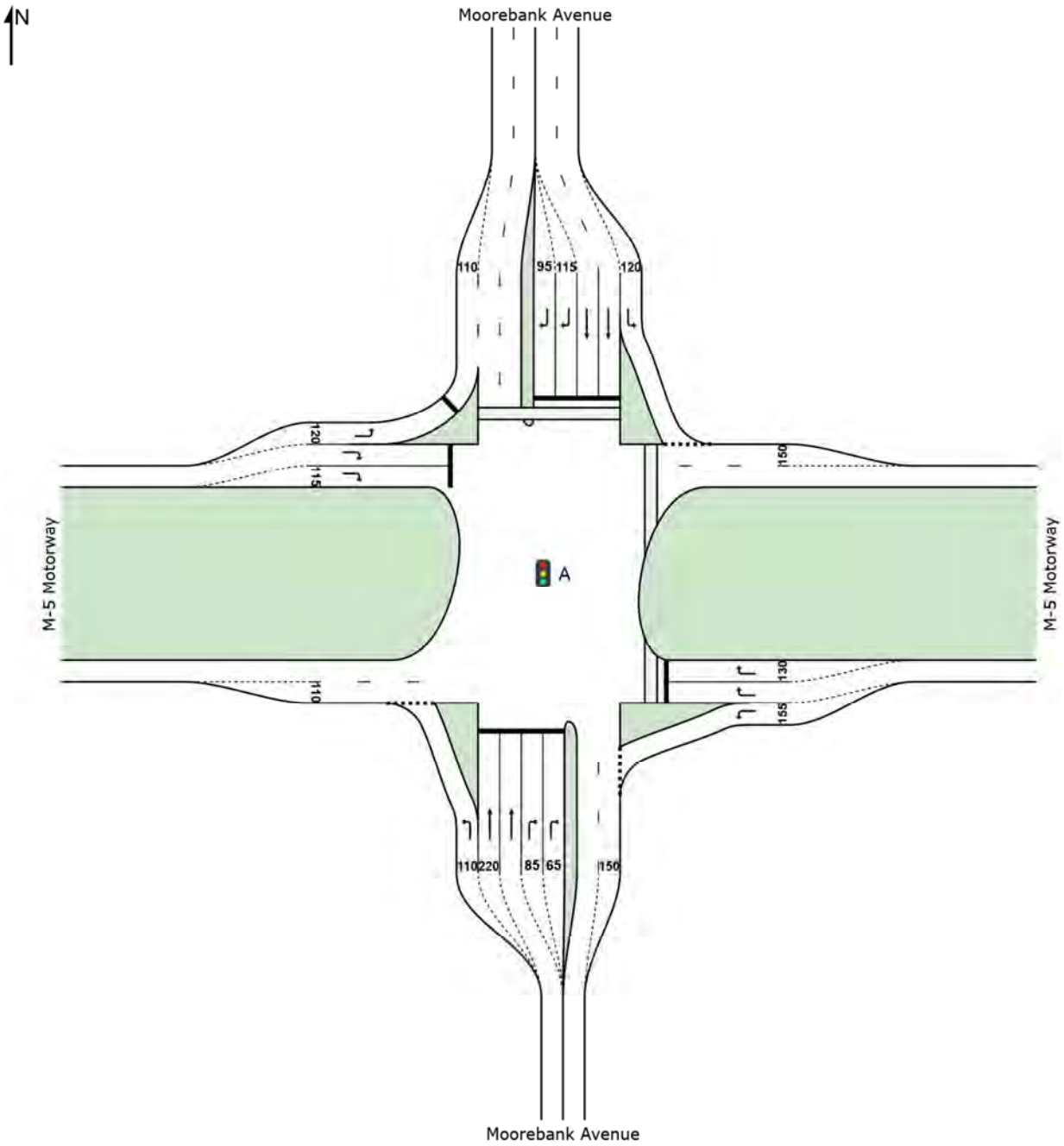
APPENDIX A – DETAILED SIDRA MOVEMENT SUMMARIES – SCENARIO 1

Stage 1

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South: Moorebank Avenue													
1	L2	419	12.8	419	12.8	0.377	14.3	LOS A	9.7	85.1	0.41	0.73	50.7
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	261	17.3	261	17.3	0.410	57.4	LOS E	8.9	83.5	0.88	0.79	26.5
Approach		1082	10.4	1082	10.4	0.410	30.2	LOS C	9.7	85.1	0.63	0.69	37.2
East: M-5 Motorway													
4	L2	263	19.2	263	19.2	0.216	6.1	LOS A	1.0	9.3	0.11	0.57	47.8
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		506	12.1	506	12.1	0.949	53.1	LOS D	10.7	81.6	0.54	0.80	22.7
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.2	LOS A	0.5	4.4	0.17	0.58	52.9
8	T1	174	8.5	174	8.5	0.128	27.4	LOS B	4.1	33.6	0.64	0.51	24.8
9	R2	506	20.2	506	20.2	0.961	85.9	LOS F	28.4	279.4	0.98	0.97	22.4
Approach		728	17.3	728	17.3	0.961	66.7	LOS E	28.4	279.4	0.84	0.83	23.6
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	445	9.2	445	9.2	0.689	64.3	LOS E	16.3	135.1	0.97	0.83	19.8
Approach		1801	8.0	1801	8.0	0.887	21.2	LOS B	21.5	173.2	0.60	0.70	39.8
All Vehicles		4118	10.8	4118	10.8	0.961	35.5	LOS C	28.4	279.4	0.64	0.73	33.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.8 %
Number of Iterations: 16 (maximum specified: 20)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

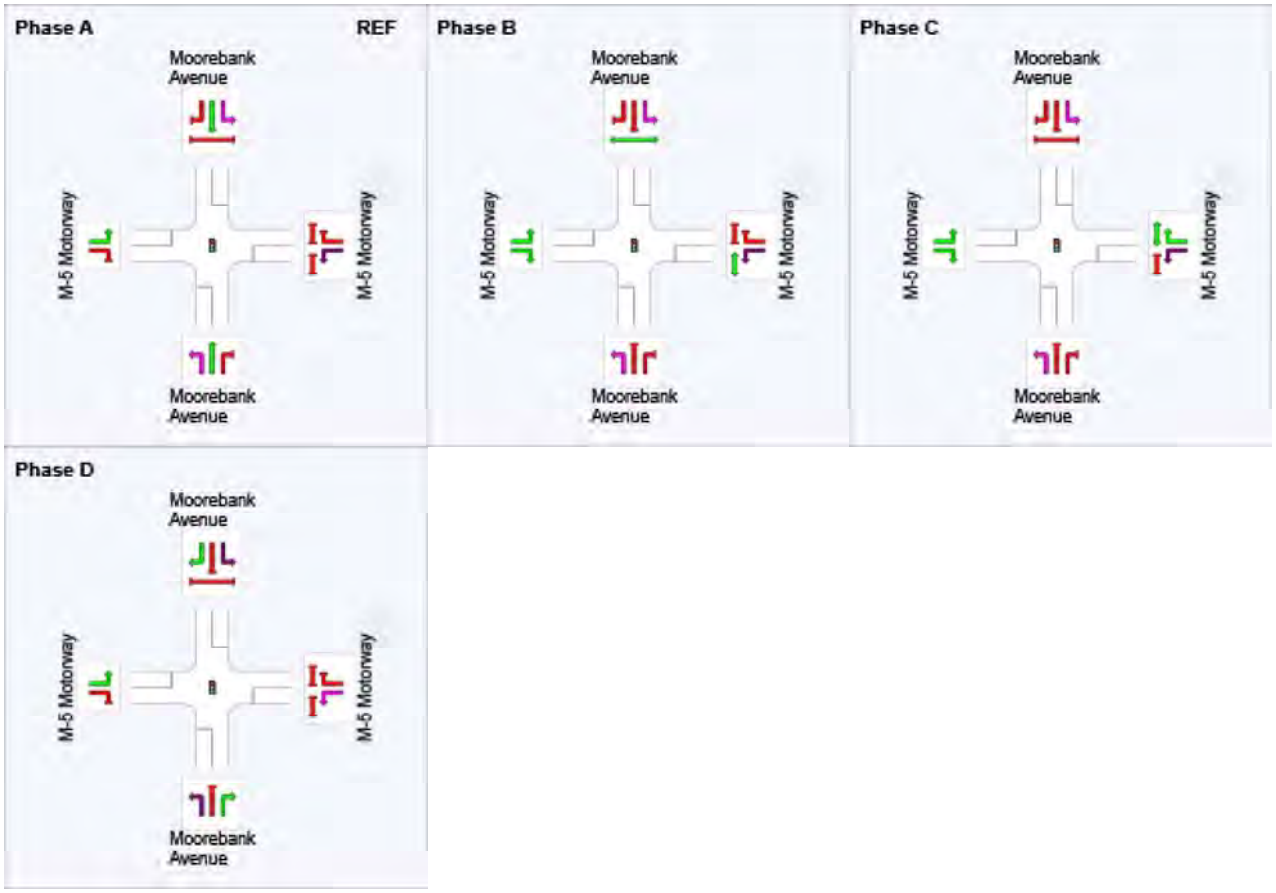
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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

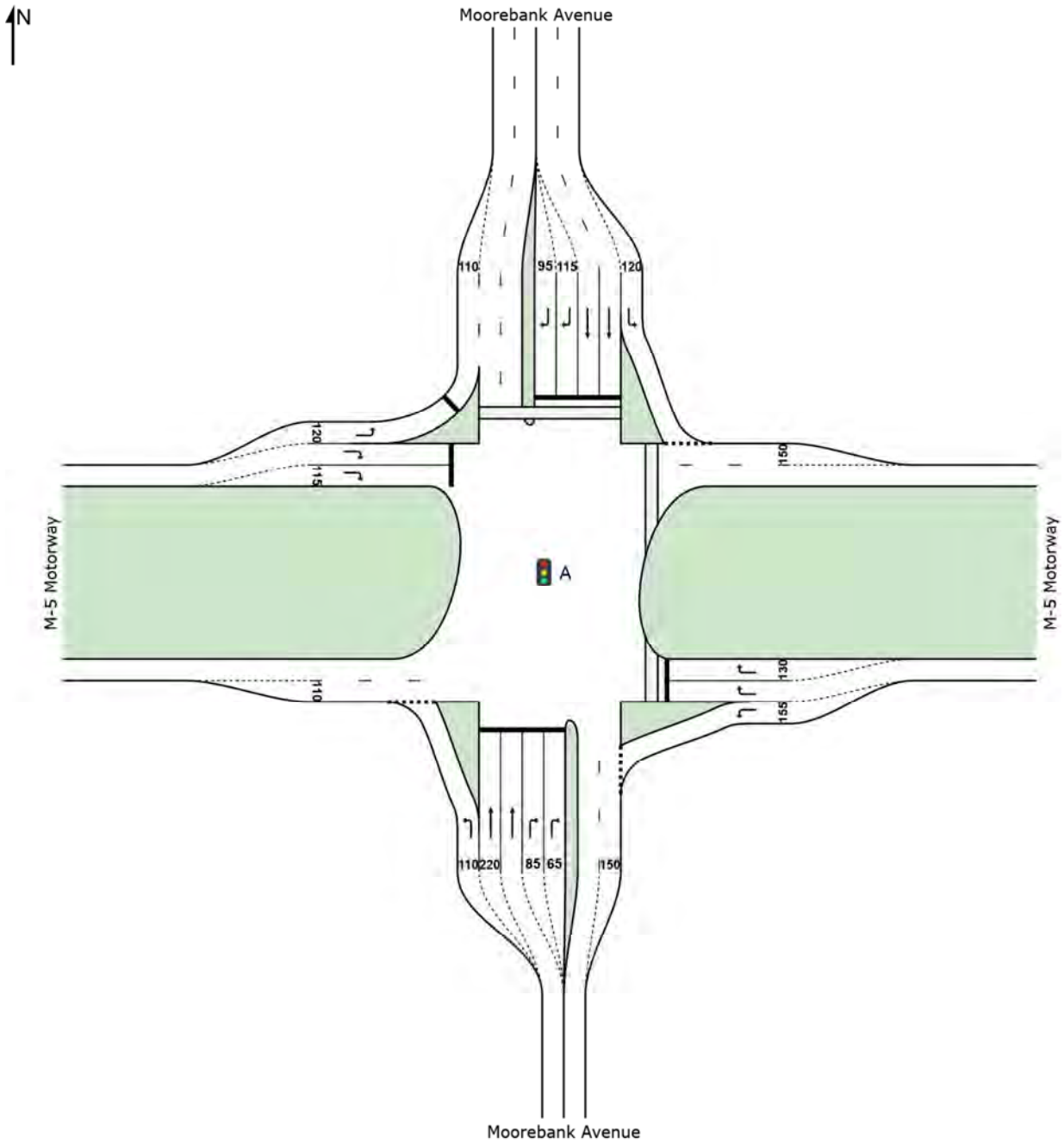


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	398	6.9	398	6.9	0.556	36.3	LOS C	19.3	153.4	0.81	0.97	37.9
2	T1	199	3.7	199	3.7	0.401	65.0	LOS E	6.8	50.9	0.96	0.76	22.7
3	R2	261	8.9	261	8.9	0.154	21.8	LOS B	4.8	39.9	0.50	0.70	42.1
Approach		858	6.7	858	6.7	0.556	38.6	LOS C	19.3	153.4	0.75	0.84	34.4
East: M-5 Motorway													
4	L2	268	8.6	268	8.6	0.223	7.0	LOS A	2.7	22.2	0.20	0.61	46.4
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		356	8.0	356	8.0	0.642	27.2	LOS B	3.4	26.9	0.39	0.65	30.4
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.059	6.3	LOS A	0.5	3.5	0.13	0.58	56.4
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	426	6.9	426	6.9	0.756	70.0	LOS E	16.5	131.8	0.99	0.85	18.7
Approach		1021	7.1	1021	7.1	0.756	32.8	LOS C	16.5	131.8	0.49	0.68	33.4
All Vehicles		4009	5.7	4009	5.7	0.884	38.0	LOS C	46.1	352.4	0.67	0.79	32.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 10 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

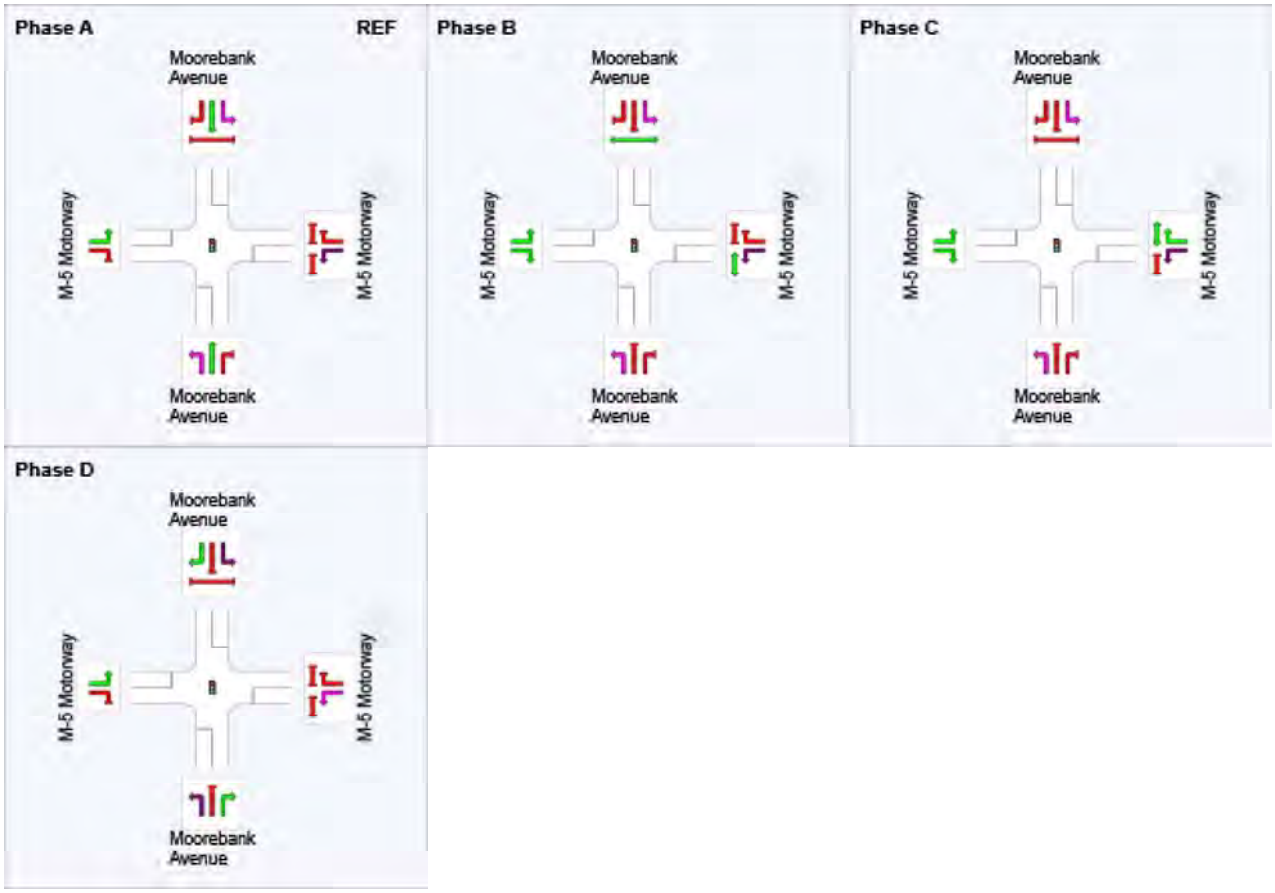
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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%.

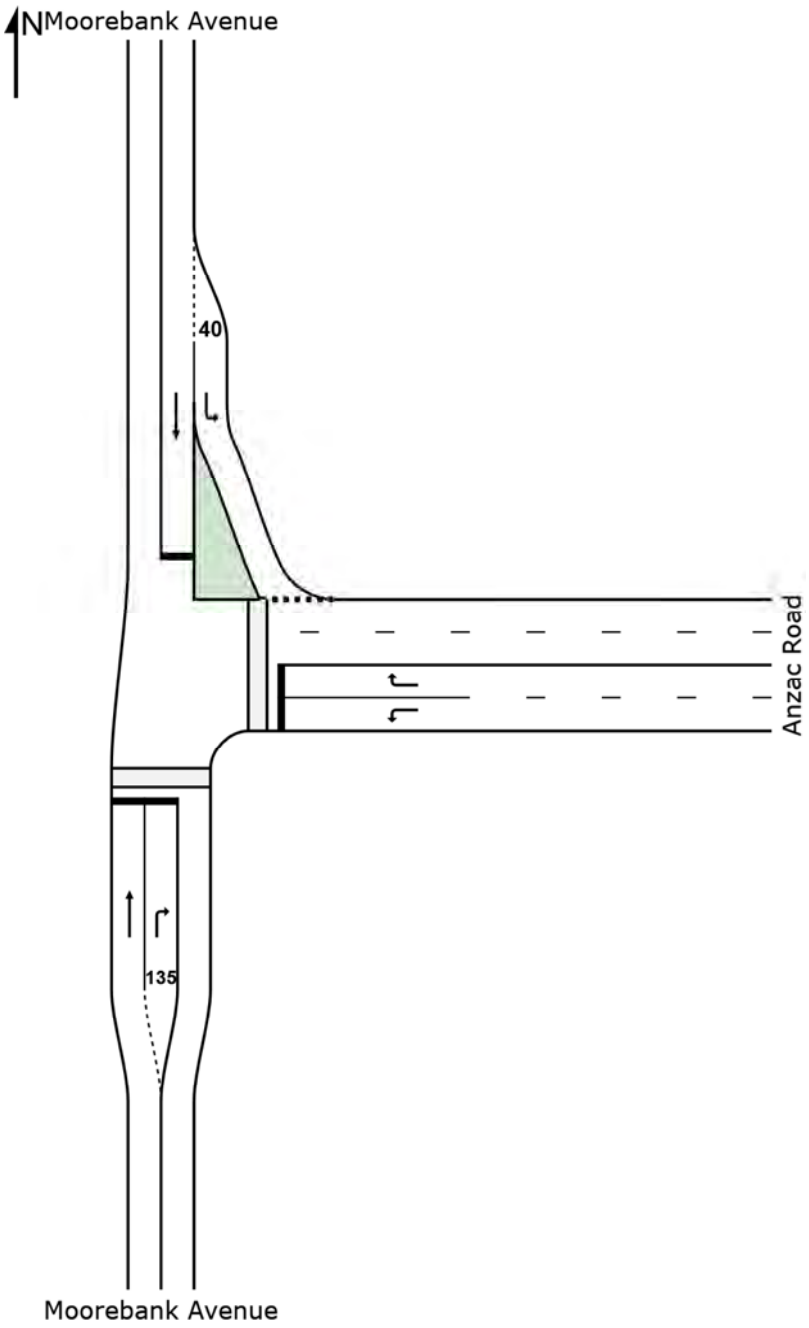


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	738	9.3	738	9.3	0.678	10.8	LOS A	17.4	144.1	0.74	0.67	29.1
3	R2	381	3.3	381	3.3	0.909	46.4	LOS D	16.5	123.5	1.00	1.13	19.6
Approach		1119	7.2	1119	7.2	0.909	22.9	LOS B	17.4	144.1	0.83	0.83	24.0
East: Anzac Road													
4	L2	186	3.4	186	3.4	0.419	30.3	LOS C	5.5	41.3	0.89	0.79	15.2
6	R2	363	11.9	363	11.9	0.864	42.6	LOS D	14.5	125.8	1.00	1.00	11.7
Approach		549	9.0	549	9.0	0.864	38.4	LOS C	14.5	125.8	0.96	0.93	12.7
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.343	7.9	LOS A	4.9	39.7	0.46	0.62	33.8
8	T1	340	22.3	340	22.3	0.907	42.1	LOS C	14.5	146.4	0.97	1.25	8.6
Approach		743	14.4	743	14.4	0.907	23.5	LOS B	14.5	146.4	0.69	0.91	18.8
All Vehicles		2412	9.9	2412	9.9	0.909	26.6	LOS B	17.4	146.4	0.82	0.87	20.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.8 %
Number of Iterations: 16 (maximum specified: 20)

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	11	26.6	LOS C	0.0	0.0	0.87	0.87
P2	East Full Crossing	11	27.5	LOS C	0.0	0.0	0.89	0.89
All Pedestrians		21	27.0	LOS C			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

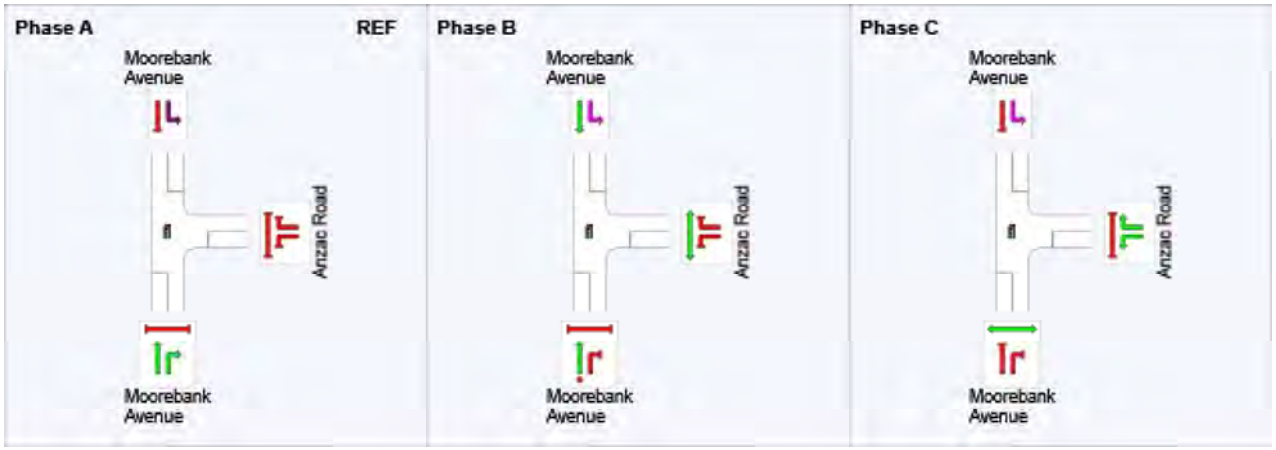
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 3 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	47
Green Time (sec)	16	19	17
Phase Time (sec)	22	25	23
Phase Split	31%	36%	33%

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%.

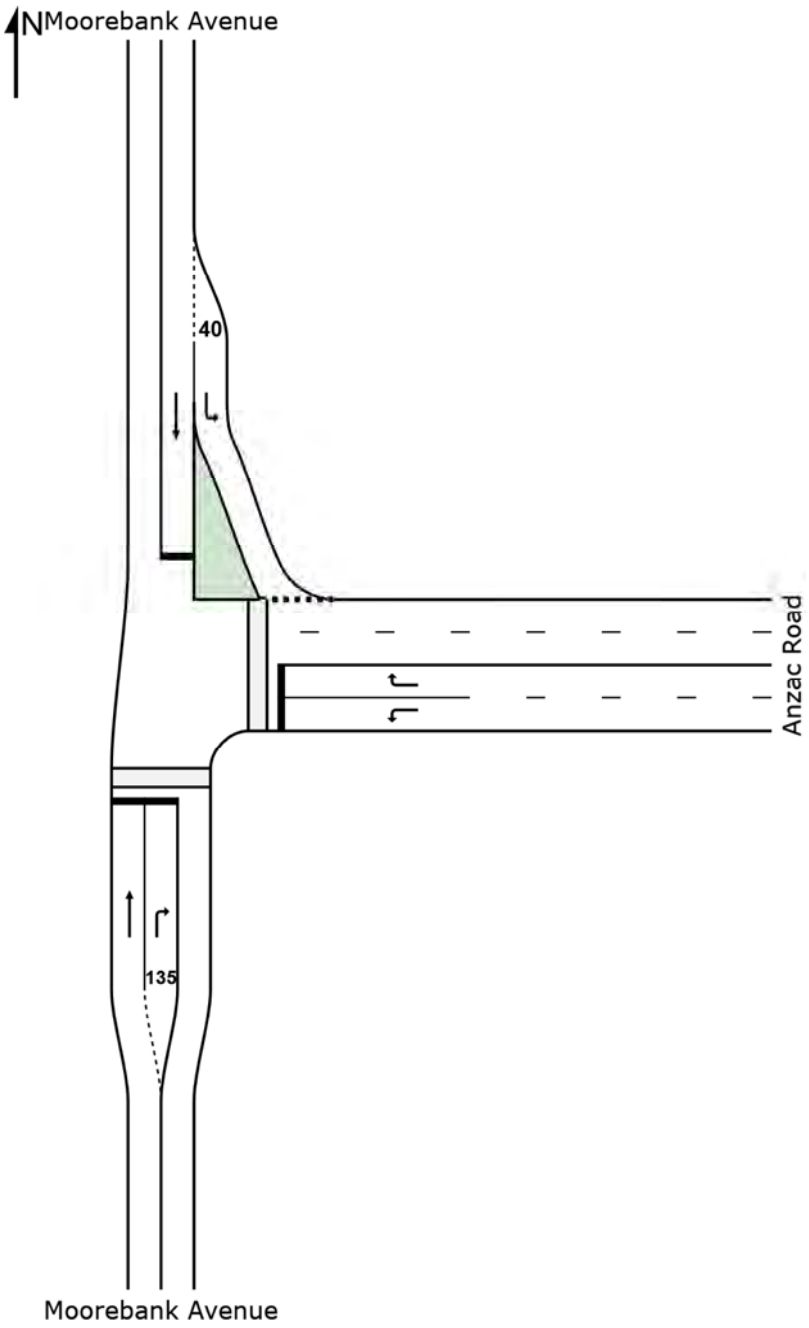


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	461	11.0	461	11.0	0.367	6.1	LOS A	8.0	68.4	0.46	0.40	33.0
3	R2	169	0.6	169	0.6	0.857	52.3	LOS D	8.0	56.9	1.00	1.03	18.4
Approach		631	8.2	631	8.2	0.857	18.5	LOS B	8.0	68.4	0.60	0.57	25.8
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.855	50.5	LOS D	13.1	94.4	1.00	0.96	10.1
6	R2	287	4.0	287	4.0	0.893	54.8	LOS D	14.2	107.5	1.00	1.01	9.5
Approach		567	2.8	567	2.8	0.893	52.7	LOS D	14.2	107.5	1.00	0.99	9.8
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.286	4.9	LOS A	3.5	25.8	0.28	0.52	37.9
8	T1	692	6.8	692	6.8	0.899	33.7	LOS C	22.6	179.5	0.84	0.97	10.2
Approach		1111	5.4	1111	5.4	0.899	22.8	LOS B	22.6	179.5	0.63	0.80	17.6
All Vehicles		2308	5.5	2308	5.5	0.899	29.0	LOS C	22.6	179.5	0.71	0.78	17.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 10 (maximum specified: 20)

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	11	35.8	LOS D	0.0	0.0	0.92	0.92
P2	East Full Crossing	11	16.5	LOS B	0.0	0.0	0.62	0.62
All Pedestrians		21	26.2	LOS C			0.77	0.77

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

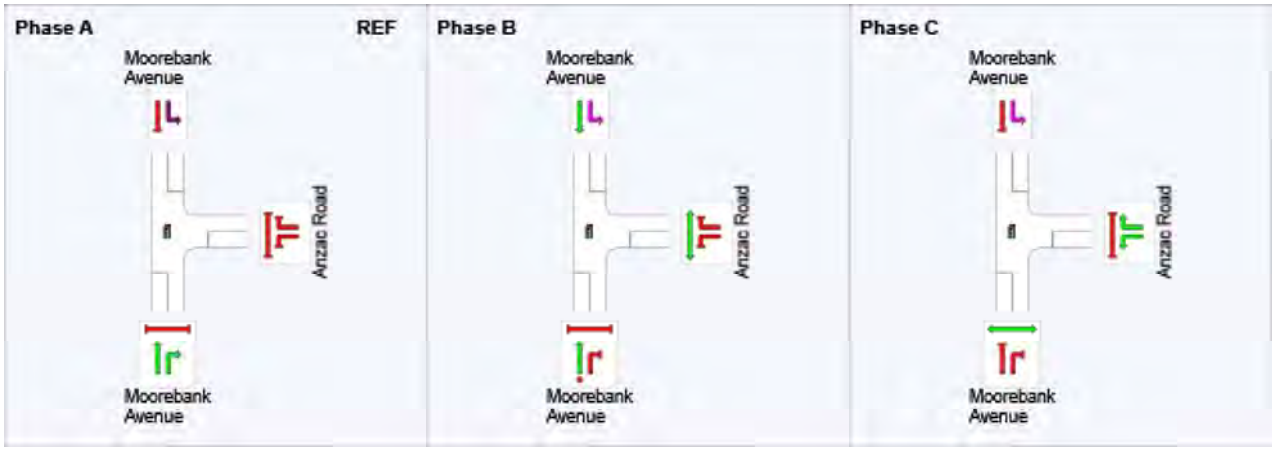
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 3 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	15	64
Green Time (sec)	9	43	15
Phase Time (sec)	15	49	21
Phase Split	18%	58%	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%.



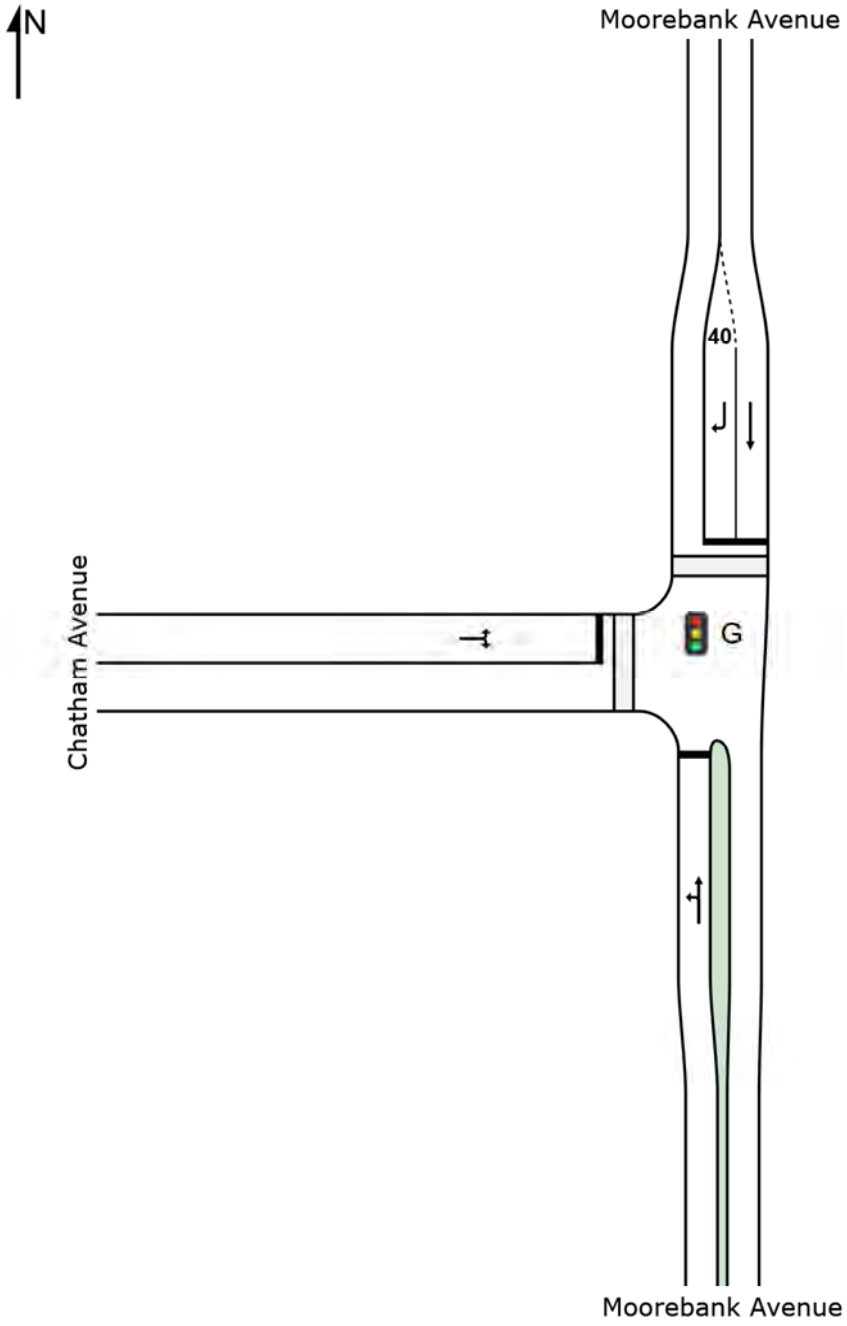
REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class Running	Other Movement Class Stopped
Mixed Running & Stopped Movement Classes	
Undetected Movement	Phase Transition Applied

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.879	26.9	LOS B	43.8	330.2	0.89	0.95	36.9
2	T1	1081	3.8	1081	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
Approach		1082	3.8	1082	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	40	100.0	40	100.0	0.523	50.3	LOS D	1.8	38.1	1.00	0.78	23.7
Approach		497	16.5	497	16.5	0.523	6.5	LOS A	5.3	43.6	0.36	0.31	43.3
West: Chatham Avenue													
10	L2	40	100.0	40	100.0	0.488	50.8	LOS D	1.8	37.9	1.00	0.76	11.8
12	R2	1	0.0	1	0.0	0.488	50.4	LOS D	1.8	37.9	1.00	0.76	26.3
Approach		41	97.4	41	97.4	0.488	50.8	LOS D	1.8	37.9	1.00	0.76	12.3
All Vehicles		1620	10.1	1620	10.1	0.879	19.1	LOS B	43.8	330.2	0.73	0.75	37.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.8 %
Number of Iterations: 16 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

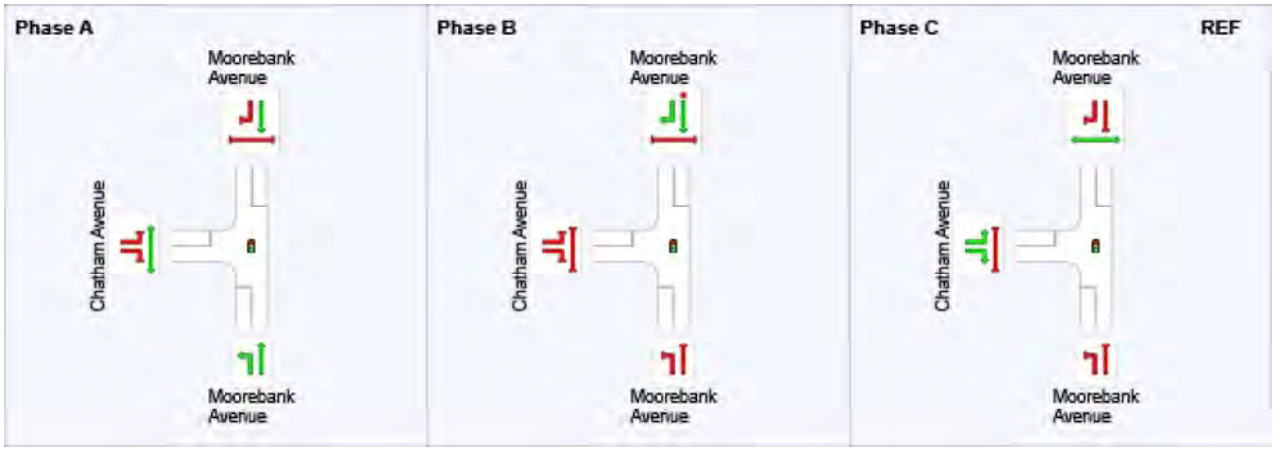
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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%.

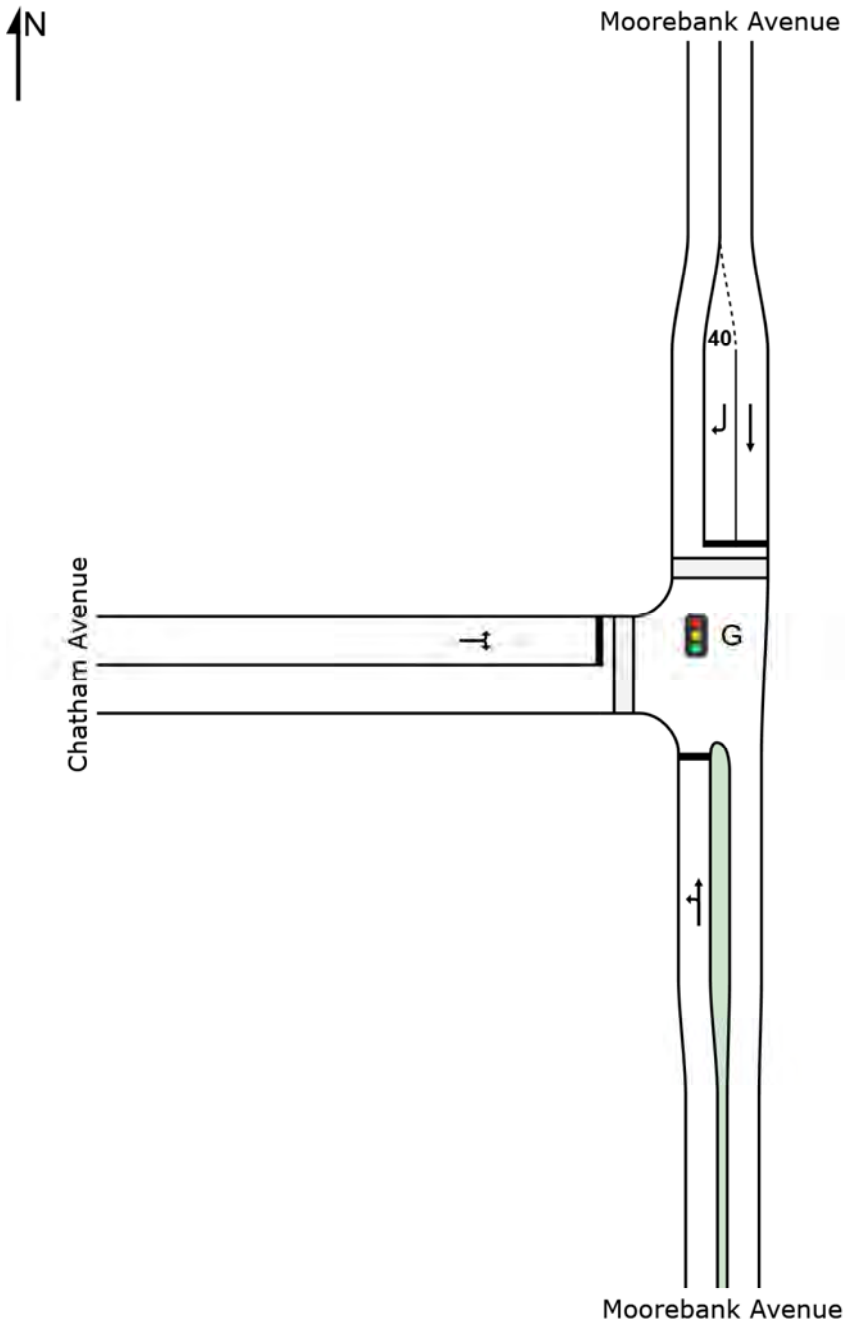


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	936	1.2	936	1.2	0.843	14.2	LOS A	21.0	150.9	0.84	0.93	40.3
9	R2	40	100.0	40	100.0	0.277	25.1	LOS B	0.9	18.7	0.93	0.73	30.0
Approach		976	5.3	976	5.3	0.843	14.7	LOS B	21.0	150.9	0.84	0.92	39.9
West: Chatham Avenue													
10	L2	105	38.0	105	38.0	0.500	26.4	LOS B	2.4	29.4	0.97	0.78	18.7
12	R2	1	0.0	1	0.0	0.500	26.1	LOS B	2.4	29.4	0.97	0.78	35.0
Approach		106	37.6	106	37.6	0.500	26.4	LOS B	2.4	29.4	0.97	0.78	18.9
All Vehicles		1584	6.5	1584	6.5	0.843	17.4	LOS B	21.0	150.9	0.89	0.92	38.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 10 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			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.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

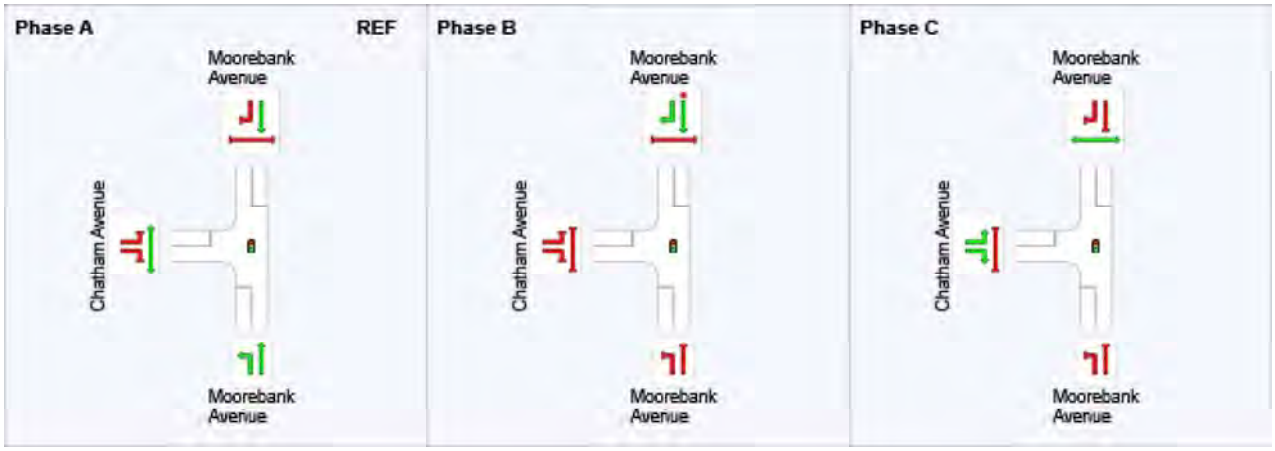
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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%.



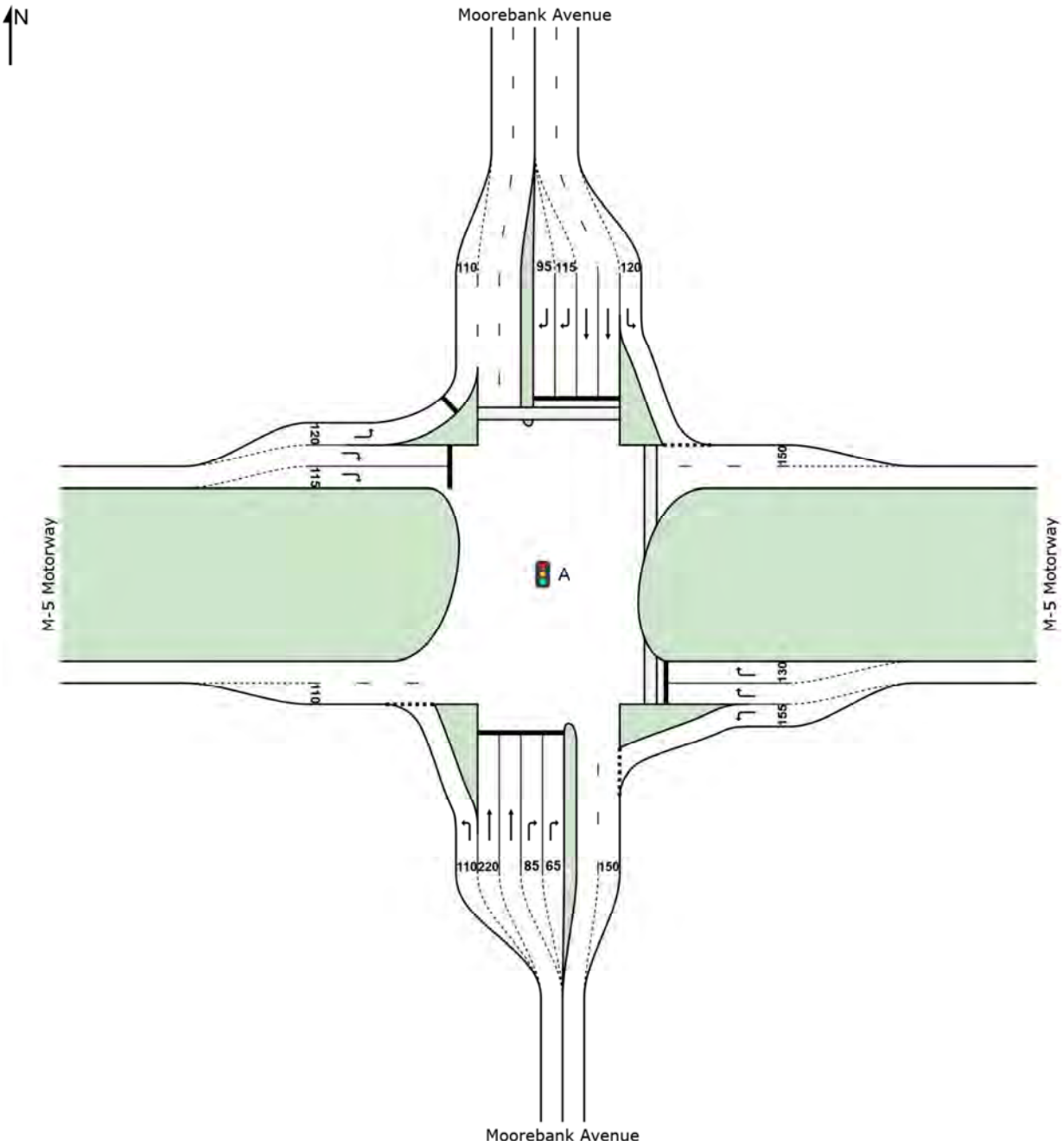
REF: Reference Phase
VAR: Variable Phase

Stage 2(i)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.5	LOS A	9.9	89.9	0.42	0.74	50.2
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	273	22.0	273	22.0	0.228	6.2	LOS A	1.0	10.2	0.11	0.57	47.8
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		516	13.7	516	13.7	0.949	52.3	LOS D	10.7	81.6	0.53	0.80	22.8
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	174	8.5	174	8.5	0.128	27.4	LOS B	4.1	33.6	0.64	0.51	24.8
9	R2	506	20.2	506	20.2	0.961	85.9	LOS F	28.4	279.4	0.98	0.97	22.4
Approach		728	17.3	728	17.3	0.961	66.7	LOS E	28.4	279.4	0.84	0.84	23.5
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	455	11.1	455	11.1	0.723	65.4	LOS E	17.0	145.6	0.98	0.85	19.6
Approach		1811	8.5	1811	8.5	0.887	21.7	LOS B	21.5	173.2	0.60	0.71	39.6
All Vehicles		4156	11.6	4156	11.6	0.961	35.7	LOS C	28.4	279.4	0.64	0.74	32.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

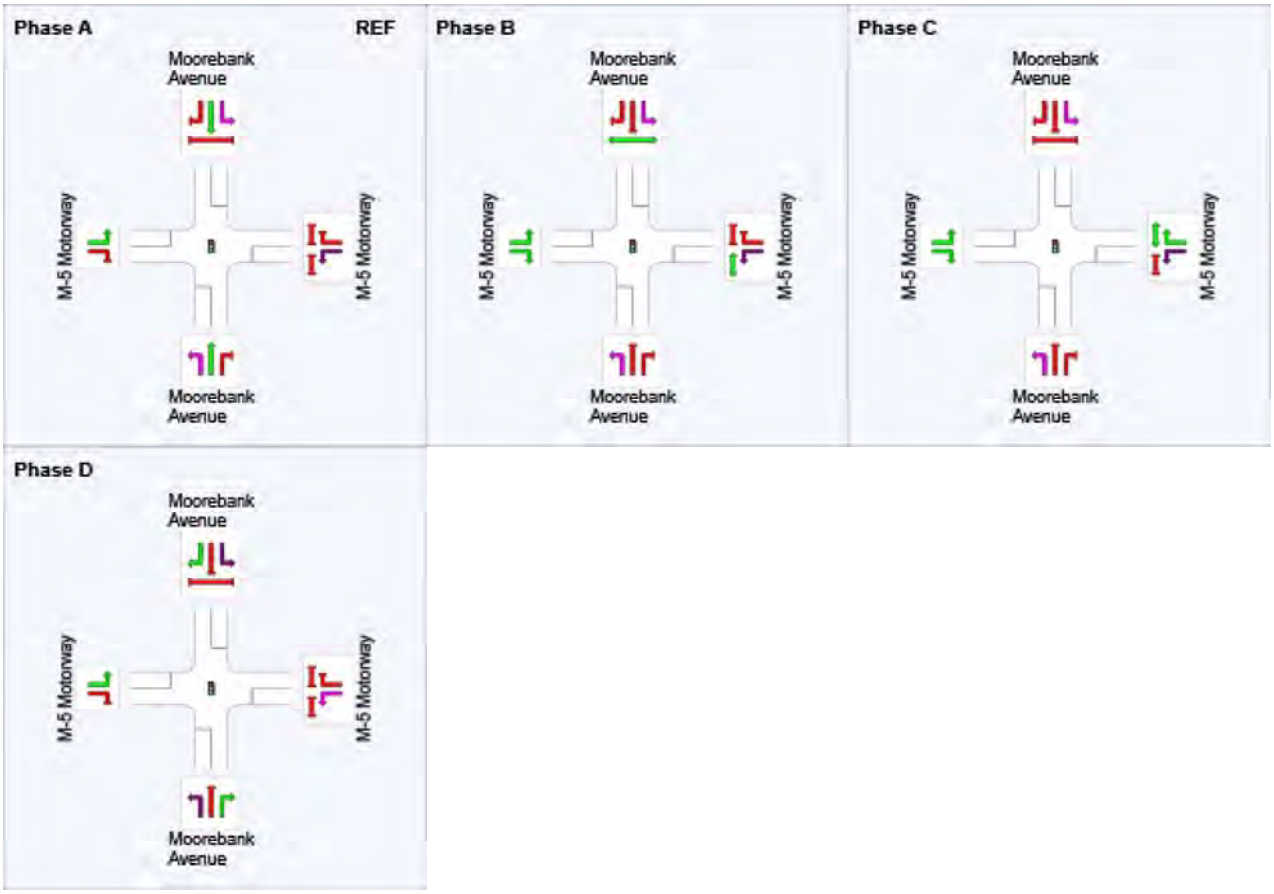
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

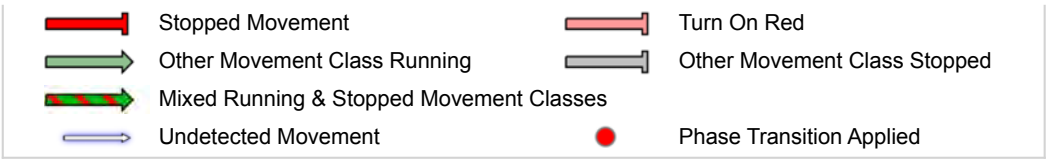
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

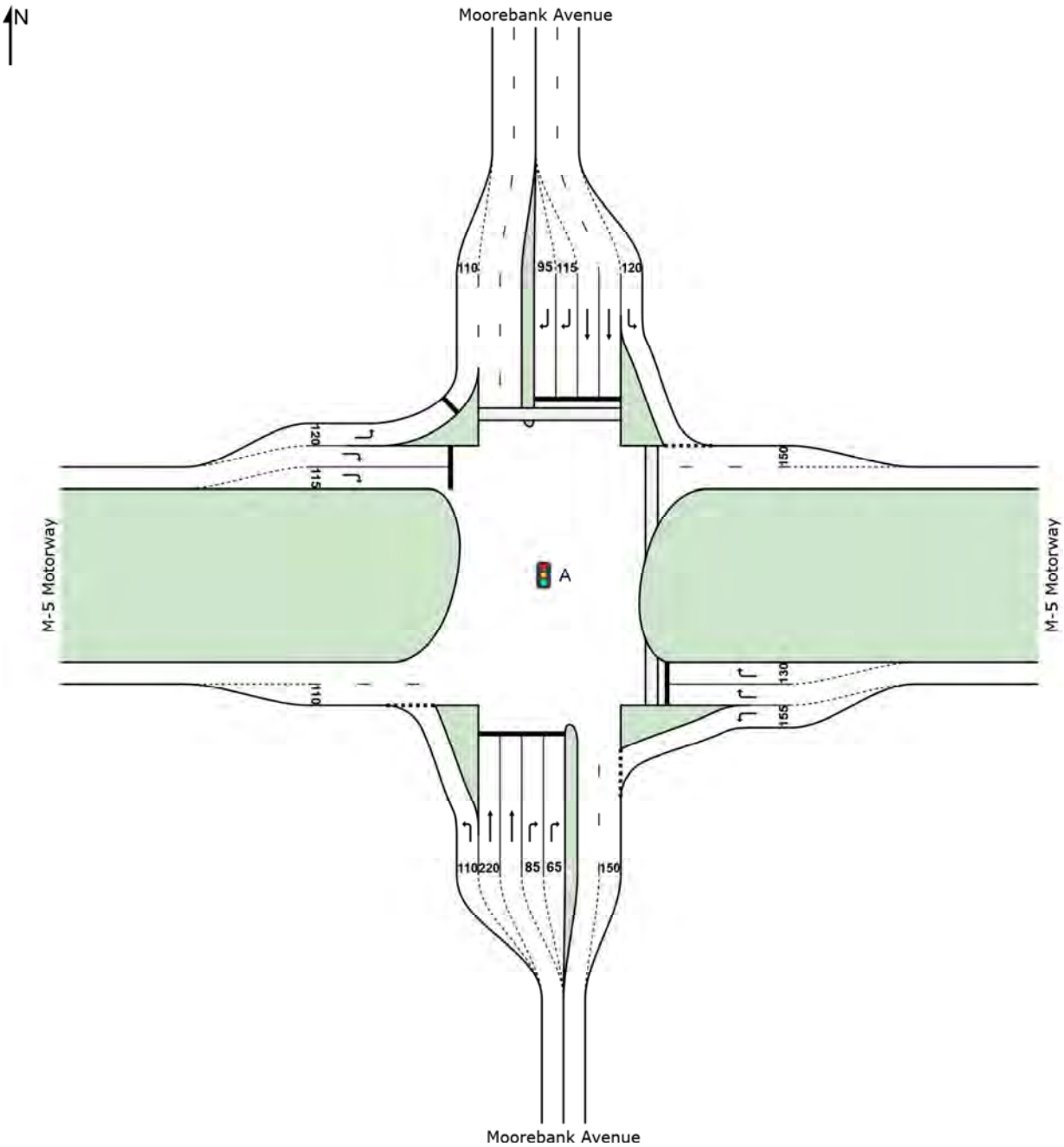
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	482	7.6	482	7.6	0.681	40.3	LOS C	23.4	189.0	0.87	1.02	36.1
2	T1	249	3.0	249	3.0	0.497	66.0	LOS E	8.6	63.9	0.98	0.78	22.5
3	R2	345	9.5	345	9.5	0.206	22.3	LOS B	6.6	55.1	0.52	0.71	41.7
Approach		1077	7.1	1077	7.1	0.681	40.5	LOS C	23.4	189.0	0.78	0.87	33.5
East: M-5 Motorway													
4	L2	278	11.7	278	11.7	0.235	7.1	LOS A	2.9	24.7	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		365	10.4	365	10.4	0.642	26.7	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.062	6.5	LOS A	0.5	4.1	0.15	0.59	56.2
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	436	8.9	436	8.9	0.796	71.9	LOS F	17.4	143.7	1.00	0.87	18.3
Approach		1031	8.0	1031	8.0	0.796	33.9	LOS C	17.4	143.7	0.50	0.69	32.9
All Vehicles		4247	6.3	4247	6.3	0.884	38.7	LOS C	46.1	352.4	0.68	0.80	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 1.0 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

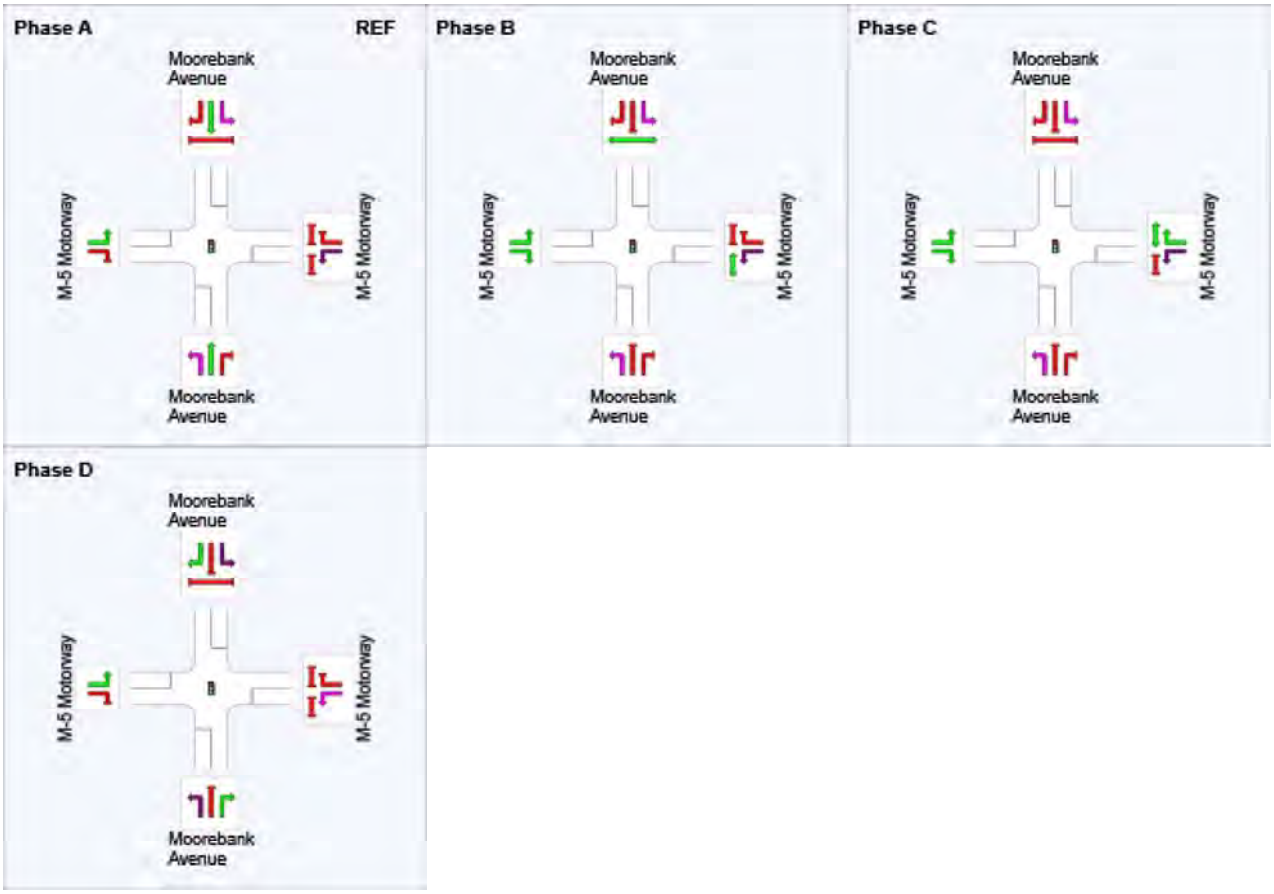
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

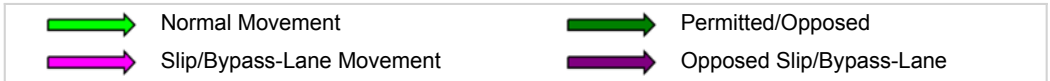
Phase Timing Results

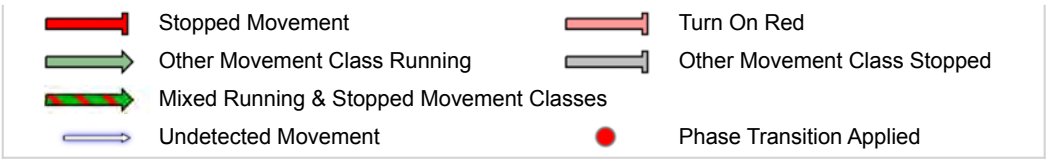
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase





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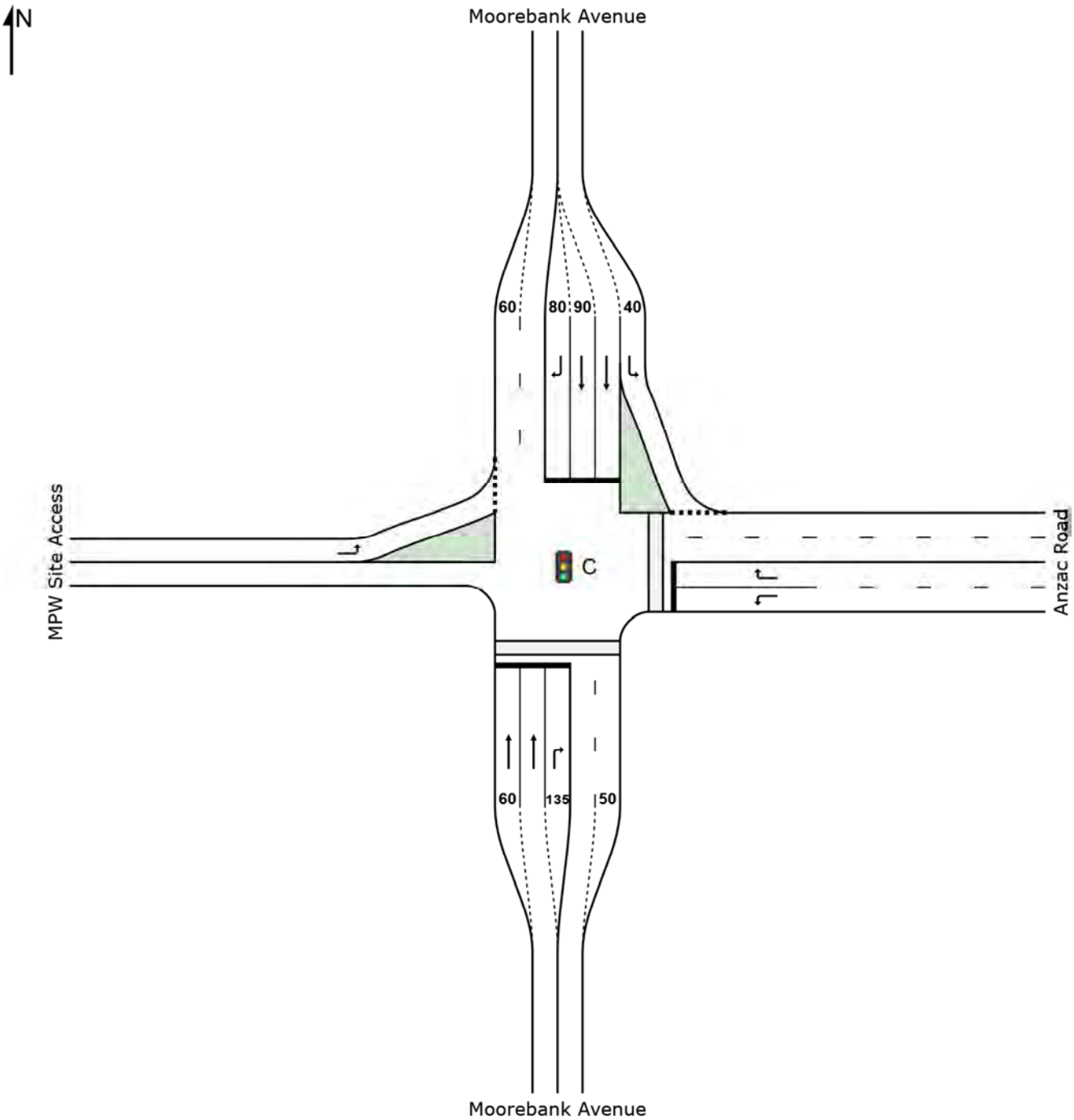
SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	727	8.0	727	8.0	0.877	29.2	LOS C	20.3	165.0	0.92	0.97	19.8
3	R2	381	3.3	381	3.3	0.606	24.4	LOS B	11.0	82.2	0.88	0.81	26.5
Approach		1108	6.4	1108	6.4	0.877	27.5	LOS B	20.3	165.0	0.91	0.92	22.3
East: Anzac Road													
4	L2	186	3.4	186	3.4	0.419	30.3	LOS C	5.5	41.3	0.89	0.79	15.2
6	R2	363	11.9	363	11.9	0.864	42.6	LOS D	14.5	125.8	1.00	1.02	12.0
Approach		549	9.0	549	9.0	0.864	38.4	LOS C	14.5	125.8	0.96	0.94	12.9
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.361	7.3	LOS A	5.2	42.5	0.50	0.62	34.4
8	T1	329	19.8	329	19.8	0.903	40.7	LOS C	10.6	103.5	0.98	1.12	8.8
9	R2	29	100.0	29	100.0	0.171	35.3	LOS C	0.9	12.1	0.90	0.73	29.1
Approach		762	16.6	762	16.6	0.903	22.8	LOS B	10.6	103.5	0.72	0.84	20.1
West: MPW Site Access													
10	L2	29	100.0	29	100.0	0.068	13.9	LOS A	0.4	4.6	0.65	0.66	42.1
Approach		29	100.0	29	100.0	0.068	13.9	LOS A	0.4	4.6	0.65	0.66	42.1
All Vehicles		2449	11.3	2449	11.3	0.903	28.3	LOS B	20.3	165.0	0.86	0.90	19.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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	11	29.3	LOS C	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	29.3	LOS C	0.0	0.0	0.91	0.91
All Pedestrians		21	29.3	LOS C			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

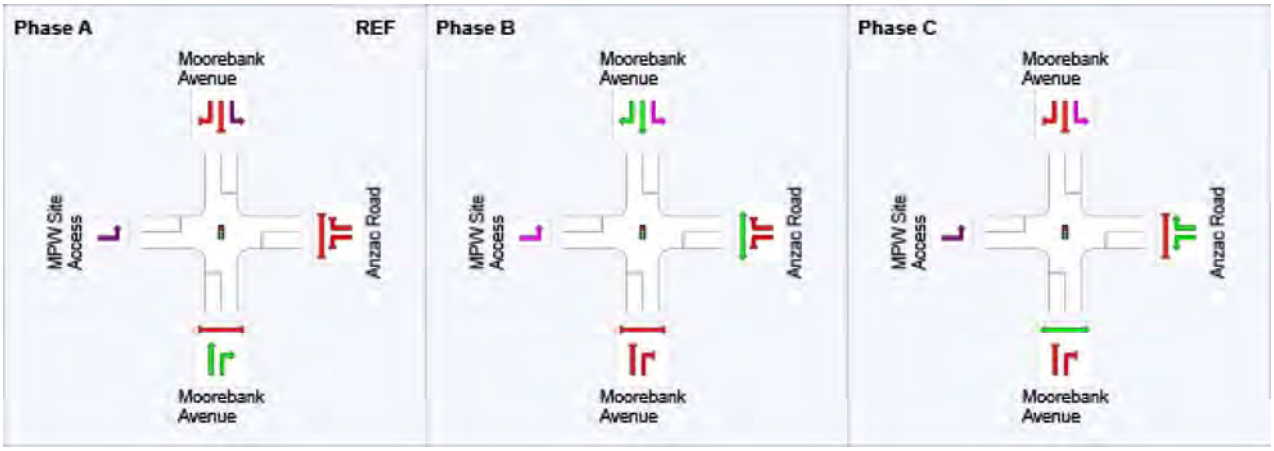
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	30	47
Green Time (sec)	24	11	17
Phase Time (sec)	30	17	23
Phase Split	43%	24%	33%

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%.



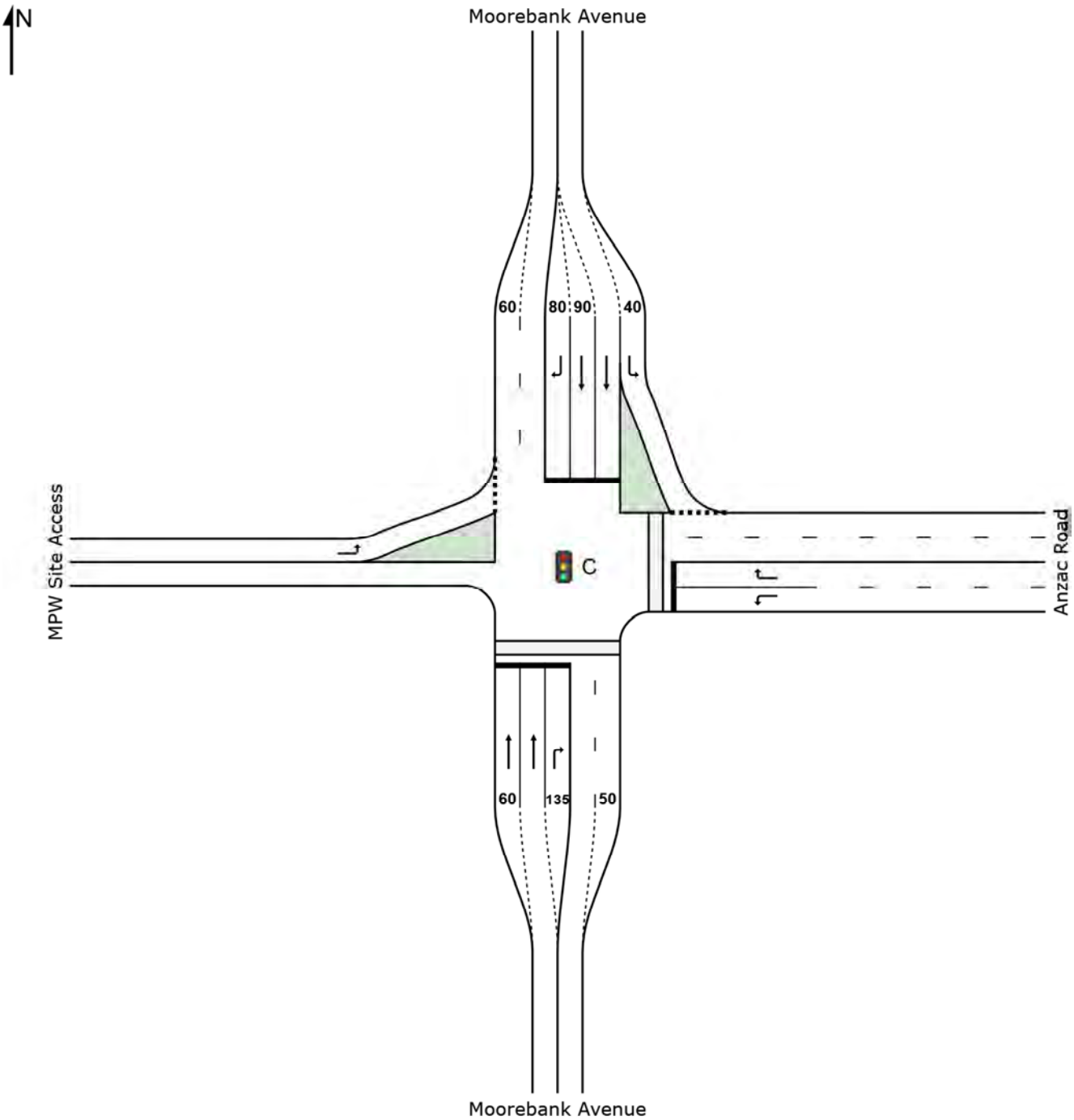
REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class Running	Other Movement Class Stopped
Mixed Running & Stopped Movement Classes	
Undetected Movement	Phase Transition Applied

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	651	6.1	651	6.1	0.782	18.7	LOS B	12.1	94.9	0.92	0.89	24.2
3	R2	192	0.5	192	0.5	0.854	33.8	LOS C	5.6	39.8	1.00	1.10	23.2
Approach		842	4.9	842	4.9	0.854	22.1	LOS B	12.1	94.9	0.94	0.94	23.9
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.754	29.4	LOS C	7.3	52.8	1.00	0.92	15.5
6	R2	287	4.0	287	4.0	0.788	30.6	LOS C	7.8	58.7	1.00	0.96	15.5
Approach		567	2.8	567	2.8	0.788	30.0	LOS C	7.8	58.7	1.00	0.94	15.5
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.356	5.5	LOS A	3.1	23.0	0.47	0.61	36.9
8	T1	681	5.4	681	5.4	0.841	21.3	LOS B	14.3	111.3	0.94	0.99	14.0
9	R2	29	100.0	29	100.0	0.224	29.9	LOS C	0.7	9.5	0.94	0.72	31.3
Approach		1129	7.0	1129	7.0	0.841	15.7	LOS B	14.3	111.3	0.77	0.84	22.5
West: MPW Site Access													
10	L2	29	100.0	29	100.0	0.060	11.5	LOS A	0.3	3.4	0.64	0.66	44.4
Approach		29	100.0	29	100.0	0.060	11.5	LOS A	0.3	3.4	0.64	0.66	44.4
All Vehicles		2568	6.4	2568	6.4	0.854	20.9	LOS B	14.3	111.3	0.87	0.89	21.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 5 (maximum specified: 20)

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	11	19.4	LOS B	0.0	0.0	0.88	0.88
P2	East Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
All Pedestrians		21	19.4	LOS B			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

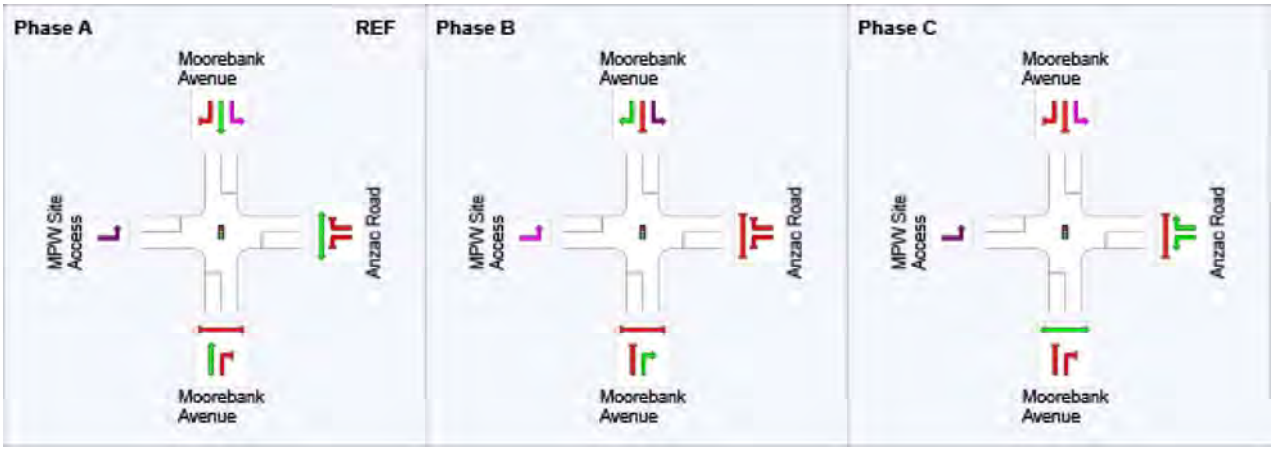
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	34
Green Time (sec)	16	6	10
Phase Time (sec)	22	12	16
Phase Split	44%	24%	32%

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%.



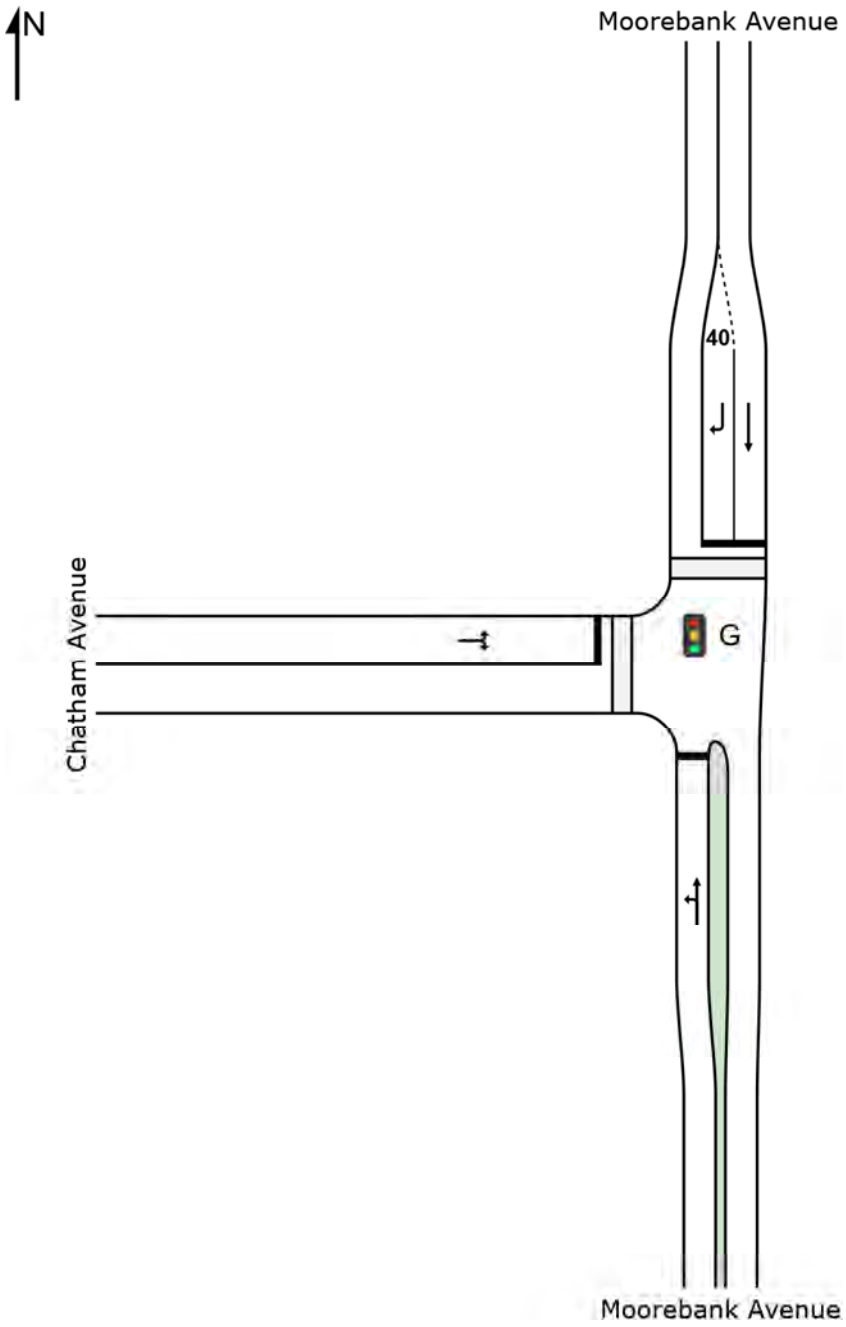
REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class Running	Other Movement Class Stopped
Mixed Running & Stopped Movement Classes	
Undetected Movement	Phase Transition Applied

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.879	26.9	LOS B	43.8	330.2	0.89	0.95	36.9
2	T1	1081	3.8	1081	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
Approach		1082	3.8	1082	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	29	100.0	29	100.0	0.385	49.3	LOS D	1.3	27.5	0.99	0.73	23.9
Approach		486	14.7	486	14.7	0.385	5.5	LOS A	5.3	43.6	0.34	0.30	43.9
West: Chatham Avenue													
10	L2	29	100.0	29	100.0	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	11.9
12	R2	1	0.0	1	0.0	0.361	49.6	LOS D	1.3	27.5	0.99	0.73	26.5
Approach		31	96.6	31	96.6	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	12.7
All Vehicles		1599	8.9	1599	8.9	0.879	18.7	LOS B	43.8	330.2	0.73	0.75	37.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P3	North Full Crossing	11	32.2	LOS D	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	20.1	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

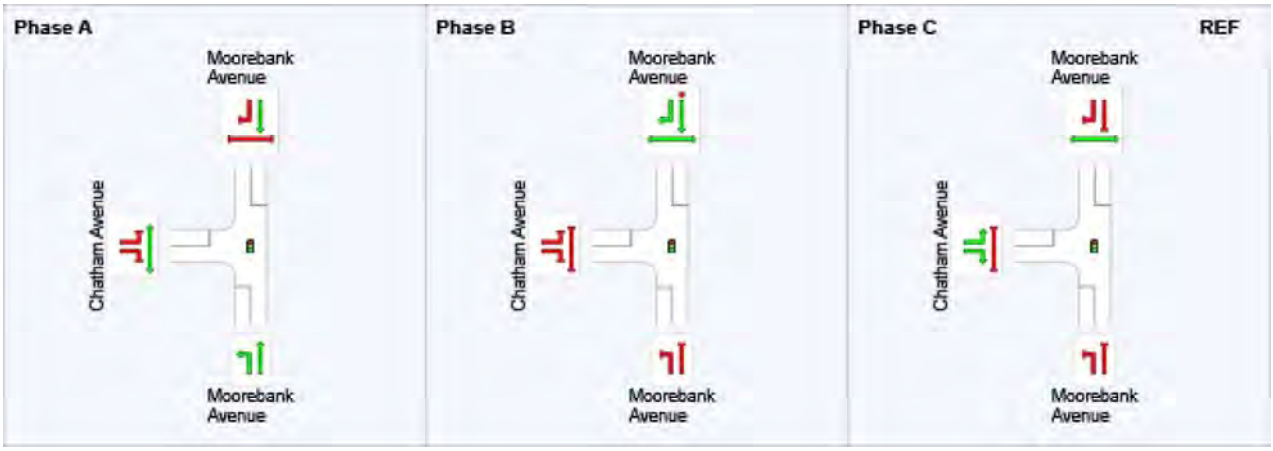
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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%.

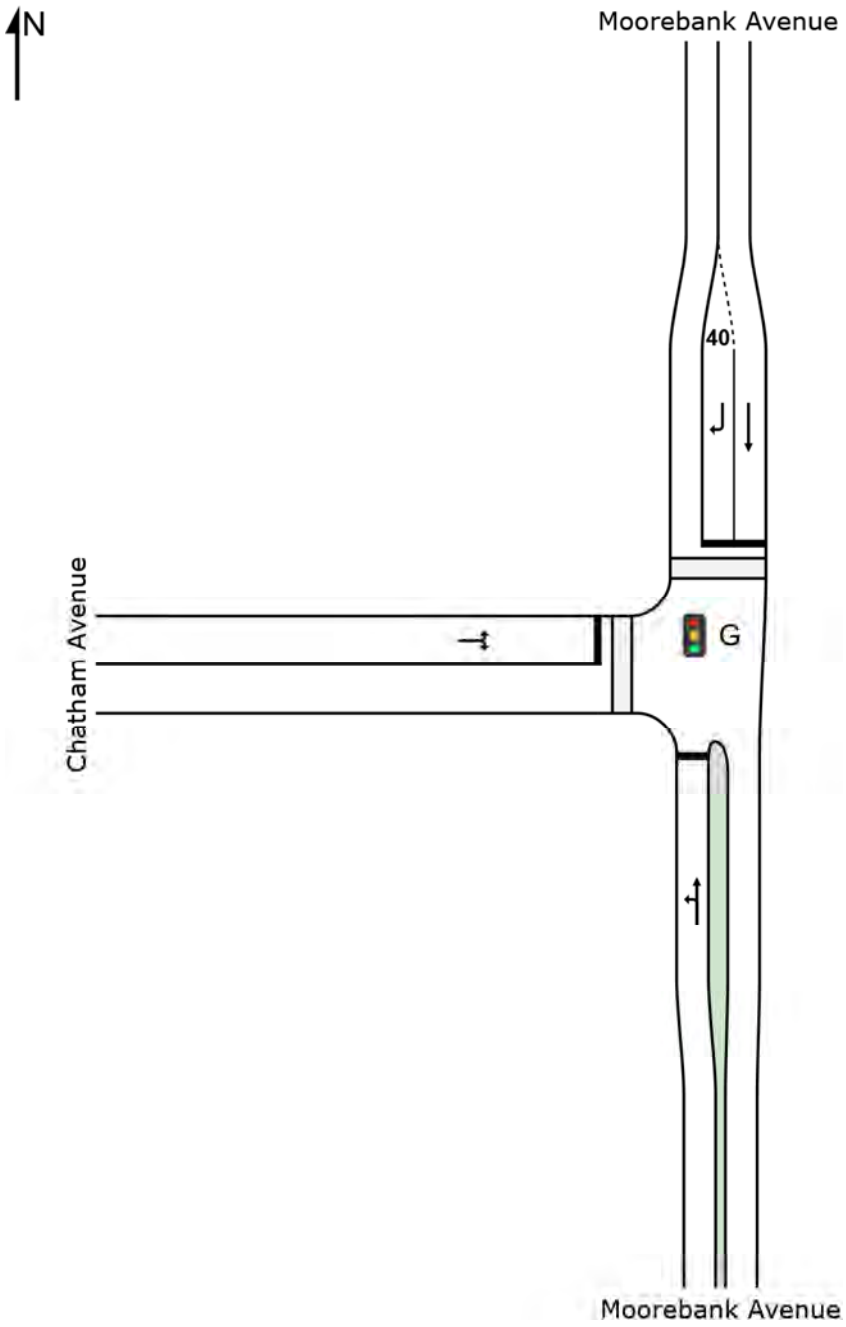


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.817	27.6	LOS B	13.5	98.5	0.98	1.00	36.5
2	T1	501	2.3	501	2.3	0.817	24.4	LOS B	13.5	98.5	0.98	1.00	33.5
Approach		502	2.3	502	2.3	0.817	24.4	LOS B	13.5	98.5	0.98	1.00	33.5
North: Moorebank Avenue													
8	T1	936	1.2	934	1.2	0.893	22.4	LOS B	28.0	200.7	0.92	1.10	37.2
9	R2	31	96.6	31	96.6	0.231	28.1	LOS B	0.8	15.5	0.94	0.72	28.8
Approach		966	4.2	964 N1	4.3	0.893	22.6	LOS B	28.0	200.7	0.92	1.09	36.9
West: Chatham Avenue													
10	L2	318	9.3	318	9.3	0.841	31.9	LOS C	9.1	75.6	1.00	1.03	16.4
12	R2	1	0.0	1	0.0	0.841	31.9	LOS C	9.1	75.6	1.00	1.03	32.5
Approach		319	9.2	319	9.2	0.841	31.9	LOS C	9.1	75.6	1.00	1.03	16.5
All Vehicles		1787	4.6	1785 N1	4.6	0.893	24.8	LOS B	28.0	200.7	0.95	1.05	34.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 1.0 %
Number of Iterations: 5 (maximum specified: 20)

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

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
P4	West Full Crossing	11	16.8	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	18.1	LOS B			0.85	0.85

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

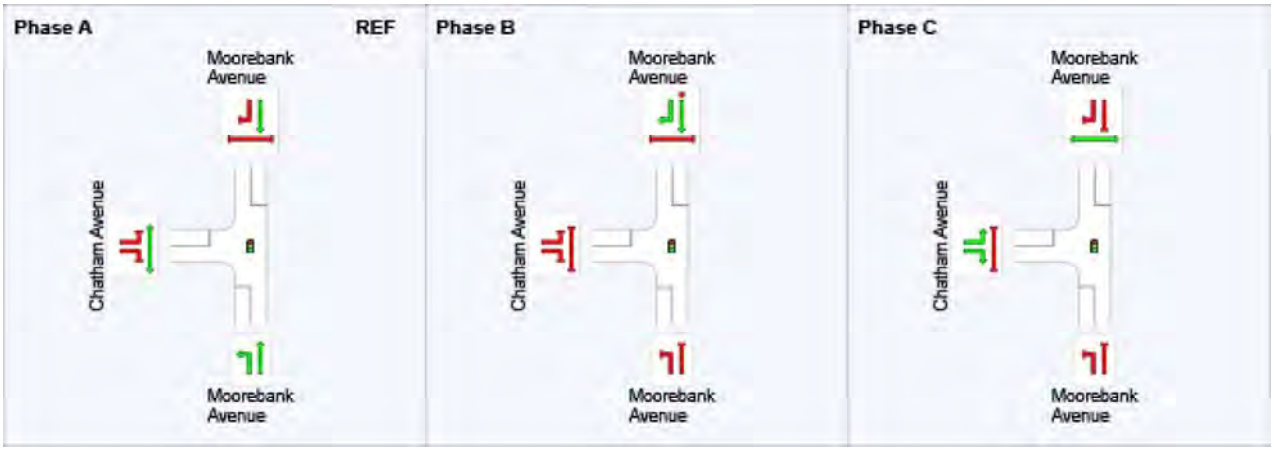
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	34
Green Time (sec)	16	6	10
Phase Time (sec)	22	12	16
Phase Split	44%	24%	32%

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%.



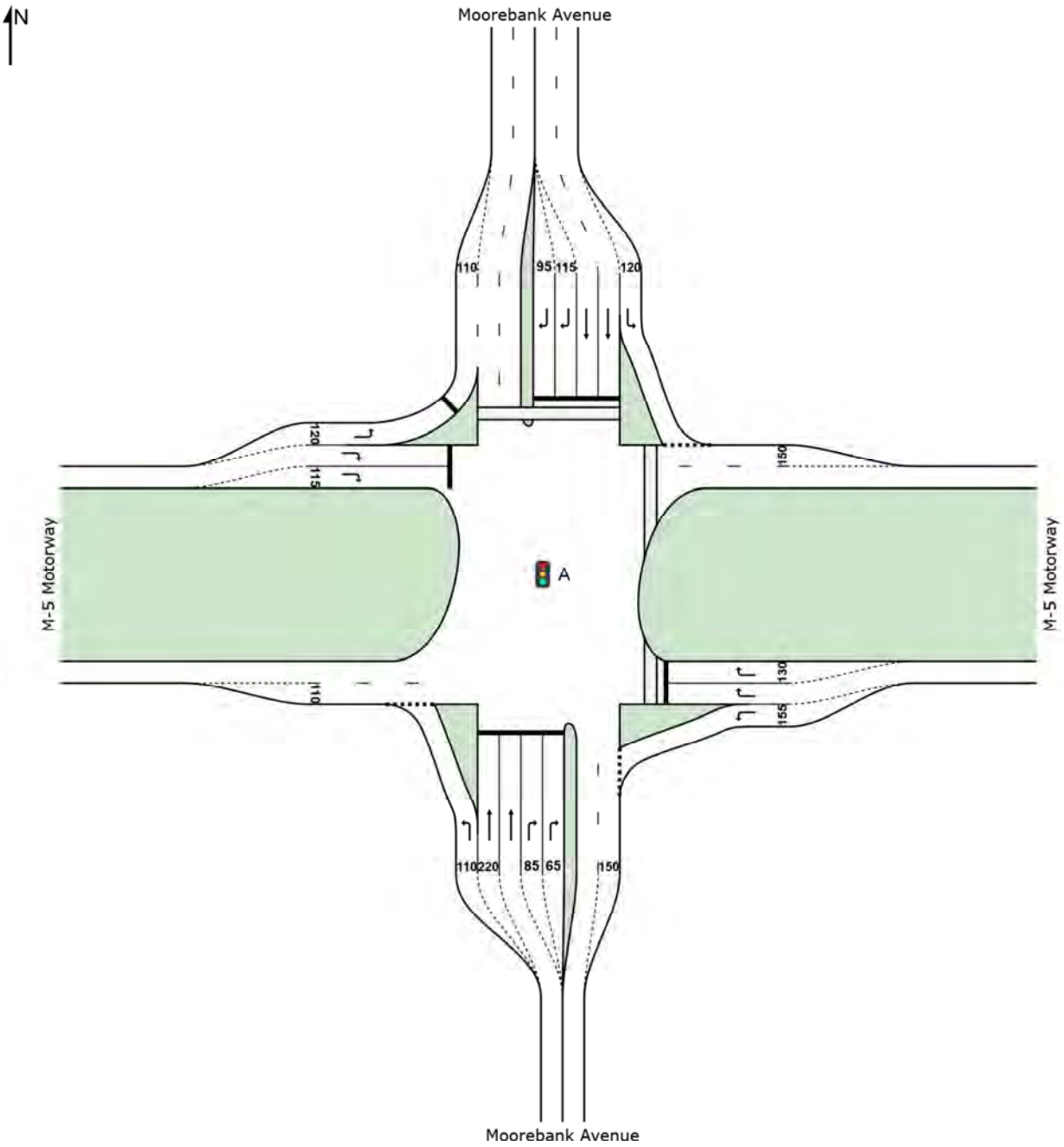
REF: Reference Phase
VAR: Variable Phase

Stage 2(ii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.5	LOS A	9.9	89.9	0.42	0.74	50.2
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	273	22.0	273	22.0	0.228	6.2	LOS A	1.0	10.2	0.11	0.57	47.8
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		516	13.7	516	13.7	0.949	52.3	LOS D	10.7	81.6	0.53	0.80	22.8
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	174	8.5	174	8.5	0.128	27.4	LOS B	4.1	33.6	0.64	0.51	24.8
9	R2	506	20.2	506	20.2	0.961	85.9	LOS F	28.4	279.4	0.98	0.97	22.4
Approach		728	17.3	728	17.3	0.961	66.7	LOS E	28.4	279.4	0.84	0.84	23.5
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	455	11.1	455	11.1	0.723	65.4	LOS E	17.0	145.6	0.98	0.85	19.6
Approach		1811	8.5	1811	8.5	0.887	21.7	LOS B	21.5	173.2	0.60	0.71	39.6
All Vehicles		4156	11.6	4156	11.6	0.961	35.7	LOS C	28.4	279.4	0.64	0.74	32.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

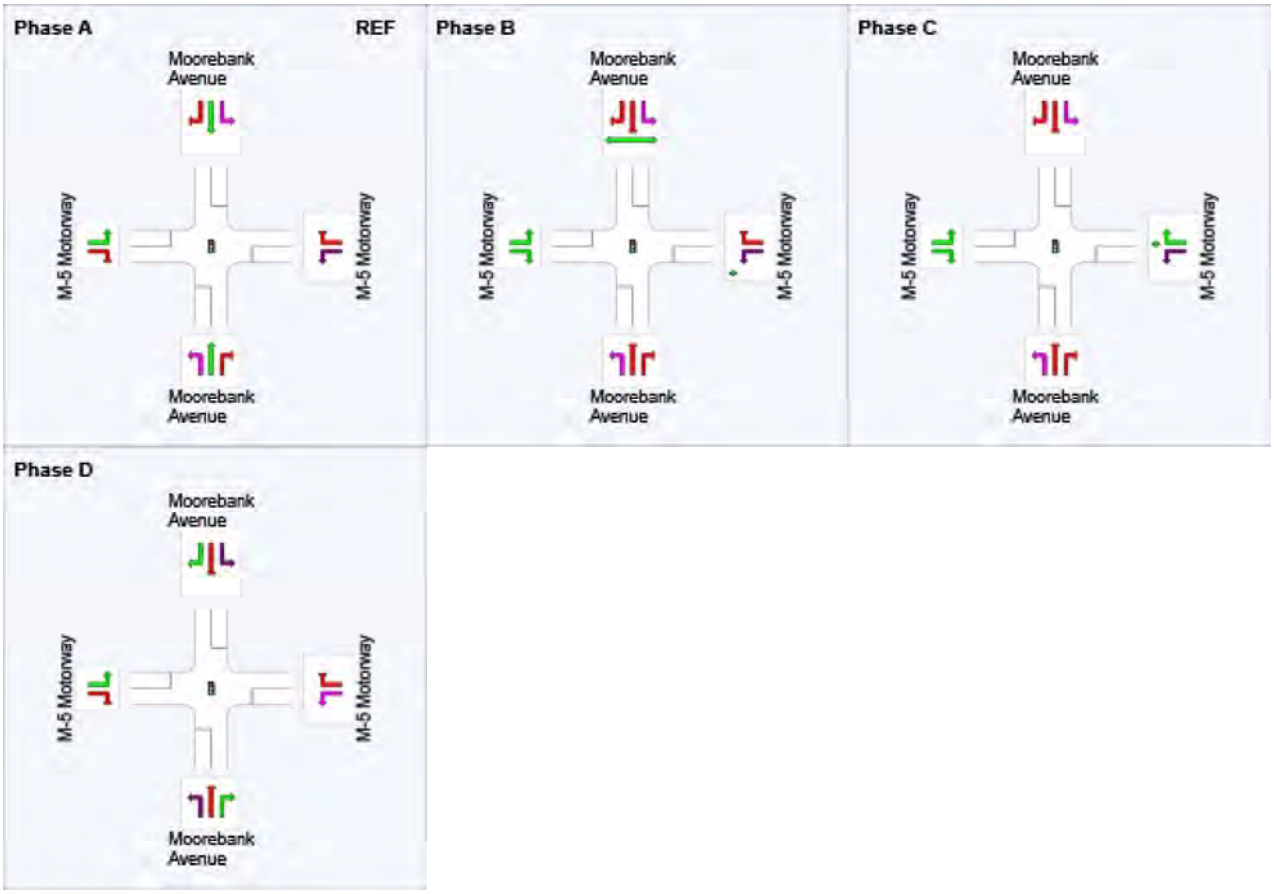
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

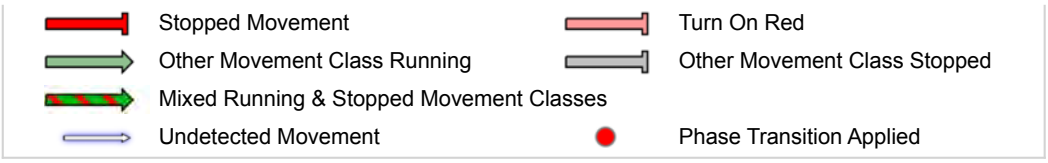
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

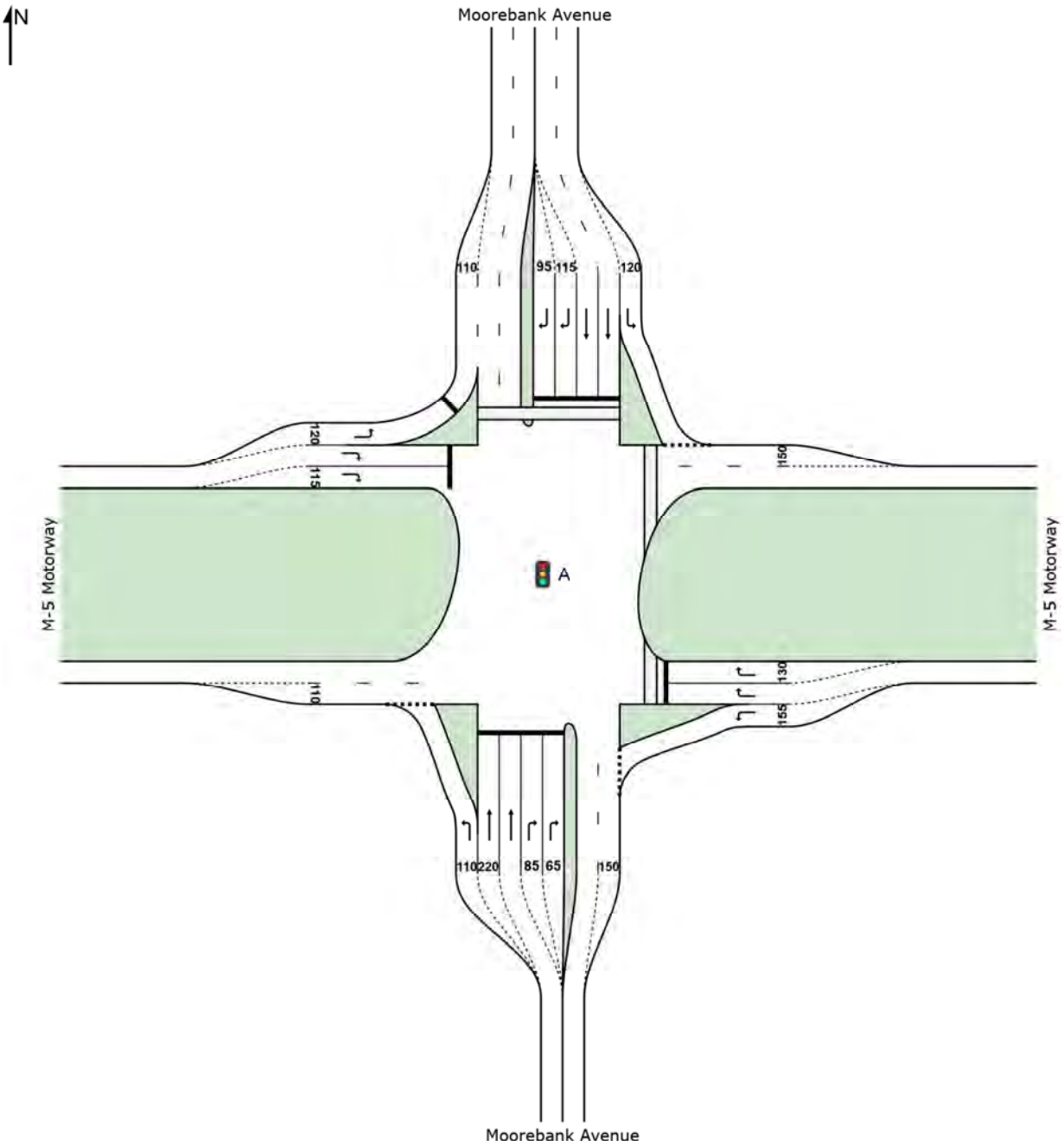
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	482	7.6	482	7.6	0.681	40.3	LOS C	23.4	189.0	0.87	1.02	36.1
2	T1	249	3.0	249	3.0	0.497	66.0	LOS E	8.6	63.9	0.98	0.78	22.5
3	R2	345	9.5	345	9.5	0.206	22.3	LOS B	6.6	55.1	0.52	0.71	41.7
Approach		1077	7.1	1077	7.1	0.681	40.5	LOS C	23.4	189.0	0.78	0.87	33.5
East: M-5 Motorway													
4	L2	278	11.7	278	11.7	0.235	7.1	LOS A	2.9	24.7	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		365	10.4	365	10.4	0.642	26.7	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.062	6.5	LOS A	0.5	4.1	0.15	0.59	56.2
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	436	8.9	436	8.9	0.796	71.9	LOS F	17.4	143.7	1.00	0.87	18.3
Approach		1031	8.0	1031	8.0	0.796	33.9	LOS C	17.4	143.7	0.50	0.69	32.9
All Vehicles		4247	6.3	4247	6.3	0.884	38.7	LOS C	46.1	352.4	0.68	0.80	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 1.0 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

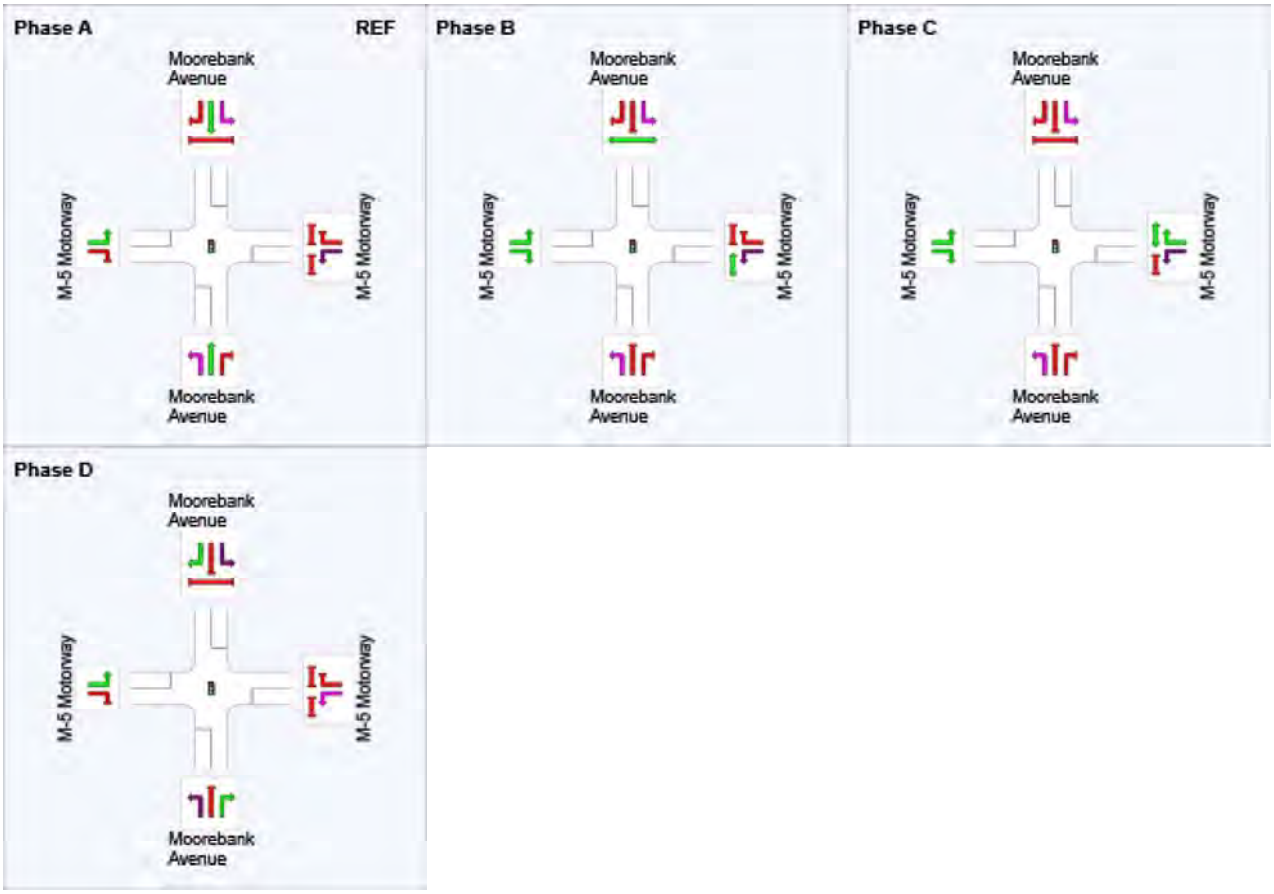
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

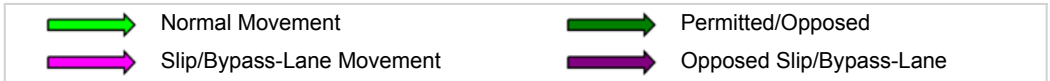
Phase Timing Results

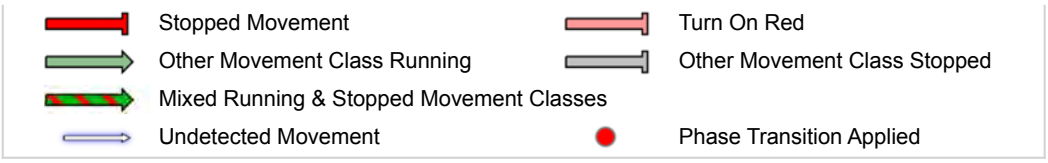
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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

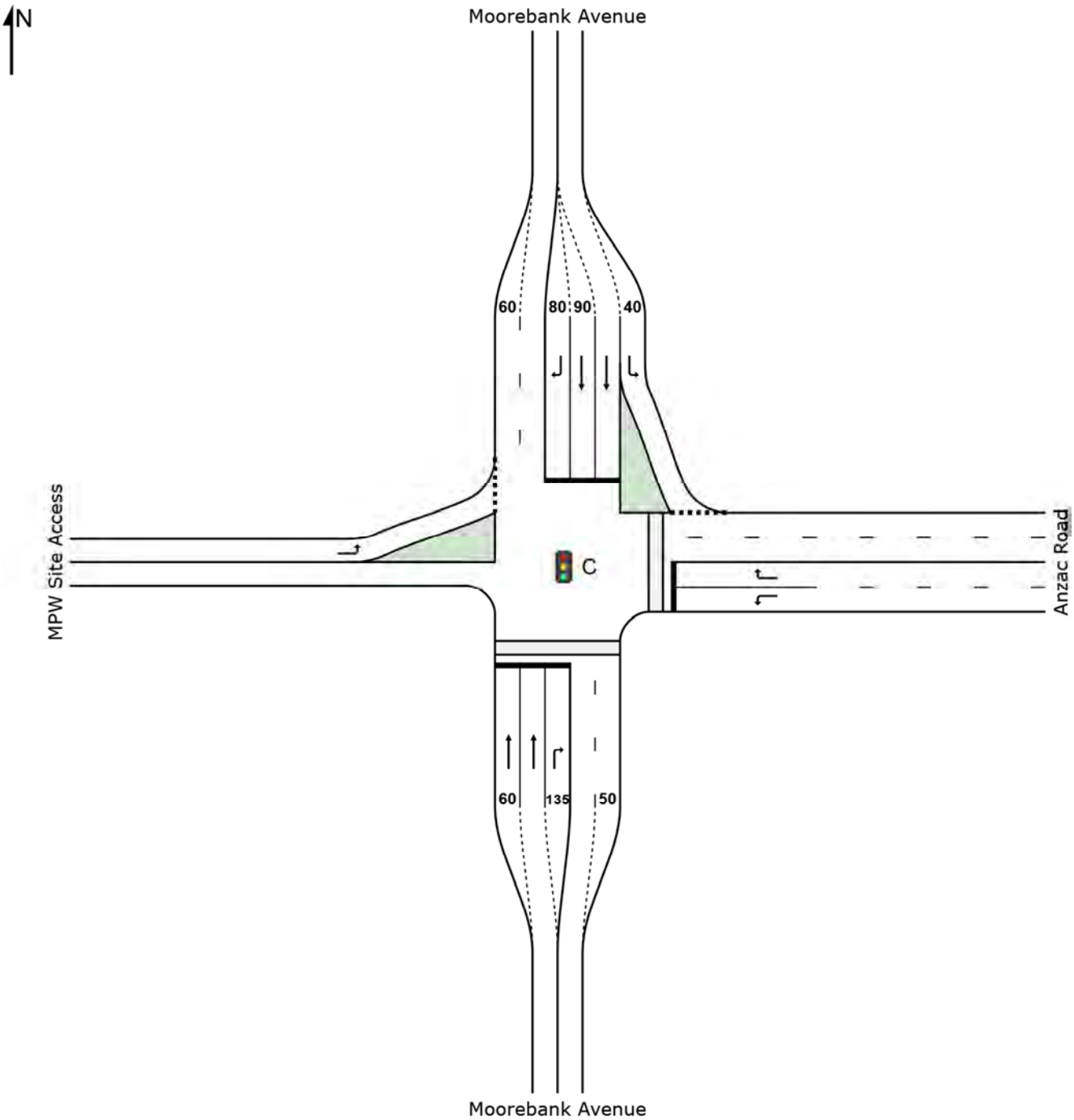




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	713	6.1	713	6.1	0.880	27.4	LOS B	18.2	143.0	0.95	1.03	20.4
3	R2	381	3.3	381	3.3	0.656	23.3	LOS B	10.0	74.9	0.92	0.84	26.9
Approach		1094	5.1	1094	5.1	0.880	26.0	LOS B	18.2	143.0	0.94	0.96	22.9
East: Anzac Road													
4	L2	186	3.4	186	3.4	0.436	27.6	LOS B	4.8	36.2	0.90	0.79	16.3
6	R2	363	11.9	363	11.9	0.900	42.9	LOS D	13.7	118.3	1.00	1.10	12.0
Approach		549	9.0	549	9.0	0.900	37.7	LOS C	13.7	118.3	0.97	0.99	13.1
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.369	7.0	LOS A	4.7	37.7	0.52	0.63	34.6
8	T1	315	16.1	315	16.1	0.885	34.4	LOS C	8.5	78.9	0.98	1.09	10.0
9	R2	44	100.0	44	100.0	0.269	32.4	LOS C	1.3	16.3	0.92	0.74	30.3
Approach		762	16.6	762	16.6	0.885	19.8	LOS B	8.5	78.9	0.73	0.83	22.2
West: MPW Site Access													
10	L2	44	100.0	44	100.0	0.100	13.7	LOS A	0.5	6.4	0.70	0.68	42.3
Approach		44	100.0	44	100.0	0.100	13.7	LOS A	0.5	6.4	0.70	0.68	42.3
All Vehicles		2449	11.3	2449	11.3	0.900	26.5	LOS B	18.2	143.0	0.88	0.92	20.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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	11	24.3	LOS C	0.0	0.0	0.90	0.90
P2	East Full Crossing	11	24.3	LOS C	0.0	0.0	0.90	0.90
All Pedestrians		21	24.3	LOS C			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

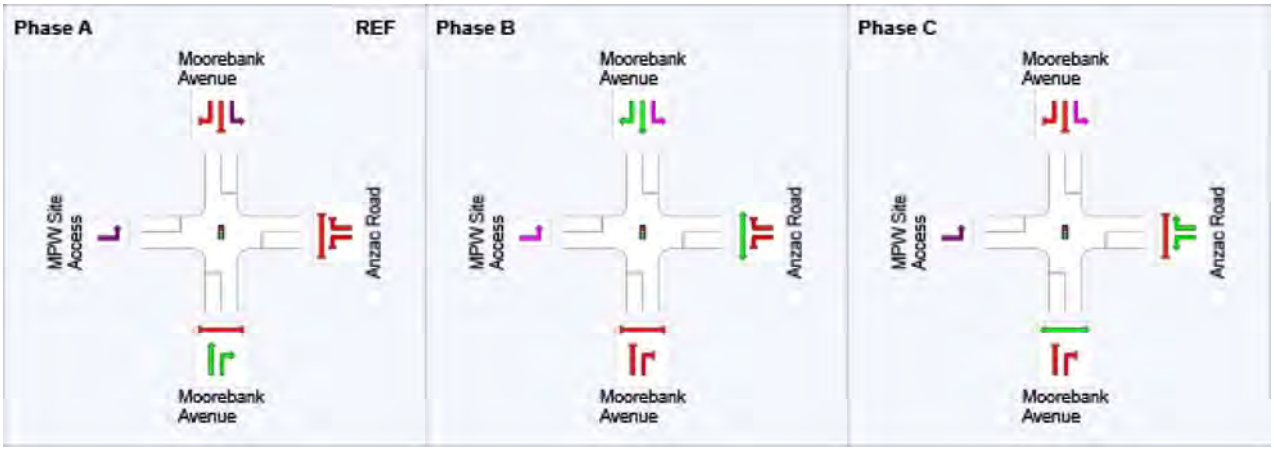
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 60 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	25	40
Green Time (sec)	19	9	14
Phase Time (sec)	25	15	20
Phase Split	42%	25%	33%

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%.

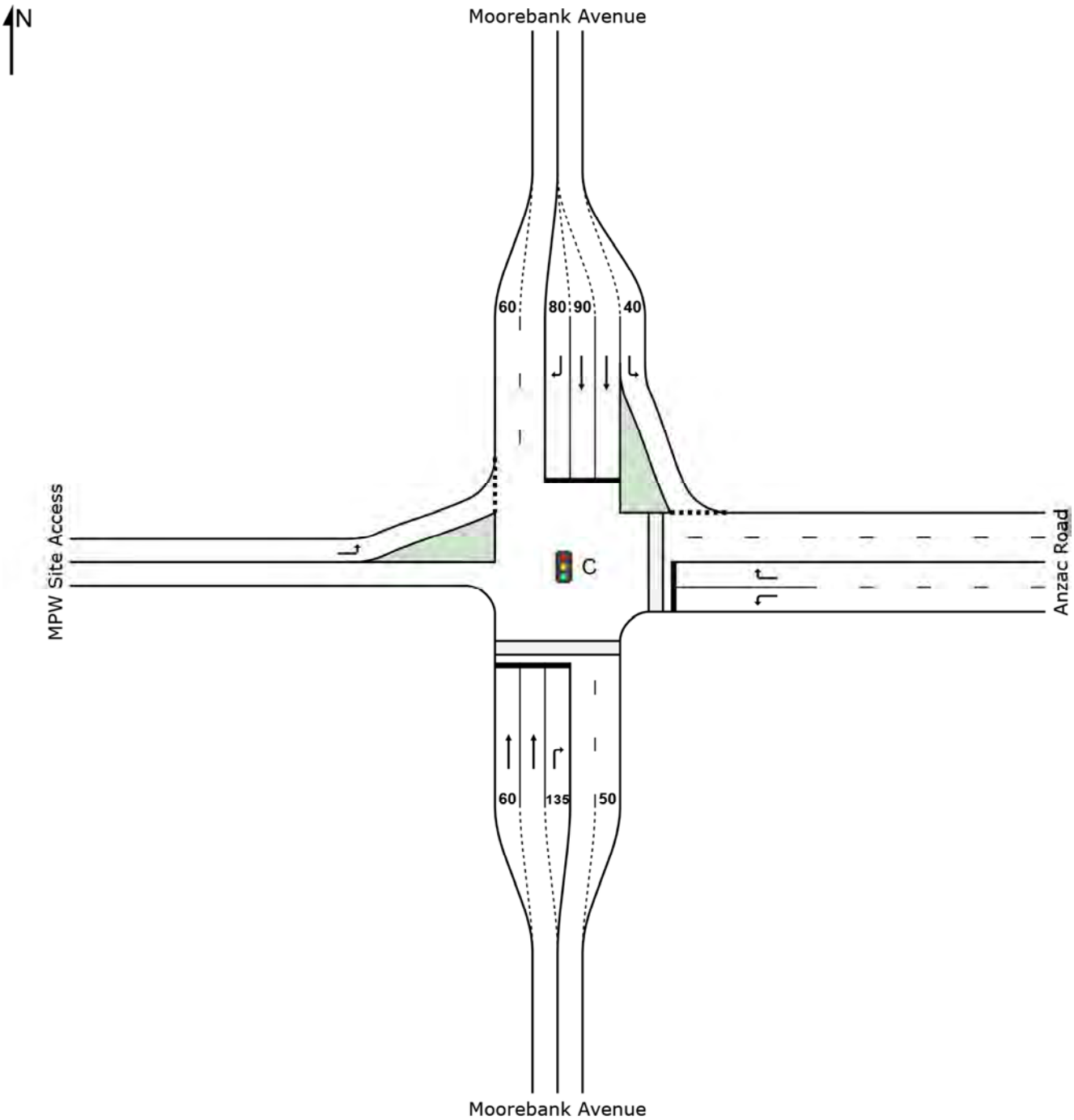


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	636	4.0	636	4.0	0.754	17.8	LOS B	11.4	85.9	0.91	0.85	24.6
3	R2	192	0.5	192	0.5	0.854	33.8	LOS C	5.6	39.8	1.00	1.10	23.2
Approach		827	3.2	827	3.2	0.854	21.5	LOS B	11.4	85.9	0.93	0.91	24.2
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.754	29.4	LOS C	7.3	52.8	1.00	0.92	15.5
6	R2	287	4.0	287	4.0	0.788	30.6	LOS C	7.8	58.7	1.00	0.96	15.5
Approach		567	2.8	567	2.8	0.788	30.0	LOS C	7.8	58.7	1.00	0.94	15.5
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.356	5.5	LOS A	3.1	23.0	0.47	0.61	36.9
8	T1	666	3.3	666	3.3	0.812	19.8	LOS B	13.3	99.4	0.93	0.94	14.6
9	R2	44	100.0	44	100.0	0.336	30.4	LOS C	1.1	14.5	0.95	0.74	31.1
Approach		1129	7.0	1129	7.0	0.812	14.9	LOS B	13.3	99.4	0.76	0.81	23.4
West: MPW Site Access													
10	L2	44	100.0	44	100.0	0.089	11.2	LOS A	0.4	4.9	0.62	0.67	44.8
Approach		44	100.0	44	100.0	0.089	11.2	LOS A	0.4	4.9	0.62	0.67	44.8
All Vehicles		2568	6.4	2568	6.4	0.854	20.3	LOS B	13.3	99.4	0.87	0.87	22.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 1.0 %
Number of Iterations: 5 (maximum specified: 20)

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	11	19.4	LOS B	0.0	0.0	0.88	0.88
P2	East Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
All Pedestrians		21	19.4	LOS B			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

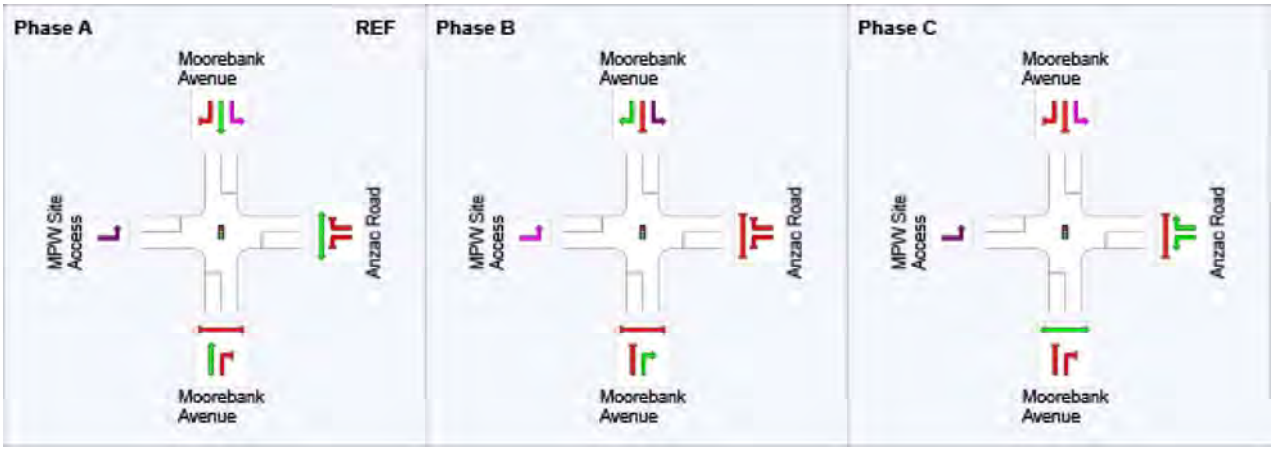
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	34
Green Time (sec)	16	6	10
Phase Time (sec)	22	12	16
Phase Split	44%	24%	32%

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%.



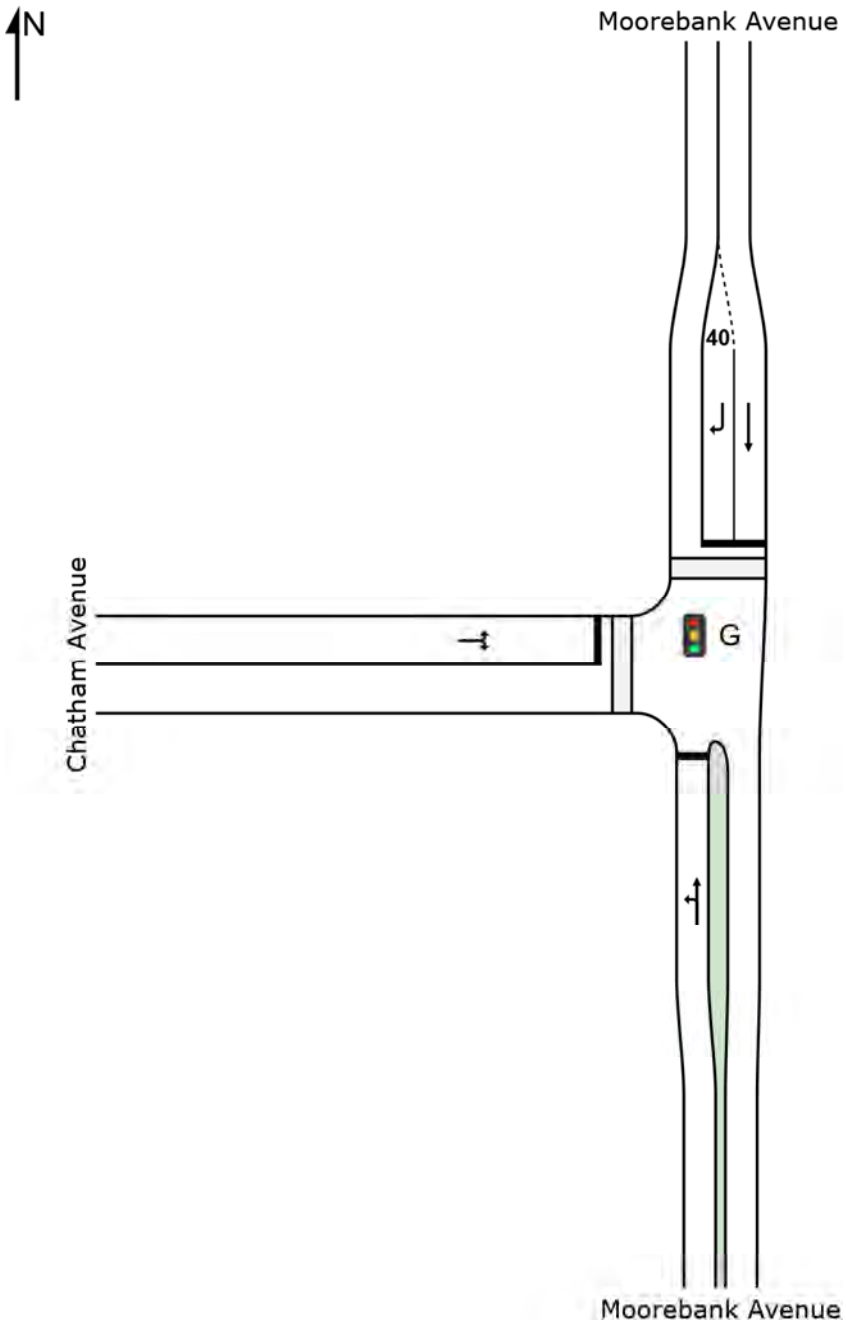
REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class Running	Other Movement Class Stopped
Mixed Running & Stopped Movement Classes	
Undetected Movement	Phase Transition Applied

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.879	26.9	LOS B	43.8	330.2	0.89	0.95	36.9
2	T1	1081	3.8	1081	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
Approach		1082	3.8	1082	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	15	100.0	15	100.0	0.193	48.2	LOS D	0.6	13.4	0.97	0.70	24.1
Approach		472	12.1	472	12.1	0.315	4.1	LOS A	5.3	43.6	0.32	0.28	44.8
West: Chatham Avenue													
10	L2	15	100.0	15	100.0	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	12.1
12	R2	1	0.0	1	0.0	0.184	48.5	LOS D	0.7	13.6	0.97	0.70	26.8
Approach		16	93.3	16	93.3	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	13.5
All Vehicles		1569	7.2	1569	7.2	0.879	18.1	LOS B	43.8	330.2	0.72	0.75	38.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

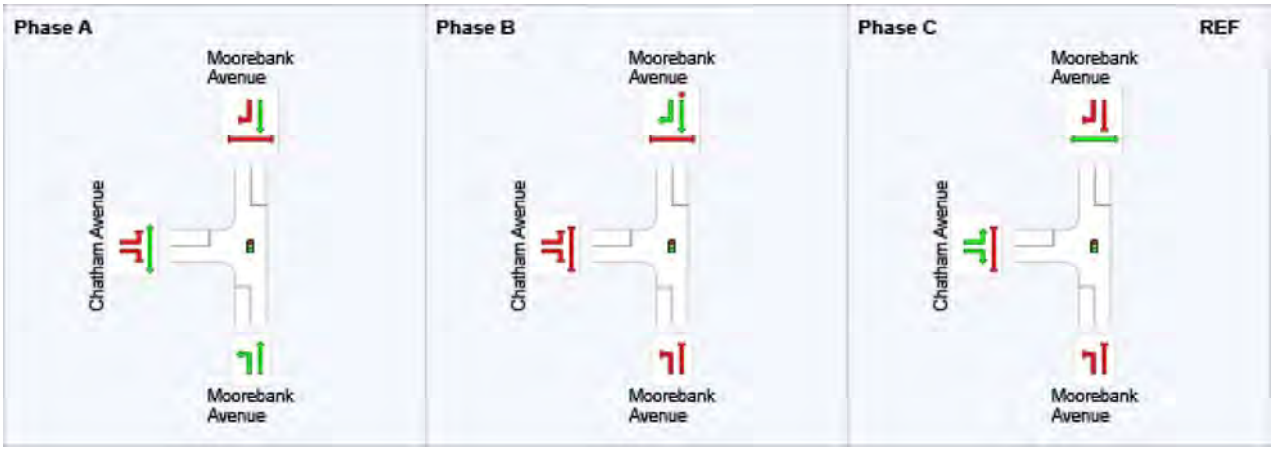
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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%.

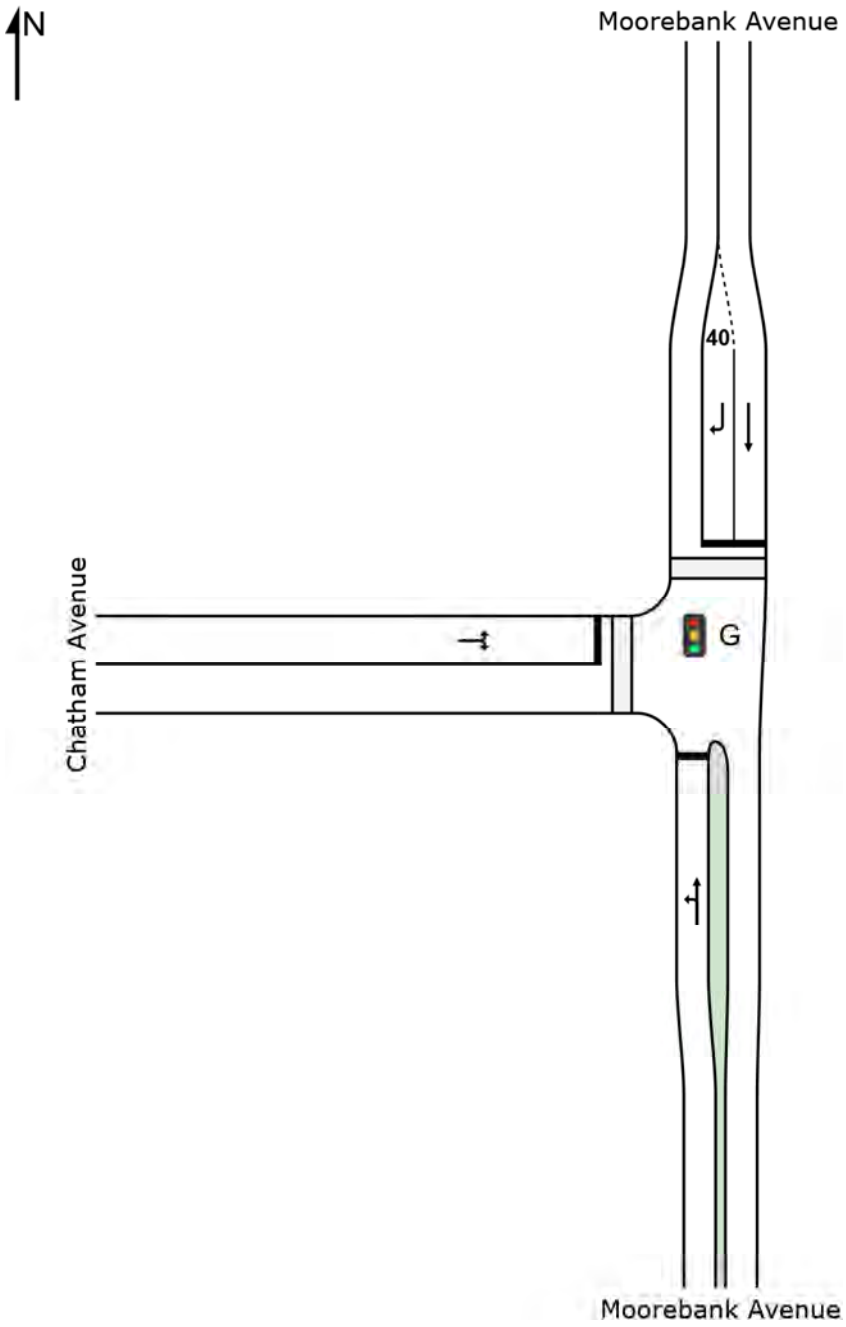


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.769	24.6	LOS B	12.4	90.9	0.95	0.93	38.2
2	T1	501	2.3	501	2.3	0.769	21.4	LOS B	12.4	90.9	0.95	0.93	35.4
Approach		502	2.3	502	2.3	0.769	21.4	LOS B	12.4	90.9	0.95	0.93	35.4
North: Moorebank Avenue													
8	T1	936	1.2	934	1.2	0.847	16.0	LOS B	23.7	170.2	0.88	0.96	39.6
9	R2	15	100.0	15	100.0	0.113	27.2	LOS B	0.4	7.5	0.92	0.68	29.4
Approach		951	2.8	949 N1	2.8	0.847	16.2	LOS B	23.7	170.2	0.88	0.95	39.4
West: Chatham Avenue													
10	L2	303	4.9	303	4.9	0.865	33.9	LOS C	9.0	69.0	1.00	1.07	15.7
12	R2	1	0.0	1	0.0	0.865	33.9	LOS C	9.0	69.0	1.00	1.07	31.7
Approach		304	4.8	304	4.8	0.865	33.9	LOS C	9.0	69.0	1.00	1.07	15.8
All Vehicles		1757	3.0	1755 N1	3.0	0.865	20.8	LOS B	23.7	170.2	0.92	0.97	36.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 1.0 %
Number of Iterations: 5 (maximum specified: 20)

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

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	11	19.4	LOS B	0.0	0.0	0.88	0.88
P4	West Full Crossing	11	16.0	LOS B	0.0	0.0	0.80	0.80
All Pedestrians		21	17.7	LOS B			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.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

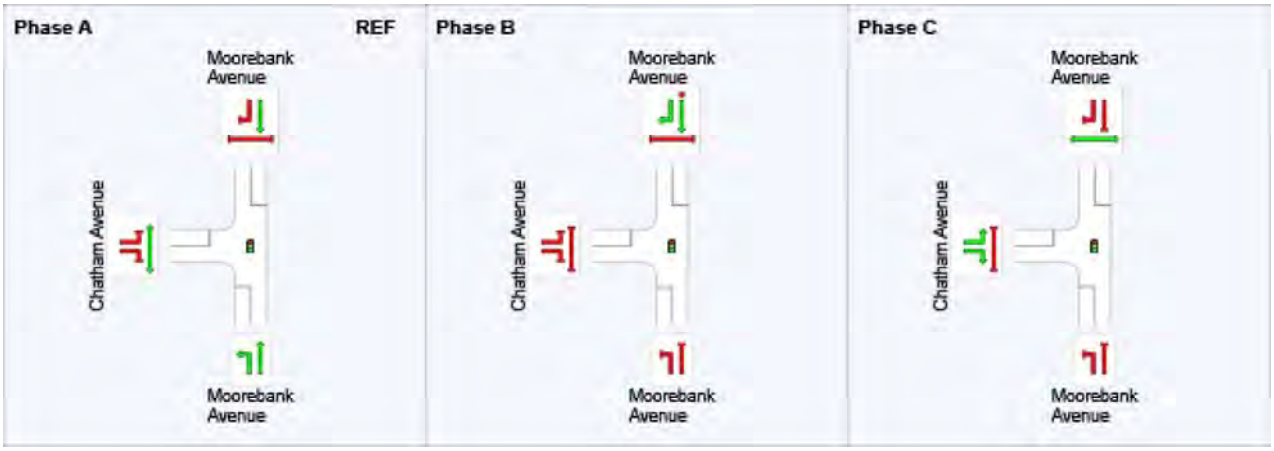
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 50 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	23	35
Green Time (sec)	17	6	9
Phase Time (sec)	23	12	15
Phase Split	46%	24%	30%

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%.



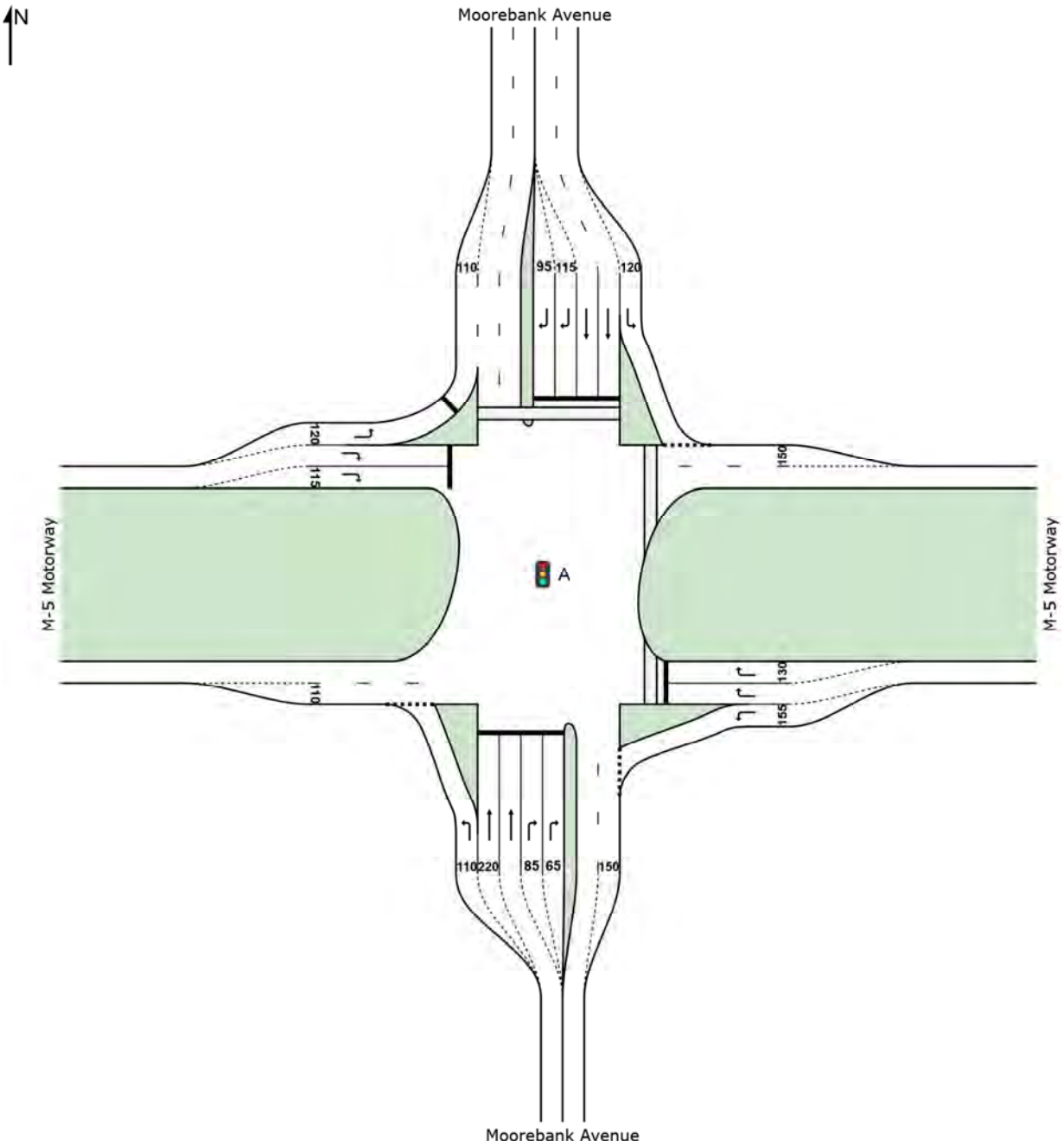
REF: Reference Phase
VAR: Variable Phase

Stage 2(iii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.5	LOS A	9.9	89.9	0.42	0.74	50.2
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	273	22.0	273	22.0	0.228	6.2	LOS A	1.0	10.2	0.11	0.57	47.8
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		516	13.7	516	13.7	0.949	52.3	LOS D	10.7	81.6	0.53	0.80	22.8
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	174	8.5	174	8.5	0.128	27.4	LOS B	4.1	33.6	0.64	0.51	24.8
9	R2	506	20.2	506	20.2	0.961	85.9	LOS F	28.4	279.4	0.98	0.97	22.4
Approach		728	17.3	728	17.3	0.961	66.7	LOS E	28.4	279.4	0.84	0.84	23.5
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	455	11.1	455	11.1	0.723	65.4	LOS E	17.0	145.6	0.98	0.85	19.6
Approach		1811	8.5	1811	8.5	0.887	21.7	LOS B	21.5	173.2	0.60	0.71	39.6
All Vehicles		4156	11.6	4156	11.6	0.961	35.7	LOS C	28.4	279.4	0.64	0.74	32.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 8 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

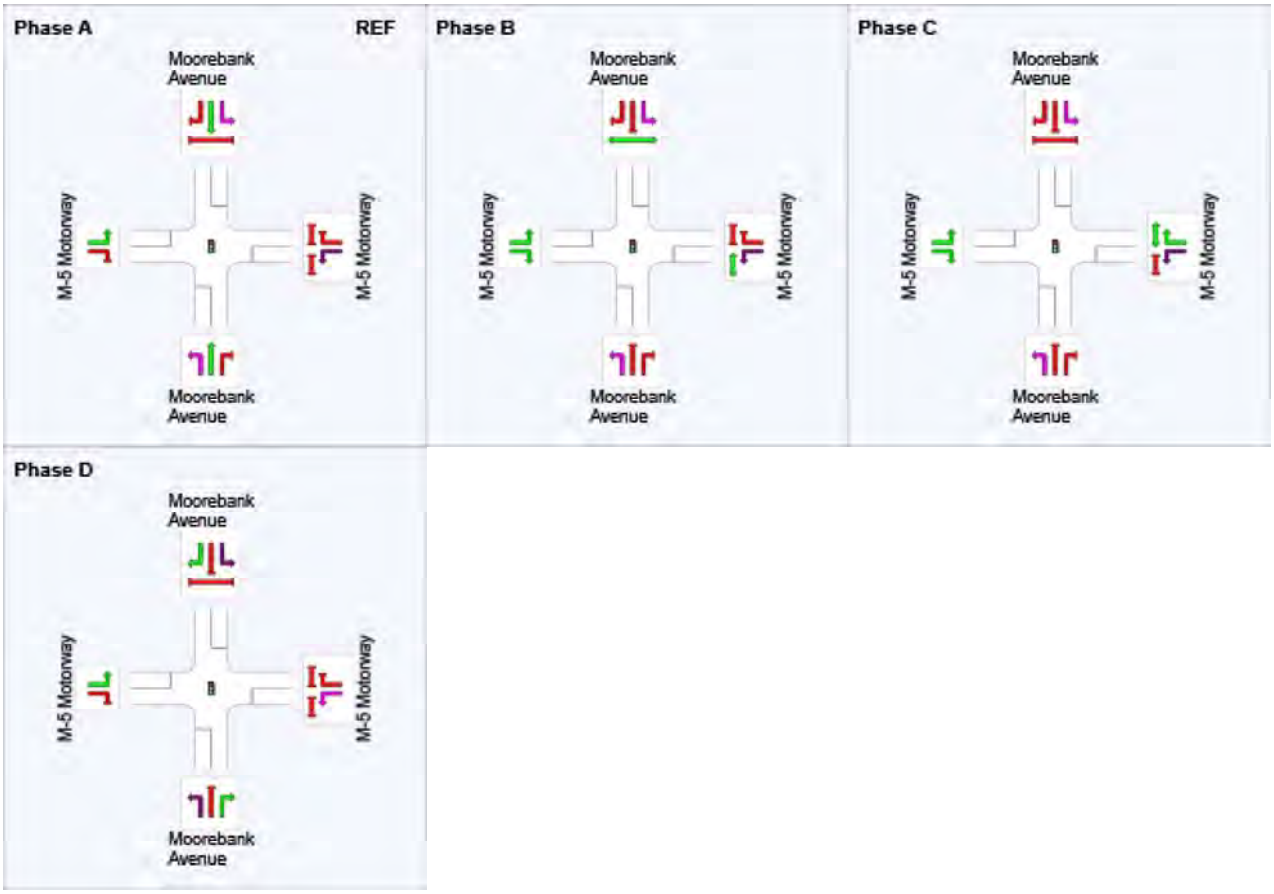
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

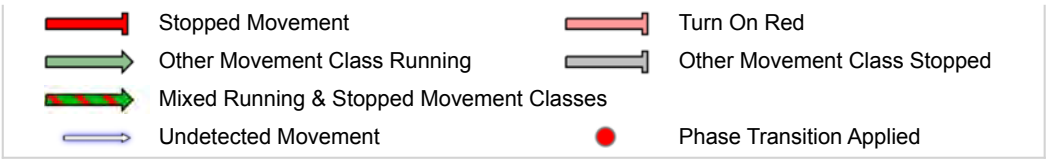
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

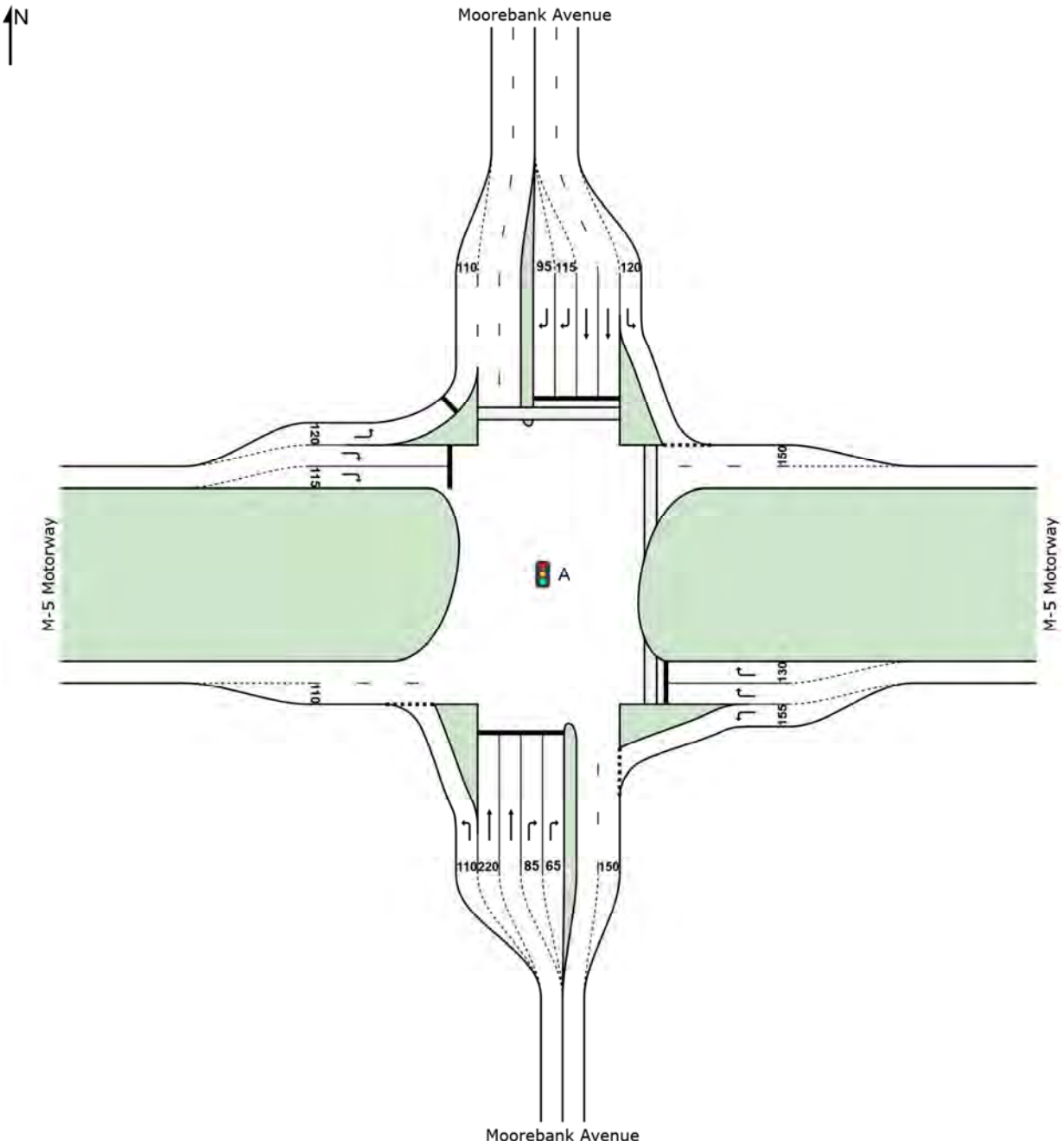
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	482	7.6	482	7.6	0.681	40.3	LOS C	23.4	189.0	0.87	1.02	36.1
2	T1	249	3.0	249	3.0	0.497	66.0	LOS E	8.6	63.9	0.98	0.78	22.5
3	R2	345	9.5	345	9.5	0.206	22.3	LOS B	6.6	55.1	0.52	0.71	41.7
Approach		1077	7.1	1077	7.1	0.681	40.5	LOS C	23.4	189.0	0.78	0.87	33.5
East: M-5 Motorway													
4	L2	278	11.7	278	11.7	0.235	7.1	LOS A	2.9	24.7	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		365	10.4	365	10.4	0.642	26.7	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.062	6.5	LOS A	0.5	4.1	0.15	0.59	56.2
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	436	8.9	436	8.9	0.796	71.9	LOS F	17.4	143.7	1.00	0.87	18.3
Approach		1031	8.0	1031	8.0	0.796	33.9	LOS C	17.4	143.7	0.50	0.69	32.9
All Vehicles		4247	6.3	4247	6.3	0.884	38.7	LOS C	46.1	352.4	0.68	0.80	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

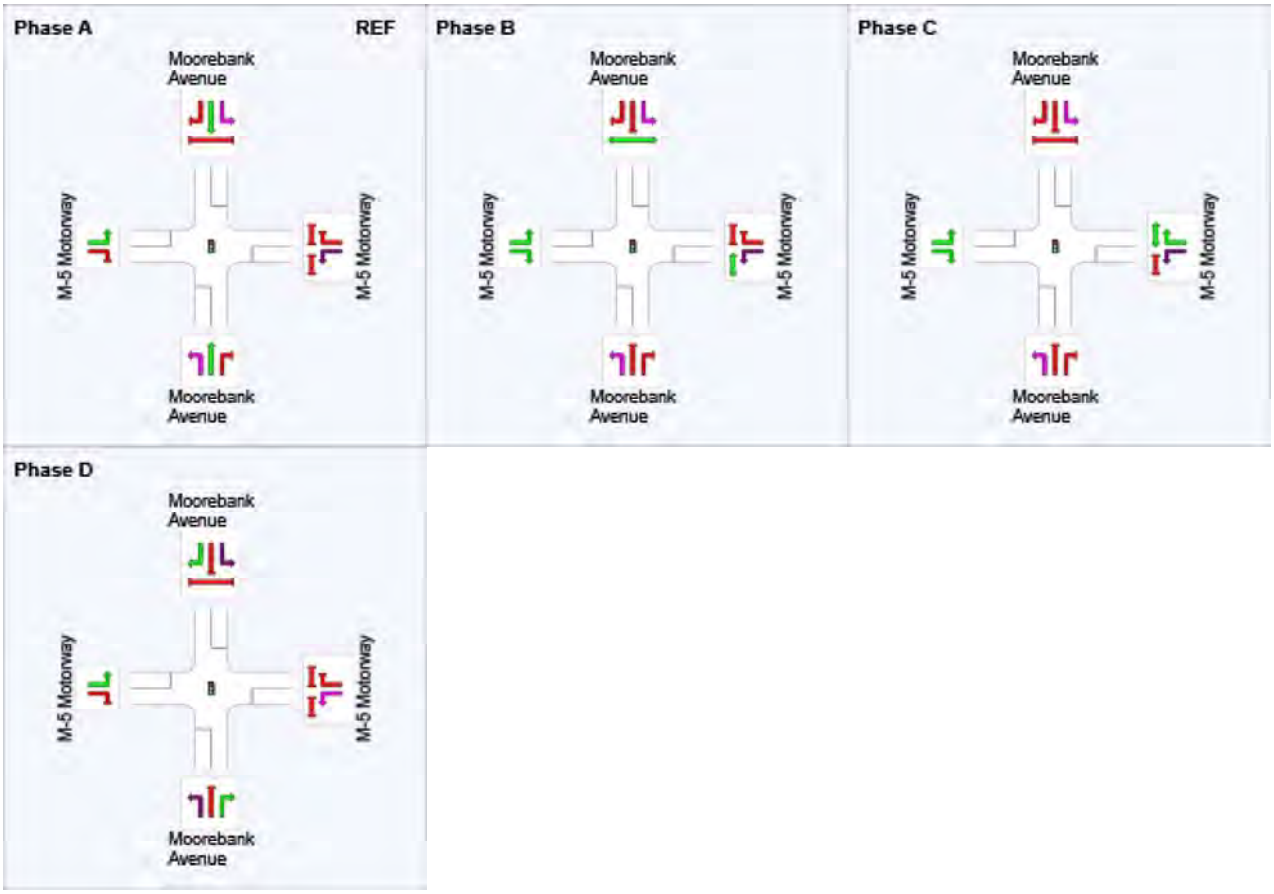
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

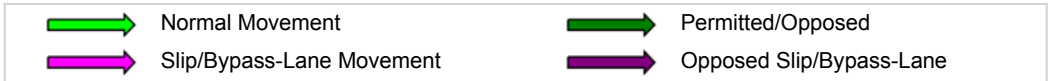
Phase Timing Results

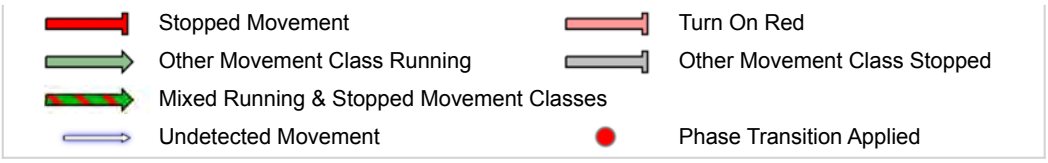
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase





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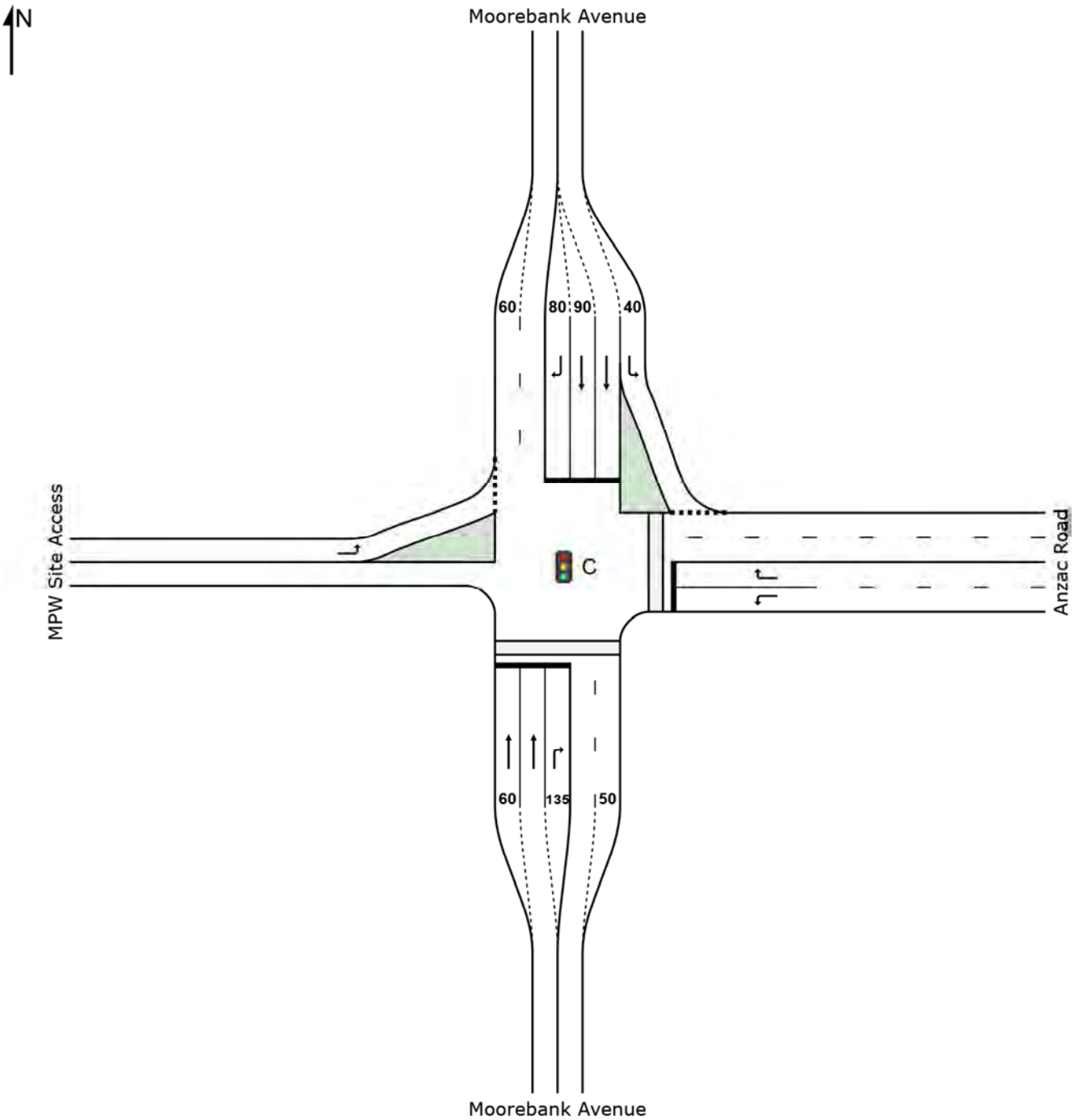
SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	698	4.1	698	4.1	0.911	29.7	LOS C	18.2	137.5	0.95	1.12	19.6
3	R2	381	3.3	381	3.3	0.715	24.3	LOS B	10.0	74.5	0.95	0.89	26.5
Approach		1079	3.8	1079	3.8	0.911	27.8	LOS B	18.2	137.5	0.95	1.04	22.2
East: Anzac Road													
4	L2	186	3.4	186	3.4	0.430	25.6	LOS B	4.4	33.2	0.90	0.79	17.1
6	R2	363	11.9	363	11.9	0.888	39.0	LOS C	12.4	107.1	1.00	1.09	12.9
Approach		549	9.0	549	9.0	0.888	34.4	LOS C	12.4	107.1	0.96	0.99	14.1
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.373	7.2	LOS A	4.4	35.7	0.54	0.63	34.4
8	T1	300	11.9	300	11.9	0.848	29.9	LOS C	7.2	62.0	0.98	1.02	11.1
9	R2	59	100.0	59	100.0	0.370	31.1	LOS C	1.6	20.6	0.94	0.76	30.8
Approach		762	16.6	762	16.6	0.848	18.0	LOS B	7.2	62.0	0.75	0.79	23.8
West: MPW Site Access													
10	L2	59	100.0	59	100.0	0.130	13.7	LOS A	0.6	8.3	0.73	0.69	42.3
Approach		59	100.0	59	100.0	0.130	13.7	LOS A	0.6	8.3	0.73	0.69	42.3
All Vehicles		2449	11.3	2449	11.3	0.911	25.9	LOS B	18.2	137.5	0.89	0.94	21.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 8 (maximum specified: 20)

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	11	21.8	LOS C	0.0	0.0	0.89	0.89
P2	East Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
All Pedestrians		21	21.8	LOS C			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

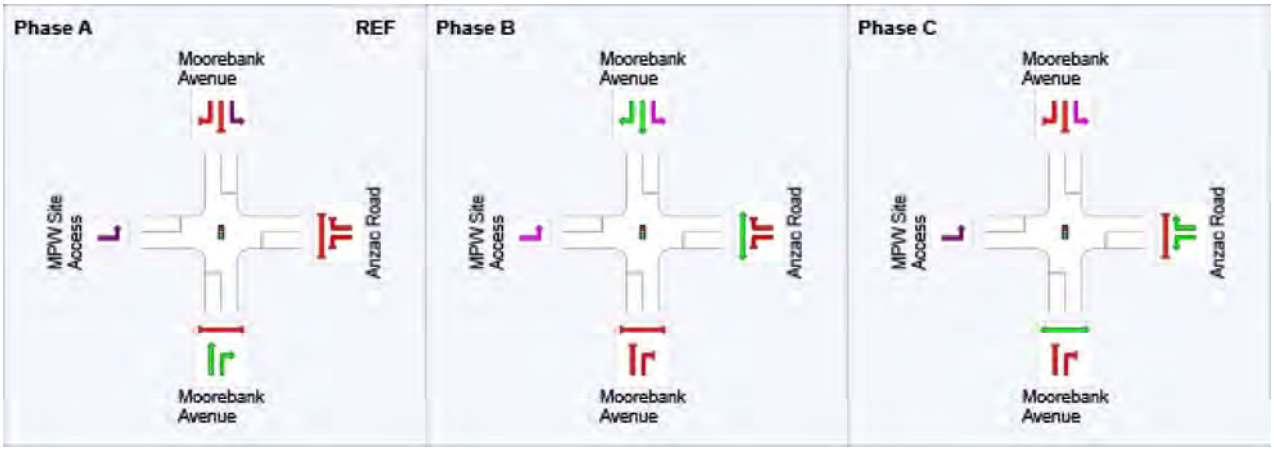
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	22	36
Green Time (sec)	16	8	13
Phase Time (sec)	22	14	19
Phase Split	40%	25%	35%

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%.



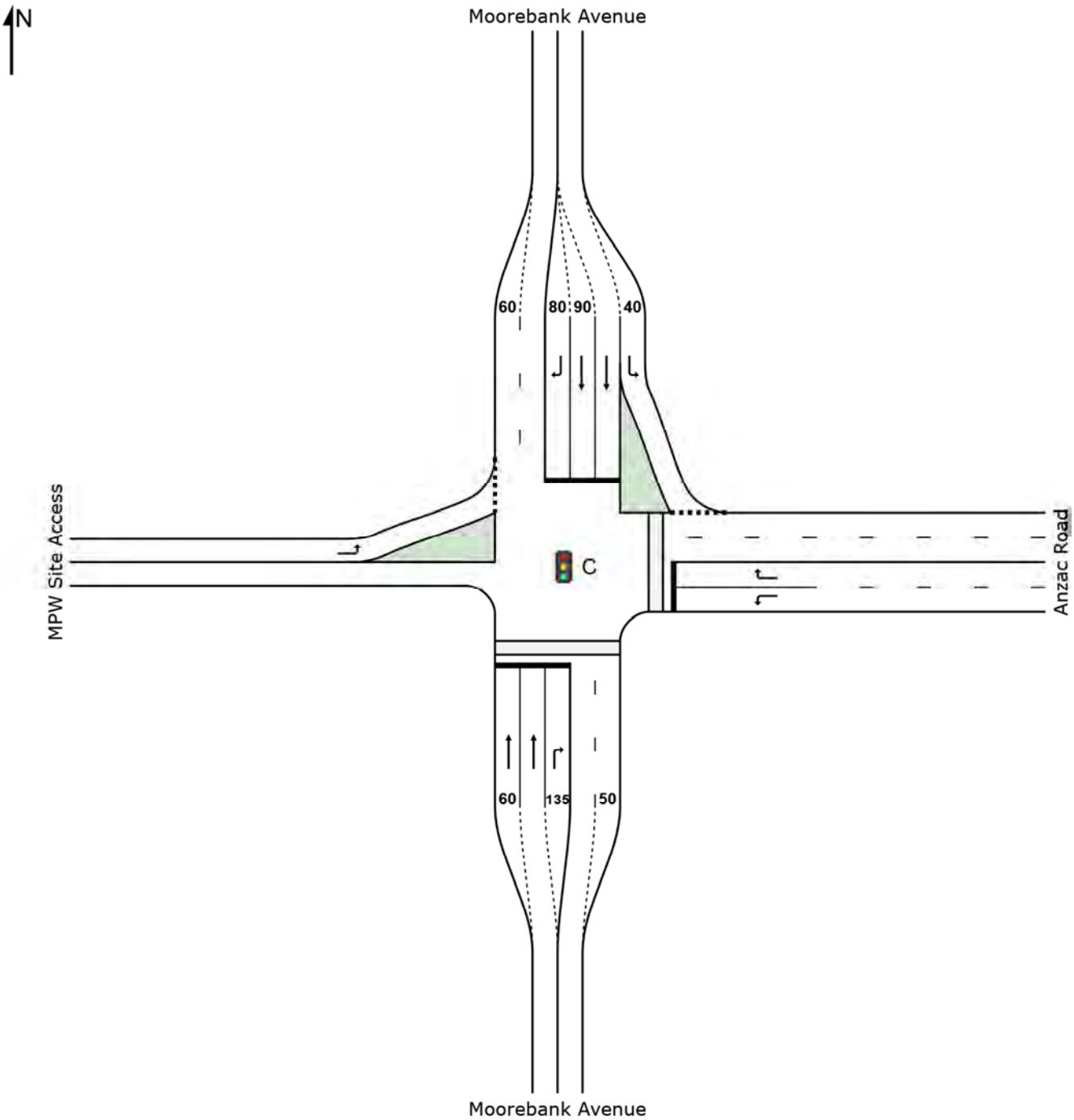
REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class Running	Other Movement Class Stopped
Mixed Running & Stopped Movement Classes	
Undetected Movement	Phase Transition Applied

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
2	T1	621	1.7	621	1.7	0.804	18.7	LOS B	10.9	79.2	0.94	0.94	24.2
3	R2	192	0.5	192	0.5	0.769	27.8	LOS B	4.7	33.6	1.00	0.98	25.2
Approach		813	1.4	813	1.4	0.804	20.9	LOS B	10.9	79.2	0.95	0.95	24.5
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.848	31.7	LOS C	7.4	53.4	1.00	1.03	14.7
6	R2	287	4.0	287	4.0	0.886	34.7	LOS C	8.1	61.2	1.00	1.11	14.1
Approach		567	2.8	567	2.8	0.886	33.2	LOS C	8.1	61.2	1.00	1.07	14.4
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.369	5.4	LOS A	2.8	21.1	0.50	0.63	37.0
8	T1	652	1.1	652	1.1	0.867	21.9	LOS B	13.2	94.8	0.95	1.05	13.7
9	R2	59	100.0	59	100.0	0.404	27.7	LOS B	1.3	17.5	0.95	0.76	32.3
Approach		1129	7.0	1129	7.0	0.867	16.1	LOS B	13.2	94.8	0.78	0.88	23.0
West: MPW Site Access													
10	L2	59	100.0	59	100.0	0.115	11.1	LOS A	0.5	6.2	0.65	0.68	44.9
Approach		59	100.0	59	100.0	0.115	11.1	LOS A	0.5	6.2	0.65	0.68	44.9
All Vehicles		2568	6.4	2568	6.4	0.886	21.3	LOS B	13.2	94.8	0.88	0.94	22.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 5 (maximum specified: 20)

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	11	16.9	LOS B	0.0	0.0	0.87	0.87
P2	East Full Crossing	11	10.7	LOS B	0.0	0.0	0.69	0.69
All Pedestrians		21	13.8	LOS B			0.78	0.78

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

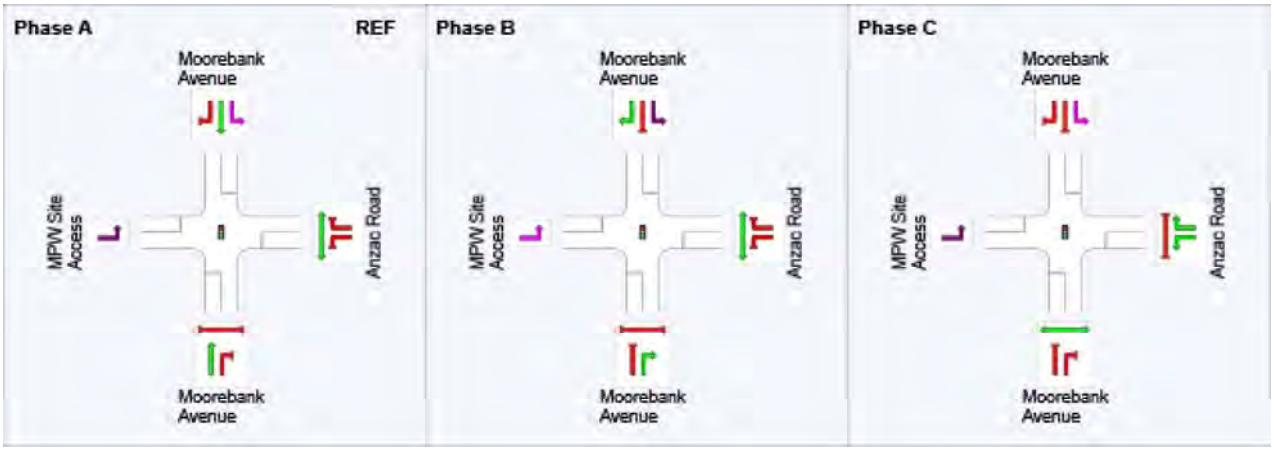
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	19	31
Green Time (sec)	13	6	8
Phase Time (sec)	19	12	14
Phase Split	42%	27%	31%

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%.



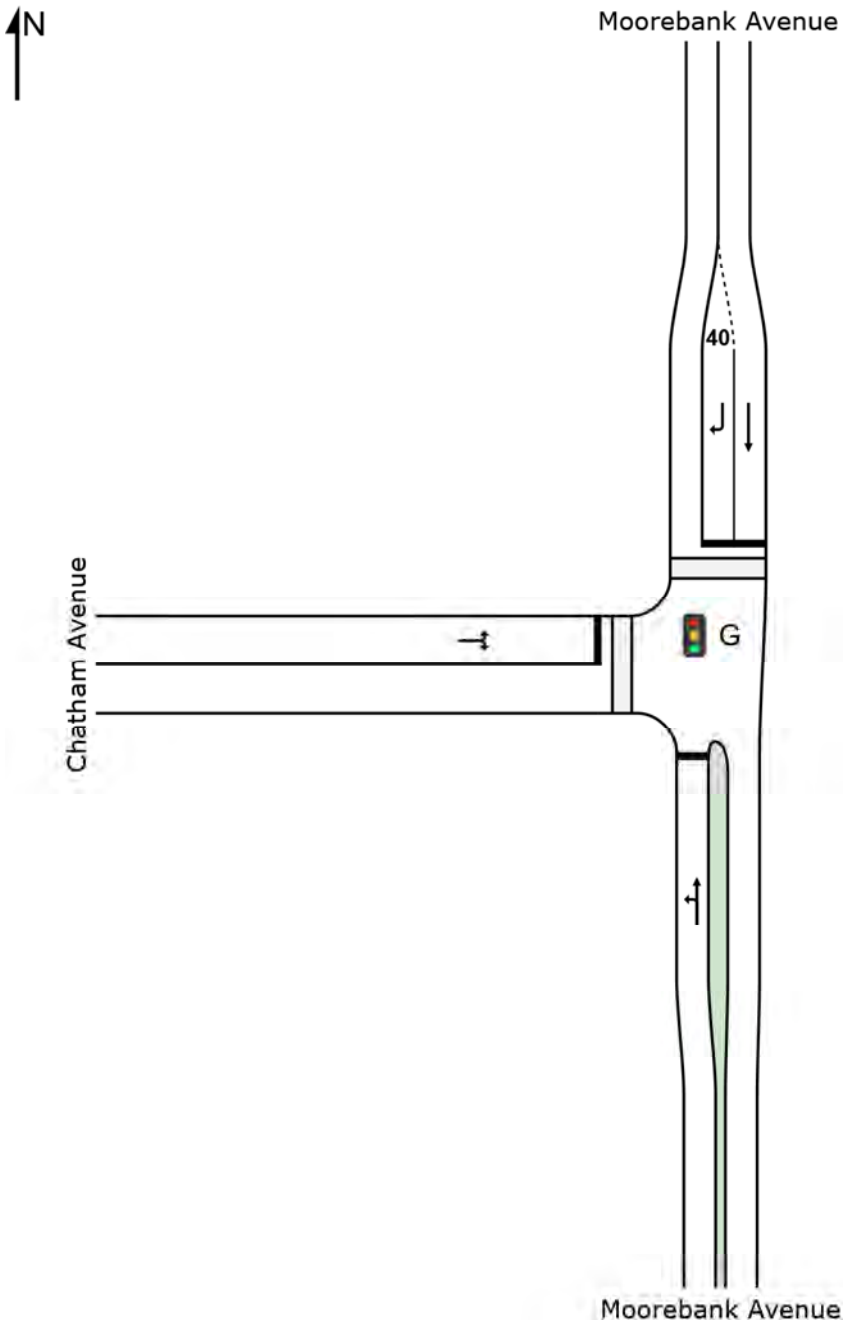
REF: Reference Phase
VAR: Variable Phase

Normal Movement	Permitted/Opposed
Slip/Bypass-Lane Movement	Opposed Slip/Bypass-Lane
Stopped Movement	Turn On Red
Other Movement Class Running	Other Movement Class Stopped
Mixed Running & Stopped Movement Classes	
Undetected Movement	Phase Transition Applied

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.879	26.9	LOS B	43.8	330.2	0.89	0.95	36.9
2	T1	1081	3.8	1081	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
Approach		1082	3.8	1082	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	1	0.0	1	0.0	0.008	44.2	LOS D	0.0	0.3	0.95	0.58	25.2
Approach		458	9.2	458	9.2	0.315	2.8	LOS A	5.3	43.6	0.30	0.27	45.6
West: Chatham Avenue													
10	L2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	12.7
12	R2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	27.7
Approach		2	0.0	2	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	21.8
All Vehicles		1542	5.4	1542	5.4	0.879	17.5	LOS B	43.8	330.2	0.72	0.75	38.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 8 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

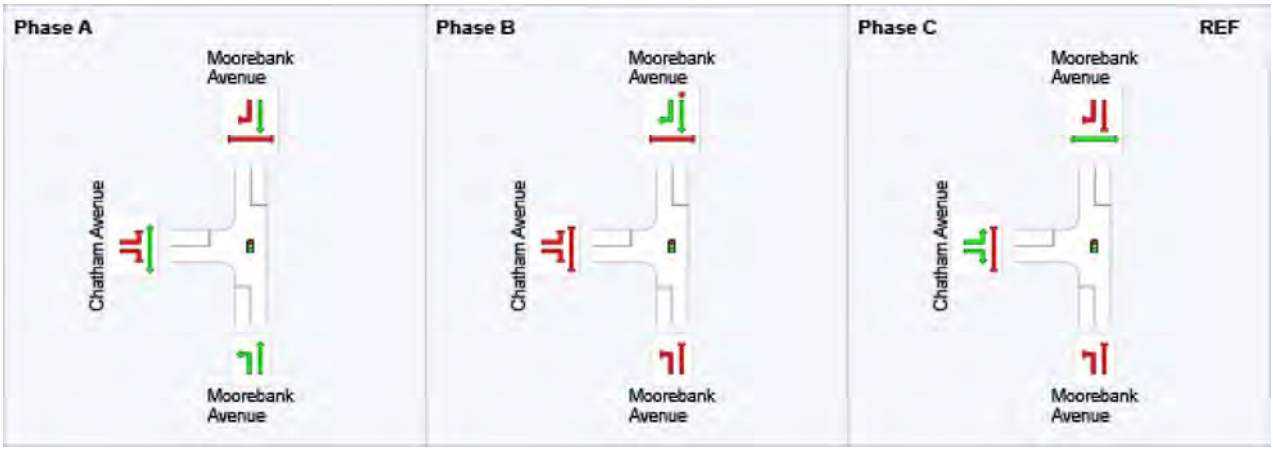
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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%.

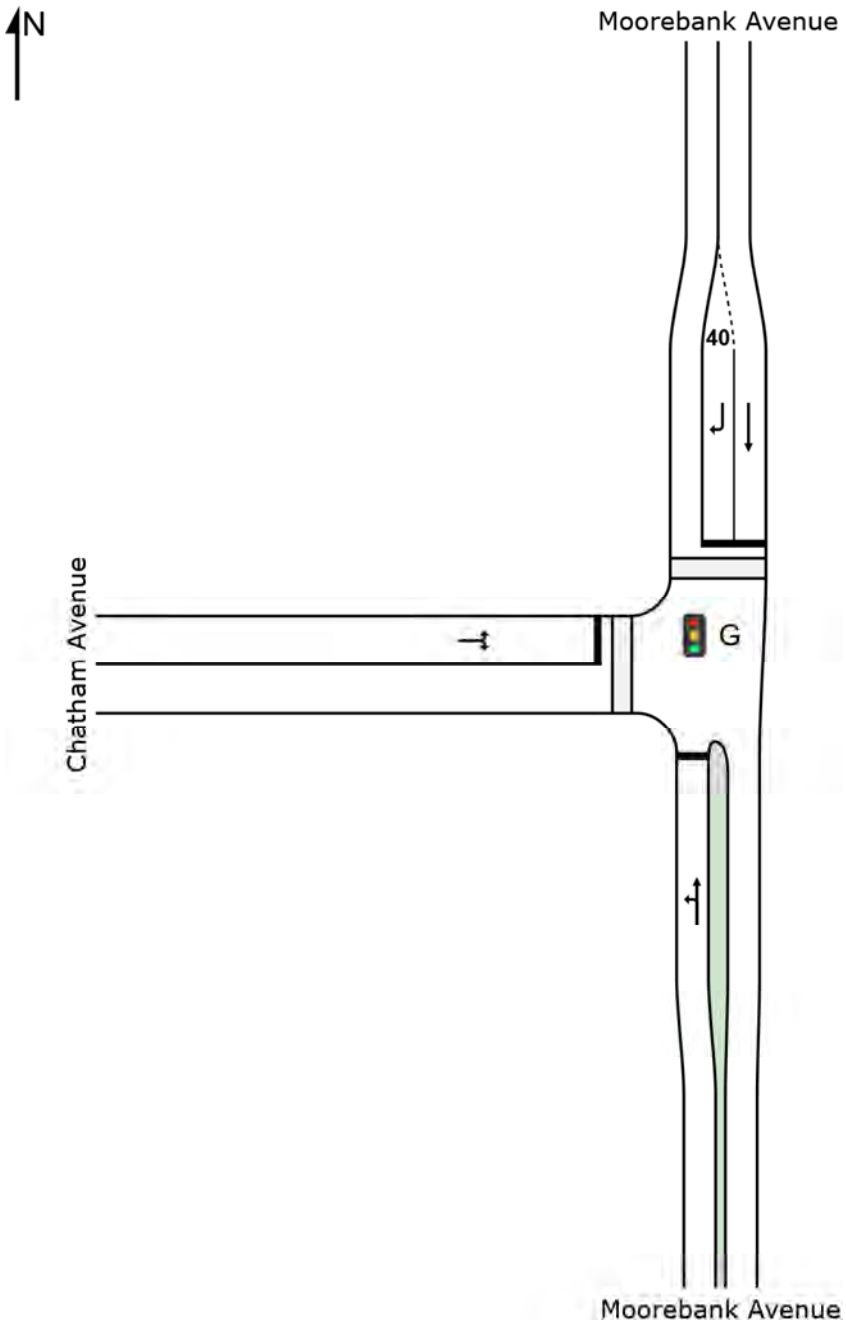


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.905	34.6	LOS C	15.0	109.5	1.00	1.18	33.2
2	T1	501	2.3	501	2.3	0.905	31.4	LOS C	15.0	109.5	1.00	1.18	29.7
Approach		502	2.3	502	2.3	0.905	31.4	LOS C	15.0	109.5	1.00	1.18	29.7
North: Moorebank Avenue													
8	T1	936	1.2	934	1.2	0.870	18.2	LOS B	24.2	173.3	0.93	1.07	38.7
9	R2	1	0.0	1	0.0	0.004	22.2	LOS B	0.0	0.1	0.88	0.57	31.3
Approach		937	1.2	935[N1]	1.2	0.870	18.2	LOS B	24.2	173.3	0.93	1.07	38.7
West: Chatham Avenue													
10	L2	288	0.0	288	0.0	0.806	28.3	LOS B	7.2	50.5	1.00	0.99	17.7
12	R2	1	0.0	1	0.0	0.806	28.3	LOS B	7.2	50.5	1.00	0.99	34.0
Approach		289	0.0	289	0.0	0.806	28.3	LOS B	7.2	50.5	1.00	0.99	17.8
All Vehicles		1728	1.3	1726[N1]	1.3	0.905	23.8	LOS B	24.2	173.3	0.96	1.09	34.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 5 (maximum specified: 20)

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

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
All Pedestrians		21	16.9	LOS B			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.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

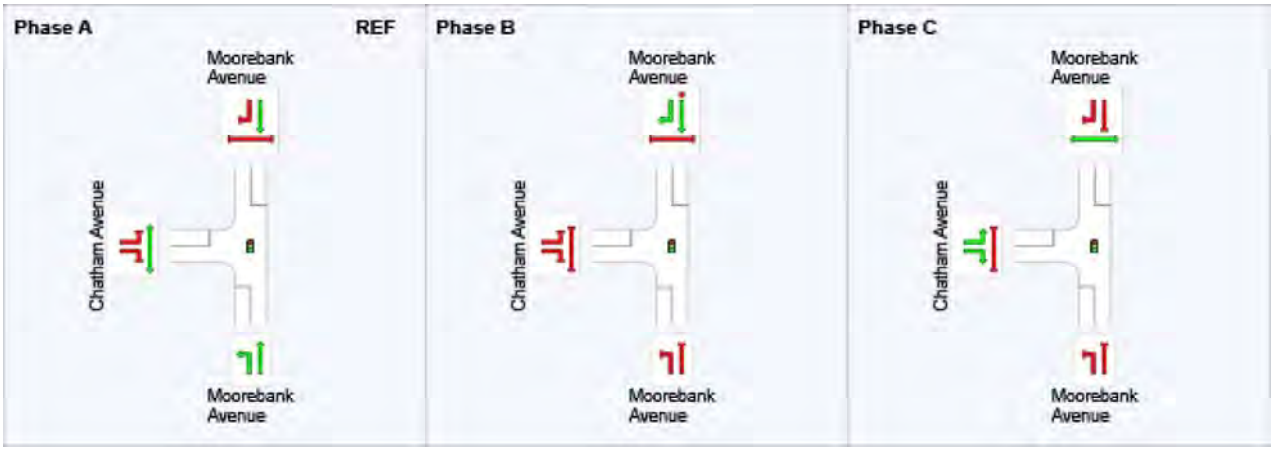
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	19	31
Green Time (sec)	13	6	8
Phase Time (sec)	19	12	14
Phase Split	42%	27%	31%

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%.



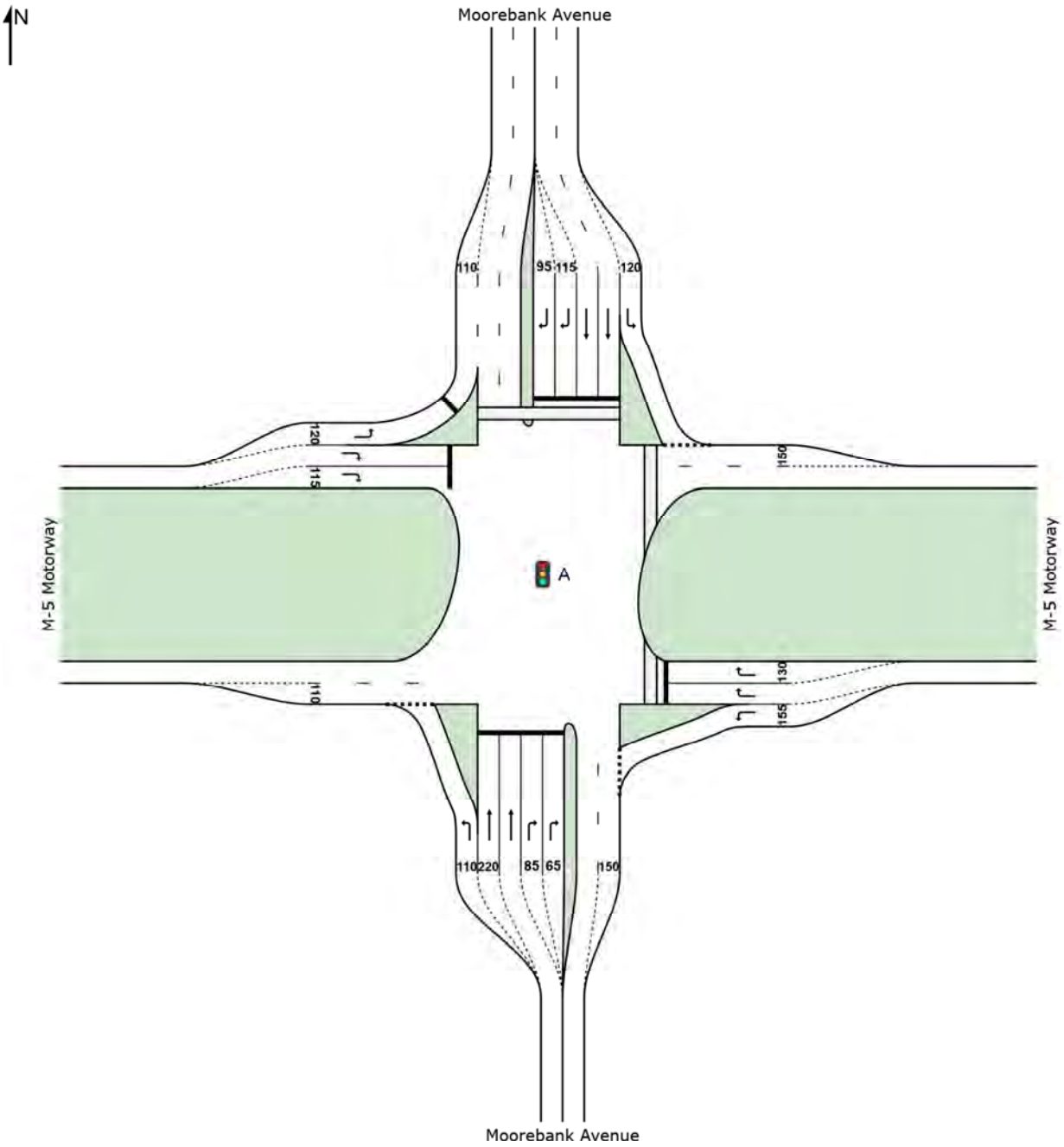
REF: Reference Phase
VAR: Variable Phase

Stage 3(i)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.5	LOS A	9.9	89.9	0.42	0.74	50.2
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	273	22.0	273	22.0	0.228	6.2	LOS A	1.0	10.2	0.11	0.57	47.8
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		516	13.7	516	13.7	0.949	52.3	LOS D	10.7	81.6	0.53	0.80	22.8
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	174	8.5	174	8.5	0.128	27.4	LOS B	4.1	33.6	0.64	0.51	24.8
9	R2	506	20.2	506	20.2	0.961	85.9	LOS F	28.4	279.4	0.98	0.97	22.4
Approach		728	17.3	728	17.3	0.961	66.7	LOS E	28.4	279.4	0.84	0.84	23.5
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	455	11.1	455	11.1	0.723	65.4	LOS E	17.0	145.6	0.98	0.85	19.6
Approach		1811	8.5	1811	8.5	0.887	21.7	LOS B	21.5	173.2	0.60	0.71	39.6
All Vehicles		4156	11.6	4156	11.6	0.961	35.7	LOS C	28.4	279.4	0.64	0.74	32.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

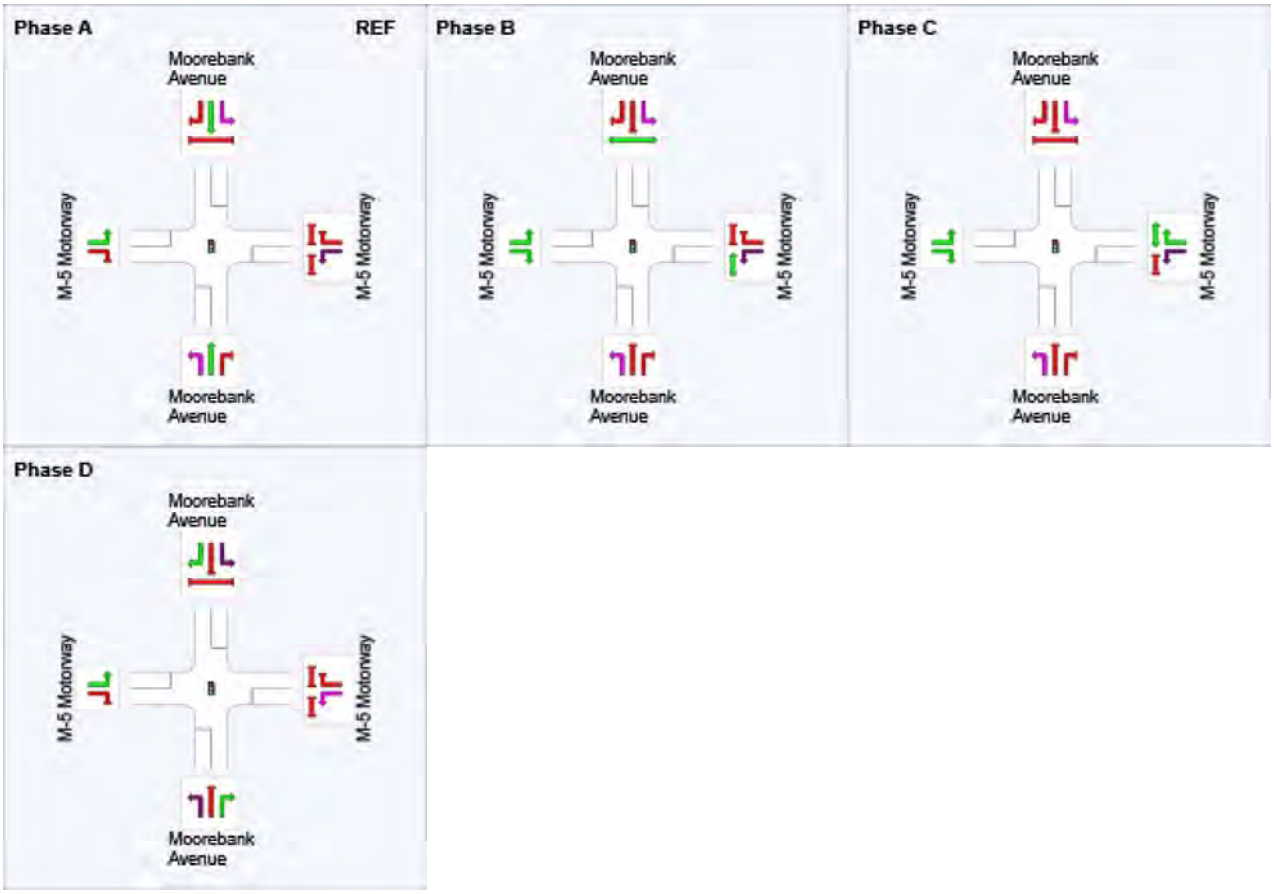
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

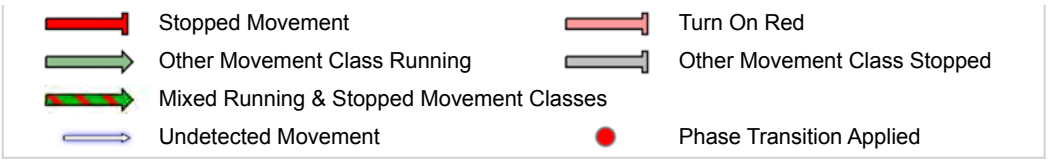
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

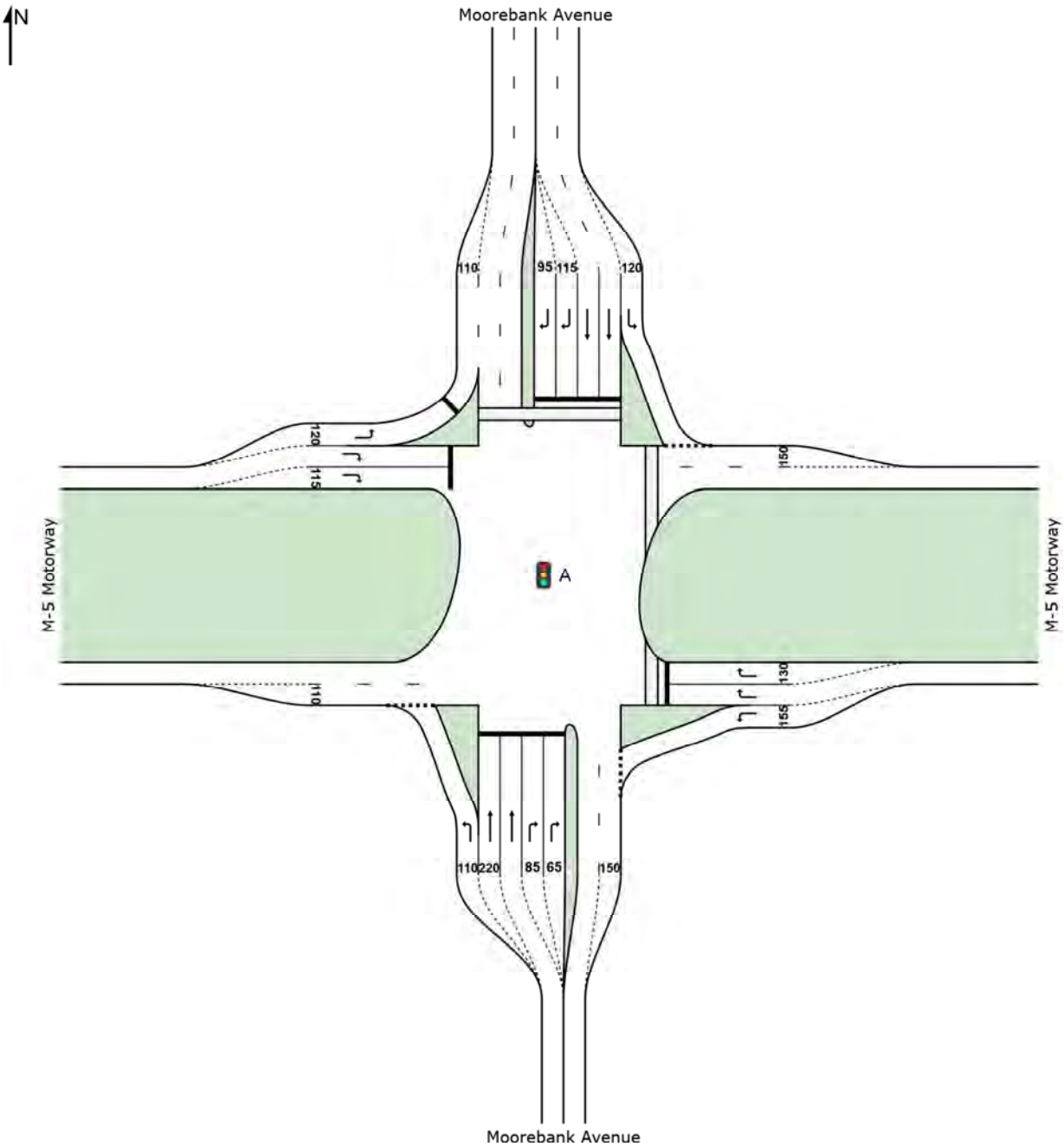
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	482	7.6	482	7.6	0.681	40.3	LOS C	23.4	189.0	0.87	1.02	36.1
2	T1	249	3.0	249	3.0	0.497	66.0	LOS E	8.6	63.9	0.98	0.78	22.5
3	R2	345	9.5	345	9.5	0.206	22.3	LOS B	6.6	55.1	0.52	0.71	41.7
Approach		1077	7.1	1077	7.1	0.681	40.5	LOS C	23.4	189.0	0.78	0.87	33.5
East: M-5 Motorway													
4	L2	278	11.7	278	11.7	0.235	7.1	LOS A	2.9	24.7	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		365	10.4	365	10.4	0.642	26.7	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.062	6.5	LOS A	0.5	4.1	0.15	0.59	56.2
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	436	8.9	436	8.9	0.796	71.9	LOS F	17.4	143.7	1.00	0.87	18.3
Approach		1031	8.0	1031	8.0	0.796	33.9	LOS C	17.4	143.7	0.50	0.69	32.9
All Vehicles		4247	6.3	4247	6.3	0.884	38.7	LOS C	46.1	352.4	0.68	0.80	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.4 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

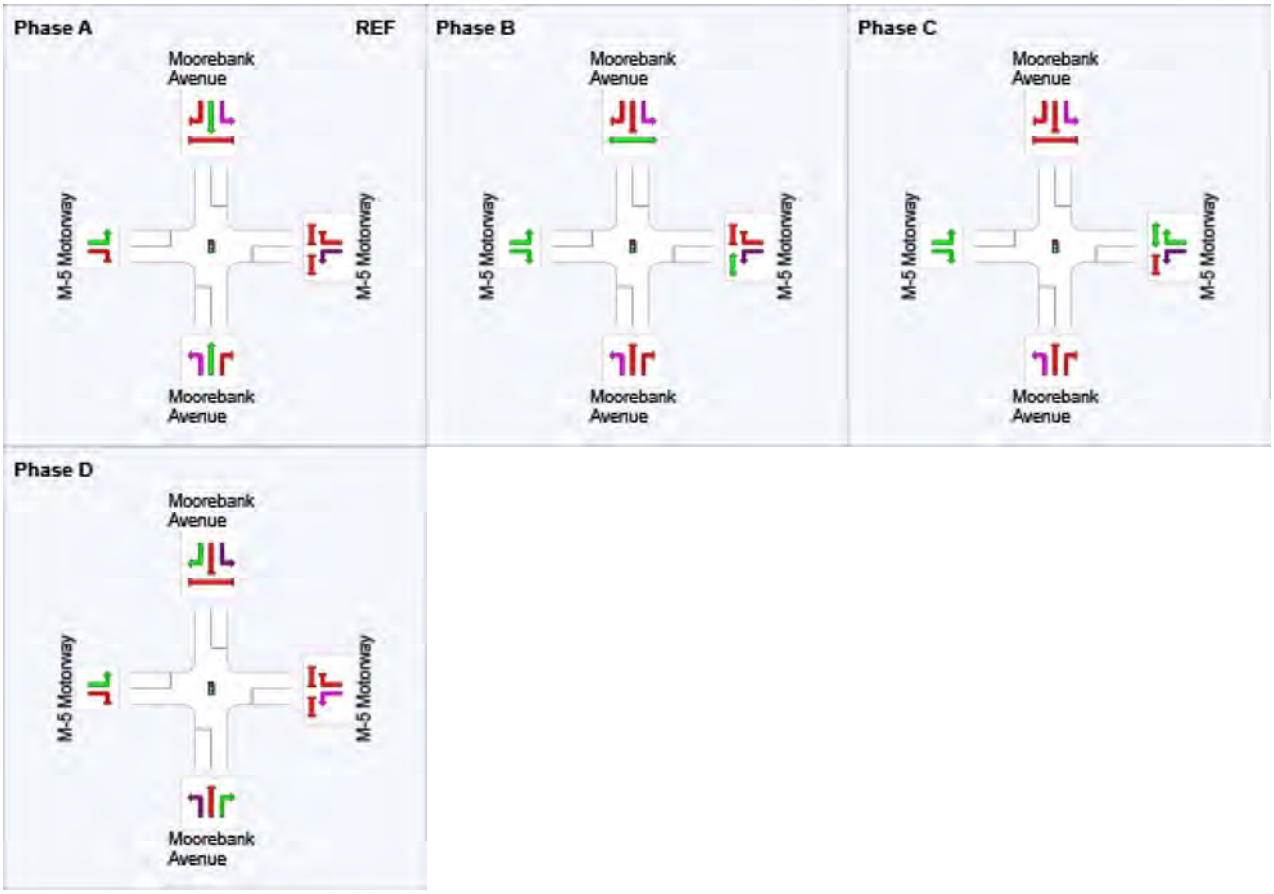
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

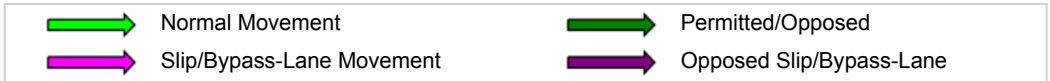
Phase Timing Results

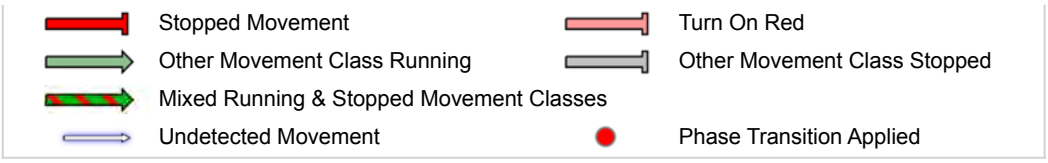
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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

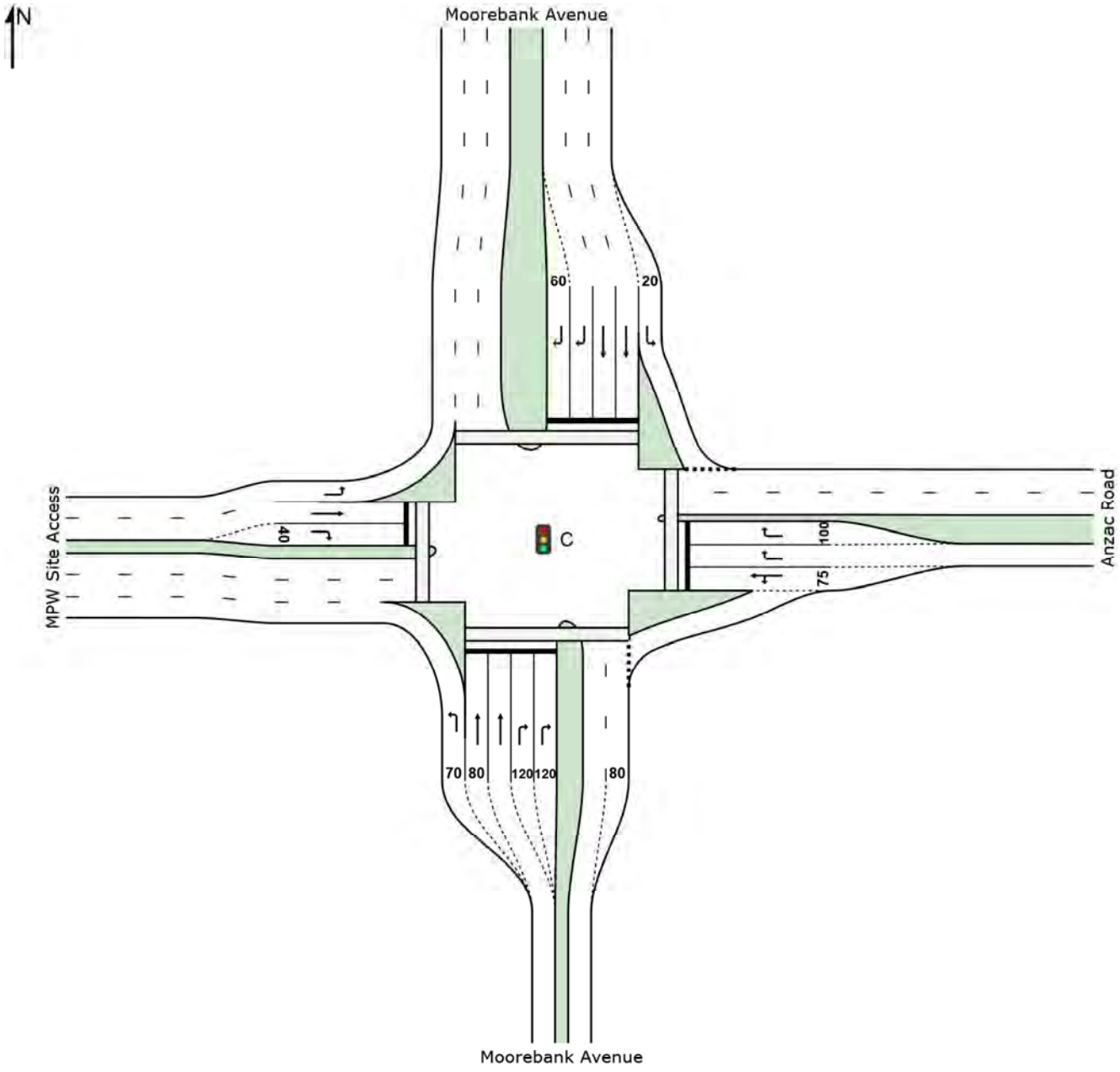




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



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Project: \\HC-AUS-NS-FS-01\jobs\AA008765\D-Calculations\Traffic\01 MPW Stage 2 Response\03 Anzac Rd Sensitivity Testing\SIDRA Model \Scenario 1\Scenario 1_Stage 3_50%.sip7

MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	37	0.0	37	0.0	0.020	5.6	LOS A	0.0	0.0	0.00	0.53	53.9
2	T1	727	8.0	727	8.0	0.890	33.3	LOS C	12.3	99.6	1.00	1.23	18.6
3	R2	381	3.3	381	3.3	0.953	48.5	LOS D	7.3	54.3	1.00	1.36	19.4
Approach		1145	6.2	1145	6.2	0.953	37.5	LOS C	12.3	99.6	0.97	1.25	19.8
East: Anzac Road													
4	L2	186	3.4	186	3.4	0.174	7.7	LOS A	1.3	9.4	0.39	0.65	34.8
5	T1	1	0.0	1	0.0	0.174	2.1	LOS A	1.3	9.4	0.39	0.65	50.4
6	R2	363	11.9	363	11.9	0.825	37.3	LOS C	5.7	49.1	1.00	1.00	13.6
Approach		551	9.0	551	9.0	0.825	27.2	LOS B	5.7	49.1	0.79	0.88	17.1
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.326	5.2	LOS A	2.8	23.0	0.43	0.59	36.8
8	T1	329	19.8	329	19.8	0.580	21.3	LOS B	5.6	54.9	0.92	0.75	14.4
9	R2	172	17.2	172	17.2	0.470	32.8	LOS C	2.4	19.0	0.98	0.76	31.3
Approach		904	14.0	904	14.0	0.580	16.3	LOS B	5.6	54.9	0.71	0.68	27.8
West: MPW Site Access													
10	L2	29	100.0	29	100.0	0.027	6.1	LOS A	0.0	0.0	0.00	0.50	51.0
11	T1	1	0.0	1	0.0	0.005	24.1	LOS B	0.0	0.2	0.91	0.53	37.8
12	R2	3	33.3	3	33.3	0.019	30.8	LOS C	0.1	0.7	0.91	0.62	30.6
Approach		34	90.6	34	90.6	0.027	9.0	LOS A	0.1	0.7	0.11	0.51	47.4
All Vehicles		2634	10.5	2634	10.5	0.953	27.7	LOS B	12.3	99.6	0.83	0.97	21.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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	11	21.8	LOS C	0.0	0.0	0.89	0.89
P2	East Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P3	North Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P4	West Full Crossing	53	21.9	LOS C	0.1	0.1	0.89	0.89

All Pedestrians	84	21.9	LOS C	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

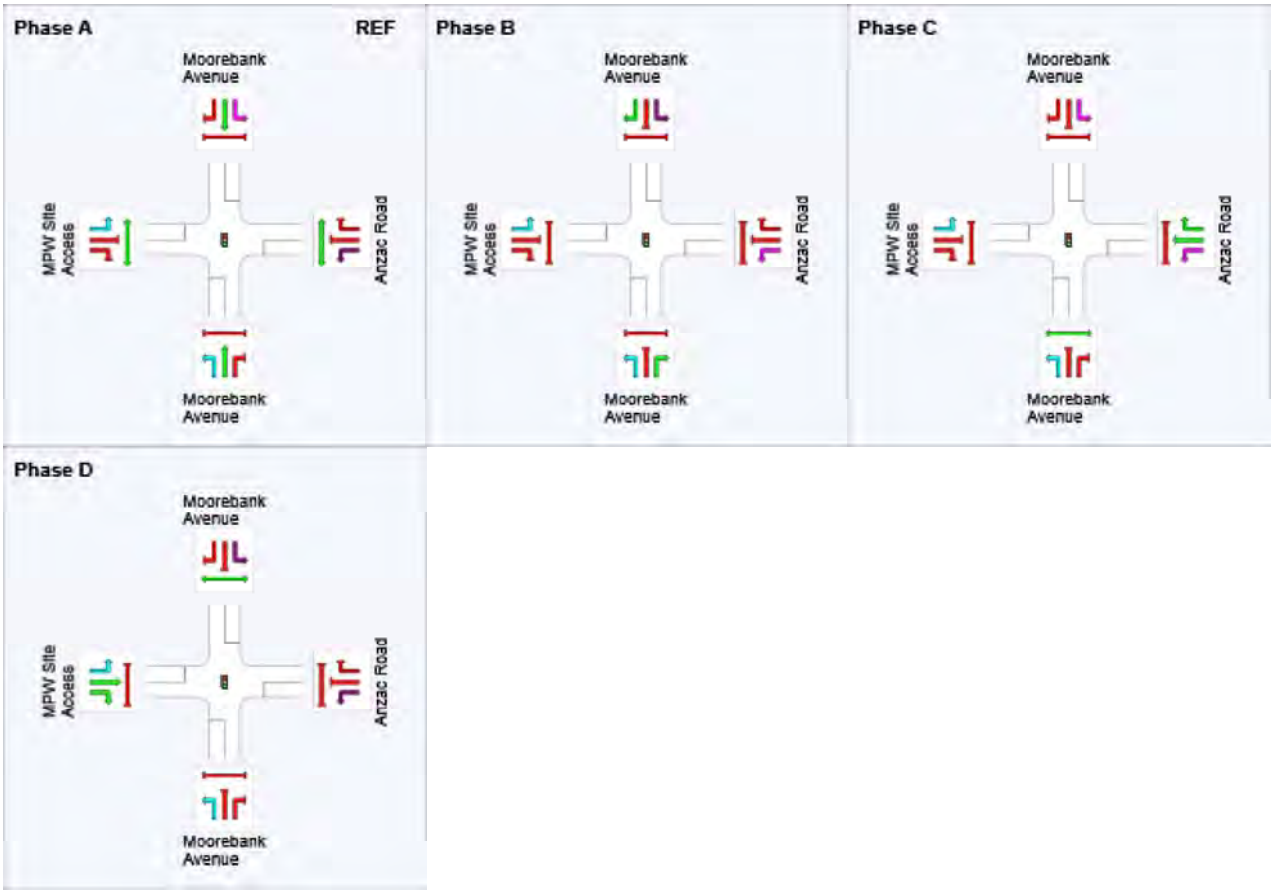
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

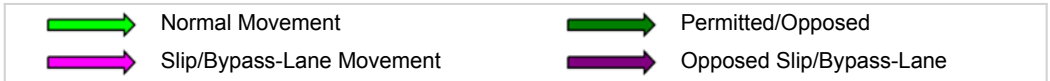
Phase Timing Results

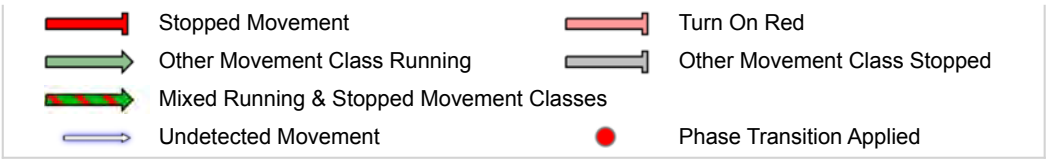
Phase	A	B	C	D
Phase Change Time (sec)	0	18	30	43
Green Time (sec)	12	6	7	6
Phase Time (sec)	18	12	13	12
Phase Split	33%	22%	24%	22%

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

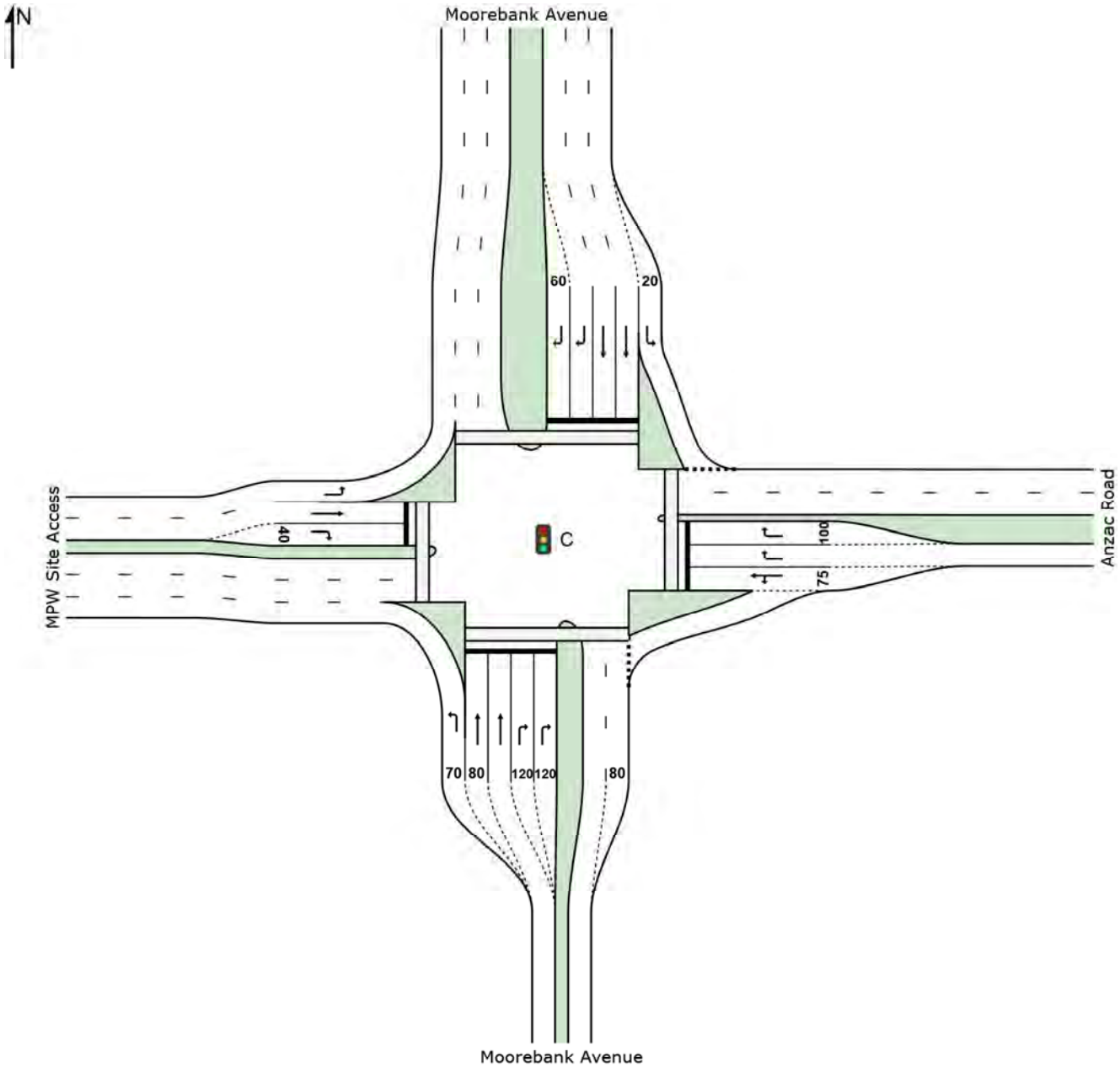




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	6	83.3	6	83.3	0.005	6.5	LOS A	0.0	0.0	0.00	0.49	50.5
2	T1	515	6.7	515	6.7	0.434	20.9	LOS B	7.1	56.5	0.84	0.71	23.3
3	R2	178	0.6	178	0.6	0.555	39.3	LOS C	3.2	22.5	1.00	0.79	21.7
Approach		699	5.9	699	5.9	0.555	25.5	LOS B	7.1	56.5	0.87	0.73	23.0
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.299	11.0	LOS A	4.0	28.8	0.52	0.71	29.4
5	T1	1	0.0	1	0.0	0.299	5.4	LOS A	4.0	28.8	0.52	0.71	47.1
6	R2	287	4.0	287	4.0	0.460	35.0	LOS C	4.6	34.9	0.94	0.79	14.2
Approach		568	2.8	568	2.8	0.460	23.1	LOS B	4.6	34.9	0.74	0.75	19.1
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.293	4.4	LOS A	2.4	17.9	0.30	0.54	38.6
8	T1	659	5.6	659	5.6	0.740	23.6	LOS B	14.4	112.3	0.91	0.82	13.5
9	R2	41	71.8	41	71.8	0.193	41.3	LOS C	0.7	8.1	0.96	0.71	27.2
Approach		1119	7.1	1119	7.1	0.740	17.1	LOS B	14.4	112.3	0.68	0.71	22.1
West: MPW Site Access													
10	L2	159	18.5	159	18.5	0.097	5.8	LOS A	0.0	0.0	0.00	0.52	51.0
11	T1	15	0.0	15	0.0	0.088	33.5	LOS C	0.5	3.4	0.95	0.65	33.1
12	R2	22	0.0	22	0.0	0.139	39.5	LOS C	0.7	5.2	0.96	0.70	26.7
Approach		196	15.1	196	15.1	0.139	11.7	LOS A	0.7	5.2	0.18	0.55	44.3
All Vehicles		2582	6.4	2582	6.4	0.740	20.3	LOS B	14.4	112.3	0.71	0.71	23.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.4 %
Number of Iterations: 5 (maximum specified: 20)

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	11	29.3	LOS C	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	28.4	LOS C	0.0	0.0	0.90	0.90
P3	North Full Crossing	11	29.3	LOS C	0.0	0.0	0.91	0.91
P4	West Full Crossing	53	28.4	LOS C	0.1	0.1	0.90	0.90
All Pedestrians		84	28.6	LOS C			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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

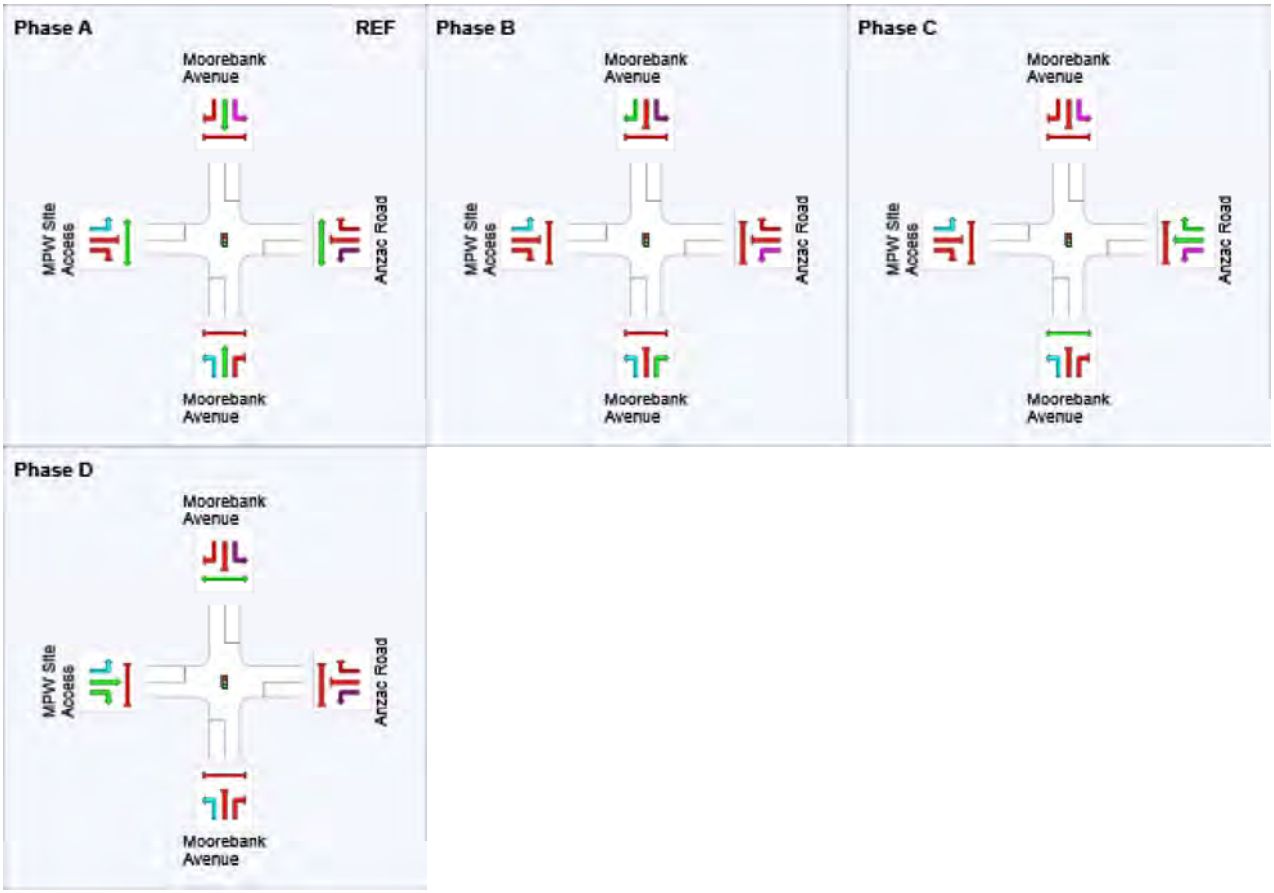
Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

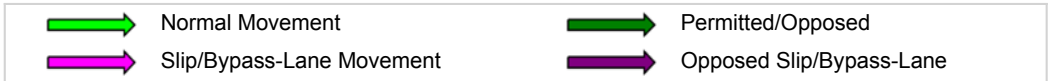
Phase Timing Results

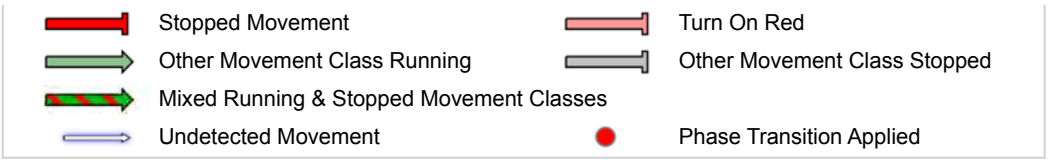
Phase	A	B	C	D
Phase Change Time (sec)	0	28	40	58
Green Time (sec)	22	6	12	6
Phase Time (sec)	28	12	18	12
Phase Split	40%	17%	26%	17%

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

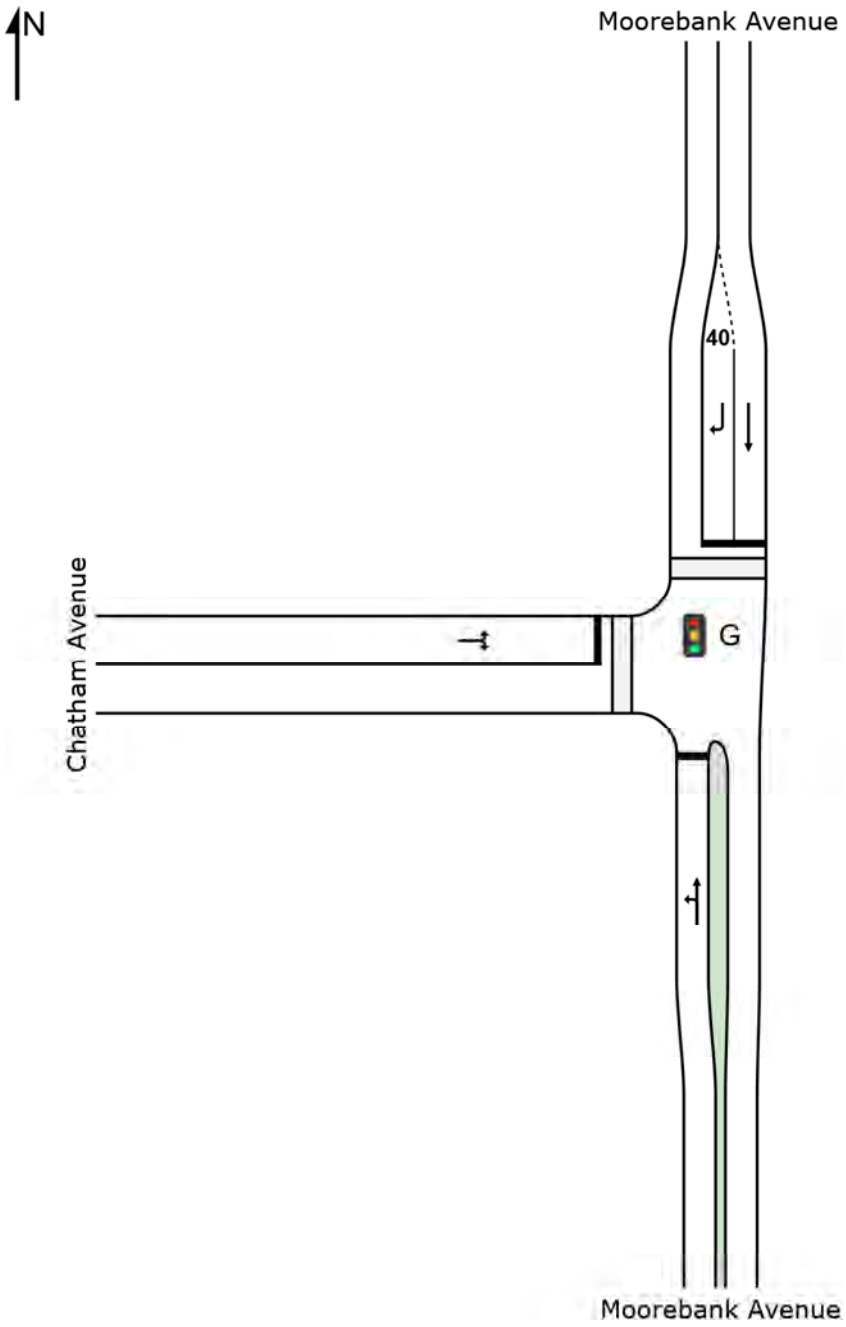




SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.879	26.9	LOS B	43.8	330.2	0.89	0.95	36.9
2	T1	1081	3.8	1081	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
Approach		1082	3.8	1082	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	29	100.0	29	100.0	0.385	49.3	LOS D	1.3	27.5	0.99	0.73	23.9
Approach		486	14.7	486	14.7	0.385	5.5	LOS A	5.3	43.6	0.34	0.30	43.9
West: Chatham Avenue													
10	L2	29	100.0	29	100.0	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	11.9
12	R2	1	0.0	1	0.0	0.361	49.6	LOS D	1.3	27.5	0.99	0.73	26.5
Approach		31	96.6	31	96.6	0.361	50.1	LOS D	1.3	27.5	0.99	0.73	12.7
All Vehicles		1599	8.9	1599	8.9	0.879	18.7	LOS B	43.8	330.2	0.73	0.75	37.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

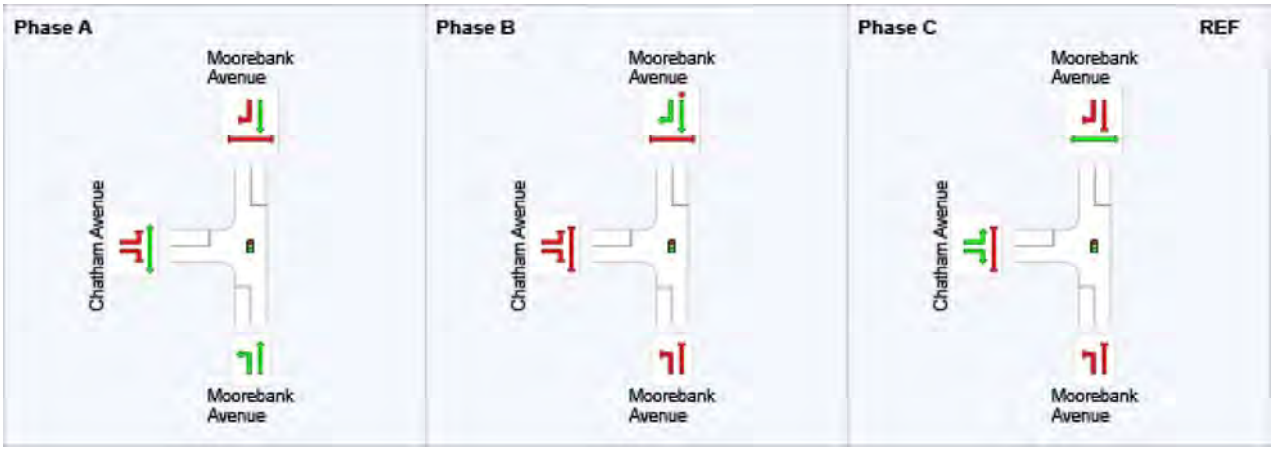
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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%.

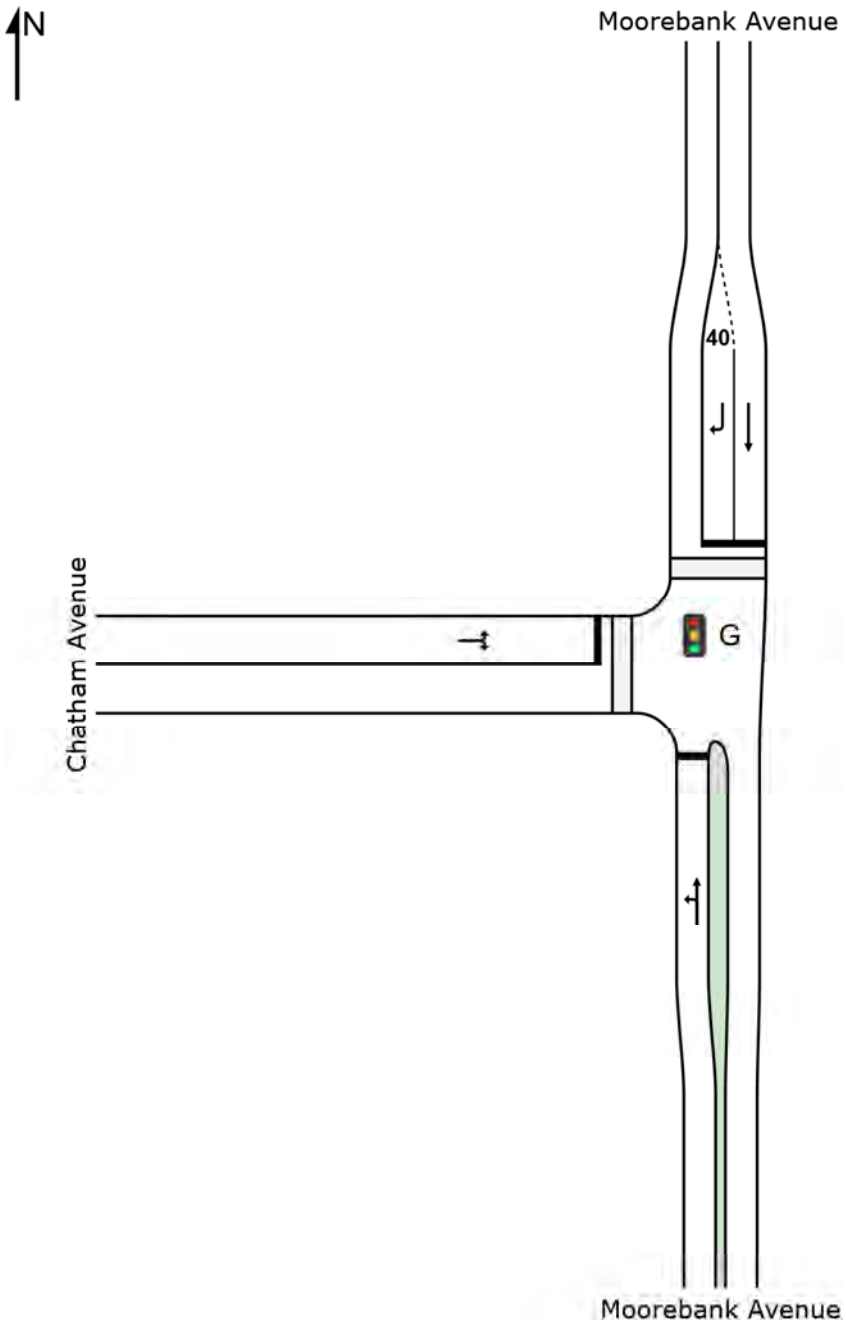


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	936	1.2	936	1.2	0.834	13.4	LOS A	20.5	147.1	0.84	0.91	40.7
9	R2	29	100.0	29	100.0	0.204	24.8	LOS B	0.6	13.6	0.92	0.71	30.1
Approach		965	4.3	965	4.3	0.834	13.7	LOS A	20.5	147.1	0.84	0.91	40.4
West: Chatham Avenue													
10	L2	174	17.0	174	17.0	0.726	28.3	LOS B	4.2	39.7	1.00	0.93	17.8
12	R2	1	0.0	1	0.0	0.726	28.2	LOS B	4.2	39.7	1.00	0.93	34.0
Approach		175	16.9	175	16.9	0.726	28.3	LOS B	4.2	39.7	1.00	0.93	17.9
All Vehicles		1642	5.0	1642	5.0	0.834	17.4	LOS B	20.5	147.1	0.89	0.92	38.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.4 %
Number of Iterations: 5 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			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.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

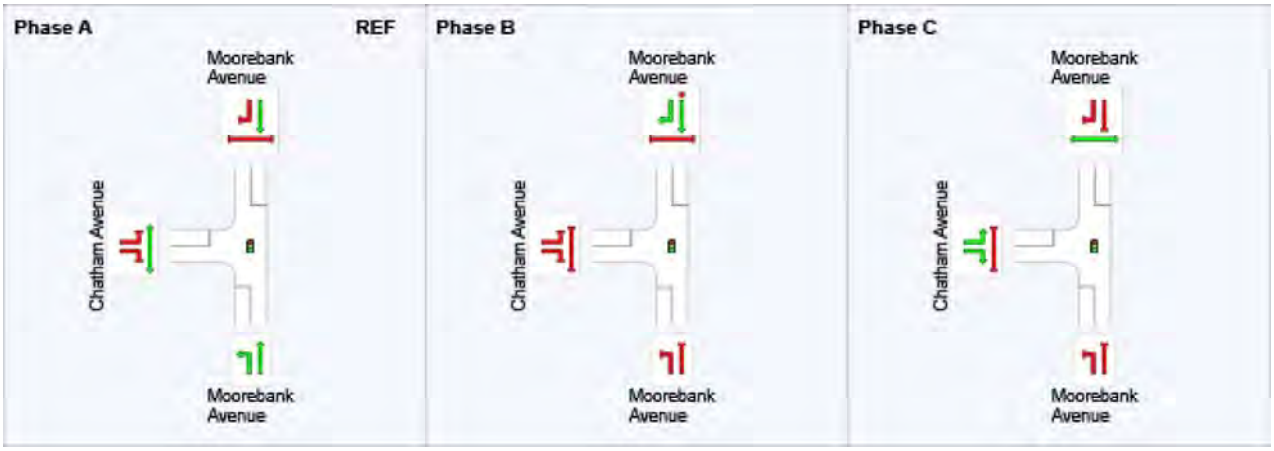
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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%.



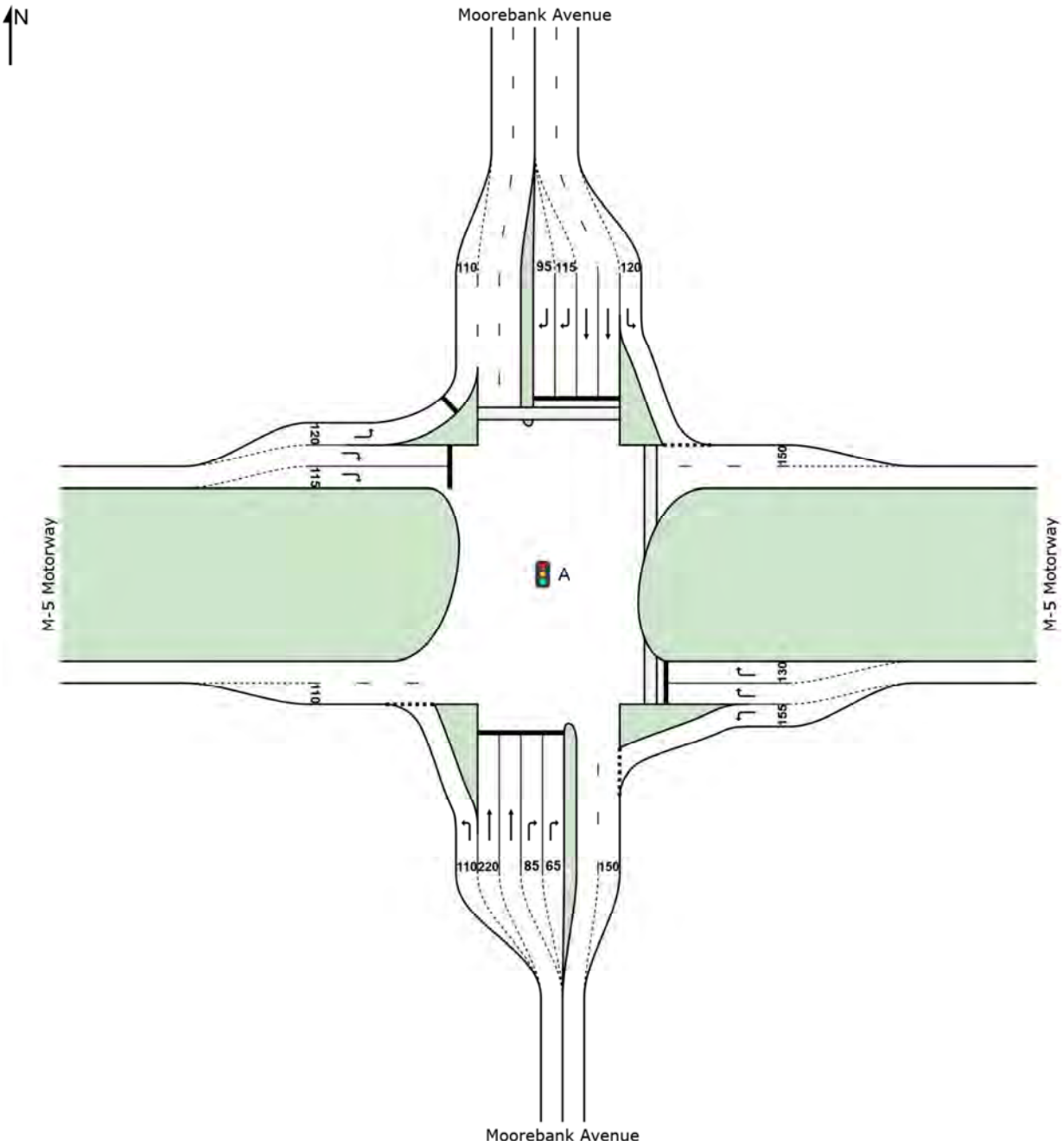
REF: Reference Phase
VAR: Variable Phase

Stage 3(ii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.5	LOS A	9.9	89.9	0.42	0.74	50.2
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	273	22.0	273	22.0	0.228	6.2	LOS A	1.0	10.2	0.11	0.57	47.8
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		516	13.7	516	13.7	0.949	52.3	LOS D	10.7	81.6	0.53	0.80	22.8
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	174	8.5	174	8.5	0.128	27.4	LOS B	4.1	33.6	0.64	0.51	24.8
9	R2	506	20.2	506	20.2	0.961	85.9	LOS F	28.4	279.4	0.98	0.97	22.4
Approach		728	17.3	728	17.3	0.961	66.7	LOS E	28.4	279.4	0.84	0.84	23.5
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	455	11.1	455	11.1	0.723	65.4	LOS E	17.0	145.6	0.98	0.85	19.6
Approach		1811	8.5	1811	8.5	0.887	21.7	LOS B	21.5	173.2	0.60	0.71	39.6
All Vehicles		4156	11.6	4156	11.6	0.961	35.7	LOS C	28.4	279.4	0.64	0.74	32.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

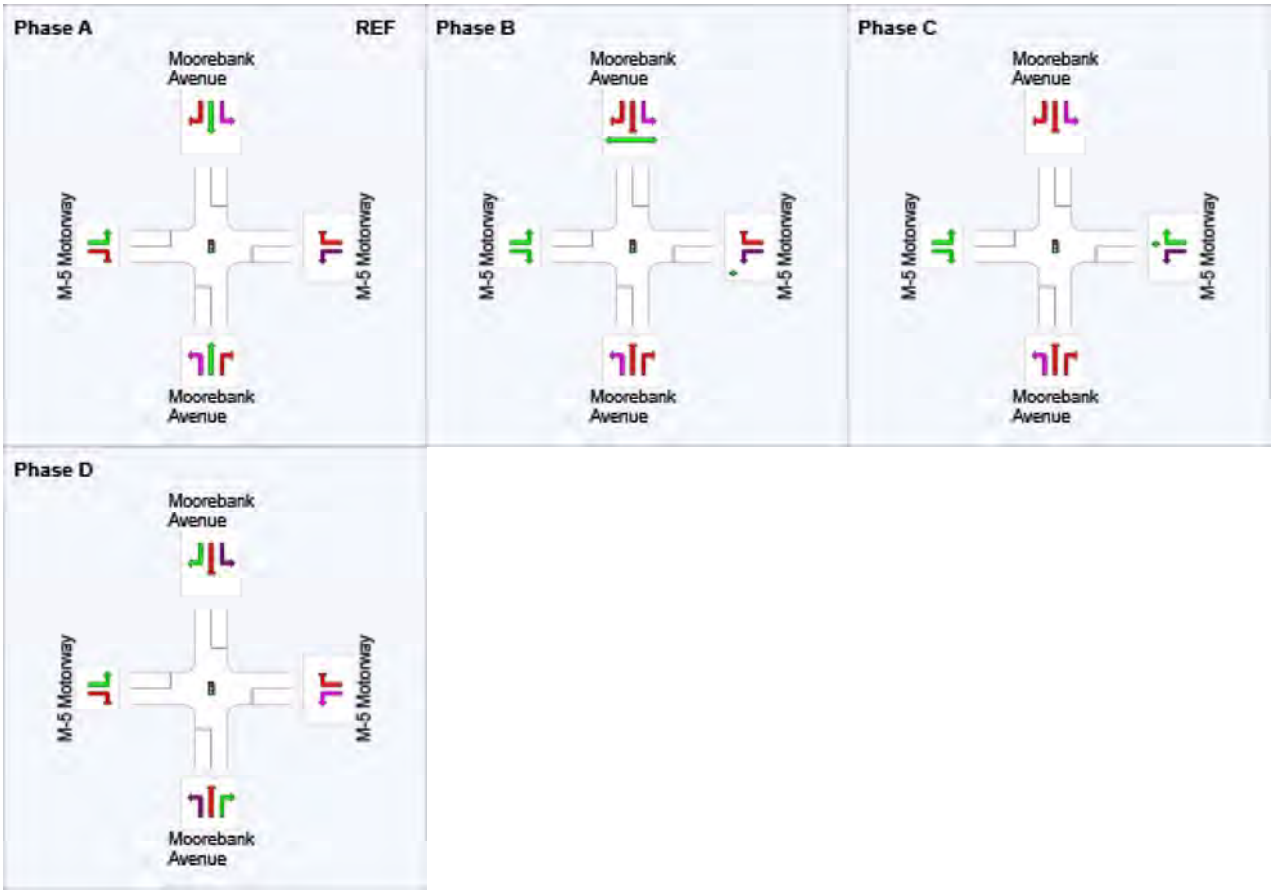
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

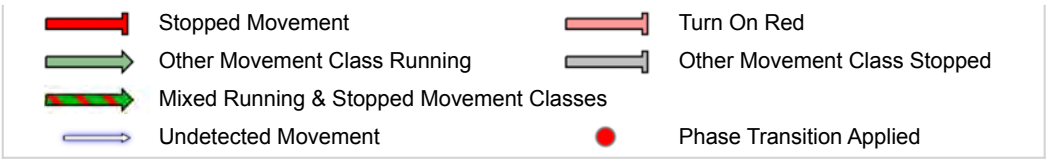
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



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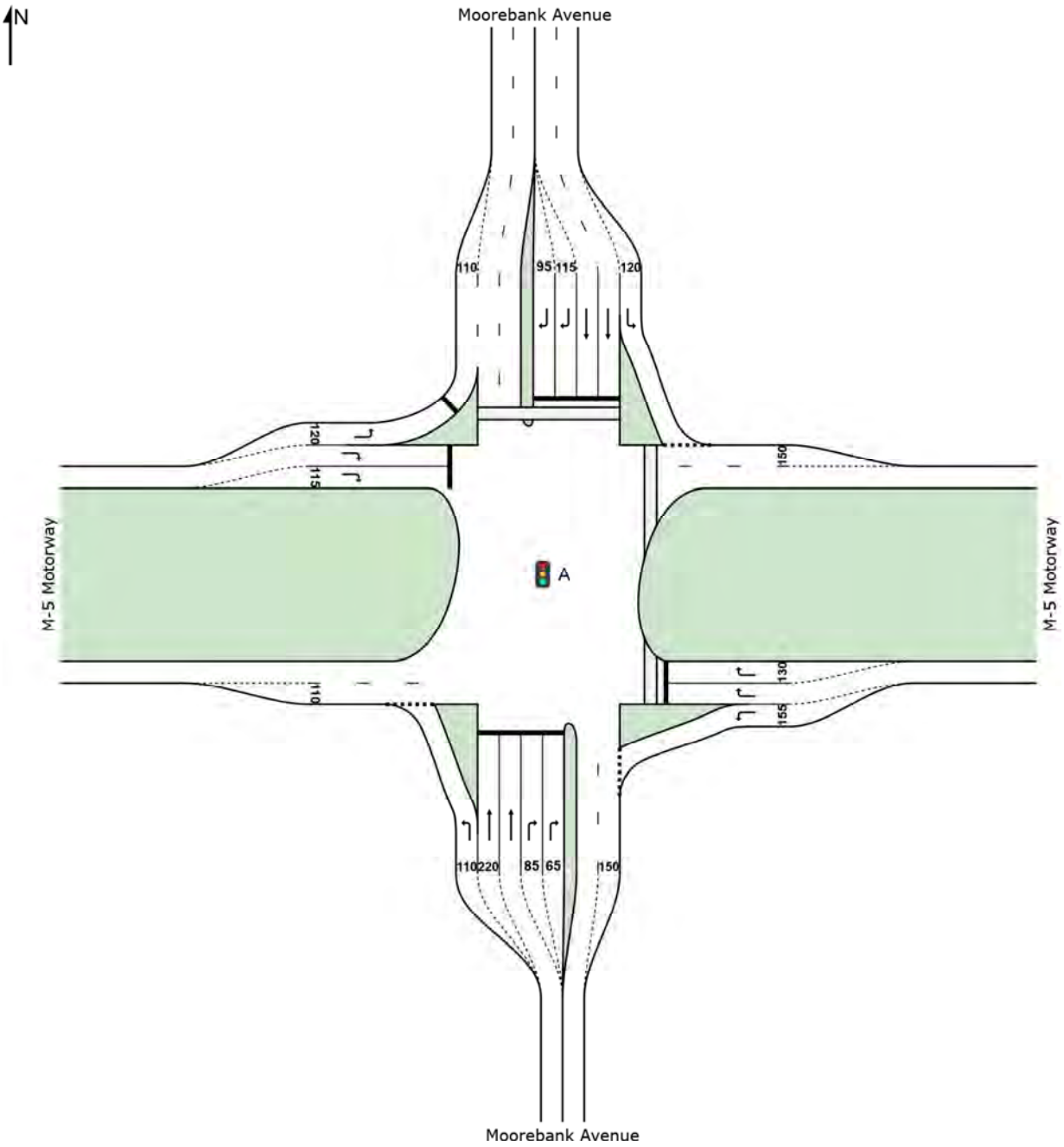
SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	482	7.6	482	7.6	0.681	40.3	LOS C	23.4	189.0	0.87	1.02	36.1
2	T1	249	3.0	249	3.0	0.497	66.0	LOS E	8.6	63.9	0.98	0.78	22.5
3	R2	345	9.5	345	9.5	0.206	22.3	LOS B	6.6	55.1	0.52	0.71	41.7
Approach		1077	7.1	1077	7.1	0.681	40.5	LOS C	23.4	189.0	0.78	0.87	33.5
East: M-5 Motorway													
4	L2	278	11.7	278	11.7	0.235	7.1	LOS A	2.9	24.7	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		365	10.4	365	10.4	0.642	26.7	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.062	6.5	LOS A	0.5	4.1	0.15	0.59	56.2
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	436	8.9	436	8.9	0.796	71.9	LOS F	17.4	143.7	1.00	0.87	18.3
Approach		1031	8.0	1031	8.0	0.796	33.9	LOS C	17.4	143.7	0.50	0.69	32.9
All Vehicles		4247	6.3	4247	6.3	0.884	38.7	LOS C	46.1	352.4	0.68	0.80	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.2 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

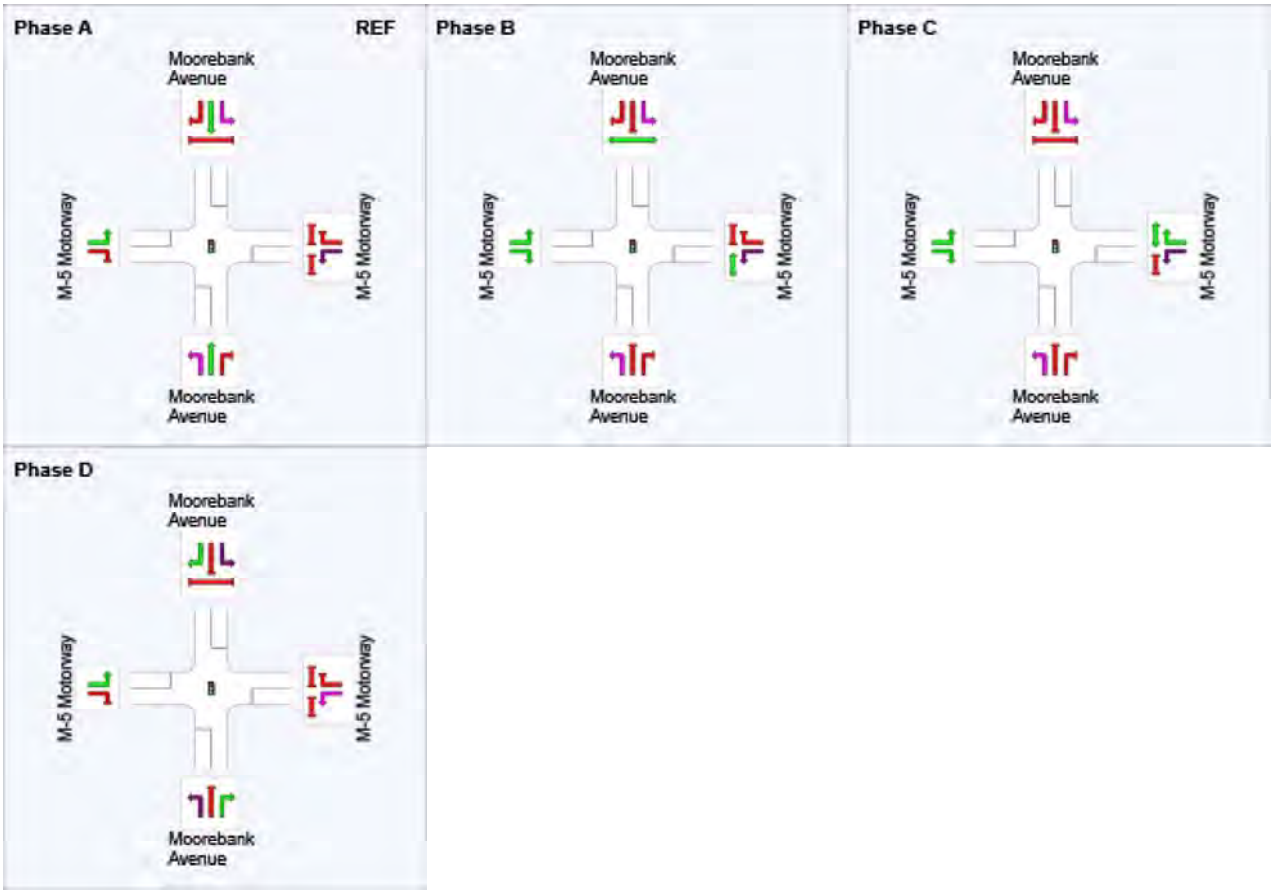
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

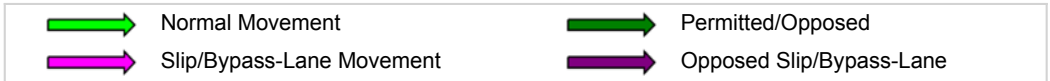
Phase Timing Results

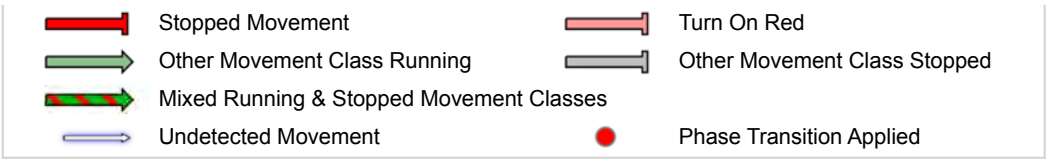
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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



REF: Reference Phase
VAR: Variable Phase





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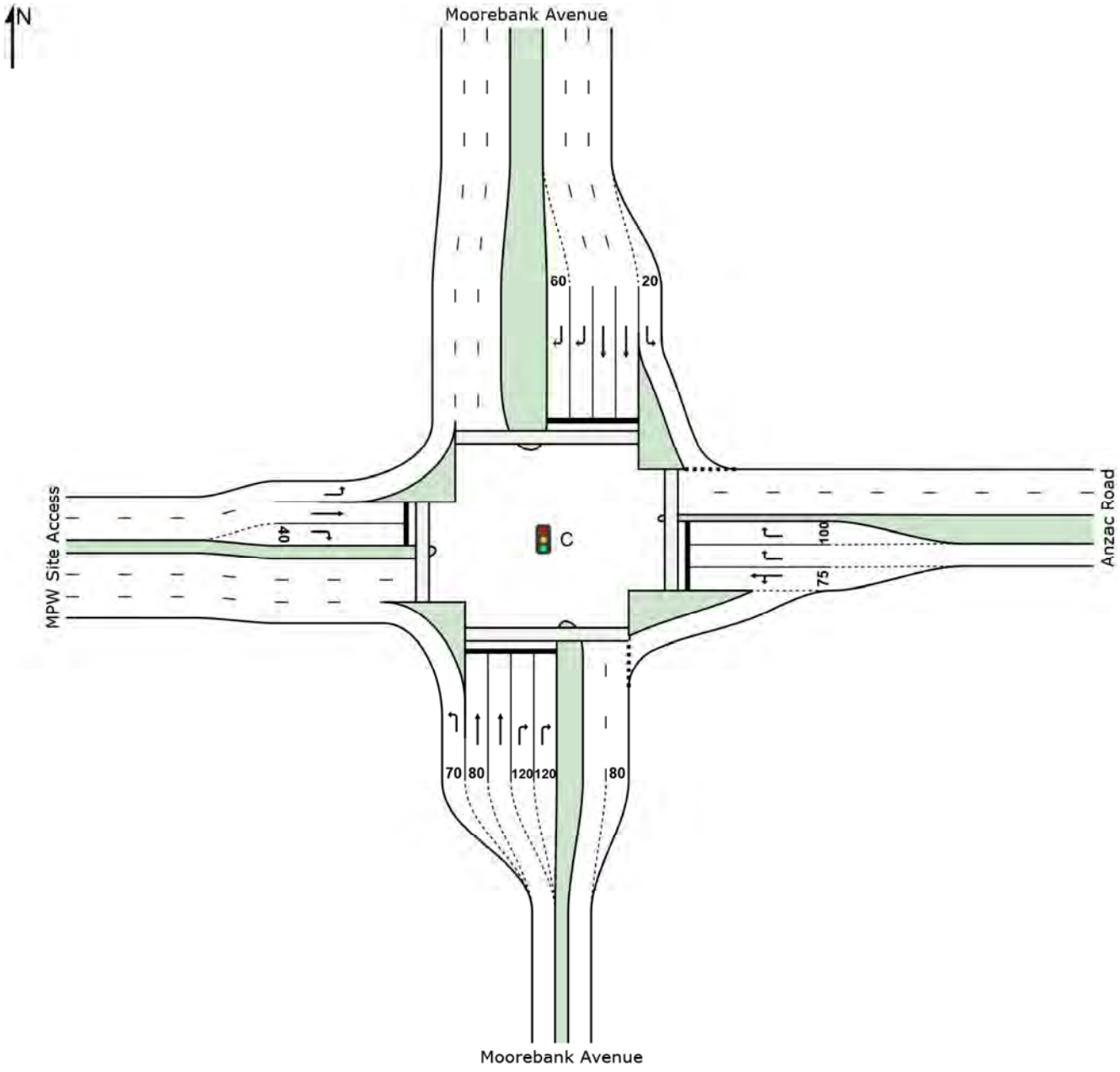
SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	37	0.0	37	0.0	0.020	5.6	LOS A	0.0	0.0	0.00	0.53	53.9
2	T1	713	6.1	713	6.1	0.940	41.9	LOS C	13.6	106.9	1.00	1.40	16.4
3	R2	381	3.3	381	3.3	0.817	34.3	LOS C	5.9	43.9	1.00	1.04	23.1
Approach		1131	4.9	1131	4.9	0.940	38.2	LOS C	13.6	106.9	0.97	1.25	19.7
East: Anzac Road													
4	L2	186	3.4	186	3.4	0.172	7.4	LOS A	1.2	8.7	0.37	0.65	35.2
5	T1	1	0.0	1	0.0	0.172	1.8	LOS A	1.2	8.7	0.37	0.65	50.6
6	R2	363	11.9	363	11.9	0.825	37.3	LOS C	5.7	49.1	1.00	1.00	13.6
Approach		551	9.0	551	9.0	0.825	27.1	LOS B	5.7	49.1	0.79	0.88	17.2
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.327	5.2	LOS A	2.8	23.0	0.43	0.59	36.8
8	T1	315	16.1	315	16.1	0.592	22.3	LOS B	5.5	50.6	0.93	0.77	14.0
9	R2	186	23.7	186	23.7	0.456	31.8	LOS C	2.5	21.2	0.97	0.77	31.7
Approach		904	14.0	904	14.0	0.592	16.6	LOS B	5.5	50.6	0.71	0.69	27.9
West: MPW Site Access													
10	L2	44	100.0	44	100.0	0.041	6.1	LOS A	0.0	0.0	0.00	0.50	51.0
11	T1	1	0.0	1	0.0	0.005	24.1	LOS B	0.0	0.2	0.91	0.53	37.8
12	R2	3	33.3	3	33.3	0.019	30.8	LOS C	0.1	0.7	0.91	0.62	30.6
Approach		48	93.5	48	93.5	0.041	8.1	LOS A	0.1	0.7	0.08	0.51	48.5
All Vehicles		2634	10.5	2634	10.5	0.940	27.9	LOS B	13.6	106.9	0.83	0.97	21.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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	11	21.8	LOS C	0.0	0.0	0.89	0.89
P2	East Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P3	North Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P4	West Full Crossing	53	21.9	LOS C	0.1	0.1	0.89	0.89

All Pedestrians	84	21.9	LOS C	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

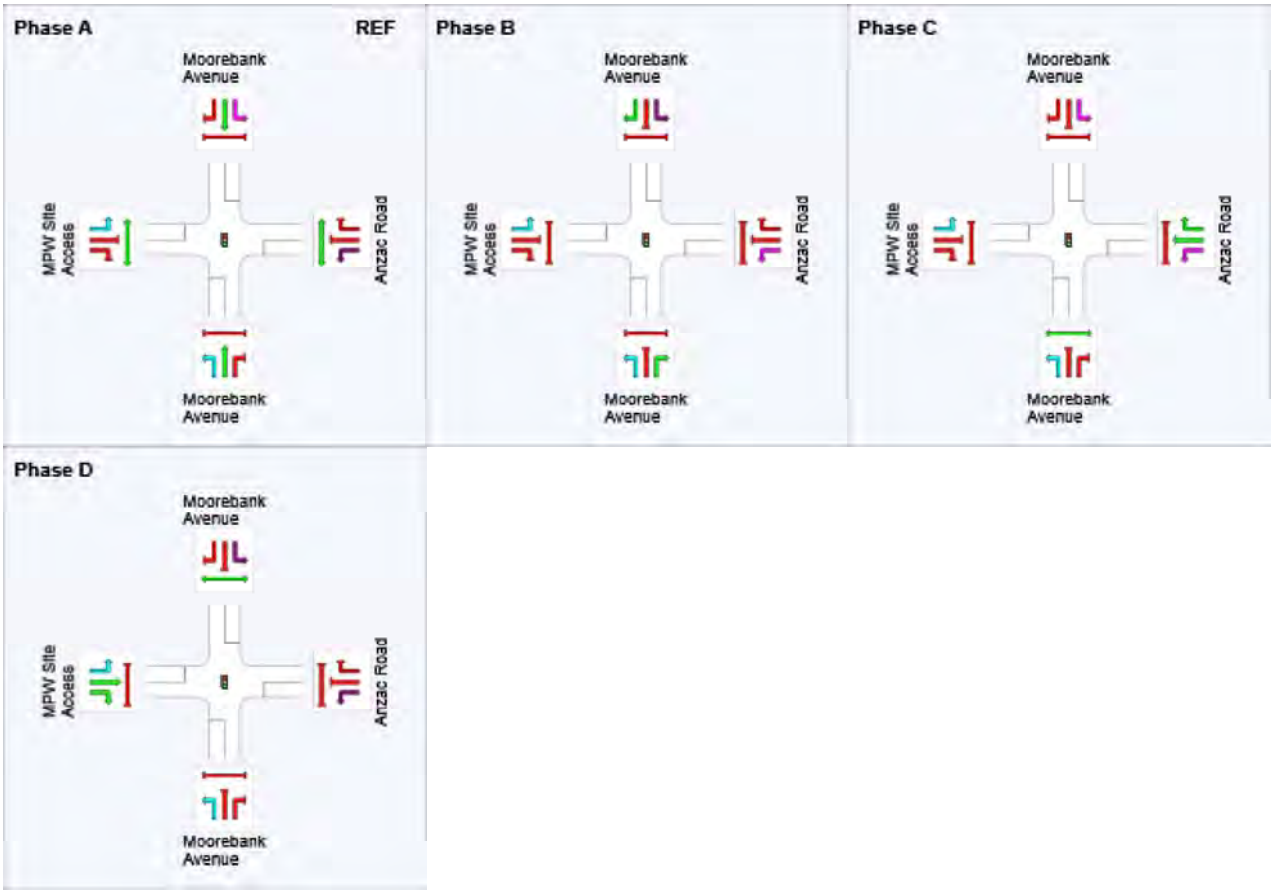
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

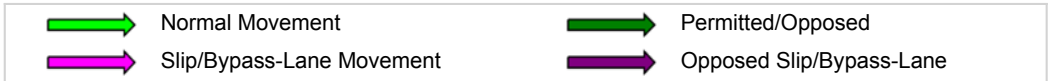
Phase Timing Results

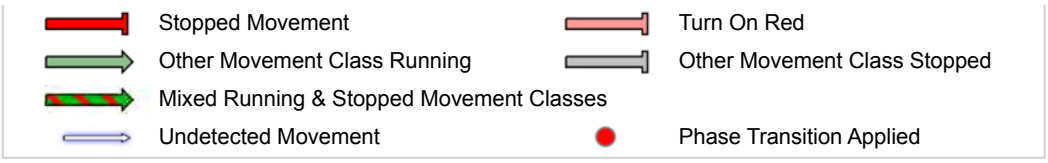
Phase	A	B	C	D
Phase Change Time (sec)	0	17	30	43
Green Time (sec)	11	7	7	6
Phase Time (sec)	17	13	13	12
Phase Split	31%	24%	24%	22%

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





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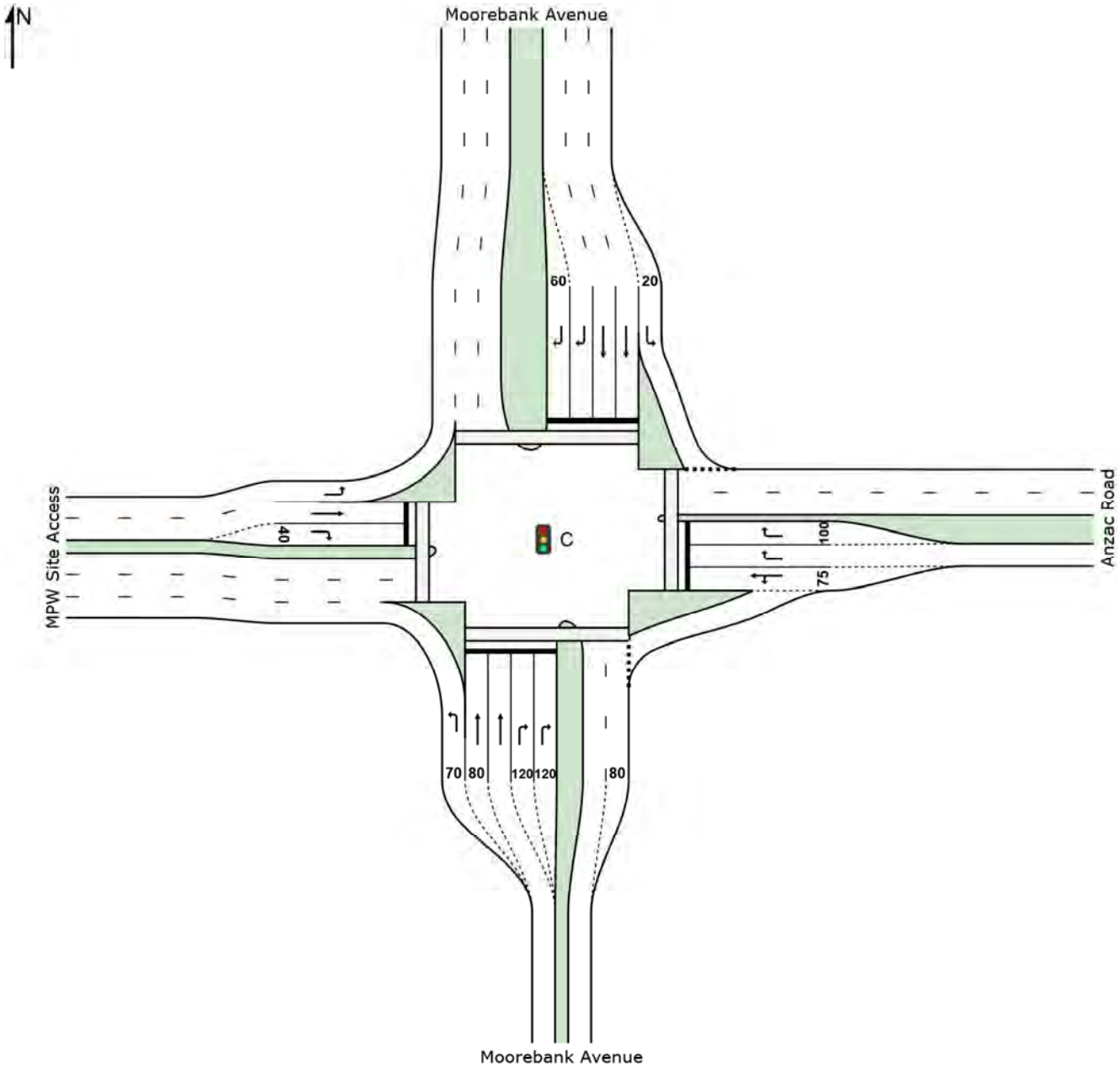
Project: \\HC-AUS-NS-FS-01\jobs\AA008765\D-Calculations\Traffic\01 MPW Stage 2 Response\03 Anzac Rd Sensitivity Testing\SIDRA Model \Scenario 1\Scenario 1_Stage 3_75%.sip7

SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	6	83.3	6	83.3	0.005	6.5	LOS A	0.0	0.0	0.00	0.49	50.5
2	T1	436	4.6	436	4.6	0.380	21.2	LOS B	6.0	45.8	0.84	0.69	23.1
3	R2	171	0.6	171	0.6	0.532	39.1	LOS C	3.0	21.5	1.00	0.78	21.8
Approach		613	4.3	613	4.3	0.532	26.1	LOS B	6.0	45.8	0.87	0.71	22.9
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.291	10.6	LOS A	3.8	27.5	0.50	0.70	30.0
5	T1	1	0.0	1	0.0	0.291	4.9	LOS A	3.8	27.5	0.50	0.70	47.5
6	R2	287	4.0	287	4.0	0.424	33.9	LOS C	4.5	34.2	0.93	0.78	14.6
Approach		568	2.8	568	2.8	0.424	22.3	LOS B	4.5	34.2	0.72	0.74	19.6
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.293	4.4	LOS A	2.4	17.9	0.30	0.54	38.6
8	T1	644	3.4	644	3.4	0.747	24.5	LOS B	14.3	107.2	0.92	0.83	13.1
9	R2	56	79.2	56	79.2	0.271	41.9	LOS C	1.0	11.6	0.97	0.72	26.9
Approach		1119	7.1	1119	7.1	0.747	17.8	LOS B	14.3	107.2	0.69	0.71	22.0
West: MPW Site Access													
10	L2	239	18.5	239	18.5	0.146	5.8	LOS A	0.0	0.0	0.00	0.52	51.0
11	T1	22	0.0	22	0.0	0.132	33.8	LOS C	0.7	5.2	0.95	0.67	33.0
12	R2	22	0.0	22	0.0	0.139	39.5	LOS C	0.7	5.2	0.96	0.70	26.7
Approach		283	15.6	283	15.6	0.146	10.6	LOS A	0.7	5.2	0.15	0.54	45.4
All Vehicles		2583	6.4	2583	6.4	0.747	20.0	LOS B	14.3	107.2	0.68	0.70	24.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.2 %
Number of Iterations: 5 (maximum specified: 20)

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	11	29.3	LOS C	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	29.3	LOS C	0.0	0.0	0.91	0.91
P3	North Full Crossing	11	29.3	LOS C	0.0	0.0	0.91	0.91
P4	West Full Crossing	53	29.3	LOS C	0.1	0.1	0.92	0.92
All Pedestrians		84	29.3	LOS C			0.92	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

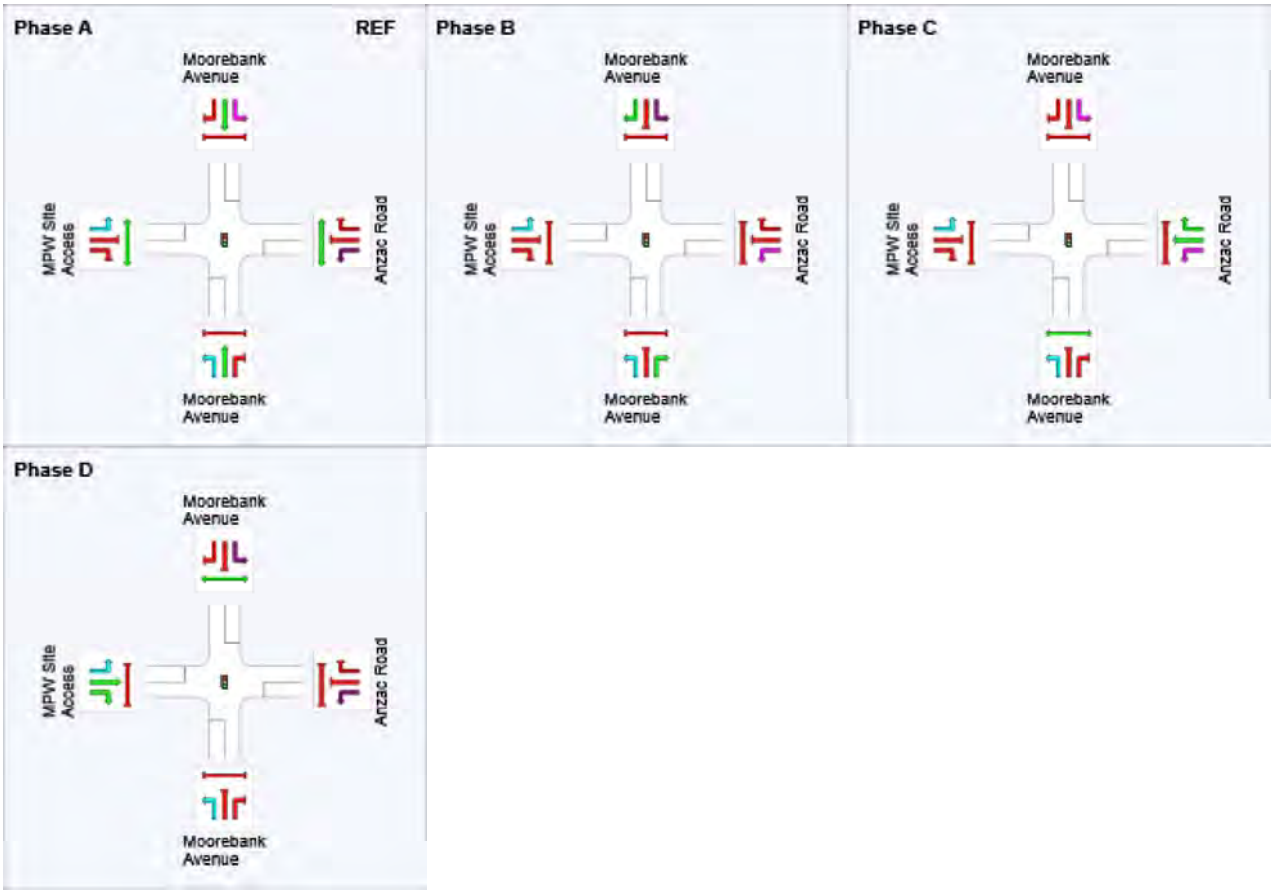
Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 70 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

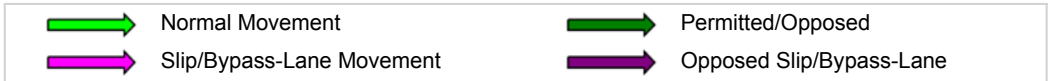
Phase Timing Results

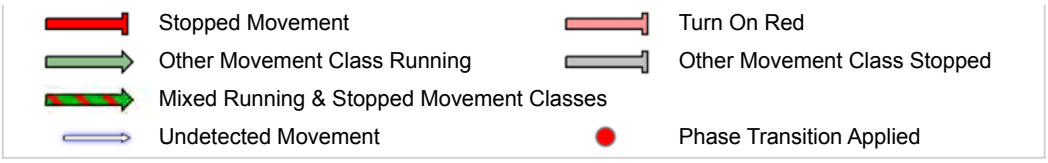
Phase	A	B	C	D
Phase Change Time (sec)	0	27	39	58
Green Time (sec)	21	6	13	6
Phase Time (sec)	27	12	19	12
Phase Split	39%	17%	27%	17%

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





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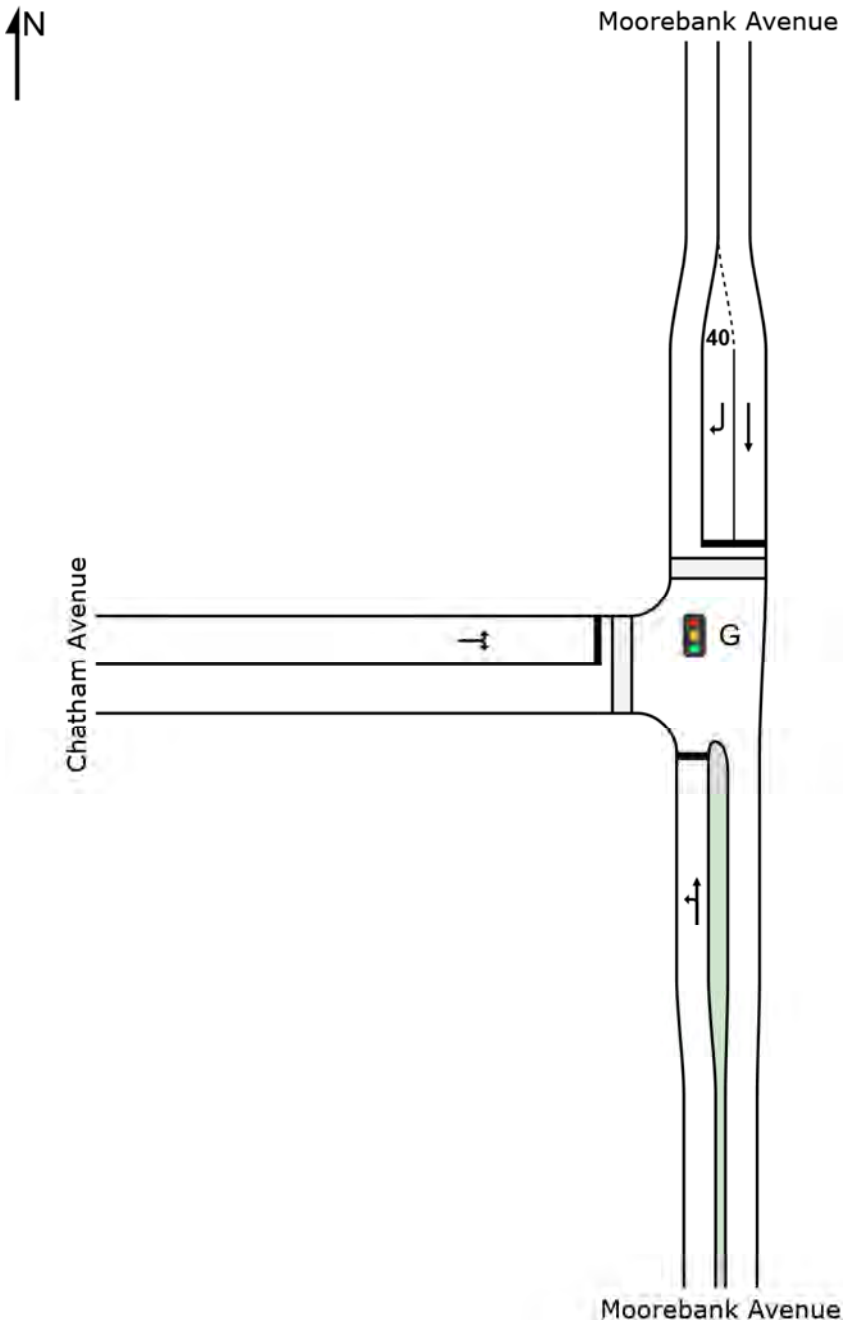
SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.879	26.9	LOS B	43.8	330.2	0.89	0.95	36.9
2	T1	1081	3.8	1081	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
Approach		1082	3.8	1082	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	15	100.0	15	100.0	0.193	48.2	LOS D	0.6	13.4	0.97	0.70	24.1
Approach		472	12.1	472	12.1	0.315	4.1	LOS A	5.3	43.6	0.32	0.28	44.8
West: Chatham Avenue													
10	L2	15	100.0	15	100.0	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	12.1
12	R2	1	0.0	1	0.0	0.184	48.5	LOS D	0.7	13.6	0.97	0.70	26.8
Approach		16	93.3	16	93.3	0.184	49.0	LOS D	0.7	13.6	0.97	0.70	13.5
All Vehicles		1569	7.2	1569	7.2	0.879	18.1	LOS B	43.8	330.2	0.72	0.75	38.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 13 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

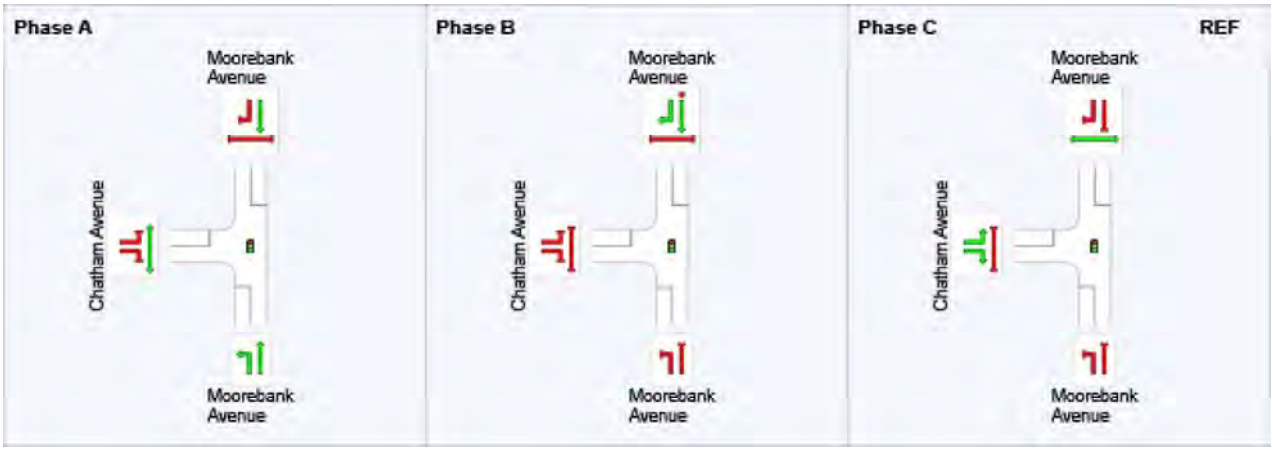
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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%.

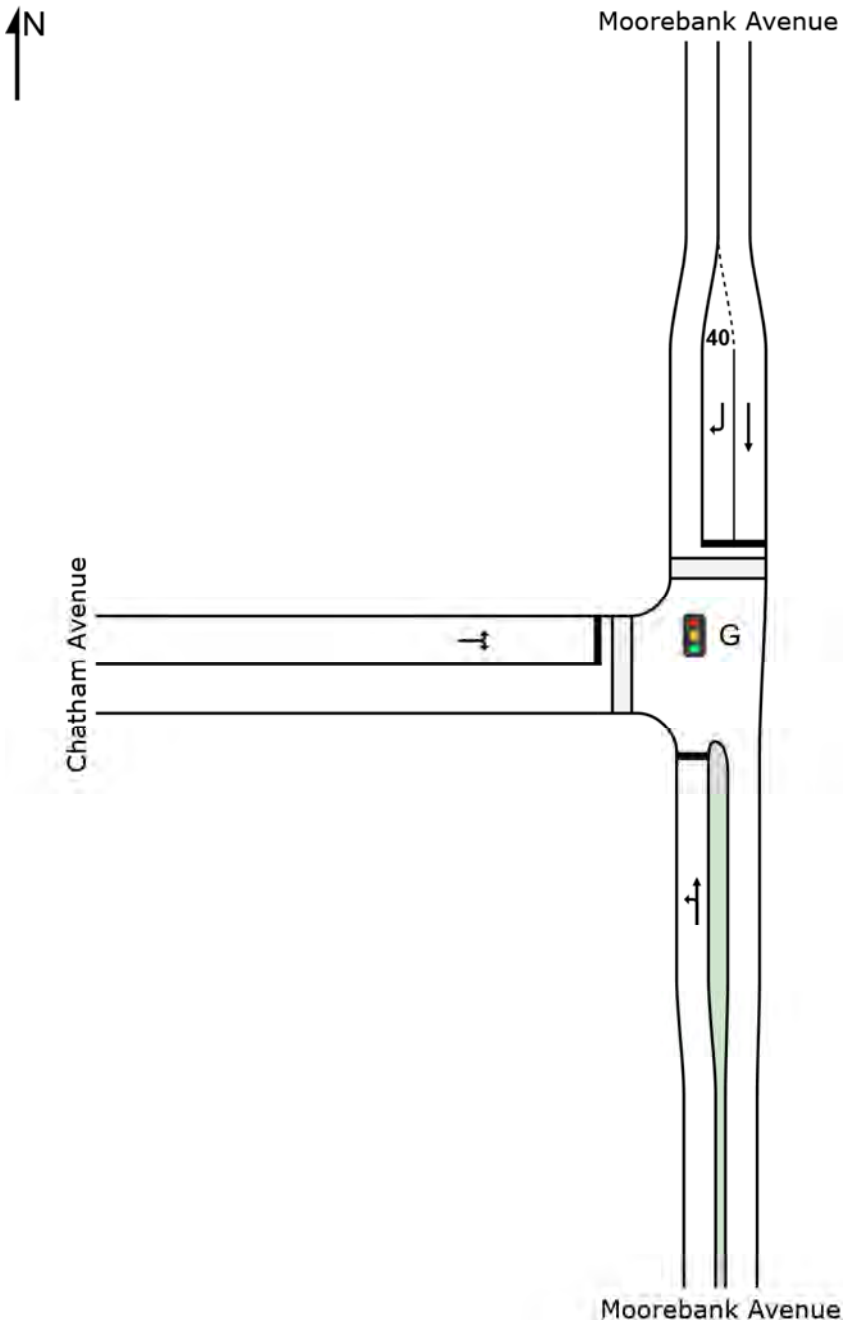


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	936	1.2	936	1.2	0.820	12.4	LOS A	19.8	142.2	0.84	0.89	41.1
9	R2	15	100.0	15	100.0	0.102	24.2	LOS B	0.3	6.6	0.91	0.68	30.3
Approach		951	2.8	951	2.8	0.820	12.6	LOS A	19.8	142.2	0.84	0.89	40.9
West: Chatham Avenue													
10	L2	86	17.1	86	17.1	0.363	25.5	LOS B	1.9	17.8	0.95	0.75	19.0
12	R2	1	0.0	1	0.0	0.363	25.4	LOS B	1.9	17.8	0.95	0.75	35.4
Approach		87	16.9	87	16.9	0.363	25.5	LOS B	1.9	17.8	0.95	0.75	19.3
All Vehicles		1540	3.4	1540	3.4	0.820	15.9	LOS B	19.8	142.2	0.88	0.90	39.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.2 %
Number of Iterations: 5 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			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.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

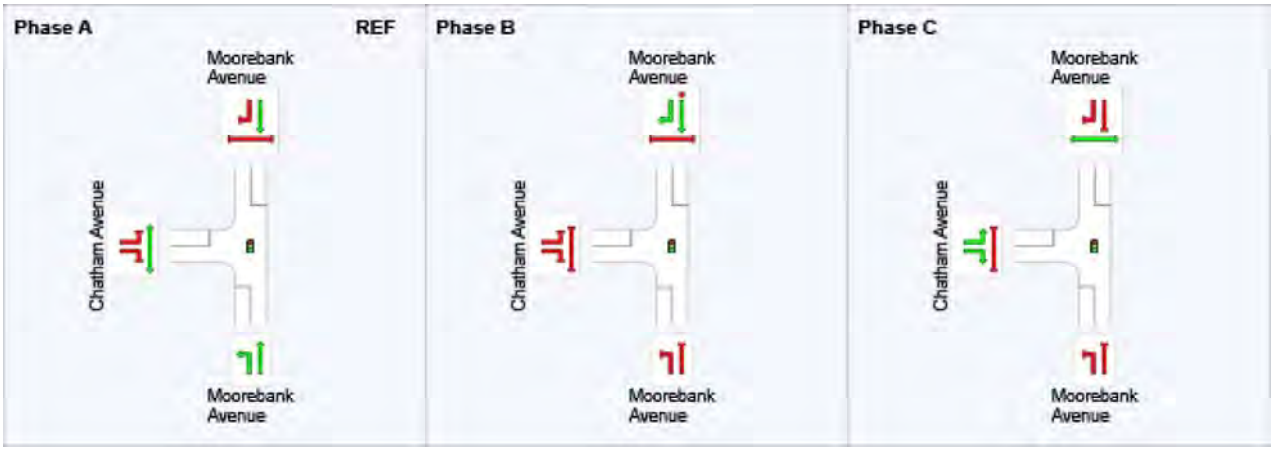
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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%.



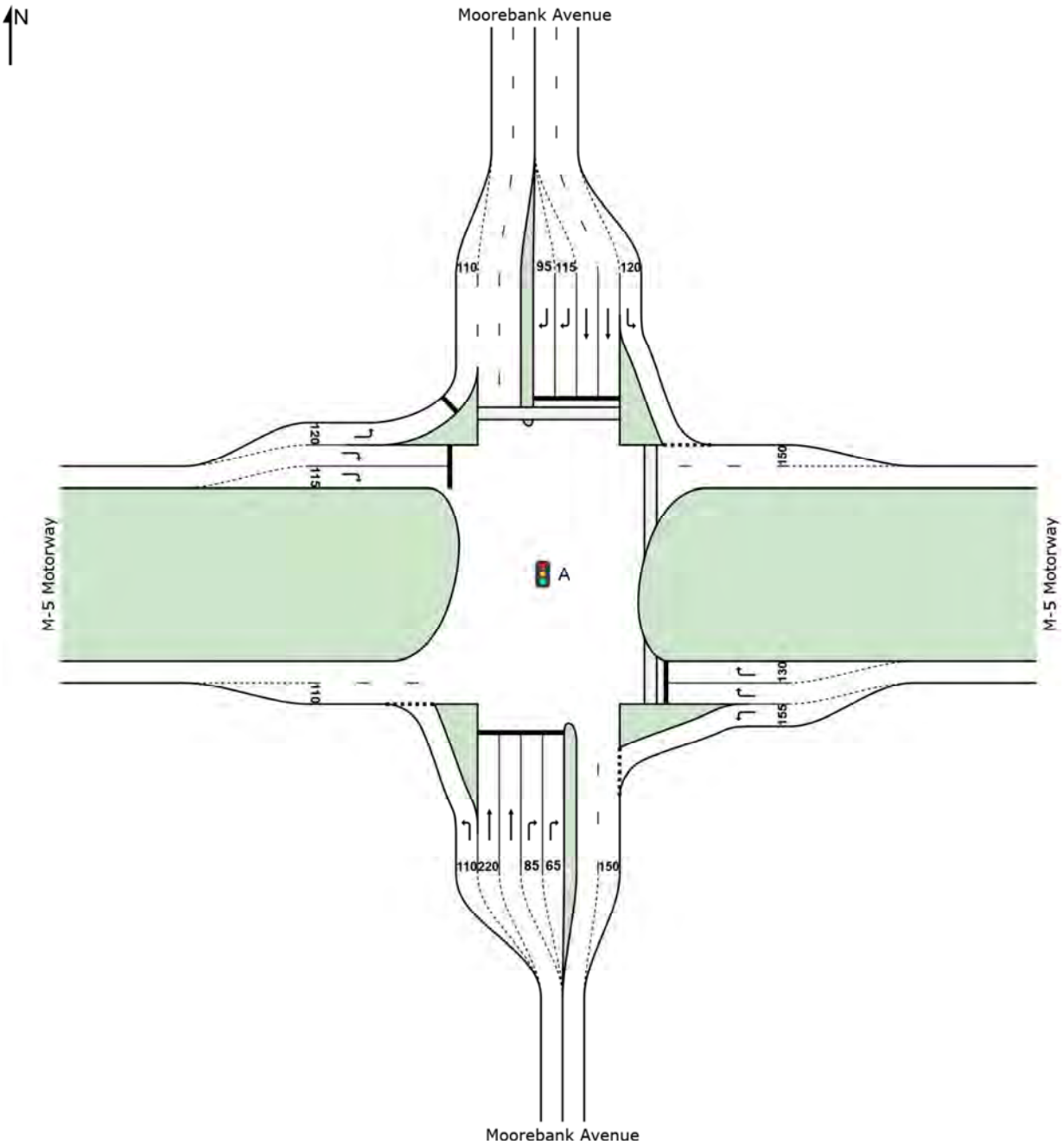
REF: Reference Phase
VAR: Variable Phase

Stage 3(iii)

SITE LAYOUT

Site: A [M5/Moorebank Avenue_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	428	14.7	428	14.7	0.396	14.5	LOS A	9.9	89.9	0.42	0.74	50.2
2	T1	402	3.4	402	3.4	0.252	29.2	LOS C	9.3	69.3	0.68	0.58	34.6
3	R2	271	20.2	271	20.2	0.441	57.9	LOS E	9.3	91.2	0.89	0.80	26.2
Approach		1101	12.0	1101	12.0	0.441	30.5	LOS C	9.9	91.2	0.63	0.69	36.9
East: M-5 Motorway													
4	L2	273	22.0	273	22.0	0.228	6.2	LOS A	1.0	10.2	0.11	0.57	47.8
6	R2	243	4.3	243	4.3	0.949	104.0	LOS F	10.7	81.6	1.00	1.05	17.1
Approach		516	13.7	516	13.7	0.949	52.3	LOS D	10.7	81.6	0.53	0.80	22.8
North: Moorebank Avenue													
7	L2	48	19.6	48	19.6	0.042	7.3	LOS A	0.5	4.7	0.18	0.58	52.8
8	T1	174	8.5	174	8.5	0.128	27.4	LOS B	4.1	33.6	0.64	0.51	24.8
9	R2	506	20.2	506	20.2	0.961	85.9	LOS F	28.4	279.4	0.98	0.97	22.4
Approach		728	17.3	728	17.3	0.961	66.7	LOS E	28.4	279.4	0.84	0.84	23.5
West: M-5 Motorway													
10	L2	1356	7.6	1356	7.6	0.887	7.1	LOS A	21.5	173.2	0.48	0.66	50.5
12	R2	455	11.1	455	11.1	0.723	65.4	LOS E	17.0	145.6	0.98	0.85	19.6
Approach		1811	8.5	1811	8.5	0.887	21.7	LOS B	21.5	173.2	0.60	0.71	39.6
All Vehicles		4156	11.6	4156	11.6	0.961	35.7	LOS C	28.4	279.4	0.64	0.74	32.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 8 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	68.2	LOS F	0.1	0.1	0.95	0.95
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.3	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_AM]

Network: 1 [Scenario 1_AM]

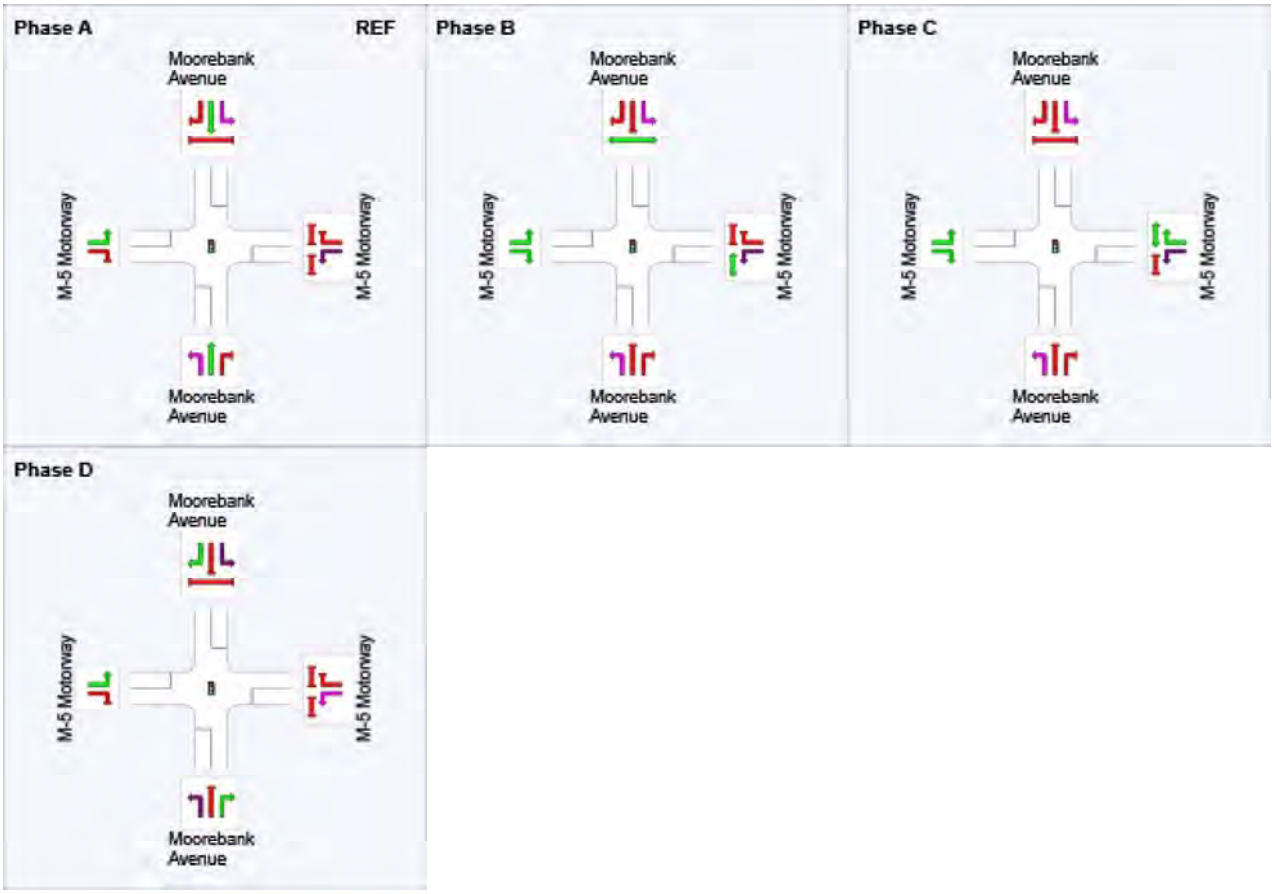
Intersection of Moorebank Avenue and M5 Motorway
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

Phase Timing Results

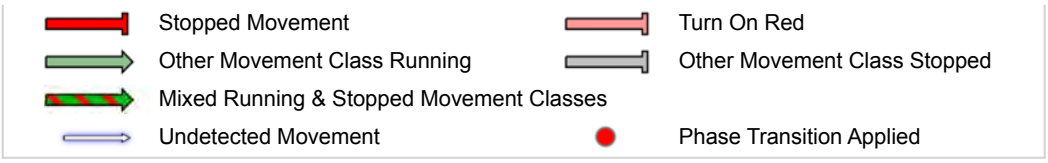
Phase	A	B	C	D
Phase Change Time (sec)	0	70	91	108
Green Time (sec)	64	15	11	36
Phase Time (sec)	70	21	17	42
Phase Split	47%	14%	11%	28%

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



REF: Reference Phase
VAR: Variable Phase

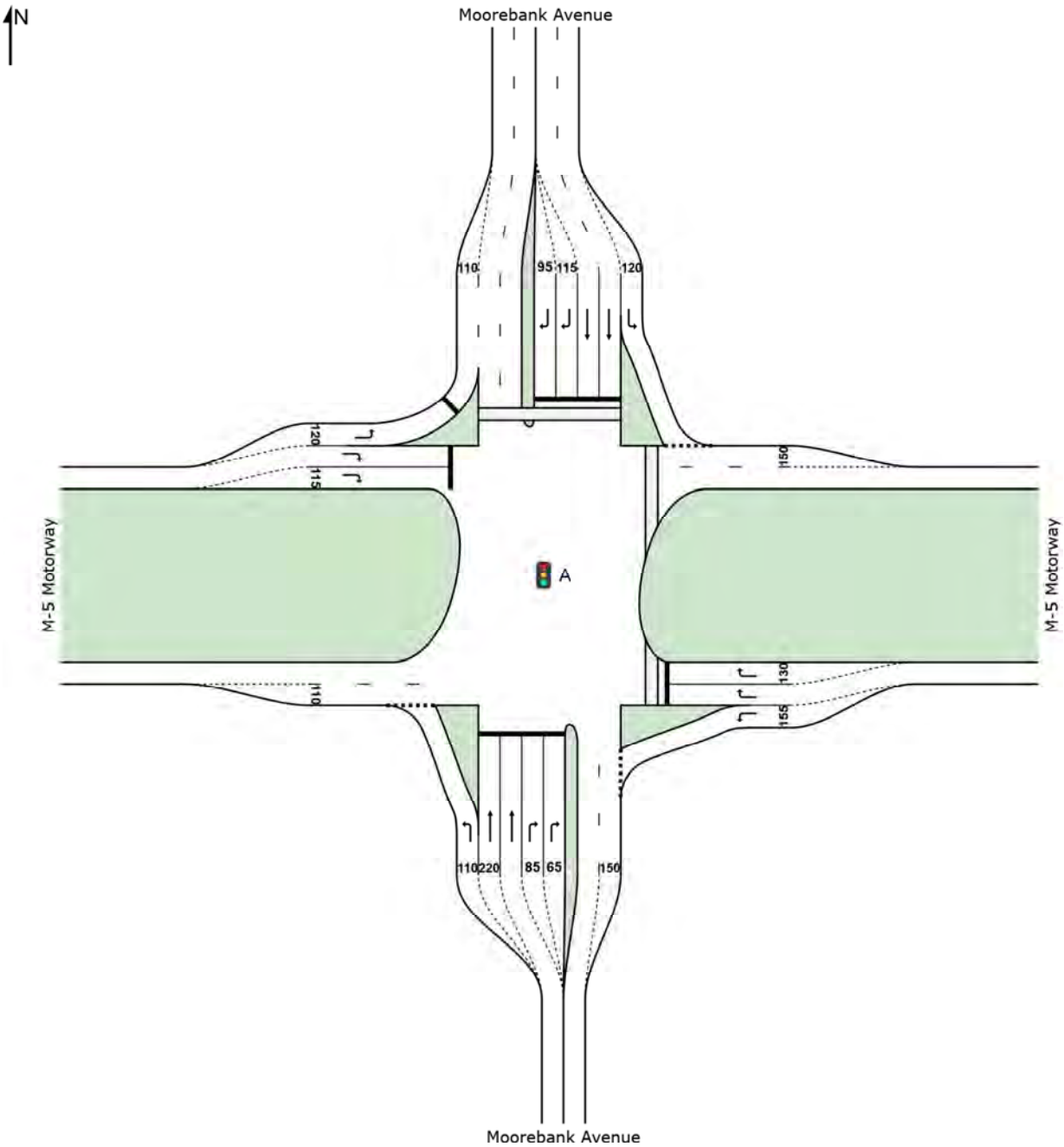
Normal Movement
Permitted/Opposed
Slip/Bypass-Lane Movement
Opposed Slip/Bypass-Lane



SITE LAYOUT

Site: A [M5/Moorebank Avenue_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	482	7.6	482	7.6	0.681	40.3	LOS C	23.4	189.0	0.87	1.02	36.1
2	T1	249	3.0	249	3.0	0.497	66.0	LOS E	8.6	63.9	0.98	0.78	22.5
3	R2	345	9.5	345	9.5	0.206	22.3	LOS B	6.6	55.1	0.52	0.71	41.7
Approach		1077	7.1	1077	7.1	0.681	40.5	LOS C	23.4	189.0	0.78	0.87	33.5
East: M-5 Motorway													
4	L2	278	11.7	278	11.7	0.235	7.1	LOS A	2.9	24.7	0.20	0.61	46.3
6	R2	87	6.0	87	6.0	0.642	89.0	LOS F	3.4	26.9	1.00	0.78	19.0
Approach		365	10.4	365	10.4	0.642	26.7	LOS B	3.4	26.9	0.39	0.65	30.7
North: Moorebank Avenue													
7	L2	74	5.7	74	5.7	0.062	6.5	LOS A	0.5	4.1	0.15	0.59	56.2
8	T1	405	1.8	405	1.8	0.864	74.2	LOS F	17.4	126.4	1.00	0.92	12.4
9	R2	1296	4.5	1296	4.5	0.884	35.2	LOS C	46.1	352.4	0.76	0.85	38.0
Approach		1775	4.0	1775	4.0	0.884	42.9	LOS D	46.1	352.4	0.79	0.85	31.6
West: M-5 Motorway													
10	L2	595	7.3	595	7.3	0.387	6.1	LOS A	2.8	22.5	0.13	0.56	52.0
12	R2	436	8.9	436	8.9	0.796	71.9	LOS F	17.4	143.7	1.00	0.87	18.3
Approach		1031	8.0	1031	8.0	0.796	33.9	LOS C	17.4	143.7	0.50	0.69	32.9
All Vehicles		4247	6.3	4247	6.3	0.884	38.7	LOS C	46.1	352.4	0.68	0.80	32.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.8 %
Number of Iterations: 5 (maximum specified: 20)

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
P21	East Stage 1	26	64.5	LOS F	0.1	0.1	0.93	0.93
P22	East Stage 2	26	69.2	LOS F	0.1	0.1	0.96	0.96
P3	North Full Crossing	26	69.2	LOS F	0.1	0.1	0.96	0.96
All Pedestrians		79	67.6	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: A [M5/Moorebank Avenue_PM]

Network: 1 [Scenario 1_PM]

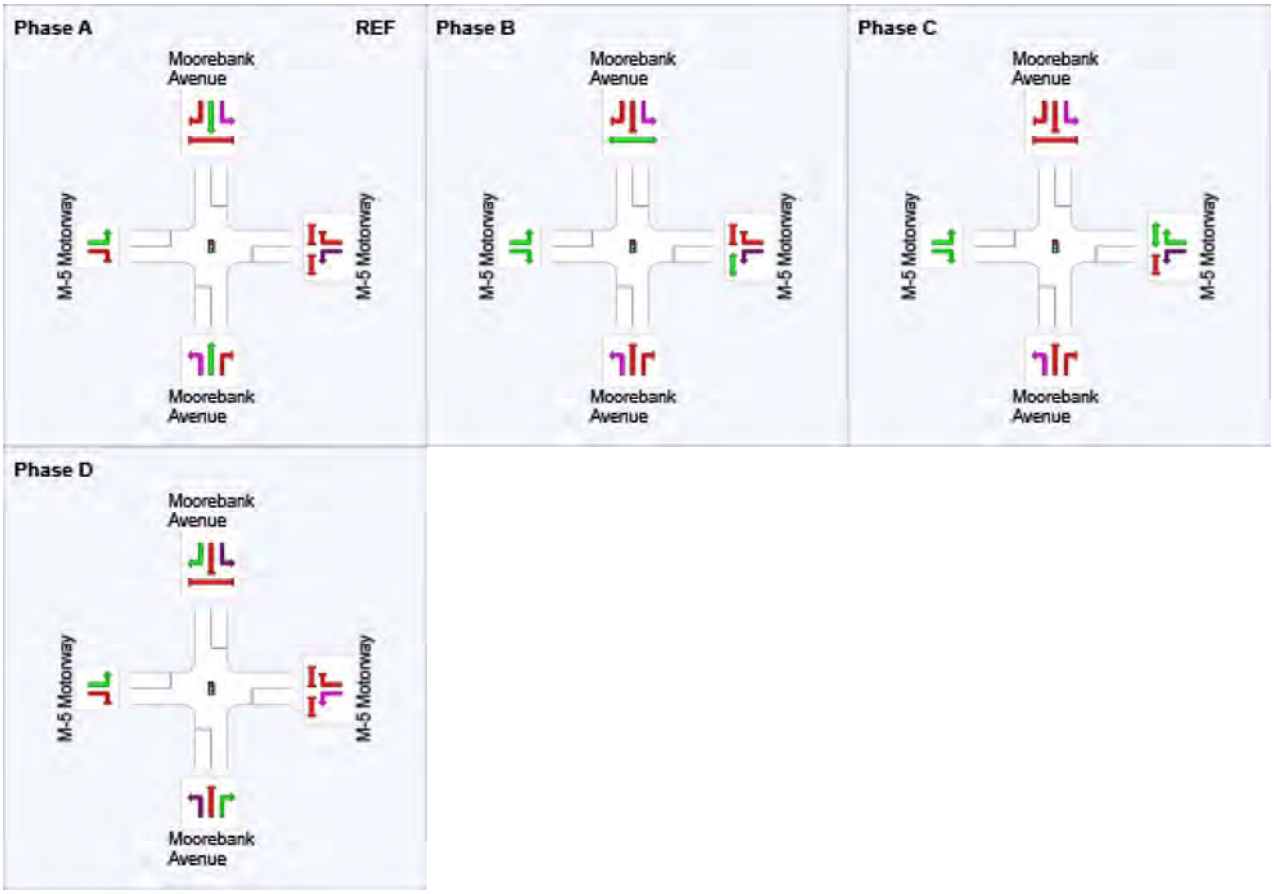
Intersection of Moorebank Avenue and M5 Motorway
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 150 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4-phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

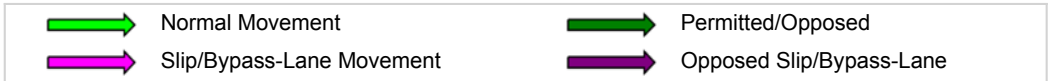
Phase Timing Results

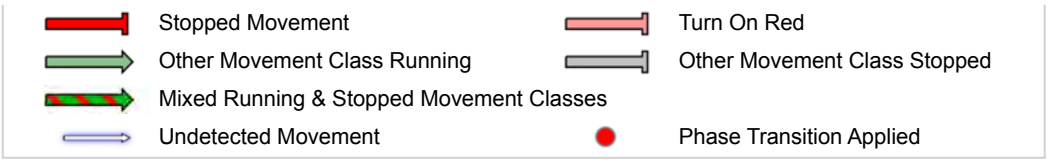
Phase	A	B	C	D
Phase Change Time (sec)	0	26	47	59
Green Time (sec)	20	15	6	85
Phase Time (sec)	26	21	12	91
Phase Split	17%	14%	8%	61%

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

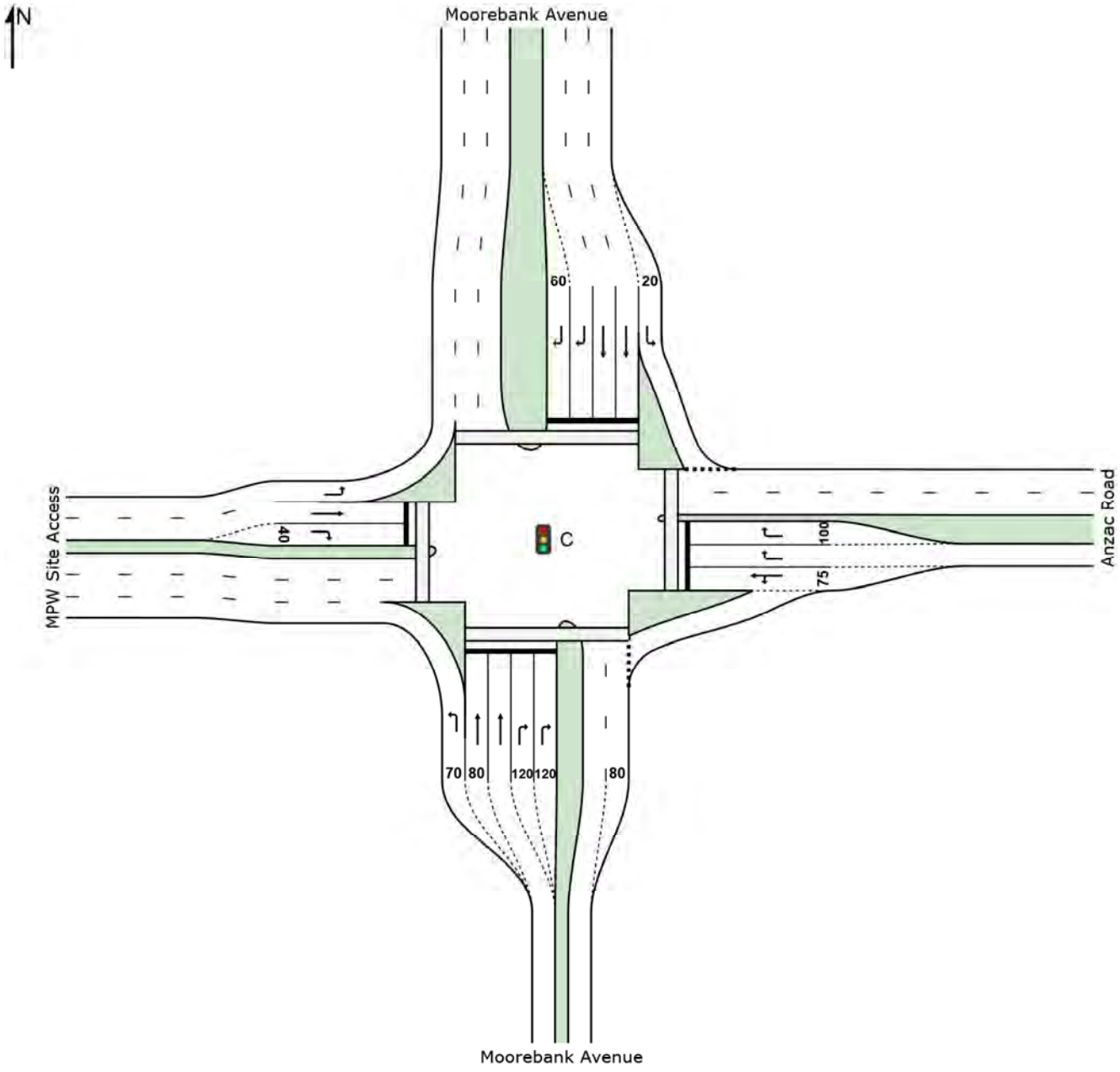




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated



Organisation: ARCADIS AUSTRALIA PACIFIC PTY LIMITED | Created: Wednesday, 31 May 2017 4:04:45 PM
Project: \\HC-AUS-NS-FS-01\jobs\AA008765\D-Calculations\Traffic\01 MPW Stage 2 Response\03 Anzac Rd Sensitivity Testing\SIDRA Model \Scenario 1\Scenario 1_Stage 3_100%.sip7

MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	37	0.0	37	0.0	0.020	5.6	LOS A	0.0	0.0	0.00	0.53	53.9
2	T1	698	4.1	698	4.1	0.909	36.0	LOS C	12.2	92.6	1.00	1.28	17.9
3	R2	381	3.3	381	3.3	0.817	34.3	LOS C	5.9	43.9	1.00	1.04	23.1
Approach		1116	3.7	1116	3.7	0.909	34.4	LOS C	12.2	92.6	0.97	1.17	20.8
East: Anzac Road													
4	L2	186	3.4	186	3.4	0.170	7.4	LOS A	1.2	8.7	0.37	0.65	35.3
5	T1	1	0.0	1	0.0	0.170	1.8	LOS A	1.2	8.7	0.37	0.65	50.6
6	R2	363	11.9	363	11.9	0.825	37.3	LOS C	5.7	49.1	1.00	1.00	13.6
Approach		551	9.0	551	9.0	0.825	27.1	LOS B	5.7	49.1	0.79	0.88	17.2
North: Moorebank Avenue													
7	L2	403	7.8	403	7.8	0.327	5.2	LOS A	2.8	23.0	0.43	0.59	36.8
8	T1	300	11.9	300	11.9	0.550	22.0	LOS B	5.1	44.4	0.93	0.75	14.1
9	R2	201	29.3	201	29.3	0.509	32.1	LOS C	2.8	24.1	0.98	0.78	31.4
Approach		904	14.0	904	14.0	0.550	16.8	LOS B	5.1	44.4	0.71	0.69	28.2
West: MPW Site Access													
10	L2	59	100.0	59	100.0	0.054	6.1	LOS A	0.0	0.0	0.00	0.50	51.0
11	T1	1	0.0	1	0.0	0.005	24.1	LOS B	0.0	0.2	0.91	0.53	37.8
12	R2	3	33.3	3	33.3	0.019	30.8	LOS C	0.1	0.7	0.91	0.62	30.6
Approach		63	95.0	63	95.0	0.054	7.7	LOS A	0.1	0.7	0.06	0.51	49.0
All Vehicles		2634	10.5	2634	10.5	0.909	26.2	LOS B	12.2	92.6	0.82	0.93	22.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.9 %
Number of Iterations: 8 (maximum specified: 20)

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	11	21.8	LOS C	0.0	0.0	0.89	0.89
P2	East Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P3	North Full Crossing	11	21.8	LOS C	0.0	0.0	0.89	0.89
P4	West Full Crossing	53	21.9	LOS C	0.1	0.1	0.89	0.89

All Pedestrians	84	21.9	LOS C	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.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_AM]

Network: 1 [Scenario 1_AM]

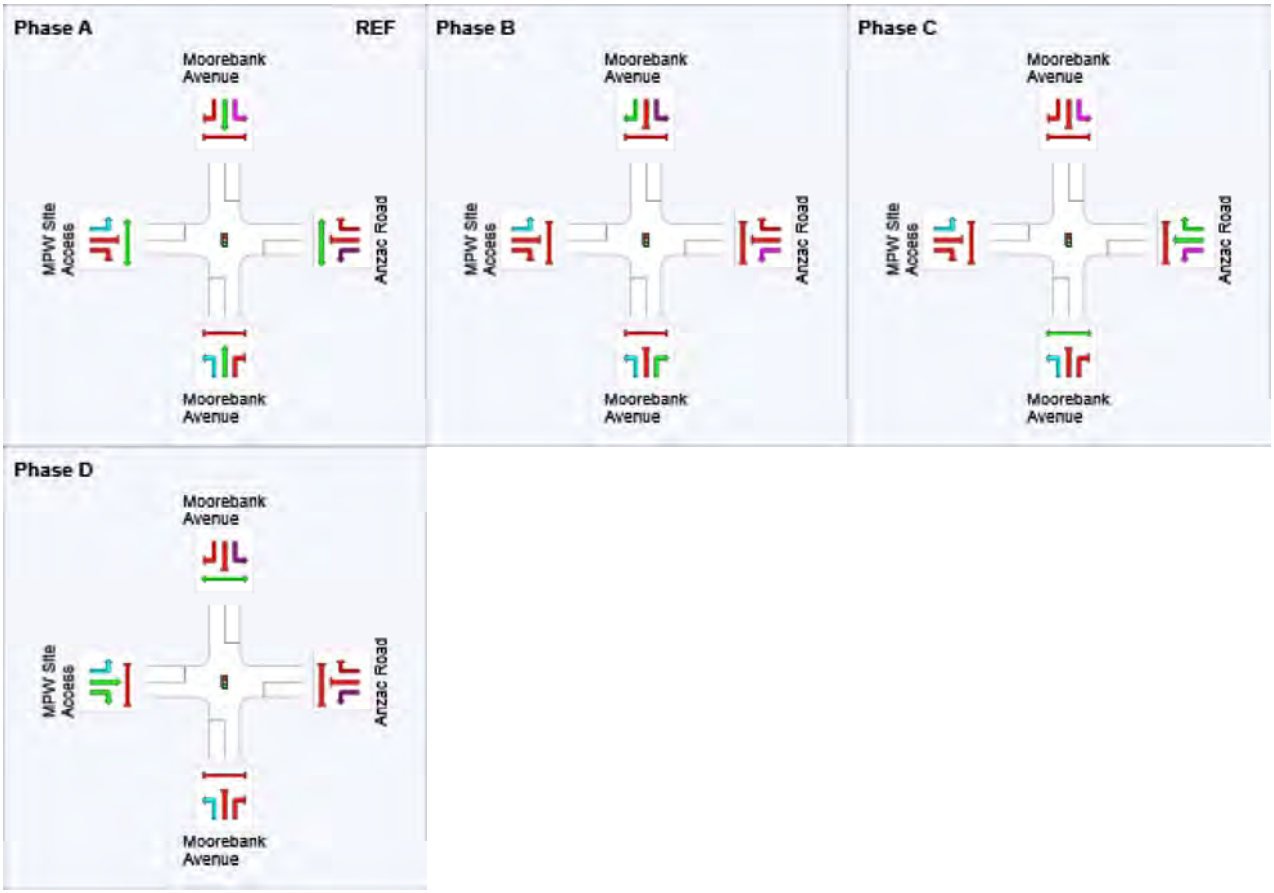
Intersection of Moorebank Avenue and Anzac Road
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 55 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

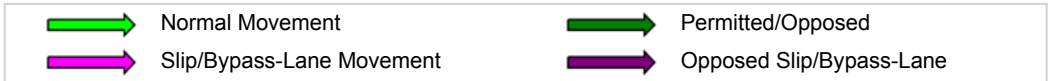
Phase Timing Results

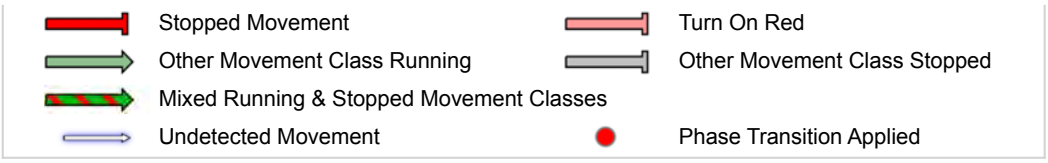
Phase	A	B	C	D
Phase Change Time (sec)	0	17	30	43
Green Time (sec)	11	7	7	6
Phase Time (sec)	17	13	13	12
Phase Split	31%	24%	24%	22%

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

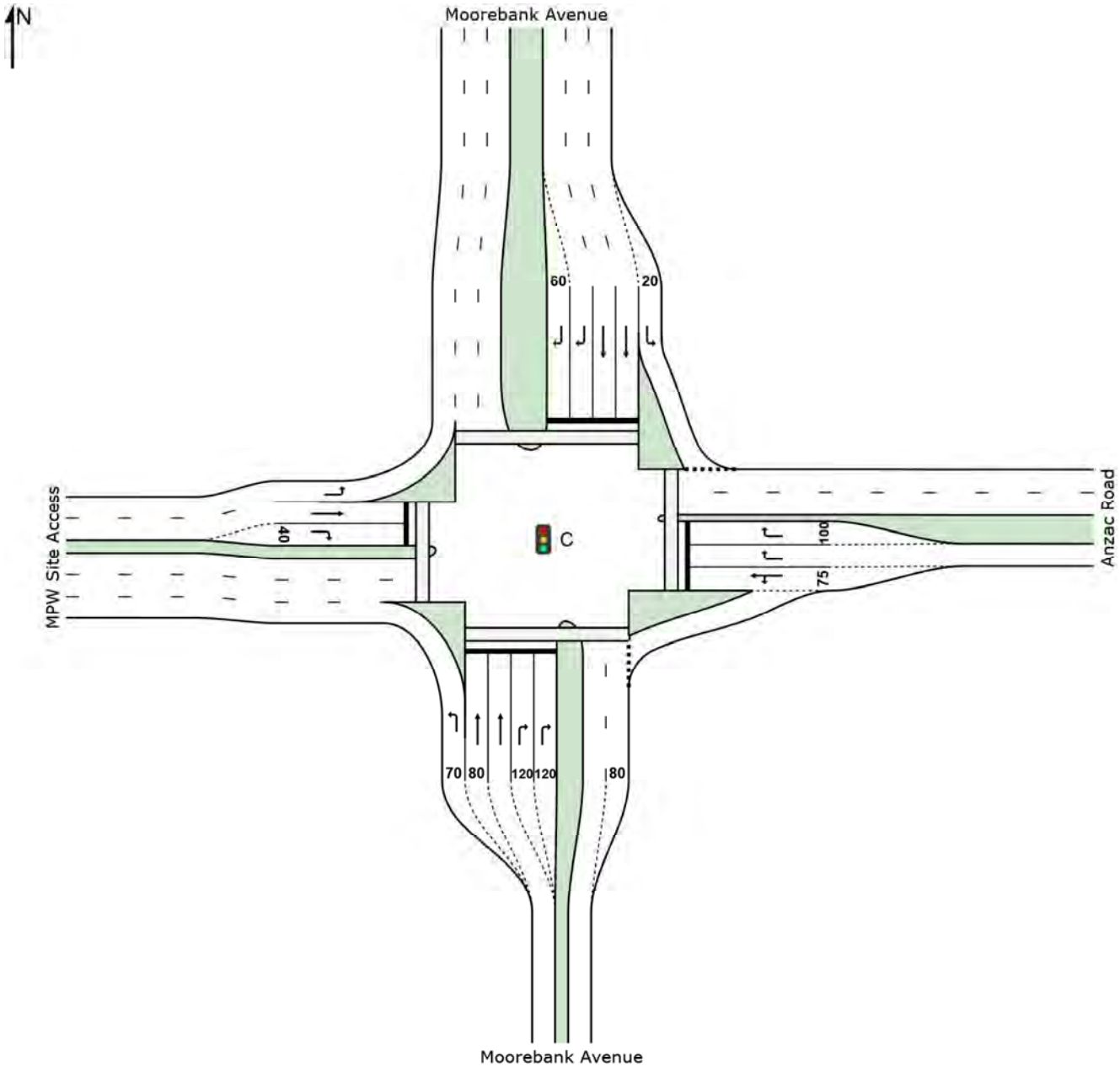




SITE LAYOUT

Site: C [Moorebank Avenue_Anzac Road_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated



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MOVEMENT SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 65 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	6	83.3	6	83.3	0.005	6.5	LOS A	0.0	0.0	0.00	0.49	50.5
2	T1	356	1.5	356	1.5	0.349	21.5	LOS B	4.7	33.9	0.86	0.70	23.0
3	R2	163	0.6	163	0.6	0.473	35.9	LOS C	2.7	18.9	0.99	0.76	22.7
Approach		525	2.2	525	2.2	0.473	25.8	LOS B	4.7	33.9	0.89	0.71	23.2
East: Anzac Road													
4	L2	280	1.5	280	1.5	0.279	9.6	LOS A	3.3	23.6	0.48	0.69	31.4
5	T1	1	0.0	1	0.0	0.279	4.0	LOS A	3.3	23.6	0.48	0.69	48.4
6	R2	287	4.0	287	4.0	0.427	32.1	LOS C	4.2	31.9	0.93	0.78	15.2
Approach		568	2.8	568	2.8	0.427	21.0	LOS B	4.2	31.9	0.71	0.74	20.4
North: Moorebank Avenue													
7	L2	419	3.0	419	3.0	0.299	4.5	LOS A	2.4	17.9	0.32	0.55	38.4
8	T1	629	1.2	629	1.2	0.888	31.9	LOS C	17.5	125.5	0.96	1.04	10.9
9	R2	71	83.6	71	83.6	0.325	39.3	LOS C	1.2	14.0	0.97	0.73	27.7
Approach		1119	7.1	1119	7.1	0.888	22.1	LOS B	17.5	125.5	0.72	0.84	20.1
West: MPW Site Access													
10	L2	318	18.5	318	18.5	0.194	5.8	LOS A	0.0	0.0	0.00	0.52	51.0
11	T1	28	0.0	28	0.0	0.158	31.1	LOS C	0.9	6.2	0.95	0.68	34.2
12	R2	22	0.0	22	0.0	0.129	36.7	LOS C	0.7	4.8	0.95	0.70	27.8
Approach		368	16.0	368	16.0	0.194	9.6	LOS A	0.9	6.2	0.13	0.54	46.5
All Vehicles		2581	6.4	2581	6.4	0.888	20.8	LOS B	17.5	125.5	0.67	0.75	24.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.8 %
Number of Iterations: 5 (maximum specified: 20)

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	11	26.8	LOS C	0.0	0.0	0.91	0.91
P2	East Full Crossing	11	26.8	LOS C	0.0	0.0	0.91	0.91
P3	North Full Crossing	11	26.8	LOS C	0.0	0.0	0.91	0.91
P4	West Full Crossing	53	26.8	LOS C	0.1	0.1	0.91	0.91
All Pedestrians		84	26.8	LOS C			0.91	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: C [Moorebank Avenue_Anzac Road_PM]

Network: 1 [Scenario 1_PM]

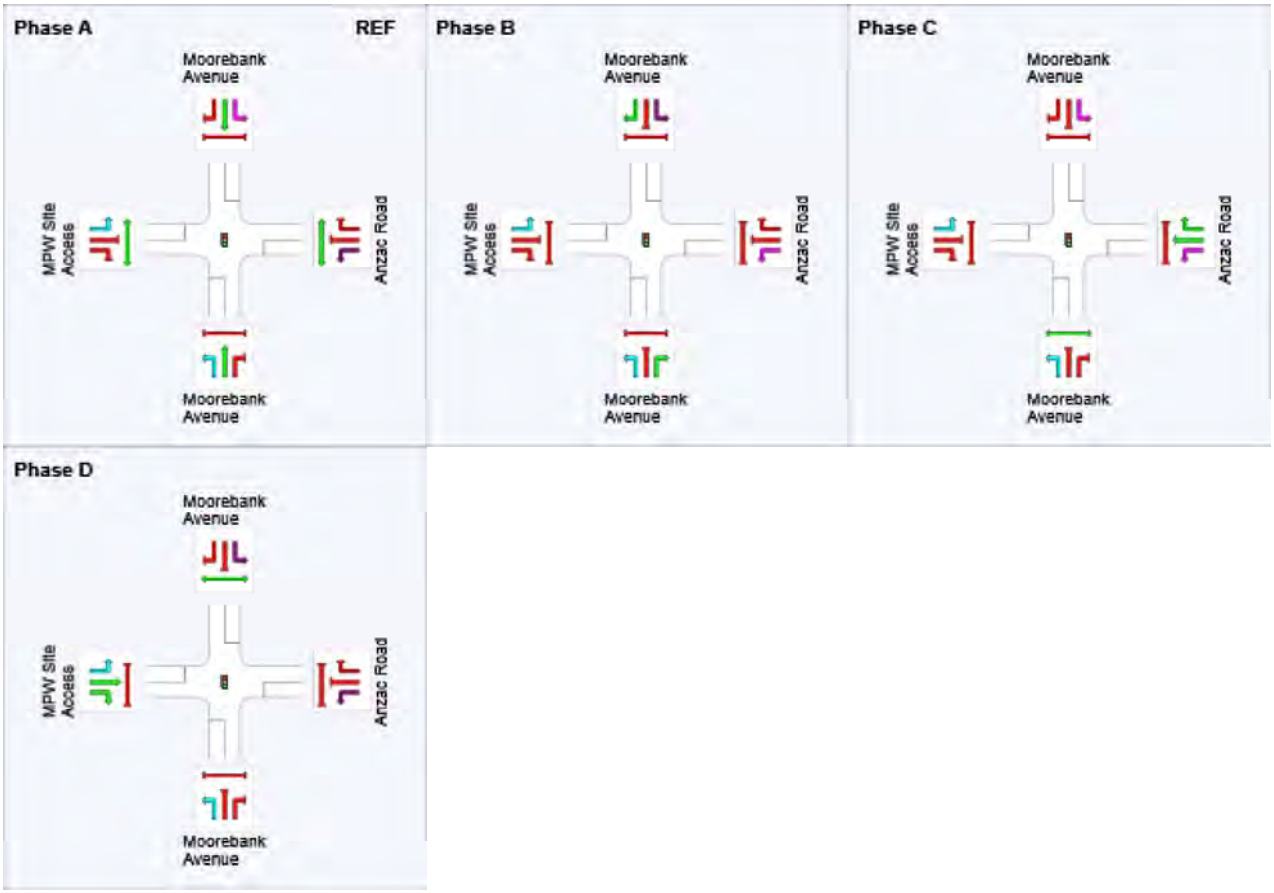
Intersection of Moorebank Avenue and Anzac Road
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 65 seconds (Practical Cycle Time)

Phase Times determined by the program
Phase Sequence: 4 Phase
Reference Phase: Phase A
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D

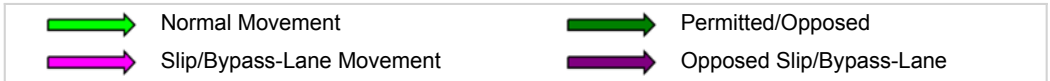
Phase Timing Results

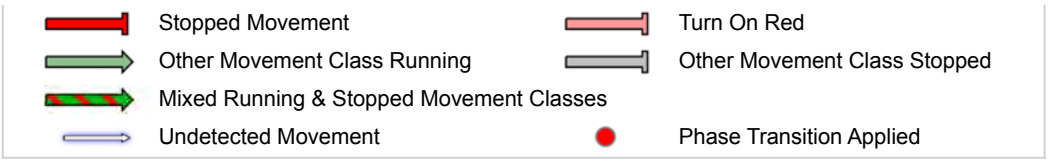
Phase	A	B	C	D
Phase Change Time (sec)	0	23	35	53
Green Time (sec)	17	6	12	6
Phase Time (sec)	23	12	18	12
Phase Split	35%	18%	28%	18%

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



REF: Reference Phase
VAR: Variable Phase

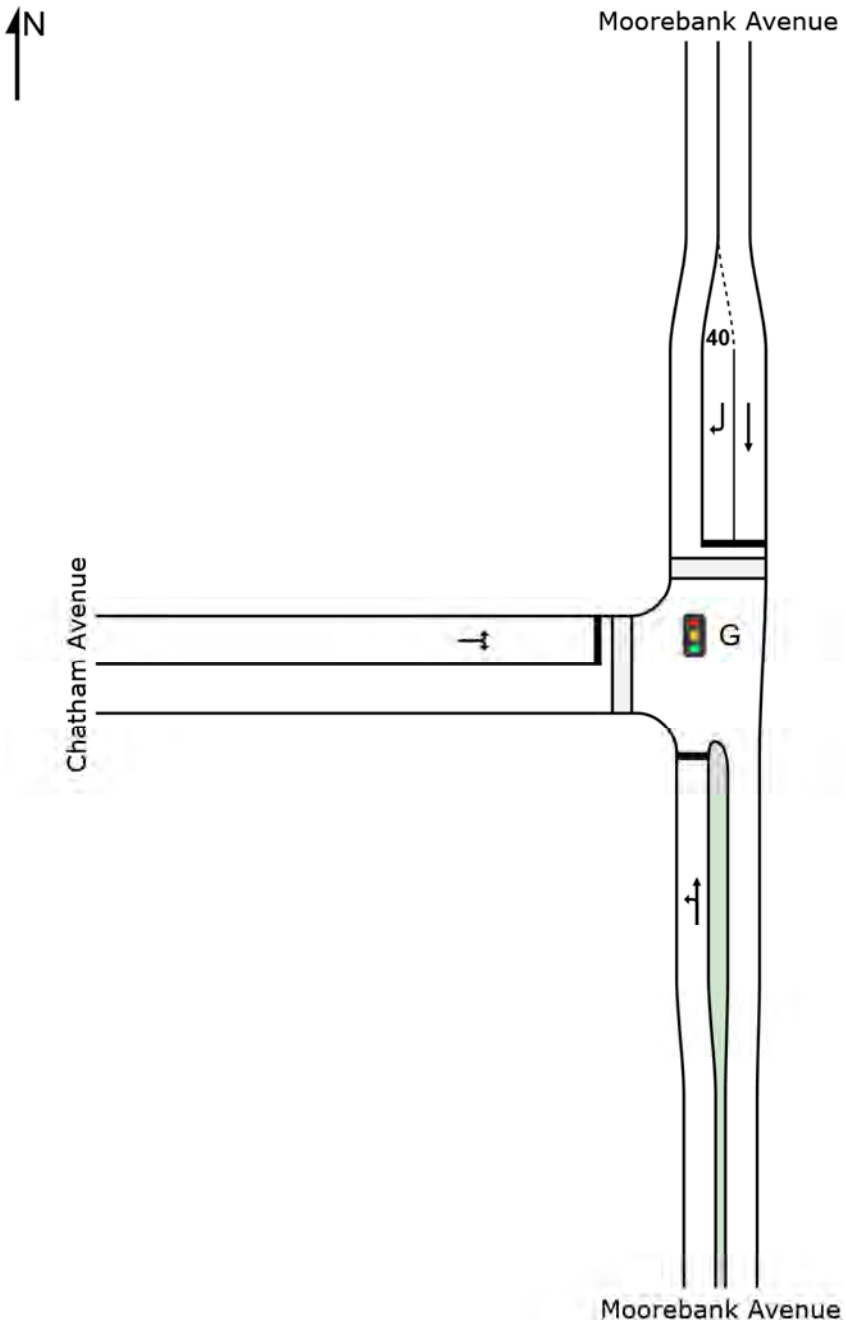




SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.879	26.9	LOS B	43.8	330.2	0.89	0.95	36.9
2	T1	1081	3.8	1081	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
Approach		1082	3.8	1082	3.8	0.879	23.7	LOS B	43.8	330.2	0.89	0.95	33.9
North: Moorebank Avenue													
8	T1	457	9.2	457	9.2	0.315	2.7	LOS A	5.3	43.6	0.30	0.27	45.7
9	R2	1	0.0	1	0.0	0.008	44.2	LOS D	0.0	0.3	0.95	0.58	25.2
Approach		458	9.2	458	9.2	0.315	2.8	LOS A	5.3	43.6	0.30	0.27	45.6
West: Chatham Avenue													
10	L2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	12.7
12	R2	1	0.0	1	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	27.7
Approach		2	0.0	2	0.0	0.015	45.3	LOS D	0.1	0.6	0.95	0.61	21.8
All Vehicles		1542	5.4	1542	5.4	0.879	17.5	LOS B	43.8	330.2	0.72	0.75	38.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 0.9 %
Number of Iterations: 8 (maximum specified: 20)

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
P3	North Full Crossing	11	36.7	LOS D	0.0	0.0	0.93	0.93
P4	West Full Crossing	11	8.1	LOS A	0.0	0.0	0.44	0.44
All Pedestrians		21	22.4	LOS C			0.68	0.68

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_AM]

Network: 1 [Scenario 1_AM]

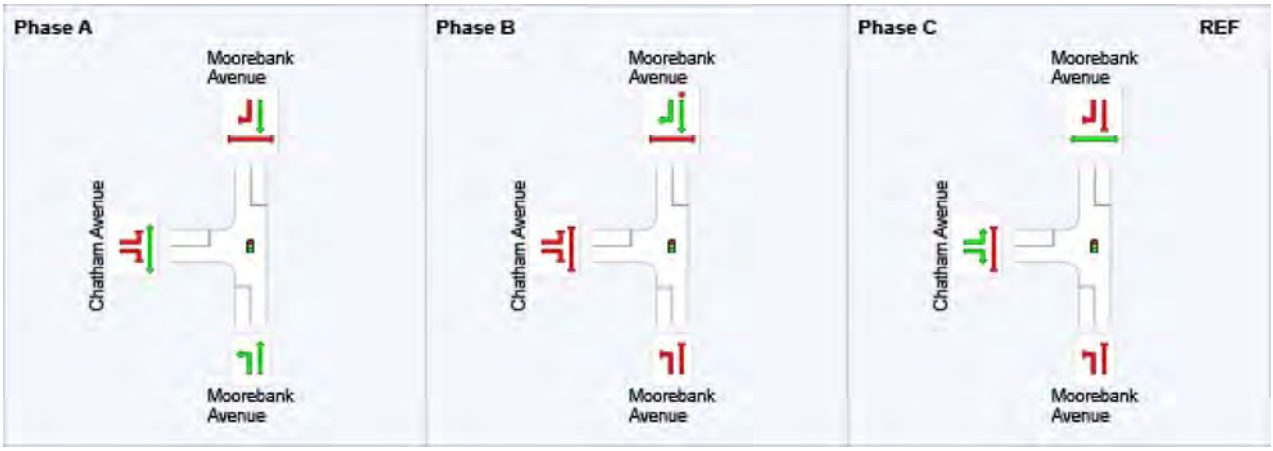
Intersection of Moorebank Avenue and Chatham Avenue
AM PEAK
Signals - Fixed Time Isolated Cycle Time = 85 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase C
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	12	73	0
Green Time (sec)	55	6	6
Phase Time (sec)	61	12	12
Phase Split	72%	14%	14%

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%.

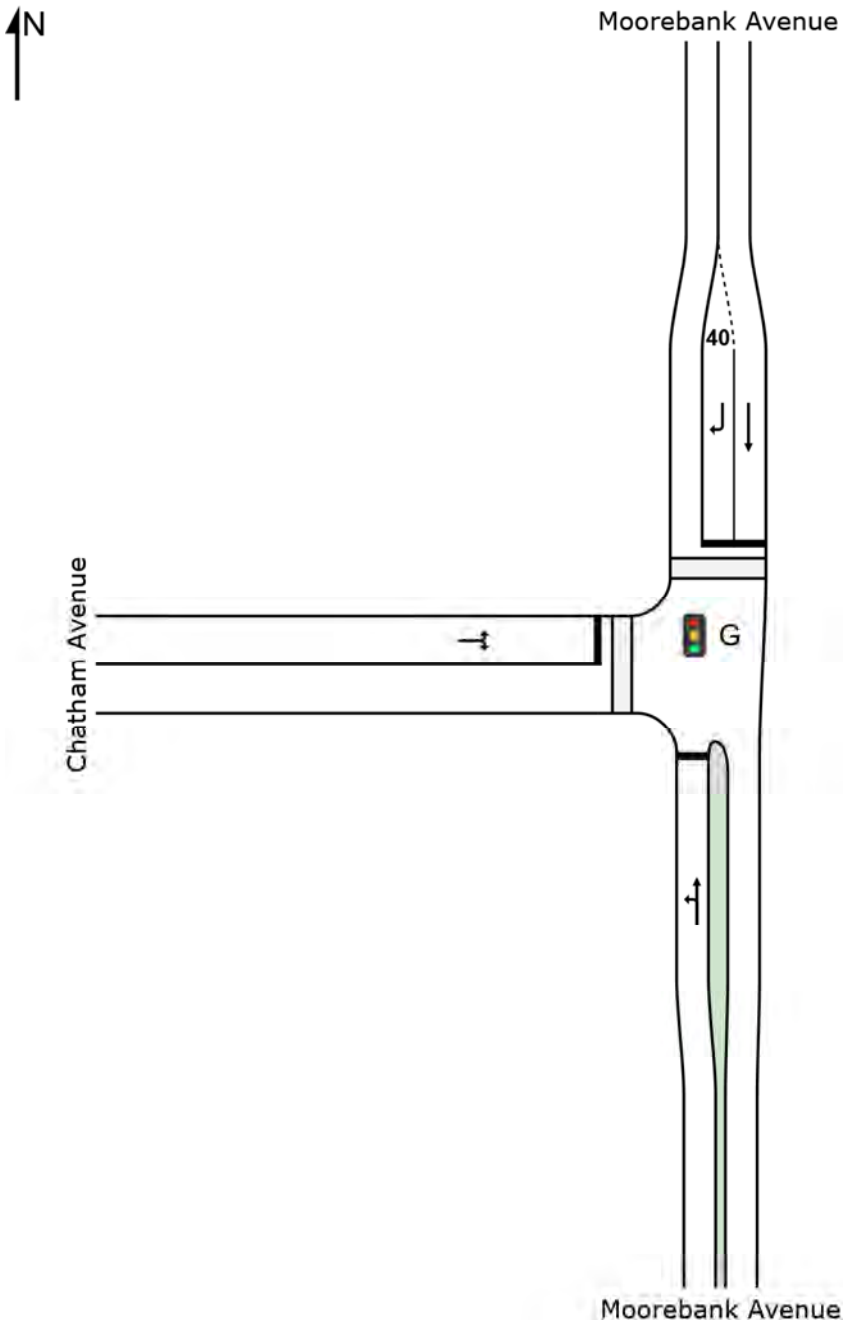


REF: Reference Phase
VAR: Variable Phase

SITE LAYOUT

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated



MOVEMENT SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival 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
South: Moorebank Avenue													
1	L2	1	0.0	1	0.0	0.784	23.9	LOS B	11.6	85.1	0.96	0.96	38.6
2	T1	501	2.3	501	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
Approach		502	2.3	502	2.3	0.784	20.7	LOS B	11.6	85.1	0.96	0.96	35.9
North: Moorebank Avenue													
8	T1	936	1.2	936	1.2	0.807	11.5	LOS A	19.2	138.0	0.84	0.87	41.5
9	R2	1	0.0	1	0.0	0.004	22.2	LOS B	0.0	0.1	0.88	0.57	31.3
Approach		937	1.2	937	1.2	0.807	11.5	LOS A	19.2	138.0	0.84	0.87	41.5
West: Chatham Avenue													
10	L2	1	0.0	1	0.0	0.008	23.3	LOS B	0.0	0.3	0.88	0.60	19.9
12	R2	1	0.0	1	0.0	0.008	23.3	LOS B	0.0	0.3	0.88	0.60	36.3
Approach		2	0.0	2	0.0	0.008	23.3	LOS B	0.0	0.3	0.88	0.60	30.5
All Vehicles		1441	1.6	1441	1.6	0.807	14.7	LOS B	19.2	138.0	0.88	0.90	40.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
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: 0.8 %
Number of Iterations: 5 (maximum specified: 20)

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
P3	North Full Crossing	11	16.9	LOS B	0.0	0.0	0.87	0.87
P4	West Full Crossing	11	15.2	LOS B	0.0	0.0	0.82	0.82
All Pedestrians		21	16.1	LOS B			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.

PHASING SUMMARY

Site: G [Moorebank Avenue/Chatham Avenue_PM]

Network: 1 [Scenario 1_PM]

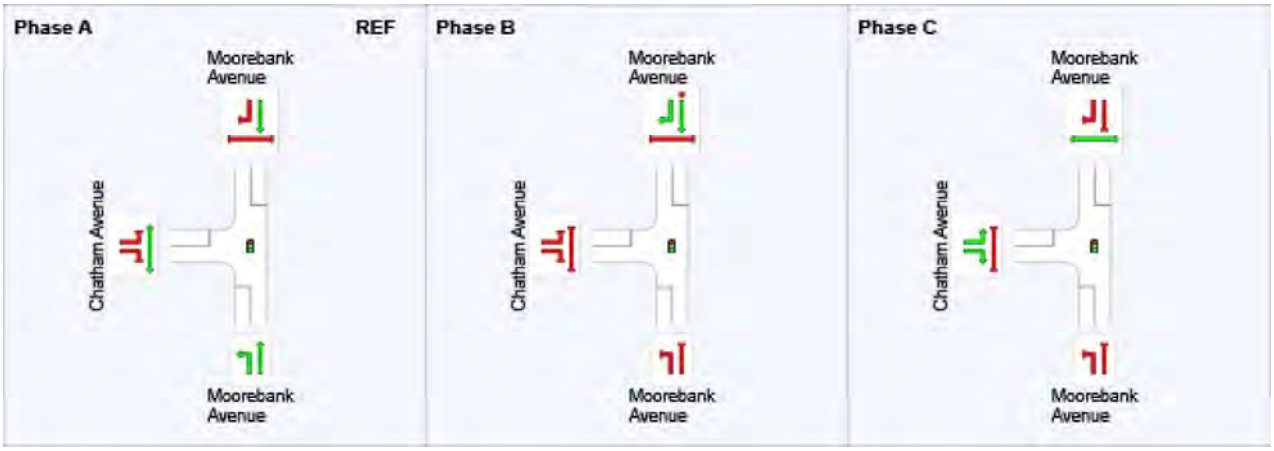
Intersection of Moorebank Avenue and Chatham Avenue
PM PEAK
Signals - Fixed Time Isolated Cycle Time = 45 seconds (Practical Cycle Time)

Phase Times determined by the program
Green Split Priority applies
Phase Sequence: Opposed Turns
Reference Phase: Phase A
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C

Phase Timing Results

Phase	A	B	C
Phase Change Time (sec)	0	21	33
Green Time (sec)	15	6	6
Phase Time (sec)	21	12	12
Phase Split	47%	27%	27%

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