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ARCHITECT

CLIENT

PROJECT

WEST BLOCK
BLOCK 3 SECTION 23
QUEEN VICTORIA TERRACE
PARKES ACT

DRAWING TITLE

TRAFFIC MANAGEMENT PLAN
TRAFFIC GUIDANCE SCHEME

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S.SCHUPFER

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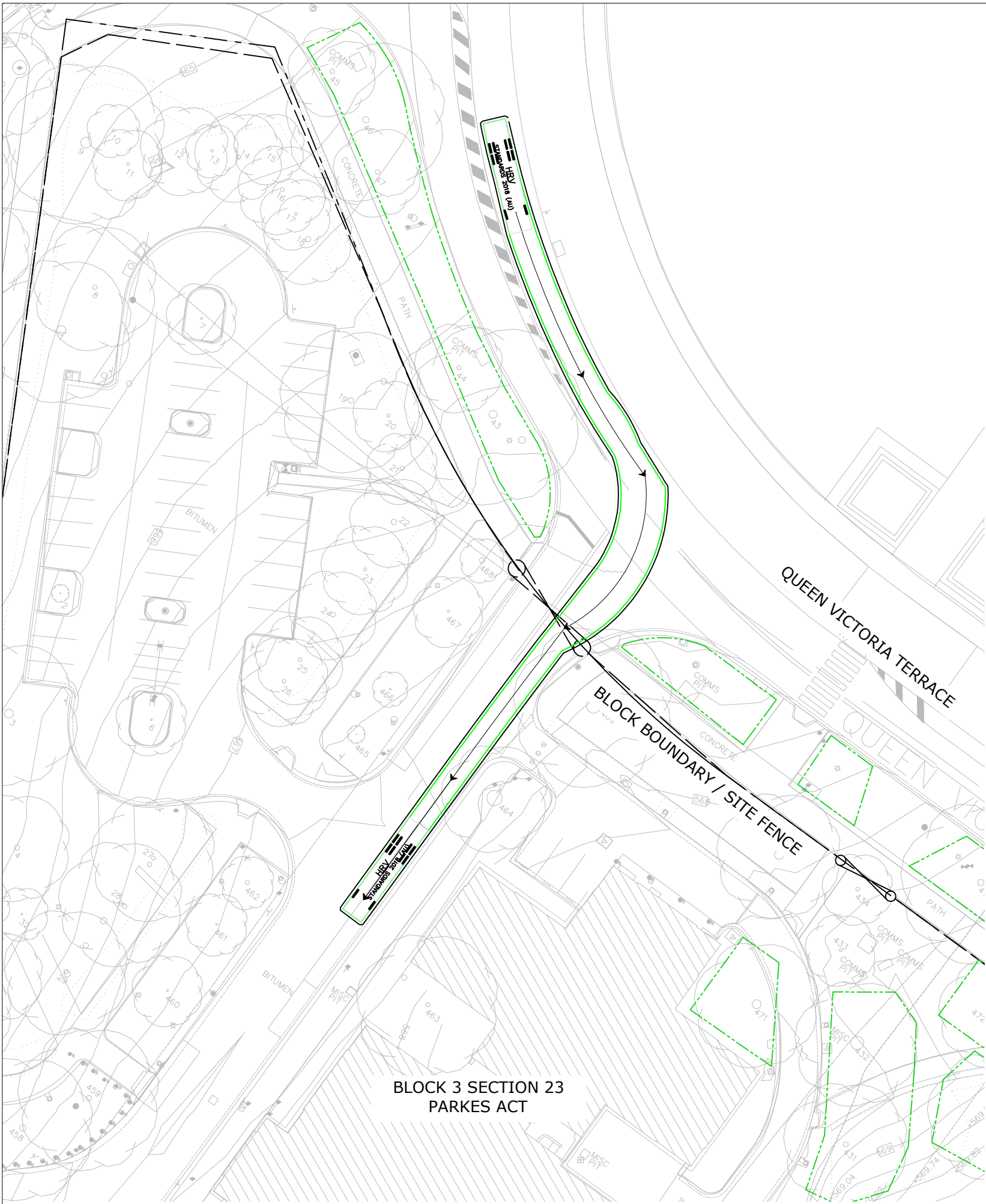
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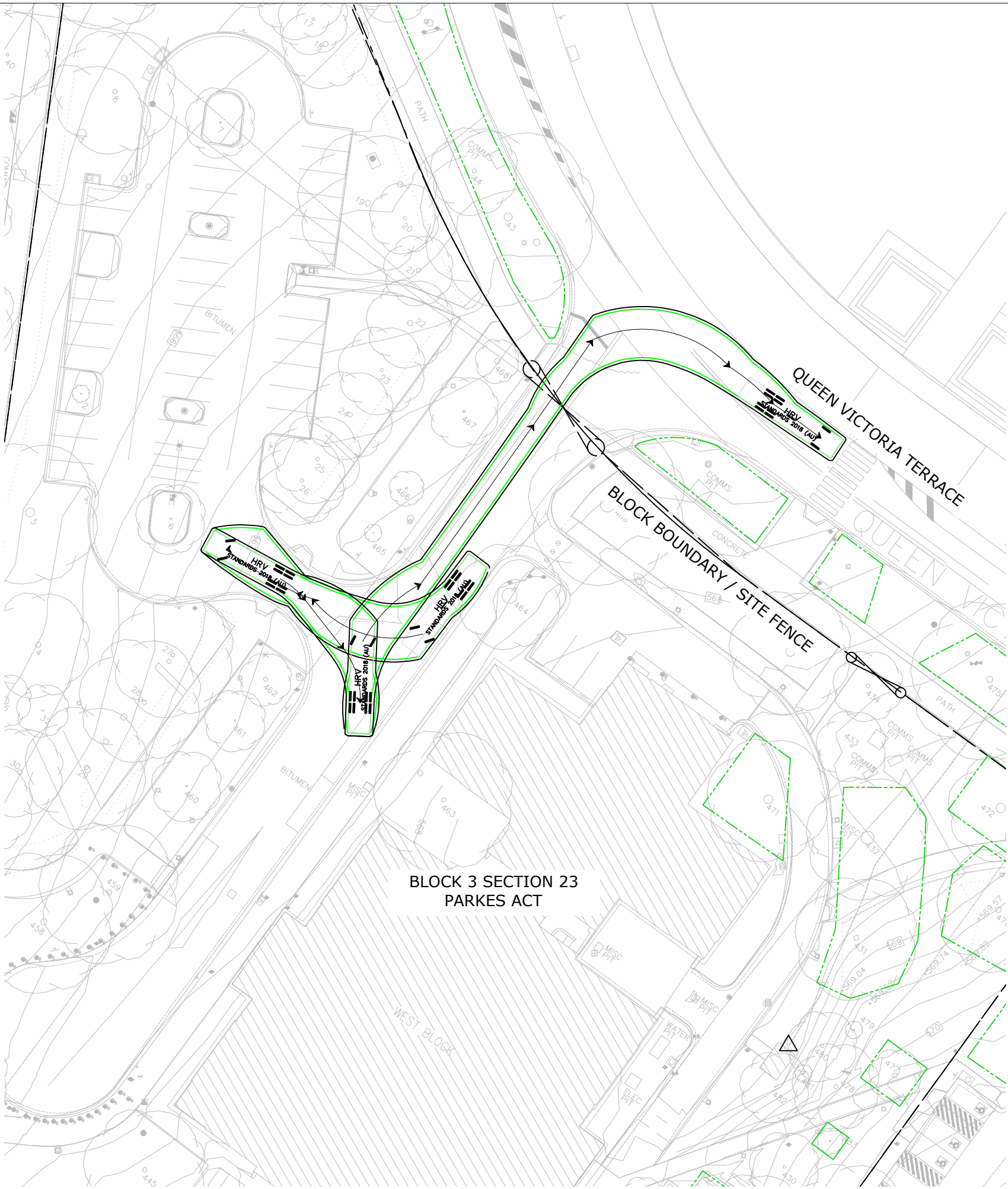
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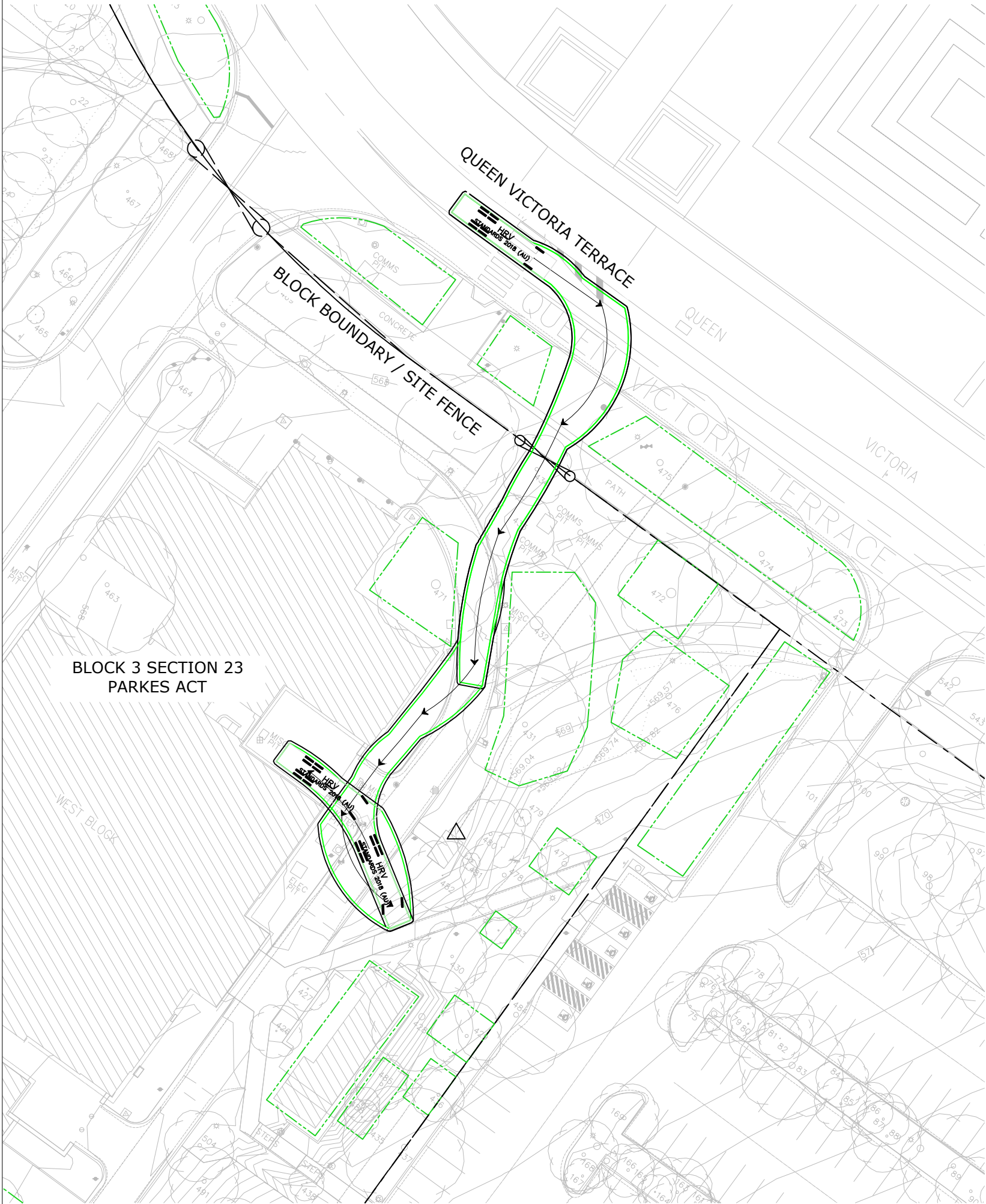
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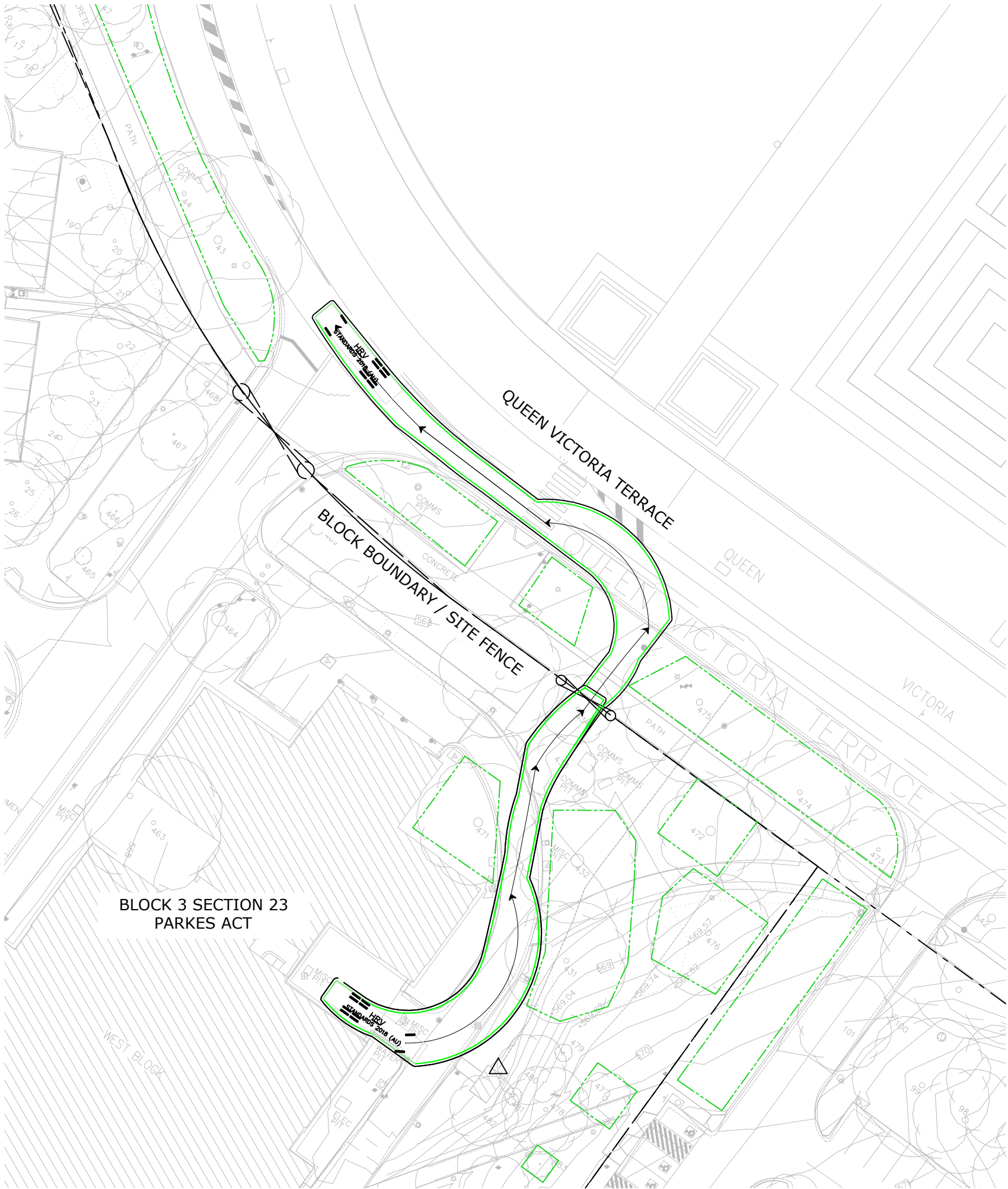
12.5m HRV - SWEEP PATH - WESTERN DRIVEWAY ACCESS
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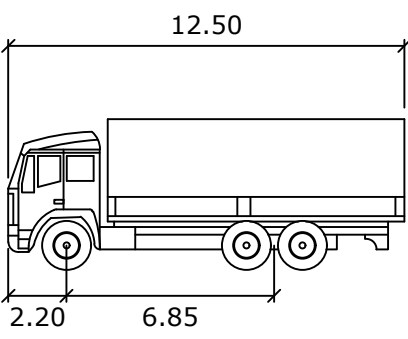
12.5m HRV - SWEEP PATH - WESTERN DRIVEWAY EGRESS
1:500 @ A1



12.5m HRV - SWEEP PATH - EASTERN DRIVEWAY ACCESS
1:500 @ A1



12.5m HRV - SWEEP PATH - EASTERN DRIVEWAY EGRESS
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SU TRUCK

Width : 2.50
Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 36.6

meters

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PROJECT
**WEST BLOCK
BLOCK 3 SECTION 23
QUEEN VICTORIA TERRACE
PARKES ACT**

DRAWING TITLE
**TRAFFIC MANAGEMENT PLAN
VEHICLE MOVEMENT PLAN**

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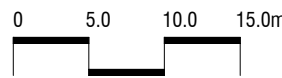
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CONSTRUCTION VEHICLE PARKING PLAN
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WEST BLOCK
BLOCK 3 SECTION 23
QUEEN VICTORIA TERRACE
PARKES ACT

DRAWING TITLE

TRAFFIC MANAGEMENT PLAN
CONSTRUCTION VEHICLE
PARKING PLAN

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Transport Impact Assessment

West Block Hotel

50521079



Prepared for
Geocon

6 August 2021

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1 Introduction

Cardno was engaged by Geocon to undertake a Traffic Impact Assessment to assess the potential traffic impacts generated by the proposed West Block Hotel development.

1.1 Scope of Services

1.1.1 Literature Review and Data Gathering

Cardno have reviewed information available for the project. This included TCCS SCATS data, midblock counts at development entrance, Transport Strategic CSTM Model, RTA Guide to Traffic Generating Developments (October 2002), Guide to Traffic Generating Developments Updated Traffic Surveys (August 2013), and the Estate Development Code (August 2020).

1.1.2 Traffic modelling

Three (3) intersections near the development will be investigated in order to determine the flow on affects from this development. Using SIDRA 9 traffic modelling software, Cardno undertook individual modelling of the following signalised and non-signalised intersections along Queen Victoria Terrace (shown in **Table 1-1**, and **Figure 1-1**).

Table 1-1 Nominated Intersections

Signalised Intersections	Non-Signalised Intersections
1. Commonwealth Ave / Coronation Dr / Queen Victoria Terrace	2. Queen Victoria Terrace / Langton Cres
	3. Queen Victoria Terrace / Development Access

1.1.3 Scenario Modelling

Cardno modelled the aforementioned intersections in both the AM and PM Peak hours for the following scenarios:

- Current 2021 Scenario
- Future “Development Operation Year” ‘Do Nothing’ Scenario
- Future “Development Operation Year” ‘With Development’ Scenario A (New development)

A total of 3 **individual models with 6 varying scenarios each** have been created for this exercise. The modelling is aimed to demonstrate the projected impact of development on the external road network.

In addition to the above a **network model (with 6 varying scenarios)** shall also be produced showing the individual intersections linked with corresponding offset signal phasing and delays.

It is assumed that the development operation year is 2024 for this study.

1.1.4 Reporting

Results and findings from the investigations have been compiled and summarised within this report.

Figure 1-1 Locality Plan of Traffic Network



1.2 Objectives

The purpose of this report is to assess the current operation of the existing traffic network and to determine the effect that the proposed West Block Hotel development will have on the existing road network. Cardno have undertaken traffic modelling for the local network which includes the traffic generated. The purpose is to achieve in-principal support from TCCS / NCA confirming that the proposed development will not have significant detrimental impact on the external road network.

2 Standards / Review of Literature

2.1 Standards

The following Standards were used in the preparation of this report.

Table 2-1 Relevant Standards

Standard	Authority	Year
Traffic Modelling Guidelines	NSW Transport Roads and Maritime Services (now TfNSW)	2013
Guidelines for Transport Impact Assessment	Transport Canberra and City Services	2016
Guide to Traffic Generating Developments	NSW Roads and Transport Authority (now TfNSW)	2002
Guide to Traffic Generating Developments Updated Traffic Surveys	NSW Roads and Maritime Services (now TfNSW)	2013
Estate Development Code	ACT Parliamentary Counsel	2019
Engineering Advisory Note 14	Transport Canberra and City Services	2019
Parking and Vehicular Access General Code	ACT Planning and Land Authority	2014
Bicycle Parking General Code	ACT Planning and Land Authority	2013
AS 2890.1:2004 Parking Facilities – Off Street Parking	Standards Australia	2004
Census Journey to Work	ABS	2016

3 Proposed Development

Geocon proposed to develop the West Block hotel upon Block 3, Section 23, Parkes. The site is currently zoned as DES: Designated as per the Territory Plan. The proposed development will consist of the following key facilities.

- > Ground floor consisting of:
 - One function room;
 - Three meeting rooms;
 - Two bars;
 - One café;
 - Two restaurants;
 - Gym;
 - Pool;
 - Wellness centre; and
 - Eleven hotel rooms.
- > Two floors of hotel rooms (49 rooms on each floor)
- > One floor of office space (112m²)
- > On-site carpark accessed via Queen Victoria Terrace, east of the building (approximately 42 car spaces)

4 Existing Road Network

The classification of the surrounding road network is defined by the ACT Estate Development Code (August 2016), which defines the minimum requirements for roads based on the zoned location and number of vehicles that utilise the road each day. Table 2A: Street Network Requirements- All Estates except in Industrial Zones, extracted from the ACT Estate Development Code (December 2019). An extract of the relevant information from both the ACT Estate Development Code is located in **Table 4-1** below.

Table 4-1 Street Network Requirements

Facility Type	Access Road A	Access Road B	Minor Collector	Major Collector	Arterial Road
Traffic volume range (vpd)	0-300	301-1000	1001-3000	3001-6000	>6000
Design speed (km/h)	50	60	60	70	80
Minimum carriageway width (m)	5.5	7	10	10	Varies
Minimum verge width	5.5	6.25	6.25	6.25	Varies
On Street Parking	Assumed on one side of carriageway only	Assumed staggered on both side of the carriageway only	Assumed on both side of the carriageway only	Assumed on one side of the carriageway only	Assumed on one side of the carriageway only
Minimum share path requirement	1.5m wide share path on one side only	2.0m wide on one side only	2.5m wide shared path on both sides and aligned at least 1.5m away from the kerb	2.5m wide shared path on both sides and aligned at least 1.5m away from the kerb	2.5m wide shared path on both sides and aligned at least 1.5m away from kerb

Figure 4-1 below provides an extract of the current *ACT Road Hierarchy Plan*, which is used to identify the classification of the road surrounding the proposed development.

Figure 4-1 ACT Road Hierarchy Plan Around West Block (Source: Active Travel Practitioner's Tool)



The peak traffic volumes for the road network were obtained using SCATS data provided by TCCS and manual traffic counts.

In order to assess the provided AM peak values in terms of vehicles per day (vpd), The *Municipal Infrastructure Standards (MIS03), Pavement Design, Section 2.4.4.3* specifies that peak hour values may be adopted to Annual Average Daily Traffic (AADT) by assuming that average AM and PM peak hour traffic volumes are representative of approximately 10-12% of the AADT.

For this study a value of 10% was adopted and applied to the traffic volumes during the AM peak. Refer to

Table 4-2 for AADT volumes within the road network.

In accordance with the ACT Road Hierarchy Plan, the classification of the roads surrounding the network are as indicated within **Table 4-2** below.

Utilising the peak hour traffic volumes within the CSTM model, an estimation for the daily vehicle capacity of the road can be obtained.

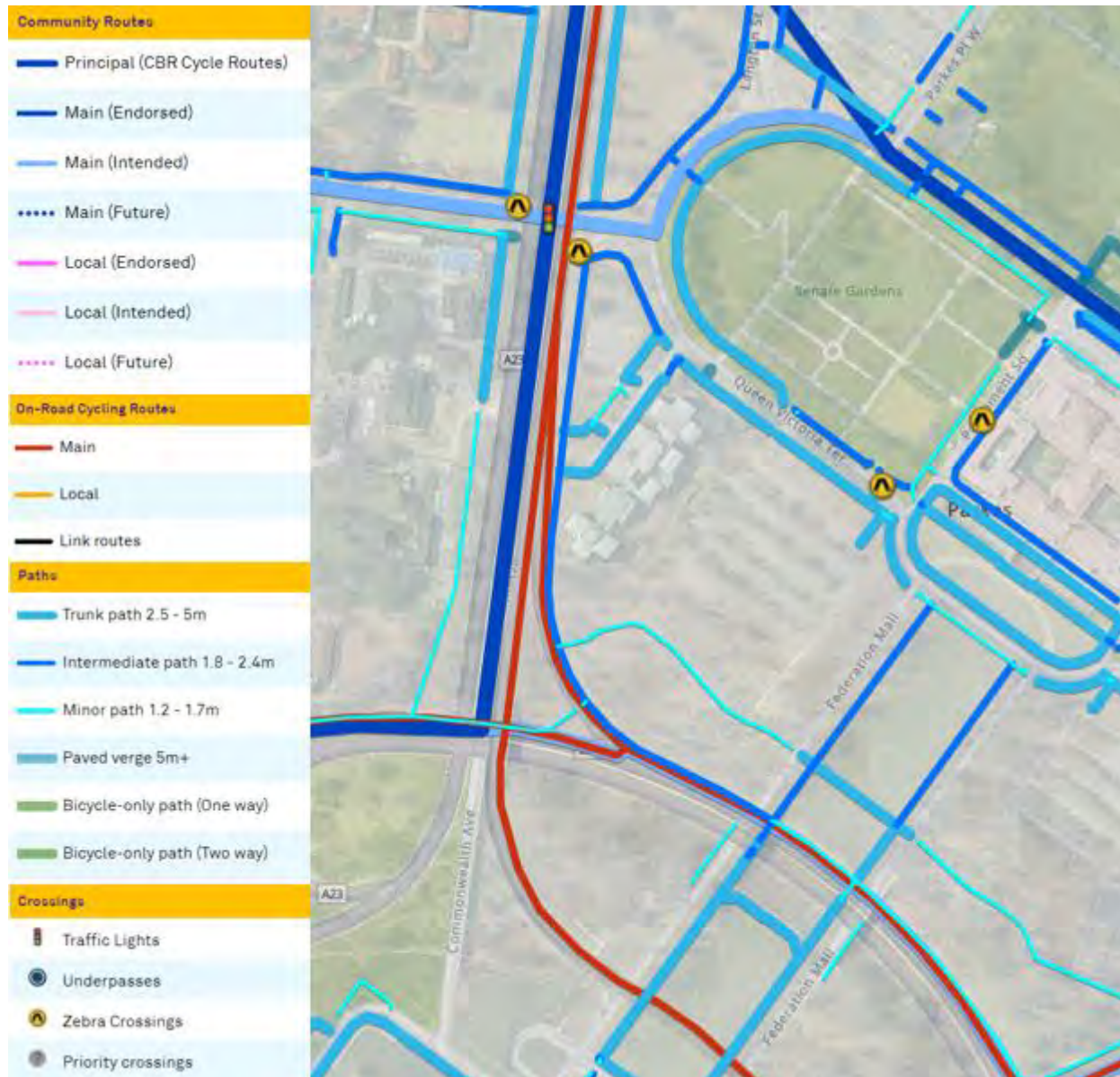
Table 4-2 Current Road Volumes

Road Name	ACT Road Classification	Capacity	Existing Volume
Commonwealth Ave South Approach	Arterial Road	>6000	29,850
Commonwealth Ave North Approach	Arterial Road	>6000	29,270
Coronation Drive	Major Collector	3001-6000	4,450
Queen Victoria Terrace	Minor Collector	1001-3000	6,690

4.2 Active Travel

The key existing Active travel routes within proximity of the proposed West Block Hotel development are highlighted in **Figure 4-2** below:

Figure 4-2 Existing Active Travel Infrastructure around West Block (Source: Active Travel Infrastructure Practitioner Tool)

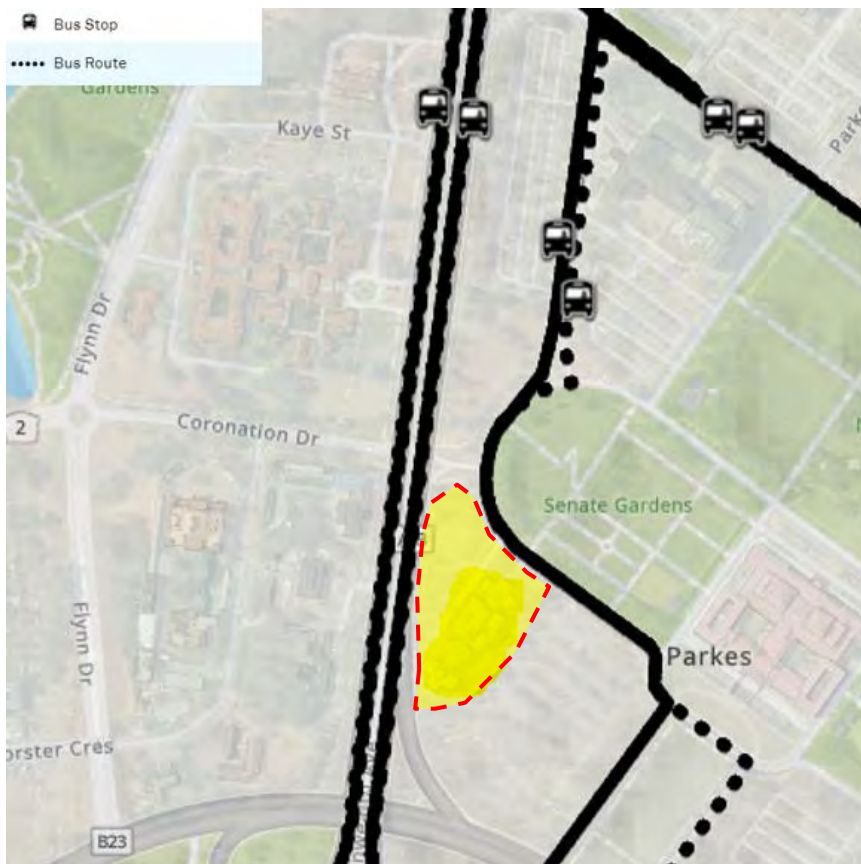


Figures 4-3 and **4-4** below detail the bus routes and stops within proximity of the proposed development. Employees and patrons will have access to the No. 57 and No. 58 bus routes from stops on Langton St, approximately 290m walking distance from the proposed development. Access to the R4, R5, R7, R10, No. 180 and No. 181 bus routes is available via bus stops on Commonwealth Ave, approximately 480m walking distance from the proposed development. There will also be access to the R2 and R6 bus routes via bus stops on King Edward Terrace approximately 550m walking distance from the proposed development. All nearby bus stops are accessible via local footpaths.

Figure 4-3 Inner South Bus Route Region Map



Figure 4-4 Existing Public Transport Infrastructure around West Block



It is worth noting that the Active Travel Infrastructure Practitioner Tool does not currently indicate any future active travel infrastructure around the West Block area.

4.3 Road Safety

4.3.1 Crash Data

Cardno was provided with crash data from ACT Roads Safety. The crash data was taken over a period of five (5) years from 01 January 2016 to 31 December 2020.

The total number of crashes that occurred at the Commonwealth Ave / Coronation Dr / Queen Victoria Terrace intersection during the study period was 53. Of these 53 crashes, three (3) resulted in injury for which medical treatment was received, while the rest resulted in property damage only. Majority of the crashes that were recorded at this intersection were attributed to rear end collisions, resulting in property damage. This is a common observation throughout most arterial roads within the ACT during peak hours.

The total number of crashes that occurred at the Langton St / Queen Victoria intersection during the study period was six (6). Of these six crashes, two (2) resulted in injury for which medical treatment was received and the other four (4) resulted in property damage only.

The total number of crashes that occurred at the King George Terrace / Langton St intersection during the study period was three. All three of the crashes resulted in injury for which medical treatment was received. Two of the three crashes involved two vehicles and were attributed to one of the vehicles failing to give way at the intersection. The third crash only involved a single vehicle and is attributed to the vehicle leaving the carriage way and colliding with an object.

Pursuant to the outcomes of the ACT Government inquiry into vulnerable road users, the development has been reviewed in the context of road safety and possible issues arising from the development. The review considered existing transport infrastructure surrounding the site, as well as the proposed interfaces of new connections to be constructed.

Based on the review of available information, the proposed development is unlikely to have an adverse impact on the safety and operability of the road network surrounding the site.

Table 4-3 West Block Area Crashes by Location

Location of Crash	Total Crashes	Total Crash Percentage (%)
Commonwealth Ave / Coronation Dr / Queen Victoria Terrace	53	85
Langton St / Queen Victoria Terrace	6	10
King George Terrace / Langton St	3	5
Total	62	

5 Traffic Engineering Assessment

5.1 Parking

5.1.1 Car Parking Requirement

As the proposed development is zoned as designated land (DES), car parking requirements are to comply with the NCA National Capital Plan.

Section 4.19.3 of the National Capital Plan stipulates that, for hotels, 1 parking space per bedroom is required. As the proposed development has 109 rooms, 109 parking Spaces will be required. The National Capital Plan does not have provisions for DDA Parking, however, in accordance with the ACT Government Parking and Vehicular Access General Code (PVAGC), 3% of the total required parking places will need to be DDA accessible parks, in this case, 4 parking spaces. Furthermore, in accordance with AS 2890.1:2004, the parking spaces for the development are required to be Class 2 parking.

The National Capital Plan does not set out requirements for the location of the required parking in relation to the development. However, the PVAGC stipulates that long stay parking should be provided on-site or within 200m of the development.

The current plans of the proposed development allow for 45 car parks to be provided on-site, with 336 paid parking spaces available directly adjacent to the development, 5 of which are DDA accessible.

5.1.2 Modal Share

As part of the proposed development, it is not expected that the majority of the guests at the hotel will be parking at the hotel for their stay. Instead, it is anticipated that guests who will be staying at the hotel during weekdays will not be driving and instead be dropped off by Ubers, Taxis, and Commonwealth Government Cars. For weekends, there are more likely to be guests who will be driving as well as members of the public visiting the hotel for leisure purposes, restaurants, bars, etc. Therefore, it is anticipated that the carpark to the east of the will be able to service the overflow during the weekend periods.

The 45 hotel carparks will be controlled via boom gates and valet car parking services, meaning the hotel operator has absolute control of the carparks and will be managed in a professional manner, commensurate with a 5-star luxury hotel offering. These carparks will be run in line with daily occupancy and booking allotments for expected hotel guest arrivals and check outs from the property

5.1.3 Motorcycle/Bicycle Parking Requirements

The National Capital Plan does not make any provisions for motorcycle or bicycle parking in Designated Zones.

5.1.4 Vehicle Queuing

The proposed vehicle queuing demand during morning peak was calculated in accordance with *TCCS Engineering Advisory Note (EAN) 6* and *AS 2890.1:2004 – Parking Facilities: Off Street Parking*. The required internal queue length is 24m from the control point. Refer to **Table 5-1** below.

Table 5-1 Vehicle Queuing Demand

Carpark	Capacity of car park	Peak hourly in-flow of traffic	Queue Length (cars)	Queue Length (m)
Development	45 cars	0-100 cars (3% of capacity)	2 (rounded up)	12
	Total		2	12

A review of the architectural plans has identified that an approximate queue length of 40m from the northern property boundary to the carpark control point is achievable. Hence, sufficient queue length will be achievable.

5.2 Traffic Generation

As the RTA Guide to Traffic Generating Developments (2002) does not have any provisions for the traffic generated by hotels. A trip rate of 0.3 trips per room was adopted. This trip rate is considered conservative, due to the proximity to public transport and government offices.

The RMS Guide to Traffic Generating Developments (2013), was used to estimate the trip generation for the restaurants and bars within the hotel that will be used by non-guests of the hotel.

Table 5-2 below summarises the traffic generation for the development.

Table 5-2 West Block Traffic Generation

Land Use	Yield	Peak Period	Trip Rate	Peak Direction	Peak Split	Trips
Hotel	109 rooms	AM	0.3/room	In	0.55	18
				Out	0.45	15
		PM	0.3/room	In	0.55	15
				Out	0.45	18
Restaurants/Bars	777m ²	AM	0	In	0	0
				Out	0	0
		PM	5/100m ²	In	0.90	35
				Out	0.10	4
Total		AM		In		47
				Out		25
				Total		72
		PM		In		50
				Out		22
				Total		72

5.3 Traffic Distribution

Cardno has developed an assumption of traffic distribution to and from the development based off of ABS Census Journey to Work Data. The assumptions are summarised in below.

The following assumptions were applied to the Operational year AM and PM SIDRA models.

5.3.1 AM Traffic Distribution into Development

- > 27% approach from the south on Commonwealth Ave
 - 100% turn right into Queen Victoria Terrace
 - 100% turn right off Queen Victoria Terrace into the development
- > 28% approach from north on Commonwealth Ave
 - 100% turn left into Queen Victoria Terrace
 - 100% turn right off Queen Victoria Terrace into the development

- > 45% approach from the east on Queen Victoria Terrace
 - 100% turn left off Queen Victoria Terrace into the development

5.3.2 PM Traffic Distribution out of Development

- > 55% turn left onto Queen Victoria Terrace
 - 50% turn right onto Commonwealth Ave
 - 50% turn left onto Commonwealth Ave
- > 45% turn right onto Queen Victoria Terrace

5.4 Road Volumes

5.4.1 SCATS Data

Transport Canberra and City Services (TCCS) provided SCATS data for the week commencing Monday 17th May to Sunday 23rd May for the signalised Commonwealth Ave / Coronation Dr / Queen Victoria Terrace intersection.

A thorough assessment was undertaken to determine the AM and PM peak hours and on which day they occurred. The peak hours for this intersection was found to occur between 08:15 – 09:15 for the AM and 16:45 – 17:45 for the PM on a Thursday.

For 2021 period used, three (3) of the detectors were faulty and did not record any traffic data. Therefore, the SCATS data for a corresponding Thursday in May in from the last time all the detectors were in working condition was also provided by TCCS, this being Thursday, 24th May, 2018.

Weighted growth rates for each approach at the intersection were calculated from the CSTM data and applied to the 2018 SCATS data for the 3 lanes in question to calculate an estimated traffic volume for these 3 lanes in 2021.

From both Coronation Drive and Queen Victoria Terrace, there are left turn slip lanes that aren't signalised and do not have any detectors to record SCATS data. Therefore, in order to calculate the traffic volumes for these slip lanes, CSTM data was used to determine the percentage of vehicles at each approach using these lanes. This percentage was then applied to the available SCATS data for that approach and an approximate volume for the slip lanes was calculated. This resulted in an extremely high volume of cars using the slip lane from Coronation Dr to turn left into Commonwealth Ave (1400 in the AM and 2000 in the PM).

Refer to **Appendix B** for SCATS Data.

5.4.2 Heavy Vehicles

Bus volumes were modelled independently of other vehicle classes, a heavy vehicle percentage of 3% was adopted for this assessment as per outlined in the *Municipal Infrastructure Standards (MIS03), Pavement Design*.

5.4.3 Growth Rates

An analysis of CSTM modelling was used to determine the growth rate for each approach to the intersection in the operational year design scenario. The CSTM models obtained provided an indication of growth between 2021 and the operational year (2024). The growth rates are listed on the next page in **Table 5-3**.

For the operational year model, the weighted growth rate for the intersection as a whole, in the AM and PM, was applied to each approach lane to determine an estimated operational year volume.

Refer to **Appendix C** for CSTM Data.

Table 5-3 Growth Rate Calculation

Period (years)	10											
CSTM Data												
Street	Queen Victoria			Coronation			Commonwealth					
Approach	East			West			South			North		
Direction	L	T	R	L	T	R	L	T	R	L	T	R
2021 AM Peak	3	8	679	424	20	1	0	2643	342	352	1934	640
%	0%	1%	98%	95%	4%	0%	0%	89%	11%	12%	66%	22%
2031 AM Peak	5	7	671	370	45	0	0	2904	282	464	2395	569
%	1%	1%	98%	89%	11%	0%	0%	91%	9%	14%	70%	17%
Growth Rate	5.24%	-1.33%	-0.12%	-1.35%	8.45%	100.00%	0.00%	0.95%	0.00%	2.80%	2.16%	-1.17%
	-0.10%			-0.70%			0.65%			1.60%		
Weighted Growth Rate	-0.09%			-0.29%			0.86%			1.69%		
Average Growth Rate	0.36%											
Weighted Growth Rate	0.06%											
2021 PM Peak	87	40	789	256	1	5	0	2273	34	0	2500	569
%	9%	4%	86%	98%	0%	2%	0%	99%	1%	0%	81%	19%
2031 PM Peak	80	65	854	500	1	4	0	2586	42	0	2660	556
%	8%	7%	85%	99%	0%	1%	0%	98%	2%	0%	83%	17%
Growth Rate	-0.84%	4.97%	0.79%	6.92%	0.00%	-2.21%	0.00%	1.30%	2.14%	0.00%	0.62%	-0.23%
	0.87%			6.78%			1.31%			0.47%		
Weighted Growth Rate	0.94%			6.84%			1.31%			0.47%		
Average Growth Rate	2.36%											
Weighted Growth Rate	0.47%											

6 Intersection Capacity Analysis

Intersection capacity has been assessed using SIDRA 9.0 which is a micro-modelling software package. SIDRA provides an indication of an intersection's performance capacity through the following key outputs:

- Degree of Saturation (DOS) - Ratio of Demand to Capacity;
- Average Delay (in seconds);
- 95th Percentile Queue Length (in metres);
- The Level of Service (LOS) criteria.

The SIDRA NETWORK model determines the backward spread of congestion as queues on downstream lanes block upstream lanes (queue spillback). SIDRA applies capacity constraint to oversaturated upstream lanes, hence limiting the flows entering downstream lanes. These two elements are highly interactive with opposing effects. A network wide iterative process is used to find a solution that balances these opposing effects.

Each model was set to 30 iterations which is the maximum number of iterations permissible by SIDRA.

The following sections discuss the capacity modelling for the key external intersections.

6.1 Level of Service Criteria

Level of Service (LOS) is determined by the average delay for each vehicle (RMS NSW method). The range definitions for LOS are indicated in **Table 6-1** below.

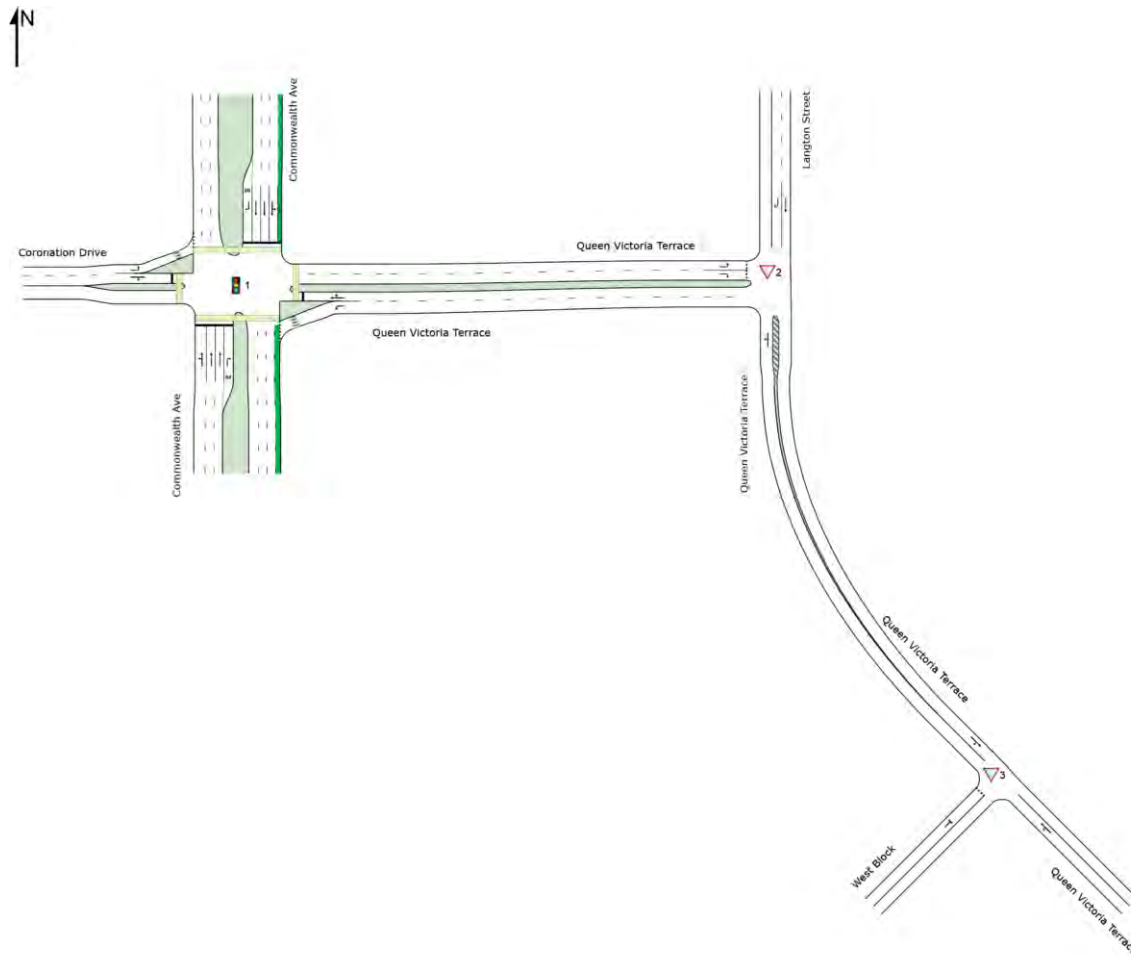
Table 6-1 Level of Service Definition Table

Level of Service	Average Delay / Vehicle (sec/veh)	Traffic Signals, Roundabouts	Give Way and Stop Signs
A	>14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, accident study required
D	43 to 56	Operating near capacity	Near capacity, accident study required
E	57 to 70	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode.
F	>70	Over capacity requires investigation of other control modes.	Over capacity, requires other control mode.

In general, intersections should operate at a minimum of LOS C to operate under satisfactory conditions. Note: For traffic signals, the Average Movement Delay and Level of Service over all movements should be taken. For priority control signalised intersection (With Stop and Give Way signs or operating under the T-junction rule) the critical movement for Level of Service assessment should be that with the worst movement delay.

Figure 6-1 below shows the layout of the network used for this assessment.

Figure 6-1 Network Layout Across Both 2021 'Base' and 2024 'Operational' Year



SITES IN NETWORK		
Site ID	CCG ID	Site Name
1	NA	AM - Commonwealth / Coronation / Queen Victoria Terrace
2	NA	AM - Queen Victoria / Langton
3	NA	AM - Queen Victoria / Development

6.2 Exclusions to the Model

6.2.1 Coronation Drive Slip Lane

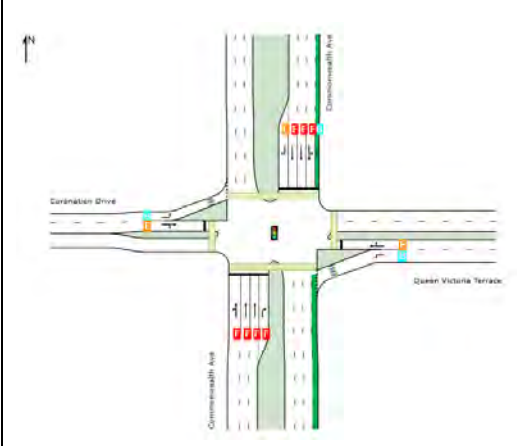
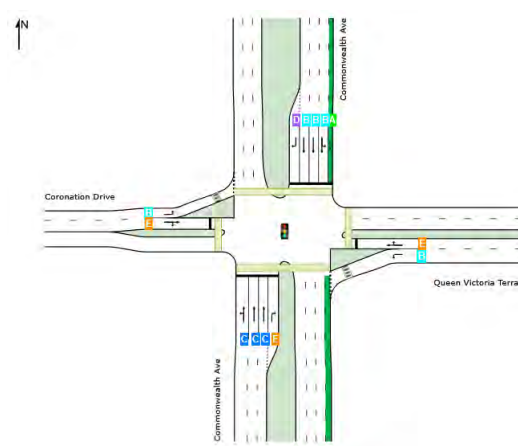
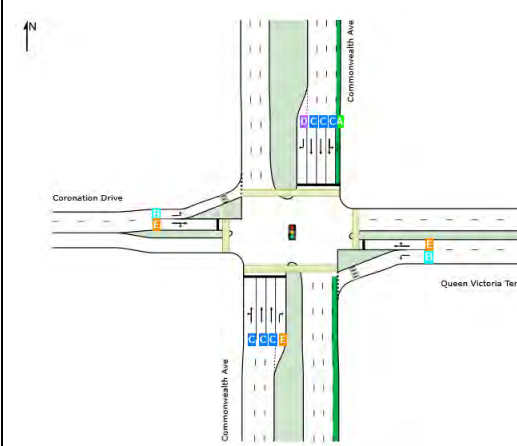
Due to the high volume of vehicles calculated for the Coronation Drive slip lane, it was decided that this lane should be excluded from the SIDRA model in order to maintain consistency in determining the net impact of development. It is unlikely and unrealistic that 1400-2000 vehicles utilise this slip lane during peak hours as displayed in the CSTM data. As this lane operates under give way control, it is unlikely to have an impact upon the signal co-ordination. It was determined that the lane be excluded from the SIDRA model and a volume of one (1) was assigned to it.

6.3 AM Peak Scenario

6.3.1 Commonwealth Avenue / Coronation Drive / Queen Victoria Terrace Intersection

Table 6-2 below summarises the results of the modelling of the Commonwealth Ave / Coronation Dr / Queen Victoria Terrace intersection in the AM Peak hour.

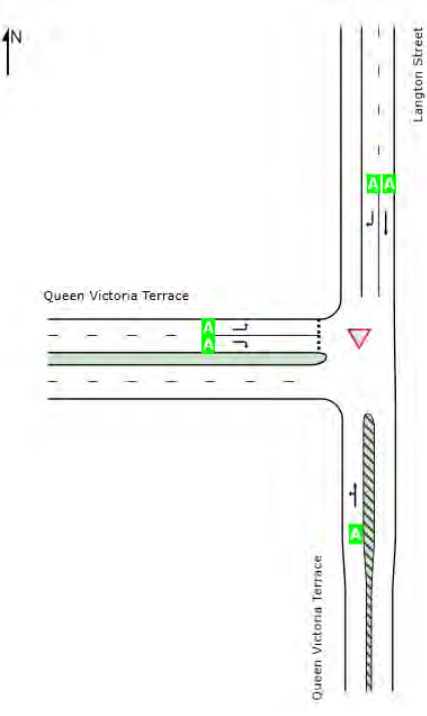
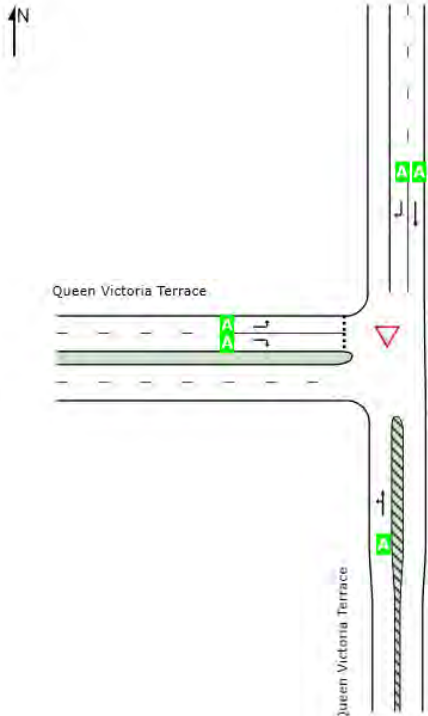
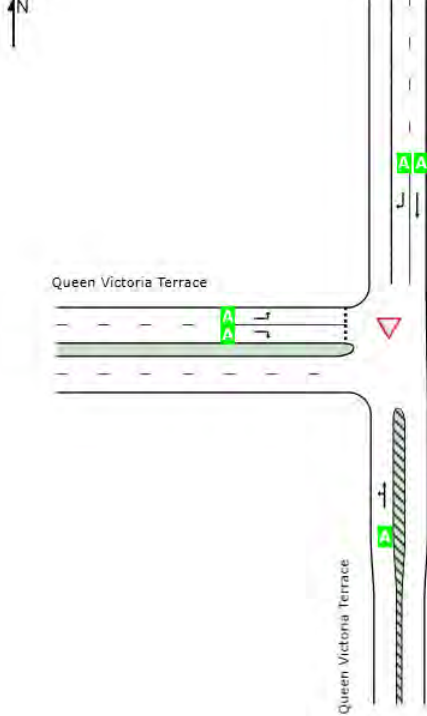
Table 6-2 Commonwealth Ave / Coronation Dr / Queen Victoria Terrace AM peak

Intersection	2021 Base	Operational Year Without Development	Operational Year With Development																																																												
Degree of Saturation	1.217	0.909	0.905																																																												
Average Delay (s)	131.8	33.0	36.0																																																												
95 th percentile Queue (m)	833.2	363.9	385.6																																																												
Extend to other intersection?	No	No	No																																																												
Cycle Time	138 seconds (Site User-Given Phase Times)	105 seconds (Network Practical Time)	105 seconds (Network Practical Time)																																																												
Phase Time	<table> <tr> <td>Phase</td><td>A</td><td>D</td><td>E</td></tr> <tr> <td>Phase Change Time (sec)</td><td>0</td><td>71</td><td>103</td></tr> <tr> <td>Green Time (sec)</td><td>64</td><td>25</td><td>28</td></tr> <tr> <td>Phase Time (sec)</td><td>71</td><td>32</td><td>35</td></tr> <tr> <td>Phase Split</td><td>51%</td><td>23%</td><td>25%</td></tr> </table>	Phase	A	D	E	Phase Change Time (sec)	0	71	103	Green Time (sec)	64	25	28	Phase Time (sec)	71	32	35	Phase Split	51%	23%	25%	<table> <tr> <td>Phase</td><td>A</td><td>D</td><td>E</td></tr> <tr> <td>Phase Change Time (sec)</td><td>0</td><td>65</td><td>78</td></tr> <tr> <td>Green Time (sec)</td><td>58</td><td>6</td><td>20</td></tr> <tr> <td>Phase Time (sec)</td><td>65</td><td>13</td><td>27</td></tr> <tr> <td>Phase Split</td><td>62%</td><td>12%</td><td>26%</td></tr> </table>	Phase	A	D	E	Phase Change Time (sec)	0	65	78	Green Time (sec)	58	6	20	Phase Time (sec)	65	13	27	Phase Split	62%	12%	26%	<table> <tr> <td>Phase</td><td>A</td><td>D</td><td>E</td></tr> <tr> <td>Phase Change Time (sec)</td><td>0</td><td>64</td><td>77</td></tr> <tr> <td>Green Time (sec)</td><td>57</td><td>6</td><td>21</td></tr> <tr> <td>Phase Time (sec)</td><td>64</td><td>13</td><td>28</td></tr> <tr> <td>Phase Split</td><td>61%</td><td>12%</td><td>27%</td></tr> </table>	Phase	A	D	E	Phase Change Time (sec)	0	64	77	Green Time (sec)	57	6	21	Phase Time (sec)	64	13	28	Phase Split	61%	12%	27%
Phase	A	D	E																																																												
Phase Change Time (sec)	0	71	103																																																												
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Phase Time (sec)	64	13	28																																																												
Phase Split	61%	12%	27%																																																												
Level of Service	LOS F	LOS C	LOS C																																																												
																																																															

6.3.2 Queen Victoria Terrace / Langton Street Intersection

Table 6-3 below summarises the results of the modelling of the Queen Victoria Terrace / Langton St intersection in the AM Peak hour.

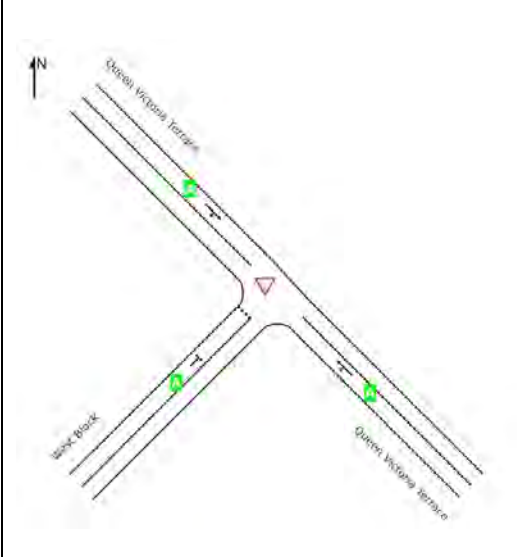
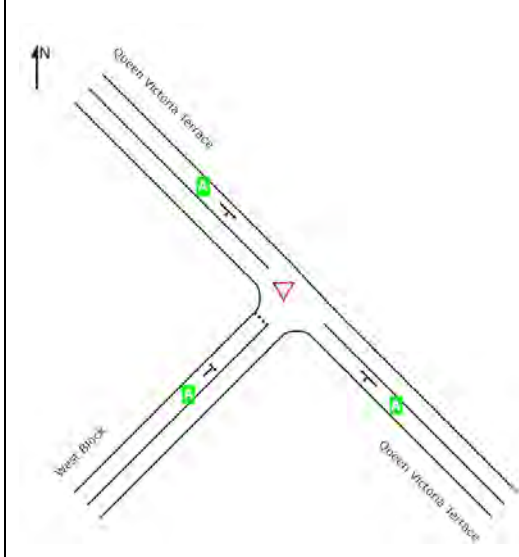
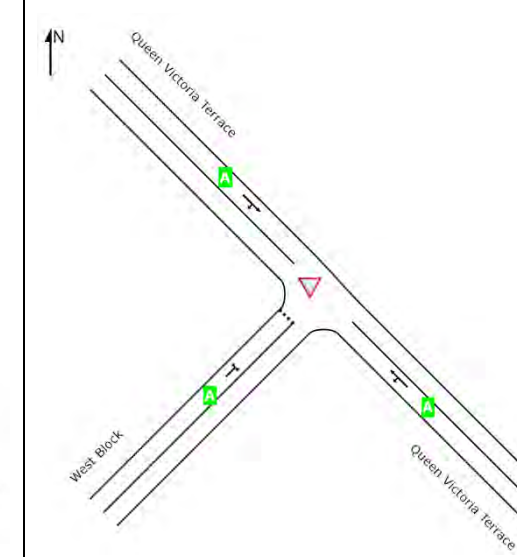
Table 6-3 Queen Victoria Terrace / Langton St AM peak

Intersection	2021 Base	Operational Year Without Development	Operational Year With Development
Degree of Saturation	0.269	0.270	0.277
Average Delay (s)	3.8	3.8	3.9
95 th percentile Queue (m)	9.2	8.0	8.2
Extend to other intersection?	No	No	No
Level of Service	LOS A	LOS A	LOS A
			

6.3.3 Queen Victoria Terrace / Development Entrance Intersection

Table 6-4 below summarises the results of the modelling of the Queen Victoria Terrace / Development Entrance intersection in the AM Peak hour.

Table 6-4 Queen Victoria Terrace / Development Entrance AM peak

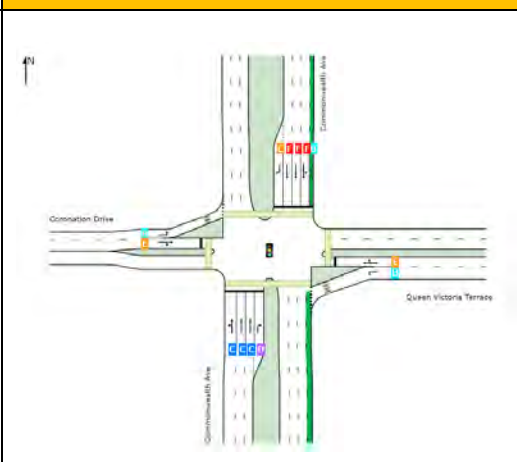
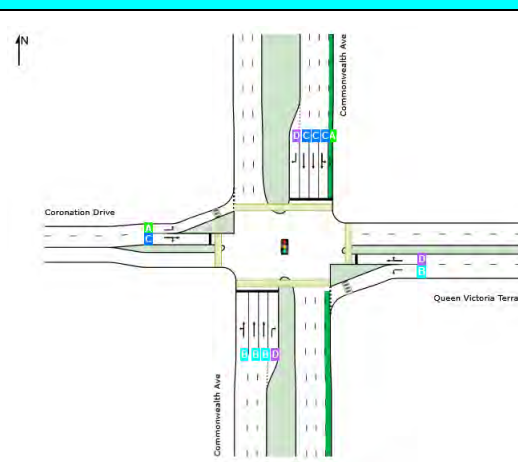
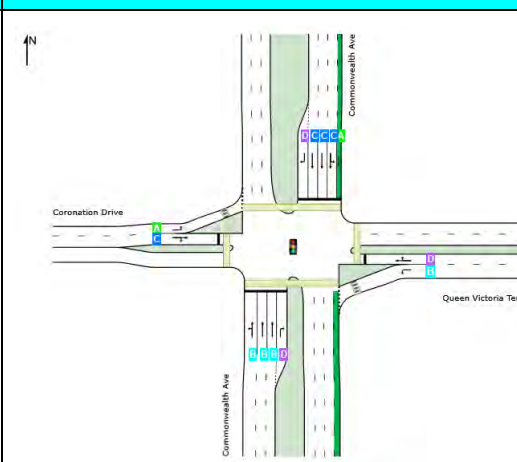
Intersection	2021 Base	Operational Year Without Development	Operational Year With Development
Degree of Saturation	0.157	0.157	0.164
Average Delay (s)	0.1	0.1	0.4
95 th percentile Queue (m)	0.1	0.1	0.5
Extend to other intersection?	No	No	No
Level of Service	LOS A	LOS A	LOS A
			

6.4 PM Peak Scenario

6.4.1 Commonwealth Avenue / Coronation Drive / Queen Victoria Terrace Intersection

Table 6-5 below summarises the results of the modelling of the Commonwealth Ave / Coronation Dr / Queen Victoria Terrace intersection in the PM Peak hour.

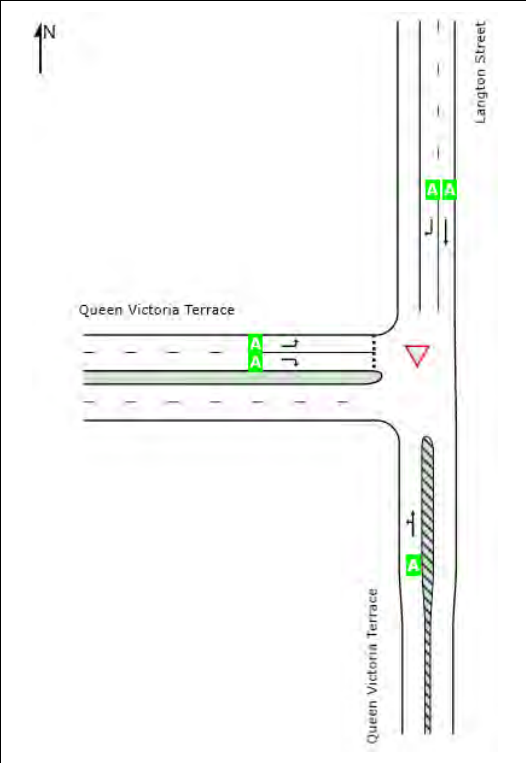
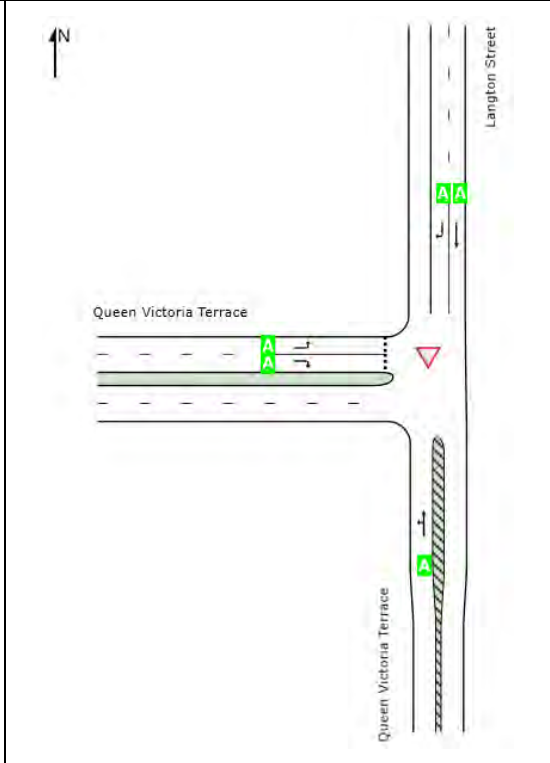
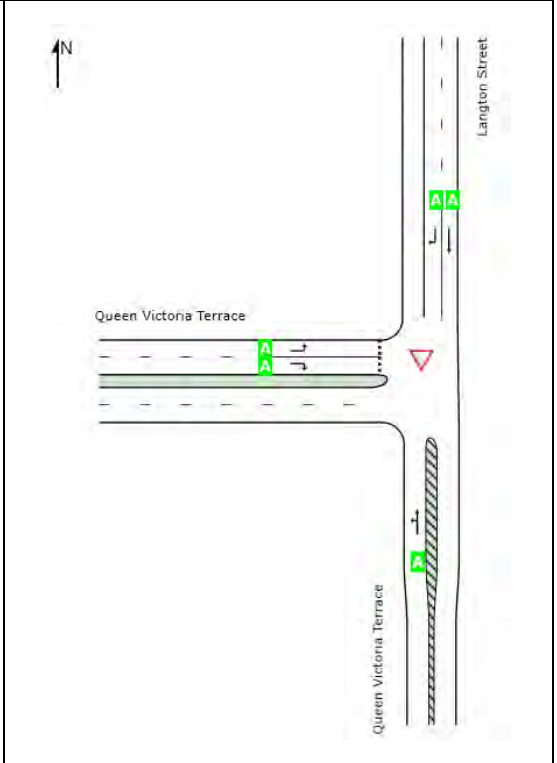
Table 6-5 Commonwealth Ave / Coronation Dr / Queen Victoria Terrace PM peak

Intersection	2021 Base	Operational Year Without Development	Operational Year With Development																																																												
Degree of Saturation	1.005	0.894	0.905																																																												
Average Delay (s)	65.8	25.9	27.6																																																												
95 th percentile Queue (m)	617.8	281.5	297.3																																																												
Extend to other intersection?	Yes (L2 East Approach)	Yes (L2 East Approach)	Yes (L2 East Approach)																																																												
Cycle Time	138 seconds (Site User-Given Phase Times)	80 seconds (Network Practical Cycle Time)	80 seconds (Network Practical Cycle Time)																																																												
Phase Time	<table> <tr> <td>Phase</td><td>A</td><td>D</td><td>E</td></tr> <tr> <td>Phase Change Time (sec)</td><td>0</td><td>71</td><td>103</td></tr> <tr> <td>Green Time (sec)</td><td>64</td><td>25</td><td>28</td></tr> <tr> <td>Phase Time (sec)</td><td>71</td><td>32</td><td>35</td></tr> <tr> <td>Phase Split</td><td>51%</td><td>23%</td><td>25%</td></tr> </table>	Phase	A	D	E	Phase Change Time (sec)	0	71	103	Green Time (sec)	64	25	28	Phase Time (sec)	71	32	35	Phase Split	51%	23%	25%	<table> <tr> <td>Phase</td><td>A</td><td>D</td><td>E</td></tr> <tr> <td>Phase Change Time (sec)</td><td>0</td><td>49</td><td>66</td></tr> <tr> <td>Green Time (sec)</td><td>42</td><td>10</td><td>7</td></tr> <tr> <td>Phase Time (sec)</td><td>49</td><td>17</td><td>14</td></tr> <tr> <td>Phase Split</td><td>61%</td><td>21%</td><td>18%</td></tr> </table>	Phase	A	D	E	Phase Change Time (sec)	0	49	66	Green Time (sec)	42	10	7	Phase Time (sec)	49	17	14	Phase Split	61%	21%	18%	<table> <tr> <td>Phase</td><td>A</td><td>D</td><td>E</td></tr> <tr> <td>Phase Change Time (sec)</td><td>0</td><td>49</td><td>66</td></tr> <tr> <td>Green Time (sec)</td><td>42</td><td>10</td><td>7</td></tr> <tr> <td>Phase Time (sec)</td><td>49</td><td>17</td><td>14</td></tr> <tr> <td>Phase Split</td><td>61%</td><td>21%</td><td>18%</td></tr> </table>	Phase	A	D	E	Phase Change Time (sec)	0	49	66	Green Time (sec)	42	10	7	Phase Time (sec)	49	17	14	Phase Split	61%	21%	18%
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Phase Change Time (sec)	0	49	66																																																												
Green Time (sec)	42	10	7																																																												
Phase Time (sec)	49	17	14																																																												
Phase Split	61%	21%	18%																																																												
Level of Service	LOS E	LOS B	LOS B																																																												
																																																															

6.4.2 Queen Victoria Terrace / Langton Street Intersection

Table 6-6 below summarises the results of the modelling of the Queen Victoria Terrace / Langton St intersection in the PM Peak hour.

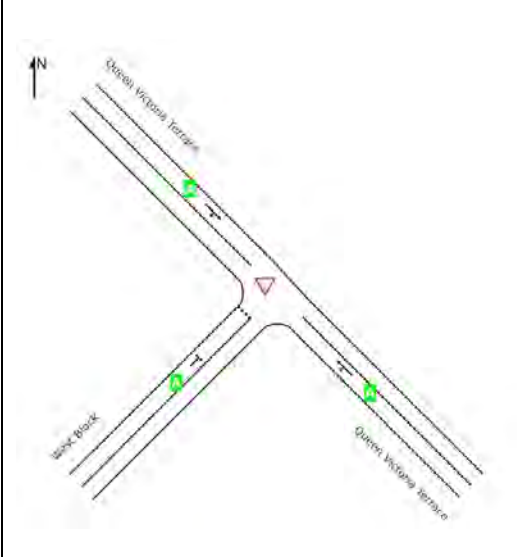
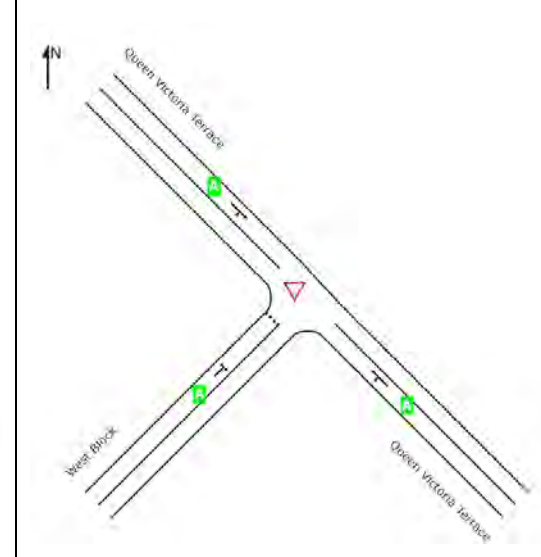
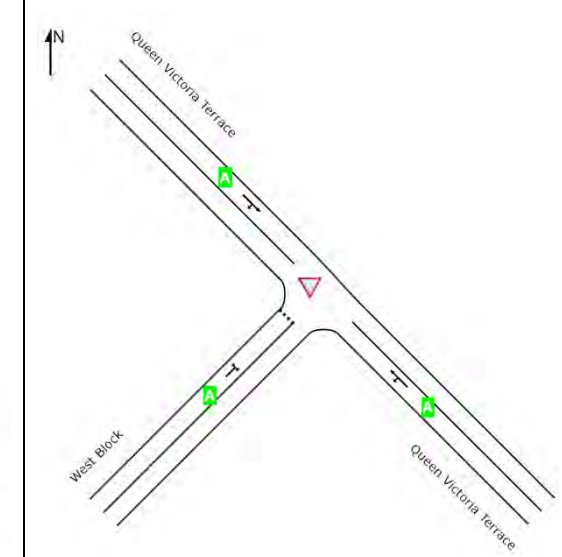
Table 6-6 Queen Victoria Terrace / Langton St PM peak

Intersection	2021 Base	Operational Year Without Development	Operational Year With Development
Degree of Saturation	0.078	0.079	0.081
Average Delay (s)	4.3	4.3	4.2
95 th percentile Queue (m)	1.4	1.4	1.8
Extend to other intersection?	No	No	No
Level of Service	LOS A	LOS A	LOS A
			

6.4.3 Queen Victoria Terrace / Development Entrance Intersection

Table 6-7 below summarises the results of the modelling of the Queen Victoria Terrace / Development Entrance intersection in the PM Peak hour.

Table 6-7 Queen Victoria Terrace / Development Entrance PM peak

Intersection	2021 Base	Operational Year Without Development	Operational Year With Development
Degree of Saturation	0.077	0.078	0.093
Average Delay (s)	0.1	0.1	1.4
95 th percentile Queue (m)	0.1	0.1	1.4
Extend to other intersection?	No	No	No
Level of Service	LOS A	LOS A	LOS A
			

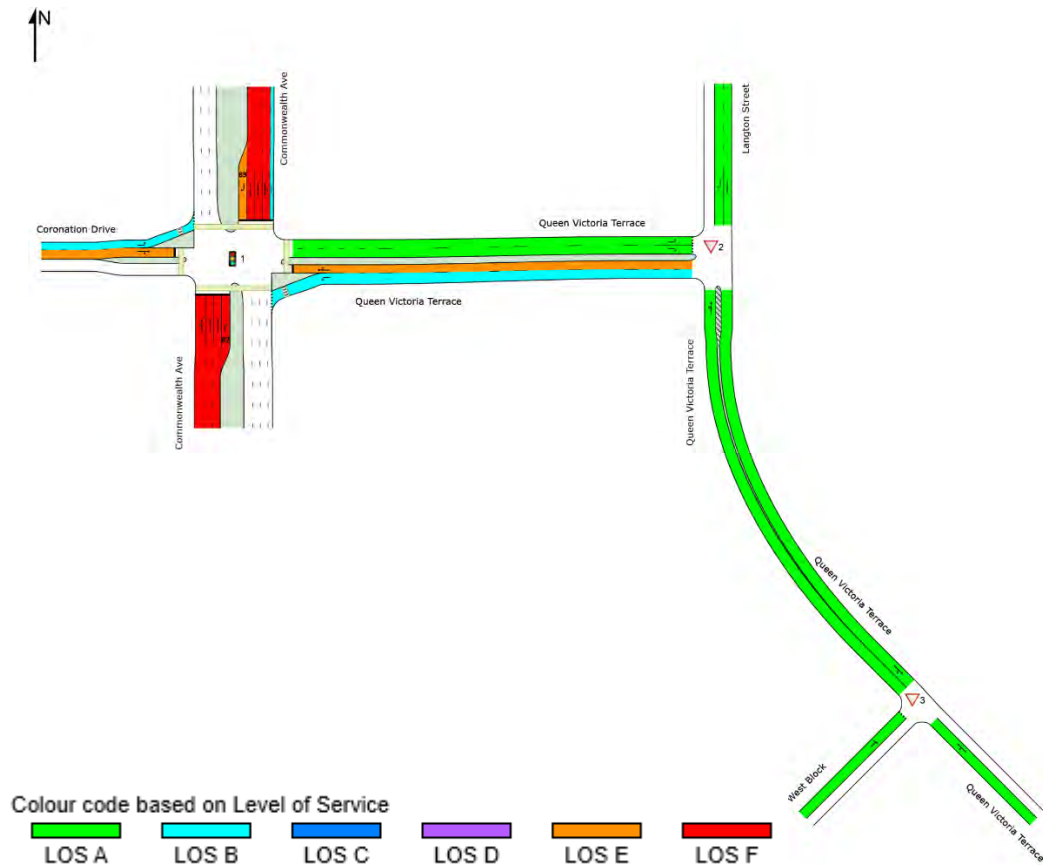
7 Traffic Network Operation

In addition to **Section 6** above, the following section provides a network wide visual representation of the level of service, queue distance and network summary modelling during each scenario.

7.1 2021 Base Scenario

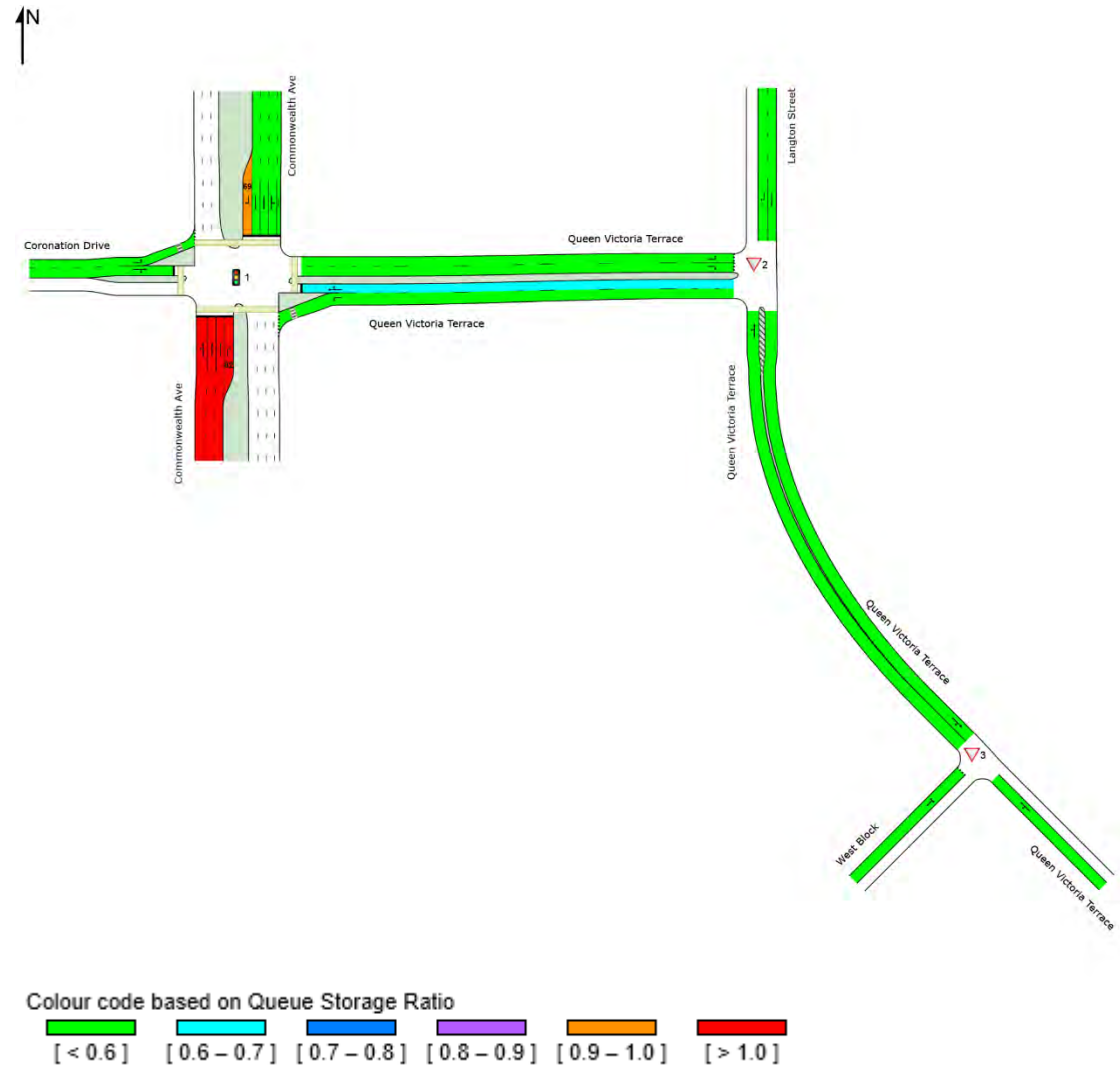
7.1.1 2021 AM 'Base' Scenario

Figure 7-1 2021 AM 'Base' Level of Service (LOS)



7.1.2 2021 AM 'Base' Queue Length (95th Percentile)

Figure 7-2 2021 AM 'Base' Queue Length (95th Percentile)



7.1.3 2021 PM 'Base' Scenario

Figure 7-3 2021 PM 'Base' Level of Service (LOS)

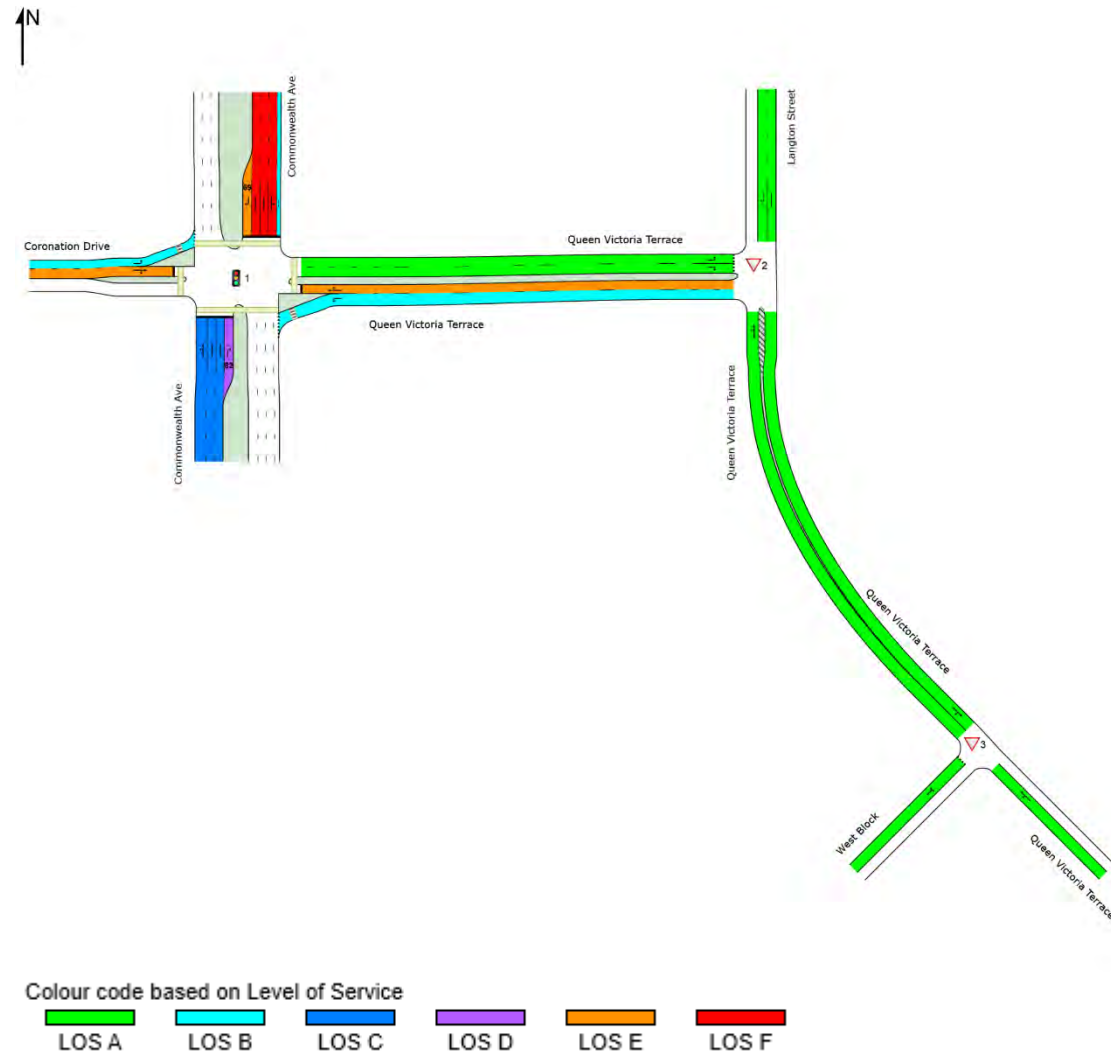
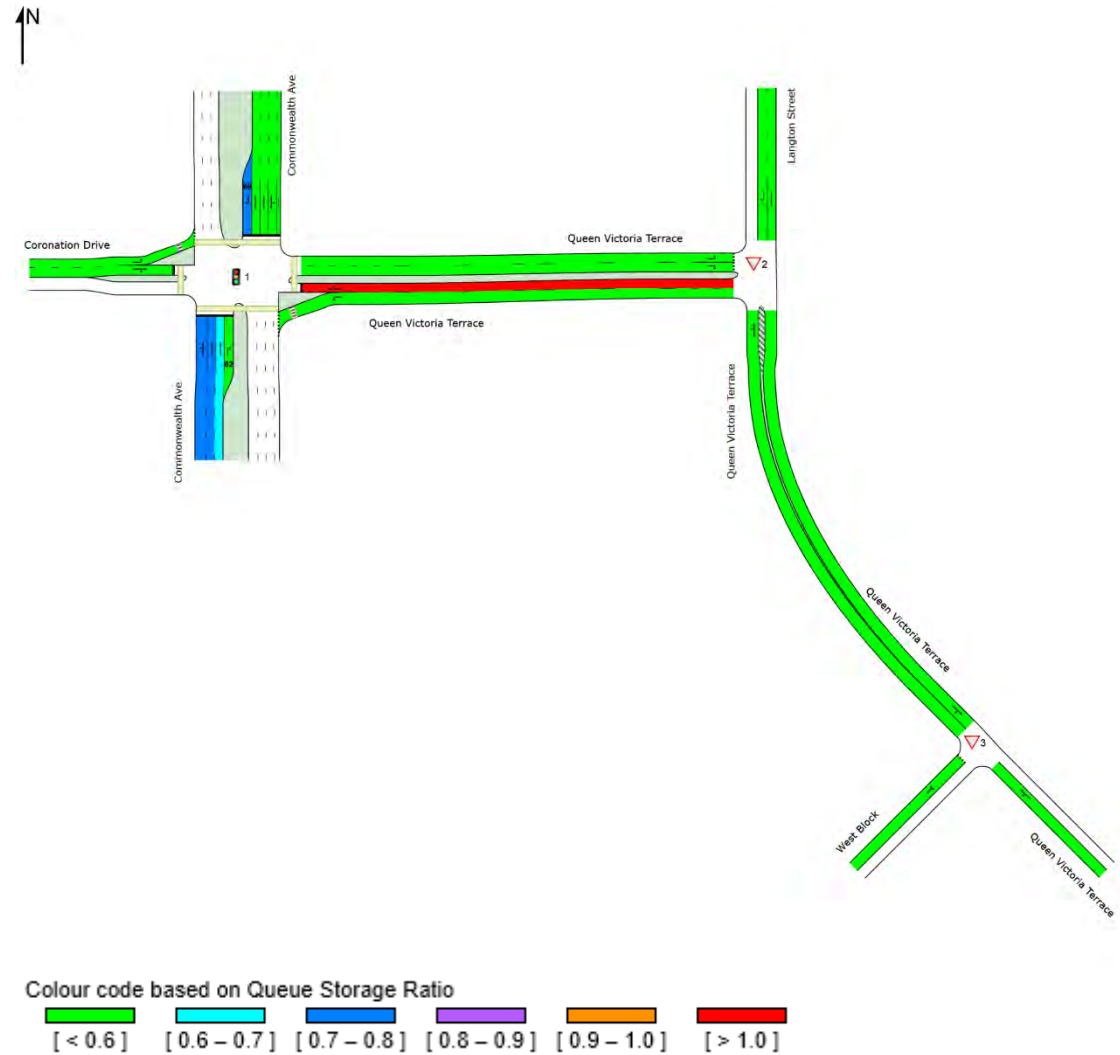


Figure 7-4 2021 PM 'Base' Queue Length (95th Percentile)



7.2.1 Operational Year AM 'Without Development' Scenario

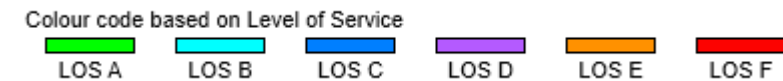
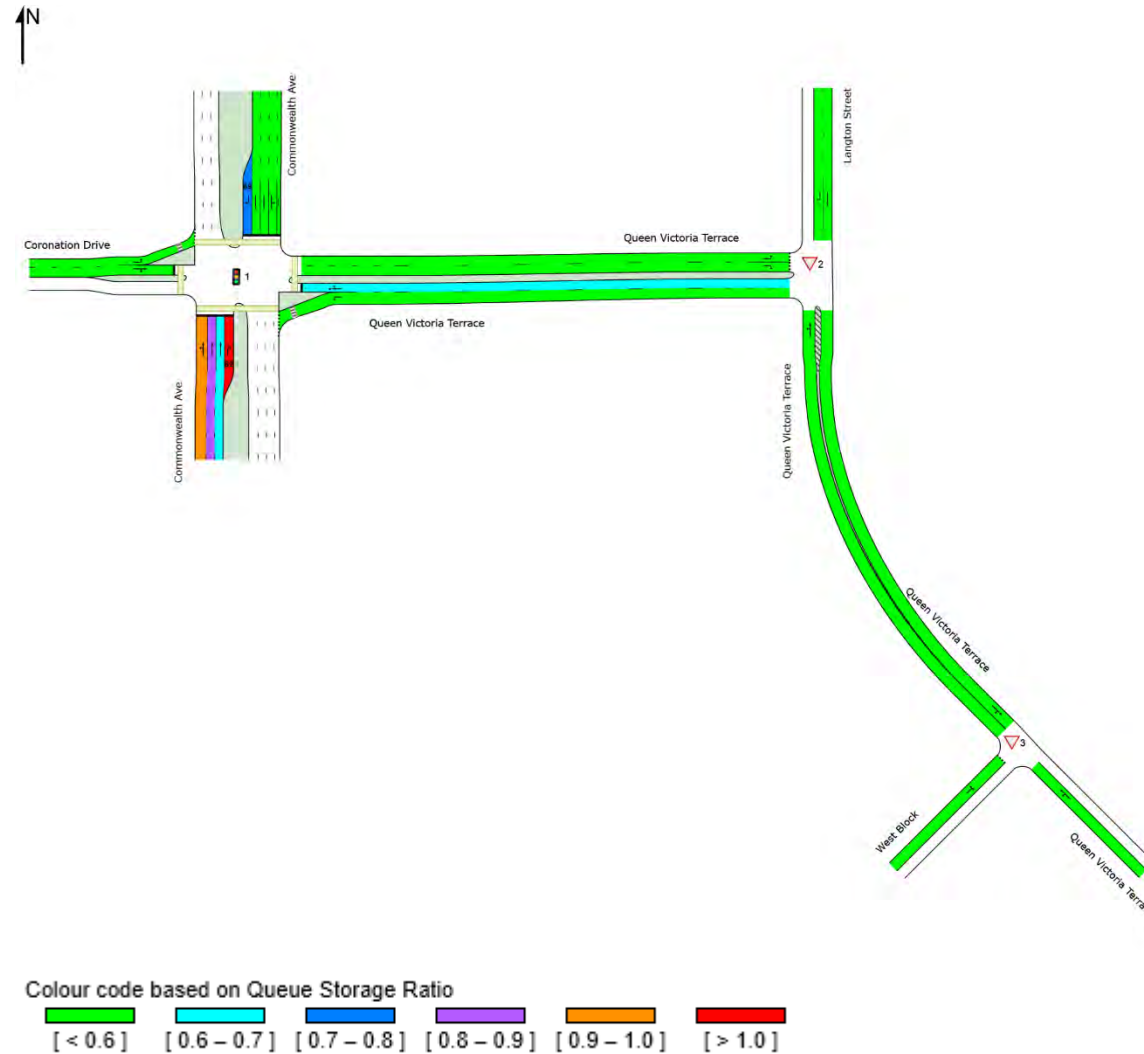


Figure 7-6 Operational Year AM 'Without Development' Queue Length (95th Percentile)



7.2.2 Operational Year PM 'Without Development' Scenario

Figure 7-7 Operational Year PM 'Without Development' Level of Service (LOS)

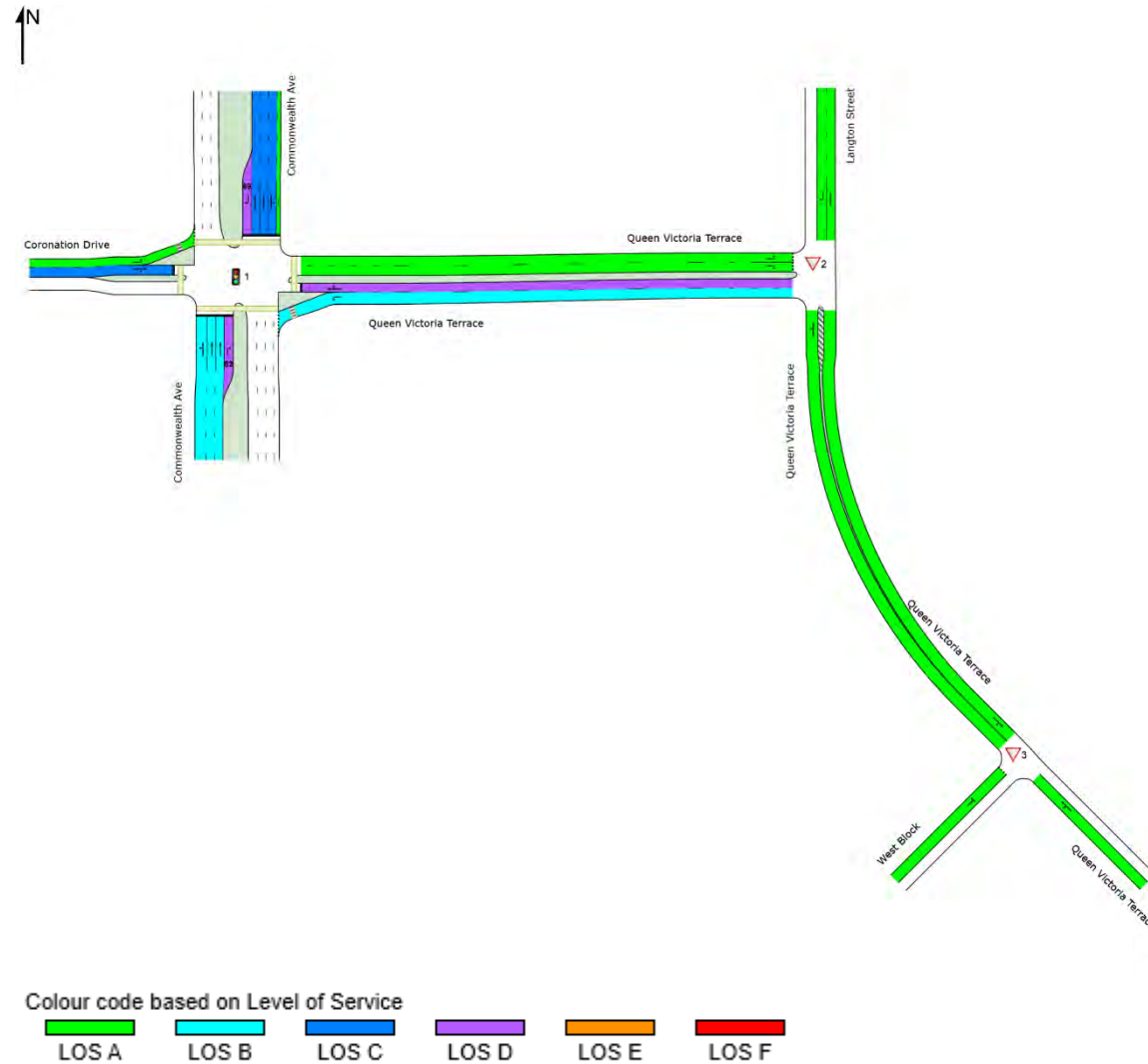


Figure 7-8 Operational Year PM 'Without Development' Queue Length (95th Percentile)



7.3 Operational Year 'With West Block Development' Scenario

7.3.1 Operational Year AM 'With Development' Scenario

Figure 7-9 Operational Year AM 'With Development' Level of Service (LOS)

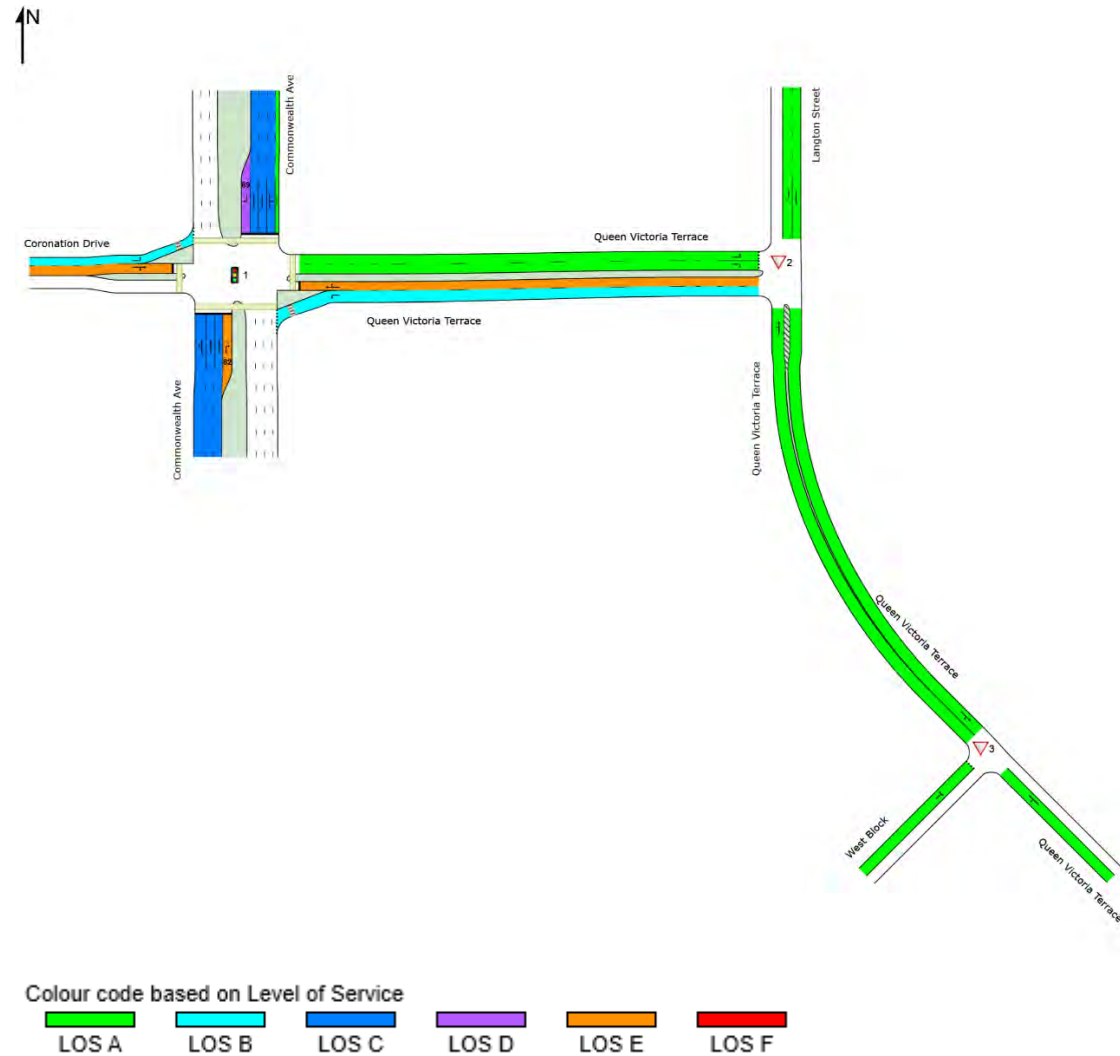
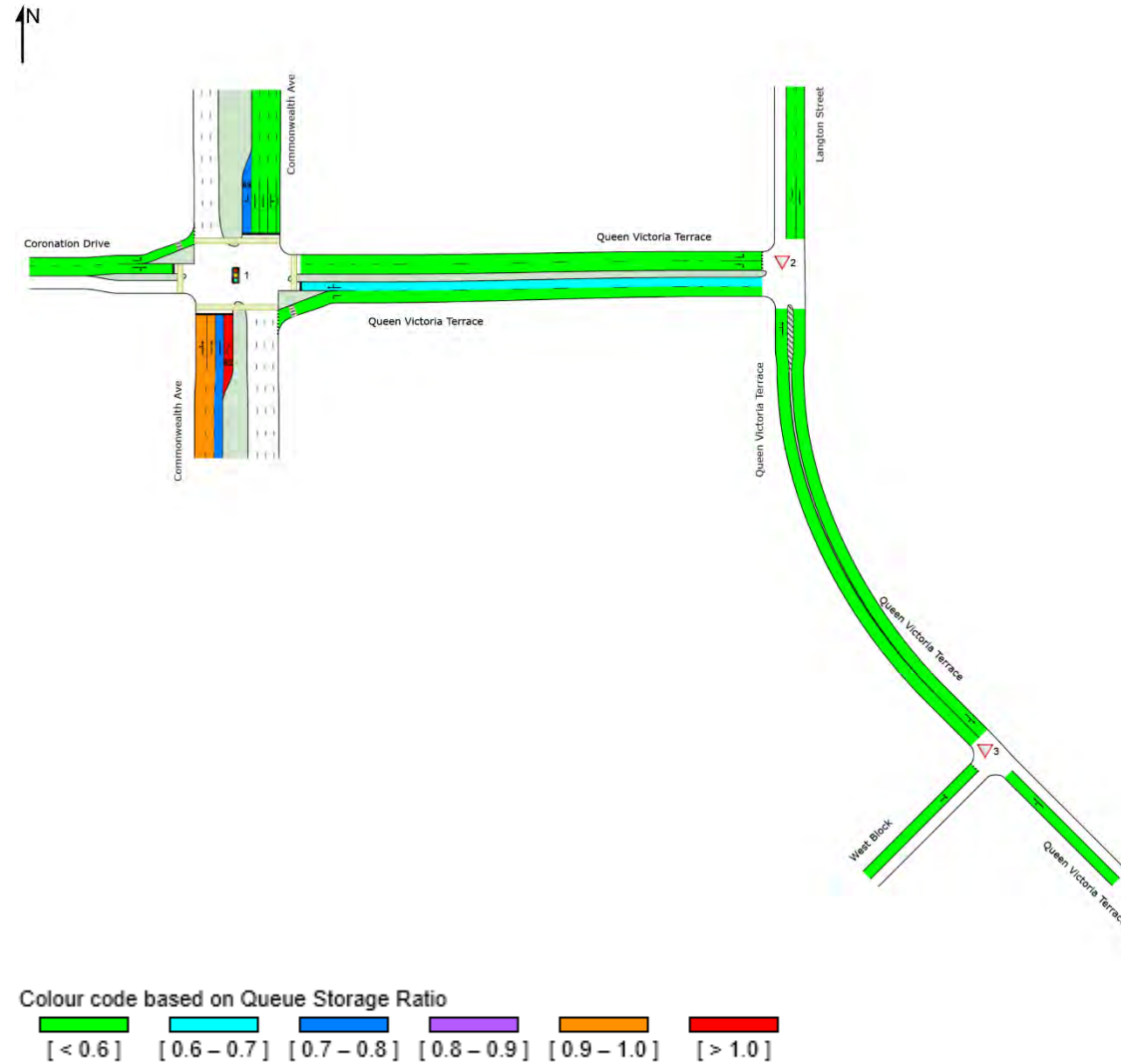


Figure 7-10 Operational Year AM 'With Development' Queue Length (95th Percentile)



7.3.2 Operational Year PM 'With Development' Scenario

Figure 7-11 Operational Year PM 'With Development' Level of Service (LOS)

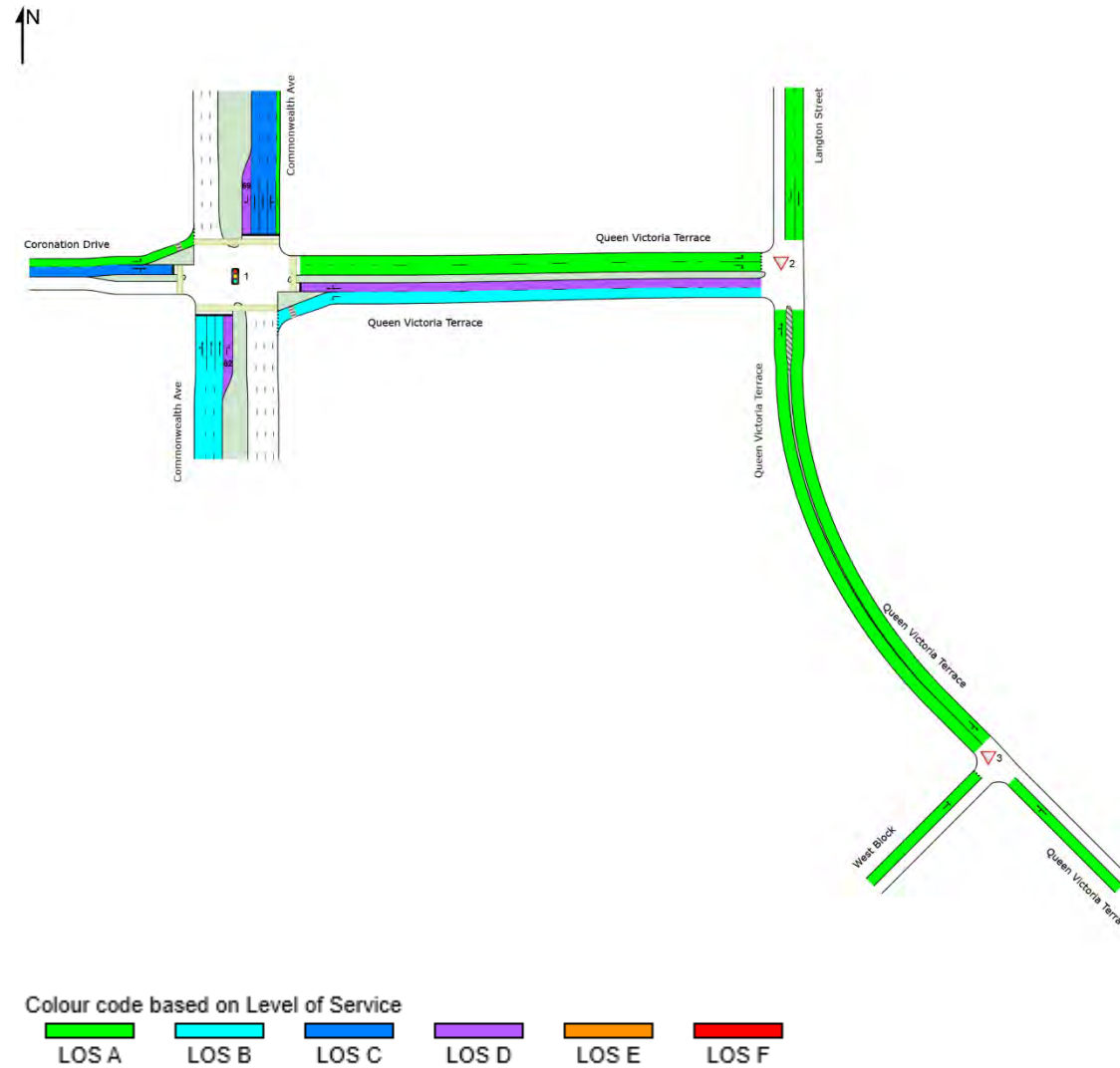


Figure 7-12 Operational Year PM 'With Development' Queue Length (95th Percentile)



8 Summary and Recommendations

An assessment of the Commonwealth Ave / Coronation Dr / Queen Victoria Terrace Intersection was undertaken to determine the impact of the proposed West Block Hotel development on the intersection.

As discussed in **Section 7-1** above, for signalised intersections, the Average Delay and Level of Service for the intersection should be taken to consider satisfactory intersection performance.

Table 8-1 AM Peak Hour Level of Service Summary

Intersection	Leg	2021 Existing	2024 Operational Year 'Do Nothing'	2024 Operational Year 'With Development'
Commonwealth Ave / Coronation Dr / Queen Victoria Terrace	South	LOS F	LOS C	LOS C
	East	LOS D	LOS E	LOS E
	North	LOS F	LOS B	LOS C
	West	LOS E	LOS E	LOS E
	Intersection	LOS F	LOS C	LOS C
Queen Victoria Terrace / Coronation Dr	South	LOS A	LOS A	LOS A
	North	LOS A	LOS A	LOS A
	West	LOS A	LOS A	LOS A
	Intersection	LOS A	LOS A	LOS A
Queen Victoria Terrace / Development Access	Southeast	LOS A	LOS A	LOS A
	Northwest	LOS A	LOS A	LOS A
	Southwest	LOS A	LOS A	LOS A
	Intersection	LOS A	LOS A	LOS A

Table 8-1 above highlights the Level of Service (LOS) changes across the analysed intersection legs as a result of the proposed development. All legs see no changes except the northern approach of the Commonwealth Ave / Coronation Dr / Queen Victoria Terrace Intersection, which decreases from LOS B to LOS C.

It is worth noting that a 120 second practical cycle time was adopted during the modelling of both 'with' and 'without' development operational years. This cycle setting was adopted to emphasise the net impact upon the network, in particular the major directional flow of Commonwealth Ave / Coronation Dr / Queen Victoria Terrace Intersection. Adopting a 130 second cycle time distorts this analysis through major prioritising the direction traffic flow phase time. The percentage increase in vehicle trips across the Commonwealth Ave / Coronation Dr / Queen Victoria Terrace Intersection major flow directions is negligible for the PM peak hour period.

Table 8-2 PM Peak Hour Level of Service Summary

Intersection	Leg	2021 Existing	2024 Operational Year 'Do Nothing'	2024 Operational Year 'With Development'
Commonwealth Ave / Coronation Dr / Queen Victoria Terrace	South	LOS C	LOS B	LOS B
	East	LOS E	LOS D	LOS D
	North	LOS F	LOS C	LOS C
	West	LOS D	LOS C	LOS C
	Intersection	LOS E	LOS B	LOS B
Queen Victoria Terrace / Coronation Dr	South	LOS A	LOS A	LOS A
	North	LOS A	LOS A	LOS A
	West	LOS A	LOS A	LOS A
	Intersection	LOS A	LOS A	LOS A
Queen Victoria Terrace / Development Access	Southeast	LOS A	LOS A	LOS A
	Northwest	LOS A	LOS A	LOS A
	Southwest	LOS A	LOS A	LOS A
	Intersection	LOS A	LOS A	LOS A

Table 8-2 above highlights that the level of service does not change across all analysed intersection legs with the proposed development.

It is worth noting that an 80 second practical cycle time was adopted during the modelling of both 'with' and 'without' development operational years. This cycle setting was adopted to emphasise the net impact upon the network, in particular the major directional flow of Commonwealth Ave / Coronation Dr / Queen Victoria Terrace Intersection. Adopting a 130 second cycle time distorts this analysis through major prioritising the direction traffic flow phase time. The percentage increase in vehicle trips across the Commonwealth Ave / Coronation Dr / Queen Victoria Terrace Intersection major flow directions is negligible for the PM peak hour period.

APPENDIX

A

SIDRA OUTPUTS

Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)] Network: 1 [2021 AM Peak (Network Folder: 2021)]

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Commonwealth Ave											
P3	Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	241.5	231.7	0.96
East: Queen Victoria Terrace											
P2	Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	228.7	215.0	0.94
North: Commonwealth Ave											
P4	Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	242.5	233.0	0.96
West: Coronation Drive											

P1 Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	226.9	212.7	0.94
All Pedestrians	211	63.3	LOS F	0.2	0.2	0.96	0.96	234.9	223.1	0.95

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

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

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

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Project: N:\Projects\505\FY21\079_WestBlock Hotel, Parkes - TIA\Design\SIDRA\Design Optimum.sip9

LANE SUMMARY

 Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)]

 Network: 1 [2021 AM Peak (Network Folder: 2021)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]	veh/h	v/c	%	sec		[Veh	Dist]		m	%	%
South: Commonwealth Ave															
Lane 1	983	4.0	983	4.0	913	1.076	100	140.1	LOS F	115.1	833.2	Full	390	0.0	75.7
Lane 2	938	4.0	938	4.0	872	1.076	100	141.2	LOS F	110.5	799.7	Full	390	0.0	71.7
Lane 3	709	4.0	709	4.0	659 ¹	1.076	100	147.6	LOS F	85.5	619.2	Full	390	0.0	47.4
Lane 4	393	3.0	393	3.0	323 ¹	1.217	100	274.3	LOS F	60.0	431.1	Short	82	0.0	NA
Approach	3023	3.9	3023	3.9		1.217		159.6	LOS F	115.1	833.2				
East: Queen Victoria Terrace															
Lane 1	1	3.0	1	3.0	670	0.002	100	23.2	LOS B	0.0	0.3	Full	43	0.0	0.0
Lane 2	67	3.0	67	3.0	272	0.248	100	56.6	LOS E	3.9	28.3	Full	43	0.0	0.0
Approach	68	3.0	68	3.0		0.248		56.0	LOS D	3.9	28.3				
North: Commonwealth Ave															
Lane 1	25	0.0	25	0.0	2873	0.009	100	20.4	LOS B	0.9	2.3	Full	1270	0.0	0.0
Lane 2	887	4.0	887	4.0	862	1.028	100	108.0	LOS F	92.3	668.3	Full	1270	0.0	0.0
Lane 3	891	4.1	891	4.1	867	1.028	100	107.1	LOS F	92.7	672.0	Full	1270	0.0	0.0
Lane 4	786	4.1	786	4.1	765 ¹	1.028	100	110.3	LOS F	83.0	601.4	Full	1270	0.0	0.0
Lane 5	151	3.0	151	3.0	367	0.410	100	58.3	LOS E	8.9	63.7	Short	69	0.0	NA
Approach	2739	4.0	2739	4.0		1.028		104.8	LOS F	92.7	672.0				
West: Coronation Drive															
Lane 1	1	3.0	1	3.0	673	0.002	100	24.9	LOS B	0.0	0.3	Full	125	0.0	0.0
Lane 2	73	3.0	73	3.0	275	0.264	100	58.4	LOS E	4.3	30.6	Full	125	0.0	0.0
Approach	74	3.0	74	3.0		0.264		57.9	LOS E	4.3	30.6				
Intersection	5904	3.9	5904	3.9		1.217		131.8	LOS F	115.1	833.2				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- ¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Approach Lane Flows (veh/h)										
South: Commonwealth Ave										
Mov.	L2	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From S To Exit:	W	N	E			Cap. veh/h	v/c	%	%	
Lane 1	1	982	-	983	4.0	913	1.076	100	NA	NA
Lane 2	-	938	-	938	4.0	872	1.076	100	NA	NA
Lane 3	-	709	-	709	4.0	659 ¹	1.076	100	NA	NA
Lane 4	-	-	393	393	3.0	323 ¹	1.217	100	100.0	3

Approach	1	2629	393	3023	3.9		1.217				
East: Queen Victoria Terrace											
Mov. From E To Exit:	L2	T1	R2	Total	%HV		Deg. Satn v/c	Lane Util.	Prob. SL Ov. %	Ov. Lane No.	
	S	W	N								
Lane 1	1	-	-	1	3.0	670	0.002	100	NA	NA	
Lane 2	-	1	66	67	3.0	272	0.248	100	NA	NA	
Approach	1	1	66	68	3.0		0.248				
North: Commonwealth Ave											
Mov. From N To Exit:	L2	T1	R2	Total	%HV		Deg. Satn v/c	Lane Util.	Prob. SL Ov. %	Ov. Lane No.	
	E	S	W								
Lane 1	-	25	-	25	0.0	2873	0.009	100	NA	NA	
Lane 2	102	784	-	887	4.0	862	1.028	100	NA	NA	
Lane 3	-	891	-	891	4.1	867	1.028	100	NA	NA	
Lane 4	-	786	-	786	4.1	765 ¹	1.028	100	NA	NA	
Lane 5	-	-	151	151	3.0	367	0.410	100	0.0	4	
Approach	102	2486	151	2739	4.0		1.028				
West: Coronation Drive											
Mov. From W To Exit:	L2	T1	R2	Total	%HV		Deg. Satn v/c	Lane Util.	Prob. SL Ov. %	Ov. Lane No.	
	N	E	S								
Lane 1	1	-	-	1	3.0	673	0.002	100	NA	NA	
Lane 2	-	3	69	73	3.0	275	0.264	100	NA	NA	
Approach	1	3	69	74	3.0		0.264				
Total %HV Deg.Satn (v/c)											
Intersection	5904	3.9		1.217							

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Commonwealth Ave Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
Full Length Lane	3	Merge Analysis not applied.									
Full Length Lane	4	Merge Analysis not applied.									
East Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
North Exit: Commonwealth Ave Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
Full Length Lane	3	Merge Analysis not applied.									
West Exit: Coronation Drive Merge Type: Not Applied											

Full Length Lane	1	Merge Analysis not applied.
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PHASING SUMMARY

Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)]

Network: 1 [2021 AM Peak (Network Folder: 2021)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 22

Reference Phase: Phase A

Input Phase Sequence: A, D, E

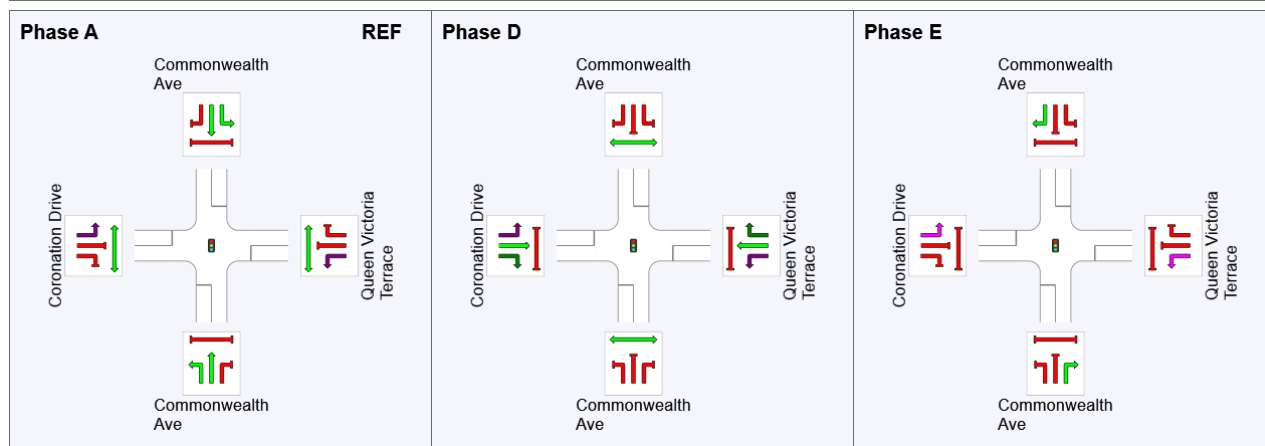
Output Phase Sequence: A, D, E

Phase Timing Summary

Phase	A	D	E
Phase Change Time (sec)	0	71	103
Green Time (sec)	64	25	28
Phase Time (sec)	71	32	35
Phase Split	51%	23%	25%

See the Timing Analysis 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, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase

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

LANE LEVEL OF SERVICE

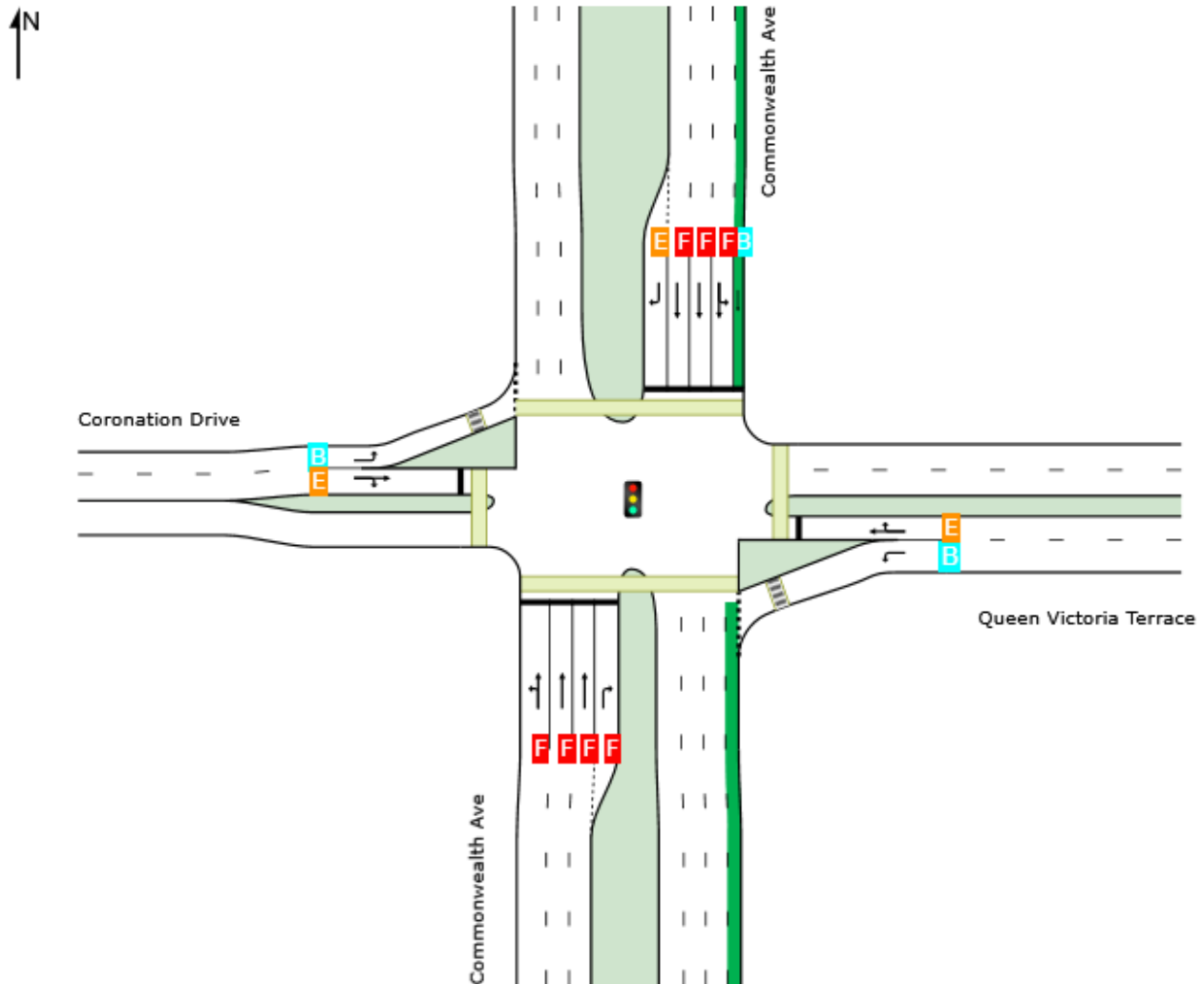
Lane Level of Service

 **Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)]**

 **Network: 1 [2021 AM Peak (Network Folder: 2021)]**

New Site
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

	Approaches				Intersection
	South	East	North	West	
LOS	F	D	F	E	F



Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 2 [AM - Queen Victoria / Langton (Site Folder: Base Year Scenario)] Network: 1 [2021 AM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Queen Victoria Terrace														
1	L2	62	3.0	62	3.0	0.038	4.2	LOS A	0.0	0.0	0.00	0.50	0.00	32.2
2	T1	7	100.0	7	100.0	0.038	0.0	LOS A	0.0	0.0	0.00	0.50	0.00	44.1
Approach		69	13.3	69	13.3	0.038	3.7	NA	0.0	0.0	0.00	0.50	0.00	34.3
North: Langton Street														
8	T1	6	100.0	6	100.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	7	3.0	7	3.0	0.004	5.7	LOS A	0.0	0.1	0.17	0.53	0.17	31.6
Approach		14	47.8	14	47.8	0.005	3.1	NA	0.0	0.1	0.09	0.28	0.09	40.5
West: Queen Victoria Terrace														
10	L2	195	0.0	167	0.0	0.103	3.7	LOS A	0.4	2.6	0.04	0.53	0.04	36.0
12	R2	303	0.0	260	0.0	0.231	4.0	LOS A	0.9	6.5	0.13	0.53	0.13	28.0
Approach		498	0.0	427 ^{N1}	0.0	0.231	3.9	LOS A	0.9	6.5	0.09	0.53	0.09	32.6
All Vehicles		581	2.7	510 ^{N1}	3.1	0.231	3.8	NA	0.9	6.5	0.08	0.52	0.08	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.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

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

LANE SUMMARY

Site: 2 [AM - Queen Victoria / Langton (Site Folder: Base Year Scenario)] Network: 1 [2021 AM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]	veh/h	v/c	%	sec		[Veh	m		m	%	%
South: Queen Victoria Terrace															
Lane 1	69	13.3	69	13.3	1809	0.038	100	3.7	LOS A	0.0	0.0	Full	56	0.0	0.0
Approach	69	13.3	69	13.3		0.038		3.7	NA	0.0	0.0				
North: Langton Street															
Lane 1	6	100.0	6	100.0	1170	0.005	100	0.0	LOS A	0.0	0.0	Full	100	0.0	0.0
Lane 2	7	3.0	7	3.0	1663	0.004	100	5.7	LOS A	0.0	0.1	Full	100	0.0	0.0
Approach	14	47.8	14	47.8		0.005		3.1	NA	0.0	0.1				
West: Queen Victoria Terrace															
Lane 1	195	0.0	167	0.0	1622	0.103	100	3.7	LOS A	0.4	2.6	Full	43	0.0	0.0
Lane 2	303	0.0	260	0.0	1126	0.231	100	4.0	LOS A	0.9	6.5	Full	43	0.0	0.0
Approach	498	0.0	427 ^{N1}	0.0		0.231		3.9	LOS A	0.9	6.5				
Intersection	581	2.7	510 ^{N1}	3.1		0.231		3.8	NA	0.9	6.5				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

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

Approach Lane Flows (veh/h)										
South: Queen Victoria Terrace										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	
From S					Cap.	v/c	%	%	Lane	
To Exit:	W	N			veh/h				No.	
Lane 1	62	7	69	13.3	1809	0.038	100	NA	NA	
Approach	62	7	69	13.3		0.038				
North: Langton Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	
From N					Cap.	v/c	%	%	Lane	
To Exit:	S	W			veh/h				No.	
Lane 1	6	-	6	100.0	1170	0.005	100	NA	NA	
Lane 2	-	7	7	3.0	1663	0.004	100	NA	NA	
Approach	6	7	14	47.8		0.005				
West: Queen Victoria Terrace										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	
From W					Cap.	v/c	%	%	Lane	
To Exit:	N	S			veh/h				No.	
Lane 1	167	-	167	0.0	1622	0.103	100	NA	NA	

Lane 2	-	260	260	0.0	1126	0.231	100	NA	NA
Approach	167	260	427	0.0		0.231			
Total %HV Deg.Satn (v/c)									
Intersection	510	3.1		0.231					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
South Exit: Queen Victoria Terrace												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Langton Street												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
West Exit: Queen Victoria Terrace												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										

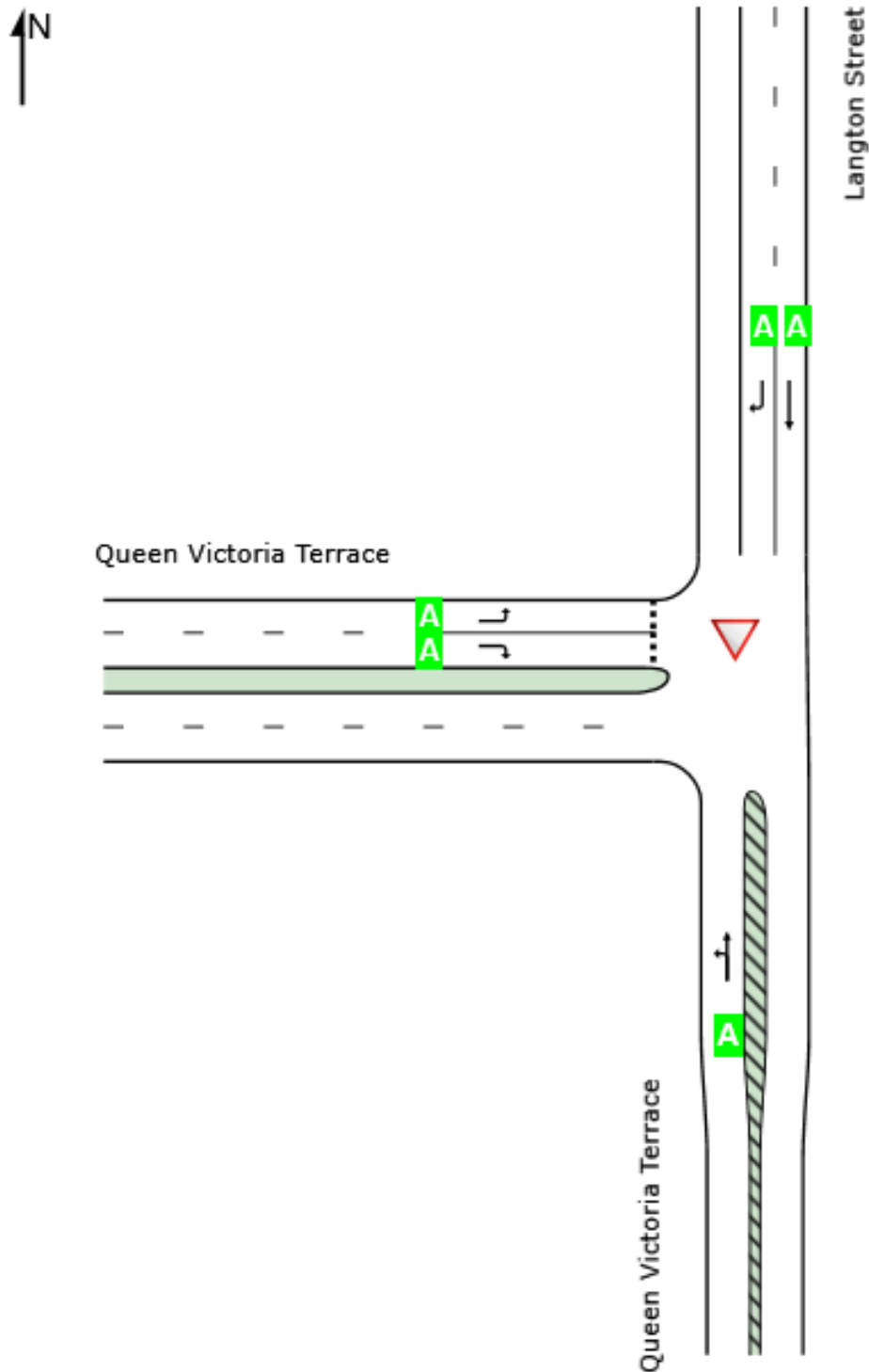
LANE LEVEL OF SERVICE

Lane Level of Service

 Site: 2 [AM - Queen Victoria / Langton (Site Folder: Base Year Scenario)]  Network: 1 [2021 AM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	South	North	West	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 3 [AM - Queen Victoria / Development (Site Folder: Base Year Scenario)] Network: 1 [2021 AM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist m				km/h
SouthEast: Queen Victoria Terrace														
4	L2	1	0.0	1	0.0	0.035	4.7	LOS A	0.0	0.0	0.00	0.01	0.00	34.2
5	T1	62	14.8	62	14.8	0.035	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	58.9
Approach		63	14.6	63	14.6	0.035	0.1	NA	0.0	0.0	0.00	0.01	0.00	57.8
NorthWest: Queen Victoria Terrace														
11	T1	309	2.0	267	2.4	0.135	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	1	0.0	1	0.0	0.135	4.4	LOS A	0.0	0.0	0.00	0.00	0.00	30.2
Approach		311	2.0	267 ^{N1}	2.4	0.135	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.7
SouthWest: West Block														
1	L2	1	0.0	1	0.0	0.002	3.8	LOS A	0.0	0.0	0.16	0.50	0.16	24.8
3	R2	1	0.0	1	0.0	0.002	4.8	LOS A	0.0	0.0	0.16	0.50	0.16	29.8
Approach		2	0.0	2	0.0	0.002	4.3	LOS A	0.0	0.0	0.16	0.50	0.16	28.1
All Vehicles		376	4.1	333 ^{N1}	4.7	0.135	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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

▼ Site: 3 [AM - Queen Victoria / Development (Site Folder: Base Year Scenario)] ■■ Network: 1 [2021 AM Peak (Network Folder: 2021)]

Lane Use and Performance																
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total	HV]	[Total	HV]						[Veh						Dist]
	veh/h	%	veh/h	%						veh/h	v/c					%
SouthEast: Queen Victoria Terrace																
Lane 1	63	14.6	63	14.6	1826	0.035	100	0.1	LOS A	0.0	0.0	Full	70	0.0	0.0	
Approach	63	14.6	63	14.6		0.035		0.1	NA	0.0	0.0					
NorthWest: Queen Victoria Terrace																
Lane 1	311	2.0	267	2.4	1976	0.135	100	0.0	LOS A	0.0	0.0	Full	56	0.0	0.0	
Approach	311	2.0	267 ^{N1}	2.4		0.135		0.0	NA	0.0	0.0					
SouthWest: West Block																
Lane 1	2	0.0	2	0.0	1175	0.002	100	4.3	LOS A	0.0	0.0	Full	45	0.0	0.0	
Approach	2	0.0	2	0.0		0.002		4.3	LOS A	0.0	0.0					
Intersection	376	4.1	333 ^{N1}	4.7		0.135		0.1	NA	0.0	0.0					

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

Approach Lane Flows (veh/h)									
SouthEast: Queen Victoria Terrace									
Mov. From SE To Exit:	L2 SW	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	62	63	14.6	1826	0.035	100	NA	NA
Approach	1	62	63	14.6		0.035			
NorthWest: Queen Victoria Terrace									
Mov. From NW To Exit:	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	267	1	267	2.4	1976	0.135	100	NA	NA
Approach	267	1	267	2.4		0.135			
SouthWest: West Block									
Mov. From SW To Exit:	L2 NW	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	1	2	0.0	1175	0.002	100	NA	NA
Approach	1	1	2	0.0		0.002			
Total %HV Deg.Satn (v/c)									

Intersection	333	4.7	0.135
--------------	-----	-----	-------

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
NorthWest Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
SouthWest Exit: West Block Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										

LANE LEVEL OF SERVICE

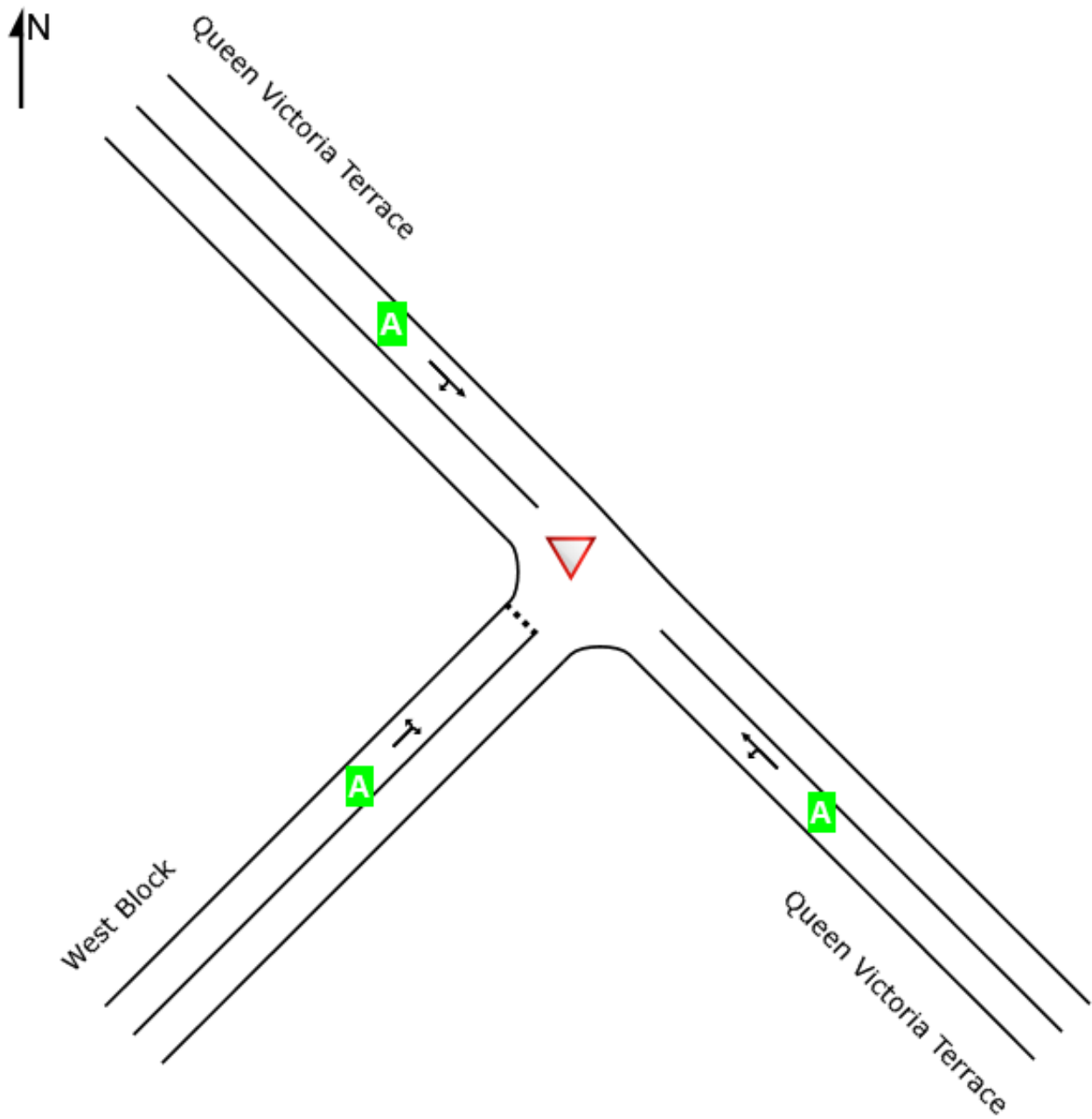
Lane Level of Service

 **Site: 3 [AM - Queen Victoria / Development (Site Folder: Base Year Scenario)]**

  **Network: 1 [2021 AM Peak (Network Folder: 2021)]**

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	Southeast	Northwest	Southwest	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

 Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)]
 Network: 2 [2021 PM Peak (Network Folder: 2021)]

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Commonwealth Ave											
P3	Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	241.5	231.7	0.96
East: Queen Victoria Terrace											
P2	Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	228.7	215.0	0.94
North: Commonwealth Ave											
P4	Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	242.5	233.0	0.96
West: Coronation Drive											

P1 Full	53	63.3	LOS F	0.2	0.2	0.96	0.96	226.9	212.7	0.94
All Pedestrians	211	63.3	LOS F	0.2	0.2	0.96	0.96	234.9	223.1	0.95

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

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

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

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LANE SUMMARY

 Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)]

 Network: 2 [2021 PM Peak (Network Folder: 2021)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]	veh/h	v/c	%	sec		[Veh	Dist]		m	%	%
South: Commonwealth Ave															
Lane 1	731	4.6	731	4.6	910	0.803	100	33.6	LOS C	41.5	301.9	Full	390	0.0	0.0
Lane 2	698	4.6	698	4.6	869	0.803	100	33.6	LOS C	39.7	288.7	Full	390	0.0	0.0
Lane 3	640	4.6	640	4.6	797 ¹	0.803	100	32.8	LOS C	35.2	256.0	Full	390	0.0	0.0
Lane 4	83	3.0	83	3.0	369	0.225	100	56.1	LOS D	4.7	33.6	Short	82	0.0	NA
Approach	2153	4.6	2153	4.6		0.803		34.2	LOS C	41.5	301.9				
East: Queen Victoria Terrace															
Lane 1	19	3.0	19	3.0	699	0.027	100	23.8	LOS B	0.7	4.9	Full	43	0.0	0.0
Lane 2	183	3.0	183	3.0	269	0.681	100	62.4	LOS E	9.8 ^{N4}	70.2 ^{N4}	Full	43	0.0	50.0
Approach	202	3.0	202	3.0		0.681		58.8	LOS E	9.8	70.2				
North: Commonwealth Ave															
Lane 1	3	0.0	3	0.0	2873	0.001	100	20.2	LOS B	0.1	0.2	Full	1270	0.0	0.0
Lane 2	871	4.2	871	4.2	866	1.005	100	93.0	LOS F	85.2	617.8	Full	1270	0.0	0.0
Lane 3	871	4.2	871	4.2	867	1.005	100	93.0	LOS F	85.2	617.8	Full	1270	0.0	0.0
Lane 4	781	4.2	781	4.2	777 ¹	1.005	100	95.9	LOS F	77.5	561.9	Full	1270	0.0	0.0
Lane 5	128	3.0	128	3.0	367	0.350	100	57.6	LOS E	7.5	53.5	Short	69	0.0	NA
Approach	2654	4.2	2654	4.2		1.005		92.1	LOS F	85.2	617.8				
West: Coronation Drive															
Lane 1	1	3.0	1	3.0	578	0.002	100	17.7	LOS B	0.0	0.2	Full	125	0.0	0.0
Lane 2	48	3.0	48	3.0	274	0.177	100	56.6	LOS E	2.8	20.0	Full	125	0.0	0.0
Approach	49	3.0	49	3.0		0.177		55.8	LOS D	2.8	20.0				
Intersection	5058	4.3	5058	4.3		1.005		65.8	LOS E	85.2	617.8				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

^{N4} Average back of queue has been restricted to the available queue storage space.

Approach Lane Flows (veh/h)											
South: Commonwealth Ave											
Mov.	L2	T1	R2	Total	%HV						
From S To Exit:	W	N	E			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	1	730	-	731	4.6	910	0.803	100	NA	NA	
Lane 2	-	698	-	698	4.6	869	0.803	100	NA	NA	
Lane 3	-	640	-	640	4.6	797 ¹	0.803	100	NA	NA	
Lane 4	-	-	83	83	3.0	369	0.225	100	0.0	3	

Approach	1	2068	83	2153	4.6		0.803				
East: Queen Victoria Terrace											
Mov. From E To Exit:	L2	T1	R2	Total	%HV		Deg. Satn v/c	Lane Util.	Prob. SL Ov. %	Ov. Lane No.	
	S	W	N								
Lane 1	19	-	-	19	3.0	699	0.027	100	NA	NA	
Lane 2	-	8	175	183	3.0	269	0.681	100	NA	NA	
Approach	19	8	175	202	3.0		0.681				
North: Commonwealth Ave											
Mov. From N To Exit:	L2	T1	R2	Total	%HV		Deg. Satn v/c	Lane Util.	Prob. SL Ov. %	Ov. Lane No.	
	E	S	W								
Lane 1	-	3	-	3	0.0	2873	0.001	100	NA	NA	
Lane 2	1	870	-	871	4.2	866	1.005	100	NA	NA	
Lane 3	-	871	-	871	4.2	867	1.005	100	NA	NA	
Lane 4	-	781	-	781	4.2	777 ¹	1.005	100	NA	NA	
Lane 5	-	-	128	128	3.0	367	0.350	100	0.0	4	
Approach	1	2524	128	2654	4.2		1.005				
West: Coronation Drive											
Mov. From W To Exit:	L2	T1	R2	Total	%HV		Deg. Satn v/c	Lane Util.	Prob. SL Ov. %	Ov. Lane No.	
	N	E	S								
Lane 1	1	-	-	1	3.0	578	0.002	100	NA	NA	
Lane 2	-	8	40	48	3.0	274	0.177	100	NA	NA	
Approach	1	8	40	49	3.0		0.177				
Total %HV Deg.Satn (v/c)											
Intersection	5058	4.3		1.005							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Commonwealth Ave Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
Full Length Lane	4	Merge Analysis not applied.										
East Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
North Exit: Commonwealth Ave Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
West Exit: Coronation Drive Merge Type: Not Applied												

Full Length Lane	1	Merge Analysis not applied.
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PHASING SUMMARY

Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)]

Network: 2 [2021 PM Peak (Network Folder: 2021)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times specified by the user

Phase Sequence: TCS 22

Reference Phase: Phase A

Input Phase Sequence: A, D, E

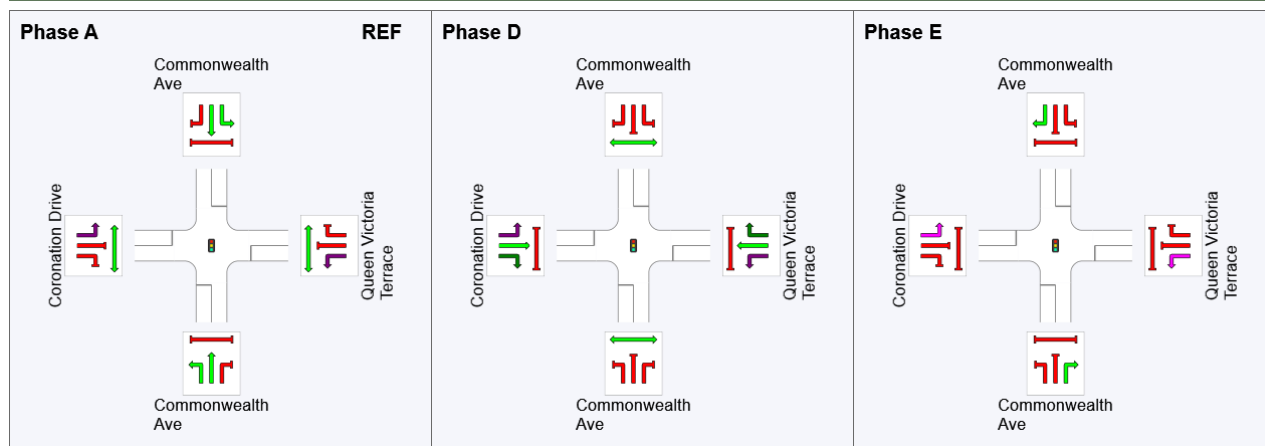
Output Phase Sequence: A, D, E

Phase Timing Summary

Phase	A	D	E
Phase Change Time (sec)	0	71	103
Green Time (sec)	64	25	28
Phase Time (sec)	71	32	35
Phase Split	51%	23%	25%

See the Timing Analysis 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, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



LANE LEVEL OF SERVICE

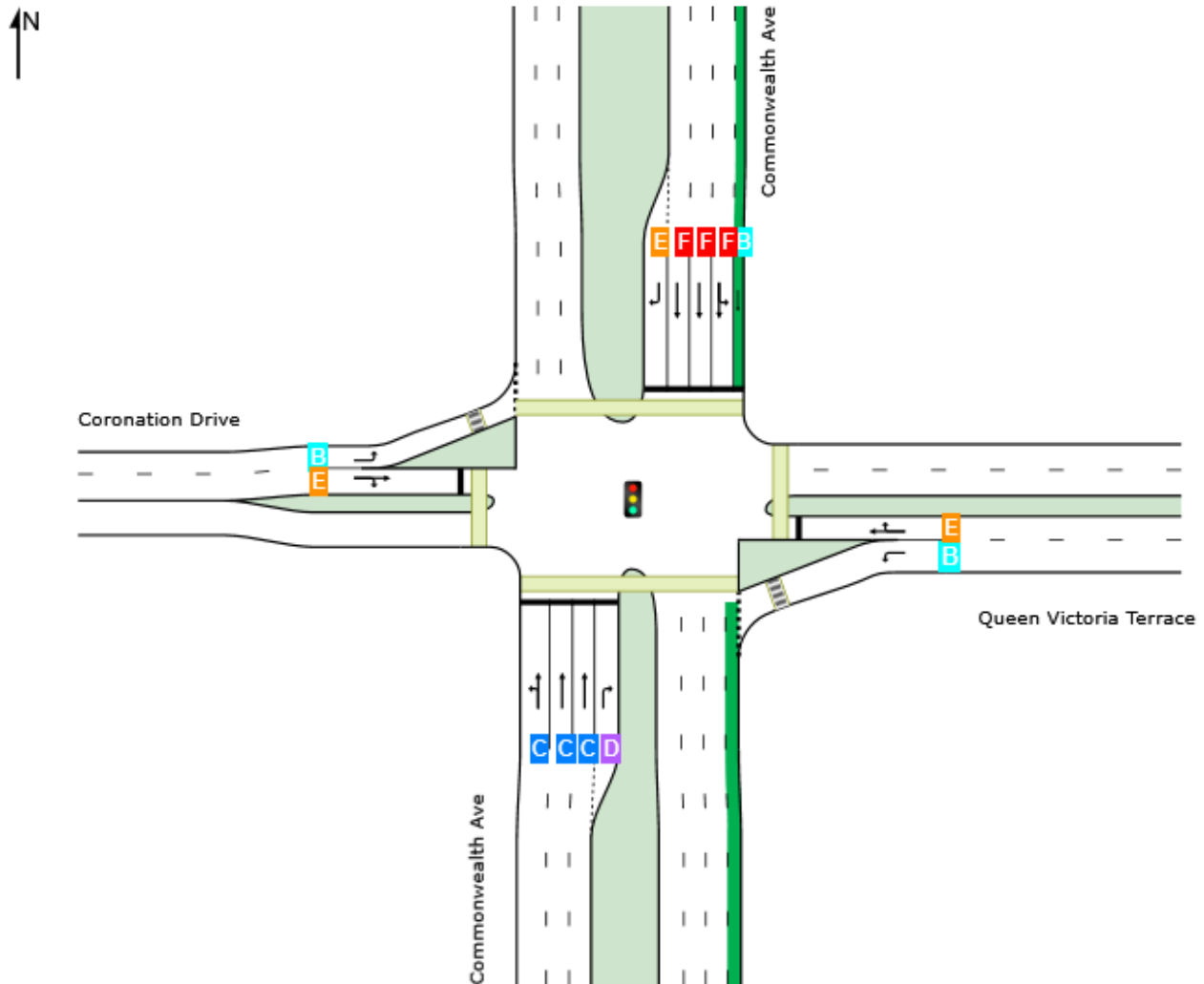
Lane Level of Service

 **Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Base Year Scenario)]**

 **Network: 2 [2021 PM Peak (Network Folder: 2021)]**

New Site
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 138 seconds (Site User-Given Phase Times)

	Approaches				Intersection
	South	East	North	West	
LOS	C	E	F	D	E



Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 2 [PM - Queen Victoria / Langton (Site Folder: Base Year Scenario)] Network: 2 [2021 PM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: Queen Victoria Terrace														
1	L2	136	3.0	136	3.0	0.078	4.2	LOS A	0.0	0.0	0.00	0.52	0.00	31.4
2	T1	8	100.0	8	100.0	0.078	0.0	LOS A	0.0	0.0	0.00	0.52	0.00	43.5
Approach		144	8.7	144	8.7	0.078	3.9	NA	0.0	0.0	0.00	0.52	0.00	32.6
North: Langton Street														
8	T1	7	100.0	7	100.0	0.006	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	66	3.0	66	3.0	0.043	6.0	LOS A	2.1	15.3	0.26	0.55	0.26	30.7
Approach		74	12.7	74	12.7	0.043	5.4	NA	2.1	15.3	0.23	0.49	0.23	32.3
West: Queen Victoria Terrace														
10	L2	64	3.0	64	3.0	0.040	3.7	LOS A	0.1	1.0	0.04	0.53	0.04	35.7
12	R2	27	3.0	27	3.0	0.028	4.4	LOS A	0.1	0.6	0.20	0.54	0.20	26.3
Approach		92	3.0	92	3.0	0.040	3.9	LOS A	0.1	1.0	0.09	0.53	0.09	34.1
All Vehicles		309	7.9	309	7.9	0.078	4.3	NA	2.1	15.3	0.08	0.52	0.08	33.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

LANE SUMMARY

Site: 2 [PM - Queen Victoria / Langton (Site Folder: Base Year Scenario)]

Network: 2 [2021 PM Peak (Network Folder: 2021)]

New Site

Site Category: Base Year

Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]	veh/h	v/c	%	sec		[Veh	m		m	%	%
South: Queen Victoria Terrace															
Lane 1	144	8.7	144	8.7	1854	0.078	100	3.9	LOS A	0.0	0.0	Full	56	0.0	0.0
Approach	144	8.7	144	8.7		0.078		3.9	NA	0.0	0.0				
North: Langton Street															
Lane 1	7	100.0	7	100.0	1170	0.006	100	0.0	LOS A	0.0	0.0	Full	100	0.0	0.0
Lane 2	66	3.0	66	3.0	1550	0.043	100	6.0	LOS A	2.1 ^{N5}	15.3 ^{N5}	Full	100	0.0	0.0
Approach	74	12.7	74	12.7		0.043		5.4	NA	2.1	15.3				
West: Queen Victoria Terrace															
Lane 1	64	3.0	64	3.0	1596	0.040	100	3.7	LOS A	0.1	1.0	Full	43	0.0	0.0
Lane 2	27	3.0	27	3.0	989	0.028	100	4.4	LOS A	0.1	0.6	Full	43	0.0	0.0
Approach	92	3.0	92	3.0		0.040		3.9	LOS A	0.1	1.0				
Intersection	309	7.9	309	7.9		0.078		4.3	NA	2.1	15.3				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

^{N5} Continuous Lane results determined by Back of Queue values of downstream lanes (proportional to lane movement flows).

Approach Lane Flows (veh/h)										
South: Queen Victoria Terrace										
Mov.	L2	T1	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From S To Exit:	W	N			veh/h	v/c	%	%		
Lane 1	136	8	144	8.7	1854	0.078	100	NA	NA	
Approach	136	8	144	8.7		0.078				
North: Langton Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From N To Exit:	S	W			veh/h	v/c	%	%		
Lane 1	7	-	7	100.0	1170	0.006	100	NA	NA	
Lane 2	-	66	66	3.0	1550	0.043	100	NA	NA	
Approach	7	66	74	12.7		0.043				
West: Queen Victoria Terrace										
Mov.	L2	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From W To Exit:	N	S			veh/h	v/c	%	%		
Lane 1	64	-	64	3.0	1596	0.040	100	NA	NA	

Lane 2	-	27	27	3.0	989	0.028	100	NA	NA
Approach	64	27	92	3.0	0.040				
Total %HV Deg. Satn (v/c)									
Intersection	309	7.9		0.078					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
South Exit: Queen Victoria Terrace												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Langton Street												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
West Exit: Queen Victoria Terrace												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										

LANE LEVEL OF SERVICE

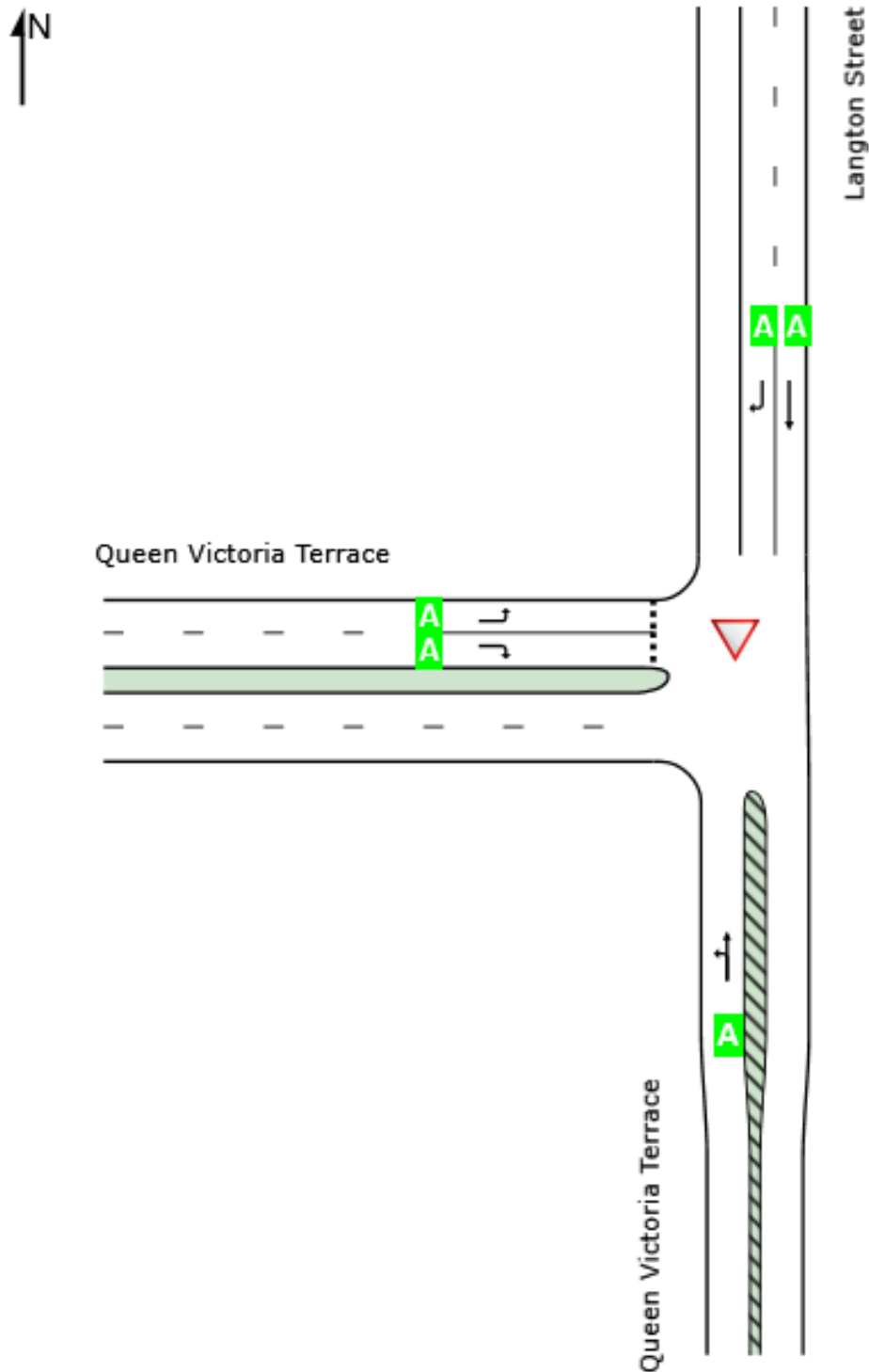
Lane Level of Service

▼ Site: 2 [PM - Queen Victoria / Langton (Site Folder: Base Year Scenario)]

■-■ Network: 2 [2021 PM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	South	North	West	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 3 [PM - Queen Victoria / Development (Site Folder: Base Year Scenario)] Network: 2 [2021 PM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
SouthEast: Queen Victoria Terrace														
4	L2	1	0.0	1	0.0	0.077	4.7	LOS A	0.0	0.0	0.00	0.00	0.00	34.3
5	T1	144	8.8	144	8.8	0.077	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.5
Approach		145	8.8	145	8.8	0.077	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.0
NorthWest: Queen Victoria Terrace														
11	T1	35	24.2	35	24.2	0.021	0.0	LOS A	0.0	0.1	0.02	0.02	0.02	58.3
12	R2	1	0.0	1	0.0	0.021	4.6	LOS A	0.0	0.1	0.02	0.02	0.02	29.7
Approach		36	23.5	36	23.5	0.021	0.2	NA	0.0	0.1	0.02	0.02	0.02	57.0
SouthWest: West Block														
1	L2	1	0.0	1	0.0	0.002	4.0	LOS A	0.0	0.0	0.24	0.49	0.24	24.5
3	R2	1	0.0	1	0.0	0.002	4.2	LOS A	0.0	0.0	0.24	0.49	0.24	29.6
Approach		2	0.0	2	0.0	0.002	4.1	LOS A	0.0	0.0	0.24	0.49	0.24	27.8
All Vehicles		183	11.6	183	11.6	0.077	0.1	NA	0.0	0.1	0.01	0.01	0.01	57.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

▼ Site: 3 [PM - Queen Victoria / Development (Site Folder: Base Year Scenario)] ■■ Network: 2 [2021 PM Peak (Network Folder: 2021)]

Lane Use and Performance																
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total	HV]	[Total	HV]						[Veh Dist]						
	veh/h	%	veh/h	%						veh/h	v/c					%
SouthEast: Queen Victoria Terrace																
Lane 1	145	8.8	145	8.8	1892	0.077	100	0.0	LOS A	0.0	0.0	Full	70	0.0	0.0	
Approach	145	8.8	145	8.8		0.077		0.0	NA	0.0	0.0					
NorthWest: Queen Victoria Terrace																
Lane 1	36	23.5	36	23.5	1734	0.021	100	0.2	LOS A	0.0	0.1	Full	56	0.0	0.0	
Approach	36	23.5	36	23.5		0.021		0.2	NA	0.0	0.1					
SouthWest: West Block																
Lane 1	2	0.0	2	0.0	1241	0.002	100	4.1	LOS A	0.0	0.0	Full	45	0.0	0.0	
Approach	2	0.0	2	0.0		0.002		4.1	LOS A	0.0	0.0					
Intersection	183	11.6	183	11.6		0.077		0.1	NA	0.0	0.1					

Approach Lane Flows (veh/h)									
SouthEast: Queen Victoria Terrace									
Mov. From SE To Exit:	L2 SW	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	144	145	8.8	1892	0.077	100	NA	NA
Approach	1	144	145	8.8		0.077			
NorthWest: Queen Victoria Terrace									
Mov. From NW To Exit:	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	35	1	36	23.5	1734	0.021	100	NA	NA
Approach	35	1	36	23.5		0.021			
SouthWest: West Block									
Mov. From SW To Exit:	L2 NW	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	1	2	0.0	1241	0.002	100	NA	NA
Approach	1	1	2	0.0		0.002			
Total %HV Deg.Satn (v/c)									

Intersection	183	11.6	0.077
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Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
NorthWest Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: West Block Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

LANE LEVEL OF SERVICE

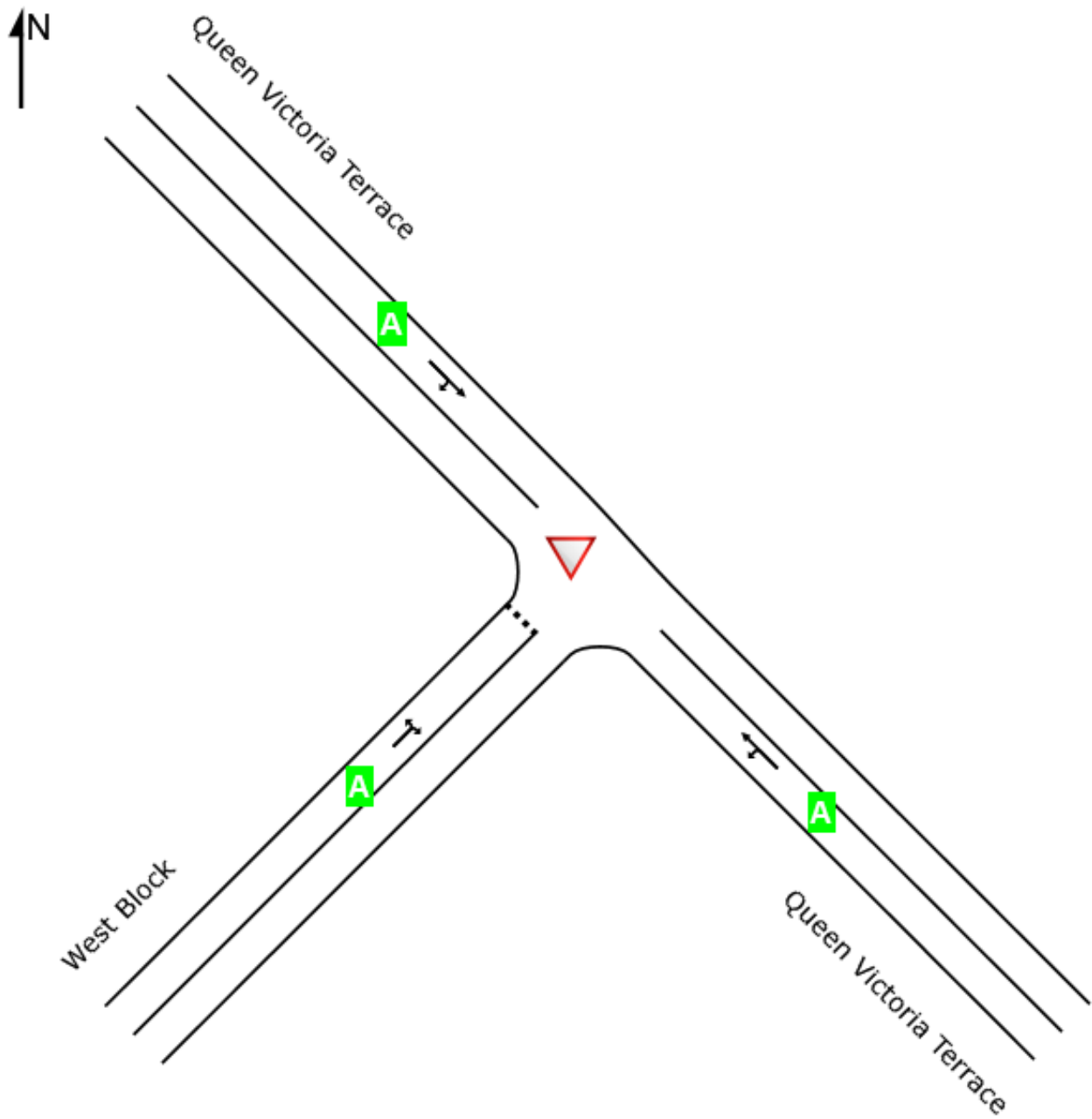
Lane Level of Service

▼ Site: 3 [PM - Queen Victoria / Development (Site Folder: Base Year Scenario)]

■-■ Network: 2 [2021 PM Peak (Network Folder: 2021)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	Southeast	Northwest	Southwest	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Commonwealth Ave											
P3	Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	225.0	231.7	1.03
East: Queen Victoria Terrace											
P2	Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	212.2	215.0	1.01
North: Commonwealth Ave											

P4 Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	226.0	233.0	1.03
West: Coronation Drive										
P1 Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	210.4	212.7	1.01
All Pedestrians	211	46.8	LOS E	0.1	0.1	0.94	0.94	218.4	223.1	1.02

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.

LANE SUMMARY

 **Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]**

 **Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]**

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %	veh/h	v/c	%	sec		[Veh	Dist] m		m	%	%
South: Commonwealth Ave															
Lane 1	967	4.0	967	4.0	1088	0.889	100	31.0	LOS C	50.3	363.9	Full	390	0.0	0.0
Lane 2	924	4.0	924	4.0	1039	0.889	100	31.8	LOS C	48.6	351.7	Full	390	0.0	0.0
Lane 3	744	4.0	744	4.0	837 ¹	0.889	100	32.0	LOS C	35.8	259.2	Full	390	0.0	0.0
Lane 4	394	3.0	394	3.0	433	0.909	100	64.5	LOS E	23.5	168.6	Short	82	25.0 ^{N2}	NA
Approach	3029	3.9	3029	3.9		0.909		35.8	LOS C	50.3	363.9				
East: Queen Victoria Terrace															
Lane 1	1	3.0	1	3.0	545	0.002	100	17.4	LOS B	0.0	0.2	Full	43	0.0	0.0
Lane 2	67	3.0	67	3.0	111	0.608	100	60.2	LOS E	3.7	26.2	Full	43	0.0	0.0
Approach	68	3.0	68	3.0		0.608		59.5	LOS E	3.7	26.2				
North: Commonwealth Ave															
Lane 1	25	0.0	25	0.0	3422	0.007	100	10.8	LOS A	0.5	1.5	Full	1270	0.0	0.0
Lane 2	886	4.0	886	4.0	1027	0.863	100	28.2	LOS B	43.0	311.6	Full	1270	0.0	0.0
Lane 3	891	4.1	891	4.1	1033	0.863	100	27.4	LOS B	43.2	313.1	Full	1270	0.0	0.0
Lane 4	791	4.1	791	4.1	916 ¹	0.863	100	27.0	LOS B	36.1	261.8	Full	1270	0.0	0.0
Lane 5	151	3.0	151	3.0	345	0.437	100	47.7	LOS D	6.9	49.9	Short	69	0.0	NA
Approach	2743	4.0	2743	4.0		0.863		28.5	LOS B	43.2	313.1				
West: Coronation Drive															
Lane 1	1	3.0	1	3.0	544	0.002	100	20.8	LOS B	0.0	0.2	Full	125	0.0	0.0
Lane 2	73	3.0	73	3.0	111	0.654	100	62.3	LOS E	4.0	28.5	Full	125	0.0	0.0
Approach	74	3.0	74	3.0		0.654		61.7	LOS E	4.0	28.5				
Intersection	5915	3.9	5915	3.9		0.909		33.0	LOS C	50.3	363.9				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

^{N2} Capacity Adjustment specified by user.

Approach Lane Flows (veh/h)											
South: Commonwealth Ave											
Mov.	L2	T1	R2	Total	%HV						
From S To Exit:	W	N	E			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	1	966	-	967	4.0	1088	0.889	100	NA	NA	
Lane 2	-	924	-	924	4.0	1039	0.889	100	NA	NA	

Lane 3	-	744	-	744	4.0	837 ¹	0.889	100	NA	NA
Lane 4	-	-	394	394	3.0	433	0.909	100	72.6	3
Approach	1	2635	394	3029	3.9		0.909			
East: Queen Victoria Terrace										
Mov. From E To Exit:	L2 S	T1 W	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	-	-	1	3.0	545	0.002	100	NA	NA
Lane 2	-	1	66	67	3.0	111	0.608	100	NA	NA
Approach	1	1	66	68	3.0		0.608			
North: Commonwealth Ave										
Mov. From N To Exit:	L2 E	T1 S	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	-	25	-	25	0.0	3422	0.007	100	NA	NA
Lane 2	102	784	-	886	4.0	1027	0.863	100	NA	NA
Lane 3	-	891	-	891	4.1	1033	0.863	100	NA	NA
Lane 4	-	791	-	791	4.1	916 ¹	0.863	100	NA	NA
Lane 5	-	-	151	151	3.0	345	0.437	100	0.0	4
Approach	102	2491	151	2743	4.0		0.863			
West: Coronation Drive										
Mov. From W To Exit:	L2 N	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	-	-	1	3.0	544	0.002	100	NA	NA
Lane 2	-	3	69	73	3.0	111	0.654	100	NA	NA
Approach	1	3	69	74	3.0		0.654			
Total %HV Deg.Satn (v/c)										
Intersection	5915	3.9		0.909						

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Commonwealth Ave Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
Full Length Lane	4	Merge Analysis not applied.										
East Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
North Exit: Commonwealth Ave Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
West Exit: Coronation Drive												

Merge Type: **Not Applied**

Full Length Lane	1	Merge Analysis not applied.
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PHASING SUMMARY

Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]

Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 22

Reference Phase: Phase A

Input Phase Sequence: A, D, E

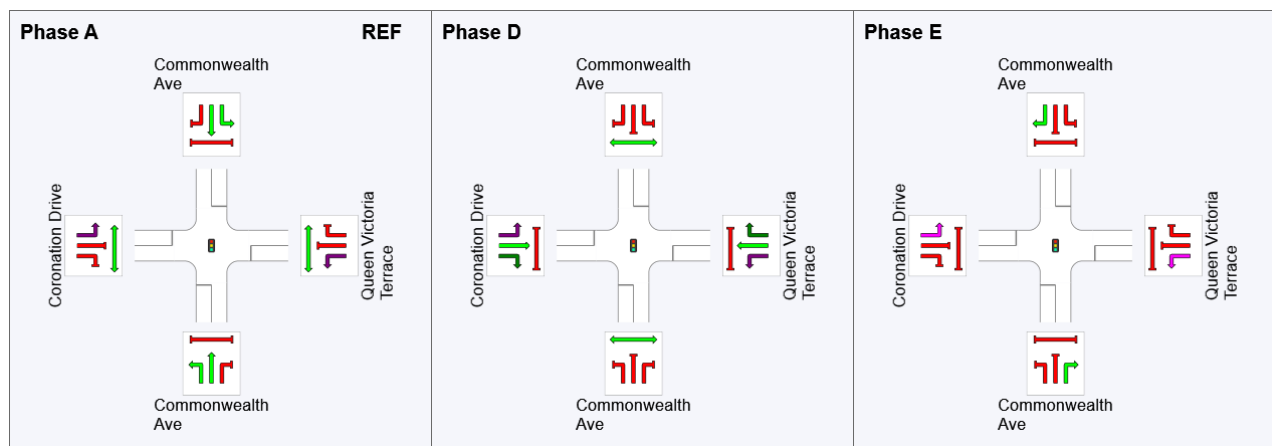
Output Phase Sequence: A, D, E

Phase Timing Summary

Phase	A	D	E
Phase Change Time (sec)	0	65	78
Green Time (sec)	58	6	20
Phase Time (sec)	65	13	27
Phase Split	62%	12%	26%

See the Timing Analysis 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, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase

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

LANE LEVEL OF SERVICE

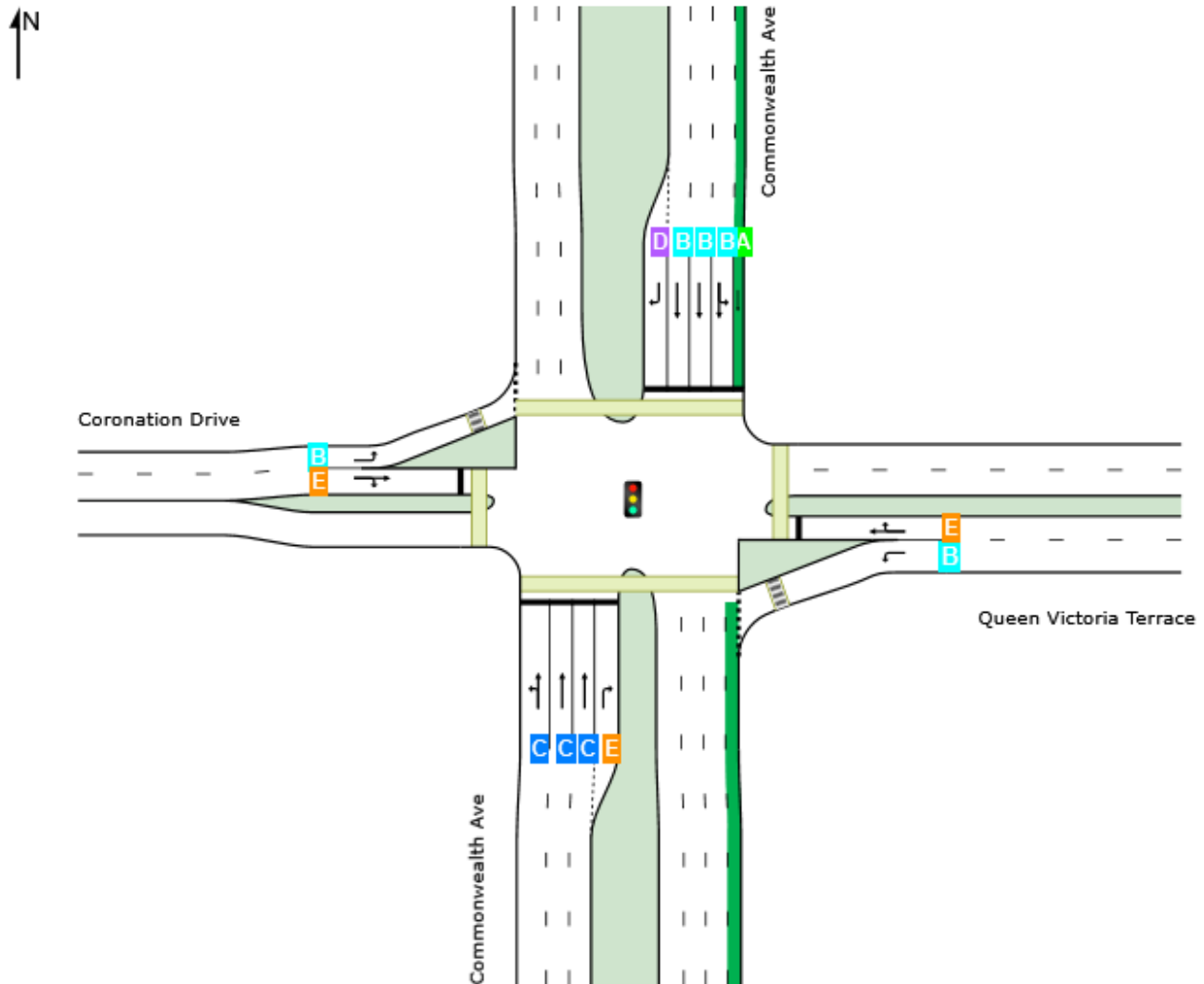
Lane Level of Service

 **Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]**

 **Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]**

New Site
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

	Approaches				Intersection
	South	East	North	West	
LOS	C	E	B	E	C



Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 2 [AM - Queen Victoria / Langton (Site Folder: Operational Year Scenario Without Development)]

Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Queen Victoria Terrace														
1	L2	62	3.0	62	3.0	0.038	4.2	LOS A	0.0	0.0	0.00	0.50	0.00	32.2
2	T1	7	100.0	7	100.0	0.038	0.0	LOS A	0.0	0.0	0.00	0.50	0.00	44.1
Approach		69	13.3	69	13.3	0.038	3.7	NA	0.0	0.0	0.00	0.50	0.00	34.3
North: Langton Street														
8	T1	6	100.0	6	100.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	7	3.0	7	3.0	0.004	5.7	LOS A	0.0	0.1	0.17	0.53	0.17	31.6
Approach		14	47.8	14	47.8	0.005	3.1	NA	0.0	0.1	0.09	0.28	0.09	40.5
West: Queen Victoria Terrace														
10	L2	195	0.0	195	0.0	0.120	3.7	LOS A	0.4	3.1	0.04	0.53	0.04	36.0
12	R2	304	0.0	304	0.0	0.270	4.0	LOS A	1.1	8.0	0.13	0.53	0.13	27.9
Approach		499	0.0	499	0.0	0.270	3.9	LOS A	1.1	8.0	0.09	0.53	0.09	32.5
All Vehicles		582	2.7	582	2.7	0.270	3.8	NA	1.1	8.0	0.08	0.52	0.08	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.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

LANE SUMMARY

Site: 2 [AM - Queen Victoria / Langton (Site Folder: Operational Year Scenario Without Development)]

Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]	veh/h	v/c	%	sec		[Veh	m		m	%	%
South: Queen Victoria Terrace															
Lane 1	69	13.3	69	13.3	1809	0.038	100	3.7	LOS A	0.0	0.0	Full	56	0.0	0.0
Approach	69	13.3	69	13.3		0.038		3.7	NA	0.0	0.0				
North: Langton Street															
Lane 1	6	100.0	6	100.0	1170	0.005	100	0.0	LOS A	0.0	0.0	Full	100	0.0	0.0
Lane 2	7	3.0	7	3.0	1663	0.004	100	5.7	LOS A	0.0	0.1	Full	100	0.0	0.0
Approach	14	47.8	14	47.8		0.005		3.1	NA	0.0	0.1				
West: Queen Victoria Terrace															
Lane 1	195	0.0	195	0.0	1622	0.120	100	3.7	LOS A	0.4	3.1	Full	43	0.0	0.0
Lane 2	304	0.0	304	0.0	1126	0.270	100	4.0	LOS A	1.1	8.0	Full	43	0.0	0.0
Approach	499	0.0	499	0.0		0.270		3.9	LOS A	1.1	8.0				
Intersection	582	2.7	582	2.7		0.270		3.8	NA	1.1	8.0				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

Approach Lane Flows (veh/h)										
South: Queen Victoria Terrace										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	W	N				v/c	%	%	%	No.
Lane 1	62	7	69	13.3	1809	0.038	100	NA	NA	
Approach	62	7	69	13.3		0.038				
North: Langton Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	S	W				v/c	%	%	%	No.
Lane 1	6	-	6	100.0	1170	0.005	100	NA	NA	
Lane 2	-	7	7	3.0	1663	0.004	100	NA	NA	
Approach	6	7	14	47.8		0.005				
West: Queen Victoria Terrace										
Mov.	L2	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From W					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	N	S				v/c	%	%	%	No.

Lane 1	195	-	195	0.0	1622	0.120	100	NA	NA
Lane 2	-	304	304	0.0	1126	0.270	100	NA	NA
Approach	195	304	499	0.0		0.270			
Total %HV Deg.Satn (v/c)									
Intersection	582	2.7		0.270					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane	Opposing Flow Rate % veh/h	Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Lane Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Queen Victoria Terrace												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Langton Street												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
West Exit: Queen Victoria Terrace												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										

LANE LEVEL OF SERVICE

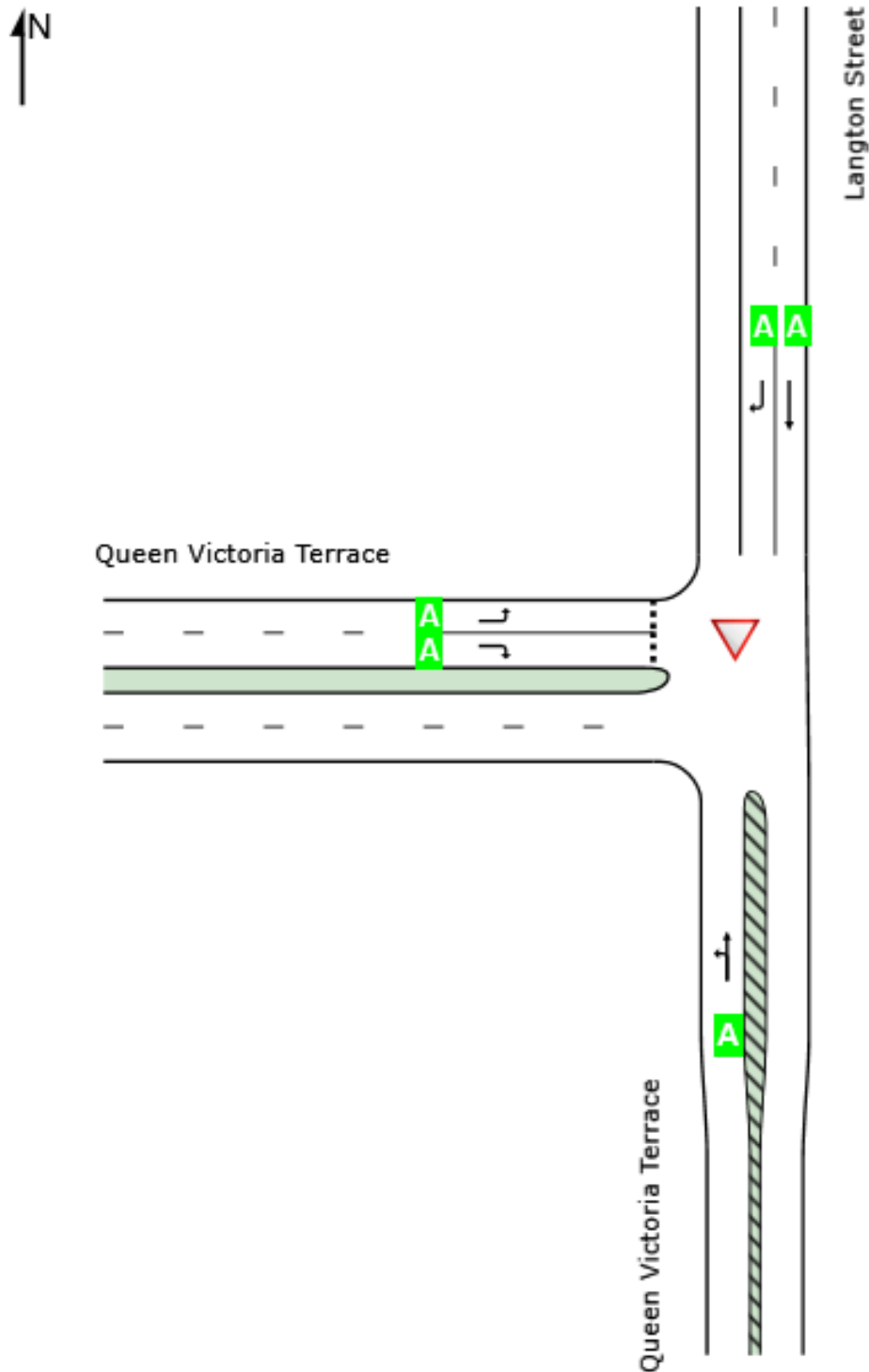
Lane Level of Service

▼ Site: 2 [AM - Queen Victoria / Langton (Site Folder:
Operational Year Scenario Without Development)]

■ Network: 3 [Operational Year
AM (Network Folder:
Operational Year Without
Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	South	North	West	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 3 [AM - Queen Victoria / Development (Site Folder: Operational Year Scenario Without Development)]

Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
SouthEast: Queen Victoria Terrace														
4	L2	1	0.0	1	0.0	0.035	4.7	LOS A	0.0	0.0	0.00	0.01	0.00	34.2
5	T1	62	14.8	62	14.8	0.035	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	58.9
Approach		63	14.6	63	14.6	0.035	0.1	NA	0.0	0.0	0.00	0.01	0.00	57.8
NorthWest: Queen Victoria Terrace														
11	T1	311	2.0	311	2.0	0.157	0.0	LOS A	0.0	0.1	0.00	0.00	0.00	59.8
12	R2	1	0.0	1	0.0	0.157	4.4	LOS A	0.0	0.1	0.00	0.00	0.00	30.2
Approach		312	2.0	312	2.0	0.157	0.0	NA	0.0	0.1	0.00	0.00	0.00	59.7
SouthWest: West Block														
1	L2	1	0.0	1	0.0	0.002	3.8	LOS A	0.0	0.0	0.16	0.50	0.16	24.5
3	R2	1	0.0	1	0.0	0.002	5.0	LOS A	0.0	0.0	0.16	0.50	0.16	29.6
Approach		2	0.0	2	0.0	0.002	4.4	LOS A	0.0	0.0	0.16	0.50	0.16	27.8
All Vehicles		377	4.1	377	4.1	0.157	0.1	NA	0.0	0.1	0.00	0.01	0.00	59.2

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

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

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

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LANE SUMMARY

Site: 3 [AM - Queen Victoria / Development (Site Folder: Operational Year Scenario Without Development)]

Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %	veh/h	v/c	%	sec		[Veh	m		m	%	%
SouthEast: Queen Victoria Terrace															
Lane 1	63	14.6	63	14.6	1826	0.035	100	0.1	LOS A	0.0	0.0	Full	70	0.0	0.0
Approach	63	14.6	63	14.6		0.035		0.1	NA	0.0	0.0				
NorthWest: Queen Victoria Terrace															
Lane 1	312	2.0	312	2.0	1980	0.157	100	0.0	LOS A	0.0	0.1	Full	56	0.0	0.0
Approach	312	2.0	312	2.0		0.157		0.0	NA	0.0	0.1				
SouthWest: West Block															
Lane 1	2	0.0	2	0.0	1142	0.002	100	4.4	LOS A	0.0	0.0	Full	45	0.0	0.0
Approach	2	0.0	2	0.0		0.002		4.4	LOS A	0.0	0.0				
Intersection	377	4.1	377	4.1		0.157		0.1	NA	0.0	0.1				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

Approach Lane Flows (veh/h)										
SouthEast: Queen Victoria Terrace										
Mov. From SE To Exit:	L2 SW	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	1	62	63	14.6	1826	0.035	100	NA	NA	
Approach	1	62	63	14.6		0.035				
NorthWest: Queen Victoria Terrace										
Mov. From NW To Exit:	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	311	1	312	2.0	1980	0.157	100	NA	NA	
Approach	311	1	312	2.0		0.157				
SouthWest: West Block										
Mov. From SW To Exit:	L2 NW	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	1	1	2	0.0	1142	0.002	100	NA	NA	
Approach	1	1	2	0.0		0.002				

	Total	%HV	Deg.Satn (v/c)
Intersection	377	4.1	0.157

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
NorthWest Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: West Block Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

LANE LEVEL OF SERVICE

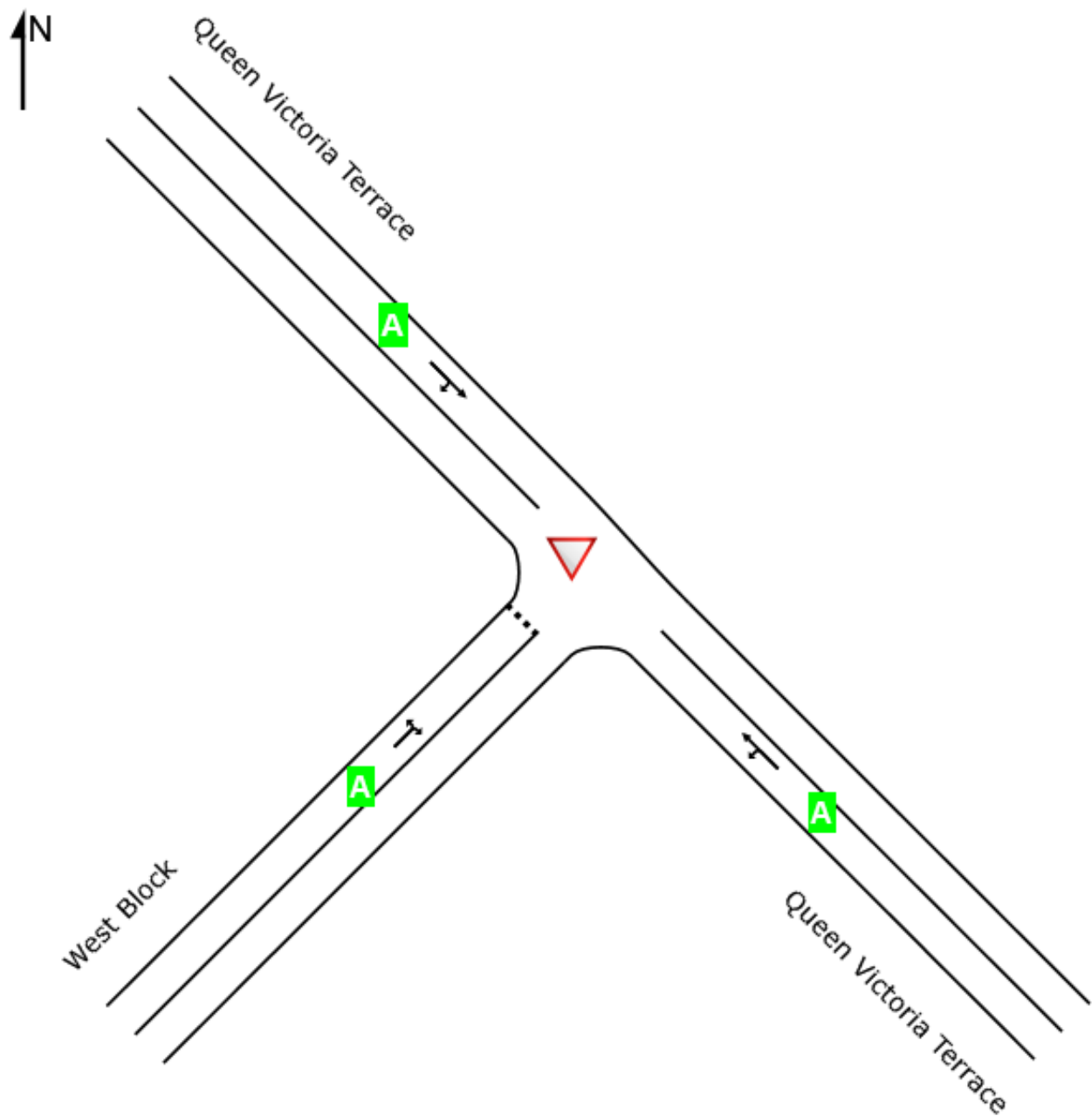
Lane Level of Service

 **Site: 3 [AM - Queen Victoria / Development (Site Folder: Operational Year Scenario Without Development)]**

 **Network: 3 [Operational Year AM (Network Folder: Operational Year Without Development)]**

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	Southeast	Northwest	Southwest	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Commonwealth Ave											
P3	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	212.5	231.7	1.09
East: Queen Victoria Terrace											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.7	215.0	1.08
North: Commonwealth Ave											

P4 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	213.5	233.0	1.09
West: Coronation Drive										
P1 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	197.9	212.7	1.07
All Pedestrians	211	34.3	LOS D	0.1	0.1	0.93	0.93	205.9	223.1	1.08

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.

LANE SUMMARY

 **Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]**

 **Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]**

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %	veh/h	v/c	%	sec		[Veh	Dist] m		m	%	%
South: Commonwealth Ave															
Lane 1	729	4.6	729	4.6	1030	0.708	100	15.5	LOS B	21.5	156.5	Full	390	0.0	0.0
Lane 2	696	4.6	696	4.6	984	0.708	100	15.5	LOS B	20.6	149.7	Full	390	0.0	0.0
Lane 3	674	4.6	674	4.6	952	0.708	100	15.2	LOS B	19.6	142.5	Full	390	0.0	0.0
Lane 4	84	3.0	84	3.0	159	0.529	100	47.0	LOS D	3.4	24.3	Short	82	0.0	NA
Approach	2183	4.6	2183	4.6		0.708		16.6	LOS B	21.5	156.5				
East: Queen Victoria Terrace															
Lane 1	19	3.0	19	3.0	576	0.033	100	16.3	LOS B	0.4	2.9	Full	43	0.0	0.0
Lane 2	185	3.0	185	3.0	210	0.882	100	51.9	LOS D	8.6	61.9	Full	43	0.0	38.3
Approach	204	3.0	204	3.0		0.882		48.6	LOS D	8.6	61.9				
North: Commonwealth Ave															
Lane 1	3	0.0	3	0.0	3253	0.001	100	9.2	LOS A	0.0	0.1	Full	1270	0.0	0.0
Lane 2	876	4.2	876	4.2	981	0.894	100	30.5	LOS C	38.8	281.5	Full	1270	0.0	0.0
Lane 3	876	4.2	876	4.2	981	0.894	100	30.5	LOS C	38.8	281.5	Full	1270	0.0	0.0
Lane 4	806	4.2	806	4.2	902 ¹	0.894	100	30.4	LOS C	34.4	249.2	Full	1270	0.0	0.0
Lane 5	131	3.0	131	3.0	158	0.825	100	52.3	LOS D	5.8	41.4	Short	69	0.0	NA
Approach	2692	4.2	2692	4.2		0.894		31.5	LOS C	38.8	281.5				
West: Coronation Drive															
Lane 1	1	3.0	1	3.0	478	0.002	100	13.1	LOS A	0.0	0.1	Full	125	0.0	0.0
Lane 2	49	3.0	49	3.0	208	0.238	100	40.4	LOS C	1.8	13.1	Full	125	0.0	0.0
Approach	51	3.0	51	3.0		0.238		39.8	LOS C	1.8	13.1				
Intersection	5129	4.3	5129	4.3		0.894		25.9	LOS B	38.8	281.5				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- ¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Approach Lane Flows (veh/h)										
South: Commonwealth Ave										
Mov. From S To Exit:	L2 W	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	728	-	729	4.6	1030	0.708	100	NA	NA
Lane 2	-	696	-	696	4.6	984	0.708	100	NA	NA
Lane 3	-	674	-	674	4.6	952	0.708	100	NA	NA

Lane 4	-	-	84	84	3.0	159	0.529	100	0.0	3
Approach	1	2098	84	2183	4.6		0.708			
East: Queen Victoria Terrace										
Mov. From E To Exit:	L2 S	T1 W	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	19	-	-	19	3.0	576	0.033	100	NA	NA
Lane 2	-	8	177	185	3.0	210	0.882	100	NA	NA
Approach	19	8	177	204	3.0		0.882			
North: Commonwealth Ave										
Mov. From N To Exit:	L2 E	T1 S	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	-	3	-	3	0.0	3253	0.001	100	NA	NA
Lane 2	1	875	-	876	4.2	981	0.894	100	NA	NA
Lane 3	-	876	-	876	4.2	981	0.894	100	NA	NA
Lane 4	-	806	-	806	4.2	902 ¹	0.894	100	NA	NA
Lane 5	-	-	131	131	3.0	158	0.825	100	0.0	4
Approach	1	2560	131	2692	4.2		0.894			
West: Coronation Drive										
Mov. From W To Exit:	L2 N	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	-	-	1	3.0	478	0.002	100	NA	NA
Lane 2	-	8	41	49	3.0	208	0.238	100	NA	NA
Approach	1	8	41	51	3.0		0.238			
Total %HV Deg.Satn (v/c)										
Intersection	5129	4.3		0.894						

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Commonwealth Ave Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
Full Length Lane	3	Merge Analysis not applied.									
Full Length Lane	4	Merge Analysis not applied.									
East Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
North Exit: Commonwealth Ave Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									
Full Length Lane	3	Merge Analysis not applied.									
West Exit: Coronation Drive Merge Type: Not Applied											

Full Length Lane	1	Merge Analysis not applied.
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Project: N:\Projects\505\FY21\079_WestBlock Hotel, Parkes - TIA\Design\SIDRA\Design Optimum.sip9

PHASING SUMMARY

Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]

Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 22

Reference Phase: Phase A

Input Phase Sequence: A, D, E

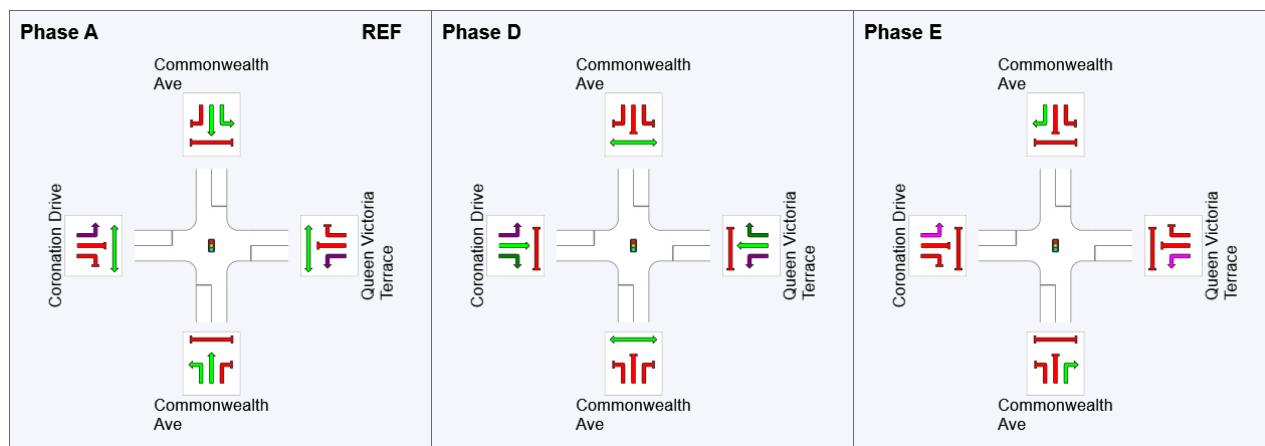
Output Phase Sequence: A, D, E

Phase Timing Summary

Phase	A	D	E
Phase Change Time (sec)	0	49	66
Green Time (sec)	42	10	7
Phase Time (sec)	49	17	14
Phase Split	61%	21%	18%

See the Timing Analysis 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, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase

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

LANE LEVEL OF SERVICE

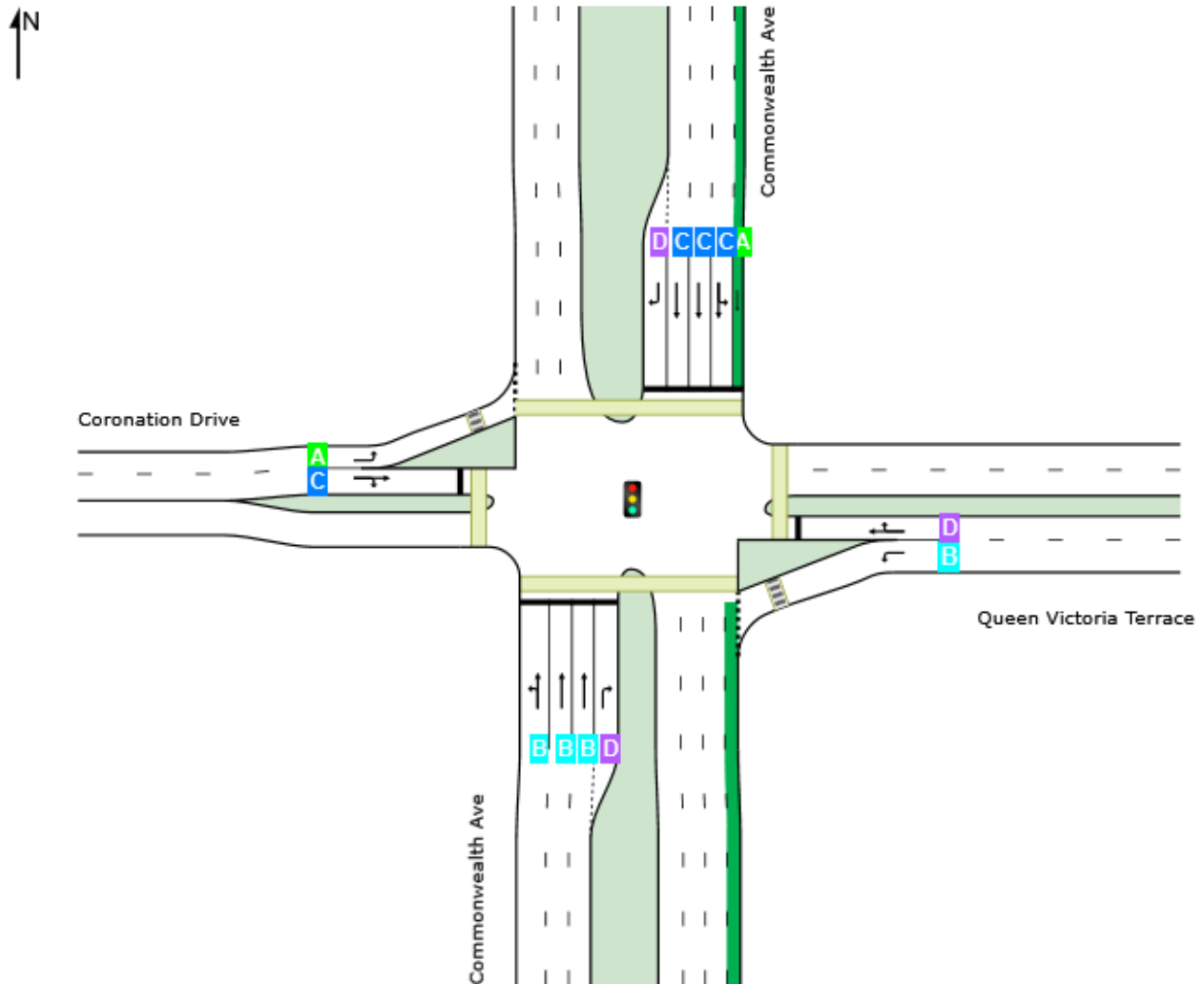
Lane Level of Service

 **Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario Without Development)]**

 **Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]**

New Site
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

	Approaches				Intersection
	South	East	North	West	
LOS	B	D	C	C	B



Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 2 [PM - Queen Victoria / Langton (Site Folder: Operational Year Scenario Without Development)]

Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Queen Victoria Terrace														
1	L2	138	3.0	138	3.0	0.079	4.2	LOS A	0.0	0.0	0.00	0.53	0.00	31.4
2	T1	8	100.0	8	100.0	0.079	0.0	LOS A	0.0	0.0	0.00	0.53	0.00	43.5
Approach		146	8.6	146	8.6	0.079	3.9	NA	0.0	0.0	0.00	0.53	0.00	32.6
North: Langton Street														
8	T1	7	100.0	7	100.0	0.006	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	67	3.0	67	3.0	0.071	6.0	LOS A	0.2	1.4	0.26	0.55	0.26	30.7
Approach		75	12.6	75	12.6	0.071	5.4	NA	0.2	1.4	0.24	0.50	0.24	32.3
West: Queen Victoria Terrace														
10	L2	66	3.0	66	3.0	0.042	3.7	LOS A	0.1	1.0	0.04	0.53	0.04	35.7
12	R2	27	3.0	27	3.0	0.028	4.5	LOS A	0.1	0.6	0.19	0.54	0.19	26.3
Approach		94	3.0	94	3.0	0.042	3.9	LOS A	0.1	1.0	0.08	0.53	0.08	34.1
All Vehicles		315	7.9	315	7.9	0.079	4.3	NA	0.2	1.4	0.08	0.52	0.08	33.1

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

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

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

LANE SUMMARY

Site: 2 [PM - Queen Victoria / Langton (Site Folder: Operational Year Scenario Without Development)]

Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV] %	[Total veh/h	HV] %	veh/h	v/c	%	sec			[Veh m	Dist] m	m	%	%
South: Queen Victoria Terrace															
Lane 1	146	8.6	146	8.6	1855	0.079	100	3.9	LOS A	0.0	0.0	Full	56	0.0	0.0
Approach	146	8.6	146	8.6		0.079		3.9	NA	0.0	0.0				
North: Langton Street															
Lane 1	7	100.0	7	100.0	1170	0.006	100	0.0	LOS A	0.0	0.0	Full	100	0.0	0.0
Lane 2	67	3.0	67	3.0	954	0.071	100	6.0	LOS A	0.2	1.4	Full	100	-38.3 ^{N3}	0.0
Approach	75	12.6	75	12.6		0.071		5.4	NA	0.2	1.4				
West: Queen Victoria Terrace															
Lane 1	66	3.0	66	3.0	1596	0.042	100	3.7	LOS A	0.1	1.0	Full	43	0.0	0.0
Lane 2	27	3.0	27	3.0	987	0.028	100	4.5	LOS A	0.1	0.6	Full	43	0.0	0.0
Approach	94	3.0	94	3.0		0.042		3.9	LOS A	0.1	1.0				
Intersection	315	7.9	315	7.9		0.079		4.3	NA	0.2	1.4				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

^{N3} Capacity Adjustment due to downstream lane blockage determined by the program.

Approach Lane Flows (veh/h)										
South: Queen Victoria Terrace										
Mov. From S To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	138	8	146	8.6	1855	0.079	100	NA	NA	
Approach	138	8	146	8.6		0.079				
North: Langton Street										
Mov. From N To Exit:	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	7	-	7	100.0	1170	0.006	100	NA	NA	
Lane 2	-	67	67	3.0	954	0.071	100	NA	NA	
Approach	7	67	75	12.6		0.071				
West: Queen Victoria Terrace										
Mov. From W	L2	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	

To Exit:	N	S							
Lane 1	66	-	66	3.0	1596	0.042	100	NA	NA
Lane 2	-	27	27	3.0	987	0.028	100	NA	NA
Approach	66	27	94	3.0	0.042				
Total %HV Deg.Satn (v/c)									
Intersection	315	7.9	0.079						

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
South Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Langton Street Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
West Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										

LANE LEVEL OF SERVICE

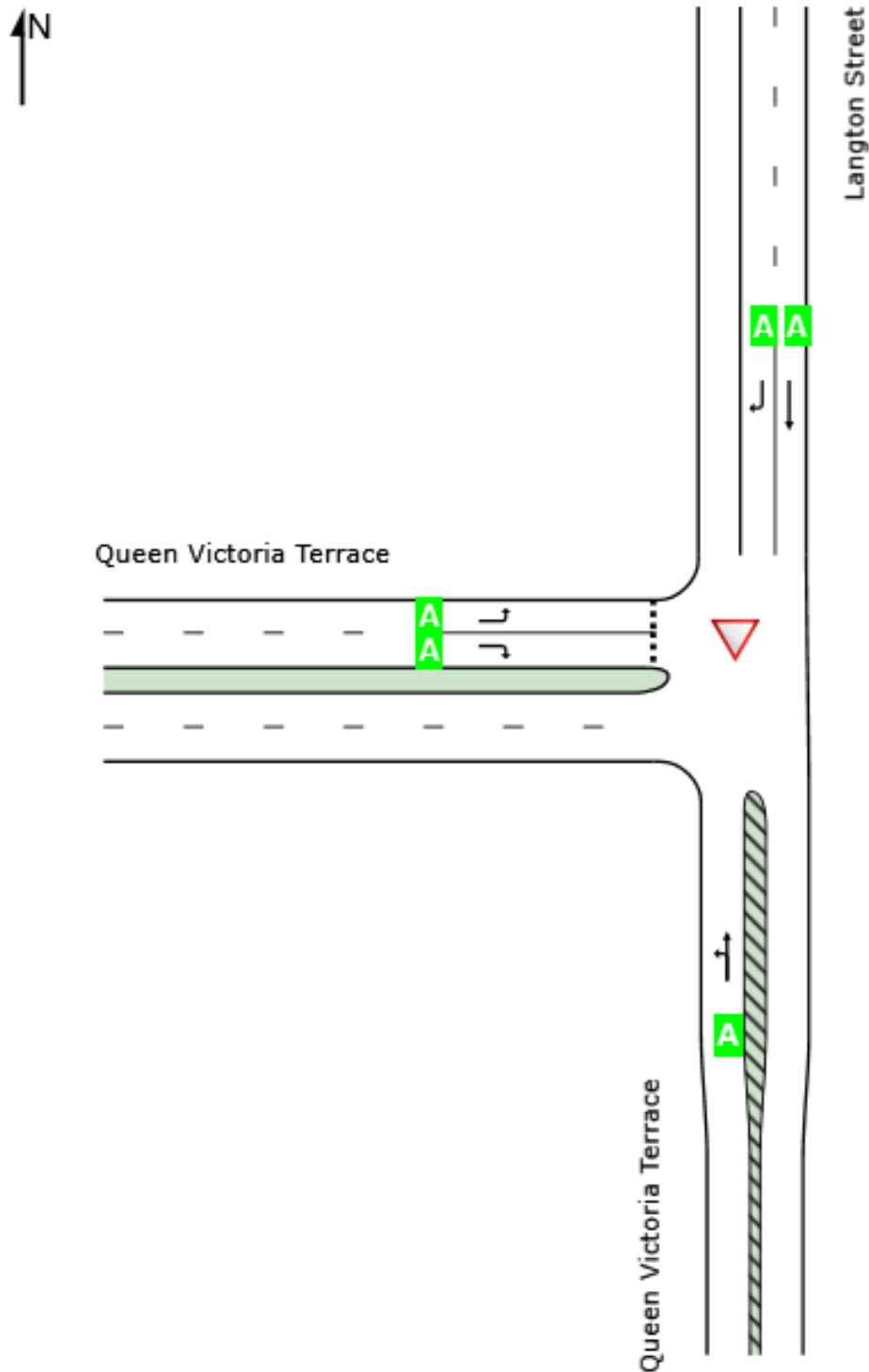
Lane Level of Service

▼ Site: 2 [PM - Queen Victoria / Langton (Site Folder:
Operational Year Scenario Without Development)]

■ Network: 4 [Operational Year
PM (Network Folder:
Operational Year Without
Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	South	North	West	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 3 [PM - Queen Victoria / Development (Site Folder: Operational Year Scenario Without Development)]

Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
SouthEast: Queen Victoria Terrace														
4	L2	1	0.0	1	0.0	0.078	4.7	LOS A	0.0	0.0	0.00	0.00	0.00	34.3
5	T1	146	8.8	146	8.8	0.078	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.5
Approach		147	8.8	147	8.8	0.078	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.0
NorthWest: Queen Victoria Terrace														
11	T1	35	24.2	35	24.2	0.021	0.0	LOS A	0.0	0.1	0.02	0.02	0.02	58.3
12	R2	1	0.0	1	0.0	0.021	4.6	LOS A	0.0	0.1	0.02	0.02	0.02	29.7
Approach		36	23.5	36	23.5	0.021	0.2	NA	0.0	0.1	0.02	0.02	0.02	57.0
SouthWest: West Block														
1	L2	1	0.0	1	0.0	0.002	4.0	LOS A	0.0	0.0	0.24	0.49	0.24	24.5
3	R2	1	0.0	1	0.0	0.002	4.2	LOS A	0.0	0.0	0.24	0.49	0.24	29.6
Approach		2	0.0	2	0.0	0.002	4.1	LOS A	0.0	0.0	0.24	0.49	0.24	27.8
All Vehicles		185	11.5	185	11.5	0.078	0.1	NA	0.0	0.1	0.01	0.01	0.01	57.7

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

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

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

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LANE SUMMARY

Site: 3 [PM - Queen Victoria / Development (Site Folder: Operational Year Scenario Without Development)]

Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %	veh/h	v/c	%	sec		[Veh	m		m	%	%
SouthEast: Queen Victoria Terrace															
Lane 1	147	8.8	147	8.8	1892	0.078	100	0.0	LOS A	0.0	0.0	Full	70	0.0	0.0
Approach	147	8.8	147	8.8		0.078		0.0	NA	0.0	0.0				
NorthWest: Queen Victoria Terrace															
Lane 1	36	23.5	36	23.5	1734	0.021	100	0.2	LOS A	0.0	0.1	Full	56	0.0	0.0
Approach	36	23.5	36	23.5		0.021		0.2	NA	0.0	0.1				
SouthWest: West Block															
Lane 1	2	0.0	2	0.0	1239	0.002	100	4.1	LOS A	0.0	0.0	Full	45	0.0	0.0
Approach	2	0.0	2	0.0		0.002		4.1	LOS A	0.0	0.0				
Intersection	185	11.5	185	11.5		0.078		0.1	NA	0.0	0.1				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

Approach Lane Flows (veh/h)										
SouthEast: Queen Victoria Terrace										
Mov. From SE To Exit:	L2 SW	T1 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	1	146	147	8.8	1892	0.078	100	NA	NA	
Approach	1	146	147	8.8		0.078				
NorthWest: Queen Victoria Terrace										
Mov. From NW To Exit:	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	35	1	36	23.5	1734	0.021	100	NA	NA	
Approach	35	1	36	23.5		0.021				
SouthWest: West Block										
Mov. From SW To Exit:	L2 NW	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	1	1	2	0.0	1239	0.002	100	NA	NA	
Approach	1	1	2	0.0		0.002				

	Total	%HV	Deg.Satn (v/c)
Intersection	185	11.5	0.078

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
NorthWest Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: West Block Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

LANE LEVEL OF SERVICE

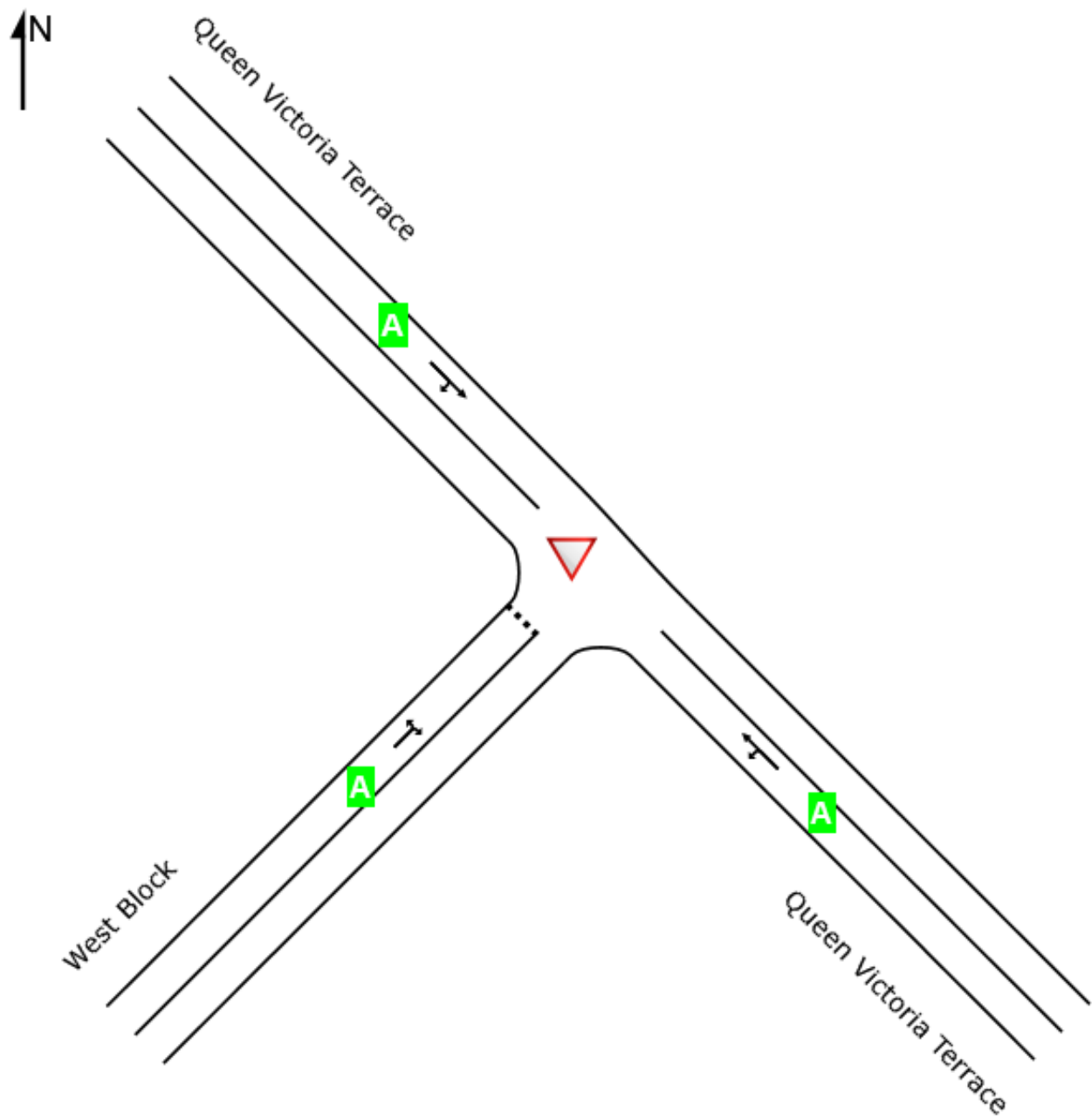
Lane Level of Service

 **Site: 3 [PM - Queen Victoria / Development (Site Folder: Operational Year Scenario Without Development)]**

 **Network: 4 [Operational Year PM (Network Folder: Operational Year Without Development)]**

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	Southeast	Northwest	Southwest	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Commonwealth Ave											
P3	Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	225.0	231.7	1.03
East: Queen Victoria Terrace											
P2	Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	212.2	215.0	1.01
North: Commonwealth Ave											

P4	Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	226.0	233.0	1.03
West: Coronation Drive											
P1	Full	53	46.8	LOS E	0.1	0.1	0.94	0.94	210.4	212.7	1.01
All Pedestrians		211	46.8	LOS E	0.1	0.1	0.94	0.94	218.4	223.1	1.02

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.

LANE SUMMARY

 Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]

 Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %	veh/h	v/c	%	sec		[Veh	Dist] m		m	%	%
South: Commonwealth Ave															
Lane 1	967	4.0	967	4.0	1069	0.905	100	35.0	LOS C	53.3	385.6	Full	390	0.0	4.0
Lane 2	924	4.0	924	4.0	1021	0.905	100	35.9	LOS C	51.4	372.5	Full	390	0.0	0.9
Lane 3	745	4.0	745	4.0	823 ¹	0.905	100	36.3	LOS C	38.1	275.6	Full	390	0.0	0.0
Lane 4	399	3.0	399	3.0	455	0.878	100	59.4	LOS E	22.6	162.2	Short	82	25.0 ^{N2}	NA
Approach	3035	3.9	3035	3.9		0.905		38.8	LOS C	53.3	385.6				
East: Queen Victoria Terrace															
Lane 1	5	3.0	5	3.0	558	0.009	100	18.3	LOS B	0.1	1.0	Full	43	0.0	0.0
Lane 2	72	3.0	72	3.0	111	0.646	100	60.6	LOS E	3.9	28.0	Full	43	0.0	0.0
Approach	77	3.0	77	3.0		0.646		57.7	LOS E	3.9	28.0				
North: Commonwealth Ave															
Lane 1	25	0.0	25	0.0	3363	0.007	100	11.3	LOS A	0.6	1.5	Full	1270	0.0	0.0
Lane 2	888	4.0	888	4.0	1009	0.879	100	31.6	LOS C	45.6	330.4	Full	1270	0.0	0.0
Lane 3	892	4.1	892	4.1	1015	0.879	100	30.8	LOS C	45.8	332.1	Full	1270	0.0	0.0
Lane 4	793	4.1	793	4.1	902 ¹	0.879	100	30.5	LOS C	38.5	278.9	Full	1270	0.0	0.0
Lane 5	151	3.0	151	3.0	362	0.416	100	46.7	LOS D	6.9	49.2	Short	69	0.0	NA
Approach	2748	4.0	2748	4.0		0.879		31.7	LOS C	45.8	332.1				
West: Coronation Drive															
Lane 1	1	3.0	1	3.0	554	0.002	100	21.3	LOS B	0.0	0.2	Full	125	0.0	0.0
Lane 2	73	3.0	73	3.0	111	0.654	100	62.3	LOS E	4.0	28.5	Full	125	0.0	0.0
Approach	74	3.0	74	3.0		0.654		61.7	LOS E	4.0	28.5				
Intersection	5934	3.9	5934	3.9		0.905		36.0	LOS C	53.3	385.6				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

^{N2} Capacity Adjustment specified by user.

Approach Lane Flows (veh/h)											
South: Commonwealth Ave											
Mov. From S To Exit:	L2	T1	R2	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	1	966	-	967	4.0	1069	0.905	100	NA	NA	
Lane 2	-	924	-	924	4.0	1021	0.905	100	NA	NA	

Lane 3	-	745	-	745	4.0	823 ¹	0.905	100	NA	NA
Lane 4	-	-	399	399	3.0	455	0.878	100	68.9	3
Approach	1	2635	399	3035	3.9	0.905				
East: Queen Victoria Terrace										
Mov. From E To Exit:	L2 S	T1 W	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	5	-	-	5	3.0	558	0.009	100	NA	NA
Lane 2	-	1	71	72	3.0	111	0.646	100	NA	NA
Approach	5	1	71	77	3.0	0.646				
North: Commonwealth Ave										
Mov. From N To Exit:	L2 E	T1 S	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	-	25	-	25	0.0	3363	0.007	100	NA	NA
Lane 2	107	780	-	888	4.0	1009	0.879	100	NA	NA
Lane 3	-	892	-	892	4.1	1015	0.879	100	NA	NA
Lane 4	-	793	-	793	4.1	902 ¹	0.879	100	NA	NA
Lane 5	-	-	151	151	3.0	362	0.416	100	0.0	4
Approach	107	2491	151	2748	4.0	0.879				
West: Coronation Drive										
Mov. From W To Exit:	L2 N	T1 E	R2 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	-	-	1	3.0	554	0.002	100	NA	NA
Lane 2	-	3	69	73	3.0	111	0.654	100	NA	NA
Approach	1	3	69	74	3.0	0.654				
Total		%HV Deg.Satn (v/c)								
Intersection	5934	3.9		0.905						

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Commonwealth Ave Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
Full Length Lane	4	Merge Analysis not applied.										
East Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
North Exit: Commonwealth Ave Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
West Exit: Coronation Drive												

Merge Type: **Not Applied**

Full Length Lane	1	Merge Analysis not applied.
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PHASING SUMMARY

 **Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]**

 **Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]**

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 22

Reference Phase: Phase A

Input Phase Sequence: A, D, E

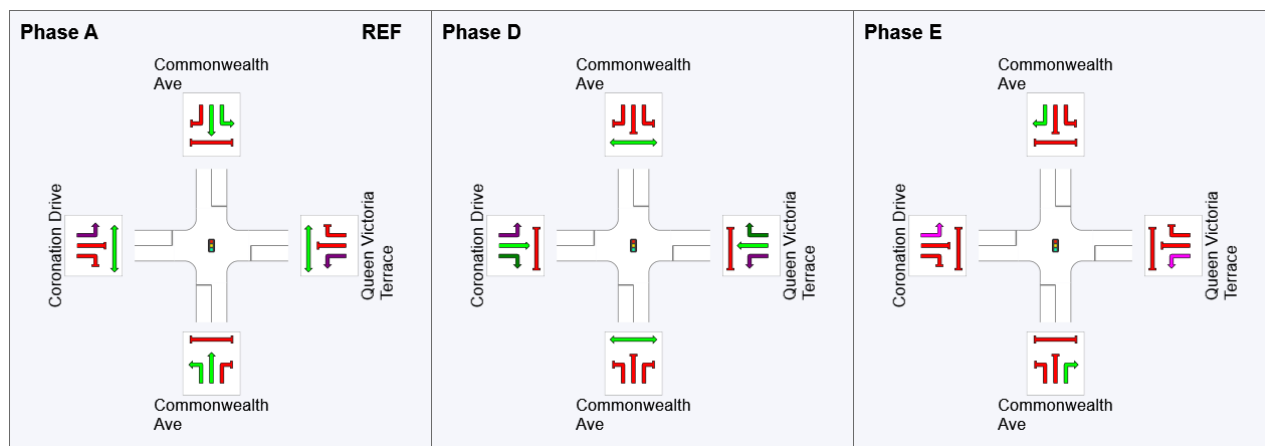
Output Phase Sequence: A, D, E

Phase Timing Summary

Phase	A	D	E
Phase Change Time (sec)	0	64	77
Green Time (sec)	57	6	21
Phase Time (sec)	64	13	28
Phase Split	61%	12%	27%

See the Timing Analysis 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, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase

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

LANE LEVEL OF SERVICE

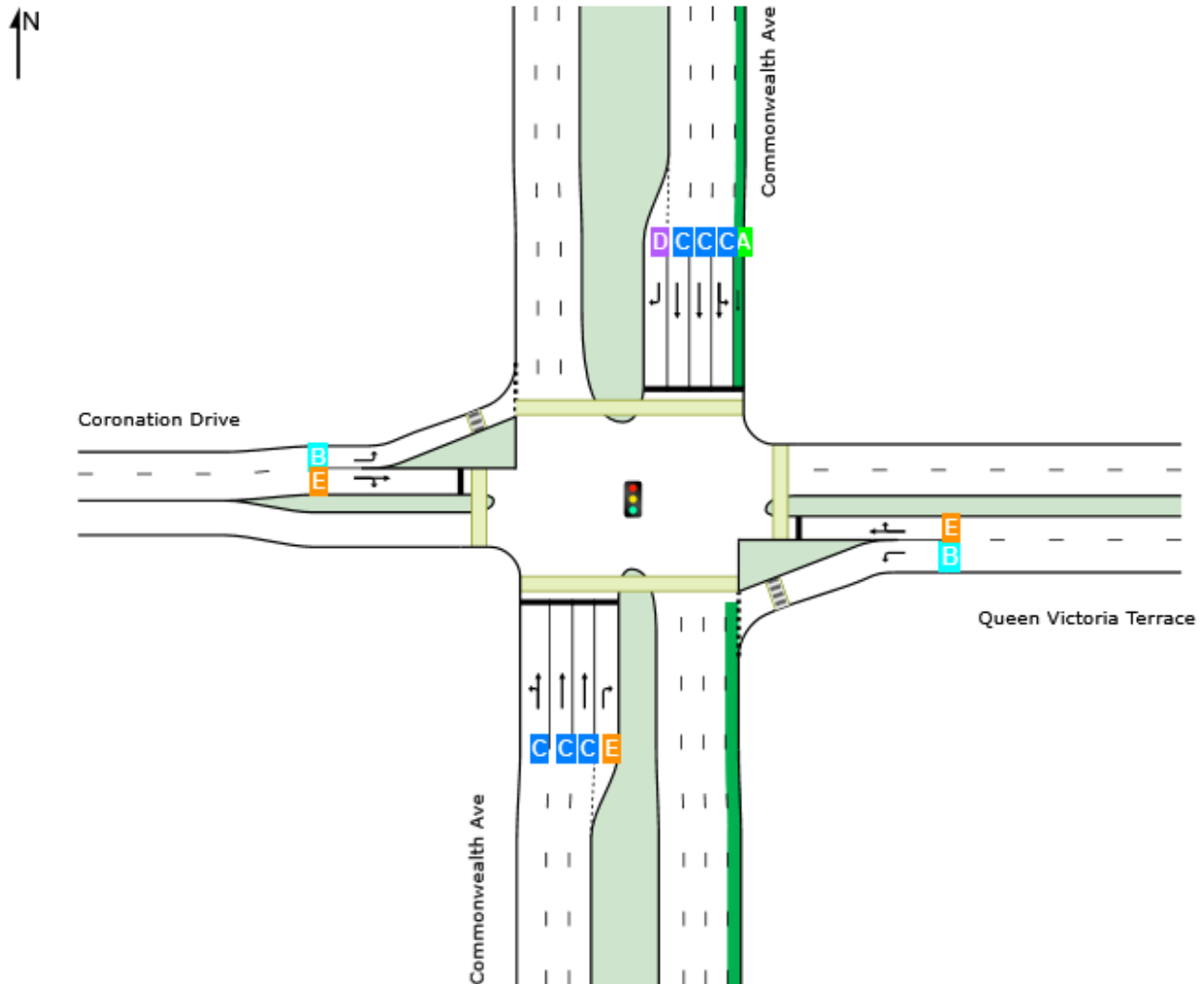
Lane Level of Service

 **Site: 1 [AM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]**

 **Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]**

New Site
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 105 seconds (Network Practical Cycle Time)

	Approaches				Intersection
	South	East	North	West	
LOS	C	E	C	E	C



Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

▼ Site: 2 [AM - Queen Victoria / Langton (Site Folder: Operational Year Scenario With Development)]

■ Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Queen Victoria Terrace														
1	L2	69	3.0	69	3.0	0.042	4.2	LOS A	0.0	0.0	0.00	0.51	0.00	32.1
2	T1	7	100.0	7	100.0	0.042	0.0	LOS A	0.0	0.0	0.00	0.51	0.00	44.0
Approach		77	12.3	77	12.3	0.042	3.8	NA	0.0	0.0	0.00	0.51	0.00	33.9
North: Langton Street														
8	T1	6	100.0	6	100.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	7	3.0	7	3.0	0.004	5.8	LOS A	0.0	0.1	0.18	0.53	0.18	31.5
Approach		14	47.8	14	47.8	0.005	3.1	NA	0.0	0.1	0.09	0.28	0.09	40.5
West: Queen Victoria Terrace														
10	L2	199	0.0	199	0.0	0.123	3.7	LOS A	0.5	3.2	0.04	0.53	0.04	36.0
12	R2	311	0.0	311	0.0	0.277	4.0	LOS A	1.2	8.2	0.14	0.53	0.14	27.8
Approach		509	0.0	509	0.0	0.277	3.9	LOS A	1.2	8.2	0.10	0.53	0.10	32.5
All Vehicles		600	2.7	600	2.7	0.277	3.9	NA	1.2	8.2	0.08	0.52	0.08	32.8

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.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

LANE SUMMARY

Site: 2 [AM - Queen Victoria / Langton (Site Folder: Operational Year Scenario With Development)]

Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]	veh/h	v/c	%	sec		[Veh	m		m	%	%
South: Queen Victoria Terrace															
Lane 1	77	12.3	77	12.3	1819	0.042	100	3.8	LOS A	0.0	0.0	Full	56	0.0	0.0
Approach	77	12.3	77	12.3		0.042		3.8	NA	0.0	0.0				
North: Langton Street															
Lane 1	6	100.0	6	100.0	1170	0.005	100	0.0	LOS A	0.0	0.0	Full	100	0.0	0.0
Lane 2	7	3.0	7	3.0	1652	0.004	100	5.8	LOS A	0.0	0.1	Full	100	0.0	0.0
Approach	14	47.8	14	47.8		0.005		3.1	NA	0.0	0.1				
West: Queen Victoria Terrace															
Lane 1	199	0.0	199	0.0	1622	0.123	100	3.7	LOS A	0.5	3.2	Full	43	0.0	0.0
Lane 2	311	0.0	311	0.0	1121	0.277	100	4.0	LOS A	1.2	8.2	Full	43	0.0	0.0
Approach	509	0.0	509	0.0		0.277		3.9	LOS A	1.2	8.2				
Intersection	600	2.7	600	2.7		0.277		3.9	NA	1.2	8.2				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

Approach Lane Flows (veh/h)										
South: Queen Victoria Terrace										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	W	N				v/c	%	%		No.
Lane 1	69	7	77	12.3	1819	0.042	100	NA	NA	
Approach	69	7	77	12.3		0.042				
North: Langton Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	S	W				v/c	%	%		No.
Lane 1	6	-	6	100.0	1170	0.005	100	NA	NA	
Lane 2	-	7	7	3.0	1652	0.004	100	NA	NA	
Approach	6	7	14	47.8		0.005				
West: Queen Victoria Terrace										
Mov.	L2	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From W					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	N	S				v/c	%	%		No.

Lane 1	199	-	199	0.0	1622	0.123	100	NA	NA
Lane 2	-	311	311	0.0	1121	0.277	100	NA	NA
Approach	199	311	509	0.0		0.277			
Total %HV Deg.Satn (v/c)									
Intersection	600	2.7		0.277					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
South Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Langton Street Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
West Exit: Queen Victoria Terrace Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										

LANE LEVEL OF SERVICE

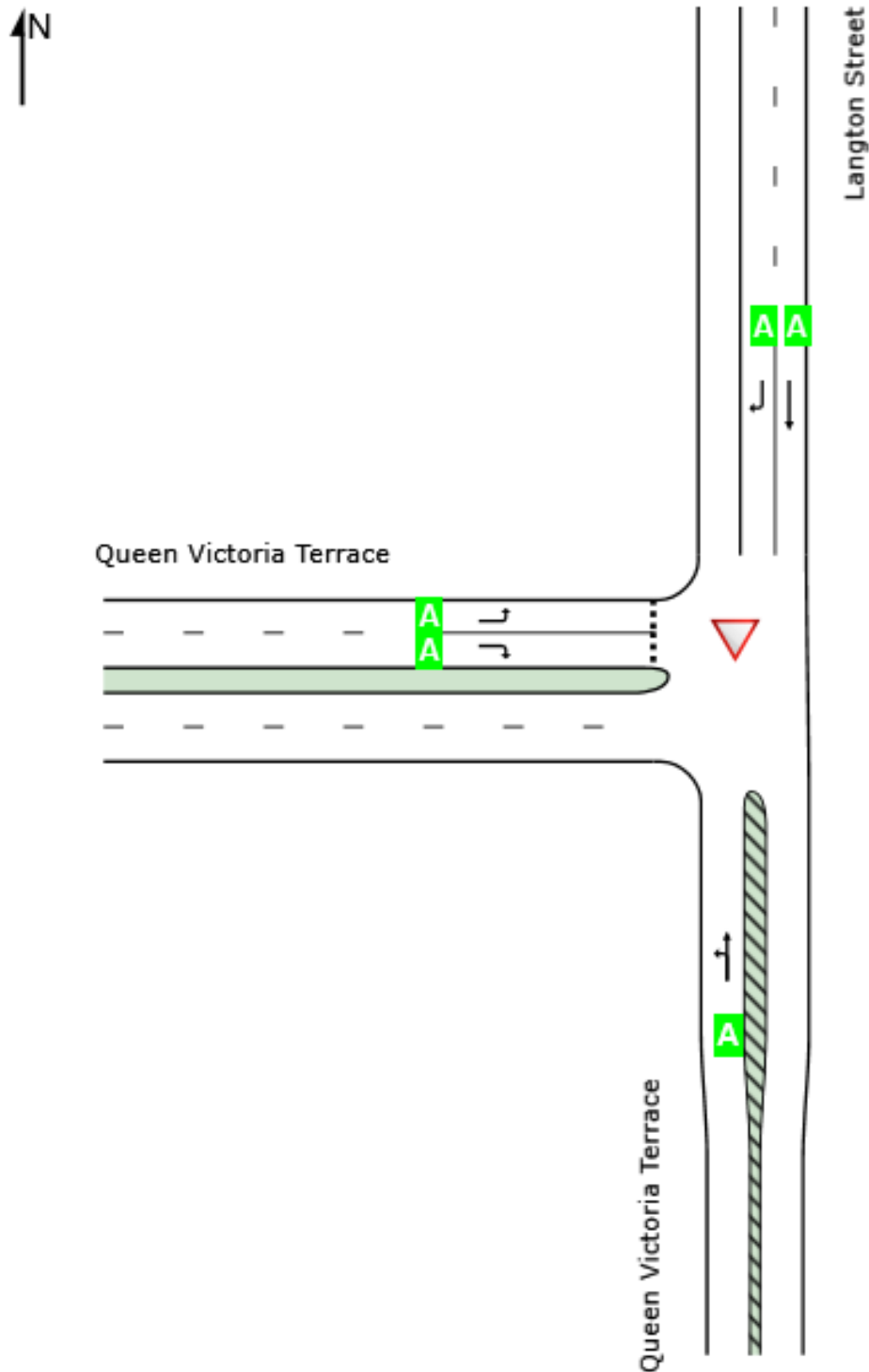
Lane Level of Service

▼ Site: 2 [AM - Queen Victoria / Langton (Site Folder: Operational Year Scenario With Development)]

■ Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	South	North	West	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 3 [AM - Queen Victoria / Development (Site Folder: Operational Year Scenario With Development)]

Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
SouthEast: Queen Victoria Terrace														
4	L2	8	0.0	8	0.0	0.042	4.7	LOS A	0.0	0.0	0.00	0.06	0.00	33.0
5	T1	68	14.9	68	14.9	0.042	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	53.5
Approach		77	13.2	77	13.2	0.042	0.5	NA	0.0	0.0	0.00	0.06	0.00	48.6
NorthWest: Queen Victoria Terrace														
11	T1	306	5.1	306	5.1	0.164	0.0	LOS A	0.1	0.5	0.02	0.02	0.02	58.4
12	R2	11	0.0	11	0.0	0.164	4.4	LOS A	0.1	0.5	0.02	0.02	0.02	29.7
Approach		317	4.9	317	4.9	0.164	0.2	NA	0.1	0.5	0.02	0.02	0.02	56.9
SouthWest: West Block														
1	L2	8	0.0	8	0.0	0.014	3.8	LOS A	0.0	0.3	0.17	0.51	0.17	24.4
3	R2	7	0.0	7	0.0	0.014	5.2	LOS A	0.0	0.3	0.17	0.51	0.17	29.6
Approach		16	0.0	16	0.0	0.014	4.5	LOS A	0.0	0.3	0.17	0.51	0.17	27.6
All Vehicles		409	6.3	409	6.3	0.164	0.4	NA	0.1	0.5	0.02	0.05	0.02	54.1

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

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

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

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LANE SUMMARY

Site: 3 [AM - Queen Victoria / Development (Site Folder: Operational Year Scenario With Development)]

Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %	veh/h	v/c	%	sec		[Veh	m		m	%	%
SouthEast: Queen Victoria Terrace															
Lane 1	77	13.2	77	13.2	1833	0.042	100	0.5	LOS A	0.0	0.0	Full	70	0.0	0.0
Approach	77	13.2	77	13.2		0.042		0.5	NA	0.0	0.0				
NorthWest: Queen Victoria Terrace															
Lane 1	317	4.9	317	4.9	1932	0.164	100	0.2	LOS A	0.1	0.5	Full	56	0.0	0.0
Approach	317	4.9	317	4.9		0.164		0.2	NA	0.1	0.5				
SouthWest: West Block															
Lane 1	16	0.0	16	0.0	1145	0.014	100	4.5	LOS A	0.0	0.3	Full	45	0.0	0.0
Approach	16	0.0	16	0.0		0.014		4.5	LOS A	0.0	0.3				
Intersection	409	6.3	409	6.3		0.164		0.4	NA	0.1	0.5				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

Approach Lane Flows (veh/h)										
SouthEast: Queen Victoria Terrace										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From SE To Exit:	SW	NW			Cap. veh/h	v/c	%	%		
Lane 1	8	68	77	13.2	1833	0.042	100	NA	NA	
Approach	8	68	77	13.2		0.042				
NorthWest: Queen Victoria Terrace										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From NW To Exit:	SE	SW			Cap. veh/h	v/c	%	%		
Lane 1	306	11	317	4.9	1932	0.164	100	NA	NA	
Approach	306	11	317	4.9		0.164				
SouthWest: West Block										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov.	Ov. Lane No.
From SW To Exit:	NW	SE			Cap. veh/h	v/c	%	%		
Lane 1	8	7	16	0.0	1145	0.014	100	NA	NA	
Approach	8	7	16	0.0		0.014				

	Total	%HV	Deg.Satn (v/c)
Intersection	409	6.3	0.164

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
NorthWest Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: West Block Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

LANE LEVEL OF SERVICE

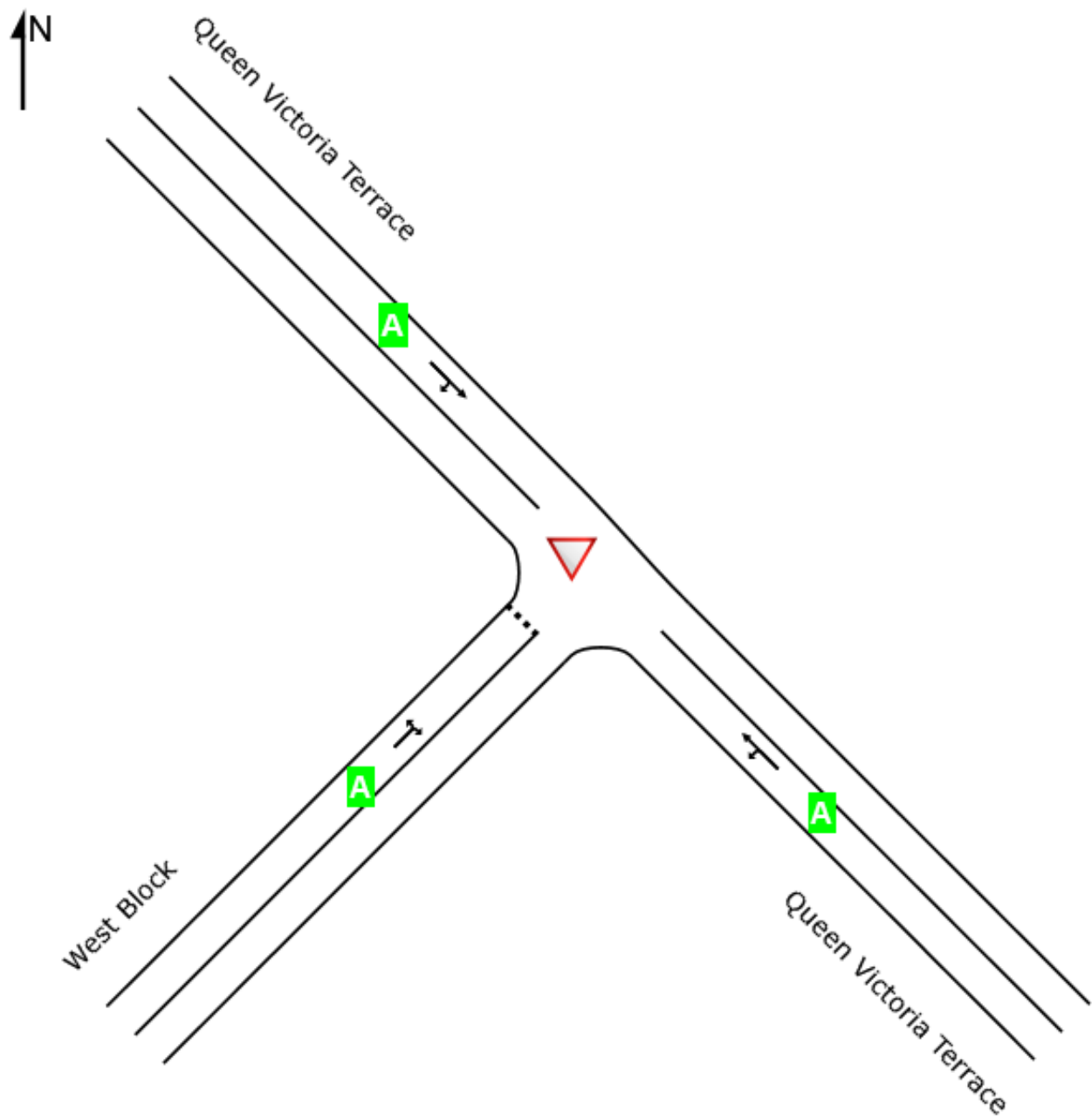
Lane Level of Service

▼ Site: 3 [AM - Queen Victoria / Development (Site Folder: Operational Year Scenario With Development)]

■ Network: 5 [Operational Year AM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	Southeast	Northwest	Southwest	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

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

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Commonwealth Ave											
P3	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	212.5	231.7	1.09
East: Queen Victoria Terrace											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.7	215.0	1.08
North: Commonwealth Ave											

P4	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	213.5	233.0	1.09
West: Coronation Drive											
P1	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	197.9	212.7	1.07
All Pedestrians		211	34.3	LOS D	0.1	0.1	0.93	0.93	205.9	223.1	1.08

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.

LANE SUMMARY

 Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]

 Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]	veh/h	v/c	%	sec		[Veh	Dist]		m	%	%
South: Commonwealth Ave															
Lane 1	727	4.6	727	4.6	1030	0.706	100	15.4	LOS B	21.4	155.7	Full	390	0.0	0.0
Lane 2	694	4.6	694	4.6	984	0.706	100	15.4	LOS B	20.5	149.0	Full	390	0.0	0.0
Lane 3	678	4.6	678	4.6	960	0.706	100	15.3	LOS B	19.8	143.9	Full	390	0.0	0.0
Lane 4	119	3.0	119	3.0	159	0.748	100	49.9	LOS D	5.1	36.3	Short	82	0.0	NA
Approach	2218	4.5	2218	4.5		0.748		17.2	LOS B	21.4	155.7				
East: Queen Victoria Terrace															
Lane 1	23	3.0	23	3.0	576	0.040	100	16.9	LOS B	0.5	3.7	Full	43	0.0	0.0
Lane 2	189	3.0	189	3.0	210	0.902	100	54.3	LOS D	9.1	65.1	Full	43	0.0	43.0
Approach	213	3.0	213	3.0		0.902		50.2	LOS D	9.1	65.1				
North: Commonwealth Ave															
Lane 1	3	0.0	3	0.0	3253	0.001	100	9.2	LOS A	0.0	0.1	Full	1270	0.0	0.0
Lane 2	887	4.2	887	4.2	979	0.905	100	33.3	LOS C	40.9	296.8	Full	1270	0.0	0.0
Lane 3	888	4.2	888	4.2	981	0.905	100	33.0	LOS C	41.0	297.3	Full	1270	0.0	0.0
Lane 4	817	4.2	817	4.2	903 ¹	0.905	100	32.9	LOS C	36.4	263.7	Full	1270	0.0	0.0
Lane 5	131	3.0	131	3.0	158	0.825	100	52.3	LOS D	5.8	41.4	Short	69	0.0	NA
Approach	2725	4.1	2725	4.1		0.905		34.0	LOS C	41.0	297.3				
West: Coronation Drive															
Lane 1	1	3.0	1	3.0	474	0.002	100	13.1	LOS A	0.0	0.1	Full	125	0.0	0.0
Lane 2	49	3.0	49	3.0	208	0.238	100	40.4	LOS C	1.8	13.1	Full	125	0.0	0.0
Approach	51	3.0	51	3.0		0.238		39.8	LOS C	1.8	13.1				
Intersection	5206	4.3	5206	4.3		0.905		27.6	LOS B	41.0	297.3				

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

Lane LOS values are based on average delay per lane.

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

- ¹ Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes. Some upstream delays at entry to short lanes are not included.

Approach Lane Flows (veh/h)										
South: Commonwealth Ave										
Mov.	L2	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From S To Exit:	W	N	E			Cap. veh/h	v/c	%	%	
Lane 1	1	726	-	727	4.6	1030	0.706	100	NA	NA
Lane 2	-	694	-	694	4.6	984	0.706	100	NA	NA
Lane 3	-	678	-	678	4.6	960	0.706	100	NA	NA

Merge Analysis												
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Commonwealth Ave												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
Full Length Lane	4	Merge Analysis not applied.										
East Exit: Queen Victoria Terrace												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
North Exit: Commonwealth Ave												
Merge Type: Not Applied												
Full Length Lane	1	Merge Analysis not applied.										
Full Length Lane	2	Merge Analysis not applied.										
Full Length Lane	3	Merge Analysis not applied.										
West Exit: Coronation Drive												
Merge Type: Not Applied												

Full Length Lane	1	Merge Analysis not applied.
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Project: N:\Projects\505\FY21\079_WestBlock Hotel, Parkes - TIA\Design\SIDRA\Design Optimum.sip9

PHASING SUMMARY

 **Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]**

 **Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]**

New Site

Site Category: Base Year

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Timings based on settings in the Network Timing dialog

Phase Times determined by the program

Downstream lane blockage effects included in determining phase times

Phase Sequence: TCS 22

Reference Phase: Phase A

Input Phase Sequence: A, D, E

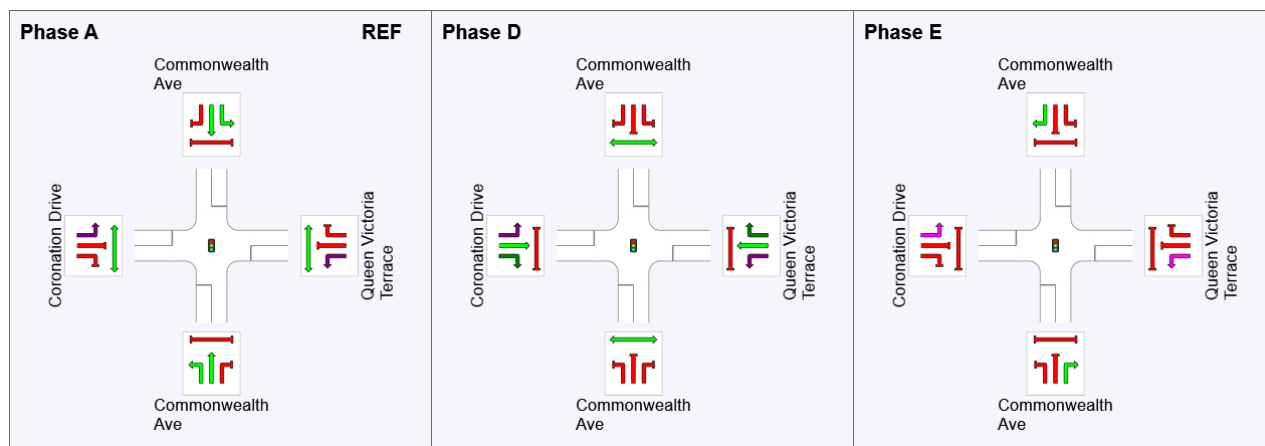
Output Phase Sequence: A, D, E

Phase Timing Summary

Phase	A	D	E
Phase Change Time (sec)	0	49	66
Green Time (sec)	42	10	7
Phase Time (sec)	49	17	14
Phase Split	61%	21%	18%

See the Timing Analysis 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, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase

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

LANE LEVEL OF SERVICE

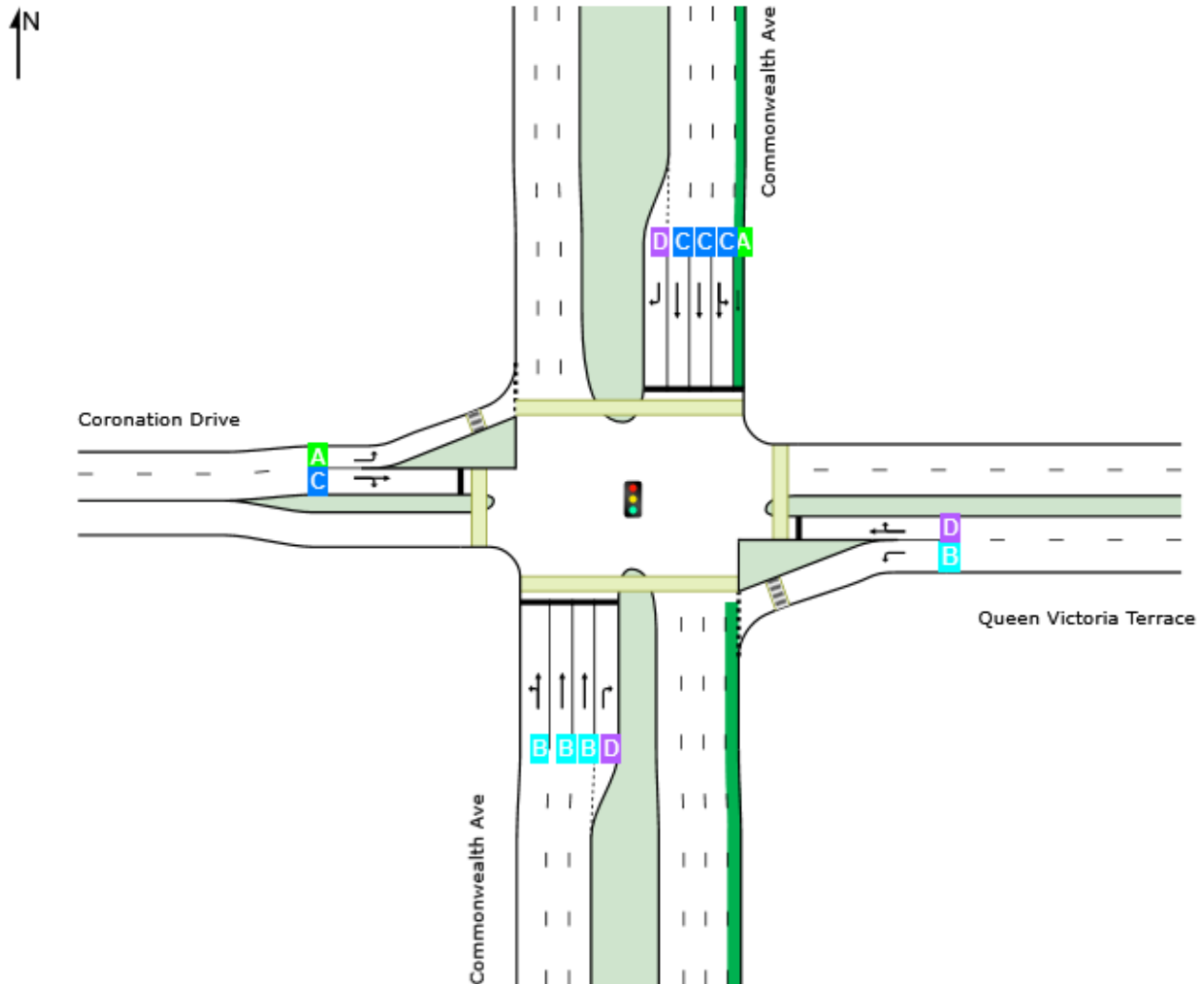
Lane Level of Service

 **Site: 1 [PM - Commonwealth / Coronation / Queen Victoria Terrace (Site Folder: Operational Year Scenario With Development)]**

 **Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]**

New Site
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

	Approaches				Intersection
	South	East	North	West	
LOS	B	D	C	C	B



Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
 Lane LOS values are based on average delay per lane.
 Intersection and Approach LOS values are based on average delay for all lanes.
 Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 2 [PM - Queen Victoria / Langton (Site Folder: Operational Year Scenario With Development)]

Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Queen Victoria Terrace														
1	L2	142	3.0	142	3.0	0.081	4.2	LOS A	0.0	0.0	0.00	0.53	0.00	31.4
2	T1	8	100.0	8	100.0	0.081	0.0	LOS A	0.0	0.0	0.00	0.53	0.00	43.4
Approach		151	8.4	151	8.4	0.081	3.9	NA	0.0	0.0	0.00	0.53	0.00	32.5
North: Langton Street														
8	T1	7	100.0	7	100.0	0.006	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	71	3.0	71	3.0	0.080	6.0	LOS A	0.2	1.5	0.27	0.56	0.27	30.6
Approach		78	12.2	78	12.2	0.080	5.4	NA	0.2	1.5	0.24	0.50	0.24	32.2
West: Queen Victoria Terrace														
10	L2	115	3.0	115	3.0	0.072	3.7	LOS A	0.3	1.8	0.04	0.53	0.04	35.7
12	R2	47	3.0	47	3.0	0.048	4.5	LOS A	0.2	1.1	0.19	0.55	0.19	26.1
Approach		162	3.0	162	3.0	0.072	3.9	LOS A	0.3	1.8	0.08	0.53	0.08	34.1
All Vehicles		391	6.9	391	6.9	0.081	4.2	NA	0.3	1.8	0.08	0.52	0.08	33.2

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

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

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

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Project: N:\Projects\505\FY21\079_WestBlock Hotel, Parkes - TIA\Design\SIDRA\Design Optimum.sip9

LANE SUMMARY

Site: 2 [PM - Queen Victoria / Langton (Site Folder: Operational Year Scenario With Development)]

Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]						[Veh	Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
South: Queen Victoria Terrace															
Lane 1	151	8.4	151	8.4	1857	0.081	100	3.9	LOS A	0.0	0.0	Full	56	0.0	0.0
Approach	151	8.4	151	8.4		0.081		3.9	NA	0.0	0.0				
North: Langton Street															
Lane 1	7	100.0	7	100.0	1170	0.006	100	0.0	LOS A	0.0	0.0	Full	100	0.0	0.0
Lane 2	71	3.0	71	3.0	878	0.080	100	6.0	LOS A	0.2	1.5	Full	100	-43.0 ^{N3}	0.0
Approach	78	12.2	78	12.2		0.080		5.4	NA	0.2	1.5				
West: Queen Victoria Terrace															
Lane 1	115	3.0	115	3.0	1596	0.072	100	3.7	LOS A	0.3	1.8	Full	43	0.0	0.0
Lane 2	47	3.0	47	3.0	981	0.048	100	4.5	LOS A	0.2	1.1	Full	43	0.0	0.0
Approach	162	3.0	162	3.0		0.072		3.9	LOS A	0.3	1.8				
Intersection	391	6.9	391	6.9		0.081		4.2	NA	0.3	1.8				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

^{N3} Capacity Adjustment due to downstream lane blockage determined by the program.

Approach Lane Flows (veh/h)										
South: Queen Victoria Terrace										
Mov. From S To Exit:	L2	T1	Total	%HV		Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	142	8	151	8.4	1857	0.081	100	NA	NA	
Approach	142	8	151	8.4		0.081				
North: Langton Street										
Mov. From N To Exit:	T1	R2	Total	%HV		Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	7	-	7	100.0	1170	0.006	100	NA	NA	
Lane 2	-	71	71	3.0	878	0.080	100	NA	NA	
Approach	7	71	78	12.2		0.080				
West: Queen Victoria Terrace										
Mov. From W	L2	R2	Total	%HV		Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	

To Exit:	N	S							
Lane 1	115	-	115	3.0	1596	0.072	100	NA	NA
Lane 2	-	47	47	3.0	981	0.048	100	NA	NA
Approach	115	47	162	3.0	0.072				
Total %HV Deg.Satn (v/c)									
Intersection	391	6.9	0.081						

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
North Exit: Langton Street Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
West Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
Full Length Lane	2	Merge Analysis not applied.									

LANE LEVEL OF SERVICE

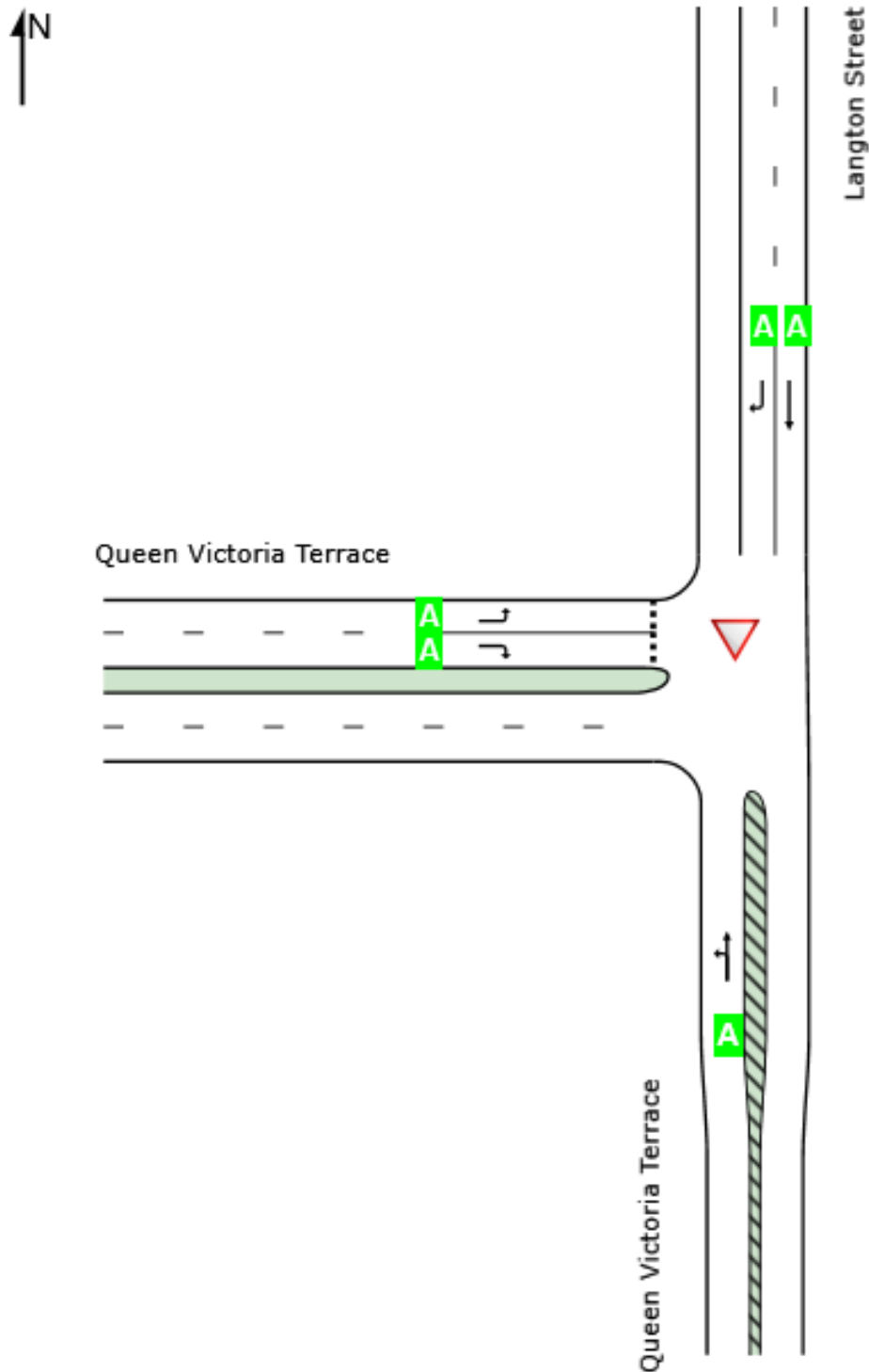
Lane Level of Service

▼ Site: 2 [PM - Queen Victoria / Langton (Site Folder: Operational Year Scenario With Development)]

■ Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	South	North	West	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

MOVEMENT SUMMARY

Site: 3 [PM - Queen Victoria / Development (Site Folder: Operational Year Scenario With Development)]

Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
SouthEast: Queen Victoria Terrace														
4	L2	31	0.0	31	0.0	0.093	4.7	LOS A	0.0	0.0	0.00	0.10	0.00	32.3
5	T1	146	8.8	146	8.8	0.093	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	50.8
Approach		177	7.3	177	7.3	0.093	0.8	NA	0.0	0.0	0.00	0.10	0.00	44.6
NorthWest: Queen Victoria Terrace														
11	T1	35	24.2	35	24.2	0.044	0.4	LOS A	0.2	1.4	0.26	0.29	0.26	41.3
12	R2	38	0.0	38	0.0	0.044	4.7	LOS A	0.2	1.4	0.26	0.29	0.26	23.7
Approach		73	11.6	73	11.6	0.044	2.6	NA	0.2	1.4	0.26	0.29	0.26	30.6
SouthWest: West Block														
1	L2	4	0.0	4	0.0	0.006	4.1	LOS A	0.0	0.1	0.25	0.50	0.25	24.4
3	R2	3	0.0	3	0.0	0.006	4.4	LOS A	0.0	0.1	0.25	0.50	0.25	29.6
Approach		7	0.0	7	0.0	0.006	4.2	LOS A	0.0	0.1	0.25	0.50	0.25	27.4
All Vehicles		257	8.3	257	8.3	0.093	1.4	NA	0.2	1.4	0.08	0.17	0.08	37.9

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

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

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

LANE SUMMARY

Site: 3 [PM - Queen Victoria / Development (Site Folder: Operational Year Scenario With Development)]

Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]

New Site
Site Category: Base Year
Give-Way (Two-Way)

Lane Use and Performance															
	DEMAND FLOWS		ARRIVAL FLOWS		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% BACK OF QUEUE		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total	HV]	[Total	HV]						[Veh	Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			m		m	%	%
SouthEast: Queen Victoria Terrace															
Lane 1	177	7.3	177	7.3	1894	0.093	100	0.8	LOS A	0.0	0.0	Full	70	0.0	0.0
Approach	177	7.3	177	7.3		0.093		0.8	NA	0.0	0.0				
NorthWest: Queen Victoria Terrace															
Lane 1	73	11.6	73	11.6	1656	0.044	100	2.6	LOS A	0.2	1.4	Full	56	0.0	0.0
Approach	73	11.6	73	11.6		0.044		2.6	NA	0.2	1.4				
SouthWest: West Block															
Lane 1	7	0.0	7	0.0	1234	0.006	100	4.2	LOS A	0.0	0.1	Full	45	0.0	0.0
Approach	7	0.0	7	0.0		0.006		4.2	LOS A	0.0	0.1				
Intersection	257	8.3	257	8.3		0.093		1.4	NA	0.2	1.4				

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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

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

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

Approach Lane Flows (veh/h)										
SouthEast: Queen Victoria Terrace										
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.	
From SE					Cap.	Satn	Util.	SL	Ov.	Lane
To Exit:	SW	NW			veh/h	v/c	%	%	%	No.
Lane 1	31	146	177	7.3	1894	0.093	100	NA	NA	
Approach	31	146	177	7.3		0.093				
NorthWest: Queen Victoria Terrace										
Mov.	T1	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From NW					Cap.	Satn	Util.	SL	Ov.	Lane
To Exit:	SE	SW			veh/h	v/c	%	%	%	No.
Lane 1	35	38	73	11.6	1656	0.044	100	NA	NA	
Approach	35	38	73	11.6		0.044				
SouthWest: West Block										
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.	
From SW					Cap.	Satn	Util.	SL	Ov.	Lane
To Exit:	NW	SE			veh/h	v/c	%	%	%	No.
Lane 1	4	3	7	0.0	1234	0.006	100	NA	NA	
Approach	4	3	7	0.0		0.006				

	Total	%HV	Deg.Satn (v/c)
Intersection	257	8.3	0.093

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis											
	Exit Lane Number	Short Lane Length m	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
SouthEast Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
NorthWest Exit: Queen Victoria Terrace Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: West Block Merge Type: Not Applied											
Full Length Lane	1	Merge Analysis not applied.									

LANE LEVEL OF SERVICE

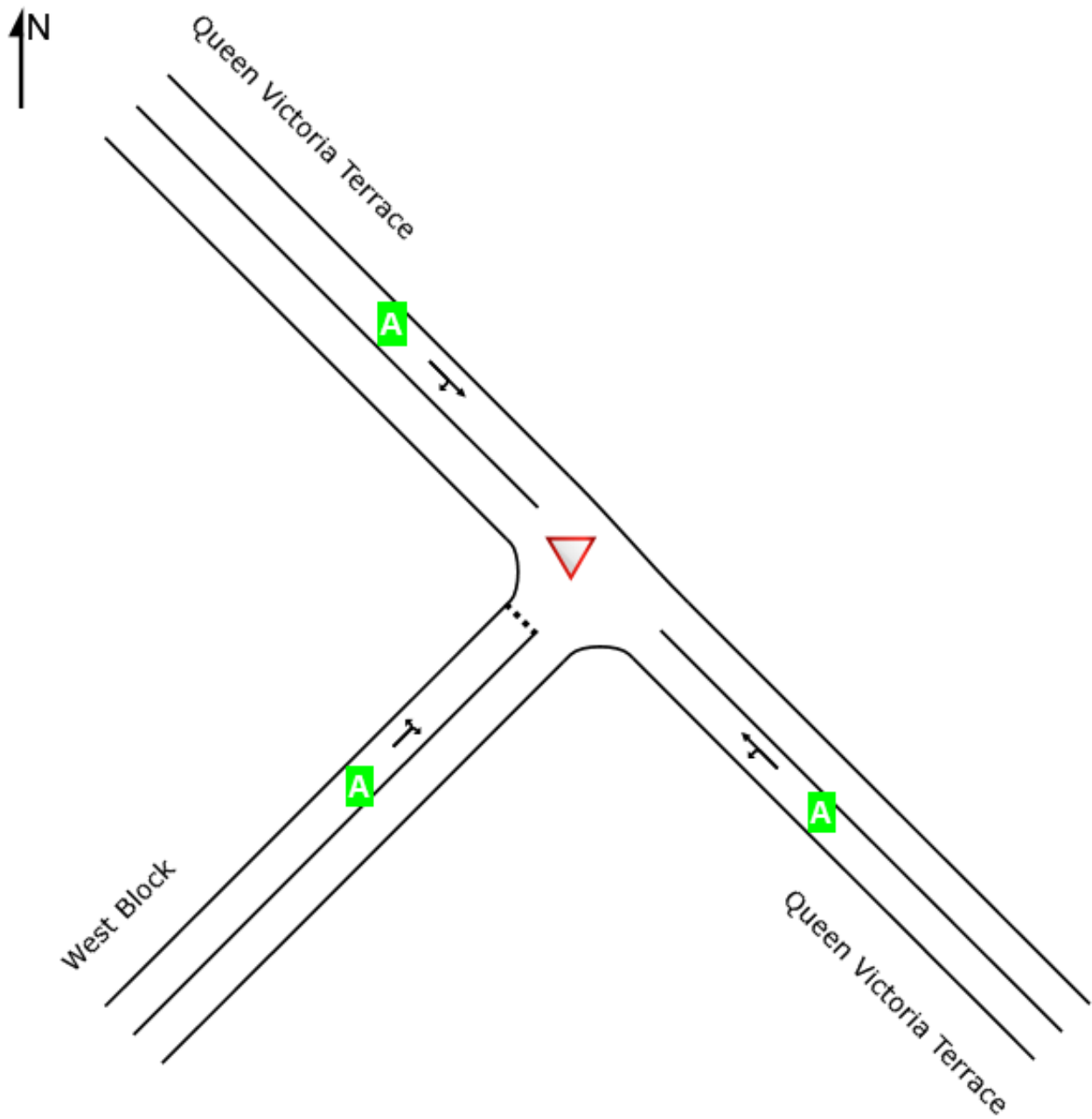
Lane Level of Service

 **Site: 3 [PM - Queen Victoria / Development (Site Folder: Operational Year Scenario With Development)]**

 **Network: 6 [Operational Year PM (Network Folder: Operational Year With Development)]**

New Site
Site Category: Base Year
Give-Way (Two-Way)

	Approaches			Intersection
	Southeast	Northwest	Southwest	
LOS	NA	NA	A	NA



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

Lane LOS values are based on average delay per lane.

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

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

Delay Model: SIDRA Standard (Geometric Delay is included).

APPENDIX

B

EXISTING SCATS SUMMAIRES

Monday, 17 May 2021				AM Peak	3454	PM Peak	0	Daily Total			26782
Time	Approach Detectors										Total
	1	2	3	4	5	6	7	8	9	10	
0:15	3	2	0	0	5	0	2	1	0	1	14
0:30	0	1	0	0	4	0	0	1	0	0	6
0:45	0	0	0	0	4	0	0	2	0	1	7
1:00	4	2	0	0	2	0	3	1	0	0	12
1:15	4	7	0	0	0	0	0	1	0	1	13
1:30	2	1	0	0	3	0	1	0	0	0	7
1:45	1	2	0	0	3	0	0	0	0	0	6
2:00	0	0	0	0	2	0	2	0	0	0	4
2:15	0	4	0	0	5	0	0	0	0	0	9
2:30	0	2	0	0	1	0	0	0	0	0	3
2:45	1	6	0	0	1	0	0	0	0	0	8
3:00	1	1	0	0	2	0	0	0	0	0	4
3:15	0	0	0	0	0	0	0	1	0	0	1
3:30	1	2	0	0	1	0	1	0	0	2	7
3:45	1	6	0	0	0	0	1	0	0	1	9
4:00	0	4	0	0	4	0	0	2	0	0	10
4:15	0	3	0	0	0	0	0	0	0	0	3
4:30	3	4	0	0	5	0	2	0	0	0	14
4:45	1	6	0	0	1	0	0	0	0	0	8
5:00	2	8	0	1	4	0	1	0	0	1	17
5:15	1	6	0	1	11	0	2	3	0	0	24
5:30	3	12	0	5	10	0	3	4	0	1	38
5:45	9	17	0	6	23	0	13	5	0	9	82
6:00	15	27	0	9	30	0	22	4	0	2	109
6:15	15	21	0	9	30	0	28	4	0	1	108
6:30	19	31	0	6	44	0	30	5	0	2	137
6:45	17	44	0	10	80	0	56	13	0	3	223
7:00	31	49	0	15	120	0	76	13	0	2	306
7:15	34	45	0	19	87	0	64	13	0	2	264
7:30	39	74	0	11	111	0	81	14	0	3	333
7:45	54	94	0	33	144	0	134	16	0	5	480
8:00	77	130	0	49	162	0	150	20	0	6	594
8:15	102	175	0	68	201	0	199	28	0	11	784
8:30	127	195	0	91	188	0	205	32	0	13	851
8:45	147	197	0	102	174	0	200	23	0	9	852
9:00	161	206	0	104	196	0	196	44	0	15	922
9:15	120	193	0	89	194	0	174	39	0	20	829
9:30	87	144	0	58	165	0	131	35	0	13	633
9:45	63	92	0	30	117	0	92	24	0	6	424
10:00	58	95	0	28	96	0	78	19	0	6	380
10:15	49	77	0	16	104	0	79	12	0	4	341
10:30	54	99	0	20	80	0	62	12	0	5	332
10:45	46	84	0	18	71	0	61	14	0	5	299
11:00	44	66	0	13	87	0	69	22	0	7	308
11:15	51	82	0	17	86	0	66	13	0	13	328
11:30	43	87	0	14	103	0	67	13	0	6	333
11:45	48	74	0	14	80	0	63	31	0	2	312
12:00	64	96	0	16	95	0	79	21	0	12	383
12:15	57	73	0	17	93	0	81	26	0	8	355
12:30	62	98	0	18	106	0	80	16	0	7	387
12:45	52	87	0	15	93	0	74	20	0	11	352
13:00	56	89	0	18	94	0	74	19	0	1	351
13:15	58	80	0	11	86	0	73	15	0	8	331
13:30	48	84	0	12	78	0	74	21	0	9	326
13:45	59	86	0	7	105	0	82	25	0	15	379
14:00	55	96	0	17	92	0	81	20	0	4	365

4:30	0	4	0	0	0	0	1	0	0	0	5
4:45	0	2	0	0	6	0	0	1	0	0	9
5:00	6	11	0	0	5	0	1	0	0	1	24
5:15	3	7	0	2	9	0	3	1	0	0	25
5:30	5	11	0	4	11	0	2	2	0	1	36
5:45	9	15	0	7	19	0	12	8	0	0	70
6:00	15	32	0	14	30	0	25	7	0	2	125
6:15	15	14	0	8	30	0	24	4	0	3	98
6:30	13	27	0	11	46	0	37	27	0	0	161
6:45	26	40	0	7	69	0	64	22	0	2	230
7:00	29	44	0	14	106	0	80	11	0	0	284
7:15	32	42	0	14	109	0	68	13	0	5	283
7:30	45	81	0	19	141	0	114	21	0	13	434
7:45	65	97	0	41	174	0	149	29	0	12	567
8:00	82	125	0	48	195	0	193	21	0	8	672
8:15	120	172	0	85	202	0	192	24	0	9	804
8:30	134	208	0	83	196	0	217	29	0	7	874
8:45	142	194	0	81	200	0	217	16	0	12	862
9:00	148	197	0	98	196	0	216	36	0	25	916
9:15	154	206	0	110	170	0	146	37	0	17	840
9:30	115	142	0	49	185	0	162	33	0	9	695
9:45	66	109	0	43	136	0	108	24	0	2	488
10:00	63	101	0	19	109	0	94	22	0	9	417
10:15	49	80	0	15	104	0	68	25	0	8	349
10:30	59	82	0	25	82	0	67	15	0	12	342
10:45	46	82	0	18	92	0	71	15	0	12	336
11:00	46	77	0	16	97	0	66	17	0	5	324
11:15	52	80	0	13	83	0	67	14	0	10	319
11:30	60	77	0	14	83	0	78	19	0	10	341
11:45	57	104	0	13	81	0	58	13	0	10	336
12:00	51	87	0	15	96	0	93	26	0	6	374
12:15	57	108	0	17	85	0	64	17	0	8	356
12:30	51	92	0	19	118	0	82	24	0	10	396
12:45	62	103	0	26	92	0	80	18	0	11	392
13:00	67	99	0	16	108	0	82	21	0	11	404
13:15	50	85	0	14	84	0	77	22	0	11	343
13:30	59	85	0	15	92	0	76	24	0	4	355
13:45	61	89	0	16	95	0	94	12	0	4	371
14:00	45	93	0	20	105	0	92	24	0	5	384
14:15	52	99	0	9	100	0	92	15	0	6	373
14:30	55	83	0	8	92	0	87	24	0	8	357
14:45	79	106	0	22	111	0	108	17	0	12	455
15:00	63	103	0	13	132	0	110	27	0	9	457
15:15	67	108	0	9	121	0	122	16	0	13	456
15:30	100	108	0	16	122	0	133	25	0	6	510
15:45	98	134	0	6	124	0	145	16	0	4	527
16:00	95	132	0	7	111	0	121	20	0	10	496
16:15	109	122	0	13	111	0	126	15	0	11	507
16:30	130	138	0	16	144	0	174	22	0	9	633
16:45	120	157	0	9	124	0	150	14	0	9	583
17:00	161	186	0	24	166	0	229	19	0	6	791
17:15	134	178	0	22	166	0	220	26	0	13	759
17:30	106	151	0	22	160	0	242	27	0	16	724
17:45	125	165	0	26	152	0	232	34	0	18	752
18:00	115	156	0	10	150	0	201	26	0	10	668
18:15	94	119	0	13	118	0	148	32	0	5	529
18:30	94	123	0	4	107	0	140	21	0	5	494
18:45	70	90	0	6	92	0	90	21	0	8	377
19:00	59	70	0	9	90	0	72	23	0	3	326
19:15	51	78	0	3	69	0	67	16	0	4	288
19:30	43	75	0	3	70	0	65	14	0	6	276
19:45	37	60	0	0	68	0	54	12	0	3	234
20:00	44	44	0	2	50	0	46	12	0	3	201

20:15	34	43	0	0	55	0	46	13	0	3	194
20:30	33	58	0	3	56	0	46	15	0	5	216
20:45	28	40	0	0	46	0	45	5	0	4	168
21:00	31	35	0	2	53	0	36	8	0	1	166
21:15	25	41	0	1	37	0	42	6	0	0	152
21:30	30	43	0	2	40	0	35	8	0	1	159
21:45	24	36	0	0	41	0	31	7	0	3	142
22:00	31	43	0	2	30	0	29	9	0	2	146
22:15	20	29	0	1	46	0	33	16	0	1	146
22:30	18	24	0	4	21	0	23	1	0	1	92
22:45	13	14	0	0	30	0	22	5	0	0	84
23:00	17	9	0	1	21	0	12	2	0	0	62
23:15	15	17	0	0	19	0	10	7	0	1	69
23:30	9	8	0	0	17	0	13	3	0	1	51
23:45	9	9	0	1	7	0	7	1	0	1	35
0:00	7	6	0	3	6	0	9	2	0	0	33

Wednesday, 19 May 2021				AM Peak	3463	PM Peak	3088	Daily Total				29904
Time	Approach Detectors										Total	
	1	2	3	4	5	6	7	8	9	10		

0:15	6	8	0	1	6	0	4	1	0	1	27
0:30	2	7	0	0	6	0	1	2	0	1	19
0:45	2	3	0	0	5	0	3	3	0	0	16
1:00	2	3	0	0	2	0	1	1	0	0	9
1:15	2	6	0	0	4	0	0	1	0	0	13
1:30	1	4	0	0	2	0	0	0	0	0	7
1:45	1	4	0	0	0	0	0	0	0	1	6
2:00	1	3	0	0	1	0	0	0	0	0	5
2:15	2	3	0	0	2	0	0	0	0	0	7
2:30	0	0	0	0	0	0	0	0	0	0	0
2:45	0	5	0	0	0	0	0	0	0	0	5
3:00	0	0	0	0	1	0	1	0	0	0	2
3:15	0	3	0	0	1	0	0	0	0	0	4
3:30	2	0	0	0	1	0	1	1	0	0	5
3:45	0	3	0	0	0	0	1	1	0	0	5
4:00	0	3	0	0	3	0	0	1	0	0	7
4:15	0	5	0	0	4	0	0	0	0	0	9
4:30	3	11	0	0	1	0	1	1	0	0	17
4:45	2	4	0	0	3	0	0	0	0	0	9
5:00	5	10	0	1	7	0	2	0	0	1	26
5:15	3	10	0	0	4	0	2	1	0	0	20
5:30	3	6	0	2	9	0	6	1	0	1	28
5:45	12	18	0	12	19	0	11	3	0	0	75
6:00	15	28	0	8	31	0	27	7	0	3	119
6:15	16	22	0	7	28	0	29	3	0	1	106
6:30	20	32	0	7	40	0	25	7	0	3	134
6:45	16	43	0	5	65	0	62	14	0	1	206
7:00	31	49	0	12	128	0	94	11	0	0	325
7:15	28	49	0	17	101	0	83	18	0	1	297
7:30	44	81	0	15	122	0	106	19	0	6	393
7:45	61	112	0	34	145	0	134	16	0	7	509
8:00	89	148	0	76	202	0	192	31	0	6	744
8:15	125	172	0	70	189	0	203	25	0	9	793
8:30	123	188	0	75	185	0	198	18	0	11	798
8:45	156	195	0	109	191	0	205	30	0	13	899
9:00	163	230	0	101	210	0	205	45	0	19	973
9:15	125	172	0	74	184	0	158	50	0	12	775
9:30	113	160	0	51	183	0	167	23	0	9	706
9:45	65	105	0	38	110	0	103	25	0	10	456
10:00	69	102	0	23	115	0	101	21	0	6	437
10:15	54	82	0	24	97	0	74	14	0	11	356

10:30	55	93	0	16	101	0	73	24	0	7	369
10:45	51	96	0	23	84	0	62	13	0	9	338
11:00	62	92	0	12	98	0	70	15	0	7	356
11:15	44	81	0	16	88	0	74	10	0	8	321
11:30	52	86	0	17	86	0	80	19	0	12	352
11:45	62	91	0	13	98	0	75	24	0	7	370
12:00	56	111	0	22	102	0	74	21	0	7	393
12:15	67	111	0	13	112	0	97	23	0	6	429
12:30	66	105	0	19	106	0	85	27	0	15	423
12:45	68	111	0	17	109	0	94	20	0	7	426
13:00	68	85	0	20	90	0	77	21	0	7	368
13:15	62	94	0	26	99	0	79	25	0	6	391
13:30	63	101	0	12	95	0	83	22	0	7	383
13:45	65	94	0	18	97	0	75	19	0	13	381
14:00	55	103	0	9	115	0	85	20	0	7	394
14:15	74	115	0	8	96	0	99	20	0	5	417
14:30	78	109	0	14	113	0	97	15	0	5	431
14:45	71	93	0	11	111	0	115	20	0	9	430
15:00	82	105	0	16	140	0	144	30	0	7	524
15:15	73	92	0	9	127	0	135	20	0	11	467
15:30	80	114	0	18	147	0	153	25	0	13	550
15:45	103	120	0	12	102	0	133	20	0	13	503
16:00	114	138	0	16	126	0	144	26	0	12	576
16:15	113	138	0	14	126	0	130	22	0	13	556
16:30	127	142	0	21	144	0	183	26	0	9	652
16:45	119	155	0	16	126	0	175	18	0	13	622
17:00	140	174	0	17	161	0	220	19	0	8	739
17:15	149	185	0	22	175	0	239	24	0	26	820
17:30	100	162	0	17	208	0	275	24	0	16	802
17:45	111	147	0	27	177	0	224	33	0	8	727
18:00	129	164	0	38	152	0	194	43	0	19	739
18:15	148	169	0	33	131	0	154	22	0	10	667
18:30	109	134	0	7	121	0	123	22	0	3	519
18:45	91	109	0	6	97	0	125	20	0	2	450
19:00	75	101	0	3	87	0	76	30	0	4	376
19:15	60	86	0	5	85	0	69	16	0	2	323
19:30	49	76	0	4	78	0	53	9	0	6	275
19:45	36	60	0	2	54	0	48	11	0	4	215
20:00	53	61	0	2	69	0	62	7	0	5	259
20:15	38	53	0	2	60	0	47	6	0	13	219
20:30	36	46	0	2	61	0	50	7	0	6	208
20:45	37	48	0	2	49	0	48	9	0	5	198
21:00	33	43	0	4	60	0	61	6	0	1	208
21:15	32	46	0	0	49	0	55	11	0	2	195
21:30	34	50	0	5	50	0	45	8	0	0	192
21:45	24	43	0	2	59	0	36	9	0	4	177
22:00	30	43	0	1	54	0	40	6	0	3	177
22:15	33	38	0	4	27	0	43	9	0	0	154
22:30	21	32	0	0	36	0	29	7	0	2	127
22:45	23	15	0	0	25	0	24	6	0	3	96
23:00	14	19	0	0	20	0	14	6	0	3	76
23:15	8	16	0	0	15	0	10	2	0	1	52
23:30	14	12	0	0	16	0	13	3	0	0	58
23:45	12	16	0	0	14	0	6	2	0	0	50
0:00	7	7	0	5	5	0	12	0	0	1	37

Thursday, 20 May 2021				AM Peak	3633	PM Peak	3029	Daily Total			30444
Time	Approach Detectors									Total	
	1	2	3	4	5	6	7	8	9		10
0:15	5	8	0	0	11	0	5	3	0	0	32
0:30	5	9	0	1	10	0	6	1	0	0	32

0:45	4	8	0	0	7	0	2	0	0	0	21
1:00	1	5	0	0	7	0	2	0	0	0	15
1:15	3	4	0	0	3	0	2	0	0	0	12
1:30	2	2	0	1	5	0	2	0	0	0	12
1:45	1	4	0	0	3	0	1	2	0	1	12
2:00	0	5	0	0	4	0	1	1	0	0	11
2:15	0	4	0	0	0	0	0	2	0	0	6
2:30	0	3	0	0	3	0	0	0	0	0	6
2:45	0	3	0	0	2	0	1	0	0	0	6
3:00	0	2	0	0	1	0	0	1	0	2	6
3:15	0	5	0	0	1	0	0	1	0	0	7
3:30	1	2	0	0	4	0	0	0	0	0	7
3:45	0	2	0	1	2	0	1	0	0	0	6
4:00	0	1	0	0	1	0	1	0	0	0	3
4:15	2	5	0	0	3	0	1	1	0	0	12
4:30	1	5	0	0	3	0	1	1	0	1	12
4:45	1	8	0	0	3	0	1	1	0	0	14
5:00	3	5	0	1	5	0	1	1	0	0	16
5:15	2	11	0	1	3	0	3	2	0	1	23
5:30	3	12	0	3	13	0	6	1	0	0	38
5:45	9	24	0	3	17	0	16	3	0	0	72
6:00	18	30	0	10	36	0	27	5	0	4	130
6:15	10	23	0	9	39	0	32	4	0	2	119
6:30	21	29	0	12	59	0	38	17	0	2	178
6:45	18	35	0	5	69	0	55	15	0	2	199
7:00	36	43	0	14	117	0	76	13	0	1	300
7:15	38	58	0	12	111	0	87	16	0	4	326
7:30	52	70	0	17	138	0	94	17	0	5	393
7:45	65	97	0	39	169	0	140	23	0	11	544
8:00	88	131	0	64	184	0	170	19	0	14	670
8:15	113	164	0	68	205	0	191	27	0	10	778
8:30	135	203	0	83	211	0	228	34	0	14	908
8:45	156	226	0	97	204	0	220	31	0	18	952
9:00	161	203	0	102	205	0	208	44	0	19	942
9:15	144	194	0	91	183	0	167	34	0	18	831
9:30	102	133	0	46	190	0	154	46	0	8	679
9:45	70	109	0	32	146	0	94	18	0	10	479
10:00	72	121	0	30	98	0	94	16	0	5	436
10:15	64	88	0	16	97	0	75	26	0	5	371
10:30	54	93	0	23	92	0	76	24	0	8	370
10:45	61	83	0	13	96	0	72	18	0	9	352
11:00	61	95	0	16	105	0	80	13	0	3	373
11:15	51	91	0	21	77	0	70	18	0	4	332
11:30	60	86	0	11	77	0	71	17	0	3	325
11:45	56	89	0	12	87	0	77	22	0	5	348
12:00	64	101	0	19	123	0	101	29	0	8	445
12:15	51	101	0	19	113	0	83	28	0	13	408
12:30	58	96	0	15	103	0	86	25	0	10	393
12:45	74	106	0	20	101	0	89	29	0	6	425
13:00	75	92	0	15	103	0	98	27	0	5	415
13:15	57	107	0	17	104	0	87	27	0	8	407
13:30	71	99	0	19	112	0	92	28	0	17	438
13:45	64	100	0	11	118	0	86	30	0	9	418
14:00	60	92	0	16	100	0	89	22	0	9	388
14:15	43	94	0	11	115	0	88	30	0	6	387
14:30	68	110	0	23	120	0	100	29	0	7	457
14:45	70	101	0	5	117	0	139	28	0	6	466
15:00	81	109	0	11	144	0	137	27	0	4	513
15:15	75	96	0	8	136	0	137	29	0	8	489
15:30	82	118	0	10	155	0	159	24	0	11	559
15:45	92	116	0	14	138	0	140	25	0	11	536
16:00	102	129	0	10	181	0	190	41	0	9	662
16:15	103	124	0	7	174	0	205	20	0	6	639

16:30	102	126	0	12	182	0	243	32	0	11	708
16:45	119	131	0	13	185	0	220	32	0	11	711
17:00	115	149	0	23	188	0	241	33	0	10	759
17:15	146	179	0	16	162	0	242	21	0	15	781
17:30	139	165	0	24	171	0	232	36	0	11	778
17:45	128	165	0	16	165	0	191	32	0	10	707
18:00	123	133	0	11	169	0	206	28	0	11	681
18:15	96	139	0	12	120	0	138	17	0	10	532
18:30	103	117	0	5	116	0	128	20	0	5	494
18:45	85	106	0	5	100	0	104	15	0	3	418
19:00	60	90	0	6	82	0	76	24	0	8	346
19:15	54	71	0	4	63	0	69	16	0	4	281
19:30	45	66	0	2	69	0	68	9	0	4	263
19:45	50	60	0	2	48	0	45	19	0	2	226
20:00	48	46	0	6	69	0	50	5	0	2	226
20:15	45	46	0	2	62	0	49	11	0	1	216
20:30	50	52	0	1	66	0	73	10	0	1	253
20:45	32	57	0	1	58	0	54	9	0	1	212
21:00	29	37	0	1	49	0	51	17	0	1	185
21:15	40	47	0	1	58	0	49	7	0	1	203
21:30	40	46	0	1	51	0	52	8	0	4	202
21:45	44	45	0	0	60	0	50	7	0	2	208
22:00	37	42	0	0	43	0	43	8	0	3	176
22:15	28	33	0	2	33	0	38	5	0	3	142
22:30	20	26	0	0	45	0	28	9	0	1	129
22:45	22	19	0	0	33	0	25	4	0	3	106
23:00	16	21	0	0	28	0	18	7	0	0	90
23:15	18	19	0	0	18	0	20	7	0	3	85
23:30	13	15	0	0	19	0	14	5	0	0	66
23:45	12	5	0	0	17	0	18	1	0	1	54
0:00	9	11	0	3	12	0	10	0	0	0	45

Friday, 21 May 2021				AM Peak 3206		PM Peak 2628		Daily Total 30079			
Time	Approach Detectors										Total
	1	2	3	4	5	6	7	8	9	10	

0:15	7	14	0	1	12	0	4	3	0	0	41
0:30	3	5	0	2	11	0	10	3	0	0	34
0:45	2	7	0	1	9	0	4	4	0	2	29
1:00	5	8	0	1	12	0	5	2	0	0	33
1:15	6	11	0	0	6	0	4	0	0	0	27
1:30	0	8	0	0	4	0	2	1	0	0	15
1:45	5	5	0	0	5	0	0	0	0	1	16
2:00	2	3	0	0	4	0	1	0	0	0	10
2:15	2	9	0	0	5	0	0	0	0	0	16
2:30	0	10	0	0	5	0	2	1	0	0	18
2:45	3	5	0	0	4	0	2	0	0	0	14
3:00	1	9	0	1	4	0	1	0	0	0	16
3:15	1	5	0	0	3	0	0	2	0	0	11
3:30	3	7	0	1	5	0	1	0	0	0	17
3:45	0	2	0	0	1	0	1	0	0	0	4
4:00	1	3	0	0	4	0	0	0	0	0	8
4:15	1	8	0	0	1	0	0	2	0	0	12
4:30	2	8	0	0	4	0	2	0	0	0	16
4:45	2	6	0	1	6	0	1	1	0	0	17
5:00	6	8	0	1	9	0	1	0	0	0	25
5:15	4	8	0	0	7	0	6	1	0	1	27
5:30	5	7	0	2	11	0	4	4	0	0	33
5:45	15	21	0	4	21	0	13	9	0	0	83
6:00	21	35	0	12	23	0	17	13	0	3	124
6:15	15	21	0	9	35	0	25	8	0	0	113
6:30	16	28	0	6	50	0	35	6	0	3	144

6:45	22	34	0	6	62	0	62	19	0	1	206
7:00	26	54	0	17	113	0	77	12	0	1	300
7:15	32	39	0	15	95	0	71	11	0	1	264
7:30	41	55	0	14	124	0	121	12	0	6	373
7:45	55	86	0	34	144	0	96	12	0	7	434
8:00	85	126	0	49	188	0	184	22	0	11	665
8:15	88	163	0	62	176	0	173	18	0	12	692
8:30	119	179	0	77	201	0	212	23	0	14	825
8:45	136	167	0	83	199	0	174	26	0	9	794
9:00	142	177	0	106	191	0	175	49	0	17	857
9:15	120	162	0	56	183	0	159	45	0	5	730
9:30	93	135	0	39	132	0	126	20	0	13	558
9:45	57	106	0	35	121	0	97	29	0	12	457
10:00	59	100	0	30	109	0	101	27	0	6	432
10:15	56	80	0	31	92	0	82	16	0	6	363
10:30	59	103	0	31	98	0	66	26	0	7	390
10:45	62	99	0	28	89	0	68	13	0	11	370
11:00	61	106	0	17	105	0	93	31	0	7	420
11:15	57	103	0	22	85	0	72	12	0	5	356
11:30	63	106	0	13	91	0	82	24	0	6	385
11:45	52	94	0	15	106	0	77	31	0	12	387
12:00	49	103	0	17	128	0	91	30	0	11	429
12:15	63	99	0	17	120	0	94	28	0	17	438
12:30	71	101	0	26	106	0	82	44	0	9	439
12:45	62	87	0	14	129	0	106	44	0	10	452
13:00	64	107	0	12	112	0	82	35	0	10	422
13:15	55	85	0	17	110	0	81	60	0	6	414
13:30	56	83	0	17	111	0	111	29	0	12	419
13:45	57	85	0	18	110	0	93	25	0	10	398
14:00	65	99	0	17	95	0	99	20	0	24	419
14:15	56	98	0	17	123	0	104	22	0	9	429
14:30	62	93	0	15	110	0	100	28	0	9	417
14:45	58	91	0	10	115	0	114	23	0	10	421
15:00	74	111	0	13	127	0	149	30	0	12	516
15:15	87	104	0	11	136	0	142	17	0	9	506
15:30	91	126	0	21	133	0	134	20	0	9	534
15:45	127	137	0	6	134	0	137	19	0	13	573
16:00	106	132	0	10	137	0	147	25	0	10	567
16:15	109	131	0	12	127	0	137	25	0	12	553
16:30	117	145	0	23	127	0	167	19	0	7	605
16:45	121	153	0	16	118	0	135	23	0	12	578
17:00	128	159	0	20	142	0	182	22	0	5	658
17:15	127	149	0	10	118	0	174	24	0	11	613
17:30	136	153	0	16	153	0	206	33	0	14	711
17:45	110	147	0	10	156	0	184	28	0	11	646
18:00	113	135	0	6	129	0	135	25	0	9	552
18:15	94	129	0	3	128	0	131	22	0	7	514
18:30	105	125	0	6	125	0	110	24	0	8	503
18:45	82	112	0	2	127	0	107	22	0	4	456
19:00	70	99	0	1	113	0	103	23	0	3	412
19:15	55	81	0	2	77	0	72	20	0	5	312
19:30	49	59	0	1	95	0	66	22	0	2	294
19:45	53	74	0	2	82	0	77	14	0	3	305
20:00	38	57	0	2	78	0	52	17	0	7	251
20:15	50	66	0	3	78	0	56	11	0	2	266
20:30	45	51	0	1	68	0	50	13	0	2	230
20:45	30	51	0	1	79	0	59	11	0	2	233
21:00	39	43	0	5	72	0	71	7	0	0	237
21:15	29	54	0	4	76	0	53	9	0	2	227
21:30	40	54	0	5	72	0	64	15	0	4	254
21:45	34	42	0	1	54	0	55	11	0	1	198
22:00	31	51	0	2	66	0	70	21	0	4	245
22:15	45	39	0	1	67	0	60	7	0	4	223

22:30	34	47	0	0	51	0	35	8	0	3	178
22:45	39	40	0	1	46	0	38	10	0	5	179
23:00	42	47	0	3	49	0	26	12	0	3	182
23:15	37	38	0	1	40	0	23	2	0	2	143
23:30	29	33	0	1	39	0	32	3	0	0	137
23:45	24	25	0	0	36	0	26	4	0	1	116
0:00	21	31	0	1	36	0	22	3	0	0	114

Saturday, 22 May 2021				AM Peak	1595	PM Peak	1727	Daily Total				21091
Time	Approach Detectors										Total	
	1	2	3	4	5	6	7	8	9	10		

0:15	18	34	0	3	30	0	17	3	0	1	106
0:30	9	33	0	2	22	0	7	1	0	2	76
0:45	9	21	0	2	15	0	9	3	0	0	59
1:00	9	17	0	0	23	0	5	1	0	1	56
1:15	5	18	0	0	15	0	5	1	0	0	44
1:30	7	24	0	0	12	0	9	2	0	0	54
1:45	2	15	0	0	11	0	4	0	0	0	32
2:00	3	14	0	0	6	0	3	2	0	0	28
2:15	5	6	0	0	17	0	9	1	0	0	38
2:30	3	18	0	0	7	0	5	0	0	0	33
2:45	5	12	0	0	1	0	1	0	0	0	19
3:00	2	9	0	0	9	0	3	3	0	0	26
3:15	5	8	0	0	7	0	1	3	0	1	25
3:30	6	13	0	1	5	0	2	0	0	0	27
3:45	0	9	0	0	10	0	6	0	0	0	25
4:00	3	5	0	1	3	0	0	0	0	0	12
4:15	3	14	0	0	7	0	1	1	0	2	28
4:30	0	9	0	0	4	0	0	1	0	0	14
4:45	0	10	0	1	7	0	1	2	0	1	22
5:00	2	10	0	0	5	0	1	1	0	0	19
5:15	3	5	0	2	10	0	5	2	0	0	27
5:30	2	6	0	0	6	0	2	2	0	0	18
5:45	3	13	0	1	10	0	8	4	0	2	41
6:00	6	15	0	3	8	0	4	4	0	0	40
6:15	8	13	0	1	9	0	12	8	0	0	51
6:30	18	17	0	2	21	0	6	2	0	0	66
6:45	15	29	0	3	36	0	22	5	0	2	112
7:00	20	25	0	13	45	0	27	8	0	3	141
7:15	14	28	0	6	19	0	16	6	0	0	89
7:30	18	28	0	8	18	0	20	4	0	1	97
7:45	15	35	0	10	31	0	31	14	0	0	136
8:00	23	41	0	14	40	0	43	17	0	2	180
8:15	17	35	0	9	28	0	32	11	0	3	135
8:30	26	50	0	15	40	0	34	10	0	2	177
8:45	33	68	0	8	51	0	48	17	0	1	226
9:00	38	83	0	21	70	0	58	13	0	6	289
9:15	39	75	0	13	44	0	53	23	0	6	253
9:30	40	65	0	17	45	0	76	18	0	8	269
9:45	46	62	0	17	60	0	64	14	0	3	266
10:00	60	78	0	27	64	0	85	19	0	4	337
10:15	51	74	0	23	55	0	90	18	0	0	311
10:30	53	79	0	26	83	0	86	27	0	9	363
10:45	54	85	0	24	91	0	107	29	0	7	397
11:00	65	103	0	29	61	0	106	33	0	4	401
11:15	59	88	0	20	72	0	99	21	0	2	361
11:30	50	84	0	23	82	0	83	26	0	8	356
11:45	73	118	0	21	96	0	103	30	0	8	449
12:00	61	111	0	16	100	0	98	33	0	10	429
12:15	61	99	0	22	91	0	98	39	0	8	418
12:30	64	102	0	25	84	0	106	26	0	10	417

12:45	70	100	0	19	89	0	84	40	0	8	410
13:00	71	110	0	15	99	0	107	40	0	10	452
13:15	71	96	0	19	80	0	102	40	0	12	420
13:30	51	102	0	19	97	0	103	49	0	10	431
13:45	62	87	0	26	72	0	96	48	0	8	399
14:00	62	88	0	25	94	0	113	53	0	14	449
14:15	76	101	0	26	86	0	114	35	0	11	449
14:30	64	90	0	14	95	0	104	39	0	12	418
14:45	61	81	0	15	97	0	100	42	0	15	411
15:00	52	96	0	17	115	0	92	42	0	16	430
15:15	75	83	0	20	83	0	102	44	0	9	416
15:30	73	90	0	18	114	0	114	43	0	6	458
15:45	54	82	0	21	92	0	110	32	0	15	406
16:00	53	67	0	16	96	0	88	28	0	7	355
16:15	55	78	0	10	79	0	79	28	0	8	337
16:30	50	79	0	6	97	0	88	28	0	4	352
16:45	65	88	0	11	82	0	60	32	0	5	343
17:00	64	86	0	11	101	0	76	33	0	6	377
17:15	68	73	0	2	108	0	90	21	0	9	371
17:30	66	77	0	2	97	0	89	26	0	6	363
17:45	51	85	0	5	109	0	78	9	0	5	342
18:00	67	79	0	2	91	0	62	21	0	2	324
18:15	51	72	0	4	96	0	63	19	0	3	308
18:30	56	79	0	5	83	0	72	13	0	7	315
18:45	47	74	0	2	69	0	54	12	0	0	258
19:00	53	66	0	4	78	0	47	9	0	3	260
19:15	44	63	0	2	65	0	44	20	0	3	241
19:30	33	51	0	2	56	0	36	16	0	1	195
19:45	31	47	0	1	66	0	38	13	0	1	197
20:00	35	59	0	1	61	0	45	11	0	0	212
20:15	32	50	0	2	65	0	38	11	0	0	198
20:30	34	41	0	4	63	0	48	9	0	3	202
20:45	25	51	0	0	56	0	47	4	0	2	185
21:00	31	41	0	2	56	0	42	9	0	1	182
21:15	24	47	0	1	60	0	41	7	0	2	182
21:30	30	48	0	0	54	0	29	7	0	4	172
21:45	30	49	0	6	66	0	44	4	0	4	203
22:00	32	49	0	2	68	0	50	11	0	3	215
22:15	32	40	0	0	71	0	51	9	0	1	204
22:30	26	41	0	0	43	0	41	9	0	2	162
22:45	28	41	0	0	44	0	36	7	0	0	156
23:00	36	38	0	3	46	0	43	8	0	6	180
23:15	30	36	0	3	49	0	38	6	0	4	166
23:30	30	43	0	1	43	0	25	7	0	3	152
23:45	22	33	0	0	37	0	28	5	0	1	126
0:00	18	26	0	0	34	0	27	5	0	2	112

Sunday, 23 May 2021				AM Peak	1445	PM Peak	1607	Daily Total			17776
Time	Approach Detectors										Total
	1	2	3	4	5	6	7	8	9	10	

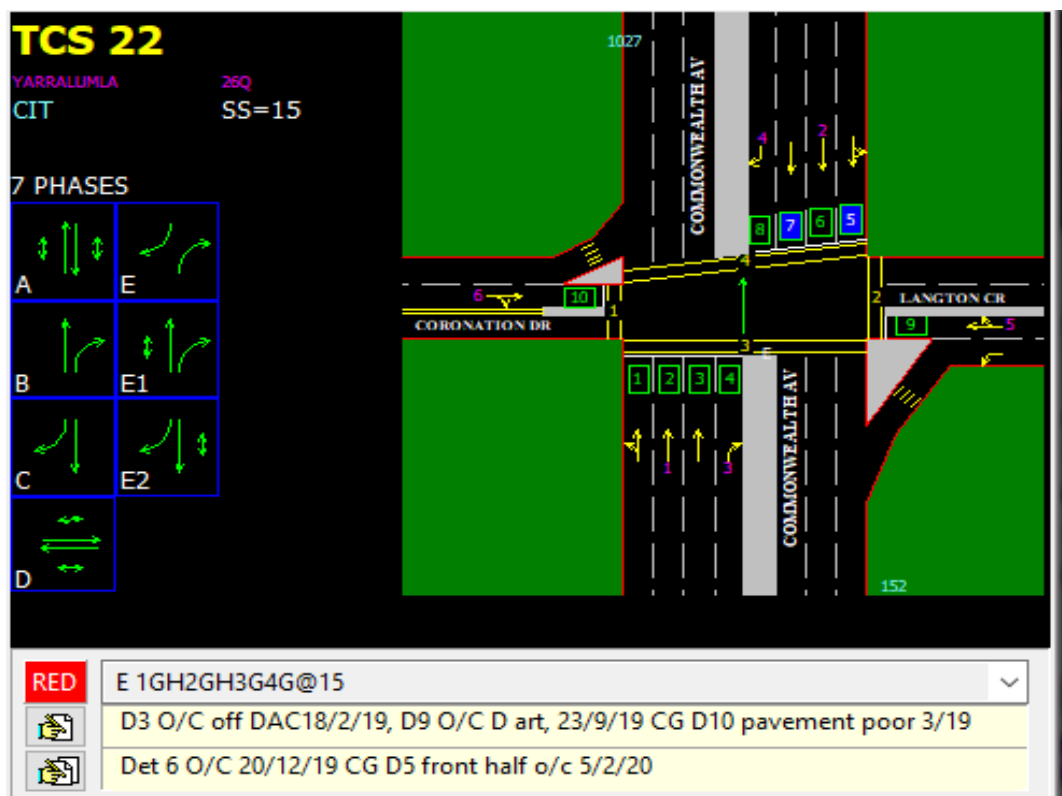
0:15	21	31	0	2	28	0	15	1	0	0	98
0:30	13	23	0	1	28	0	14	6	0	0	85
0:45	10	20	0	0	21	0	14	2	0	1	68
1:00	13	21	0	0	21	0	9	3	0	1	68
1:15	10	19	0	0	23	0	15	4	0	1	72
1:30	13	19	0	0	20	0	10	3	0	2	67
1:45	12	25	0	0	19	0	15	3	0	1	75
2:00	11	24	0	0	28	0	10	1	0	0	74
2:15	10	23	0	1	17	0	10	2	0	1	64
2:30	6	18	0	0	16	0	9	3	0	1	53
2:45	6	23	0	0	19	0	11	1	0	0	60

3:00	5	16	0	1	18	0	6	4	0	0	50
3:15	5	15	0	0	14	0	7	1	0	1	43
3:30	3	17	0	0	15	0	8	2	0	1	46
3:45	2	14	0	0	15	0	6	2	0	0	39
4:00	8	14	0	0	11	0	10	2	0	0	45
4:15	11	14	0	0	18	0	6	2	0	0	51
4:30	3	11	0	0	17	0	5	2	0	0	38
4:45	2	12	0	0	10	0	6	2	0	1	33
5:00	5	14	0	0	16	0	8	0	0	1	44
5:15	2	13	0	0	8	0	5	2	0	0	30
5:30	8	15	0	2	8	0	2	0	0	0	35
5:45	7	15	0	1	5	0	6	8	0	0	42
6:00	9	15	0	2	10	0	5	11	0	3	55
6:15	5	13	0	1	8	0	10	5	0	1	43
6:30	8	19	0	1	10	0	4	2	0	9	53
6:45	11	20	0	4	20	0	10	9	0	0	74
7:00	9	17	0	9	29	0	12	20	0	4	100
7:15	18	12	0	7	12	0	5	15	0	1	70
7:30	29	20	0	12	17	0	6	35	0	4	123
7:45	26	29	0	14	18	0	6	22	0	7	122
8:00	18	35	0	8	33	0	21	9	0	2	126
8:15	21	36	0	10	26	0	16	8	0	11	128
8:30	16	31	0	15	26	0	20	16	0	3	127
8:45	27	38	0	8	42	0	22	12	0	3	152
9:00	36	51	0	40	55	0	31	12	0	6	231
9:15	33	53	0	35	59	0	24	22	0	1	227
9:30	44	60	0	30	83	0	42	23	0	3	285
9:45	39	68	0	20	58	0	38	24	0	4	251
10:00	49	67	0	37	65	0	60	24	0	3	305
10:15	44	82	0	34	78	0	44	33	0	11	326
10:30	53	83	0	43	80	0	54	40	0	11	364
10:45	63	87	0	33	96	0	71	22	0	8	380
11:00	56	83	0	41	93	0	66	24	0	7	370
11:15	41	88	0	36	75	0	57	24	0	10	331
11:30	52	79	0	10	87	0	57	30	0	11	326
11:45	57	97	0	22	81	0	65	36	0	6	364
12:00	58	86	0	31	89	0	84	43	0	7	398
12:15	59	93	0	22	98	0	77	33	0	8	390
12:30	53	81	0	21	106	0	71	41	0	9	382
12:45	79	89	0	30	89	0	80	39	0	12	418
13:00	61	101	0	18	106	0	83	20	0	6	395
13:15	55	80	0	27	78	0	64	37	0	8	349
13:30	67	98	0	29	95	0	63	30	0	11	393
13:45	57	85	0	23	104	0	82	37	0	15	403
14:00	66	86	0	33	83	0	81	38	0	10	397
14:15	61	70	0	29	91	0	79	33	0	6	369
14:30	59	78	0	26	88	0	91	32	0	14	388
14:45	47	98	0	25	99	0	88	34	0	6	397
15:00	54	76	0	31	91	0	103	27	0	9	391
15:15	55	67	0	31	99	0	99	40	0	8	399
15:30	55	83	0	21	104	0	95	42	0	20	420
15:45	48	64	0	22	81	0	76	23	0	12	326
16:00	42	65	0	18	103	0	88	21	0	14	351
16:15	53	64	0	12	91	0	70	31	0	13	334
16:30	59	72	0	18	82	0	62	34	0	11	338
16:45	54	63	0	12	96	0	65	31	0	13	334
17:00	37	79	0	8	90	0	65	22	0	7	308
17:15	52	64	0	8	69	0	62	20	0	5	280
17:30	40	72	0	2	98	0	68	16	0	9	305
17:45	40	52	0	4	66	0	51	13	0	2	228
18:00	51	68	0	4	75	0	56	16	0	5	275
18:15	34	43	0	6	59	0	45	19	0	2	208
18:30	35	65	0	1	54	0	43	8	0	4	210

18:45	30	56	0	2	41	0	37	12	0	0	178
19:00	27	42	0	0	48	0	38	12	0	1	168
19:15	24	35	0	2	46	0	39	21	0	1	168
19:30	25	36	0	2	39	0	27	7	0	3	139
19:45	19	34	0	1	40	0	28	6	0	2	130
20:00	25	33	0	2	29	0	27	9	0	1	126
20:15	21	31	0	1	38	0	31	9	0	3	134
20:30	23	36	0	0	27	0	20	4	0	2	112
20:45	20	29	0	0	38	0	19	7	0	0	113
21:00	14	25	0	0	35	0	21	8	0	1	104
21:15	23	35	0	1	38	0	25	8	0	1	131
21:30	22	20	0	3	25	0	25	3	0	0	98
21:45	12	22	0	1	39	0	26	8	0	1	109
22:00	12	18	0	0	26	0	11	9	0	3	79
22:15	22	20	0	0	23	0	19	6	0	1	91
22:30	13	15	0	1	17	0	12	2	0	0	60
22:45	9	14	0	0	18	0	16	4	0	0	61
23:00	7	10	0	0	29	0	2	1	0	0	49
23:15	2	12	0	1	15	0	6	1	0	0	37
23:30	8	9	0	0	10	0	6	2	0	0	35
23:45	3	5	0	2	7	0	4	1	0	1	23
0:00	3	2	0	2	9	0	15	1	0	0	32

Thursday, 24 May 2018				AM Peak 5667		PM Peak 4868		Daily Total 48940			
Time	Approach Detectors										Total
	1	2	3	4	5	6	7	8	9	10	
0:15	3	4	3	0	14	6	2	2	2	0	36
0:30	5	12	6	1	6	20	1	1	0	0	52
0:45	3	7	2	0	4	6	0	1	2	1	26
1:00	4	6	1	0	6	7	2	0	0	0	26
1:15	3	7	0	1	5	6	2	2	0	1	27
1:30	1	3	1	0	3	6	0	0	0	0	14
1:45	3	2	1	0	1	10	2	1	0	1	21
2:00	1	3	1	0	4	8	1	1	0	1	20
2:15	1	10	1	1	1	1	0	0	0	1	16
2:30	2	3	0	0	6	8	1	0	2	0	22
2:45	1	8	2	0	2	6	1	1	0	0	21
3:00	2	7	2	0	1	8	1	1	0	0	22
3:15	1	3	2	0	3	5	1	0	2	0	17
3:30	0	4	0	1	2	3	1	2	0	1	14
3:45	1	9	0	1	2	7	2	0	3	0	25
4:00	1	15	1	0	4	7	1	0	1	0	30
4:15	1	6	1	0	5	11	1	3	0	0	28
4:30	2	8	0	0	3	4	4	0	0	0	21
4:45	1	13	1	1	5	7	1	0	1	1	31
5:00	3	16	0	1	6	7	5	2	0	1	41
5:15	5	9	1	1	9	12	1	2	2	0	42
5:30	5	13	9	1	16	10	9	2	2	0	67
5:45	10	22	8	3	17	13	17	3	2	0	95
6:00	18	39	15	11	33	26	24	5	1	1	173
6:15	18	33	22	1	28	20	28	4	2	1	167
6:30	22	34	14	9	48	35	48	14	7	3	234
6:45	35	65	44	10	67	51	68	17	4	3	364
7:00	43	77	50	19	91	69	80	19	8	3	459
7:15	49	84	83	16	95	68	123	11	5	3	537
7:30	62	123	93	31	134	103	142	18	15	12	733
7:45	82	145	133	36	203	139	186	27	5	5	961
8:00	104	188	201	45	203	187	222	26	11	8	1195
8:15	134	213	247	45	209	214	224	27	12	7	1332
8:30	166	239	292	73	231	207	215	27	16	10	1476
8:45	161	219	256	82	223	218	222	35	15	15	1446
9:00	180	215	266	101	198	187	195	36	18	17	1413
9:15	132	194	234	96	198	180	176	33	15	17	1275
9:30	94	152	165	50	209	175	181	27	19	11	1083
9:45	71	140	107	41	159	113	104	20	16	12	783
10:00	69	126	98	32	141	112	107	19	20	8	732
10:15	59	121	74	28	95	81	67	23	11	7	566
10:30	63	121	79	25	104	100	66	23	10	11	602
10:45	69	127	79	30	96	90	76	23	18	3	611
11:00	54	110	75	18	84	90	64	22	17	7	541
11:15	47	98	66	15	94	92	76	22	17	6	533
11:30	55	110	74	16	104	91	90	21	11	16	588
11:45	65	115	91	13	87	108	64	24	13	8	588
12:00	74	137	109	13	113	106	93	24	14	12	695
12:15	63	113	82	11	119	101	77	22	28	9	625
12:30	68	118	93	19	119	107	93	32	28	3	680
12:45	74	123	86	15	99	103	92	17	20	10	639
13:00	66	115	89	8	122	109	94	21	23	5	652
13:15	61	96	73	13	86	101	94	18	18	10	570
13:30	54	106	77	18	102	106	91	18	13	6	591
13:45	90	119	83	13	101	115	112	19	18	8	678
14:00	60	97	84	16	119	103	88	34	23	11	635
14:15	63	101	74	7	109	121	97	31	30	9	642
14:30	80	114	88	13	109	125	98	19	21	8	675

14:45	89	125	86	18	122	108	116	25	25	6	720
15:00	79	123	119	16	154	143	139	22	25	9	829
15:15	87	137	116	18	130	120	126	29	17	10	790
15:30	92	130	115	10	144	129	124	32	28	8	812
15:45	106	142	135	16	114	136	104	38	35	7	833
16:00	97	130	105	14	123	125	132	40	26	10	802
16:15	115	156	135	17	118	134	134	26	33	10	878
16:30	122	152	141	17	142	152	187	26	38	6	983
16:45	119	146	170	11	135	176	177	42	33	21	1030
17:00	146	157	169	17	150	202	216	47	47	14	1165
17:15	149	168	200	18	170	172	242	36	37	17	1209
17:30	151	168	206	20	187	210	246	44	46	11	1289
17:45	125	150	174	17	186	211	247	39	40	16	1205
18:00	121	160	167	20	161	188	228	41	30	13	1129
18:15	100	116	123	7	129	137	156	29	37	5	839
18:30	112	133	145	10	114	146	131	44	38	12	885
18:45	101	152	135	15	74	129	107	45	19	6	783
19:00	85	123	106	4	100	99	97	32	25	5	676
19:15	65	101	77	13	65	87	77	36	20	7	548
19:30	60	87	69	1	74	83	59	32	10	11	486
19:45	61	84	53	2	61	75	53	15	19	7	430
20:00	53	74	48	3	84	68	62	19	11	12	434
20:15	41	58	40	5	55	70	60	15	6	8	358
20:30	43	62	42	2	66	70	49	7	7	4	352
20:45	35	53	35	0	54	56	36	19	12	3	303
21:00	37	57	40	3	46	66	45	11	6	6	317
21:15	37	43	34	2	54	68	54	11	6	4	313
21:30	34	48	43	1	91	112	84	15	7	2	437
21:45	28	44	25	1	45	77	43	16	9	7	295
22:00	29	48	24	2	50	62	36	11	12	4	278
22:15	38	49	34	0	45	61	33	13	7	6	286
22:30	35	47	23	3	29	53	29	9	5	5	238
22:45	16	35	20	2	29	48	26	5	6	5	192
23:00	19	31	18	1	29	35	16	4	4	1	158
23:15	24	30	17	1	29	36	14	1	5	1	158
23:30	11	18	9	1	18	23	7	2	4	3	96
23:45	18	32	14	0	8	18	14	1	3	0	108
24:00:00	9	30	6	3	18	25	12	3	1	1	108



CIT Subsystem 15 - Cycle Length



Adaptive Cycle Lengths

Minimum: 60s Alternate minimum (1): 80s

Stretch: 120s Alternate minimum (2): 0s

Maximum: 130s

Edit..

Cycle Length

☒ Duration: 80 ☐ Plan: ▼

Cycle Length Lock

☐ Trim ☐ Timed ☐ Untimed

Duration: d:hh:mm 0:01:00 ...

Apply

Lock Details

Lock value:

Lock type:

Time remaining:

Applied by:

☐ All queued entries

Remove

Locks and Dwells

Close

22 - Local Times

Indicates
RAM value



Set RAM

Clear All RAM

Show ROM

Phase Times

Approaches

Detectors

Walks

Special Times

	A	B	C	D	E
Late start	0	0	0	8.0	0
Minimum green	20	6.0	6.0	20	6.0
Early cut-off green	0	0	0	0	0
Yellow	5.0	5.0	5.0	4.0	4.5
All-red	2.0	2.0	2.0	3.0	2.0
Maximum green	40	12	12	30	25
Increment	0	0	0	0	0
Maximum initial green	0	0	0	0	0
Special red	0	0	0	0	0
Special time	0	0	0	0	0

Refresh

Save

Close

×

ose

2021 AM

Data item	Frequency	Minimum	Maximum	Average	Total
A phase	26	40	91	71	1862
D phase	26	27	39	32	856
E phase	26	27	38	35	911
Nominal cycle length	15	101	130	120	1812
Active cycle length	15	101	130	120	1812
Actual cycle	25	96	162	139	3493
Split plan 3	1	0	0	0	0
Split plan 4	1	0	0	0	0
Signal group 1	26	45	105	78	2038
Signal group 2	26	33	85	64	1681
Signal group 3	26	21	32	28	743
Signal group 4	25	6	28	15	396
Signal group 5	26	20	23	20	536
Signal group 6	26	20	23	20	536
Signal group 9	12	5	6	5	71
Signal group 10	11	5	6	5	65
Signal group 11	26	13	14	13	363
Signal group 12	6	11	46	23	140

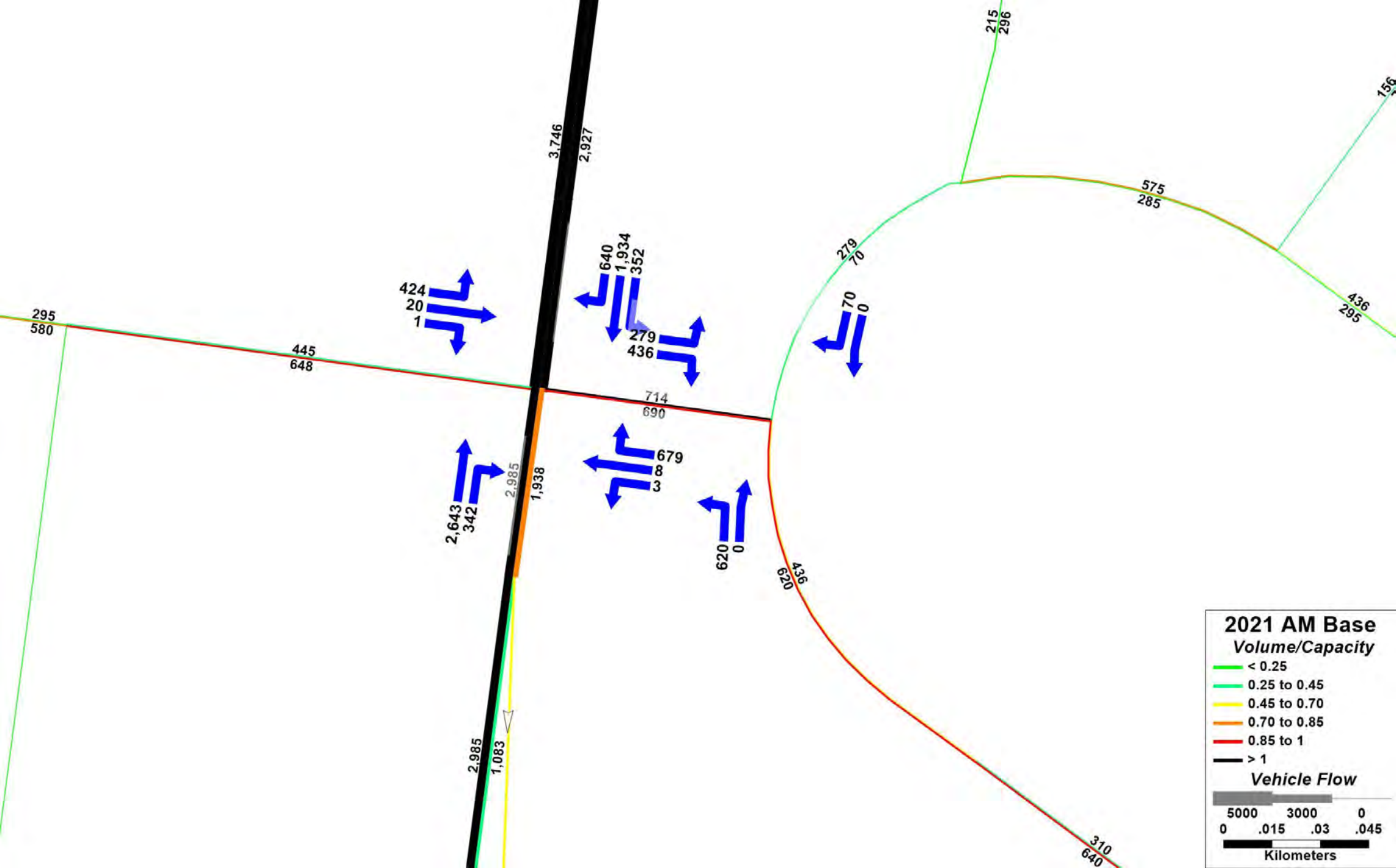
2021 PM

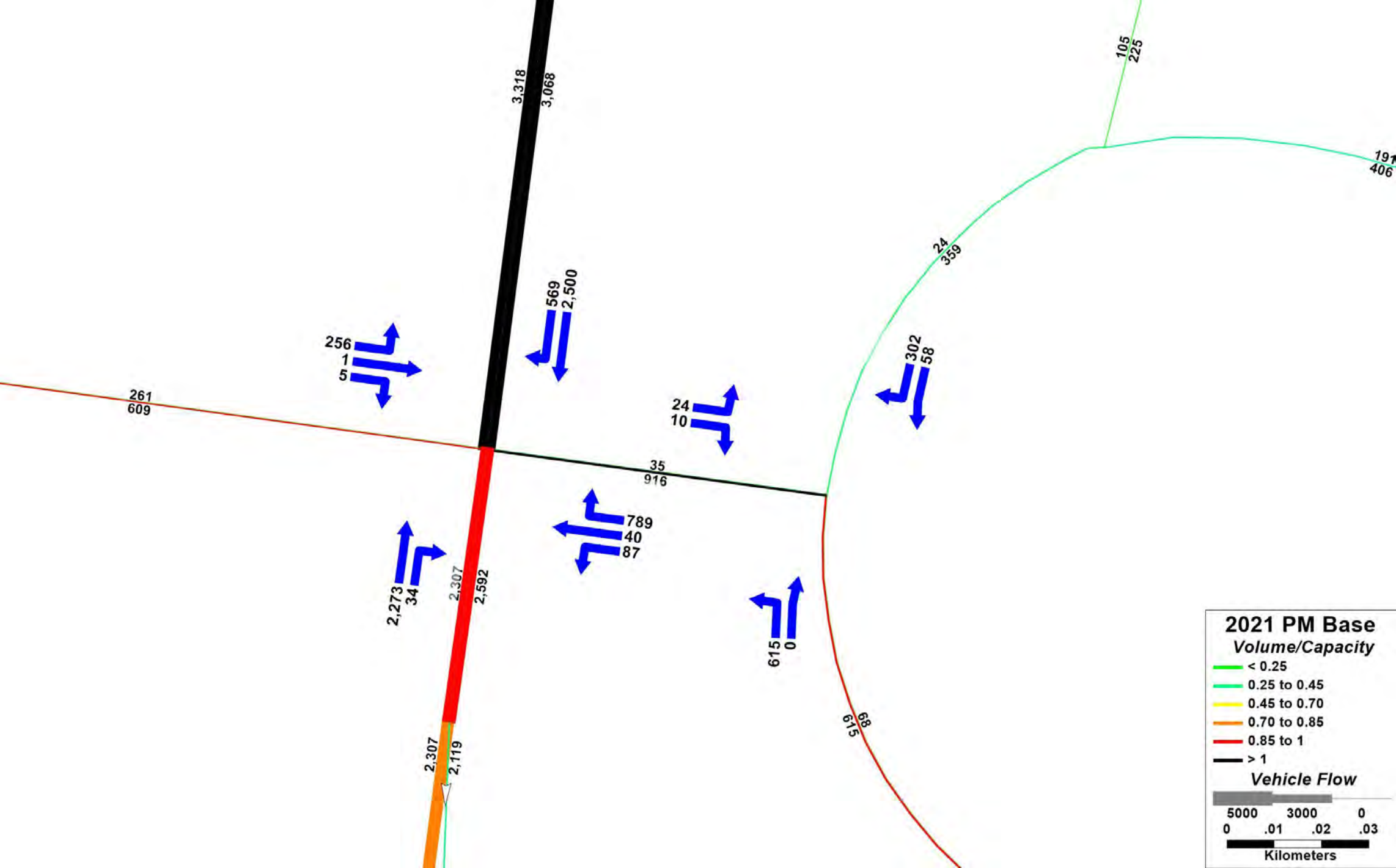
Data item	Frequency	Minimum	Maximum	Average	Total
A phase	24	51	92	85	2060
D phase	25	27	44	33	837
E phase	25	16	37	24	621
Nominal cycle length	10	98	130	117	1171
Active cycle length	10	98	130	117	1171
Actual cycle	24	102	165	144	3462
Split plan 3	1	0	0	0	0
Split plan 4	1	0	0	0	0
Signal group 1	24	44	91	80	1923
Signal group 2	24	44	112	84	2024
Signal group 3	23	6	25	14	331
Signal group 4	25	6	31	17	433
Signal group 5	25	20	29	20	522
Signal group 6	25	20	29	20	522
Signal group 9	15	6	6	6	90
Signal group 10	5	6	6	6	30
Signal group 11	25	14	41	19	492
Signal group 12	3	8	9	8	25

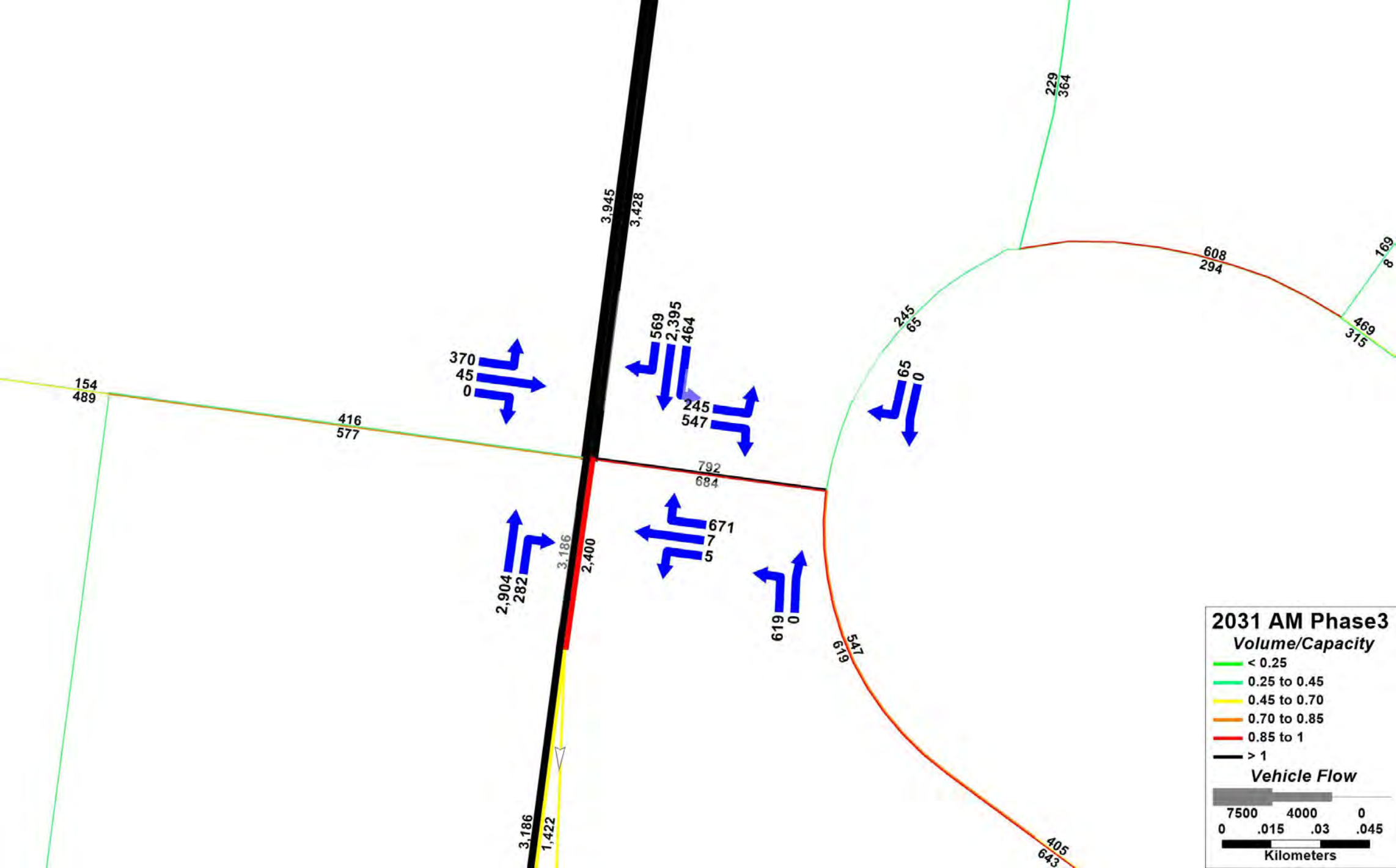
APPENDIX

C

CSTM DATA





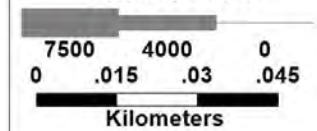


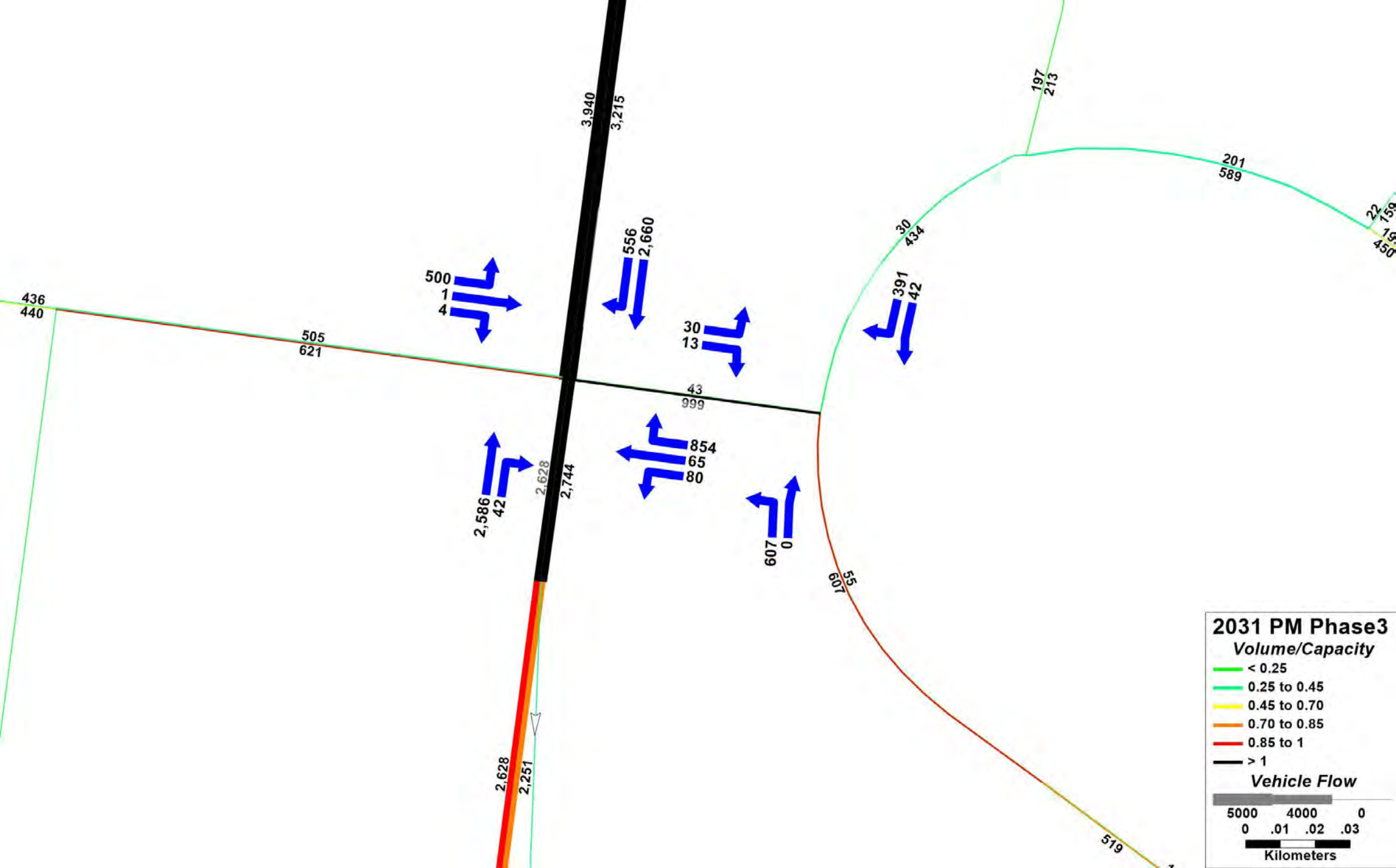
2031 AM Phase3

Volume/Capacity

- < 0.25
- 0.25 to 0.45
- 0.45 to 0.70
- 0.70 to 0.85
- 0.85 to 1
- > 1

Vehicle Flow





APPENDIX

D

ROAD SAFETY CRASH DATA

SITE REPORT

History Location: COMMONWEALTH/CORONATION/QUEEN VICTORIA
Report Date Range: 01/01/2016 12:00:00 AM -> 31/12/2020 11:59:59 PM

Location : Chainage	Police Reference	Date/Time Direction	Severity Lane	Injury Type Position	Crash Type Movement	Number of Casualties Visibility	Number of Vehicles	Road Surface	Weather	Rum Code
COMMONWEALTH/CORONATIC2016-1107710		25/01/2016 8:30	Property Damage Only			6	0	2 Good dry surface	Fine	303
	Vehicle 1	West bound	Right turn lane	Within intersection	Right turn	Not obstructed				
	Vehicle 2	West bound	Right turn lane	Within intersection	Right turn	Not obstructed				
COMMONWEALTH/CORONATIC2016-1125161		17/03/2016 11:30	Property Damage Only			6	0	2 Good dry surface	Fine	302
	Vehicle 1	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC2016-1127190		2/05/2016 16:30	Property Damage Only			6	0	2 Good dry surface	Fine	302
	Vehicle 1	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC2016-1125614		5/05/2016 9:10	Property Damage Only			6	0	2 Good dry surface	Fine	302
	Vehicle 1	East bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	East bound	Left turn lane	Within intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC2016-2031472		16/06/2016 0:30	Property Damage Only			19	0	1 Good dry surface	Fine	707
	Vehicle 1	South bound	1st (kerb or left) lane	Within intersection	U turn	Not known				
COMMONWEALTH/CORONATIC2016-1210300		7/09/2016 9:25	Property Damage Only			3	0	2 Good dry surface	Fine	305
	Vehicle 1	South bound	Other	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	South bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2016-1197438		19/09/2016 17:55	Property Damage Only			6	0	2 Good dry surface	Fine	301
	Vehicle 1	South bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	South bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2016-1231293		22/09/2016 15:20	Property Damage Only			6	0	2 Good dry surface	Fine	301
	Vehicle 1	West bound	Right turn lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	West bound	Right turn lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2016-1206679		29/10/2016 20:30	Property Damage Only			3	0	2 Good dry surface	Fine	309
	Vehicle 1	North bound	2nd lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	North bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2016-1192620		15/11/2016 15:30	Property Damage Only			6	0	2 Good dry surface	Fine	301
	Vehicle 1	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2016-1114720		16/12/2016 11:45	Property Damage Only			6	0	2 Wet surface	Light rain	301
	Vehicle 1	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2017-2010976		9/01/2017 21:36	Property Damage Only			6	0	2 Wet surface	Light rain	301
	Vehicle 1	East bound	Unknown	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	East bound	Unknown	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2017-1091489		20/01/2017 8:30	Property Damage Only			6	0	2 Wet surface	Light rain	301
	Vehicle 1	South bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	South bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC2017-1142485		25/01/2017 12:10	Property Damage Only			1	0	2 Good dry surface	Fine	202

	Vehicle 1	East bound	Right turn lane	Within intersection	Right turn	Not obstructed				
	Vehicle 2	West bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC 2017-1190435			1/03/2017 18:30 Property Damage Only				2	0	2 Good dry surface	Fine 107
	Vehicle 1	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	South bound	Cycle Lane	Within intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC 2017-2157898			12/03/2017 7:10 Injury				1	1	2 Good dry surface	Fine 202
	Vehicle 1	East bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not known				
	Vehicle 2	West bound	2nd lane	Within intersection	Right turn	Not known				
COMMONWEALTH/CORONATIC 2017-1135819			12/03/2017 20:09 Property Damage Only				6	0	2 Good dry surface	Fine 302
	Vehicle 1	South bound	1st (kerb or left) lane	Approaching intersection	Left turn	Not obstructed				
	Vehicle 2	South bound	1st (kerb or left) lane	Approaching intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC 2017-1112789			5/05/2017 14:15 Property Damage Only				6	0	2 Good dry surface	Fine 301
	Vehicle 1	North bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	North bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC 2017-1188725			24/05/2017 18:00 Property Damage Only				1	0	2 Good dry surface	Fine 202
	Vehicle 1	West bound	Right turn lane	Within intersection	Right turn	Not obstructed				
	Vehicle 2	East bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC 2017-1127290			13/07/2017 16:30 Property Damage Only				6	0	2 Good dry surface	Fine 302
	Vehicle 1	East bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	East bound	Left turn lane	Within intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC 2017-1218710			28/07/2017 18:30 Property Damage Only				6	0	2 Good dry surface	Fine 302
	Vehicle 1	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC 2017-1081918			3/11/2017 8:05 Property Damage Only				3	0	2 Good dry surface	Fine 305
	Vehicle 1	South bound	3rd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	South bound	Right turn lane	Approaching intersection	Overtaking right side	Not obstructed				
COMMONWEALTH/CORONATIC 2017-1142978			20/12/2017 14:15 Property Damage Only				6	0	2 Wet surface	Light rain 302
	Vehicle 1	East bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	East bound	Left turn lane	Within intersection	Left turn	Not known				
COMMONWEALTH/CORONATIC 2018-1186282			19/01/2018 17:24 Property Damage Only				6	0	2 Good dry surface	Fine 302
	Vehicle 1	East bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	East bound	Left turn lane	Within intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC 2018-1109891			6/02/2018 16:10 Property Damage Only				6	0	2 Good dry surface	Fine 301
	Vehicle 1	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC 2018-1096572			14/03/2018 18:05 Property Damage Only				6	0	2 Good dry surface	Fine 301
	Vehicle 1	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC 2018-1193255			17/03/2018 15:45 Property Damage Only				6	0	2 Good dry surface	Fine 302
	Vehicle 1	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
COMMONWEALTH/CORONATIC 2018-2235856			26/03/2018 17:30 Property Damage Only				6	0	2 Good dry surface	Fine 301
	Vehicle 1	South bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	South bound	2nd lane	Approaching intersection	Straight ahead	Not known				
COMMONWEALTH/CORONATIC 2018-1081506			12/05/2018 12:30 Property Damage Only				6	0	2 Wet surface	Light rain 301
	Vehicle 1	South bound	3rd lane	Approaching intersection	Straight ahead	Not obstructed				
	Vehicle 2	South bound	3rd lane	Approaching intersection	Straight ahead	Not obstructed				
COMMONWEALTH/CORONATIC 2018-1131010			20/05/2018 12:25 Property Damage Only				6	0	2 Good dry surface	Fine 302
	Vehicle 1	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				
	Vehicle 2	West bound	Left turn lane	Within intersection	Left turn	Not obstructed				

COMMONWEALTH/CORONATIC2018-1095616	31/05/2018 9:15 Property Damage Only	6	0	2 Good dry surface	Fine	301
Vehicle 1	South bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
Vehicle 2	South bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
COMMONWEALTH/CORONATIC2018-2157829	2/06/2018 23:31 Property Damage Only	1	0	2 Good dry surface	Fine	202
Vehicle 1	South bound Right turn lane	Within intersection	Right turn	Not obstructed		
Vehicle 2	North bound 1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed		
COMMONWEALTH/CORONATIC2018-1210670	4/06/2018 18:00 Property Damage Only	6	0	2 Wet surface	Light rain	303
Vehicle 1	West bound Right turn lane	Within intersection	Right turn	Not obstructed		
Vehicle 2	West bound Right turn lane	Within intersection	Right turn	Not obstructed		
COMMONWEALTH/CORONATIC2018-1208101	13/09/2018 19:00 Property Damage Only	6	0	2 Good dry surface	Fine	303
Vehicle 1	West bound Right turn lane	Within intersection	Right turn	Not obstructed		
Vehicle 2	West bound Right turn lane	Approaching intersection	Right turn	Not obstructed		
COMMONWEALTH/CORONATIC2018-1110402	14/11/2018 9:40 Property Damage Only	6	0	2 Wet surface	Cloudy or	302
Vehicle 1	East bound Left turn lane	Within intersection	Left turn	Not obstructed		
Vehicle 2	East bound Left turn lane	Within intersection	Left turn	Not obstructed		
COMMONWEALTH/CORONATIC2018-1139989	7/12/2018 7:35 Property Damage Only	6	0	2 Good dry surface	Fine	301
Vehicle 1	South bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
Vehicle 2	South bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
COMMONWEALTH/CORONATIC2018-1218392	16/12/2018 17:55 Property Damage Only	6	0	2 Good dry surface	Fine	301
Vehicle 1	East bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
Vehicle 2	East bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
COMMONWEALTH/CORONATIC2019-1091789	2/01/2019 13:30 Property Damage Only	2	0	2 Good dry surface	Fine	101
Vehicle 1	South bound 2nd lane	Approaching intersection	Straight ahead	Not obstructed		
Vehicle 2	West bound Right turn lane	Within intersection	Straight ahead	Not known		
COMMONWEALTH/CORONATIC2019-2145504	24/01/2019 14:21 Injury	1	1	2 Good dry surface	Fine	202
Vehicle 1	West bound 1st (kerb or left) lane	Within intersection	Right turn	Not known		
Vehicle 2	East bound 1st (kerb or left) lane	Within intersection	Straight ahead	Not known		
COMMONWEALTH/CORONATIC2019-1143229	14/04/2019 11:10 Property Damage Only	8	0	2 Good dry surface	Fine	404
Vehicle 1	East bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
Vehicle 2	East bound 1st (kerb or left) lane	Approaching intersection	Backing	Not obstructed		
COMMONWEALTH/CORONATIC2019-1214319	30/04/2019 16:20 Property Damage Only	1	0	2 Good dry surface	Fine	202
Vehicle 1	West bound 1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed		
Vehicle 2	East bound Right turn lane	Within intersection	Right turn	Not obstructed		
COMMONWEALTH/CORONATIC2019-1076014	3/05/2019 7:15 Property Damage Only	6	0	2 Wet surface	Heavy rain	301
Vehicle 1	South bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
Vehicle 2	South bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed		
COMMONWEALTH/CORONATIC2019-1187184	25/09/2019 17:45 Property Damage Only	6	0	2 Good dry surface	Fine	302
Vehicle 1	East bound Left turn lane	Within intersection	Left turn	Not obstructed		
Vehicle 2	East bound Left turn lane	Within intersection	Left turn	Not known		
COMMONWEALTH/CORONATIC2019-1100022	5/12/2019 9:00 Property Damage Only	1	0	2 Good dry surface	Fine	202
Vehicle 1	East bound 1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed		
Vehicle 2	West bound Right turn lane	Within intersection	Right turn	Not obstructed		
COMMONWEALTH/CORONATIC2020-1138801	6/03/2020 13:10 Property Damage Only	6	0	2 Good dry surface	Fine	302
Vehicle 1	East bound Left turn lane	Within intersection	Left turn	Not obstructed		
Vehicle 2	East bound Left turn lane	Within intersection	Left turn	Not obstructed		
COMMONWEALTH/CORONATIC2020-1199263	18/03/2020 8:50 Property Damage Only	6	0	2 Good dry surface	Fine	302
Vehicle 1	South bound 1st (kerb or left) lane	Within intersection	Left turn	Not obstructed		
Vehicle 2	South bound 1st (kerb or left) lane	Approaching intersection	Straight ahead	Not known		
COMMONWEALTH/CORONATIC2020-2131577	18/03/2020 8:50 Property Damage Only	6	0	2 Good dry surface	Fine	302
Vehicle 1	East bound Left turn lane	Within intersection	Left turn	Not known		

Vehicle 2	East bound	Left turn lane	Within intersection	Straight ahead	Not known					
COMMONWEALTH/CORONATIC 2020-2063680		26/06/2020 23:40 Property Damage Only				6	0	2 Good dry surface	Fine	301
Vehicle 1	North bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed					
Vehicle 2	North bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed					
COMMONWEALTH/CORONATIC 2020-1139265		19/08/2020 18:40 Property Damage Only				6	0	2 Wet surface	Light rain	301
Vehicle 1	North bound	2nd lane	Within intersection	Straight ahead	Not obstructed					
Vehicle 2	North bound	2nd lane	Within intersection	Straight ahead	Not known					
COMMONWEALTH/CORONATIC 2020-2143587		2/09/2020 18:00 Property Damage Only				1	0	2 Good dry surface	Fine	202
Vehicle 1	West bound	2nd lane	Within intersection	Right turn	Not known					
Vehicle 2	East bound	2nd lane	Within intersection	Straight ahead	Not known					
COMMONWEALTH/CORONATIC 2020-2009979		31/10/2020 21:25 Injury		Received medical treatment		1	3	2 Wet surface	Light rain	202
Vehicle 1	West bound	Right turn lane	Within intersection	Right turn	Not obstructed					
Vehicle 2	East bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed					
COMMONWEALTH/CORONATIC 2020-1192223		24/11/2020 13:00 Property Damage Only				8	0	2 Good dry surface	Fine	404
Vehicle 1	North bound	2nd lane	Approaching intersection	Straight ahead	Not obstructed					
Vehicle 2	North bound	2nd lane	Approaching intersection	Backing	Not known					
COMMONWEALTH/CORONATIC 2020-1124543		6/12/2020 11:30 Property Damage Only				6	0	2 Good dry surface	Fine	302
Vehicle 1	West bound	Left turn lane	Within intersection	Left turn	Not obstructed					
Vehicle 2	West bound	Left turn lane	Within intersection	Left turn	Not obstructed					

Total Crashes = 53

SITE REPORT

History Location: **LANGTON/QUEEN VICTORIA**
Report Date Range: **01/01/2016 12:00:00 AM -> 31/12/2020 11:59:59 PM**

Location : Chainage	Police Reference	Date/Time Direction	Severity Lane	Injury Type Position	Crash Type Movement	Number of Casualties Visibility	Number of Vehicles	Road Surface	Weather	Rum Code
LANGTON/QUEEN VICTORIA	2016-1091773	13/10/2016 8:40 Property Damage Only				6	0	3 Good dry surface	Fine	303
Vehicle 1		East bound	1st (kerb or left) lane	Within intersection	Right turn	Not obstructed				
Vehicle 2		East bound	1st (kerb or left) lane	Within intersection	Right turn	Not obstructed				
Vehicle 3		East bound	1st (kerb or left) lane	Within intersection	Right turn	Not obstructed				
LANGTON/QUEEN VICTORIA	2017-1214670	29/05/2017 17:37 Property Damage Only				6	0	2 Good dry surface	Fine	301
Vehicle 1		East bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
Vehicle 2		East bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
LANGTON/QUEEN VICTORIA	2018-1077838	15/02/2018 7:20 Property Damage Only				6	0	2 Good dry surface	Fine	304
Vehicle 1		North bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
Vehicle 2		North bound	1st (kerb or left) lane	Within intersection	U turn	Not known				
LANGTON/QUEEN VICTORIA	2018-2178799	8/03/2018 16:20 Injury		Received medical treatment		1	2	2 Good dry surface	Fine	202
Vehicle 1		South bound	Right turn lane	Within intersection	Right turn	Not obstructed				
Vehicle 2		North bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed				
LANGTON/QUEEN VICTORIA	2019-1218301	24/09/2019 17:50 Property Damage Only				3	0	2 Good dry surface	Fine	307
Vehicle 1		South bound	Right turn lane	Approaching intersection	Overtaking left side	Not obstructed				
Vehicle 2		South bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
LANGTON/QUEEN VICTORIA	2020-1174053	15/01/2020 16:00 Injury		Received medical treatment		2	1	2 Good dry surface	Fine	104
Vehicle 1		North bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed				

Total Crashes = 6

Vehicle 2 East bound Right turn lane Within intersection Right turn Not obstructed

SITE REPORT

History Location: **KING GEORGE/LANGTON**
Report Date Range: **01/01/2016 12:00:00 AM -> 31/12/2020 11:59:59 PM**

Location : Chainage	Police Reference	Date/Time Direction	Severity Lane	Injury Type Position	Crash Type Movement	Number of Casualties Visibility	Number of Vehicles	Road Surface	Weather	Rum Code
KING GEORGE/LANGTON	2016-2075148	7/02/2016 18:58	Injury	Received medical treatme		19	1	1 Good dry surface	Fine	704
	Vehicle 1	West bound	1st (kerb or left) lane	Approaching intersection	Straight ahead	Not obstructed				
KING GEORGE/LANGTON	2017-2122396	29/08/2017 18:00	Injury	Received medical treatme		1	1	2 Good dry surface	Cloudy or	202
	Vehicle 1	West bound	Right turn lane	Within intersection	Right turn	Not obstructed				
	Vehicle 2	East bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not obstructed				
KING GEORGE/LANGTON	2018-2096321	31/10/2018 8:42	Injury	Received medical treatme		2	1	2 Good dry surface	Fine	107
	Vehicle 1	South bound	1st (kerb or left) lane	Within intersection	Left turn	Not known				
	Vehicle 2	East bound	1st (kerb or left) lane	Within intersection	Straight ahead	Not known				

Total Crashes = 3

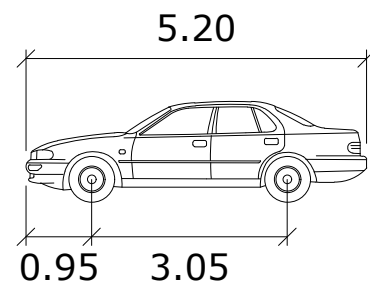
SITE REPORT

History Location: **COMMSSTATERM/COMMONWEALTH**
Report Date Range: **01/01/2016 12:00:00 AM -> 31/12/2020 11:59:59 PM**

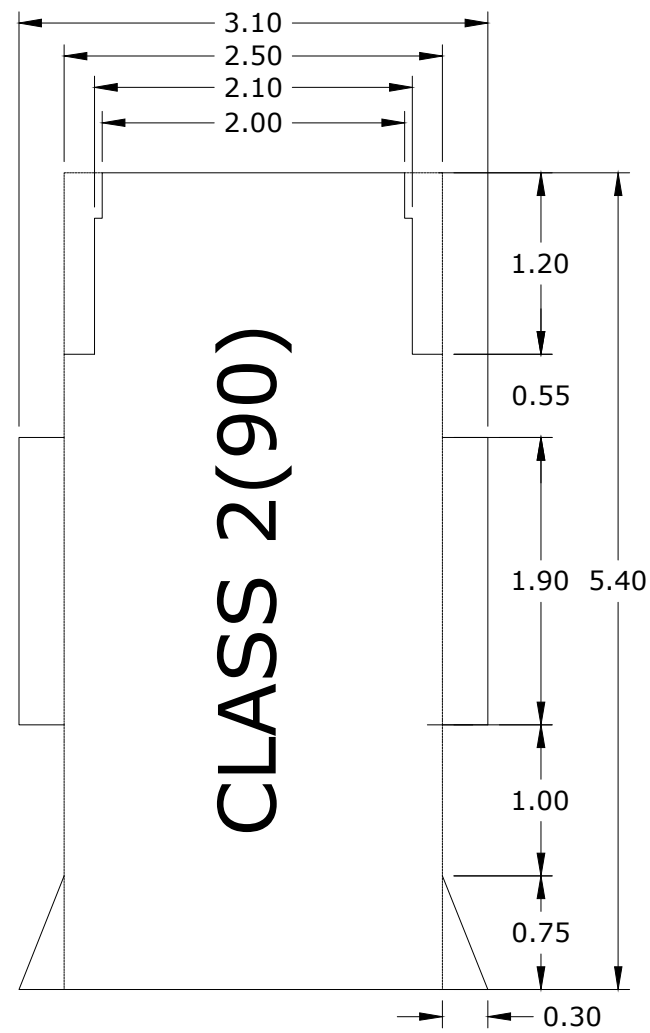
Location : Chainage	Police Reference	Date/Time Direction	Severity Lane	Injury Type Position	Crash Type Movement	Number of Casualties Visibility	Number of Vehicles	Road Surface	Weather	Rum Code
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Total Crashes = 0

1. DRAWING TO BE READ IN CONJUNCTION WITH C.1031 & C.1032.
2. CAR PARK SPATIAL REVIEWS HAVE BEEN UNDERTAKEN ACCORDING TO THE DESIGN REQUIREMENTS OUTLINED IN AS2890.1:2004 PART 1: OFF-STREET CAR PARKING AND AS2890.6:2009 PART 6: OFF-STREET PARKING FOR PEOPLE WITH DISABILITIES.
3. B99 SWEEP PATHS ARE TO BE APPLIED TO CIRCULATION ROUTES AS PER AS2890.1.
4. B85 SWEEP PATHS ARE TO BE LIMITED TO CAR PARKING SPACES AND PARKING AISLES AS PER AS2890.1.
5. ALL DIMENSIONS SHOWN IN METERS UNLESS SPECIFIED OTHERWISE.



	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



- ## CLASS 2 CAR SPACE CLEARANCE ENVELOPE

User class	Required door opening	Required aisle width	Examples of uses (Note 1)
1	Front door, first stop	Minimum for single manoeuvre entry and exit	Employee and commuter parking (generally, all-day parking)
1A	Front door, first stop	Three-point turn entry and exit into 90° parking spaces only, otherwise as for User Class 1	Residential, domestic and employee parking
2	Full opening, all doors	Minimum for single manoeuvre entry and exit	Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)

User class (Note 1)	A (Note 3)	B	C ₁	C ₂	C ₃	Aisle width (Note 4)
2.4	2.4	5.4	4.8	5.4	5.8	
1A	2.4	2.4	4.8	5.4	5.8	
2	2.5	2.5	5.4	4.8	5.4	
3	2.6	2.6	5.4	4.8	5.4	
3A	2.6	2.6	5.4	4.8	5.4	
3A	2.7	2.7	5.4	4.8	5.4	

(See Note 5)

FIGURE 2.2 LAYOUTS FOR ANGLE PARKING SPACES

AS2890.1 EXTRACT - CLASS 2 PARKING DIMENSIONS

NTS

