46.5
NorthEast: Turnock Street (NE)											
24	L2	63	6.0	0.437	9.7	LOS A	2.9	20.9	0.76	0.85	47.4
25	T1	225	1.0	0.437	9.7	LOS A	2.9	20.9	0.76	0.85	51.4
26	R2	15	2.0	0.437	14.3	LOS A	2.9	20.9	0.76	0.85	46.3
Approach		303	2.1	0.437	9.9	LOS A	2.9	20.9	0.76	0.85	50.3
NorthWest: Site Access (NW)											
27	L2	15	2.0	0.288	5.7	LOS A	1.3	9.5	0.68	0.85	42.8
28	T1	4	2.0	0.288	5.3	LOS A	1.3	9.5	0.68	0.85	41.0
29	R2	172	2.0	0.288	9.6	LOS A	1.3	9.5	0.68	0.85	43.0
Approach		191	2.0	0.288	9.2	LOS A	1.3	9.5	0.68	0.85	42.9
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.283	4.7	LOS A	1.9	13.5	0.36	0.45	46.4
31	T1	334	2.0	0.283	4.7	LOS A	1.9	13.5	0.36	0.45	54.6
32	R2	399	5.0	0.319	9.3	LOS A	2.3	16.4	0.37	0.61	48.2
Approach		734	3.6	0.319	7.2	LOS A	2.3	16.4	0.36	0.54	50.8
All Vehicles		1742	3.2	0.594	8.6	LOS A	6.1	44.3	0.61	0.73	48.6

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design MVT]**

Cudgen Road - Turnock Street
2033 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	625	2.0	0.720	8.0	LOS A	10.2	72.3	0.91	0.81	46.9
22	T1	2	2.0	0.720	7.9	LOS A	10.2	72.3	0.91	0.81	42.1
23	R2	115	2.0	0.720	12.5	LOS A	10.2	72.3	0.91	0.81	48.3
23u	U	11	0.0	0.720	14.2	LOS A	10.2	72.3	0.91	0.81	49.4
Approach		753	2.0	0.720	8.8	LOS A	10.2	72.3	0.91	0.81	47.1
NorthEast: Turnock Street (NE)											
24	L2	121	2.0	0.550	12.7	LOS A	4.6	33.2	0.87	1.01	45.5
25	T1	202	6.0	0.550	13.1	LOS A	4.6	33.2	0.87	1.01	48.9
26	R2	9	2.0	0.550	17.5	LOS B	4.6	33.2	0.87	1.01	43.7
Approach		333	4.4	0.550	13.1	LOS A	4.6	33.2	0.87	1.01	47.4
NorthWest: Site Access (NW)											
27	L2	4	2.0	0.094	6.1	LOS A	0.4	2.9	0.69	0.83	42.5
28	T1	1	2.0	0.094	5.8	LOS A	0.4	2.9	0.69	0.83	40.7
29	R2	47	2.0	0.094	10.0	LOS A	0.4	2.9	0.69	0.83	42.7
Approach		53	2.0	0.094	9.6	LOS A	0.4	2.9	0.69	0.83	42.6
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.323	5.1	LOS A	2.2	15.9	0.44	0.50	45.9
31	T1	324	3.0	0.323	5.1	LOS A	2.2	15.9	0.44	0.50	54.2
32	R2	597	4.0	0.486	9.7	LOS A	4.2	30.4	0.50	0.63	47.8
Approach		922	3.6	0.486	8.1	LOS A	4.2	30.4	0.48	0.58	49.8
All Vehicles		2060	3.1	0.720	9.2	LOS A	10.2	72.3	0.70	0.74	48.3

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design EVT]**

Cudgen Road - Turnock Street
2033 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	502	4.0	0.788	17.8	LOS B	12.7	92.0	1.00	1.24	41.3
22	T1	2	2.0	0.788	17.6	LOS B	12.7	92.0	1.00	1.24	36.2
23	R2	101	3.0	0.788	22.3	LOS B	12.7	92.0	1.00	1.24	42.6
23u	U	3	0.0	0.788	23.9	LOS B	12.7	92.0	1.00	1.24	43.6
Approach		608	3.8	0.788	18.6	LOS B	12.7	92.0	1.00	1.24	41.5
NorthEast: Turnock Street (NE)											
24	L2	75	6.0	0.584	15.3	LOS B	5.1	36.4	0.89	1.06	44.2
25	T1	262	1.0	0.584	15.1	LOS B	5.1	36.4	0.89	1.06	47.5
26	R2	9	2.0	0.584	19.8	LOS B	5.1	36.4	0.89	1.06	42.1
Approach		346	2.1	0.584	15.3	LOS B	5.1	36.4	0.89	1.06	46.6
NorthWest: Site Access (NW)											
27	L2	22	2.0	0.462	7.9	LOS A	2.6	18.4	0.77	0.97	41.2
28	T1	5	2.0	0.462	7.6	LOS A	2.6	18.4	0.77	0.97	39.6
29	R2	249	2.0	0.462	11.8	LOS A	2.6	18.4	0.77	0.97	41.4
Approach		277	2.0	0.462	11.4	LOS A	2.6	18.4	0.77	0.97	41.3
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.342	4.8	LOS A	2.5	18.0	0.41	0.47	46.1
31	T1	399	2.0	0.342	4.8	LOS A	2.5	18.0	0.41	0.47	54.3
32	R2	475	5.0	0.383	9.5	LOS A	3.0	22.0	0.42	0.61	48.0
Approach		875	3.6	0.383	7.3	LOS A	3.0	22.0	0.42	0.55	50.6
All Vehicles		2106	3.2	0.788	12.4	LOS A	12.7	92.0	0.71	0.89	45.9

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

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

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

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design PVT]**

Cudgen Road - Turnock Street
2033 Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	502	4.0	0.763	15.4	LOS B	11.6	84.0	1.00	1.17	42.5
22	T1	4	2.0	0.763	15.2	LOS B	11.6	84.0	1.00	1.17	37.5
23	R2	101	3.0	0.763	19.8	LOS B	11.6	84.0	1.00	1.17	43.9
23u	U	3	0.0	0.763	21.5	LOS B	11.6	84.0	1.00	1.17	44.9
Approach		611	3.8	0.763	16.2	LOS B	11.6	84.0	1.00	1.17	42.7
NorthEast: Turnock Street (NE)											
24	L2	75	6.0	0.579	14.0	LOS A	5.0	35.8	0.87	1.04	44.9
25	T1	267	1.0	0.579	13.9	LOS A	5.0	35.8	0.87	1.04	48.3
26	R2	18	2.0	0.579	18.6	LOS B	5.0	35.8	0.87	1.04	43.0
Approach		360	2.1	0.579	14.2	LOS A	5.0	35.8	0.87	1.04	47.3
NorthWest: Site Access (NW)											
27	L2	18	2.0	0.366	6.9	LOS A	1.8	13.1	0.74	0.91	42.0
28	T1	4	2.0	0.366	6.5	LOS A	1.8	13.1	0.74	0.91	40.2
29	R2	197	2.0	0.366	10.8	LOS A	1.8	13.1	0.74	0.91	42.1
Approach		219	2.0	0.366	10.4	LOS A	1.8	13.1	0.74	0.91	42.1
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.344	4.9	LOS A	2.5	17.8	0.42	0.48	46.0
31	T1	396	2.0	0.344	4.9	LOS A	2.5	17.8	0.42	0.48	54.3
32	R2	474	5.0	0.388	9.5	LOS A	3.0	21.9	0.44	0.62	48.0
Approach		871	3.6	0.388	7.4	LOS A	3.0	21.9	0.43	0.56	50.6
All Vehicles		2060	3.2	0.763	11.5	LOS A	11.6	84.0	0.71	0.86	46.6

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

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

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

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens MVT]**

Cudgen Road - Turnock Street
2033 AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	625	2.0	0.726	8.3	LOS A	10.4	74.4	0.92	0.83	46.7
22	T1	3	2.0	0.726	8.2	LOS A	10.4	74.4	0.92	0.83	41.8
23	R2	115	2.0	0.726	12.8	LOS A	10.4	74.4	0.92	0.83	48.1
23u	U	11	0.0	0.726	14.6	LOS B	10.4	74.4	0.92	0.83	49.2
Approach		754	2.0	0.726	9.1	LOS A	10.4	74.4	0.92	0.83	46.9
NorthEast: Turnock Street (NE)											
24	L2	121	2.0	0.556	12.9	LOS A	4.7	33.9	0.87	1.02	45.4
25	T1	203	6.0	0.556	13.3	LOS A	4.7	33.9	0.87	1.02	48.8
26	R2	11	2.0	0.556	17.7	LOS B	4.7	33.9	0.87	1.02	43.6
Approach		335	4.4	0.556	13.3	LOS A	4.7	33.9	0.87	1.02	47.3
NorthWest: Site Access (NW)											
27	L2	4	2.0	0.101	6.2	LOS A	0.4	3.2	0.69	0.83	42.4
28	T1	1	2.0	0.101	5.8	LOS A	0.4	3.2	0.69	0.83	40.6
29	R2	52	2.0	0.101	10.1	LOS A	0.4	3.2	0.69	0.83	42.6
Approach		57	2.0	0.101	9.7	LOS A	0.4	3.2	0.69	0.83	42.6
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.324	5.1	LOS A	2.2	16.0	0.45	0.50	45.9
31	T1	324	3.0	0.324	5.2	LOS A	2.2	16.0	0.45	0.50	54.1
32	R2	597	4.0	0.488	9.7	LOS A	4.2	30.5	0.51	0.63	47.8
Approach		922	3.6	0.488	8.1	LOS A	4.2	30.5	0.49	0.58	49.8
All Vehicles		2067	3.1	0.726	9.4	LOS A	10.4	74.4	0.71	0.75	48.1

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens EVT]**

Cudgen Road - Turnock Street
2033 PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	503	4.0	0.797	18.8	LOS B	13.2	95.5	1.00	1.27	40.8
22	T1	2	2.0	0.797	18.5	LOS B	13.2	95.5	1.00	1.27	35.8
23	R2	101	3.0	0.797	23.2	LOS B	13.2	95.5	1.00	1.27	42.1
23u	U	3	0.0	0.797	24.8	LOS B	13.2	95.5	1.00	1.27	43.1
Approach		609	3.8	0.797	19.5	LOS B	13.2	95.5	1.00	1.27	41.0
NorthEast: Turnock Street (NE)											
24	L2	75	6.0	0.590	15.7	LOS B	5.2	37.2	0.89	1.06	44.0
25	T1	262	1.0	0.590	15.5	LOS B	5.2	37.2	0.89	1.06	47.3
26	R2	9	2.0	0.590	20.2	LOS B	5.2	37.2	0.89	1.06	41.9
Approach		346	2.1	0.590	15.7	LOS B	5.2	37.2	0.89	1.06	46.4
NorthWest: Site Access (NW)											
27	L2	23	2.0	0.481	8.2	LOS A	2.8	19.6	0.77	0.98	41.1
28	T1	5	2.0	0.481	7.8	LOS A	2.8	19.6	0.77	0.98	39.5
29	R2	260	2.0	0.481	12.1	LOS A	2.8	19.6	0.77	0.98	41.2
Approach		288	2.0	0.481	11.7	LOS A	2.8	19.6	0.77	0.98	41.2
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.342	4.8	LOS A	2.5	18.0	0.41	0.47	46.1
31	T1	399	2.0	0.342	4.8	LOS A	2.5	18.0	0.41	0.47	54.3
32	R2	475	5.0	0.383	9.5	LOS A	3.0	22.0	0.42	0.61	48.0
Approach		875	3.6	0.383	7.3	LOS A	3.0	22.0	0.42	0.55	50.6
All Vehicles		2119	3.2	0.797	12.8	LOS A	13.2	95.5	0.71	0.90	45.7

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

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

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

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens PVT]**

Cudgen Road - Turnock Street
2033 Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Cudgen Road (SE)											
21	L2	502	4.0	0.776	16.5	LOS B	12.2	88.1	1.00	1.20	41.9
22	T1	4	2.0	0.776	16.3	LOS B	12.2	88.1	1.00	1.20	36.9
23	R2	101	3.0	0.776	20.9	LOS B	12.2	88.1	1.00	1.20	43.3
23u	U	3	0.0	0.776	22.6	LOS B	12.2	88.1	1.00	1.20	44.3
Approach		611	3.8	0.776	17.3	LOS B	12.2	88.1	1.00	1.20	42.1
NorthEast: Turnock Street (NE)											
24	L2	75	6.0	0.589	14.5	LOS B	5.2	37.2	0.88	1.05	44.6
25	T1	268	1.0	0.589	14.4	LOS A	5.2	37.2	0.88	1.05	47.9
26	R2	19	2.0	0.589	19.1	LOS B	5.2	37.2	0.88	1.05	42.6
Approach		362	2.1	0.589	14.7	LOS B	5.2	37.2	0.88	1.05	46.9
NorthWest: Site Access (NW)											
27	L2	19	2.0	0.391	7.1	LOS A	2.0	14.4	0.74	0.92	41.8
28	T1	4	2.0	0.391	6.8	LOS A	2.0	14.4	0.74	0.92	40.1
29	R2	211	2.0	0.391	11.0	LOS A	2.0	14.4	0.74	0.92	41.9
Approach		234	2.0	0.391	10.6	LOS A	2.0	14.4	0.74	0.92	41.9
SouthWest: Cudgen Road (SW)											
30	L2	1	2.0	0.345	4.9	LOS A	2.5	17.9	0.43	0.48	46.0
31	T1	397	2.0	0.345	4.9	LOS A	2.5	17.9	0.43	0.48	54.3
32	R2	474	5.0	0.388	9.5	LOS A	3.0	21.9	0.44	0.62	47.9
Approach		872	3.6	0.388	7.4	LOS A	3.0	21.9	0.43	0.56	50.6
All Vehicles		2078	3.2	0.776	11.9	LOS A	12.2	88.1	0.71	0.87	46.3

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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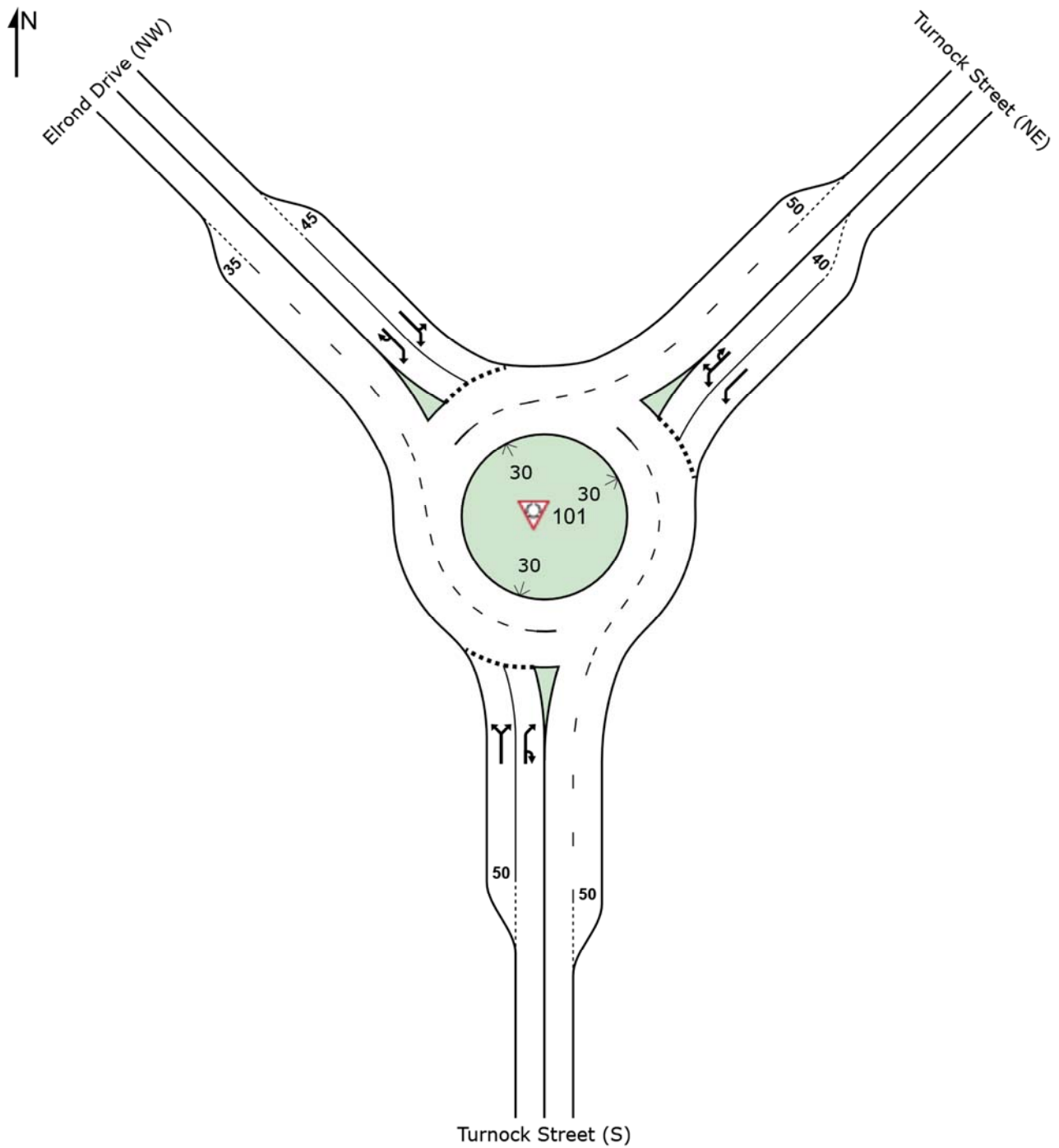
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SITE LAYOUT

 **Site: 101 [2023 Background AM]**

Turnock Street - Elrond Drive, Kingscliff
2023AM Peak
Background Traffic
Roundabout



MOVEMENT SUMMARY

 **Site: 101 [2023 Background AM]**

Turnock Street - Elrond Drive, Kingscliff
2023AM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	81	6.0	0.092	3.4	LOS A	0.4	2.8	0.16	0.42	55.8
3a	R1	293	2.0	0.180	8.2	LOS A	0.8	6.0	0.15	0.57	53.8
3u	U	4	0.0	0.180	11.7	LOS A	0.8	6.0	0.15	0.58	55.7
Approach		378	2.8	0.180	7.2	LOS A	0.8	6.0	0.15	0.54	54.2
NorthEast: Turnock Street (NE)											
24a	L1	181	2.0	0.130	3.5	LOS A	0.6	4.2	0.23	0.44	56.0
26	R2	49	0.0	0.130	9.5	LOS A	0.6	4.2	0.22	0.46	56.2
26u	U	1	0.0	0.130	11.8	LOS A	0.6	4.2	0.22	0.46	58.3
Approach		232	1.6	0.130	4.8	LOS A	0.6	4.2	0.23	0.45	56.1
NorthWest: Elrond Drive (NW)											
27	L2	79	1.0	0.070	4.6	LOS A	0.3	2.0	0.36	0.51	54.2
29a	R1	94	5.0	0.077	8.9	LOS A	0.3	2.3	0.35	0.62	51.7
29u	U	1	0.0	0.077	12.4	LOS A	0.3	2.3	0.35	0.62	53.2
Approach		174	3.2	0.077	7.0	LOS A	0.3	2.3	0.35	0.57	52.8
All Vehicles		783	2.5	0.180	6.4	LOS A	0.8	6.0	0.22	0.52	54.4

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Background PM]**

Turnock Street - Elrond Drive, Kingscliff
2023PM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	129	1.0	0.115	3.5	LOS A	0.5	3.4	0.22	0.38	56.5
3a	R1	295	2.0	0.203	8.3	LOS A	0.9	6.7	0.21	0.58	53.4
3u	U	1	0.0	0.203	11.8	LOS A	0.9	6.7	0.21	0.58	55.5
Approach		425	1.7	0.203	6.8	LOS A	0.9	6.7	0.21	0.52	54.2
NorthEast: Turnock Street (NE)											
24a	L1	218	2.0	0.163	3.3	LOS A	0.8	5.6	0.17	0.44	56.0
26	R2	88	3.0	0.163	9.4	LOS A	0.8	5.6	0.17	0.48	55.4
26u	U	1	0.0	0.163	11.7	LOS A	0.8	5.6	0.17	0.48	58.1
Approach		307	2.3	0.163	5.1	LOS A	0.8	5.6	0.17	0.45	55.8
NorthWest: Elrond Drive (NW)											
27	L2	49	2.0	0.045	4.7	LOS A	0.2	1.3	0.37	0.50	54.1
29a	R1	56	2.0	0.046	8.9	LOS A	0.2	1.4	0.36	0.61	51.7
29u	U	1	0.0	0.046	12.4	LOS A	0.2	1.4	0.36	0.61	53.2
Approach		106	2.0	0.046	7.0	LOS A	0.2	1.4	0.37	0.56	52.8
All Vehicles		839	1.9	0.203	6.2	LOS A	0.9	6.7	0.22	0.50	54.6

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Background AM]**

Turnock Street - Elrond Drive, Kingscliff
2033AM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	97	6.0	0.111	3.4	LOS A	0.5	3.5	0.18	0.42	55.7
3a	R1	347	2.0	0.216	8.2	LOS A	1.1	7.5	0.17	0.57	53.7
3u	U	5	0.0	0.216	11.7	LOS A	1.1	7.5	0.17	0.58	55.6
Approach		449	2.8	0.216	7.2	LOS A	1.1	7.5	0.18	0.54	54.1
NorthEast: Turnock Street (NE)											
24a	L1	215	2.0	0.157	3.6	LOS A	0.7	5.3	0.26	0.45	55.9
26	R2	59	0.0	0.157	9.5	LOS A	0.7	5.3	0.25	0.47	56.1
26u	U	1	0.0	0.157	11.9	LOS A	0.7	5.3	0.25	0.47	58.1
Approach		275	1.6	0.157	4.9	LOS A	0.7	5.3	0.26	0.46	55.9
NorthWest: Elrond Drive (NW)											
27	L2	94	1.0	0.087	4.8	LOS A	0.4	2.5	0.39	0.54	54.0
29a	R1	112	5.0	0.095	9.1	LOS A	0.4	2.9	0.39	0.64	51.5
29u	U	1	0.0	0.095	12.5	LOS A	0.4	2.9	0.39	0.64	53.1
Approach		206	3.2	0.095	7.2	LOS A	0.4	2.9	0.39	0.60	52.6
All Vehicles		931	2.5	0.216	6.5	LOS A	1.1	7.5	0.25	0.53	54.3

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Background PM]**

Turnock Street - Elrond Drive, Kingscliff
2033PM Peak
Background Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	154	1.0	0.139	3.6	LOS A	0.6	4.2	0.25	0.39	56.3
3a	R1	349	2.0	0.243	8.4	LOS A	1.2	8.5	0.24	0.59	53.3
3u	U	1	0.0	0.243	11.9	LOS A	1.2	8.5	0.24	0.59	55.3
Approach		504	1.7	0.243	6.9	LOS A	1.2	8.5	0.24	0.53	54.1
NorthEast: Turnock Street (NE)											
24a	L1	259	2.0	0.196	3.4	LOS A	1.0	7.0	0.20	0.45	55.9
26	R2	105	3.0	0.196	9.4	LOS A	1.0	7.0	0.19	0.48	55.3
26u	U	1	0.0	0.196	11.7	LOS A	1.0	7.0	0.19	0.48	58.0
Approach		365	2.3	0.196	5.1	LOS A	1.0	7.0	0.20	0.46	55.7
NorthWest: Elrond Drive (NW)											
27	L2	59	2.0	0.055	4.9	LOS A	0.2	1.7	0.41	0.53	53.9
29a	R1	66	2.0	0.057	9.1	LOS A	0.3	1.8	0.40	0.63	51.6
29u	U	1	0.0	0.057	12.6	LOS A	0.3	1.8	0.40	0.63	53.0
Approach		126	2.0	0.057	7.2	LOS A	0.3	1.8	0.41	0.58	52.6
All Vehicles		996	1.9	0.243	6.3	LOS A	1.2	8.5	0.25	0.51	54.5

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design MVT]**

Turnock Street - Elrond Drive, Kingscliff
2023AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	81	6.0	0.094	3.4	LOS A	0.4	2.9	0.16	0.42	55.7
3a	R1	299	2.0	0.183	8.2	LOS A	0.9	6.1	0.15	0.57	53.8
3u	U	4	0.0	0.183	11.7	LOS A	0.9	6.1	0.15	0.58	55.7
Approach		384	2.8	0.183	7.2	LOS A	0.9	6.1	0.15	0.54	54.2
NorthEast: Turnock Street (NE)											
24a	L1	194	2.0	0.137	3.5	LOS A	0.6	4.5	0.23	0.44	56.0
26	R2	49	0.0	0.137	9.5	LOS A	0.6	4.5	0.22	0.46	56.3
26u	U	1	0.0	0.137	11.8	LOS A	0.6	4.5	0.22	0.46	58.3
Approach		244	1.6	0.137	4.7	LOS A	0.6	4.5	0.23	0.44	56.1
NorthWest: Elrond Drive (NW)											
27	L2	79	1.0	0.071	4.6	LOS A	0.3	2.0	0.36	0.52	54.1
29a	R1	94	5.0	0.078	8.9	LOS A	0.3	2.3	0.35	0.62	51.7
29u	U	1	0.0	0.078	12.4	LOS A	0.3	2.3	0.35	0.62	53.2
Approach		174	3.2	0.078	7.0	LOS A	0.3	2.3	0.36	0.57	52.8
All Vehicles		802	2.5	0.183	6.4	LOS A	0.9	6.1	0.22	0.52	54.5

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design EVT]**

Turnock Street - Elrond Drive, Kingscliff
2023PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	129	1.0	0.119	3.5	LOS A	0.5	3.5	0.22	0.38	56.5
3a	R1	326	2.0	0.224	8.3	LOS A	1.1	7.6	0.21	0.59	53.4
3u	U	1	0.0	0.224	11.8	LOS A	1.1	7.6	0.21	0.59	55.5
Approach		457	1.7	0.224	7.0	LOS A	1.1	7.6	0.22	0.53	54.1
NorthEast: Turnock Street (NE)											
24a	L1	218	2.0	0.164	3.3	LOS A	0.8	5.7	0.17	0.44	56.0
26	R2	88	3.0	0.164	9.4	LOS A	0.8	5.7	0.17	0.48	55.4
26u	U	1	0.0	0.164	11.7	LOS A	0.8	5.7	0.17	0.48	58.1
Approach		307	2.3	0.164	5.1	LOS A	0.8	5.7	0.17	0.45	55.8
NorthWest: Elrond Drive (NW)											
27	L2	49	2.0	0.046	4.8	LOS A	0.2	1.4	0.39	0.51	54.0
29a	R1	56	2.0	0.047	9.0	LOS A	0.2	1.5	0.38	0.62	51.6
29u	U	1	0.0	0.047	12.5	LOS A	0.2	1.5	0.38	0.62	53.1
Approach		106	2.0	0.047	7.1	LOS A	0.2	1.5	0.39	0.57	52.7
All Vehicles		871	1.9	0.224	6.3	LOS A	1.1	7.6	0.22	0.51	54.6

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design PVT]**

Turnock Street - Elrond Drive, Kingscliff
2023PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	129	1.0	0.118	3.5	LOS A	0.5	3.5	0.22	0.38	56.5
3a	R1	320	2.0	0.220	8.3	LOS A	1.0	7.4	0.21	0.59	53.4
3u	U	1	0.0	0.220	11.8	LOS A	1.0	7.4	0.21	0.59	55.5
Approach		451	1.7	0.220	6.9	LOS A	1.0	7.4	0.21	0.53	54.1
NorthEast: Turnock Street (NE)											
24a	L1	236	2.0	0.173	3.3	LOS A	0.8	6.0	0.18	0.44	56.0
26	R2	88	3.0	0.173	9.4	LOS A	0.8	6.0	0.17	0.47	55.5
26u	U	1	0.0	0.173	11.7	LOS A	0.8	6.0	0.17	0.47	58.2
Approach		325	2.3	0.173	5.0	LOS A	0.8	6.0	0.17	0.45	55.9
NorthWest: Elrond Drive (NW)											
27	L2	49	2.0	0.045	4.8	LOS A	0.2	1.4	0.39	0.51	54.0
29a	R1	56	2.0	0.047	9.0	LOS A	0.2	1.5	0.38	0.61	51.7
29u	U	1	0.0	0.047	12.5	LOS A	0.2	1.5	0.38	0.61	53.1
Approach		106	2.0	0.047	7.1	LOS A	0.2	1.5	0.38	0.57	52.7
All Vehicles		882	1.9	0.220	6.2	LOS A	1.0	7.4	0.22	0.50	54.6

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design MVT]**

Turnock Street - Elrond Drive, Kingscliff
2033AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	97	6.0	0.112	3.4	LOS A	0.5	3.5	0.18	0.42	55.6
3a	R1	354	2.0	0.219	8.2	LOS A	1.1	7.6	0.17	0.57	53.7
3u	U	5	0.0	0.219	11.7	LOS A	1.1	7.6	0.17	0.58	55.6
Approach		456	2.8	0.219	7.2	LOS A	1.1	7.6	0.18	0.54	54.1
NorthEast: Turnock Street (NE)											
24a	L1	229	2.0	0.165	3.6	LOS A	0.8	5.6	0.26	0.45	55.9
26	R2	59	0.0	0.165	9.5	LOS A	0.8	5.6	0.25	0.47	56.1
26u	U	1	0.0	0.165	11.9	LOS A	0.8	5.6	0.25	0.47	58.2
Approach		289	1.6	0.165	4.8	LOS A	0.8	5.6	0.26	0.45	56.0
NorthWest: Elrond Drive (NW)											
27	L2	94	1.0	0.087	4.9	LOS A	0.4	2.5	0.40	0.54	54.0
29a	R1	112	5.0	0.095	9.1	LOS A	0.4	2.9	0.39	0.64	51.5
29u	U	1	0.0	0.095	12.5	LOS A	0.4	2.9	0.39	0.64	53.0
Approach		206	3.2	0.095	7.2	LOS A	0.4	2.9	0.39	0.60	52.6
All Vehicles		952	2.5	0.219	6.5	LOS A	1.1	7.6	0.25	0.53	54.4

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

Site: 101 [2033 Design EVT]

Turnock Street - Elrond Drive, Kingscliff
2033PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	154	1.0	0.143	3.6	LOS A	0.6	4.4	0.25	0.39	56.3
3a	R1	387	2.0	0.269	8.4	LOS A	1.4	9.6	0.25	0.59	53.3
3u	U	1	0.0	0.269	11.9	LOS A	1.4	9.6	0.25	0.59	55.3
Approach		542	1.7	0.269	7.0	LOS A	1.4	9.6	0.25	0.53	54.0
NorthEast: Turnock Street (NE)											
24a	L1	259	2.0	0.197	3.4	LOS A	1.0	7.1	0.20	0.45	55.9
26	R2	105	3.0	0.197	9.4	LOS A	1.0	7.1	0.19	0.48	55.3
26u	U	1	0.0	0.197	11.7	LOS A	1.0	7.1	0.19	0.48	58.0
Approach		365	2.3	0.197	5.1	LOS A	1.0	7.1	0.20	0.46	55.7
NorthWest: Elrond Drive (NW)											
27	L2	59	2.0	0.057	5.1	LOS A	0.3	1.8	0.44	0.54	53.8
29a	R1	66	2.0	0.058	9.3	LOS A	0.3	1.9	0.43	0.63	51.5
29u	U	1	0.0	0.058	12.8	LOS A	0.3	1.9	0.43	0.63	52.8
Approach		126	2.0	0.058	7.4	LOS A	0.3	1.9	0.43	0.59	52.5
All Vehicles		1034	1.9	0.269	6.4	LOS A	1.4	9.6	0.25	0.51	54.4

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

Site: 101 [2033 Design PVT]

Turnock Street - Elrond Drive, Kingscliff
2033PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	154	1.0	0.142	3.6	LOS A	0.6	4.3	0.25	0.39	56.3
3a	R1	379	2.0	0.263	8.4	LOS A	1.3	9.4	0.25	0.59	53.3
3u	U	1	0.0	0.263	11.9	LOS A	1.3	9.4	0.25	0.59	55.3
Approach		534	1.7	0.263	7.0	LOS A	1.3	9.4	0.25	0.53	54.0
NorthEast: Turnock Street (NE)											
24a	L1	279	2.0	0.206	3.4	LOS A	1.1	7.6	0.20	0.45	55.9
26	R2	105	3.0	0.206	9.4	LOS A	1.1	7.6	0.20	0.47	55.4
26u	U	1	0.0	0.206	11.7	LOS A	1.1	7.6	0.20	0.47	58.1
Approach		385	2.3	0.206	5.1	LOS A	1.1	7.6	0.20	0.45	55.8
NorthWest: Elrond Drive (NW)											
27	L2	59	2.0	0.057	5.1	LOS A	0.3	1.8	0.43	0.54	53.8
29a	R1	66	2.0	0.058	9.2	LOS A	0.3	1.9	0.42	0.63	51.5
29u	U	1	0.0	0.058	12.7	LOS A	0.3	1.9	0.42	0.63	52.9
Approach		126	2.0	0.058	7.3	LOS A	0.3	1.9	0.43	0.59	52.5
All Vehicles		1045	1.9	0.263	6.3	LOS A	1.3	9.4	0.25	0.51	54.5

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens MVT]**

Turnock Street - Elrond Drive, Kingscliff
2033AM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total Flows veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	97	6.0	0.112	3.4	LOS A	0.5	3.5	0.18	0.42	55.7
3a	R1	351	2.0	0.217	8.2	LOS A	1.1	7.6	0.17	0.57	53.7
3u	U	5	0.0	0.217	11.7	LOS A	1.1	7.6	0.17	0.58	55.6
Approach		453	2.8	0.217	7.2	LOS A	1.1	7.6	0.18	0.54	54.1
NorthEast: Turnock Street (NE)											
24a	L1	232	2.0	0.166	3.6	LOS A	0.8	5.7	0.26	0.45	55.9
26	R2	59	0.0	0.166	9.5	LOS A	0.8	5.7	0.25	0.47	56.1
26u	U	1	0.0	0.166	11.9	LOS A	0.8	5.7	0.25	0.47	58.2
Approach		292	1.6	0.166	4.8	LOS A	0.8	5.7	0.26	0.45	56.0
NorthWest: Elrond Drive (NW)											
27	L2	94	1.0	0.087	4.9	LOS A	0.4	2.5	0.40	0.54	54.0
29a	R1	112	5.0	0.095	9.1	LOS A	0.4	2.9	0.39	0.64	51.5
29u	U	1	0.0	0.095	12.5	LOS A	0.4	2.9	0.39	0.64	53.1
Approach		206	3.2	0.095	7.2	LOS A	0.4	2.9	0.39	0.60	52.6
All Vehicles		951	2.5	0.217	6.5	LOS A	1.1	7.6	0.25	0.52	54.4

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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P3378.001M Turnock Street - Elrond Drive.sip7

MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens EVT]**

Turnock Street - Elrond Drive, Kingscliff
2033PM Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	154	1.0	0.140	3.6	LOS A	0.6	4.3	0.25	0.39	56.3
3a	R1	365	2.0	0.254	8.4	LOS A	1.3	9.0	0.24	0.59	53.3
3u	U	1	0.0	0.254	11.9	LOS A	1.3	9.0	0.24	0.59	55.3
Approach		520	1.7	0.254	7.0	LOS A	1.3	9.0	0.24	0.53	54.0
NorthEast: Turnock Street (NE)											
24a	L1	259	2.0	0.196	3.4	LOS A	1.0	7.1	0.20	0.45	55.9
26	R2	105	3.0	0.196	9.4	LOS A	1.0	7.1	0.19	0.48	55.3
26u	U	1	0.0	0.196	11.7	LOS A	1.0	7.1	0.19	0.48	58.0
Approach		365	2.3	0.196	5.1	LOS A	1.0	7.1	0.20	0.46	55.7
NorthWest: Elrond Drive (NW)											
27	L2	59	2.0	0.056	5.0	LOS A	0.2	1.8	0.42	0.53	53.8
29a	R1	66	2.0	0.057	9.2	LOS A	0.3	1.9	0.41	0.63	51.5
29u	U	1	0.0	0.057	12.7	LOS A	0.3	1.9	0.41	0.63	52.9
Approach		126	2.0	0.057	7.3	LOS A	0.3	1.9	0.42	0.58	52.6
All Vehicles		1012	1.9	0.254	6.4	LOS A	1.3	9.0	0.25	0.51	54.5

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 Design Sens PVT]**

Turnock Street - Elrond Drive, Kingscliff
2033PM Development Peak
Design Traffic
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Turnock Street (S)											
1a	L1	154	1.0	0.140	3.6	LOS A	0.6	4.3	0.25	0.39	56.3
3a	R1	362	2.0	0.252	8.4	LOS A	1.2	8.9	0.24	0.59	53.3
3u	U	1	0.0	0.252	11.9	LOS A	1.2	8.9	0.24	0.59	55.3
Approach		517	1.7	0.252	7.0	LOS A	1.2	8.9	0.24	0.53	54.1
NorthEast: Turnock Street (NE)											
24a	L1	280	2.0	0.207	3.4	LOS A	1.1	7.5	0.20	0.44	55.9
26	R2	105	3.0	0.207	9.4	LOS A	1.1	7.5	0.20	0.47	55.4
26u	U	1	0.0	0.207	11.7	LOS A	1.1	7.5	0.20	0.47	58.1
Approach		386	2.3	0.207	5.1	LOS A	1.1	7.5	0.20	0.45	55.8
NorthWest: Elrond Drive (NW)											
27	L2	59	2.0	0.056	5.0	LOS A	0.2	1.8	0.42	0.53	53.9
29a	R1	66	2.0	0.057	9.2	LOS A	0.3	1.8	0.41	0.63	51.5
29u	U	1	0.0	0.057	12.7	LOS A	0.3	1.8	0.41	0.63	52.9
Approach		126	2.0	0.057	7.2	LOS A	0.3	1.8	0.42	0.58	52.6
All Vehicles		1029	1.9	0.252	6.3	LOS A	1.2	8.9	0.25	0.51	54.5

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

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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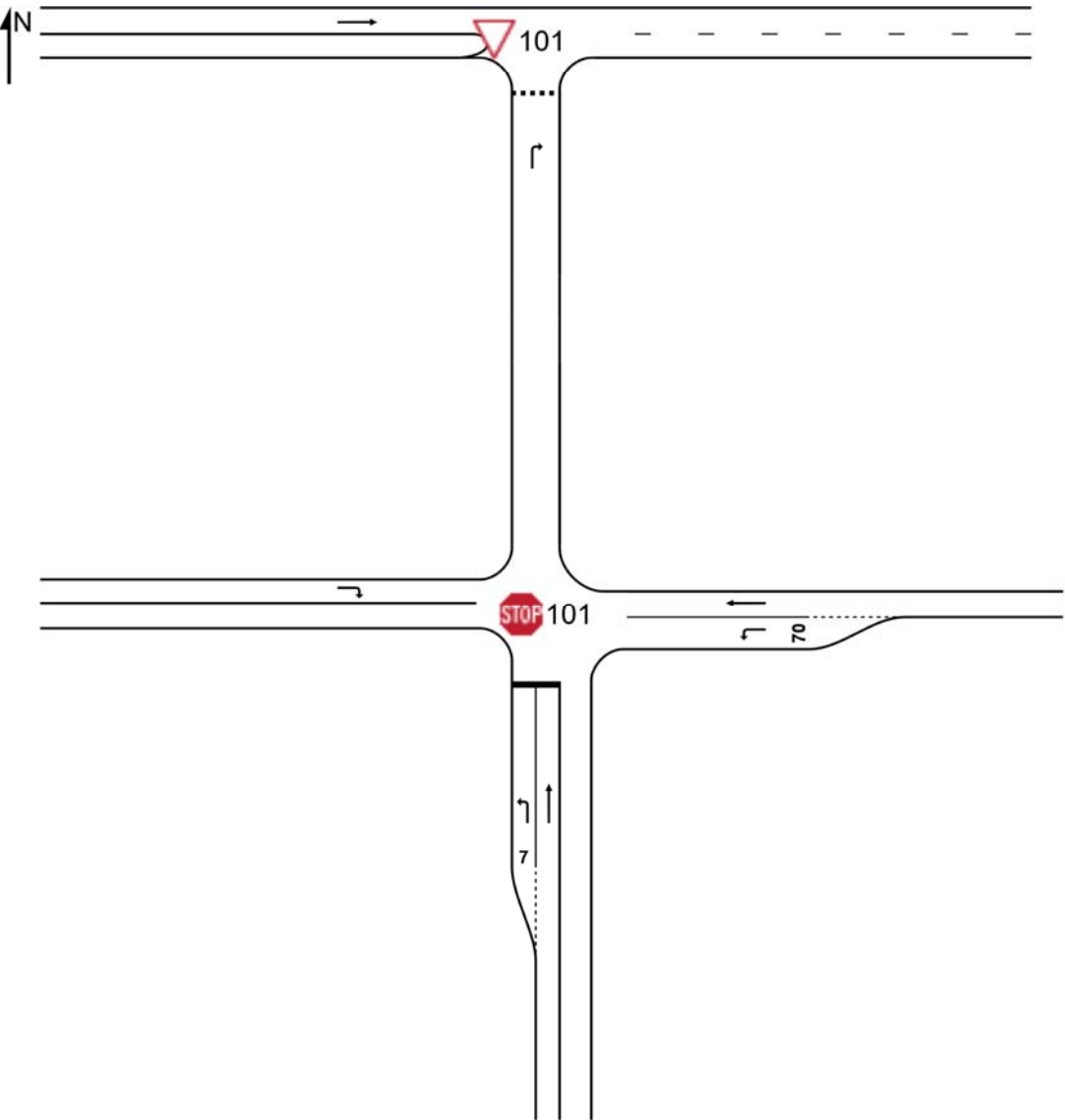
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NETWORK LAYOUT

Network: N101 [2023 Background AM]

Cudgen Road / TAFE Access



SITES IN NETWORK		
Site ID	CCG ID	Site Name
 101	NA	2023 Background AM - S1
 101	NA	2023 Background AM - S2

MOVEMENT SUMMARY

 Site: 101 [2023 Background AM - S1]

 Network: N101 [2023 Background AM]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2023 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	36	0.0	36	0.0	0.052	9.2	LOS A	0.2	1.3	0.55	0.94	36.0
2	T1	5	5.0	5	5.0	0.020	18.2	LOS B	0.1	0.5	0.76	0.98	13.5
Approach		41	0.6	41	0.6	0.052	10.3	LOS A	0.2	1.3	0.58	0.94	33.8
East: Cudgen Road (E)													
4	L2	62	7.0	62	7.0	0.034	5.6	LOS A	0.0	0.0	0.00	0.57	37.3
5	T1	603	4.0	603	4.0	0.317	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		665	4.3	665	4.3	0.317	0.5	NA	0.0	0.0	0.00	0.05	58.1
West: Cudgen Road (W)													
12	R2	222	3.0	222	3.0	0.350	11.3	LOS A	1.7	12.0	0.66	0.91	36.3
Approach		222	3.0	222	3.0	0.350	11.3	NA	1.7	12.0	0.66	0.91	36.3
All Vehicles		928	3.8	928	3.8	0.350	3.5	NA	1.7	12.0	0.18	0.30	49.5

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [2023 Background AM - S2]

Network: N101 [2023 Background AM]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2023 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	5	5.0	5	5.0	0.008	5.0	LOS A	0.0	0.2	0.56	0.64	28.2
Approach		5	5.0	5	5.0	0.008	5.0	LOS A	0.0	0.2	0.56	0.64	28.2
West: Cudgen Road (W)													
11	T1	767	3.0	767	3.0	0.401	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		767	3.0	767	3.0	0.401	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		773	3.0	773	3.0	0.401	0.1	NA	0.0	0.2	0.00	0.00	59.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
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: 0.0 %
Number of Iterations: 5 (maximum specified: 10)

MOVEMENT SUMMARY

 Site: 101 [2023 Background PM - S1]

 Network: N101 [2023 Background PM]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2023 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	112	0.0	112	0.0	0.168	9.8	LOS A	0.6	4.4	0.59	1.00	35.5
2	T1	34	5.0	34	5.0	0.091	14.4	LOS A	0.3	2.4	0.68	1.03	15.4
Approach		145	1.2	145	1.2	0.168	10.9	LOS A	0.6	4.4	0.61	1.01	32.4
East: Cudgen Road (E)													
4	L2	11	10.0	11	10.0	0.006	5.6	LOS A	0.0	0.0	0.00	0.57	37.2
5	T1	633	3.0	633	3.0	0.331	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		643	3.1	643	3.1	0.331	0.1	NA	0.0	0.0	0.00	0.01	59.6
West: Cudgen Road (W)													
12	R2	23	3.0	23	3.0	0.036	9.4	LOS A	0.1	0.9	0.56	0.75	38.1
Approach		23	3.0	23	3.0	0.036	9.4	NA	0.1	0.9	0.56	0.75	38.1
All Vehicles		812	2.8	812	2.8	0.331	2.3	NA	0.6	4.4	0.13	0.21	52.1

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

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

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [2023 Background PM - S2]

Network: N101 [2023 Background PM]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2023 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	34	0.0	34	0.0	0.046	4.3	LOS A	0.1	1.0	0.51	0.67	29.9
Approach		34	0.0	34	0.0	0.046	4.3	LOS A	0.1	1.0	0.51	0.67	29.9
West: Cudgen Road (W)													
11	T1	686	4.0	686	4.0	0.361	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		686	4.0	686	4.0	0.361	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		720	3.8	720	3.8	0.361	0.2	NA	0.1	1.0	0.02	0.03	59.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
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: 0.0 %
Number of Iterations: 5 (maximum specified: 10)

MOVEMENT SUMMARY

 Site: 101 [2033 Background AM - S1]

 Network: N101 [2033 Background AM]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2033 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	42	0.0	42	0.0	0.073	10.5	LOS A	0.3	1.8	0.62	0.99	34.9
2	T1	6	5.0	6	5.0	0.034	24.7	LOS B	0.1	0.8	0.84	1.02	11.1
Approach		48	0.7	48	0.7	0.073	12.4	LOS A	0.3	1.8	0.65	0.99	32.3
East: Cudgen Road (E)													
4	L2	74	7.0	74	7.0	0.040	5.6	LOS A	0.0	0.0	0.00	0.57	37.3
5	T1	716	4.0	716	4.0	0.377	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		789	4.3	789	4.3	0.377	0.5	NA	0.0	0.0	0.00	0.05	58.1
West: Cudgen Road (W)													
12	R2	264	3.0	264	3.0	0.511	15.0	LOS B	2.8	19.9	0.78	1.04	33.3
Approach		264	3.0	264	3.0	0.511	15.0	NA	2.8	19.9	0.78	1.04	33.3
All Vehicles		1102	3.8	1102	3.8	0.511	4.5	NA	2.8	19.9	0.22	0.33	47.9

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [2033 Background AM - S2]

Network: N101 [2033 Background AM]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	6	5.0	6	5.0	0.013	6.6	LOS A	0.0	0.3	0.65	0.74	25.7
Approach		6	5.0	6	5.0	0.013	6.6	LOS A	0.0	0.3	0.65	0.74	25.7
West: Cudgen Road (W)													
11	T1	911	3.0	911	3.0	0.476	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		911	3.0	911	3.0	0.476	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		917	3.0	917	3.0	0.476	0.1	NA	0.0	0.3	0.00	0.01	59.7

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

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

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - TAFE Access\IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

 Site: 101 [2033 Background PM - S1]

 Network: N101 [2033 Background PM]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2033 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	132	0.0	132	0.0	0.244	11.8	LOS A	0.9	6.6	0.69	1.03	34.0
2	T1	40	5.0	40	5.0	0.143	18.2	LOS B	0.5	3.7	0.77	1.02	13.5
Approach		172	1.2	172	1.2	0.244	13.3	LOS A	0.9	6.6	0.71	1.03	30.5
East: Cudgen Road (E)													
4	L2	13	10.0	13	10.0	0.007	5.6	LOS A	0.0	0.0	0.00	0.57	37.2
5	T1	752	3.0	752	3.0	0.393	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		764	3.1	764	3.1	0.393	0.1	NA	0.0	0.0	0.00	0.01	59.6
West: Cudgen Road (W)													
12	R2	27	3.0	27	3.0	0.052	10.9	LOS A	0.2	1.3	0.64	0.83	36.6
Approach		27	3.0	27	3.0	0.052	10.9	NA	0.2	1.3	0.64	0.83	36.6
All Vehicles		963	2.8	963	2.8	0.393	2.8	NA	0.9	6.6	0.14	0.21	51.3

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - TAFE Access\IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Background PM - S2]

Network: N101 [2033 Background PM]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	40	0.0	40	0.0	0.066	5.5	LOS A	0.2	1.4	0.60	0.77	27.9
Approach		40	0.0	40	0.0	0.066	5.5	LOS A	0.2	1.4	0.60	0.77	27.9
West: Cudgen Road (W)													
11	T1	814	4.0	814	4.0	0.428	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		814	4.0	814	4.0	0.428	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		854	3.8	854	3.8	0.428	0.3	NA	0.2	1.4	0.03	0.04	58.9

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - TAFE Access\IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

 Site: 101 [2023 Design MVT - S1]

 Network: N101 [2023 Design MVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2023 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	36	0.0	36	0.0	0.056	9.7	LOS A	0.2	1.4	0.57	0.95	35.6
2	T1	5	5.0	5	5.0	0.022	20.0	LOS B	0.1	0.6	0.79	1.00	12.7
Approach		41	0.6	41	0.6	0.056	11.0	LOS A	0.2	1.4	0.60	0.96	33.3
East: Cudgen Road (E)													
4	L2	62	7.0	62	7.0	0.034	5.6	LOS A	0.0	0.0	0.00	0.57	37.3
5	T1	652	4.0	652	4.0	0.343	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		714	4.3	714	4.3	0.343	0.5	NA	0.0	0.0	0.00	0.05	58.2
West: Cudgen Road (W)													
12	R2	222	3.0	222	3.0	0.378	12.3	LOS A	1.8	13.2	0.70	0.94	35.5
Approach		222	3.0	222	3.0	0.378	12.3	NA	1.8	13.2	0.70	0.94	35.5
All Vehicles		977	3.8	977	3.8	0.378	3.6	NA	1.8	13.2	0.18	0.29	49.5

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [2023 Design MVT - S2]

Network: N101 [2023 Design MVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2023 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	5	5.0	5	5.0	0.008	5.0	LOS A	0.0	0.2	0.56	0.64	28.1
Approach		5	5.0	5	5.0	0.008	5.0	LOS A	0.0	0.2	0.56	0.64	28.1
West: Cudgen Road (W)													
11	T1	771	3.0	771	3.0	0.403	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		771	3.0	771	3.0	0.403	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		776	3.0	776	3.0	0.403	0.1	NA	0.0	0.2	0.00	0.00	59.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
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: 0.0 %
Number of Iterations: 5 (maximum specified: 10)

MOVEMENT SUMMARY

 Site: 101 [2023 Design EVT - S1]

 Network: N101 [2023 Design EVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2023 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	112	0.0	112	0.0	0.254	13.9	LOS A	1.0	6.7	0.75	1.04	32.6
2	T1	34	5.0	34	5.0	0.155	22.4	LOS B	0.5	3.9	0.83	1.02	11.8
Approach		145	1.2	145	1.2	0.254	15.9	LOS B	1.0	6.7	0.77	1.04	28.9
East: Cudgen Road (E)													
4	L2	11	10.0	11	10.0	0.006	5.6	LOS A	0.0	0.0	0.00	0.57	37.2
5	T1	856	3.0	856	3.0	0.447	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		866	3.1	866	3.1	0.447	0.1	NA	0.0	0.0	0.00	0.01	59.6
West: Cudgen Road (W)													
12	R2	23	3.0	23	3.0	0.054	12.6	LOS A	0.2	1.3	0.71	0.88	35.2
Approach		23	3.0	23	3.0	0.054	12.6	NA	0.2	1.3	0.71	0.88	35.2
All Vehicles		1035	2.8	1035	2.8	0.447	2.6	NA	1.0	6.7	0.12	0.17	52.3

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [2023 Design EVT - S2]

Network: N101 [2023 Design EVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2023 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	34	0.0	34	0.0	0.047	4.5	LOS A	0.1	1.0	0.52	0.69	29.6
Approach		34	0.0	34	0.0	0.047	4.5	LOS A	0.1	1.0	0.52	0.69	29.6
West: Cudgen Road (W)													
11	T1	702	4.0	702	4.0	0.369	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		702	4.0	702	4.0	0.369	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		736	3.8	736	3.8	0.369	0.2	NA	0.1	1.0	0.02	0.03	59.0

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - TAFE Access\IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

 Site: 101 [2023 Design PVT - S1]

 Network: N101 [2023 Design PVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2023 PM Peak - Development Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	112	0.0	112	0.0	0.235	12.9	LOS A	0.9	6.2	0.73	1.03	33.3
2	T1	34	5.0	34	5.0	0.140	20.6	LOS B	0.5	3.5	0.81	1.02	12.5
Approach		145	1.2	145	1.2	0.235	14.7	LOS B	0.9	6.2	0.74	1.03	29.6
East: Cudgen Road (E)													
4	L2	11	10.0	11	10.0	0.006	5.6	LOS A	0.0	0.0	0.00	0.57	37.2
5	T1	817	3.0	817	3.0	0.427	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		827	3.1	827	3.1	0.427	0.1	NA	0.0	0.0	0.00	0.01	59.6
West: Cudgen Road (W)													
12	R2	23	3.0	23	3.0	0.050	11.9	LOS A	0.2	1.2	0.68	0.87	35.8
Approach		23	3.0	23	3.0	0.050	11.9	NA	0.2	1.2	0.68	0.87	35.8
All Vehicles		996	2.8	996	2.8	0.427	2.5	NA	0.9	6.2	0.12	0.18	52.4

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

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

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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MOVEMENT SUMMARY

Site: 101 [2023 Design PVT - S2]

Network: N101 [2023 Design PVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2023 PM Peak - Development Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	34	0.0	34	0.0	0.047	4.4	LOS A	0.1	1.0	0.51	0.68	29.7
Approach		34	0.0	34	0.0	0.047	4.4	LOS A	0.1	1.0	0.51	0.68	29.7
West: Cudgen Road (W)													
11	T1	699	4.0	699	4.0	0.368	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		699	4.0	699	4.0	0.368	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		733	3.8	733	3.8	0.368	0.2	NA	0.1	1.0	0.02	0.03	59.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
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: 0.0 %
Number of Iterations: 5 (maximum specified: 10)

MOVEMENT SUMMARY

 Site: 101 [2033 Design MVT - S1]

 Network: N101 [2033 Design MVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2033 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	42	0.0	42	0.0	0.082	11.3	LOS A	0.3	2.0	0.66	1.00	34.4
2	T1	6	5.0	6	5.0	0.040	27.9	LOS B	0.1	0.9	0.86	1.02	10.2
Approach		48	0.7	48	0.7	0.082	13.5	LOS A	0.3	2.0	0.69	1.00	31.5
East: Cudgen Road (E)													
4	L2	74	7.0	74	7.0	0.040	5.6	LOS A	0.0	0.0	0.00	0.57	37.3
5	T1	772	4.0	772	4.0	0.406	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		845	4.3	845	4.3	0.406	0.5	NA	0.0	0.0	0.00	0.05	58.2
West: Cudgen Road (W)													
12	R2	264	3.0	264	3.0	0.565	17.1	LOS B	3.1	22.5	0.82	1.08	31.8
Approach		264	3.0	264	3.0	0.565	17.1	NA	3.1	22.5	0.82	1.08	31.8
All Vehicles		1158	3.8	1158	3.8	0.565	4.8	NA	3.1	22.5	0.22	0.33	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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - TAFE Access\IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Design MVT - S2]

Network: N101 [2033 Design MVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	6	5.0	6	5.0	0.013	6.6	LOS A	0.0	0.3	0.66	0.75	25.7
Approach		6	5.0	6	5.0	0.013	6.6	LOS A	0.0	0.3	0.66	0.75	25.7
West: Cudgen Road (W)													
11	T1	915	3.0	915	3.0	0.478	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		915	3.0	915	3.0	0.478	0.0	NA	0.0	0.0	0.00	0.00	59.8
All Vehicles		921	3.0	921	3.0	0.478	0.1	NA	0.0	0.3	0.00	0.01	59.7

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

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

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Organisation: BITZIOS CONSULTING | Processed: Thursday, 13 June 2019 11:29:30 AM

Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - TAFE Access\IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

 Site: 101 [2033 Design EVT - S1]

 Network: N101 [2033 Design EVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2033 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	132	0.0	132	0.0	0.430	20.7	LOS B	1.7	12.0	0.87	1.13	28.5
2	T1	40	5.0	40	5.0	0.288	36.6	LOS C	1.0	7.3	0.91	1.06	8.4
Approach		172	1.2	172	1.2	0.430	24.4	LOS B	1.7	12.0	0.88	1.12	24.2
East: Cudgen Road (E)													
4	L2	13	10.0	13	10.0	0.007	5.6	LOS A	0.0	0.0	0.00	0.57	37.2
5	T1	1009	3.0	1009	3.0	0.528	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1022	3.1	1022	3.1	0.528	0.1	NA	0.0	0.0	0.00	0.01	59.6
West: Cudgen Road (W)													
12	R2	27	3.0	27	3.0	0.090	16.4	LOS B	0.3	2.1	0.80	0.92	32.3
Approach		27	3.0	27	3.0	0.090	16.4	NA	0.3	2.1	0.80	0.92	32.3
All Vehicles		1221	2.8	1221	2.8	0.528	3.9	NA	1.7	12.0	0.14	0.18	50.1

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

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

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Organisation: BITZIOS CONSULTING | Processed: Thursday, 13 June 2019 11:29:44 AM

Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models\Cudgen Road - TAFE Access\IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Design EVT - S2]

Network: N101 [2033 Design EVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	40	0.0	40	0.0	0.068	5.7	LOS A	0.2	1.4	0.61	0.77	27.5
Approach		40	0.0	40	0.0	0.068	5.7	LOS A	0.2	1.4	0.61	0.77	27.5
West: Cudgen Road (W)													
11	T1	833	4.0	833	4.0	0.438	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		833	4.0	833	4.0	0.438	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		873	3.8	873	3.8	0.438	0.3	NA	0.2	1.4	0.03	0.04	58.9

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: 0.0 %
Number of Iterations: 5 (maximum specified: 10)

MOVEMENT SUMMARY

Site: 101 [2033 Design PVT - S2]

Network: N101 [2033 Design PVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 PM Peak - Development Peak
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 of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	40	0.0	40	0.0	0.068	5.6	LOS A	0.2	1.4	0.61	0.77	27.6
Approach		40	0.0	40	0.0	0.068	5.6	LOS A	0.2	1.4	0.61	0.77	27.6
West: Cudgen Road (W)													
11	T1	828	4.0	828	4.0	0.436	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		828	4.0	828	4.0	0.436	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		868	3.8	868	3.8	0.436	0.3	NA	0.2	1.4	0.03	0.04	58.9

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: 0.0 %
Number of Iterations: 5 (maximum specified: 10)

MOVEMENT SUMMARY

 Site: 101 [2033 Design Sens MVT - S1]

 Network: N101 [2033 Design Sens MVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2033 AM Peak
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 of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h	
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	42	0.0	42	0.0	0.082	11.4	LOS A	0.3	2.0	0.66	1.00	34.3
2	T1	6	5.0	6	5.0	0.040	28.2	LOS B	0.1	0.9	0.86	1.02	10.1
Approach		48	0.7	48	0.7	0.082	13.6	LOS A	0.3	2.0	0.69	1.00	31.4
East: Cudgen Road (E)													
4	L2	74	7.0	74	7.0	0.040	5.6	LOS A	0.0	0.0	0.00	0.57	37.3
5	T1	777	4.0	777	4.0	0.409	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		851	4.3	851	4.3	0.409	0.5	NA	0.0	0.0	0.00	0.05	58.2
West: Cudgen Road (W)													
12	R2	264	3.0	264	3.0	0.571	17.3	LOS B	3.2	22.8	0.83	1.09	31.7
Approach		264	3.0	264	3.0	0.571	17.3	NA	3.2	22.8	0.83	1.09	31.7
All Vehicles		1163	3.8	1163	3.8	0.571	4.9	NA	3.2	22.8	0.22	0.32	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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Cudgen Road - TAFE Access
IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Design Sens MVT - S2]

Network: N101 [2033 Design Sens MVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 AM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	6	5.0	6	5.0	0.013	6.6	LOS A	0.0	0.3	0.66	0.75	25.7
Approach		6	5.0	6	5.0	0.013	6.6	LOS A	0.0	0.3	0.66	0.75	25.7
West: Cudgen Road (W)													
11	T1	915	3.0	915	3.0	0.478	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		915	3.0	915	3.0	0.478	0.0	NA	0.0	0.0	0.00	0.00	59.8
All Vehicles		921	3.0	921	3.0	0.478	0.1	NA	0.0	0.3	0.00	0.01	59.7

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

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

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Organisation: BITZIOS CONSULTING | Processed: Thursday, 27 June 2019 1:36:14 PM

Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Cudgen Road - TAFE Access
P3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

 Site: 101 [2033 Design Sens EVT - S1]

 Network: N101 [2033 Design Sens EVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2033 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: TAFE Access (S)													
1	L2	132	0.0	132	0.0	0.436	21.0	LOS B	1.7	12.2	0.87	1.13	28.4
2	T1	40	5.0	40	5.0	0.292	37.3	LOS C	1.0	7.4	0.91	1.06	8.2
Approach		172	1.2	172	1.2	0.436	24.8	LOS B	1.7	12.2	0.88	1.12	24.0
East: Cudgen Road (E)													
4	L2	13	10.0	13	10.0	0.007	5.6	LOS A	0.0	0.0	0.00	0.57	37.2
5	T1	1015	3.0	1015	3.0	0.531	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		1027	3.1	1027	3.1	0.531	0.1	NA	0.0	0.0	0.00	0.01	59.6
West: Cudgen Road (W)													
12	R2	27	3.0	27	3.0	0.091	16.6	LOS B	0.3	2.1	0.80	0.92	32.1
Approach		27	3.0	27	3.0	0.091	16.6	NA	0.3	2.1	0.80	0.92	32.1
All Vehicles		1226	2.8	1226	2.8	0.531	3.9	NA	1.7	12.2	0.14	0.18	50.0

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Cudgen Road - TAFE Access
IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Design Sens EVT - S2]

Network: N101 [2033 Design Sens EVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 PM Peak
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 of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	40	0.0	40	0.0	0.068	5.7	LOS A	0.2	1.4	0.61	0.77	27.5
Approach		40	0.0	40	0.0	0.068	5.7	LOS A	0.2	1.4	0.61	0.77	27.5
West: Cudgen Road (W)													
11	T1	833	4.0	833	4.0	0.438	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		833	4.0	833	4.0	0.438	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		873	3.8	873	3.8	0.438	0.3	NA	0.2	1.4	0.03	0.04	58.9

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Organisation: BITZIOS CONSULTING | Processed: Thursday, 27 June 2019 1:36:28 PM

Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Cudgen Road - TAFE Access
P3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

 Site: 101 [2033 Design Sens PVT - S1]

 Network: N101 [2033 Design Sens PVT]

Cudgen Road - TAFE Access
Stage 1 of Crossing
2033 PM Peak - Development Peak
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 of Queue Vehicles	Prop. Queued	Effective Stop Rate per veh	Average Speed	
		veh/h	%	veh/h	%	v/c	sec		veh	m		km/h	
South: TAFE Access (S)													
1	L2	132	0.0	132	0.0	0.394	18.8	LOS B	1.6	11.0	0.85	1.12	29.6
2	T1	40	5.0	40	5.0	0.259	32.7	LOS C	0.9	6.6	0.89	1.06	9.1
Approach		172	1.2	172	1.2	0.394	22.0	LOS B	1.6	11.0	0.86	1.10	25.3
East: Cudgen Road (E)													
4	L2	13	10.0	13	10.0	0.007	5.6	LOS A	0.0	0.0	0.00	0.57	37.2
5	T1	975	3.0	975	3.0	0.510	0.0	LOS A	0.0	0.0	0.00	0.00	59.8
Approach		987	3.1	987	3.1	0.510	0.1	NA	0.0	0.0	0.00	0.01	59.6
West: Cudgen Road (W)													
12	R2	27	3.0	27	3.0	0.082	15.4	LOS B	0.3	1.9	0.78	0.91	33.0
Approach		27	3.0	27	3.0	0.082	15.4	NA	0.3	1.9	0.78	0.91	33.0
All Vehicles		1186	2.8	1186	2.8	0.510	3.6	NA	1.6	11.0	0.14	0.19	50.4

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

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

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: 0.0 %

Number of Iterations: 5 (maximum specified: 10)

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Organisation: BITZIOS CONSULTING | Processed: Thursday, 27 June 2019 1:36:00 PM

Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Cudgen Road - TAFE Access
IP3378.001M Cudgen Road - TAFE Access.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Design Sens PVT - S2]

Network: N101 [2033 Design Sens PVT]

Cudgen Road - TAFE Access
Stage 2 of Crossing
2033 PM Peak - Development Peak
Giveaway / Yield (Two-Way)

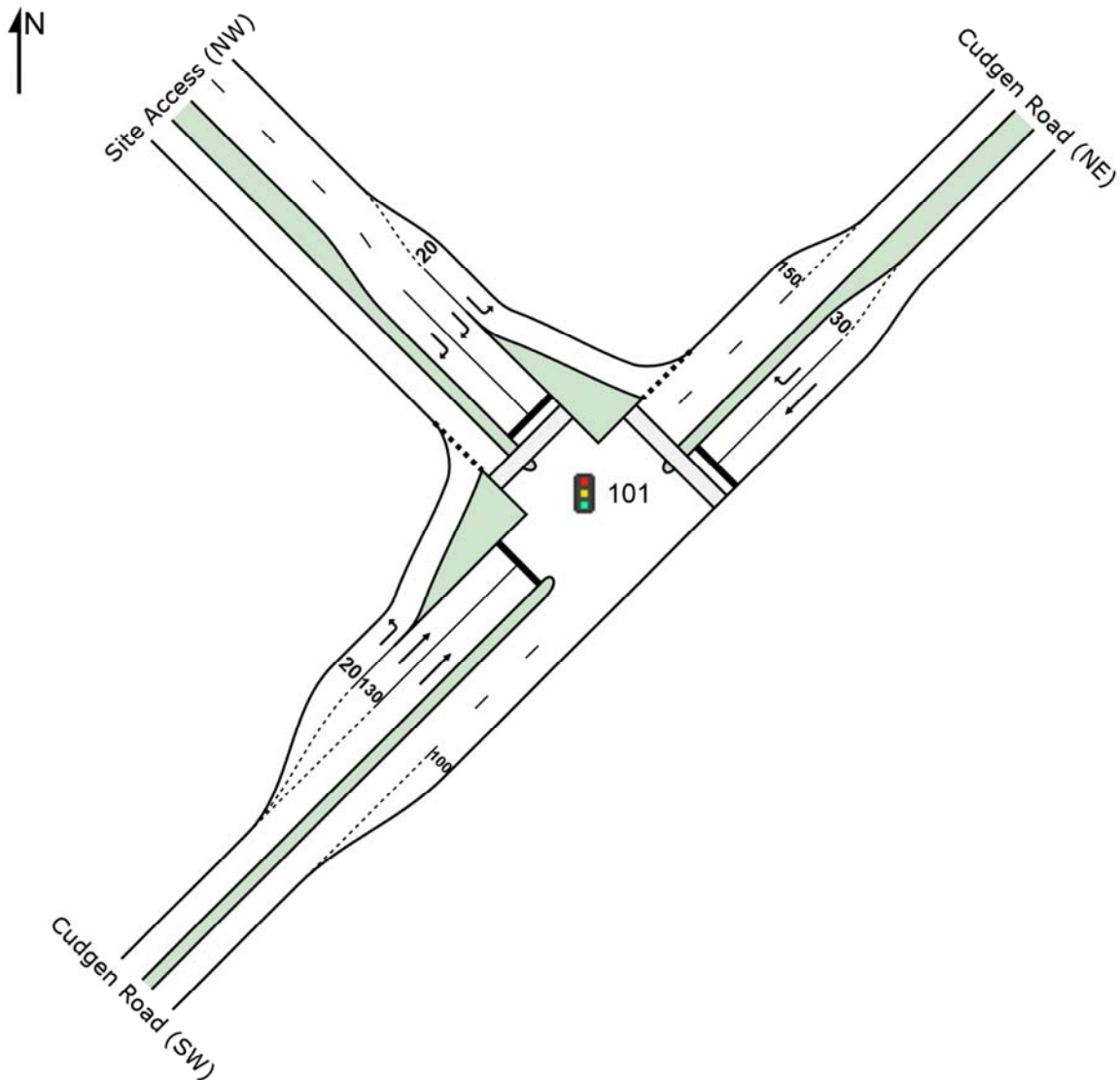
Movement Performance - Vehicles													
Mov ID	OD Mov	Demand Total	Flows HV	Arrival Total	Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Queue Distance	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
		veh/h	%	veh/h	%	v/c	sec		veh	m			
South: Median Storage Area													
3	R2	40	0.0	40	0.0	0.068	5.6	LOS A	0.2	1.4	0.61	0.77	27.6
Approach		40	0.0	40	0.0	0.068	5.6	LOS A	0.2	1.4	0.61	0.77	27.6
West: Cudgen Road (W)													
11	T1	829	4.0	829	4.0	0.436	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		829	4.0	829	4.0	0.436	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		869	3.8	869	3.8	0.436	0.3	NA	0.2	1.4	0.03	0.04	58.9

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: 0.0 %
Number of Iterations: 5 (maximum specified: 10)

SITE LAYOUT

 **Site: 101 [2023 Design MVT]**

Cudgen Road - Site Access
2023 AM Peak
Design Traffic
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: 101 [2023 Design EVT]

Cudgen Road - Site Access

2023 PM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
NorthEast: Cudgen Road (NE)											
25	T1	948	3.0	0.649	4.3	LOS A	16.3	117.4	0.48	0.45	56.1
26	R2	7	2.0	0.014	11.2	LOS A	0.1	0.7	0.43	0.64	38.5
Approach		956	3.0	0.649	4.3	LOS A	16.3	117.4	0.48	0.45	56.0
NorthWest: Site Access (NW)											
27	L2	16	2.0	0.019	1.8	LOS A	0.1	0.8	0.28	0.20	43.7
29	R2	144	2.0	0.579	41.7	LOS C	3.3	23.3	1.00	0.79	26.4
Approach		160	2.0	0.579	37.8	LOS C	3.3	23.3	0.93	0.73	27.2
SouthWest: Cudgen Road (SW)											
30	L2	46	2.0	0.033	7.0	LOS A	0.1	1.0	0.16	0.64	46.1
31	T1	684	6.0	0.375	7.5	LOS A	8.3	61.4	0.50	0.44	53.5
Approach		731	5.7	0.375	7.5	LOS A	8.3	61.4	0.48	0.45	53.2
All Vehicles		1846	4.0	0.649	8.5	LOS A	16.3	117.4	0.52	0.47	51.8

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

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

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

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.

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	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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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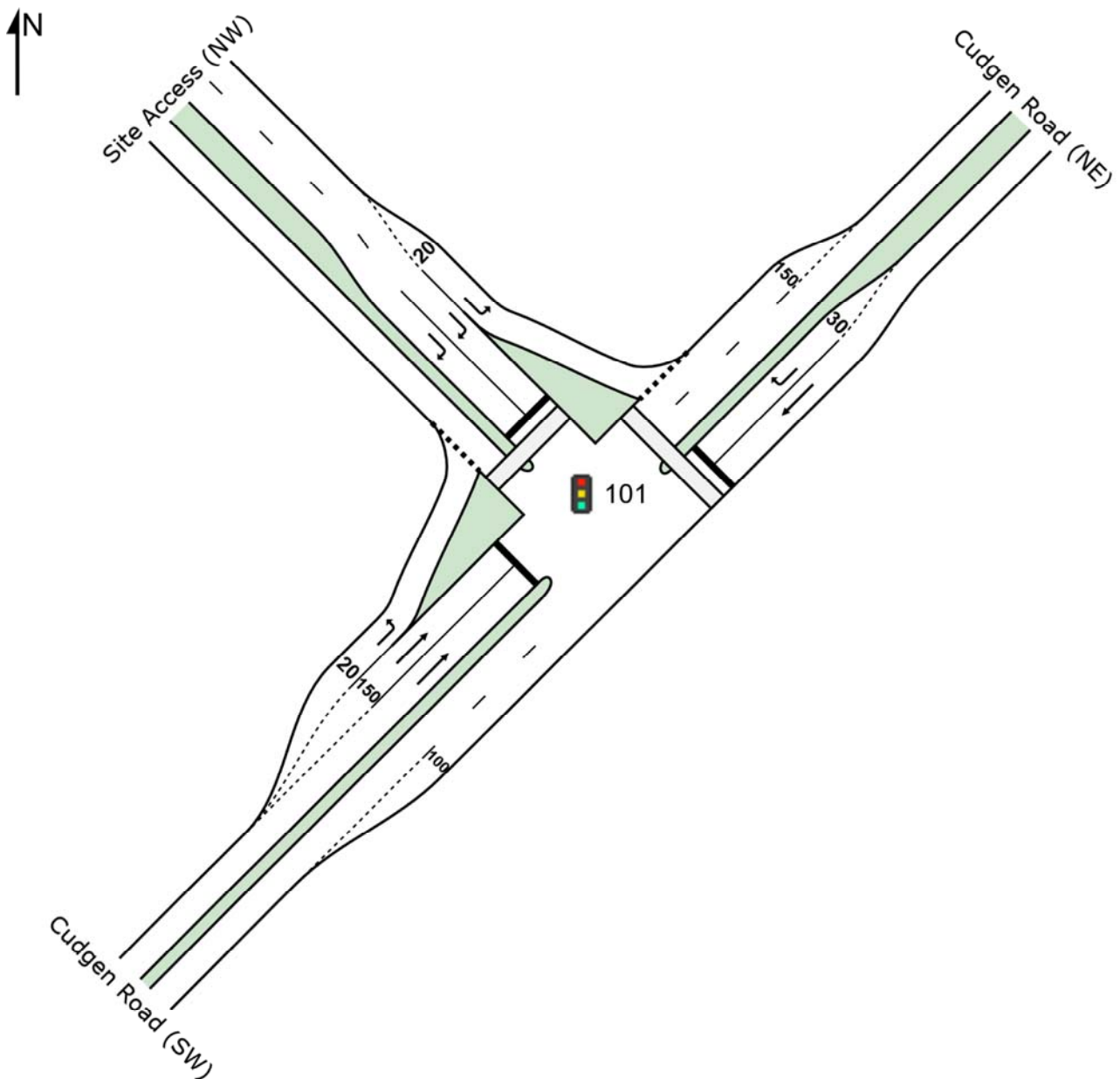
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SITE LAYOUT

 **Site: 101 [2023 Design MVT]**

Cudgen Road - Site Access
2023 AM Peak
Design Traffic
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: 101 [2023 Design MVT]

Cudgen Road - Site Access

2023 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total Flows veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
NorthEast: Cudgen Road (NE)											
25	T1	680	5.0	0.473	3.4	LOS A	9.2	67.3	0.38	0.34	56.9
26	R2	7	2.0	0.019	13.8	LOS A	0.1	0.9	0.51	0.65	36.4
Approach		687	5.0	0.473	3.5	LOS A	9.2	67.3	0.38	0.35	56.8
NorthWest: Site Access (NW)											
27	L2	3	2.0	0.005	3.2	LOS A	0.0	0.2	0.35	0.23	42.2
29	R2	27	2.0	0.110	39.3	LOS C	0.6	4.2	0.96	0.66	27.1
Approach		31	2.0	0.110	35.6	LOS C	0.6	4.2	0.90	0.61	27.9
SouthWest: Cudgen Road (SW)											
30	L2	48	2.0	0.034	7.0	LOS A	0.1	1.1	0.16	0.64	46.1
31	T1	1001	6.0	0.556	8.6	LOS A	14.6	107.1	0.58	0.51	52.7
Approach		1049	5.8	0.556	8.5	LOS A	14.6	107.1	0.56	0.52	52.5
All Vehicles		1767	5.4	0.556	7.0	LOS A	14.6	107.1	0.49	0.45	53.6

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2023 Design PVT]**

Cudgen Road - Site Access

2023 PM Peak - Development Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m	per veh	km/h	
NorthEast: Cudgen Road (NE)											
25	T1	904	3.0	0.626	4.1	LOS A	14.9	107.0	0.46	0.43	56.3
26	R2	13	2.0	0.024	11.2	LOS A	0.2	1.2	0.43	0.65	38.5
Approach		917	3.0	0.626	4.2	LOS A	14.9	107.0	0.46	0.43	56.1
NorthWest: Site Access (NW)											
27	L2	13	2.0	0.016	1.8	LOS A	0.1	0.7	0.27	0.20	43.7
29	R2	114	2.0	0.457	41.1	LOS C	2.5	18.0	0.99	0.74	26.6
Approach		126	2.0	0.457	37.1	LOS C	2.5	18.0	0.92	0.69	27.4
SouthWest: Cudgen Road (SW)											
30	L2	85	2.0	0.061	7.1	LOS A	0.3	1.9	0.17	0.64	46.1
31	T1	697	6.0	0.382	7.5	LOS A	8.5	62.9	0.50	0.44	53.5
Approach		782	5.6	0.382	7.5	LOS A	8.5	62.9	0.47	0.46	52.9
All Vehicles		1825	4.0	0.626	7.9	LOS A	14.9	107.0	0.50	0.46	52.3

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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

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

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

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MOVEMENT SUMMARY

Site: 101 [2033 Design EVT]

Cudgen Road - Site Access

2033 PM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
NorthEast: Cudgen Road (NE)											
25	T1	1120	3.0	0.770	5.2	LOS A	23.5	168.8	0.59	0.55	55.4
26	R2	8	2.0	0.018	12.0	LOS A	0.1	0.9	0.46	0.65	37.8
Approach		1128	3.0	0.770	5.3	LOS A	23.5	168.8	0.59	0.55	55.3
NorthWest: Site Access (NW)											
27	L2	19	2.0	0.025	2.2	LOS A	0.2	1.1	0.30	0.22	43.2
29	R2	166	2.0	0.668	42.4	LOS C	3.9	27.4	1.00	0.86	26.1
Approach		185	2.0	0.668	38.3	LOS C	3.9	27.4	0.93	0.79	27.0
SouthWest: Cudgen Road (SW)											
30	L2	54	2.0	0.038	7.0	LOS A	0.2	1.2	0.16	0.64	46.1
31	T1	812	6.0	0.446	7.9	LOS A	10.6	77.7	0.53	0.46	53.2
Approach		865	5.8	0.446	7.8	LOS A	10.6	77.7	0.51	0.48	52.9
All Vehicles		2179	4.0	0.770	9.1	LOS A	23.5	168.8	0.59	0.54	51.4

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

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

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

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.

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	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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

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

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

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MOVEMENT SUMMARY

Site: 101 [2033 Design MVT]

Cudgen Road - Site Access

2033 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		Total veh/h	HV %	v/c	sec		veh	m		per veh	km/h
NorthEast: Cudgen Road (NE)											
25	T1	805	5.0	0.569	3.8	LOS A	12.2	89.0	0.43	0.39	56.6
26	R2	8	2.0	0.026	17.1	LOS B	0.2	1.2	0.59	0.67	34.0
Approach		814	5.0	0.569	3.9	LOS A	12.2	89.0	0.43	0.39	56.4
NorthWest: Site Access (NW)											
27	L2	3	2.0	0.006	5.2	LOS A	0.0	0.3	0.43	0.28	40.3
29	R2	32	2.0	0.127	39.4	LOS C	0.7	4.8	0.96	0.67	27.0
Approach		35	2.0	0.127	36.3	LOS C	0.7	4.8	0.91	0.63	27.7
SouthWest: Cudgen Road (SW)											
30	L2	55	2.0	0.038	7.0	LOS A	0.2	1.2	0.16	0.64	46.1
31	T1	1187	6.0	0.664	9.4	LOS A	19.4	142.7	0.63	0.57	52.1
Approach		1242	5.8	0.664	9.3	LOS A	19.4	142.7	0.61	0.57	51.9
All Vehicles		2091	5.4	0.664	7.6	LOS A	19.4	142.7	0.54	0.50	53.1

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

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

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

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.

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 ped	m		per ped	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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

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

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

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MOVEMENT SUMMARY

Site: 101 [2033 Design PVT]

Cudgen Road - Site Access

2033 PM Peak - Development Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows		Deg. Satn	Average Delay	Level of Service	95% Back of Queue	Prop. Queued	Effective Stop Rate	Average Speed	
		Total veh/h	HV %	v/c	sec		Vehicles veh	Distance m	per veh	km/h	
NorthEast: Cudgen Road (NE)											
25	T1	1067	3.0	0.745	4.9	LOS A	21.0	150.8	0.55	55.6	
26	R2	15	2.0	0.032	12.1	LOS A	0.2	1.6	0.46	37.7	
Approach		1082	3.0	0.745	5.0	LOS A	21.0	150.8	0.55	55.5	
NorthWest: Site Access (NW)											
27	L2	15	2.0	0.020	2.2	LOS A	0.1	0.9	0.30	43.2	
29	R2	132	2.0	0.529	41.4	LOS C	3.0	21.1	1.00	26.5	
Approach		146	2.0	0.529	37.4	LOS C	3.0	21.1	0.93	27.3	
SouthWest: Cudgen Road (SW)											
30	L2	99	2.0	0.071	7.1	LOS A	0.3	2.2	0.17	46.1	
31	T1	826	6.0	0.456	7.9	LOS A	10.9	80.2	0.53	53.2	
Approach		925	5.6	0.456	7.9	LOS A	10.9	80.2	0.49	52.6	
All Vehicles		2154	4.0	0.745	8.4	LOS A	21.0	150.8	0.55	51.9	

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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

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

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

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MOVEMENT SUMMARY

Site: 101 [2033 Design Sens EVT]

Cudgen Road - Site Access

2033 PM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
NorthEast: Cudgen Road (NE)											
25	T1	1124	3.0	0.773	5.2	LOS A	23.7	170.3	0.59	0.56	55.3
26	R2	8	2.0	0.018	12.0	LOS A	0.1	0.9	0.46	0.65	37.8
Approach		1133	3.0	0.773	5.3	LOS A	23.7	170.3	0.59	0.56	55.3
NorthWest: Site Access (NW)											
27	L2	19	2.0	0.026	2.2	LOS A	0.2	1.1	0.30	0.22	43.2
29	R2	174	2.0	0.698	42.7	LOS D	4.1	28.9	1.00	0.89	26.1
Approach		193	2.0	0.698	38.8	LOS C	4.1	28.9	0.93	0.82	26.8
SouthWest: Cudgen Road (SW)											
30	L2	56	2.0	0.040	7.0	LOS A	0.2	1.2	0.16	0.64	46.1
31	T1	819	6.0	0.451	7.9	LOS A	10.7	78.7	0.53	0.47	53.2
Approach		875	5.7	0.451	7.9	LOS A	10.7	78.7	0.51	0.48	52.9
All Vehicles		2200	4.0	0.773	9.2	LOS A	23.7	170.3	0.59	0.55	51.3

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Cudgen Road - Site Access
 \P3378.002M Site Access - Cudgen Road.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Design Sens MVT]

Cudgen Road - Site Access

2033 AM Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
NorthEast: Cudgen Road (NE)											
25	T1	847	5.0	0.600	3.9	LOS A	13.4	97.5	0.44	0.41	56.5
26	R2	9	2.0	0.029	16.6	LOS B	0.2	1.3	0.58	0.67	34.4
Approach		857	5.0	0.600	4.1	LOS A	13.4	97.5	0.44	0.41	56.3
NorthWest: Site Access (NW)											
27	L2	4	2.0	0.007	4.8	LOS A	0.1	0.4	0.41	0.28	40.6
29	R2	35	2.0	0.140	39.5	LOS C	0.7	5.3	0.96	0.67	27.0
Approach		39	2.0	0.140	35.8	LOS C	0.7	5.3	0.90	0.63	27.8
SouthWest: Cudgen Road (SW)											
30	L2	60	2.0	0.042	7.0	LOS A	0.2	1.3	0.16	0.64	46.1
31	T1	1151	6.0	0.644	9.2	LOS A	18.4	135.5	0.62	0.56	52.2
Approach		1211	5.8	0.644	9.1	LOS A	18.4	135.5	0.60	0.56	52.0
All Vehicles		2106	5.4	0.644	7.6	LOS A	18.4	135.5	0.54	0.50	53.1

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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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 \P3378.002M Site Access - Cudgen Road.sip7

MOVEMENT SUMMARY

Site: 101 [2033 Design Sens PVT]

Cudgen Road - Site Access

2033 PM Peak - Development Peak

Design Traffic

Signals - Fixed Time Isolated Cycle Time = 80 seconds (User-Given Cycle Time)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
NorthEast: Cudgen Road (NE)											
25	T1	1076	3.0	0.752	4.9	LOS A	21.4	153.5	0.56	0.52	55.6
26	R2	16	2.0	0.035	12.5	LOS A	0.2	1.7	0.48	0.66	37.4
Approach		1092	3.0	0.752	5.0	LOS A	21.4	153.5	0.56	0.52	55.4
NorthWest: Site Access (NW)											
27	L2	16	2.0	0.022	2.5	LOS A	0.1	1.0	0.32	0.23	43.0
29	R2	141	2.0	0.567	41.6	LOS C	3.2	22.8	1.00	0.78	26.4
Approach		157	2.0	0.567	37.7	LOS C	3.2	22.8	0.93	0.73	27.2
SouthWest: Cudgen Road (SW)											
30	L2	105	2.0	0.075	7.1	LOS A	0.3	2.4	0.17	0.65	46.1
31	T1	836	6.0	0.463	8.0	LOS A	11.1	81.7	0.53	0.47	53.2
Approach		941	5.6	0.463	7.9	LOS A	11.1	81.7	0.49	0.49	52.6
All Vehicles		2189	4.0	0.752	8.6	LOS A	21.4	153.5	0.56	0.52	51.7

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

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

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

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.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped	
P6	NorthEast Full Crossing	53	34.3	LOS D	0.1	0.1	0.93	0.93	
P7	NorthWest Full Crossing	53	9.5	LOS A	0.1	0.1	0.49	0.49	
All Pedestrians		105	21.9	LOS C			0.71	0.71	

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.

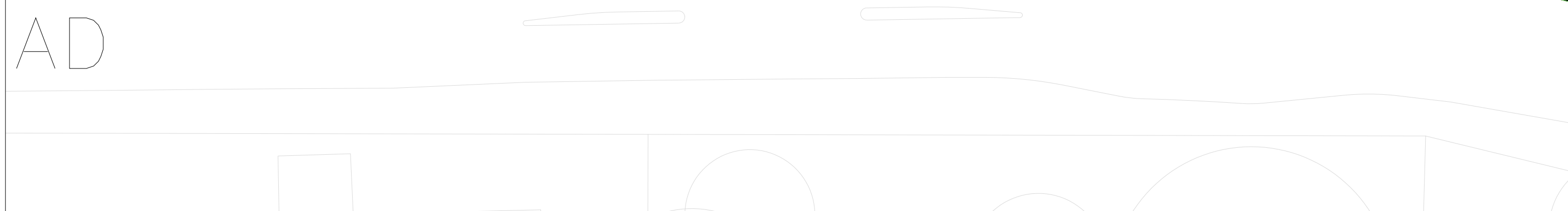
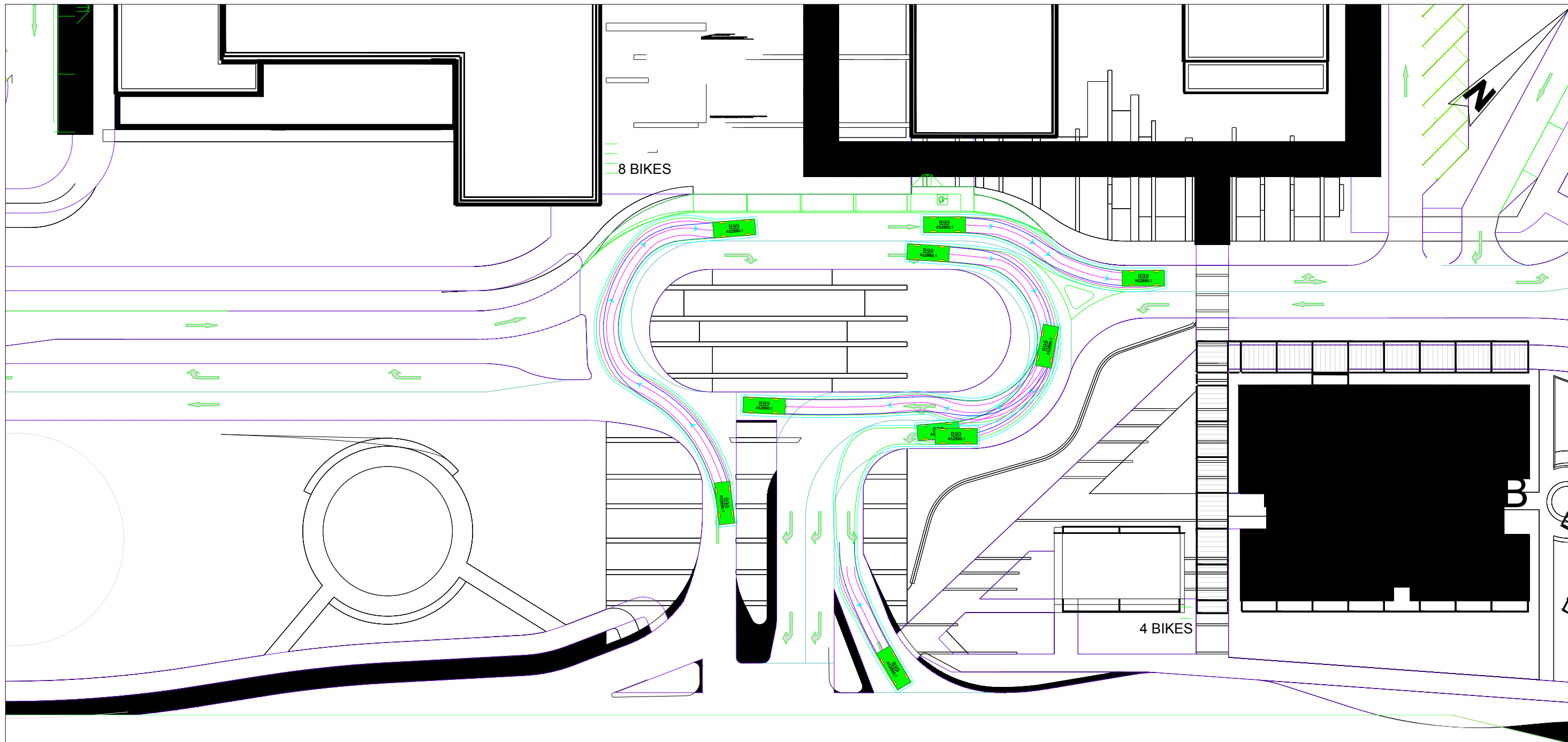
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Project: P:\P3378 Tweed Valley Hospital\Technical Work\Models\Stage 2 Models - Sensitivity Test 499 Beds\Cudgen Road - Site Access
 \P3378.002M Site Access - Cudgen Road.sip7

APPENDIX D

SWEPT PATH ASSESSMENT



BITZIOS

consulting

REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
001	Version 1	J.W-G	09/08/19
002	Version 2	J.W-G	13/08/19

Scale @ A3

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5

10

15

20

25

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Project

Tweed Valley Hospital

Title

B99 Swept Paths

NOT FOR CONSTRUCTION

Project Number

P3378

Sheet Number

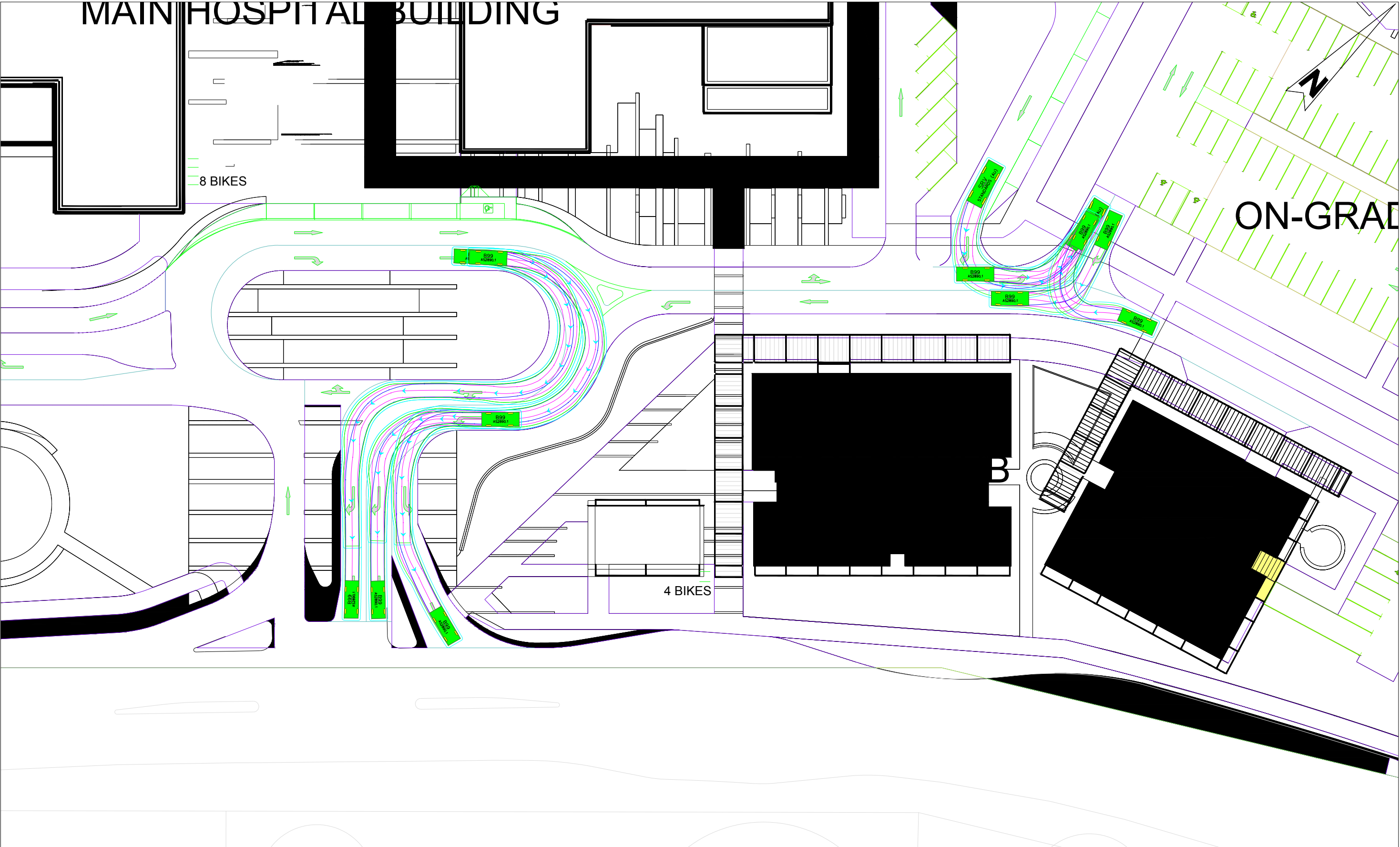
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Date

13/09/2019

Issue

002



BITZIOS

consulting

REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
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002	Version 2	J.W-G	13/08/19

Scale @ A3

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20

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Project

Tweed Valley Hospital

Title

B99 Swept Paths

NOT FOR CONSTRUCTION

Project Number

P3378

Sheet Number

2

Date

13/09/2019

Issue

002

PROPOSED MULTI-DECK CARPARK

4 BIKES

N

BITZIOS
consulting

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	Version 1	J.W-G	09/08/19
002	Version 2	J.W-G	13/08/19

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Project

Tweed Valley Hospital

Title

B99 & SRV Swept Paths

NOT FOR
CONSTRUCTION

Project Number

P3378

Date

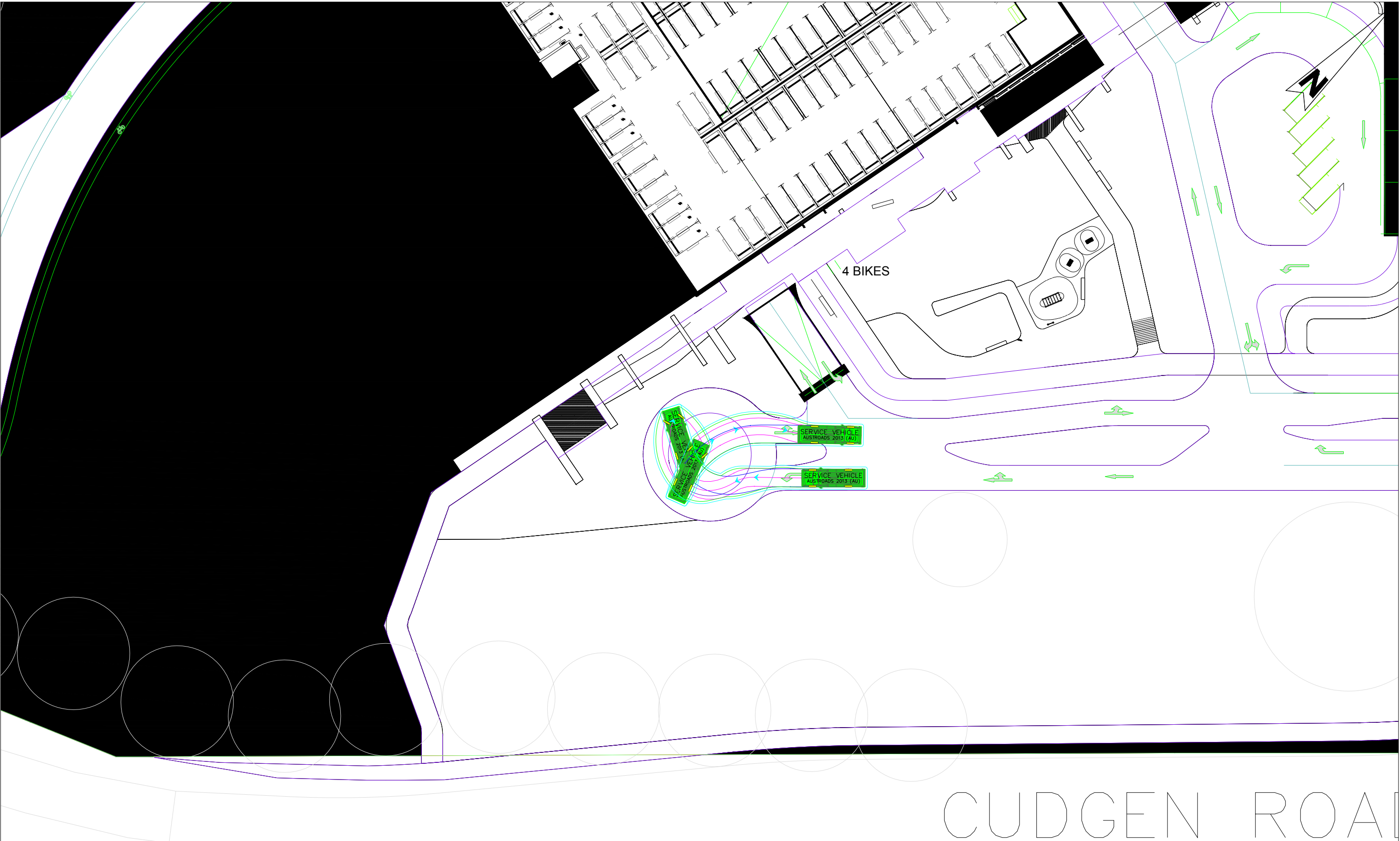
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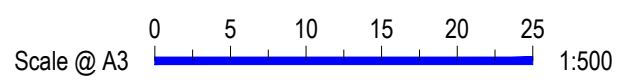
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Issue

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002	Version 2	J.W-G	13/08/19

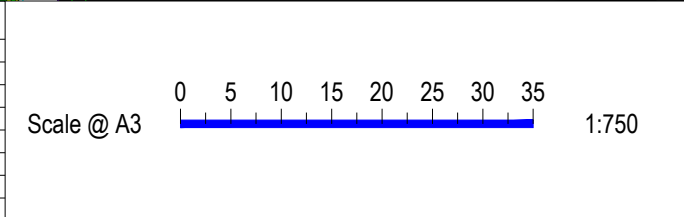


Project	Tweed Valley Hospital
Title	MRV Swept Paths

NOT FOR CONSTRUCTION	
Project Number	Date
P3378	13/09/2019
Sheet Number	Issue
4	002

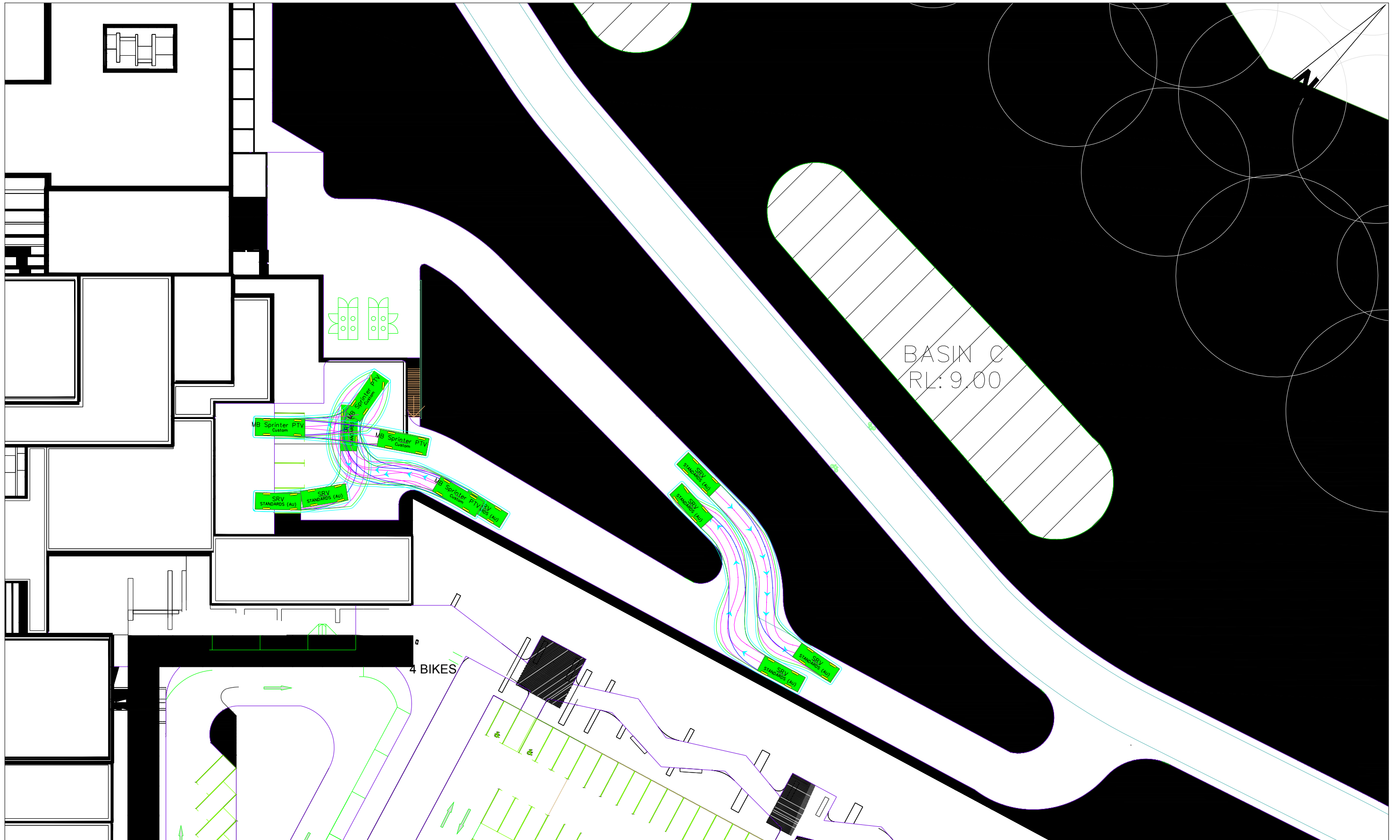


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002	Version 2	J.W-G	13/08/19



Project	Tweed Valley Hospital
Title	AV Swept Paths

NOT FOR CONSTRUCTION	
Project Number	Date
P3378	13/09/2019
Sheet Number	Issue
5	002



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Issue		REVISIONS		Drawn	Date
		Revisions/Descriptions			
001	Version 1			J.W-G	09/08/19
002	Version 2			J.W-G	13/08/19

Scale @ A3

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Project

Tweed Valley Hospital

Title

SRV & PTV Swept Paths

NOT FOR CONSTRUCTION

Project Number

P3378

Sheet Number

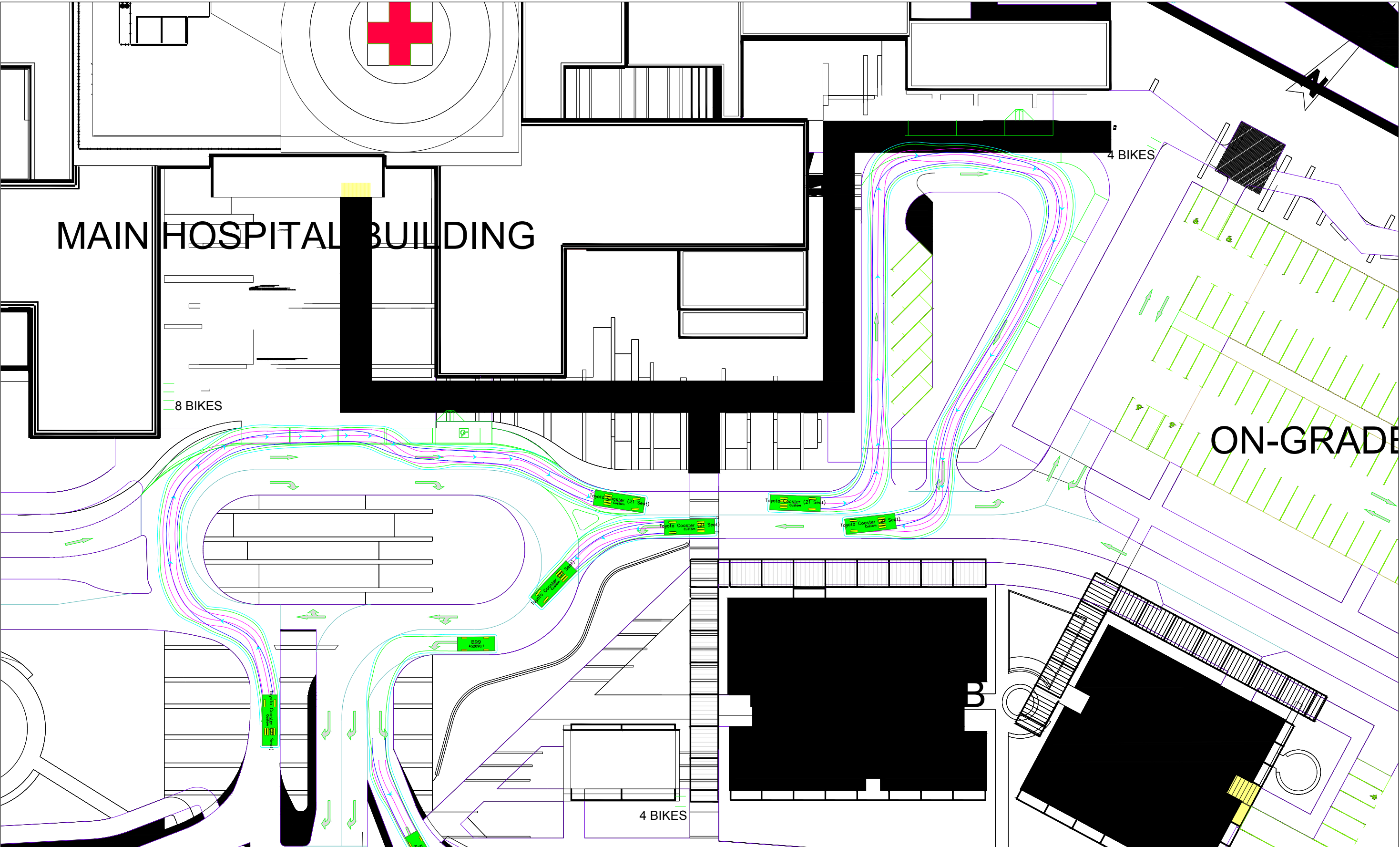
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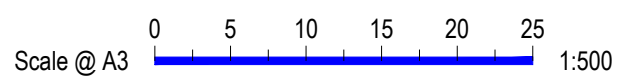
13/09/2019

Issue

002



REVISIONS			
Issue	Version	Revisions/Descriptions	Drawn Date
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002	Version 2		J.W-G 13/08/19



Project	Tweed Valley Hospital
Title	Minibus Swept Paths

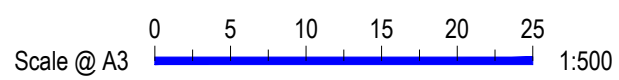
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Project Number	Date
P3378	13/09/2019
Sheet Number	Issue
7	002



PROPOSED MULTI-DECK
CARPARK



REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
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002	Version 2	J.W-G	13/08/19

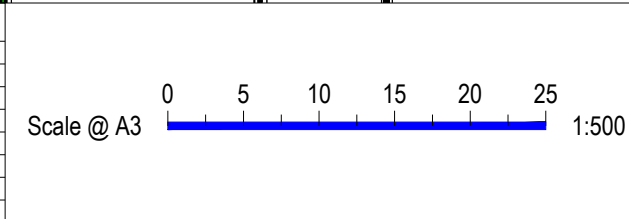


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Title	SRV Swept Paths	

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Sheet Number	Issue
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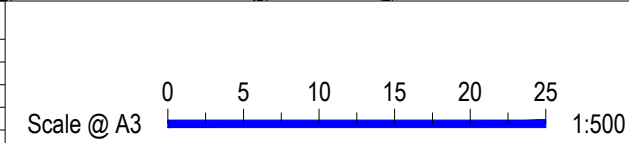


Project	Tweed Valley Hospital	
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NOT FOR CONSTRUCTION	
Project Number	Date
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Sheet Number	Issue
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Issue	Revisions/Descriptions	Drawn	Date
001	Version 1	J.W-G	09/08/19
002	Version 2	J.W-G	13/08/19



Project	Tweed Valley Hospital
Title	HRV & SRV Swept Paths

NOT FOR CONSTRUCTION	
Project Number	Date
P3378	13/09/2019
Sheet Number	Issue
10	002